ROLL NO. BB

OFFICIAL GAZETTE

UNITED STATES

PATENT OFFICE

JAN & FEB 1933

VOLS. 426 & 427

MICRO — PHOTO INC

CLEVELAND 3, OHIO

OFFICIAL GAZETTE

OF THE

UNITED STATES PATENT OFFICE

VOLUME 426

JANUARY

1933

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1933

R608
13
.426 Jan. 1933

CONTENTS

	Page
DECISIONS OF THE COMMISSIONER OF PATENTS, January 3, 10, 17, 24, 31	3, 239, 457, 639, 785
TRADE-MARKS PUBLISHED AND REGISTERED, January 3, 10, 17, 24, 31	9, 245, 461, 643, 789
LABELS AND PRINTS REGISTERED, January 3, 10, 17, 24, 31	41, 274, 488, 667, 807
REISSUES, January 3, 10, 17, 24, 31	43, 277, 489, 669, 809
PLANT PATENTS, January 10, 24, 31	278, 670, 810
DESIGNS, January 3, 10, 17, 24, 31	44, 278, 490, 670, 810
PATENTS, January 3, 10, 17, 24, 31	65, 295, 499, 678, 821

ANNOUNCEMENTS

	Page
ADVERSE DECISIONS	8, 287, 459, 637, 783
APPLICATIONS—Condition of pending	2, 288, 456, 638, 784
COUPONS—Suggestion for use	783
DISCLAIMERS—Burgher, Clarence L	287
Chilton, Roland	783
Frederickson, Otto A., (two)	8
Galassi, Pasquale	785
Harrison, Ward, and John H. Waterbury	459
Haug, Anton J	287
Smith, Theodore A	783
Roberts, Walter van Braam	460
DRAWINGS—Instructions relative to preparing and mailing	637
INTERFERENCE NOTICES—De Villa, James	1
Leader Food Products Co	287, 455, 637
Meynardie, Pierre Jerome de Saint Andre	1, 287
RULES OF PRACTICE—Amendment rule 17—*Order No. 3,230*	455
PATENT SUITS	7, 243, 458, 642, 788
PATENTS—List of adjudicated	1, 244, 459
TRADE-MARKS—Canceled	460
Notice of cancellation	244, 455, 637

TABLE OF CASES REPORTED

	Page
* Creveling. In re	4
* Cross. In re	457
* Fischer. In re	785
* Gage. In re	457
ª General Electric Company and Carboloy Company, Inc., *v.* The Marvel Rare Metals Company, The Ohio Instrument Manufacturing Company, Charles L. Gebauer et al	3
* McGrath. In re	6
* Mortimer. In re	5
ᶜ Naivette, Inc., *v.* Bishinger et al. Herold Bros. Co. *v.* Philad Co. et al	239
* Peller. In re	639
* Spreen. In re	641
* Williams and McCabe. In re	785

[Decisions of the United States Court of Customs and Patent Appeals are indicated by a star (*), of the United States Circuit Court of Appeals by the letter (ᶜ), and of the Supreme Court of the United States by the letter (ª).]

ERRATA

Trade-Mark Registrations Renewed, page 274, No. 91,886, particular description of goods, for "Screens" read *Screws*.

VOL. 426.

327377

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Adams, Aida H. (See Alda's Laboratories, assignor.)
Air-Way Electric Appliance Corporation, Toledo, Ohio. Liquid preparation for application to the under surface of rugs. Serial No. 331,363; Jan. 3. Class 5.
Alda's Laboratories, assignor to Alda H. Adams, Long Beach, Calif. Cream, face powder, hand lotion, etc. Serial No. 331,719; Jan. 3. Class 6.
Allen, Robert S. (See Pearson, Andrew R., and Allen.)
Applebaum-Mautner Company, Inc., The, Madison, Wis. Boots, shoes, slippers, and hosiery. Serial No. 330,194; Jan. 3. Class 39.
Associated Oil Company, San Francisco, Calif. Gasoline. Serial No. 331,972; Jan. 3. Class 15.
Axbell, Charles C., St. Louis, Mo. Income savings stamps. Serial No. 331,242; Jan. 3. Class 38.
B-Vite Company, Philadelphia, Pa. Vitamin-containing syrup. Serial No. 328,883; Jan. 3. Class 46.
Bahama Isles Foods Corporation, Dover, Del., and Miami, Fla. Conch chowder and/or broth. Serial No. 331,538; Jan. 3. Class 46.
Bahama Isles Foods Corporation, Dover, Del., and Miami, Fla. Tonic. Serial Nos. 331,534–5; Jan. 3. Class 6.
Bahama Isles Foods Corporation, Dover, Del., and Miami, Fla. Cocktail made of conch juice. Serial Nos. 331,536–7; Jan. 3. Class 46.
Baumeister, Fitch J., Chicago, Ill. Gasoline. Serial No. 331,065; Jan. 3. Class 15.
Belcraft Sales Corporation, New York, N. Y. Hosiery and lingerie. Serial No. 331,482; Jan. 3. Class 39.
Berkshire Knitting Mills, Wyomissing, P. O., Reading, Pa. Hosiery. Serial Nos. 332,108–11; Jan. 3. Class 39.
Biggs, Floyd R., doing business as Pioneer Asbestos Company, St. Louis, Mo. Brake-linings. Serial No. 327,998; Jan. 3. Class 35.
Bolta Rubber Co., Inc., Lawrence, Mass. Composition sheet material made of rubber, acetate-cellulose, etc. Serial No. 331,036; Jan. 3. Class 50.
Brockman, Oscar, Louisville, Ky. Composition rubber shoe soles. Serial No. 331,816; Jan. 3. Class 39.
Brockton Last Manufacturing Co., Brockton, Mass. Second lasts. Serial No. 331,176; Jan. 3. Class 50.
Brown Company, Portland, Me., and Berlin, N. H. Cellulose pulps and felts made therefrom. Serial No. 331,667; Jan. 3. Class 1.
Brown & Wells, Inc., Boston, Mass. Neckties. Serial No. 321,983; Jan. 3. Class 39.
Bulova Watch Company, Inc., New York, N. Y. Bracelet watches and their attached bracelets. Serial No. 329,526; Jan. 3. Class 27.
California and Hawaiian Sugar Refining Corporation, Limited, San Francisco, Calif. Sugar. Serial No. 330,739; Jan. 3. Class 46.
Cardo Laboratories. (See Roppo, Dominick M.)
Central Fibre Products Co., Inc., Hutchinson, Kans. Wall board. Serial No. 330,990; Jan. 3. Class 12.
Chiantis, Harry T., Boston, Mass. Liniments. Serial No. 331,851; Jan. 3. Class 6.
Clark Thread Company, The, Newark, N. J. Thread and yarn. Serial Nos. 332,177–80; Jan. 3. Class 48.
Clark, W. L. M., Incorporated, St. Louis, Mo. Packet or package containing quilt patches, etc. Serial No. 330,396; Jan. 3. Class 40.
Consolidated Wire & Associated Corporations, Chicago, Ill. Cord, bare, insulated wire, cables, and radio antenna wire. Serial No. 319,509; Jan. 3. Class 21.
Cooke & Cobb Company, The, Brooklyn, N. Y. Expanding files, envelopes, folders, etc. Serial No. 332,184; Jan. 3. Class 37.
Cossitt & Company, Inc., San Francisco, Calif. Photographic reproductions, photostatic prints, and photolithograph work. Serial No. 323,164; Jan. 3. Class 38.
Davison-Paxon Company, Atlanta, Ga. Cotton goods. Serial No. 329,889; Jan. 3. Class 42.
De-O-Es Products Corporation, Rochester, N. Y. Polishing and cleaning powder. Serial No. 331,220; Jan. 3. Class 4.
Distillers Corporation Limited, Montreal, Quebec, Canada. Potable spirits, whiskey and liquors. Serial No. 330,463; Jan. 3. Class 49.
Dorogi, Dr., és Társa Gummigyár R. I., Budapest, Hungary. Rubber toys. Serial No. 332,448; Jan. 3. Class 22.
Dovedown Hosiery Mills, Griffin, Ga. Hosiery. Serial No. 331,854; Jan. 3. Class 39.
Edison, Thomas A., Incorporated, West Orange, N. J. Storage batteries. Serial No. 331,261; Jan. 3. Class 21.
Education Molds Company. (See Ide, Chandler.)
Enterprise Manufacturing Company, The, Akron, Ohio. Fishing reels. Serial No. 332,406; Jan. 3. Class 22.
Erinoid Limited, London, England. Synthetic material. Serial No. 331,301; Jan. 3. Class 1.
Eskimo Pie Corporation, New York and Brooklyn, N. Y. Frozen confections. Serial No. 327,136; Jan. 3. Class 46.
Esterbrook Steel Pen Manufacturing Company, The, Camden, N. J. Fountain pens, feeds, caps, etc. Serial No. 328,839; Jan. 3. Class 37.
Ettelbrick Shoe Manufacturing Co., Casey, Ill. Shoes. Serial No. 328,484; Jan. 3. Class 39.
Falkenhagen Mills, Philadelphia, Pa. Chemical preparation for water softening purposes having incidental cleaning properties. Serial No. 331,224; Jan. 3. Class 6.
Fershtman, Ben, Philadelphia, Pa. Laxative. Serial No. 331,776; Jan. 3. Class 6.
Fischer's Surfa-Saver, Inc., Cincinnati, Ohio. Saponaceous material. Serial No. 321,248; Jan. 3. Class 4.
Foley & Company, Chicago, Ill. Laxatives. Serial No. 332,227; Jan. 3. Class 6.
Foote, G. Clifford, one of the executors of the estate of Henry C. Rowe, deceased, doing business as H. C. Rowe & Company, New Haven, Conn. Oysters. Serial No. 330,422; Jan. 3. Class 46.
Fort Howard Paper Company, Green Bay, Wis. Toilet paper, paper towels, napkins, etc. Serial No. 332,371; Jan. 3. Class 37.
Fort Lupton Canning Company, The, Fort Lupton, Colo. Canned tomatoes, peas, and beans. Serial No. 331,951; Jan. 3. Class 46.
Gelbart, Abraham L., doing business as Geico Co., Brooklyn, N. Y. Insecticides. Serial No. 330,544; Jan. 3. Class 6.
Geico Co. (See Gelbart, Abraham L.)
Glendronach Distillery Company, Limited, The, Glendronach, Scotland. Whiskey. Serial No. 332,450; Jan. 3. Class 49.
Goldberg, Bowen & Co., San Francisco, Calif. Olive oil. Serial No. 330,513; Jan. 3. Class 46.
Goldblatt Bros., Inc., Chicago, Ill. Toilet soap. Serial No. 331,925; Jan. 3. Class 4.
Goldblatt Bros., Inc., Chicago, Ill. Shaving cream. Serial No. 331,926; Jan. 3. Class 4.
Gold Maid Hosiery Mills, Inc., Chicago, Ill. Hosiery. Serial No. 331,550; Jan. 3. Class 39.
Gordon-East Coast Company, Moundsville, W. Va. Shirts. Serial No. 331,823; Jan. 3. Class 39.
Greenebaum, J., Tanning Company, Chicago, Ill., Boston, Mass., and Milwaukee, Wis. Leathers. Serial No. 330,178; Jan. 3. Class 1.
Greenhouse, Martin E., Philadelphia, Pa. Safety razor blades. Serial No. 288,454; Jan. 3. Class 28.
Gremal Products Company, Inc., New York, N. Y. Preparation useful for a mouth wash, toothpowder, and in oral hygiene. Serial No. 331,734; Jan. 3. Class 6.
Hall, Horace W., Newton, Mass. Tennis rackets. Serial No. 331,561; Jan. 3. Class 22.
Harrington & Waring, New York, N. Y. Hosiery. Serial No. 329,468; Jan. 3. Class 39.
Heath-Sweetser, Inc., New York, N. Y. Shirts and collars. Serial No. 332,040; Jan. 3. Class 39.
Herzberg, Louis, Los Angeles, Calif. Nail polish, cuticle oil, nail white, etc. Serial No. 327,940; Jan. 3. Class 6.
Hillerich & Bradsby Co., Louisville, Ky. Baseball bats. Serial Nos. 332,481–9; Jan. 3. Class 22.
Hilton Clothes Corporation, New York, N. Y., and Newark, N. J. Suits and overcoats, shirts, mufflers, etc. Serial No. 331,275; Jan. 3. Class 39.
Hollywood Laboratories, Los Angeles, Calif. Dandruff remover and hair restorer. Serial No. 331,064; Jan. 3. Class 6.
Holyoke Card & Paper Company, Springfield, Mass. Paper. Serial No. 332,149; Jan. 3. Class 37.
Ide, Chandler, doing business as Educational Molds Company, Los Angeles, Calif. Toy molds. Serial No. 332,532; Jan. 3. Class 22.
Individual Drinking Cup Co., Inc., Easton, Pa. Cups and containers. Serial No. 331,619; Jan. 3. Class 2.
International News Service, Inc., New York, N. Y. Printed news messages, dispatches, and newspapers. Serial No. 331,085; Jan. 3. Class 38.
International Paper Company, New York, N. Y. Wrapping paper. Serial No. 331,466; Jan. 3. Class 37.
Iowa Chemical Company, Cedar Rapids, Iowa. Feeds for livestock and poultry. Serial No. 327,780; Jan. 3. Class 46.
Jaburg Brothers, Inc., New York, N. Y. Rubber, vegetable, and synthetic gums and hops. Serial No. 330,851; Jan. 3. Class 1.
Jenkins, Jesse M., doing business as Jenkins Associated Industries, New York, N. Y. Pipes. Serial No. 332,043; Jan. 3. Class 8.
Johns-Manville Corporation, New York, N. Y. Thermal insulating materials. Serial No. 331,000; Jan. 3. Class 12.
Kelly-Springfield Tire Company, The, New York, N. Y. Tires and tubes. Serial No. 332,491; Jan. 3. Class 35.
Kohler Co., Kohler, Wis. Paste. Serial No. 331,034; Jan. 3. Class 5.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Kopps Brothers, Inc., New York, N. Y. Abdominal supporting belts. Serial No. 332,493; Jan. 3. Class 44.

Kresge Department Store Corporation, Newark, N. J. Hosiery, lingerie. Serial No. 320,730; Jan. 3. Class 39.

Krupin, Philip, doing business as Proven Products Company, Newark, N. J. Compositions for eliminating offensive breath odors. Serial No. 331,088; Jan. 3. Class 6.

Larranaga, John F., doing business as Ultralyn Essential Products Company, New York, N. Y. Dry cleaning fluids and cleaners. Serial No. 328,193; Jan. 3. Class 4.

Likly and Rockett Trunk Company, The, Cleveland, Ohio. Trunks and wardrobes, hat boxes, etc. Serial No. 319,068; Jan. 3. Class 3.

Lincoln Oil Refining Company, Robinson, Ill. Gasoline, kerosene, and lubricating oils and greases. Serial No. 331,747; Jan. 3. Class 15.

Loewith, Julius, Inc., New York, N. Y. Food flavoring extracts. Serial No. 330,427; Jan. 3. Class 46.

Martin Brothers Electric Company, The, Cleveland, Ohio. Driers for the hair, etc. Serial Nos. 331,052–3; Jan. 3. Class 44.

Marvin-Neitzel Corporation, Troy, N. Y. Aprons, bibs, caps, etc. Serial No. 331,509; Jan. 3. Class 39.

Mayer, William G., New York, N. Y. Candies and confectionery. Serial No. 331,389; Jan. 3. Class 46.

McFadden, Charles, doing business as Dr. H. Vickrey Remedy Co., Chicago, Ill. Salves, liniments, and medicinal preparations. Serial No. 331,527; Jan. 3. Class 6.

McGrew, Orville V., doing business as McGrew Paint and Asphalt Co., Chicago, Ill. Asphaltic compound. Serial No. 331,057; Jan. 3. Class 12.

McLeod, Donald, doing business as D. McLeod & Company, Glasgow, Scotland. Gut cast lines and traces, silk lines, artificial bait, etc. Serial No. 329,450; Jan. 3. Class 22.

Medical Foundation, The. (See Weinberger, Aaron V.)

Melatol Laboratories. (See Spiker, Joseph W.)

Missouri State Chickeries, Jefferson City, Mo. Dressed chickens. Serial No. 312,614; Jan. 3. Class 46.

Moore, B. J., Sons' Co., Utica, N. Y. Rat poison. Serial No. 331,060; Jan. 3. Class 6.

National Cornstalk Processes, Inc., Chicago, Ill. Fiber composition board, insulating material and other structures. Serial No. 313,199; Jan. 3. Class 12.

Neisler Mills Inc., Kings Mountain, N. C. Table napkins. Serial No. 332,099; Jan. 3. Class 42.

O-Do Company. (See Smith, Clyde S.)

Onota Chemical Company, Pittsfield, Mass. Germicide, disinfectant, and deodorant. Serial No. 327,320; Jan. 3. Class 6.

Otis Elevator Company, Jersey City, N. J., and New York, N. Y. Electric motors and generators, switching equipment, etc. Serial No. 331,697; Jan. 3. Class 21.

Otis Elevator Company, Jersey City, N. J., and New York, N. Y. Electric motors and generators, switching equipment, etc. Serial No. 331,700; Jan. 3. Class 21.

Panther Rubber Manufacturing Company, Stoughton, Mass. Rubber heels. Serial No. 320,692; Jan. 3. Class 39.

Pearson, Andrew R., and Robert S. Allen, Washington, D. C. News columns and special articles. Serial No. 332,072; Jan. 3. Class 38.

Perfection Rubber Company, The, Akron, Ohio. Prophylactic rubber articles. Serial No. 331,752; Jan. 3. Class 44.

Perkins-Goodwin Company, The, New York, N. Y. Paper. Serial No. 332,465; Jan. 3. Class 37.

Pharmazeutische Industrie A. G., Vienna, Austria. Medicated blood-stopping gauze, wadding, and bandage gauze. Serial No. 332,046; Jan. 3. Class 44.

Phillips, I. W., Chicago, Ill. Cartoons. Serial No. 332,414; Jan. 3. Class 38.

Phoenix Trimming Co., Chicago, Ill. Drapes, curtains, portières and attachable materials. Serial No. 330,828; Jan. 3. Class 42.

Pioneer Asbestos Company. (See Biggs, Floyd R.)

Poliak, Henry, Inc., New York, N. Y. Hats. Serial No. 331,264; Jan. 3. Class 39.

Porth and Haas Company, New York, N. Y. Preparation for the relief of insect bites. Serial No. 329,096; Jan. 3. Class 6.

Postum Company, Inc., New York, N. Y. Cereal foods. Serial No. 329,385; Jan. 3. Class 46.

Poth's F. A., Sons, Inc., Philadelphia, Pa. Malt beverage. Serial Nos. 332,415–18; Jan. 3. Class 48.

Pratt-Mallory Company, Sioux City, Iowa. Toilet tissue. Serial No. 331,907; Jan. 3. Class 37.

Proven Products Company. (See Krupin, Philip.)

Quaker Hosiery Company, Inc., Philadelphia, Pa. Hosiery. Serial No. 329,961; Jan. 3. Class 39.

Rawls, Walter C., doing business as W. C. Rawls & Company, assignor to W. C. Rawls & Company, Incorporated, Norfolk, Va. Radio receiving sets, television receiving sets and combination radio and television receiving sets, and radio tubes. Serial No. 328,405; Jan. 3. Class 21.

Remington Arms Company, Inc., Bridgeport, Conn., and Ilion and New York, N. Y. Firearms and parts thereof, shot shells, blank cartridges, etc. Serial No. 331,228; Jan. 3. Class 9.

Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Greaseproof wrapping paper. Serial No. 330,899; Jan. 3. Class 37.

Rockwell, W. S., Company, New York, N. Y. Industrial electric furnaces and parts thereof. Serial No. 327,708; Jan. 3. Class 21.

Roppo, Dominick M., doing business as Cardo Laboratories, New York, N. Y. Mineral solution. Serial No. 331,122; Jan. 3. Class 6.

Rowe, Henry C. (See Foote, G. Clifford.)

Royal Card & Paper Co., Inc., New York, N. Y. Paper. Serial No. 332,631; Jan. 3. Class 37.

Russell, Robert H., Cleveland, Ohio. Electric motors, rheostats, etc. Serial No. 331,873; Jan. 3. Class 21.

Safety Electrical Appliances, Inc., Detroit, Mich. Electric sad irons. Serial Nos. 331,652–3; Jan. 3. Class 21.

Schubart, Henry A., New York, N. Y. Periodical publication. Serial No. 332,604; Jan. 3. Class 38.

Seagram, Joseph E., & Sons Limited, Waterloo, Ontario, Canada. Whiskey and potable spirits. Serial No. 330,494; Jan. 3. Class 49.

Seminole Paper Corporation, The, Chicago, Ill. Toilet paper. Serial No. 331,836; Jan. 3. Class 37.

Settlement Cook Book Company, The, Milwaukee, Wis. Printed books. Serial No. 332,047; Jan. 3. Class 38.

Smith, Clyde S., doing business as O-Do Company, Dallas, Tex. Deodorant and astringent. Serial No. 331,012; Jan. 3. Class 6.

Smith, Woodhouse & Co. Ltd., London, England, and Oporto, Portugal. Port wine. Serial No. 332,427; Jan. 3. Class 47.

Smukler, Nathan, New York, N. Y. Enamel paint. Serial No. 332,313; Jan. 3. Class 16.

Society of Chemical Industry in Basle, Basel, Germany. Pharmaceutical product. Serial No. 332,077; Jan. 3. Class 6.

Southern Coffee Mills, Ltd., New Orleans, La. Coffee. Serial No. 331,876; Jan. 3. Class 46.

Spiker, Joseph W., doing business as Melatol Laboratories, San Francisco, Calif. Medicinal preparation. Serial No. 331,201; Jan. 3. Class 6.

Sterling Products Company, Evansville, Ind. Malt extract. Serial No. 323,724; Jan. 3. Class 46.

Sun-A-Sured, Inc., Minneapolis, Minn. Medicinal preparation containing vitamin D. Serial No. 331,757; Jan. 3. Class 6.

Sunday Company, The, New York, N. Y. Tooth whitener. Serial No. 331,269; Jan. 3. Class 6.

Taj Perfume Co., Detroit, Mich. Incense. Serial No. 331,129; Jan. 3. Class 6.

Topics Publishing Company, Inc., New York, N. Y. Periodical publication. Serial No. 332,014; Jan. 3. Class 38.

Trifari, Krussman & Fishel, Inc., New York, N. Y. Pearls. Serial No. 330,388; Jan. 3. Class 28.

Triplex Tire Co., Ltd., Oakland, Calif. Pneumatic rubber tires. Serial No. 330,800; Jan. 3. Class 35.

Troponwerke Dinklage & Co., Cologne-Mulheim, Germany. Compound for use in the treatment of headaches, neuralgia, etc. Serial No. 331,764; Jan. 3. Class 6.

Tudela, Emilio, New York, N. Y. Canned sardines. Serial No. 326,094; Jan. 3. Class 46.

Ultralyn Essential Products Company. (See Larranaga, John F.)

United States Rubber Company, New York, N. Y. Hose. Serial No. 321,043; Jan. 3. Class 35.

Viavi Company, The, San Francisco, Calif. Medicines. Serial No. 322,338; Jan. 3. Class 6.

Vickrey, Dr. H., Remedy Co. (See McFadden, Charles.)

Wanamaker, John, Philadelphia, Philadelphia, Pa. Dresses. Serial No. 331,811; Jan. 3. Class 39.

Warren, W., Thread Works, Westfield, Mass. Thread Serial No. 329,068; Jan. 3. Class 43.

Wason Bros. Co., Inc., Seattle, Wash. Coffee, tea, table syrup, etc. Serial No. 309,182; Jan. 3. Class 46.

Weinberger, Aaron V., doing business as The Medical Foundation, New York, N. Y. Medical preparation. Serial No. 331,839; Jan. 3. Class 6.

Wesendonck, John, New York, N. Y. Hosiery. Serial No. 319,556; Jan. 3. Class 39.

Western Tablet and Stationery Corporation, Dayton, Ohio. Writing paper, note books, envelopes, etc. Serial No. 332,285; Jan. 3. Class 37.

Witt and Hamm, Boston, Mass. Atomizers. Serial No. 313,987; Jan. 3. Class 44.

LIST OF REGISTRANTS OF TRADE-MARKS

Acero, José S., Malaga, Spain. Olive oil. 300,077; Jan. 3; Serial No. 319,518; published Oct. 25, 1932. Class 46.

Adams, Walter A., doing business as Adams Machine Company, Rochester, N. Y. Electric floor, table, wall, and ceiling lamps, etc. 299,982; Jan. 3; Serial No. 329,781; published Oct. 25, 1932. Class 21.

Admiral Products Company. (See Strauss Stores Corporation.)

Air-Way Electric Appliance Corporation, Toledo, Ohio. Blower and electric heating element, unit space heaters, etc. 300,006; Jan. 3; Serial No. 300,316; published Oct. 18, 1932. Class 21.

Albert, Samuel, New York, N. Y. Dental powder and cream, face powder, etc. 300,018; Jan. 3; Serial No. 329,728; published Oct. 18, 1932. Class 6.

Alex Mo Compound Co., Redondo, Calif. Hypnotic, antispasmodic sedative, etc. 300,013; Jan. 3; Serial No. 330,005; published Oct. 25, 1932. Class 6.

American Auto Accessories Stores, Inc., Wilkes-Barre, Pa. Spark plugs. 299,987; Jan. 3; Serial No. 330,006; published Oct. 18, 1932. Class 21.

American Diamalt Company, The, Cincinnati, Ohio, assignor to Standard Brands Incorporated. Composition suitable for use as a binder. 299,957; Jan. 3; Serial No. 329,845; published Oct. 18, 1932. Class 5.

American Feather Products Corporation, Chicago, Ill. Pillows and cushions. 300,058; Jan. 3; Serial No. 326,451; published Oct. 18, 1932. Class 32.

American Hard Rubber Co., New York, to American Hard Rubber Company, Hempstead and New York, N. Y. Battery cells. 40,406; renewed May 19, 1933.

American Lady Corset Co., Inc., Detroit, Mich. Corsets, brassières, camisoles, and petticoats, etc. 299,943; Jan. 3; Serial No. 329,128; published Oct. 11, 1932. Class 39.

American New Fashion Heel Corporation, Brooklyn, N. Y. Shoe heels. 299,942; Jan. 3; Serial No. 329,216; published Oct. 11, 1932. Class 39.

American Sales Book Company, Limited, Toronto, Ontario, Canada, and Niagara Falls and Elmira, N. Y. Autographic registers. 299,928; Jan. 3; Serial No. 329,419; published Oct. 18, 1932. Class 37.

American Sales Company, New York, N. Y. Electrical apparatus and appliances. 300,130; Jan. 3. Class 21.

American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Metal fence posts. 300,030; Jan. 3; Serial No. 330,154; published Oct. 25, 1932. Class 13.

American Supply Co., Inc., Washington, D. C. Gasoline, motor fuel oils, and lubricating oils. 300,141; Jan. 3. Class 15.

American Writing Paper Company, assignor to American Writing Paper Company, Inc., Holyoke, Mass. Writing and printing paper. 91,543; renewed May 13, 1933.

Asbron, Incorporated, Cleveland, Ohio. Medicine. 300,068; Jan. 3; Serial No. 322,926; published Oct. 11, 1932. Class 6.

Associated Seed Growers, Incorporated, New Haven, Conn. Seeds, bulbs, and plants. 299,969; Jan. 3; Serial No. 330,175; published Oct. 25, 1932. Class 1.

Associated Seed Growers, Incorporated, New Haven, Conn. Garden and field seeds, bulbs, and plants. 300,098; Jan. 3; Serial No. 329,106; published Nov. 1, 1932. Class 1.

Associated Seed Growers, Incorporated, New Haven, Conn. Garden and field seeds, bulbs, and plants. 300,099; Jan. 3; Serial No. 328,208; published Nov. 1, 1932. Class 1.

Associated Stationers Supply Company, Chicago, Ill. Books of notes, drafts, receipts, and checks; printed forms, loose leaf covers, etc. 300,085; Jan. 3; Serial No. 315,900; published Oct. 25, 1932. Class 37.

Atlantic Products Corporation, Trenton, N. J. Hand bags. 300,088; Jan. 3; Serial No. 317,918; published Oct. 18, 1932. Class 3.

Atlas Supply Company, Newark, N. J. Spark plugs. 299,974; Jan. 3; Serial No. 327,125; published Oct. 18, 1932. Class 21.

Bagadasarian, D. H., & Sons Inc., Fresno, Calif. Fresh grapes. 300,142; Jan. 3. Class 46.

Baker Ice Machine Co. Inc., Omaha, Nebr. Frozen confections. 300,053; Jan. 3; Serial No. 325,979; published Oct. 18, 1932. Class 46.

Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic frames and mountings. 300,120; Jan. 3. Class 26.

Bay West Paper Company, Green Bay, Wis. Paper towels. 300,138; Jan. 3. Class 37.

Bayuk Cigars Incorporated, Philadelphia, Pa. Cigars. 299,966; Jan. 3; Serial No. 329,761; published Oct. 25, 1932. Class 17.

Behr-Manning Corporation, Troy, N. Y. Flexible abrasives. 300,065; Jan. 3; Serial No. 330,243; published Oct. 18, 1932. Class 4.

Black Bros. Flour Mills, Beatrice, Nebr. Wheat flour. 300,072; Jan. 3; Serial No. 324,454; published Oct. 11, 1932. Class 46.

Blume, Marcel, doing business as Fairyland, assignor to Societe a Responsabilite Limitee Fairyland, Paris, France. Dresses, suits, and lingerie. 300,009; Jan. 3; Serial No. 286,854; published Oct. 1, 1929. Class 39.

Borgfeldt, Geo., & Co., New York, N. Y. Brushes. 91,314; renewed Apr. 29, 1933.

Borun Bros., Los Angeles, Calif. Cosmetics and pharmaceutical preparations. 300,115; Jan. 3. Class 6.

Brazilian Insecticide Company, Brooklyn, N. Y. Insecticide. 300,016; Jan. 3; Serial No. 329,850; published Oct. 25, 1932. Class 6.

Brown Company, Portland, Me., and Berlin, N. H. Wrapping paper, bond paper, and paper towels. 299,991; Jan. 3; Serial No. 330,196; published Oct. 18, 1932. Class 37.

Brown and Findeisen, Inc., Miami, Fla. Periodical. 299,990; Jan. 3; Serial No. 330,158; published Oct. 25, 1932. Class 38.

Budd, Edward G., Manufacturing Company, Philadelphia, Pa. Electric welding machines. 299,979; Jan. 3; Serial No. 329,129; published Oct. 25, 1932. Class 21.

Budd, Roxy O., Vermillion, S. Dak. Hair grower. 300,182; Jan. 3. Class 6.

Buffalo Specialty Company, as assignee of Fulton Chemical Company, New York, assignor to Liquid Veneer Corporation, Buffalo, N. Y. Preparations for destroying vermin, rodents, and insects. 90,188; Renewed Feb. 11, 1933.

Bulova Watch Company, Inc., New York, N. Y. Bracelet watches and their attached bracelets. 300,102; Jan. 3. Class 27.

Calbar Paint & Varnish Co., Philadelphia, Pa. Paint. 300,134; Jan. 3. Class 16.

California Fruit Canners Association, assignor to California Packing Corporation, San Francisco, Calif. Canned fruits, dried fruits, and raisins. 91,167; renewed Apr. 22, 1933.

Calumet Refining Co., Chicago, Ill. Penetrating oils for lubricating, etc. 300,070; Jan. 3; Serial No. 328,934; published Oct. 25, 1932. Class 15.

Capital Paper Company, Indianapolis, Ind. Toilet paper. 300,074; Jan. 3; Serial No. 330,221; published Oct. 18, 1932. Class 37.

Capital Paper Company, Indianapolis, Ind. Toilet paper. 300,075; Jan. 3; Serial No. 330,223; published Oct. 18, 1932. Class 37.

Carnrick, G. W., Co., Newark, N. J. Standardized ovarian hormone preparation. 300,022; Jan. 3; Serial No. 329,110; published Oct. 18, 1932. Class 6.

Carter, William, Company, The, Needham Heights, Mass. Knitted underwear, hosiery, and caps. 89,069; renewed Jan. 21, 1933.

Cavallaro-Ferrara, Salvatore, to Frances Cavallaro-Ferrara, Baltimore, Md., Successor. Medicinal powder. 89,422; renewed Dec. 10, 1932.

Champion Chemical Works, Chicago, Ill. Lye. 300,011; Jan. 3; Serial No. 330,336; published Oct. 25 1932. Class 6.

Chicago Biscuit & Cone Co., Chicago, Ill. Wafers. 300,005; Jan. 3; Serial No. 302,930; published Oct. 18, 1932. Class 46.

Chicago Mail Order Company, Chicago, Ill. Cutlery of base metal. 300,095; Jan. 3; Serial No. 327,580; published Oct. 25, 1932. Class 28.

Chieftain Manufacturing Company, The, Baltimore, Md. Shoe polishes, shoe dyes, stove polishes. 300,129; Jan. 3. Class 4.

Clark Thread Company, The. (See Spool Cotton Company, The, assignor.)

Clore, Edward A., doing business as E. A. Clore & Sons, Madison, Va. Chairs and tables. 300,064; Jan. 3; Serial No. 329,737; published Oct. 18, 1932. Class 32.

Coal Roller Pill Company. (See Granger Medicine Co. Inc., The.)

Congoleum-Nairn, Inc., Kearny, N. J. Wax preparations for floors. 299,946; Jan. 3; Serial No. 329,768; published Oct. 18, 1932. Class 16.

Consolidated Dairy Products Co. (See Skagit County Dairymen's Association.)

Copeman Protex Company, Flint, Mich. Prepared liquid latex. 300,067; Jan. 3; Serial No. 324,659; published Oct. 18, 1932. Class 6.

Copy Papers Inc., Chicago, Ill. Paper. 300,118; Jan. 3. Class 37.

Cottentex Products Co. Milwaukee, Wis. Cellulose fiber. 299,954; Jan. 3; Serial No. 325,088; published Oct. 25, 1932. Class 1.

Cromar Company, The, Williamsport, Pa. Ready mixed paints, floor and prepared waxes and varnishes. 299,929; Jan. 3; Serial No. 329,014; published Oct. 18, 1932. Class 16.

Davis, R. T., Mill & Mfg. Co., St. Joseph, Mo., to The Quaker Oats Company, Chicago, Ill., successor. Malted wheat flake food. 40,006; renewed Mar. 31, 1933.

Decker, Ellen W., New York, N. Y., to Ellen W. Decker, South Orange, N. J. Stockings. 89,997; renewed Jan. 28, 1933.

Dee-Moth Products. (See Mowry, Nelson A.)

De Hoff & Gaylord, Sodus, N. Y. Evaporated, or sun dried apples and fruits. 300,100; Jan. 3; Serial No. 318,193; published Oct. 18, 1932. Class 46.

Dell Publishing Co. Inc., New York, N. Y. Magazine. 299,986; Jan. 3; Serial No. 329,982; published Oct. 18, 1932. Class 38.

Delray Corporation, San Francisco, Calif. Ravioli and food flavoring sauce. 300,078; Jan. 3; Serial No. 323,891; published Oct. 18, 1932. Class 46.

Delta Manufacturing Company, doing business as Delta Specialty Company, Milwaukee, Wis. Lathes and drill presses. 300,036; Jan. 3; Serial No. 329,674; published Oct. 25, 1932. Class 23.

Dennis, Martin, Company, Newark, N. J. Adhesive preparation. 299,985; Jan. 3; Serial No. 329,802; published Oct. 25, 1932. Class 5.

Detroit Stoker Company, Monroe and Detroit, Mich. Stoker castings and forgings in the rough. 299,940; Jan. 3; Serial No. 329,397; published Oct. 25, 1932. Class 14.

District of Columbia Paper Manufacturing Company, Washington, D. C. Blotting paper. 300,003; Jan. 3; Serial No. 304,754; published Oct. 18, 1932. Class 37.

Duncan Coffee Co., Houston, Tex. Coffee. 299,961; Jan. 3; Serial No. 328,781; published Oct. 25, 1932. Class 46.

Duplex Printing Press Co., Battle Creek, Mich. Rotary folders, matrix rollers, mat rollers, etc. 300,083; Jan. 3; Serial No. 313,469; published Oct. 25, 1932. Class 25.

Duralé Co., Inc., The, St. Louis, Mo. Deep wave hair lotion, nail enamel, etc. 300,015; Jan. 3; Serial No. 329,890; published Oct. 25, 1932. Class 6.

Edwards, J., & Co., Inc., Philadelphia, Pa. Shoes. 299,941; Jan. 3; Serial No. 329,224; published Oct. 11, 1932. Class 39.

Electricitätsgesellschaft "Sanitas" mit beschrankter Haftung, Berlin, Germany. Electric air-douches and hair-drying apparatus. 91,179; renewed Apr. 22, 1933.

Emerson & Stevens Mfg. Co., Inc., Oakland, Me. Scythes. 300,035; Jan. 3; Serial No. 329,705; published Oct. 25, 1932. Class 23.

Eskimo Pie Corporation, New York, and Brooklyn, N. Y. Frozen confections. 300,055; Jan. 3; Serial No. 328,867; published Oct. 18, 1932. Class 46.

Fairyland. (See Blume, Marcel.)

Fame Canning Company. (See Stokely Brothers & Company.)

Farm Service Stores, Inc., Minneapolis, Minn. Field, garden and vegetable seeds. 299,951; Jan. 3; Serial No. 328,687; published Oct. 25, 1932. Class 1.

Federal Motor Truck Company, Detroit, Mich. Six wheel vehicles equipped with bodies for transport purposes. 299,975; Jan. 3; Serial No. 327,784; published Oct. 25, 1932. Class 19.

Ferry Hats, Inc., Newark, N. J. Men's felt hats. 299,939; Jan. 3; Serial No. 329,707; published Oct. 11, 1932. Class 39.

Fess and Fischer, Chicago, Ill. Electric reading lamps adapted to be combined with alarm clocks. 299,988; Jan. 3; Serial No. 329,776; published Oct. 25, 1932. Class 21.

Fibreboard Products Inc., San Francisco, Calif. Paper. 299,995; Jan. 3; Serial No. 318,829; published Oct. 25, 1932. Class 37.

Fire Proof Fabrics Sales Corporation, Philadelphia, Pa. Fire resistant fabrics. 299,971; Jan. 3; Serial No. 330,343; published Oct. 25, 1932. Class 50.

Firestone Battery Company, Akron, Ohio. Battery clamps, terminals and connectors, etc. 299,977; Jan. 3; Serial No. 328,090; published Oct. 19, 1932. Class 21.

Florida Growers Publishing Company, assignor to Florida Grower Magazine, Inc., Tampa, Fla. Periodical. 91,471; renewed May 6, 1933.

Forest Hills Company. (See Old Colony Breweries Co.)

Fort Howard Paper Company, Green Bay, Wis. Paper towels, napkins, and tissue paper, etc. 299,956; Jan. 3; Serial No. 329,893; published Oct. 18, 1932. Class 37.

Fort Pitt Bedding Company, Pittsburgh, Pa. Bed springs. 300,062; Jan. 3; Serial No. 330,390; published Oct. 25, 1932. Class 32.

Fownide Laboratories. (See R. F. R. Chemical Co.)

Fox, Lewis I., doing business as Fox Poultry Farm, Metuchen, assignor to Irwin Krelelsheimer, Perth Amboy, N. J. Light modifying lacquer. 299,935; Jan. 3; Serial No. 325,847; published Oct. 18, 1932. Class 16.

Fox River Paper Company, Appleton, Wis. Bond paper. 299,950; Jan. 3; Serial No. 330,295; published Oct. 25, 1932. Class 37.

Freiberg, Ernest, Brooklyn, N. Y. Surgical devices for holding bandages. 300,103; Jan. 3. Class 44.

Fulton Chemical Company. (See Buffalo Specialty Company, assignor.)

Fulton, William, & Sons Limited, Paisley, Scotland. Cloths and stuffs of wool, worsted, or hair. 40,368; renewed May 12, 1933.

Gamma Phi Beta, Chicago, Ill. Jewelry. 299,989; Jan. 3; Serial No. 330,085; published Oct. 25, 1932. Class 28.

Gardner, Prince A., jr., doing business as Gardner Pocket Book Mfg. Co., St. Louis, Mo. Pocket receptacles. 299,927; Jan. 3; Serial No. 329,545; published Oct. 18, 1932. Class 3.

General Electric X-Ray Corporation. (See Victor Electric Company, assignor.)

Gerstendorfer Bros., by change of name to Sapolin Co. Inc., New York, N. Y. Paints and painters' materials. 91,475; renewed May 6, 1933.

Glidden Company, The. (See Twin City Varnish Company, assignor.)

Gordon, Sewall & Co., Inc., Houston, Tex. Foods. 91,085; renewed Apr. 15, 1933.

Goserud, Chester O., St. Paul, Minn. Storm window fasteners, etc. 300,033; Jan. 3; Serial No. 330,012; published Oct. 25, 1932. Class 13.

Gould's Pumps, Incorporated, Seneca Falls, N. Y. Centrifugal pumps. 300,093; Jan. 3; Serial No. 329,113; published Oct. 25, 1932. Class 23.

Granger Medicine Co. Inc., The, doing business as Coal Roller Pill Company, New Iberia, La. Pills. 300,028; Jan. 3; Serial No. 328,352; published Oct. 25, 1932. Class 6.

Gum Tragasol Supply Company Limited, The, by change of name to Tragasol Products Ltd., Hooton, England. Painters' size and dressings and polishes. 91,478–9; renewed May 6, 1933.

Gutta Percha & Rubber Mfg. Co., The, New York, assignor to Hewitt-Gutta Percha Rubber Corporation, Buffalo, N. Y. Mechanical rubber goods. 91,338; renewed Apr. 29, 1933.

H. M. Chemical Company, Ltd., Los Angeles, Calif. Shaving creams. 300,106; Jan. 3. Class 4.

Hachmeister-Lind Company, McKees Rocks, Pa. Antiseptic and germicide. 300,021; Jan. 3; Serial No. 329,261; published Oct. 11, 1932. Class 6.

Hance Bros. & White, assignor, by mesne assignments, to Hance Brothers and White, Incorporated, Philadelphia, Pa. Remedies and liniments for diseases and ailments. 89,252; renewed Dec. 3, 1932.

Harding-Jones Paper Company, The, Excello, Ohio. Writing and printing paper. 299,949; Jan. 3; Serial No. 330,125; published Oct. 25, 1932. Class 37.

Harrison Wholesale Company, Chicago, Ill. Radio receiving sets, storage batteries, etc. 299,980; Jan. 3; Serial No. 329,187; published Oct. 18, 1932. Class 21.

Haslam, Fred., & Co., Inc., Brooklyn, N. Y. Dissecting, post mortem and general operating instruments. 300,142; Jan. 3. Class 44.

Heller, B., & Company, Chicago, Ill. Insecticides and preparations for the extermination of vermin. 300,128; Jan. 3. Class 6.

Heneph Corporation, The, Kingston, N. Y. Medicinal tablets or lozenges. 300,014; Jan. 3; Serial No. 329,947; published Oct. 18, 1932. Class 6.

Herder, Friedr., Abr. Sohn, Solingen, Germany. Knives and carvers, clippers, etc. 300,084; Jan. 3; Serial No. 315,400; published Nov. 24, 1932. Class 23.

Hewitt-Gutta Percha Rubber Corporation. (See Gutta Percha & Rubber Mfg. Co., The, assignor.)

Hindu Incense Manufacturing Co., Chicago, Ill. Incense. 300,107; Jan. 3. Class 6.

Hinman, H. P., Company, Inc., Barre, Vt. Granite monuments. 300,140; Jan. 3. Class 50.

Hirzel, Carl R., doing business as Hirzel Canning Company, Toledo, Ohio. Canned sauer kraut and tomatoes. 300,048; Jan. 3; Serial No. 329,797; published Oct. 25, 1932. Class 46.

Hoffmann-La Roche Chemical Works, The, New York, N. Y., assignor to The Hoffmann-La Roche Inc., Nutley, N. J. Bromin compound. 91,843; renewed Apr. 29, 1933.

Home Run Razor Blade Co. (See World's Products Co.)

Houchens Medicine Company, Baltimore, Md. Medicinal preparation. 40,311; renewed May 12, 1933.

Howard Bros. Chemical Co., Buffalo, N. Y. Eye-salve. 89,262; renewed Dec. 3, 1932.

Howard Bros. Chemical Co., Buffalo, N. Y. Pile remedy. 89,264; renewed Dec. 3, 1932.

Howard Bros. Chemical Co., Buffalo, N. Y. Remedies for certain named diseases. 89,363; renewed Dec. 10, 1932.

Howard Bros. Chemical Co., Buffalo, N. Y. Eye-salve, pile remedy, cathartic tablets, and eye-water. 89,364; renewed Dec. 10, 1932.

Hudnut, Richard, New York, N. Y. Pharmaceutical preparations. 81,213; renewed Apr. 22, 1933.

Hudnut, Richard, New York, N. Y. Orange-wood sticks and nail boards. 91,214; renewed Apr. 22, 1933.

Hudnut, Richard, New York, N. Y. Soaps. 91,215; renewed Apr. 22, 1933.

Imperial Type Metal Company, Philadelphia, Pa. Type metal alloys. 299,936; Jan. 3; Serial No. 330,228; published Oct. 25, 1932. Class 14.

Independent Macaroni Co., Inc., Mount Vernon, N. Y. Macaroni. 300,082; Jan. 3; Serial No. 314,158; published Oct. 25, 1932. Class 46.

Inks Inc., New York, N. Y. Printing ink. 299,937; Jan. 3; Serial No. 330,065; published Oct. 25, 1932. Class 11.

International Tobacco Company, Limited, London; England. Cigarettes. 299,970; Jan. 3; Serial No. 330,297; published Oct. 25, 1932. Class 17.

Jackson, Byron, Co., Los Angeles, Calif. Pumps and parts therefor. 300,035–9; Jan. 3; Serial Nos. 329,191–2; published Oct. 25, 1932. Class 23.

Jelke, John F., Company, Chicago, Ill. Mayonnaise, salad and French dressing, etc. 300,052; Jan. 3; Serial No. 329,898; published Oct. 25, 1932. Class 46.

Jenious, Gensie, & Company, Montclair, N. J. Hair pomade vegetable oil preparation, and a preparation for dandruff. 300,112; Jan. 3. Class 6.

Kabushikikaisha Honkano Shoten. (See Shoten, Hon K.)

Kadiak Fisheries Company, Seattle, Wash. Canned salmon. 300,008; Jan. 3; Serial No. 299,136; published Oct. 18, 1932. Class 46.

Kanstroom, Bernard, Washington, D. C. Ophthalmic lenses. 300,123; Jan. 3. Class 26.

Kaplan, Louis, Baltimore, Md. Racing cards and newspaper columns. 300,076; Jan. 3; Serial No. 330,372; published Oct. 18, 1932. Class 38.

Kaufmann, K., & Co., Inc., Newark, N. J. Traveling bags, suit cases, etc. 299,947; Jan. 3; Serial No. 329,798; published Oct. 18, 1932. Class 3.

Kenglo Coats, Inc., New York, N. Y. Coats. 300,063; Jan. 3; Serial No. 329,994; published Oct. 25, 1932. Class 39.

Kennedy, Andrew R., Inc., New York, N. Y. Lawn grass seed mixture. 300,043; Jan. 3; Serial No. 323,457; published Oct. 25, 1932. Class 1.

Kerr, Robert A., & James F. Hopkins, Detroit, Mich. Nuts. 300,081; Jan. 3; Serial No. 324,226; published Oct. 25, 1932. Class 46.

Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth, Budweis, Czechoslovakia. Crayons. 299,955; Jan. 3; Serial No. 329,859; published Oct. 18, 1932. Class 37.

Kreielsheimer, Irwin. (See Fox, Lewis I., assignor.)

Kress, S. H., & Co., New York, N. Y. Brooches, bracelets, rings, etc. 300,044; Jan. 3; Serial No. 328,339; published Oct. 18, 1932. Class 28.

Kuhmarker Manufacturing Company, assignor to Kuhmarker Waxed Paper Co. Inc., New York, N. Y. Waxed paper. 91,492; renewed May 6, 1933.

La Compania Frankau de Tabacos, S. A. (See Upmann, H., & Co.)

Lageman, Clemens, doing business as H. Trommsdorff Chemische Fabrik, Aachen, Germany. Iodine preparation. 300,069; Jan. 3; Serial No. 321,657; published Oct. 11, 1932. Class 6.

Larus & Brother Company, Incorporated, Richmond, Va. Smoking tobacco, chewing tobacco, and cigarettes. 299,964; Jan. 3; Serial No. 329,639; published Oct. 25, 1932. Class 17.

Laughlin, Homer, China Co., The, Newell, W. Va. Chinaware. 89,362; renewed Dec. 10, 1932.

Library Efficiency Corporation, New York, N. Y. Bill files, filing books, file signals, etc. 299,930; Jan. 3; Serial No. 328,736; published Oct. 25, 1932. Class 37.

Liquid Veneer Corporation. (See Buffalo Specialty Company, assignor.)

Liquid Veneer Corporation, Buffalo, N. Y. Liquid cleanser. 300,116; Jan. 3. Class 4.

Lisner, Leonard E., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. 300,119; Jan. 3. Class 6.

Lisa Jack, Dress Corp., New York, N. Y. Dresses. 300,137; Jan. 3. Class 39.

Lombardy, David, Cleveland, Ohio. Olive oil, canned tunny fish, macaroni, etc. 300,057; Jan. 3; Serial No. 328,614; published Oct. 25, 1932. Class 46.

Long John Distilleries Limited. (See McDonald, D. P., & Sons, Limited, assignor.)

Luntz, Joseph, Brooklyn, N. Y. Laxative tonic. 300,026; Jan. 3; Serial No. 327,825; published Oct. 25, 1932. Class 6.

MacDonald, Ian, Modesto, Calif. Folding or collapsible table and seats. 300,059; Jan. 3; Serial No. 329,584; published Oct. 18, 1932. Class 32.

Macy, R. H., & Co., Inc., New York, N. Y. Women's hats. 299,938; Jan. 3; Serial No. 329,717; published Oct. 11, 1932. Class 39.

Markem Machine Co., to Markem Machine Company, Boston, Mass., successor. Printing-ink. 89,933; renewed Jan. 21, 1933.

Martin Brothers Electric Company, The, Cleveland, Ohio. Driers and steamers, and therapeutic lamps. 300,127; Jan. 3. Class 44.

Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y. Confectionery. 39,305; renewed Nov. 18, 1932.

Mass Production Corporation, New York, N. Y. Typewriters and parts. 300,032; Jan. 3; Serial No. 330,045; published Oct. 18, 1932. Class 28.

McCrory Stores Corporation, New York, N. Y. Blank books and loose leaf binders. 299,988; Jan. 3; Serial No. 330,047; published Oct. 18, 1932. Class 37.

McDonald, D. P., & Sons, Limited, Fort William, Scotland, assignor to Long John Distilleries Limited, London, England. Straight scotch whisky. 88,332; renewed Sept. 10, 1932.

McKinstry, Lucile, Los Angeles, Calif. Cosmetics. 300,114; Jan. 3. Class 6.

McNeil, Robert, Philadelphia, Pa. Surgical dressings. 300,108; Jan. 3. Class 44.

Meinecke & Co., New York, N. Y. Hot-water bags and ice-bags and stoppers for same. 40,405; renewed May 19, 1933.

Menasha Products Company, The, Menasha, Wis. Toilet tissue. 299,948; Jan. 3; Serial No. 329,803; published Oct. 25, 1932. Class 37.

Merit Underwear Co., Shoemakersville, Pa. Underwear. 300,113; Jan. 3. Class 39.

Merriam, G. & C., Company, Springfield, Mass. Books. 300,136; Jan. 3. Class 38.

Meyer Brothers Drug Company, St. Louis, Mo. Medicinal preparation in liquid form. 300,010; Jan. 3; Serial No. 330,408; published Oct. 25, 1932. Class 6.

Mittag & Volger, assignor to Mittag & Volger, Incorporated, Parkridge, N. J. Carbon paper. 39,447; renewed Dec. 9, 1932.

Monroe Products Co., Los Angeles, Calif. Facial and hand creams, hair tonics, perfumes, etc. 300,027; Jan. 3; Serial No. 327,699; published Oct. 25, 1932. Class 6.

Moran, James G., doing business as James G. Moran Co., Philadelphia, Pa. Bluing preparation. 300,126; Jan. 3. Class 6.

Morse, Robert V., New York, N. Y. Check valves for vacuum control devices. 300,094; Jan. 3; Serial No. 329,089; published Oct. 25, 1932. Class 13.

Mowry, Nelson A., doing business as Dee-Moth Products, Edgewood, Pa. Liquid for destroying moths and preventing destruction of furniture and carpets. 300,104; Jan. 3. Class 6.

Mustard, Harry G., Dallas, Tex. Meat. 299,967; Jan. 3; Serial No. 329,834; published Oct. 18, 1932. Class 46.

National Electric Products Corporation, Pittsburgh, Pa. Electrical house-wiring fixtures and apparatus. 300,124; Jan. 3. Class 21.

National Malleable and Steel Castings Company, Cleveland, Ohio. Railway trucks and side frames. 299,981; Jan. 3; Serial No. 329,452; published Oct. 18, 1932. Class 19.

National Silk Company, Inc., The, South Coventry, Conn. Threads, yarns, and novelty yarns. 300,131; Jan. 3. Class 48.

Nelaton Remedy Co., Baltimore, Md. Remedy for rheumatism, gout, and neuralgia. 89,414; renewed Dec. 10, 1932.

New York Merchandise Co. Inc., New York, N. Y. Jew's harp. 300,089; Jan. 3; Serial No. 318,285; published Oct. 18, 1932. Class 36.

Northern Paper Mills, Green Bay, Wis. Paper. 299,934; Jan. 3; Serial No. 327,830; published July 19, 1932. Class 37.

Norwich Knitting Company, Norwich, N. Y. Underwear, Knitted. 300,111; Jan. 3. Class 39.

Novato French Cheese Factory. (See Rudolff, Hermann.)

Nu-Ray Health Products Co. (See Possenheim, Louis.)

Old Colony Breweries Co., Fall River, to Forest Hills Company, Boston, Mass., successor. Porter, ale, and lager-beer. 90,729; renewed Mar. 18, 1933.

Orr, Grace G., San Pedro, Calif. Antiseptic and germicide. 300,025; Jan. 3; Serial No. 327,960; published Oct. 18, 1932. Class 6.

Paesana Packing Co. (See Scaramelli & Company.)

Pantasote Leather Company, The, Passaic, N. J. Coated textile fabrics for window shades, etc. 299,972; Jan. 3; Serial No. 330,351; published Oct. 25, 1932. Class 50.

Parents' Publishing Association, Inc., New York, N. Y. Weekly publication. 300,097; Jan. 3; Serial No. 328,181; published Oct. 18, 1932. Class 38.

Paulson, Henry, doing business as Henry Paulson & Company, Chicago, Ill. Finger rings and bracelets. 299,993; Jan. 3; Serial No. 322,471; published Oct. 25, 1932. Class 28.

Peerless Paper Mills, Inc., The, Oakd, Pa. Toilet paper. 299,931; Jan. 3; Serial No. 328,182; published Oct. 25, 1932. Class 37.

Pharis Tire and Rubber Company, The, Newark, Ohio. Pneumatic rubber tires. 300,109; Jan. 3. Class 85.

Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Gas meters. 300,090; Jan. 3; Serial No. 318,322; published Oct. 25, 1932. Class 26.

Popular Publications, Inc., New York, N. Y. Magazine. 299,996; Jan. 3; Serial No. 318,719; published Oct. 25, 1932. Class 38.

Porter, Alex W., Atlantic City, N. J. Prepared sandwiches and box lunches. 300,050; Jan. 3; Serial No. 328,645; published Oct. 25, 1932. Class 46.

Possenheim, Louis, doing business as Nu-Ray Health Products Co., New York, N. Y. Candy. 300,046; Jan. 3; Serial No. 328,105; published Oct. 25, 1932. Class 46.

Prybranda, Inc., Long Island City, N. Y. Razors and razor blades. 300,034; Jan. 3; Serial No. 329,839; published Oct. 18, 1932. Class 23.

Quaker Oats Company, The. (See Davis, R. T., Mill & Mfg. Co.)

R. F. R. Chemical Co., doing business as Fownide Laboratories, Los Angeles, Calif. Antiseptic. 300,020; Jan. 3; Serial No. 329,408; published Oct. 18, 1932. Class 6.

Rasmussen, Geo., Co., Chicago, Ill. Cream tartar. 300,087; Jan. 3; Serial No. 316,505; published Oct. 18, 1932. Class 6.

Reading Poultry Food Company, Reading Pa. Peat moss and muiching. 299,952; Jan. 3; Serial No. 329,463; published Oct. 25, 1932. Class 1.

Reau, Paul O. A., Glenay (Deux-Sevres), France. Glue, paste, anhydrous cement, etc. 300,007; Jan. 3; Serial No. 299,154; published Oct. 18, 1932. Class 5.

Renstrom, Carl W., doing business as Tip-Top Products Co., Omaha, Nebr. Liquid solder. 299,976; Jan. 3; Serial No. 328,018; published Oct. 25, 1932. Class 5.

Romanoff Caviar Company, New York, N. Y. Anchovies and antipasto. 300,080; Jan. 3; Serial No. 324,008; published Oct. 25, 1932. Class 46.

Rototiller, Inc., Wilmington, Del., and Long Island City, N. Y. Farm machine for soil cultivation. 300,066; Jan. 3; Serial No. 326,600; published Oct. 25, 1932. Class 23.

Royal Typewriter Company, Inc., New York, N. Y. Typewriting machines and parts thereof and therefor. 300,029; Jan. 3; Serial No. 330,208; published Oct. 18, 1932. Class 23.

Rudolff, Hermann, doing business as Novato French Cheese Factory, Novato, Calif. Cheese. 299,968; Jan. 3; Serial No. 330,167; published Oct. 25, 1932. Class 46.

Rudolph, Anna, Cincinnati, Ohio. Preparations for promoting the growth of hair. 300,017; Jan. 3; Serial No. 329,778; published Oct. 25, 1932. Class 6.

Rusch & Co., New York, N. Y., assignor to Tootal Broadhurst Lee Company Limited, Manchester, England. Handkerchiefs. 90,138; renewed Feb. 4, 1933.

Samuels, Albert S., Co., San Francisco, Calif. Finger rings. 300,012; Jan. 3; Serial No. 330,129; published Oct. 25, 1932. Class 28.

Sanka Coffee Corporation, New York, N. Y. Coffees. 299,962; Jan. 3; Serial No. 329,155; published Oct. 18, 1932. Class 46.

Sapolin Co. Inc. (See Gerstendorfer Bros.)

Saunders, Charles, Estate of; Nellie L. Saunders and Charles M. Saunders, administrators, doing business as Charles Saunders, Key West, Fla. Sponges. 299,953; Jan. 3; Serial No. 328,934; published Oct. 25, 1932. Class 1.

Savarese, James, New York, N. Y. Tomato sauce. 299,965; Jan. 3; Serial No. 329,656; published Oct. 18, 1932. Class 46.

Scaramelli & Company, Inc., doing business as Paesana Packing Co., New York, N. Y., and Boston, Mass. Canned vegetables and tomato sauce. 300,054; Jan. 3; Serial No. 327,417; published Oct. 18, 1932. Class 46.

Schering & Glatz, Inc., New York, N. Y. Medicinal preparation. 300,096; Jan. 3; Serial No. 330,552; published Nov. 1, 1932. Class 6.

Schleicher, Carl, & Schüll, Düren, Germany, assignor to Carl Schleicher & Schull Co., New York, N. Y. Filters and filtering-paper. 89,067; renewed Nov. 5, 1932.

Schoeneman, Incorporated, Baltimore, Md. Coats, vests, trousers, etc. 300,110; Jan. 3. Class 39.

Schwabacher Bros & Co., Incorporated, Seattle, Wash. Toilet tissue. 300,125; Jan. 3. Class 37.

Schwendermans, Algoma, Wis. Cheese. 299,959; Jan. 3; Serial No. 328,039; published Oct. 18, 1932. Class 46.

Seacoast Canning Co., Eastport, to Seacoast Canning Company, Lubec, Me. Sardines. 91,807; renewed May 27, 1933.

Segall, Mrs. Joseph R., doing business as Mrs. J. R. Segall, El Paso, Tex. Preparation for removing wrinkles. 300,019; Jan. 3; Serial No. 329,588; published Oct. 18, 1932. Class 6.

Seminole Paper Corporation, Chicago, Ill. Toilet paper. 300,122; Jan. 3. Class 37.

Shaw, Elton R., doing business as Sunny Slope Farm, San Jose, Calif. Tomato juice. 300,117; Jan. 3. Class 46.

Shoten, Hon ~~K~~ to Kabushikikaisha Honkano Shoten, Mikage Town, Japan, Successor. Japanese sake. 89,752; renewed Jan. 7, 1933.

Singer Manufacturing Co., The, New York, N. Y., to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machines and sewing machine attachments and parts thereof. 39,791; renewed Feb. 10, 1933.

Skagit County Dairymen's Association, doing business as Consolidated Dairy Products Co., Burlington and Seattle, Wash. Powdered preparation for malted milk beverages. 300,056; Jan. 3; Serial No. 329,100; published Oct. 18, 1932. Class 46.

Smith, Carroll Dunham, Pharmacal Co., doing business as Smith Pharmacal Co., New York, N. Y. Tonic and appetite stimulator. 300,028; Jan. 3; Serial No. 325,190; published Oct. 25, 1932. Class 6.

Snap-On Tools, Inc., Kenosha, Wis. Wrenches, wrench handles, screw drivers, etc. 300,086; Jan. 3; Serial No. 316,137; published Oct. 25, 1932. Class 23.

"Snia-Viscosa" Societa Nazionale Industria Applicazioni Viscosa, Milan, Italy. Tufts of artificial staple fibers. 299,958; Jan. 3; Serial No. 327,262; published Oct. 25, 1932. Class 1.

Societe a Responsabilite Limitee Fairyland. (See Blume, Marcel, assignor.)

Society of the Colonaide, Incorporated, New York, N. Y. Tablets. 300,071; Jan. 3; Serial No. 323,509; published Oct. 25, 1932. Class 6.

Spletter, Albert, Washington, D. C. Adhesive cement. 299,933; Jan. 3; Serial No. 328,021; published Oct. 18, 1932. Class 5.

Spool Cotton Company, The, Newark, N. J. and New York, N. Y., assignor to The Clark Thread Company, Newark, N. J. Thread. 89,961; renewed Jan. 21, 1933.

Squibb, E. R., & Sons, New York, N. Y. Powdered whey. 300,047; Jan. 3; Serial No. 329,905; published Oct. 25, 1932. Class 46.

Squibb, E. R., & Sons, New York, N. Y. Effervescent antacid, laxative, and diuretic tablets. 300,121; Jan. 3. Class 6.

Standard Brands Incorporated. (See American Diamalt Company, The, assignor.)

Standard Brands Incorporated, New York, N. Y. Coffee. 300,004; Jan. 3; Serial No. 303,391; published Oct. 18, 1932. Class 46.

Standard Oil Company of New Jersey, Wilmington, Del. Lubricating oils. 299,992; Jan. 3; Serial No. 330,209; published Oct. 25, 1932. Class 15.

Stant Manufacturing Company, Connersville, Ind. Vehicle radiator and gasoline filler caps. 299,973; Jan. 3; Serial No. 326,963; published Oct. 18, 1932. Class 19.

Star Union Overall Co., Inc., The, South Norwalk, Conn. Children's overalls, playsuits and sunsuits. 300,060; Jan. 3; Serial No. 329,102; published Oct. 4, 1932. Class 39.

Stark Metal Products Company, The, Massillon, Ohio. Plastic cement. 299,926; Jan. 3; Serial No. 329,657; published Oct. 18, 1932. Class 5.

Sterling Button Co. Inc., New York, N. Y. Buttons, buckles, and pins made from ivory, bone, etc. 299,944; Jan. 3; Serial No. 329,125; published Oct. 18, 1932. Class 40.

Stokely Brothers & Company, doing business as Fame Canning Company, Louisville, Ky. Canned vegetables, sauer kraut, catsup, etc. 300,045; Jan. 3; Serial No. 328,282; published Oct. 25, 1932. Class 46.

Strauss Stores Corporation doing business as Admiral Products Company, Brooklyn, N. Y. Automobile body polish, rubber paint enamel, etc. 299,932; Jan. 3; Serial No. 328,143; published Oct. 18, 1932. Class 16.

Strauss Stores Corporation, doing business as Admiral Products Company, Brooklyn, N. Y. Penetrating and lubricating oils. 299,978; Jan. 3; Serial No. 328,142; published Oct. 25, 1932. Class 15.

Strauss Stores Corporation, doing business as Admiral Products Company, Brooklyn, N. Y. Motor radiator cleaning compound, etc. 300,024; Jan. 3; Serial No. 328,141; published Oct. 18, 1932. Class 6.

Sunny Slope Farm. (See Shaw, Elton R.)

Superior Packing Corp., New York, N. Y. Malted milk. 300,135; Jan. 3. Class 46.

Swann Chemical Company, Birmingham, Ala. Fertilizer. 299,997; Jan. 3; Serial No. 318,418; published Oct. 18, 1932. Class 10.

Swann Chemical Company, Birmingham, Ala. Fertilizer. 299,998–9; Jan. 3; Serial Nos. 318,334–5; published Oct. 18, 1932. Class 10.

Swann Chemical Company, Birmingham, Ala. High potash fertilizer. 300,000; Jan. 3; Serial No. 318,333; published Oct. 18, 1932. Class 10.

Swann Chemical Company, Birmingham, Ala. Drillable concentrated fertilizer. 300,001; Jan. 3; Serial No. 318,329; published Oct. 18, 1932. Class 10.

Swann Chemical Company, Birmingham, Ala. High potash accurately sized drillable fertilizer. 300,002; Jan. 3; Serial No. 318,330; published Oct. 18, 1932. Class 10.

Swann Chemical Company, Birmingham, Ala. Concentrated fertilizer. 300,041; Jan. 3; Serial No. 320,014; published Oct. 25, 1932. Class 10.

Swann Chemical Company, Birmingham, Ala. Drillable fertilizer. 300,042; Jan. 3; Serial No. 319,787; published Oct. 18, 1932. Class 10.

Swann Chemical Company, Birmingham, Ala. Concentrated fertilizer. 300,091; Jan. 3; Serial No. 318,327; published Oct. 18, 1932. Class 10.

Swann Chemical Company, Birmingham, Ala. Drillable fertilizer. 300,092; Jan. 3; Serial No. 318,328; published Oct. 18, 1932. Class 10.

Tapo Citrus Association, Simi, Calif. Fresh citrus fruits. 300,051; Jan. 3; Serial No. 329,511; published Oct. 18, 1932. Class 46.

Tate, John E., Boston, Mass. Glare eliminators. 300,037; Jan. 3; Serial No. 329,512; published Oct. 25, 1932. Class 34.

Tennessee Cereal Company, Nashville, Tenn. Cereal breakfast food. 300,049; Jan. 3; Serial No. 329,540; published Oct. 25, 1932. Class 46.

Texas Company, The, New York, N. Y. Gasoline. 300,073; Jan. 3; Serial No. 330,213; published Oct. 25, 1932. Class 15.

Tip-Top Products Co. (See Renstrom, Carl W.)

Toledo Porcelain Enamel Products Company, The, Toledo, Ohio. Porcelain enameled sheet metal. 299,960; Jan. 3; Serial No. 328,463; published Oct. 25, 1932. Class 14.

Tootal Broadhurst Lee Company Limited. (See Rusch & Co., assignor.)

Topics Publishing Company, Inc., New York, N. Y. Publication. 299,984; Jan. 3; Serial No. 329,780; published Oct. 18, 1932. Class 38.

Tragasol Products Ltd. (See Gum Tragasol Supply Company Limited, The.)

Tranin Egg Products Co., Kansas City, Mo. Broken eggs in liquid and dried form. 299,945; Jan. 3; Serial No. 325,244; published Oct. 18, 1932. Class 46.

Trommsdorff, H., Chemische Fabrik. (See Lageman, Clemens.)

Tulsa Petroleum Company, The, Scranton, Pa. Lubricating greases oils for heating and lighting, etc. 300,101; Jan. 3. Class 15.

Twin City Varnish Company, St. Paul, Minn., assignor to The Glidden Company, Cleveland, Ohio. Varnishes and enamels. 91,018; renewed Apr. 8, 1933.

Upmann, H., & Co., to La Compania Frankau de Tobacos, S. A., Havana, Cuba, Successor. Cigars. 89,518; renewed Dec. 17, 1932.

Utrecht Export Cy. "Griendt Brothers," Ltd., The Utrecht, Netherlands. Artificial butter (oleomargarine). 89,308; renew Dec. 3, 1932.

Victor Electric Company, assignor by mesne assignmnts, to General Electric X-Ray Corporation, Chicago, Ill. Electrical apparatus, machines and supplies. 91,530; renewed May 6, 1933.

Victor Saw Works, Inc., Middletown, N. Y. Saws and saw blades. 300,040; Jan. 3; Serial No. 323,151; published Oct. 18, 1932. Class 23.

Viking Oil Corporation, Clarendon, Pa. Lubricants in oil and grease form. 299,994; Jan. 3; Serial No. 318,961; published Oct. 25, 1932. Class 15.

Wagstaffe Limited, Hamilton, Ontario, Canada. Jams, jellies, marmalade, etc. 300,079; Jan. 3; Serial No. 324,811; published Oct. 25, 1932. Class 46.

Walgreen Co., Chicago, Ill. Electric heating pads, waffle irons, hot plates, etc. 300,139; Jan. 3. Class 21.

Wallenstein Mayer Company, The, Cincinnati, Ohio. Watches and clocks. 300,061; Jan. 3; Serial No. 325,356; published Oct. 18, 1932. Class 27.

Ward, Samuel, Company, by change of name to Samuel Ward Manufacturing Company, Boston, Mass. Diaries and calendars. 91,534; renewed May 6, 1933. Class 38.

West Disinfecting Company, Long Island City, N. Y. Floor wax. 300,133; Jan. 3. Class 16.

Wilfley, A. R., and Sons, Inc., Denver, Colo. Centrifugal pumps. 300,105; Jan. 3. Class 23.

Wilson, C. E., & Company, Inc., Manchester, Conn. Nursery stock. 299,963; Jan. 3; Serial No. 329,568; published Oct. 25, 1932. Class 1.

World's Products Co., doing business as Home Run Razor Blade Co., Spencer, Ind. Razor blades. 300,031; Jan. 3; Serial No. 330,113; published Oct. 25, 1932. Class 23.

LIST OF REGISTRANTS OF LABELS

Alice & Evelyn, New York, N. Y. Alice and Evelyn. For Women's Apparel. 41,600; Jan. 3.

B/G Sandwich Shops, Inc., doing business as Dairy Lane, Chicago, Ill. Dairy Lane—Good Food, Quick! For Chicken Pies, Meat Pies, Sandwiches, Salads, Pies, Cakes, Etc. 41,601; Jan. 3.

Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Shot through with Quality! With Every Shot of the Loom, lively Wool is anchored firmly in place by the Bigelow True-Tension Weave. For Rugs. 41,602; Jan. 3.

Columbian Rope Company, Auburn, N. Y. Coroco Tire Chains. For Tire Chains. 41,603; Jan. 3.

Dairy Lane. (See B/G Sandwich Shops, Inc.)

Embalmers' Supply Company, The, Westport, Conn. Duo-Raa-Co. For Embalming Fluid. 41,604; Jan. 3.

Embalmers' Supply Company, The, Westport, Conn. Cavos. For Embalming Fluid. 41,605; Jan. 3.

Embalmers' Supply Company, The, Westport, Conn. Duo-Escohol. For Embalming Fluid. 41,606; Jan. 3.

Eurasian Health Products Co., Denver, Colo. Eurasian Health Tea. For Health Tea. 41,607; Jan. 3.

Kolorkraft Company. (See Wilson, Walter E.)

Krank, A. J., Company, St. Paul, Minn. Rose Skin Food. For Skin Food, a Cold Cream and Massage Cream. 41,608; Jan. 3.

Krank, A. J., Company, St. Paul, Minn. Pink Oil Massage Cream. For Massage Cream, Skin Softener and Skin Cleanser. 41,609; Jan. 3.

Mynderse, Andrew W., doing business as Mynderse and Mynderse Beverage Company, Schenectady, N. Y. Mynderse—Since 1885. For Ginger Ale. 41,610; Jan. 3.

National Paper Napkin Mfg. Company, Chicago, Ill. A Nar-O-Fold Product. For Paper Folded Napkins. 41,611; Jan. 3.

Purol Manufacturing Co., Newark, N. J. Morso. For Soap. 41,612; Jan. 3.

Rosen Brothers Frocks, Inc., New York, N. Y. Rosco Sheer Fabrics. For Sheer Fabrics. 41,613; Jan. 3.

Roux Laboratories, Inc., New York, N. Y. Roux Supertint—The Scientific Hair Coloring that yields accurate and dependable results. For Hair Coloring. 41,614; Jan. 3.

Sutherland Paper Company, Kalamazoo, Mich. John Alden. For Butter. 41,615; Jan. 3.

Tetley, Joseph, & Co., Inc., New York, N. Y. Tetley Sunflower Brand. For Tea. 41,616; Jan. 3.

United Paper Box Mfg. Co., The, Cleveland, Ohio. Ardmore Chocolates. For Chocolates. 41,617; Jan. 3.

Upsher Smith, F. A., doing business as Upsher Smith Co., Minneapolis, Minn. Tincture Digismith. For Digitalis. 41,618; Jan. 3.

Williamson Candy Company, Chicago, Ill. Vitaminized. For Candy. 41,619; Jan. 3.

Wilson, Walter E., doing business as Kolokraft Company, Detroit, Mich. Kopy-Kat, Lots of Fun. For Pictures. 41,620; Jan. 3.

Wilson, Walter E., doing business as Kolokraft Company, Detroit, Mich. Kopy-Kat, Watercolor Paint Set. For Water Color Paint Sets. 41,621; Jan. 3.

Wright, John L., Long Beach, Michigan City, Ind. Wright Blocks. For Toy Building Blocks. 41,622; Jan. 3.

LIST OF REGISTRANTS OF PRINTS

Arden, Elizabeth, New York Ltd., doing business as Elizabeth Arden, New York, N. Y. The Days. For Cleansing Cream, Skin Tonic, Skin Cream, Orange Skin Food. 13,990; Jan. 3.

Armour and Company, Chicago, Ill. All the Richness and Flavor of 8 Half-Pints of Table Cream are In Every Pound of Armour's Full Cream Cloverbloom Butter. For Butter, Canned Meats, and Bacon. 13,991; Jan. 3.

Armour and Company, Chicago, Ill. Now—Here's A Finer Tasting, Milder and More Tender Ham . . . It's Armour's Fixed Flavor Star Ham. For Ham and Bacon. 13,992; Jan. 3.

Armour and Company, Chicago, Ill. It's Richer . . . It's Fresher . . . And the Delicious Goodness of Armour's Full Cream Cloverbloom Butter Never Varies. For Butter, Lard, and Canned Meats. 13,993; Jan. 3.

Armour and Company, Chicago, Ill. For Unrivaled Taste and Tenderness! Armour's Fixed Flavor Star Ham for Your Easter Dinner. For Ham and Bacon. 13,994; Jan. 3.

Armour and Company, Chicago, Ill. Delicious Flavor and Unusual Nourishment That's What You Get When You Cook and Bake With Armour's Star Pure Lard. For Lard, Bacon and Butter. 13,995; Jan. 3.

Armour and Company, Chicago, Ill. Mild? . . . Yes!—But if You Want Mildness With Flavor Just Try Armour's Fixed Flavor Star Bacon. For Bacon, Lard, and Canned Meats. 13,996; Jan. 3.

Armour and Company, Chicago, Ill. Tenderness! Mildness! Matchless Flavor! Armour's Star Bacon Fixed Flavor. For Bacon, Butter, and Canned Meats. 13,997; Jan. 3.

Armour and Company, Chicago, Ill. All the Richness and Flavor of 8 Half-Pints of Table Cream are In Every Pound of Armour's Full Cream Cloverbloom Butter. For Butter, Canned Meats, and Ham. 13,998; Jan. 3.

Armour and Company, Chicago, Ill. Save Money . . . Save Time . . . And Make a Meal a Success With Armour's Veribest Corned Beef. For Corned Beef, Butter, and Bacon. 13,999; Jan. 3.

Armour and Company, Chicago, Ill. For Variety . . . Convenience . . . And Economy Armour's Veribest Corned Beef . . . Ox Tongue . . . Vienna Sausage. For Canned Meats, Ham, and Butter. 14,000; Jan. 3.

Armour and Company, Chicago, Ill. 5 Ways to Use Armour's Fixed Flavor Star Ham Leftovers. For Ham, Bacon, and Lard. 14,001; Jan. 3.

Armour and Company, Chicago, Ill. Tenderness! Mildness! Matchless Flavor! Armour's Star Bacon Fixed Flavor. For Bacon, Butter, and Ham. 14,002; Jan. 3.

Armour and Company, Chicago, Ill. It's Richer . . . It's Fresher . . . And the Delicious Goodness of Armour's Full Cream Cloverbloom Butter Never Varies. For Butter, Lard, and Canned Meats. 14,003; Jan. 3.

Armour and Company, Chicago, Ill. Mild? . . . Yes!—But If You Want Mildness With Flavor Just Try Armour's Fixed Flavor Star Bacon. For Bacon, Lard, and Ham. 14,004; Jan. 3.

Armour and Company, Chicago, Ill. Your Pies . . . Your Biscuits . . . Will Taste So Much Better When You Use Armour's Star Pure Lard. For Lard, Bacon, and Ham. 14,005; Jan. 3.

Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Outlawed: The Rule of Thumb! For Rugs. 14,006; Jan. 3.

Bradley Knitting Company, Delavan, Wis. On a Roof in Manhattan. For Clothing. 14,007; Jan. 3.

Bradley Knitting Company, Delavan, Wis. "Our Best-Dressed Beaches Are All of a Stripe." For Clothing. 14,008; Jan. 3.

Bradley Knitting Company, Delavan, Wis. We're Always Chasing Rainbows. For Clothing. 14,009; Jan. 3.

Chilton Pen Company, Inc., The, New York, N. Y. Chilton Pen. For Fountain Pens. 14,010; Jan. 3.

Cream Of Wheat Corporation, The, Minneapolis, Minn. Chores . . . For Children Under Seven? For Wheat Breakfast Food. 14,011; Jan. 3.

General Mills, Inc., Minneapolis, Minn. Now! Anybody a Perfect Biscuit Maker. For Biscuit Flour. 14,012; Jan. 3.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Cellulose, fiber. Cottentex Products Co. 299,954; Jan. 3; Serial No. 325,088; published Oct. 25, 1932.
Fibers, Tufts of artificial staple. "Snia-Viscosa" Societa Nazionale Industria Applicazioni Viscosa. 299,958; Jan. 3; Serial No. 327,262; published Oct. 25, 1932.
Nursey stock. C. E. Wilson & Company. 299,963; Jan. 3; Serial No. 329,568; published Oct. 25, 1932.
Peat moss and mulching. Reading Poultry Food Company. 299,952; Jan. 3; Serial No. 329,463; published Oct. 25, 1932.
Seed mixture, Lawn grass. Andrew R. Kennedy, Inc. 300,043; Jan. 3; Serial No. 323,457; published Oct. 25, 1932.
Seeds, bulbs and plants. Associated Seed Growers, Incorporated. 299,969; Jan. 3; Serial No. 330,175; published Oct. 25, 1932.
Seeds, bulbs and plants, Garden and field. Associated Seed Growers, Incorporated. 300,098; Jan. 3; Serial No. 329,106; published Nov. 1, 1932.
Seeds, bulbs and plants, Garden and field. Associated Seed Growers, Incorporated. 300,099; Jan. 3; Serial No. 328,208; published Nov. 1, 1932.
Seeds, Field, garden and vegetable. Farm Service Stores, Inc. 299,951; Jan. 3; Serial No. 328,687; published Oct. 25, 1932.
Sponges. C. Saunders. 299,953; Jan. 3; Serial No. 328,934; published Oct. 25, 1932.

CLASS 3

Bags, Hand. Atlantic Products Corporation. 300,088; Jan. 3; Serial No. 317,918; published Oct. 18, 1932.
Bags, suit cases, etc., Traveling. K. Kaufmann & Co. 299,947; Jan. 3; Serial No. 329,798; published Oct. 18, 1932.
Cosmetics. L. McKinstry. 300,114; Jan. 3.
Receptacles, Pocket. P. A. Gardner, jr. 299,927; Jan. 3; Serial No. 329,545; published Oct. 18, 1932.

CLASS 4

Abrasives, Flexible. Behr-Manning Corporation. 300,065; Jan. 3; Serial No. 330,243; published Oct. 18, 1932.
Creams, Shaving. H. M. Chemical Company. 300,106; Jan. 3.
Liquid cleanser. Liquid Veneer Corporation. 300,116; Jan. 3.
Polishes, dyes, and stove polishes, Shoe. Chieftain Manufacturing Company. 300,129; Jan. 3.
Soaps. R. Hudnut. 91,215; renewed Apr. 22, 1933.

CLASS 5

Adhesive preparation. Martin Dennis Company. 299,985; Jan. 3; Serial No. 329,802; published Oct. 25, 1932.
Cement, Adhesive. A. Spletter. 299,933; Jan. 3; Serial No. 328,021; published Oct. 18, 1932.
Cement, Plastic. Stark Metal Products Company. 299,926; Jan. 3; Serial No. 329,657; published Oct. 18, 1932.
Composition suitable for use as a binder. American Dialmalt Company. 299,957; Jan. 3; Serial No. 329,845; published Oct. 18, 1932.
Glue, paste, anhydrous cement, etc. P. O. A. Beau. 300,007; Jan. 3; Serial No. 299,154; published Oct. 18, 1932.
Solder, Liquid. C. W. Renstrom. 299,976; Jan. 3; Serial No. 328,018; published Oct. 25, 1932.

CLASS 6

Antiseptic. R. F. R. Chemical Co. 300,020; Jan. 3; Serial No. 329,408; published Oct. 18, 1932.
Antiseptic and germicide. Hachmeister-Lind Company. 300,021; Jan. 3; Serial No. 329,261; published Oct. 11, 1932.
Antiseptic and germicide. G. G. Orr. 300,025; Jan. 3; Serial No. 327,960; published Oct. 18, 1932.
Astringents, astringent cerates, bleach and beauty creams, etc. L. E Lisner. 300,119; Jan. 3.
Blueing preparation. J. G. Moran. 300,126; Jan. 3.
Bromin compound. Hoffmann-La Roche Chemical Works. 91,343; renewed Apr. 29, 1933.
Cleaning compound. Strauss Stores Corporation. 300,024; Jan. 3; Serial No. 328,141; published Oct. 18, 1932
Cosmetics and pharmaceutical preparations. Borun Bros. 300,115; Jan. 3.
Cream tartar. Geo. Rasmussen Co. 300,087; Jan. 3; Serial No. 316,505; published Oct. 18, 1932.
Creams, hair tonics, perfumes, etc., Facial and hand. Monroe Products Co. 300,027; Jan. 3; Serial No. 327,699; published Oct. 25, 1932.
Effervescent antacid, laxative, and diuretic tablets. E. R. Squibb & Sons. 300,121; Jan. 3.
Hair grower. R. O. Budd. 300,132; Jan. 3.
Hair lotion, nail enamel for finger nails, etc.. Deep wave. Durale Co. 300,015; Jan. 3; Serial No. 329,890; published Oct. 25, 1932.

Hair pomade vegetable oil preparation, and a preparation for removing dandruff. Gensie Jenious & Company. 300,112; Jan. 3.
Hormone preparation, Standardized ovarian. G. W. Carnrick Co. 300,022; Jan. 3; Serial No. 329,110; published Oct. 18, 1932.
Hypnotic, anti-spasmodic sedative, etc. Alex Mo Compound Co. 300,013; Jan. 3; Serial No. 330,005; published Oct. 25, 1932.
Incense. Hindu Incense Manufacturing Co. 300,107; Jan. 3.
Insecticide. Brazilian Insecticide Company. 300,016; Jan. 3; Serial No. 329,850; published Oct. 25, 1932.
Insecticides and preparations for the extermination of vermin. B. Heller & Company. 300,128; Jan. 3.
Iodine preparation. C. Lageman. 300,069; Jan. 3; Serial No. 321,687; published Oct. 11, 1932.
Latex, Prepared liquid. Copeman Protex Company. 300,067; Jan. 3; Serial No. 324,659; published Oct. 18, 1932.
Laxative tonic. J. Luntz. 300,026; Jan. 3; Serial No. 327,825; published Oct. 25, 1932.
Liquid for destroying moths and preventing destruction of furniture and carpets. N. A. Mowry. 300,104; Jan. 3.
Lye. Champion Chemical Works. 300,011; Jan. 3; Serial No. 330,336; published Oct. 25, 1932.
Medicinal powder for headaches and indigestion. S. Cavallaro-Ferrara. 89,422; renewed Dec. 10, 1932.
Medicinal preparation. Houchens Medicine Company. 40,311; renewed May 12, 1933.
Medicinal preparation. Schering & Glatz, Inc. 300,096; Jan. 3; Serial No. 330,552; published Nov. 1, 1932.
Medicinal preparation in liquid form. Meyer Brothers Drug Company. 300,010; Jan. 3; Serial No. 330,408; published Oct. 25, 1932.
Medicinal tablets or lozenges. Heneph Corporation. 300,014; Jan. 3; Serial No. 329,947; published Oct. 18, 1932.
Medicine. Asbron, Incorporated. 300,068; Jan. 3; Serial No. 322,926; published Oct. 11, 1932.
Pharmaceutical preparations. R. Hudnut. 91,213; renewed Apr. 22, 1933.
Pile remedy. Howard Bros. Chemical Co. 89,264; renewed Dec. 3, 1932.
Pills. Granger Medicine Co. Inc. 300,023; Jan. 3; Serial No. 328,352; published Oct. 25, 1932.
Powder and cream, face powder, etc., Dental. S. Albert. 300,018; Jan. 3; Serial No. 329,728; published Oct. 18, 1932.
Preparation for removing wrinkles. Mrs. J. R. Segall. 300,019; Jan. 3; Serial No. 329,588; published Oct. 18, 1932.
Preparations for destroying vermin, rodents, and insects. Buffalo Specialty Company. 90,188; renewed Feb. 11, 1933.
Preparations for promoting the growth of hair. A. Rudolph. 300,017; Jan. 3; Serial No. 329,778; published Oct. 25, 1932.
Remedies and liniments for diseases and ailments. Hance Bros. & White. 89,252; renewed Dec. 3, 1932.
Remedies for certain named diseases. Howard Bros. Chemical Co. 89,363; renewed Dec. 10, 1932.
Remedy for rheumatism, gout, and neuralgia. Nelaton Remedy Co. 89,414; renewed Dec. 10, 1932.
Salve, Eye. Howard Bros. Chemical Co. 89,262; renewed Dec. 3, 1932.
Salve, pile remedy, cathartic tablets, and eye-water, Eye. Howard Bros. Chemical Co. 89,364; renewed Dec. 10, 1932.
Tablets, a medicinal preparation. Society of the Colonaide, Incorporated. 300,071; Jan. 3; Serial No. 328,509; published Oct. 25, 1932.
Tonic and appetite stimulator. Carroll Dunham Smith Pharmacal Co. 300,028; Jan. 3; Serial No. 325,190; published Oct. 25, 1932.

CLASS 10

Fertilizer. Swann Chemical Company. 299,997; Jan. 3; Serial No. 318,418; published Oct. 18, 1932.
Fertilizer. Swann Chemical Comoany. 299,998–9; Jan. 3; Serial Nos. 318,334–5; published Oct. 18, 1932.
Fertilizer, Concentrated. Swann Chemical Company. 300,041; Jan. 3; Serial No. 320,014; published Oct. 25, 1932.
Fertilizer, Concentrated. Swann Chemical Company. 300,091; Jan. 3; Serial No. 318,327; published Oct. 18, 1932.
Fertilizer, Drillable. Swann Chemical Company. 300,042; Jan. 3; Serial No. 319,787; published Oct. 18, 1932.
Fertilizer, Drillable. Swann Chemical Company. 300,092; Jan. 3; Serial No. 318,328; published Oct. 18, 1932.
Fertilizer, Drillable concentrated. Swann Chemical Company. 300,001; Jan. 3; Serial No. 318,329; published Oct. 18, 1932.

Fertilizer, High potash. Swann Chemical Company. 300,000; Jan. 3; Serial No. 318,333; published Oct. 18, 1932.
Fertilizer, High potash. Swann Chemical Company. 300,002; Jan. 3; Serial No. 318,330; published Oct. 18, 1932.

CLASS 11

Carbon paper. Mittag & Volger. 39,447; renewed Dec. 9, 1932.
Ink, Printing. Inks Inc. 299,937; Jan. 3; Serial No. 330,065; published Oct. 25, 1932.
Ink, Printing. Markem Machine Co. 89,933; renewed Jan. 21, 1933.

CLASS 13

Fasteners, etc., Storm window. C. O. Goserud. 300,033; Jan. 3; Serial No. 330,012; published Oct. 25, 1932.
Fence posts, Metal. American Steel and Wire Company of New Jersey. 300,030; Jan. 3; Serial No. 330,154; published Oct. 25, 1932.
Valves, Check. R. V. Morse. 300,094; Jan. 3; Serial No. 329,089; published Oct. 25, 1932.

CLASS 14

Castings and forgings in the rough, Stoker. Detroit Stoker Company. 299,940; Jan. 3; Serial No. 329,397; published Oct. 25 1932.
Metal alloys, Type. Imperial Type Metal Company. 299,936; Jan. 3; Serial No. 330,228; published Oct. 25, 1932.
Metal, Porcelain enameled sheet. Toledo Porcelain Enamel Products Company. 299,960; Jan. 3; Serial No. 328,463; published Oct. 25, 1932.

CLASS 15

Gasoline. Texas Company. 300,073; Jan. 3; Serial No. 330,213; published Oct. 25, 1932.
Gasoline, motor fuel and lubricating oils. American Supply Co. 300,141; Jan. 3.
Greases and oils. Tulsa Petroleum Company. 300,101; Jan. 3.
Lubricants. Viking Oil Corporation. 299,994; Jan. 3; Serial No. 318,961; published Oct. 25, 1932.
Oils for lubricating, Penetrating. Calumet Refining Co 300,070; Jan. 3; Serial No. 323,934; published Oct. 25, 1932.
Oils, Lubricating. Standard Oil Company of New Jersey. 299,992; Jan. 3; Serial No. 330,209; published Oct. 25, 1932.
Oils, Penetrating and lubricating. Strauss Stores Corporation. 299,978; Jan. 3; Serial No. 328,142; published Oct. 25, 1932.

CLASS 16

Lacquer. L. I. Fox. 299,935; Jan. 3; Serial No. 325,847; published Oct. 18, 1932.
Paint. Calbar Paint & Varnish Co. 300,134; Jan. 3.
Paints and painters' materials. Gerstendorfer Bros. 91,475; renewed May 6, 1933.
Paints, waxes and varnishes, Ready mixed. Cromar Company. 299,929; Jan. 3; Serial No. 329,014; published Oct. 18, 1932.
Polish, rubber paint enamel, etc., Automobile body. Strauss Stores Corporation. 299,932; Jan. 3; Serial No. 328,143; published Oct. 18, 1932.
Size and dressings and polishes, Painters'. Gum Tragasol Supply Company Limited. 91,478–9; renewed May 6, 1933.
Varnishes and enamels. Twin City Varnish Company. 91,048; renewed Apr. 8, 1933.
Wax. Congolenm-Nairn, Inc. 299,946; Jan. 3; Serial No. 329,768; published Oct. 18, 1932.
Wax, Floor. West Disinfecting Company. 300,133; Jan. 3.

CLASS 17

Cigarettes. International Tobacco Company. 299,970; Jan. 3; Serial No. 330,297; published Oct. 25, 1932.
Cigars. Bayuk Cigars Incorporated. 299,966; Jan. 3; Serial No. 329,761; published Oct. 25, 1932.
Cigars. H. Upmann & Co. 89,518; renewed Dec. 17, 1932.
Tobacco, cigarettes, Smoking and chewing. Larus & Brother Company. 299,964; Jan. 3; Serial No. 329,639; published Oct. 25, 1932.

CLASS 19

Trucks and side frames, Railway. National Malleable and Steel Castings Company. 299,981; Jan. 3; Serial No. 329,452; published Oct. 18, 1932.
Vehicle radiator and gasoline filler caps. Stant Manufacturing Company. 299,973; Jan. 3; Serial No 326,963; published Oct. 18, 1932.
Vehicles equipped with transport bodies. Six wheel. Federal Motor Truck Company. 299,975; Jan. 3; Serial No. 327,784; published Oct. 25, 1932.

CLASS 21

Battery cells. American Hard Rubber Co. 40,406; renewed May 19, 1933.
Blower and electric heating element, unit space heaters, etc. Air-Way Electric Appliance Corporation. 300,006; Jan. 3; Serial No. 300,816; published Oct. 18, 1932.
Clamps, terminals and connectors, etc., Battery. Firestone Battery Company. 299,977; Jan. 3; Serial No. 328,090; published Oct. 18, 1932.
Electric welding machines. Edward G. Budd Manufacturing Company. 299,979; Jan. 3; Serial No. 329,129; published Oct. 25, 1932.
Electrical apparatus and appliances. American Sales Company. 300,130; Jan. 3.
Electrical apparatus, machines and supplies. Victor Electric Company. 91,530; renewed May 6, 1933.
Electrical house-wiring fixtures and apparatus. National Electric Products Corporation. 300,124; Jan. 3.
Heating pads, waffle irons, hot plates, Electric. Walgreen Co. 300,139; Jan. 3.
Lamps adapted to be combined with alarm clocks, Electric reading. Fess and Fischer. 299,983; Jan. 3; Serial No. 329,776; published Oct. 25, 1932.
Lamps etc., Electric floor, table, wall and ceiling. W. A. Adams. 299,982; Jan. 3; Serial No. 329,731; published Oct. 25, 1932.
Plugs, Spark. American Auto Accessories Stores, Inc. 299,987; Jan. 3; Serial No. 330,006; published Oct. 18, 1932.
Plugs, Spark. Atlas Supply Company. 299,974; Jan. 3; Serial No. 327,125; published Oct. 18, 1932.
Radio receiving sets, storage batteries, electric fans, etc. Harrison Wholesale Company. 299,980; Jan. 3; Serial No. 329,187; published Oct. 18, 1932.

CLASS 23

Cutlery. Chicago Mail Order Company. 300,095; Jan. 3; Serial No. 327,580; published Oct. 25, 1932.
Farm machine for soil cultivation. Rototiller, Inc. 300,066; Jan. 3; Serial No. 326,600; published Oct. 25, 1932.
Folders, matrix rollers, mat rollers, etc., Rotary. Duplex Printing Press Co. 300,083; Jan. 3; Serial No. 313,469; published Oct. 25, 1932.
Knives and carvers, clippers, etc. Friedr. Herder Abr. Sohn. 300,084; Jan. 3; Serial No. 315,400; published Nov. 24, 1931.
Lathes and drill presses. Delta Manufacturing Company. 300,036; Jan. 3; Serial No. 329,674; published Oct. 25, 1932.
Pumps and parts therefor. Byron Jackson Co. 300,038–9; Jan. 3; Serial Nos. 329,191–2; published Oct. 25, 1932.
Pumps, Centrifugal. Goulds, Pumps, Incorporated. 300,093; Jan. 3; Serial No. 329,113; published Oct. 25, 1932.
Pumps, Centrifugal. A. R. Wilfley and Sons, Inc. 300,105; Jan. 3.
Razor blades. World's Products Co. 300,031; Jan. 3; Serial No. 330,113; published Oct. 25, 1932.
Razors and razor blades. Prybrands, Inc. 300,034; Jan. 3; Serial No. 329,839; published Oct. 18, 1932.
Saws and saw blades. Victor Saw Works, Inc. 300,040; Jan. 3; Serial No. 323,151; published Oct. 18, 1932.
Scythes. Emerson & Stevens Mfg. Co. 300,035; Jan. 3; Serial No. 329,705; published Oct. 25, 1932.
Sewing machines and sewing machine attachments and parts thereof. Singer Manufacturing Co. 39,791; renewed Feb. 10, 1933.
Typewriters and parts. Mass Production Corporation. 300,032; Jan. 3; Serial No. 330,045; published Oct. 18, 1932.
Typewriting machines and parts thereof and therefor. Royal Typewriter Company. 300,029; Jan. 3; Serial No. 330,208; published Oct. 18, 1932.
Wrenches, wrench handles, screw drivers, etc. Snap-On Tools, Inc. 300,086; Jan. 3; Serial No. 316,137; published Oct. 25, 1932.

CLASS 26

Lenses, Ophthalmic. B. Kanstoroom. 300,123; Jan. 3.
Meters, Gas. Pittsburgh Equitable Meter Company. 300,090; Jan. 3; Serial No. 318,322; published Oct. 25, 1932.
Ophthalmic frames and mountings. Bausch & Lomb Optical Company. 300,120; Jan. 3.

CLASS 27

Watches and clocks. Wallenstein Mayer Company. 300,061; Jan. 3; Serial No. 325,356; published Oct. 18, 1932.
Watches and their attached bracelets. Bracelet. Bulova Watch Company. 300,102; Jan. 3.

CLASS 28

Brooches, bracelets, rings, etc. S. H. Kress & Co. 300,044; Jan. 3; Serial No. 323,339; published Oct. 18, 1932.
Jewelry. Gamma Phi Beta. 299,989; Jan. 3; Serial No. 330,085; published Oct. 25, 1932.
Rings. Albert S. Samuels Co. 300,012; Jan. 3; Serial No. 330,129; published Oct. 25, 1932.
Rings and bracelets. H. Panlson. 299,993; Jan. 3; Serial No. 322,471; published Oct. 25, 1932.

CLASS 29

Brushes. Geo. Borgfeldt & Co. 91,314; renewed Apr. 29, 1933.

CLASS 30

Chinaware. Homer Laughlin China Co. 89,362; renewed Dec. 10, 1932.

CLASS 32

Chairs and tables. E. A. Clore. 300,064; Jan. 3; Serial No. 329,737; published Oct. 18, 1932.
Pillows and cushions. American Feather Products Corporation. 300,058; Jan. 3; Serial No. 326,451; published Oct. 18, 1932.
Springs, Bed. Fort Pitt Bedding Company. 300,062; Jan. 3; Serial No. 330,390; published Oct. 25, 1932.
Table and seats, Folding or collapsible. I. MacDonald. 300,059; Jan. 3; Serial No. 329,584; published Oct. 18, 1932.

CLASS 34

Glare eliminators. J. E. Tate. 300,037; Jan. 3; Serial No. 329,512; published Oct. 25, 1932.

CLASS 35

Rubber goods. Gutta Percha & Rubber Mfg. Co. 91,338; renewed Apr. 29, 1933.
Tires, Pneumatic rubber. Pharis Tire and Rubber Company. 300,109; Jan. 3.

CLASS 36

Harp, Jew's. New York Merchandise Co. Inc. 300,089; Jan. 3; Serial No. 318,285; published Oct. 18, 1932.

CLASS 37

Bill files, filing books, file signals, etc. Library Efficiency Corporation. 299,930; Jan. 3; Serial No. 328,736; published Oct. 25, 1932.
Books and loose leaf binders, Blank. McCrory Stores Corporation. 299,988; Jan. 3; Serial No. 330,047; published Oct. 18, 1932.
Books of notes, receipts, checks, printed forms, loose leaf covers, etc. Associated Stationers Supply Company. 300,085; Jan. 3; Serial No. 315,960; published Oct. 25, 1932.
Crayons. Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth. 299,955; Jan. 3; Serial No. 329,859; published Oct. 18, 1932.
Filters and filtering-paper. Carl Schleicher & Schüll. 89,067; renewed Nov. 5, 1932.
Paper. Copy Papers Inc. 300,118; Jan. 3.
Paper. Fibreboard Products Inc. 299,995; Jan. 3; Serial No. 318,829; published Oct. 25, 1932.
Paper, Blotting. District of Columbia Paper Manufacturing Company. 300,003; Jan. 3; Serial No. 304,754; published Oct. 18, 1932.
Paper, Bond. Fox River Paper Company. 299,950; Jan. 3; Serial No. 330,295; published Oct. 25, 1932.
Paper, bond paper, paper towels, Wrapping. Brown company. 299,991; Jan. 3; Serial No. 330,196; published Oct. 18, 1932.
Paper, Toilet. Capital Paper Company. 300,074; Jan. 3; Serial No. 330,221; published Oct. 18, 1932.
Paper, Toilet. Capital Paper Company. 300,075; Jan. 3; Serial No. 330,223; published Oct. 18, 1932.
Paper, Toilet. Northern Paper Mills. 299,934; Jan. 3; Serial No. 327,830; published July 19, 1932.
Paper, Toilet. Peerless Paper Mills, Inc. 299,931; Jan. 3; Serial No. 328,182; published Oct. 25, 1932.
Paper, Toilet. Seminole Paper Corporation. 300,122; Jan. 3.
Paper towels. Bay West Paper Company. 300,138; Jan. 3.
Paper towels, napkins and tissue paper. Fort Howard Paper Company. 299,956; Jan. 3; Serial No. 329,893; published Oct. 18, 1932.
Paper, Waxed. Kuhmarker Manufacturing Company. 91,492; renewed May 6, 1933.
Paper, Writing and printing. American Writing Paper Company. 91,543; renewed May 13, 1933.
Paper, Writing and printing. Harding-Jones Paper Company. 299,949; Jan. 3; Serial No. 330,125; published Oct. 25, 1932.
Registers, Autographic. American Sales Book Company. 299,928; Jan. 3; Serial No. 329,419; published Oct. 18, 1932.
Tissue, Toilet. Menasha Products Company. 299,948; Jan. 3; Serial No. 329,803; published Oct. 25, 1932.
Tissue, Toilet. Schwabacher Bros. & Co. 300,125; Jan. 3.

CLASS 38

Books. G. & C. Merriam Company. 300,136; Jan. 3.
Cards and newspaper columns, Racing. L. Kaplan. 300,076; Jan. 3; Serial No. 330,372; published Oct. 18, 1932.
Diaries and calendars. Samuel Ward Company. 91,534; renewed May 6, 1933.
Magazine. Dell Publishing Co. Inc. 299,986; Jan. 3; Serial No. 329,982; published Oct. 18, 1932.
Magazine. Popular Publications, Inc. 299,996; Jan. 3; Serial No. 318,719; published Oct. 25, 1932.
Periodical. Brown and Findeisen, Inc. 299,990; Jan. 3; Serial No. 330,158; published Oct. 25, 1932.
Periodical. Florida Growers Publishing Company. 91,471; renewed May 6, 1933.
Publication. Parents' Publishing Association, Inc. 300,097; Jan. 3; Serial No. 328,181; published Oct. 18, 1932
Publication. Topics Publishing Company. 299,984; Jan. 3; Serial No. 329,780; published Oct. 18, 1932.

CLASS 39

Coats. Kenglo Coats, Inc. 300,063; Jan. 3; Serial No. 329,994; published Oct. 25, 1932.
Coats, vests, trousers, etc. J. Schoeneman, Incorporated. 300,110; Jan. 3.
Corsets, brassières, camisoles, and petticoats, etc. American Lady Corset Co. 299,943; Jan. 3; Serial No. 329,128; published Oct. 11, 1932.
Dresses. Jack Liss Dress Corp. 300,137; Jan. 3.
Dresses, suits and lingerie. M. Blume. 300,009; Jan. 3; Serial No. 286,854; published Oct. 1, 1929.
Hats, Men's felt. Ferry Hats, Inc. 299,939; Jan. 3; Serial No. 329,707; published Oct. 11, 1932.
Hats, Women's. R. H. Macy & Co. 299,938; Jan. 3; Serial No. 329,717; published Oct. 11, 1932.
Overalls, playsuits, and sunsuits, Children's. Star Union Overall Co. 300,060; Jan. 3; Serial No. 329,102; published Oct. 4, 1932.
Shoe heels. American New Fashion Heel Corporation. 299,942; Jan. 3; Serial No. 329,216; published Oct. 11, 1932.
Shoes. J. Edwards & Co. 299,941; Jan. 3; Serial No. 329,224; published Oct. 11, 1932.
Stockings. E. W. Decker. 89,997; renewed Jan. 28, 1933.
Underwear. Merit Underwear Co. 300,113; Jan. 3.
Underwear, Knitted. Norwich Knitting Company. 300,111; Jan. 3.
Underwear, hosiery, and caps, Knitted. William Carter Company. 89,969; renewed Jan. 21, 1933.

CLASS 40

Buttons, buckles, pins. Sterling Button Co. Inc. 299,944; Jan. 3; Serial No. 329,125; published Oct. 18, 1932.

CLASS 42

Cloths and stuffs of wool, worsted or hair. William Fulton & Sons Limited. 40,368; renewed May 12, 1933.
Handkerchiefs. Rusch & Co. 90,138; renewed Feb. 4, 1933.

CLASS 43

Thread. Spool Cotton Company. 89,961; renewed Jan. 21, 1933.
Threads, yarns, and novelty yarns. National Silk Company. 300,131 Jan. 3.

CLASS 44

Air-douches, and hair-drying apparatus, Electric. Elektricitätsgesellschaft "Sanitas" mit beschrankter Haftung. 81,179; renewed Apr. 22, 1933.
Dissecting, post mortem and general operating instruments. Fred. Haslam & Co. 300,143; Jan. 3.
Driers and steamers and therapeutic lamps. Martin Brothers Electric Company. 300,127; Jan. 3.
Hot-water bags and ice-bags and stoppers for same. Meinecke & Co. 40,405; renewed May 19, 1933.
Orange-wood sticks and nail boards. R. Hudnut. 91,214; renewed Apr. 22, 1933.
Surgical devices for holding bandages. E. Freiberg. 300,103; Jan. 3.
Surgical dressings. R. McNeil. 300,108; Jan. 3.

CLASS 46

Anchovies and antipasto. Romanoff Caviar Company. 300,080; Jan. 3; Serial No. 324,008; published Oct. 25, 1932.
Apples and fruits, Evaporated or sun dried. De Hoff & Gaylord. 300,100; Jan. 3; Serial No. 318,193; published Oct. 18, 1932.
Butter (oleomargarin), Artificial. Utrecht Export Cy. "Griendt Brothers," Ltd. 89,308; renewed Dec. 3, 1932.
Candy. L. Possenheim. 300,046; Jan. 3; Serial No. 328,105; published Oct. 25, 1932.
Canned fruits, dried fruits, and raisins. California Fruit Canners Association. 81,167; renewed Apr. 22, 1933.
Canned salmon. Kadiak Fisheries Company. 300,008; Jan. 3; Serial No. 299,136; published Oct. 18, 1932.
Canned sauerkraut and tomatoes. C. R. Hirzel. 300,048; Jan. 3; Serial No. 329,797; published Oct. 25, 1932.
Canned vegetables and tomato sauce Scaramelli & Company. 300,054; Jan. 3; Serial No. 327,417; published Oct. 18, 1932.
Canned vegetables, sauerkraut, catsup, etc. Stokely Brothers & Company. 300,045; Jan. 3; Serial No. 328,282; published Oct. 25, 1932.
Cereal breakfast food. Tennessee Cereal Company. 300,049; Jan. 3; Serial No. 329,540; published Oct. 25, 1932.
Cheese. H. Rudolff. 299,968; Jan. 3; Serial No. 330,167; published Oct. 25, 1932
Cheese. Schwendermans. 299,959; Jan. 3; Serial No. 38,039; published Oct. 18, 1932.
Coffee. Duncan Coffee Co. 299,961; Jan. 3; Serial No. 328,781; published Oct. 25, 1932.
Coffee. Standard Brands Incorporated. 300,004; Jan. 3; Serial No. 303,391; published Oct. 18, 1932.
Coffees. Sanka Coffee Corporation. 299,962; Jan. 3; Serial No. 329,155; published Oct. 18, 1932.

Confectionery. Mason, Au & Magenheimer Confectionery Manufacturing Company. 89,305; renewed Nov. 18, 1932.
Confections, Frozen. Baker Ice Machine Co., Inc. 300,053; Jan. 3; Serial No. 325,979; published Oct. 18, 1932.
Confections, Frozen. Eskimo Pie Corporation. 300,055; Jan. 3; Serial No. 328,867; published Oct. 18, 1932.
Eggs in liquid and dried form, Broken. Tranin Egg Products Co. 299,945; Jan. 3; Serial No. 325,244; published Oct. 18, 1932.
Flour, Wheat. Black Bros. Flour Mills. 300,072; Jan. 3; Serial No. 324,454; published Oct. 11, 1932.
Foods. Gordon, Sewall & Co. 91,085; renewed Apr. 15, 1933.
Fruits, Fresh citrus. Tapo Citrus Association. 300,051; Jan. 3; Serial No. 320,511; published Oct. 18, 1932.
Grapes, Fresh. D. H. Bagdasarian & Sons Inc. 300,142; Jan. 3.
Jams, jellies, marmalade, etc. Wagstaffe Limited. 300,079; Jan. 3; Serial No. 324,811; published Oct. 25, 1932.
Macaroni. Independent Macaroni Co. 300,082; Jan. 3; Serial No. 314,158; published Oct. 25, 1932.
Mayonnaise, salad and French dressing, etc. John F. Jelke Company. 300,052; Jan. 3; Serial No. 329,898; published Oct. 25, 1932.
Meat. H. G. Mustard. 299,967; Jan. 3; Serial No. 329,834; published Oct. 18, 1932.
Milk, Malted. Superior Packing Corp. 300,135; Jan. 3.
Nuts. R. A. Kerr & J. F. Hopkins. 300,081; Jan. 3; Serial No. 324,226; published Oct. 25, 1932.
Olive oil. J. S Acero. 300,077; Jan 3; Serial No. 319,518; published Oct. 25, 1932.
Olive-oil, canned tunny fish, macaroni, etc. D. Lombardy. 300,057; Jan. 3; Serial No. 328,614; published Oct. 25, 1932.
Powdered preparation for malted milk beverages. Skagit County Dairymen's Association. 300,056; Jan. 3; Serial No. 329,100; published Oct. 18, 1932.
Ravioli and food flavoring sauce. Delray Corporation. 300,078; Jan. 3; Serial No. 323,891; published Oct. 18, 1932.
Sandwiches and box lunches, Prepared. A. W. Porter. 300,050; Jan. 3; Serial No. 328,645; published Oct. 25, 1932.
Sardines. Seacoast Canning Co. 91,807; renewed May 27, 1933.
Tomato juice. E. R. Shaw. 300,117; Jan. 3.
Tomato sauce. J. Savarese. 399,965; Jan. 3; Serial No. 329,656; published Oct. 18, 1932.
Wafers. Chicago Biscuit & Cone Co. 300,005; Jan. 3; Serial No. 302,930; published Oct. 18, 1932.
Wheat flake food, Malted. R. T. Davis Mill & Mfg. Co. 40,006; renewed Mar. 31, 1933.
Whey, Powdered. E. R. Squibb & Sons. 300,047; Jan. 3; Serial No. 329,905; published Oct. 25, 1932.

CLASS 48

Porter, ale, and lager-beer. Old Colony Breweries Co. 90,729; renewed Mar. 18, 1933.
Sake, Japanese. H. K. Shoten. 89,752; renewed Jan. 7, 1933.

CLASS 49

Whisky, Straight Scotch. D. P. McDonald & Sons, Limited. 88,332; renewed Sept. 10, 1932.

CLASS 50

Fire resistant fabrics. Fire Proof Fabrics Sales Corporation. 299,971; Jan. 3; Serial No. 330,343; published Oct. 25, 1932.
Monuments, Granite. H. P. Hinman Company. 300,140; Jan. 3.
Textile fabrics for window shades, Coated. Pantasote Leather Company. 299,972; Jan. 3; Serial No. 330,351; published Oct. 25, 1932.

LIST OF LABELS

Alice and Evelyn. For Women's Apparel. Alice & Evelyn. 41,600; Jan. 3.
A Nar-O-Fold Product. For Paper Folded Napkins. National Paper Napkin Mfg. Company. 41,611; Jan. 3.
Ardmore Chocolates. For Chocolates. United Paper Box Mfg. Co. 41,617; Jan. 3.
Cavos. For Embalming Fluid. Embalmers' Supply Company. 41,605; Jan. 3.
Coroco Tire Chains. For Tire Chains. Columbian Rope Company. 41,603; Jan. 3.
Dairy Lane—Good Food. Quick! For Chicken Pies, Meat Pies, Sandwiches, Salads, Pies, Cakes, Etc. B/G Sandwich Shops, Inc. 41,601; Jan. 3.
Duo-Escohol. For Embalming Fluid. Embalmers' Supply Company. 41,606; Jan. 3.
Duo-Raa-Co. For Embalming Fluid. Embalmers' Supply Company. 41,604; Jan. 3.
Eurasian Health Tea. For Health Tea. Eurasian Health Products Co. 41,607; Jan. 3.
John Alden. For Butter. Sutherland Paper Company. 41,615; Jan. 3.
Kopy-Kat, Lots of Fun. For Pictures. W. E. Wilson. 41,620; Jan. 3.
Kopy-Kat, Watercolor Paint Set. For Water Color Paint Sets. W. E. Wilson. 41,621; Jan. 3.
Morso. For Soap. Purol Manufacturing Co. 41,612; Jan. 3.
Mynderse—Since 1885. For Ginger Ale. A. W. Mynderse. 41,610; Jan. 3.
Pink Oil Massage Cream. For Massage Cream, Skin Softener and Skin Cleanser. A. J. Krank Company. 41,609; Jan. 3.
Rosco Sheer Fabrics. For Sheer Fabrics. Rosen Brothers Frocks, Inc. 41,618; Jan. 3.
Rose Skin Food. For Skin Food, a Cold Cream and Massage Cream. A. J. Krank Company. 41,608; Jan. 3.
Roux Supertint—The Scientific Hair Coloring that yields accurate and dependable results. For Hair Coloring. Roux Laboratories, Inc. 41,614; Jan. 3.
Shot through with Quality! With every Shot of the Loom, lively Wool is anchored firmly in place by the Bigelow True-Tension Weave. For Rugs. Bigelow-Sanford Carpet Co. 41,602; Jan. 3.
Tetley Sunflower Brand. For Tea. Joseph Tetley & Co. 41,616; Jan. 3.
Tincture Digismith. For Digitalis. F. A. Upsher Smith. 41,618; Jan. 3.
Vitaminized. For Candy. Williamson Candy Company. 41,619; Jan. 3.
Wright Blocks. For Toy Building Blocks. J. L. Wright. 41,622; Jan. 3.

LIST OF PRINTS

All the Richness and Flavor of 8 Half-Pints of Table Cream Are In Every Pound of Armour's Full Cream Cloverbloom Butter. For Butter, Meats, and Bacon. Armour and Company. 13,991; Jan. 3.
All the Richness and Flavor of 8 Half-Pints of Table Cream Are In Every Pound of Armour's Full Cream Cloverbloom Butter. For Butter, Canned Meats, and Ham. Armour and Company. 13,998; Jan. 3.
Chilton Pen. For Fountain Pens. Chilton Pen Company. 14,010; Jan. 3.
Chores . . For Children Under Seven? For Wheat Breakfast Food. Cream of Wheat Corporation. 14,001; Jan. 3.
Delicious Flavor and Unusual Nourishment That's What You Get When You Cook and Bake With Armour's Pure Lard. For Lard, Bacon, and Butter. Armour and Company. 13,995; Jan. 3.
5 Ways to Use Armour's Fixed Flavor Star Ham Leftovers. For Ham, Bacon, and Lard. Armour and Company. 14,001; Jan. 3.
For Unrivaled Taste and Tenderness! Armour's Fixed Flavor Star Ham for Your Easter Dinner. For Ham and Bacon. Armour and Company. 13,994; Jan. 3.
For Variety . . . Convenience . . . And Economy Armour's Veribest Corned Beef . . . Ox Tongue . . . Vienna Sausage. For Canned Meats, Ham, and Butter. Armour and Company. 14,000; Jan. 3.
It's Richer . . . It's Fresher . . . And the Delicious Goodness of Armour's Full Cream Cloverbloom Butter Never Varies. For Butter, Lard, and Canned Meats. Armour and Company. 13,993; Jan. 3.
It's Richer . . . It's Fresher . . . And the Delicious Goodness of Armour's Full Cream Cloverbloom Butter Never Varies. For Butter, Lard, and Canned Meats. Armour and Company. 14,003; Jan. 3.
Mild? . . . Yes!—But If You Want Mildness With Flavor Just Try Armour's Fixed Flavor Star Bacon. For Bacon, Lard, and Canned Meats. Armour and Company. 13,996; Jan. 3.
Mild? . . . Yes!—But If You Want Mildness With Flavor Just Try Armour's Fixed Flavor Star Bacon. For Bacon, Lard, and Ham. Armour and Company. 14,004; Jan. 3.
Now! Anybody a Perfect Biscuit Maker! For Biscuit Flour. General Mills, Inc. 14,012; Jan. 3.
Now—Here's a Finer Tasting, Milder and More Tender Ham . . . It's Armour's Fixed Flavor Star Ham. For Ham and Bacon. Armour and Company. 13,992; Jan. 3.
On A Roof In Manhattan. For Clothing. Bradley Knitting Company. 14,007; Jan. 3.
"Our Best-Dressed Beaches Are All of A Stripe." For Clothing. Bradley Knitting Company. 14,008; Jan. 3.
Outlawed: The Rule of Thumb! For Rugs. Bigelow-Sanford Carpet Co. 14,006; Jan. 3.

Save Money . . . Save Time . . . And Make A Meal A Success With Armour's Veribest Corned Beef. For Corned Beef, Butter, and Bacon. Armour and Company. 13,999; Jan. 3.

Tenderness! Mildness! Matchless Flavor! Armour's Star Bacon Fixed Flavor. For Bacon, Butter, and Canned Meats. Armour and Company. 13,997; Jan. 3.

Tenderness! Mildness! Matchless Flavor! Armour's Star Bacon Fixed Flavor. For Bacon, Butter, and Ham. Armour and Company. 14,002; Jan. 3.

The Days. For Cleansing Cream, Skin Tonic, Skin Cream, Orange Skin Food. Elizabeth Arden of New York Ltd. 13,990; Jan. 3.

We're Always Chasing Rainbows. For Clothing. Bradley Knitting Company. 14,009; Jan. 3.

Your Pies . . . Your Biscuits . . . Will Taste So Much Better When You Use Armour's Star Pure Lard. For Lard, Bacon, and Ham. Armour and Company. 14,005; Jan. 3.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 3D DAY OF JANUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acetol Products, Inc. (See Zimmerli, Adolph, assignor.)

Addressograph Company. (See Fassmann, Bruno, assignor.)

Addressograph Company. (See McCain, Cecil C., assignor.)

Adlake Company, The. (See Hamm, William S., assignor.)

Adlake Company, The. (See Larson, Carl H., assignor.)

Agfa Ansco Corporation. (See Griessbach, R., and Kollmann, assignors.)

Ahlbell Battery Container Corporation. (See Hunter, John L., assignor.)

Ahrens-Fox Fire Engine Company, The. (See Fox, Charles H., assignor.)

Aktiebolaget Ljungströms Angturbin. (See Lysholm, Alf, assignor.)

Alger, Don L., Avalon, Calif. Amusement device. 1,893,121; Jan. 3.

Allan, William T., Shotts, Scotland. Metal reenforcement for highways construction. 1,893,387; Jan. 3.

Allgemeine Elektricitats-Gesellschaft. (See Bäbler, Justus, assignor.)

Allin, Matthew C. (See Robertson, R. M., and Allin.)

Altman, Beatrice, Brooklyn, assignor to L. J. Hyams and Company, New York, N. Y. Textile fabric or the like. Des. 88,847; Jan. 3.

Altman, Beatrice, Brooklyn, assignor to L. J. Hyams and Company, New York, N. Y. Textile fabric or the like. Des. 88,848; Jan. 3.

American Air Filter Company, Inc. (See Birkhols, Hans E., assignor.)

American Bemberg Corporation. (See Hofmann, H., and Korff, assignors.)

American Bosch Magneto Corporation. (See Lang, Gustave J., assignor.)

American Cyanamid Company. (See Christmann, Ludwig J., assignor.)

American Electric Heating Company. (See Gannon, J. E., and Winter, assignors.)

American Glanzstoff Corporation. (See Herrmann, Conrad, assignor.)

American LaFrance and Foamite Corporation. (See Harte, James A., assignor.)

American Metal Products Corporation (Delaware). (See Kauffman, Samuel, assignor.)

American Murex Corporation. (See Clarke, Edward J., assignor.)

American Pulverizer Company. (See Elzemeyer, E. E., and Griesedieck, assignors.)

American Radiator Company. (See Eggleston, Lewis W., assignor.)

American Radiator & Standard Sanitary Corporation. (See Murray, Joseph B., assignor.)

American Rubber Products Company. (See Lindh, Carl T. G., assignor.)

American Thermos Bottle Company, The. (See Schlumbohm, Peter, assignor.)

Anabisa, Tiofilo L. (See Pineda, U., and Anabisa.)

Anderson, Arvid E., Lansdowne, Pa., assignor to General Electric Company. System of electric distribution. 1,893,347; Jan. 3.

Anderson, Arvid E., Lansdowne, Pa., assignor to General Electric Company. Circuit breaker control system. 1,893,348; Jan. 3.

Anings, Johannes, Eindhoven, assignor to N. V. Maatschappij Tot Exploitatie van Uitvindingen, Rotterdam, Netherlands. Device for stringing glass bodies on a mandrel. 1,892,744; Jan. 3.

Apple, Edward M., et al., executors. (See Apple, Vincent G.)

Apple, Herbert F., et al., executors. (See Apple, Vincent G.)

Apple, Vincent G., deceased, Dayton, Ohio; H. F. and E. M. Apple and G. Darroch, executors. Motor for driving flexible shafts. 1,893,261; Jan. 3.

Apple, Vincent G., deceased; H. F. and E. M. Apple and G. Darroch, executors, Dayton, Ohio. Reenforced electrical coil. 1,893,262; Jan. 3.

Arenz, John A., Mount Vernon, N. Y., assignor to Lock Nut Company, a division of International Screw Company, Wilmington, Del. Nut lock. 1,893,067; Jan. 3.

Arite Corporation. (See Carter, William D., assignor.)

Armitage, Joseph B. (See Kearney, E. J., and Armitage.)

Arnault, Earl T., Tacoma, Wash. Wall clock. Des. 88,849; Jan. 3.

Ascherl, Alfons, and W. Gruber, Burghausen, assignors to Dr. Alexander Wacker Gesellschaft fur Elektrochemische Industrie, Munich, Bavaria, Germany. Drawing cellulose acetate threads. 1,892,923; Jan. 3.

Aske, Irving E., W. F., and L. E., Minneapolis, Minn. Electromagnetic valve. 1,892,825; Jan. 3.

Aske, Leonard E. (See Aske, Irving E., W. F., and L. E.)

Aske, William F. (See Aske, Irving E., W. F., and L. E.)

Associated Electric Laboratories, Inc. (See Crocker, Thomas F., assignor.)

Associated Electric Laboratories, Inc. (See Steerup, Godfrey, assignor.)

Atkinson, Cecil C. (See Jahn, F. M., and Atkinson.)

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. High tension installation. 1,893,318; Jan. 3.

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Electrical protective apparatus. 1,893,319; Jan. 3.

Austin, Herbert, Bromsgrove, England. Motor vehicle body having collapsible head. 1,893,349; Jan. 3.

Austin, Herbert, Bromsgrove, England. Motor vehicle body having collapsible head. 1,893,350; Jan. 3.

Austin, Herbert, Bromsgrove, England. Vehicle body having a collapsible head. 1,893,351; Jan. 3.

Austin, Walter M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit interrupter. 1,893,046; Jan. 3.

"Automatic" Sprinkler Company of America. (See Rider, Harry N., assignor.)

Avila, Charles F. (See Elmer, W. B., and Avila.)

Babb, Elmer, New York, and A. W. Zaborowski, Jamaica, N. Y. Ink or other fluid container. Des. 88,850; Jan. 3.

Babcock & Wilcox Company, The. (See Black, John E., assignor.)

Babitch, Abraham M., Flint, Mich. Variable stroke fuel pump. 1,893,215; Jan. 3.

Babitch, Abraham M., Flint, Mich. Linkage for fuel pumps. 1,893,216; Jan. 3.

Babitch, Abraham M., Flint, Mich. Fuel pump with lost motion lever. 1,893,217; Jan. 3.

Babitch, Abraham M., and G. W. Harry, Flint, Mich. Fuel pump of reversed type. 1,893,218; Jan. 3.

Bäbler, Justus, assignor to Allgemeine Elektricitats-Gesellschaft, Berlin, Germany. Amplifying arrangement with tubes connected in counter cadence. 1,892,924; Jan. 3.

Backes, Ludwig J., Lyons, Ill. Folding door. 1,893,263; Jan. 3.

Backman, Charles A., Providence, R. I. Hair waving pad. 1,893,352; Jan. 3.

Bacollini, August, Brooklyn, assignor to William Willhelm Co., Inc., New York, N. Y. Textile fabric or similar article. 88,851; Jan. 3.

Baggi, Ugo. (See Barberis, M., and Baggi.)

Baker, Edward F., Shepherdstown, Pa. Stringed musical instrument. 1,893,264; Jan. 3.

Baker, Roy O. (See Council, O., Beaty and Baker.)

Baldeweg, Max, Dresden, Germany. Roll film box camera. 1,893,122; Jan. 3.

Baldwin, Louis C., Chicago, Ill. Combination key and coin container. 1,893,265; Jan. 3.

Baldwin, Luther C., assignor to U. S. Bobbin & Shuttle Company, Providence, R. I. Bobbin and bobbin reenforcing means. 1,893,320; Jan. 3.

Ball, George E. (See Perry, E. D., and Ball.)

Ballard, Harrison A., Timber Lake, S. Dak. Motor vehicle screen. 1,892,975; Jan. 3.

Ballou, Richard P., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electric train signalling apparatus. 1,892,716; Jan. 3.

Baninger, John H., Bristol, assignor to The New Departure Manufacturing Company, Bristol, Conn. Bearing mounting. 1,893,219; Jan. 3.

Barbaron, Marius J-B, Neuilly-sur-Seine, France. Packing joint for water cooled internal combustion engines. 1,893,192; Jan. 3.

Barberis, Mario and U. Baggi, Turin, assignors, by mesne assignments, to S. I. R. T. I. (Societa Italiana Reti Telefoniche Interurbane), Milan, Italy. Electric cable. 1,893,266; Jan. 3.

Barks, Frank S., assignor to Lincoln Engineering Company, St. Louis, Mo. Lubricating apparatus. 1,893,464; Jan. 3.

Barrett Company, The. (See Miller, Stuart P., assignor.)

Barrett, Harvey N., Tiffin, assignor to Dolomite, Inc., Cleveland, Ohio. Refined magnesia product from mineral sources of magnesia and making same. 1,893,047; Jan. 3.

Barycz, Frank V., Los Angeles, Calif. Collapsible fuselage for airplanes and the like. 1,892,925; Jan. 3.

Bastian Brothers Company. (See Schnarr, Edward J., assignor.)

Baum, Kenneth M. (See Ralston O. C., and Baum.)

Bexenden, Thomas G., Watford, and J. R. Collyear, Bushey, England. Spool for photographic films. 1,892,717; Jan. 3.

Bayer, Ernest G., Middle Village, Long Island, N. Y. Thermometer. 1,893,388; Jan. 3.
Beardsley & Wolcott Manufacturing Company, The. (See Perry, E. D., and Ball, assignors.)
Beaty, John W. (See Council, O., Beaty and Baker.)
Beboutoff, Michel, Lyon, France, assignor to L. J. Hyams and Company, New York, N. Y. Printed textile fabric or similar article. 88,901; Jan. 3.
Beck, Kolier & Company. (See Linner, Franz, assignor.)
Becker, George H., assignor to The Bridgeport Coach Lace Company, Bridgeport, Conn. Narrow webbing. Des. 88,902; Jan. 3.
Becton, Dickinson & Co. (See Lawshe, Errol R., assignor.)
Bedford, Frederick G. H., et al. (See Parsons, C. A., and Rosen.)
Bell & Howell Company, The. (See Howell, Albert S., assignor.)
Bell Telephone Laboratories, Incorporated. (See Llewellyn, Frederick B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Peterson, Eugene, assignor.)
Bellman, Georg, assignor to Universelle Cigarettenmaschinen-Fabrik, J. C. Muller & Company, Dresden, Germany. Apparatus for erecting box shells. 1,893,389; Jan. 3.
Benjamin, Hamilton F., et al. (See Satterthwaite, Thomas W., assignor.)
Bennett, Owen G., assignor to Catalyst Research Corporation, Baltimore, Md. Hydrogenation process and catalyst therefor. 1,893,155; Jan. 3.
Benzick, William M., and O. W. Eck, St. Paul, Minn. Bait. 1,893,390; Jan. 3.
Bergman, Jerome E., Buffalo, and F. P. Ego, Kenmore, assignors to Bergman Tool Mfg. Co., Buffalo, N. Y. Battery tool. 1,893,353; Jan. 3.
Bergman, Sven R., Nahant, Mass., assignor to General Electric Company. Arc welding system. 1,893,354; Jan. 3.
Bergman Tool Mfg. Co. (See Bergman, J. E., and Ego, assignors.)
Berkshire Knitting Mills. (See White, Le Roy, assignor.)
Berlinger, Joseph, Company. (See van der Does, Jean, assignor.)
Bern, Frank, Cleveland, Ohio. Photographic printing device. 1,893,156; Jan. 3.
Berry, Roy, Olney, Ill. Liquid dispenser. 1,893,391; Jan. 3.
Berwind-White Coal Mining Company, The. (See Newbaker, Edward J., assignor.)
Beth, Hugo W. H., assignor to Norton Company, Worcester, Mass. Tunnel kiln car. 1,893,123; Jan. 3.
Bethlehem Steel Company. (See McGrew, John A., assignor.)
Bethlehem Steel Company. (See Shimer, W. R., and Daniels, assignors.)
Bethlehem Steel Company. (See Ward, Clemson H., assignor.)
Bettison, David C., and F. H. Keaton, Omaha, Nebr. Rail fissure detector. 1,892,826; Jan. 3.
Betts, John H. (See Curtis, Henry E., assignor.)
Bickel, William A., Oak Park, Ill., assignor of one-third to H. W. Roberts and two-thirds to E. W. Thompson. Racket stringing vise. 1,893,267; Jan. 3.
Bicknell, Putnam P., Rockland, Me. Bush chisel. 1,893,355; Jan. 3.
Bigelow Sanford Carpet Co. (See Lehner, Charles, assignor.)
Bigelow Sanford Carpet Co. (See Travis, John S., assignor.)
Bilde, Tord E. D., Stockholm, Sweden, assignor to Inventia Patent-Verwertungs-Gesellschaft, Schaffhausen, Switzerland. Brush member. 1,892,926; Jan. 3.
Birkenbeuel, Julia H., administratrix. (See Casswell, Richard H., assignor.)
Birkholz, Hans E., Chicago, Ill., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky. Filtering material. 1,893,048; Jan. 3.
Biszantz, Fred, assignor to The Central Ohio Steel Products Company, Galion, Ohio. Invertible manifold and valve for hydraulic hoists. 1,893,124; Jan. 3.
Biszantz, Fred, assignor to The Central Ohio Steel Products Co., Galion, Ohio. Reversible pump for hydraulic hoists. 1,893,125; Jan. 3.
Black, John E., Rumson, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Heat transfer device. 1,892,778; Jan. 3.
Black, John S., Jasper, Ala. Revolving mail box post. 1,893,392; Jan. 3.
Blackmore, Charles C., assignor to The Dayton Toy & Specialty Company, Dayton, Ohio. Toy coaster wagon. 1,893,193; Jan. 3.
Blake, David K., Scotia, N. Y., assignor to General Electric Company. Electrical distribution system. 1,893,356; Jan. 3.
Blanc, Francis E., Park City, Utah. Cutting tool. 1,892,863; Jan. 3.
Blaylock, Raymond C., Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Control surface for aircraft. 1,892,927; Jan. 3.
Blokland Visser, Jan, assignor to Naamlooze Vennootschap: Koninklijke Maatschappij "de Schelde", Scheepsbouw en Werktuigenfabriek, Flushing, Netherlands. Passenger ship. 1,892,820; Jan. 3.
Blossom, John T., Shaker Heights, Ohio. Stocking stretcher. 1,893,220; Jan. 3.
Blumenfeld, Joseph, Paris, France, and M. Meyer, Karlsbad, Czechoslovakia, assignors, by mesne assignments, to Krebs Pigment and Color Corporation, Newark, N. J. Preparation of titanium pigments. 1,892,693; Jan. 3.
Blunt, James G., Schenectady, N. Y. Fluid pressure articulated conduit. 1,893,194; Jan. 3.
Bocler, Harry. (See Burrill, L. C., Bocler, and Hunter.)
Boenning, William M., Manitowoc, Wis. Folding furniture leg. 1,893,195; Jan. 3.
Bogopolsky, Jacques, Geneve-Acacias, Switzerland. Regulator device. 1,893,126; Jan. 3.
Bohn, Walter A., Lakewood, assignor to Master Products Company, Cleveland, Ohio. Casing for a bearing. Des. 88,903; Jan. 3.
Bohn, Walter A., Lakewood, assignor to Master Products Company, Cleveland, Ohio. Casing for a bearing. Des. 88,904; Jan. 3.
Bolich, Daniel B., Skidmore, Mo. Reading stand. 1,892,745; Jan. 3.
Bollmann, Hermann, and A. Schwieger, assignors to Hanseatische Muhlenwerke Aktiengesellschaft, Hamburg, Germany. Refinement of vegetable phosphatides. 1,893,393; Jan. 3.
Bondy, Hugo A., Ridgewood, N. J. Glove. 1,893,394; Jan. 3.
Booth, Frank A., El Segundo, Calif. Timing mechanism. 1,892,928; Jan. 3.
Booth, Harold S., G. G. Torrey, and M. Merlub-Sobel, Cleveland Heights, Ohio. Electrolytic deposition of metals. 1,893,221; Jan. 3.
Booth, Morris F., Chicago, Ill., assignor to Mullins Manufacturing Corporation, Salem, Ohio. Cooling unit for refrigerating systems. 1,893,321; Jan. 3.
Bosler, Wilson T., assignor to The U. G. I. Contracting Company, Philadelphia, Pa. Apparatus for cooling coke. 1,893,468; Jan. 3.
Boucher, Creed H., Burlingame, Calif. Undercar wiring duct system. 1,893,268; Jan. 3.
Boudette, Clayton M., Revere, Mass. Sound producing device. 1,893,049; Jan. 3.
Bousfield, Alfred, St. Johnsbury, Vt. Health scale. Des. 88,852; Jan. 3.
Bousfield, Alfred, St. Johnsbury, Vt. Infant scale. Des. 88,853; Jan. 3.
Bousfield, Alfred, assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Infant scale. 1,892,718; Jan. 3.
Braden, Elmer A., Springfield, Ill. Self contained oil seal. 1,893,012; Jan. 3.
Brand, Harry R., New York, N. Y. Token delivering machine. 1,893,013; Jan. 3.
Brassert, Walter O., Kalamazoo, Mich. Concrete silo wall member. 1,892,864; Jan. 3.
Broguet, Louis, Paris, France. Device for stabilizing and controlling aircraft provided with rotatable wings, of the helicopter type. 1,893,395; Jan. 3.
Breitwieser, Heinrich, Griesheim, near Darmstadt, assignor to Maschinenfabrik Augsburg-Nurnberg, A. G., Nuremberg, Germany. Eccentric lifting device. 1,893,014; Jan. 3.
Bresnahan, William H., Lynn, Mass., assignor to Compo Shoe Machinery Corporation, New York, N. Y. Affixing soles. 1,893,015; Jan. 3.
Bricker, Paul E., Michigan City, Ind. Headlight attachment. 1,892,976; Jan. 3.
Bridgeport Conch Lace Company, The. (See Becker, George H., assignor.)
Bridgeport Hardware Manufacturing Corporation, The. (See Curtis, Harry B., assignor.)
Bridges, James, London, England, assignor to Republic Flow Meters Company, Chicago, Ill. Pyrometer adapted to the control of temperature. 1,893,134; Jan. 3.
Bridier, Fernand, Paris, France. Textile fabric or similar article. Des. 88,854; Jan. 3.
Briggs & Stratton Corporation. (See Jacobi, Edward N., assignor.)
Bristol Aeroplane Company, Limited, The. (See Pearce, Llewellyn T., assignor.)
Brodsky, Michel, Paris, France, assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,855; Jan. 3.
Bronson, Adelbert E., assignor to The Dill Manufacturing Company, Cleveland, Ohio. Pressure indicator. 1,893,222; Jan. 3.
Broscombe, Henry, assignor of one-half to A. F. Kellett, Leeds, England. Ramp for use in re-railing vehicles. 1,892,977; Jan. 3.
Brower, Claude R., Santa Ana, and D. Z. Kirkham, San Pedro, Calif. Adjusting means for the tangent posts of gas meters. 1,892,827; Jan. 3.
Brown, Charles S., Syracuse, N. Y. Motor implement. 1,892,865; Jan. 3.
Brown, John G., Purcell, Okla. Gin saw filing machine attachment. 1,893,322; Jan. 3.
Brown, John L., San Bernardino, Calif. Portable log trimming machine. 1,893,016; Jan. 3.
Brown, Robert S., assignor, by mesne assignments to The New Britain-Gridley Machine Company, New Britain, Conn. Metal working machine. 1,892,929; Jan. 3.
Brown, Stanley W., Buffalo, N. Y. Thermionic amplifying device. 1,892,866; Jan. 3.
Bruce, Alfred W., New York, N. Y. Stay bolt construction. 1,893,017; Jan. 3.

Bruni, Giuseppe, and T. G. Levi, assignors to Societa Italiana Pirelli, Milan, Italy. Vulcanization of rubber. 1,892,719; Jan. 3.
Buchi, Alfred, Winterthur, Switzerland. Internal combustion engine. 1,893,127; Jan. 3.
Buck, George B., Moline, Ill. Fender and body straightening tool. 1,893,196; Jan. 3.
Buckeye Incubator Manufacturing Company, The. (See Sturgis, La Verne C., assignor.)
Budd, Edward G., Manufacturing Company. (See Tarbox, John P., assignor.)
Buhrle, Paul, Bronx, assignor to United Metal Goods Mfg. Co., Inc., Brooklyn, N. Y. Clock case. Des. 88,856; Jan. 3.
Builders Iron Foundry. (See Dolbey, H. S., and Smith, assignors.)
Bullough, Maynard, Ogden, Utah. Fish rod ferrule. 1,893,396; Jan. 3.
Bunge, Ralph W. (See Patitz, G. J., and Bunge.)
Burch, Clarence P., Louisville, Ky. Plow. 1,892,978; Jan. 3.
Burgess Battery Company. (See Zimmerman, James G., assignor.)
Burhenne, Henri, assignor to Davis & Furber Machine Company, North Andover, Mass. Tape condenser. 1,893,050; Jan. 3.
Burkle, Robert R., Woodcliff, N. J., assignor to Ward Leonard Electric Company. Electric controlling apparatus. 1,893,223; Jan. 3.
Burman, Frank V., St. Paul, Minn. Impeller for blowers. 1,892,930; Jan. 3.
Burnett, Clarence H., Crothersville, Ind. Cigar and cigarette holder. 1,893,269; Jan. 3.
Burnham, George B., Reno, Nev. Apparatus for obtaining sodium chloride. 1,892,760; Jan. 3.
Burr, William H., San Francisco, Calif. Electric finger nail file and buffer. 1,892,867; Jan. 3.
Burrill, Lennard C., H. Bocler, and N. M. Hunter, assignors to The Optimum Davit Company Limited, Wallsend-upon-Tyne, England. Crane structure. 1,893,157; Jan. 3.
Burroughs Adding Machine Company. (See Pasinski, Walter J., assignor.)
Burrows, Ernest E., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Height measuring attachment. 1,892,720; Jan. 3.
Buxton, Warner R., Longmeadow, Mass. Flexible pocket receptacle. 1,893,397; Jan. 3.
Byrnes, Clarence P. (See Stahle, Erik G., assignor.)
Caldwell, William J., assignor to The National Air Control Co. Inc., Kansas City, Mo. Radiator. 1,893,270; Jan. 3.
Calvert, John F., Huntington, Ind. Casement window holder. 1,893,128; Jan. 3.
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Load discharging gondola car. 1,892,868; Jan. 3.
Canty, Bert C. (See Linville, D. B., and Canty.)
Capstan Glass Company. (See Dreyfuss, Henry, assignor.)
Cardarelli, Victor A., Quincy, Mass. Writing pad holder. 1,892,721; Jan. 3.
Carew, Paul T., Orange, N. J. Prayer card. Des. 88,857; Jan. 3.
Carlson, Anthony E., Los Angeles, Calif. Well reaming device. 1,893,224; Jan. 3.
Carlson, Edwin G., East Providence, assignor to A. C. R. Speidel, doing business as Speidel Brothers, Providence, R. I. Adjustable bracelet structure. 1,893,271; Jan. 3.
Carlson, George, Bridgeport, Conn., assignor to General Electric Company. Bracket for outlet boxes. 1,893,357; Jan. 3.
Carter, William D., Caldwell, N. J., assignor to Airite Corporation, New York, N. Y. Humidifier. 1,892,694; Jan. 3.
Casswell, Richard H., deceased, Portland, Oreg.; Julia H. Birkenbeuel, administratrix. Identification system. 1,893,225; Jan. 3.
Catalyst Research Corporation. (See Bennett, Owen G., assignor.)
Celander, Philip A., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Stone construction. 1,892,761; Jan. 3.
Celanese Corporation of America. (See Ellis, George H., assignor.)
Celanese Corporation of America. (See Mellor, A., and McLellan, assignors.)
Central Metallic Casket Company. (See Raap, Peter H., assignor.)
Central Ohio Steel Products Company, The. (See Biszantz, Fred, assignor.)
Chain Belt Company. (See Merwin, John C., assignor.)
Chamberlain, John W., Akron, Ohio. Dry cleaning machine. 1,893,398; Jan. 3.
Champion Pneumatic Machinery Co. (See Rayfield, Frederick J., assignor.)
Chantler, William, Minneapolis, Minn. Charcoal heater. 1,893,358; Jan. 3.
Charpentier, Jean F. G. M. L., St. Cloud, France. Airplane constituted by a three-element wing. 1,893,129; Jan. 3.
Chelazzi, Mirko, and D. Frulli, Genoa, Italy. Fountain pen. 1,893,130; Jan. 3.
Cheney Brothers. (See George, Robert, assignor.)
Cherry-Burrell Corporation. (See Feldmeier, H., Wightman, and Steves, assignors.)
Chiles, Howard M., Champaign, assignor to Pyro-Pack Products Co., Chicago, Ill. Water soluble di-iodo-hydroxy-mercury fluorescein. 1,893,226; Jan. 3.
Chireix, Henri, and H. Goudet, Paris, France. High-speed printing telegraph. 1,893,158; Jan. 3.
Chireix, Henri, and H. Goudet, assignors to Compagnie Generale de Telegraphie Sans Fil, Paris, France. High-speed multiple telegraphy. 1,893,159; Jan. 3.
Choate, Roy E., Cedar Rapids, Iowa. Hydraulic hoist. 1,892,829; Jan. 3.
Christman, Peter J. (See Lyon, R. F., and Christman.)
Christmann, Ludwig J., Jersey City, N. J., assignor to American Cyanamid Company, New York, N. Y. Salts of organic di-thiophosphates. 1,893,018; Jan. 3.
Cincinnati Milling Machine Company, The. (See Ernst, H., and Nenninger, assignors.)
Circle A Products Corporation. (See Oberdorfer, H. D., and True, assignors.)
Clark, Stewart H., Union City, Ind. Gasket. 1,893,399; Jan. 3.
Clark, Thomas N., Dock Island, Ill. Device for handling automobile wheels and tires. 1,892,979; Jan. 3.
Clarke, Edward J., Charing Cross, England, assignor, by mesne assignments, to American Murex Corporation, New York, N. Y. Electrode for electric arc welding or soldering. 1,893,160; Jan. 3.
Clarke, Phillips H. (See Johnson, H. P., and Clarke.)
Clay Equipment Corporation. (See Clay, Joseph B., assignor.)
Clay, Joseph B., assignor to Clay Equipment Corporation, Cedar Falls, Iowa. Combination ventilator and smoke pipe. 1,893,272; Jan. 3.
Coghlin, B. J., Company Limited. (See McConkey, T. C., and Picard, assignors.)
Cohen-Venezian, Carlo, Turin, Italy. Vehicle for carrying aircraft parts and other loads. 1,893,227; Jan. 3.
Cohn, Samuel, assignor to Samcoe Holding Corporation, New York, N. Y. Method of and apparatus for treating tubular textile fabric. 1,893,197; Jan. 3.
Cole, Austin A., Cambridge, Mass. Mold for meat patties. 1,892,779; Jan. 3.
Collins, William A., Brooklyn, N. Y., assignor, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Toledo, Ohio. Temperature indicator. 1,893,400; Jan. 3.
Collins, William D. (See McComb, H. G., and Collins.)
Collyear, John R. (See Baxenden, T. G., and Collyear.)
Colonnese, Vittorino, Rome, Italy. Float structure. 1,892,746; Jan. 3.
Colt's Patent Fire Arms Manufacturing Co. (See Donovan, Arthur F., assignor.)
Columbia Axle Company, The. (See Harper, George W., assignor.)
Columbian Rope Company. (See Dodge, Milo C., assignor.)
Comings, Henry E. (See Gregory, E. E., and Comings.)
Compagnie Generale de Telegraphie Sans Fil. (See Chireix, H., and Goudet, assignors.)
Compo Shoe Machinery Corporation. (See Bresnahan, William H., assignor.)
Comstock & Wescott, Inc. (See Comstock, Daniel F., assignor.)
Comstock & Wescott, Inc. (See Whitney, Lyman F., assignor.)
Comstock, Daniel F., Brookline, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc. Heat exchange method and apparatus. 1,829,869; Jan. 3.
Comstock, Daniel F., assignor to Comstock & Wescott, Inc., Boston, Mass. Fluid system. 1,892,870; Jan. 3.
Condon, Edward T., New York, N. Y. Directional sign for motor vehicles. Des. 88,858; Jan. 3.
Conner, Edward A., Stratford, Conn., assignor to Magazine Repeating Razor Company, New York, N. Y. Magazine razor. 1,892,931; Jan. 3.
Consolidated Automatic Merchandising Corporation. (See Robinson, Andrew M., assignor.)
Consolidated Car-Heating Company. (See Hynes, Lee P., assignor.)
Constable, Charles E., assignor to The National Marking Machine Company, Cincinnati, Ohio. Truck lift. 1,893,273; Jan. 3.
Continental Can Company. (See McDonald, Charles D., assignor.)
Cook, Fred A., Rock Island, Ill. Shim. 1,892,932; Jan. 3.
Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Method and apparatus for refrigerating. 1,893,228; Jan. 3.
Corson, Ralph, Ashland, N. J. Indicating device. 1,893,198; Jan. 3.
Coryell, Charles. (See Komarek, MacPhail, and Coryell.)
Coryell, William C., assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio. Rolling mill. 1,892,933; Jan. 3.
Coryell, William C., assignor to Republic Steel Corporation, Youngstown, Ohio. Tension control for rolling mills. 1,892,934; Jan. 3.
Cosgrove, Caroline E., administratrix. (See Cosgrove, John W.)
Cosgrove, John W., deceased; C. E. Cosgrove, administratrix, Medford, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Coating apparatus. 1,893,161; Jan. 3.

Council, Owen, J. W. Beaty, and R. O. Baker, Mission, Tex. Border and panel connecting machine. 1,893,131; Jan. 3.
Court, Frank T., Moline, Ill., assignor to Court Tractor Equipment Company, Independence, Iowa. Tractor-driven cultivator. 1,893,069; Jan. 3.
Court Tractor Equipment Company. (See Court, Frank T., assignor.)
Covert, Martin B., assignor to Renu Parts Corporation, Holland, Mich. Treating piston rings. 1,893,274; Jan. 3.
Cowan, Lewis L. (See Tilton, Edwin W., assignor.)
Crabtree, George W., Cleveland Heights, Ohio. Vehicle spring clip. 1,893,229; Jan. 3.
Cranz, James M., Buffalo, N. Y. Sealing means for floating roofs for tanks. 1,893,162; Jan. 3.
Crawford, Jesse O., Houston, Tex. Engine starting device. 1,893,070; Jan. 3.
Cremer, Frits, Englewood, N. J., assignor to Xetal Corporation, New York, N. Y. Process and apparatus for making rubber or like strip or thread material. 1,893,465; Jan. 3.
Crocker, Howard E., Malden, and W. W. Harris, Melrose, Mass.; said Harris assignor to said Crocker. Washing machine. 1,893,230; Jan. 3.
Crocker, Thomas F., assignor to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,893,323; Jan. 3.
Croslen, Roy C., Whittier, assignor of one-half to C. J. Perkins, Los Angeles, Calif. Quick acting coupling. 1,893,132; Jan. 3.
Crouse, Wesley T., St. Louis, Mo. Window-ventilator. 1,892,995; Jan. 3.
Crowell, Joyce H., Buffalo, assignor to National Aniline & Chemical Company, New York, N. Y. Color base and composition containing the same. 1,892,871; Jan. 3.
Crowell, William J., jr. (See Gamble, R. H., and Crowell.)
Culber, Charles A., Northfield, Minn. Electrical generator. 1,893,019; Jan. 3.
Curtis, Harry B., Huntington, assignor to The Bridgeport Hardware Manufacturing Corporation, Bridgeport, Conn. Implement handle. Des. 88,859; Jan. 3.
Curtis, Henry E., San Jose, assignor of one-half to J. H. Betts, Long Beach, Calif. Motor vehicle construction. 1,893,324; Jan. 3.
Curtis Manufacturing Company. (See Steedman, Edwin H., assignor.)
Curtiss Aeroplane & Motor Company. (See Blaylock, Raymond C., assignor.)
Curtiss Aeroplane & Motor Company. (See Trimbach, Clem G., assignor.)
Curtiss Aeroplane & Motor Company. (See Vinje, Arne F., assignor.)
Cushing, John H., Los Angeles, Calif. Drill pipe protector. 1,893,020; Jan. 3.
Dahlen, Miles A. (See Hitch, E. F., and Dahlen.)
Dahlstrom, Arvid, assignor of one-third to F. Landberg and one-third to J. P. Seeburg, Chicago, Ill. Automatic phonograph. 1,893,469; Jan. 3.
Dahlstrom Metallic Door Company. (See Rose, Edwin L., assignor.)
Daman, Arthur C., and W. E., Smith, assignors to The Denver Equipment Co., Denver, Colo. Ore classifier. 1,892,872; Jan. 3.
Damm, Max, Company. (See Lacher, Samuel, assignor.)
D'Andelet, Jerome H. (See Hirsh, E. M., and D'Andelet.)
Daniels, Fred C. T. (See Shimer, W. R., and Daniels.)
Daniels, Lloyd C. (See Jaeger, A. O., and Daniels.)
Danner, Philip S., Point Richmond, assignor to Standard Oil Company of California, San Francisco, Calif. Non-detonating fuel. 1,893,021; Jan. 3.
Darnell Corporation, Ltd., The. (See McGrath, Allen G., assignor.)
Darrah, William A., Chicago, Ill. Surfacing board and article therefor. 1,892,873; Jan. 3.
Darroch, Gourley, et al., executors. (See Apple, Vincent G.)
Davidson, Le Roy E., assignor to Visual Demonstration System, Inc., Buffalo, N. Y. Optical projection apparatus. 1,893,359; Jan. 3.
Davis, Durrel H., assignor to Highway Trailer Company, Edgerton, Wis. Fifth wheel construction for tractors and semitrailers. 1,892,797; Jan. 3.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Washing apparatus. 1,893,199; Jan. 3.
Davis & Furber Machine Company. (See Burhenne, Henri, assignor.)
Dayton Toy & Specialty Company, The. (See Blackmore, Charles C., assignor.)
Deere & Company. (See Strandlund, Carl G., assignor.)
DeForest, Matthew J., Jackson Heights, assignor, by mesne assignments, to United Research Corporation, Long Island City, N. Y. Electrical attenuator network. 1,892,935; Jan. 3.
DeForest Radio Telephone & Telegraph Company. (See Gowen, Robert G., assignor.)
De Jesus-Angeles, Benjamin, San Francisco, Calif. Tube closing device. 1,893,401; Jan. 3.
De Laval Separator Company, The. (See Strezynski, George J., assignor.)
Delling, Paul R., Haddon Heights, N. J. Steam generation. 1,893,133; Jan. 3.
Del Mar, William A., Greenwich, Conn., assignor to Habirshaw Cable & Wire Corporation, New York, N. Y. Method of and apparatus for improving the electrical properties of cables. 1,892,663; Jan. 3.
Denisoff, Alexander J., Ardsley, N. Y., assignor to The Diamond Match Company, Baltimore, Md. Match and ash tray or similar article. Des. 88,860; Jan. 3.
Denison, Arthur C. (See Fuller, C. M., and Denison.)
Denver Equipment Co., The. (See Daman, A. C., and Smith, assignors.)
De Sherbinin, William N., Hastings-upon-Hudson, N. Y. Adjustable supporting mechanism for lamps. 1,893,071; Jan. 3.
Des Roches, Philip W., Detroit, Mich. Compression type refrigeration system. 1,892,874; Jan. 3.
Deutsche Gold- und Silber-Scheideanstalt vormals Roessler. (See Walter H., and Schulz, assignors.)
Deutscher, William F., New York, N. Y. Aeroplane construction. 1,893,275; Jan. 3.
Diamond Match Company, The. (See Denisoff, Alexander J., assignor.)
Dick, Bismarck, Melvindale, Mich. Fuel economizer. 1,893,072; Jan. 3.
Dickerson, Arthur, Logan, Utah. Carburetor. 1,892,828; Jan. 3.
Dictograph Products Company. (See Koch, Henry, assignor.)
Dieterich, Conrad A., Mount Vernon, N. Y. Radiator bracket. 1,892,762; Jan. 3.
Dietz, Valentin, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to Multigraph Company, Wilmington, Del. Planographic printing process. 1,892,875; Jan. 3.
Dietz, Valentin, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to Multigraph Company, Wilmington, Del. Planographic printing process. 1,893,163; Jan. 3.
Diggin, Myron B. (See Hogaboom, G. B., and Diggin.)
Dilks, William H., Los Angeles, Calif. Valve cylinder oiler. 1,893,073; Jan. 3.
Dill Manufacturing Company, The. (See Bronson, Adelbert E., assignor.)
Division of International Screw Company. (See Arena, John A.)
Dodge, Eugene W., Long Beach, Calif. Oil pump. 1,892,876; Jan. 3.
Dodge, Milo C., assignor to Columbian Rope Company, Auburn, N. Y. Packaging articles. 1,892,722; Jan. 3.
Doeg, Ralph W., assignor to Kelvinator Corporation, Detroit, Mich. Refrigerator controller. 1,893,360; Jan. 3.
Dolbey, Harry S., and E. S. Smith, jr., assignors to Builders Iron Foundry, Providence, R. I. Pressure responsive device and diaphragm for use therein. 1,893,200; Jan. 3.
Dolomite, Inc. (See Barrett, Harvey N., assignor.)
Donovan, Arthur F., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Button. Des. 88,861; Jan. 3.
Dorr Company, The. (See Keefer, C. E., and Wachter, assignors.)
Dorr Company, The. (See Rankin, Renville S., assignor.)
Dougherty, Owen T., St. Paul, Minn. Manhole and cover. 1,892,830; Jan. 3.
Douillard, Frank T., assignor of one-half to Southern California Gas Company, Los Angeles, Calif. Meter. 1,893,022; Jan. 3.
Dow Chemical Company, The. (See Dow, Herbert H., assignor.)
Dow, Herbert H., assignor to The Dow Chemical Company, Midland, Mich. Heat-energy transfer medium. 1,893,051; Jan. 3.
Drake, Harcourt C., Hempstead, assignor, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y. Flaw detector. 1,893,074; Jan. 3.
Dresser, S. E., Manufacturing Company. (See Ochtman, Leonard, jr., assignor.)
Dreyfuss, Henry, New York, N. Y., assignor to Capstan Glass Company, Connellsville, Pa. Jar or similar article. Des. 88,905; Jan. 3.
Driest, Charles, Marlboro, N. J. Scissors. 1,892,877; Jan. 3.
Driggs, Frank H. (See Lilliendahl, W. C., and Driggs.)
Druker, Joshua, Dorchester, Mass. Polishing device. 1,892,723; Jan. 3.
Dubonnet, André, Neuilly-sur-Seine, France. Suspension for vehicles. 1,892,937; Jan. 3.
Duncan, Robert D., jr., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Receiving wired radio signals on space radioreceivers. 1,892,696; Jan. 3.
Du Pont, E. I., de Nemours & Company. (See Henke, Clyde O., assignor.)
Du Pont, E. I., de Nemours & Company. (See Hitch, E. F., and Dahlen, assignors.)
Du Pont, E. I., de Nemours & Company. (See Howell, E. T., and Gubelmann, assignors.)
Durafer (Inc.) (See Sargent, William D., assignor.)
Durán, Rodrigo F., Barranquilla, Colombia. Combined message blank and envelope. 1,893,276; Jan. 3.
Durnell, Joseph W. (See Ziegler, W. L., and Durnell.)
Duwelius, Walter S., Cincinnati, Ohio. Game board. Des. 88,906; Jan. 3.

Dworkin, Samuel, Passaic, N. J., assignor to Passaic Kiddy Shop, Inc. Garment hanger. 1,892,986; Jan. 3.
Dyer, William J. H., Providence, R. I. Boat hull. Des. 88,862; Jan. 3.
Eck, Oscar W. (See Benzick, W. M., and Eck.)
Eckblom, Albert W., St. Paul, Minn. Advertising sign. Des. 88,863; Jan. 3.
Edwards, Henry H., Auckland, New Zealand. Composition for use in forming a glazing solution. 1,892,980; Jan. 3.
Eggleston, Lewis W., Detroit, Mich., assignor to American Radiator Company, New York, N. Y. Apparatus for controlling temperature. 1,893,277; Jan. 3.
Ego, Frederick P. (See Bergman, J. E., and Ego.)
Ehrlich, Gustav, New York, N. Y. Golf game. 1,893,402; Jan. 3.
Eliot, Amory V. (See Wehr, A. J., Sheeres, and Eliot.)
Elkin, Newton, Philadelphia, Pa. Shoe. Des. 88,864; Jan. 3.
Elliott Core Drilling Company. (See Murdock, R. A., and McKenna, assignors.)
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Grease-resisting box board. 1,892,939; Jan. 3.
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Production of black colorations on mixed materials containing organic derivatives of cellulose. 1,892,878; Jan. 3.
Elmer, Charles B. (See Elmer, W. B., and Avila, assignors.)
Elmer, William B., and C. F. Avila, Cambridge, Mass., assignors to C. B. Elmer, White Plains, N. Y. Cable rider. 1,892,798; Jan. 3.
Ely, Richard, et al. (See Satterthwaite, Thomas W., assignor.)
Elzemeyer, Edwin E., and H. Griesedieck, Webster Groves, assignors to American Pulverizer Company, St. Louis, Mo. Crushing or pulverizing machine. 1,892,697; Jan. 3.
Emeth Financial Corporation. (See Goodman, Jacob, assignor.)
Emms, Charles, London, England. Jodhpur and like garment. 1,893,470; Jan. 3.
Enterprise Railway Equipment Company. (See Campbell, Argyle, assignor.)
Erbach, Frederick R., assignor to Kelvinator Corporation, Detroit, Mich. Evaporator. 1,893,361; Jan. 3.
Erdahl, Nicholai M., assignor to Highway Trailer Company, Edgerton, Wis. Brake. 1,892,940; Jan. 3.
Eriksen, Einar B., Long Beach, Calif. Golf practicing device. 1,893,278; Jan. 3.
Ernst, Hans, and L. F. Nenninger, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Control for hydraulic systems. 1,893,068; Jan. 3.
Eschenbach, Gustavus W., Los Angeles, Calif. Pictorial display apparatus. 1,893,052; Jan. 3.
Everett, Jones, Machine Company. (See Hearle, L. B., and Hudson, assignors.)
Everhot Electric & Mfg. Co. (See Fogwell, Harrison H., assignor.)
Evinrude, Ole, assignor to Outboard Motors Corporation, Milwaukee, Wis. Outboard motor drive shaft housing assembly. 1,892,981; Jan. 3.
Eyles, Harry, Chicago, Ill. Spinning game. 1,892,664; Jan. 3.
Fairbanks, E. and T., and Company. (See Bousfield, Alfred, assignor.)
Fairbanks, E. and T., and Company. (See Burrows, Ernest E., assignor.)
Fairbanks, E. and T., and Company. (See Hadley, Harlan A., assignor.)
Falkenwalde, Oscar, assignor of one-half to R. H. Lyon, Baltimore, Md. Auxiliary gas generating means for oil burners. 1,893,403; Jan. 3.
Fanner Manufacturing Company, The. (See Magnuson, Thure J., assignor.)
Farrel-Birmingham Company. (See Kuhns, Austin, assignor.)
Fassmann, Bruno, Berlin, Germany, assignor to Addressograph Company, Chicago, Ill. Safety device for printing machines and the like. 1,893,164; Jan. 3.
Feintuch, Israel. (See Penner, D., and Feintuch.)
Feldmeier, Harvey, and R. J. Wightman, Little Falls, and R. B. Steves, Ilion, N. Y., assignors to Cherry-Burrell Corporation, Wilmington, Del. Heat exchange device. 1,893,135; Jan. 3.
Felten & Guilleaume Carlswerk Actien-Gesellschaft. (See Zapf, Georg, assignor.)
Fick, Reinhold. (See Schumann, C., Fick, and Oberreit.)
Field, Herbert C. (See Lakin, J. W., and Field.)
Fildes, Frederick K., Altoona, Pa. Transportation container. 1,892,698; Jan. 3.
Firth-Smith Company. (See Smith, William J., assignor.)
Fisher, John F., Santa Cruz, Calif. Accelerator pedal for automobiles. 1,893,075; Jan. 3.
Fitz Gerald, Martin E., Danville, Ill., assignor to Universal Draft Gear Attachment Company. Car journal protector. 1,893,279; Jan. 3.
Flintkote Corporation, The. (See Van Heurn, Frans C., assignor.)
Florea, Park S., Jersey City, N. J., and I. J. Henry, Garden City, N. Y. Case for radiotubes. 1,892,879; Jan. 3.
Flower, Arthur H. (See Geyer, H. D., and Flower.)
Floyd, Linzy B., Phoenix, Ariz. Overrunning clutch. 1,893,231; Jan. 3.
Flygare, Carl G., assignor to Norton Company, Worcester, Mass. Hydraulically operated cylindrical grinding machine. 1,893,076; Jan. 3.
Fogwell, Harrison H., assignor to Everhot Electric & Mfg. Co., Los Angeles, Calif. Thermostatic switch. 1,892,938; Jan. 3.
Fortune, James M., Grantwood, N. J. Apparatus for erecting, staging, platforms, and the like. 1,893,165; Jan. 3.
Foster, Reuben, and S. K. Waldorf, Baltimore, Md.; said Waldorf assignor to said Foster. Telephone dial illumination. 1,893,325; Jan. 3.
Fournier, Edmond E., Shrewsbury, and M. I. Vestal, Fall River, Mass. Clothing for cards and the like. 1,893,326; Jan. 3.
Fowler, Fred D., Newton, Mass., assignor to The B. F. Goodrich Company, New York, N. Y. Shoe sole. Des. 88,865; Jan. 3.
Fowler, Morris G., Clarkdale, Ariz., assignor to United Verde Copper Company. Metallurgical apparatus. 1,893,023; Jan. 3.
Fox, Charles H., assignor to The Ahrens-Fox Fire Engine Company, Cincinnati, Ohio. Fire engine. 1,893,166; Jan. 3.
Franklin, Charles S., Buckhurst Hill, and E. Green, Hendon, London, England, assignors to Radio Corporation of America. Circuit arrangement. 1,893,136; Jan. 3.
French Battery Company. (See Shannon, James L., assignor.)
French, Louis O., Milwaukee, Wis. Liquid fuel internal combustion engine. 1,892,880; Jan. 3.
Frey, Charles N. (See Schultz, A., and Frey.)
Frey, Percy C., assignor to H. Vogt Machine Co., Louisville, Ky. Refrigerating apparatus of the absorption type. 1,892,941; Jan. 3.
Friedman, Nathan, Yonkers, N. Y. Smoking pipe. 1,893,137; Jan. 3.
Friend, Joseph C., Ashtabula, Ohio. Adjustable reamer grinding clearance gauge. 1,893,404; Jan. 3.
Frigidaire Corporation. (See Summers, Otto M., assignor.)
Frigidaire Corporation. (See Wallis, Harold B., assignor.)
Frulli, Dino. (See Chelazzi, M., and Frulli.)
Fuller, Charles M., and A. C. Denison, Visalia, assignors to Chas. M. Fuller Corporation Ltd., Stockton, Calif. Elevating power shovel. 1,892,881; Jan. 3.
Fuller, Chas. M., Corporation Ltd. (See Fuller, C. M., and Denison, assignors.)
Funcke, Karl, Ottweiler, Germany. Perforating device for printing presses. 1,893,053; Jan. 3.
Gagnier, George E. (See Place, Bion C., assignor.)
Gamble, Ralph H., Moorestown, N. J., and W. J. Crowell, jr., Wyncote, assignors to Pulenlite Company, Philadelphia, Pa. Match packaging machine. 1,893,201; Jan. 3.
Gammeter, John R., assignor to National Rubber Machinery Company, Akron, Ohio. Vulcanizing press. 1,892,942; Jan. 3.
Gannon, James E., and J. M. Winter, assignors to American Electric Heating Company, Erie, Pa. Electric radiator. 1,892,882; Jan. 3.
Gardner Broom Company. (See Mahoney, John P., assignor.)
Garfinkl, Nathaniel, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,866; Jan. 3.
Gartha, Edward A., Detroit, Mich. Air filter. 1,892,982; Jan. 3.
Garweg, August, Wuppertal-Ronsdorf, Germany. Hardening medium and process for hardening tools of iron or steel. 1,893,077; Jan. 3.
Gary, Wright W., assignor of one-half to C. O. Middleton, Beverly Hills, Calif. Treating petroleum. 1,893,138; Jan. 3.
Gass, Melvin E., Colfax, Wash. Grain drill sterilizer-mixing attachment. 1,892,763; Jan. 3.
Gastrich, Gustav, assignor to Textile Machine Works, Wyomissing, Pa. Stocking. Des. 88,867; Jan. 3.
Gaylord Company, The. (See Gaylord, John F., assignor.)
Gaylord, John F., Muncie, Ind., assignor to The Gaylord Company, Inc., Homer, Iowa. Free wheeling transmission. 1,893,405; Jan. 3.
Gebruder Brehmer Maschinenfabrik. (See Kleinschmit, Oscar, assignor.)
Gega, Joseph M., Portland, Oreg. Water pressure driven motor. 1,892,831; Jan. 3.
Geiger, Paul H., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Preparing uni-directional current carrying devices. 1,892,832; Jan. 3.
Geigy, J. R., S. A. (See Richard, Bernhard, assignor.)
General Aniline Works, Inc. (See Laska, L., and Werdermann, assignors.)
General Electric Company. (See Anderson, Arvid E., assignor.)
General Electric Company. (See Bergman, Sven R., assignor.)
General Electric Company. (See Blake, David K., assignor.)
General Electric Company. (See Carlson, George, assignor.)

General Electric Company. (See Given, R. D., and Jefferson, assignors.)
General Electric Company. (See Hall, Chester I., assignor.)
General Electric Company. (See Heter, Wylie, assignor.)
General Electric Company. (See Hull, John I., assignor.)
General Electric Company. (See Lind, Valentin, assignor.)
General Electric Company. (See Mechau, Emil, assignor.)
General Electric Company. (See Patterson, Franklin G., assignor.)
General Electric Company. (See Piercy, Carl A., assignor.)
General Electric Company. (See Uschman, C. W., and Hartman, assignors.)
General Electric Company. (See Watson, Harold L., assignor.)
General Electric Vapor Lamp Company. (See Moehler, Otto J., assignor.)
General Printing Ink Corporation. (See Ogden, Ashley, G., assignor.)
General Reduction Corporation. (See Smith, William H., assignor.)
General Register Corporation. (See Heisel, Reuben H., assignor.)
General Zeolite Co. (See Hughes, Walter J., assignor.)
Genuit, John W., Huntington Park, assignor to Stoody Company, Whittier, Calif. Sintered hard metal alloy. 1,893,078; Jan. 3.
George, Harry F., Chicago, Ill. Covering means. 1,892,780; Jan. 3.
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,868; Jan. 3.
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,869; Jan. 3.
George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 88,907; Jan. 3.
Geraghty, John P., Jersey City, N. J. Hood locking device for automobiles. 1,893,406; Jan. 3.
Gerfen, Roye P., Newark, N. J. Foldable bootjack. 1,893,280; Jan. 3.
Gessler, Harry C., Brooklyn, N. Y. Sugar dispenser. 1,893,139; Jan. 3.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Vibration-absorbing connecter. 1,892,943; Jan. 3.
Geyer, Harvey D., and A. H. Flower, assignors to The Inland Manufacturing Company, Dayton, Ohio. Rubber covered leaf spring. 1,892,944; Jan. 3.
Giefers, George W., Brooklyn, N. Y. Automobile jack. 1,892,665; Jan. 3.
Gilbert, Reginald, San Francisco, Calif. Power unit. 1,892,833; Jan. 3.
Gill, Edwin R., jr., Yonkers, N. Y. Sign. 1,893,024; Jan. 3.
Gilmore, Allen R., St. Louis, Mo. Valve for flush tanks. 1,893,202; Jan. 3.
Gilmore, Forrest H., and H. H. Kruger, San Pierre, Ind. Anticreeping device. 1,892,747; Jan. 3.
Given, Ralph D., Leamington Spa, and H. F. Jefferson, Rugby, England, assignors to General Electric Company. Apparatus for recording or reproducing sound. 1,893,362; Jan. 3.
Gagolin, Boris S. New York, N. Y. Rotating stage mounting. 1,893,167; Jan. 3.
Gleason Works. (See Stonebraker, Harold E., assignor.)
Godel, Albert, assignor to Société de Recherches & d'Exploitations Petrolliferes, Paris, France. Actication of carbonaceous substances. 1,893,363; Jan. 3.
Goerz, C. P., American Optical Company. (See Mueller, Emil M., assignor.)
Goettsch, William H., Holstein, Iowa. Brooder alarm 1,893,407; Jan. 3.
Goff, Thomas L., Duqhoin, Ill. Shock absorbing derrick mast for well drilling machines. 1,893,408; Jan. 3.
Goldkamp, Otto B., assignor of one-half to San Diego Consolidated Gas and Electric Company, San Diego, Calif. Fluid pressure controlling means. 1,892,883; Jan. 3.
Goodman, Harry S., Chicago, Ill. Attachment for savings banks. 1,893,364; Jan. 3.
Goodman, Jacob, Brooklyn, assignor to Emeth Financial Corporation. New York, N. Y. Hair curl clip 1,893,281; Jan. 3.
Goodrich, B. F., Company, The. (See Fowler, Fred D., assignor.)
Goodrich, B. F., Company, The. (See L'Hollier, Leslie H., assignor.)
Göttesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,870; Jan. 3.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,871; Jan. 3.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,872; Jan. 3.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,908; Jan. 3.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,909; Jan. 3.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,910; Jan. 3.
Goudet, Hugues. (See Chireix, H., and Goudet.)
Gouiden, George H. (See Robinson, Q. O., and Goulden.)
Gowen, Robert F., assignor to DeForest Radio Telephone & Telegraph Company, New York, N. Y. Audion construction. 1,893,466; Jan. 3.
Grant, Bessie S. B. (See Grant, Robert L., jr., assignor.)
Grant, Robert L., jr., assignor to B. S. B. Grant, Texarkana, Ark. Electric lamp guard. 1,893,409; Jan. 3.
Grauman, Arthur H. (See Grauman, Frank A., and A. H.)
Grauman, Frank A. and A. H., Seattle, Wash. Sediment collecting stopper. 1,892,884; Jan. 3.
Gray, Alanson M., administrator. (See Gray, Philander R., assignor.)
Gray, Philander R., deceased, Newark, N. J., Alanson M. Gray, administrator, assignor to The Gray Processes Corporation, Newark, N. J. Distilling system. 1,892,764; Jan. 3.
Gray Processes Corporation, The. (See Gray, Philander R., assignor.)
Grayson Appliance Company. (See Grayson, John H., assignor.)
Grayson, John H., assignor to Grayson Appliance Company, Ltd., Lynwood, Calif. Casing for a control mechanism for time controlled cooking. Des. 88,873; Jan. 3.
Green, Ernest. (See Franklin, C. S., and Green.)
Green, Samuel M., Springfield, Mass. Fire extinguisher. 1,892,724; Jan. 3.
Greenwald, Harold A. (See Whitehead, T. C., and Greenwald.)
Gregory, Eli E., Brooklyn, and H. E. Comings, Manhasset, N. Y.; said Comings assignor to said Gregory. Electromotor. 1,893,025; Jan. 3.
Gridley Dairy Company. (See Kelly, F. W., and Luedicke, assignors.)
Griebat, Herman, Lodi, Calif. Tractor lug. 1,892,945; Jan. 3.
Griesedieck, Henry. (See Elzemeyer, E. E., and Griesedieck, assignors.)
Griessbach, Robert, Wolfen, and T. Kollmann, Mannheim, Germany, assignors to Agfa Ansco Corporation, Binghampton, N. Y. Production of photosensitive emulsions. 1,892,725; Jan. 3.
Grigsby, Owen E., Park Ridge, assignor, by mesne assignments, to Porcelain Tile Corporation, Chicago, Ill. Tiled wall or the like. 1,892,885; Jan. 3.
Groen, Christopher, assignor to A. Y. McDonald Mfg. Co., Dubuque, Iowa. Power head. 1,893,282; Jan. 3.
Grosbost, Alphonse, assignor of one-half to Société d'Etudes & de Constructions Metallurgiques, Paris, France. Flying shears. 1,892,834; Jan. 3.
Gruber, Wolfgang. (See Ascheri, A., and Gruber.)
Gubelmann, Ivan. (See Howell, E. T., and Gubelmann.)
Guerri, Giuseppe, Jesi, Ancona, Italy. Raising and lowering tractor drawn implements. 1,893,410; Jan. 3.
Guhl, Maclyn, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,874; Jan. 3.
Guhl, Maclyn, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,911; Jan. 3.
Gurney, Erving R., Allentown, Pa., assignor to International Motor Company, New York, N. Y. Bus body without chassis. 1,892,666; Jan. 3.
Guyn, George L. H. (See Guyn, Henry E., assignor.)
Guyn, Henry E., assignor of one-half to G. L. H. Guyn, Philadelphia, Pa. Flag. Des. 88,912; Jan. 3.
Habirshaw Cable & Wire Corporation. (See Del Mar, William A., assignor.)
Hadley, Harlan A., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Recording scale. 1,892,726; Jan. 3.
Hagenest, Hermann, Wiesdorf-on-the-Rhine, and F. W. Stauf, Cologne-Deutz, Germany, assignors, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y. Cupric cyanic compound and process for its manufacture. 1,892,728; Jan. 3.
Hahn, Eugene, Philadelphia, Pa. Ash discharging device. 1,892,946; Jan. 3.
Haight, John T., Rockford, Ill. Drumstick for bass drums. 1,892,886; Jan. 3.
Hall, Chester I., Fort Wayne, Ind., assignor to General Electric Company. Circuit controller. 1,893,365; Jan. 3.
Hallermann, Adolf, Munster, Germany. Process and apparatus for clarifying or separating the head from the fermenting liquor in brewing or in other fermentation processes. 1,893,411; Jan. 3.
Hallwood, Nathan A., Columbus, Ohio. Scale. 1,892,729; Jan. 3.
Halsey, Arthur S., Washington, D. C. Bomb rack and control. 1,893,232; Jan. 3.
Hamer, Leland S., Long Beach, Calif. Stopcock. 1,892,835; Jan. 3.
Hamilton, Wm. A. (See Nemes, Mike J., assignor.)
Hamm, William S., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Sash construction. 1,892,887; Jan. 3.

Hammer, Samuel, assignor to United Metal Box Co., Inc., Brooklyn, N. Y. Mounting for pictures, panels, and the like. 1,893,168; Jan. 3.
Hanseatische Muhlenwerke Aktiengesellschaft. (See Bollmann, H., and Schwieger, assignors.)
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Percussive drill unit. 1,893,203; Jan. 3.
Hanson-Van Winkle-Munning Company. (See Hogaboom, G. B., and Diggin, assignors.)
Harding, Franklin T., Melrose, Mass. Condenser. 1,893,366; Jan. 3.
Harnden, Edwin C., Waverly, N. Y. Sharpener for sharpening blades of lawn mowers or shears. 1,892,667; Jan. 3.
Harper, George W., assignor to The Columbia Axle Company, Cleveland, Ohio. Axle. Re18,708; Jan. 3.
Harris, William W., Brockton, Mass. Acetylene generator. 1,892,947; Jan. 3.
Harris, Winfred W. (See Crocker, H. E., and Harris.)
Harry, Gordon W. (See Babitch, A. M., and Harry.)
Harte, James A., Utica, assignor to American LeFrance and Foamite Corporation, New York, N. Y. Oil tank fire protection. 1,893,026; Jan. 3.
Harter, George F., assignor to The Standard Electric Time Company, Springfield, Mass. Electric clock system. 1,892,699; Jan. 3.
Harter, George F., assignor to The Standard Electric Time Company, Springfield, Mass. Electric control system. 1,892,700; Jan. 3.
Hartford-Empire Company. (See Howard, George E., assignor.)
Hartford-Empire Company. (See Peiler, Karl E., assignor.)
Hartford-Empire Company. (See Smith, Algy J., assignor.)
Hartford-Empire Company. (See Willetts, Paul G., assignor.)
Hartman, Howard W. (See Uschman, C. W., and Hartman.)
Hartmann, Carl W., Lyngby, near Copenhagen, Denmark. Carton filling apparatus. 1,893,169; Jan. 3.
Hartmann Trunk Company. (See Ritter, Julius, jr., assignor.)
Harvey, George R., LaFayette, Ind. Combination razor and shaving brush. 1,892,836; Jan. 3.
Harvey, Paul D., Chicago, Ill. Automatic control. 1,892,948; Jan. 3.
Haubensak, Wilhelm, and W. A. Wetterwald, Zurich, Switzerland. Valve for footballs and other inflatable articles. 1,892,727; Jan. 3.
Hawley, Kent A., assignor to Locke Insulator Corporation, Baltimore, Md. Strain insulator. 1,892,888; Jan. 3.
Hearle, Louis B., and H. G. Hudson, Wilson, assignors of one-half to Jones Everett Machine Co., Ardmore, Okla. Testing tool. 1,892,837; Jan. 3.
Heath, Frank M., Silver Spring, Md. Ventilated horse collar cushion. 1,893,079; Jan. 3.
Heddon's, James, Sons. (See Jamar, Mitchell F., jr., assignor.)
Heil, Hiram E. (See Mix, M. I., and Heil.)
Heiney, John W., Allentown, Pa., assignor to International Motor Company, New York, N. Y. Rolling spring shackle. 1,892,668; Jan. 3.
Heiney, John W., Allentown, Pa., assignor to International Motor Company, New York, N. Y. Engine cooling device. 1,892,669; Jan. 3.
Heinke, Alfred J., Towaco, N. J. Textile fabric or the like. Des. 88,913; Jan. 3.
Heilman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,875; Jan. 3.
Heilman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,876; Jan. 3.
Heisel, Reuben H., Long Island City, assignor to General Register Corporation, Brooklyn, N. Y. Switch. 1,893,027; Jan. 3.
Henke, Clyde O., South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. Purifying abietene-sulphonic acid compounds. 1,892,889; Jan. 3.
Henry, Donald E. (See Rentschler, H. C., and Henry.)
Henry, Irving J. (See Flores, P. S., and Henry.)
Herberts, Curtis A., Los Angeles, Calif. Spindle shaper. 1,893,080; Jan. 3.
Herrick, Henry N. (See Zeitfuchs, E. H., and Herrick.)
Herrmann, Conrad, Wuppertal-Elberfeld, Germany, assignor to American Glanzstoff Corporation, New York, N. Y. Rayon spinning machine. 1,893,054; Jan. 3.
Herrmann, Conrad, Wuppertal-Elberfeld, Germany, assignor to American Glanzstoff Corporation, New York, N. Y. Spooling machine. 1,893,055; Jan. 3.
Herzstark, Samuel J., Vienna, Austria. Printing or typing adding or subtracting machine or typing calculating machine. 1,893,061; Jan. 3.
Hess, Henry K., Wolcott, N. Y. Bowling alley. 1,893,412; Jan. 3.
Heter, Wylie, Scotia, N. Y., assignor to General Electric Company. Direct current dynamo-electric machine. 1,893,367; Jan. 3.
Hibbs, Mark G., Ross Township, Allegheny County, Pa. Spark amplifier for use in the ignition systems of internal combustion engines. 1,893,204; Jan. 3.
Highway Trailer Company. (See Davis, Durrel H., assignor.)
Highway Trailer Company. (See Erdahl, Nicholai M., assignor.)
Hill, Edward G., assignor to Hill Engineering Corporation, Richmond, Va. Clutch operating mechanism for motor vehicles. 1,893,471; Jan. 3.
Hill Engineering Corporation. (See Hill, Edward G., assignor.)
Hillier, Harold J., and R. G. Hillier, Toronto, Ontario, Canada. Warm air furnace. 1,893,240; Jan. 3.
Hillier, Ronald G. (See Hillier, Harold J. and R. G.)
Hilton, John, Dublin, Irish Free State. Pillow or cushion. 1,893,170; Jan. 3.
Hirsh, Edgar M., and J. H. D'Andelet, Silver Spring, Md. Apparatus for transmitting power. 1,893,413; Jan. 3.
Hitch, Emmet F., and M. A. Dahlen, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Cellulose derivative composition. 1,893,283; Jan. 3.
Hitch, Emmet F., and M. A. Dahlen, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Cellulose derivative composition. 1,893,284; Jan. 3.
Hodges, Irving L., Attleboro, Mass., assignor to C. A. Marsh & Co. Inc. Bracelet. 1,893,056; Jan. 3.
Hoenstine, Earle E., Altoona, Pa. Joint for superheaters or the like. 1,892,781; Jan. 3.
Hoerle, William F., assignor to Union Hardware Company, Torrington, Conn. Making ice skates. 1,893,140; Jan. 3.
Hoffman, George M., Upper Montclair, N. J. Revetment and laying the same. 1,892,701; Jan. 3.
Hofmann, Hugo, and M. E. Korff, Johnson City, Tenn., assignors to American Bemberg Corporation, New York, N. Y. Twisting and winding machine. 1,892,782; Jan. 3.
Hofmann, Hugo, and M. E. Korff, Johnson City, Tenn., assignors to American Bemberg Corporation, New York, N. Y. Twisting and winding machine. 1,892,783; Jan. 3.
Hohn, Max P. E., assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Cigarette machine. 1,893,057; Jan. 3.
Hogaboom, George B., New Britain, Conn., and M. B. Diggin, assignors to Hanson-Van Winkle-Munning Company, Matawan, N. J. Cadmium plating composition. 1,893,368; Jan. 3.
Holloway, Mynard L., La Porte, and C. Stephenson, Hanna, Ind. Core box. 1,892,748; Jan. 3.
Holmer, Erik M., Gottenborg, Sweden. Cardboard box. 1,892,983; Jan. 3.
Holmes, Christopher C., Los Angeles, Calif. Helicopter-aircraft. 1,892,949; Jan. 3.
Honigbaum, Harry H., Richmond Hill, N. Y. Composition shingle. 1,893,028; Jan. 3.
Hooklees Fastener Company. (See Sundback, Gideon, assignor.)
Hoover Company, The. (See Smellie, Donald G., assignor.)
Horii, Shinjiro, Tokyo, Japan. Manufacturing files for stencilizing stencil sheets. 1,892,984; Jan. 3.
Horning, Harry L., assignor to Waukesha Motor Company, Waukesha, Wis. Internal combustion engine. 1,892,838; Jan. 3.
Horton, Erwin C. (See Hueber, H., and Horton.)
Horton, Erwin C., Hamburg, assignor to Trico Products Corporation, Buffalo, N. Y. Mirror support and making same. 1,893,472; Jan. 3.
Hounsfield, Leslie H., London, England. Graph-recording apparatus. 1,892,709; Jan. 3.
Houpt, Clayton S., Detroit, Mich. Removing of enamel from a metal base. 1,892,950; Jan. 3.
Houseman, Harold E., Edge Moor, assignor to Standard-Trump Bros. Machine Company, Wilmington, Del. Knitting mechanism. 1,892,702; Jan. 3.
Howard, Agnes R. (See Howard, Earl T., assignor.)
Howard, Earl T., assignor of one-half to A. R. Howard, Fullerton, Calif. Crack sealer for concrete pavements. 1,893,082; Jan. 3.
Howard, George E., Butler, Pa., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Method and apparatus for feeding molten glass. 1,892,765; Jan. 3.
Howard, Henry, Newport, R. I. Measuring and controlling the density of suspensions of solids in liquids. 1,892,839; Jan. 3.
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Photographic camera. 1,893,327; Jan. 3.
Howell, Edward T., and I. Gubelmann, South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. Substitution products of amino benzoyl ortho benzoic acid and preparing the same. 1,892,890; Jan. 3.
Hudson, Henry G. (See Hearle, L. B., and Hudson.)
Hueber, Henry, Buffalo, and E. C. Horton, Hamburg, assignors to Trico Products Corporation, Buffalo, N. Y. Fuel pump. 1,893,473; Jan. 3.
Hughes, Charles W., Oakmont, Pa. Kite. 1,892,985; Jan. 3.
Hughes, Frederick G., assignor to The New Departure Manufacturing Company, Bristol, Conn. Gauging apparatus. 1,893,205; Jan. 3.
Hughes, Walter J., assignor to General Zeolite Co., Chicago, Ill. Automatic filter wash control. 1,892,951; Jan. 3.

Hull, John I., Schenectady, N. Y., assignor to General Electric Company. Control of induction apparatus. 1,893,328; Jan. 3.
Hull, Nathaniel D., La Fayette, Ind. Liquid flow indicator. 1,893,233; Jan. 3.
Hund, August, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Signaling system. 1,893,029; Jan. 3.
Hunter, John L., assignor to Ahlbell Battery Container Corporation, Waukegan, Ill. Press for plastic material. 1,893,234; Jan. 3.
Hunter, Norman M. (See Burrill, L. C., Bocler, and Hunter.)
Hunziker, Paul, Hamilton Beach, assignor to Potdevin Machine Company, Brooklyn, N. Y. Bag making machine. 1,893,285; Jan. 3.
Hyams, L. J., and Company. (See Altman, Beatrice, assignor.)
Hyams, L. J., and Company. (See Beboutoff, Michel, assignor.)
Hyams, L. J., and Company. (See Journoud, Pierre, assignor.)
Hyland, Lawrence A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Battery charging system for airplanes. 1,892,891; Jan. 3.
Hyman, Henry F., Houston, Tex. Vermin trap. 1,892,952; Jan. 3.
Hynes, Lee P., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y. Motor-car heating and ventilating system. 1,893,329; Jan. 3.
I. G. Farbenindustrie Aktiengesellschaft. (See Schumann, C., Fick, and Oberreit, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Wietzel, G., and Starke, assignors.)
Indge, Herbert S., and S. Player, Westboro, assignors to Norton Company, Worcester, Mass. Lapping machine. 1,893,083; Jan. 3.
Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)
Ingersoll-Rand Company. (See Parkhill, Mortimer S., assignor.)
Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)
Inland Manufacturing Company, The. (See Geyer, H. D., and Flower, assignors.)
International Honey-Butter Corporation. (See Rasky, David, assignor.)
International Motor Company. (See Gurney, Erving R., assignor.)
International Motor Company. (See Heiney, John W., assignor.)
Inventia Patent-Verwertungs-Gesellschaft. (See Bilde, Tord, E. D., assignor.)
Ionides, Alexander G. (See Stokes, I. T., and Ionides.)
Iredell, Charles V., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Carbonizing metals and alloys. 1,893,286; Jan. 3.
Isherwood, John J. (See Messler, E. L., and Isherwood.)
Iulo, Daniel J. (See Rustin, E. H., and Iulo.)
Iulo, Rena. (See Rustin, E. H., and Iulo.)
Iverson, Erling C., Port Arthur, Tex. Navigational instrument. 1,893,235; Jan. 3.
Jacobi, Edward N., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Lock. 1,893,142; Jan. 3.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Catalytic removal of hydrogen or oxygen containing groups from organic compounds. 1,892,766; Jan. 3.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Catalytic oxidation of ammonia. 1,892,767; Jan. 3.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Oxidation of fluorene. 1,892,768; Jan. 3.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Plastic or coating compositions. 1,892,769; Jan. 3.
Jaeger, Alphons O., Mount Lebanon, and L. C. Daniels, Crafton, assignors to The Selden Company, Pittsburgh, Pa. Purification of crude aromatic compounds. 1,892,770; Jan. 3.
Jaeger, Alphons O., Mount Lebanon, and L. C. Daniels, Crafton, assignors to The Selden Company, Pittsburgh, Pa. Purification of crude aromatic compounds. 1,892,771; Jan. 3.
Jaeger, Alphons O., Mount Lebanon, and L. C. Daniels, Crafton, assignors to The Selden Company, Pittsburgh, Pa. Purification of crude aromatic compounds. 1,892,772; Jan. 3.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Plastic or coating composition. 1,892,784; Jan. 3.
Jaeger, Fred, Rutherford, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Apparatus for handling articles. 1,892,670; Jan. 3.
Jahn, Francis M., and C. C. Atkinson, Philadelphia, Pa. Ophthalmic mounting. 1,892,671; Jan. 3.
Jakoubek, Kajetan, C., Phillips, Wis. Animal trap. 1,893,236; Jan. 3.
Jamar, Mitchell F., jr., assignor to James Heddon's Sons, Dowagiac, Mich. Artificial minnow. 1,892,892; Jan. 3.
Januszewski, Julius, Middle Village, Long Island, N. Y. Swing. 1,893,084; Jan. 3.
Jaros, Edward T. (See Jaros, Frank J. and E. T.)
Jaros, Frank J. and E. T., Chicago, Ill. Signaling device for automobiles. 1,893,369; Jan. 3.
Jaros, Frank J., and E. T., Chicago, Ill. Signaling switch. 1,893,370; Jan. 3.
Jefferson, Harold F. (See Given, R. D., and Jefferson.)
Jenkins, C. Francis, Inc. (See Jenkins, C. Francis, assignor.)
Jenkins, Charles F., assignor to C. Francis Jenkins, Inc., Washington, D. C. Airplane radio equipment. 1,893,287; Jan. 3.
Jenkins, Wayne, Los Angeles, Calif. Gas stove combined manifold cover and controls. Des. 88,914; Jan. 3.
Jensen, Martin. (See Yohe, L. N., and Jensen.)
Johnson, Albert S., Los Angeles, Calif. Automatic fluid pipe connecter train coupling. 1,892,853; Jan. 3.
Johnson, Clarence G., Hartford City, Ind. Movable sealing strip for doors and the like. 1,892,986; Jan. 3.
Johnson, Harvey P., Brentwood, and P. H. Clarke, Hyattsville, Md. Combination puller. 1,893,414; Jan. 3.
Johnson & Johnson. (See Sander, Frank V., assignor.)
Johnson, Stanley J., assignor to Neon Process, Incorporated, Cleveland, Ohio. Luminous tube. 1,893,085; Jan. 3.
Johnson, Tomlinson F., Atlanta, Ga. Switch. 1,893,415; Jan. 3.
Johnston, Walter S., Blue Island, Ill., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Treating shingles. 1,892,672; Jan. 3.
Jones, Charles L., Pittsburgh, Pa. Permeable metal and making the same. 1,893,330; Jan. 3.
Journoud, Pierre, Lyon, France, assignor to L. J. Hyams and Company, New York, N. Y. Printed textile fabric or similar article. Des. 88,877; Jan. 3.
Kaess, Louis L. (See Winkler, F. W., and Kaess.)
Kägi, Emil, assignor to Firm Sulzer Frères Société Anonyme, Winterthur, Switzerland. Rotary compressor. 1,893,171; Jan. 3.
Kaiser, George, Folcroft, Pa. Harrow tooth. 1,893,416; Jan. 3.
Kamber, Adam, Youngstown, Ohio. Broom machine. 1,892,800; Jan. 3.
Kampfer, Herbert F., St. Paul, Minn. Universal link. 1,893,141; Jan. 3.
Kamps, Otto, Aachen, Germany. Aluminum alloy. 1,892,840; Jan. 3.
Kangro, Walther, and A. Lindner, Brunswick, Germany. Separating beryllium compounds from beryllium containing minerals or other substances. 1,893,331; Jan. 3.
Karnes, James C., Buffalo, N. Y. Optical system. 1,892,893; Jan. 3.
Kauffman, Samuel, assignor to American Metal Products Corporation (Delaware), St. Louis, Mo. Radiator shield. 1,892,954; Jan. 3.
Kaufmann, Henry L., Newton, Mass. Mattress protector. 1,892,841; Jan. 3.
Kaufmann, John J., Elkins Park, assignor to Steel Heddle Manufacturing Company, Philadelphia, Pa. Heddle. 1,893,288; Jan. 3.
Kearney, Edward J., and J. B. Armitage, Wauwatosa, assignors to Kearney & Trecker Corporation, West Allis, Wis. Machine tool. 1,892,894; Jan. 3.
Kearney & Trecker Corporation. (See Kearney, E. J., and Armitage, assignors.)
Keaton, Frank H. (See Bettison, D. C., and Keaton.)
Keefer, Clarence E., and F. C. Wachter, Baltimore, Md., assignors to The Dorr Company, Inc., New York, N. Y. Sewage treating apparatus. 1,892,688; Jan. 3.
Keiser, Herman L., Omaha, Nebr. Barbed wire reel. 1,892,785; Jan. 3.
Keller, Georg, Berlin-Steglitz, Germany. Arrangement for consecutively addressing any number of envelopes without carbon copy by means of a typewriter. 1,893,086; Jan. 3.
Kellett, Albert F. (See Broscombe, Henry, assignor.)
Kelly, Frank W., and A. H. Luedicke, assignors to Gridley Dairy Company, Milwaukee, Wis. Pasteurizing apparatus. 1,892,955; Jan. 3.
Kelvinator Corporation. (See Doeg, Ralph W., assignor.)
Kelvinator Corporation. (See Erbach, Frederick K., assignor.)
Kelvinator Corporation. (See Philipp, Lawrence A., assignor.)
Kelvinator Corporation. (See Spreen, Charles C., assignor.)
Kelvinator Corporation. (See Spring, George L., assignor.)
Kelvinator Corporation. (See Vis, George A., assignor.)
Kelvinator Corporation. (See Whitehead, Thomas C., assignor.)
Kelvinator Corporation. (See Whitehead, T. C., and Greenwald, assignors.)
Kendall Company, The. (See Reed, Raymond E., assignor.)
Kendall, Genevieve A. (See Kendall, Ira H., assignor.)
Kendall, Ira H., assignor to G. A. Kendall, Potsdam, N. Y. Can washing machine. 1,892,773; Jan. 3.
Kennedy, Harry E. (See Walker, B., and Kennedy.)
Kennedy, Harry E., Berkeley, Calif. Magnetic structure. 1,892,956; Jan. 3.

Kerns, Leonard R., assignor to Lubrication Devices, Inc., Battle Creek, Mich. Lubricator valve. 1,893,087; Jan. 3.
Kiewicz, John, assignor to The Reese Button Hole Machine Company, Boston, Mass. Sewing machine. 1,892,895; Jan. 3.
Kilgore, Frederick O., Boston, Mass. Hydraulic shock absorber. 1,893,058; Jan. 3.
Kilkenny, John E., Portland, Oreg. Combined socket handle and lamp guard. 1,893,088; Jan. 3.
Killefer Manufacturing Corporation, Ltd. (See Sjogren, O. W., and Vaughn, assignors.)
Kimball, Franklin E., Long Beach, Calif. Refining gasoline. 1,892,801; Jan. 3.
Kimberling, Henry R., St. Louis, Mo. Under drain for sewer filtering plants. 1,892,842; Jan. 3.
King, Henry F. (See Stolzenburg, F., and King.)
King Self-Service Electric Diner Inc., Ltd. (See Stolzenburg, F., and King, assignors.)
Kingsland, George D., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Heat regulating device. 1,893,237; Jan. 3.
Kingsland, George D., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Control device. 1,893,238; Jan. 3.
Kingsley, Charles B., Clairton, Pa. Crusher for glass and the like. 1,893,030; Jan. 3.
Kirby, James B., West Richfield, Ohio. Pivotal connection. 1,892,896; Jan. 3.
Kirkham, Doyle Z. (See Brower, C. R., and Kirkham.)
Kitchens, William F. (See Smith, Roy F., assignor.)
Kitson Company. (See Lovekin, Luther D., assignor.)
Kleinschmit, Oscar, assignor to Gebruder Brehmer Maschinenfabrik, Leipsig-Plagwitz, Germany. Flat gluing machine. 1,892,987; Jan. 3.
Klopotowski, Lucien, Paris, France. Buoy for saving the occupants and the material of submarine boats. 1,893,089; Jan. 3.
Klopp, Friedrich, Solingen-Wald, Germany. Apparatus for surface hardening of the inner wall of hollow bodies. 1,892,843; Jan. 3.
Knapp, Andrew S., St. Louis, Mo., assignor to Knapp-Monarch Company, Webster City, Iowa. Stopper or closure for insulated containers. 1,892,988; Jan. 3.
Knapp-Monarch Company. (See Knapp, Andrew S., assignor.)
Knowlton, Eugene W., Buffalo, N. Y. Control device for signals. 1,893,371; Jan. 3.
Koch, Henry, Jamaica, assignor to Dictograph Products Co., Inc., New York, N. Y. Acoustic device. 1,893,143; Jan. 3.
Kollmann, Theodor. (See Griessbach, R., and Kollmann.)
Komarek, Gustav, Chicago, Ill., and G. MacPhail, and C. Coryell, Bay City, Mich. Briquette. 1,893,417; Jan. 3.
Kouyoumjian, Haroutiun K., Providence, R. I., assignor to Ward Leonard Electric Company. Electric controlling apparatus. 1,893,289; Jan. 3.
Koza, Millard J., assignor of one-half to E. J. Watkins, Iowa City, Iowa. Piston ring inserter. 1,892,989; Jan. 3.
Kraenslein, Georg, Frankfort-on-the-Main, R. Welde, deceased, Frankfort-on-the-Main-Hochst, Anna Welde, administratrix, and P. Ochwat, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparing derivatives of the naphthazarine series. 1,892,730; Jan. 3.
Kratz, Edouard M., assignor to Marsene Products Co., Chicago, Ill. Transparent sheet and process of manufacture. 1,893,172; Jan. 3.
Krebs Pigment and Color Corporation. (See Blumenfeld, J., and Mayer, assignors.)
Kreidler, Alfred, Stuttgart, Germany. Indicating device. 1,893,090; Jan. 3.
Kress, Claude W., New York, N. Y. Display cabinet. 1,892,673; Jan. 3.
Kreutzer, Casper, Milltown, N. J. Double rope skipping toy. 1,893,173; Jan. 3.
Kroener, Paul F., Hyde Park, assignor to Textile Machine Works, Wyomissing, Pa. Stocking. Des. 88,915; Jan. 3.
Kroener, Paul F., Hyde Park, assignor to Textile Machine Works, Wyomissing, Pa. Stocking. Des. 88,916; Jan. 3.
Kroener, Paul F., Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa. Stocking. Des. 88,917; Jan. 3.
Kroener, Paul F., Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa. Stocking. Des. 88,918; Jan. 3.
Kroener, Paul F., Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa. Stocking. Des. 88,919; Jan. 3.
Kroener, Paul F., Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa. Stocking. Des. 88,920; Jan. 3.
Kroener, Paul F., Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa. Stocking. Des. 88,921; Jan. 3.
Kroener, Paul F., Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa. Stocking. Des. 88,922; Jan. 3.
Kroener, Paul F., Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa. Stocking. Des. 88,923; Jan. 3.
Kroener, Paul F., Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa. Stocking. Des. 88,924; Jan. 3.
Kroener, Paul F., Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa. Stocking. Des. 88,925; Jan. 3.
Kroener, Paul F., Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa. Stocking. Des. 88,926; Jan. 3.
Kropf, Alfred, Wetzlar, Germany, assignor to Stahlwerke Rochling-Buderus A. G. Alloy of high fusion point. 1,893,144; Jan. 3.
Kruger, Herman H. (See Gilmore, F. H., and Kruger.)
Kryzanowsky, Constant J., Baltimore, Md., assignor to Mine Safety Appliances Company, Pittsburgh, Pa., and H. J. Newmark, New York, N. Y. Apparatus for treating exhaust gases of internal combustion engines. 1,893,372; Jan. 3.
Kuchan, Zanon V., Aberdeen, Wash. Automobile jack. 1,893,418; Jan. 3.
Kuhns, Austin, assignor to Farrel-Birmingham Company, Inc., Buffalo, N. Y. Rolling mill. 1,893,290; Jan. 3.
Kulzer, Jakob, Detroit, Mich. Sewing stand. 1,893,419; Jan. 3.
Kwartin, Bernard, Brooklyn, N. Y. Volume control apparatus for recording and broadcasting. 1,893,291; Jan. 3.
La Bar, Bert C. (See Mylius, W. G., and La Bar.)
Labreche, Joseph C. A., Montreal, Quebec, Canada. Headlight lens. 1,893,174; Jan. 3.
Lacher, Samuel, New York, N. Y. Slide fastener and concealing means therefor. 1,893,420; Jan. 3.
Lacher, Samuel, New York, N. Y., assignor to Max Damm Company, Newark, N. J. Partition stop for luggage. 1,892,897; Jan. 3.
Lakin, John W., Detroit, Mich., and H. C. Field, Windsor, Ontario, Canada, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Window regulator. 1,892,731; Jan. 3.
Lambert, Douglas E. (See Leeson, B. H., and Lambert.)
Landberg, Frithiof, et al. (See Dahlstrom, Arvid, assignor.)
Lang, Gustave J., Longmeadow, assignor to American Bosch Magneto Corporation, Springfield, Mass. Magneto distributor construction. 1,892,802; Jan. 3.
Lange, Henry, assignor to Quincy Stove Manufacturing Co., Quincy, Ill. Gas range. Des. 88,878; Jan. 3.
Langlang, Felomino V., et al. (See Pineda, U., and Anabisa, assignors.)
Larson, Carl H., Elkhart, Ind., assignor to The Adlake Company. Electric hand lantern. 1,893,292; Jan. 3.
Larson, Carl H., Elkhart, Ind., assignor to The Adlake Company. Electric hand lantern. 1,893,293; Jan. 3.
Larson, Carl H., Elkhart, Ind., assignor to The Adlake Company. Electric hand lantern. 1,893,294; Jan. 3.
Laska, Leopold, and A. Werdermann, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Derivatives of the diphenylamine series and making same. 1,893,091; Jan. 3.
Latzko, Johann, Vienna, and O. Plechl, Pfaffstatten, assignors to Oesterreichische Brown-Boveri Werke A. G., Vienna, Austria. Indicating and recording apparatus. 1,893,421; Jan. 3.
Lawshe, Errol R., Rutherford, assignor to Becton, Dickinson & Co., East Rutherford, N. J. Injection device. 1,892,803; Jan. 3.
Lawson, John R., Denver, Colo. Coal cutter. 1,892,844; Jan. 3.
Le Bailly, Andrew R., assignor to Sargent & Lundy, Chicago, Ill. Spring support. 1,893,295; Jan. 3.
Leeson, Bruce H., Tynemouth, and D. E. Lambert, Harpenden, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England. Electric selective remote control system. 1,893,479; Jan. 3.
Lehberger, George F. (See Murphy, D., and Lehberger.)
Lehner, Charles, Long Island City, N. Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 88,927; Jan. 3.
Lehr, Paul E., Oilfields, Calif. Planimeter. 1,892,957; Jan. 3.
Leib, August, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Weatherproof direction-finding antenna. 1,892,958; Jan. 3.
Lemoine, Fred F., Maynard, Mass. Holder for ash trays or other articles. Des. 88,879; Jan. 3.
Levenson, Herman, Brooklyn, N. Y. Refreshment cart or similar article. Des. 88,880; Jan. 3.
Levenson, Simon, New York, N. Y. Embroidered letter for monograms. 1,893,422; Jan. 3.
Levi, Tullio G. (See Brunl, G., and Levi.)
Lewis, Charles H. (See Urbain, Oliver M., assignor.)
Lewis, Richard W., New York, N. Y. Light projector. 1,892,898; Jan. 3.
L'Hollier, Leslie H., Waltham, Mass., assignor to The B. F. Goodrich Company, New York, N. Y. Shoe sole. Des. 88,881; Jan. 3.
Libby, McNeill & Libby. (See Shoji, George K., assignor.)
Liberman, Alexander J., Berlin, Germany. Device for cutting out sections of a photographic film for development. 1,893,092; Jan. 3.
Lieber, Hugo, assignor to Sonotone Corporation, New York, N. Y. Earpiece for ear phones. 1,893,474; Jan. 3.
Lightner, Donald C. (See Wilhelm, R. M., and Lightner.)

Lilliendahl, William C., Montclair, and F. H. Driggs, Bloomfield, N. J., assignors to Westinghouse Lamp Company. Preparation of metal phosphides. 1,893,296; Jan. 3.

Lincoln Engineering Company. (See Barks, Frank S., assignor.)

Lind, Valentin, Berlin-Charlottenburg, Germany, assignor to General Electric Company. Control system. 1,893,332; Jan. 3.

Lindh, Carl T. G., Highland Park, assignor to American Rubber Products Company, Detroit, Mich. Producing plastic composition. 1,892,703; Jan. 3.

Lindner, Agnes. (See Kangro, W., and Lindner.)

Line Material Company. (See Steinmayer, Alwin G., assignor.)

Linner, Franz, Vienna, Austria, assignor, by mesne assignments, to Beck, Koller & Company, Inc., Detroit, Mich. Preparation of alkyl substituted aromatic hydroxyl compounds. 1,892,990; Jan. 3.

Linville, Darrell B., and B. C. Canty, Rockford, Ill. Electric soldering tool. 1,893,093; Jan. 3.

Lippert, Paul, Chicago, Ill. Sprinkler. 1,892,059; Jan. 3.

Llewellyn, Frederick B., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Control circuits for space discharge devices. 1,893,031; Jan. 3.

Lock Nut Company. (See Arenz, John A., assignor.)

Locke Insulator Corporation. (See Hawley, Kent A., assignor.)

Löffler, Jenny E., sole heir. (See Löffler, Stephan.)

Löffler, Stephan, deceased, by Jenny E. Löffler, sole heir, Berlin-Charlottenburg, Germany. Treating coals, tars, mineral oils, and the like, by hydrogenation under high pressure and at high temperature. 1,893,423; Jan. 3.

Lonza Elektrizitaetswerke und Chemische Fabriken, A. G. (See Wamoscher, Laszlo, assignor.)

Lorenz, C., A. G. (See Scheppmann, Wilhelm, assignor.)

Lotter, Adolph G., assignor to Stationers Loose Leaf Co., Milwaukee, Wis. Loose leaf binder. 1,893,175; Jan. 3.

Loun, Henry J., Brooklyn, assignor to Wullschleger & Co., New York, N. Y. Textile fabric or the like. Des. 88,882; Jan. 3.

Lovekin, Luther D., Villa Nova, assignor to Kitson Company, Philadelphia, Pa. Cold water inlet control valve. 1,892,674; Jan. 3.

Lubrication Devices, Inc. (See Kerns, Leonard R., assignor.)

Luedicke, Alex H. (See Kelly, F. W., and Luedicke.)

Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,883; Jan. 3.

Lush, Ernest J., London, England. Hydrogenating apparatus. 1,892,732; Jan. 3.

Luzardo, Rudolph, New York, N. Y. Buffing machine. 1,893,424; Jan. 3.

Lyon Metal Products, Incorporated. (See Vance, Walter N., assignor.)

Lyon, Robert H. (See Falkenwalde, Oscar, assignor.)

Lyon, Russell F., Menasha, and P. J. Christman, Green Bay, assignors to Marathon Paper Mills Company, Rothschild, Wis. Method of and apparatus for forming sulphurized fiber board containers. 1,892,675; Jan. 3.

Lysholm, Alf, assignor to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden. Elastic fluid turbine of the combined radio-axial flow type. 1,892,899; Jan. 3.

Macalpine, William W., East Orange, N. J. Radio receiving system. 1,892,704; Jan. 3.

MacDaniel, Fenwick A. (See Mitchell, Alvan C., assignor.)

MacPhail, George. (See Komarek, G., MacPhail, and Coryell.)

Magazine Repeating Razor Company. (See Conner, Edward A., assignor.)

Magee, James M., et al. (See Palmer, John V., assignor.)

Magnuson, Thure J., Chicago, Ill., assignor to The Fanner Manufacturing Company, Cleveland, Ohio. Chaplet. 1,893,425; Jan. 3.

Mahan, Joseph P., assignor to The National Supply Company, Toledo, Ohio. Stroke regulating device for pull rods. 1,893,333; Jan. 3.

Mahin, James E. (See Marshall, C. M., and Mahin.)

Mahoney, John P., assignor to Gardner Broom Company, Amsterdam, N. Y. Combination broom holder and dustpan. 1,893,426; Jan. 3.

Maisch, Jacques, New York, N. Y. Textile fabric or the like. Des. 88,884; Jan. 3.

Maisch, Jacques, New York, N. Y. Textile fabric or the like. Des. 88,885; Jan. 3.

Marathon Paper Mills Company. (See Lyon, R. F., and Christman, assignors.)

Marsene Products Co. (See Kratz, Edouard M., assignor.)

Marsh, C. A. & Co., Inc. (See Hodges, Irving L., assignor.)

Marshall, Clarence M., and J. E. Mahin, assignors of one-third to Martin D. Murphy, Stockton, Calif. Valve puller. 1,892,900; Jan. 3.

Maschinenfabrik Augsburg-Nurnberg, A. G. (See Breitwieser, Heinrich, assignor.)

Master Products Company. (See Bohn, Walter A., assignor.)

Matsunawa, Shinta, Iogi Machi, Toyotama Gun, and Fusatoshi Nozawa, Higashi Chofu Machi, Ebara Gun, Tokyo Fu, Japan. Lubricant and preparing same. 1,893,094; Jan. 3.

Matthes, Samuel S., assignor to The Ohio Brass Company, Mansfield, Ohio. Trolley harp. 1,893,373; Jan. 3.

Maulsby, John R. (See Maulsby, Zene R. and J. R.)

Maulsby Machine Company. (See Maulsby, Zene R. and J. R., assignors.)

Maulsby, Zene R. and J. R., assignors to Maulsby Machine Company, Inc., Everett, Wash. Fabric forming machine. Re18,705; Jan. 3.

Maxmoor Corporation. (See Moore, Arlington, assignor.)

Mayer, Max. (See Blumenfeld, J., and Mayer.)

Mayhew, Peter, Barrington, R. I. Motor vehicle heater. 1,893,059; Jan. 3.

McCain, Cecil C., Glen Ellyn, Ill., assignor to Addressograph Company, Wilmington, Del. Embossing machine. 1,893,463; Jan. 3.

McCarty, Edgar V., Los Angeles, Calif. Attachment for automatic pistol handles. 1,893,095; Jan. 3.

McClintic-Marshall Corporation. (See Overholtz, George D., assignor.)

McComb, Henry G., Chicago, Ill., and W. D. Collins, Evansville, Ind., assignors to Servel Inc., New York, N. Y. Refrigeration. 1,892,960; Jan. 3.

McConkey, Thomas C., and G. Picard, assignors to The B. J. Coghlin Company Limited, Montreal, Quebec, Canada. Spring control. 1,892,991; Jan. 3.

McDonald, A. Y., Mfg. Co. (See Groen, Christopher, assignor.)

McDonald, Charles D., Chicago, Ill., assignor, by mesne assignments, to Continental Can Company, Inc., New York, N. Y. Apparatus for automatically stopping automatic power presses. 1,893,427; Jan. 3.

McDonald, Charles D., Chicago, Ill., assignor, by mesne assignments, to Continental Can Company, Inc., New York, N. Y. Apparatus for automatically stopping automatic power presses. 1,893,428; Jan. 3.

McDonald, David, Birmingham, Ala. Metal window guard attachment. 1,893,176; Jan. 3.

McEnery, Joseph P., Flushing, N. Y. Adapter or attachment for cigarette packages or the like. 1,892,676; Jan. 3.

McEnery, Joseph P., Flushing, N. Y. Cigarette package case. 1,892,677; Jan. 3.

McGorry, Donald H., McMinnville, Oreg. Liquid meter. 1,893,429; Jan. 3.

McGrath, Allen G., assignor to The Darnell Corporation, Ltd., Long Beach, Calif. Removable wheel caster. 1,892,845; Jan. 3.

McGrew, John A., Albany, N. Y., assignor to Bethlehem Steel Company. Six-wheeled motorized truck. 1,893,032; Jan. 3.

McIntyre, George E., and L. J. Smyth, Kansas City, Mo. Attaching fixture. 1,892,678; Jan. 3.

McKenna, John S. (See Murdock, R. A., and McKenna.)

McKenzie, Donald A., Deerfield, Ill. Building unit and making the same. 1,893,430; Jan. 3.

McLellan, David T. (See Mellor, A., and McLellan.)

Mechau, Emil, Berlin-Sudende, Germany, assignor to General Electric Company. Motion picture projector. 1,893,374; Jan. 3.

Megroz, Roger, Bronxville, assignor to William Willheim Co. Inc., New York, N. Y. Textile fabric or similar article. Des. 88,886; Jan. 3.

Megroz, Roger, Bronxville, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,887; Jan. 3.

Megroz, Roger, Bronxville, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,928; Jan. 3.

Meier, John A., Hamilton, Ohio. Packing case or box for beehives. 1,893,431; Jan. 3.

Mellor, Albert, and D. T. McLellan, Spondon, near Derby, England, assignors to Celanese Corporation of America. Coloration of textile materials. 1,893,239; Jan. 3.

Menard, Hubert. (See Rouanet, Louis, assignor.)

Mendenhall, J. Howard, and T. T. Shoaf, San Francisco, Calif. Suspended camp cooler. 1,892,733; Jan. 3.

Merlub-Sobel, Menahem. (See Booth, H. S., Torrey, and Merlub-Sobel.)

Merwin, John C., assignor to Chain Belt Company, Milwaukee, Wis. Locking pin construction. 1,893,467; Jan. 3.

Messler, Eugene L., and J. J. Isherwood, Pittsburgh, Pa.; said Isherwood, assignor to said Messler. Ingot mold assembly. 1,893,206; Jan. 3.

Messler, Eugene L., and J. J. Isherwood, Pittsburgh, Pa.; said Isherwood assignor to said Messler. Hot top. 1,893,207; Jan. 3.

Michaud, John C., West Springfield, Mass. Clothes drier reel. 1,893,096; Jan. 3.

Michelsen, William O., Woodhaven, assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,893,097; Jan. 3.

Middleton, Charles O. (See Gary, Wright W., assignor.)

Miller, Charles F., assignor to The National Marking Machine Company, Cincinnati, Ohio. Laundry assorting device. 1,892,774; Jan. 3.

Miller, D. D. (See Stewart, Jay V., assignor.)

Miller Devices Inc. (See Miller, Philip M., assignor.)

Miller, E. H. (See Shively, Everett E., assignor.)

Miller, J. H., et al. (See Shively, Everett E., assignor.)

Miller, Philip M., Youngstown, Ohio, assignor to Miller Devices Inc., New York, N. Y. Metal wheel. 1,893,334; Jan. 3.

Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Distillation of tar. 1,893,145; Jan. 3.

Mills, John W. (See Muirhead, J. R., and Mills.)

Mine Safety Appliances Company et al. (See Kryzanowsky, Constant J., assignor.)

Minneapolis-Honeywell Regulator Company. (See Kingsland, George D., assignor.)

Mishawaka Rubber and Woolen Manufacturing Company. (See Taber, John E., assignor.)

Mitchell, Alvan C., assignor of one-half to F. A. MacDaniel, Detroit, Mich. Building structure. 1,893,480; Jan. 3.

Mix, Martin I., and H. E. Heil, Chicago, Ill. Fluid control device. 1,892,775; Jan. 3.

Mix, Martin I., and H. E. Heil, Chicago, Ill. Fluid control device. 1,892,776; Jan. 3.

Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Concealed radiator. 1,893,146; Jan. 3.

Modine Manufacturing Company. (See Modine, Arthur B., assignor.)

Moehler, Otto J., Newark, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Ultra-violet sterilizing apparatus. Des. 88,929; Jan. 3.

Monaco, Joseph, New York, N. Y. Indoor clothesline extension. 1,893,432; Jan. 3.

Mong, Fern, Greenville, Ohio. Nozzle support. 1,893,241; Jan. 3.

Moore, Arlington, assignor to Maxmoor Corporation, New York, N. Y. Fuel metering control for internal combustion engines. 1,893,297; Jan. 3.

Moore, Emmett B., Evanston, Ill. Hose nozzle. 1,893,298; Jan. 3.

Moran, John J., and J. W. Quick, New Orleans, La. Dispensing device. 1,892,992; Jan. 3.

Morrison, Montford, Montclair, N. J., assignor to Westinghouse X-Ray Company, Inc. Discharge tube stabilizer system. 1,893,299; Jan. 3.

Moto Meter Gauge & Equipment Corporation. (See Collins, William A., assignor.)

Mueller, Emil M., assignor to C. P. Goers American Optical Company, New York, N. Y. Camera. 1,892,846; Jan. 3.

Muirhead, John R., Kirkcaldy, and J. W. Mills, Adelaide, South Australia, Australia. Pump. 1,893,433; Jan. 3.

Müller, Karl H., Bronxville, N. Y. Smooth flow compensator. 1,893,434; Jan. 3.

Muller, Otto A., Ambler, Pa. Plant support. 1,893,335; Jan. 3.

Mullins Manufacturing Corporation. (See Booth, Morris F., assignor.)

Multigraph Company. (See Dietz, Valentin, assignor.)

Murdock, Russell A., and J. S. McKenna, Los Angeles, Calif., assignors to Elliott Core Drilling Company. Rock drill. 1,893,033; Jan. 3.

Murphy, Daniel, and G. F. Lehberger, New Castle, Pa. Air control device with automatic release. 1,892,734; Jan. 3.

Murphy, Martin D. (See Marshall, C. M., and Mahin, assignors.)

Murray, Joseph B., Brooklyn, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation. Radiator. 1,893,034; Jan. 3.

Murray, William A., jr. (See Murray, William A., sr., and W. A., jr.)

Murray, William A., Spring Company, The. (See Murray, William A., sr., and W. A., jr., assignors.)

Murray, William A., sr., and W. A. Murray, jr., assignors to The William A. Murray Spring Company, Cincinnati, Ohio. Spring seat. 1,893,098; Jan. 3.

Mylius, Walter G., Summit, and B. G. La Bar, Union, N. J., assignors to Westinghouse Electric and Manufacturing Company. Watthour meter. 1,893,177; Jan. 3.

N. V. Maatschappij tot Exploitatie van Uitvindingen. (See Aninga, Johannes, assignor.)

Naamlooze Vennootschap: Koninklijke Maatschappij "de Schelde", Scheepsbouw en Werktuigenfabriek. (See Blokland Visser, Jan, assignor.)

National Air Control Co. Inc. (See Caldwell, William J., assignor.)

National Aniline & Chemical Company. (See Crowell, Joyce H., assignor.)

National Desk Company. (See Thomas, C. R., jr., and Wich, assignors.)

National Marking Machine Company, The. (See Constable, Charles E., assignor.)

National Marking Machine Company, The. (See Miller, Charles F., assignor.)

National Rubber Machinery Company. (See Gammeter, John R., assignor.)

National Supply Company, The. (See Mahan, Joseph R., assignor.)

Neal, Theophilus E., Prairie View, Tex. Shower bath spray. 1,893,435; Jan. 3.

Neaman, Harry I., et al. (See Palmer, John V., assignor.)

Nelson, Hans P., Grantwood, N. J. Tapered center for riding device. 1,893,099; Jan. 3.

Nemes, Mike J., assignor of one-third to Wm. A. Hamilton, Steubenville, Ohio. Stopper operating mechanisms for ladles. 1,893,436; Jan. 3.

Nenninger, Lester F. (See Ernst, Hans, assignor.)

Neon Process, Incorporated. (See Johnson, Stanley J., assignor.)

Nevin, Mendel, Brooklyn, N. Y. Syringe. 1,892,998; Jan. 3.

Newbaker, Edward J., Windber, Pa., assignor to The Berwind-White Coal Mining Company. Mining apparatus. 1,892,994; Jan. 3.

New Britain-Gridley Machine Company, The. (See Brown, Robert S., assignor.)

New Departure Manufacturing Company, The. (See Baninger, John H., assignor.)

New Departure Manufacturing Company, The. (See Hughes, Frederick G., assignor.)

New Departure Manufacturing Company, The. (See Vuilleumier, Albert, assignor.)

Newman, William A., Montreal, Quebec, Canada, assignor to Universal Draft Gear Attachment Company, Chicago, Ill. Railway brake. 1,893,300; Jan. 3.

Newmark, H. J., et al. (See Kryzanowsky, Constant J., assignor.)

New Yorker Hotel Corporation. (See Scavullo, Angelo C., assignor.)

Nicholson, Robert H., Los Angeles, Calif. Marking plate for keys and securing same. 1,892,995; Jan. 3.

Norgren, Oscar B., Chicago, Ill. Die casting machine. 1,893,301; Jan. 3.

Norquay, John G., St. Andrew, Manitoba, Canada. Exhaust steam spreader. 1,892,996; Jan. 3.

Norton, Charles H., Plainville, Conn., assignor to Norton Company, Worcester, Mass. Lapping or grinding machine. 1,893,100; Jan. 3.

Norton Company. (See Beth, Hugo W. H., assignor.)

Norton Company. (See Flygare, Carl G., assignor.)

Norton Company. (See Indge, H. S., and Player, assignors.)

Norton Company. (See Norton, Charles H., assignor.)

Norton Company. (See Ridgway, Raymond R., assignor.)

Norton Company. (See Strong, Arthur J., assignor.)

Norton Company. (See Webster, D. E., and Sanford, assignors.)

Nozawa, Fusatoshi. (See Matsunawa, S., and Nozawa.)

Ober, Beverly, W. W. Pagon, G. L. Pruett, and W. W. Troxell, assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md. Producing phosphatic fertilizers. 1,893,437; Jan. 3.

Oberdorfer, Henry D., and R. True, assignors to Circle A Products Corporation, Newcastle, Ind. Folding partition. 1,893,147; Jan. 3.

Oberle, Alfred, Washington, D. C., assignor of one-half to Thomas E. Scofield, Kansas City, Mo. Purifying petroleum hydrocarbons. 1,893,438; Jan. 3.

Oberphos Company, The. (See Ober, B., Pagon, Pruett, and Troxell, assignors.)

Oberrelt, Erwin. (See Schumann, C., Fick, and Oberrelt.)

Ochtman, Leonard, jr., Plainfield, N. J., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa. Compressor. 1,892,786; Jan. 3.

Ochwat, Paul. (See Kraenzlein, G., Welde, and Ochwat.)

Oesterreichische Brown-Boveri Werke A. G. (See Latzko, J., and Plechl, assignors.)

Ogden, Ashley G., Baltimore, Md., assignor to General Printing Ink Corporation, New York, N. Y. Photoprinting. 1,893,439; Jan. 3.

Ohio Brass Company, The. (See Austin, Arthur O., assignor.)

Ohio Brass Company, The. (See Matthes, Samuel S., assignor.)

Ohio Brass Company, The. (See Way, Clarence J., assignor.)

Ohio Truss Company, The. (See Pease, Isaac M., assignor.)

Ohlis, Julius J. (See Old, James H., assignor.)

Old, James H., Forrest Park, assignor of one-half to J. J. Ohlis, Chicago, Ill. Shield for skylight, floor light, and vault light structures. 1,893,101; Jan. 3.

Oldenburg, Alfred, Berlin-Charlottenburg, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Electric tool with an electric motor mounted in the handle. 1,892,997; Jan. 3.

O'Neill, Augustine G., Tulsa, Okla. Color screens and making same. 1,892,901; Jan. 3.

Optimum Davit Company Limited, The. (See Burrill, L. C., Bocler, and Hunter, assignors.)

Osgood, George H., Tacoma, Wash. Windshield warmer. 1,892,847; Jan. 3.

Osius, Frederick J., and M. Seiderman, Miami, Fla.; said Seiderman assignor to said Osius. Drink mixer. Des. 88,888; Jan. 3.

Ostersetzer, Alfons, Klosterneuburg, and F. Riesenfeld, Vienna, Austria, assignors to Pollopas Limited, Nottingham, England. Manufacture of phenol formaldehyde condensation products. 1,892,848; Jan. 3.

Outboard Motors Corporation. (See Evinrude, Ole, assignor.)

Overholtz, George D., Fair Oaks, assignor to McClintic-Marshall Corporation, Bethlehem, Pa. Outdoor advertising structure. 1,892,998; Jan. 3.

Overmeyer, John, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,930; Jan. 3.

Packer, Hartley G., Reno, Nev. Device for securing milk can covers. 1,893,102; Jan. 3.

Page, Robert R., Crestwood, N. Y. Articulated fountain divider. 1,893,148; Jan. 3.

Pagliuchi, Frank D., New York, N. Y. Hydrostatic pump. 1,893,440; Jan. 3.

Pagon, Willard W. (See Ober, B., Pagon, Pruett, and Troxell.)

Palen, Vernon W., Flushing, N. Y. Circuit control means. 1,893,336; Jan. 3.
Palmer, John V., assignor of one-third to H. I. Neaman and one-third to J. M. Magee, Pittsburgh, Pa. Connecter for railway rails. 1,893,208; Jan. 3.
Paramount Textile Machinery Company. (See Stetten, Julius O. V., assignor.)
Parker, Arthur L., Cleveland, Ohio. Tube coupling. 1,893,441; Jan. 3.
Parker, Arthur L., Cleveland, Ohio. Tube coupling. 1,893,442; Jan. 3.
Parker, Edwin D., assignor to The Parker Pattern Works Company, Springfield, Ohio. Sweeping machine. 1,892,961; Jan. 3.
Parker Pattern Works, Company, The. (See Parker, Edwin D., assignor.)
Parkhill, Mortimer S., Corning, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve cage. 1,893,209; Jan. 3.
Parsons, Charles A., deceased, and J. Rosen, Newcastle-upon-Tyne, England; said Rosen assignor to said Parsons; K. Parsons, V. Thompson, and F. G. H. Bedford legal representatives. Electrical machinery. 1,893,375; Jan. 3.
Parsons, John S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical distribution system. 1,893,178; Jan. 3.
Parsons, John S., East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company. Relay for network distribution systems. 1,893,179; Jan. 3.
Parsons, John S., East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company. Electrical distribution system. 1,893,180; Jan. 3.
Parsons, Katharine, et al., legal representatives. (See Parsons, C. A., and Rosen.)
Pasinski, Walter J., assignor to Burroughs Adding Machine Company, Detroit, Mich. Cash register. Des. 88,889; Jan. 3.
Pasquali, Eteocle, Freeport, N. Y. Antiskid appliance for shoes. 1,893,103; Jan. 3.
Passaic Kiddy Shop, Inc. (See Dworkin, Samuel, assignor.)
Patent and Licensing Corporation, The. (See Jaeger, Fred, assignor.)
Patent and Licensing Corporation, The. (See Johnston, Walter S., assignor.)
Patent and Licensing Corporation, The. (See Petersen, Edwin S., assignor.)
Patitz, Gerhardt J., Peekskill, and R. W. Bunge, Bronxville, assignors to Standard Brands Incorporated, New York, N. Y. Automatic machine for cutting plastic products. 1,892,705; Jan. 3.
Patterson, Franklin G., Schenectady, N. Y., assignor to General Electric Company. Lightning field intensity recorder. 1,893,337; Jan. 3.
Patterson, Luther M., jr., New Philadelphia, Ohio. Storage battery. 1,892,962; Jan. 3.
Pawlikowski, Rudolf, Goerlitz, Germany. Internal combustion engine for pulverulent fuel. 1,893,035; Jan. 3.
Pearce, Llewellyn T., assignor to The Bristol Aeroplane Company, Limited, Bristol, England. Apparatus for machining propeller blades and like articles. 1,893,443; Jan. 3.
Pease, Isaac M., Cincinnati, Ohio, assignor to The Ohio Truss Company. Truss pad construction. 1,892,804; Jan. 3.
Pease, Isaac M., Cincinnati, Ohio, assignor to The Ohio Truss Company. Truss pad. 1,892,805; Jan. 3.
Pedersen, Ingvald O., Wilkinsburg, Pa. Manufacture of drawn glass. 1,892,806; Jan. 3.
Peiler, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Forehearth for molten glass. 1,893,060; Jan. 3.
Peiler, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Forehearth for molten glass. 1,893,061; Jan. 3.
Peiler, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for circulating molten glass. 1,893,062; Jan. 3.
Pell, James D., et al. (See Satterthwaite, Thomas W., assignor.)
Penner, Daniel, and I. Feintuch, Kingston, N. Y. Mattress. 1,892,679; Jan. 3.
Perkins, Clarence J. (See Croslen, Roy C., assignor.)
Perry, Edward D., Watertown, Conn., and G. E. Ball, Cranston, R. I., assignors to The Beardsley & Wolcott Manufacturing Company, Waterbury, Conn. Sadiron. Des. 88,890; Jan. 3.
Peters, Arthur M., assignor of one-half to J. K. Smith, North Baltimore, Ohio. Automatic starter switch. 1,893,242; Jan. 3.
Petersen, Edwin S., Jamaica Plain, assignor to The Patent and Licensing Corporation, Boston, Mass. Cutting mechanism for composition constructional material. 1,892,680; Jan. 3.
Peterson, Eugene, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Controlling electric wave amplifiers. 1,893,302; Jan. 3.
Philaja, Nels, El Paso, Tex. Comb. 1,892,749; Jan. 3.
Philipp, Lawrence A., assignor to Kelvinator Corporation, Detroit, Mich. Evaporator for refrigerators. 1,893,338; Jan. 3.
Philips, N. V., Gloeilampenfabrieken. (See Van Gessel, Karel M., assignor.)
Philips, Samuel C., Tulsa, Okla. Safety extension signal. 1,893,303; Jan. 3.
Phillips, Stephen N. H., London, England. Carton or box for cigarettes and the like. 1,892,807; Jan. 3.
Picard, Georges. (See McConkey, T. C., and Picard.)
Picco, John, New York, N. Y. Tubular aerial advertising device. 1,893,149; Jan. 3.
Piercy, Carl A., Ballston Lake, N. Y., assignor to General Electric Company. High tension power transmitting electric cable. 1,893,376; Jan. 3.
Pineda, Urbano, and T. L. Anabisa, assignors of one-half to said Pineda, one-fourth to said Anabisa, and one-fourth to Felomino V. Langlang, San Francisco, Calif. Compass. 1,892,735; Jan. 3.
Place, Bion C., assignor of one-half to George E. Gagnier, Detroit, Mich. Vehicle body trim panel. 1,893,104; Jan. 3.
Player, Sydney. (See Indge, H. S., and Player.)
Plechl, Otto. (See Latzko, J., and Plechl.)
Pollopas Limited. (See Ostersetzer, A., and Riesenfeld, assignors.)
Porcelain Tile Corporation. (See Grigsby, Owen E., assignor.)
Porter, Gilbert E., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Vehicle spring. 1,893,150; Jan. 3.
Potdevin Machine Company. (See Hunziker, Paul, assignor.)
Preatka, Joseph, New York, N. Y. Aeroplane. 1,892,808; Jan. 3.
Prentice, George E., Berlin, Conn. Fastener. 1,893,036; Jan. 3.
Prentice, George E., Berlin, Conn. Slider for separable fasteners. 1,893,037; Jan. 3.
Prosperity Company Inc., The. (See Davis, Ernest, assignor.)
Pruett, George L. (See Ober, B., Pagon, Pruett, and Troxell.)
Pruitt, Harvey E., assignor of one-half to H. E. Wertman, Flint, Mich. Castellating machine. 1,893,444; Jan. 3.
Pullenlite Company. (See Gamble, R. H., and Crowell, assignors.)
Pyro-Pack Products Co. (See Chiles, Howard M., assignor.)
Quick, John W. (See Moran, J. J., and Quick.)
Quincy Stove Manufacturing Co. (See Lange, Henry, assignor.)
Raaen, Ole E., Fargo, N. Dak. Box car door. 1,893,105; Jan. 3.
Raap, Peter H., Oak Park, Ill., assignor to Central Metallic Casket Company. Burial casket. Des. 88,891; Jan. 3.
Raap, Peter H., Oak Park, Ill., assignor to Central Metallic Casket Company. Burial casket. Des. 88,931; Jan. 3.
Racine, Mederic, assignor of one-fourth to A. Tribanit, Montreal, Quebec, Canada. Concealed ironing board. 1,892,963; Jan. 3.
Radio Corporation of America. (See Franklin, C. S., and Green, assignors.)
Rainey, David M., Stratford, Conn. Padlock. 1,892,964; Jan. 3.
Ralston, Oliver C., and K. M. Baum, assignor to United Verde Copper Company, Clarkdale, Ariz. Recovering sulphur. 1,892,999; Jan. 3.
Rankin, Renville S., Hastings-upon-Hudson, assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y. Sewage disposal. 1,892,681; Jan. 3.
Ranney, Leo, New York, N. Y. Submersible toy. 1,893,000; Jan. 3.
Rasky, David, Duluth, Minn., assignor, by mesne assignments, to The International Honey-Butter Corporation, Cleveland, Ohio. Food product and producing the same. 1,892,902; Jan. 3.
Rawles, Garnett R., and A. Tedder, Memphis, Tenn. Cylinder construction. 1,892,852; Jan. 3.
Rayfield, Frederick J., assignor to Champion Pneumatic Co., Chicago, Ill. Lubricating system. 1,892,849; Jan. 3.
Raymond Concrete Pile Company. (See Watt, Elihu D., assignor.)
Red Spot Electric Co. Inc. (See Staley, Miles E., assignor.)
Reece Button Hole Machine Company, The. (See Kiewicz, John, assignor.)
Reed, Raymond E., Chicago, Ill., assignor to The Kendall Company, Chicago, Ill. Surgical bandage and preparing same. 1,892,706; Jan. 3.
Rees, William H., Berkeley, Calif. Weighing apparatus. 1,893,243; Jan. 3.
Remington Arms Company. (See Woodford, Watson H., assignor.)
Rentschler, Harvey C., East Orange, N. J., assignor to Westinghouse Lamp Company. Making failure indicator lamps. 1,893,305; Jan. 3.
Rentschler, Harvey C., East Orange, and D. E. Henry, Bloomfield, N. J., assignors to Westinghouse Lamp Company. Negative glow lamp. 1,893,304; Jan. 3.
Renu Parts Corporation. (See Covert, Martin B., assignor.)
Republic Flow Meters Company. (See Bridges, James, assignor.)
Republic Steel Corporation. (See Coryell, William C., assignor.)
Reyrolle, A., & Company. (See Leeson, B. H., and Lambert, assignors.)

Rice, John S. (See Trew, James W., assignor.)
Richard, Bernhard, assignor to the Firm J. R. Geigy S. A., Basel, Switzerland. Manufacture of monoazo-dyestuffs. 1,893,244; Jan. 3.
Richards, Thomas E., Auckland, New Zealand. Making a printing plate. 1,892,682; Jan. 3.
Richardson Company, The. (See Worthington, Everett, assignor.)
Rider, Harry N., Youngstown, assignor to "Automatic" Sprinkler Company of America, Cleveland, Ohio. Fluid distributing device. 1,893,210; Jan. 3.
Ridgway, Raymond R., Niagara Falls, N. Y., assignor to Norton Company, Worcester, Mass. Method of and apparatus for electrically fusing nonconducting materials. 1,893,106; Jan. 3.
Riesenfeld, Franz. (See Ostersetzer, A., and Riesenfeld.)
Riley Stoker Corporation. (See Robertson, R. M., and Allin, assignors.)
Rimele, William T., West Palm Beach, Fla. Turbine water meter. 1,893,445; Jan. 3.
Ritter, Julius, jr., assignor to Hartmann Trunk Company, Racine, Wis. Wardrobe case. 1,892,903; Jan. 3.
Ritz Woller, Oliver C., Chicago, Ill. Mirror structure for trucks and the like. 1,893,245; Jan. 3.
Roberts, Harold W., et al. (See Bickel, William A., assignor.)
Robertshaw, Clarence W., assignor to Robertshaw Thermostat Company, Youngwood, Pa. Heat control device for ovens and the like. 1,892,809; Jan. 3.
Robertshaw, George A., Youngwood, Pa. Automatic fuel controller. 1,892,810; Jan. 3.
Robertshaw Thermostat Company. (See Robertshaw, Clarence W., assignor.)
Robertson, Robert M., Toronto, and M. C. Allin, Weston, Ontario, Canada, assignors to Riley Stoker Corporation, Worcester, Mass. Automatic stoker. 1,893,246; Jan. 3.
Robertson, Robert R., Evanston, Ill. Single plate multiple photographic reproduction. 1,892,683; Jan. 3.
Robertson, Robert R., Evanston, Ill. Camera. 1,892,684; Jan. 3.
Robinson, Andrew M., New York, N. Y., assignor to Consolidated Automatic Merchandising Corporation. Spurious coin detector. 1,892,777; Jan. 3.
Robinson, Quint O., and G. H. Goulden, Denver, Colo. Pipe threading device. 1,892,904; Jan. 3.
Robison, Thomas W., Hillsdale, Oreg. Quick drop attachment for type casting machines. 1,893,247; Jan. 3.
Rocquin, Camille J., New Orleans, La. Rake. 1,892,965; Jan. 3.
Rogers, Clarence T., New York, N. Y. Doorcheck and control device therefor. 1,892,811; Jan. 3.
Rohrbach, Adolf, Berlin, Germany, assignor to Rohrbach Patents Corporation. Arrangement of engine on aircraft. 1,893,001; Jan. 3.
Rohrbach Patents Corporation. (See Rohrbach, Adolf, assignor.)
Rolls Royce Limited. (See Royce, Frederick H., assignor.)
Root, Charles S., Springfield, Mass. Compact. 1,892,786; Jan. 3.
Rose, Edwin L., Cambridge, Mass., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y. Rectilinear electromagnetic motor. 1,893,377; Jan. 3.
Rosen, Jessel. (See Parsons, C. A., and Rosen.)
Rosenberg, Edmund, Brunn, Czechoslovakia. Control means for fare indicators. 1,892,905; Jan. 3.
Rotheim, Erik, Oslo, Norway. Method and apparatus for atomizing materials. 1,892,750; Jan. 3.
Rothschild, Claudia, Ocean Park, Calif. Toothbrush. 1,893,002; Jan. 3.
Rouanet, Louis, Irvy-Port, assignor, by mesne assignments, to Hubert Menard, St. Maurice, France. Braking device. 1,892,966; Jan. 3.
Rous, Bernard, Brooklyn, N. Y. Corrugating machine. 1,892,812; Jan. 3.
Royal Electric Manufacturing Company. (See Thomas, Cyril H., assignor.)
Royal Typewriter Company. (See Michelsen, William O., assignor.)
Royce, Frederick H., Elmstead, West Wittering, near Chichester, assignors to Rolls Royce Limited, Derby, England. Shock damping device. 1,893,339; Jan. 3.
Rubel, Chester D., Wichita Falls, Tex. Pneumatic displacement pump. 1,893,151; Jan. 3.
Rubin, Abraham M., Brooklyn, N. Y. Rolling window screen and suspension frame. 1,892,787; Jan. 3.
Ruegg, Max, Detroit, Mich. Hydraulic brake master cylinder. 1,892,707; Jan. 3.
Rumatz, Frank A., Topeka, Kans. Packing for water gauge glasses. 1,893,181; Jan. 3.
Russell, Alexander C., Catheart, assignor to G. & J. Weir, Limited, Glasgow, Scotland. Valve for steam engines. 1,893,446; Jan. 3.
Rustin, Eugene H., and D. J. Iulo; said E. H. Rustin assignor of two-thirds to M. Rustin and said D. J. Iulo assignor of one-third to R. Iulo, Brooklyn, N. Y. Muffler. 1,892,853; Jan. 3.
Rustin, Marie. (See Rustin, Eugene H., assignor.)
Ruths, Johannes, Djursholm, Sweden, assignor to Ruthsaccumulator A. B., Berlin, Germany. Energy distribution system. 1,892,967; Jan. 3.
Ruthsaccumulator A. B. (See Ruths, Johannes, assignor.)
S. I. R. T. I. (Societa Italiana Reti Telefoniche Interurbane). (See Barberis, M., and Baggi, assignors.)
Sachs, Joseph, West Hartford, Conn. Electric circuit controlling appliance. 1,892,854; Jan. 3.
Saeder, Alvin, St. Louis, Mo. Escape attachment for submarines. 1,892,850; Jan. 3.
Samcoe Holding Corporation. (See Cohn, Samuel, assignor.)
Sander, Frank V., assignor to Johnson & Johnson, New Brunswick, N. J. Manufacture of mercuri-mononitro-para-cresol and its salts. 1,893,248; Jan. 3.
San Diego Consolidated Gas and Electric Company. (See Goldkamp, Otto B., assignor.)
Sanford, Baalis. (See Webster, D. E., and Sanford.)
Sargent & Company. (See Shaw, John H., assignor.)
Sargent & Lundy. (See Le Bailly, Andrew R., assignor.)
Sargent, William D., Newark, N. J., assignor to Durafer (Inc.), Dover, Del. Brake shoe. 1,893,306; Jan. 3.
Satterthwaite, Thomas W., New York, N. Y., assignor to H. F. Benjamin, J. D. Pell, New York, N. Y., and R. Ely, Short Hills, N. J. Package sealing machine. 1,893,307; Jan. 3.
Scavullo, Angelo C., Great Kills, N. Y., assignor to New Yorker Hotel Corporation. Plate or similar article. Des. 88,932; Jan. 3.
Scheibell, Gordon B., Newark, N. J. Sound recording apparatus. 1,892,855; Jan. 3.
Schenck, LeRoy C., Moline, Ill., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y. Oscillation limit device. 1,893,038; Jan. 3.
Scheppmann, Wilhelm, assignor to C. Lorenz, A. G., Berlin-Tempelhof, Germany. Making electrical condensers. 1,892,755; Jan. 3.
Schetelig, Paul, Basel, and T. Sutter, Monthey, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Making acetylene condensation products. 1,893,249; Jan. 3.
Schieferstein, Georg H., Berlin-Charlottenburg, Germany. Mechanical oscillators. 1,892,968; Jan. 3.
Schlueter, Henry W., Beverly Hills, Calif. Sea wall. 1,893,008; Jan. 3.
Schlumbohm, Peter, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn. Distilling apparatus. 1,893,340; Jan. 3.
Schmid, Arnold, deceased, Vienna, Austria, H. Schmid and I. Schmid, administrators, assignors to Karl Schmid, Mannheim, Germany. Process of and apparatus for nitrating glycerine, glycol, and similar alcohols. 1,893,447; Jan. 3.
Schmid, Hans et al., administrators. (See Schmid, Arnold.)
Schmid, Irma, et al., administrators. (See Schmid, Arnold.)
Schmid, Karl. (See Schmid, Arnold, assignor.)
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Marine condenser circulating system. 1,893,039; Jan. 3.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Lubricating system. 1,893,040; Jan. 3.
Schmidt, Jean, Strasbourg, France. Wadding. 1,893,448; Jan. 3.
Schmitz, Fred A., Canton, Ohio. Weighing scale. 1,893,041; Jan. 3.
Schnarr, Edward J., assignor to Bastian Brothers Company, Rochester, N. Y. Ring. 1,892,787; Jan. 3.
Schnarr, Edward J., assignor to Bastian Brothers Company, Rochester, N. Y. Ring. 1,892,788; Jan. 3.
Schneider, Arthur. (See Urbanek, J., and Schneider.)
Schneider, John N., New Brunswick, N. J. Indicator snap gauge. 1,892,969; Jan. 3.
Schnitter, Sylvester B., Maracaibo, Venezuela. Flow check. 1,892,906; Jan. 3.
Scholbe, Paul F. (See Sorensen, Edward E., assignor.)
Schultz, Alfred, and C. N. Frey, assignors to Standard Brands Incorporated, New York, N. Y. Manufacture of yeast. 1,893,152; Jan. 3.
Schulz, Hermann. (See Walter, H., and Schulz.)
Schümann, Curt, R. Fick, and E. Oberreit, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of cyanides of calcium. 1,892,970; Jan. 3.
Schwartz, Arthur H., Los Angeles, Calif. Container and closure means therefor. 1,892,788; Jan. 3.
Schwarz, Emil P., St. Paul, Minn., assignor to Seeger Refrigerator Company. Door construction. 1,892,708; Jan. 3.
Schweitzer, Otto, Bortmund, Germany. Regenerative reverberatory furnace. 1,892,971; Jan. 3.
Schweizer, Jack, Rye, N. Y. Textile fabric or the like. Des. 88,933; Jan. 3.
Schwiegr, Albert. (See Bollman, H., and Schweiger.)
Scofield, Thomas E. (See Oberle, Alfred, assignor.)
Sedgley, Reginald F., Philadelphia, Pa. Rifle loading mechanism. Re18,706; Jan. 3.
Seeburg, Justus P., et al. (See Dahlstrom, Arvid, assignor.)
Seeger Refrigerator Company. (See Schwarz, Emil P., assignor.)
Seery, Howard B., Lincoln Place, Pa. Furnace door. 1,893,449; Jan. 3.
Seiderman, Maurice. (See Osius, F. J., and Seiderman.)
Selden Company, The. (See Jaeger, Alphons O., assignor.)
Selden Company, The. (See Jaeger, A. O., and Daniels, assignors.)

Seregi, Anthony, assignor to Marie Seregi, New York, N. Y. Folding sunshade. 1,893,182; Jan. 3.
Seregi, Marie. (See Seregi, Anthony, assignor.)
Servel Inc. (See McComb, H. G., and Collins, assignors.)
Severson, Irwin A., Soldier, Iowa. Twine impregnating device. 1,893,107; Jan. 3.
Severy, Melvin L., assignor to The Vocalsevro Company, Los Angeles, Calif. Producing compound tones of predetermined musical quality. 1,893,250; Jan. 3.
Shannon, James L., Longmeadow, Mass., assignor, by mesne assignments, to French Battery Company, Madison, Wis. Battery hand lamp, or flash light. 1,893,108; Jan. 3.
Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Separable knob lock. 1,892,709; Jan. 3.
Sheeres, John W. (See Wehr, A. J., Sheeres, and Eliot.)
Sheldon, Edgar H., Muskegon, Mich. Desk structure. 1,892,813; Jan. 3.
Shimer, William R., and F. C. T. Daniels, Bethlehem, Pa., assignors to Bethlehem Steel Company. Silico-molybdenum steel and article made therefrom. 1,893,004; Jan. 3.
Shively, Everett E., deceased, assignor of one-third to S. E. Smith, J. H. Miller, and E. H. Miller, New Philadelphia, Ohio; Wilhelmina E. Shively, administratrix. Door hinge. 1,893,450; Jan. 3.
Shively, Wilhelmina E., administratrix. (See Shively, Everett E.)
Shoaf, Thomas T. (See Mendenhall, J. H., and Shoaf.)
Shoji, George K., Honolulu, Hawaii, assignor to Libby, McNeill & Libby, Chicago, Ill. Pineapple tidbit machine. 1,892,685; Jan. 3.
Short, Ira, Essington, Pa., assignor to Westinghouse Electric & Manufacturing Company. Reduction gearing. 1,893,042; Jan. 3.
Siemens-Schuckertwerke Aktiengesellschaft. (See Oldenburg, Alfred, assignor.)
Simjian, Luther G., New Haven, Conn. Pose-reflecting system for photographic apparatus. 1,893,211; Jan. 3.
Simpson, Kenneth M., New York, N. Y. Producing ferrochrome. 1,893,109; Jan. 3.
Singer, Fritz, Nuremberg, Germany. Hot extrusion method. 1,892,789; Jan. 3.
Sjogren, Oscar W., Huntington Park, and J. A. Vaughn, assignors to Killefer Manufacturing Corporation, Ltd., Los Angeles, Calif. Revolving scraper of the wheel type. 1,892,907; Jan. 3.
Sleffel, Charles C., assignor to Superior Engine Company, Springfield, Ohio. Air manifold for internal combustion engines. 1,893,183; Jan. 3.
Smellie, Donald G., Canton, Ohio, assignor to The Hoover Company. Fan. 1,893,184; Jan. 3.
Smelser, Chase D., South Bend, Ind. Stoker shut-off device. 1,892,790; Jan. 3.
Smith, Algy J., Bloomfield, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for conditioning molten glass. 1,893,063; Jan. 3.
Smith, Ed S., jr. (See Dolbey, H. S., and Smith.)
Smith, J. Hugo, Detroit, Mich. Tool and tool holder. 1,892,739; Jan. 3.
Smith, Jacob K. (See Peters, Arthur M., assignor.)
Smith, Marsden C., Richmond, Va. Floc treatment. 1,893,451; Jan. 3.
Smith, Roy F., assignor of one-half to W. F. Kitchens, El Paso, Tex. Impulse clock. 1,892,710; Jan. 3.
Smith, S. E., et al. (See Shively, Everett E., assignor.)
Smith, William E. (See Daman, A. C., and Smith.)
Smith, William H., assignor to General Reduction Corporation, Detroit, Mich. Metals reduced from their oxides without melting. 1,892,740; Jan. 3.
Smith, William J., Brockton, assignor to Firth-Smith Company, Boston, Mass. Method of and apparatus for operating on spinning frames and other machines. 1,892,751; Jan. 3.
Smyth, Louis J. (See McIntyre, G. E., and Smyth.)
Societa Italiena Pirelli. (See Bruni, G., and Levi, assignor.)
Societe de Recherches & d'Exploitations Petrolifieres. (See Godel, Albert, assignor.)
Société d'Etudes & de Constructions Metallurgiques. (See Grosbost, Alphonse, assignor.)
Society of Chemical Industry in Basle. (See Schetelig, P., and Sutter, assignors.)
Society of Chemical Industry in Basle. (See Wettstein, Walter, assignor.)
Sola Corporation. (See Sola, Joseph G., assignor.)
Sola, Joseph G., assignor to Sola Corporation, Chicago, Ill. Voltage compensator. 1,893,251; Jan. 3.
Sonotone Corporation. (See Lieber, Hugo, assignor.)
Sorensen, Edward E., assignor to P. F. Scholbe, Detroit, Mich. Refrigerant. 1,892,741; Jan. 3.
Southern California Gas Company. (See Douillard, Frank T., assignor.)
Sparkes, Harry P., Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Synchronous motor. 1,892,856; Jan. 3.
Speidel, Albert C. R. (See Carlson, Edwin G., assignor.)
Speidel Brothers. (See Carlson, Edwin G., assignor.)
Spellmeyer, Erwin F., East Orange, N. J. Composition for preventing boiler priming or frothing. 1,892,857; Jan. 3.
Sperry Products, Inc. (See Drake, Harcourt C., assignor.)
Sporn, Philip, New York, N. Y. Transformer regulating system. 1,892,752; Jan. 3.
Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Evaporator for refrigerators. 1,893,341; Jan. 3.
Spring, George L., assignor to Kelvinator Corporation, Detroit, Mich. Cooling unit. 1,893,378; Jan. 3.
Stabler, Reuben A., Endicott, N. Y. Hinge. 1,893,252; Jan. 3.
Stahle, Erik G., Lumberport, W. Va., assignor to Clarence P. Byrnes, trustee. Capping glass cylinder. 1,892,814; Jan. 3.
Stahlwerke Rochling-Buderus A. G. (See Kropf, Alfred, assignor.)
Staley, Miles E., assignor to Red Spot Electric Co. Inc., Tacoma, Wash. Thermostatic electric switch. 1,892,858; Jan. 3.
Standage, Charles A. G., London, England. Flexible shaft coupling for the transmission of power. 1,893,452; Jan. 3.
Standard Brands Incorporated. (See Patitz, G. J., and Bunge, assignors.)
Standard Brands Incorporated. (See Schultz, A., and Frey, assignors.)
Standard Electric Time Company, The. (See Harter, George F., assignor.)
Standard Oil Company of California. (See Danner, Philip S., assignor.)
Standard Oil Company of California. (See Zeitfuchs, E. H., and Herrick, assignors.)
Standart-Trump Bros. Machine Company. (See Houseman, Harold E., assignor.)
Starke, Alfred. (See Wietzel, G., and Starke.)
Startz, Peter J., Manitowish, Wis. Oar lock. 1,893,110; Jan. 3.
Stationers Loose Leaf Co. (See Lotter, Adolph G., assignor.)
Stator Refrigeration, Inc. (See Comstock, Daniel F., assignor.)
Stator Refrigeration, Inc. (See Weaver, Eastman A., assignor.)
Stator Refrigeration, Inc. (See Whitney, Lyman F., assignor.)
Stauf, Friedrich W. (See Hagenest, H., and Stauf.)
Stear, Lawrence E., assignor to N. L. Upper, Detroit, Mich. Boiler. 1,892,908; Jan. 3.
Steedman, Edwin H., St. Louis, assignor to Curtis Manufacturing Company, Wellston, Mo. Automobile lift. 1,893,185; Jan. 3.
Steel Heddle Manufacturing Company. (See Kaufmann, John J., assignor.)
Steerup, Godfrey, Maywood, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Producing electrical condensers. 1,893,342; Jan. 3.
Steiner Sales Company. (See Tyler, Tracy B., assignor.)
Steinmayer, Alwin G., Milwaukee, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Street lighting fixture. Re18,707; Jan. 3.
Stepan, John. (See Wolf, Peter, assignor.)
Stephenson, Clyde. (See Holloway, M. L., and Stephenson.)
Stetten, Julius O. V., Philadelphia, Pa., assignor to Paramount Textile Machinery Company, Kankakee, Ill. Insulated drying form. 1,892,851; Jan. 3.
Steves, Raymond B. (See Feldmeier, H., Wightman, and Steves.)
Stewart, Jay V., Perry Township, Stark County, assignor of one-half to D. D. Miller, Canton, Ohio. Humidifier. 1,892,686; Jan. 3.
Stoecker, Dewald, Aberdeen, S. Dak. Nonleak accordion pad. 1,893,453; Jan. 3.
Stokes, Irene T., Ripley, and A. G. Ionides, Dunstable, England. Electric heating or cooking apparatus for food. 1,893,253; Jan. 3.
Stolzenburg, Ferdinand, and H. F. King, San Diego, Calif., assignors to King Self-Service Electric Diner Inc., Ltd. Heated table. 1,893,454; Jan. 3.
Stone, Albert A., London, England. Sheet feeding mechanism. 1,893,455; Jan. 3.
Stonebraker, Harold E., assignor to Gleason Works, Rochester, N. Y. Gear cutting mechanism. 1,893,043; Jan. 3.
Stoody Company. (See Genuit, John W., assignor.)
Stradling, Robert W., Eaton, Ind. Watering device. 1,892,909; Jan. 3.
Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Plow. 1,892,753; Jan. 3.
Straw, Walter H., Devon, Conn. Stock and die. 1,893,308; Jan. 3.
Strezynski, George J., Poughkeepsie, assignor to The De Laval Separator Company, New York, N. Y. Centrifugal separator bowl. 1,893,005; Jan. 3.
Strong, Arthur J., Detroit, Mich., assignor to Norton Company, Worcester, Mass. Crank shaft lapping machine. 1,893,111; Jan. 3.
Stühler, Martin, Cologne, Germany. Centrifugal machine for making conical hollow bodies, particularly reenforced concrete poles. 1,892,815; Jan. 3.
Sturgis, La Verne C., Springfield, assignor to The Buckeye Incubator Manufacturing Company, Beachwood, Ohio. Egg tray for incubators. 1,893,153; Jan. 3.
Sulzer Frères Société Anonyme, Firm. (See Kagi, Emil, assignor.)
Sulzer Frères Société Anonyme. (See Trechsel, Max, assignor.)

Summers, Otto M., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,892,711; Jan. 3.
Sundback, Gideon, assignor to Hookless Fastener Company, Meadville, Pa. Separable fastener. 1,893,379; Jan. 3.
Superior Engine Company. (See Sleffel, Charles C., assignor.)
Sutter, Theodor. (See Schetelig, P., and Sutter.)
Sweeney, Bernard J., Malden, Mass. Pressure reducing valve. 1,893,254; Jan. 3.
Swendsen, Johan W., Oslo, Norway. Induction motor with short-circuited secondary. 1,893,112; Jan. 3.
Syfrig, Hans, Ruschlikon, near Zurich, Switzerland. Implement for slicing meats, vegetables, and so on. 1,893,113; Jan. 3.
Sykes, John P., Wallingford, and W. T. Thompson, Ridley Park, Pa. Erecting locomotive cabs, car bodies, and jigs therefor. 1,893,456; Jan. 3.
Symington, Edith R., et al., executors. (See Symington, Thomas H.)
Symington, T. H., & Son, Inc. (See Symington, Thomas H., assignor.)
Symington, Thomas H., deceased, by E. R. and T. R. Symington, executors, assignors to T. H. Symington & Son, Inc., Baltimore, Md. Truck side frame. 1,892,859; Jan. 3.
Symington, Thomas H., deceased, by E. R. and T. R. Symington, executors, assignors to T. H. Symington & Son, Inc., Baltimore, Md. Truck side frame. 1,893,475; Jan. 3.
Symington, Thomas H., deceased, by E. R. and T. R. Symington, executors, assignors to T. H. Symington & Son, Inc., Baltimore, Md. Truck side frame. 1,893,476; Jan. 3.
Symington, Thomas R., et al., executors. (See Symington, Thomas H.)
Taber, John E., South Bend, assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Overshoe. 1,892,791; Jan. 3.
Tagliabue, Charles J., Mfg. Co. (See Wilhelm, R. M., and Lightner, assignors.)
Tarbox, John P., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Forming interior angle in sheet metal stamping. 1,892,754; Jan. 3.
Tartrais, Eugène H., Montmorency, France. Spraying and injecting device for internal combustion engines employing liquid fuel. 1,893,457; Jan. 3.
Tatum, John J., Baltimore, Md. Car seat. 1,893,458; Jan. 3.
Taylor, James H., Oak Park, Ill. Forming pipe T's. 1,892,712; Jan. 3.
Tebbs, Howard, Baltimore, Md. Aircraft. 1,892,910; Jan. 3.
Tedder, Alvin. (See Rawles, G. R., and Tedder.)
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Leib, August, assignor.)
Ternstedt Manufacturing Company. (See Lakin, J. W., and Field, assignors.)
Teufel, Otto C., Eldon, Iowa. Adjustable supporting device. 1,892,687; Jan. 3.
Textile Machine Works. (See Gastrich, Gustav, assignor.)
Textile Machine Works. (See Kroener, Paul F., assignor.)
Thibault, Aldege. (See Racine, Mederic, assignor.)
Thomas, Charles R., jr., Drexel Hill, Pa., and B. Wich, assignors to National Desk Company, Herkimer, N. Y. Drawer partition. 1,893,186; Jan. 3.
Thomas, Cyril H., Flossmoor, assignor to Royal Electric Manufacturing Company, Chicago, Ill. Refrigeration apparatus. 1,892,911; Jan. 3.
Thomas, Ira L., Fort Madison, Iowa. Protected teller's booth. 1,893,459; Jan. 3.
Thompson, Earl W., et al. (See Bickel, William A., assignor.)
Thompson, Joseph S., San Francisco, Calif. Spot cleaning device. 1,892,792; Jan. 3.
Thomuson, Milton W., Atlanta, Ga. Vehicle wheel. 1,893,154; Jan. 3.
Thompson, Vincent, et al., legal representatives. (See Parsons, C. A., and Rosen.)
Thompson, Watson T. (See Sykes, J. P., and Thompson.)
Thornburgh, Bert C., Yakima, Wash. Brake lining anchorage and article. 1,892,816; Jan. 3.
Tice Lock Washer Manufacturing Company. (See Tice, William H., assignor.)
Tice, William H., assignor to Tice Lock Washer Manufacturing Company, Portland, Oreg. Lock washer. 1,893,114; Jan. 3.
Tilbury, Lyle C., Houston, Tex. Well screen. 1,892,912; Jan. 3.
Tilton, Edwin W., Haverhill, Mass., assignor to Lewis L. Cowan, Cincinnati, Ohio. Cutting, sorting, and conveying device. 1,893,460; Jan. 3.
Timken-Detroit Axle Company, The. (See Porter, Gilbert E., assignor.)
Timm, Sumner C., Eau Claire, Wis. Mattress. 1,892,913; Jan. 3.
Toman, E., & Company. (See Toman, Edward, assignor.)
Toman, Edward, Chicago, assignor to E. Toman & Company, Chicago, Ill. Making molds. 1,893,309; Jan. 3.
Tonjes, Henry, jr., Wisner, Nebr. Tractor scraper. 1,892,817; Jan. 3.
Torrey, Gilberta G. (See Booth, H. S., Torrey, and Merlub-Sobel.)
Tracy, James J., Shaker Heights, Ohio. Automotive vehicle drive. 1,893,255; Jan. 3.
Travis, John S., Long Island City, N. Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 88,934; Jan. 3.
Trechsel, Max, assignor to the Firm Sulzer Frères Société Anonyme, Winterthur, Switzerland. Internal combustion engine with supercharging. 1,893,006; Jan. 3.
Trew, James W., Gettysburg, assignor to J. S. Rice, Biglerville, Pa. Fruit facing apparatus. 1,892,818; Jan. 3.
Trico Products Corporation. (See Horton, Erwin C., assignor.)
Trico Products Corporation. (See Hueber, H., and Horton, assignors.)
Trimbach, Clem G., Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Machine gun mount for aircraft. 1,892,914; Jan. 3.
Troxell, William W. (See Ober, B., Pagon, Pruett, and Troxell.)
Troy Laundry Machinery Company. (See Schenck, Le Roy C., assignor.)
Troy, Seymour, New York, N. Y. Shoe construction. 1,893,007; Jan. 3.
True, Ronald. (See Oberdorfer, H. D., and True.)
Tyler, Tracy B., Detroit, Mich., assignor to Steiner Sales Company, Salt Lake City, Utah. Towel cabinet. 1,893,343; Jan. 3.
U. G. I. Contracting Company. (See Bosler, Wilson T., assignor.)
Union Hardware Company. (See Hoerle, William F., assignor.)
Union Switch & Signal Company, The. (See Ballou, Richard P., assignor.)
Union Switch & Signal Company, The. (See Geiger, Paul H., assignor.)
Union Switch & Signal Company, The. (See Williamson, Arba G., assignor.)
United Metal Box Co., Inc. (See Hammer, Samuel, assignor.)
United Metal Goods Mfg. Co. Inc. (See Buhrle, Paul, assignor.)
United Research Corporation. (See De Forest, Matthew J., assignor.)
United Shoe Machinery Corporation. (See Cosgrove, John W., assignor.)
U. S. Bobbin & Shuttle Company. (See Baldwin, Luther C., assignor.)
United Verde Copper Company. (See Fowler, Morris G., assignor.)
United Verde Copper Company. (See Ralston, O. C., and Baum, assignors.)
Universal Draft Gear Attachment Company. (See Fitz Gerald, Martin E., assignor.)
Universal Draft Gear Attachment Company. (See Newman, William A., assignor.)
"Universelle" Cigarettenmaschinen-Fabrik, J. C. Muller & Company. (See Bellmann, Georg, assignor.)
"Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co. (See Hohn, Max P. E., assignor.)
Upper, Norman L. (See Stear, Lawrence E., assignor.)
Urbain, Oliver M., Columbus, assignor to C. H. Lewis, Harpster, Ohio. Water purification process. 1,892,972; Jan. 3.
Urbanek, Julius, Vienna, Austria, and A. Schneider, Dusseldorf, Germany. Cushioning mechanism for power hammers. 1,893,187; Jan. 3.
Uschman, Carl W., Schenectady, and H. W. Hartman, Scotia, N. Y., assignors to General Electric Company. Soldering apparatus. 1,893,380; Jan. 3.
Vance, Walter N., North Aurora, assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Locker hinge. 1,893,461; Jan. 3.
Van der Does, Jean, assignor to Joseph Berlinger Company, New York, N. Y. Textile fabric. Des. 88,892; Jan. 3.
Van der Does, Jean, assignor to Joseph Berlinger Company, New York, N. Y. Textile fabric. Des. 88,893; Jan. 3.
Van der Does, Jean, assignor to Joseph Berlinger Company, New York, N. Y. Textile fabric. Des. 88,894; Jan. 3.
Van Gessel, Karel M., assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Soldering together metal parts. 1,892,819; Jan. 3.
Van Heurn, Frans C., Amsterdam, Netherlands, assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Vulcanization of rubber latex or other rubber dispersions. 1,893,477; Jan. 3.
Van Horne, Josephine A. (See Van Horne, Ralph E., assignor.)
Van Horne, Ralph E., assignor to Josephine A. Van Horne, Milwaukee, Wis. Food container. 1,892,756; Jan. 3.
Vaughn, Jesse A. (See Sjogren, O. W., and Vaughn.)
Veenschoten, Vincent V., Erie, Pa. Spray nozzle. 1,893,212; Jan. 3.
Vermont Spool & Bobbin Co. (See Wilson, William H., assignor.)
Vestal, Merton I. (See Fournier, E. E., and Vestal.)
Vilkomerson, Benjamin, Brooklyn, N. Y. Interrupter for current supply systems. 1,893,115; Jan. 3.
Vinje, Arne F., Freeport, assignor to Curtiss Aeroplane & Motor Company, Inc. Aircraft control surface adjusting mechanisms. 1,892,915; Jan. 3.

Vinje, Arne F., Freeport, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Aircraft control. 1,892,916; Jan. 3.

Virgile, Gabriel, Long Beach, N. Y., assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,900; Jan. 3.

Vis, George A., assignor to Kelvinator Corporation, Detroit, Mich. Refrigerator condensing unit. 1,893,344; Jan. 3.

Visual Demonstration System, Inc. (See Davidson, Leroy E., assignor.)

Vocalsevro Company, The. (See Severy, Melvin L., assignor.)

Vogt, Henry, Machine Co. (See Frey, Percy C., assignor.)

Von Sanden, Frederick W., Seattle, Wash. Wood preserver composition. 1,893,310; Jan. 3.

Vowinkel, Frank J., Drexel Hill, Pa. Pipe or conduit clamp for use in structural iron. 1,893,116; Jan. 3.

Vuilleumier, Albert, assignor to The New Departure Manufacturing Company, Bristol, Conn. Abrading machine. 1,893,213; Jan. 3.

Wachenheimer, Harry, Providence, R. I. Ornamental chain. 1,893,256; Jan. 3.

Wachter, Frank C. (See Keefer, Clarence E., and Wachter.)

Wacker, Dr. Alexander, Gesellschaft fur Elektrochemische Industrie. (See Ascherl, A., and Gruber, assignors.)

Wahlberg, Nils A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transmission line device. 1,893,188; Jan. 3.

Wait, Charles L., Tulsa, Okla. Automatic valve. 1,893,462; Jan. 3.

Waldorf, Sigmund K. (See Foster, R., and Waldorf.)

Walker, Brooks, Piedmont, and H. E. Kennedy, Berkeley, Calif. Magnetic valve. 1,892,917; Jan. 3.

Walker, Raymond R., Follansbee, W. Va. Coaster sled. 1,893,381; Jan. 3.

Waller, Anthony E., Providence, R. I. Finding for a clasp. 1,892,918; Jan. 3.

Wallis, Harold B., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,892,713; Jan. 3.

Walsh, Philip J., San Francisco, Calif. Amplifier system. 1,893,044; Jan. 3.

Walter, Hans, and H. Schulz, Mainz-Mombach, assignors to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Production of acetone. 1,892,742; Jan. 3.

Wamoscher, Laszlo, Berlin-Wilmersdorf, Germany, assignor to Firm Lonza Elektrizitaetswerke und Chemische Fabriken, A. G., Basel, Switzerland. Prevention of metaldehyde poisonings. 1,893,008; Jan. 3.

Ward, Clemson H., Bethlehem, Pa., assignor to Bethlehem Steel Company. Charge calculator. 1,893,009; Jan. 3.

Ward Leonard Electric Company. (See Burkle, Robert R., assignor.)

Ward Leonard Electric Company. (See Kouyoumjian, Harountiun K., assignor.)

Warner, Archibald A., Dearborn, Mich. Vibration damper. 1,892,793; Jan. 3.

Warren John W. L., Mount Albert, Auckland, New Zealand. Milking machine. 1,893,257; Jan. 3.

Washburn, Franklin F., Portland, Oreg. Lawn perforator. 1,893,258; Jan. 3.

Watkins, Edward J. (See Koza, Millard J., assignor.)

Watson, Harold L., Lynn, Mass., assignor to General Electric Company. Making cast basalt articles. 1,893,382; Jan. 3.

Watson, James A., jr., Silver Spring, Md. Rear axle construction for motor vehicles. 1,893,259; Jan. 3.

Watt, Elihu D., La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y. Internally tapered pile shell section. 1,893,010; Jan. 3.

Watt, Elihu D., La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y. Lining pile shells. 1,893,011; Jan. 3.

Watts, Felix J., Bronson, and C. Wittenmyer, Detroit, Mich. Motion picture machine. 1,893,189; Jan. 3.

Waukesha Motor Company. (See Horning, Harry L., assignor.)

Way, Clarence J., assignor to The Ohio Brass Company, Mansfield, Ohio. Current collector. 1,893,383; Jan. 3.

Weaver, Bernard H., Hudson, N. Y. Automatic window closer. 1,893,260; Jan. 3.

Weaver, Eastman A., Winchester, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc. Refrigeration. 1,892,821; Jan. 3.

Weaver, Ira A., assignor to Weaver Manufacturing Company, Springfield, Ill. Vehicle-wheel brake tester. 1,892,919; Jan. 3.

Weaver Manufacturing Company. (See Weaver, Ira A., assignor.)

Webster, Duane E., and B. Sanford, assignors to Norton Company, Worcester, Mass. Making articles of resin bonded granular material. 1,893,117; Jan. 3.

Wehr, Arthur J., San Francisco, Calif., J. W. Sheeres, Jackson Heights, N. Y., and A. V. Eliot, Fort Sam Houston, Tex. Vehicle traffic indicator. 1,892,860; Jan. 3.

Weidner, Earl W., Reading, Pa. Internal combustion engine. 1,893,045; Jan. 3.

Weir, G. & J., Limited. (See Russell, Alexander C., assignor.)

Weiss, Harry H., Chicago, Ill. Material conveyer. 1,892,920; Jan. 3.

Welde, Anna, administratrix. (See Kraenzlein, G., Welde, and Ochwat.)

Welde, Robert. (See Kraenzlein, G., Welde, and Ochwat.)

Wellman, Charles P., West Medford, Mass. Receptacle. 1,892,714; Jan. 3.

Wellman, Charles P., West Medford, Mass. Receptacle. 1,892,715; Jan. 3.

Welty, Helen E., Seattle, Wash. Slicing mold. 1,892,861; Jan. 3.

Wenger, David M., Leola, Pa. Closure fastener for receptacles. 1,892,743; Jan. 3.

Werdermann, Arthur. (See Laska, L., and Werdermann.)

Werner, John, Berlin, Germany. Producing imitations of valuable sorts of wood and tarsia style coatings. 1,893,384; Jan. 3.

Wertman, Harvey E. (See Pruitt, Harvey E., assignor.)

Wertzler, Borghild, Chicago, Ill. Wardrobe hanger. 1,892,794; Jan. 3.

West, Robert N., Maplewood, N. J. Ironing machine. 1,893,190; Jan. 3.

West, Thomas S., Nowata, Okla. Locating buried pipe lines, etc. 1,893,311; Jan. 3.

Westinghouse Electric & Manufacturing Company. (See Austin, Walter M., assignor.)

Westinghouse Electric and Manufacturing Company. (See Mylius, W. G., and La Bar, assignors.)

Westinghouse Electric & Manufacturing Company. (See Parsons, John S., assignor.)

Westinghouse Electric & Manufacturing Company. (See Schmidt, Henry F., assignor.)

Westinghouse Electric & Manufacturing Company. (See Short, Ira, assignor.)

Westinghouse Electric & Manufacturing Company. (See Sparkes, Harry P., assignor.)

Westinghouse Electric & Manufacturing Company. (See Wahlberg, Nils A., assignor.)

Westinghouse Lamp Company. (See Iredell, Charles V., assignor.)

Westinghouse Lamp Company. (See Lilliendahl, W. C., and Driggs, assignors.)

Westinghouse Lamp Company. (See Rentschler, Harvey C., assignor.)

Westinghouse Lamp Company. (See Rentschler, H. C., and Henry, assignors.)

Westinghouse X-Ray Company. (See Morrison, Montford, assignor.)

Wetterwald, Walter A. (See Haubensak, W., and Wetterwald.)

Wettstein, Walter, Monthey, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Obtaining concentrated sulphur dioxide. 1,893,385; Jan. 3.

White, Charles A., Toledo, Ohio. Safety valve. 1,892,921; Jan. 3.

White, LeRoy, Shillington, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Frictional connecting mechanism for straight knitting machines. 1,893,312; Jan. 3.

Whitehead, Thomas C., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Refrigerating apparatus. 1,893,345; Jan. 3.

Whitehead, Thomas C., and H. A. Greenwald, assignors to Kelvinator Corporation, Detroit, Mich. Refrigerating apparatus. 1,893,478; Jan. 3.

Whitney, Lyman F., assignor, by mesne assignments, to Stator Refrigeration, Inc., Boston, Mass. Fluid pumping. 1,892,822; Jan. 3.

Whitney, Lyman F., assignor to Comstock & Wescott, Inc., Boston, Mass. Fluid pressure apparatus. 1,892,823; Jan. 3.

Wich, Barnard. (See Thomas, C. R., jr., and Wich.)

Wietzel, Gustav, Ludwigshafen-on-the-Rhine, and A. Starke, Mannheim, assignors to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of unsaturated gaseous hydrocarbons and hydrogen. 1,892,973; Jan. 3.

Wightman, Rolan J. (See Feldmeier, H., Wightman, and Steves.)

Wilcox, William D., Lawrence, Kans. Apparatus for the thermal dissociation of hydrocarbon gases and vapors. 1,892,862; Jan. 3.

Wilhelm, Robert M., Brooklyn, and D. C. Lightner, Valley Stream, assignors to Charles J. Tagliabue Mfg. Co., Brooklyn, N. Y. Universal scale dairy thermometer. 1,892,689; Jan. 3.

Willetts, Paul G., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Refractory. 1,893,313; Jan. 3.

Willetts, Paul G., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Producing fired ceramic blocks. 1,893,314; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,895; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,896; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric collar or similar article. Des. 88,897; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,898; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,899; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,935; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,936; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,937; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,938; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,939; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,940; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,941; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,942; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric or similar article. Des. 88,943; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric collar or similar article. Des. 88,944; Jan. 3.

Willhelm, William, New York, N. Y. Textile fabric collar or similar article. Des. 88,945; Jan. 3.

Willhelm, William, Co. (See Bacolini, August, assignor.)

Willhelm, William, Co. (See Brodsky, Michel, assignor.)

Willhelm, William, Co. (See Garfinkl, Nathaniel, assignor.)

Willhelm, William Co. (See Gottesman, Joseph M., assignor.)

Willhelm, William, Co. (See Guhl, Maclyn, assignor.)

Willhelm, William, Co. (See Hellman, Carl R., assignor.)

Willhelm, William, Co. (See Megroz, Roger, assignor.)

Willhelm, William, Co. (See Overmeyer, John, assignor.)

Willhelm, William, Co. (See Virgile, Gabriel, assignor.)

Williams Oil-O-Matic Heating Corporation. (See Celander, Philip A., assignor.)

Williams Oil-O-Matic Heating Corporation. (See Zellhoefer, Glenn F., assignor.)

Williams, Walter W., Bloomington, Ill. Fluid fuel burner for domestic heating purposes. 1,892,757; Jan. 3.

Williamson, Arba G., Carnegie, assignor to The Union Switch & Signal Company, Swissvale, Pa. Train control system. 1,893,315; Jan. 3.

Williamson, Arba G., Carnegie, assignor to The Union Switch & Signal Company, Swissvale, Pa. Train control system. 1,893,316; Jan. 3.

Wilson, William H., assignor to Vermont Spool & Bobbin Co., Burlington, Vt. Spool for Axminster looms. 1,893,386; Jan. 3.

Winkler, Frederick W., and L. L. Kaess, Jamaica, N. Y.; said Winkler assignor to said Kaess. Direction finder. 1,892,758; Jan. 3.

Winter, Joseph M. (See Gannon, J. E., and Winter.)

Winther, Anthony. (See Winther, Martin P. and A.)

Winther Company, The. (See Winther, Martin P. and A., assignors.)

Winther, Martin P., Chicago, Ill., and A. Winther, Kenosha, Wis., assignors to The Winther Company, Wilmington, Del. Power translator. 1,893,346; Jan. 3.

Wintbrop Chemical Company. (See Hagenest, H., and Stauf, assignors.)

Wired Radio, Inc. (See Duncan, Robert D., jr., assignor.)

Wired Radio, Inc. (See Hund, August, assignor.)

Wired Radio, Inc. (See Hyland, Lawrence A., assignor.)

Witkin, Zara, Los Angeles, Calif. Safety drill table. 1,892,690; Jan. 3.

Wittenmyer, Carlos. (See Watts, F. J., and Wittenmyer.)

Wolf, Peter, assignor of one-half to J. Stepan, Omaha, Nebr. Lawn edging tool. 1,892,795; Jan. 3.

Wood, Henry A. Wise, assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Web splicing device. 1,892,974; Jan. 3.

Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)

Woodford, Watson H., Bridgeport, Conn., assignor to Remington Arms Company, Inc. Ammunition. 1,892,759; Jan. 3.

Worthington, Everett, Chicago, Ill., assignor to The Richardson Company, Lockland, Ohio. Compartment plate or similar article. Des. 88,946; Jan. 3.

Wuest, Charles C., St. Louis, Mo. Magazine shaving brush. 1,893,191; Jan. 3.

Wullschleger & Co. (See Loun, Henry J., assignor.)

Wyatt, Evan E., Los Angeles, Calif. Instruction desk assembly. 1,892,796; Jan. 3.

Xetal Corporation. (See Cremer, Frits, assignor.)

Yohe, Lester N., New Oxford, and M. Jensen, Harrisburg, Pa. Control system for ailerons. 1,893,118; Jan. 3.

Young, Archer E., Pittsburgh, Pa. Measuring apparatus. 1,893,214; Jan. 3.

Zaborowski, Anthony W. (See Babb, E., and Zaborowski.)

Zap Development Company. (See Zaparka, Edward F., assignor.)

Zaparka, Edward F., assignor to Zap Development Company, New York, N. Y. Aircraft. 1,893,064; Jan. 3.

Zaparka, Edward F., assignor to Zap Development Company, New York, N. Y. Aircraft and control thereof. 1,893,065; Jan. 3.

Zapf, Georg, Riehlerwall, Cologne, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Cable for comparatively deep seas. 1,893,119; Jan. 3.

Zapf, Georg, Riehlerwall, Cologne, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Electric hollow conductor. 1,893,120; Jan. 3.

Zeitfuchs, Edward H., and H. N. Herrick, Berkeley, assignors to Standard Oil Company of California, San Francisco, Calif. Acid bottle for well surveying. 1,892,922; Jan. 3.

Zellhoefer, Glenn F., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Float actuated pump valve. 1,893,066; Jan. 3.

Ziegler, Walter L., and J. W. Durnell, Long Beach, Calif. Valve lifter. 1,892,824; Jan. 3.

Zimmerli, Adolph, New Brunswick, N. J., assignor to Acetol Products, Inc. Isolation of ergosterol. 1,893,317; Jan. 3.

Zimmerman, James G., assignor to Burgess Battery Company, Madison, Wis. Coating composition for dry cells. 1,892,691; Jan. 3.

Zimmerman, James G., assignor to Burgess Battery Company, Madison, Wis. Dry cell. 1,892,692; Jan. 3.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 3D DAY OF JANUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrading machine. A. Vuilleumier. 1,893,213; Jan. 3.
Accelerator pedal for automobiles. J. F. Fisher. 1,893,075; Jan. 3.
Accordion pad, Nonleak. D. Stoecker. 1,893,453; Jan. 3.
Acetone, Production of. H. Walter and H. Schulz. 1,892,742; Jan. 3.
Acetylene generator. W. W. Harris. 1,892,947; Jan. 3.
Acid compounds, Purifying abietene-sulphonic. C. O. Henke. 1,892,889; Jan. 3.
Acoustic device. H. Koch. 1,893,143; Jan. 3.
Advertising device, Tubular aerial. J. Picco. 1,893,149; Jan. 3.
Advertising sign. A. W. Eckblom. Des. 88,863; Jan. 3.
Advertising structure, Outdoor. G. D. Overholtz. 1,892,998; Jan. 3.
Aeroplane. J. Preatka. 1,892,808; Jan. 3.
Aeroplane construction. W. F. Deutscher. 1,893,275; Jan. 3.
Air control device with automatic release. D. Murphy and G. F. Lehberger. 1,892,734; Jan. 3.
Aircraft. H. Tebbs. 1,892,910; Jan. 3.
Aircraft. E. F. Zaparka. 1,893,064; Jan. 3.
Aircraft and control thereof. E. F. Zaparka. 1,893,065; Jan. 3.
Aircraft control. A. F. Vinje. 1,892,916; Jan. 3.
Aircraft control surface adjusting mechanisms. A. F. Vinje. 1,892,915; Jan. 3.
Aircraft, Control surface for. R. C. Blaylock. 1,892,927; Jan. 3.
Aircraft, Helicopter. C. C. Holmes. 1,892,949; Jan. 3.
Aircraft provided with rotatable wings, of the helicopter type, Device for stabilizing and controlling. L. Breguet. 1,893,395; Jan. 3.
Air filter. E. A. Gartha. 1,892,982; Jan. 3.
Airplane constituted by a three-element wing. J. F. G. M. L. Charpentier. 1,893,129; Jan. 3.
Alkyl substituted aromatic hydroxyl compounds, Preparation of. F. Linner. 1,892,990; Jan. 3.
Alloy, Aluminium. O. Kamps. 1,892,840; Jan. 3.
Alloy of high fusion point. A. Kropf. 1,893,144; Jan. 3.
Amino benzol ortho benzoic acid and preparing the same. Substitution products of. E. T. Howell and I. Gubelmann. 1,892,890; Jan. 3.
Ammonia, Catalytic oxidation of. A. O. Jaeger. 1,892,767; Jan. 3.
Ammunition. W. H. Woodford. 1,892,759; Jan. 3.
Amplifier system. P. J. Walsh. 1,893,044; Jan. 3.
Amplifiers, Controlling electric wave. E. Peterson. 1,893,302; Jan. 3.
Amplifying arrangement with tubes connected in counter cadence. J. Bäbler. 1,892,924; Jan. 3.
Amplifying device, Thermionic. S. W. Brown. 1,892,866; Jan. 3.
Amusement device. D. L. Alger. 1,893,121; Jan. 3.
Animal trap. K. C. Jakoubek. 1,893,236; Jan. 3.
Antenna, Weatherproof direction-finding. A. Leib. 1,892,958; Jan. 3.
Anticreeping device. F. H. Gilmore and H. H. Kruger. 1,892,747; Jan. 3.
Anti-skid appliance for shoes. E. Pasquali. 1,893,103; Jan. 3.
Apparatus for erecting staging, platforms, and the like. J. McI. Fortune. 1,893,165; Jan. 3.
Arc welding system. S. R. Bergman. 1,893,354; Jan. 3.
Aromatic compounds, Purification of crude. A. O. Jaeger and L. C. Daniels. 1,892,770–2; Jan. 3.
Articles, Apparatus for handling. F. Jaeger. 1,892,670; Jan. 3.
Articles of resin bonded granular material, Making. D. E. Webster and B. Sanford. 1,893,117; Jan. 3.
Ash discharging device. E. Hahn. 1,892,946; Jan. 3.
Atomizing materials, Method and apparatus for. E. Rotheim. 1,892,750; Jan. 3.
Audion construction. R. F. Gowen. 1,893,466; Jan. 3.
Automatic control. P. D. Harvey. 1,892,948; Jan. 3.
Automatic machine for cutting plastic products. G. J. Patitz and R. W. Bunge. 1,892,705; Jan. 3.
Automatic valve. C. L. Wait. 1,893,462; Jan. 3.
Automobile jack. G. W. Giefers. 1,892,665; Jan. 3.
Automobile jack. Z. V. Kuchan. 1,893,418; Jan. 3.
Automobile lift. E. H. Steedman. 1,893,185; Jan. 3.
Axle. G. W. Harper. Re18,708; Jan. 3.
Axle construction for motor vehicles, Rear. J. A. Watson, jr. 1,893,259; Jan. 3.

Bag making machine. P. Hubziker. 1,893,285; Jan. 3.
Bait. W. M. Benzick and O. W. Eck. 1,893,390; Jan. 3.
Bandage and preparing same, Surgical. R. E. Reed. 1,892,706; Jan. 3.
Banks. Attachment for savings. H. S. Goodman. 1,893,364; Jan. 3.
Barbed wire reel. H. L. Keiser. 1,892,785; Jan. 3.
Basalt articles, Making cast. H. L. Watson. 1,893,382; Jan. 3.
Bath spray, Shower. T. E. Neal. 1,893,435; Jan. 3.
Battery: *See*—
Storage battery.
Battery charging system for airplanes. L. A. Hyland. 1,892,891; Jan. 3.
Battery tool. J. E. Bergman and F. P. Ego. 1,893,353; Jan. 3.
Bearing mounting. J. H. Baninger. 1,893,219; Jan. 3.
Beryllium compounds from beryllium containing minerals or other substances, Separating. W. Kangro and A. Lindner. 1,893,331; Jan. 3.
Binder, Loose leaf. A. G. Lotter. 1,893,175; Jan. 3.
Blank and envelope, Combined message. R. F. Durán. 1,893,276; Jan. 3.
Board: *See*—
Box board. Ironing board.
Bobbin and bobbin reenforcing means. L. C. Baldwin. 1,893,320; Jan. 3.
Boiler. L. E. Stear. 1,892,908; Jan. 3.
Bolt construction, Stay. A. W. Bruce. 1,893,017; Jan. 3.
Bomb rack and control. A. S. Halsey. 1,893,232; Jan. 3.
Booth, Protected ateller's. I. L. Thomas. 1,893,459; Jan. 3.
Bootjack, Foldable. R. P. Gerfen. 1,893,280; Jan. 3.
Border and panel connecting machine. O. Council, J. W. Beaty and R. O. Baker. 1,893,131; Jan. 3.
Bottle for well surveying, Acid. E. H. Zeltfuchs and H. N. Herrick. 1,892,922; Jan. 3.
Bowl, Centrifugal separator. G. J. Strezynski. 1,893,005; Jan. 3.
Bowling alley. H. K. Hess. 1,893,412; Jan. 3.
Box: *See*—
Cardboard box. Core box.
Box board, Grease-resisting. C. Ellis. 1,892,939; Jan. 3.
Box shells, Apparatus for erecting. G. Bellmann. 1,893,389; Jan. 3.
Bracelet. I. L. Hodges. 1,893,056; Jan. 3.
Bracelet structure, Adjustable. E. G. Carlson. 1,893,271; Jan. 3.
Bracket: *See*—
Radiator bracket.
Bracket for outlet boxes. G. Carlson. 1,893,357; Jan. 3.
Brake: *See*—
Railway brake.
Brake. N. M. Erdahl. 1,892,940; Jan. 3.
Brake lining anchorage and article. B. C. Thornburgh. 1,892,816; Jan. 3.
Brake shoe. W. D. Sargent. 1,893,306; Jan. 3.
Brake tester, Vehicle-wheel. I. E. Weaver. 1,892,919; Jan. 3.
Braking device. L. Rouanet. 1,892,966; Jan. 3.
Briquet. G. Komarek and G. MacPhail. 1,893,417; Jan. 3.
Brooder alarm. W. H. Goettsch. 1,893,407; Jan. 3.
Broom machine. A. Kamber. 1,892,800; Jan. 3.
Brush, Magazine shaving. C. C. Wuest. 1,893,191; Jan. 3.
Brush member. T. E. D. Bilde. 1,892,926; Jan. 3.
Buffing machine. R. Luzardo. 1,893,424; Jan. 3.
Building structure. A. C. Mitchell. 1,893,480; Jan. 3.
Building unit and making the same. D. A. McKenzie. 1,893,430; Jan. 3.
Buoy for saving the occupants and the material of submarine boats. L. Klopotowski. 1,893,089; Jan. 3.
Burner for domestic heating purposes, Fluid fuel. W. W. Williams. 1,892,757; Jan. 3.
Bus body without chassis. E. R. Gurney. 1,892,666; Jan. 3.
Button. A. F. Donovan. Des. 88,861; Jan. 3.
Cabinet, Display. C. W. Kress. 1,892,673; Jan. 3.
Cabinet, Towel. T. B. Tyler. 1,893,343; Jan. 3.
Cable, Electric. M. Barberisk and U. Baggi. 1,893,266; Jan. 3.
Cable for comparatively deep seas. G. Zapf. 1,893,119; Jan. 3.
Cable, High tension power trahsmitting electric. C. A. Piercy. 1,893,376; Jan. 3.
Cable rider. W. B. Elmer and C. F. Avila. 1,892,798; Jan. 3.
Cables, Method of and apparatus for improving the electrical properties of. W. A. Del Mar. 1,892,663; Jan. 3.
Cadmium plating composition. G. B. Hogaboom. 1,893,368; Jan. 3.
Camera. E. M. Mneller. 1,892,846; Jan. 3.
Camera. R. R. Robertson. 1,892,684; Jan. 3.
Camera, Photographic. A. S. Howell. 1,893,327; Jan. 3.
Camera, Roll film box. M. Baldeweg. 1,893,122; Jan. 3.
Camp cooler, Suspended. J. H. Mendenhall and T. T. Shoaf. 1,892,733; Jan. 3.
Can washing machine. I. H. Kendall. 1,892,773; Jan. 3.

Car, Load discharging gondola. A. Campbell. 1,892,868; Jan. 3.
Car seat. J. J. Tatum. 1,893,458; Jan. 3.
Car, Tunnel kiln. H. W. H. Beth. 1,893,123; Jan. 3.
Carbonaceous substances, Activation of. A. Godel. 1,893,363; Jan. 3.
Carburetor. A. Dickerson. 1,892,828; Jan. 3.
Card, Prayer. P. T. Carew. Des. 88,857; Jan. 3.
Cardboard box. E. M. Holmer. 1,892,983; Jan. 3.
Cards and the like, Clothing for. E. E. Fournier and M. I. Vestal. 1,893,326; Jan. 3.
Carpet. C. Lehner. Des. 88,927; Jan. 3.
Carpet. J. S. Travis. Des. 88,934; Jan. 3.
Cart or similar article, Refreshment. H. Levenson. Des. 88,880; Jan. 3.
Carton filling apparatus. C. W. Hartmann. 1,893,169; Jan. 3.
Carton or box for cigarettes and the like. S. N. H. Phillips. 1,892,807; Jan. 3.
Case: *See*—
Cigarette package case. Wardrobe case.
Case for radiotubes. P. S. Florea and I. J. Henry. 1,892,879; Jan. 3.
Case or box for beehives, Packing. J. A. Meier. 1,893,431; Jan. 3.
Casement window holder. J. F. Calvert. 1,893,128; Jan. 3.
Casing for a bearing. W. A. Bohn. Des. 88,903–4; Jan. 3.
Casing for a control mechanism for time controlled cooking. J. H. Grayson. Des. 88,873; Jan. 3.
Casket, Burial. P. H. Raap. Des. 88,891; Jan. 3.
Casket, Burial. P. H. Raap. Des. 88,931; Jan. 3.
Castellating machine. H. E. Pruitt. 1,893,444; Jan. 3.
Caster, Removable wheel. A. G. McGrath. 1,892,845; Jan. 3.
Cellulose derivative composition. E. F. Hitch and M. A. Dahlen. 1,893,283–4; Jan. 3.
Centrifugal machine for making conical hollow bodies, particularly reenforced concrete poles. M. Stühler. 1,892,815; Jan. 3.
Ceramic blocks, Producing fired. P. G. Willetts. 1,893,314; Jan. 3.
Chain: *See*—
Ornamental chain.
Chaplet. T. J. Magnuson. 1,893,425; Jan. 3.
Charcoal heater. W. Chantler. 1,893,358; Jan. 3.
Charge calculator. C. H. Ward. 1,893,009; Jan. 3.
Check, Flow. S. B. Schnitter. 1,892,906; Jan. 3.
Chisel, Bush. P. P. Bicknell. 1,893,355; Jan. 3.
Cigar and cigarette holder. C. H. Burnett. 1,893,269; Jan. 3.
Cigarette machine. M. P. E. Hohn. 1,893,057; Jan. 3.
Cigarette package case. J. P. McEnery. 1,892,677; Jan. 3.
Cigarette packages or the like, Adapter or attachment for. J. P. McEnery. 1,892,676; Jan. 3.
Circuit arrangement. C. S. Franklin. 1,893,136; Jan. 3.
Circuit breaker control system. A. E. Anderson. 1,893,348; Jan. 3.
Circuit control means. V. W. Palen. 1,893,336; Jan. 3.
Circuit controller. C. I. Hall. 1,893,365; Jan. 3.
Circuit interrupter. W. M. Austin. 1,893,046; Jan. 3.
Circuits for space discharge devices, Control. F. B. Llewellyn. 1,893,031; Jan. 3.
Clamp for use in structural iron, Pipe or conduit. F. J. Vowinkel. 1,893,116; Jan. 3.
Clearance gauge, Adjustable reamer grinding. J. C. Friend. 1,893,404; Jan. 3.
Clip: *See*—
Hair curl clip. Spring clip.
Clock case. P. Buhrle. Des. 88,856; Jan. 3.
Clock, Impulse. R. F. Smith. 1,892,710; Jan. 3.
Clock, Wall. E. T. Arnault. Des. 88,849; Jan. 3.
Clothes drier reel. J. C. Michaud. 1,893,096; Jan. 3.
Clothes line extension, Indoor. J. Monaco. 1,893,432; Jan. 3.
Clutch: *See*—
Over running clutch.
Clutch operating mechanism for motor vehicles. E. G. Hill. 1,893,471; Jan. 3.
Coal cutter. J. R. Lawson. 1,892,844; Jan. 3.
Coals, tars, mineral oils, and the like, by hydrogenation under high pressure and at high temperature, Treating. S. Löffler. 1,893,423; Jan. 3.
Coating apparatus. J. W. Cosgrove. 1,893,161; Jan. 3.
Coating composition for dry cells. J. G. Zimmerman. 1,892,691; Jan. 3.
Coatings, Producing imitations of valuable sorts of wood and tarsia style. J. Werner. 1,893,384; Jan. 3.
Coin detector, Spurious. A. M. Robinson. 1,892,777; Jan. 3.
Coke, Apparatus for cooling. W. T. Bosler. 1,893,468; Jan. 3.
Color base and composition containing the same. J. H. Crowell. 1,892,871; Jan. 3.
Color screens and making same. A. G. O'Neill. 1,892,901; Jan. 3.
Comb. N. Philaja. 1,892,749; Jan. 3.
Combination puller. H. P. Johnson and P. H. Clarke. 1,893,414; Jan. 3.
Compact. C. S. Root. 1,892,736; Jan. 3.
Compass. U. Pineda and T. L. Anabisa. 1,892,735; Jan. 3.
Compensator, Smooth flow. K. H. Müller. 1,893,434; Jan. 3.
Composition for preventing boiler priming or frothing. E. F. Spellmeyer. 1,892,857; Jan. 3.
Composition for use in forming a glazing solution. H. H. Edwards. 1,892,980; Jan. 3.
Compressor. L. Ochtman, jr. 1,892,786; Jan. 3.
Compressor, Rotary. E. Kägi. 1,893,171; Jan. 3.
Concrete silo wall member. W. O. Brassert. 1,892,864; Jan. 3.
Condensation products, Making acetylene. P. Schetelig and T. Sutter. 1,893,249; Jan. 3.
Condenser: *See*—
Tape condenser.
Condenser. F. T. Harding. 1,893,306; Jan. 3.
Condenser circulating system, Marine. H. F. Schmidt. 1,893,039; Jan. 3.
Condensers, Making electrical. W. Scheppmann. 1,892,755; Jan. 3.
Condensers, Producing electrical. G. Steerup. 1,893,342; Jan. 3.
Conductor, Electric hollow. G. Zapf. 1,893,120; Jan. 3.
Conduit, Fluid pressure articulated. J. G. Blunt. 1,893,194; Jan. 3.
Connecter: *See*—
Vibration-absorbing connecter.
Connecter for railway rails. J. V. Palmer. 1,893,208; Jan. 3.
Connecting mechanism for straight knitting machines, Frictional. L. White. 1,893,312; Jan. 3.
Connection, Pivotal. J. B. Kirby. 1,892,896; Jan. 3.
Container: *See*—
Food container. Transportation container.
Container and closure means therefor. A. H. Schwartz. 1,892,788; Jan. 3.
Containers, Method of and apparatus for forming sulphurized fiberboard. R. F. Lyon and P. J. Christman. 1,892,675; Jan. 3.
Control device. G. D. Kingsland. 1,893,238; Jan. 3.
Control device for signals. E. W. Knowlton. 1,893,371; Jan. 3.
Control for hydraulic systems. H. Ernst and L. F. Nenninger. 1,893,068; Jan. 3.
Control of induction apparatus. J. I. Hull. 1,893,328; Jan. 3.
Control system. V. Lind. 1,893,332; Jan. 3.
Control system for ailerons. L. N. Yohe and M. Jensen. 1,893,118; Jan. 3.
Conveyer, Material. H. H. Weiss. 1,892,920; Jan. 3.
Cooler: *See*—
Camp cooler.
Cooling unit. G. L. Spring. 1,893,378; Jan. 3.
Cooling unit for refrigerating systems. M. F. Booth. 1,893,321; Jan. 3.
Core box. M. L. Holloway and C. Stephenson. 1,892,748; Jan. 3.
Corrugating machine. B. Rous. 1,892,812; Jan. 3.
Coupling: *See*—
Quick acting coupling. Tube coupling.
Train coupling.
Cover and controls, Gas stove combined manifold. W. Jenkins. 88,914; Jan. 3.
Covering means. H. F. George. 1,892,780; Jan. 3.
Covers, Device for securing milk can. H. G. Packer. 1,893,102; Jan. 3.
Crack sealer for concrete pavements. E. T. Howard. 1,893,082; Jan. 3.
Crane structure. L. C. Burrill, H. Bocler, and N. M. Hunter. 1,893,157; Jan. 3.
Crankshaft lapping machine. A. J. Strong. 1,893,111; Jan. 3.
Crops, Tapered center for riding. H. P. Nelson. 1,893,099; Jan. 3.
Crusher for glass and the like. C. B. Kingsley. 1,893,030; Jan. 3.
Crushing or pulverizing machine. E. E. Elzemeyer and H. Griesedieck. 1,892,697; Jan. 3.
Cultivator, Tractor-driven. F. T. Court. 1,893,069; Jan. 3.
Cupric cyanic compound and its manufacture. H. Hagenest and F. W. Stauf. 1,892,728; Jan. 3.
Current carrying devices, Preparing uni-directional. P. H. Geiger. 1,892,832; Jan. 3.
Current collector. C. J. Way. 1,893,383; Jan. 3.
Cushion, Ventilated horse collar. F. M. Heath. 1,893,079; Jan. 3.
Cushioning mechanism for power hammers. J. Urbanek and A. Schneider. 1,893,187; Jan. 3.
Cutter: *See*—
Coal cutter.
Cutting mechanism for composition constructional material. E. S. Petersen. 1,892,680; Jan. 3.
Cutting, sorting, and conveying device. E. W. Tilton. 1,893,460; Jan. 3.
Cutting tool. F. E. Blanc. 1,892,863; Jan. 3.
Cyanides of calcium, Production of. C. Schumann, R. Fick, and E. Oberreit. 1,892,970; Jan. 3.
Cylinder, Capping glass. E. G. Stahle. 1,892,814; Jan. 3.
Cylinder construction. G. R. Rawles and A. Tedder. 1,892,852; Jan. 3.
Cylinder, Hydraulic brake master. M. Ruegg. 1,892,707; Jan. 3.

Damper, Vibration. A. A. Warner. 1,892,793; Jan. 3.
Density of suspensions of solids in liquids, Measuring and controlling the. H. Howard. 1,892,839; Jan. 3.
Derivatives of the diphenylamine series and making same. L. Laska and A. Werdermann. 1,893,091; Jan. 3.

Derivatives of the naphthazarine series, Preparing. G. Kraenzlein, R. Weide, and P. Ochwat. 1,892,730; Jan. 3.
Derrick mast for well drilling machines, Shock absorbing. T. L. Goff. 1,893,408; Jan. 3.
Desk assembly, Instruction. E. E. Wyatt. 1,892,796; Jan. 3.
Desk structure. E. H. Sheldon. 1,892,813; Jan. 3.
Die casting machine. O. B. Norgren. 1,893,301; Jan. 3.
Di-ido-hydroxy-mercury fluorescein, Water soluble. H. M. Chiles. 1,893,226; Jan. 3.
Direct current dynamo-electric machine. W. Heter. 1,893,367; Jan. 3.
Direction finder. F. W. Winkler and L. L. Kaess. 1,892,758; Jan. 3.
Directional sign for motor vehicles. E. T. Condon. Des. 88,858; Jan. 3.
Discharge tube stabilizer system. M. Morrison. 1,893,299; Jan. 3.
Dispenser: *See*—
Liquid dispenser. Sugar dispenser.
Dispensing device. J. J. Moran and J. W. Quick. 1,892,992; Jan. 3.
Distilling apparatus. P. Schlumbohm. 1,893,340; Jan. 3.
Distilling system. P. R. Gray. 1,892,764; Jan. 3.
Door, Box car. O. E. Raaen. 1,893,105; Jan. 3.
Door check and control device therefor. C. T. Rogers. 1,892,811; Jan. 3.
Door construction. E. P. Schwarz. 1,892,708; Jan. 3.
Door, Folding. L. J. Backes. 1,893,263; Jan. 3.
Door, Furnace. H. B. Seery. 1,893,449; Jan. 3.
Door hinge. E. E. Shively. 1,893,450; Jan. 3.
Drain for sewer filtering plants, Under. H. R. Kimberling. 1,892,842; Jan. 3.
Drawer partition. C. R. Thomas, jr., and B. Wich. 1,893,186; Jan. 3.
Drill: *See*—
Rock drill.
Drill pipe protector. J. H. Cushing. 1,893,020; Jan. 3.
Drill sterilizer-mixing attachment, Grain. M. E. Gass. 1,892,763; Jan. 3.
Drill unit, Percussive. C. C. Hansen. 1,893,203; Jan. 3.
Drink mixer. F. J. Osius and M. Seiderman. Des. 88,888; Jan. 3.
Drive, Automotive vehicle. J. J. Tracy. 1,893,255; Jan. 3.
Drumstick for bass drums. J. T. Haight. 1,892,886; Jan. 3.
Dry cell. J. G. Zimmerman. 1,892,692; Jan. 3.
Dry cleaning machine. J. W. Chamberlain. 1,893,398; Jan. 3.
Dyestuffs, Manufacture of monoazo. B. Richard. 1,893,244; Jan. 3.
Earpiece for earphones. H. Lieber. 1,893,474; Jan. 3.
Eccentric lifting device. H. Breitwieser. 1,893,014; Jan. 3.
Electric circuit controlling appliance. J. Sachs. 1,892,854; Jan. 3.
Electric clock system. G. F. Harter. 1,892,699; Jan. 3.
Electric controlling apparatus. R. R. Burkle. 1,893,223; Jan. 3.
Electric controlling apparatus. H. K. Kouyoumjian. 1,893,289; Jan. 3.
Electric distribution, System of. A. E. Anderson. 1,893,347; Jan. 3.
Electric heating or cooking apparatus for food. I. T. Stokes and A. G. Ionides. 1,893,253; Jan. 3.
Electric protective apparatus. A. O. Austin. 1,893,319; Jan. 3.
Electric soldering tool. D. B. Linville and B. C. Canty. 1,893,093; Jan. 3.
Electric switch, Thermostatic. M. E. Staley. 1,892,858; Jan. 3.
Electrical attenuator network. M. J. De Forest. 1,892,935; Jan. 3.
Electrical coil, Reenforced. V. G. Apple. 1,893,262; Jan. 3.
Electrical control system. G. F. Harter. 1,892,700; Jan. 3.
Electrical distribution system. D. K. Blake. 1,893,356; Jan. 3.
Electrical distribution system. J. S. Parsons. 1,893,178; Jan. 3.
Electrical distribution system. J. S. Parsons. 1,893,180; Jan. 3.
Electrical generator. C. A. Culber. 1,893,019; Jan. 3.
Electrical machinery. C. A. Parsons and J. Rosen. 1,893,375; Jan. 3.
Electrically fusing nonconducting materials, Method of and apparatus for. R. R. Ridgway. 1,893,106; Jan. 3.
Electrode for electric arc welding or soldering. E. J. Clarke. 1,893,160; Jan. 3.
Electromagnetic motor, Rectilinear. E. L. Rose. 1,893,377; Jan. 3.
Electromagnetic valve. W. F. and L. E. Aske. 1,892,825; Jan. 3.
Electromotor. E. E. Gregory and H. E. Comings. 1,893,025; Jan. 3.
Embossing machine. C. C. McCain. 1,893,463; Jan. 3.
Emulsions, Production of photosensitive. R. Griessbach and T. Kollmann. 1,892,725; Jan. 3.
Enamel from a metal base, Removing of. C. S. Houpt. 1,892,950; Jan. 3.
Energy distribution system. J. Ruths. 1,892,967; Jan. 3.
Engine: *See*—
Fire engine. Internal combustion engine.
Engine cooling device. J. W. Heiney. 1,892,669; Jan. 3.
Engine for pulverulent fuel, Internal combustion. R. Pawlikowski. 1,893,035; Jan. 3.
Engine on aircraft, Arrangement of. A. Rohrbach. 1,893,001; Jan. 3.
Engine starting device. J. O. Crawford. 1,893,070; Jan. 3.
Engine with supercharging, Internal combustion. M. Trechsel. 1,893,006; Jan. 3.
Engines, Packing joint for water cooled internal combustion. M. J. B. Barbarou. 1,893,192; Jan. 3.
Envelopes without carbon copy by means of a typewriter, Arrangement for consecutively addressing any number of. G. Keller. 1,893,086; Jan. 3.
Ergosterol, Isolation of. A. Zimmerli. 1,893,317; Jan. 3.
Escape attachment for submarines. A. Saeder. 1,892,850; Jan. 3.
Evaporator. F. R. Erbach. 1,893,361; Jan. 3.
Evaporator for refrigerators. L. A. Philipp. 1,893,338; Jan. 3.
Evaporator for refrigerators. C. C. Spreen. 1,893,341; Jan. 3.
Fabric forming machine. Z. R. and J. R. Maulsby. Re18,705; Jan. 3.
Fabrics, Method of and apparatus for treating tubular textile. S. Cohn. 1,893,197; Jan. 3.
Fan. D. G. Smellie. 1,893,184; Jan. 3.
Fare indicators, Control means for. E. Rosenberg. 1,892,905; Jan. 3.
Fastener: *See*—
Separable fastener.
Fastener. G. E. Prentice. 1,893,036; Jan. 3.
Fastener and concealing means therefor, Slide. S. Lacher. 1,893,420; Jan. 3.
Fastener for receptacles, Closure. D. M. Wenger. 1,892,743; Jan. 3.
Fender and body straightening tool. G. B. Buck. 1,893,196; Jan. 3.
Ferrochrome, Producing. K. M. Simpson. 1,893,109; Jan. 3.
Ferrule, Fish rod. M. Bullough. 1,893,396; Jan. 3.
Fertilizers, Producing phosphatic. B. Ober, W. W. Pagon, G. L. Pruett, and W. W. Troxell. 1,893,437; Jan. 3.
File and buffer, Electric finger nail. W. H. Burr. 1,892,867; Jan. 3.
Files for stencilising stencil sheets, Manufacturing. S. Horii. 1,892,984; Jan. 3.
Filter: *See*—
Air filter.
Filter wash control, Automatic. W. J. Hughes. 1,892,951; Jan. 3.
Filtering material. H. E. Birkholz. 1,893,048; Jan. 3.
Finding for a clasp. A. E. Waller. 1,892,918; Jan. 3.
Fire engine. C. H. Fox. 1,893,166; Jan. 3.
Fire extinguisher. S. M. Green. 1,892,724; Jan. 3.
Fire protection, Oil tank. J. A. Harte. 1,893,026; Jan. 3.
Fixture, Attaching. G. E. McIntyre and L. J. Smyth. 1,892,678; Jan. 3.
Flag. H. E. Guyn. Des. 88,912; Jan. 3.
Flat gluing machine. O. Kleinschmidt. 1,892,987; Jan. 3.
Flaw detector. H. C. Drake. 1,893,074; Jan. 3.
Float structure. V. Colonnese. 1,892,746; Jan. 3.
Floc treatment. M. C. Smith. 1,893,451; Jan. 3.
Fluid control device. M. I. Mix and H. E. Heil. 1,892,775–6; Jan. 3.
Fluid distributing device. H. N. Rider. 1,893,210; Jan. 3.
Fluid pressure apparatus. L. F. Whitney. 1,892,823; Jan. 3.
Fluid pressure controlling means. O. B. Goldkamp. 1,892,883; Jan. 3.
Fluid pumping. L. F. Whitney. 1,892,822; Jan. 3.
Fluid system. D. F. Comstock. 1,892,870; Jan. 3.
Fluorene, Oxidation of. A. O. Jaeger. 1,892,768; Jan. 3.
Food container. R. E. Van Horne. 1,892,756; Jan. 3.
Food product and producing the same. D. Rasky. 1,892,902; Jan. 3.
Forehearth for molten glass. K. E. Peiler. 1,893,060–1; Jan. 3.
Form, Insulated drying. J. O. V. Stetten. 1,892,851; Jan. 3.
Formaldehyde condensation products, Manufacture of phenol. A. Ostersetzer and F. Riesenfeld. 1,892,848; Jan. 3.
Fountain divider, Articulated. R. R. Page. 1,893,148; Jan. 3.
Frame: *See*—
Truck side frame.
Fruit facing apparatus. J. W. Trew. 1,892,818; Jan. 3.
Fuel controller, Automatic. G. A. Robertshaw. 1,892,810; Jan. 3.
Fuel economizer. B. Dick. 1,893,072; Jan. 3.
Fuel metering control for internal combustion engines. A. Moore. 1,893,297; Jan. 3.
Fuel, Nondetonating. P. S. Danner. 1,893,021; Jan. 3.
Fuel pump. H. Hueber and E. C. Horton. 1,893,473; Jan. 3.
Fuel pump, Variable stroke. A. M. Babitch. 1,893,215; Jan. 3.
Furnace: *See*—
Regenerative reverbatory furnace. Warm air furnace.
Furniture leg, Folding. W. M. Boenning. 1,893,195; Jan. 3.
Fuselage for airplanes and the like, Collapsible. F. V. Barycs. 1,892,925; Jan. 3.
Game board. W. S. Duwelius. Des. 88,906; Jan. 3.

Game, Spinning. H. Eyles. 1,892,664; Jan. 3.
Garment hanger. S. Dworkin. 1,892,936; Jan. 3.
Gas generating means for oil burners, Auxiliary. O. Falkenwalde. 1,893,403; Jan. 3.
Gases and vapors, Apparatus for the thermal dissociation of hydrocarbon. W. D. Wilcox. 1,892,862; Jan. 3.
Gases of internal combustion engines, Apparatus for treating exhaust. C. J. Kryzanowsky. 1,893,372; Jan. 3.
Gasket. S. H. Clark. 1,893,399; Jan. 3.
Gasoline, Refining. F. E. Kimball. 1,892,801; Jan. 3.
Gauge: *See*—
Clearance gauge. Indicator snap gauge.
Gauging apparatus. F. G. Hughes. 1,893,205; Jan. 3.
Gear cutting mechanism. H. E. Stonebraker. 1,893,043; Jan. 3.
Gearing, Reduction. I. Short. 1,893,042; Jan. 3.
Generator: *See*—
Acetylene generator. Electrical generator.
Glass, Apparatus for conditioning molten. A. J. Smith. 1,893,063; Jan. 3.
Glass bodies on a mandrel, Device for stringing. J. Aninga. 1,892,744; Jan. 3.
Glass, Manufacture of drawn. I. O. Pedersen. 1,892,806; Jan. 3.
Glass, Method and apparatus for feeding molten. G. E. Howard. 1,892,765; Jar. 3.
Glass, Method of and apparatus for circulating molten. K. E. Peiler. 1,893,062; Jan. 3.
Glove. H. A. Bondy. 1,893,394; Jan. 3.
Glycerine, glycol, and similar alcohols, Process of and apparatus for nitrating. A. Schmid. 1,893,447; Jan. 3.
Golf game. G. Ehrlich. 1,893,402; Jan. 3.
Golf practicing device. E. B. Eriksen. 1,893,278; Jan. 3.
Graph-recording apparatus. L. H. Hounsfield. 1,892,799; Jan. 3.
Grinding machine, Hydraulically operated cylindrical. C. G. Flygare. 1,893,076; Jan. 3.
Guard, Electric lamp. R. L. Grant, jr. 1,893,409; Jan. 3.
Gun mount for aircraft, Machine. C. G. Trimbach. 1,892,914; Jan. 3.
Hair curl clip. J. Goodman. 1,893,281; Jan. 3.
Hair waving pad. C. A. Backman. 1,893,352; Jan. 3.
Hanger: *See*—
Garment hanger. Wardrobe hanger.
Hardening medium and process for hardening tools of iron or steel. A. Garweg. 1,893,077; Jan. 3.
Harrow tooth. G. Kaiser. 1,893,416; Jan. 3.
Headlight attachment. P. E. Bricker. 1,892,976; Jan. 3.
Headlight lens. J. C. A. Labreche. 1,893,174; Jan. 3.
Heat control device for ovens and the like. C. W. Robertshaw. 1,892,809; Jan. 3.
Heat-energy transfer medium. H. H. Dow. 1,893,051; Jan. 3.
Heat exchange device. H. Feldmeier, R. J. Wightman, and R. B. Steves. 1,893,135; Jan. 3.
Heat exchange method and apparatus. D. F. Comstock. 1,892,869; Jan. 3.
Heat regulating device. G. D. Kingsland. 1,893,237; Jan. 3.
Heat transfer device. J. E. Black. 1,892,778; Jan. 3.
Heated table. F. Stolzenburg and H. F. King. 1,893,454; Jan. 3.
Heater: *See*—
Charcoal heater. Vehicle heater.
Heating and ventilating system, Motor-car. L. P. Hynes. 1,893,329; Jan. 3.
Heddle. John J. Kaufmann. 1,893,288; Jan. 3.
Height measuring attachment. E. E. Burrows. 1,892,720; Jan. 3.
High tension installation. A. O. Austin. 1,893,318; Jan. 3.
Hinge: *See*—
Door hinge. Locker hinge.
Hinge. R. A. Stabler. 1,893,252; Jan. 3.
Hoist, Hydraulic. R. E. Choate. 1,892,829; Jan. 3.
Holder: *See*—
Casement window holder. Pad holder.
Cigar and cigarette holder.
Holder and dustpan, Combination broom. J. P. Mahoney. 1,893,420; Jan. 3.
Holder for ash trays or other articles. F. F. Lemoine. Des. 88,879; Jan. 3.
Hot extrusion method. F. Singer. 1,892,789; Jan. 3.
Hot top. E. L. Messler and J. J. Isherwood. 1,893,207; Jan. 3.
Hull, Boat. W. J. H. Dyer. Des. 88,862; Jan. 3.
Humidifier. W. D. Carter. 1,892,694; Jan. 3.
Humidifier. J. V. Stewart. 1,892,686; Jan. 3.
Hydrocarbons and hydrogen, Production of unsaturated gaseous. G. Wietzel and A. Starke. 1,892,978; Jan. 3.
Hydrogen or oxygen containing groups from organic compounds, Catalytic removal of. A. O. Jaeger. 1,892,766; Jan. 3.
Hydrogenating apparatus. E. J. Lush. 1,892,782; Jan. 3.
Hydrogenation process and catalyst therefor. O. G. Bennett. 1,893,155; Jan. 3.
Hydrostatic pump. F. D. Pagliuchi. 1,893,440; Jan. 3.
Identification system. R. H. Caswell. 1,893,225; Jan. 3.
Impeller for blowers. F. V. Burman. 1,892,930; Jan. 3.
Implement for slicing meats, vegetables, and so on. H. Syfrig. 1,893,113; Jan. 3.
Implement handle. H. B. Curtis. Des. 88,859; Jan. 3.
Indicating and recording apparatus. J. Latzko and O. Plechl. 1,893,421; Jan. 3.
Indicating device. R. Corson. 1,893,198; Jan. 3.
Indicating device. A. Kreidler. 1,893,090; Jan. 3.
Indicator: *See*—
Liquid flow indicator. Temperature indicator.
Pressure indicator. Vehicle traffic indicator.
Indicator snap gauge. J. N. Schneider. 1,892,969; Jan. 3.
Ingot mold assembly. E. L. Messler and J. J. Isherwood. 1,893,206; Jan. 3.
Injection device. E. R. Lawshe. 1,892,803; Jan. 3.
Ink or other fluid container. E. Babb and A. W. Zaborowski. Des. 88,850; Jan. 3.
Inlet control valve, Cold water. L. D. Lovekin. 1,892,674; Jan. 3.
Insulator, Strain. K. A. Hawley. 1,892,888; Jan. 3.
Intensity recorder, Lightning field. F. G. Patterson. 1,893,337; Jan. 3.
Internal combustion engine. A. Buchi. 1,893,127; Jan. 3.
Internal combustion engine. H. L. Horning. 1,892,838; Jan. 3.
Internal combustion engine. E. W. Weidner. 1,893,045; Jan. 3.
Internal combustion engine, Liquid fuel. L. O. French. 1,892,880; Jan. 3.
Interrupter for current supply systems. B. Vilkomerson. 1,893,115; Jan. 3.
Ironing board, Concealed. M. Racine. 1,892,963; Jan. 3.
Ironing machine. R. N. West. 1,893,190; Jan. 3.
Jack: *See*—
Automobile jack. Boot jack.
Jar or similar article. H. Dreyfuss. Des. 88,905; Jan. 3.
Jodhpur and like garment. C. Emma. 1,893,470; Jan. 3.
Joint for superheaters or the like. E. E. Hoenstine. 1,892,781; Jan. 3.
Journal protector, Car. M. E. Fitz Gerald. 1,893,279; Jan. 3.
Key and coin container, Combination. L. C. Baldwin. 1,893,265; Jan. 3.
Kite. C. W. Hughes. 1,892,985; Jan. 3.
Knitting mechanism. H. E. Houseman. 1,892,702; Jan. 3.
Knob lock, Separable. J. H. Shaw. 1,892,709; Jan. 3.
Lamp, Negative glow. H. C. Rentschler and D. E. Henry. 1,893,304; Jan. 3.
Lamp, or flashlight, Battery hand. J. L. Shannon. 1,893,108; Jan. 3.
Lamps, Making failure indicator. H. C. Rentschler. 1,893,305; Jan. 3.
Lantern, Electric hand. C. H. Larson. 1,893,292–4; Jan. 3.
Lapping machine. H. S. Indge and S. Player. 1,893,083; Jan. 3.
Lapping or grinding machine. C. H. Norton. 1,893,100; Jan. 3.
Laundry assorting device. C. F. Miller. 1,892,774; Dec. 3.
Lawn edging tool. P. Wolf. 1,892,795; Jan. 3.
Lawn perforator. F. F. Washburn. 1,893,258; Jan. 3.
Leaf spring, Rubber covered. H. D. Geyer and A. H. Flower. 1,892,944; Jan. 3.
Letter for monograms, Embroidered. S. Levenson. 1,893,422; Jan. 3.
Lifter: *See*—
Valve lifter.
Light projector. R. W. Lewis. 1,892,898; Jan. 3.
Lighting fixture, Street. A. G. Steinmayer. Re18,707; Jan. 3.
Link, Universal. H. F. Kampfer. 1,893,141; Jan. 3.
Linkage for fuel pumps. A. M. Babitch. 1,893,216; Jan. 3.
Liquid dispenser. R. Berry. 1,893,391; Jan. 3.
Liquid flow indicator. N. D. Hull. 1,893,233; Jan. 3.
Liquid meter. D. H. McGogy. 1,893,429; Jan. 3.
Liquor in brewing or other fermentation processes, Process and apparatus for clarifying or separating the head from the fermenting. A. Hallermann. 1,893,411; Jan. 3.
Lock: *See*—
Knob lock. Oar lock.
Nut lock.
Lock. E. N. Jacobi. 1,893,142; Jan. 3.
Lock washer. W. H. Tice. 1,893,114; Jan. 3.
Locker hinge. W. N. Vance. 1,893,461; Jan. 3.
Locking device for automobiles, Hood. J. P. Geraghty. 1,893,406; Jan. 3.
Locking pin construction. J. C. Merwin. 1,893,467; Jan. 3.
Locomotive cabs, car bodies, and jigs therefor, Erecting. J. P. Sykes and W. T. Thompson. 1,893,456; Jan. 3.
Log trimming machine, Portable. J. L. Brown. 1,893,016; Jan. 3.
Lubricant and preparing same. S. Matsunawa and F. Nozawa. 1,893,094; Jan. 3.
Lubricating apparatus. F. S. Barks. 1,893,464; Jan. 3.
Lubricating system. F. J. Rayfield. 1,892,849; Jan. 3.
Lubricating system. H. F. Schmidt. 1,893,040; Jan. 3.
Lubricator valve. L. R. Kerns. 1,893,087; Jan. 3.
Luminous tube. S. J. Johnson. 1,893,085; Jan. 3.
Machine tool. E. J. Kearney and J. B. Armitage. 1,892,894; Jan. 3.
Magnesia product from mineral sources of magnesia and making same, Refined. H. N. Barrett. 1,893,047; Jan. 3.
Magnetic structure. H. E. Kennedy. 1,892,956; Jan. 3.
Magnetic valve. B. Walker and H. E. Kennedy. 1,892,917; Jan. 3.
Magneto distributor construction. G. J. Lang. 1,892,802; Jan. 3.

Mail box post, Revolving. J. S. Black. 1,893,392; Jan. 3.
Manhole and cover. O. T. Dougherty. 1,892,830; Jan. 3.
Manifold and valve for hydraulic hoists, Invertible. F. Biszantz. 1,893,124; Jan. 3.
Manifold for internal combustion engines, Air. C. C. Sieffel. 1,893,183; Jan. 3.
Marking plate for keys and securing same. R. H. Nicholson. 1,892,995; Jan. 3.
Match packaging machine. R. H. Gamble and W. J. Crowell, jr. 1,893,201; Jan. 3.
Materials containing organic derivatives of cellulose, Production of black colorations on mixed. G. H. Ellis. 1,892,878; Jan. 3.
Mattress. D. Penner and I. Feintuch. 1,892,679; Jan. 3.
Mattress. S. C. Timm. 1,892,913; Jan. 3.
Mattress protector. H. L. Kaufmann. 1,892,841; Jan. 3.
Measuring apparatus. A. E. Young. 1,893,214; Jan. 3.
Mercuri-mononitro-para-cresol and its salts, Manufacture of. F. V. Sander. 1,893,248; Jan. 3.
Metal alloy, Sintered hard. J. W. Gennit. 1,893,078; Jan. 3.
Metal and making the same, Permeable. C. L. Jones. 1,893,330; Jan. 3.
Metal parts, Soldering together. K. M. Van Gessel. 1,892,819; Jan. 3.
Metal phosphides, Preparation of. W. C. Lilliendahl and F. H. Driggs. 1,893,296; Jan. 3.
Metal reenforcement for highway construction. W. T. Allan. 1,893,387; Jan. 3.
Metal stamping, Forming interior angle in sheet. J. P. Tarbox. 1,892,754; Jan. 3.
Metal wheel. P. M. Miller. 1,893,334; Jan. 3.
Metal working machine. R. S. Brown. 1,892,929; Jan. 3.
Metallurgical apparatus. M. G. Fowler. 1,893,023; Jan. 3.
Metals and alloys, Carbonizing. C. V. Iredell. 1,893,286; Jan. 3.
Metals, Electrolytic deposition of. H. S. Booth, G. G. Torrey, and M. Merlub-Sobel. 1,893,221; Jan. 3.
Metals reduced from their oxides without melting. W. H. Smith. 1,892,740; Jan. 3.
Metaldehyde poisonings, Prevention of. L. Wamoscher. 1,893,008; Jan. 3.
Meter: *See*—
Liquid meter. Watthour meter.
Water meter.
Meter. F. T. Douillard. 1,893,022; Jan. 3.
Meters, Adjusting means for the tangent posts of gas. C. R. Brower and D. Z. Kirkham. 1,892,827; Jan. 3.
Milking machine. J. W. L. Warren. 1,893,257; Jan. 3.
Mill: *See*—
Rolling mill.
Mining apparatus. E. J. Newbaker. 1,892,994; Jan. 3.
Minnow, Artificial. M. F. Jaman, jr. 1,892,892; Jan. 3.
Mirror structure for trucks and the like. O. C. Ritz Woller. 1,893,245; Jan. 3.
Mold: *See*—
Slicing mold.
Mold for meat patties. A. A. Cole. 1,892,779; Jan. 3.
Molds, Making. E. Toman. 1,893,309; Jan. 3.
Motor: *See*—
Electromagnetic motor. Synchronous motor.
Pressure driven motor.
Motor for driving flexible shafts. V. G. Apple. 1,893,261; Jan. 3.
Motor implement. C. S. Brown. 1,892,865; Jan. 3.
Motor vehicle screen. H. A. Ballard. 1,892,975; Jan. 3.
Motor with short-circuited secondary, Induction. J. W. Swendsen. 1,893,112; Jan. 3.
Mounting for pictures, panels, and the like. S. Hammer. 1,893,168; Jan. 3.
Muffler. E. H. Rustin and D. J. Iulo. 1,892,853; Jan. 3.
Musical instrument, Stringed. E. F. Baker. 1,893,264; Jan. 3.
Navigational instrument. E. C. Iverson. 1,893,235; Jan. 3.
Nozzle, Hose. E. B. Moore. 1,893,298; Jan. 3.
Nozzle, Spray. V. V. Veenschoten. 1,893,212; Jan. 3.
Nozzle support. F. Mong. 1,893,241; Jan. 3.
Nut lock. J. A. Arenz. 1,893,067; Jan. 3.
Oar lock. P. J. Startz. 1,893,110; Jan. 3.
Oil pump. E. W. Dodge. 1,892,876; Jan. 3.
Oiler, Valve cylinder. W. H. Dilks. 1,893,073; Jan. 3.
Ophthalmic mounting. F. M. Jahn and C. C. Atkinson. 1,892,671; Jan. 3.
Optical projection apparatus. L. E. Davidson. 1,893,359; Jan. 3.
Optical system. J. C. Karnes. 1,892,893; Jan. 3.
Ore classifier. A. C. Daman and W. E. Smith. 1,892,872; Jan. 3.
Ornamental chain. H. Wachenheimer. 1,893,256; Jan. 3.
Oscillation limit device. L. C. Schenck. 1,893,038; Jan. 3.
Oscillators, Mechanical. G. H. Schieferstein. 1,892,968; Jan. 3.
Over running clutch. L. B. Floyd. 1,893,231; Jan. 3.
Overshoe. J. E. Taber. 1,892,791; Jan. 3.
Package sealing machine. T. W. Satterthwaite. 1,893,307; Jan. 3.
Packaging articles. M. C. Dodge. 1,892,722; Jan. 3.
Packing for water gauge glasses. F. A. Rumats. 1,893,181; Jan. 3.
Pad: *See*—
Accordion pad. Truss pad.
Hair waving pad.
Pad holder, Writing. V. A. Cardarelli. 1,892,721; Jan. 3.
Padlock. D. M. Rainey. 1,892,964; Jan. 3.
Panel, Vehicle body trim. B. C. Place. 1,893,104; Jan. 3.
Partition, Folding. H. D. Oberdorfer and R. True. 1,893,147; Jan. 3.
Pasteurizing apparatus. F. W. Kelly and A. H. Luedicke. 1,892,955; Jan. 3.
Pen, Fountain. M. Chelazzi and D. Frulli. 1,893,180; Jan. 3.
Perforating device for printing presses. K. Funcke. 1,893,053; Jan. 3.
Petroleum hydrocarbons, Purifying. A. Oberle. 1,893,488; Jan. 3.
Petroleum, Treating. W. W. Gary. 1,893,138; Jan. 3.
Phonograph, Automatic. A. Dahlstrom. 1,893,469; Jan. 3.
Photographic film for development, Device for cutting out sections of a. A. J. Liberman. 1,893,092; Jan. 3.
Photographic printing device. F. Bern. 1,893,156; Jan. 3.
Photographic reproduction, Single plate multiple. R. R. Robertson. 1,892,683; Jan. 3.
Photoprinting. A. G. Ogden. 1,893,439; Jan. 3.
Pictorial display apparatus. G. W. Eschenbach. 1,893,052; Jan. 3.
Picture machine, Motion. F. J. Watts and C. Wittenmyer. 1,893,189; Jan. 3.
Picture projector, Motion. E. Mechau. 1,893,374; Jan. 3.
Pigments, Preparation of titanium. J. Blumenfeld and M. Mayer. 1,892,693; Jan. 3.
Pile shell section, Internally tapered. E. D. Watt. 1,893,010; Jan. 3.
Pile shells, Lining. E. D. Watt. 1,893,011; Jan. 3.
Pillow or cushion. J. Hilton. 1,893,170; Jan. 3.
Pineapple tidbit machine. G. K. Shoji. 1,892,685; Jan. 3.
Pipe: *See*—
Smoking pipe.
Pipe lines, etc, Locating buried. T. S. West. 1,893,311; Jan. 3.
Pipe T's, Forming. J. H. Taylor. 1,892,712; Jan. 3.
Pipe threading device. Q. O. Robinson and G. H. Goulden. 1,892,904; Jan. 3.
Pistol handles, attachment for automatic. E. V. McCarty. 1,893,095; Jan. 3.
Piston ring inserter. M. J. Koza. 1,892,989; Jan. 3.
Piston rings, Treating. M. B. Covert. 1,893,274; Jan. 3.
Planimeter. P. E. Lehr. 1,892,957; Jan. 3.
Planographic printing process. V. Dietz. 1,892,875; Jan. 3.
Planographic printing process. V. Dietz. 1,893,163; Jan. 3.
Plant support. O. A. Muller. 1,893,335; Jan. 3.
Plastic composition, Producing. C. T. G. Lindh. 1,892,703; Jan. 3.
Plastic or coating, Composition. A. O. Jaeger. 1,892,769; Jan. 3.
Plastic or coating composition. A. O. Jaeger. 1,892,784; Jan. 3.
Plate or similar article. A. C. Scavullo. Des. 88,932; Jan. 3.
Plate or similar article, Compartment. E. Worthington. Des. 88,946; Jan. 3.
Plow. C. P. Burch. 1,892,978; Jan. 3.
Plow. C. G. Strandlund. 1,892,753; Jan. 3.
Pneumatic displacement pump. C. D. Rubel. 1,893,151; Jan. 3.
Pocket receptacle, Flexible. W. R. Buxton. 1,893,897; Jan. 3.
Polishing device. J. Druker. 1,892,723; Jan. 3.
Pose-reflecting system for photographic apparatus. L. G. Simjian. 1,893,211; Jan. 3.
Post: *See*—
Mail box post.
Power, Apparatus for transmitting. E. M. Hirsh and J. H. D'Andelet. 1,893,413; Jan. 3.
Power head. C. Groen. 1,893,282; Jan. 3.
Power translator. M. P. and A. Winther. 1,893,346; Jan. 3.
Power unit. R. Gilbert. 1,892,833; Jan. 3.
Press: *See*—
Vulcanizing press.
Press for plastic material. J. L. Hunter. 1,893,234; Jan. 3.
Presses, Apparatus for automatically stopping automatic power. C. D. McDonald. 1,893,427–8; Jan. 3.
Pressure driven motor, Water. J. M. Gega. 1,892,831; Jan. 3.
Pressure indicator. A. E. Bronson. 1,893,222; Jan. 3.
Pressure reducing valve. B. J. Sweeney. 1,893,254; Jan. 3.
Pressure responsive device and diaphragm for use therein. H. S. Dolbey and E. S. Smith, jr. 1,893,200; Jan. 3.
Printing or typing adding or subtracting machine or typing calculating machine. S. J. Herzstark. 1,893,081; Jan. 3.
Printing plate, Making a. T. E. Richards. 1,892,682; Jan. 3.
Propeller blades and like articles, Apparatus for machining. L. T. Pearce. 1,893,443; Jan. 3.

Protector: *See*—
Drill pipe protector. Mattress protector.
Journal protector.
Puller: *See*—
Combination puller. Valve puller.
Pump: *See*—
Fuel pump. Pneumatic displacement pump.
Hydrostatic pump.
Oil pump.
Pump. J. R. Muirhead and J. W. Mills. 1,893,433; Jan. 3.
Pump for hydraulic hoists, Reversible. F. Biszantz. 1,893,125; Jan. 3.
Pump of reversed type, Fuel. A. M. Babitch and G. W. Harry. 1,893,218; Jan. 3.
Pump valve, Float actuated. G. F. Zellhoefer. 1,893,066; Jan. 3.
Pump with lost motion lever, Fuel. A. M. Babitch. 1,893,217; Jan. 3.
Pyrometer adapted to the control of temperature. J. Bridges. 1,893,184; Jan. 3.
Quick acting coupling. R. C. Croslen. 1,893,132; Jan. 3.
Racket stringing vise. W. A. Bickel. 1,893,267; Jan. 3.
Radiator. W. J. Caldwell. 1,893,270; Jan. 3.
Radiator. J. B. Murray. 1,893,034; Jan. 3.
Radiator bracket. C. A. Dieterich. 1,892,762; Jan. 3.
Radiator, Concealed. A. B. Modine. 1,893,146; Jan. 3.
Radiator, Electric. J. E. Gannon and J. M. Winter. 1,892,882; Jan. 3.
Radio equipment, Airplane. C. F. Jenkins. 1,893,287; Jan. 3.
Radio receiving system. W. W. Macalpine. 1,892,704; Jan. 3.
Rail fissure detector. D. C. Bettison and F. H. Keaton. 1,892,826; Jan. 3.
Railway brake. W. A. Newman. 1,893,300; Jan. 3.
Rake. C. J. Rocquin. 1,892,965; Jan. 3.
Ramp for use in rerailing vehicles. H. Broscombe. 1,892,977; Jan. 3.
Range, Gas. H. Lange. Des. 88,878; Jan. 3.
Rayon spinning machine. C. Herrmann. 1,893,054; Jan. 3.
Razor and shaving brush, Combination. G. R. Harvey. 1,892,836; Jan. 3.
Razor, Magazine. E. A. Conner. 1,892,931; Jan. 3.
Reading stand. D. B. Bolich. 1,892,745; Jan. 3.
Receptacle: *See*—
Pocket receptacle.
Receptacle. C. P. Wellman. 1,892,714–15; Jan. 3.
Recorder: *See*—
Intensity recorder.
Reel: *See*—
Barbed wire reel. Clothes drier reel.
Refractory. P. G. Willetts. 1,893,313; Jan. 3.
Refrigerant. E. E. Sorensen. 1,892,741; Jan. 3.
Refrigerating apparatus. O. M. Summers. 1,892,711; Jan. 3.
Refrigerating apparatus. H. B. Wallis. 1,892,713; Jan. 3.
Refrigerating apparatus. T. C. Whitehead. 1,893,845; Jan. 3.
Refrigerating apparatus. T. C. Whitehead and H. A. Greenwald. 1,893,478; Jan. 3.
Refrigerating apparatus of the absorption type. P. C. Frey. 1,892,941; Jan. 3.
Refrigerating, Method and apparatus for. L. G. Copeman. 1,893,228; Jan. 3.
Refrigerating system, Compression type. P. W. Des Roches. 1,892,874; Jan. 3.
Refrigeration. H. G. McComb and W. D. Collins. 1,892,960; Jan. 3.
Refrigeration. E. A. Weaver. 1,892,821; Jan. 3.
Refrigeration apparatus. C. H. Thomas. 1,892,911; Jan. 3.
Refrigerator condensing unit. G. A. Vis. 1,893,344; Jan. 3.
Refrigerator controller. R. W. Doeg. 1,893,360; Jan. 3.
Regenerative reverberatory furnace. O. Schweitzer. 1,892,971; Jan. 3.
Register, Cash. W. J. Pasinski. Des. 88,889; Jan. 3.
Regulator: *See*—
Window regulator.
Regulator device. J. Bogopolsky. 1,893,126; Jan 3.
Relay for network distribution systems. J. S. Parsons. 1,893,179; Jan. 3.
Remote control system, Electric selective. B. H. Leeson and D. E. Lambert. 1,893,479; Jan. 3.
Revetment and laying the same. G. M. Hoffman. 1,892,701; Jan 3.
Rifle loading mechanism. R. F. Sedgley. Re18,706; Jan. 3.
Ring. E. J. Schnarr. 1,892,737–8; Jan. 3.
Rock drill. R. A. Murdock and J. S. McKenna. 1,893,033; Jan. 3.
Rolling mill. W. C. Coryell. 1,892,933; Jan. 3.
Rolling mill. A. Kuhns. 1,893,290; Jan. 3.
Rubber latex or other rubber dispersions, Vulcanization of. F. C. Van Heurn. 1,893,477; Jan. 3.
Rubber vulcanization. G. Bruni and T. G. Levi. 1,892,719; Jan. 3.
Sadiron. E. D. Perry and G. E. Ball. Des. 88,890; Jan. 3.
Safety device for printing machines and the like. B. Fassmann. 1,893,164; Jan. 3.
Safety drill table. Z. Witkin. 1,892,690; Jan. 3.
Safety extension signal. S. C. Philips. 1,893,303; Jan. 3.
Safety valve. C. A. White. 1,892,921; Jan. 3.
Salts of organic di-thiophosphates. L. J. Christmann. 1,893,018; Jan. 3.
Sash construction. W. S. Hamm. 1,892,887; Jan. 3.
Saw filing machine attachment, Gin. J. G. Brown. 1,893,322; Jan. 3.
Scale. N. A. Hallwood. 1,892,729; Jan. 3.
Scale, Health. A. Bousfield. Des. 88,852; Jan. 3.
Scale, Infant. A. Bousfield. Des. 88,853; Jan. 3.
Scale, Infant. A. Bousfield. 1,892,718; Jan. 3.
Scale, Recording. H. A. Hadley. 1,892,726; Jan. 3.
Scale, Weighing. F. A. Schmitz. 1,893,041; Jan. 3.
Scissors. C. Driest. 1,892,877; Jan. 3.
Scraper of the wheel type, Revolving. O. W. Sjogren and J. A. Vaughn. 1,892,907; Jan. 3.
Scraper, Tractor. H. Tonjes, jr. 1,892,817; Jan. 3.
Screen: *See*—
Motor vehicle screen. Well screen.
Screen and suspension frame, Rolling window. A. M. Rubin. 1,892,787; Jan. 3.
Sea wall. H. W. Schlueter. 1,893,003; Jan. 3.
Seal, Self container oil. E. A. Braden. 1,893,012; Jan. 3.
Sealing means for floating roofs for tanks. J. M. Crans. 1,893,162; Jan. 3.
Seat: *See*—
Car seat. Spring seat.
Separable fastener. G. Sundback. 1,893,379; Jan. 3.
Sewage disposal. R. S. Rankin. 1,892,681; Jan. 3.
Sewage treating apparatus. C. E. Keefer and F. C. Wachter. 1,892,688; Jan. 3.
Sewing machine. J. Kiewics. 1,892,895; Jan. 3.
Sewing stand. J. Kulzer. 1,893,419; Jan. 3.
Shackle, Rolling spring. J. W. Heiney. 1,892,668; Jan. 3.
Shade, Folding sun. A. Seregi. 1,893,182; Jan. 3.
Shaft coupling for the transmission of power, Flexible. C. A. G. Standage. 1,893,452; Jan. 3.
Shaft housing assembly, Outboard motor drive. O. Evinrude. 1,892,981; Jan. 3.
Sharpener for sharpening blades of lawn mowers or shears. E. C. Harnden. 1,892,667; Jan. 3.
Shears, Flying. A. Grosbost. 1,892,834; Jan. 3.
Sheet and process of manufacture, Transparent. E. M. Kratz. 1,893,172; Jan. 3.
Sheet feeding mechanism. A. A. Stone. 1,893,455; Jan. 3.
Shield for skylight, floor light and vault structures. J. H. Old. 1,893,101; Jan. 3.
Shield, Radiator. S. Kauffman. 1,892,954; Jan. 3.
Shim. F. A. Cook. 1,892,932; Jan. 3.
Shingle, Composition. H. H. Honigbaum. 1,893,028; Jan. 3.
Shingles, Treating. W. S. Johnston. 1,892,672; Jan. 3.
Ship, Passenger. J. Blokland Visser. 1,892,820; Jan. 3.
Shock absorber, Hydraulic. F. O. Kilgore. 1,893,058; Jan. 3.
Shock damping device. F. H. Royce. 1,893,339; Jan. 3.
Shoe. N. Elkin. Des. 88,864; Jan. 3.
Shoe construction. S. Troy. 1,893,007; Jan. 3.
Shovel, Elevating power. C. M. Fuller and A. C. Denison. 1,892,881; Jan. 3.
Sign. E. R. Gill. 1,893,024; Jan. 3.
Signal: *See*—
Safety extensible signal.
Signaling apparatus, Electric train. R. P. Ballou. 1,892,716; Jan. 3.
Signaling device for automobiles. F. J. and E. T. Jaros. 1,893,369; Jan. 3.
Signaling switch. F. J. and E. T. Jaros. 1,893,370; Jan. 3.
Signaling system. A. Hund. 1,893,029; Jan. 3.
Signals on space radioreceivers, Receiving wired radio. R. D. Duncan, jr. 1,892,696; Jan. 3.
Skates, Making ice. W. F. Hoerle. 1,893,140; Jan. 3.
Sled, Coaster. R. R. Walker. 1,893,381; Jan. 3.
Slicing mold. H. E. Welty. 1,892,861; Jan. 3.
Slider for separable fasteners. G. E. Prentice. 1,893,037; Jan. 3.
Smoking pipe. N. Friedman. 1,893,137; Jan. 3.
Socket handle and lamp guard, Combined. J. E. Kilkenny. 1,893,088; Jan. 3.
Sodium chloride, Apparatus for obtaining. G. B. Burnham. 1,892,760; Jan. 3.
Soldering apparatus. C. W. Uschman and H. W. Hartman. 1,893,380; Jan. 3.
Sole, Shoe. F. D. Fowler. Des. 88,865; Jan. 3.
Sole, Shoe. L. H. L'Hollier. Des. 88,881; Jan. 3.
Soles, Affixing. W. H. Bresnahan. 1,893,015; Jan. 3.
Sound, Apparatus for recording or reproducing. R. D. Given and H. F. Jefferson. 1,893,362; Jan. 3.
Sound producing device. C. M. Boudette. 1,893,049; Jan. 3.
Sound recording apparatus. G. B. Scheibell. 1,892,855; Jan. 3.
Spark amplifier for use in the ignition systems of internal combustion engines. M. G. Hibbs. 1,893,204; Jan. 3.
Spindle shaper. C. A. Herberts. 1,893,080; Jan. 3.
Spinning frames and other machines, Method of and apparatus for operating on. W. J. Smith. 1,892,751; Jan. 3.
Spool for Axminster looms. W. H. Wilson. 1,893,386; Jan. 3.
Spool for photographic films. T. G. Baxenden and J. R. Collyear. 1,892,717; Jan. 3.
Spooling machine. C. Herrmann. 1,893,055; Jan. 3.
Spot cleaning device. J. S. Thompson. 1,892,792; Jan. 3.

Spraying and injecting device for internal combustion engines employing liquid fuel. E. H. Tartrais. 1,893,457; Jan. 3.
Spring: *See*—
Leaf spring. Vehicle spring.
Spring clip, Vehicle. G. W. Crabtree. 1,893,229; Jan. 3.
Spring control. T. C. McConkey and G. Picard. 1,892,991; Jan. 3.
Spring seat. W. A., sr., and W. A. Murray, jr. 1,893,098; Jan. 3.
Spring support. A. R. Le Bailly. 1,893,295; Jan. 3.
Sprinkler. P. Lippert. 1,892,959; Jan. 3.
Stage mounting, Rotating. B. S. Glagolin. 1,893,167; Jan. 3.
Stands: *See*—
Reading stand. Sewing stand.
Starter switch, Automatic. A. M. Peters. 1,893,242; Jan. 3.
Steam generation. P. R. Delling. 1,893,133; Jan. 3.
Steam spreader, Exhaust. J. G. Norquay. 1,892,996; Jan. 3.
Steel and article made therefrom, Silico-molybdenum. W. R. Shimer and F. C. T. Daniels. 1,893,004; Jan. 3.
Stock and die. W. H. Straw. 1,893,308; Jan. 3.
Stocking. G. Gastrich. Des. 88,867; Jan. 3.
Stocking. P. F. Kroener. Des. 88,915–26; Jan. 3.
Stoker, Automatic. R. M. Robertson and M. C. Allin. 1,893,246; Jan. 3.
Stoker shut-off device. C. D. Smelser. 1,892,790; Jan. 3.
Stone construction. P. A. Celander. 1,892,761; Jan. 3.
Stop for luggage, Partition. S. Lacher. 1,892,897; Jan. 3.
Stopcock. L. S. Hamer. 1,892,835; Jan. 3.
Stopper operating mechanism for ladles. M. J. Nemes. 1,893,436; Jan. 3.
Stopper or closure for insulated containers. A. S. Knapp. 1,892,988; Jan. 3.
Stopper, Sediment collecting. F. A. and A. H. Grauman. 1,892,884; Jan. 3.
Storage battery. L. M. Patterson, jr. 1,892,962; Jan. 3.
Stretcher, Stocking. J. T. Blossom. 1,893,220; Jan. 3.
Strip for doors and the like, Movable sealing. C. G. Johnson. 1,892,986; Jan. 3.
Strip or thread material, Process and apparatus for making rubber or like. F. Cremer. 1,893,465; Jan. 3.
Stroke-regulating device for pull rods. J. R. Mahan. 1,893,333; Jan. 3.
Sugar dispenser. H. C. Gessler. 1,893,139; Jan. 3.
Sulphur dioxide, Obtaining concentrated. W. Wettstein. 1,893,385; Jan. 3.
Sulphur, Recovering. O. C. Ralston and K. M. Baum. 1,892,999; Jan. 3.
Support: *See*—
Nozzle support. Spring support.
Plant support.
Support and making same, Mirror. E. C. Horton. 1,893,472; Jan. 3.
Supporting device, Adjustable. O. C. Teufel. 1,892,687; Jan. 3.
Supporting mechanism for lamps, Adjustable. W. N. de Sherbinin. 1,893,071; Jan. 3.
Surfacing board and article therefor. W. A. Darrah. 1,892,873; Jan. 3.
Sweeping machine. E. D. Parker. 1,892,961; Jan. 3.
Swing. J. Januszewski. 1,893,084; Jan. 3.
Switch: *See*—
Electric switch. Starter switch.
Signaling switch. Thermostatic switch.
Switch. R. H. Heisel. 1,893,027; Jan. 3.
Switch. T. F. Johnson. 1,893,415; Jan. 3.
Synchronous motor. H. P. Sparkes. 1,892,856; Jan. 3.
Syringe. M. Nevin. 1,892,903; Jan. 3.
Table: *See*—
Heated table. Safety drill table.
Tape condenser. H. Burhenne. 1,893,050; Jan. 3.
Tar distillation. S. P. Miller. 1,893,145; Jan. 3.
Telegraph, High speed printing. H. Chireix and H. Goudet. 1,893,158; Jan. 3.
Telegraphy, High speed multiplex. H. Chireix and H. Goudet. 1,893,159; Jan. 3.
Telephone dial illumination. R. Foster and S. K. Waldorf. 1,893,325; Jan. 3.
Telephone system. T. F. Crocker. 1,893,323; Jan. 3.
Temperature, Apparatus for controlling. L. W. Eggleston. 1,893,277; Jan. 3.
Temperature indicator. W. A. Collins. 1,893,400; Jan. 3.
Tension control for rolling mills. W. C. Coryell. 1,892,934; Jan. 3.
Testing tool. L. B. Hearle and H. G. Hudson. 1,892,887; Jan. 3.
Textile fabric. R. George. Des. 88,868–9; Jan. 3.
Textile fabric. R. George. Des. 88,907; Jan. 3.
Textile fabric. J. van der Does. Des. 88,892–4; Jan. 3.
Textile fabric collar or similar article. W. Willheim. Des. 88,897; Jan. 3.
Textile fabric collar or similar article. W. Willheim. Des. 88,945; Jan. 3.
Textile fabric or similar article. A. Bacolini. Des. 88,851; Jan. 3.
Textile fabric or similar article. F. Bridier. Des. 88,854; Jan. 3.
Textile fabric or similar article. M. Brodsky. Des. 88,855; Jan. 3.
Textile fabric or similar article. N. Garfinkl. Des. 88,866; Jan. 3.
Textile fabric or similar article. J. M. Gottesman. Des. 88,870–2; Jan. 3.
Textile fabric or similar article. J. M. Gottesman. Des. 88,908–10; Jan. 3.
Textile fabric or similar article. M. Guhl. Des. 88,874; Jan. 3.
Textile fabric or similar article. M. Guhl. Des. 88,911; Jan. 3.
Textile fabric or similar article. C. R. Hellman. Des. 88,875–6; Jan. 3.
Textile fabric or similar article. R. Megros. Des. 88,886–7; Jan. 3.
Textile fabric or similar article. R. Megros. Des. 88,928; Jan. 3.
Textile fabric or similar article. J. Overmeyer. Des. 88,930; Jan. 3.
Textile fabric or similar article. G. Virgile. Des. 88,900; Jan. 3.
Textile fabric or similar article. W. Willheim. Des. 88,895–6; Jan. 3.
Textile fabric or similar article. W. Willheim. Des. 88,899; Jan. 3.
Textile fabric or similar article. W. Willheim. Des. 88,935–44; Jan. 3.
Textile fabric or similar article, Printed. M. Beboutoff. Des. 88,901; Jan. 3.
Textile fabric or similar article, Printed. P. Journoud. Des. 88,877; Jan. 3.
Textile fabric or the like. B. Altman. Des. 88,847–8; Jan. 3.
Textile fabric or the like. A. J. Heinke. Des. 88,913; Jan. 3.
Textile fabric or the like. H. J. Loun. Des. 88,882; Jan. 3.
Textile fabric or the like. J. Lukas. Des. 88,883; Jan. 3.
Textile fabric or the like. J. Maisch. Des. 88,884–5; Jan. 3.
Textile fabric or the like. J. Schweizer. Des. 88,933; Jan. 3.
Textile material, Coloration of. A. Mellor and D. T. McLellan. 1,893,239; Jan. 3.
Thermometer. E. G. Bayer. 1,893,388; Jan. 3.
Thermometer, Universal scale dairy. R. M. Wilhelm and D. C. Lightner. 1,892,689; Jan. 3.
Thermostatic switch. H. H. Fogwell. 1,892,938; Jan. 3.
Threads, Drawing cellulose acetate. A. Ascherl and W. Gruber. 1,892,923; Jan. 3.
Timing mechanism. F. A. Booth. 1,892,928; Jan. 3.
Token delivering machine. H. R. Brand. 1,893,013; Jan. 3.
Tones of predetermined musical quality, Producing compound. M. L. Severy. 1,893,250; Jan. 3.
Tool: *See*—
Battery tool. Lawn edging tool.
Cutting tool. Machine tool.
Electric soldering tool. Testing tool.
Fender and body straightening tool.
Tool and tool holder. J. H. Smith. 1,892,739; Jan. 3.
Tool with an electric motor mounted in the handle, Electric. A. Oldenburg. 1,892,997; Jan. 3.
Toothbrush. C. Rothschild. 1,893,002; Jan. 3.
Toy coaster wagon. C. C. Blackmore. 1,893,193; Jan. 3.
Toy, Double rope skipping. C. Kreutzer. 1,893,173; Jan. 3.
Toy, Submersible. L. Ranney. 1,893,000; Jan. 3.
Tractor drawn implements, Raising and lowering. G. Guerri. 1,893,410; Jan. 3.
Tractor lug. H. Griebat. 1,892,945; Jan. 3.
Train control system. A. G. Williamson. 1,893,315–16; Jan. 3.
Train coupling, Automatic fluid pipe connecter. A. S. Johnson. 1,892,953; Jan. 3.
Transformer regulating system. P. Sporn. 1,892,752; Jan. 3.
Transmission, Free wheeling. J. F. Gaylord. 1,893,405; Jan. 3.
Transmission line device. N. A. Wahlberg. 1,893,188; Jan. 3.
Transportation container. F. K. Fildes. 1,892,698; Jan. 3.
Trap: *See*—
Animal trap. Vermin trap.
Tray for incubators, Egg. L. C. Sturgis. 1,893,153; Jan. 3.
Tray or similar article, Match and ash. A. J. Denisoff. Des. 88,860; Jan. 3.
Trolley harp. S. S. Matthes. 1,893,378; Jan. 3.
Truck lift. C. E. Constable. 1,893,273; Jan. 3.
Truck side frame. T. H. Symington. 1,892,859; Jan. 3.
Truck side frame. T. H. Symington. 1,893,475–6; Jan. 3.
Truck, Six-wheeled motorized. J. A. McGrew. 1,893,032; Jan. 3.
Truss pad. I. M. Pease. 1,892,805; Jan. 3.
Truss pad construction. I. M. Pease. 1,892,804; Jan. 3.
Tube: *See*—
Luminous tube.
Tube closing device. B. De Jesús-Angeles. 1,893,401; Jan. 3.
Tube coupling. A. L. Parker. 1,893,441–2; Jan. 3.
Turbine of the combined radio axial flow type, Elastic fluid. A. Lysholm. 1,892,899; Jan. 3.

Twine impregnating device. I. A. Severson. 1,893,107; Jan. 3.
Twisting and winding machine. H. Hofmann and M. E. Korff. 1,892,782–3; Jan. 3.
Type casting machines, Quick drop attachment for. T. W. Robison. 1,893,247; Jan. 3.
Typewriting machine. W. O. Michelsen. 1,893,097; Jan. 3.
Ultra violet sterilising apparatus. O. J. Meehler. Des. 88,929; Jan. 3.
Underfloor wiring duct system. C. H. Boucher. 1,893,268; Jan. 3.
Valve: *See*—
Automatic valve. Magnetic valve.
Electromagnetic valve. Pressure reducing valve.
Inlet control valve. Pump valve.
Lubricator valve. Safety valve.
Valve cage. M. S. Parkhill. 1,893,209; Jan. 3.
Valve for flush tanks. A. R. Gilmore. 1,893,202; Jan. 3.
Valve for footballs and other inflatable articles. W. Haubensak and W. A. Wetterwald. 1,892,727; Jan. 3.
Valve for steam engines. A. C. Russell. 1,893,446; Jan. 3.
Valve lifter. W. L. Ziegler and J. W. Durnell. 1,892,824; Jan. 3.
Valve puller. C. M. Marshall and J. E. Mahin. 1,892,900; Jan. 3.
Vegetable phosphatides, Refinement of. H. Bollmann and A. Schwieger. 1,893,393; Jan. 3.
Vehicle body having a collapsible head. H. Austin. 1,893,351; Jan. 3.
Vehicle body having collapsible head, Motor. H. Austin. 1,893,349–50; Jan. 3.
Vehicle construction, Motor. H. E. Curtis. 1,893,324; Jan. 3.
Vehicle for carrying aircraft parts and other loads. C. Cohen-Venezian. 1,893,227; Jan. 3.
Vehicle heater, Motor. P. Mayhew. 1,893,059; Jan. 3.
Vehicle spring. G. E. Porter. 1,893,150; Jan. 3.
Vehicle suspension. A. Dubonnet. 1,892,937; Jan. 3.
Vehicle traffic indicator. A. J. Wehr, J. W. Sheeres and A. V. Eliot. 1,892,860; Jan. 3.
Vehicle wheel. M. W. Thompson. 1,893,154; Jan. 3.
Ventilator: *See*—
Window ventilator.
Ventilator and smoke pipe, Combination. J. B. Clay. 1,893,272; Jan. 3.
Vermin trap. H. F. Hyman. 1,892,952; Jan. 3.
Vibration-absorbing connecter. H. D. Geyer. 1,892,948; Jan. 3.
Voltage compensator. J. G. Sola. 1,893,251; Jan. 3.
Volume control apparatus for recording and broadcasting. B. Kwartin. 1,893,291; Jan. 3.
Vulcanizing press. J. R. Gammeter. 1,892,942; Jan. 3.
Wadding. J. Schmidt. 1,893,448; Jan. 3.
Wall of hollow bodies, Apparatus for surface hardening of the inner. F. Klopp. 1,892,843; Jan. 3.
Wall or the like, Tiled. O. E. Grigsby. 1,892,885; Jan. 3.
Wardrobe case. J. Ritter, jr. 1,892,903; Jan. 3.
Wardrobe hanger. B. Wertzler. 1,892,794; Jan. 3.
Warm air furnace. H. J. and R. G. Hillier. 1,893,240; Jan. 3.
Washer: *See*—
Lock washer.
Washing apparatus. E. Davis. 1,893,199; Jan. 3.
Washing machine. H. E. Crocker and W. W. Harris. 1,893,230; Jan. 3.
Water meter, Turbine. W. T. Rimele. 1,893,445; Jan. 3.
Water purification process. O. M. Urbain. 1,892,972; Jan. 3.
Watering device. R. W. Stradling. 1,892,909; Jan. 3.
Watthour meter. W. G. Mylius and B. G. La Bar. 1,893,177; Jan. 3.
Web splicing device. H. A. Wood. 1,892,974; Jan. 3.
Webbing, Narrow. G. H. Becker. Des. 88,902; Jan. 3.
Weighing apparatus. W. H. Rees. 1,893,243; Jan. 3.
Well reaming device. A. E. Carlson. 1,893,224; Jan. 3.
Well screen. L. C. Tilbury. 1,892,912; Jan. 3.
Wheel: *See*—
Metal wheel. Vehicle wheel.
Wheel construction for tractors and semitrailers, Fifth. D. H. Davis. 1,892,797; Jan. 3.
Wheels and tires, Device for handling automobile. T. N. Clark. 1,892,979; Jan. 3.
Window closer, Automatic. B. H. Weaver. 1,893,260; Jan. 3.
Window guard attachment, Metal. D. McDonald. 1,893,176; Jan. 3.
Window regulator. J. W. Lakin and H. C. Field. 1,892,781; Jan. 3.
Window ventilator. W. T. Crouse. 1,892,695; Jan. 3.
Windshield warmer. G. H. Osgood. 1,892,847; Jan. 3.
Wood preserver composition. F. W. von Sanden. 1,893,310; Jan. 3.
Yeast manufacture. A. Schultz and C. N. Frey. 1,893,152; Jan. 3.

CLASSIFICATION OF PATENTS

ISSUED JANUARY 3, 1933

NOTE.—First number—class, second number—subclass, third number—patent number

2— 159: 1,893,394
228: 1,893,470
278: 1,893,422
4— 63: 1,893,202
145: 1,893,435
5— 252: 1,893,170
352: 1,892,913
357: 1,892,679
6— 1: 1,893,431
8— 5: 1,892,878
19: 1,893,197
9— 22: 1,893,157
26: 1,893,110
10— 72: 1,893,444
107: 1,892,904
115: 1,893,308
12— 142: 1,892,791
13— 34: 1,893,108
14— 35: 1,893,014
15— 83: 1,892,961
137: 1,892,728
191: 1,893,191
197: 1,893,002
199: 1,892,926
269: 1,892,751
16— 30: 1,892,845
49: 1,892,811
128: 1,893,461
131: 1,893,252
18— 8: 1,893,054
55: 1,893,055
17: 1,892,942
19: 1,893,234
53: 1,892,719
55: 1,893,477
54: 1,892,923
55: 1,893,465
59: 1,893,430
19— 114: 1,893,326
151: 1,893,050
20— 1.01: 1,893,489
1.123: 1,893,167
16: 1,893,450
20: 1,892,986
1,893,147
1,893,263
26: 1,893,105
35: 1,892,708
40.5: 1,892,847
60: 1,893,399
71: 1,893,176
22— 13: 1,892,748
60: 1,893,301
70: 1,893,247
85: 1,893,436
139: 1,893,208
147: 1,893,207
184: 1,893,425
193: 1,893,309
23— 7: 1,892,862
17: 1,893,331
75: 1,892,726
79: 1,892,970
162: 1,892,767
180: 1,893,285
201: 1,893,047
204: 1,893,298
226: 1,892,999
253: 1,893,230
273: 1,892,760
288: 1,892,732
1,893,372
24— 17: 1,892,722
71: 1,893,271
72.8: 1,892,841
205: 1,893,036
1,893,037
1,893,379
1,893,420
237: 1,892,678
252: 1,892,918
25— 30: 1,892,815
142: 1,893,123
153: 1,893,314
29— 37: 1,892,929
84: 1,892,773
1,893,456
85: 1,893,353
1,893,414
86.3: 1,892,824
1,892,900
86.4: 1,892,980
148: 1,893,140
155.5: 1,892,819
156.6: 1,893,274
157.3: 1,893,230
20— 12: 1,892,826
1,892,931
13: 1,892,877
20: 1,893,113
31— 32: 1,892,861
73: 1,893,257
33— 122: 1,892,957
147: 1,892,720
1,892,960
149: 1,892,735
170: 1,893,404
36— 18: 1,893,007
64: 1,893,103
37— 129: 1,892,907
40— 2.2: 1,893,225
19.5: 1,892,774
53: 1,893,052
70: 1,893,364
125: 1,892,998
127: 1,893,149
130: 1,893,024
148: 1,893,168
41— 33: 1,893,384
42— 18: R. 18,706
71: 1,893,095
43— 42: 1,893,300
46: 1,892,892
70: 1,893,236
121: 1,892,952
44— 7: 1,893,008
9: 1,893,021
14: 1,893,417
45— 7: 1,893,186
11: 1,893,195
97: 1,893,345
1,893,472
132: 1,892,733
46— 40: 1,893,000
47— 44: 1,893,335
57: 1,893,258
48— 53.3: 1,892,947
49— 17.1: 1,892,744
50: 1,892,814
55: 1,892,765
1,893,051
56: 1,893,060
1,893,062
1,893,063
79: 1,893,252
83.1: 1,892,906
50— 23: 1,893,254
51— 73: 1,893,083
1,893,111
95: 1,893,076
108: 1,893,213
118: 1,893,100
165: 1,893,205
186: 1,892,997
278: 1,893,117
54— 65: 1,893,079
55— 114: 1,892,965
58— 24: 1,892,699
26: 1,892,710
59— 90: 1,893,256
60— 13: 1,893,127
54.6: 1,892,707
61— 4: 1,893,003
38: 1,892,701
57: 1,893,010
78: 1,893,011
62— 7: 1,892,911
8: 1,893,338
91.5: 1,893,228
1,893,277
62— 95: 1,893,341
1,893,361
1,893,378
115: 1,892,821
1,892,822
1,892,823
1,892,869
1,892,870
1,892,874
1,893,344
116: 1,892,960
1,893,345
1,893,478
119: 1,892,941
126: 1,892,713
1,893,321
63— 11: 1,893,056
15: 1,892,737
1,892,738
64— 96: 1,893,452
65— 20: 1,893,426
66— 126: 1,893,312
135: 1,892,702
68— 3: 1,893,432
9: 1,893,190
10: 1,892,963
26: 1,892,792
37: 1,893,199
38: 1,893,398
70— 46: 1,893,142
91: 1,892,709
113: 1,892,964
71— 7: 1,893,437
72— 6: 1,892,864
16: 1,893,480
18: 1,892,885
73— 1: 1,892,827
1,893,022
30: 1,893,429
37: 1,893,445
51: 1,892,919
52: 1,892,689
1,893,368
151: 1,893,000
167: 1,893,200
74— 6: 1,892,793
7: 1,892,833
1,893,362
14: 1,892,872
1,893,282
1,893,333
32: 1,893,141
1,893,467
35: 1,892,968
58: 1,893,405
81: 1,893,075
99: 1,893,255
108: 1,892,852
113: 1,893,300
75— 1: 1,893,078
1,893,144
14: 1,893,109
17: 1,892,740
76— 24: 1,892,984
32: 1,893,322
110: 1,892,995
80— 4: 1,892,984
28: 1,892,983
54: 1,893,260
58: 1,893,004
81— 3: 1,893,267
15: 1,893,196
82— 33: 1,893,219
83— 11: 1,892,697
11: 1,893,030
84— 1: 1,893,250
266: 1,893,264
376: 1,893,453
422: 1,892,886
85— 15: 1,893,017
87— 5: 1,892,950
9: 1,893,094
12: 1,893,155
27: 1,893,857
86— 1: 1,892,980
1,893,211
88— 16: 1,892,846
1,893,327
16.8: 1,893,374
17: 1,893,189
24: 1,892,683
1,893,156
1,893,421
28: 1,893,359
33: 1,892,893
42: 1,892,671
89— 40: 1,892,914
90— 4: 1,893,043
13.4: 1,893,443
21: 1,892,894
1,893,088
91— 50: 1,893,161
51: 1,893,107
68: 1,893,242
70: 1,892,672
1,892,989
92— 40: 1,892,673
93— 2: 1,893,267
6: 1,893,189
7: 1,893,201
27: 1,893,285
36: 1,893,289
39: 1,892,675
94— 8: 1,893,287
34: 1,893,101
35: 1,892,830
39: 1,893,082
95— 4.5: 1,893,439
5.4: 1,892,682
7: 1,892,725
31: 1,893,122
39: 1,892,684
81.5: 1,892,901
90.5: 1,893,092
97— 47: 1,893,089
50: 1,893,410
55: 1,893,181
72: 1,892,753
184: 1,892,978
208: 1,893,416
227: 1,892,796
98— 42: 1,893,272
99: 1,892,695
18: 1,892,902
101— 1: 1,893,463
149: 1,892,675
1,893,163
210: 1,893,148
102— 28: 1,892,789
103— 38: 1,893,218
1,893,216
1,893,217
44: 1,893,440
89: 1,893,433
150: 1,893,218
152: 1,893,473
208: 1,893,464
221: 1,892,876
248: 1,893,008
1,893,151
104— 208: 1,892,977
105— 196: 1,893,032
205: 1,892,899
1,893,475
1,893,476
244: 1,892,893
106— 2: 1,892,708
10: 1,893,313
22: 1,892,709
37: 1,892,784
1,893,233
1,893,284
39: 1,893,172
107— 19: 1,892,779
21: 1,892,705
108— 7: 1,893,088
110— 171: 1,892,946
173: 1,893,449
111— 1: 1,892,763
112— 70: 1,892,895
113— 51: 1,892,754
114— 16.6: 1,892,880
114— 16.7: 1,893,089
71: 1,892,820
115— 18: 1,892,981
116— 117: 1,893,233
118: 1,893,198
117— 23: 1,892,782
1,892,783
119— 44: 1,893,153
73: 1,892,909
120— 20: 1,892,745
42: 1,893,130
121— 154: 1,893,446
122— 45: 1,893,183
169: 1,892,908
123— 39: 1,892,880
54: 1,893,045
65: 1,893,035
75: 1,893,006
148: 1,893,204
171: 1,893,183
173: 1,893,192
174: 1,893,059
180: 1,893,209
191: 1,892,838
196: 1,893,073
125— 41: 1,893,355
126— 53: 1,893,072
73: 1,893,358
98: 1,892,751
108: 1,893,240
268: 1,893,454
128— 91: 1,892,705
105: 1,892,805
112: 1,892,804
218: 1,892,993
224: 1,892,893
129— 41: 1,893,175
131— 12: 1,893,137
37: 1,893,057
51: 1,893,269
132— 4: 1,893,280
11: 1,892,749
31: 1,893,281
36.2: 1,893,352
74: 1,892,867
83: 1,892,796
133— 1: 1,893,013
134— 1: 1,892,691
12: 1,892,980
26: 1,893,371
88: 1,892,693
78.6: 1,893,310
136— 123: 1,892,992
134: 1,892,962
187— 21: 1,892,955
75: 1,892,906
78: 1,892,734
1,892,778
1,892,776
1,892,883
139: 1,892,835
1,892,917
140— 1: 1,892,837
5: 1,892,912
167— 28: 1,893,248
169— 4: 1,893,026
26: 1,892,794
170— 104: 1,893,851
171— 97: 1,893,347
119: 1,893,788
1,893,251
1,893,289
126: 1,893,354
252: 1,893,367
1,893,375
172— 36: 1,892,907
1,893,251
126: 1,893,025
220: 1,893,246
278: 1,893,356
280: 1,893,113
290: 1,893,977
314: 1,892,891
173— 13: 1,893,130
25: 1,893,799
251: 1,893,315
264: 1,893,376
266: 1,893,498
1,893,119
1,893,285
318: 1,893,298
1,893,139
175— 21: 1,893,282
30: 1,893,310
41: 1,893,755
152: 1,893,311
183: 1,893,529
1,893,074
204: 1,893,173
1,893,180
1,893,329
1,893,336
1,893,949
1,893,350
220: 1,893,323
241: 1,893,940
253: 1,893,010
266: 1,892,932
176— 16: 1,893,305
51: 1,893,893
122: 1,893,304
126: 1,893,026
177— 230: 1,893,309
251: 1,893,400
253: 1,893,479
178— 15: 1,893,188
44: 1,893,130
51: 1,893,189
179— 1: 1,892,985
1,893,391
2.5: 1,892,896
32: 1,893,238
81: 1,893,125
100.3: 1,892,856
100.11: 1,892,704
115.5: 1,893,049
171: 1,892,924
1,893,029
1,893,051
1,893,044
1,893,302
182: 1,893,474

180— 27: 1,892,865
54: 1,892,669
82: 1,893,406
88: 1,893,259
181— 23: 1,893,143
183— 49: 1,892,982
51: 1,893,048
184— 6: 1,893,040
1,893,042
7: 1,893,087
13: R. 18,708
24: 1,892,849
187— 29: 1,893,332
188— 82: 1,892,940
88: 1,893,339
89: 1,893,058
96: 1,893,187
130: 1,892,966
184: 1,893,126
251: 1,892,816
1,893,306
189— 73: 1,892,887
190— 28: 1,892,903
41: 1,892,807
191— 59.1: 1,893,383
60.1: 1,893,373
192— 45: 1,893,231
48: 1,893,413
91: 1,893,471
125: 1,893,428
127: 1,893,427
130: 1,893,164
194— 101: 1,892,777
195— 20: 1,893,152
196— 31: 1,893,138
36: 1,892,801
44: 1,893,438
47: 1,892,764
62: 1,893,423
197— 143: 1,893,097
198— 37: 1,892,790
103: 1,892,670
226: 1,893,246
200— 4: 1,893,371
24: 1,892,802
25: 1,893,365
48: 1,893,415
82: 1,893,242
83: 1,893,360
90: 1,893,115
91: 1,893,179
138: 1,892,938

200— 139: 1,893,238
140: 1,892,858
1,893,407
160: 1,893,370
163: 1,892,854
1,893,027
165: 1,893,046
202— 30: 1,893,145
46: 1,892,770
1,892,771
1,892,772
190: 1,893,340
228: 1,893,468
204— 1: 1,893,221
1,893,368
206— 41: 1,892,676
1,892,677
48: 1,892,807
207— 10: 1,892,789
210— 2: 1,892,688
1,892,972
8: 1,892,681
16: 1,893,451
53: 1,893,411
72: 1,893,038
130: 1,892,951
148: 1,892,842
211— 99: 1,892,687
172: 1,893,096
214— 65.4: 1,892,979
90: 1,892,881
126: 1,893,273
215— 37: 1,892,884
56: 1,892,988
219— 8: 1,893,160
12: 1,893,093
1,893,380
19: 1,893,253
34: 1,892,882
220— 26: 1,893,162
55: 1,892,743
1,893,102
221— 60: 1,892,788
1,893,401
61: 1,893,139
108: 1,892,992
117: 1,893,391
223— 17: 1,892,851
19: 1,893,220
52: R. 18,705
53: 1,893,419
64: 1,892,936

226— 17: 1,892,818
69: 1,892,685
229— 16: 1,892,715
29: 1,892,879
32: 1,892,983
33: 1,892,714
43: 1,892,756
69: 1,893,088
92.1: 1,893,276
230— 100: 1,892,998
134: 1,892,930
1,893,184
179: 1,892,786
210: 1,893,171
231— 2: 1,893,099
232— 40: 1,893,302
233— 21: 1,893,005
234— 1: 1,892,923
1,893,243
5.5: 1,893,337
235— 30: 1,892,905
60: 1,893,081
61: 1,893,009
1,893,214
83: 1,893,235
236— 9: 1,893,237
70: 1,893,134
237— 12.4: 1,893,329
79: 1,892,954
238— 216: 1,893,208
288: 1,892,747
240—10.63: 1,893,292
1,893,293
1,893,294
10.67: 1,893,108
41.3: 1,892,976
41.4: 1,893,174
54: 1,893,088
78: R. 18,707
81: 1,893,071
103: 1,893,409
242— 58: 1,892,974
71: 1,892,717
95: 1,892,783
120: 1,893,320
124: 1,893,386
244— 1: 1,893,232
2: 1,892,746
12: 1,892,910
1,893,064
1,893,065
1,893,129

244— 12: 1,893,275
13: 1,892,808
15: 1,892,949
19: 1,893,395
22: 1,892,985
29: 1,892,915
1,892,916
1,892,927
1,893,118
30: 1,892,925
31: 1,893,001
246— 63: 1,892,716
1,893,215
1,893,316
247— 2: 1,893,177
3: 1,893,208
21: 1,893,357
248— 17: 1,892,762
20: 1,893,166
1,893,303
29: 1,893,241
30: 1,892,943
31: 1,893,295
32: 1,893,116
250— 11: 1,892,758
27.5: 1,892,866
1,893,296
1,893,466
33: 1,892,958
1,893,287
34: 1,893,299
251— 103: 1,892,835
252— 3: 1,893,363
5: 1,892,741
1,893,051
253— 16.5: 1,892,809
254— 86: 1,893,418
89: 1,893,185
94: 1,892,665
139: 1,893,408
186: 1,892,829
255— 23: 1,892,690
51: 1,893,203
64: 1,893,033
73: 1,892,863
74: 1,893,224
257— 26: 1,893,039
35: 1,893,266
129: 1,893,270
136: 1,893,146
144: 1,893,034

257— 184: 1,893,135
227: 1,892,778
259— 144: 1,893,230
260— 4: 1,892,848
13: 1,893,226
38: 1,893,349
56: 1,892,730
64: 1,892,890
92: 1,893,244
98: 1,893,018
1,893,393
108: 1,892,766
124: 1,893,091
131: 1,892,768
134: 1,892,742
144: 1,893,447
154: 1,892,990
156: 1,893,317
159: 1,892,880
170: 1,892,973
261— 50: 1,892,828
69: 1,893,297
91: 1,892,694
123: 1,892,853
262— 13: 1,892,994
33: 1,892,844
263— 15: 1,892,971
265— 2: 1,892,709
5: 1,892,726
22: 1,893,278
27: 1,892,718
56: 1,892,729
68: 1,893,041
266— 4: 1,892,843
43: 1,893,022
267— 19: 1,893,324
34: 1,892,937
37: 1,892,944
41: 1,893,150
48: 1,892,901
52: 1,892,932
53: 1,893,220
54: 1,892,668
268— 122: 1,893,260
126: 1,892,731
271— 44: 1,893,455
272— 74: 1,893,173
273— 32: 1,893,402
39: 1,893,412
65: 1,892,727
86: 1,893,121
143: 1,892,664

274— 10: 1,893,469
277— 46: 1,892,711
279— 93: 1,892,739
280— 21: 1,893,281
29: 1,893,227
33.1: 1,892,797
87.5: 1,893,198
158: 1,892,817
281— 44: 1,892,721
285— 24: 1,892,958
25: 1,892,781
86: 1,893,441
1,893,442
90: 1,893,434
94: 1,893,194
122: 1,893,181
175: 1,893,132
286— 5: 1,893,012
287— 98: 1,893,396
290— 4: 1,892,967
38: 1,893,070
292— 255: 1,893,128
296— 28: 1,892,666
44: 1,893,104
107: 1,893,349
137: 1,893,350
1,893,351
298— 7: 1,892,698
299— 24: 1,892,686
71: 1,892,959
74: 1,893,212
95: 1,892,750
107.6: 1,893,457
114: 1,893,210
148: 1,893,298
300— 12: 1,892,800
301— 6: 1,893,334
16: 1,893,154
44: 1,892,945
302— 25: 1,892,920
304— 5: 1,893,165
306— 11: 1,892,896
308— 6: 1,893,020
38: 1,893,279
312— 38: 1,893,343
114: 1,892,673
176: 1,892,794

U.S. GOVERNMENT PRINTING OFFICE: 1933

U.S. GOVERNMENT PRINTING OFFICE: 1933

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Advanx Ty-Re-Pair Company Limited, Sydney, Australia. Machinery for vulcanizing and retreading tyres. Serial No. 325,160; Jan. 10. Class 28.

Altose, Ester, Bellingham, Wash. Beauty products. Serial No. 325,030; Jan. 10. Class 6.

American Bemberg Corporation. (See Bemberg, I. P., Aktiengesellschaft, assignor.)

Annandale Graphite Corporation, Annandale, N. J. Raw and partly prepared graphite. Serial No. 329,882; Jan. 10. Class 1.

Athenia Manufacturing Company. (See Austern, Lester.)

Austern, Lester, doing business as Athenia Manufacturing Company, New York, N. Y. Toilet preparations. Serial No. 326,774; Jan. 10. Class 6.

Bachrach-Feld Company, Inc., doing business as Maltwort Concentrated Malt Co., The, Cincinnati, Ohio. Concentrated liquid malt syrup. Serial No. 332,244; Jan. 10. Class 46.

Bahama Isles Foods Corporation, Dover, Del., and Miami, Fla. Conch chowder and/or broth. Serial No. 331,532; Jan. 10. Class 46.

Barium Reduction Corporation, Charleston, W. Va. Vermin exterminator preparations, insecticides, etc. Serial No. 331,913; Jan. 10. Class 6.

Battle Creek Biscuit Company, Battle Creek, Mich. Chocolate covered biscuits. Serial No. 320,489; Jan. 10. Class 46.

Bemberg, I. P., Aktiengesellschaft, Wuppertal Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filaments of artificial silk. Serial No. 329,618; Jan. 10. Class 42.

Biltmore Paper Co., Inc., The, New York, N. Y. Toilet paper. Serial No. 332,680; Jan. 10. Class 37.

Bloch Bros., Glasgow, Scotland. Whiskey. Serial No. 332,025; Jan. 10. Class 49.

Bowman, Mae C., doing business as Southeastern Chemical Co., Alexandria, Va. Insecticides. Serial No. 331,985; Jan. 10. Class 6.

Broemmel's Laboratories. (See Nik-O-Kleen Co.)

Brown Company, Portland, Me., and Berlin, N. H. Papers. Serial No. 332,175; Jan. 10. Class 37.

Brown & Williamson Tobacco Corporation, Louisville, Ky. Cigars, cigarettes, tobacco, etc. Serial No. 332,443; Jan. 10. Class 17.

Bucking, Henry J., San Francisco, Calif. Apparatus in the nature of a vent. Serial No. 304,398; Jan. 10. Class 13.

Calite Manufacturing Co. Ltd., Los Angeles, Calif. Soaps. Serial No. 332,575; Jan. 10. Class 4.

Campbell, John, & Co., New York, N. Y. Dyes and dyestuffs. Serial No. 332,248; Jan. 10. Class 6.

Canady, William A., Raleigh, N. C. Liniment. Serial No. 330,549; Jan. 10. Class 6.

Capone, A. J., Company, New York, N. Y. Canned tomato paste and tomatoes. Serial No. 321,905; Jan. 10. Class 46.

Carborundum Company, The, Niagara Falls, N. Y. Filter plates and tubes, diffuser plates, etc. Serial No. 332,292; Jan. 10. Class 31.

Cary, Fred G., Lodi, Calif. Fresh grapes. Serial No. 311,720; Jan. 10. Class 46.

Central Press Association, Inc., New York, N. Y. Newspaper cartoon. Serial No. 332,835; Jan. 10. Class 38.

Charm Laboratories, Inc., New York, N. Y. Herbaceous laxative. Serial No. 331,771; Jan. 10. Class 6.

Christmas Club, New York, N. Y. Publication. Serial No. 332,710; Jan. 10. Class 38.

Cleveland Container Co., The, Cleveland, Ohio. Construction building sets. Serial No. 332,518; Jan. 10. Class 22.

Cluett, Peabody & Co., Inc., Troy, N. Y. Collars, shirts, union suits, etc. Serial No. 332,113; Jan. 10. Class 39.

Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. Serial No. 332,251; Jan. 10. Class 4.

Columbia Chemical Company, Portland, Oreg. Paints and paint enamels. Serial No. 331,888; Jan. 10. Class 16.

Columbus Dental Manufacturing Co., The, Columbus, Ohio. Display cards. Serial No. 332,182; Jan. 10. Class 2.

Contal, Camille, Paris, France. Motion picture projection machines. Serial No. 325,893; Jan. 10. Class 26.

Continental Optical Company, Indianapolis, Ind. Ophthalmic frames and mountings. Serial No. 332,183; Jan. 10. Class 26.

Continental Steel Corporation, Kokomo and Indianapolis, Ind., and Canton, Ohio. Wire. Serial No. 332,615; Jan. 10. Class 14.

Crazy Water Hotel Company, Mineral Wells, Tex. Medicinal preparation. Serial No. 331,853; Jan. 10. Class 6.

Creco Company, Inc., Long Island City, N. Y. Waxes. Serial No. 332,402; Jan. 10. Class 16.

Crescent Braid, Inc., Providence, R. I. Cables. Serial No. 332,333; Jan. 10. Class 21.

Dana, Charles A., and John B. Pierce, receivers of The Fisk Rubber Company, Chicopee Falls, Mass., and Cudahy, Wis. Vehicle tires and inner tubes. Serial No. 326,461; Jan. 10. Class 35.

Davis & Lawrence Co., New York, N. Y. Antiseptic dressing. Serial No. 330,160; Jan. 10. Class 6.

Delta Manufacturing Company, doing business as Delta Specialty Company, Milwaukee, Wis. Miter gages. Serial No. 331,249; Jan. 10. Class 26.

Delta Manufacturing Company, doing business as Delta Specialty Company, Milwaukee, Wis. Rip gages. Serial No. 331,250; Jan. 10. Class 26.

Duffy, Louise, Los Angeles, Calif. Salad dressings and table syrups. Serial No. 332,578; Jan. 10. Class 46.

Embrey & Hudson, doing business as Kephaldol Laboratories and Kephaldol Laboratory, Nashville, Tenn. Medicine. Serial No. 332,407; Jan. 10. Class 6.

Eskimo Pie Corporation, New York, N. Y. Paper or pasteboard confection receptacles. Serial No. 332,338; Jan. 10. Class 2.

Eveready Oil Co., Inc., Philadelphia, Pa. Kerosene. Serial No. 332,089; Jan. 10. Class 15.

Exhibit Supply Company, The. (See Meyer, John F.)

Fargo, Charles R., Beverley Hills, Calif. Table games. Serial No. 332,062; Jan. 10. Class 22.

Fisk Rubber Company, The. (See Dana, Charles A., and Pierce.)

Fraskin Laboratories, San Francisco, Calif. Cleansing, scouring and polishing compound. Serial No. 331,661; Jan. 10. Class 4.

Fulton Bag & Cotton Mills, Atlanta, Ga. Cotton flour bags. Serial No. 332,144; Jan. 10. Class 2.

Gaball Limited, London, England. Medicines. Serial No. 330,255; Jan. 10. Class 6.

Gates-Pfeiffer Engineering Company, New York, N. Y. Apparatus used in treatment of textile materials. Serial No. 321,102; Jan. 10. Class 28.

Gay-Day Corporation, Chicago, Ill. Paint enamel and paint and varnish remover. Serial No. 331,952; Jan. 10. Class 16.

Grant, W. T., Company, New York, N. Y. Washboards. Serial No. 332,813; Jan. 10. Class 24.

Guarantee Lamp Co., Brooklyn, N. Y. Incandescent lamps or bulbs. Serial No. 332,063; Jan. 10. Class 21.

Guardian Valve Company. (See Skner, Samuel.)

Hall Brothers, Hallville Mill, Norwich, Conn. Overcoatings, suitings, dress goods, etc. Serial No. 324,345; Jan. 10. Class 42.

Ha-Mail Medical Co., Carter, Okla. Liver and blood tonic, healing oil, medicine. Serial No. 331,735; Jan. 10. Class 6.

Hanson, Arthur C., doing business as Slimmers Company, Minneapolis, Minn. Preparation for reducing weight. Serial No. 332,065; Jan. 10. Class 6.

Hatton, Frank, Miami, Fla. Preparation for a prophylactic treatment. Serial No. 329,669; Jan. 10. Class 6.

Hershkowitz, J., Inc., New York, N. Y. Tailors marking crayons. Serial No. 332,692; Jan. 10. Class 37.

Hindes Limited, Birmingham, England. Massage devices or appliances. Serial No. 331,861; Jan. 10. Class 44.

Holt, Alberta, doing business as Holt Chemical Company, Memphis, Tenn. Salve. Serial No. 328,989; Jan. 10. Class 6.

Hurlbut Paper Company, South Lee, Mass. Paper. Serial No. 332,322; Jan. 10. Class 37.

Hurlbut Paper Company, South Lee, Mass. Paper. Serial No. 332,325; Jan. 10. Class 37.

International Nickel Company, Inc., The, New York, N. Y. Nickel-containing iron castings. Serial No. 331,791; Jan. 10. Class 14.

Iowa Soap Company, Burlington, Iowa. Laundry soap. Serial No. 330,628; Jan. 10. Class 4.

Italian Food Products Company, Inc., Long Beach, Calif. Canned fish. Serial No. 332,540; Jan. 10. Class 46.

Jensens, Georg, Solvsmedie A/S, Copenhagen, Denmark. Bracelets, brooches, trays, dishes, etc. Serial No. 331,369; Jan. 10. Class 28.

Johnson & Johnson, New Brunswick, N. J. Papoid. Serial No. 331,051; Jan. 10. Class 6.

Kalenscher, William, doing business as Zing Manufacturing Co., Inc., Miami, Fla. Skin protecting compound. Serial No. 331,607; Jan. 10. Class 6.

Kansas Cooperative Wheat Marketing Association, The, Wichita, Kans. Publication. Serial No. 327,281; Jan. 10. Class 38.

Kardshke, A. H., Inc., Tulsa, Okla. Well-drilling rigs and derricks therefor. Serial No. 328,611; Jan. 10. Class 28.

Kaufmann Department Stores, Inc., Pittsburgh, Pa. Dental cream. Serial No. 332,456; Jan. 10. Class 6.

Kaynee Company, The, Cleveland, Ohio. Shirts. Serial No. 332,120; Jan. 10. Class 39.

Kee, Look Teong, Honolulu, Hawaii. Fertilizing compound. Serial No. 332,586; Jan. 10. Class 10.

Kephaldol Laboratories. (See Embrey & Hudson.)

Kresge Department Store Corporation, Newark, N. J. Candy, popcorn, coffee, tea, etc. Serial No. 331,434; Jan. 10. Class 46.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Kress, S. H., & Co., New York, N. Y. Hair nets, sport nets, towels, etc. Serial No. 329,087; Jan. 10. Class 42.
La Crosse Refining Company, La Crosse, Wis. Malt syrup. Serial No. 329,603; Jan. 10. Class 46.
Lacy Products Corporation, Chicago, Ill. Food warmer. Serial No. 332,190; Jan. 10. Class 34.
Larkin Refrigerating Corporation, Atlanta, Ga. Refrigerating coils. Serial No. 331,114; Jan. 10. Class 31.
Levine, Joseph, New York, N. Y. Formed razor sharpeners. Serial No. 332,373; Jan. 10. Class 23.
Lewis Coal & Oil Co. Inc., Port Washington, N. Y. Motor fuel and lubricating and fuel oil. Serial No. 331,470; Jan. 10. Class 15.
Lifton, George J., doing business as McDonald Medicine Company of Canada, Detroit, Mich. Laxative. Serial No. 330,268; Jan. 10. Class 6.
Lomberg, Ernst, G. m. b. H., Berlin, Germany. Sensitized photographic films and plates. Serial No. 327,225; Jan. 10. Class 26.
Lorraine Manufacturing Co., Pawtucket, R. I. Textile fabrics in the piece. Serial No. 331,796; Jan. 10. Class 42.
Majestic Pictures Corporation, New York, N. Y. Moving picture films. Serial No. 331,928; Jan. 10. Class 26.
Major Petroleum Company, Wilmington, Del., and Philadelphia, Pa. Gasoline, lubricating oil, kerosene, etc. Serial No. 329,817; Jan. 10. Class 15.
Maltwort Concentrated Malt Co. (See Bachrach Feld Company, Inc., The.)
Marshall, W. E., & Co., Inc., New York, N. Y. Lawn and grass seed. Serial No. 332,437; Jan. 10. Class 1.
Maury-Cole Company, Memphis, Tenn. Prepared biscuit flour. Serial No. 332,622; Jan. 10. Class 46.
McBride, Dwight D., doing business as The Dwight McBride Co., Golden City, Mo. Lunch and game baskets. Serial No. 330,305; Jan. 10. Class 2.
McDonald Medicine Company of Canada. (See Lifton, George J.)
Metz, H. A., & Co., Inc., New York, N. Y. Preparations for finishing textile fabrics. Serial No. 332,378; Jan. 10. Class 6.
Meyer, John F., doing business as The Exhibit Supply Company, Chicago, Ill. Coin-operated amusement machines. Serial No. 332,728; Jan. 10. Class 22.
Mikimoto, Kokichi, Tokyo, Japan, and New York, N. Y. Cultured pearls. Serial No. 330,566; Jan. 10. Class 28.
Miller, Harry J., doing business as Ridgely Chem. Co., Washington, D. C. Special preparation compounded for relieving nasal irritations, etc. Serial No. 332,011; Jan. 10. Class 6.
Minor, P. W., & Son, Inc., Batavia, N. Y. Shoes. Serial No. 330,271; Jan. 10. Class 39.
Monarch Products Co. Inc., Shrewsbury, N. J. Valve grinding compounds. Serial Nos. 332,494–5; Jan. 10. Class 4.
Moorhead Knitting Co., Inc., Harrisburg, Pa. Socks. Serial No. 331,313; Jan. 10. Class 39.
Murphy, Peter F., Co., Philadelphia, Pa. Smoking and chewing tobacco. Serial No. 332,045; Jan. 10. Class 17.
Nashua Manufacturing Company, Nashua, N. H. Cotton piece goods. Serial No. 327,661; Jan. 10. Class 42.
National Machine Products Company, Detroit, Mich. Nuts, bolts, and screws. Serial No. 332,263; Jan. 10. Class 13.
National Sheriffs' & Police Ass'n., Inc., Denver, Colo. Periodical. Serial No. 332,819; Jan. 10. Class 38.
Neumann, R., & Company, Hoboken, N. J. Tanned leather. Serial No. 332,596; Jan. 10. Class 1.
Neumann, R., & Company, Hoboken, N. J. Leather. Serial No. 332,625; Jan. 10. Class 1.
New Yorker Hotel Corporation, The, New York, N. Y. Candies and chocolates. Serial No. 322,289; Jan. 10. Class 46.
Nik-O-Kleen Co., doing business as Broemmel's Laboratories, San Francisco, Calif. Preparation for removing tobacco and nicotine stains from the skin. Serial No. 324,968; Jan. 10. Class 6.
O'Connell Products Company, Chicago, Ill. Cleansing preparation. Serial No. 307,242; Jan. 10. Class 4.
Osborne, Harold, doing business as Harold Osborne Company, Hynes, Calif. Fresh fruits and vegetables. Serial No. 332,544; Jan. 10. Class 46.
Park & Tilford, New York, N. Y. Perfumeries, lotions, rouge, etc. Serial No. 330,864; Jan. 10. Class 6.
Parsan Chemical Company, New York, N. Y. Medicines. Serial No. 329,058; Jan. 10. Class 6.
Phoenix Hosiery Company, Milwaukee, Wis. Hosiery. Serial No. 322,349; Jan. 10. Class 39.
Pierce Governor Company, The, Anderson, Ind. Speed operable fuel control device for internal combustion engines. Serial No. 327,595; Jan. 10. Class 23.
Piqua Hosiery Company, Inc., The, Piqua, Ohio. Sweaters. Serial No. 332,199; Jan. 10. Class 39.
Postage Meter Company, The, Stamford, Conn. Envelopes. Serial No. 332,731; Jan. 10. Class 37.
Prybrands, Inc., Long Island City, N. Y. Razors and razor blades. Serial No. 330,756; Jan. 10. Class 23.
Quigley Company, Inc., New York, N. Y. Plastic neutral base. Serial No. 332,160; Jan. 10. Class 12.
Rare Chemicals, Inc., Nepera Park, N. Y. Antiseptic and germicidal preparation. Serial No. 330,551; Jan. 10. Class 6.
Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, bleach creams, etc. Serial No. 332,265; Jan. 10. Class 6.
Reliance Wax Products Corporation, Ltd., Los Angeles, Calif. Shoe polish and shoe burnishing ink. Serial No. 331,593; Jan. 10. Class 4.
Rentschler, John F., doing business as Trux-O Chemical Co., Kansas City, Mo. Washing and cleaning compound. Serial No. 331,798; Jan. 10. Class 4.
Ridgely Chem. Co. (See Miller, Harry J.)
Riegel, Guy E., Spokane, Wash. Malt beverages. Serial No. 332,782; Jan. 10. Class 48.
Robinson, Perry, Corporation, The, New York, N. Y. Chemical composition. Serial No. 321,964; Jan. 10. Class 16.
Rockwell, W. S., Company, New York, N. Y. Industrial furnaces. Serial No. 327,707; Jan. 10. Class 34.
Russell, Robert H., Cleveland, Ohio. Gear pumps, steam turbines, compressors, etc. Serial No. 331,872; Jan. 10. Class 23.
Ryerson, Joseph T., & Son, Inc., Chicago, Ill. Machinery bearings and bearing collars. Serial No. 331,659; Jan. 10. Class 23.
Sage, Peggy, Inc., New York, N. Y. Nail polish and white, cuticle remover, etc. Serial No. 328,622; Jan. 10. Class 6.
Sandusky Crayon Company, Inc., Sandusky, Ohio. Crayons. Serial No. 325,347; Jan. 10. Class 37.
Santoline, Rocco, Basking Ridge, N. J. Hair tonics and shampoos. Serial No. 329,293; Jan. 10. Class 6.
Scott Paper Company, Chester, Pa. Paper towels in roll form. Serial No. 320,990; Jan. 10. Class 37.
Sears, Roebuck and Co., Chicago, Ill. Levels, miter boxes, squares, etc. Serial No. 332,271; Jan. 10. Class 26.
Shedd Products Company, Detroit, Mich. Maltless carbonated beverages and syrups and extracts for making the same. Serial No. 332,238; Jan. 10. Class 45.
Skinner, William, & Sons, Holyoke, Mass., and New York, N. Y. Silk crepes in the piece. Serial No. 332,201; Jan. 10. Class 42.
Skner, Samuel, doing business as Guardian Valve Company, New York, N. Y. Valves. Serial No. 332,470; Jan. 10. Class 13.
Slimmerz Company. (See Hanson, Arthur C.)
Smith, L. C., & Corona Typewriters, Inc., New York, N. Y. Typewriting machines. Serial No. 332,272; Jan. 10. Class 23.
Sokol-Collier Co., Boston, Mass. Overalls, work-pants and jackets. Serial No. 332,050; Jan. 10. Class 39.
Sonneborn, L., Sons, Inc., New York, N. Y. Lubricating oil. Serial No. 332,499; Jan. 10. Class 15.
Southeastern Chemical Co. (See Bowman, Mae C.)
Standard Brands Incorporated, New York, N. Y. Amylolytic or starch-liquefying preparation. Serial No. 331,517; Jan. 10. Class 6.
Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Lubricating oils. Serial No. 331,323; Jan. 10. Class 15.
Standard Rice Company, Inc., Houston, Tex., and Memphis, Tenn. Rice. Serial No. 332,103; Jan. 10. Class 46.
Standardverken Aktiebolag, Strandvagen, Sweden. Hinges, screws, nails, etc. Serial No. 327,456; Jan. 10. Class 13.
Star Union Overall Co., Inc., The, South Norwalk, Conn. Pajamas and night shirts. Serial No. 332,315; Jan. 10. Class 39.
Steinberger Bros. Inc., New York, N. Y. Yarns. Serial No. 332,129; Jan. 10. Class 43.
Stephano Brothers, Philadelphia, Pa. Cigars, cigarettes, and tobacco. Serial No. 332,386; Jan. 10. Class 17.
Stevens Manufacturing Corporation, Fall River, Mass. Bedspreads. Serial No. 331,567; Jan. 10. Class 42.
Thermoid Rubber Company, Trenton, N. J. Brake linings. Serial No. 332,667; Jan. 10. Class 35.
Traphagen (Leigh), Ethel, doing business as Traphagen School of Fashion, New York, N. Y. Artistic drawings for textile designs. Serial No. 332,168; Jan. 10. Class 38.
Trapier, Pierre P. A., Washington, D. C. Picture post cards and art prints. Serial No. 332,350; Jan. 10. Class 38.
Tropical Juice Corporation, Miami and Titusville, Fla. Maltless fruit juices. Serial No. 332,637; Jan. 10. Class 45.
Trux-O Chemical Co. (See Rentschler, John F.)
Twenty Grand Blade Company, Inc., Spencer, Ind. Razor blades. Serial No. 332,358; Jan. 10. Class 23.
Union Special Machine Company, Chicago, Ill. Sewing machine needles. Serial No. 332,388; Jan. 10. Class 23.
United States Bedding Company, St. Paul, Minn. Bed springs. Serial No. 320,649; Jan. 10. Class 32.
United States Electric Mfg. Corp., New York, N. Y. Combination pocket lighter and flashlight. Serial No. 332,638; Jan. 10. Class 21.
Universal Appliance Company, Boston, Mass. Oil burners and equipment for ranges. Serial No. 331,600; Jan. 10. Class 34.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Valley Camp Coal Company, The, Cleveland, Ohio. Coke. Serial No. 321,701; Jan. 10. Class 1.
Ward Baking Company, New York, N. Y. Cake. Serial No. 326,876; Jan. 10. Class 46.
Wayne Knitting Mills, Fort Wayne, Ind. Hosiery. Serial No. 332,359; Jan. 10. Class 39.
Williams and Smale, Ashley, Ohio. Hog preparation for the treatment of worms, rickets, and cholera. Serial No. 330,500; Jan. 10. Class 6.
Winget Kickernick Company, Minneapolis, Minn. Bloomers, combination garments, etc. Serial No. 330,589; Jan. 10. Class 39.
Zing Manufacturing Co., Inc. (See Kalenscher, William.)

LIST OF REGISTRANTS OF TRADE-MARKS

A. P. W. Paper Company, Inc. (See Albany Perforated Wrapping Paper Company.)
Abbott Laboratories, North Chicago, Ill. Insecticidal soaps. 300,310; Jan. 10; Serial No. 329,589; published Oct. 25, 1932. Class 4.
Admiral Products Company. (See Strauss Stores Corporation.)
Adtowl Corporation, New York, N. Y. Cloth towels. 300,263; Jan. 10; Serial No. 330,078; published Oct. 25, 1932. Class 42.
Advance Manufacturing Company, Milwaukee, Wis. Roller skates. 300,204; Jan. 10; Serial No. 330,612; published Nov. 1, 1932. Class 22.
Alaska Freezer Co., Inc., The, Winchendon, Mass. Oil burners. 300,323; Jan. 10. Class 34.
Albany Perforated Wrapping Paper Company, by change of name to A. P. W. Paper Company, Inc., Albany, N. Y. Toilet-paper. 91,438; renewed May 6, 1933.
Albany Perforated Wrapping Paper Company, by change of name to A. P. W. Paper Company, Inc., Albany, N. Y. Toilet-paper. 91,741; renewed May 27, 1933.
Albany Perforated Wrapping Paper Company, by change of name to A. P. W. Paper Company, Inc., Albany, N. Y. Toilet-paper. 91,743–5; renewed May 27, 1933.
All Nations Bakers, Inc., New York, N. Y. Sweet biscuits. 300,316; Jan. 10; Serial No. 329,734; published Nov. 15, 1932. Class 46.
Allen-Sandlin Laboratories, Louisville, Ky. Bacteriophages. 300,293; Jan. 10; Serial No. 329,571; published Oct. 18, 1932. Class 6.
American Bemberg Corporation. (See Bemberg, I. P., Aktiengesellschaft.)
Anthracite Equipment Corporation, New York, N. Y. Filtering media. 300,145; Jan. 10; Serial No. 328,932; published Nov. 1, 1932. Class 31.
Atlas Publishing Company, Inc., New York, N. Y. Magazine. 300,228; Jan. 10; Serial No. 312,747; published Nov. 1, 1932. Class 38.
Ballantine, P., and Sons, Newark, N. J. Frosting or icing. 300,318; Jan. 10. Class 46.
Bancroft, Joseph, & Sons Co., Rockford, Wilmington, Del. Cotton piece goods. 300,240; Jan. 10; Serial No. 329,366; published Oct. 18, 1932. Class 42.
Barber Asphalt Company, The, Philadelphia, Pa. Composition roofing and shingles. 300,154; Jan. 10; Serial No. 329,217; published Sept. 13, 1932. Class 12.
Barnard Company. (See Peoples Drug Stores, Inc.)
Battle Creek Food Company, The, Battle Creek, Mich. Soluble iron with copper and chlorophyl for use in secondary anemia. 300,231; Jan. 10; Serial No. 329,547; published Oct. 18, 1932. Class 6.
Behr-Manning Corporation, Troy, N. Y. Composition sheet material. 300,265–7; Jan. 10; Serial Nos. 330,058–60; published Nov. 1, 1932. Class 50.
Bemberg, I. P., Aktiengesellschaft, Wuppertal Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Piece goods comprising or containing artificial silk. 300,270; Jan. 10; Serial No. 326,777; published Sept. 27, 1932. Class 42.
Bennett Mills, Incorporated, Philadelphia, Pa. Pile fabrics. 300,325; Jan. 10. Class 42.
Birk-Bros. Malt Products, Inc., Chicago, Ill. Malt syrup. 300,282; Jan. 10; Serial No. 329,077; published Oct. 18, 1932. Class 46.
Blish Milling Company, Seymour, Ind. Wheat flour. 300,313; Jan. 10; Serial No. 329,343; published Oct. 25, 1932. Class 46.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 300,261; Jan. 10; Serial No. 330,156; published Oct. 18, 1932. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 300,276–7; Jan. 10; Serial Nos. 329,827–8; published Oct. 18, 1932. Class 42.
Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Chemical substances. 300,209; Jan. 10; Serial No. 329,493; published Oct. 18, 1932. Class 6.
Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Moistening preparations, protecting preparations, etc., for use in the treatment of textile fabrics and leather. 300,296–8; Jan. 10; Serial Nos. 329,496–8; published Oct. 18, 1932. Class 6.
Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Chemical substances. 300,299; Jan. 10; Serial No. 329,494; published Oct. 18, 1932. Class 6.
Boss, Burton S., New York, N. Y. Face cream. 300,191; Jan. 10; Serial No. 326,068; published Oct. 25, 1932. Class 6.
Boyd, Isaac N., York, Pa. Medicinal preparation. 300,212; Jan. 10; Serial No. 329,299; published Oct. 25, 1932. Class 6.
Bratton, Brown C., Marlin, Tex. Mineral water. 300,348; Jan. 10. Class 45.
Brown, Worth A., Capitola, Calif. Maltless beverages and sirups and extracts for making same. 300,203; Jan. 10; Serial No. 330,332; published Nov. 1, 1932. Class 45.
Bugge, P. O., Bisbee, N. Dak. Medicinal preparation. 300,165; Jan. 10; Serial No. 329,131; published Oct. 18, 1932. Class 6.
Bullen, J. Warren, doing business as The Bullen Chemical Company, Folcroft, Pa. Disinfectant and insecticide. 300,192; Jan. 10; Serial No. 325,561; published Oct. 18, 1932. Class 6.
Bunkley, Nellie N. B., Washington, D. C. Hair grower. 300,336; Jan. 10. Class 6.
Canada Foundries & Forgings, Limited, Brockville, Ontario, Canada. Furnaces. 300,326; Jan. 10. Class 34.
Capital Paper Company, Indianapolis, Ind. Toilet paper. 300,200; Jan. 10; Serial No. 330,225; published Nov. 1, 1932. Class 37.
Cappel Furniture Company, The, Dayton, Ohio. Electric refrigerators. 300,346; Jan. 10. Class 31.
Champion Chemical Works, Inc., Chicago, Ill. Lye. 300,170; Jan. 10; Serial No. 328,864; published Oct. 18, 1932. Class 6.
Champion Hardware Company, The, Geneva, Ohio. Barn door catches, chain bolts, thumb and sash fasteners, etc. 300,198; Jan. 10; Serial No. 330,448; published Nov. 1, 1932. Class 25.
Chaplin, W. H., & Co., Limited, London, England. Alcoholic bitters. 90,160; renewed Feb. 11, 1933.
Chappel Bros. Inc., Rockford, Ill. Hemic solution. 300,172; Jan. 10; Serial No. 328,684; published Oct. 18, 1932. Class 6.
Chicago Spice & Flavor Co. (See Tesoro, Sam.)
Chicago Spice & Flavoring Ext. Co. (See Tesoro, Sam.)
Citro Chemical Co. to Citro Chemical Company of America, Maywood, N. J. Toilet preparation. 91,646; renewed May 20, 1933.
Clapp, Otis & Son, Inc., Boston, Mass. Blood food or tonic. 300,183; Jan. 10; Serial No. 329,178; published Oct. 25, 1932. Class 6.
Coble, John M., jr., doing business as Red Cee Bottling Company, Burlington, N. C. Maltless beverages. 300,178; Jan. 10; Serial No. 327,214; published Nov. 1, 1932. Class 45.
Columbia Steel Equipment Company, Philadelphia, Pa. Manually operated machines for wrapping merchandise. 300,347; Jan. 10. Class 28.
Combier & Co. Inc., New York, N. Y. Piece goods. 300,335; Jan. 10. Class 42.
Continental Car-Na-Var Corporation, Brasil, Ind. Liquid floor waxes and polishes. 300,258; Jan. 10; Serial No. 326,622; published Nov. 1, 1932. Class 16.
Coryell, L. L., & Son, Lincoln, Nebr. Automobile tires, tubes, and portable tire patch outfits. 300,275; Jan. 10; Serial No. 329,740; published Nov. 1, 1932. Class 35.
Cotonificio Valle di Susa, Turin, Italy. Thread and yarn. 300,233; Jan. 10; Serial No. 327,006; published Oct. 18, 1932. Class 43.
Creo-Dipt Company Inc., North Tonawanda, N. Y. Shingles. 300,339; Jan. 10. Class 12.
Crompton-Richmond Co., Inc., Crompton, R. I. Pile fabrics. 300,264; Jan. 10; Serial No. 330,061; published Nov. 1, 1932. Class 42.
Deane Plaster Co., The, Yonkers, N. Y. Sanitary napkins and bandages and/or cellulose and sanitary belts. 300,303; Jan. 10; Serial No. 330,293; published Oct. 25, 1932. Class 44.
Deauville Bags, Inc., New York, N. Y. Handbags. 300,331; Jan. 10. Class 3.
Deauville-Palatine Corporation, New York, N. Y. Shoe polish and cleaner. 300,314; Jan. 10; Serial No. 329,325; published Oct. 18, 1932. Class 4.
Desbecker, Harold C., doing business as Tic Toc Toy Company, Buffalo, N. Y. Teething rings. 300,196; Jan. 10; Serial No. 302,218; published Oct. 18, 1932. Class 44.
Detergent Products Corporation, Atlanta, Ga. Cleaning compound. 300,260; Jan. 10; Serial No. 328,479; published Oct. 18, 1932. Class 4.
Detergent Products Corporation, Atlanta, Ga. Cleaning compound. 300,284; Jan. 10; Serial No. 328,480; published Oct. 25, 1932. Class 4.

Disston, Henry, & Sons, Incorporated, Philadelphia, Pa. Measuring instruments. 90,000; renewed Jan. 28, 1933.

Disston, Henry, & Sons, Incorporated, Philadelphia, Pa. Tools. 90,101; renewed Feb. 4, 1933.

Distillers Corporation Limited, Montreal, Quebec, Canada. Spirits, whiskey, and liquors. 300,152–3; Jan. 10; Serial Nos. 330,456–7; published Nov. 1, 1932. Class 49.

Distillers Corporation Limited, Montreal, Quebec, Canada. Spirits, whiskey, and liquors. 300,155; Jan. 10; Serial No. 330,462; published Nov. 1, 1932. Class 49.

Distillers Corporation Limited, Montreal, Quebec, Canada. Spirits, whiskey, and liquors. 300,158–9; Jan. 10; Serial Nos. 330,467–8; published Nov. 1, 1932. Class 49.

Distillers Corporation Limited, Montreal, Quebec, Canada. Potable spirits, whiskey, and liquors. 300,206; Jan. 10; Serial No. 330,471; published Nov. 1, 1932. Class 49.

Distillers Corporation Limited, Montreal, Quebec, Canada. Potable spirits, whiskey, and liquors. 300,286; Jan. 10; Serial No. 330,469; published Nov. 1, 1932. Class 49.

Dormont Company. (See Goldberg, Max.)

Drewry & Sons Co., St. Paul, Minn. Maltless beverages. 300,179; Jan. 10; Serial No. 328,727; published Nov. 1, 1932. Class 45.

Dunlevy and Brother, Pittsburgh, assignor, by mesne assignments, to Dunlevy-Franklin Company, East Liberty Station, Pittsburgh, Pa. Fresh and cured meats. 40,452; renewed May 26, 1933.

Dyer-Ensinger Company, Inc., doing business as Radio Feature Syndicate, Milwaukee, Wis. Printed news service for daily newspapers and magazines. 300,320; Jan. 10. Class 38.

Earl Fruit Company, San Francisco, Calif. Fresh deciduous fruits. 300,321; Jan. 10. Class 46.

Eastern Brass & Copper Co. Inc., New York, N. Y. Strips, sheets, rods, and similar members of non-ferrous metals and alloys thereof. 300,268; Jan. 10; Serial No. 329,983; published Nov. 1, 1932. Class 14.

Eck-O-Lin Mfg. Co., Minneapolis, Minn. Antiseptic skin perfector and hair tonic. 300,186; Jan. 10; Serial No. 327,937; published Oct. 25, 1932. Class 6.

Economy Mills, Lubbock, Tex. Medicinal preparation. 300,292; Jan. 10; Serial No. 329,575; published Oct. 18, 1932. Class 6.

Entromul Company, The. (See McBride, Thomas J.)

Esslinger's Inc., Philadelphia, Pa. Malt beverages. 300,146; Jan. 10; Serial No. 330,421; published Nov. 1, 1932. Class 48.

Ever-Nu Enamel Co., Inc., Chicago, Ill. Paint enamel. 300,305; Jan. 10; Serial No. 330,041; published Nov. 1, 1932. Class 16.

F. and W. Co., San Francisco, Calif. Ointment. 300,285; Jan. 10; Serial No. 326,676; published Oct. 18, 1932. Class 6.

Ferris, Alexander T., doing business as Sans Souci Products Co., Los Angeles, Calif. Prophylactic compound. 300,211; Jan. 10; Serial No. 329,331; published Oct. 25, 1932. Class 6.

Firex Chemical Co., Baltimore, Md. Powdered chemicals used as fire extinguishers. 300,182; Jan. 10; Serial No. 329,228; published Oct. 25, 1932. Class 6.

Forstmann Woolen Co., The, Passaic, N. J. Woolen piece goods. 300,236; Jan. 10; Serial No. 328,665; published Oct. 18, 1932. Class 42.

Forstmann Woolen Company, Passaic, N. J. Woolen piece goods. 300,341–2; Jan. 10. Class 42.

Fry, J. S., and Sons, Limited, Bristol, England. Chocolate and cocoa. 90,982; renewed Apr. 8, 1933.

Gardner, John F., doing business as Gardner's Remedies Incorporated, Seattle, Wash. Medicinal compound. 300,190; Jan. 10; Serial No. 326,523; published Oct. 18, 1932. Class 6.

Gehlert, R. S., & Co. (See Royal Valley Coffee Co., assignor.)

Gehlert, R. S., & Co. (See Wagstaff, Charles B., assignor.)

General Kontrolar Company, Inc., Dayton, Ohio. Electrically operated chimes. 300,226; Jan. 10; Serial No. 315,257; published Nov. 1, 1932. Class 21.

Gilbert Paper Company, Menasha, Wis. Paper. 300,156; Jan. 10; Serial No. 324,376; published Apr. 12, 1932. Class 37.

Godissart & Pyles, Hollywood, Calif. Antiseptic, antitoxic, and deodorant. 300,181; Jan. 10; Serial No. 329,232; published Oct. 25, 1932. Class 6.

Goldberg, Max, doing business as Dormont Company, New York, N. Y. Coated fabrics, coated appliqué materials, and backed fabrics. 300,219; Jan. 10; Serial No. 321,560; published Nov. 1, 1932. Class 50.

Grace-Lee Products, Inc., Minneapolis, Minn. Cleansing and scouring compound. 300,312; Jan. 10; Serial No. 329,401; published Oct. 18, 1932. Class 4.

Graemicer Bros. Inc., New York, N. Y. Handkerchiefs. 300,273; Jan. 10; Serial No. 329,375; published Oct. 18, 1932. Class 42.

Hall's, J. S., Sons, Knoxville, Tenn. Overcoats, coats, vests, etc. 91,788; renewed May 27, 1933.

Hanes Hosiery Mills Co., Winston-Salem, N. C. Yarns. 300,282; Jan. 10; Serial No. 330,086; published Oct. 18, 1932. Class 43.

Hanley Milling Company, The, doing business as Wheat Division of the Wheat Krinkler Corp., Mansfield, Ohio. Whole wheat and bread made therefrom. 300,283; Jan. 10; Serial No. 328,920; published Oct. 18, 1932. Class 46.

Hardwick & Magee Company, Philadelphia, Pa. Textile rugs. 300,338; Jan. 10. Class 42.

Harutunian, Harry, doing business as Middlesex Laboratories, Watertown, Mass. Foot ointment. 300,195; Jan. 10; Serial No. 329,555; published Oct. 18, 1932. Class 6.

Haselton, Guy D., Hollywood, Calif. Motion pictures. 300,157; Jan. 10; Serial No. 328,170; published Nov. 8, 1932. Class 26.

Heller, B., & Company, Chicago, Ill. Cleaning and polishing preparations. 300,333; Jan. 10. Class 4.

Hercules Powder Company, Wilmington, Del. Depilating compound. 300,288; Jan. 10; Serial No. 329,796; published Oct. 25, 1932. Class 6.

Hollins, William, and Company, Limited, Nottingham, England. Yarns. 300,243; Jan. 10; Serial No. 329,636; published Oct. 18, 1932. Class 43.

Hollins, William, and Company, Limited, Nottingham, England. Silk piece goods. 300,274; Jan. 10; Serial No. 329,638; published Oct. 18, 1932. Class 42.

Hood-Hall Chemical Co., Inc., Montgomery, Ala. Antiseptic. 300,291; Jan. 10; Serial No. 329,582; published Oct. 11, 1932. Class 6.

Hood Rubber Co., Boston, Mass., assignor, by mesne assignments, to Hood Tire Corporation, New York, N. Y. Rubber or cushion tires. 89,261; renewed Dec. 3, 1932.

Hopkins Chemical Co., Washington, D. C., and Newark, N. J. Soap paste. 300,301; Jan. 10; Serial No. 330,346; published Oct. 25, 1932. Class 4.

Hoppe, Frank A., Incorporated, Philadelphia, Pa. Gun greases and lubricating oils. 300,232; Jan. 10; Serial No. 330,091; published Nov. 1, 1932. Class 15.

Horne, W. Hill, doing business as Hill Horne Drug Company, Greenville, N. C. Medicines. 300,175; Jan. 10; Serial No. 326,718; published Oct. 18, 1932. Class 6.

Houbigant, Inc., New York, N. Y. Perfume, toilet water, bath salts, etc. 300,161; Jan. 10; Serial No. 329,446; published Oct. 18, 1932. Class 6.

Hubbard, C. D., Fruit Company, Carpenteria, Calif. Lemons. 91,348; renewed Apr. 29, 1933.

Hyo Products Company, Binghamton, N. Y. Cleaning compound. 300,304; Jan. 10; Serial No. 330,179; published Oct. 25, 1932. Class 4.

Illinois Lumber and Tile Co., St. Louis, Mo. Toy. 300,147; Jan. 10; Serial No. 329,601; published Nov. 1, 1932. Class 22.

Illinois Watch Case Co., Elgin, Ill. Watchcases. 89,586; renewed Dec. 30, 1932.

Independent Products Company, assignor to Independent Superba Products Corporation, New York, N. Y. Paint, linseed-oil, turpentine, etc. 90,023; renewed Jan. 28, 1933.

Independent Products Company, assignor to Independent Superba Products Corporation, New York, N. Y. Lubricating oil and greases. 90,836; renewed Feb. 18, 1933.

Indiana Chemical & Mfg. Co., Indianapolis, Ind. Anti-offset, ink softener, and safe dryer. 300,329; Jan. 10. Class 11.

International Fire Equipment Corporation, West New Brighton, N. Y. Fire extinguishers. 300,344; Jan. 10. Class 23.

Johnson, S. C., & Son, Racine, Wis. Polish. 300,218; Jan. 10; Serial No. 323,943; published Oct. 18, 1932. Class 4.

Jo-Mar Dairies Company, The. (See Western Pure Milk Products, The, assignor.)

Jones, Almon E., Philadelphia, Pa. Electrically driven fans. 300,214; Jan. 10; Serial No. 319,095; published Nov. 1, 1932. Class 21.

Jones, Rosa-Lee, New York, N. Y. Preparation for stimulating the growth of the hair. 300,164; Jan. 10; Serial No. 329,167; published Oct. 18, 1932. Class 6.

Kendall Company, The, Walpole, Mass. Absorbent cotton. 300,257; Jan. 10; Serial No. 325,229; published Oct. 18, 1932. Class 44.

Kennedy Company, The, doing business as Kennedy's, Boston, Mass. Men's dress-suit cases. 300,278; Jan. 10; Serial No. 329,858; published Nov. 1, 1932. Class 3.

King Features Syndicate, Inc., New York, N. Y. Dress patterns. 300,332; Jan. 10. Class 26.

Knights Co., Cambridge, Mass. Prophylactic rubber articles. 300,300; Jan. 10; Serial No. 330,347; published Oct. 25, 1932. Class 44.

Koch Beverage & Ice Company, The, Wapakoneta, Ohio. Malt cereal beverages. 300,216; Jan. 10; Serial No. 318,741; published Nov. 1, 1932. Class 48.

Koenig, J. Henry, Co., The, Cincinnati, Ohio. Coffee. 91,881; renewed June 3, 1933.

Kops Bros. Inc., New York, N. Y. Fabrics. 300,322; Jan. 10. Class 42.

Laura Hair Novelty Co. (See Modish Specialties, Inc.)

Lee, Robert W., doing business as Lee Manufacturing Co., Brooklyn, N. Y. Automobile and furniture polish. 300,327; Jan. 10. Class 16.

Lockett Crimping Machine Co., Boston, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., and Boston, Mass. Crimping-machines. 90,121; renewed Feb. 4, 1933.

CARNEGIE LIBRARY OF ATLANTA

Lorraine Manufacturing Co., Pawtucket, R. I. Textile fabrics in the piece. 300,242; Jan. 10; Serial No. 329,605; published Nov. 1, 1932. Class 42.

Mac-It-Parts Company, Lancaster, Pa. Bar-steel and steel castings. 91,885; renewed June 3, 1933.

Mac-It-Parts Company, Lancaster, Pa. Screens. 91,886; renewed June 3, 1933.

Mae-O Company, The. (See Peterson, Thomas H.)

Majestic Coal Mining Company, Kansas City, Mo. Coal. 300,269; Jan. 10; Serial No. 327,852; published Nov. 1, 1932. Class 1.

Majewicz, Constanty, doing business as Peg-O-Loop Mfg. Co., Dearborn, Mich. Outdoor game. 300,149; Jan. 10; Serial No. 330,230; published Nov. 1, 1932. Class 22.

Major Petroleum Company, Wilmington, Del., and Philadelphia, Pa. Dry cleaner. 300,308; Jan. 10; Serial No. 329,818; published Oct. 25, 1932. Class 4.

Manissadjian, Haigasun Barsam, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Plastic compound made of acetyl cellulose. 89,463; renewed Dec. 17, 1932.

Marden Mfg. Co., Minneapolis, Minn. Machine used by the individual smoker to form cigarettes. 300,272; Jan. 10; Serial No. 328,872; published Nov. 1, 1932. Class 8.

McBride, Thomas J., doing business as The Entromul Company, Los Angeles, Calif. Preparation for the treatment of intestinal disorders. 300,302; Jan. 10; Serial No. 330,306; published Oct. 25, 1932. Class 6.

McKay, Edna M., Akron, Ohio. Skin lotion. 300,289; Jan. 10; Serial No. 329,718; published Oct. 25, 1932. Class 6.

Merck & Co., Inc., Rahway, N. J. Medicinal preparation used as an antisyphilitic. 300,287; Jan. 10; Serial No. 329,863; published Oct. 25, 1932. Class 6.

Meteor Electric Corporation, New York and Brooklyn, N. Y. Heater plugs, wall plates, canopy switches, etc. 300,213; Jan. 10; Serial No. 328,848; published Nov. 1, 1932. Class 21.

Middlesex Laboratories. (See Harutunian, Harry.)

Model Stogie Co., Wheeling, W. Va. Stogies. 300,345; Jan. 10. Class 17.

Modish Specialties, Inc., assignor to Charles K. Thau, doing business as Laura Hair Novelty Co., New York, N. Y. Hair nets and water wave nets. 330,324; Jan. 10. Class 42.

Motor Wheel Corporation, Lansing, Mich. Wheels. 300,215; Jan. 10; Serial No. 318,918; published Nov. 1, 1932. Class 19.

Mulhens, Ferd, Inc., New York, N. Y. Eau de Cologne, perfumery, shampoo, etc. 300,166; Jan. 10; Serial No. 329,117; published Oct. 18, 1932. Class 6.

National Automatic Tool Company, The, Dayton, Ohio, and Richmond, Ind., assignor to The National Automatic Tool Company, Richmond, Ind. Drilling, reaming, tapping, machines, etc. 89,486; renewed Dec. 17, 1932.

National India Rubber Company, Bristol, R. I., assignor to United States Rubber Company, New York, N. Y. Rubber boots and shoes and rubber soled shoes. 89,870; renewed Jan. 14, 1933.

National Silk Co., Inc., The, South Coventry, Conn. Threads, yarns, and novelty yarns. 300,244–6; Jan. 10; Serial Nos. 329,646–8; published Oct. 11, 1932. Class 43.

National Silk Co., Inc., The, South Coventry, Conn. Threads, yarns, and novelty yarns. 300,247; Jan. 10; Serial No. 329,650; published Oct. 11, 1932. Class 43.

National Silk Company, Inc., The, South Coventry, Conn. Threads, yarns, and novelty yarns. 300,254; Jan. 10; Serial No. 330,377; published Oct. 25, 1932. Class 43.

Nikostop Ipari és Kereskedelmi Részvény Társaság, Budapest, Hungary. Cigars and cigarette holders, smoke filtering devices, etc. 300,224; Jan. 10; Serial No. 315,973; published Nov. 1, 1932. Class 8.

Nordmark-Werke G. m. b. H., Hamburg, Germany. Medicinal preparation. 300,187; Jan. 10; Serial No. 327,598; published Oct. 18, 1932. Class 6.

Nordmark-Werke G. m. b. H., Hamburg, Germany. A medicinal dietetic food preparation. 300,188; Jan. 10; Serial No. 327,597; published Oct. 25, 1932. Class 6.

North American Thread Co., Inc., New York, N. Y. Thread. 300,249; Jan. 10; Serial No. 329,751; published Oct. 4, 1932. Class 43.

Nourse Oil Company, Kansas City, Kans. Insecticides. 300,173; Jan. 10; Serial No. 328,249; published Oct. 18, 1932. Class 6.

Oliver, Webster J., New York, N. Y. Paper, metal, and fiber waste and garbage receptacles. 300,148; Jan. 10; Serial No. 329,772; published Nov. 1, 1932. Class 2.

Oswego Falls Corporation, Fulton, N. Y. Paper cans and covers therefor. 300,176; Jan. 10; Serial No. 325,073; published Nov. 1, 1932. Class 2.

Pacific States Fence Co., Los Angeles, Calif. Wooden fence paling. 300,319; Jan. 10. Class 12.

Paper Novelty Manufacturing Company, New York, N. Y. Shredded foil for Christmas-tree and other decorations. 300,151; Jan. 10; Serial No. 330,379; published Nov. 1, 1932. Class 22.

Paramount Taxicab Corporation, New York, N. Y. Automobiles. 300,169; Jan. 10; Serial No. 329,057; published Nov. 1, 1932. Class 19.

Paxton and Gallagher Co., Omaha, Nebr. Canned peas. 90,049; renewed Jan. 28, 1933.

Peg-O-Loop Mfg. Co. (See Majewicz, Constanty.)

Peoples Drug Stores, Inc., doing business as Barnard Company, Washington, D. C. Cleansing tissues. 300,199; Jan. 10; Serial No. 330,274; published Nov. 1, 1932. Class 37.

Pepsodent Co., The, Chicago, Ill. Medicinal tablets. 300,295; Jan. 10; Serial No. 329,562; published Oct. 18, 1932. Class 6.

Perkins Products Co., Chicago, Ill. Gelatine dessert. 300,343; Jan. 10. Class 46.

Perolin Company of America, The, Chicago, Ill. Lubricating oils and greases. 300,174; Jan. 10; Serial No. 328,731; published Nov. 1, 1932. Class 15.

Peterson, Thomas H., doing business as The Mae-O Company, Cody, Wyo. Stomach tablets. 300,185; Jan. 10; Serial No. 328,370; published Oct. 25, 1932. Class 6.

Petrolagar Laboratories, Inc., Chicago, Ill. Live surgical maggots. 300,162; Jan. 10; Serial No. 329,354; published Oct. 18, 1932. Class 6.

Pfeiffer, S., Mfg. Co., St. Louis, Mo. Medicinal preparation. 300,227; Jan. 10; Serial No. 313,866; published July 7, 1931. Class 6.

Phoenix Oil Company, The, Cleveland, Ohio. Shampoo. 300,167–8; Jan. 10; Serial Nos. 329,093–4; published Oct. 18, 1932. Class 6.

Phoenix Oil Company, The, Cleveland, Ohio. Liquid cleaning preparation. 300,281; Jan. 10; Serial No. 329,092; published Oct. 25, 1932. Class 4.

Pim Chemical Company, West Palm Beach, Fla. Asthma preparation. 300,184; Jan. 10; Serial No. 329,060; published Oct. 25, 1932. Class 6.

Portable Draperies Co., Inc., New York, N. Y. Curtains of rayon, silk, cotton, cellanese, and tubise, draperies, and fabrics. 300,250; Jan. 10; Serial No. 329,902; published Oct. 25, 1932. Class 42.

Portland Maine Publishing Company, Portland, Me. Newspaper column. 300,271; Jan. 10; Serial No. 328,874; published Nov. 1, 1932. Class 38.

Potter-Wrightington, Inc., Charlestown, Mass. Flea soap. 300,306; Jan. 10; Serial No. 330,020; published Oct. 25, 1932. Class 4.

Pyramid Rubber Company, The, Ravenna, Ohio. Rubber nursing bottle nipples. 300,315; Jan. 10; Serial No. 329,242; published Oct. 25, 1932. Class 44.

Pyrrole Products Corporation, Portsmouth, Ohio. Liquid and/or its concentrated form for white leather, etc. 300,309; Jan. 10; Serial No. 329,607; published Oct. 18, 1932. Class 4.

Radio Feature Syndicate. (See Dyer-Ensinger Company, Inc.)

Raffetto, G. B., Incorporated, New York, N. Y. Canned and bottled fruits and vegetables. 300,340; Jan. 10. Class 46.

Red Cee Bottling Company. (See Coble, John M., jr.)

Reliance Piece Dye Works, Paterson, N. J. Piece goods. 300,241; Jan. 10; Serial No. 329,338; published Oct. 18, 1932. Class 42.

Riegel Textile Corporation, New York, N. Y. Cotton piece goods. 300,287; Jan. 10; Serial No. 329,122; published Oct. 11, 1932. Class 42.

Roessel, Louis, & Co., Inc., Hasleton, Pa., and New York, N. Y. Silk piece goods. 300,248; Jan. 10; Serial No. 329,690; published Oct. 11, 1932. Class 42.

Roessel, Louis, & Co., Inc., Hasleton, Pa., and New York, N. Y. Silk goods in the piece. 300,262; Jan. 10; Serial No. 330,102; published Oct. 25, 1932. Class 42.

Ross, Sydney, Co., The, New York, N. Y., to The Sydney Ross Co., Newark, N. Y. Cathartic in pill form. 91,799; renewed May 27, 1933.

Rossie Velvet Company, Mystic, Conn. Velvets in the piece. 300,234–5; Jan. 10; Serial Nos. 327,453–4; published Oct. 18, 1932. Class 42.

Rossie Velvet Company, Mystic, Conn. Velvets in the piece. 300,256; Jan. 10; Serial No. 330,606; published Nov. 1, 1932. Class 42.

Royal Valley Coffee Co., assignor, by mesne assignments, to R. S. Gehlert & Co., Detroit, Mich. Coffees and teas. 91,516; renewed May 6, 1933.

Rubio, Fernando A., Barcelona, Spain. General tonics, cod liver oil, laxative medicines, etc. 300,290; Jan. 10; Serial No. 329,655; published Oct. 25, 1932. Class 6.

Sani-Fil, Inc., Newton Centre, Mass. Paper bags. 300,202; Jan. 10; Serial No. 330,638; published Nov. 1, 1932. Class 2.

Sans Souci Products Co. (See Ferris, Alexander T.)

Seadron, Louis H., New York, N. Y. Optical products. 300,207; Jan. 10; Serial No. 327,416; published July 26, 1932. Class 26.

Sears, Roebuck and Co., Chicago, Ill. Lawn mowers. 300,330; Jan. 10. Class 23.

Seiberling Latex Products Company, Barberton, Ohio. Golf balls. 300,144; Jan. 10; Serial No. 328,860; published Nov. 1, 1932. Class 22.

Simpson, Wm., Sons & Co., Philadelphia, Pa. Cotton goods in the piece. 330,223; Jan. 10; Serial No. 317,618; published Nov. 1, 1932. Class 42.

Society of Chemical Industry in Basle. (See Manissadjian, Haigasun B., assignor.)

Standard Brands Incorporated, New York, N. Y. Coffee. 300,328; Jan. 10. Class 46.

Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton thread. 300,238–9; Jan. 10; Serial Nos. 329,318–9; published Oct. 4, 1932. Class 43.

Star Expansion Bolt Company, New York, N. Y. Expansion shields. 300,334; Jan. 10. Class 13.

Stephano Brothers, Philadelphia, Pa. Cigarettes. 300,197; Jan. 10; Serial No. 330,583; published Nov. 1, 1932. Class 17.
Stine, Bessie H., South Orange, N. J. Color charts. 300,317; Jan. 10. Class 38.
Strauss Stores Corporation, doing business as Admiral Products Company, Brooklyn, N. Y. Brake dressing, chromium cleaner, etc. 300,259; Jan. 10; Serial No. 328,108; published Oct. 18, 1932. Class 4.
Sussberg & Feinberg, Inc., New York, N. Y. Silk and rayon piece goods. 300,279; Jan. 10; Serial No. 329,908; published Oct. 25, 1932. Class 42.
Swann Chemical Company, Birmingham, Ala. Fertilizer. 300,220–1; Jan. 10; Serial Nos. 318,331–2; published Nov. 1, 1932. Class 10.
Tampa Drug Company, Tampa, Fla. Saltpetre, cod liver oil, ammonia, etc. 300,189; Jan. 10; Serial No. 327,204; published Oct. 25, 1932. Class 6.
Terminal Barber Shops, Inc., New York, N. Y. Toilet lotions. 300,193; Jan. 3; Serial No. 325,490; published Oct. 25, 1932. Class 6.
Terminal Barber Shops, Inc., New York, N. Y. Cosmetics. 300,194; Jan. 10; Serial No. 325,489; published Oct. 25, 1932. Class 6.
Tesoro, Sam, doing business as Chicago Spice & Flavor Co., Tesoro Brand Products, and Chicago Spice & Flavoring Ext. Co., Chicago, Ill. Effervescent citrate preparation. 300,180; Jan. 10; Serial No. 329,267; published Oct. 25, 1932. Class 6.
Textiles, Incorporated, Gastonia, N. C. Yarns. 300,253; Jan. 10; Serial No. 330,317; published Oct. 18, 1932. Class 43.
Thau, Charles K. (See Modish Specialties, Inc., assignor.)
Tic Toc Toy Company. (See Desbecker, Harold C.)
Toch Brothers, assignor to Toch Brothers, Inc., New York, N. Y. Cement preparation for coating metals. 40,281; renewed May 5, 1933.
Tomkins, William, Point Loma, Calif. Title for newspaper feature articles. 300,208; Jan. 10; Serial No. 330,235; published Nov. 1, 1932. Class 38.
Tulon, Inc., New York, N. Y. Beauty cream. 300,230; Jan. 10; Serial No. 329,484; published Oct. 18, 1932. Class 6.
United Laboratories, Omaha, Nebr. Lining preparation used as a separating media between a porous object and a hecolite or a vulcanite covering therefor. 300,217; Jan. 10; Serial No. 324,410; published Oct. 18, 1932. Class 44.
United Shoe Machinery Corporation. (See Lockett Crimping Machine Co., assignor.)
United States Playing Card Co., The, assignor to The United States Playing Card Company, Cincinnati, Ohio. 91,399; renewed Apr. 29, 1933. Class 32.
United States Rubber Company. (See National India Rubber Company, assignor.)
Ure Druggist, Inc., Cleveland, Ohio. Beef, iron, wine, cocoanut oil shampoo, etc. 300,225; Jan. 10; Serial No. 315,654; published Oct. 18, 1932. Class 6.
Veglia, Francesco, Turin, Italy. Forceps for castration of animals. 300,311; Jan. 10; Serial No. 329,461; published Oct. 18, 1932. Class 44.
Vernon, S. E. & M., Inc., New York, N. Y. Loose leaf note books and blank books. 300,280; Jan. 10; Serial No. 329,960; published Nov. 1, 1932. Class 37.
Volunteer Stores, Inc., Chattanooga, Tenn. Grape juice, ginger ale. 300,150; Jan. 10; Serial No. 330,279; published Nov. 1, 1932. Class 45.
Wagstaff, Charles B., assignor, by mesne assignments, to B. S. Gehlert & Co., Detroit, Mich. Blended coffee. 90,939; renewed Apr. 1, 1933.
Warner Bros. Pictures, Inc., New York, N. Y. Motion pictures and motion picture films. 300,337; Jan. 10. Class 26.
Western Auto Supply Agency of Los Angeles, Los Angeles, Calif. Piston rings. 300,177; Jan. 10; Serial No. 325,862; published Nov. 1, 1932. Class 35.
Western Pure Milk Products Company, The, Salina, Kans., assignor to The Jo-Mar Dairies Company. Ice cream. 300,229; Jan. 10; Serial No. 305,835; published Jan. 12, 1932. Class 46.
Wheat Division of the Wheat Krinkler Corp. (See Hanley Milling Company, The.)
White, S. S., Dental Manufacturing Company, The, Philadelphia, Pa. Dental alloys. 300,307; Jan. 10; Serial No. 329,914; published Oct. 25, 1932. Class 44.
Whiting Laboratories, Inc., Whiting, Ind. Bottled fluid composition for cleaning walls, etc. 300,222; Jan. 10; Serial No. 317,916; published Dec. 15, 1931. Class 4.
Williams, Edward M., Norway, Iowa. Medicine. 300,294; Jan. 10; Serial No. 329,566; published Oct. 25, 1932. Class 6.
Williams, Joseph D., Bellflower, Calif. Newspaper. 300,201; Jan. 10; Serial No. 330,187; published Nov. 1, 1932. Class 38.
Wilson, Andrew, Inc., Springfield, N. J. Agricultural insecticides. 300,163; Jan. 10; Serial No. 329,341; published Oct. 18, 1932. Class 6.
Wilson Products Co., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. 300,160; Jan. 10; Serial No. 329,462; published Oct. 18, 1932. Class 6.
Wiora, Martha, Almond, Wis. Preparation for removing wrinkles. 300,210; Jan. 10; Serial No. 329,365; published Oct. 25, 1932. Class 6.
Wise, Julius C., Kansas City, Mo. Local anesthetic. 91,733; renewed May 20, 1933.
Wollner & Smith, New York, N. Y. Goods in the piece. 300,255; Jan. 10; Serial No. 330,560; published Oct. 25, 1932. Class 42.
Woll-Wäscherei und Kämmerei in Döhren bei Hannover, Dohren, near Hanover, Germany. Hydrous and anhydrous adeps lanæ or lanolin toilet preparations. 300,171; Jan. 10; Serial No. 328,826; published Oct. 18, 1932. Class 6.
Young, L. A., Company, The, Detroit, Mich. Wood and metal golf clubs. 300,205; Jan. 10; Serial No. 330,561; published Nov. 1, 1932. Class 22.
Zekaria Brothers, New York, N. Y. Laces and embroideries. 300,251; Jan. 10; Serial No. 329,912; published Oct. 11, 1932. Class 42.

LIST OF REGISTRANTS OF LABELS

Abilene Flour Mills Co., The, Abilene, Kans. "Lite-Flake" Minute Biscuit Flour. For Biscuit Flour. 41,623; Jan. 10.
Atmore & Son, Inc., Philadelphia, Pa. Simple Simon. For Mince Meat. 41,624; Jan. 10.
Baker Ice Machine Co. Inc., Omaha, Nebr. Hey! Hey! Skweezit and Bite. For Flavors. 41,625; Jan. 10.
Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Beans. For Kosher Beans. 41,626; Jan. 10.
Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Assorted Drops. For Assorted Drops. 41,627; Jan. 10.
Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Grahams. For Graham Crackers. 41,628; Jan. 10.
Breakstone Bros., Inc., New York, N. Y. Plaza Hotel Bars. For Butter. 41,629; Jan. 10.
Brooks, Will, Los Angeles, Calif. 8 Bells Coffee. For Coffee. 41,630; Jan. 10.
Bunn, J. T., doing business as Crown Packing Company, Los Angeles, Calif. Bunny. For Fresh Lettuce. 41,631; Jan. 10.
Campbell Products Co., Chicago, Ill. Campbell's Dual Shave. For Shaving Cream. 41,632; Jan. 10.
Carroccio, T. A., & Sons, New York, N. Y. Carroccio's Prepared Sauce for Spaghetti, etc. For Prepared Sauce for Spaghetti, Etc. 41,633; Jan. 10.
Conadwel Laboratories, Inc., New York, N. Y. Sunviro. For Reconstructive Tonic. 41,634; Jan. 10.
Crown Packing Company. (See Bunn, J. T.)
Dairy Corporation of America, Wilmington, Del., Milwaukee, Wis., Chicago, Ill. Super Whole Milk Bread. For Bread. 41,635; Jan. 10.
Demille, Julia C., doing business as Demille Products Company, Baltimore, Md. Tinkr-Mendr. For Liquid Solder or Cement. 41,636; Jan. 10.
Egry Register Company, The, Dayton, Ohio. Fresh-Pak. For Carbon Paper. 41,637; Jan. 10.
Esmond Mills, The, Esmond, Smithfield, R. I. Esmond All Wool Blanket. For Textile Blankets. 41,638; Jan. 10.
Foreman, C. N., doing business as C. N. Foreman and Co., Red Lion, Pa. Lincoln Logs. For Cigars. 41,639; Jan. 10.
Hardwicke, John B., doing business as John B. Hardwicke Company, Corpus Christi, Tex. Brahma. For Fresh Vegetables. 41,640; Jan. 10.
Hills Bros., San Francisco, Calif. Seasons Greetings—Hills Bros. Coffee-Adform 9. For Coffee. 41,641; Jan. 10.
Hoague-Sprague Corporation, Lynn, Mass. Attractive Footwear. For Boxes. 41,642; Jan. 10.
Kemp, E. F., Inc., Somerville, Boston, and Worcester, Mass. Kemp's Chocolates from the Famous Golden Glow Shops. For Chocolates. 41,643; Jan. 10.
Kraus, Morris, New York, N. Y. Monarch of Cuba. For Cigars. 41,644; Jan. 10.
Liberty Baking Company, Pittsburgh, Pa. Liberty Grade A Bread. For Bread. 41,645; Jan. 10.
Megs Macaroni Company, Harrisburg, Pa. Terminiimerese Brand Macaroni. For Macaroni. 41,646; Jan. 10.
Megs Macaroni Company, Harrisburg, Pa. La Mamma Brand Macaroni. For Macaroni. 41,647; Jan. 10.
Megs Macaroni Company, Harrisburg, Pa. Saluto Brand Macaroni. For Macaroni. 41,648; Jan. 10.
Micky Malto Products Co., San Francisco, Calif. Micky Malto. For Powdered Composition, Including Malt, Milk, and Egg, Forming a Base. For Beverages. 41,649; Jan. 10.
Minerva Wax Paper Co., Minerva, Ohio. Xlent Wax Paper. For Wax Paper. 41,650; Jan. 10.

Northern Illinois Cereal Company, Lockport, Ill. Big Value 2½ Pounds Rolled Oats. For Rolled Oats. 41,651; Jan. 10.
Palmore, Roy B., Baltimore, Md. Rocks. For Sweetmeats. 41,652; Jan. 10.
Phillips Milling Company Incorporated, San Francisco, Calif. Phillips Whole Wheat Flour. For Whole Wheat Flour. 41,653; Jan. 10.
Randall, Arthur L., Los Angeles, Calif. Atha-Foot. For Preparation for Athletes Foot, Trycophytosis. 41,654; Jan. 10.
Schuldt, E. H., Inc., Newark, N. J. E-Z-Clean-Pad. For Cleaning Pads. 41,655; Jan. 10.
Standard Brands Incorporated, New York, N. Y. Chase and Sanborn's Special Hotel. For Coffee. 41,656; Jan. 10.
Standard Brands Incorporated, New York, N. Y. Chase and Sanborn's Special Restaurant. For Coffee. 41,657; Jan. 10.
Union Oil Company of California, Los Angeles, Calif. Union Solvent Soap. For Solvent Soap. 41,658; Jan. 10.
Wesco Foods Company, Cincinnati, Ohio. Easy Task Brand No. 1 Brooms. For Brooms. 41,659; Jan. 10.
Wesco Foods Company, Cincinnati, Ohio. Avalon Brand Fancy Parlor Broom. For Brooms. 41,660; Jan. 10.
Wesco Foods Company, Cincinnati, Ohio. Trump Brand Special Broom. For Brooms. 41,661; Jan. 10.
Worcester Salt Company, New York, N. Y. Worcester Ivory Salt. For Salt. 41,662; Jan. 10.
Worcester Salt Company, New York, N. Y. Sparkling Louisiana Table Salt. For Salt. 41,663; Jan. 10.

LIST OF REGISTRANTS OF PRINTS

Anestex Laboratories (De-Ce Products Co. of N. Y.). (See Curtis, David.)
Arden, Elizabeth, of N. Y. Ltd., doing business as Elizabeth Arden, New York, N. Y. The Hours. For Cleansing Cream, Velva Cream, Spotpruf Lotion, Illusion Powder, Skin Tonic, Etc. 14,013; Jan. 10.
Bromo-Mint Company, Inc., Selinsgrove, Pa. Crotzer's Bromo-Mint. Effervescent. The Keeper of Good Health. For Preparation for Simple Headaches, Heartburn, Gas, Sour or Sick Stomach, Etc. 14,014; Jan. 10.
Campana Corporation, Batavia, Ill. Campana Lucky Coin. For Lucky Coins. 14,015; Jan. 10.
Chilton Pen Company, Inc., The, New York, N. Y. Chilton Pen. For Fountain Pens. 14,016; Jan. 10.
Cream of Wheat Corporation, The, Minneapolis, Minn. Aunt "Money Bags" She Came, She Saw . . . She Was Conquered. For Wheat Breakfast Food. 14,017; Jan. 10.
Curtis, David, doing busines as Anestex Laboratories (De-Ce Products Co. of N. Y.), New York, N. Y. Anestex Neotubes. For Local Anesthetic. 14,018; Jan. 10.
Hills Bros., San Francisco, Calif. An Extra Gift—Adform 9A. For Coffee. 14,019; Jan. 10.
K. O. Laboratories, Ltd., Pasadena and Hollywood, Calif. Hollywood K. O. Burning Perfume Sticks. For Burning Perfume Sticks. 14,020; Jan. 10.
Wood, J. R., & Sons, Inc., Brooklyn, N. Y. When One-Tenth of a Second Means World's Records! For Watches. 14,021; Jan. 10.
Worcester Salt Company, New York, N. Y. Worcester Salt Tooth Paste. For Tooth Paste. 14,022; Jan. 10.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Majestic Coal Mining Company. 300,269; Jan. 10; Serial No. 327,852; published Nov. 1, 1932.
Plastic compound. H. B. Manissadjian. 89,463; renewed Dec. 17, 1932.

CLASS 2

Bags, Paper. Sani-Fil, Inc. 300,202; Jan. 10; Serial No. 330,638; published Nov. 1, 1932.
Cans and covers therefor, Paper. Oswego Falls Corporation. 300,176; Jan. 10; Serial No. 325,073; published Nov. 1, 1932.
Receptacles, Paper, metal and fiber waste and garbage. W. J. Oliver. 300,148; Jan. 10; Serial No. 329,772; published Nov. 1, 1932.

CLASS 3

Cases, Men's dress-suit. Kennedy Company. 300,278; Jan. 10; Serial No. 329,858; published Nov. 1, 1932.
Handbags. Deauville, Bags, Inc. 300,331; Jan. 10.

CLASS 4

Cleaner, Dry. Major Petroleum Company. 300,308; Jan. 10; Serial No. 329,818; published Oct. 25, 1932.
Cleaning compound. Detergent Products Corporation. 300,260; Jan. 10; Serial No. 328,479; published Oct. 18, 1932.
Cleaning compound. Detergent Products Corporation. 300,284; Jan. 10; Serial No. 328,480; published Oct. 25, 1932.
Cleaning compound. Hyo Products Company. 300,304; Jan. 10; Serial No. 330,179; published Oct. 25, 1932.
Cleaning preparation, Liquid. Phoenix Oil Company. 300,281; Jan. 10; Serial No. 329,092; published Oct. 25, 1932.
Cleaning and polishing preparations. B. Heller & Company. 300,333; Jan. 10.
Cleansing and scouring compound. Grace-Lee Products, Inc. 300,312; Jan. 10; Serial No. 329,401; published Oct. 18, 1932.
Composition for cleaning walls, etc., Bottled fluid. Whiting Laboratories, Inc. 300,222; Jan. 10; Serial No. 317,916; published Dec. 15, 1931.
Dressing, chromium cleaner, etc., Brake. Strauss Stores Corporation. 300,259; Jan. 10; Serial No. 328,108; published Oct. 18, 1932.
Liquid and/or its concentrated form for white leather, etc. Pyrrole Products Corporation. 300,309; Jan. 10; Serial No. 329,607; published Oct. 18, 1932.
Polish. S. C. Johnson & Son. 300,218; Jan. 10; Serial No. 323,943; published Oct. 18, 1932.
Polish and cleaner, Shoe. Deauville-Palatine Corporation. 300,314; Jan. 10; Serial No. 329,325; published Oct. 18, 1932.
Soap, Flea. Potter-Wrightington, Inc. 300,306; Jan. 10; Serial No. 330,020; published Oct. 25, 1932.
Soap paste. Hopkins Chemical Co. 300,301; Jan. 10; Serial No. 330,346; published Oct. 25, 1932.
Soaps, Insecticidal. Abbott Laboratories. 300,310; Jan. 10; Serial No. 329,589; published Oct. 25, 1932.

CLASS 6

Adeps lanæ or lanolin toilet preparations, Hydrous and anhydrous. Woll-Wäscherei und Kämmerei in Döhren bei Hannover. 300,171; Jan. 10; Serial No. 328,826; published Oct. 18, 1932.
Anesthetic, Local. J. C. Wise. 91,733; renewed May 20, 1933.
Antiseptic. Hood-Hall Chemical Co. 300,291; Jan. 10; Serial No. 329,582; published Oct. 11, 1932.
Antiseptic, anti-toxic and deodorant. Godissart & Pyles. 300,181; Jan. 10; Serial No. 329,232; published Oct. 25, 1932.
Asthma preparation. Pim Chemical Company. 300,184; Jan. 10; Serial No. 329,060; published Oct. 25, 1932.
Astringents, astringent cerates, bleach and beauty creams, etc. Wilson Products Co. 300,160; Jan. 10; Serial No. 329,462; published Oct. 18, 1932.
Bacteriophages. Allen-Sandlin Laboratories. 300,298; Jan. 10; Serial No. 329,571; published Oct. 18, 1932.
Beef, iron, wine, cocoanut oil shampoo, etc. Ure Druggest, Inc. 300,225; Jan. 10; Serial No. 315,654; published Oct. 18, 1932.
Bitters, Alcoholic. W. H. Chaplin & Co. 90,160; renewed Feb. 11, 1933.
Blood food or tonic. Otis Clapp & Son, Inc. 300,183; Jan. 10; Serial No. 329,178; published Oct. 25, 1932.
Cathartic. Sydney Ross Co. 91,799; renewed May 27, 1933.
Chemical substances. H. Th. Böhme, Aktiengesellschaft. 300,209; Jan. 10; Serial No. 329,493; published Oct. 18, 1932.
Chemical substances. H. Th. Böhme Aktiengesellschaft. 300,299; Jan. 10; Serial No. 329,494; published Oct. 18, 1932.
Chemicals used as fire extinguishers, Powdered. Firex Chemical Co. 300,182; Jan. 10; Serial No. 329,228; published Oct. 25, 1932.
Citrate preparation, Effervescent. S. Tesoro. 300,180; Jan. 10; Serial No. 329,267; published Oct. 25, 1932.
Cosmetics. Terminal Barber Shops, Inc. 300,194; Jan. 10; Serial No. 325,489; published Oct. 25, 1932.
Cream, Beauty. Tulon, Inc. 300,230; Jan. 10; Serial No. 329,484; published Oct. 18, 1932.
Cream, Face. B. S. Boss. 300,191; Jan. 10; Serial No. 326,068; published Oct. 25, 1932.
Depilating compound. Hercules Powder Company. 300,288; Jan. 10; Serial No. 329,796; published Oct. 25, 1932.
Disinfectant and insecticide. J. W. Bullen. 300,192; Jan. 10; Serial No. 325,561; published Oct. 18, 1932.
Eau de Cologne, perfumery, shampoo, etc. Ferd. Mülhens, Inc. 300,166; Jan. 10; Serial No. 329,117; published Oct. 18, 1932.
Hair grower. N. N. B. Bunkley. 300,336; Jan. 10.

Hemic solution. Chappel Bros. Inc. 300,172; Jan. 10; Serial No. 328,684; published Oct. 18, 1932.
Insecticides. Nourse Oil Company. 300,173; Jan. 10; Serial No. 328,249; published Oct. 18, 1932.
Insecticides, Agricultural. Andrew Wilson, Inc. 300,163; Jan. 10; Serial No. 329,341; published Oct. 18, 1932.
Iron with copper and chlorophyl for use in secondary anemia, Soluble. Battle Creek Food Company. 300,231; Jan. 10; Serial No. 329,547; published Oct. 18, 1932.
Lotions, Toilet. Terminal Barber Shops, Inc. 300,193; Jan. 10; Serial No. 325,490; published Oct. 25, 1932.
Lye. Champion Chemical Works, Inc. 300,170; Jan. 10; Serial No. 328,864; published Oct. 18, 1932.
Medicinal compound. J. F. Gardner. 300,190; Jan. 10; Serial No. 326,523; published Oct. 18, 1932.
Medicinal dietetic food preparation. Nordmark-Werke G. m. b. H. 300,188; Jan. 10; Serial No. 327,597; published Oct. 25, 1932.
Medicinal preparation. I. N. Boyd. 300,212; Jan. 10; Serial No. 329,299; published Oct. 25, 1932.
Medicinal preparation. P. O. Bugge. 300,165; Jan. 10; Serial No. 329,131; published Oct. 18, 1932.
Medicinal preparation. Economy Mills. 300,292; Jan. 10; Serial No. 329,575; published Oct. 18, 1932.
Medicinal preparation. Nordmark-Werke G. m. b. H. 300,187; Jan. 10; Serial No. 327,598; published Oct. 18, 1932.
Medicinal preparation. S. Pfeiffer Mfg. Co. 300,227; Jan. 10; Serial No. 313,866; published July 7, 1931.
Medicinal preparation used as an antisyphilitic. Merck & Co. 300,287; Jan. 10; Serial No. 329,863; published Oct. 25, 1932.
Medicinal tablets. Pepsodent Co. 300,295; Jan. 10; Serial No. 329,562; published Oct. 18, 1932.
Medicine. E. M. Williams. 300,294; Jan. 10; Serial No. 329,566; published Oct. 25, 1932.
Medicines. W. H. Horne. 300,175; Jan. 10; Serial No. 326,713; published Oct. 18, 1932.
Moistening preparations, protecting preparations, etc., for use in the treatment of textile fabrics and leather. H. Th. Böhme Aktiengesellschaft. 300,296–8; Jan. 10; Serial Nos. 329,496–8; published Oct. 18, 1932.
Ointment. F. and W. Co. 300,285; Jan. 10; Serial No. 326,676; published Oct. 18, 1932.
Ointment, Foot. H. Harutunian. 300,195; Jan. 10; Serial No. 329,555; published Oct. 18, 1932.
Perfume, toilet water, bath salts, etc. Houbigant, Inc. 300,161; Jan. 10; Serial No. 329,446; published Oct. 18, 1932.
Preparation for removing wrinkles. M. Wiora. 300,210; Jan. 10. Serial No. 329,365; published Oct. 25, 1932.
Preparation for stimulating the growth of the hair. R.-L. Jones. 300,164; Jan. 10; Serial No. 329,167; published Oct. 18, 1932.
Preparation for the treatment of intestinal disorders. T. J. McBride. 300,302; Jan. 10; Serial No. 330,306; published Oct. 25, 1932.
Prophylactic compound. A. T. Ferris. 300,211; Jan. 10; Serial No. 329,331; published Oct. 25, 1932.
Saltpetre, cod liver oil, ammonia, etc. Tampa Drug Company. 300,189; Jan. 10; Serial No. 327,204; published Oct. 25, 1932.
Shampoo. Phoenix Oil Company. 300,167–8; Jan. 10; Serial Nos. 329,093–4; published Oct. 18, 1932.
Skin lotion. E. M. McKay. 300,289; Jan. 10; Serial No. 329,718; published Oct. 25, 1932.
Skin perfector and hair tonic, Antiseptic. Eck-O-Lin Mfg. Co. 300,186; Jan. 10; Serial No. 327,937; published Oct. 25, 1932.
Stomach tablets. T. H. Peterson. 300,185; Jan. 10; Serial No. 328,370; published Oct. 25, 1932.
Surgical maggots, Live. Petrolagar Laboratories, Inc. 300,162; Jan. 10; Serial No. 329,354; published Oct. 18, 1932.
Toilet preparation. Citro Chemical Co. 91,646; renewed May 20, 1933.
Tonics, cod liver oils, laxative medicine, etc., General. F. A. Rubió. 300,290; Jan. 10; Serial No. 329,655; published Oct. 25, 1932.

CLASS 8

Holders, smoke filtering devices, etc., Cigar and cigarette. Nikostop Ipari és Kereskedelmi Részvény Társaság. 300,224; Jan. 10; Serial No. 315,973; published Nov. 1, 1932.
Machine to form cigarettes. Marden Mfg. Co. 300,272; Jan. 10; Serial No. 328,872; published Nov. 1, 1932.

CLASS 10

Fertilizer. Swann Chemical Company. 300,220–1; Jan. 10; Serial Nos. 318,331–2; published Nov. 1, 1932.

CLASS 11

Anti-offset, ink softener, and safe dryer. Indiana Chemical & Mfg. Co. 300,329; Jan. 10.

CLASS 12

Cement preparation. Toch Brothers. 40,281; renewed May 5, 1933.
Fence paling, Wooden. Pacific States Fence Co. 300,319; Jan. 10.
Roofing and shingles, Composition. Barber Asphalt Company. 300,154; Jan. 10; Serial No. 329,217; published Sept. 13, 1932.
Shingles. Creo-Dipt Company Inc. 300,339; Jan. 10.

CLASS 13

Screens. Mac-It-Parts Company. 91,886; renewed June 3, 1933.
Shields, Expansion. Star Expansion Bolt Company. 300,334; Jan. 10.

CLASS 14

Steel and steel castings, Bar. Mac-It-Parts Company. 91,885; renewed June 3, 1933.
Strips, sheets, rods of non-ferrous metals and alloys thereof. Eastern Brass & Copper Co. Inc. 300,268; Jan. 10; Serial No. 329,983; published Nov. 1, 1932.

CLASS 15

Grease and lubricating oils, Gun. Frank A. Hoppe, Incorporated. 300,232; Jan. 10; Serial No. 330,091; published Nov. 1, 1932.
Oils and greases, Lubricating. Independent Products Company. 90,336; renewed Feb. 18, 1933.
Oils and greases, Lubricating. Perolin Company of America. 300,174; Jan. 10; Serial No. 326,781; published Nov. 1, 1932.

CLASS 16

Enamel, Paint. Ever-Nu Enamel Co. 300,305; Jan. 10; Serial No. 330,041; published Nov. 1, 1932.
Paint, linseed-oil, turpentine, etc. Independent Products Company. 90,023; renewed Jan. 28, 1933.
Polish. R. W. Lee. 300,327; Jan. 10.
Waxes and polishes, Liquid floor. Continental Car-Na-Var Corporation. 300,258; Jan. 10; Serial No. 326,622; published Nov. 1, 1932.

CLASS 17

Cigarettes. Stephano Brothers. 300,197; Jan. 10; Serial No. 330,583; published Nov. 1, 1932.
Stogies. Model Stogie Co. 300,345; Jan. 10.

CLASS 19

Automobiles. Paramount Taxicab Corporation. 300,169; Jan. 10; Serial No. 329,057; published Nov. 1, 1932.
Wheels. Motor Wheel Corporation. 300,215; Jan. 10; Serial No. 318,918; published Nov. 1, 1932.

CLASS 21

Chimes, Electrically operated. General Kontrolar Company. 300,226; Jan. 10; Serial No. 315,257; published Nov. 1, 1932.
Fans, Electrically driven. A. E. Jones. 300,214; Jan. 10; Serial No. 319,095; published Nov. 1, 1932.
Plugs, wall plates, canopy switches, etc., Heater. Meteor Electric Corporation. 300,213; Jan. 10; Serial No. 323,348; published Nov. 1, 1932.

CLASS 22

Foil, Shredded. Paper Novelty Manufacturing Company. 300,151; Jan. 10; Serial No. 330,379; published Nov. 1, 1932.
Game, Outdoor. C. Majewicz. 330,149; Jan. 10; Serial No. 330,230; published Nov. 1, 1932.
Golf balls. Seiberling Latex Products Company. 300,144; Jan. 10; Serial No. 328,860; published Nov. 1, 1932.
Golf clubs. L. A. Young Company. 300,205; Jan. 10; Serial No. 330,561; published Nov. 1, 1932.
Skates, Roller. Advance Manufacturing Company. 300,204; Jan. 10; Serial No. 330,612; published Nov. 1, 1932.
Toy. Illinois Lumber and Tile Co. 300,147; Jan. 10; Serial No. 329,601; published Nov. 1, 1932.

CLASS 23

Crimping-machines. Lockett Crimping Machine Co. 90,121; renewed Feb. 4, 1933.
Drilling, reaming, and tapping machines. National Automatic Tool Company. 89,486; renewed Dec. 17, 1932.
Fire extinguishers. International Fire Equipment Corporation. 300,344; Jan. 10.
Manually operated machines. Columbia Steel Equipment Company. 300,347; Jan. 10.
Mowers, Lawn. Sears, Roebuck and Co. 300,330; Jan. 10.
Tools. Henry Disston & Sons, Incorporated. 90,101; renewed Feb. 4, 1933.

CLASS 25

Catches, chain bolts, thumb and sash fasteners, etc., Barn door. Champion Hardware Company. 300,198; Jan. 10; Serial No. 330,448; published Nov. 1, 1932.

CLASS 26

Measuring instruments. Henry Disston & Sons, Incorporated. 90,000; renewed Jan. 28, 1933.
Optical products. L. H. Scadron. 300,207; Jan. 10; Serial No. 327,416; published July 26, 1932.
Patterns, Dress. King Features Syndicate, Inc. 300,332; Jan. 10.

Pictures and picture films, Motion. Warner Bros. Pictures, Inc 300,337; Jan. 10.
Pictures, Motion. G. D. Haselton. 300,157; Jan. 10; Serial No. 328,170; published Nov. 8, 1932.

CLASS 27

Watchcases. Illinois Watch Case Co. 89,586; renewed Dec. 30, 1932.

CLASS 31

Filtering media. Anthracite Equipment Corporation. 300,145; Jan. 10; Serial No. 328,982; published Nov. 1, 1932.
Refrigerators, Electric. Cappel Furniture Company. 300,346; Jan. 10.

CLASS 32

Cards, Playing. United States Playing Card Co. 91,899½; renewed Apr. 29, 1933.

CLASS 34

Burners, Oil. Alaska Freezer Co. 300,323; Jan. 10.
Furnaces. Canada Foundries & Forgings, Limited. 300,326; Jan. 10.

CLASS 35

Piston rings. Western Auto Supply Agency of Los Angeles. 300,177; Jan. 10; Serial No. 325,862; published Nov. 1, 1932.
Tires, Rubber or cushion. Hood Rubber Co. 89,261; renewed Dec. 3, 1932.
Tires, tubes, and portable tire patch outfits, Automobile. L. L. Coryell & Son. 300,275; Jan. 10; Serial No. 329,740; published Nov. 1, 1932.

CLASS 37

Books and blank books, Loose leaf note. S. E. & M. Vernon Inc. 300,280; Jan. 10; Serial No. 329,969; published Nov. 1, 1932.
Paper. Gilbert Paper Company. 300,156; Jan. 10; Serial No. 324,376; published Apr. 12, 1932.
Paper, Toilet. Albany Perforated Wrapping Paper Company. 91,438; renewed May 6, 1933.
Paper, Toilet. Albany Perforated Wrapping Paper Company. 91,471–5; renewed May 27, 1933.
Paper, Toilet. Albany Perforated Wrapping Paper Company. 91,473–5; renewed May 27, 1933.
Paper, Toilet. Capital Paper Company. 300,200; Jan. 10; Serial No. 330,225; published Nov. 1, 1932.
Tissues, Cleansing. Peoples Drug Stores, Inc. 300,199; Jan. 10; Serial No. 330,274; published Nov. 1, 1932.

CLASS 38

Charts, Color. B. H. Stine. 300,317; Jan. 10.
Magazine. Atlas Publishing Company. 300,228; Jan. 10; Serial No. 312,747; published Nov. 1, 1932.
Newspaper. J. D. Williams. 300,201; Jan. 10; Serial No. 330,187; published Nov. 1, 1932.
Newspaper column. Portland Maine Publishing Company. 300,271; Jan. 10; Serial No. 328,874; published Nov. 1, 1932.
Newspaper feature articles, Title for. W. Tomkins. 300,205; Jan. 10; Serial No. 330,235; published Nov. 1, 1932.
News service, Printed. Dyer-Ensinger Company. 300,320; Jan. 10.

CLASS 39

Boots and shoes, Rubber. National India Rubber Company. 89,870; renewed Jan. 14, 1933.
Overcoats, coats, vests, etc. J. S. Hall's Sons. 91,768; renewed May 27, 1933.

CLASS 42

Cotton piece goods. Joseph Bancroft & Sons Co. 300,240; Jan. 10; Serial No. 329,866; published Oct. 18, 1932.
Cotton piece goods. Riegel Textile Corporation. 300,237; Jan. 10; Serial No. 329,122; published Oct. 11, 1932.
Curtains, draperies, and fabrics. Portage Draperies Co. 300,250; Jan. 10; Serial No. 329,902; published Oct. 25, 1932.
Fabrics. Kops Bros. Inc. 300,322; Jan. 10.
Goods in the piece. Wollner & Smith. 300,255; Jan. 10; Serial No. 330,560; published Oct. 25, 1932.
Goods in the piece, Cotton. Wm. Simpson, Sons & Co. 300,223; Jan. 10; Serial No. 317,618; published Nov. 1, 1932.
Handkerchiefs. Graemiger Bros. Inc. 300,273; Jan. 10; Serial No. 329,375; published Oct. 18, 1932.
Laces and embroideries. Zekaria Brothers. 300,251; Jan. 10; Serial No. 329,912; published Oct. 11, 1932.
Nets, Hair and water wave. Modish Specialties, Inc. 300,324; Jan. 10.
Piece goods. I. P. Bemberg Aktiengesellschaft. 300,270; Jan. 10; Serial No. 326,777; published Sept. 27, 1932.
Piece goods. Combier & Co. Inc. 300,335; Jan. 10.
Piece goods. Reliance Piece Dye Works. 300,241; Jan. 10; Serial No. 329,338; published Oct. 18, 1932.
Pile fabrics. Bennett Mills, Incorporated. 300,325; Jan. 10.
Pile fabrics. Sidney Blumenthal & Co. Inc. 300,261; Jan. 10; Serial No. 330,156; published Oct. 18, 1932.
Pile fabrics. Sidney Blumenthal & Co. Inc. 300,276–7; Jan. 10; Serial Nos. 329,827–8; published Oct. 18, 1932.
Pile fabrics. Crompton-Richmond Co. 300,264; Jan. 10; Serial No. 330,061; published Nov. 1, 1932.
Rugs, Textile. Hardwick & Magee Company. 300,333; Jan. 10.
Silk and rayon piece goods. Sussberg & Feinberg, Inc. 300,279; Jan. 10; Serial No. 329,908; published Oct. 25, 1932.
Silk goods in the piece. Louis Roessel & Co. 300,262; Jan. 10; Serial No. 330,102; published Oct. 25, 1932.
Silk piece goods. William Hollins and Company. 300,274; Jan. 10; Serial No. 329,638; published Oct. 18, 1932.
Silk piece goods. Louis Roessel & Co. 300,248; Jan. 10; Serial No. 329,690; published Oct. 11, 1932.
Textile fabrics in the piece. Lorraine Manufacturing Co. 300,242; Jan. 10; Serial No. 329,606; published Nov. 1, 1932.
Towels, Cloth. Adtowl Corporation. 300,263; Jan. 10; Serial No. 330,078; published Oct. 25, 1932.
Velvets in the piece. Roessle Velvet Company. 300,234–5; Jan. 10; Serial Nos. 327,453–4; published Oct. 18, 1932.
Velvets in the piece, Roesle Velvet Company. 300,256; Jan. 10; Serial No. 330,606; published Nov. 1, 1932.
Woolen piece goods. Forstmann Woolen Co. 300,236; Jan. 10; Serial No. 328,665; published Oct. 18, 1932.
Woolen piece goods. Forstmann Woolen Company. 300,341–2; Jan. 10.

CLASS 43

Thread. North American Thread Co. 300,249; Jan. 10; Serial No. 329,751; published Oct. 4, 1932.
Thread and yarn. Cotonificio Valle di Susa. 300,238; Jan. 10; Serial No. 327,006; published Oct. 18, 1932.
Thread, Cotton. Standard-Coosa-Thatcher Company. 300,238–9; Jan. 10; Serial Nos. 329,318–19; published Oct. 4, 1932.
Threads, yarns and novelty yarns. National Silk Co. 300,244–6; Jan. 10; Serial Nos. 329,646–8; published Oct. 11, 1932.
Threads, yarns, and novelty yarns. National Silk Co. 300,247; Jan. 10; Serial No. 329,650; published Oct. 11, 1932.
Threads, yarns, and novelty yarns. National Silk Company. 300,254; Jan. 10; Serial No. 330,377; published Oct. 25, 1932.
Yarns. Hanes Hosiery Mills Co. 300,252; Jan. 10; Serial No. 330,086; published Oct. 18, 1932.
Yarns. William Hollins and Company. 300,243; Jan. 10; Serial No. 329,636; published Oct. 18, 1932.
Yarns. Textile, Incorporated. 300,253; Jan. 10; Serial No. 330,317; published Oct. 18, 1932.

CLASS 44

Absorbent cotton. Kendall Company. 300,257; Jan. 10; Serial No. 325,229; published Oct. 18, 1932.
Dental alloys. S. S. White Dental Manufacturing Company. 300,307; Jan. 10; Serial No. 329,914; published Oct. 25, 1932.
Forceps for castration of animals. F. Veglia. 300,311; Jan. 10; Serial No. 329,461; published Oct. 18, 1932.
Lining preparation used as a separating media between a porous object and a hecolite or a vulcanite covering therefor. United Laboratories. 300,217; Jan. 10; Serial No. 324,410; published Oct. 18, 1932.
Nipples, Nursing bottle. Pyramid Rubber Company. 300,315; Jan. 10; Serial No. 329,242; published Oct. 25, 1932.
Prophylactic rubber articles. Knights Co. 300,300; Jan. 10; Serial No. 330,347; published Oct. 25, 1932.
Sanitary napkins and bandages and/or cellulose and sanitary belts. Deane Plaster Co. 300,303; Jan. 10; Serial No. 330,293; published Oct. 25, 1932.
Teething rings. H. C. Desbecker. 300,196; Jan. 10; Serial No. 302,218; published Oct. 18, 1932.

CLASS 45

Beverages, and sirups and extracts for making same, Maltless. W. A. Brown. 300,203; Jan. 10; Serial No. 330,332; published Nov. 1, 1932.
Beverages, Maltless. J. M Coble, jr. 300,178; Jan. 10; Serial No. 327,214; published Nov. 1, 1932.
Beverages, Maltless. Drewry & Sons Co. 300,179; Jan. 10; Serial No. 328,727; published Nov. 1, 1932.
Grape juice, ginger ale, Volunteer Stores, Inc. 300,150; Jan. 10; Serial No. 330,279; published Nov. 1, 1932.
Water, Mineral. B. C. Bratton. 300,348; Jan. 10.

CLASS 46

Biscuits, Sweet. All Nations Bakers, Inc. 300,316; Jan 10; Serial No. 329,734; published Nov. 15, 1932.
Canned and bottled fruits and vegetables. G. B. Raffetto, Incorporated. 300,340; Jan. 10.
Canned peas. Paxton and Gallagher Co. 90,049; renewed Jan. 28, 1933.
Chocolate and cocoa. J. S. Fry and Sons, Limited. 90,982; renewed Apr. 8, 1933.
Coffee. J. Henry Koenig Co. 91,881; renewed June 3, 1933.
Coffee. Standard Brands Incorporated. 300,328; Jan. 10.
Coffee. C. B. Wagstaff. 90,939; renewed Apr. 1, 1933.
Coffees and teas. Royal Valley Coffee Co. 91,516; renewed May 6, 1933.
Flour, Wheat. Bliss Milling Company. 300,313; Jan. 10; Serial No. 329,343; published Oct. 25, 1932.

Frosting or icing. P. Ballantine and Sons. 300,318; Jan. 10.
Fruits, Fresh deciduous. Earl Fruit Company. 300,321; Jan. 10.
Gelatine dessert. Perkins Products Co. 300,343; Jan. 10.
Ice cream. Western Pure Milk Products Company. 300,329; Jan. 10; Serial No. 305,835; published Jan. 12, 1932.
Lemons. C. D. Hubbard Fruit Company. 91,348; renewed Apr. 29, 1933.
Meats, Fresh and cured. Dunlevy and Brother. 40,452; renewed May 26, 1933.
Syrup, Malt. Birk Bros. Malt Products, Inc. 300,282; Jan. 10; Serial No. 329,077; published Oct. 18, 1932.
Wheat and bread made therefrom, Whole. Hanley Milling Company. 300,283; Jan. 10; Serial No. 328,920; published Oct. 18, 1932.

CLASS 48

Malt beverages. Esslinger's Inc. 300,146; Jan. 10; Serial No. 330,421; published Nov. 1, 1932.
Malt cereal beverages. Koch Beverage & Ice Company. 300,216; Jan. 10; Serial No. 318,741; published Nov. 1, 1932.

CLASS 49

Spirits, whiskey, and liquors, Potable. Distillers Corporation Limited. 300,152–3; Jan. 10; Serial Nos. 330,456–7; published Nov. 1, 1932.
Spirits, whiskey, and liquors, Potable. Distillers Corporation Limited. 300,155; Jan. 10; Serial No. 330,462; published Nov. 1, 1932.
Spirits, whiskey, and liquors, Potable. Distillers Corporation Limited. 300,158–9; Jan. 10; Serial Nos. 330,467–8; published Nov. 1, 1932.
Spirits, whiskey, and liquors, Potable. Distillers Corporation Limited. 300,206; Jan. 10; Serial No. 330,471; published Nov. 1, 1932.
Spirits, whiskey, and liquors, Potable. Distillers Corporation Limited. 300,286; Jan. 10; Serial No. 330,469; published Nov. 1, 1932.

CLASS 50

Coated fabrics, coated appliqué materials and backed fabrics. M. Goldberg. 300,219; Jan. 10; Serial No. 321,560; published Nov. 1, 1932.
Sheet material, Composition. Behr-Manning Corporation. 300,265–7; Jan. 10; Serial Nos. 330,058–60; published Nov. 1, 1932.

LIST OF LABELS

Atha-Foot. For Preparation for Athlete's Foot, Trycophytosis. A. L. Randall. 41,654; Jan. 10.
Attractive Footwear. For Boxes. Hoague-Sprague Corporation. 41,642; Jan. 10.
Avalon Brand Fancy Parlor Broom. For Brooms. Wesco Foods Company. 41,660; Jan. 10.
Beech-Nut Assorted Drops. For Assorted Drops. Beech-Nut Packing Company. 41,627; Jan. 10.
Beech-Nut Beans. For Kosher Beans. Beech-Nut Packing Company. 41,626; Jan. 10.
Beech-Nut Grahams. For Graham Crackers. Beech-Nut Packing Company. 41,628; Jan. 10.
Big Value 2½ Pounds Rolled Oats. For Rolled Oats. Northern Illinois Cereal Company. 41,651; Jan. 10.
Brahma. For Fresh Vegetables. J. B. Hardwicke. 41,640; Jan. 10.
Bunny. For Fresh Lettuce. J. T. Bunn. 41,631; Jan. 10.
Campbell's Dual Shave. For Shaving Cream. Campbell Products Co. 41,632; Jan. 10.
Carroccio's Prepared Sauce for Spaghetti, etc. For Prepared Sauce for Spaghetti, etc. T. A. Carroccio & Sons. 41,633; Jan. 10.
Chase and Sanborn's Special Hotel. For Coffee. Standard Brands Incorporated. 41,656; Jan. 10.
Chase and Sanborn's Special Restaurant. For Coffee. Standard Brands Incorporated. 41,657; Jan. 10.
E-Z-Clean-Pad. For Cleaning Pads. E. H. Schuldt, Inc. 41,655; Jan. 10.
Easy Task Brand No. 1 Brooms. For Brooms. Wesco Foods Company. 41,659; Jan. 10.
8 Bells Coffee. For Coffee. W. Brooks. 41,630; Jan. 10.
Esmond All Wool Blanket. For Textile Blankets. Esmond Mills. 41,638; Jan. 10.
Fresh-Pak. For Carbon Paper. Egry Register Company. 41,637; Jan. 10.
Hey! Hey! Skweesit and Bite. For Flavors. Baker Ice Machine Co. Inc. 41,625; Jan. 10.
Kemp's Chocolates from the Famous Golden Glow Shops. For Chocolates. E. F. Kemp, Inc. 41,643; Jan. 10.
La Mamma Brand Macaroni. For Macaroni. Megs Macaroni Company. 41,647; Jan. 10.
Liberty Grade A Bread. For Bread. Liberty Baking Company. 41,645; Jan. 10.
Lincoln Logs. For Cigars. C. N. Foreman. 41,639; Jan. 10.
'Lite-Flake' Minute Biscuit Flour. For Biscuit Flour. Abilene Flour Mills Co. 41,623; Jan. 10.
Micky Malto. For Powdered Composition, Including Malt, Milk, and Egg, Forming a Base for Beverages. Micky Malto Products Co. 41,649; Jan. 10.
Monarch of Cuba. For Cigars. M. Kraus. 41,644; Jan. 10.
Phillips Whole Wheat Flour. For Whole Wheat Flour. Phillips Milling Company Incorporated. 41,653; Jan. 10.
Plaza Hotel Bars. For Butter. Breakstone Bros., Inc. 41,629; Jan. 10.
Rocks. For Sweetmeats. R. B. Palmore. 41,652; Jan. 10.
Saluto Brand Macaroni. For Macaroni. Megs Macaroni Company. 41,648; Jan. 10.
Seasons Greeting—Hills Bros. Coffee—Adform 9. For Coffee. Hills Bros. 41,641; Jan. 10.
Simple Simon. For Mince Meat. Atmore & Son, Inc. 41,624; Jan. 10.
Sparkling Louisiana Table Salt. For Salt. Worcester Salt Company. 41,663; Jan. 10.
Sunviro. For Reconstructive Tonic. Conadwel Laboratories, Inc. 41,634; Jan. 10.
Super Whole Milk Bread. For Bread. Dairy Corporation of America. 41,635; Jan. 10.
Termini-Imerese Brand Macaroni. For Macaroni. Megs Macaroni Company. 41,646; Jan. 10.
Tinkr-Mendr. For Liquid Solder or Cement. J. C. Demille. 41,636; Jan. 10.
Trump Brand Special Broom. For Brooms. Wesco Foods Company. 41,661; Jan. 10.
Union Solvent Soap. For Solvent Soap. Union Oil Company of California. 41,658; Jan. 10.
Worcester Ivory Salt. For Salt. Worcester Salt Company. 41,662; Jan. 10.
Xlent Wax Paper. For Wax Paper. Minerva Wax Paper Co. 41,650; Jan. 10.

LIST OF PRINTS

An Extra Gift—Adform 9A. For Coffee. Hills Bros. 14,019; Jan. 10.
Anestex Neotubes. For Local Anesthetic. D. Curtis. 14,018; Jan. 10.
Aunt "Money Bags" She Came, She Saw . . . She was Conquered. For Wheat Breakfast Food. Cream of Wheat Corporation. 14,017; Jan. 10.
Campana Lucky Coin. For Lucky Coins. Campana Corporation. 14,015; Jan. 10.
Chilton Pen. For Fountain Pens. Chilton Pen Company. 14,016; Jan. 10.
Crotzer's Bromo-Mint, Effervescent, The Keeper of Good Health. For Preparation for Simple Headaches, Heartburn, Gas, Sour or Sick Stomach, Etc. Bromo-Mint Company. 14,014; Jan. 10.
Hollywood K. O. Burning Perfume Sticks. For Burning Perfume Sticks. K. O. Laboratories, Ltd. 14,020; Jan. 10.
The Hours. For Cleansing Cream, Velva Cream, Spotpruf Lotion, Illusion Powder, Skin Tonic, Etc. Elizabeth Arden of N. Y. Ltd. 14,013; Jan. 10.
When One-Tenth of a Second Means World's Records. For Watches. J. R. Wood & Sons, Inc. 14,021; Jan. 10.
Worcester Salt Tooth Paste. For Tooth Paste. Worcester Salt Company. 14,022; Jan. 10.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 10TH DAY OF JANUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Adams, Lester V., Schenectady, N. Y., assignor to General Electric Company. Resinous compositions and making. 1,893,874; Jan. 10.
Adams, Walter A., Rochester, N. Y. Table, bench, shelf or similar structures. 1,893,481; Jan. 10.
Adin, Henry. (See Barnard, A. W. A., and Adin.)
Adria S. A. Galerie du Commerce. (See Dreyfuss, Jacques, assignor.)
Aerocrete Corporation of America, The. (See Billner, Karl P., assignor.)
Ahlm, Charles E. F., Cleveland, Ohio, assignor, by mesne assignments, to Automotive Research Company, Warren, Ohio. Transmission gearing. 1,893,640; Jan. 10.
Aircraft Development Corporation. (See Fritsche, Carl B., assignor.)
Air Reduction Company. (See Anderson, James L., assignor.)
Akron Standard Mold Company, The. (See Bostwick, Henry C., assignor.)
Albrecht, Christian A., Berlin, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y. Typographical composing and line casting machine. 1,894,143; Jan. 10.
Aldrich, Lloyd I., assignor, by mesne assignments, to Preferred Oil Burners, Inc., Peoria, Ill. Safety control mechanism for liquid fuel burners. 1,893,875; Jan. 10.
Aldrich, Ralph N., assignor to Standard Stations, Inc., San Francisco, Calif. Building. Des. 88,947; Jan. 10.
Alessi, Fred, Wood-Ridge, N. J. Nautical precision instrument. 1,893,925; Jan. 10.
Alexander, Jesse, assignor of one-half to W. W. Payne, Los Angeles, Calif. Carriage construction. 1,893,488; Jan. 10.
All Fair Incorporated. (See Anderson, Frohman, assignor.)
Allegheny Steel Company. (See Fink, Colin G., assignor.)
Allegheny Steel Company. (See Musheno, Fred G., assignor.)
Allen, Frederick C., assignor to The Henry & Wright Manufacturing Company, Hartford, Conn. Drill press. 1,894,214; Jan. 10.
Allgemeine Elektricitats-Gesellschaft et al. (See Stein, T., and Wünsch, assignors.)
Aloi, Millio F., Huntington Park, assignor to J. Grant, Los Angeles, Calif. Rotary underreamer. 1,893,693; Jan. 10.
Aluminum Company of America. (See Malby, Seth G., assignor.)
Aluminum Company of America. (See McFadden, Benjamin C., assignor.)
American Abrasive Metals Company. (See Edmondson, R. S., and Holmes, assignors.)
American Cyanamid Company. (See Bradley, Theodore F., assignor.)
American Electrical Heater Company. (See Kuhn, Frank, assignor.)
American Electrical Heater Company. (See Thomas, Lurrance H., assignor.)
American Gas Machine Company. (See Rasmussen, Sophus, assignor.)
American Hammered Piston Ring Company. (See Morton, Allen W., assignor.)
American Optical Company. (See Maynard, Albert E., assignor.)
American Optical Company. (See Schumacher, Elmer L., assignor.)
American Reenforced Paper Company. (See Gibbs, George E., assignor.)
American Seating Company. (See Vandervoort, Milford T., assignor.)
American Telephone and Telegraph Company. (See Gannett, Danforth K., assignor.)
American Telephone and Telegraph Company. (See Thorp, Vaughn P., assignor.)
Anderson, Frohman, Detroit, Mich., assignor to All Fair Incorporated, Churchville, N. Y. Figure toy. 1,894,144; Jan. 10.
Anderson, Harrison, Los Angeles, Calif. Bookholder. 1,893,976; Jan. 10.
Anderson, Harrison, Los Angeles, Calif. Bookholder. 1,893,977; Jan. 10.
Anderson, Ian B. and R. F. and J. Thomas, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Production of dibenzanthrone derivatives and the like. 1,893,530; Jan. 10.
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Production of scale-free welded tubing. 1,893,926; Jan. 10.
Anderson, Martin J., assignor to Mathews Conveyer Company, Ellwood City, Pa. Conveyer. 1,893,574; Jan. 10.
Anderson, Philip G., New Rochelle, N. Y. Stairway construction. 1,893,876; Jan. 10.
Andler, Edward J., Margate City, N. J. Door desk. 1,894,145; Jan. 10.
Anthes, Eugen. (See Pier, M., and Anthes.)
Appel, William, Little Rock, Ark. Pencil sharpener. 1,893,877; Jan. 10.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Vehicle brake mechanism. 1,893,833; Jan. 10.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Vehicle wheel. 1,893,834; Jan. 10.
Arrow Safety Device Company. (See Haines, John R., assignor.)
Askania-Werke Aktiengesellschaft, vormals Centralwerkstatt Dessau und Carl Bamberg Friedenau, et al. (See Stein, T., and Wünsch, assignors.)
Associated Electric Laboratories. (See Wicks, John, assignor.)
Attkiss, Philip, Brooklyn, N. Y. Antifreezing solution. 1,893,835; Jan. 10.
Atwood, Francis C., Newton, Mass. Casein solution and making the same. 1,893,608; Jan. 10.
Austin, Dwight E., Los Angeles, Calif. Demountable motor construction for automobiles. 1,893,600; Jan. 10.
Autofont Company, The. (See Moore, John W., assignor.)
Autogenwerk Sirius Gesellschaft mit beschränkter Haftung. (See Keusen, Peter, assignor.)
Automatic Burner Corporation. (See Hirsch, Jacob H., assignor.)
Automatic Water Softener Company. (See Dotterweich, Andrew J., assignor.)
Automotive Research Corporation. (See Ahlm, Charles E. F., assignor.)
Auto Specialties Manufacturing Company. (See Bullis, Fred J., assignor.)
Avery, Henry W., Cleveland, Ohio. Fitting for threaded members. 1,893,927; Jan. 10.
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)
Bacharach, George, New York, and E. McCauliff, jr., Yonkers, assignors of thirty per cent to Radio Patents Corporation, New York, N. Y. Manufacture of benzanthrone. 1,893,575; Jan. 10.
Baer, Alfred, Charlottenburg, Berlin, Germany. Cooling means for rotary valves. 1,893,855; Jan. 10.
Bailey, Walter T. (See Federwitz, T. A., and Bailey.)
Baird, Andrew C., et al. (See Edwards, Eldon J., assignor.)
Baker, John S., New Orleans, La. Score card holder or writing tablet. 1,894,146; Jan. 10.
Baldwin, William A., Panora, Iowa. Bolster and stake construction. 1,893,878; Jan. 10.
Balcs, James E., Aurora, assignor, by mesne assignments, to Standard Oil Company, Chicago, Ill. Service lubricating cart. Des. 89,006; Jan. 10.
Balian, Abrahams, Los Angeles, Calif. Making a coated frozen confection. 1,893,513; Jan. 10.
Ball, Albert P., assignor to Briggs Manufacturing Company, Detroit, Mich. Adjustable seat assembly. 1,893,531; Jan. 10.
Ball, Albert P., assignor to Briggs Manufacturing Company, Detroit, Mich. Truck body construction. 1,893,532; Jan. 10.
Baninger, John H., assignor to The New Departure Manufacturing Company, Bristol, Conn. Bearing mounting. 1,893,836; Jan. 10.
Banks, Charles M., Philadelphia, Pa. Release valve. 1,893,757; Jan. 10.
Barber, George H., New Rochelle, N. Y., assignor to Bond Electric Corporation, Jersey City, N. J. Flash light bottom cap. 1,894,147; Jan. 10.
Barber, Hugh B., assignor to Surface Combustion Corporation, Toledo, Ohio. Gas burner. 1,893,533; Jan. 10.
Barksdale, Irving S., Greenville, S. C. Bacteriacide and making same. 1,893,997; Jan. 10.
Barnard, Alfred W. A., and H. Adin, Foxton, assignors of one-half to R. W. Priest, and F. Cumming, Broadway, Palmerston North, New Zealand. Regulating the flow of liquid from containers. 1,893,978; Jan. 10.
Barr and Stroud Limited. (See Barr, Archibald, assignor.)
Barr, Archibald, Anniesland, Glasgow, assignor to Barr and Stroud Limited, Glasgow, Scotland. Topographical stereoscope. 1,894,148; Jan. 10.
Barrere, John P., Nyack, N. Y. Cleaning device for waste or drain pipes. 1,893,979; Jan. 10.

Barrett & Company. (See Robinson, Karl D., assignor.)
Bartling, Friedrich, Hugling, Germany. Conserving granular materials. 1,894,149; Jan. 10.
Barycz, Frank V., Los Angeles, Calif. Controlling apparatus for drilled wells. 1,893,489; Jan. 10.
Barz, Friedrich, Berlin-Friedenau, Germany, assignor to General Electric Company. Electric valve converting apparatus. 1,894,078; Jan. 10.
Barz, Friedrich, Berlin-Lankwitz, Germany, assignor to General Electric Company. Electric valve converting system. 1,894,079; Jan. 10.
Beach & Arthur, Inc. (See Levy, Joseph, assignor.)
Beaumont Iron Works Company. (See Myers, Gordon F., assignor.)
Beckwith, Harry H. (See Woodruff, Frank O., assignor.)
Becze, George. (See Török, G., and Becze.)
Beekley, John S., Charleston, W. Va., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del. Gas analysis. 1,893,490; Jan. 10.
Beers, John R., Bloomfield, N. J. Thermostat switch. 1,894,150; Jan. 10.
Behncke, Martin H. (See Crowther, H. R., and Hawkins, assignors.)
Belcher, Daniel, assignor to Bemis Bro. Bag Co., Minneapolis, Minn. Bag closing machine. 1,893,610; Jan. 10.
Bell, John P., Baltimore, Md. Sprue wire. 1,894,151; Jan. 10.
Bell, Leon M., Portsmouth, Ohio. Pressed in sput. 1,893,980; Jan. 10.
Bell Telephone Laboratories, Incorporated. (See Blount, Nelson, assignor.)
Bell Telephone Laboratories, Incorporated. (See Dawson, Wilfrid L., assignor.)
Bell Telephone Laboratories, Incorporated. (See Cruser, Victor I., assignor.)
Belt, Joseph S. (See Sullivan, Edward G., assignor.)
Belt, Joseph S., Amarillo, Tex. Bath apparatus. 1,893,482; Jan. 10.
Belt, Joseph S., Amarillo, Tex. Refrigerating apparatus and method. 1,893,483; Jan. 10.
Belt, Joseph S., Amarillo, Tex. Heat exchanger. 1,893,484; Jan. 10.
Bemis Bro. Bag Co. (See Belcher, Daniel, assignor.)
Bendix Brake Company. (See Apple, Vincent G., assignor.)
Bendix Research Corporation. (See Havill, Clinton H., assignor.)
Bennett, Owen G., and J. C W. Frazer; said Bennett assignor to Catalyst Research Corporation, Baltimore, Md. Metallic catalyst. 1,893,879; Jan. 10.
Berlinger, Joseph, Company. (See Solomon, Sophia, assignor.)
Berlinger, Joseph, Company. (See van der Does, Jean, assignor.)
Bernstein, Wilburn F., Los Angeles, Calif. Septic indicator. 1,894,015; Jan. 10.
Bieler, Oscar, Pittsburgh, Pa. Counterbalance for drive shafts. 1,893,928; Jan. 10.
Bienenstein, Andreas, assignor to Conklin Pen Company, Toledo, Ohio. Fountain pen desk set. 1,893,534; Jan. 10.
Big Rock Ranch Company. (See Harris, Ford W., assignor.)
Billgren, Otto E., Jersey City, N. J. Pipe stand and cleaner. 1,894,080; Jan. 10.
Billner, Karl P., assignor to The Aerocrete Corporation of America, New York, N. Y. Concrete arch bridge. 1,893,491; Jan. 10.
Biological Engineering Laboratories. (See Lorens, A. J., and Hartman, assignors.)
Birkenmaier, Theodore, assignor to W. N. Matthews Corporation, St. Louis, Mo. Guy guard. 1,893,981; Jan. 10.
Black, Lee J., Beaumont, Tex. Quick detachable pitman. 1,893,485; Jan. 10.
Black, Lee J., Beaumont, Tex. Shock absorber for rotatable elements. 1,893,486; Jan. 10.
Black, Lee J., Beaumont, Tex. Bottom hole choke for oil wells. 1,893,487; Jan. 10.
Blake, Benjamin F., deceased, Marion, by The Hoover Company, North Canton, Ohio, assignee. Suction cleaner agitator. Re18,712; Jan. 10.
Bloch, Max, Frankfort-on-the-Main, Germany. Machine for steeping pelts. 1,893,758; Jan. 10.
Blount, Nelson, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone desk set. 1,894,016; Jan. 10.
Boda, Joseph E., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Disk harrow. 1,893,641; Jan. 10.
Boeing Airplane Company. (See Minshall, Robert J., assignor.)
Boeing Airplane Company. (See Monteith, C. N., Kylstra, and Minshall, assignors.)
Borgs Manufacturing Corporation. (See Ghent, William E., assignor.)
Bohmker, John C., Kankakee, Ill. Incubator. 1,893,694; Jan. 10.
Bolens, Harry W., Port Washington, Wis. Chair irons. 1,893,929; Jan. 10.
Bolz, Charles, Pleasant Grove, N. J. Collapsible tube dispensing means. 1,894,152; Jan. 10.
Bond Electric Corporation. (See Barber, George H., assignor.)
Boomershine, Adam, assignor of one-half to G. W. Nicholas, Dayton, Ohio. Dispensing apparatus. 1,893,725; Jan. 10.
Bortner, Norman S., Baltimore, Md. Perimeter delineator. 1,893,793; Jan. 10.
Bostwick, Henry C., assignor to The Akron Standard Mold Company, Akron, Ohio. Vulcaniser. 1,894,017; Jan. 10.
Boulanger, Anthony D. and F. P. Hubrich, assignors of one-third to F. D. Boulanger, 2d., Ridgefield Park, N. J. Razor blade stropper. 1,893,642; Jan. 10.
Bourquin, Georges, assignor to Leutheric, Societe Anonyme, Paris, France. Powder dispenser. 1,893,880; Jan. 10.
Bouwers, Albert, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. X-ray tube. 1,893,759; Jan. 10.
Bové, Ramon, Bayside, N. Y. Hair waving device. 1,893,794; Jan. 10.
Bowman, George. (See Stevenson, J. F., and Bowman.)
Boyajian, Aram, Pittsfield, Mass., assignor to General Electric Company. Voltage regulating system. 1,893,760; Jan. 10.
Bradley, Theodore F., Westfield, N. J., assignor to American Cyanamid Company, New York, N. Y. Wrinkled. finished coating. 1,893,611; Jan. 10.
Bradley, Theodore F., Westfield, assignor to Ellis-Foster Company, Montclair, N. J. Ester resin product and making same. 1,893,982; Jan. 10.
Braner, Stephen W., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill. Gasket. 1,893,881; Jan. 10.
Brandt, David G., Westfield, N. J., assignor, by mesne assignments, to Foster Wheeler Corporation, New York, N. Y. Pipe still furnace. 1,894,215; Jan. 10.
Brandtjen, Henry A., assignor to Brandtjen and Kluge, Inc., St. Paul, Minn. Heating appliance for printing presses. 1,894,018; Jan. 10.
Brandtjen and Kluge, Inc. (See Brandtjen, Henry A., assignor.)
Brasier, Oscar H., Tacoma, Wash. Toy savings bank. 1,893,726; Jan. 10.
Breaker, Harry O., assignor to Industrial Furnace Corporation, Buffalo, N. Y. Annealing box. 1,893,930; Jan. 10.
Bridier, Fernand, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,948; Jan. 10.
Bridier, Fernand, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,006; Jan. 10.
Bridier, Fernand, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,007; Jan. 10.
Brietzke, Adrian P., assignor to Moto Meter Gauge & Equipment Corporation, Toledo, Ohio. Pressure gauge. 1,894,153; Jan. 10.
Briggs Manufacturing Company. (See Ball, Albert P., assignor.)
Brill, John L., Charleston, W. Va., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del. Process and apparatus for catalytic gaseous reactions. 1,893,492; Jan. 10.
Brocius, Lawrence E., Summerville, Pa. Change over device. 1,893,576; Jan. 10.
Brockman, Oscar, Louisville, Ky. Shoe sole. Des. 89,021; Jan. 10.
Brodsky, Michel, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,022; Jan. 10.
Bromfeld, Louis, Bronx, N. Y. Handbag and the like. 1,893,931; Jan. 10.
Brooks, Charles E., St. Louis County, Mo. Propeller. 1,894,081; Jan. 10.
Broughton, Denis McD., London, England. Relay. 1,893,856; Jan. 10.
Brown Instrument Company, The. (See Poole, Foster M., assignor.)
Brown, Russell L., Lowell, Mass., assignor, by mesne assignments, to Fitger California Company, Los Angeles, Calif. Cleaning wool and other allied fibers. 1,894,154; Jan. 10.
Bryan, Joseph M., and B. Smartt, Indianapolis, Ind.; said Smartt assignor to said Bryan. Self-lubricating bearing. 1,894,082; Jan. 10.
Buchan, Hugh G., assignor to Buchan Telephone Records Company, Philadelphia, Pa. Pamphlet binding back. 1,893,727; Jan. 10.
Buchan Telephone Records Company. (See Buchan, Hugh G., assignor.)
Buchanan, Michael K., Ocean View, Va. Ice cube pan lifter. 1,893,535; Jan. 10.
Buck, Charles M., Brooklyn, N. Y. Pulverized fuel feeder. 1,893,857; Jan. 10.
Buckeye Steel Castings Company, The. (See Orr, Claude L., assignor.)
Buckley, John P., Washington, D. C. Aircraft signaling. 1,894,019; Jan. 10.
Buhrle, Paul, Bronx, assignor to United Metal Goods Mfg. Co., Inc., Brooklyn, N. Y. Clock case or similar article. Des. 89,030; Jan. 10.

Bullis, Fred J., Chicago, Ill., assignor to Auto Specialties Manufacturing Company, San Francisco, Calif. Jack. 1,893,728; Jan. 10.
Burch, Leslie F., Los Angeles, Calif. Hairpin. 1,893,514; Jan. 10.
Burford, James C., Winston-Salem, N. C. Lubricator. 1,893,536; Jan. 10.
Burke, Arthur R., assignor of one-half to O. Longlo, Rochester, Minn. Toy clock. 1,893,882; Jan. 10.
Burkhardt, Jacob R. (See Powell, J. W., and Burkhardt.)
Burns, Archibald, M. (See Friendly, H. M., and Burns.)
Burns, Fred J., Saginaw, Mich., assignor to Columbia Mills, Inc., New York, N. Y. Intermediate support for Venetian blind tilt rails. 1,894,216; Jan. 10.
Burrell, Harold P., Nutley, N. J., assignor to MacArthur Concrete Pile Corporation, New York, N. Y. Composite pile. 1,893,515; Jan. 10.
Burton, Roy, Salem, Oreg. Marker. 1,894,155; Jan. 10.
Butusov, Emil P., Hollywood, assignor of one-half to D. Lewy, Chicago, Ill. Elevator signaling system. Re18,709; Jan. 10.
Bylington, James A., Orlando, Fla. Packing box press. 1,894,156; Jan. 10.
Byrnes, Clarence P., trustee. (See James, Joseph H., assignor.)
Caille Motor Company. (See Smith, Theodore L., assignor.)
Caldwell, Frank W., Dayton, Ohio, assignor, by mesne assignments, to Hamilton Standard Propeller Company. Propeller. 1,893,612; Jan. 10.
Call, Reginald L., assignor to The Charles Parker Company, Meriden, Conn. Fixture support. 1,893,729; Jan. 10.
Cameron, William J. (See Grothe, Arthur A., assignor.)
Campbell, Charles D., Springdale, Ark. Side dressing machine. 1,894,157; Jan. 10.
Carborundum Company, The. (See Cowie, Harry J., assignor.)
Card, Frederic M., Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine for joining fabrics. 1,893,577; Jan. 10.
Carey, Daniel J., Eaton Park, Fla. Separating minerals. 1,893,578; Jan. 10.
Carey, Philip, Manufacturing Company, The. (See Moeller, William J., assignor.)
Carey Salt Company. (See Kershner, George, assignor.)
Carlson, Harry, Chicago, Ill. Scale. 1,893,858; Jan. 10.
Carnes, Robert E., Greenville, S. C. Heating system. 1,893,643; Jan. 10.
Carter, Alva J., assignor to Carter Radio Company, Chicago, Ill. Switch. 1,893,613; Jan. 10.
Carter Radio Company. (See Carter, Alva J., assignor.)
Carter, Russell S., Hewlett, N. Y. Fountain pen. 1,893,579; Jan. 10.
Case, J. I., Company. (See Boda, Joseph E., assignor.)
Case, J. I., Company. (See Ceraldson, Gerald, assignor.)
Caspari, Rudolph, Uerdingen-Niederrhein, Germany, assignor, by mesne assignments, to General Aniline Works, Inc., New York, N. Y. Manufacture of chromium oxide and chromium hydroxide. 1,893,761; Jan. 10.
Catalyst Research Corporation. (See Bennett, O. G., assignor, and Fraser.)
Cement Gun Company. (See Talbot, Lyman R., assignor.)
Central Republic Bank and Trust Company of Illinois et al., executors. (See Friendly, H. M., and Burns.)
Central Scientific Company. (See Harrington, Ertle L., assignor.)
Central Scientific Company. (See Klopsteg, Paul E., assignor.)
Chance, Thomas M., Merion, Pa. Valve gear for coal washers and concentrators and operating same. 1,894,020; Jan. 10.
Chaney, Franklin V., Boston, Mass., assignor to Dust Guards, Inc. Dust guard. 1,893,516; Jan. 10.
Chaney, Jonathan O., North Hollywood, Calif. Top rack for automobiles. 1,894,083; Jan. 10.
Chaney, Newcomb K., Lakewood, Ohio, assignor to National Carbon Co., Inc. Treatment of alimentary products. 1,894,158; Jan. 10.
Chapman, Roy McK., Erwin, Tenn. Inflatable cleaning and dyeing last for shoes. 1,893,795; Jan. 10.
Chapman, William H., Montclair, N. J., assignor to General Motors Corporation, Detroit, Mich. Grinding machine. 1,893,837; Jan. 10.
Chappell, Marvin L. (See Halloran, R. A., and Chappell.)
Charles, Mabel R, San Diego, Calif. Lamp. 1,893,780; Jan. 10.
Chase Delmar D., Scotia, N. Y., assignor to General Electric Company. System of distribution. 1,894,084; Jan. 10.
Checker Cab Manufacturing Corporation. (See Kuensel, S H Hunter, assignor.)
Chemical Works formerly Sandos. (See Knecht, O., and Wirth, assignors.)
Cheney, Charles W., Birmingham, England. Press tool for fixing attaché case locks and similar fastenings. 1,893,493; Jan. 10.
Chenoweth, Jesse W., assignor of one-half to E. M. Hicks, Lebanon, Ind. Equalizing chassis. 1,893,695; Jan. 10.
Choate, Roy E., Cedar Rapids, Iowa. Draft appliance. 1,893,983; Jan. 10.
Christen, Marcel, Woodside, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,023; Jan. 10.
Cincinnati Milling Machine Company, The. (See Ernst, Hans, assignor.)
Cincinnati Car Corporation, The. (See Warhus, Oliver F., assignor.)
Clark, Allan J., and W. H. Todd, Lead, S. Dak. Apparatus for the recovery of gold. 1,894,159; Jan. 10.
Clark, Harry O., Philadelphia, Pa. Brake mechanism controlled by steering means. 1,894,160; Jan. 10.
Cleveland Tractor Company, The. (See Heaslet, James G., assignor.)
Clifford, Albert M., Stow, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Age resistor. 1,894,230; Jan. 10.
Clifford, Albert M., Stow, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Antioxidant. 1,894,231; Jan. 10.
Coe, George B., Waterbury, Conn., assignor, by mesne assignments, to Tube Reducing Corporation, Wilmington, Del. Apparatus for reducing metal stock. 1,894,232; Jan. 10.
Coleman, Roy E., Meriden, Conn. Acoustic device. 1,893,796; Jan. 10.
Colicchio, Nicola. (See Rossi, D., and Colicchio.)
Collet, Mark W., Philadelphia, Pa. Automatic parachute pack releaser. 1,893,618; Jan. 10.
Colley, Russell S., Kent, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Wheel chock. 1,893,580; Jan. 10.
Colton, James H., Berkeley, Calif., assignor to Pacific Portland Cement Company, Consolidated. Manufacturing Portland cement. 1,893,696; Jan. 10.
Columbia Mills, Inc. (See Burns, Fred J., assignor.)
Combier & Co. Inc. (See Megros, Georges, assignor.)
Communication Patents, Inc. (See Nicolson, Alexander McL., assignor.)
Conklin Pen Company. (See Bienenstein, Andreas, assignor.)
Conley, Arthur W., Shaker Heights, Ohio. Air conditioning and circulating device. 1,894,085; Jan. 10.
Coran, Jack J., St. Louis, Mo. Metatarsal arch support. 1,893,697; Jan. 10.
Corcoran-Brown Lamp Company, The. (See Hyatt, Samuel W., assignor.)
Cornell, Ulysses G., Lincoln, Nebr. Film record. 1,894,021; Jan. 10.
Corson, Michael G., Jackson Heights, N. Y., assignor to Electro Metallurgical Company. Alloy. 1,893,984; Jan. 10.
Cortigiano, Louis M., Waterbury, assignor of one-half to P. D. Hippolitus, Bridgeport, Conn. Automatic jack. 1,894,086; Jan. 10.
Coryell, Charles. (See Komarek, G., MacPhail, and Coryell.)
Couch, Roydon O., Grant, Fla. Low-head rotary pump. 1,893,614; Jan. 10.
Court, Benjamin F., Long Beach, Calif. Oil clarifier. 1,893,581; Jan. 10.
Cowan, Harry L., Los Angeles, Calif. Projecting machine. Des. 88,949; Jan. 10.
Cowie, Harry J., Niagara Falls, Canada, assignor to The Carborundum Company, Niagara Falls, N. Y. Stone cutting implement. 1,894,087; Jan. 10.
Crane Co. (See Zinkil, R. H., and Stine, assignors.)
Crapo, John B., Wakefield, N. H. Hot water bottle attachment. 1,894,161; Jan. 10.
Crespinel, William T., assignor to Multicolor, Ltd., Los Angeles, Calif. Method and apparatus for placing sound records in color photography. 1,893,698; Jan. 10.
Cross, Walter M., Kansas City, Mo., assignor to Gasoline Products Company, Inc., Jersey City, N. J. Oil heating furnace. 1,893,731; Jan. 10.
Crosthwait, David N., jr., assignor to C. A. Dunham Company, Marshalltown, Iowa. Exhausting mechanism. 1,893,883; Jan. 10.
Crowther, Harry R., and S. W. Hawkins, Cuyahoga Falls, assignor of one-third to Martin H. Behncke, Akron, Ohio. Steam generating system. 1,894,217; Jan. 10.
Cruikshank, James W., Pittsburgh, Pa., assignor, by mesne assignments, to Pilkington Brothers Limited, Lancashire, England. Polishing glass. 1,893,985; Jan. 10.
Cruser, Victor I., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Container. 1,894,022; Jan. 10.
Cruze, George R., Danville, Pa. Fastening device for sheet metal structures. 1,893,587; Jan. 10.
Cullen, Harry E. (See Monson, E. G., and Cullen.)
Cumming, Fergus, et al. (See Barnard, A. W. A., and Adin, assignors.)
Currie, James N., J. H. Kane, and A. Finlay, assignors to Charles Pfizer & Company, Brooklyn, N. Y. Producing gluconic acid by fungi. 1,893,819; Jan. 10.
Cutler, Charles L., Springfield, Mass. Game board. 1,893,732; Jan. 10.
Cutler-Hammer Inc. (See Giard, Eugene A., assignor.)
Dalmer, Otto, and C. Diehl, Darmstadt, Germany. New chlorine derivative and process for making same. 1,894,162; Jan. 10.
Dal Porto, Charles F., Vallejo, Calif. Signal light switch. 1,894,163; Jan. 10.
Darlington, Homer T., West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America. Apparatus for treating hydrocarbon and other gases and oils. 1,893,667; Jan. 10.

Davis, Harlow M., Buffalo, N. Y. Merchandise display rack. Des. 88,950; Jan. 10.
Davis, Thomas E., Arlington, Mass. Milk and cream dispenser. 1,893,884; Jan. 10.
Davison, Arthur W., Jamestown, N. Y. Edible receptacle. Des. 88,951; Jan. 10.
Dawson, Wilfrid L., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Circuits for photo-electric cells. 1,894,023; Jan. 10.
Dayton Veneer & Lumber Mills. (See James, Oliver M., assignor.)
Deanesly, Richard M., Berkeley, assignor to Shell Development Company, San Francisco, Calif. Separation of olefines from paraffin hydrocarbons. 1,893,733; Jan. 10.
Deen, James M., Harlan, Iowa, assignor to J. W. Malmquist, Aberdeen, S. Dak. Luggage carrier. 1,893,752; Jan. 10.
De Forest, Lee, assignor to General Talking Picture Corporation, New York, N. Y. Photographic sound reproducing apparatus. 1,894,024; Jan. 10.
De Forest Radio Company. (See Ruffley, Frederick, assignor.)
DeGanahl, Carl, Greenlawn, and N. O. Robinson, Brooklyn, N. Y., assignors to Fleetwings, Inc. Boat hull and reducing the water friction thereupon. 1,894,256; Jan. 10.
Delta Manufacturing Company. (See Tautz, Herbert E., assignor.)
De Mattia, Barthold, Passaic, N. J. Vulcanizing apparatus. 1,893,762; Jan. 10.
Dennison, Lawrence I., Brookfield, and C. F. Dreyer, Oak Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Gauging apparatus. 1,894,025; Jan. 10.
Dent, Harry M., Buffalo, N. Y., assignor to General Plastics, Inc. Making phenolic condensation products. 1,894,088; Jan. 10.
De Reamer, William J., Crown Point, assignor to Mapes Consolidated Manufacturing Company, Griffith, Ind. Molding machine for pulp. 1,894,089; Jan. 10.
Derry, Gardner C., Sharon, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Heat exchange apparatus. 1,894,026; Jan. 10.
Desmarais, Joseph V., New Bedford, Mass. Window construction. 1,893,763; Jan. 10.
Despatis, Roch. (See Pfeffer, Solomon, assignor.)
Deutschmeister, Abraham, New York, N. Y. Advertising carrier. 1,894,027; Jan. 10.
Deutschmeister, Abraham, New York, N. Y. Advertising carrier. 1,894,028; Jan. 10.
Dewey, George D., East Milton, Mass. Device for rocking the bodies of motor vehicles. 1,893,932; Jan. 10.
Diaz, Octaviano, Antofagasta, Chile. Camera. 1,893,668; Jan. 10.
Dicks, Thomas A., assignor to Pittsburgh Screw and Bolt Corporation, Pittsburgh, Pa. Exhaust gas hub. 1,893,820; Jan. 10.
Diehl, Claus. (See Diehl, C., and Dalmer.)
Dieux, Jean, Paris, France. Device for the transformation of electric currents. 1,894,029; Jan. 10.
Ditchfield, Frank, assignor to The Youngstown Steel Door Company, Cleveland, Ohio. Car construction. 1,893,494; Jan. 10.
Doht, Elvin F., Quincy, Ill. Fishing pole carrier. 1,894,164; Jan. 10.
Dolly, James M., Chicago, Ill. Bushing and cylinder reamer. 1,893,885; Jan. 10.
Dotterweich, Andrew J., assignor to Automatic Water Softener Company, Pittsburgh, Pa. Water softening apparatus. 1,893,933; Jan. 10.
Dougherty, Charles F., Tulsa, Okla., assignor to J. J. Larkin, St. Louis, Mo. Casing shoe attachment. 1,894,212; Jan. 10.
Douglas, Fredric E., assignor to Draper Corporation, Hopedale, Mass. Thread cutting temple for looms. 1,893,734; Jan. 10.
Douglas, John G., Leagrave, Luton, England. Steering gear. 1,893,764; Jan. 10.
Dow Chemical Company, The. (See Heath, Sheldon B., assignor.)
Dow Chemical Company, The. (See Stoesser, Wesley C., assignor.)
Dowling, John F., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass feeding machine. 1,894,080; Jan. 10.
Draper Corporation. (See Douglas, Fredric E., assignor.)
Dreyer, Charles F. (See Dennison, L. I., and Dreyer.)
Dreyfuss, Jacques, assignor to the Firm Adria S. A. Galerie du Commerce, Lausanne, Switzerland. Adjustable brace. 1,893,986; Jan. 10.
Drysdale & Company, Limited. (See Drysdale, John W. W., assignor.)
Drysdale, John W. W., assignor to Drysdale and Company, Limited, Yoker, Glasgow, Scotland. Centrifugal pump. 1,894,165; Jan. 10.
Duncan Electric Manufacturing Company. (See Holmes, Frederick, assignor.)
Dunham, C. A., Company. (See Crosthwait, David N., jr., assignor.)
Dünnebier, Max. (See Winkler, A., and Dünnebier.)
Dunning, Samuel G., Cleveland Heights, assignor to The Reliance Electric & Engineering Company, Cleveland, Ohio. Mounting units. 1,893,699; Jan. 10.
Dunsheath, Percy, Sidcup, Kent, assignor to W. T. Henley's Telegraph Works Company Limited, London, England. Extrusion of metal pipes and the like. Re18,710; Jan. 10.
Du Pont, E. I., de Nemours & Company. (See Beekley, John S., assignor.)
Du Pont, E. I., de Nemours & Company. (See Brill, John L., assignor.)
Du Pont, E. I., de Nemours & Company. (See Morton, Francis B., assignor.)
Du Pont, E. I., de Nemours & Company. (See Tyler, C., and Parker, assignors.)
Durward, Eric S., Dallas, Tex., assignor to Shell Petroleum Corporation. Adjustable bottom hole flow bean. 1,893,934; Jan. 10.
Dusinberre, George B., Wellsboro, Pa. Straightener for shoe soles. 1,893,987; Jan. 10.
Dust Guards, Inc. (See Chaney, Franklin V., assignor.)
Eastburn, Thomas B., Bywood, Upper Darby, assignor to I-T-E Circuit Breaker Company, Philadelphia, Pa. Nonclosable circuit breaker. 1,893,615; Jan. 10.
Easy Washing Machine Corporation. (See Ringer, Luther, assignor.)
Eberhard, Rudolf, Munich, Germany. Making coating materials for deoxidation of rust. 1,893,495; Jan. 10.
Eckel, Clarence N. (See Frick, E. H., and Eckel.)
Ederer, Lothar A., assignor to R. J. Ederer Co., Chicago, Ill. Bead stringer. 1,893,538; Jan. 10.
Ederer, R. J., Co. (See Ederer, Lothar A., assignor.)
Edmondson, Ralph S., Elizabeth, and M. Holmes, Hillside, N. J., assignors to American Abrasive Metals Company. Casting abrasive-faced articles. 1,893,539; Jan. 10.
Edmondson, Ralph S., Elizabeth, and M. Holmes, Hillside, N. J., assignors to American Abrasive Metals Company. Casting abrasive faced articles. 1,893,540; Jan. 10.
Edwords, Eldon J., assignor of one-half to A. C. Baird, L. B. Porter, and S. L. Westerman, Detroit, Mich. Manhole catch basin sump. 1,894,031; Jan. 10.
Electric Auto-Lite Company. (See Patterson, Harry R., assignor.)
Electro Metallurgical Company. (See Corson, Michael G., assignor.)
Electro Metallurgical Company. (See Hamilton, W. B., and Evans, assignors.)
Electroncusitic Gesellschaft mit beschränkter Haftung. (See Hecht, H., and Stenzel, assignors.)
Elliott, Henry, Hillhead, Glasgow, Scotland. Support for rolled goods. 1,894,166; Jan. 10.
Ellis, Arthur H., assignor of one-half to Rochester Appliance Company, Rochester, Minn. Automobile attachment. 1,894,233; Jan. 10.
Ellis-Foster Company. (See Bradley, Theodore F., assignor.)
Elmendorf, Armin, Chicago, Ill. Veneered board and making same. 1,893,886; Jan. 10.
Elmendorf, Armin, Chicago, Ill., assignor to The Flexwood Company. Method of gluing thin wood veneer to a backing and flattening the veneer. 1,894,218; Jan. 10.
Elmwall, Gustave W., New York, N. Y. Aeroplane. 1,893,665; Jan. 10.
Emmerlieben, Otto, Berlin, Germany. Highly emissive cathode. 1,893,935; Jan. 10.
Engstrand, Gunnar C., assignor to Sludge Pumping, Inc., New York, N. Y. Oil pumping apparatus. 1,894,234; Jan. 10.
Enlund, Bror D., Degerfors, Sweden, assignor to H. Enlund, Binghamton, N. Y. Determining the contents of a foreign substance. 1,893,700; Jan. 10.
Enlund, Henning. (See Enlund, Bror D., assignor.)
Ericsson, Arvid. (See McGregor, J. M., and Ericsson.)
Erickson, C. N. (See Goodner, Monroe H., assignor.)
Eriksson, Andreas, Chicago, Ill. Power means for aircraft. 1,893,936; Jan. 10.
Erith, Henry C., Sutton, and R. C. Erith, London County, England. Kiln for the heat treatment of materials. 1,894,167; Jan. 10.
Erith, Raymond C. (See Erith, Henry C. and R. C.)
Ernst, Hans, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Hydraulic transformer. 1,893,825; Jan. 10.
Evans, Frederick A. A., London, England. Apparatus for playing race games. 1,893,541; Jan. 10.
Evans, Ralph L., assignor to Zotos Corporation, New York, N. Y. Permanently waving hair. 1,894,032; Jan. 10.
Evans, Thomas A. (See Hamilton, W. B., and Evans.)
Evers, George C., Spokane, Wash. Milk filtering apparatus. 1,893,735; Jan. 10.
Fagerholm Calculators, Limited. (See Fagerholm, Per E., assignor.)
Fagerholm, Per E., Stockholm, Sweden, assignor to Fagerholm Calculators, Limited, London, England. Bomb sight. 1,893,542; Jan. 10.
Fairfield Engineering Company, The. (See Walker, Henry B., assignor.)
Farmer, Robert F., Houston, Tex. Telephone attachment. 1,894,235; Jan. 10.
Farwell, Raymond H., Groton, Conn., assignor to Michell-Crankless Engines Corporation, New York, N. Y. Engine. 1,894,033; Jan. 10.
Federwitz, Theodore A., and W. T. Bailey, assignors to Stokes & Smith Company, Philadelphia, Pa. Conveying system. 1,893,736; Jan. 10.

Fein, Robert, New York, N. Y. Signal light for vehicles. Des. 88,952; Jan. 10.
Felix, Friedrich, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Dyeing of colloids of the cellulose series of the group of cellulose esters or ethers fast greenish yellow tints. 1,893,543; Jan. 10.
Ferguson, Gale L., Cleveland, Ohio, assignor, by mesne assignments, to Westco Pump Corporation, Davenport, Iowa. Pumping apparatus. 1,893,616; Jan. 10.
Ferguson, J. L., Company. (See Ferguson, John L., assignor.)
Ferguson, John L., assignor to J. L. Ferguson Company, Joliet, Ill. Sealer guide adjusting means. 1,894,496; Jan. 10.
Feurer, Robert, assignor to La Nationale S. A., Geneva, Switzerland. Combined cigarette case and lighter. 1,893,765; Jan. 10.
Fieg, Joseph F., LaGrange, assignor to United Screw and Bolt Corporation, Chicago, Ill. Screw head. 1,894,034; Jan. 10.
Filan, Elef, Hay, Wash. Combination tool. 1,893,767; Jan. 10.
Fine, Harry A., College Point, assignor to I. B. Kleinert Rubber Company, New York, N. Y. Attachment for sewing machines. 1,893,582; Jan. 10.
Fink, Colin G., New York, N. Y., assignor to Allegheny Steel Company, Brackenridge, Pa. Improving the resistance of alloy articles to corrosion. 1,893,821; Jan 10.
Finlay, Alexander. (See Currie, J. N., Kane, and Finlay.)
Fitger California Company. (See Brown, Russell L., assignor.)
Fitz Gerald, Alan S., Wynnewood, Pa., assignor to General Electric Company. Electric translation circuits. 1,893,766; Jan. 10.
Fitz Gerald, Alan S., Wynnewood, Pa., and F. L. Gaines, Berkeley, Calif., assignors to General Electric Company. Electric regulator. 1,893,767; Jan. 10.
Fitz Gerald, Alan S., Wynnewood, Pa., assignor to General Electric Company. Electric regulator. 1,893,768; Jan. 10.
Fleetwings, Inc. (See DeGanahl, C., and Robinson, assignors.)
Fleischel, Gaston, Blenean, France. Progressive clutch control for automatic gear shifting systems. 1,893,644; Jan. 10.
Flexwood Company, The. (See Elmendorf, Armin, assignor.)
Flood, Oscar S., assignor to Sellstrom Manufacturing Company, Chicago, Ill. Portable guard. 1,893,617; Jan. 10.
Forbes, Henry C., assignor to General Motors Radio Corporation, Dayton, Ohio. Coupling device. 1,893,618; Jan 10.
Forgrove Machinery Company, Limited, The. (See Grover, Frederick, assignor.)
Foster, Charles W., Kansas City, Mo. Washing machine. 1,983,797; Jan. 10.
Foster Wheeler Corporation. (See Brandt, David G., assignor.)
Foster Wheeler Corporation. (See Primrose, John, assignor.)
Foster Wheeler Corporation. (See Primrose, J., and Swanson, assignors.)
Fowler, Morris G., C. R. Kusell, and O. C. Ralston, assignors to United Verde Copper Company, Clarkdale, Ariz. Metallurgy of complex ores. 1,893,798; Jan. 10.
Fraser, Joseph C. W. (See Bennett, O. G., and Fraser.)
Fredsell, Charles E., New York, assignor to McDonald Engineering Corporation, Brooklyn, N. Y. Labeling machine. 1,893,826; Jan. 10.
Freeman Furniture Factories, Inc. (See Kelly, Gooding N., assignor.)
French, James O., Los Angeles, Calif. Level. 1,893,988; Jan. 10.
Frick, Emory H., and C. N. Eckel, Cincinnati, Ohio, assignors to Worthington Pump and Machinery Corporation, New York, N. Y. Pattern for sheaves or pulleys. 1,893,583; Jan. 10.
Friedrich, Edward. (See Friedrich, George E., assignor.)
Friedrich, George E., assignor to E. Friedrich, San Antonio, Tex. Refrigerator. 1,893,769; Jan. 10.
Friendly, Herbert M., deceased, and A. M. Burns, Portland, Oreg.; said Burns assignor to said Friendly, M. S. Frinedly, and Central Republic Bank and Trust Company of Illinois, executors. Toll telephone switching apparatus. 1,894,090; Jan. 10.
Friendly, Milton S., et al., executors. (See Friendly, H. M., and Burns.)
Frigidaire Corporation. (See Schmieding, Warren H. F., assignor.)
Fritsche, Carl B., assignor to Aircraft Development Corporation, Detroit, Mich. Airship mooring method and apparatus. 1,893,584; Jan. 10.
Fumarol, John A., Omaha, Nebr. Grave marker. Des. 88,953; Jan. 10.
Furgason, Claude E., assignor to Reo Motor Car Company, Lansing, Mich. Brake and clutch lever. 1,893,544; Jan. 10
Gaines, Francis L. (See Fitz Gerald, A. S., and Gaines.)
Galer, Robert E., assignor to Minute Electric Broiler, Seattle, Wash. Electric broiler. 1,893,989; Jan. 10.
Gannett, Danforth K., Jackson Heights, N. Y., assignor to American Telephone and Telegraph Company. Alternating current amplifier. 1,893,845; Jan. 10.
Gantner & Mattern Company. (See Gantner, Vallejo, assignor.)
Gantner, Vallejo, assignor to Gantner & Mattern Company, San Francisco, Calif. Sweater. Des. 88,954; Jan. 10.
Garbe, Ernst A., Berlin-Lichterfelde, Germany. Disinfecting medium and manufacturing the same. 1,893,770; Jan. 10.
Garbell, Max, Chicago, Ill. Toy gun. 1,893,701; Jan. 10.
Gardiner, John B. W., New York, N. Y. Method and apparatus for coating pipes. 1,893,937; Jan. 10.
Gardner, Henry A., Washington, D. C. Modifying the characteristics of pigments, and product. 1,894,168; Jan. 10.
Garman, George W., Scotia, N. Y., assignor to General Electric Company. Electric regulator. 1,893,771; Jan. 10.
Garman, George W., Scotia, N. Y., assignor to General Electric Company. Electrical regulator. 1,893,772; Jan. 10.
Gasoline Products Company, Inc. (See Cross, Walter M., assignor.)
Gastrich, Gustav, assignor to Textile Machine Works, Wyomissing, Pa. Knitted fabric. Des. 88,955; Jan. 10.
Gaudin, Antoine M., Butte, Mont. Separation of minerals by flotation. 1,893,517; Jan. 10.
Gearing, Charles A., Bellwood, Ill. Flag. Des. 88,956; Jan. 10.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Temperature control system for electromechanical oscillators. 1,893,666; Jan. 10.
Gebruder Brehmer. (See Klemm, Rudolf, assignor.)
General Aniline Works, Inc. (See Caspari, Rudolph, assignor.)
General Aniline Works, Inc. (See Haller, J., and Taube, assignors.)
General Aniline Works Inc. (See Holzach, K., and von Rosenberg, assignors.)
General Aniline Works, Inc. (See Kracker, H., and Thoma, assignors.)
General Aniline Works, Inc. (See Krzikalla, Hans, assignor.)
General Aniline Works, Inc. (See Nawiasky, P., and Krause, assignors.)
General Aniline Works, Inc. (See Sander, Ludwig, assignor.)
General Electric Company. (See Adams, Lester V., assignor.)
General Electric Company. (See Barz, Friedrich, assignor.)
General Electric Company. (See Boyajian, Aram, assignor.)
General Electric Company. (See Chase, Delmar D., assignor.)
General Electric Company. (See Fitz Gerald, Alan S., assignor.)
General Electric Company. (See Fitz Gerald, A. S., and Gaines, assignors.)
General Electric Company. (See Garman, George W., assignor.)
General Electric Company. (See Hackett, Harold N., assignor.)
General Electric Company. (See Hall, Chester L., assignor.)
General Electric Company. (See Janisch, Leopold, assignor.)
General Electric Company. (See Kerr, Thomas, assignor.)
General Electric Company. (See Kienle, Roy H., assignor.)
General Electric Company. (See Lyman, Harold T., jr., assignor.)
General Electric Company. (See Marcellus, Fredrick S., assignor.)
General Electric Company. (See Miller, Phillips, assignor.)
General Electric Company. (See Mittag, Albert H., assignor.)
General Electric Company. (See McNeil, Roderick S., assignor.)
General Electric Company. (See Pollard, E. V., and Somes, assignors.)
General Electric Company. (See Pratt, William H., assignor.)
General Electric Company. (See Prince, David C., assignor.)
General Electric Company. (See Rice, C. W., and Kellogg, assignors.)
General Electric Company. (See Schaefer, Edward J., assignor.)
General Electric Company. (See Stone, Charles W., assignor.)
General Electric Company. (See Thompson, Louis W., assignor.)
General Electric Company. (See Tonks, Lewi, assignor.)
General Electric Company. (See Wideröe, Rolf, assignor.)
General Motors Corporation. (See Chapman, William H., assignor.)
General Motors Corporation. (See Hutchinson, P. H., and Klopak, assignors.)
General Motors Radio Corporation. (See Forbes, Henry C., assignor.)
General Plastics, Inc. (See Dent, Harry M., assignor.)

General Talking Pictures Corporation. (See De Forest, Lee, assignor.)
Geraldson, Gerald, assignor to J. I. Case Company, Racine, Wis. Earth working implement. 1,893,619; Jan. 10.
Gerhardt, Harry F., Chicago, Ill. Refreshment stand. Des. 88,957; Jan. 10.
Gervais, Donat. (See Saucier, Edward E., assignor.)
Getchell, Benjamin E., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Electric switch. 1,893,827; Jan. 10.
Ghent, William E., assignor to Boggs Manufacturing Corporation, Atlanta, N. Y. Grading machine. 1,893,938; Jan. 10.
Gianni, Francesco, assignor of one-half to Allessandro Salvi, Milan, Italy. Soft coating metals to be submitted to cold deformations. 1,894,169; Jan. 10.
Giard, Eugene A., Shorewood, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electron tube. 1,893,887; Jan. 10.
Gibbs, George E., assignor to American Reenforced Paper Company, Attleboro, Mass. Reenforced paper. 1,894,219; Jan. 10.
Gilbert, Levi L., Muskegon, Mich. Sheet for sanitary and surgical purposes and making the same. 1,893,669; Jan. 10.
Gill, Edwin R., sr., Yonkers, N. Y. Electric current rectifying device. 1,894,035; Jan. 10.
Gillian, Herman, Coshocton, Ohio. Glove and the production thereof. 1,894,091; Jan. 10.
Gilligan, John J., Brooklyn, N. Y., and H. R. Starr, Metuchen, N. J. Telegraph typewriter pasting platform. 1,893,518; Jan. 10.
Ginn, Everett W., administrator. (See Kikstrom, Oskar W., assignor.)
Ginn, Percy E. (See Wikstrom, Oskar W., assignor.)
Glaenzer, Harry, Philadelphia, Pa. Ash pan for locomotives. 1,894,170; Jan. 10.
Gleason, Carl E., and M. A. Martin, Watsonville, Calif. Compensating valve. 1,893,859; Jan. 10.
Gleason Works. (See Johanson, Magnus H., assignor.)
Gledhill, Walter, Huddersfield, England. Rising-and-falling shuttle box and like motions for looms for weaving. 1,893,546; Jan. 10.
Glenn, Edward R., Philadelphia, Pa. Garment hanger support. 1,893,702; Jan. 10.
Globe Machine & Stamping Company. (See Green, Lee B., assignor.)
Globe Slicing Machine Co. (See Porter, George G., assignor.)
Godfrey, Elmore, M., jr., Knoxville, Tenn. Holder support for hand assembling valve stems and pneumatic tubes. 1,893,645; Jan. 10.
Goldberger, Hugo, assignor to Noveltex, Inc., New York, N. Y. Apron. Des. 88,958; Jan. 10.
Goldberger, Hugo, assignor to Noveltex, Inc., New York, N. Y. Apron. Des. 88,959; Jan. 10.
Goldberger, Hugo, assignor to Noveltex, Inc., New York, N. Y. Apron. Des. 88,960; Jan. 10.
Goldwyn, George L., Chicago, Ill. Bag. 1,893,888; Jan. 10.
Good, Palmer, River Forest, Ill. Surgical head lamp. 1,893,773; Jan. 10.
Goodman, Louis, San Francisco, Calif., assignor to State Holding Co., Inc. Grease gun. 1,893,738; Jan. 10.
Goodman Manufacturing Company. (See Lindgren, Frank A., assignor.)
Goodner, Monroe H., assignor to C. N. Erickson, Glendale, Calif. Resuscitator and the like. 1,893,670; Jan. 10.
Goodrich, B. F., Company, The. (See Colley, Russell S., assignor.)
Goodrich Electric Company. (See Saaf, Dirk G., assignor.)
Goodyear Tire & Rubber Company, The. (See Clifford, Albert M., assignor.)
Goodyear Tire & Rubber Company, The. (See Mallory, Gerald D., assignor.)
Goodyear Tire & Rubber Company, The. (See Musselman, Alvin J., assignor.)
Goodyear Tire & Rubber Company, The. (See White, Will T., assignor.)
Goodyear Tire & Rubber Company, The. (See Woodward, Alva W., assignor.)
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,961; Jan. 10.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,962; Jan. 10.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,963; Jan. 10.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,964; Jan. 10.
Gottesman, Joseph M., Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,024; Jan. 10.
Graeme, Charles G., Buffalo, N. Y., assignor to J. H. Wells. Machine for separating and counting coins. 1,893,828; Jan. 10.
Graham, John S., Berkeley, Calif. Vehicle signal. 1,893,547; Jan. 10.
Grant, John. (See Aloi, Millio F., assignor.)
Gray, Fred D., Herkimer, N. Y., assignor to Holed-Tite Packing Corporation. Apparatus and method of drying pulp articles. 1,893,497; Jan. 10.
Green, Joshua, Dalston, London, assignor, by direct and mesne assignments, to Malenite Industries Limited, London, England. Veneering. 1,894,171; Jan. 10.
Green, Lee B., Lakewood, assignor to Globe Machine & Stamping Company, Cleveland, Ohio. Automobile radiator shell with louver-type grille. Des. 88,965; Jan. 10.
Greene, John S., and P. Landrock, Rochester, N. Y., assignors to Photostat Corporation, Providence, R. I. Print treating apparatus. 1,894,092; Jan. 10.
Griffin, James J., West Orange, N. J. Score and tally device. 1,894,093; Jan. 10.
Gropper Sport Apparel Co., Inc. (See Spector, Benjamin, assignor.)
Grossman, Morris, New York, N. Y. Manufacturing metallic coated products. 1,893,939; Jan. 10.
Grothe, Arthur A., Oak Park, assignor to W. J. Cameron, Chicago, Ill. Actuating mechanism for an electric safety razor. 1,893,620; Jan. 10.
Grover, Frederick, assignor to The Forgrove Machinery Company, Limited, Leeds, England. Wrapping machine. 1,893,990; Jan. 10.
Grozow, Ben, Kansas City, Mo. Garment hanger. 1,893,519; Jan. 10.
Grulich, Anton, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,966; Jan. 10.
Guerini, Annibale A., Bronx, N. Y. Butter spreader. 1,893,889; Jan. 10.
Guerriero, Anthony, Brooklyn, N. Y. Automobile turn frame. 1,893,822; Jan. 10.
Gunn, Earl G., Racine, assignor to The Nash Motors Company, Kenosha, Wis. Brake. 1,894,036; Jan. 10.
Guthrie, Robert G., and O. J. Wilbor, assignors to Peoples Gas By-Products Corporation, Chicago, Ill. Apparatus for determining the moisture content of gases. 1,894,172; Jan. 10.
Gutmann, John, jr., St. Albans, assignor, by mesne assignments, to Motor Jack Corp., New York, N. Y. Jacking apparatus. 1,893,890; Jan. 10.
Haag, John F., Weatherford, Okla. Cow pea harvester. 1,893,860; Jan. 10.
Hackett, Harold N., Ballston Lake, N. Y., assignor to General Electric Company. Flange coupling. 1,894,094; Jan. 10.
Haeuber, Hans. (See Winkler, F., and Haeuber.)
Haines, John R., Vincentown, assignor to Arrow Safety Device Company, Inc., Mount Holly, N. J. Rear motor vehicle signal. 1,894,173; Jan. 10.
Hall, Chester I., Philadelphia, Pa., assignor to General Electric Company. Relay control device. 1,894,095; Jan. 10.
Haller, Josef, Wiesdorf-on-the-Rhine, and C. Taube, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs on the fiber and new compositions of matter. 1,893,991; Jan. 10.
Halliwell, John J., Tuckahoe, assignor to R. Hoe & Co., Inc., New York, N. Y. Paper roll control. 1,893,891; Jan. 10.
Halliwell-Shelton Electric Corporation. (See Unger, Ernest G., assignor.)
Halloran, Ralph A., Berkeley, and M. L. Chappell, Los Angeles, assignor to Standard Oil Company of California, San Francisco, Calif. Manufacturing lubricating oil. 1,893,774; Jan. 10.
Hamilton, John W. H., New York, N. Y. Combination magazine and book rack or the like article. Des. 88,967; Jan. 10.
Hamilton Standard Propeller Company. (See Caldwell, Frank W., assignor.)
Hamilton, Walter B., Birkdale, and T. A. Evans, Whitefield, England, assignors to Electro Metallurgical Company, New York, N. Y. Production of metals and alloys by reduction. 1,893,992; Jan. 10.
Hammerly, Herman J., Wallingford, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Inclosed switch. 1,893,829; Jan. 10.
Hammond, John H., jr., Gloucester, Mass. Piano with reaction loud speaker. 1,893,892; Jan. 10.
Hammond, John H., jr., Gloucester, Mass. Piano with loud speaker on secondary sound boards. 1,893,893; Jan. 10.
Hammond, John H., jr., Gloucester, Mass. Sounding board. 1,893,894; Jan. 10.
Hammond, John H., jr., Gloucester, Mass. Musical instrument. 1,893,895; Jan. 10.
Hammond, John H., jr., Gloucester, Mass. Regenerative piano. 1,893,940; Jan. 10.
Hansen, Christian J., Essen-on-the-Ruhr, Germany, assignor, by mesne assignments, to the Koppers Company of Delaware, East Pittsburgh, Pa. Treating thiocyanates. 1,894,252; Jan. 10.
Hansen, Christian S., Medford, assignor of one-half to O. W. H. Wendler, Melrose, Mass. Mechanical movement. 1,893,621; Jan. 10.
Hardy, Henry F., Ottawa, Ontario, Canada. Sleeping bag and the like. 1,893,548; Jan. 10.
Harrington, Ertle L., Saskatoon, Saskatchewan, Canada, assignor to Central Scientific Company, Chicago, Ill. Laboratory support. 1,893,799; Jan. 10.

Harris, Ford W., assignor to Big Rock Ranch Company, Los Angeles, Calif. Side-loading hearse with fixed turntable. 1,893,739; Jan. 10.
Harshberger, Norman P., Chicago, Ill. Shingle machine. 1,894,037; Jan. 10.
Harth, John H., Mendota, Ill. Automobile brake tester. 1,894,174; Jan. 10.
Hartman, Frank E. (See Lorens, A. J., and Hartman.)
Hassall, John, Inc. (See Smith, Theodore B., assignor.)
Havill, Clinton H., South Orange, assignor to Bendix Research Corporation, East Orange, N. J. Propeller. 1,893,861; Jan. 10.
Hawkins, Sylvanues W. (See Crowther, H. R., and Hawkins.)
Hawksworth, David W., Birmingham, and S. J. Stone, assignors to Hutchins Car Roofing Company, Detroit, Mich. Car roof. 1,893,549; Jan. 10.
Hazeltine Corporation. (See Whitman, Vernon E., assignor.)
Health-O-Meter Company, The. (See Weber, Mathias J., assignor.)
Heaslet, James G., Shaker Heights, assignor to The Cleveland Tractor Company, Cleveland, Ohio. Steering lever control. 1,893,776; Jan. 10.
Heath, Sheldon B., assignor to The Dow Chemical Company, Midland, Mich. Purification of calcium chlorate. 1,893,740; Jan. 10.
Hecht, Heinrich, Kiel, and H. Stenzel, Berlin, assignors to Electroacustic Gesellschaft mit beschränkter Haftung, Kiel, Germany. Arrangement for direction transmission and reception with a plurality of oscillators. 1,893,741; Jan. 10.
Hecox, Emery D., Columbus, Ohio. Apparatus for producing musical tones and sounds. 1,893,838; Jan. 10.
Heftler, Victor R., Detroit, Mich., assignor to Societe du Carbureteur Zenith, Lyon, France. Carburetor. 1,893,896; Jan. 10.
Heidman, Paul G., Detroit, Mich., assignor to National Hellofloor Company. Floor construction. 1,893,742; Jan. 10.
Hemeon, James R., assignor to Thermoid Rubber Company, Trenton, N. J. Flexible coupling disk. 1,894,175; Jan. 10.
Henderson, James B., Lee, England. Gyroscopic steering indicator or controller. 1,894,038; Jan. 10.
Henley's, W. T., Telegraph Works Company Limited. (See Dunsheath, Percy, assignor.)
Henry & Wright Manufacturing Company, The. (See Allen, Frederick C., assignor.)
Henry & Wright Manufacturing Company, The. (See Sherman, Cortis F., assignor.)
Hentschel, Ernest R., deceased, Washington, D. C.; J. Olson, administrator, assignor to Wired Radio, Inc., New York, N. Y. Volume control system. 1,893,671; Jan. 10.
Hercules Powder Company. (See Humphrey, Irvin W., assignor.)
Herzog, Carl, Irvington, N. J. Bottle washing device. 1,893,498; Jan. 10.
Hibner, Ole, Cleveland, Ohio. Therapeutic arc lamp. 1,893,703; Jan. 10.
Hicks, Earl M. (See Chenoweth, Jesse W., assignor.)
Hill, C. V. & Co. (See Stollsteimer, Frederick J., assignor.)
Hill, Frank F., assignor to Union Oil Company of California, Los Angeles, Calif. Apparatus for the straight drilling of wells. 1,894,039; Jan. 10.
Hippolitus, Paul D. (See Cortigiano, Louis M., assignor.)
Hirsch, Jacob, Erie, Pa. Foldable rack. 1,894,176; Jan. 10.
Hirsch, Jacob H., assignor to Automatic Burner Corporation, Chicago, Ill. Pipe-closure device. 1,893,993; Jan. 10.
Hirshman, Joseph, Brooklyn, N. Y. Covered container. 1,893,743; Jan. 10.
Hoague-Sprague Corporation. (See Knowlton, Cutler D., assignor.)
Hoe, R., & Co., Inc. (See (Halliwell, John J., assignor.)
Hogan, William F., Wildwood, N. J. Flag holder and support therefor. 1,893,585; Jan. 10.
Holed-Tite Packing Corporation. (See Gray, Fred D., assignor.)
Holmes, Frederick, assignor to Duncan Electric Manufacturing Company, Lafayette, Ind. Electricity meter service installation. 1,893,550; Jan. 10.
Holmes, Mathew. (See Edmondson, R. S., and Holmes.)
Holsach, Karl, Ludwigshafen-on-the-Rhine, and G. von Rosenberg, Mannheim, Germany, assignors to General Aniline Works Inc., New York, N. Y. Azo dyestuffs and complex metal compounds thereof. 1,893,646; Jan. 10.
Home, Hugo, Essen-Ruhr, Germany. Shock absorber for vehicles. 1,893,800; Jan. 10.
Hoover Cimpany, The. (See Blake, Benjamin F., assignor.)
Hopkins, Selden G., Washington, D. C., assignor to MacElhone Methods, Inc., Binghamton, N. Y. Ice cream cone. 1,893,941; Jan. 10.
Horsley, George F., Norton-upon-Tees, England, assignor to Imperial Chemical Industries Limited. Increasing the ethylene content of ethylene containing gaseous mixtures. 1,894,586; Jan. 10.
Hott, Ion V. K., assignor to The Joyce-Cridland Company, Dayton, Ohio. Lifting mechanism. 1,894,040; Jan. 10.
Houghton, Harry W., Glen Echo, Md., assignor to Safety Fumigant Company, Boston, Mass. Fumigant gas producing composition. 1,894,041; Jan. 10.
Howard, John L., Columbus, Ohio. Vending machine. Des. 88,968; Jan. 10.
Howard, Stanley R., Milton, assignor to Pneumatic Scale Corporation Limited, Quincy, Mass. Weighing machine. 1,893,622; Jan. 10.
Hubrich, Frank P. (See Boulanger, A. D., and Hubrich.)
Huffman, Samuel C., Lincoln, Nebr. Storage file. 1,893,801; Jan. 10.
Hull, Monroe R., Anaconda, Mont. Pump. 1,893,776; Jan. 10.
Hummer, Charles W., Brooklyn, N. Y. Toy vehicle. 1,893,897; Jan. 10.
Humphrey, Irvin W., Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del. Producing paracymene. 1,893,802; Jan. 10.
Hutchins Car Roofing Company. (See Hawksworth, D. W., and Stone, assignors.)
Hutchinson, Orrin F. (See Mau, E. A., and Hutchinson.)
Hutchinson, Philip H., Montclair, and J. Klopak, Newark, N. J., assignors to General Motors Corporation, Detroit, Mich. Article feeding machine. 1,893,839; Jan. 10.
Hyatt, Samuel W., Connersville, Ind., assignor, by mesne assignments, to The Corcoran-Brown Lamp Company, Cincinnati, Ohio. Ash receiver. 1,893,704; Jan. 10.
I. G. Farbenindustrie Aktiengesellschaft. (See Mittasch, A., Wietzel, and Pfaundler, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Naumann, M., and Schlecht, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pier, M., and Anthes, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schmidt, Otto, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Wietzel, G., and Schiller, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Winkler, F., and Haeuber, assignors.)
I-T-E Circuit Breaker Company. (See Eastburn, Thomas B., assignor.)
I-X-L Metal Spring Cover Company. (See Kuechle, Herbert G., assignor.)
Imhoff, Karl, Essen, Germany. Sewage purification. 1,893,623; Jan. 10.
Imperial Chemical Industries Limited. (See Horsley, George F., assignor.)
Imperial Chemical Industries Limited. (See Weil, Jacob A., assignor.)
Industrial Furnace Corporation. (See Breaker, Harry O., assignor.)
International Banding Machine Company. (See Radzinsky, Harry, assignor.)
International Harvester Company. (See Johnston, Edward A., assignor.)
International Harvester Company. (See Slonneger, John C., assignor.)
International Harvester Company. (See Welty, Albert B., assignor.)
Jackson, Walter C., assignor to Tingley Reliance Rubber Corporation, Rahway, N. J. Spring for reenforcing clamping devices. 1,893,975; Jan. 10.
Jahn, Reinhard. (See Prönnecke, Walter, assignor.)
James, Enoch R. (See James, Lee G., H. E., and E. R.)
James, Harry E. (See James, Lee G., H. E., and E. R.)
James', Inc. (See James, Lee G., H. E., and E. R., assignors.)
James, Joseph H., Pittsburgh, assignor to Clarence P. Byrnes, trustee, Sewickley, Pa. Soap product and making same. 1,894,096; Jan. 10.
James, Joseph H., Pittsburgh, assignor to Clarence P. Byrnes, trustee, Sewickley, Pa. Making solvents. 1,894,097; Jan. 10.
James, Lee G., H. E., and E. R., Atlantic City, N. J. Machine for producing candy confection. 1,893,672; Jan. 10.
James, Lee G., H. E., and E. R., Atlantic City, assignors to James', Inc., Atlantic City, N. J. Machine for manufacturing confections. 1,893,673; Jan. 10.
James, Oliver M., assignor to Dayton Veneer & Lumber Mills, Dayton, Tenn. Basket. 1,894,236; Jan. 10.
Janisch, Leopold, Berlin, Germany, assignor to General Electric Company. Controller. 1,894,098; Jan. 10.
Jaques, Fernando O., Providence, R. I. Forming tooth crowns. 1,893,520; Jan. 10.
Jay, Webb, Port Washington, N. Y. Container and supporting unit. 1,893,624; Jan. 10.
Jeavons, William R., Cleveland Heights, and M. J. Rentschler, Willoughby, Ohio. Treating metals. 1,893,499; Jan. 10.
Jenkins, Charles F., assignor to Jenkins Laboratories, Washington, D. C. Gaseous light-valve. 1,894,042; Jan. 10.
Jenkins Laboratories. (See Jenkins, Charles F., assignor.)
Jensen, James A., assignor to Quaker City Iron Works, Philadelphia, Pa. Safety valve for gasoline tanks and the like. 1,893,942; Jan. 10.
Jensen, John, assignor to Whitney Metal Tool Company, Rockford, Ill. Foot press. 1,893,705; Jan. 10.
Joham, Charles W., Los Angeles, Calif. Artificial leaf. 1,893,500; Jan. 10.
Johanson, Magnus H., assignor to Gleason Works, Rochester, N. Y. Tool mechanism for gear cutting machines. 1,893,943; Jan. 10.
Johansson, Charles H., Texas City, Tex. Bin alarm switch. 1,893,862; Jan. 10.

Johnson, Charles O., Brittatorp, Sweden. Motor propelled surfing apparatus or aquaplane. 1,893,994; Jan. 10.

Johnson Fare Box Company. (See Thompson, Ernst H., assignor.)

Johnson, Frank R., Seattle, Wash. Forming designs. 1,893,944; Jan. 10.

Johnston, Charles H., Steubenville, Ohio. Safety lock. 1,894,177; Jan. 10.

Johnston, Edward A., Chicago, Ill., assignor to International Harvester Company. Tapered roller bearing. 1,894,099; Jan. 10.

Jones Chemical Company. (See Jones, Coulter W., assignor.)

Jones, Coulter W., Shreveport, assignor to Jones Chemical Company, McDade, La. Treating brines. 1,893,744; Jan. 10.

Jones, Frank S., Philadelphia, Pa. Piston cylinder. 1,894,043; Jan. 10.

Jones, Montgomery O., and W. P. Shomsker, Richmond, Va. Feeding mechanism. 1,894,044; Jan. 10.

Josias, Jacob, Brooklyn, N. Y. Catamenial bandage. 1,893,745; Jan. 10.

Joyce-Cridland Company, The. (See Hott, Ion V. K., assignor.)

Jung, Heinrich. (See Schmidt, H., and Jung.)

Jung, Karl, Berlin, Germany. Bearing for accurately running shafts using ball bearings. 1,893,995; Jan. 10.

Jurs, Henry C., Alliance, Ohio. Furnace. 1,893,898; Jan. 10.

Kadow, August, assignor to Owens-Illinois Glass Company, Toledo, Ohio. Method of and apparatus for making glass tubes. 1,894,100; Jan. 10.

Kahellek, Harold. (See McGregor, Mildred, assignor.)

Kamen, Aaron, and H. Kamen, Brooklyn, N. Y. Sleeve. 1,894,045; Jan. 10.

Kamen, Herman. (See Kamen, Aaron and H.)

Kammer, William F., Wenatchee, Wash. Airplane landing ski. 1,893,647; Jan. 10.

Kane, Jasper H. (See Currie, J. N., Kane, and Finlay.)

Kannel, Charles, Endicott, N. Y. Method and apparatus for tanning leather. 1,893,706; Jan. 10.

Kantor, James, assignor to The Liquid Carbonic Corporation, Chicago, Ill. Propeller for bottle filling machines. 1,893,746; Jan. 10.

Kappler, Emil M. (See Schmidt, Friedrich, assignor.)

Karshner, George C., Detroit, Mich. Tree fertilizer. 1,893,707; Jan. 10.

Kaselitz, Oscar, Berlin, Germany. Production of potassium nitrate. 1,893,945; Jan. 10.

Kaselitz, Oscar, Berlin, Germany. Production of calcium nitrate. 1,893,946; Jan. 10.

Kask, Alexander, San Mateo, Calif. Combined table and bookcase. 1,893,551; Jan. 10.

Kauffman, Irvin H., Detroit, and A. M. Williams, Dearborn, Mich. Dispensing apparatus. 1,893,708; Jan. 10.

Kaumagraph Company. (See Lawrence, Winthrop S., assignor.)

Keller, Charles G., Hyde Park, N. Y. Vehicle wheel. 1,893,947; Jan. 10.

Kellogg, Edward W. (See Rice, C. W., and Kellogg.)

Kelly, Gooding N., assignor, by mesne assignments, to Freeman Furniture Factories, Inc., Chicago, Ill. Table. 1,894,220; Jan. 10.

Kennedy, Howard L., assignor to Kennedy Manufacturing Company, Van Wert, Ohio. Tote box. 1,893,747; Jan. 10.

Kennedy Manufacturing Company. (See Kennedy, Howard L., assignor.)

Kennedy Manufacturing Company. (See Shriver, Harry P., assignor.)

Kerns, Adolf, Gonzales, Calif. Agricultural implement. 1,893,863; Jan. 10.

Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Baffle support. 1,893,803; Jan. 10.

Kerr, Thomas, Schenectady, N. Y., assignor to General Electric Company. Machine center. 1,894,101; Jan. 10.

Kershner, George, assignor to Carey Salt Company, Hutchinson, Kans. Hydraulic salt press. 1,893,996; Jan. 10.

Keusen, Peter, Dusseldorf, assignor to Autogenwerk Sirius Gesellschaft mit beschränkter Haftung, Dusseldorf-Eller, Germany. Production of gases from carbides and water. 1,893,777; Jan. 10.

Kienle, Roy H., Schenectady, N. Y., assignor to General Electric Company. Resinous condensation products and making them. 1,893,873; Jan. 10.

Killam Gas Burner Company. (See Killam, Gaston B., assignor.)

Killam, Gaston B., assignor to Killam Gas Burner Company, Denver, Colo. Gas burner. 1,893,587; Jan. 10.

King, Catherine C., Bronxville, N. Y. Worktable for invalids. 1,893,552; Jan. 10.

Kitts, Sara M., Lima, Ohio. Washing machine. 1,894,178; Jan. 10.

Kleinert, I. B., Rubber Company. (See Fine, Harry A., assignor.)

Klemm, Rudolf, assignor to Gebruder Brehmer, Leipsig-Plagwitz, Germany. Paper feeding. 1,893,778; Jan. 10.

Klopak, Joseph. (See Hutchinson, P. H., and Klopak.)

Klopsteg, Paul E., assignor to Central Scientific Company, Chicago, Ill. Thermoelectric device. 1,893,748; Jan. 10.

Klopsteg, Paul E., assignor to Central Scientific Company, Chicago, Ill. Viscosity apparatus. 1,893,749; Jan. 10.

Klotz, Wilhelm, Dusseldorf, Germany. Door-key attachment. 1,893,948; Jan. 10.

Knecht, Oscar, and T. Wirth, assignors to the Firm Chemical Works formerly Sandoz, Basel, Switzerland. Manufacture of monoazo-dyestuffs. 1,893,553; Jan. 10.

Knowlton, Cutler D., Beverly, assignor to Hoague-Sprague Corporation, Lynn, Mass. Box-making machine. 1,893,554; Jan. 10.

Kocher, Philip, Baltimore, Md. Comb. 1,893,864; Jan. 10.

Koehring Company. (See Lichtenberg, E. H., and Nelson, assignors.)

Koehring Company. (See Robb, John F., assignor.)

Koller, Kurt, Koenigsberg, Germany. Couch bed. 1,893,949; Jan. 10.

Komarek, Gustav, Chicago, Ill., G. MacPhail, and C. Coryell, Bay City, Mich. Manufacturing briquettes. 1,893,555; Jan. 10.

Koppers Company, The. (See Hansen, Christian J., assignor.)

Kopperstein, Louis, New York, N. Y. Deodorizing and disinfecting apparatus. 1,893,648; Jan. 10.

Kracker, Herbert, and E. Thoma, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs and material dyed with them. 1,893,556; Jan. 10.

Kraemer, Paul, jr., Jersey City, N. J. Adjustable neckband and collar sizing and ironing board. 1,894,046; Jan. 10.

Kramer, Marcel D., New York, N. Y. Lady's watch. 1,893,899; Jan. 10.

Krause, Arthur. (See Nawiasky, P., and Krause.)

Krawitz, Nathan, Philadelphia, Pa. Power transmission mechanism. 1,893,501; Jan. 10.

Krzikalla, Hans, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Metal compounds of an O-Hydroxyazo dyestuff. 1,893,557; Jan. 10.

Kubes, John P., Cleveland, Ohio. Crate. 1,894,179; Jan. 10.

Kuechle, Herbert G., assignor, by mesne assignments, to I-X-L Metal Spring Cover Company, Milwaukee, Wis. Spring cover. 1,893,950; Jan. 10.

Kuehn, Arthur E., Portland, Oreg. Intake manifold for motors. 1,893,502; Jan. 10.

Kuenzel, S H Hunter, assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Guard for automobile doors. 1,894,102; Jan. 10.

Kuenzel, S H Hunter, assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Convertible vehicle body. 1,894,103; Jan. 10.

Kuhlman, Carl H., Toledo, Ohio. Humidity factor telethermometer. 1,894,104; Jan. 10.

Kuhn, Frank, assignor to American Electrical Heater Company, Detroit, Mich. Thermostatic control for electric heaters. 1,893,558; Jan. 10.

Kühner, Otto, Goppingen, Germany. Sheet metal press. 1,893,951; Jan. 10.

Kumagai, Minoru, Osaka, Japan. Oil feeding apparatus for internal combustion engines. 1,893,649; Jan. 10.

Kupfer, Louis E., Chicago, Ill. Toy. 1,894,105; Jan. 10.

Kuzell, Charles R. (See Fowler, M. G., Kuzell, and Ralston.)

Kylstra, John. (See Monteith, C. N., Kylstra, and Minshall.)

L'Air Liquide, Societe Anonyme pour l'Etude & l'Exploitation des Procedes Georges Claude. (See Lants, Henri, assignor.)

Lake Erie Chemical Company, The. (See Spring, Alva F., assignor.)

La Montagne Machine Company. (See La Montagne, Patrick P., assignor.)

La Montagne, Patrick P., assignor to La Montagne Machine Company, Kankakee, Ill. Stocking and stocking web. 1,893,588; Jan. 10.

La Montagne, Patrick P., assignor to La Montagne Machine Company, Kankakee, Ill. Knitting machine. 1,893,589; Jan. 10.

"La Nationale S. A." (See Feurer, Robert, assignor.)

Land, Charles H., Grosse Pointe, assignor to Mechanical Development Company, Detroit, Mich. Shock absorber. 1,893,625; Jan. 10.

Landrock, Paul. (See Greene, J. S., and Landrock.)

Langlo, Oscar. (See Burke, Arthur R., assignor.)

Lants, Henri, assignor to l'Air Liquide, Societe Anonyme Pour l'Etude & l'Exploitation des Procedes Georges Claude, Paris, France. Separation of gaseous mixtures by liquefaction. 1,894,180; Jan. 10.

Larkin, John J. (See Dougherty, Charles F., assignor.)

Lawrence, Winthrop S., Brooklyn, assignor to Kaumagraph Company, New York, N. Y. Transferring designs and transfer composition. 1,893,626; Jan. 10.

Lebert, Alfred, Dusseldorf, Germany. Tool and apparatus for leveling cylindrical surfaces from grinding disks. 1,894,181; Jan. 10.

Lee, Arthur L. (See Peterson, R. S., and Lee.)

Legat, Robert C., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn. Separable fastener. 1,893,828; Jan. 10.

Lehrack, Otto J., Mission Township, Johnson County, Kans. Crushing and mixing machine. 1,894,106; Jan. 10.

Lentheric, Societe Anonyme. (See Bourquin, Georges, assignor.)

Lesikar, John J., Temple, Tex. Cotton cleaning device for cotton gins. 1,894,182; Jan. 10.

Levitt, David D., Rochester, N. Y. Catapult for game apparatus. 1,893,865; Jan. 10.

Levy, Joseph, Brooklyn, N. Y., assignor, by mesne assignments, to Beach & Arthur, Inc., Indianapolis, Ind. Container. Re18,711; Jan. 10.

Levy, Lucien, Paris, France. Superheterodyne receiving system. 1,893,779; Jan. 10.

Levy, Robert J., New York, N. Y. Knit sweater. Des. 89,019; Jan. 10.

Lewy, Daniel. (See Butusov, Emil P., assignor.)

Libert, Marcel, Paris, France. Textile fabric or similar article. Des. 89,008; Jan. 10.

Lichtenberg, Erich H., and W. A. Nelson, assignors to Koehring Company, Milwaukee, Wis. Subgrade planer. 1,893,559; Jan. 10.

Lightoller Co. (See Moser, Carl, assignor.)

Lilley, Daniel G., assignor of one-half to A. J. O'Brien, Denver, Colo. Hydraulic propeller. 1,894,047; Jan. 10.

Lilley, Daniel G., assignor of one-half to A. J. O'Brien, Denver, Colo. Variable pitch propeller. 1,894,048; Jan. 10.

Lilly, Eli, and Company. (See Walden, George B., assignor.)

Lindgren, Frank A., assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,893,952; Jan. 10.

Lindner, John H., South Pittsburgh, Pa. Hold fast shoe lace fastener. 1,894,183; Jan. 10.

Liquid Carbonic Corporation, The. (See Kantor, James, assignor.)

Littlefield, Edgar E., Los Angeles, Calif. Valves and their operation. 1,893,627; Jan. 10.

Loewe, Siegmund, and E. Römhild, Berlin, Germany. Electron valve with centered heater. 1,893,953; Jan. 10.

Loewy, Raymond G. F., New York, N. Y. Windshield. 1,893,709; Jan. 10.

Lombardo, Anthony, Brooklyn, N. Y. Bridge watch. Des. 88,969; Jan. 10.

Loomis, Chauncey C., Lenox, Mass. Treatment of dolomitic stone. 1,894,184; Jan. 10.

Lorenz, Anthony J., and F. B. Hartman, assignors to Biological Engineering Laboratories, Chicago, Ill. Humidifier. 1,893,954; Jan. 10.

Lozelle, Dolph, Detroit, Mich. Reenforcing rod holder. 1,893,998; Jan. 10.

Lück, Willibald, New York, N. Y. Adjustable protractor. 1,894,107; Jan. 10.

Ludlow Manufacturing Associates, trustees. (See Stone, M. B., and Williamson, assignors.)

Luftschiffbau Zeppelin Gesellschaft mit beschrankter Haftung. (See Schirmer, Max, assignor.)

Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,970; Jan. 10.

Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,971; Jan. 10.

Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 88,972; Jan. 10.

Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 89,009; Jan. 10.

Lukas, Julia, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,973; Jan. 10.

Lykken, Henry G., Minneapolis, Minn. Fluid impeller. 1,893,710; Jan. 10.

Lyle, James C., and R. W. Messmore, Daytona Beach, Fla. Oil burner. 1,893,674; Jan. 10.

Lyman Harold T., jr., Schenectady, N. Y., assignor to General Electric Company. Electric regulator. 1,893,780; Jan. 10.

Lyman, Harold T., jr., assignor to General Electric Company, Schenectady, N. Y. Electric regulator. 1,893,781; Jan. 10.

Lynd, Andrew R. (See Richardson, D. E., and Lynd.)

Lyons, Richard, Lambertville, N. J. Brooder stove. 1,894,108; Jan. 10.

MacArthur Concrete Pile Corporation. (See Burrell, Harold P., assignor.)

MacElhone Methods, Inc. (See Hopkins, Selden G., assignor.)

MacGillis & Gibbs Company. (See Monson, E. G., and Cullen, assignors.)

Machado, William, Reno, Nev. Cradle for lifeboats. 1,893,866; Jan. 10.

Mackenzie, George W., Beaver, Pa. Movable signal for automotive vehicles. Des. 88,974; Jan. 10.

Mackie, Charles H., assignor of one-half to Augustus L. Merolle, Brooklyn, N. Y. Cigarette package. 1,894,221; Jan 10.

MacPhail, George. (See Komarek, G., MacPhail, and Coryell.)

Mahone, George A., Baltimore, Md. Radio system. 1,893,675; Jan. 10.

Majewics, Constanty, Dearborn, Mich. Vehicle wheel of the wire spoke type. Des. 88,975; Jan. 10.

Malby, Seth G., Tenafly, N. J., assignor to Aluminum Company of America, Pittsburgh, Pa. Making valve castings. 1,893,711; Jan. 10.

Malenite Industries Limited. (See Green, Joshua, assignor.)

Mallory, Gerald D., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Breaker strip. 1,894,237; Jan. 10.

Malmquist, John W. (See Deen, James M., assignor.)

Malmquist, John W. (See Shelton, Roy M., assignor.)

Malmquist, John W., Aberdeen, S. Dak. Automobile trunk. 1,893,750; Jan. 10.

Malmquist, John W., Aberdeen, S. Dak. Combined trunk and luggage carrier for automobiles. 1,893,751; Jan. 10.

Mapes Consolidated Manufacturing Company. (See DeBeamer, William J., assignor.)

Marcel, Francois R., Brooklyn, N. Y. Curling iron. 1,893,503; Jan. 10.

Marcellus, Frederick S., Scotia, N. Y., assignor to General Electric Company. Temperature measurement. 1,894,109; Jan. 10.

Marcellus, Frederick S., Scotia, N. Y., assignor to General Electric Company. Temperature measurement. 1,894,110; Jan 10.

Marcellus, Frederick S., Scotia, N. Y., assignor to General Electric Company. Light beam instrument. 1,894,111; Jan. 10.

Maris, Harry B., Riverdale, Md. Television scanning disk. 1,893,676; Jan. 10.

Marschner, Martin. (See von Girsewald, C., Siegens, and Marschner.)

Marsden, John R., Philadelphia, Pa. Mixing bowl. 1,893,628; Jan. 10.

Marshall Field & Company. (See Reist, Emily M., assignor.)

Marshall, Leslie H., assignor to The Technimet Company, Columbus, Ohio. Production of coated malleable iron castings. 1,893,782; Jan. 10.

Martin, Fred M., Beatrice, Nebr. Filing rack. 1,894,185; Jan. 10.

Martin, John F., assignor to United American Bosch Corporation, Springfield, Mass. Magneto. 1,893,840; Jan. 10.

Martin, Melvin A. (See Gleason, C. E., and Martin.)

Mason, John A., Burlingame, Calif. Rose. Pl. Pt. 52; Jan. 10.

Massé, Joseph H., Montreal, Quebec, Canada. Index holder. 1,893,999; Jan. 10.

Masson, Paul. (See McCarthy, P. N., and Masson.)

Masterson, William E., and H. Price, Borger, Tex., assignors of one-third to H. R. Rogers, Denver, Colo. Electric motor. 1,893,629; Jan 10.

Mathews Conveyer Company. (See Anderson, Martin J., assignor.)

Mathieson Alkali Works, Inc., The. (See Taylor, Maurice C., assignor.)

Matthews, W. N., Corporation. (See Birkenmaier, Theodore, assignor.)

Mau, Edward A., Arlington, N. J., and O. F. Hutchinson, assignors to Rockbestos Products Corporation, New Haven, Conn. Insulating wire. 1,893,590; Jan. 10.

Maynard, Albert E., assignor to American Optical Company, Southbridge, Mass. Surfacing machine. 1,893,955; Jan. 10.

McCall Company. (See Parsons, Donald H., assignor.)

McCarthy, Philip N., Gatineau Mills, and P. Masson, Wrightville, Quebec, Canada, assignors, by mesne assignments, to Pope Appliance Corporation, Portland, Me. Mechanism for winding paper into rolls. 1,894,253; Jan. 10.

McCauliff, Eugene, jr. (See Bacharach, G., and McCauliff.)

McClintock, O. B., Company. (See McClintock, Oliver B., assignor.)

McClintock, Oliver B, assignor to O. B. McClintock, Company, Minneapolis, Minn. Temporary cut-out switch for vault ventilators. 1,893,900; Jan. 10.

McCord, Clarence O., Cresco, Iowa. Windshield wiper. 1,894,186; Jan. 10.

McDonald Engineering Corporation. (See Fredsell, Charles R., assignor.)

McDonell, Frank W., et al. (See Riggs, Alger S., assignor.)

McFadden, Benjamin C., New Kensington, assignor to Aluminum Company of America, Pittsburgh, Pa. Tread plate. Des. 88,976; Jan. 10.

McGregor, John M., and A. Ericcson, assignors to Signode Steel Strapping Company, Chicago, Ill. Sealing tool. 1,893,901; Jan. 10.

McGregor, Mildred, assignor of one-half to H. Kahellek, Fernwood, Idaho. Electrical swivel connection. 1,894,187; Jan. 10.

McLaughlin, Dennis J. (See Solem, P., and McLaughlin.)

McMillan Book Company. (See Reynolds, Reginald M., assignor.)

McMillan Book Company. (See Unger, Paul O., assignor.)

McNeil, Roderick S., Bridgeport, Conn., assignor to General Electric Company. Extension outlet. 1,894,112; Jan. 10.

McWhirter, William C., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Automatic crossing gate. 1,893,824; Jan. 10.

Meachem, Harry, Teaneck, N. J., assignor to Todd Dry Dock Engineering & Repair Corporation, Brooklyn, N. Y. Liquid fuel combustion. 1,893,902; Jan. 10.

Mechanical Development Company. (See Land, Charles H., assignor.)

Megros, Georges, Bronxville, assignor to Combier & Co. Inc., New York, N. Y. Textile fabric or the like. Des. 89,010; Jan. 10.

Mergenthaler Linotype Company. (See Albrecht, Christian A., assignor.)

Merolle, Augustus L. (See Mackie, Charles H., assignor.)

Merritt, Malcolm, Fort Wayne, Ind., assignor to The Western Gas Construction Company. Return bend for pipe coils. 1,893,841; Jan. 10.

Messer, William E., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treatment of rubber. 1,893,630; Jan. 10.

Messmore, Richmond W. (See Lyle, J. C., and Messmore.)

Mesta Machine Company. (See Wood, Frank J., assignor.)

Metallgesellschaft Aktiengesellschaft. (See Von Girsewald, C., Siegens, and Marschner, assignors.)

Metzner, Albert W. (See Sherman, J. Q., and Metzner.)

Mexican American Hat Company. (See Ostolaza, Frank, assignor.)

Michaels, Frank L., Covington, Ky. Store front coupling. 1,893,956; Jan. 10.

Michell-Crankless Engines Corporation. (See Farwell, Raymond H., assignor.)

Milestone, Walter E., Lakewood, Ohio. Liquid dispensing apparatus. 1,893,843; Jan. 10.

Miller, Arthur F., Bartlett, Ill. Quack grass digger. 1,893,867; Jan. 10.

Miller, Philip S., Scotia, N. Y., assignor to General Electric Company. Manganese resinate. 1,894,113; Jan. 10.

Miller, Willard D., El Paso, Tex. Bottle. Des. 88,977; Jan. 10.

Minshall, Robert J. (See Montieth, C. N., Kylstra, and Minshall.)

Minshall, Robert J., assignor to Boeing Airplane Company, Seattle, Wash. Arresting hook for airplanes. 1,893,591; Jan. 10.

Minute Electric Broiler. (See Galer, Robert E., assignor.)

Mirafuentes, Alfonso F., Guadalupe, Mexico. Tonsorial device. 1,894,188; Jan. 10.

Mitchell Camera Corporation. (See Mitchell, George A., assignor.)

Mitchell, George A., assignor to Mitchell Camera Corporation, West Hollywood, Calif. Camera focusing mechanism. 1,893,712; Jan. 10.

Mittag, Albert H., Schenectady, N. Y. Electric power converting apparatus. 1,894,114; Jan. 10.

Mittasch, Alwin, Mannheim, R. Wietzel, Ludwigshafen-on-the-Rhine, and Conrad Pfaundler, Oppau, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Heat treating hydrocarbons at an elevated temperature. 1,893,804; Jan. 10.

Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Tube for heat exchange devices. 1,893,521; Jan. 10.

Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Air heating device. 1,893,631; Jan. 10.

Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heat exchange unit. 1,893,650; Jan. 10.

Modine Manufacturing Company. (See Modine, Arthur B., assignor.)

Moeller, William J., Mount Healthy, Ohio, assignor to The Philip Carey Manufacturing Company. Asbestos cement building material. 1,893,783; Jan. 10.

Monson, Edwin G., and H. E. Cullen, Minneapolis, Minn., assignors to MacGillis & Gibbs Company, Milwaukee, Wis. Pole puncturing machine. 1,894,049; Jan. 10.

Monteith, Charles N., J. Kylstra, and R. J. Minshall, assignors to Boeing Airplane Company, Seattle, Wash. Pursuit airplane. Des. 88,978; Jan. 10.

Moore, John W., assignor to The Autofont Company, Detroit, Mich. Dispensing apparatus. 1,893,632; Jan. 10.

Morris, Della M. (See Roberts, Charles H., assignor.)

Morrison, Lee B., Portland, Oreg. Refrigerator cabinet. 1,893,805; Jan. 10.

Mortenson, Gustav M., Kane, Pa. Automobile locking means. 1,894,189; Jan. 10.

Morton, Allen W., assignor to American Hammered Piston Ring Company, Baltimore, Md. Piston ring. 1,894,000; Jan. 10.

Morton, Francis B., Parlin, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Coating composition. 1,894,050; Jan. 10.

Morton, Harold A., Akron, Ohio. Vulcanization of rubber. 1,893,868; Jan. 10.

Morton, Harold A., Akron, Ohio. Vulcanizable compound and preparing same. 1,893,869; Jan. 10.

Mortrude, William E., jr., Seattle, Wash. Electrical treatment cabinet. Des. 88,979; Jan. 10.

Moser, Carl, assignor to Lightoiler Co., New York, N. Y. Lighting fixture head. Des. 88,980; Jan. 10.

Moto Meter Gauge & Equipment Corporation. (See Brietzke, Adrian, assignor.)

Motor Devices, Incorporated. (See Trail, Herbert H., assignor.)

Motor Jack Corp. (See Gutmann, John, jr., assignor.)

Mullins, Fred J., Piedmont, Calif. Fish handling device. 1,893,903; Jan. 10.

Multicolor, Ltd. (See Crespinel, William T., assignor.)

Murnane, Daniel J., assignor to Non Pressure Glazing Company, Burbank, Calif. Plate glass holding bar. 1,893,713; Jan. 10.

Murphy, Michael F., Newark, N. J. Plural chambered collapsible tube. 1,894,115; Jan. 10.

Musheno, Fred G., Schuylkill Haven, Pa., assignor to Allegheny Steel Company. Grinding apparatus. 1,893,806; Jan. 10.

Musselman, Alvin J., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Hub assembly for wheel tires. 1,894,238; Jan. 10.

Mutscheller, Arthur, New York, N. Y., assignor to Wappler Electric Company, Inc. Control system for hot cathode vacuum tubes. 1,894,051; Jan. 10.

Myers, Gordon F., assignor to Beaumont Iron Works Company, Beaumont, Tex. Cooling means for draw works for well drilling machinery. 1,894,001; Jan. 10.

Myers, Herbert B., Little Rock, Ark. Coin assorting and counting machine. 1,894,190; Jan. 10.

N. V. Philips' Gloeilampenfabrieken. (See Bouwers, Albert, assignor.)

Nash Motors Company, The. (See Gunn, Earl G., assignor.)

Nash Motors Company, The. (See Wahlberg, Nils E., assignor.)

National Carbon Co. (See Chaney, Newcomb K., assignor.)

National Heliofloor Company. (See Heidman, Paul G., assignor.)

Naugatuck Chemical Company, The. (See Messer, William E., assignor.)

Naumann, Max, and L. Schlecht, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of molybdenum and tungsten carbonyls. 1,894,239; Jan. 10.

Nau-Touron, Albert, Grasse, France. Textile apparatus. 1,894,052; Jan. 10.

Nawiasky, Paul, and A. Krause, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Dyestuff of the anthraquinone series. 1,894,191; Jan. 10.

Nehf, Charles J., Castle Shannon, Pa. Frozen food packet and manufacturing the same. 1,893,842; Jan. 10.

Nelson, William A. (See Lichtenberg, E. H., and Nelson.)

Newberry, Charles P. Tweedsprult, Orange Free State, Union of South Africa. Carburetor for internal combustion engines. 1,893,560; Jan. 10.

New Departure Manufacturing Company, The. (See Baninger, John H., assignor.)

New Idea Spreader Co., The. (See Oppenheim, Theodore H., assignor.)

Newman, John W., London, England. Sign and the like. 1,894,240; Jan. 10.

Newman, Louis, New York, N. Y. Hinge. 1,893,592; Jan. 10.

New York Wire Cloth Company. (See Turner, Robert P., assignor.)

Nicholas, Grant W. (See Boomershine, Adam, assignor.)

Nicolson, Alexander McL., assignor to Communication Patents, Inc., New York, N. Y. Arc screen protection system. 1,893,504; Jan. 10.

Noble, Warren, Detroit, Mich. Supercharger casing. 1,894,054; Jan. 10.

Nobbs, George H., Watertown, Mass. Lawn mower. 1,894,053; Jan. 10.

Non Pressure Glazing Company. (See Murnane, Daniel J., assignor.)

Nordberg Manufacturing Company. (See Talboys, Henry H., assignor.)

Norristown Magnesia & Asbestos Company. (See Wilson, Grant V., assignor.)

North American Chemical Company. (See Thoma, Andrew, assignor.)

Noulanger, Frank D., 2d. (See Boulanger, A. D., and Hubrich, assignors.)

Noveltex, Inc. (See Goldberger, Hugo, assignor.)

Nungesser, Philip P., Cleveland Heights, Ohio. Apparatus for collecting and conveying dusts. 1,893,505; Jan. 10.

O'Brien, A. J. (See Lilley, Daniel G., assignor.)

Obst, Elsa M. (See Weber, Erwin I., assignor.)

O'Donnell, Edward M., Galva, Iowa. Process and apparatus for polishing finger nails. 1,893,561; Jan. 10.

Oechsle, Joseph S., Philadelphia, Pa., assignor, by mesne assignments, to Worthington Pump and Machinery Corporation, New York, N. Y. Flexible coupling. 1,893,593; Jan. 10.

Oestreich, Albert R., Coleraine, Minn. Card holder. 1,893,594; Jan. 10.

Ohio Parts Company, The. (See Terrell, Harold C., assignor.)

Oil Corporation of America. (See Darlington, Homer T., assignor.)

Oliver, Chauncey B., Oak Park, Ill., and V. E. Vallet, Detroit, Mich., assignors, by mesne assignments, to Oliver United Filters Inc., San Francisco, Calif. Apparatus and process for making cement. 1,893,522; Jan. 10.

Oliver United Filters Inc. (See Oliver, C. B., and Vallet, assignors.)

Olsen, Fredrich, Dover, N. J. Purification of nitrocellulose. 1,893,677; Jan. 10.

Olson Bros. Saw Manufacturing Co. Inc. (See Olson, William, assignor.)

Olson, John, administrator. (See Hentschel, Ernest R.)

Olson, William, assignor to Olson Bros. Saw Manufacturing Co., Inc., Brooklyn, N. Y. Landing net. 1,894,192; Jan. 10.

Oppenheim, Theodore H., Coldwater, Ohio, assignor to The New Idea Spreader Co. Loader. 1,893,506; Jan. 10.

O-Rigina] Products Incorporated. (See Paulson, Bernard J., assignor.)

Orr, Claude L., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Spring arrangement for car trucks. 1,894,198; Jan. 10.

Ostolaza, Frank, assignor to Mexican American Hat Company, St. Louis, Mo. Hat. 1,894,213; Jan. 10.

Ottenheimer, Reuben E. (See Sherer, William T., assignor.)

Overmeyer, John, New York, N. Y. Textile fabric or similar article. Des. 89,012; Jan. 10.

Overmeyer, John, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,981; Jan. 10.

Overmeyer, John, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,011; Jan. 10.

Overmeyer, John, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,020; Jan. 10.

Overmeyer, John, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,025; Jan. 10.

Overmon, Elmer, Sperry, Okla. Combined steering hitch and automatic brake. 1,894,194; Jan. 10.

Owen, Arthur H., Moberly, Mo. Artificial body member. 1,893,714; Jan. 10.

Owens-Illinois Glass Company. (See Dowling, John F., assignor.)

Owens-Illinois Glass Company. (See Kadow, August, assignor.)

Owens-Illinois Glass Company. (See Rohrich, H. A., and Soubier, assignors.)

Owens-Illinois Glass Company. (See Soubier, Leonard D., assignor.)

Owens-Illinois Glass Company. (See Williams, Percy Q., assignor.)

Paasche, Jens A., Wilmette, Ill. Air painting system and the like. 1893562; Jan. 10.

Pacific Copper and Brass Works Incorporated. (See Travis Bertram C. assignor.)

Pacific Portland Cement Company. (See Colton, James H., assignor.)

Paine, Wilbur V., East Hartford, assignor to The Spencer Turbine Co., Hartford, Conn. Valve outlet fixture. 1,894,222; Jan. 10.

Palkin, Samuel, Washington, D. C., and H. R. Watkins, Somerset Md. Purification and preservation of ether. 1,893,870; Jan. 10.

Pape, William F., Chicago, Ill. Spreader. 1,894,223; Jan. 10.

Paper Service Company, The. (See Rowe, William W., assignor.)

Parker, Charles, Company, The. (See Call, Reginald L., assignor.)

Parker, Frank W. (See Tyler, C., and Parker.)

Parsons, Donald H., Noroton, Conn., assignor to McCall Company, New York, N. Y. Book. 1,894,224; Jan. 10.

Parten, Gustave A., Minneapolis, Minn. Carving machine structure. 1,893,957; Jan. 10.

Parten, Gustave A., Minneapolis, Minn. Carving machine structure. 1,893,958; Jan. 10.

Patterson, Edward B., Merchantville, N. J., assignor to Radio Corporation of America. Acoustic panel for vehicles. Des. 88,982; Jan. 10.

Patterson, Harry R., assignor, by mesne assignments, to the Electric Auto-Lite Company, Toledo, Ohio. Driving mechanism. 1,893,959; Jan. 10.

Paulson, Bernard J., Wauwatosa, assignor to O-Riginal Products Incorporated, Milwaukee, Wis. Bridge stand. Des. 88,983; Jan. 10.

Pavan, A. (See Romera, Manuel, assignor.)

Payne, W. W. (See Alexander, Jesse, assignor.)

Pearlman, Malkan A., Chicago, Ill. Deck of playing cards or the like. Des. 89,013; Jan. 10.

Pease, Isaac M., Cincinnati, Ohio. Abdominal supporting belt. 1,893,960; Jan. 10.

Peoples Gas By-Products Corporation. (See Guthrie, R. G., and Wilbor, assignors.)

Perkins, David N., Norwood, Ohio. Steering gear. 1,894,055; Jan. 10.

Perkins, Walter F., Montclair, and L. Trager, Newark, N. J., assignors to Worthington Pump and Machinery Corporation, New York, N. Y. Meter. 1,893,595; Jan. 10.

Perkins, Walter F., Upper Montclair, N. J., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Butt for backfill tampers. 1,893,596; Jan. 10.

Peterson, Johann G., West Hartford, Conn. Electric switch. 1,894,002; Jan. 10.

Peterson, Johann G., West Hartford, Conn. Electric switch. 1,894,225; Jan. 10.

Peterson, Raymond S., and A. L. Lee, Chicago, Ill. Car dumping apparatus. 1,893,633; Jan. 10.

Peterson, Victor E., assignor to J. R. Wood & Sons, Inc., Brooklyn, N. Y. Wedding ring. Des. 88,984; Jan. 10.

Petrus, John B., assignor of one-fourth to J. S. Stone, Kansas City, Mo. Time switch. 1,893,904; Jan. 10.

Pfaundler, Conrad. (See Mittasch, A., Wietsel, and Pfaundler.)

Pfeffer, Solomon, assignor of one-half to R. Despatis, Montreal, Quebec, Canada. Safety device for vehicles. 1,893,634; Jan. 10.

Pfizer, Charles, & Company. (See Currie, J. N., Kane, and Finlay, assignors.)

Phelps Dodge Corporation. (See Woodward, Herbert S., assignor.)

Photostat Corporation. (See Greene, J. S., and Landrock, assignors.)

Pier, Mathias, Heidelberg, Germany, assignor, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Apparatus for carrying out the destructive hydrogenation of carbonaceous material. 1,894,116; Jan. 10.

Pier, Mathias, Heidelberg, and E. Anthes, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of liquid hydrocarbons. 1,894,257; Jan. 10.

Pilkington Brothers Limited. (See Cruikshank, James W., assignor.)

Pilkington Brothers Limited. (See Slocombe, Frank E., assignor.)

Pirsch, Peter, assignor to Peter Pirsch and Sons Co., Kenosha, Wis. Pump pulsation reducing device. 1,893,685; Jan. 10.

Pirsch, Peter, and Sons Co. (See Pirsch, Peter, assignor.)

Pittman, Ralph E., and C. H. Walsh, Pine Bluff, Ark. Automatic fuse-changer. 1,894,056; Jan. 10.

Pittsburgh Research Corporation. (See Simpson, George L., assignor.)

Pittsburgh Screw and Bolt Corporation. (See Dicks, Thomas A., assignor.)

Pneumatic Scale Corporation Limited. (See Howard, Stanley R., assignor.)

Poirier, Ernest, assignor of twenty-five one-hundredths to J. W. Stoble, Waterville, Me. Paper making process and machine. 1,893,678; Jan. 10.

Pollard, Edward V., Lynn, and A. D. Somes, East Lynn, Mass., assignors to General Electric Company. Elastic fluid turbine. 1,894,117; Jan. 10.

Poole, Foster M., Kansas City, Mo., assignor to The Brown Instrument Company, Philadelphia, Pa. Heater control system. 1,893,635; Jan. 10.

Pope Appliance Corporation. (See McCarthy, P. N., and Masson, assignors.)

Porter, George G., assignor to Globe Slicing Machine Co., Inc., New York, N. Y. Slicing machine. 1,893,905; Jan. 10.

Porter, Leonard B., et al. (See Edwords, Eldon J., assignor.)

Powell, James W., and J. R. Burkhardt, assignors to The Springfield Metallic Casket Company, Springfield, Ohio. Grave vault. 1,894,118; Jan. 10.

Prange, Charles A. (See Prange, Frank R. and C. A.)

Prange, Frank R. and C. A., Minneapolis, Minn. Anti-skid attachment for wheels. 1,894,003; Jan. 10.

Pratt, William H., Lynn, Mass., assignor to General Electric Company. Current limiter. 1,894,119; Jan. 10.

Pratt, Willis L., et al. (See Riggs, Alger S., assignor.)

Preferred Oil Burners, Inc. (See Aldrich, Loyd I., assignor.)

Prentice, G. E., Manufacturing Company. (See Legat, Robert C., assignor.)

Price, Henry. (See Masterson, W. E., and Price.)

Priest, Roy W., et al. (See Barnard, A. W. A., and Adin, assignors.)

Primrose, John, Richmond, and H. R. Swanson, West New Brighton, assignors to Foster Wheeler Corporation, New York, N. Y. Fractionating tower. 1,893,906; Jan. 10.

Primrose, John, Richmond, assignor to Foster Wheeler Corporation, New York, N. Y. Fractionating method. 1,893,907; Jan. 10.

Prince, David C., Schenectady, N. Y., assignor to General Electric Company. Voltage regulating system. 1,893,784; Jan. 10.

Prince, David C., Schenectady, N. Y., assignor to General Electric Company. Vapor electric device. 1,894,120; Jan. 10.

Prönnecke, Walter, Quedlinburg, assignor to Reinhard Jahn, Bad Suderode, Ostharz, Germany. Clothes peg. 1,894,121; Jan. 10.

Pulver, Harold L., North Attleboro, Mass. Ornamental bead chain. 1,894,195; Jan. 10.

Quaker City Iron Works. (See Jensen, James A., assignor.)

Queen, Walter K., Needham Heights, Mass. Making rod packing. 1,893,597; Jan. 10.

Quinn, John P., Sioux City, Iowa. Hand and rotary sander. 1,893,679; Jan. 10.

Quinn, John P., Sioux City, Iowa. Sanding block. 1,893,680; Jan. 10.

Rabbes, Henry H., Washington, D. C. Foot rest. 1,893,681; Jan. 10.

Radio Corporation of America. (See Patterson, Edward B., assignor.)

Radio Patents Corporation. (See Bacharach, G., and McCauliff, jr., assignors.)

Radsinsky, Harry, assignor to International Banding Machine Company, New York, N. Y. Cigar wrapper and making the same. 1,893,523; Jan. 10.

Raff, Phillip, Chicago, Ill. Combined lighting and air circulating fixture. Des. 88,985; Jan. 10.

Rahn Aircraft Corporation. (See Rahn, William, assignor.)

Rahn, William, New York, N. Y., assignor to Rahn Aircraft Corporation. Aeronautic equipment. 1,894,057; Jan. 10.

Ralston, Oliver C. (See Fowler, M. G., Kusell, and Ralston.)

Ranney, Leo, New York, N. Y. Hydraulic toy. 1,893,507; Jan. 10.

Rasmussen, Sophus, assignor to American Gas Machine Company, Albert Lea, Minn. Vaporizing tube with gas connection. 1,893,598; Jan. 10.

Raus, Anton J., Cleveland, Ohio. Cleaning apparatus. 1,893,844; Jan. 10.

Ray, Leonard A., Center Rutland, Vt. Window screen. 1,893,651; Jan. 10.

Raynolds, Reginald M., New York, assignor to McMillan Book Company, Syracuse, N. Y. Leaf flipper. 1,894,241; Jan. 10.

Reed, Francis T. (See Reed, Isaac N. and F. T.)

Reed, Isaac N. and F. T., Shreveport, La. Plug valve. 1,894,196; Jan. 10.

Reese, Thomas S., Cleveland, Ohio. Method and apparatus for decorating and forming articles. 1,893,785; Jan. 10.

Reich, Gustave T., Anaheim, Calif. Cleaning gas cylinders. 1,893,652; Jan. 10.

Reiner, Otto, Rheinhausen, Germany. Reversing gear for furnaces. 1,893,786; Jan. 10.

Reininger, Gustave M., Bellevue, Ky. Sign. 1,893,653; Jan. 10.

Reist, Emily M., New York, N. Y., assignor to Marshall Field & Company, Chicago, Ill. Textile fabric. Des. 89,026; Jan. 10.

Reliance Electric & Engineering Company, The. (See Dunning, Samuel G., assignor.)

Rentschler, Mahlon J. (See Jeavons, W. R., and Rentschler.)

Reo Motor Car Company. (See Furgason, Claude E., assignor.)

Rice, Chester W., Schenectady, N. Y., and E. W. Kellogg, Moorestown, N. J., assignors to General Electric Company. Sound reproducing apparatus. 1,894,197; Jan. 10.

Rice, William A., Jerseyville, Ill. Method and apparatus for separating seeds and the like. 1,894,058; Jan. 10.

Rich, Frederick R., et al. (See Riggs, Alger S., assignor.)

Richards, Albert E., assignor of one-third to E. Thompson, Wawota, Saskatchewan, Canada. Poppet valve. 1,894,254; Jan. 10.

Richardson & Boynton Company. (See Richardson, D. R., and Lynd, assignors.)

Richardson, David R., New York, N. Y., and A. R. Lynd, Dover, N. J., assignors to Richardson & Boynton Company, New York, N. Y. Warm air heater. 1,894,122; Jan. 10.

Ridgway, Herbert, Brooklyn, N. Y. Metallic house framing. 1,893,636; Jan. 10.

Riggs, Alger S., assignor to W. L. Pratt, New York, F. W. McDonell, Rye, and F. R. Rich, New York, N. Y. Selective amplifier. 1,893,563; Jan. 10.

Ringer, Luther, Union Springs, assignor to Easy Washing Machine Corporation, Syracuse, N. Y. Ironer. 1,894,242; Jan. 10.

Robb, John F., Cleveland Heights, Ohio, assignor to Koehring Company, Milwaukee, Wis. Accelerator attachment for excavating machines. 1,893,564; Jan. 10.

Robb, John M., Peoria, Ill. Steam recuperator. 1,893,715; Jan. 10.

Robbins, Charles A., Pittsburgh, Pa. Auxiliary packing gland. 1,893,961; Jan. 10.

Roberson, Willard D., New York, N. Y. Textile fabric or the like. Des. 88,986; Jan. 10.

Roberts, Charles H., Phoenix, Ariz., assignor of one-half to D. M. Morris, Los Angeles, Calif. Hydraulic variable speed control. 1,893,654; Jan. 10.

Robinson, Karl D., New York, N. Y., assignor to Barrett & Company. Leather or similar article of manufacture. Des. 88,987; Jan. 10.

Robinson, Nathaniel O. (See de Ganahl, C., and Robinson.)

Rochester Appliance Company. (See Ellis, Arthur H., assignor.)

Rockbestos Products Corporation. (See Mau, E. A., and Hutchinson, assignors.)

Rogers, Bird L., Farnsworth, Tex. Harvester thresher. 1,894,123; Jan. 10.

Rogers, Harry R. (See Masterson, W. E., and Price, assignors.)

Rogers, Harry R., Denver, Colo. Friction taper valve cutter and finisher. 1,893,637; Jan. 10.

Rohrbach, Adolf, Berlin, Germany, assignor to Rohrbach Patents Corporation. Flying boat. 1,893,908; Jan. 10.

Rohrbach Patents Corporation. (See Rohrbach, Adolf, assignor.)

Rohrich, Harold A., and L. D. Soubier, Alton, Ill., assignors to Owens-Illinois Glass Company. Mold. 1,894,243; Jan. 10.

Romera, Manuel, Castroville, assignor, by mesne assignments, of two-thirds to A. Pavan, San Francisco, Calif. Agricultural machine. 1,893,871; Jan. 10.

Römhild, Edgar. (See Loewe, S., and Römhild.)

Ronsone, David B., Brooklyn, N. Y., assignor to Vacuum Packing Corporation, Salem, N. J. Filling, vacuumizing, sterilising, and sealing machine. 1,893,716; Jan. 10.

Rose, William H. T. R., Chester, England. Photographic printing apparatus. 1,894,004; Jan. 10.

Rose, William H. T. R., Chester, England. Photographic printing apparatus. 1,894,005; Jan. 10.

Rosenberg, Solomon, Los Angeles, Calif. Garment hanger. 1,893,508; Jan. 10.

Rosler, Charles A., Bronx, N. Y. Internal combustion engine. 1,893,682; Jan. 10.

Ross, Louis, Brooklyn, assignor to Beatrice R. Somach, New York, N. Y. Folding box. 1,894,226; Jan. 10.

Rossi, Domenick, and N. Colicchio, Albany, N. Y. Electromechanical pilot light control. 1,894,006; Jan. 10.

Rowan, William J., Akron, Ohio. Valve spring lifter. 1,893,962; Jan. 10.

Rowe, William W., Cincinnati, assignor to The Paper Service Company, Lockland, Ohio. Creping webs of paper and the like. 1,893,717; Jan. 10.

Rubber Service Laboratories Co. (See Scott, Winfield, assignor.)

Rubin, Herman H., New York, N. Y. Grip strap. 1,893,807; Jan. 10.

Rubinstein, Louis, New York, N. Y. Combined match holder and windshield. 1,893,655; Jan. 10.

Ruble, Wilbur J., Washington, D. C. Antenna reel. 1,894,244; Jan. 10.

Ruffley, Frederick, assignor to De Forest Radio Company, Jersey City, N. J. Producing electron emitters and the product. 1,894,059; Jan. 10.

Rurka, Joseph M., Chicago, Ill. Window lock. 1,894,060; Jan. 10.

Russ, Emil F., Cologne-Marienburg, Germany. Electrically heated drying furnace for casting cores and the like. 1,893,963; Jan. 10.

Russell, George E. (See Weidlich, L., and Russell.)

Rust, John D. and M. D., Newllano, La. Cotton picking machine. 1,894,198; Jan. 10.

Rust, Mack D. (See Rust, John D., and M. D.)

Saaf, Dirk G., assignor to Goodrich Electric Company, Chicago, Ill. Lamp shade. 1,894,227; Jan. 10.

Saeger, Charles M., jr., Bowmanstown, Pa. Core or mold binder, coating or paste. 1,893,683; Jan. 10.

Saeger, Charles M., jr., Bowmanstown, Pa. Core or mold binder, coating or paste. 1,893,684; Jan. 10.

Safety Fumigant Company. (See Houghton, Harry W., assignor.)

Saint-Jacques, Eugène C., Paris, France. Process and apparatus for the roasting or calcination of pulverulent matters. 1,893,918; Jan. 10.

Salomon, Robert, Neuilly-sur-Seine, France. Machine for drawing glass tubes or rods. 1,894,201; Jan. 10.

Salsburg, Louis K., Wilkes-Barre, Pa. Frozen confection package. 1,894,199; Jan. 10.

Salvi, Allesandro. (See Gianni, Francesco, assignor.)

Sander, Ludwig, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Amides of 2.3-amino-naphthoic acid and preparing them. 1,893,656; Jan. 10.

Sanders, Reginald E., Neenah, Wis. Toy construction block. 1,894,061; Jan. 10.

Saucier, Edward E., assignor of one-half to Donat Gervais, Lowell, Mass. Oscillatory combined windshield heater and wiper device. 1,894,200; Jan. 10.

Schaefer, Edward J., Fort Wayne, Ind., assignor to General Electric Company. Single-phase motor. 1,894,124; Jan. 10.

Schäfer, Carl, Solingen-Weyer, Germany. Device for simultaneously opening a plurality of valves. 1,893,657; Jan. 10.

Schiff, Sigmund, Cincinnati, Ohio. Combination divider and baller. 1,893,845; Jan. 10.

Schild, Theodor, Grenchen, Switzerland. Keyless watch. 1,893,909; Jan. 10.

Schiller, Georg. (See Wietzel, G., and Schiller.)

Schlipp, Charles P., Cleveland Heights, Ohio. Artificial fish lure. 1,893,686; Jan. 10.

Schirmer, Max, assignor to Luftschiffbau Zeppelin Gesellschaft mit beschrankter Haftung, Friedrichshafen, Bodensee, Germany. Airship. 1,894,245; Jan. 10.

Schlecht, Leo. (See Naumann, M., and Schlecht.)

Schmidt, Friedrich, Berlin-Lichtenrade, assignor of one-half to Emil M. Kappler, Berlin-Wilmersdorf, Germany. Pounder washer. 1,894,125; Jan. 10.

Schmidt, Hans, Wuppertal, Vohwinkel, and H. Jung, Wuppertal-Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Metal complex compound. 1,893,872; Jan. 10.

Schmidt, John, assignor to Sprague-Sells Corporation, Hoopeston, Ill. Liquid filling machine. 1,894,007; Jan. 10.

Schmidt, Otto, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of carbon black. 1,894,126; Jan. 10.

Schmieding, Warren H. F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,894,127; Jan. 10.

Schmierer, Johannes M., Berlin-Lichterfelde, Germany. Gas discharge relay. 1,893,638; Jan. 10.

Schnepf, William K., Rochester, N. Y. Selector switch for automatic telephone systems. 1,893,565; Jan. 10.

Schomer, Henry J., assignor to Waite Carpet Company, Oshkosh, Wis. Tufting mechanism. 1,893,660; Jan. 10.

Schrank, Max C., Bridgeton, N. J. Garment. 1,894,062; Jan. 10.

Schroeder, Carl A., assignor to The F. W. Wakefield Brass Company, Vermilion, Ohio. Lighting fixture. 1,894,063; Jan. 10.

Schroeder, Otto F., Santa Ana, Calif. Torpedo dart. 1,893,787; Jan. 10.

Schubenel, Robert X., Pantin, France. Tap. 1,894,064; Jan. 10.

Schubert, Hermann J., Hackensack, N. J. Paper hanger's table or board. 1,893,788; Jan. 10.

Schult, Kurt, Berlt-Steglitz, Germany. Holding clip consisting of a spring for cigarettes or cigars. 1,894,128; Jan. 10.

Schumacher, Elmer L., assignor to American Optical Company, Southbridge, Mass. Connecting means for ophthalmic mountings and the like. 1,893,964; Jan. 10.

Schweizer, Jack, Rye, N. Y. Textile fabric or the like. Des. 88,988; Jan. 10.

Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,989; Jan. 10.

Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,990; Jan. 10.

Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,991; Jan. 10.

Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,992; Jan. 10.

Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,993; Jan. 10.

Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 88,994; Jan. 10.

Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,027; Jan. 10.

Scott, Winfield, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Rubber vulcanization process. 1,893,846; Jan. 10.

Scottish Dyes, Limited. (See Anderson, I. B., Thomson, and Thomas, assignors.)

Secretary of War of the United States of America. (See Woodberry, David L., assignor.)

Segars, Burrell W., Oswego, S. C. Fertilizer distributor. 1,894,008; Jan. 10.

Sellstrom Manufacturing Company. (See Flood, Oscar S., assignor.)

Seymour, Almeric W., Los Angeles, Calif. Protective coating. 1,893,599; Jan. 10.

Shanley, Catherine E., Allston, Mass. Tongue scraper and cleaner. 1,893,524; Jan. 10.

Shaw, Harry J., Toledo, Ohio. Concrete delivery. 1,894,129; Jan. 10.

Shell Development Company. (See Deanesly, Richard M., assignor.)

Shell Perforating Company. (See Shull, Daniel L., assignor.)

Shell Petroleum Corporation. (See Durward, Eric S., assignor.)

Shelton, Roy M., Sioux City, assignor to J. W. Malmquist, Aberdeen, S. Dak. Extensible automobile trunk. 1,893,753; Jan. 10.

Sherer, William T., Chicago, Ill., assignor, by mesne assignments, to Reuben E. Ottenheimer, Baltimore, Md. Antifogging device. 1,893,525; Jan. 10.

Sherman, Cortis F., assignor to The Henry & Wright Manufacturing Company, Hartford, Conn. Drill press. 1,893,965; Jan. 10.

Sherman, John Q., and A. W. Metzner, Dayton, Ohio, assignors to The Standard Register Company. Manifolding machine. 1,894,065; Jan. 10.

Shew, Frank L., Ashtabula, Ohio. Rubber product and making the same. 1,893,966; Jan. 10.

Shomaker, Wesley P. (See Jones, M. O., and Shomaker.)

Shriver, Harry P., assignor to Kennedy Manufacturing Company, Van Wert, Ohio. Cantilever kit. 1,893,526; Jan. 10.

Shriver, Harry P., assignor to Kennedy Manufacturing Company, Van Wert, Ohio. Carrying case. 1,893,527; Jan. 10.

Shull, Daniel L., Bakersfield, Calif., assignor to Shell Perforating Company. Collar locator. 1,893,600; Jan. 10.

Siegens, Hans. (See von Girsewald, C., Siegens, and Marschner.)

Signode Steel Strapping Company. (See McGregor, J. M., and Ericsson, assignors.)

Silverman, Joseph, Chicago, Ill. Foot for supporting legs and the like. 1,893,910; Jan. 10.

Simon, Louis, New York, N. Y. Dustless street cleaning truck. 1,893,967; Jan. 10.

Simpson, George L., Coraopolis, assignor to Pittsburgh Research Corporation, Pittsburgh, Pa. Controlling temperature. 1,893,847; Jan. 10.

Singer Manufacturing Company, The. (See Card, Frederic B., assignor.)

Slingerland, Henry H. (See Soderberg, Walter E., assignor.)

Slocombe, Frank E., Kirk Sandall, assignor to Pilkington Brothers Limited, Liverpool, England. Apparatus for cutting flat glass. 1,893,658; Jan. 10.

Slonneger, John C., Milwaukee, Wis., assignor to International Harvester Company. Cutting apparatus for mowers. 1,894,130; Jan. 10.

Sludge Pumping, Inc. (See Engstrand, Gunnar C., assignor.)

Smartt, Brinay. (See Bryan, J. M., and Smartt.)

Smidth, Leonard, New York, N. Y. Urea-formaldehyde condensation product and producing same. 1,893,911; Jan. 10.

Smith, Emerson J., Ravenna, Ohio. Rubber glove. 1,894,066; Jan. 10.

Smith, Frank P., Cordelia, Calif. Jar opener. 1,894,202; Jan. 10.

Smith, Theodore B., Great Neck, assignor to John Hassall, Inc., Brooklyn, N. Y. Grinding method and means. 1,894,067; Jan. 10.

Smith, Theodore L., assignor to Caille Motor Company, Detroit, Mich. Propeller and control means therefor. 1,893,661; Jan. 10.

Smith, Theodore L., assignor to Caille Motor Company, Detroit, Mich. Gear pump for outboard motors and the like. 1,893,662; Jan. 10.

Societe du Carburetor Zenith. (See Heftler, Victor R., assignor.)

Society of Chemical Industry in Basle. (See Felix, Friedrich, assignor.)

Soderberg, Walter E., Duluth, Minn., assignor to H. H. Slingerland, Chicago, Ill. Snare drum. 1,894,068; Jan. 10.

Solem, Peter A., Rockford, Ill., and D. J. McLaughlin, Ilion, N. Y.; said McLaughlin assignor to said Solem. Hopper feed for endless bed machines. 1,893,566; Jan. 10.

Solomita, Albert, Brooklyn, N. Y. Sign with changeable panel. 1,893,567; Jan. 10.

Solomon, Sophia, Brooklyn, assignor to Joseph Berlinger Company, New York, N. Y. Textile fabric. Des. 89,014; Jan. 10.

Solomon, Sophia, Brooklyn, assignor to Joseph Berlinger Company, New York, N. Y. Textile fabric. Des. 89,015; Jan. 10.

Somach, Beatrice R. (See Ross, Louis, assignor.)

Somes, Arthur D. (See Pollard, E. V., and Somes.)

Soubier, Leonard D. (See Rohrich, H. A., and Soubier.)

Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Method and apparatus for producing glass articles. 1,894,069; Jan. 10.

Spaulding, Franklin, Chicago, Ill. Buttonhole working attachment for sewing machines. 1,893,912; Jan. 10.

Spector, Benjamin, assignor to Gropper Sport Apparel Co., Inc., New York, N. Y. Yarn carrier for knitting machines. 1,893,808; Jan. 10.

Spence, Rose M., Buffalo, N. Y. Garment cover. 1,893,968; Jan. 10.

Spencer Turbine Co. (See Paine, Wilbur V., assignor.)

Sprague, Henry H., assignor to The Sprague Meter Company, Bridgeport, Conn. Gas meter. 1,893,601; Jan. 10.

Sprague Meter Company, The. (See Sprague, Henry H., assignor.)

Sprague-Sells Corporation. (See Schmidt, John, assignor.)

Spring, Alva F., Cleveland Heights, assignor to The Lake Erie Chemical Company, Cleveland, Ohio. Firing device. 1,894,203; Jan. 10.

Springfield Metallic Gasket Company, The. (See Powell, J. W., and Burkhardt, assignors.)

Stack, Samuel, New York, N. Y. Metal awning. 1,893,659; Jan. 10.

Standard-I. G. Company. (See Pier, Mathias, assignor.)

Standard Oil Company. (See Bales, James E., assignor.)

Standard Oil Company of California. (See Halloran, R. A., and Chappell, assignors.)

Standard Register Company, The. (See Sherman, J. Q., and Metzner, assignors.)

Standard Stations, Inc. (See Aldrich, Ralph N., assignor.)

Starr, Harry B. (See Gilligan, J. J., and Starr.)

Starr, Morton H., Beloit, Wis. Weighing scale. 1,894,009; Jan. 10.

State Holding Co. (See Goodman, Louis, assignor.)

Staude, Edwin G., Minneapolis, Minn. Paper box machine. 1,894,131; Jan. 10.

Steele, George H., Nashville, Tenn. Direction signal switch. 1,894,204; Jan 10.

Stein, Theodor, Berlin-Grunewald, and G. Wünsch, Steglitz, near Berlin, assignors to Askania-Werke Aktiengesellschaft, vormals Centralwerkstatt Dessau und Carl Bamberg Friedenau, Berlin-Friedenau and Allgemeine Elektricitats-Gesellschaft, Berlin, Germany. Device for regulating power generating plants, especially electricity works. 1,894,246; Jan. 10.

Steiner, George A., assignor to Steiner Sales Company, Salt Lake City, Utah. Garment. 1,893,914; Jan. 10.

Steiner Sales Company. (See Steiner, George A., assignor.)

Stenzel, Heinrich. (See Hecht, H., and Stenzel.)

Stephens, Oscar K., San Gabriel, Calif. Production control assembly. 1,893,602; Jan. 10.

Stettner, Henry M., St. Paul, Minn. Antiskid device. 1,893,718; Jan. 10.

Stevenson, John F., and G. Bowman, Belfast, Ireland. Jacking device for road vehicles. 1,893,848; Jan. 10.

Stimpson, Edwin B., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y. Slotting machine. 1,893,509; Jan. 10.
Stimpson, Edwin B., Company (See Stimpson, Edwin B., assignor.)
Stine, Louis B. (See Zinzil, R. H., and Stine.)
Stobie, John W. (See Poirier, Ernest, assignor.)
Stoesser, Wesley C., assignor to The Dow Chemical Company, Midland, Mich. Separating cuprous and ammonium chlorides. 1,893,969; Jan. 10.
Stokes & Smith Company. (See Federwitz, T A., and Bailey, assignors.)
Stollstelmer, Frederick J., assignor to C. V. Hill & Co., Inc., Trenton, N. J. Preventing frosting or condensation of moisture on glass or other surfaces. 1,894,205; Jan. 10.
Stone, Charles W., Schenectady, N Y., assignor to General Electric Company. Color analyzer. 1,894,132; Jan. 10.
Stone, John S. (See Petrus, John B., assignor.)
Stone, Malcolm B., Milton, and W. P. Williamson, Ludlow, assignors to Ludlow Manufacturing Associates, trustees, Boston, Mass. Manufacture of yarn. 1,893,809; Jan 10.
Stone, Stanley J. (See Hawksworth, D. W., and Stone.)
Strauss, Joseph B., Chicago, Ill. Sleeping car. 1,893,510; Jan. 10.
Sturtevant, B. F., Company. (See Derry, Gardner C., assignor.)
Stutson, Willis, Chicago, Ill. Dovetail 1,893,639; Jan. 10.
Sullivan, Edward G., assignor to J. S. Belt, Amarillo, Tex. Bath apparatus. 1,893,849; Jan. 10.
Sullivan, Edward G., assignor to J. S. Belt, Amarillo, Tex. Apparatus for producing solid carbon dioxide. 1,893,850; Jan 10.
Sullivan, Edward G., assignor to J. S. Belt, Amarillo, Tex. Apparatus for producing solid carbon dioxide. 1,893,851; Jan. 10.
Sullivan, Edward G., assignor to J. S. Belt, Amarillo, Tex. Process of and apparatus for producing solid carbon dioxide. 1,893,852; Jan. 10.
Sure Guard Corporation (See Teichner, R. R., and Yancey, assignors.)
Surface Combustion Corporation. (See Barber, Hugh B., assignor.)
Surgident, Ltd. (See van Rossem, Walter J., assignor.)
Swanson, Harry R. (See Primrose, J., and Swanson.)
Takahashi, Yeinosuke, Montara, Calif. Flower support. 1,893,970; Jan. 10.
Talbot, Lyman R., Port Washington, N Y., assignor to Cement Gun Company. Caisson work. 1,894,206; Jan. 10.
Talboys, Henry H., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Spike puller. 1,893,719; Jan. 10.
Taube, Carl. (See Haller, J., and Taube.)
Tautz, Herbert E., assignor to Delta Manufacturing Company, Milwaukee, Wis. Work-holding means for gauges. 1,894,010; Jan. 10.
Taylor, Maurice C., Niagara Falls, assignor to The Mathieson Alkali Works, Inc., New York, N. Y. Detergent composition. 1,894,207; Jan. 10.
Technimet Company, The. (See Marshall, Leslie H., assignor.)
Teichner, Rudolphr, and S. R. Yancey, assignors to Sure Guard Corporation, New York, N. Y. Electric switch. 1,894,070; Jan. 10.
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See von Arco, Georg, assignor.)
Telescope Cot Bed Company, The. (See Vanderminden, Edwin, assignor.)
Terrell, Harold C., assignor to The Ohio Parts Company, Cincinnati, Ohio. Storage battery lifter. 1,893,971; Jan. 10.
Textile Machine Works. (See Gastrich, Gustav, assignor.)
Textile Machine Works. (See Winkler, Emil W., assignor.)
Thayer, Joseph E., West Bridgewater, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Welt tempering device for shoe sewing machines. 1,893,789; Jan. 10.
Thermoid Rubber Company. (See Hemeon, James R., assignor.)
Thoma, Andrew, assignor to North American Chemical Company, Cambridge, Mass. Method of filling shoes. 1,894,226; Jan. 10.
Thoma, Erwin. (See Kracker, H., and Thoma.)
Thomas, John. (See Anderson, I. B., Thomson, and Thomas.)
Thomas, Laurence H., assignor to American Electrical Heater Company, Detroit, Mich. Switch for electric heaters. 1,893,568; Jan. 10.
Thomas, William M., Albuquerque, N. Mex. Carburetor. 1,893,754; Jan. 10.
Thompson, Ernest H., Winnetka, assignor to Johnson Fare Box Company, Chicago, Ill. Fare box. 1,894,071; Jan. 10.
Thompson, Ethel. (See Richards, Albert E., assignor.)
Thompson, Louis W., Schenectady, N. Y., assignor to General Electric Company. Electrical regulator. 1,894,133; Jan. 10.
Thomson, Robert F. (See Anderson, I. B., Thomson and Thomas.)
Thorp, Vaughn P., River Edge, N. J., assignor to American Telephone and Telegraph Company. Reduction of interference in carrier systems. 1,893,569; Jan. 10.
Tingley Reliance Rubber Corporation. (See Jackson, Walter C., assignor.)
Tobin, Robert J., Hollis, N. Y. Composition roofing or siding strip. Des. 88,995; Jan. 10.
Todd Dry Dock, Engineering & Repair Corporation. (See Meachem, Harry, assignor.)
Todd, Samuel J., West Grove, Pa. Razor blade clip. 1,894,072; Jan. 10.
Todd, Warren H. (See Clark, A. J., and Todd.)
Tonks, Lewi, Schenectady, N. Y., assignor to General Electric Company. Parallel conductor system. 1,894,134; Jan. 10.
Török, Gabriel and G. Becze, Budapest, Hungary. Making dough and bread. 1,894,135; Jan. 10.
Trager, Leon. (See Perkins, W. F., and Trager.)
Trail, Herbert H., Vancouver, British Columbia, Canada, assignor to Motor Devices, Incorporated, Chicago, Ill. Carburetor. 1,893,511; Jan. 10.
Travis, Bertram C., assignor of one-half to Pacific Copper and Brass Works, Incorporated, Los Angeles, Calif. Portable machine for boring tapered elliptical holes. 1,893,510; Jan. 10.
Trumbull Electric Manufacturing Company, The. (See Getchell, Benjamin E., assignor.)
Trumbull Electric Manufacturing Company, The. (See Hammerly, Herman J., assignor.)
Trumbull Electric Manufacturing Company, Pacific Division. (See von Normann, Alfred G., assignor.)
Tube Reducing Corporation. (See Coe, George B., assignor.)
Tullis, Amos E., Minneapolis, Minn. Artificial limb. 1,893,853; Jan. 10.
Turner, Robert P., York, Pa., assignor to New York Wire Cloth Company, New York, N. Y. Wire fabric. 1,893,830; Jan. 10.
Tyler, Chaplin and Frank W. Parker, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Fertilizer manufacture. 1,894,136; Jan. 10.
Unger, Ernest G., Brooklyn, assignor to Halliwell-Shelton Electric Corporation, New York, N. Y. Combined spindle and croquignole hair waving heater. 1,894,073; Jan. 10.
Unger, Paul O., assignor to McMillan Book Company, Syracuse, N. Y. Transfer device. 1,894,137; Jan. 10.
Union Oil Company of California. (See Hill, Frank F., assignor.)
Union Switch & Signal Company, The. (See McWhirter, William C., assignor.)
Union Switch & Signal Company, The. (See Vantassel, Harry C., assignor.)
United American Bosch Corporation. (See Martin, John F., assignor.)
United Metal Goods Mfg. Co. (See Buhrle, Paul, assignor.)
United Screw and Bolt Corporation. (See Fieg, Joseph F., assignor.)
United Shoe Machinery Corporation. (See Thayer, Joseph E., assignor.)
United Verde Copper Company. (See Fowler, M. G., Kuzell, and Ralston, assignors.)
Vacuum Packing Corporation. (See Ronzone, David B., assignor.)
Vallet, Victor E. (See Oliver, C. B., and Vallet.)
Van der Does, Jean, assignor to Joseph Berlinger Company, New York, N. Y. Textile fabric. Des. 88,996; Jan. 10.
Vanderminden, Edwin, assignor to The Telescope Cot Bed Company, Granville, N. Y. Connection for collapsible articles of furniture. 1,893,603; Jan. 10.
Vandervoort, Milford T., assignor to American Seating Company, Grand Rapids, Mich. Combined typewriter stand and desk. 1,893,720; Jan. 10.
Van Rossem, Walter J., assignor to Surgident, Ltd., Los Angeles, Calif. Sanitary covered receptacle. 1,893,604; Jan. 10.
Vantassel, Harry C., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling system. 1,893,790; Jan. 10.
Vickers (Aviation) Limited. (See Wallis, Barnes N., assignor.)
Victor Manufacturing & Gasket Company. (See Braner, Stephen W., assignor.)
Vidor, William H., Maplewood, N. J. Alternating current rectifier. 1,893,915; Jan. 10.
Von Arco, Georg, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Transmitter arrangement. 1,893,605; Jan. 10.
Von Girsewald, Conway, Frankfort-on-the-Main, Hans Siegens, Horrem, near Cologne, and Martin Marschner, Frankfort-on-the-Main, assignors to Metallgesellschaft Aktiengesellschaft, Frankfort-on-the-Main, Prussia, Grmany. Producing alumina. 1,894,208; Jan. 10.
Von Normann, Alfred G., assignor to Trumbull Electric Manufacturing Company, Pacific Division, Seattle, Wash. Safety switch. 1,894,074; Jan. 10.
Von Rosenberg, Guido. (See Holzach, K., and von Rosenberg.)
Wahlberg, Nils E., assignor to The Nash Motors Company, Kenosha, Wis. Automobile frame. 1,893,721; Jan. 10.

Waite Carpet Company. (See Schomer, Henry J., assignor.)
Waite, Sheridan C., Springville, N. Y. Necktie holder. 1,893,570; Jan. 10.
Wakefield, F. W., Brass Company, The. (See Schroeder, Carl A., assignor.)
Walden, George B., Southport, assignor to Eli Lilly and Company, Indianapolis, Ind. Therapeutic compound and producing it. 1,894,247; Jan. 10.
Waldrich, Oskar, Siegen, Germany. Copying mechanism. 1,893,916; Jan. 10.
Walker, Henry B., assignor to The Fairfield Engineering Company, Marion, Ohio. Portable loader. 1,893,917; Jan. 10.
Wallis, Barnes N., assignor to Vickers (Aviation) Limited, Weybridge, England. Construction of fuselage or other bodies of aircraft. 1,894,011; Jan. 10.
Walloch, Frank A., Seattle, Wash. Screen filter for hot-air registers. 1,893,571; Jan. 10.
Walsh, Carroll H. (See Pittman, R. R., and Walsh.)
Wanner, George D., Dayton, Ohio. Miniature structure. 1,893,791; Jan. 10.
Wanner, George D., Dayton, Ohio. Constructing miniature structures. 1,893,792; Jan. 10.
Wappler Electric Company. (See Mutscheller, Arthur, assignor.)
Ware, John H., jr., Oxford, Pa. Package for candy bars. 1,893,811; Jan. 10.
Warhus, Oliver F., Albany, N. Y., assignor, by mesne assignments, to The Cincinnati Car Corporation, Cincinnati, Ohio. Motor vehicle. 1,894,075; Jan. 10.
Watkins, Howard R. (See Palkin, S., and Watkins.)
Watson, Leston, Fort Worth, Tex. Pile driving machine. 1,893,687; Jan. 10.
Weber, Carl M., assignor to Weber Machine Corporation, Rochester, N. Y. Machine for filling containers. 1,893,831; Jan. 10.
Weber, Erwin L., Seattle, Wash., assignor to Elsa M. Obst, St. Paul, Minn. Heating and ventilating device. 1,894,229; Jan. 10.
Weber Machine Corporation. (See Weber, Carl M., assignor.)
Weber, Mathias J., assignor, by mesne assignments, to The Health-O-Meter Company, Chicago, Ill. Platform scale casing. Des. 88,997; Jan. 10.
Weidlich Bros. Manufacturing Corporation, The. (See Weidlich, L., and Russell, assignors.)
Weidlich, Louis, Stratford, and G. E. Russell, Bridgeport, assignors to The Weidlich Bros. Manufacturing Corporation, Bridgeport, Conn. Salt shaker. 1,894,076; Jan. 10.
Weil, Jacob A., Manchester, assignor to Imperial Chemical Industries Limited, London, England. Production of catalytic material. 1,893,812; Jan. 10.
Weise, Paul G. A., Lester Prairie, Minn. Stanchion anchor structure. 1,893,722; Jan. 10.
Wellman, Ralph A., Cleveland, Ohio. Manufacturing bags. 1,893,832; Jan. 10.
Wells, Frank O., Greenfield, Mass. Making thread cutting dies. 1,893,688; Jan. 10.
Wells, John H. (See Graeme, Charles G., assignor.)
Welty, Albert B., Kenilworth, Ill., assignor to International Harvester Company. Harvester thresher. 1,894,138; Jan. 10.
Wemlinger, Julius R., Brooklyn, N. Y. Corrugated sheet piling. 1,894,012; Jan. 10.
Wendler, Otto W. H. (See Hansen, Christian S., assignor.)
Wentworth, Charles M., St. Louis, Mo. Handy service tray assembly. 1,893,755; Jan. 10.
Wenzel, Anna M., Brooklyn, N. Y. Adjustable cutter for sewing machines. 1,894,013; Jan. 10.
Westco Pump Corporation. (See Ferguson, Gale L., assignor.)
Westerman, S. L., et al. (See Edwords, Eldon J., assignor.)
Western Electric Company. (See Dennison, L. I., and Dreyer, assignors.)
Western Gas Construction Company, The. (See Merritt, Malcolm, assignor.)
Westinghouse Electric & Manufacturing Company. (See Zworykin, Vladimir K., assignor.)
Weston, William S., Dallas, Tex. Adjustable curve ruler. 1,893,689; Jan. 10.
Weston, William S., Dallas, Tex. Adjustable curved ruler. 1,893,690; Jan. 10.
White, Will T., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Vehicle wheel. 1,894,248; Jan. 10.
Whitman, Roger B., New Hyde Park, N. Y. Gasoline pump. 1,893,972; Jan. 10.
Whitman, Vernon E., New York, N. Y., assignor to Hazeltine Corporation. Oscillator. 1,893,813; Jan. 10.
Whitney Metal Tool Company. (See Jensen, John, assignor.)
Wicks, John, Oak Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Multioffice telephone system. 1,893,691; Jan. 10.
Widerøe, Rolf, Karlshorst, Germany, assignor to General Electric Company. Control of electric switches. 1,894,139; Jan. 10.
Widin, Edgar, Roselle Park, N. J. Oil seal and spring. 1,893,814; Jan. 10.
Wieneke, Frederick D., Baltimore, Md. Radio tube. 1,893,756; Jan. 10.
Wietzel, Gustav, Ludwigshafen-on-the-Rhine, and G. Schiller, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Apparatus for endothermic catalytic reactions. 1,894,140; Jan. 10.
Wietzel, Rudolf. (See Mittasch, A., Wietzel, and Pfaundler.)
Wikstrom, Oskar W., assignor to P. E. Ginn, deceased, Newton, Mass.; Everett W. Ginn, administrator. Box-folding machine. 1,894,209; Jan. 10.
Wilbor, Oscar J. (See Guthrie, R. G., and Wilbor.)
Wildhaber, Ernest, Brooklyn, N. Y. Gearing. 1,893,572; Jan. 10.
Wilhelm, Wilson A., Vernon, Tex. Cake stripper. 1,893,854; Jan. 10.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 88,998; Jan. 10.
Willheim, William, New York, N. Y. Textile fabric or similar article. 88,999; Jan. 10.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,000; Jan. 10.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,001; Jan. 10.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,002; Jan. 10.
Willheim, William, New York, N. Y. Textile fabric or similar articles. Des. 89,003; Jan. 10.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,016; Jan. 10.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,017; Jan. 10.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,018; Jan. 10.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,028; Jan. 10.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,029; Jan. 10.
Willheim, William, Co. (See Bridier, Fernand, assignor.)
Willheim, William, Co. (See Brodsky, Michel, assignor.)
Willheim, William, Co. (See Christen, Marcel, assignor.)
Willheim, William, Co. (See Gottesman, Joseph M., assignor.)
Willheim, William, Co. (See Grulich, Anton, assignor.)
Willheim, William, Co. (See Lukas, Julia, assignor.)
Willheim, William, Co. (See Overmeyer, John, assignor.)
Willheim, William, Co. (See Schweitzer, Jack, assignor.)
Williams, Arthur M. (See Kauffman, I. H., and Williams.)
Williams, Arthur M., Dearborn, Mich. Coin and slug segregating apparatus. 1,893,692; Jan. 10.
Williams, Harry J., Zephyrhills, Fla. Figure toy. Des. 89,004; Jan. 10.
Williams, Percy Q., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Heating apparatus for glass furnaces. 1,894,249; Jan. 10.
Williamson, William P. (See Stone, M. B., and Williamson.)
Wilson, Grant V., Chicago, Ill., assignor to Norristown Magnesia & Asbestos Company, Norristown, Pa. Treating amphibolic material for transportation. 1,894,250; Jan. 10.
Wilson, Leland A., Merriam, Kans. Incubator. 1,893,918; Jan. 10.
Wilson Lighting, Inc. (See Wilson, Wesley, assignor.)
Wilson, Wesley, assignor to Wilson Lighting, Inc., Chicago, Ill. Lighting device. 1,893,606; Jan. 10.
Wilson, William K., Norwalk, Conn. Fur plucking. 1,893,919; Jan. 10.
Wilt, Charles T., jr., E. E., C. D., and R. L., assignors to Wilt Trunk Company, Chicago, Ill. Garment hanger. 1,893,815; Jan. 10.
Wilt, Colin D. (See Wilt, Charles T., jr., E. E., C. D., and R L.)
Wilt, Elmer E. (See Wilt, Charles T., jr., E. E., C. D., and R. L.)
Wilt, Robert L (See Wilt, Charles T., jr., E. E., C. D., and R. L.)
Wilt Trunk Company. (See Wilt, Charles T., jr., E. E., C. D., and R. L., assignors.)
Winfield, Edward A., La Canada, Calif. Carburetor. 1,893,920; Jan. 10.
Winkler, Alfred, and M. Dünnebier, Neuwiec, Germany. Chocolate and the like coating machine. 1,894,077; Jan. 10.
Winkler, Emil W., assignor to Textile Machine Works, Wyomissing, Pa. Manipulating holder for needles or the like. 1,893,528; Jan. 10.
Winkler, Fritz, and H. Haeuber, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft Frankfort-on-the-Main, Germany. Production of liquid hydrocarbons from olefines. 1,894,255; Jan. 10.
Winning, William F., Braddock, Pa. Refillable vanity case. 1,894,210; Jan. 10.
Wintroath, John A., Los Angeles, assignor to Wintroath Pumps, Ltd., Alhambra, Calif. Lubrication for submerged bearings. 1,893,921; Jan. 10.
Wintroath, John A., Los Angeles, assignor to Wintroath Pumps, Ltd., Alhambra, Calif. Submersible bearing structure. 1,893,922; Jan. 10.
Wintroath Pumps, Ltd. (See Wintroath, John A., assignor.)
Winthrop Chemical Company. (See Schmidt, H., and Jung, assignors.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)

Wired Radio, Inc. (See Hentschel, Ernest R., assignor.)
Wirth, Theodor. (See Knecht, O., and Wirth.)
Wolf, Nicholas F., Evansville, Ind. Refrigerating automobile truck. 1,894,014; Jan. 10.
Wood, Frank J., Mount Lebanon, assignor to Mesta Machine Company, Pittsburgh, Pa. Rotary pickling machine. 1,894,141; Jan. 10.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Forming mechanism for web presses. 1,893,816; Jan. 10.
Wood, J. R., & Sons, Inc. (See Peterson, Victor E., assignor.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Wood, Walter C., Providence, R. I. Winch. 1,893,723; Jan. 10.
Woodberry, David L., Baltimore, Md., assignor to Secretary of War of the United States of America. Fuse for bombs. 1,893,663; Jan. 10.
Woodward, Alva W., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Vehicle wheel. 1,894,251; Jan. 10.
Woodward, Herbert S., assignor to Phelps Dodge Corporation, Morenci, Ariz. Electrode cleaning process. 1,893,817; Jan. 10.
Woodruff, Frank O., Newton, assignor to H. H. Beckwith, Brookline, Mass. Manufacture of shoe stiffener material. 1,893,923; Jan. 10.
Woodruff, Frank O., Newton, assignor to H. H. Woodruff, Brookline, Mass. Manufacture of shoe stiffener material. 1,893,924; Jan. 10.
Worthington Pump and Machinery Corporation. (See Frick, E. H., and Eckel, assignors.)
Worthington Pump and Machinery Corporation. (See Oechsle, Joseph S., assignor.)
Worthington Pump and Machinery Corporation. (See Perkins, Walter F., assignor.)
Worthington Pump and Machinery Corporation. (See Perkins, W. F., and Trager, assignors.)
Wünsch, Guido. (See Stein, T., and Wünsch.)
Würzburger, Paul, Wiesbaden, Germany. Polishing appliance for finger nails. 1,894,142; Jan. 10.
Yancey, Stirling R. (See Teichner, R. R., and Yancey.)
Yavicoli, Felix, Buffalo, N. Y. Mechanic's tool. 1,893,973; Jan. 10.
Yorgason, Charles E., Ogden City, Utah. Automobile brake testing device. 1,893,529; Jan. 10.
Youngstown Steel Door Company, The. (See Ditchfield, Frank, assignor.)
Zeruneith, Rudolf E., Camden, N. J. Anvil blade for wire stitching machines. 1,893,664; Jan. 10.
Zink, Emmett K., West Somerville, Mass. Bilge log. 1,894,211; Jan. 10.
Zinkil, Roy H., Chicago, and L. B. Stine, Niles Center, assignors to Crane Co., Chicago, Ill. Aspirator. 1,893,724; Jan. 10.
Zook, Erle T., Casper, Wyo. Trap. 1,893,974; Jan. 10.
Zotos Corporation. (See Evans, Ralph L., assignor.)
Zottoli, Anthony M., Quincy, Mass. Making building material. 1,893,607; Jan. 10.
Zuckerman, Roscoe C., Stockton, Calif. Distributing fertilizer in conjunction with seed planting. 1,893,512; Jan. 10.
Zworykin, Vladimir K., Swissvale, Pa., assignors to Westinghouse Electric & Manufacturing Company. Light sensitive tube. 1,893,573; Jan. 10.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 10TH DAY OF JANUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accelerator attachment for excavating machines. J. F. Robb. 1,893,564; Jan. 10.
Acid and preparing them, Amides of 2.3-amino-naphthoic. L. Sander. 1,893,656; Jan. 10.
Acid by fungi, Producing gluconic. J. N. Currie, J. H. Kane, and A. Finlay. 1,893,819; Jan. 10.
Acoustic device. R. E. Coleman. 1,893,796; Jan. 10.
Acoustic panel for vehicles. E. B. Patterson. Des. 88,982; Jan. 10.
Actuating mechanism for an electric safety razor. A. A. Grothe. 1,893,620; Jan. 10.
Adjustable brace. J. Dreyfuss. 1,893,986; Jan. 10.
Advertising carrier. A. Deutschmeister. 1,894,027–8; Jan. 10.
Aeronautic equipment. W. Rahn. 1,894,057; Jan. 10.
Aeroplane. G. W. Elmwall. 1,893,665; Jan. 10.
Age registor. A. M. Clifford. 1,894,230; Jan. 10.
Agricultural implement. A. Kerns. 1,893,863; Jan. 10.
Agricultural machine. M. Romera. 1,893,871; Jan. 10.
Air conditioning and circulating device. A. W. Conley. 1,894,035; Jan. 10.
Aircraft, Power means for. A. Erikson. 1,893,936; Jan. 10.
Air heater, Warm. D. R. Richardson and A. R. Lynd. 1,894,122; Jan. 10.
Air heating device. A. B. Modine. 1,893,631; Jan. 10.
Air painting system and the like. J. A. Paasche. 1,893,562; Jan. 10.
Airplane, Pursuit. C. N. Monteith, J. Kylstra, and R. J. Minshall. Des. 88,978; Jan. 10.
Airship. M. Schirmer. 1,894,245; Jan. 10.
Airship mooring method and apparatus. C. B. Fritsche. 1,893,584; Jan. 10.
Alimentary products, Treatment of. N. K. Chaney. 1,894,158; Jan. 10.
Alloy. M. G. Corson. 1,893,984; Jan. 10.
Alloy articles to corrosion, Improving the resistance of. C. G. Fink. 1,893,821; Jan. 10.
Alumina, Producing. C. von Girsewald, H. Siegens, and M. Marschner. 1,894,208; Jan. 10.
Amphibolic material for transportation, Treating. G. V. Wilson. 1,894,250; Jan. 10.
Amplifier, Selective. A. S. Riggs. 1,893,563; Jan. 10.
Anchor structure, Stanchion. P. G. A. Weise. 1,893,722; Jan. 10.
Annealing box. H. O. Breaker. 1,893,930; Jan. 10.
Antenna reel. W. J. Ruble. 1,894,244; Jan. 10.
Antifogging device. W. T. Sherer. 1,893,525; Jan. 10.
Antifreezing solution. P. Attkiss. 1,893,835; Jan. 10.
Antioxidant. A. M. Clifford. 1,894,231; Jan. 10.
Antiskid attachment for wheels. F. R. and C. A. Prange. 1,894,003; Jan. 10.
Antiskid device. H. M. Stettner. 1,893,718; Jan. 10.
Anvil blade for wire stitching machines. R. E. Zeruneith. 1,893,664; Jan. 10.
Apparatus for collecting and conveying dusts. P. P. Nungesser. 1,893,505; Jan. 10.
Apron. H. Goldberger. Des. 88,958–60; Jan. 10.
Arc screen protection system. A. McL. Nicolson. 1,893,504; Jan. 10.
Arch support, Metatarsal. J. J. Coran. 1,893,697; Jan. 10.
Article feeding machine. P. H. Hutchinson and J. Klopak. 1,893,839; Jan. 10.
Articles, Method and apparatus for decorating and forming. T. S. Reese. 1,893,785; Jan. 10.
Ash receiver. S. W. Hyatt. 1,893,704; Jan. 10.
Aspirator. R. H. Zinkil and L. B. Stine. 1,893,724; Jan. 10.
Automatic jack. L. M. Cortigiano. 1,894,086; Jan. 10.
Automobile attachment. A. H. Ellis. 1,894,233; Jan. 10.
Automobile frame. N. E. Wahlberg. 1,893,721; Jan. 10.
Automobile radiator shell with louver-type grille. L. B. Green. Des. 88,965; Jan. 10.
Automobile turn frame. A. Gueriero. 1,893,822; Jan. 10.
Awning, Metal. S. Stack. 1,893,659; Jan. 10.
Bacteriacide and making same. I. S. Barksdale. 1,893,997; Jan. 10.
Baffle support. H. J. Kerr. 1,893,803; Jan. 10.
Bag. G. I. Goldwyn. 1,893,888; Jan. 10.
Bag and the like, Sleeping. H. F. Hardy. 1,893,548; Jan. 10.
Bag closing machine. D. Belcher. 1,893,610; Jan. 10.
Bags, Manufacturing. R. A. Wellman. 1,893,832; Jan. 10.
Bar: *See*—
Holding bar.
Basin sump, Manhole catch. E. J. Edwords. 1,894,031; Jan. 10.
Basket. O. M. James. 1,894,236; Jan. 10.
Bath apparatus. J. S. Belt. 1,893,482; Jan. 10.
Bath apparatus. E. G. Sullivan. 1,893,849; Jan. 10.
Battery lifter, Storage. H. C. Terrell. 1,893,971; Jan. 10.
Bead chain, Ornamental. H. L. Pulver. 1,894,195; Jan. 10.
Bead stringer. L. A. Ederer. 1,893,538; Jan. 10.
Bean, Adjustable bottom hole flow. E. S. Durward. 1,893,934; Jan. 10.
Bearing: *See*—
Roller bearing.
Self lubricated bearing.
Bearing for accurately running shafts using ball bearings. K. Jung. 1,893,995; Jan. 10.
Bearing mounting. J. H. Baninger. 1,893,836; Jan. 10.
Bearing structure, Submersible. J. A. Wintroath. 1,893,922; Jan. 10.
Bearing, Tapered roller. E. A. Johnston. 1,894,099; Jan. 10.
Bed, Couch. K. Koller. 1,893,949; Jan. 10.
Belt, Abdominal supporting. I. M. Pease. 1,893,960; Jan. 10.
Bend for pipe coils, Return. M. Merritt. 1,893,841; Jan. 10.
Benzanthrone, Manufacture of. G. Bacharach and E. McCauliff, jr. 1,893,575; Jan. 10.
Binalarm switch. C. H. Johansson. 1,893,862; Jan. 10.
Binder, Coating or paste, Core or mold. C. M. Saeger, jr. 1,893,683–4; Jan. 10.
Block: *See*—
Sanding block.
Toy construction block.
Board: *See*—
Game board.
Sounding board.
Sizing and ironing board.
Board and making same, Veneered. A. Elmendorf. 1,893,886; Jan. 10.
Boat, Flying. A. Rohrbach. 1,893,908; Jan. 10.
Boat hull and reducing the water friction thereupon. C. de Ganahl and N. O. Robinson. 1,894,256; Jan. 10.
Bodies of motor vehicles, Device for rocking the. G. D. Dewey. 1,893,932; Jan. 10.
Body member, Artificial. A. H. Owen. 1,893,714; Jan. 10.
Bolster and stake construction. W. A. Baldwin. 1,893,878; Jan. 10.
Bomb sight. P. E. Fagerholm. 1,893,542; Jan. 10.
Book. D. H. Parsons. 1,824,224; Jan. 10.
Bookholder. H. Anderson. 1,893,976–7; Jan. 10
Bottle. W. D. Miller. Des. 88,977; Jan. 10.
Bottle attachment, Hot water. J. B. Crapo. 1,894,161; Jan. 10.
Bottle washing device. C. Herzog. 1,893,498; Jan. 10.
Bowl, Mixing. J. E. Marsden. 1,893,628; Jan. 10.
Box: *See*—
Annealing box.
Folding box.
Fare box.
Tote box.
Box-folding machine. O. W. Wikstrom. 1,894,209; Jan. 10.
Box-making machine. C. D. Knowlton. 1,893,554; Jan. 10.
Box press, Packing. J. A. Byington. 1,894,156; Jan. 10.
Brace: *See*—
Adjustable brace.
Brake. E. G. Gunn. 1,894,036; Jan. 10.
Brake mechanism controlled by steering means. H. O. Clark. 1,894,160; Jan. 10.
Brake mechanism, Vehicle. V. G. Apple. 1,893,833; Jan. 10.
Brake tester, Automobile. J. H. Harth. 1,894,174; Jan. 10.
Brake testing device, Automobile. C. E. Yorgason. 1,893,529; Jan. 10.
Breaker strip. G. D. Mallory. 1,894,237; Jan. 10.
Bridge, Concrete arch. K. P. Billner. 1,893,491; Jan. 10.
Bridge stand. B. J. Paulson. Des. 88,983; Jan. 10.
Bridge watch. A. Lombardo. Des. 88,969; Jan. 10.
Brines, Treating. C. W. Jones. 1,893,744; Jan. 10.
Briquettes, Manufacturing. G. Komarek, G. MacPhail, and C. Coryell. 1,893,555; Jan. 10.
Broiler, Electric. R. E. Galer. 1,893,989; Jan. 10.
Building. R. N. Aldrich. Des. 88,947; Jan. 10.
Building material, Making. A. M. Zottoli. 1,893,607; Jan. 10.
Burner: *See*—
Gas burner.
Oil burner.
Bushing and cylinder reamer. J. M. Dolly. 1,893,885; Jan. 10.
Butt for backfill tampers. W. F. Perkins. 1,893,596; Jan. 10.
Butter spreader. A. A. Guerini. 1,893,889; Jan. 10.
Cabinet, Electrical treatment. W. E. Mortrude, jr. Des. 88,979; Jan. 10.

Cabinet, Refrigerator. L. B. Morrison. 1,893,805; Jan. 10.
Caisson work. L. R. Aalbot. 1,894,206; Jan. 10.
Cake stripper. W. A. Wilhelm. 1,893,854; Jan. 10.
Calcium chlorate, Purification of. S. B Heath. 1,893,740; Jan. 10.
Calcium nitrate, Production of. O. Kaselitz. 1,893,946; Jan. 10.
Camera. O. Diax. 1,893,668; Jan. 10
Camera focusing mechanism. G. A. Mitchell. 1,893,712; Jan. 10.
Car construction. F. Ditchfield. 1,893,494; Jan 10.
Car dumping apparatus. R. S. Peterson and A. L. Lee. 1,893,633; Jan. 10.
Car, Sleeping. J. B Strauss. 1,893,510; Jan. 10.
Carbon black, Production of. O. Schmidt. 1,894,126; Jan. 10.
Carbon dioxide, Apparatus for producing solid. E. G. Sullivan. 1,893,850–1; Jan. 10.
Carbon dioxide, Process of and apparatus for producing solid. E. G. Sullivan. 1,893,852; Jan. 10.
Carbonaceous material, Apparatus for carrying out the destructive hydrogenation of. M. Pier. 1,894,116; Jan. 10.
Carburetor. V. R. Heftler. 1,893,896; Jan. 10.
Carburetor. W. M. Thomas. 1,893,754; Jan. 10.
Carburetor. H. H. Trail. 1,893,511; Jan. 10.
Carburetor. E. A. Winfield. 1,893,920; Jan. 10.
Carburetor for internal combustion engines. C. P. Newberry. 1,893,560; Jan. 10.
Card holder. A. R. Oestreich. 1,893,594; Jan. 10.
Cards or the like, Deck of playing. M. A. Pearlman. Des. 89,013; Jan. 10.
Carriage construction. J. Alexander. 1,893,488; Jan. 10.
Carrier: *See*—
Advertising carrier. Pole carrier.
Luggage carrier.
Carrying case. H. P. Shriver. 1,893,527; Jan. 10.
Cart, Service lubricating. J. E. Bales. Des. 89,005; Jan. 10.
Carving machine structure. G. A. Parten. 1,893,957–8; Jan. 10.
Case: *See*—
Carrying case. Vanity case.
Case and lighter, Combined cigarette. R. Feurer. 1,893,765; Jan. 10.
Casein solution and making the same. F. C. Atwood. 1,893,608; Jan. 10.
Casing, Platform scale. M. J. Weber. Des. 88,997; Jan. 10.
Casing, Supercharger. W. Noble. 1,894,054; Jan. 10.
Casting abrasive-faced articles. R. S. Edmondson and M. Holmes. 1,893,539–40; Jan. 10.
Castings, Production of coated malleable iron. L. H. Marshall. 1,893,782; Jan. 10.
Catalyst, Metallic. O. G. Bennett and J. C. W. Frazer. 1,893,879; Jan. 10.
Catalytic material, Production of. J. A. Weil. 1,893,812; Jan. 10.
Catalytic reactions, Apparatus for endothermic. G. Wietzel and G. Schiller. 1,894,140; Jan. 10.
Catamenial bandage. J. Josias. 1,893,745; Jan. 10.
Catapult for game apparatus. D. D. Levitt. 1,893,865; Jan. 10.
Cathode, Highly emissive. O. Emersleben. 1,893,935; Jan. 10.
Cement, Apparatus and process for making. C. B. Oliver and V. E. Vallet. 1,893,522; Jan. 10.
Cement building material, Asbestos. W. J. Moeller. 1,893,783; Jan. 10.
Cement, Manufacturing Portland. J. H. Colton. 1,893,696; Jan. 10.
Centrifugal pump. J. W. W. Drysdale. 1,894,165; Jan. 10.
Chain: *See*—
Bead chain.
Change over device. L. E. Brocius. 1,893,576; Jan. 10.
Chassis, Equalizing. J. W. Chenoweth. 1,893,695; Jan. 10.
Chlorides, Separating cuprous and ammonium. W. C. Stoesser. 1,893,969; Jan. 10.
Chock, Wheel. R. S. Colley. 1,893,580; Jan. 10.
Chocolate and the like coating machine. A. Winkler and M. Dünnebier. 1,894,077; Jan. 10.
Choke for oil wells, Button hole. L. J. Black. 1,893,487; Jan. 10.
Choline derivative and making same, New. O. Dalmer and C. Diehl. 1,894,162; Jan. 10.
Chromium oxide and chromium hydroxide, Manufacture of. R. Caspari. 1,893,761; Jan. 10.
Cigar wrapper and making the same. H. Radzinsky. 1,893,523; Jan. 10.
Cigarette package. C. H. Mackie. 1,894,221; Jan. 10.
Circuit breaker, Nonclosable. T. B. Eastburn. 1,893,615; Jan. 10.
Circuits, Electric translation. A. S. Fitz Gerald. 1,893,766; Jan. 10.
Circuits for photo-electric cells. W. L. Dawson. 1,894,023; Jan. 10.
Cleaning apparatus. A. J. Raus. 1,893,844; Jan. 10.
Cleaning device for waste or drain pipes. J. P. Barrere. 1,893,979; Jan. 10.
Clip: *See*—
Blade clip.
Clip consisting of a spring for cigarettes or cigars, Holding. K. Schult. 1,894,128; Jan. 10.
Clock case or similar article. P. Buhrle. Des. 89,030; Jan. 10.
Clothes peg. W. Prönnecke. 1,894,121; Jan. 10.
Clutch control for automatic gear shifting systems, Progressive. G. Fleischel. 1,893,644; Jan. 10.
Coating composition. F. B. Morton. 1,894,050; Jan. 10.
Coating, Protective. A. W. Seymour. 1,893,599; Jan. 10.
Coating, Wrinkled finish. T. F. Bradley. 1,893,611; Jan. 10.
Coin and slug segregating apparatus. A. M. Williams. 1,893,692; Jan. 10.
Coin assorting and counting machine. H. B. Myers. 1,894,190; Jan. 10.
Collapsible tube, Plural chambered. M. F. Murphy. 1,894,115; Jan. 10.
Collar locator. D. L. Shull. 1,893,600; Jan. 10.
Colloids of the cellulose series of the group of cellulose esters or ethers fast greenish yellow tints, Dyeing of. F. Felix. 1,893,543; Jan. 10.
Color analyzer. C. W. Stone. 1,894,132; Jan. 10.
Comb. P. Kocher. 1,893,864; Jan. 10.
Combination tool. E. Filan. 1,893,737; Jan. 10.
Compensating valve. C. E. Gleason and M. A. Martin. 1,893,859; Jan. 10.
Compound and preparing same, Vulcanizable. H. A. Morton. 1,893,869; Jan. 10.
Concrete delivery. H. J. Shaw. 1,894,129; Jan. 10.
Conductor system, Parallel. L. Tonks. 1,894,134; Jan. 10.
Confection, Making a coated frozen. A. Balian. 1,893,513; Jan. 10.
Confection package, Frozen. L. K. Salsburg. 1,894,199; Jan. 10.
Connecting means for ophthalmic mountings and the like. E. L. Schumacher. 1,893,964; Jan. 10.
Connection for collapsible articles of furniture. E. Vanderminden. 1,893,603; Jan. 10.
Container: *See*—
Covered container.
Container. V. I. Cruser. 1,894,022; Jan. 10.
Container. J. Levy. Re18,711; Jan. 10.
Container and supporting unit. W. Jay. 1,893,624; Jan. 10.
Control systems for hot cathode vacuum tubes. A. Mutscheller. 1,894,051; Jan. 10.
Controller. L. Janisch. 1,894,098; Jan. 10.
Controlling apparatus for drilled wells. F. V. Barycz. 1,893,489; Jan. 10.
Conveyer. M. J. Anderson. 1,893,574; Jan. 10.
Conveying system. T. A. Federwitz and W. T. Bailey. 1,893,736; Jan 10.
Cooling means for draw works for well drilling machinery. G. F. Myers. 1,894,001; Jan. 10.
Cooling means for rotary valves. A. Baer. 1,893,855; Jan. 10.
Copying mechanism. O. Waldrich. 1,893,916; Jan. 10.
Cotton cleaning device for cotton gins. J. J. Lesikar. 1,894,182; Jan. 10.
Cotton picking machine. J. D. and M. D. Rust. 1,894,198; Jan. 10.
Counterbalance for drive shafts. O. Bieler. 1,893,928; Jan. 10.
Coupling: *See*—
Flange coupling.
Flexible coupling. Store front coupling.
Coupling device. H. C. Forbes. 1,893,618; Jan. 10.
Cover: *See*—
Garment cover. Spring cover.
Covered container. J. Hirshman. 1,893,743; Jan. 10.
Cradle for lifeboats. W. Machado. 1,893,866; Jan. 10.
Crate. J. P. Kubes. 1,894,179; Jan. 10.
Crossing gate, Automatic. W. C. McWhirter. 1,893,824; Jan. 10.
Crushing and mixing machine. O. J. Lebrack. 1,894,106; Jan. 10.
Curling iron. F. R. Marcel. 1,893,503; Jan. 10.
Current amplifier, Alternating. D. K. Gannett. 1,893,545; Jan. 10.
Current limiter. W. H. Pratt. 1,894,119; Jan. 10.
Current rectifier, Alternating. W. H. Vidor. 1,893,915; Jan. 10.
Current rectifying device, Electric. E. R. Gill. 1,894,035; Jan. 10.
Currents, Device for the transformation of electric. J. Dieux. 1,894,029; Jan. 10.
Cutting apparatus for mowers. J. C. Slonneger. 1,894,130; Jan. 10.
Cylinder, Piston. F. S. Jones. 1,894,043; Jan. 10.
Cylinders, Cleaning gas. G. T. Reich. 1,893,652; Jan. 10.
Deodorizing and disinfecting apparatus. L. Kopperstein. 1,893,648; Jan. 10.
Designs and transfer composition, Transferring. W. S. Lawrence. 1,893,626; Jan. 10.
Designs, Forming. F. R. Johnson. 1,893,944; Jan. 10.
Desk, Door. E. J. Andler. 1,894,145; Jan. 10.
Detergent composition. M. C. Taylor. 1,894,207; Jan. 10.
Dibenzanthrone derivatives and the like, Production of. I. B. Anderson, R. F. Thomson, and J. Thomas. 1,893,530; Jan. 10.
Dies, Making thread cutting. F. O. Wells. 1,893,688; Jan. 10.
Directional transmission and reception with a plurality of oscillators Arrangement for. H. Hecht, and H. Stenzel. 1,893,741; Jan. 10.

Disinfecting medium and manufacturing the same. E. A. Garbe. 1,893,770; Jan. 10.
Disk, Flexible coupling. J. R. Hemeon. 1,894,175; Jan. 10.
Disk harrow. J. E. Boda. 1,893,641; Jan. 10.
Dispenser: *See*—
Milk and cream dispenser. Powder dispenser.
Dispensing apparatus. A. Boomershine. 1,893,725; Jan. 10.
Dispensing apparatus. I. H. Kauffman and A. M. Williams. 1,893,708; Jan. 10.
Dispensing apparatus. J. W. Moore. 1,893,632; Jan. 10.
Display rack, Merchandise. H. M. Davis. Des. 88,950; Jan. 10.
Distribution system. D. D. Chase. 1,894,084; Jan. 10.
Divider and baller, Combination. S. Schiff. 1,893,845; Jan. 10.
Dough and bread, Making. G. Török and G. Becze. 1,894,135; Jan. 10.
Dovetail. W. Stutson. 1,893,639; Jan. 10.
Draft appliance. R. E. Choate. 1,893,983; Jan. 10.
Drill press. F. C. Allen. 1,894,214; Jan. 10.
Drill Press. C. F. Sherman. 1,893,965; Jan. 10.
Driving mechanism. H. R. Patterson. 1,893,959; Jan. 10.
Drum, Snare. W. E. Soderberg. 1,894,068; Jan. 10.
Dyestuff of the anthraquinone series, P. Nawiasky and A. Krause. 1,894,191; Jan. 10.
Dyestuffs and complex metal compounds thereof, Azo. K. Holzach and G. von Rosenberg. 1,893,646; Jan. 10.
Dyestuffs and material dyed with them, Azo. H. Kracker and E. Thoms. 1,893,556; Jan. 10.
Dyestuffs, Manufacture of monoazo. O. Knecht and T. Wirth. 1,893,553; Jan. 10.
Dyestuffs on the fiber and new compositions of matter, Azo. J. Haller and C. Taube. 1,893,991; Jan. 10.
Earth working implement. G. Geraldson. 1,893,619; Jan. 10.
Edible receptacle. A. W. Davison. Des. 88,951; Jan. 10.
Electric motor. W. E. Masterson and H. Price. 1,893,629; Jan. 10.
Electric regulator. A. S. Fitz Gerald. 1,893,768; Jan. 10.
Electric regulator. A. S. Fitz Gerald and F. L. Gaines. 1,893,767; Jan. 10.
Electric regulator. G. W. Garman. 1,893,771; Jan. 10.
Electric regulator. H. T. Lyman, jr. 1,893,780–1; Jan. 10.
Electric switch. B. E. Getchell. 1,893,827; Jan. 10.
Electric switch. J. G. Peterson. 1,894,002; Jan. 10.
Electric switch. J. G. Peterson. 1,894,225; Jan. 10.
Electric switch. R. R. Teichner and S. R. Yancey. 1,894,070; Jan. 10.
Electrical regulator. G. W. Garman. 1,893,772; Jan. 10.
Electrical regulator. L. W. Thompson. 1,894,133; Jan. 10.
Electrical swivel connection. M. McGregor. 1,894,187; Jan. 10.
Electrode cleaning process. H. S. Woodward. 1,893,817; Jan. 10.
Electron emitters and the product, Producing. F. Ruffey. 1,894,059; Jan. 10.
Electron tube. E. A. Giard. 1,893,887; Jan. 10.
Elevator-signaling system. E. P. Butusov. Re18,709; Jan. 10.
Engine: *See*—
Internal combustion engine.
Engine. R. H. Farwell. 1,894,033; Jan. 10.
Engines, Oil feeding apparatus for internal combustion. M. Kumagai. 1,893,649; Jan. 10.
Ester resin product and making same. T. F. Bradley. 1,893,982; Jan. 10.
Ether, Purification and preservation of. S. Palkin and H. P. Watkins. 1,893,870; Jan. 10.
Ethylene containing gaseous mixtures. Increasing the ethylene content of. G. F. Horsley. 1,893,536; Jan. 10.
Exhausting mechanism. D. N. Crosthwait, jr. 1,893,883; Jan. 10.
Extension outlet. R. S. McNeil. 1,894,112; Jan. 10.
Fabric: *See*—
Wire fabric.
Fare box. E. H. Thompson. 1,894,071; Jan. 10.
Fastener: *See*—
Separable fastener. Shoe lace fastener.
Fastening device for sheet metal structures. G. R. Cruze. 1,893,537; Jan. 10.
Feeding mechanism. M. O. Jones and W. P. Shomaker. 1,894,044; Jan. 10.
Fertilizer distributor. B. W. Segars. 1,894,008; Jan. 10.
Fertilizer in conjunction with seed planting, Distributing. R. C. Zuckerman. 1,893,512; Jan. 10.
Fertilizer manufacture. C. Tyler and F. W. Parker. 1,894,136; Jan. 10.
Fertilizer, Tree. G. C. Karshner. 1,893,707; Jan. 10.
Figure toy. F. Anderson. 1,894,144; Jan. 10.
File, Storage. S. C. Huffman. 1,893,801; Jan. 10.
Filing rack. F. M. Martin. 1,894,185; Jan. 10.
Filling, vacummizing, sterilizing, and sealing machine. D. B. Ronzone. 1,893,716; Jan. 10.
Film record. W. G. Cornell. 1,894,021; Jan. 10.
Filter for hot-air registers, Screen. F. A. Walloch. 1,893,571; Jan. 10.
Firing device. A. F. Spring. 1,894,203; Jan. 10.
Fish handling device. F. J. Mullins. 1,893,903; Jan. 10.
Fish lure, Artificial. C. P. Schlipp. 1,893,686; Jan. 10.
Fitting for threaded members. H. W. Avery. 1,893,927; Jan. 10.
Fixture support. R. L. Call. 1,893,729; Jan. 10.
Flag. C. A. Gearing. Des. 88,956; Jan. 10.
Flag holder and support therefor. W. F. Hogan. 1,893,585; Jan. 10.
Flange coupling. H. N. Hackett. 1,894,094; Jan. 10.
Flash light bottom cap. G. H. Barber. 1,894,147; Jan. 10.
Flexible coupling. J. S. Oechsle. 1,893,593; Jan. 10.
Floor construction. P. G. Heidman. 1,893,742; Jan. 10.
Flower support. Y. Takahashi. 1,893,970; Jan. 10.
Fluid impeller. H. G. Lykken. 1,893,710; Jan. 10.
Foldable rack. J. Hirsch. 1,894,176; Jan. 10.
Folding box. L. Boss. 1,894,226; Jan. 10.
Food packet and manufacturing the same, Frozen. C. J. Nehf. 1,893,842; Jan. 10.
Foot for supporting legs and the like. J. Silverman. 1,893,910; Jan. 10.
Foot press. J. Jensen. 1,893,705; Jan. 10.
Foot rest. H. H. Rabbes. 1,893,681; Jan. 10.
Foreign substance, Determining the contents of a. B. D. Enlund. 1,893,700; Jan. 10.
Forming mechanism for web presses. H. A. W. Wood. 1,893,816; Jan. 10.
Fractionating method. J. Primrose. 1,893,907; Jan. 10.
Frame: *See*—
Automobile frame. Automobile turn frame.
Frosting or condensation of moisture on glass or other surfaces, Preventing. F. J. Stollsteimer. 1,894,205; Jan. 10.
Fuel combustion, Liquid. H. Meachem. 1,893,902; Jan. 10.
Fuel feeder, Pulverized. C. M. Buck. 1,893,857; Jan. 10.
Fumigant gas producing composition. H. W. Houghton. 1,894,041; Jan. 10.
Fur plucking. W. K. Wilson. 1,893,919; Jan. 10.
Furnace: *See*—
Oil heating furnace. Pipe still furnace.
Furnace. H. C. Jurs. 1,893,898; Jan. 10.
Furnace for casting cores and the like, Electrically heated drying. E. F. Russ. 1,893,963; Jan. 10.
Fuse-changer, Automatic. R. R. Pittman and C. H. Walsh. 1,894,056; Jan. 10.
Fuse for bombs. D. L. Woodberry. 1,893,663; Jan. 10.
Fuselage or other bodies of aircraft, Construction of. B. N. Wallis. 1,894,011; Jan. 10.
Game board. C. L. Cutler. 1,893,732; Jan. 10.
Games, Apparatus for playing race. F. A. A. Evans. 1,893,541; Jan. 10.
Garment. M. C. Schrank. 1,894,062; Jan. 10.
Garment. G. A. Steiner. 1,893,914; Jan. 10.
Garment cover. R. M. Spence. 1,893,968; Jan. 10.
Garment hanger. B. Grozow. 1,893,519; Jan. 10.
Garment hanger. S. Rosenberg. 1,893,508; Jan. 10.
Garment hanger. C. T., jr., E. E., C. D., and R. L. Wilt. 1,893,815; Jan. 10.
Gas analysis. J. S. Beekley. 1,893,490; Jan. 10.
Gas burner. H. B. Barber. 1,893,533; Jan. 10.
Gas burner. G. B. Killam. 1,893,587; Jan. 10.
Gas discharge relay. J. M. Schmierer. 1,893,638; Jan. 10.
Gas hub, Exhaust. T. A. Dicks. 1,893,820; Jan. 10.
Gas meter. H. H. Sprague. 1,893,601; Jan. 10.
Gaseous light-valve. C. F. Jenkins. 1,894,042; Jan. 10.
Gaseous mixtures by liquefaction, Separation of. H. Lantz. 1,894,180; Jan. 10.
Gaseous reactions, Process and apparatus for catalytic. J. L. Brill. 1,893,492; Jan. 10.
Gases and oils, Apparatus for treating hydrocarbon and other. H. T. Darlington. 1,893,667; Jan. 10.
Gases from carbides and water, Production of. P. Keusen. 1,893,777; Jan. 10.
Gasket. S. W. Braner. 1,893,881; Jan. 10.
Gasoline pump. R. B. Whitman. 1,893,972; Jan. 10.
Gate: *See*—
Crossing gate.
Gauge: *See*—
Pressure gauge.
Gauging apparatus. L. I. Dennison and C. F. Dreyer. 1,894,025; Jan. 10.
Gear: *See*—
Steering gear.
Gear for coal washers and concentrators and operating the same, Valve. T. M. Chance. 1,894,020; Jan. 10.
Gear for furnaces, Reversing. O. Reiner. 1,893,786; Jan. 10.
Gearing. E. Wildhaber. 1,893,572; Jan. 10.
Gearing, Transmission. C. E. F. Ahlm. 1,893,640; Jan. 10.
Glass, Apparatus for cutting flat. 1,893,658; Jan. 10.
Glass articles, Method and apparatus for producing. L. D. Soubier. 1,894,069; Jan. 10.
Glass feeding machine. J. F. Dowling. 1,894,030; Jan. 10.
Glass, Polishing. J. W. Crnikshank. 1,893,985; Jan. 10.
Glove and the production thereof. H. Gillilan. 1,894,091; Jan. 10.
Glove, Rubber. E. J. Smith. 1,894,066; Jan. 10.
Gold, Apparatus for the recovery of. A. J. Clark and W. H. Todd. 1,894,159; Jan. 10.
Grading machine. W. E. Ghent. 1,893,938; Jan. 10.
Granular materials, Conserving. F. Bartling. 1,894,149; Jan. 10.
Grass digger, Quack. A. F. Miller. 1,893,867; Jan. 10.
Grease gun. L. Goodman. 1,893,738; Jan. 10.
Grinding apparatus. F. G. Musbeno. 1,893,806; Jan. 10.

Grinding machine. W. H. Chapman. 1,893,837; Jan. 10.
Grinding method and means. T. B. Smith. 1,894,067; Jan. 10.
Grip strap. H. H. Rubin. 1,893,807; Jan. 10.
Guard, Dust. F. V. Chaney. 1,893,516; Jan. 10.
Guard for automobile doors. S H H. Kuensel. 1,894,102; Jan. 10.
Guard, Guy. T. Birkenmaier. 1,893,961; Jan. 10.
Guard, Portable. O. S. Flood. 1,893,617; Jan. 10.
Guide adjusting means, Sealer. J. L. Ferguson. 1,893,496; Jan. 10.
Hair, Permanently waving. R. L. Evans. 1,894,032; Jan. 10.
Hairpin. L. F. Burch. 1,893,514; Jan. 10.
Hair waving device. R. Bove. 1,893,794; Jan. 10.
Handbag and the like. L. Bromfeld. 1,893,931; Jan. 10.
Hanger: *See*—
Garment hanger.
Hanger support, Garment. E. R. Glenn. 1,893,702; Jan. 10.
Harvester, Cow pea. J. F. Haag. 1,893,860; Jan. 10.
Harvester thresher. B. L. Rogers. 1,894,123; Jan. 10.
Harvester thresher. A. B. Welty. 1,894,138; Jan. 10.
Hat. F. Ostolaza. 1,894,213; Jan. 10.
Hearse with fixed turntable, Side-loading. F. W. Harris. 1,893,739; Jan. 10.
Heat exchange apparatus. G. C. Derry. 1,894,026; Jan. 10.
Heat exchange unit. A. B. Modine. 1,893,650; Jan. 10.
Heat exchanger. J. S. Belt. 1,893,484; Jan. 10.
Heat treating hydrocarbons at an elevated temperature. A. Mittasch, R. Wietzel, and C. Pfaundler. 1,893,804; Jan. 10.
Heater: *See*—
Air heater.
Spindle and croquinole hair waving heater.
Heater and wiper device, Oscillatory combined windshield. E. E. Saucier. 1,894,200; Jan. 10.
Heater control system. F. M. Poole. 1,893,635; Jan. 10.
Heating and ventilating device. E. L. Weber. 1,894,229; Jan. 10.
Heating apparatus for glass furnaces. P. Q. Williams. 1,894,249; Jan. 10.
Heating appliance for printing presses. H. A. Brandtjen. 1,894,018; Jan. 10.
Heating system. R. E. Carnes. 1,893,643; Jan. 10.
Hinge. L. Newman. 1,893,592; Jan. 10.
Holder: *See*—
Card holder. Necktie holder.
Index holder. Rod holder.
Holder and windshield, Combined match. L. Rubinstein. 1,893,655; Jan. 10.
Holder for needles or the like, Manipulating. E. W. Winkler. 1,893,528; Jan. 10.
Holder or writing tablet, Score card. J. S. Baker. 1,894,146; Jan. 10.
Holder support for hand assembling valve stems and pneumatic tubes. E. M. Godfrey, jr. 1,893,645; Jan. 10.
Holding bar, Plate glass. D. J. Murnane. 1,893,713; Jan. 10.
Hook for airplanes, Arresting. R. J. Minshall. 1,893,591; Jan. 10.
Hopper feed for endless bed machines. P. A. Solem and D. J. McLaughlin. 1,893,566; Jan. 10.
House framing, Metallic. H. Ridgway. 1,893,636; Jan. 10.
Hub assembly for wheel tires. A. J. Musselman. 1,894,238; Jan. 10.
Humidifier. A. J. Lorenz and F. E. Hartman. 1,893,954; Jan. 10.
Hydrocarbons from olefines, Production of liquid. F. Winkler and H. Haeuber. 1,894,255; Jan. 10.
Hydrocarbons, Production of liquid. M. Pier and E. Anthes. 1,894,257; Jan. 10.
Ice cream cone. S. G. Hopkins. 1,893,941; Jan. 10.
Inclosed switch. H. J. Hammerly. 1,893,829; Jan. 10.
Incubator. J. C. Bohmker. 1,893,694; Jan. 10.
Incubator. L. A. Wilson. 1,893,918; Jan. 10.
Index holder. J. H. Massé. 1,893,990; Jan. 10.
Indicator: *See*—
Septic indicator.
Interference in carrier systems, Reduction of. V. P. Thorp. 1,893,569; Jan. 10.
Internal combustion engine. C. A. Rosler. 1,893,682; Jan. 10.
Iron, Chair. H. W. Bolens. 1,893,929; Jan. 10.
Ironer. L. Ringer. 1,894,242; Jan. 10.
Jack: *See*—
Automatic jack.
Jack. F. J. Bullis. 1,893,728; Jan. 10.
Jacking apparatus. J. Gutmann, jr. 1,893,890; Jan. 10.
Jacking device for road vehicles. J. F. Stevenson and G. Bowman. 1,893,848; Jan. 10.
Key attachment. Door. W. Klotz. 1,893,948; Jan. 10.
Kiln for the heat treatment of materials. H. C. and R. C. Erith. 1,894,167; Jan. 10.
Kit, Cantilever. H. P. Shriver. 1,893,526; Jan. 10.
Knitted fabric. G. Gastrich. Des. 88,955; Jan. 10.
Knitting machine. P. P. La Montagne. 1,893,589; Jan. 10.
Labeling machine. C. R. Fredsell. 1,893,826; Jan. 10.
Laboratory support. E. L. Harrington. 1,893,799; Jan. 10.
Lamp. M. R. Charles. 1,893,730; Jan. 10.
Lamp, Surgical head. P. Good. 1,893,773; Jan. 10.
Lamp, Therapeutic arc. O. Hibner. 1,893,703; Jan. 10.
Last for shoes, Inflatable cleaning and dyeing. R. M. K. Chapman. 1,893,795; Jan. 10.
Leaf, Artificial. C. W. Jonam. 1,893,500; Jan. 10.
Leaf flipper. R. M. Raynolds. 1,894,241; Jan. 10.
Leather, Method and apparatus for tanning. C. Kannel. 1,893,706; Jan. 10.
Leather or similar article of manufacture. K. D. Robinson. Des. 88,987; Jan. 10.
Level. J. O. French. 1,893,988; Jan. 10.
Lever, Brake and clutch. C. E. Furgason. 1,893,544; Jan. 10.
Lifter: *See*—
Battery lifter. Valve spring lifter.
Pan lifter.
Lifting mechanism. I. V. K. Hott. 1,894,040; Jan. 10.
Light beam instrument. F. S. Marcellus. 1,894,111; Jan. 10.
Light control, Electro-mechanical pilot. D. Rossi and N. Colicchio. 1,894,006; Jan. 10.
Light sensitive tube. V. Zworykin. 1,893,573; Jan. 10.
Lighting and air circulating fixture, Combined. P. Raff. Des. 88,985; Jan. 10.
Lighting device. W. Wilson. 1,893,606; Jan. 10.
Lighting fixture. C. A. Schroeder. 1,894,063; Jan. 10.
Lighting fixture head. C. Moser. Des. 88,980; Jan. 10.
Limb, Artificial. A. E. Tullis. 1,893,853; Jan. 10.
Liquid dispensing apparatus. W. E. Milestone. 1,893,843; Jan. 10.
Liquid filling machine. J. Schmidt. 1,894,007; Jan. 10.
Liquid from containers, Regulating the flow of. A. W. A. Barnard and H. Adin. 1,893,978; Jan. 10.
Loader. T. H. Oppenheim. 1,893,506; Jan. 10.
Loader, Portable. H. B. Walker. 1,893,917; Jan. 10.
Lock: *See*—
Safety lock. Window lock.
Locking means, Automobile. G. M. Mortenson. 1,894,189; Jan. 10.
Log, Bilge. E. K. Zink. 1,894,211; Jan. 10.
Looms, Thread cutting temple for. F. E. Douglas. 1,893,734; Jan. 10.
Lubrication for submerged bearings. J. A. Wintroath. 1,893,921; Jan. 10.
Lubricator. J. C. Burford. 1,893,536; Jan. 10.
Luggage carrier. J. M. Deen. 1,893,752; Jan. 10.
Machine center. T. Kerr. 1,894,101; Jan. 10.
Machine for drawing glass tubes or rods. R. Salomon. 1,894,201; Jan. 10.
Machine for filling containers. C. M. Weber. 1,893,831; Jan. 10.
Machine for manufacturing confections. L. G., H. E., and E. R. James. 1,893,673; Jan. 10.
Machine for producing candy confection. L. G., H. E., and E. R. James. 1,893,672; Jan. 10.
Machine for separating and counting coins. C. G. Graeme. 1,893,828; Jan. 10.
Machine for steeping pelts. M. Bloch. 1,893,758; Jan. 10.
Magazine and book rack or the like article, Combination. J. W. H. Hamilton. Des. 88,967; Jan. 10.
Magneto. J. F. Martin. 1,893,840; Jan. 10.
Manganese resinate. P. S. Miller. 1,894,113; Jan. 10.
Manifold for motors, Intake. A. E. Kuehn. 1,893,502; Jan. 10.
Manifolding machine. J. Q. Sherman and A. W. Metzner. 1,894,065; Jan. 10.
Marker. R. Burton. 1,894,155; Jan. 10.
Marker, Grave. J. A. Fumaroi. Des. 88,953; Jan. 10.
Materials for deoxidation of rust, Making coating. R. Eberhard. 1,893,495; Jan. 10.
Matters, Process and apparatus for the roasting or calcination of pulverulent. E. C. Saint-Jacques. 1,893,913; Jan. 10.
Mechanical movement. C. S. Hansen. 1,893,621; Jan. 10.
Mechanic's tool. F. Yavicoli. 1,893,973; Jan. 10.
Metal complex compound. H. Schmidt and H. Jung. 1,893,872; Jan. 10.
Metal compounds of an o-hydroxyazo dyestuff. H. Krzikalla. 1,893,557; Jan. 10.
Metal stock, Apparatus for reducing. G. B. Coe. 1,894,232; Jan. 10.
Metals and alloys by reduction, Production of. W. B. Hamilton and T. A. Evans. 1,893,992; Jan. 10.
Metals to be submitted to cold deformations, Soft coating. F. Gianni. 1,894,169; Jan. 10.
Metals, Treating. W. R. Jeavons and M. J. Rentschler. 1,893,499; Jan. 10.
Metallic coated products, Manufacturing. M. Grossman. 1,893,939; Jan. 10.
Meter: *See*—
Gas meter.
Meter. W. F. Perkins and L. Trager. 1,893,595; Jan. 10.
Meter service installation, Electricity. F. Holmes. 1,893,550; Jan. 10.
Milk and cream dispenser. T. E. Davis. 1,893,884; Jan. 10.
Milk filtering apparatus. G. C. Every. 1,893,735; Jan. 10.
Minerals by flotation, Separation of. A. M. Gaudin. 1,893,517; Jan. 10.
Minerals, Separating. D. J. Carey. 1,893,578; Jan. 10.
Miniature structure. G. D. Wanner. 1,893,791; Jan. 10.

Miniature structures, Constructing. G. D. Wanner. 1,893,792; Jan. 10.
Mining machine. F. A. Lindgren. 1,893,952; Jan. 10.
Moisture content of gases, Apparatus for determining the. R. G. Guthrie and O. J. Wilbor. 1,894,172; Jan. 10.
Mold. H. A. Rohrich and L. D. Soubier. 1,894,243; Jan. 10.
Molding machine for pulp. W. J. De Reamer. 1,894,089; Jan. 10.
Molybdenum and tungsten cabonyls, Production of. M. Naumann and L. Schlecht. 1,894,239; Jan. 10.
Motor: *See*—
Electric motor. Single-phase motor.
Motor construction for automobiles, Demountable. D. E. Austin. 1,893,609; Jan. 10.
Mounting units. S. G. Dunning. 1,893,699; Jan. 10.
Mower, Lawn. G. H. Nobbs. 1,894,053; Jan. 10.
Musical instrument. J. H. Hammond, jr. 1,893,895; Jan. 10.
Musical tones and sounds, Apparatus for producing. E. D. Hecox. 1,893,838; Jan. 10.
Nails, Process and apparatus for polishing finger. E. M. O'Donnell. 1,893,561; Jan. 10.
Nautical precision instrument. F. Alessi. 1,893,925; Jan. 10.
Necktie holder. S. C. Waite. 1,893,570; Jan. 10.
Net, Landing. W. Olson. 1,894,192; Jan. 10.
Nitrocellulose, Purification of. F. Olsen. 1,893,677; Jan. 10.
Oil burner. J. C. Lyle and R. W. Messmore. 1,893,674; Jan. 10.
Oil clarifier. B. F. Court. 1,893,581; Jan. 10.
Oil heating furnace. W. M. Cross. 1,893,731; Jan. 10.
Oil, Manufacturing lubricating. R. A. Halloran and M. L. Chappell. 1,893,774; Jan. 10.
Oil pumping apparatus. G. C. Engstrand. 1,894,234; Jan. 10.
Olefines from paraffin hydrocarbons, Separation of. R. M. Deanesly. 1,893,733; Jan. 10.
Opener, Jar. F. P. Smith. 1,894,202; Jan. 10.
Ores, Metallurgy of complex. M. G. Fowler, C. R. Kuzell, and O. C. Ralston. 1,893,798; Jan. 10.
Oscillator. V. E. Whitman. 1,893,813; Jan. 10.
Package for candy bars. J. H. Ware, jr. 1,893,811; Jan. 10.
Packing gland, Auxiliary. C. A. Robbins. 1,893,961; Jan. 10.
Packing, Making rod. W. K. Queen. 1,893,597; Jan. 10.
Pamphlet binding back. H. G. Buchan. 1,893,727; Jan. 10.
Pan for locomotive, Ash. H. Glaenser. 1,894,170; Jan. 10.
Pan lifter, Ice cube. M. K. Buchanan. 1,893,585; Jan. 10.
Paper and the like, Creping webs of. W. W. Rowe. 1,893,717; Jan. 10.
Paper box machine. E. G. Staude. 1,894,131; Jan. 10.
Paper feeding. R. Klemm. 1,893,778; Jan. 10.
Paper into rolls, Mechanism for winding. P. N. McCarthy and P. Masson. 1,894,253; Jan. 10.
Paper making process and machine. E. Poirier. 1,893,678; Jan. 10.
Paper, Reenforced. G. E. Gibbs. 1,894,219; Jan. 10.
Paper roll control. J. J. Halliwell. 1,893,891; Jan. 10.
Parachute pack releaser, Automatic. M. W. Collet. 1,893,818; Jan. 10.
Para-cymene, Producing. I. W. Humphrey. 1,893,802; Jan. 10.
Pattern for sheaves or pulleys. E. H. Frick and C. N. Eckel. 1,893,583; Jan. 10.
Pen desk set, Fountain. A. Bienenstein. 1,893,534; Jan. 10.
Pen, Fountain. R. S. Carter. 1,893,579; Jan. 10.
Perimeter delineator. N. S. Bortner. 1,893,793; Jan. 10.
Phenolic condensation products, Making. H. M. Dent. 1,894,088; Jan. 10.
Photographic printing apparatus. W. H. T. R. Rose. 1,894,004–5; Jan. 10.
Piano, Regenerative. J. H. Hammond, jr. 1,893,940; Jan. 10.
Piano with loud speaker on secondary sound board. J. H. Hammond, jr. 1,893,893; Jan. 10.
Piano with reaction loud speaker. J. H. Hammond, jr. 1,893,892; Jan. 10.
Pigments and product, Modifying the characteristics of. H. A. Gardner. 1,894,168; Jan. 10.
Pile, Composite. H. P. Burrell. 1,893,515; Jan. 10.
Pile driving machine. L. Watson. 1,893,687; Jan. 10.
Piling, Corrugated sheet. J. R. Wemlinger. 1,894,012; Jan. 10.
Pipe-closure device. J. H. Hirsch. 1,893,993; Jan. 10.
Pipe still furnace. D. G. Brandt. 1,894,215; Jan. 10.
Pipes and the like, Extrusion of metal. P. Dunsheath. Re18,710; Jan. 10.
Pipes, Method and apparatus for coating. J. B. W. Gardiner. 1,893,937; Jan. 10.
Piston ring. A. W. Morton. 1,894,000; Jan. 10.
Pitch propeller, Variable. D. G. Lilley. 1,894,048; Jan. 10.
Pitman, Quick detachable. L. J. Black. 1,893,485; Jan. 10.
Planer, Subgrade. E. H. Lichtenberg and W. A. Nelson. 1,893,559; Jan. 10.
Platform, Telegraph typewriter pasting. J. J. Gilligan and H. R. Starr. 1,893,518; Jan. 10.
Plug valve. I. N. and F. T. Reed. 1,894,196; Jan. 10.
Pole carrier, Fishing. E. F. Doht. 1,894,104; Jan. 10.
Pole puncturing machine. E. G. Monson and H. E. Cullen. 1,894,049; Jan. 10.
Polishing appliance for finger nails. P. Würsburger. 1,894,142; Jan. 10.
Poppet valve. A. E. Richards. 1,894,254; Jan. 10.
Portable machine for boring tapered elliptical holes. B. C. Travis. 1,893,810; Jan. 10.
Potassium nitrate, Production of. O. Kaselitz. 1,893,945; Jan. 10.
Pounder washer. F. Schmidt. 1,894,125; Jan. 10.
Powder dispenser. G. Bourquin. 1,893,880; Jan. 10.
Power converting apparatus, Electric. A. H. Mittag. 1,894,114; Jan. 10.
Power generating plants, especially electricity works, Device for regulating. T. Stein and G. Wünsch. 1,894,246; Jan. 10.
Power transmission mechanism. N. Krawitz. 1,893,501; Jan. 10.
Press: *See*—
Box press. Salt press.
Drill press. Sheet-metal press.
Foot press.
Pressed in spot. L. M. Bell. 1,893,980; Jan. 10.
Pressure gauge. A. P. Brictske. 1,894,153; Jan. 10.
Print treating apparatus. J. S. Greene and P. Landrock. 1,894,092; Jan. 10.
Production control assembly. O. K. Stephens. 1,893,602; Jan. 10.
Projecting machine. H. L. Cowan. Des. 88,949; Jan. 10.
Propeller. C. E. Brooks. 1,894,081; Jan. 10.
Propeller. F. W. Caldwell. 1,893,612; Jan. 10.
Propeller. C. H. Havill. 1,893,861; Jan. 10.
Propeller and control means therefor. T. L. Smith. 1,893,661; Jan. 10.
Propeller for bottle filling machines. J. Kantor. 1,893,746; Jan. 10.
Propeller, Hydraulic. D. G. Lilley. 1,894,047; Jan. 10.
Protractor, Adjustable. W. Lück. 1,894,107; Jan. 10.
Puller: *See*—
Spike puller.
Pulp articles, Apparatus and method of drying. F. D. Gray. 1,893,497; Jan. 10.
Pump: *See*—
Centrifugal pump. Rotary pump.
Gasoline pump.
Pump. M. R. Hull. 1,893,776; Jan. 10.
Pump for outboard motors and the like, Gear. T. L. Smith. 1,893,662; Jan. 10.
Pump pulsation reducing device. P. Pirsch. 1,893,685; Jan. 10.
Pumping apparatus. G. L. Ferguson. 1,893,616; Jan. 10.
Rack: *See*—
Filing rack. Foldable rack.
Rack for automobiles, Top. J. O. Chaney. 1,894,083; Jan. 10.
Radio system. G. A. Mahone. 1,893,675; Jan. 10.
Radio tube. F. D. Wieneke. 1,893,756; Jan. 10.
Razor blade clip. S. J. Todd. 1,894,072; Jan. 10.
Receptacle: *See*—
Sanitary covered receptacle.
Reel: *See*—
Antenna reel.
Refreshment stand. H. F. Gerhardt. Des. 88,957; Jan. 10.
Refrigerating apparatus. W. H. F. Schmieling. 1,894,127; Jan. 10.
Refrigerating apparatus and method. J. S. Belt. 1,893,483; Jan. 10.
Refrigerator. G. E. Friedrich. 1,893,769; Jan. 10.
Regulator: *See*—
Electric regulator. Electrical regulator.
Relay. D. M. Broughton. 1,893,856; Jan. 10.
Relay control device. C. I. Hall. 1,894,095; Jan. 10.
Release valve. C. M. Banks. 1,893,757; Jan. 10.
Resinous compositions and making. L. V. Adams. 1,893,874; Jan. 10.
Resinous condensation products and making them. R. H. Kienle. 1,893,873; Jan. 10.
Resuscitator and the like. M. H. Goodner. 1,893,670; Jan. 10.
Ring: *See*—
Piston ring.
Rod holder, Reenforcing. D. Lozelle. 1,893,998; Jan. 10.
Roof, Car. D. W. Hawksworth and S. J. Stone. 1,893,549; Jan. 10.
Roofing or siding strip, Composition. R. J. Tobin. Des. 88,995; Jan. 10.
Rose. J. A. Mason. Pl. Pt. 52; Jan. 10.
Rotary pickling machine. F. J. Wood. 1,894,141; Jan. 10.
Rotary pump, Low-head. R. O. Conch. 1,893,614; Jan. 10.
Rubber product and making the same. F. L. Shew. 1,893,966; Jan. 10.
Rubber treatment. W. E. Messer. 1,893,630; Jan. 10.
Rubber vulcanization. H. A. Morton. 1,893,868; Jan. 10.
Rubber vulcanizing process. W. Scott. 1,893,646; Jan. 10.
Ruler, Adjustable curve. W. S. Weston. 1,893,689; Jan. 10.
Ruler, Adjustable curved. W. S. Weston. 1,893,690; Jan. 10.
Safety control mechanism for liquid fuel burners. L. I. Aldrich. 1,893,875; Jan. 10.
Safety device for vehicles. S. Pfeffer. 1,893,634; Jan. 10.

Safety lock. C. H. Johnston. 1,894,177; Jan. 10.
Safety switch. A. G. von Normann. 1,894,074; Jan. 10.
Salt press, Hydraulic. G. Kershner. 1,893,996; Jan. 10.
Salt shaker. L. Weidlich and G. E. Russell. 1,894,076; Jan. 10.
Sander, Hand and rotary. J. P. Quinn. 1,893,679; Jan. 10.
Sanding block. J. P. Quinn. 1,893,680; Jan. 10.
Sanitary covered receptacle. W. J. van Rossem. 1,893,604; Jan. 10.
Scale. H. Carlson. 1,893,858; Jan. 10.
Scale, Weighing. M. H. Starr. 1,894,009; Jan. 10.
Score and tally device. J. J. Grimn. 1,894,093; Jan. 10.
Screen: *See*—
Window screen.
Screw head. J. F. Fleg. 1,894,034; Jan. 10.
Seal and spring, Oil. E. Widin. 1,893,814; Jan. 10.
Sealing tool. J. M. McGregor and A. Ericsson. 1,893,901; Jan. 10.
Seat assembly, Adjustable. A. P. Ball. 1,893,531; Jan. 10.
Seeds and the like, Method and apparatus for separating. W. A. Rice. 1,894,058; Jan. 10.
Self-lubricating bearing. J. M. Bryan and B. Smartt. 1,894,082; Jan. 10.
Separable fastener. R. C. Legat. 1,893,823; Jan. 10.
Septic indicator. W. F. Bernstein. 1,894,015; Jan. 10.
Sewage purification. K. Imhoff. 1,893,623; Jan. 10.
Sewing machine for joining fabrics. F. M. Card. 1,893,577; Jan. 10.
Sewing machines, Adjustable cutter for. A. M. Wenzel. 1,894,013; Jan. 10.
Sewing machines, Attachment for. H. A. Fine. 1,893,582; Jan. 10.
Sewing machines, Buttonhole working attachment for. F. Spaulding. 1,893,912; Jan. 10.
Shade, Lamp. D. G. Saaf. 1,894,227; Jan. 10.
Sharpener, Pencil. W. Appel. 1,893,877; Jan. 10.
Sheet for sanitary and surgical purposes and making the same. L. L. Gilbert. 1,893,669; Jan. 10.
Sheet-metal press. O. Kühner. 1,893,951; Jan. 10.
Shingle machine. N. P. Harshberger. 1,894,037; Jan. 10.
Shock absorber. C. H. Land. 1,893,625; Jan. 10.
Shock absorber for rotatable elements. L. J. Black. 1,893,486; Jan. 10.
Shock absorber for vehicles. H. Höme. 1,893,800; Jan. 10.
Shoe attachment, Casing. C. F. Dougherty. 1,894,212; Jan. 10.
Shoe lace fastener, Hold fast. J. H. Lindner. 1,894,183; Jan. 10.
Shoe sole. O. Brockman. Des. 89,021; Jan. 10.
Shoe stiffener material, Manufacture of. F. O. Woodruff. 1,893,923–4; Jan. 10.
Shoes, Method of filling. A. Thoma. 1,894,228; Jan. 10.
Shuttle box and like motions for looms for weaving, Rising-and-falling. W. Gledhill. 1,893,546; Jan. 10.
Side dressing machine. C. D. Campbell. 1,894,157; Jan. 10.
Sign. G. M. Reininger. 1,893,653; Jan. 10.
Sign and the like. J. W. Newman. 1,894,240; Jan. 10.
Sign with changeable panel. A. Solomita. 1,893,567; Jan. 10.
Signal: *See*—
Vehicle signal.
Signal for automotive vehicles, Movable. G. W. Mackenzie. Des. 88,974; Jan. 10.
Signal light for vehicles. R. Fein. Des. 88,952; Jan. 10.
Signal light switch. C. F. Dal Porto. 1,894,163; Jan. 10.
Signal switch, Directional. G. H. Steele. 1,894,204; Jan. 10.
Signaling, Aircraft. J. P. Buckley. 1,894,019; Jan. 10.
Signaling system, Railway. H. C. Vantassel. 1,893,790; Jan. 10.
Single-phase motor. E. J. Schaefer. 1,894,124; Jan. 10.
Sizing and ironing board, Adjustable neckband and collar. P. Kraemer, jr. 1,894,046; Jan. 10.
Ski, Airplane landing. W. F. Kammer. 1,893,647; Jan. 10.
Sleeve. A. and H. Kamen. 1,894,045; Jan. 10.
Slicing machine. G. G. Porter. 1,893,905; Jan. 10.
Slotting machine. E. B. Stimpson. 1,893,509; Jan. 10.
Soap product and making same. J. H. James. 1,894,096; Jan. 10.
Solvents, Making. J. H. James. 1,894,097; Jan. 10.
Sound records in color photography, Method and apparatus for placing. W. T. Crespinel. 1,893,698; Jan. 10.
Sound reproducing apparatus. C. W. Rice and E. W. Kellogg. 1,894,197; Jan. 10.
Sound reproducing apparatus, Photographic. L. de Forest. 1,894,024; Jan. 10.
Sounding board. J. H. Hammond, jr. 1,893,894; Jan. 10.
Speed control, Hydraulic variable. C. H. Roberts. 1,893,654; Jan. 10.
Spike puller. H. H. Talboys. 1,893,719; Jan. 10.
Spindle and croquignole hair waving heater, Combined. E. G. Unger. 1,894,073; Jan. 10.
Spreader. W. F. Pape. 1,894,223; Jan. 10.
Spring arrangement for car trucks. C. L. Orr. 1,894,193; Jan. 10.
Spring cover. H. G. Kuechle. 1,893,950; Jan. 10.
Spring for reenforcing clamping devices. W. C. Jackson. 1,893,975; Jan. 10.
Stairway construction. P. G. Anderson. 1,893,876; Jan. 10.
Stand and cleaner, Pipe. O. E. Billgren. 1,894,080; Jan. 10.
Stand and desk, Combined typewriter. M. T. Vandervoort. 1,893,720; Jan. 10.
Steam generating system. H. R. Crowther and S. W. Hawkins. 1,894,217; Jan. 10.
Steam recuperator. J. M. Robb. 1,893,715; Jan. 10.
Steering gear. J. G. Douglas. 1,893,764; Jan. 10.
Steering gear. D. N. Perkins. 1,894,055; Jan. 10.
Steering hitch and automatic brake, Combined. E. Overmon. 1,894,194; Jan. 10.
Steering indicator or controller, Gyroscopic. J. B. Henderson. 1,894,038; Jan. 10.
Steering lever control. J. G. Heaslet. 1,893,775; Jan. 10.
Stereoscope, Topographical. A. Barr. 1,894,148; Jan. 10.
Stocking and stocking web. P. P. La Montagne. 1,893,588; Jan. 10.
Stone cutting implement. H. J. Cowie. 1,894,087; Jan. 10.
Stone, Treatment of dolomitic. C. C. Loomis. 1,894,184; Jan. 10.
Store front coupling. F. L. Michaels. 1,893,956; Jan. 10.
Stove, Brooder. R. Lyons. 1,894,108; Jan. 10.
Straightener for shoe soles. G. B. Dusinberre. 1,893,987; Jan. 10.
Strap: *See*—
Grip strap.
Stropper, Razor blade. A. D. Boulanger and F. P. Hubrich. 1,893,642; Jan. 10.
Suction cleaner agitator. B. F. Blake. Re18,712; Jan. 10.
Superheterodyne receiving system. L. Levy. 1,893,779; Jan. 10.
Support: *See*—

Arch support.	Flower support.
Baffle support.	Hanger support.
Fixture support.	Laboratory support.

Support for rolled goods. H. Elliott. 1,894,166; Jan. 10.
Support for Venetian blind tilt rails, Intermediate. F. J. Burns. 1,894,216; Jan. 10.
Surfacing machine. A. E. Maynard. 1,893,955; Jan. 10.
Surfing apparatus or aquaplane, Motor propelled. C. O. Johnson. 1,893,994; Jan. 10.
Sweater. V. Gantner. Des. 88,954; Jan. 10.
Sweater, Knit. R. J. Levy. Des. 89,019; Jan. 10.
Switch: *See*—

Bin alarm switch.	Signal light switch.
Electric switch.	Signal switch.
Inclosed switch.	Thermostat switch.
Safety switch.	Time switch.

Switch. A. J. Carter. 1,893,613; Jan. 10.
Switch for automatic telephone systems, Selector. W. K. Schnepf. 1,893,565; Jan. 10.
Switch for electric heaters. L. H. Thomas. 1,893,568; Jan. 10.
Switch for vault ventilators, Temporary cut-out. O. B. McClintock. 1,893,900; Jan. 10.
Switches, Control of electric. R. Widerõe. 1,894,139; Jan. 10.
Table. G. N. Kelly. 1,894,220; Jan. 10.
Table and bookcase, Combined. A. Kask. 1,893,551; Jan. 10.
Table, bench, shelf, or similar structures. W. A. Adams. 1,893,481; Jan. 10.
Table or board, Paper hanger's. H. J. Schubert. 1,893,788; Jan. 10.
Tap. R. X. Schubenel. 1,894,064; Jan. 10.
Telephone attachment. R. F. Farmer. 1,894,235; Jan. 10.
Telephone desk set. N. Blount. 1,894,016; Jan. 10.
Telephone switching apparatus, Toll. H. M. Friendly and A. M. Burns. 1,894,090; Jan. 10.
Telephone system, Multioffice. J. Wicks. 1,893,691; Jan. 10.
Telethermometer, Humidity factor. C. H. Kuhlman. 1,894,104; Jan. 10.
Television scanning disk. H. B. Maris. 1,893,676; Jan. 10.
Temperature control system for electro-mechanical oscillators. L. A. Gebhard. 1,893,666; Jan. 10.
Temperature, Controlling. G. L. Simpson. 1,893,847; Jan. 10.
Temperature measurement. F. S. Marcellus. 1,894,109–10; Jan. 10.
Textile apparatus. A. Nau-Touron. 1,894,052; Jan. 10.
Textile fabric. E. M. Reist. Des. 89,026; Jan. 10.
Textile fabric. S. Solomon. Des. 89,014–15; Jan. 10.
Textile fabric. J. van der Does. Des. 88,996; Jan. 10.
Textile fabric or similar article. F. Bridier. Des. 88,948; Jan. 10.
Textile fabric or similar article. F. Bridier. Des. 89,006–7; Jan. 10.
Textile fabric or similar article. M. Brodsky. Des. 89,022; Jan. 10.
Textile fabric or similar article. M. Christen. Des. 89,023; Jan. 10.
Textile fabric or similar article. J. M. Gottesman. Des. 89,024; Jan. 10.
Textile fabric or similar article. J. M. Gottesman. Des. 88,961–4; Jan. 10.
Textile fabric or similar article. A. Grulich. Des. 88,966; Jan. 10.
Textile fabric or similar article. M. Libert. Des. 89,008; Jan. 10.
Textile fabric or similar article. J. Lukas. Des. 88,973; Jan. 10.

Textile fabric or similar article. J. Overmeyer. Des. 88,981; Jan. 10.
Textile fabric or similar article. J. Overmeyer. Des. 89,011–12; Jan. 10.
Textile fabric or similar article. J. Overmeyer. Des. 89,020; Jan. 10.
Textile fabric or similar article. J. Overmeyer. Des. 89,025; Jan. 10.
Textile fabric or similar article. J. Schweizer. Des. 88,989–94; Jan. 10.
Textile fabric or similar article. J. Schweizer. Des. 89,027; Jan. 10.
Textile fabric or similar article. W. Willheim. Des. 88,998–003; Jan. 10.
Textile fabric or similar article. W. Willheim. Des. 89,016–18; Jan. 10.
Textile fabric or similar article. W. Willheim. Des. 89,028–9; Jan. 10.
Textile fabric or the like. J. Lukas. Des. 88,970–2; Jan. 10.
Textile fabric or the like. J. Lukas. Des. 89,009; Jan. 10.
Textile fabric or the like. G. Megros. Des. 89,010; Jan. 10.
Textile fabric or the like. W. D. Roberson. Des. 88,986; Jan. 10.
Textile fabric or the like. J. Schweizer. Des. 88,988; Jan. 10.
Therapeutic compound and producing it. G. B. Walden. 1,894,247; Jan. 10.
Thermoelectric device. P. E. Klopsteg. 1,893,748; Jan. 10.
Thermostat switch. J. R. Beers. 1,894,150; Jan. 10.
Thermostatic control for electric heaters. F. Kuhn. 1,893,558; Jan. 10.
Thiocyanates, Treating. C. J. Hansen. 1,894,252; Jan. 10.
Time switch. J. B. Petrus. 1,893,904; Jan. 10.
Tongue scraper and cleaner. C. E. Shanley. 1,893,524; Jan. 10.
Tonsorial device. A. F. Mirafuentes. 1,894,188; Jan. 10.
Tool: *See*—

Combination tool.	Sealing tool.
Mechanic's tool.	

Tool and apparatus for leveling cylindrical surfaces from grinding disks. A. Lebert. 1,894,181; Jan. 10.
Tool for fixing attaché case locks and similar fastenings, Press. C. W. Cheney. 1,893,493; Jan. 10.
Tool mechanism for gear cutting machines. M. H. Johanson. 1,893,943; Jan. 10.
Tooth crowns, Forming. F. O. Jaques. 1,893,520; Jan. 10.
Torpedo dart. O. F. Schroeder. 1,893,787; Jan. 10.
Tote box. H. L. Kennedy. 1,893,747; Jan. 10.
Tower, Fractionating. J. Primrose and H. R. Swanson. 1,893,906; Jan. 10.
Toy. L. E. Kupfer. 1,894,105; Jan. 10.
Toy clock. A. R. Burke. 1,893,882; Jan. 10.
Toy construction block. R. E. Sanders. 1,894,061; Jan. 10.
Toy, Figure. H. J. Williams. Des. 89,004; Jan. 10.
Toy gun. M. Garbell. 1,893,701; Jan. 10.
Toy, Hydraulic. L. Ranney. 1,893,507; Jan. 10.
Toy savings bank. O. H. Brasier. 1,893,726; Jan. 10.
Toy vehicle. C. W. Hummer. 1,893,897; Jan. 10.
Transfer device. P. O. Unger. 1,894,137; Jan. 10.
Transformer, Hydraulic. H. Ernst. 1,893,825; Jan. 10.
Transmitter arrangement. G. Von Arco. 1,893,605; Jan. 10.
Trap. E. T. Zook. 1,893,974; Jan. 10.
Tray assembly, Handy service. C. M. Wentworth. 1,893,755; Jan. 10.
Tread plate. B. C. McFadden. Des. 88,976; Jan. 10.
Truck body construction. A. P. Ball. 1,893,532; Jan. 10.
Truck, Dustless street cleaning. L. Simon. 1,893,967; Jan. 10.
Truck, Refrigerating automobile. N. F. Wolf. 1,894,014; Jan. 10.
Trunk and luggage carrier for automobiles, Combined. J. W. Malmquist. 1,893,751; Jan. 10.
Trunk, Automobile. J. W. Malmquist. 1,893,750; Jan. 10.
Trunk, Extensible automobile. R. M. Shelton. 1,893,753; Jan. 10.
Tube: *See*—

Collapsible tube.	Radio tube.
Electron tube.	X-ray tube.
Light sensitive tube.	

Tube dispensing means, Collapsible. C. Bolz. 1,894,152; Jan. 10.
Tube for heat exchange devices. A. B. Modine. 1,893,521; Jan. 10.
Tube with gas connection, Vaporizing. S. Rasmussen. 1,893,598; Jan. 10.
Tubes, Method of and apparatus for making glass. A. Kadow. 1,894,100; Jan. 10.
Tubing, Production of scale-free welded. J. L. Anderson. 1,893,926; Jan. 10.
Tufting mechanism. H. J. Schomer. 1,893,660; Jan. 10.
Turbine, Elastic fluid. E. V. Pollard and A. D. Somes. 1,894,117; Jan. 10.
Typographical composing and line-casting machine. C. A. Albrecht. 1,894,143; Jan. 10.
Underreamer, Rotary. M. F. Aloi. 1,893,693; Jan. 10.
Urea-formaldehyde condensation product and producing same. L. Smidth. 1,893,911; Jan. 10.
Valve: *See*—

Compensating valve.	Poppet valve.
Gaseous light valve.	Release valve.
Plug valve.	

Valve casings, Making. S. G. Malby. 1,893,711; Jan. 10.
Valve converting apparatus, Electric. F. Barz. 1,894,078–9; Jan. 10.
Valve converting system, Electric. F. Barz. 1,894,079; Jan. 10.
Valve cutter and finisher, Friction taper. H. R. Rogers. 1,893,637; Jan. 10.
Valve for gasoline tanks and the like, Safety. J. A. Jensen. 1,893,942; Jan. 10.
Valve outlet fixture. W. V. Paine. 1,894,222; Jan. 10.
Valve spring lifter. W. J. Rowan. 1,893,962; Jan. 10.
Valve with centered heater, Electron. S. Loewe and B. Römhild. 1,893,953; Jan. 10.
Valves and their operation. E. E. Littlefield. 1,893,627; Jan. 10.
Valves, Device for simultaneously opening a plurality of. C. Schäfer. 1,893,657; Jan. 10.
Vanity case, Refillable. W. F. Winning. 1,894,210; Jan. 10.
Vapor electric device. D. C. Prince. 1,894,120; Jan. 10.
Vault, Grave. J. W. Powell and J. R. Burkhardt. 1,894,118; Jan. 10.
Vehicle body, Convertible. S. H. H. Kuenzel. 1,894,103; Jan. 10.
Vehicle, Motor. O. F. Warhus. 1,894,075; Jan. 10.
Vehicle signal. J. S. Graham. 1,893,547; Jan. 10.
Vehicle signal, Rear motor. J. R. Haines. 1,894,173; Jan. 10.
Vehicle-wheel. V. G. Apple. 1,893,834; Jan. 10.
Vehicle wheel. C. G. Keller. 1,893,947; Jan. 10.
Vehicle wheel. W. T. White. 1,894,248; Jan. 10.
Vehicle wheel. A. W. Woodward. 1,894,251; Jan. 10.
Vending machine. J. L. Howard. Des. 88,968; Jan. 10.
Veneer to a backing and flattening the veneer, Gluing thin wood. A. Elmendorf. 1,894,218; Jan. 10.
Veneering. J. Green. 1,894,170; Jan. 10.
Viscosity apparatus. P. E. Klopsteg. 1,893,749; Jan. 10.
Voltage regulating system. A. Boyajian. 1,893,760; Jan. 10.
Voltage regulating system. D. C. Prince. 1,893,784; Jan. 10.
Volume control system. E. R. Hentschel. 1,893,671; Jan. 10.
Vulcanizer. H. C. Bostwick. 1,894,017; Jan. 10.
Vulcanizing apparatus. B. De Mattia. 1,893,762; Jan. 10.
Washer: *See*—
Pounder washer.
Washing machine. C. W. Foster. 1,893,797; Jan. 10.
Washing machine. S. M. Kitts. 1,894,178; Jan. 10.
Watch, Keyless. T. Schild. 1,893,909; Jan. 10.
Watch, Lady's. M. D. Kramer. 1,893,899; Jan. 10.
Water softening apparatus. A. J. Dotterweich. 1,893,933; Jan. 10.
Wedding ring. V. E. Peterson. Des. 88,984; Jan. 10.
Weighing machine. S. R. Howard. 1,893,622; Jan. 10.
Wells, Apparatus for the straight drilling of. F. F. Hill. 1,894,039; Jan. 10.
Welt tempering device for shoe sewing machines. J. E. Thayer. 1,893,789; Jan. 10.
Wheel: *See*—
Vehicle wheel.
Wheel of the wire spoke type, Vehicle. C. Majewicz. Des. 88,975; Jan. 10.
Winch. W. C. Wood. 1,893,723; Jan. 10.
Windshield. R. G. F. Loewy. 1,893,709; Jan. 10.
Window construction. J. V. Desmarais. 1,893,763; Jan. 10.
Window lock. J. M. Rurka. 1,894,060; Jan. 10.
Window screen. L. A. Ray. 1,893,651; Jan. 10.
Wiper, Windshield. C. O. McCord. 1,894,186; Jan. 10.
Wire fabric. R. P. Turner. 1,893,830; Jan. 10.
Wire, Insulating. E. A. Mau and O. F. Hutchinson. 1,893,590; Jan. 10.
Wire, Sprue. J. P. Bell. 1,894,151; Jan. 10.
Wool and other allied fibers, Cleaning. R. L. Brown. 1,894,154; Jan. 10.
Work-holding means for gauges. H. E. Tautz. 1,894,010; Jan. 10.
Worktable for invalids. C. C. King. 1,893,552; Jan. 10.
Wrapping machine. F. Grover. 1,893,990; Jan. 10.
X-ray tube. A. Bouwers. 1,893,759; Jan. 10.
Yarn carrier for knitting machines. B. Spector. 1,893,808; Jan. 10.
Yarn, Manufacture of. M. B. Stone and W. P. Williamson. 1,893,809; Jan. 10.

CLASSIFICATION OF PATENTS

ISSUED JANUARY 10, 1933

NOTE.—First number—class, second number—subclass, third number—patent number.

1— 4: 1,893,493
13.1: 1,893,664
2— 11: 1,893,617
41: 1,893,960
73: 1,894,062
93: 1,893,914
123: 1,894,045
168: 1,894,066
169: 1,894,091
183: 1,894,213
3— 9: 1,893,853
12: 1,893,714
5— 14: 1,893,949
334: 1,893,548
7— 3: 1,893,737
8— 5: 1,893,543
6: 1,893,991
21: 1,893,758
9— 22: 1,893,866
10— 11: 1,893,509
12— 129: 1,893,795
129.1: 1,893,987
142: 1,894,228
13— 24: 1,893,847
15— 13: R.18,712
104.05: 1,893,979
265: 1,894,186
1,894,200
16— 88: 1,893,639
128: 1,893,592
17— 2: 1,893,903
18— 2: 1,893,762
17: 1,894,017
48.5: 1,893,007
50: 1,893,966
1,894,230
1,894,231
53: 1,893,630
1,893,946
1,893,868
1,893,869
19— 37: 1,894,182
66: 1,894,154
20— 10: 1,893,576
12: 1,893,763
16: 1,894,102
40.5: 1,894,205
92: 1,893,481
23— 1: 1,894,181
158: 1,893,583
188: 1,893,683
1,893,684
202: 1,893,539
1,893,540
22— 85: 1,893,740
100: 1,893,969
102: 1,893,945
1,893,946
119: 1,894,252
201: 1,894,184
203: 1,894,239
217: 1,893,744
232: 1,893,490
233: 1,893,579
234: 1,893,812
239: 1,894,250
245: 1,894,149
258: 1,893,735
277: 1,893,913
288: 1,894,140
289: 1,893,492
24— 73: 1,893,537
122: 1,894,183
138: 1,894,121
205: 1,893,823
255: 1,893,508
25— 2: 1,894,167
91: 1,893,996
144: 1,893,808
27— 35: 1,894,118
29— 84: 1,893,699
86.3: 1,893,962
157.1: 1,893,711
160.6: 1,893,520
30— 12: 1,893,642
1,894,188
33— 1: 1,894,148
23: 1,893,793
44: 1,894,155
93: 1,894,107
97: 1,893,925
103: 1,893,973
172: 1,894,025
177: 1,893,689
1,893,690
204: 1,894,038
205: 1,893,600
212: 1,893,988
34— 12: 1,893,963
17: 1,893,497
35— 12: 1,893,791
1,893,792
1,893,944
36— 71: 1,893,697
39— 7: 1,893,824
40— 2: 1,893,948
11: 1,893,594
63: 1,893,567
130: 1,893,653
141: 1,894,240
41— 13: 1,893,500
33: 1,893,626
1,893,785
42— 12: 1,894,192
42: 1,893,686
88: 1,893,974
45— 46: 1,893,552
51: 1,894,145
68.1: 1,893,720
70: 1,893,551
82: 1,894,146
85: 1,893,976
1,893,977
113: 1,894,220
137: 1,893,910
46— 14: 1,894,105
35: 1,894,061
40: 1,893,507
45: 1,894,144
46: 1,893,701
47: 1,893,897
47— 1: Pl. Pt. 52
48: 1,893,707
55: 1,893,970
48— 54: 1,893,777
49— 5: 1,894,099
1,894,100
1,894,243
17.1: 1,894,201
48: 1,893,658
62: 1,894,030
51— 28: 1,893,637
103: 1,893,837
184.2: 1,893,806
1,893,885
187: 1,893,679
1,893,680
215: 1,893,566
263: 1,893,955
278: 1,893,985
1,894,067
55— 60: 1,893,863
53: 1,893,641
56— 14: 1,894,198
20: 1,894,138
26: 1,894,053
122: 1,894,123
124: 1,893,860
208: 1,894,130
351: 1,893,506
58— 80: 1,893,909
88: 1,893,899
106: 1,893,882
60— 54.5: 1,894,055
92: 1,893,715
61— 53: 1,893,515
60: 1,894,012
74: 1,893,687
81: 1,894,206
62— 13: 1,894,014
89.5: 1,893,769
91.5: 1,893,483
62— 91.5: 1,894,199
108.5: 1,893,535
1,894,127
121: 1,893,850
1,893,851
1,893,852
63— 28: 1,894,195
64— 96: 1,894,175
97: 1,893,593
100: 1,893,486
65— 12: 1,893,889
13: R.18,711
15: 1,893,628
45: 1,894,076
66— 41: 1,893,589
126: 1,893,808
184: 1,893,588
68— 5: 1,894,125
9: 1,894,242
10: 1,894,046
18: 1,893,844
70— 46: 1,894,177
71— 9: 1,894,136
72— 8: 1,893,491
73— 1: 1,893,601
24: 1,894,104
1,894,172
30: 1,893,595
32: 1,894,109
1,894,110
51: 1,893,529
109: 1,894,153
122: 1,894,211
74— 7: 1,893,959
21: 1,893,501
30: 1,893,775
41: 1,893,872
57: 1,893,640
58: 1,894,214
71: 1,893,928
79: 1,893,764
81: 1,893,544
1,893,681
97: 1,893,644
100: 1,894,000
75— 1: 1,893,984
17: 1,893,499
22.5: 1,893,992
28: 1,893,798
76— 101: 1,893,688
77— 2: 1,893,810
33: 1,893,965
80— 14: 1,894,232
81— 3: 1,893,528
3.1: 1,894,202
9.1: 1,893,901
13: 1,893,645
82— 19: 1,893,916
33: 1,894,101
83— 45: 1,894,106
57: 1,893,505
73: 1,894,129
91: 1,894,208
84— 1: 1,893,838
189: 1,893,895
1,893,940
192: 1,893,892
1,893,893
1,893,894
415: 1,894,068
85— 45: 1,894,034
87— 5: 1,894,207
16: 1,894,096
88— 1: 1,893,542
16.2: 1,893,576
1,893,698
24: 1,894,004
1,894,005
53: 1,893,984
61: 1,894,042
90— 9: 1,893,943
13.2: 1,893,957
1,893,958
91— 30: 1,893,937
45: 1,893,562
47: 1,893,826
91— 68: 1,893,611
1,893,530
1,893,924
92— 3: 1,893,923
46: 1,893,678
56: 1,894,089
69: 1,893,717
93— 1: 1,893,523
2: 1,893,496
1,893,610
5: 1,893,990
36: 1,893,532
36: 1,893,554
49: 1,894,131
51: 1,894,209
94— 3: 1,893,742
45: 1,893,559
49: 1,893,596
95— 1.1: 1,894,021
18: 1,893,668
45: 1,893,712
90.5: 1,894,092
97— 10: 1,893,867
47: 1,893,619
216: 1,893,871
98— 23: 1,893,900
108: 1,893,571
99— 10: 1,894,135
11: 1,893,842
1,893,941
1,894,158
100— 52: 1,893,854
57: 1,894,156
101— 247: 1,894,044
416: 1,894,018
102— 26: 1,893,787
1,894,203
39: 1,893,663
103— 5: 1,894,234
89: 1,893,614
96: 1,893,616
113: 1,894,165
148: 1,893,776
174: 1,893,825
223: 1,893,685
262: 1,893,724
105— 197: 1,894,193
315: 1,893,510
354: 1,893,807
106— 25: 1,893,522
107— 1: 1,894,077
4: 1,893,672
1,893,845
19: 1,893,513
23: 1,893,673
108— 5.4: 1,893,549
110— 98: 1,893,803
166: 1,894,170
111— 73: 1,893,512
112— 43: 1,893,780
77: 1,893,912
79: 1,893,660
122: 1,894,013
134: 1,893,582
209: 1,893,577
113— 38: 1,893,951
112: 1,893,926
114— 67: 1,894,256
115— 17: 1,893,562
34: 1,893,994
116— 114: 1,894,015
120: 1,894,111
118— 38: 1,893,809
55: 1,894,052
119— 32: 1,894,108
37: 1,893,694
1,893,918
147: 1,893,722
120— 47: 1,893,579
90: 1,893,877
108: 1,893,534
122— 356: 1,893,731
451: 1,894,217
123— 173: 1,894,043
177: 1,893,855
124— 13: 1,893,865
125— 22: 1,894,087
37: 1,894,181
126— 99: 1,894,122
128— 23: 1,893,773
29: 1,893,670
258: 1,894,161
290: 1,893,745
304: 1,893,524
129— 1: 1,893,999
1,894,137
4: 1,894,241
38: 1,893,727
131— 12: 1,894,080
51: 1,893,704
1,894,128
132— 18: 1,893,864
32: 1,893,794
36.2: 1,894,032
37: 1,893,503
52: 1,893,514
74: 1,893,561
78: 1,894,142
82: 1,893,880
83: 1,894,210
133— 3: 1,893,828
1,894,190
134— 1: 1,893,495
12: 1,893,608
26: 1,894,113
58: 1,893,761
1,894,168
60: 1,894,126
79: 1,894,050
136— 4: 1,893,748
137— 69: 1,894,222
76: 1,893,903
91: 1,893,927
104: 1,893,859
139: 1,893,627
1,893,978
153: 1,893,657
138— 9: 1,893,757
139— 182: 1,893,546
303: 1,893,734
141— 1: 1,893,652
7: 1,893,498
9: 1,893,797
143— 109: 1,894,010
144— 2: 1,894,049
309: 1,893,886
1,894,171
1,894,218
146— 102: 1,893,905
148— 8: 1,893,817
1,893,821
21.8: 1,893,782
149— 11: 1,893,706
27: 1,893,919
150— 1: 1,893,888
42: 1,893,931
152— 14: 1,894,003
21: 1,894,238
154— 2: 1,893,599
14: 1,894,237
40: 1,893,669
1,893,939
45.9: 1,893,783
52: 1,894,219
155— 14: 1,893,531
77: 1,893,929
156— 17: 1,894,216
39: 1,893,651
43: 1,893,659
158— 7.5: 1,894,249
63: 1,893,674
81: 1,893,596
108: 1,893,587
109: 1,893,533
117.5: 1,893,902
164— 17: 1,894,065
19: 1,893,705
28: 1,894,037
78: 1,893,788
166— 1: 1,894,212
2: 1,893,487
1,893,934
15: 1,893,489
1,893,602
167— 34: 1,893,770
35: 1,894,041
74: 1,894,247
170— 150: 1,894,061
151: 1,893,621
162: 1,893,861
163: 1,893,612
1,893,661
1,894,047
1,894,048
172: 1,893,820
171— 97: 1,894,119
119: 1,893,760
1,893,767
1,893,768
1,893,771
1,893,772
1,893,780
1,893,781
1,894,133
209: 1,893,840
327: 1,893,666
172— 126: 1,893,620
238: 1,894,084
239: 1,893,629
278: 1,894,124
281: 1,894,078
1,894,079
173— 264: 1,893,590
324: 1,894,187
332: 1,894,112
367: 1,894,244
175— 183: 1,893,700
204: 1,893,827
1,894,139
341: 1,893,547
363: 1,893,766
1,893,784
1,894,114
366: 1,894,085
375: 1,894,005
176— 16: 1,893,730
65: 1,893,708
177— 329: 1,894,173
336: R.18,709
386: 1,893,741
178— 1: 1,893,518
6: 1,893,504
1,893,676
69: 1,893,569
179— 27: 1,893,691
1,894,060
27.52: 1,893,565
100.3: 1,894,024
115.5: 1,894,197
147: 1,894,016
171: 1,893,845
1,893,563
1,894,029
180— 54: 1,894,075
64: 1,893,609
182— 2: 1,894,031
183— 4: 1,893,525
115: 1,894,180
184— 27: 1,893,536
65: 1,893,649
188— 20: 1,894,160
32: 1,893,580
78: 1,894,036
89: 1,893,625
264: 1,894,001
189— 1: 1,893,636
31.5: 1,893,981
46: 1,893,494
78: 1,893,713
1,893,966
192— 3: 1,893,823
60: 1,893,654
194— 28: 1,893,726
103: 1,893,662
196— 10: 1,894,265

196— 53: 1,894,116
1,894,257
78: 1,893,774
94: 1,893,907
116: 1,894,215
139: 1,893,906
140: 1,893,667
197— 60: 1,893,488
198— 22: 1,893,746
233: 1,893,917
199— 18: 1,894,143
200— 11: 1,893,002
1,894,204
1,894,225
16: 1,894,070
17: 1,894,098
38: 1,893,904
50: 1,893,529
59: 1,894,163
68: 1,893,613
76: 1,894,074
85: 1,893,862
89: 1,893,615
93: 1,893,856
126: 1,894,056
138: 1,893,568
1,893,575
1,894,150
164: 1,894,006
202— 22: 1,893,555
205— 21: 1,894,169
206— 16: 1,893,526
1,893,527
1,893,747
1,894,072
19.5: 1,893,624
29: 1,893,655
41: 1,894,221
41.4: 1,893,765
46: 1,893,811
207— 2: R. 18,710
209— 1: 1,894,058
2: 1,893,578
42: 1,894,159

209— 84: 1,893,938
155: 1,894,020
167: 1,893,517
210— 8: 1,893,623
24: 1,893,933
164: 1,893,581
211— 88: 1,894,185
89: 1,893,570
121: 1,894,166
133: 1,893,755
178: 1,894,176
214— 1: 1,893,822
62: 1,893,633
67: 1,893,967
135: 1,893,564
215— 63: 1,893,604
217— 12: 1,894,179
56: 1,894,022
122: 1,894,236
219— 19: 1,893,989
24: 1,894,073
25: 1,893,558
220— 1: 1,893,743
221— 27: 1,894,064
47.1: 1,893,738
60: 1,894,115
1,894,152
95: 1,893,843
1,893,972
112: 1,893,632
119: 1,894,157
127: 1,893,839
222— 3: 1,893,696
223— 52: 1,893,538
61: 1,893,519
1,893,815
1,893,968
224— 29: 1,893,750
1,893,751
1,893,752
1,893,753
1,894,083
1,894,164
225— 26: 1,893,884

226— 68: 1,893,716
71: 1,893,831
104: 1,894,007
229— 9: 1,893,801
36: 1,894,226
68: 1,894,027
1,894,028
230— 92: 1,893,883
234— 5.5: 1,894,132
235— 32: 1,894,071
236— 70: 1,893,635
71: 1,894,009
237— 12.3: 1,893,643
240— 2.17: 1,894,235
10.66: 1,894,147
78: 1,894,063
103: 1,894,227
138: 1,893,606
242— 75: 1,893,891
244— 2: 1,893,591
1,893,647
1,893,906
3: 1,893,584
18: 1,893,936
21: 1,893,818
25: 1,894,057
29: 1,893,665
1,894,245
30: 1,894,011
246— 41: 1,893,790
247— 2: 1,893,550
248— 20: 1,893,729
30: 1,893,702
37: 1,893,555
41: 1,893,799
249— 59: 1,893,622
250— 3: 1,894,019
16: 1,893,618
17: 1,893,605
20: 1,893,671
1,893,779
1,893,813
27: 1,893,638
27.5: 1,893,573

250— 27.5: 1,893,756
1,893,887
1,893,915
1,893,935
1,893,953
1,894,059
1,894,120
34: 1,894,051
35: 1,893,759
36: 1,894,134
40: 1,893,675
41.5: 1,894,023
251— 97: 1,894,196
252— 5: 1,893,635
253— 59: 1,894,117
254— 18: 1,893,719
86: 1,893,890
93: 1,893,848
94: 1,894,086
98: 1,893,986
102: 1,893,728
103: 1,894,040
164: 1,893,723
255— 19: 1,894,039
76: 1,893,693
267— 130: 1,893,531
135: 1,893,631
235: 1,893,484
242: 1,894,026
259: 1,893,650
259— 91: 1,893,932
144: 1,894,178
260— 3: 1,893,911
4: 1,894,088
6: 1,893,575
8: 1,893,873
1,893,874
11: 1,893,872
1,893,997
12: 1,893,557
1,893,646
60: 1,894,191
61: 1,893,530
87: 1,893,553

260— 95: 1,893,656
98: 1,893,982
106: 1,894,162
116: 1,894,097
120: 1,893,819
124: 1,893,656
148: 1,893,677
151: 1,893,870
168: 1,893,802
170: 1,893,586
1,893,733
1,893,804
261— 20: 1,893,483
29: 1,894,229
30: 1,893,954
34: 1,893,511
39: 1,893,849
41: 1,893,895
44: 1,893,920
53: 1,893,754
64: 1,893,560
91: 1,894,085
262— 30: 1,893,952
263— 49: 1,893,930
265— 1: 1,894,174
11: 1,893,749
47: 1,893,858
266— 23: 1,894,141
267— 1: 1,893,814
1,893,975
11: 1,893,800
37: 1,893,950
270— 5: 1,893,816
271— 29: 1,893,778
79: 1,893,736
273— 86: 1,893,541
136: 1,893,732
274— 6: 1,893,796
275— 2: 1,894,008
5: 1,894,223
277— 1: 1,893,942
5: 1,893,786
280—33.44: 1,893,983
1,894,194

280— 104: 1,893,695
106: 1,893,721
143: 1,893,878
281— 16: 1,894,224
43: 1,894,093
285— 20: 1,893,841
49: 1,893,960
129: 1,894,094
286— 6: 1,893,516
38: 1,893,961
287— 94: 1,893,485
99: 1,893,603
103: 1,893,998
288— 1: 1,893,597
1,893,881
290— 2: 1,894,246
292— 6: 1,894,189
63: 1,894,060
293— 25: 1,893,634
294— 92: 1,893,971
296— 10: 1,893,532
16: 1,893,739
24: 1,894,103
84: 1,893,709
97: 1,894,233
299— 22: 1,893,648
301— 6: 1,893,834
1,894,251
13: 1,893,947
18: 1,894,248
47: 1,893,718
302— 37: 1,893,710
1,893,857
306— 20: 1,893,574
84: 1,894,082
134: 1,893,922
168: 1,893,921
187: 1,893,995
189: 1,893,836
214: 1,894,099
312— 36: 1,893,708
51: 1,893,725
184: 1,893,805

U. S. GOVERNMENT PRINTING OFFICE: 1933

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Adam Hat Stores, Inc., New York, N. Y. Men's hats. Serial No. 329,616; Jan. 17. Class 39.

Aderer, Julius, Inc., New York, N. Y. Dental wire. Serial Nos. 332,674–6; Jan. 17. Class 44.

Ahles, Martha W., Chicago, Ill. Hair net. Serial No. 330,987; Jan. 17. Class 42.

American Hard Rubber Company, Hempstead and New York, N. Y. Hard rubber combs. Serial No. 332,214; Jan. 17. Class 40.

American Maize-Products Company, New York, N. Y. Corn syrup. Serial No. 332,213; Jan. 17. Class 46.

American Manufacturing Company, Boston, Mass., and Brooklyn, N. Y. Twine. Serial No. 332,862; Jan. 17. Class 7.

Barrell, William L., Company, Inc., New York, N. Y. Cotton piece goods. Serial No. 332,217; Jan. 17. Class 42.

Beech-Nut Packing Company, Canajoharie, N. Y. Chewing gum. Serial No. 324,094; Jan. 17. Class 46.

Berkeley Company, Chicago, Ill. Sanitary napkins. Serial No. 331,916; Jan. 17. Class 44.

Biltrite Motor Equipment Co. Inc., New York, N. Y. Lubricating oils and greases for motor vehicles. Serial No. 332,218; Jan. 17. Class 15.

Biltrite Motor Equipment Co. Inc., New York, N. Y. Paint, paint enamels, stains, etc. Serial No. 332,219; Jan. 17. Class 16.

Bloomingdale Bros., Inc., New York, N. Y. Artificial trees. Serial No. 330,361; Jan. 17. Class 50.

Blue Ribbon Books, Inc., New York, N. Y. Printed books. Serial No. 332,140; Jan. 17. Class 38.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 332,082; Jan. 17. Class 42.

Bonus Tobacco Company, Cincinnati, Ohio. Chewing tobacco. Serial No. 332,874; Jan. 17. Class 17.

Bowles, Frank A., doing business as Bowles Bros. Co., Los Angeles, Calif. Soaps. Serial No. 332,611; Jan. 17. Class 4.

Boye, James H., Manufacturing Co., Chicago, Ill. Electric floor lamps. Serial No. 331,946; Jan. 17. Class 21.

British Ropes Limited, London, England. Rope of jute and hemp. Serial Nos. 331,918–21; Jan. 17. Class 7.

Brockman, Oscar, doing business as Oscar Brockman Company, Louisville Ky. Shoe soles. Serial No. 331,540; Jan. 17. Class 39.

Buckeye Soda Company, The, Painesville Township, Ohio. Washing soda. Serial No. 332,223; Jan. 17. Class 6.

Budd, Edward G., Manufacturing Company, Philadelphia, Pa. Vehicles and structural parts thereof and/or structural subassemblies of such vehicles. Serial No. 329,130; Jan. 17. Class 19.

Burlington County Shoe Company, Mount Holly, N. J. Shoes. Serial No. 331,542; Jan. 17. Class 39.

Butterfield, Fred, & Co., Inc., New York, N. Y. Fabrics. Serial No. 332,247; Jan. 17. Class 42.

Cannon Mills, Inc., New York, N. Y. Textile sheets, sheetings, and pillow cases. Serial No. 321,198; Jan. 17. Class 42.

Chippewa Shoe Manufacturing Company, doing business as Kushion-Aire Shoe Company, Chippewa Falls, Wis. Shoes. Serial No. 327,904; Jan. 17. Class 39.

Clem, E. D., doing business as Standard Amusement Company, Beaumont, Tex. Amusement device. Serial No. 332,436; Jan. 17. Class 22.

Collins, Ashton B., Birmingham, Ala. Mats, electrotypes, etc. Serial No. 331,039; Jan. 17. Class 50.

Commercial Packing Corporation, New York, N. Y. Food product of fruits and jelly. Serial No. 330,992; Jan. 17. Class 46.

Commonwealth Flour Mills, Inc., St. Louis, Mo. Flour. Serial No. 332,444; Jan. 17. Class 46.

Conant Ball Company, Boston, Mass. Household furniture. Serial No. 331,040; Jan. 17. Class 32.

Corsetry Incorporated, The, South Norwalk, Conn. Foundation garments, corsets, brassières, etc. Serial No. 331,493; Jan. 17. Class 39.

Crizler, Robert L., Covington, Ky. Whisky. Serial No. 332,875; Jan. 17. Class 49.

Curry, Howard L., & Co. Inc., New York, N. Y. Goods: woolen cloth in the piece. Serial No. 329,688; Jan. 17. Class 42.

Dane, Ernest B., and Albert J. Meserve, doing business as The Shepherd Worsted Mills, Newton, Mass. Fingering yarns for knitting and crocheting. Serial No. 330,810; Jan. 17. Class 42.

Day Chemical Company, Newark, N. J. Surgical jelly. Serial No. 332,087; Jan. 17. Class 6.

Distillers Agency Limited, The, Edinburgh, Scotland. Scotch whisky. Serial No. 330,454; Jan. 17. Class 49.

Edwards, S. T., & Co., Chicago, Ill. Dried skim milk. Serial No. 325,286; Jan. 17. Class 46.

Electric Auto-Lite Company, The, Toledo, Ohio. Time indicating and registering apparatus and parts thereof. Serial No. 326,581; Jan. 17. Class 27.

Electric Auto-Lite Company, The, Toledo, Ohio. Time indicating and registering apparatus and parts thereof. Serial No. 326,583; Jan. 17. Class 27.

Ellanay Frocks, Inc., Los Angeles, Calif. Women's frocks. Serial No. 332,337; Jan. 17. Class 39.

Enterprise Manufacturing Company, The, Akron, Ohio. Artificial bait. Serial No. 332,996; Jan. 17. Class 22.

Ferguson Printing Ink Corporation, New York, N. Y. Cellulose acetate sheeting. Serial No. 332,767; Jan. 17. Class 1.

Ferry-Hanly Advertising Company, Kansas City, Mo. Trading stamps. Serial No. 331,178; Jan. 17. Class 38.

Finch, Leon, Ltd., Los Angeles, Calif. Paints, paint colors, white lead, putty, etc. Serial No. 332,524; Jan. 17. Class 16.

Fleischer Studios, Incorporated, New York, N. Y. Motion picture cartoons. Serial No. 332,712; Jan. 17. Class 26.

Frankel, Miriam, Brooklyn, N. Y. Lampshades. Serial No. 330,595; Jan. 17. Class 34.

Gilbert, A. C., Company, The, New Haven, Conn. Electric vibrators and hairdryers. Serial No. 330,368; Jan. 17. Class 44.

Glenfyne Distillery Company Limited, The, Ardrishaig, Scotland. Whisky. Serial No. 331,782; Jan. 17. Class 49.

Glenfyne Distillery Company Limited, The, Ardrishaig, Scotland. Whisky. Serial Nos. 331,784–6; Jan. 17. Class 49.

Glenfyne Distillery Company Limited, The, Ardrishaig, Scotland. Whisky. Serial No. 331,788; Jan. 17. Class 49.

Goldberg, Rose, Brooklyn, N. Y. Safety razor blades. Serial No. 331,857; Jan. 17. Class 28.

Graff, George B., Co., Cambridge, Mass. Indicator tabs or file signals. Serial No. 330,951; Jan. 17. Class 37.

Great Atlantic & Pacific Tea Company, doing business as The Quaker Maid Co., Inc., New York, N. Y. Bird gravel. Serial No. 329,896; Jan. 17. Class 1.

Greenebaum, J., Tanning Company, Chicago, Ill., Boston, Mass., and Milwaukee, Wis. Leather. Serial No. 331,733; Jan. 17. Class 1.

Green-Hall, Inc., Chicago, Ill. Magazines. Serial No. 332,917; Jan. 17. Class 38.

Gube, Frank, doing business as St. Ann's Laboratory, Waterbury, Conn. Ointment, cough, sirup, etc. Serial No. 331,046; Jan. 17. Class 6.

Hall & Ruckel, Inc., Brooklyn, N. Y. Deodorants and depilatories. Serial No. 329,710; Jan. 17. Class 6.

Harvey, John, & Sons, Limited, Bristol, England. Scotch whisky. Serial No. 331,552; Jan. 17. Class 49.

Hurlbut Paper Company, South Lee, Mass. Writing and printing paper. Serial No. 332,324; Jan. 17. Class 37.

Hynson, Westcott & Dunning, Incorporated, Baltimore, Md. Antiseptics, bactericides, etc. Serial No. 332,255; Jan. 17. Class 6.

I. & P. Home Products Company, Inc., Port Chester, N. Y. Percolated compound for culinary flavoring. Serial No. 331,183; Jan. 17. Class 46.

Independent Druggists' Alliance Distributing Co., Chicago, Ill. Tooth paste. Serial No. 327,858; Jan. 17. Class 6.

Industrial Oil Corporation, Warren, Pa. Motor lubricating oils. Serial No. 332,455; Jan. 17. Class 15.

International Nickel Company, Inc., The, New York, N. Y. Sinks. Serial No. 332,719; Jan. 17. Class 13.

International Nickel Company, Inc., The, New York, N. Y. Table tops. Serial No. 332,720; Jan. 17. Class 32.

International Shoe Co., St. Louis, Mo. Boots and shoes. Serial No. 331,556; Jan. 17. Class 39.

Juvenile Shoe Corporation of America, The, Aurora and St. Louis, Mo. Shoes and slippers. Serial No. 332,066; Jan. 17. Class 39.

K B Beverage Company, Bay City, Mich. Malt beverages. Serial Nos. 332,886–7; Jan. 17. Class 48.

Kentucky Consumers Oil Company, Inc., Louisville, Ky. Lubricant. Serial No. 332,457; Jan. 17. Class 15.

Koonts, Edwin E., Kansas City, Mo. Chocolate covered cone. Serial No. 319,998; Jan. 17. Class 46.

Kuner Pickle Company, The, Brighton, Colo. Peas, sugar corn, cherries, hominy, etc. Serial No. 318,152; Jan. 17. Class 46.

Kushion-Aire Shoe Company. (See Chippewa Shoe Manufacturing Company.)

La Crosse Refining Company, La Crosse, Wis. Malt syrup. Serial No. 331,645; Jan. 17. Class 46.

Largman, Gray Company, Croydon, Pa., and New York, N. Y. Gloves and underwear. Serial No. 331,867; Jan. 17. Class 39.

Leon, Inc., Los Angeles, Calif., and Peabody, Mass. Sheep skins. Serial No. 331,287; Jan. 17. Class 1.

Loeser, Frederick, & Co., Inc., Brooklyn, N. Y. Meters applied to gas ranges. Serial No. 331,795; Jan. 17. Class 26.

Lubri-Graph Corporation, The, Cleveland and Wickliffe, Ohio. Lubricating oils and lubricating greases. Serial No. 332,460; Jan. 17. Class 15.
Marion Shoe Company, Marion, Ind. Footwear. Serial No. 331,507; Jan. 17. Class 39.
Markowitz, Samuel L., Inc., New York, N. Y. Nails. Serial No. 331,621; Jan. 17. Class 13.
Marsh, C. A., Inc., Orlando, Fla. Citrus fruits. Serial No. 319,824; Jan. 17. Class 46.
May Oil Burner Corporation, Baltimore, Md. Heating furnace fuel oils. Serial Nos. 332,592–3; Jan. 17. Class 15.
McLaren, L. M., Yuma, Ariz. Vegetables. Serial No. 321,651; Jan. 17. Class 46.
McNeil, Robert, Philadelphia, Pa. Prophylactic astringent. Serial No. 332,157; Jan. 17. Class 6.
Mechanical Improvements Corporation, Camden, N. J. Metal key holders. Serial No. 332,657; Jan. 17. Class 13.
Meisel, C., Inc., New York, N. Y. Violins, violas, violoncellos, etc. Serial No. 331,832; Jan. 17. Class 36.
Metal Textile Corporation, West Orange, N. J. Metallic abrasive pot cleaner. Serial No. 330,518; Jan. 17. Class 4.
Metal Textile Corporation, West Orange, N. J. Dish mops. Serial No. 330,519; Jan. 17. Class 4.
Mexican Importing Company, New York, N. Y. Chile sauce and ketchup. Serial No. 331,288; Jan. 17. Class 46.
Meyer, George, doing business as The Puissant Co. Lubricating compound. Serial No. 332,346; Jan. 17. Class 15.
Midwest Hardware Company, Chicago, Ill. Moth-proofing materials. Serial No. 332,096; Jan. 17. Class 6.
Model Brassiere Co. Inc., Brooklyn, N. Y. Brassières. Serial No. 330,632; Jan. 17. Class 39.
Modern Merchandising Bureau, Inc., New York, N. Y. Hats and caps, scarfs, underwear, etc. Serial No. 329,685; Jan. 17. Class 39.
Munro, Walter J., New York, N. Y. Blankets, carriage sets, carriage robes. Serial No. 328,892; Jan. 17. Class 42.
National Milling & Chemical Company, Philadelphia, Pa. Soap compound, etc. Serial No. 330,580; Jan. 17. Class 4.
National Silk Hosiery Mills, Inc., Indianapolis, Ind. Hosiery. Serial No. 332,496; Jan. 17. Class 39.
Natural Crystals Corporation, Excelsior Springs, Mo. Dehydrated medicinal salts. Serial No. 332,309; Jan. 17. Class 6.
Nelson Knitting Company, Rockford, Ill. Hosiery. Serial No. 330,549; Jan. 17. Class 39.
New Jersey Porcelain Co., Trenton, N. J. Bathroom-fixtures. Serial No. 330,384; Jan. 17. Class 13.
North American Paint & Chemical Co. Ltd., Los Angeles, Calif. Paints, paint colors, white lead, etc. Serial No. 321,815; Jan. 17. Class 16.
North Pacific Nut Growers' Cooperative, Lebanon, Oreg. Canned nuts. Serial No. 331,409; Jan. 17. Class 46.
Park & Tilford, New York, N. Y. Perfumeries, lotions, etc. Serial No. 331,437; Jan. 17. Class 6.
Park & Tilford, New York, N. Y. Perfumeries, lotions, etc. Serial No. 331,438; Jan. 17. Class 6.
Parker Brothers, Inc., Portland, Me., and Salem, Mass. Board game. Serial No. 333,009; Jan. 17. Class 22.
Parks-Cramer Company, Fitchburg, Mass. Humidifiers. Serial Nos. 331,315–16; Jan. 17. Class 34.
Patons & Baldwins, Limited, Halifax, England. Yarns. Serial No. 332,134; Jan. 17. Class 43.
Pauly and Ramsey, Tulsa, Okla. Cereal breakfast foods. Serial No. 331,714; Jan. 17. Class 46.
Petroleum Heat and Power Company, New York, N. Y. Heating furnace oils. Serial No. 332,466; Jan. 17. Class 15.
Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Meters, gauges, and meter provers. Serial No. 327,961; Jan. 17. Class 26.
Popsicle Corporation of the United States, The, New York, N. Y. Frozen confections. Serial No. 331,563; Jan. 17. Class 46.
Professional Products Corporation, New Brunswick, N. J. Tablets. Serial No. 331,992; Jan. 17. Class 6.
Puissant Co., The. (See Meyer, George.)
Quaker Maid Co., The. (See Great Atlantic & Pacific Tea Company.)
Real-Oil-Heat Burner Company, Winona, Minn. Oil burners, humidifiers, and heat savers. Serial No. 318,170; Jan. 17. Class 34.
Red & White Corporation, Buffalo, N. Y. Gelatine dessert. Serial No. 331,753; Jan. 17. Class 46.
Reina, Salvatore A., doing business as Salva-Gene Chemical Laboratory, San Francisco, Calif. Internal medicine. Serial No. 332,101; Jan. 17. Class 6.
Reynolds Spring Co., Jackson, Mich. Receptacles of synthetic resin, etc. Serial No. 327,450; Jan. 17. Class 2.
Reynolds Wire Co., Dixon, Ill. Wire cloth. Serial No. 330,944; Jan. 17. Class 13.
Royal Baking Powder Company, New York, N. Y. Pudding and pie filling. Serial No. 321,219; Jan. 17. Class 46.
Ruck, George, Philadelphia, Pa. Antipyreticum and analgesic and specific. Serial No. 332,734; Jan. 17. Class 6.
Russell, Robert H., Cleveland, Ohio. Industrial liquid fuel burners and atomizers, furnace retorts, and furnace air registers. Serial No. 332,632; Jan. 17. Class 34.
Rustvoid Products, Inc., Long Island City, N. Y. Liquid preparation. Serial No. 331,595; Jan. 17. Class 6.
St. Ann's Laboratory. (See Guba, Frank.)
Salva-Gene Chemical Laboratory. (See Reina, Salvatore A.)
Sandeman, Geo. G., Sons & Co. Limited, London, England. Sherry wine. Serial No. 331,703; Jan. 17. Class 47.
Sandeman, Geo. G., Sons & Co. Limited, London, England. Port wine. Serial No. 331,707; Jan. 17. Class 47.
Sears, Roebuck and Co., Chicago, Ill. Lawn mowers. Serial No. 331,415; Jan. 17. Class 23.
Sears, Roebuck and Co., Chicago, Ill. White paste. Serial No. 333,015; Jan. 17. Class 5.
Security Products Company, St. Louis, Mo. Flush valves. Serial No. 332,553; Jan. 17. Class 13.
Seibert, William D., New York, N. Y. Binder for magazines. Serial No. 332,384; Jan. 17. Class 37.
Shellabarger Mill & Elevator Company, The, Salina, Kans. Wheat flour. Serial No. 332,634; Jan. 17. Class 46.
Shepherd Worsted Mills, The. (See Dane, Ernest B., and Albert J. Meserve.)
Shoreham Coffee Company, Washington, D. C. Coffee. Serial No. 316,224; Jan. 17. Class 46.
Silex Company, The, Hartford, Conn. Stoves, gas and spirit. Serial No. 330,639; Jan. 17. Class 34.
Simplex Piston Ring Company of America, Inc., The, Cleveland, Ohio. Brake linings. Serial No. 329,243; Jan. 17. Class 35.
Slessinger, Stephen, New York, N. Y. Games. Serial No. 332,423; Jan. 17. Class 22.
Slessinger, Stephen, New York, N. Y. Toys. Serial No. 332,424; Jan. 17. Class 22.
Soluol Corporation, Providence, R. I. Sizing and treatment material. Serial No. 332,128; Jan. 17. Class 6.
Soubegan Apple Packing Association, Wilton, N. H. Apples. Serial No. 331,910; Jan. 17. Class 46.
Standard Amusement Company. (See Clem, E. D.)
Standard Brands Incorporated, New York, N. Y. Invertase preparation. Serial No. 331,655; Jan. 17. Class 46.
Stirn, L. & E., Inc., New York, N. Y. Silk and rayon fabrics. Serial No. 332,202; Jan. 17. Class 42.
Tesman, Jacob, doing business as Tesman Drug Co., Philadelphia, Pa. Liniment. Serial No. 332,327; Jan. 17. Class 6.
Tetley, Joseph, & Co., New York, N. Y. Tea. Serial No. 331,938; Jan. 17. Class 46.
Tri-Vee Company, Baltimore, Md. Vegetised iron. Serial No. 331,878; Jan. 17. Class 6.
Troy, Seymour, & Co., Inc., New York, N. Y. Shoes. Serial No. 332,497; Jan. 17. Class 39.
Truscon Laboratories, The, Detroit, Mich. Paints, paint enamels, stains, etc. Serial No. 332,241; Jan. 17. Class 16.
Union Oil Company, Parsons, Kans., and North Kansas City, Mo. Vehicle tires and inner tubes. Serial No. 331,272; Jan. 17. Class 35.
Universal Button Fastening & Button Company, Detroit, Mich. Buttons. Serial No. 327,951; Jan. 17. Class 40.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Veterinary medicine. Serial Nos. 332,274–5; Jan. 17. Class 6.
Veterinary Products Laboratory, Inc. Jamaica, N. Y. Medicinal preparation for man or beast. Serial No. 332,276; Jan. 17. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Veterinary medicine. Serial No. 332,277; Jan. 17. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Veterinary medicinal preparation. Serial No. 332,278; Jan. 17. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Veterinary nerve tonic. Serial No. 332,279; Jan. 17. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Medicinal preparation for swollen tendons, etc. Serial No. 332,280; Jan. 17. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Veterinary medicinal preparation. Serial No. 332,282; Jan. 17. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Medicinal preparation for skin diseases of man or beast. Serial No. 332,283; Jan. 17. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Veterinary tonic. Serial No. 332,284; Jan. 17. Class 6.
Voyages, Harry, New York, N. Y. Hair tonic. Serial No. 326,725; Jan. 17. Class 6.
Waldfogel-Abrams Company, Boston, Mass. Overcoats. Serial No. 328,080; Jan. 17. Class 39.

Washington Times Company, The, Washington, D. C. Column of a newspaper. Serial No. 332,934; Jan. 17. Class 38.
Weiner, Simon, New York, N. Y. Shoes, slippers, and sandals, etc. Serial No. 331,281; Jan. 17. Class 39.
Whitall Tatum Company, Millville, N. J. Electrical insulators. Serial No. 331,522; Jan. 17. Class 21.
White Horse Distillers, Limited, Glasgow, Scotland. Whisky. Serial Nos. 332,473–4; Jan. 17. Class 49.
Wiener, David, New York, N. Y. Ladies' dresses and coats. Serial No. 331,681; Jan. 17. Class 39.
Windowitch Company, Cleveland, Ohio. Rubbing, squeegeeing and polishing devices. Serial No. 331,812; Jan. 17. Class 29.
Winthrop Chemical Company, Inc., New York, N. Y. Tonic and reconstructive. Serial No. 332,170; Jan. 17. Class 6.

LIST OF REGISTRANTS OF TRADE-MARKS

Adams, Walter A., doing business as Adams Machine Company, Rochester, N. Y. Industrial furniture. 300,397; Jan. 17; Serial No. 329,732; published Nov. 1, 1932. Class 23.
Alpine Ice Cream Co. Inc., Corona, N. Y. Ice cream. 300,396; Jan. 17; Serial No. 329,666; published Nov. 1, 1932. Class 46.
American Beauty Macaroni Company, The. (See Kansas City Macaroni & Importing Company.)
American Brass & Steel Products Co., New York, N. Y. Metal stamping dies, button covering machines, eyelet setting machines, etc. 300,370; Jan. 17; Serial No. 289,306; published Nov. 8, 1932. Class 23.
American Record Corporation, New York, N. Y. Game. 300,451; Jan. 17; Serial No. 330,151; published Nov. 8, 1932. Class 22.
Amick, James J., doing business as James J. Amick & Son, Detroit, Mich. Medicinal compound. 300,385; Jan. 17; Serial No. 324,278; published Nov. 1, 1932. Class 6.
Angier & Earle, Inc., Boston, Mass. Plastic solder. 300,361; Jan. 17; Serial No. 329,781; published Nov. 8, 1932. Class 14.
Arena, A., & Co., Ltd., Los Angeles, Calif. Fresh oranges, melons, and vegetables. 300,374; Jan. 17; Serial No. 305,025; published Oct. 25, 1932. Class 46.
Armor Products Inc., New York, N. Y. Mechanical packings, belting, hose plastic packings, etc. 300,429; Jan. 17; Serial No. 329,346; published Nov. 8, 1932. Class 35.
Associated Seed Growers, Incorporated, New Haven, Conn. Garden and field seeds, bulbs, and plants. 300,456; Jan. 17; Serial No. 328,211; published Nov. 15, 1932. Class 1.
Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic lenses. 300 387–8; Jan. 17; Serial Nos. 330,287–8; published Nov. 1, 1932. Class 26.
Behr-Manning Corporation, Troy, N. Y. Composition sheet material. 300 358; Jan. 17; Serial No. 330,242; published Nov. 8, 1932. Class 50.
Bergs, E. A., Fabriks Aktiebolag, Eskilstuna, Sweden. Plane irons, chisels, knives and tongs. 300,454; Jan. 17; Serial No. 328,835; published Nov. 1, 1930. Class 23.
Borg & Beck Company, The, Chicago, Ill. Mechanical clutches, clutch plates, and parts thereof. 300,396; Jan. 17; Serial No. 329,931; published Nov. 1, 1932. Class 23.
Breck, John H., Inc., Springfield, Mass. Shampoo preparations. 300,357; Jan. 17; Serial No. 330,392; published Nov. 1, 1932. Class 6.
British Vacuum Cleaner & Engineering Co. Ltd., The, London, England. Suction cleaning machines. 300,453; Jan. 17; Serial No. 330,007; published Nov. 8, 1932. Class 23.
Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Bowling pins. 300,432; Jan. 17; Serial No. 329,396; published Nov. 8, 1932. Class 22.
Bryant Manufacturing Company, The, Wapakoneta, Ohio. Handles for hoes, hay forks, manure forks, etc. 300,395; Jan. 17; Serial No. 329,935; published Nov. 1, 1932. Class 23.
Buffalo Envelope Company, Inc., Buffalo, N. Y. Correspondence and mailing envelopes. 300,431; Jan. 17; Serial No. 329,441; published Nov. 8, 1932. Class 37.
Buttitta, Anthony J., doing business as Contempo, Ltd. Magazine. 300,408; Jan. 17; Serial No. 329,071; published Nov. 8, 1932. Class 38.
Carmel Oil Co., New York, N. Y. Edible white oil. 300,404; Jan. 17; Serial No. 329,040; published Nov. 1, 1932. Class 46.
Citra Packing Co., The, Citra, Fla. Oranges, lemons, grape-fruit, etc. 300,403; Jan. 17; Serial No. 329,420; published Nov. 1, 1932. Class 46.
Contempo, Ltd. (See Buttitta, Anthony J.)
Contoure Laboratories, Inc., New York, N. Y. Cleansing cream, tissue cream, foundation cream, etc. 300,360; Jan. 17; Serial No. 329,887; published Nov. 1, 1932. Class 6.
Cooper Products Corporation, assignor to Earl Safety Razor Corporation, New York, N. Y. Razor blades. 300,424; Jan. 17; Serial No. 330,419; published Nov. 1, 1932. Class 28.
Corn & Ware, Calipatria, Calif. Fresh vegetables, citrus fruits, melons, etc. 300,375; Jan. 17; Serial No. 31,822; published Nov. 1, 1932. Class 46.
Cottonwood Products, Inc., Reading, Mass. Packing pads and wrappers, insulating mat or sheet for packing pads, etc. 300,380; Jan. 17; Serial No. 321,679; published Nov. 8, 1932. Class 50.
Cupples, Samuel, Envelope Company, St. Louis, Mo. Mailing envelopes. 300,377; Jan. 17; Serial No. 313,771; published Nov. 8, 1932. Class 37.
Curtis-Martin Newspapers, Inc., Philadelphia, Pa. Column of humor in newspaper publications. 300,450; Jan. 17; Serial No. 330,159; published Nov. 8, 1932. Class 38.
Cutler-Hammer, Inc., Milwaukee, Wis. Automatic thermo-electric gas mixing control apparatus. 300,416; Jan. 17; Serial No. 327,344; published Nov. 1, 1932. Class 26.
Darling Valve & Manufacturing Company, Williamsport, Pa. Fabric cups. 300,442; Jan. 17; Serial No. 330,571; published Nov. 8, 1932. Class 35.
Dean, John, San Francisco, Calif. Wall board. 300,378; Jan. 17; Serial No. 320,498; published Nov. 1, 1932. Class 12.
De Leon Peanut Company, De Leon, Tex. Shelled peanuts. 300,391; Jan. 17; Serial No. 330,039; published Nov. 1, 1932. Class 46.
Dentay Company, The. (See Tuvin, Julius H.)
Duovac Radio Tube Corp., Brooklyn, N. Y. Electric meter and tone indicator. 300,352; Jan. 17; Serial No. 327,051; published Nov. 8, 1932. Class 26.
Earl Safety Razor Corporation. (See Cooper Products Corporation, assignor.)
Enterprise Aluminum Company, The, Massillon, Ohio. Percolators. 300,413; Jan. 17; Serial No. 330,342; published Nov. 1, 1932. Class 13.
Esterbrook Steel Pen Manufacturing Company, The, Camden, N. J. Writing pens of all kinds. 300,407; Jan. 17; Serial No. 330,743; published Nov. 8, 1932. Class 37.
Esterbrook Steel Pen Manufacturing Company, The, Camden, N. J. Writing pens of all kinds. 300,421–3; Jan. 17; Serial Nos. 330,698–700; published Nov. 8, 1932. Class 37.
Esterbrook Steel Pen Manufacturing Company, The, Camden, N. J. Writing pens of all kinds. 300,436; Jan. 17; Serial No. 330,697; published Nov. 8, 1932. Class 37.
Excelsior Tobacco Co. Inc., St. Louis, Mo. Cigarettes, cigars, and smoking tobacco. 300,382; Jan. 17; Serial No. 323,575; published Nov. 8, 1932. Class 17.
Fairbanks, Morse & Co., Chicago, Ill. Internal combustion engines, pumps, windmills, etc. 300,399; Jan. 17; Serial No. 329,631; published Nov. 8, 1932. Class 23.
Faness Industries, Chicago, Ill. Game. 300,444; Jan. 17; Serial No. 330,510; published Nov. 8, 1932. Class 22.
Ferguson, George M., doing business as Ferguson Manufacturing Company, Portland, Oreg. Compound for protecting automobile radiators from leakage. 300,362; Jan. 17; Serial No. 329,664; published Nov. 1, 1932. Class 6.
Fried. Krupp Aktiengesellschaft Grusonwerk, to Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany, successor. Metal forgings and castings. 89,837; renewed Jan. 14, 1933.
Gellman Manufacturing Co., Rock Island, Ill. Bread slicing machines. 300,381; Jan. 17; Serial No. 322,691; published Nov. 1, 1932. Class 23.
General Box Company, Chicago, Ill. Wooden crates and boxes. 300,433; Jan. 17; Serial No. 327,586; published Nov. 8, 1932. Class 2.
Grav, Ellsworth, doing business as Saxet Tool Company, Houston, Tex. Oil well supplies. 300 447; Jan. 17; Serial No. 330,257; published Nov. 8, 1932. Class 23.
Gunite Foundries Corporation, Rockford, Ill. Safes. 300,440; Jan. 17; Serial No. 330,656; published Nov. 8, 1932. Class 25.
Hart & Cooley Mfg. Company, New Britain, Conn. Registers. 300,405; Jan. 17; Serial No. 328,609; published Nov. 8, 1932. Class 34.
Herbert, Edward J., Mount Vernon, N. Y. Featured published articles. 300,457; Jan. 17; Serial No. 306,508; published Nov. 8, 1932. Class 38.

Hercules Powder Company, Wilmington, Del. Dynamite. 300,445; Jan. 17; Serial No. 330,424; published Nov. 8, 1932. Class 9.

Horton, Emily A., doing business as The Swedish Laboratories, Cambridge, Mass. Shampoo. 300,359; Jan. 17; Serial No. 330,064; published Nov. 1, 1932. Class 6.

Horton Manufacturing Company, The, Bristol, Conn. Fishing reels. 300,441; Jan. 17; Serial No. 330,598; published Nov. 8, 1932. Class 22.

International Nickel Company, Inc., The, New York, N. Y. Sinks. 300,392; Jan. 17; Serial No. 330,016; published Nov. 1, 1932. Class 13.

Inwood Products Corporation. (See Wolbert, Everett D.)

Jay Tobacco Company. (See Josephs, Jean.)

Jeffery, Alfred, & Co., doing business as Jeffery's Patent Marine Glue Works, London, England. Marine glue. 300,425; Jan. 17; Serial No. 330,370; published Nov. 8, 1932. Class 5.

Josephs, Jean, doing business as Jay Tobacco Company, Philadelphia, Pa. Cigarettes. 300,363; Jan. 17; Serial No. 330,658; published Nov. 8, 1932. Class 17.

Kansas City Macaroni & Importing Company, The, doing business as The American Beauty Macaroni Company, Kansas City, Mo. Macaroni. 300,393; Jan. 17; Serial No. 329,951; published Nov. 1, 1932. Class 46.

Kansas City Macaroni & Importing Company, The, doing business as The American Beauty Macaroni Company, Kansas City, Mo. Combination of macaroni and beans. 300,394; Jan. 17; Serial No. 329,950; published Nov. 1, 1932. Class 46.

Kassekert, Fred, Greenwich, Conn. Razor blades. 300,400; Jan. 17; Serial No. 329,583; published Nov. 8, 1932. Class 23.

Keasbey & Mattison Company, Ambler, Pa. Asbestos-cement product. 300,366; Jan. 17; Serial No. 329,424; published Nov. 1, 1932. Class 12.

Kendall Company, The, Chicago, Ill., and Boston, Mass. Bandage compress, dental floss, gauze, etc. 300,349; Jan. 17; Serial No. 325,099; published Nov. 1, 1932. Class 44.

Kress, S. H., & Co., New York, N. Y. Razors, safety razors, razor blades, acissors, etc. 300,389; Jan. 17; Serial No. 330,265; published Nov. 1, 1932. Class 23.

Larus & Brother Company, Incorporated, Richmond, Va. Cigarette papers and booklets. 300,379; Jan. 17; Serial No. 320,981; published Nov. 8, 1932. Class 8.

Leunox Furnace Company, Marshalltown, Iowa. Automatic gas burning units and fuel controlling devices therefor. 300,386; Jan. 17; Serial No. 312,713; published Nov. 8, 1932. Class 34.

Loft, Inc., Long Island City, N. Y. Ginger ale. 300,418; Jan. 17; Serial No. 330,792; published Nov. 8, 1932. Class 45.

Mantle Lamp Company of America, The, Chicago, Ill. Heating and lighting apparatus, parts of and accessories therefor. 300,350; Jan. 17; Serial No. 328,560; published Nov. 1, 1932. Class 34.

Melton Farms Inc. (See Melton, J. T.)

Melton, J. T., doing business as Melton Farms Inc., Fort Lauderdale, Fla. Fresh citrus fruits, deciduous fruits and vegetables. 300,353; Jan. 17; Serial No. 326,892; published Nov. 1, 1932. Class 46.

Morris & Company, Incorporated, Baltimore, Md. Uniforms, aprons, and house garments. 300,455; Jan. 17; Serial No. 329,833; published Nov. 1, 1932. Class 39.

Murdock, Peter, doing business as Murdock Pharmacal Co., New York, N. Y. Preparations for skin irritation. 300,412; Jan. 17; Serial No. 330,349; published Nov. 8, 1932. Class 6.

Nashua Package Sealing Co. Inc., Nashua, N. H. Devices and appliances for moistening and/or serving adhesive or gummed tape, etc. 330,487–9; Jan. 17; Serial Nos. 330,661–3; published Nov. 8, 1932. Class 37.

Newark Paraffine & Parchment Paper Co., Newark, N. J. Waxed paper bags and transparent containers. 300,410; Jan. 17; Serial No. 328,247; published Nov. 8, 1932. Class 2.

Nordmark-Werke G. m. b. H., Hamburg, Germany. Liver food preparations and tonic food preparations, malt and fodder. 300,355; Jan. 17; Serial No. 325,237; published Nov. 1, 1932. Class 46.

Pacific Wire Products Company, Los Angeles Calif. Tinned bronze wire insect screening. 300,414; Jan. 17; Serial No. 330,350; published Nov. 1, 1932. Class 13.

Phelps Dodge Copper Products Corporation, Dover, Del., and New York, N. Y. Seamless brass and copper tubing. 300,443; Jan. 17; Serial No. 330,565; published Nov. 8, 1932. Class 13.

Pinchot-Neumann Holding Corp., New York, N. Y. Sensitised gelatine coated paper sheets for use in photographic and colo-type printing. 300 369; Jan. 17; Serial No. 288,980; published Nov. 1, 1932. Class 26.

Pioneer Paper Stock Company, Chicago, Ill. Paper excelsior. 300,406; Jan. 17; Serial No. 330,831; published Nov. 8, 1932. Class 37.

Premier Malt Products Co., Peoria Heights, Ill. Malt beverage. 300,435; Jan. 17; Serial No. 330,381; published Nov. 8, 1932. Class 48.

Ramapo Ajax Corporation, New York, N. Y. Switch stands. 330,373; Jan. 17; Serial No. 304,888; published Nov. 1, 1932. Class 23.

Redding & Co., Incorporated, Melrose, Mass. Salve. 89,772; renewed Jan. 7, 1933.

Reserve Officers' Association of the United States, Washington, D. C. Magazine. 300,411; Jan. 17; Serial No. 330,711; published Nov. 8, 1932. Class 38.

Roessel, Louis, & Co., Inc., Hazleton, Pa., and New York, N. Y. Silk goods in the piece. 300,426; Jan. 17; Serial No. 330,101; published Oct. 11, 1932. Class 42.

Safety Car Heating & Lighting Company, The, New Haven, Conn., and New York, N. Y. Plumbing, steam-fitting valves, etc. 300,371; Jan. 17; Serial No. 292,012; published Nov. 1, 1932. Class 13.

Safety Car Heating & Lighting Company, The, New Haven, Conn., and New York, N. Y. Globes, shades, and reflectors. 300,372; Jan. 17; Serial No. 292,013; published Nov. 8, 1932. Class 33.

Saxet Tool Company. (See Gray, Ellsworth.)

Schuman, Irving, doing business as Vitadent Laboratories, Jersey City, N. J. Dentrifice. 300,354; Jan. 17; Serial No. 326,304; published Nov. 1, 1932. Class 6.

Standard Rate & Data Service, Chicago, Ill. Periodical. 300,449; Jan. 17; Serial No. 330,168; published Nov. 8, 1932. Class 38.

Stark Metal Products Company, The, Massillon, Ohio. Adhesive cement. 300,430; Jan. 17; Serial No. 329,809; published Nov. 8, 1932. Class 5.

Sterilometer Laboratories, Los Angeles, Calif. Controls comprising a pyro-recording composition. 300,401; Jan. 17; Serial No. 329,565; published Nov. 8, 1932. Class 26.

Stewart, Jesse C., Co., Pittsburgh, Pa. Laundry blue powder. 300,376; Jan. 17; Serial No. 313,396; published Nov. 1, 1932. Class 6.

Swedish Laboratories, The. (See Horton, Emily A.)

Tachette Manufacturing Corporation, Long Island City, N. Y. Packets of absorbent tissue. 300,427–8; Jan. 17; Serial Nos. 330,054–5; published Nov. 8, 1932. Class 37.

Tanqueray, Gordon & Co. Limited, London, England. Whisky. 39,651; renewed Jan. 20, 1933.

Tate, Elizabeth J., Washington, D. C. Hair tonic. 300,356; Jan. 17; Serial No. 330,671; published Nov. 1, 1932. Class 6.

Terra Ceia Citrus Growers Association, Terra Ceia, Fla. Oranges, grape-fruit, tangerines, lemons, and limes. 89,517; renewed Dec. 17, 1932.

Terre Haute Brewing Co., assignor to Wabash Realty & Loan Co., Terre Haute, Ind. Lager beer and bottled beer. 39,906; renewed Mar. 10, 1933.

Tuvin, Julius H., doing business as The Dentay Company, New York, N. Y. Preparation for holding artificial teeth in place. 300,367; Jan. 17; Serial No. 329,206; published Nov. 1, 1932. Class 6.

Union Malt Products Company, Detroit, Mich. Malt syrup. 300,384; Jan. 17; Serial No. 324,236; published Nov. 1, 1932. Class 46.

United American Bosch Corporation, Springfield, Mass. Electrical condenser testing instruments. 300,402; Jan. 17; Serial No. 329,542; published Nov. 8, 1932. Class 26.

United States Rubber Company, New York, N. Y. Rubber cement. 300,420; Jan. 17; Serial No. 330,768; published Nov. 8, 1932. Class 5.

Universal Lubricating Systems, Inc., Pittsburgh, Pa. Metered dispensing pumps. 300,415; Jan. 17; Serial No. 327,034; published Nov. 1, 1932. Class 26.

Utility Manufacturing Company, Inc., New York, N. Y. Cameras and parts thereof. 300,417; Jan. 17; Serial No. 328,747; published Nov. 1, 1932. Class 26.

Van Wagner, Lester, doing business as Van Wagner & Co., Richmond Hill, N. Y. Sanitary paper sheets. 300,446; Jan. 17; Serial No. 330,353; published Nov. 8, 1932. Class 37.

Vitadent Laboratories. (See Schuman, Irving.)

Vogt Brothers Mfg. Co., Louisville, Ky. Fluid mixing heads and throats for aeration, purification, and treatment. 300,351; Jan. 17; Serial No 327,240; published Nov. 8, 1932. Class 13.

Wabash Realty & Loan Co. (See Terre Haute Brewing Co., assignor.)

Walfix Specialties, Inc., New York, N. Y. Wall bathroom fixtures. 300,383; Jan. 17; Serial No. 323,734; published Nov. 1, 1932. Class 13.

Wilckes, Martin, Wilckes Company, New York, N. Y. Carbon black. 300,419; Jan. 17; Serial No. 330,770; published Nov. 8, 1932. Class 16.

Wilson-Hall Printing Company, Rockford, Ill. Periodical publication. 300,409; Jan. 17; Serial No. 330,771; published Nov. 8, 1932. Class 38.

Wilson-Jones Company, Chicago, Ill. Covered and bound blank books, note books, index books, etc. 300,452; Jan. 17; Serial No. 330,136; published Nov. 8, 1932. Class 37.

Wisconsin Abrasive Co., Milwaukee, Wis. Razor hones. 300,364–5; Jan. 17; Serial Nos. 330,501–2; published Nov. 1, 1932. Class 4.

Wolbert, Everett D., doing business as Inwood Products Corporation, San Francisco, Calif. Finish in the nature of a paint or varnish. 300,434; Jan. 17; Serial No. 327,388; published Nov. 8, 1932. Class 16.

Worthy Paper Company Association, North Agawam, Mass. Bond, ledger, linen, and manuscript cover papers. 300,448; Jan. 17; Serial No. 330,173; published Nov. 8, 1932. Class 37.

Zigzag Sharpener Co., Tulsa, Okla. Razor sharpeners. 300,390; Jan. 17; Serial No. 330,137; published Nov. 1, 1932. Class 23.

Zotos Corporation, New York, N. Y. Hair waving pads. 300,368; Jan. 17; Serial No. 328,112; published Nov. 1, 1932. Class 44.

LIST OF REGISTRANTS OF LABELS

Bo-Kay Perfume Co., New York, N. Y. B/Doctor's Prescription Powder. For Preparation for the Relief of Athlete's Foot, Prickly Heat, Etc. 41,664; Jan. 17.

Burnett, John, doing business as Burnett Laboratories, Chicago, Ill. Burnett's Skin Salve. For Skin Salve. 41,665; Jan. 17.

Carlson, Carl, doing business as Marysville Home Bakery, Marysville, Wash. Big Boy. For Bread. 41,666; Jan. 17.

Chlorine Chemical Corp., New York, N. Y. Da-Ko. For Washing and Cleaning Compound. 41,667; Jan. 17.

Dayton Spice Mills Co., The, Dayton, Ohio. Choice Roasted Coffee. For Coffee. 41,668; Jan. 17.

Eclipse Food Products Co., Scarsdale and New York, N. Y. Eclipse. For Food Products. 41,669; Jan. 17.

Hoague-Sprague Corporation, Lynn, Mass. Filene's. For Boxes. 41,670; Jan. 17.

Hoague-Sprague Corporation, Lynn, Mass. Fenmode. For Boxes. 41,671; Jan. 17.

Hoague-Sprague Corporation, Lynn, Mass. Model Mode Footwear. For Boxes. 41,672; Jan. 17.

Hoague-Sprague Corporation, Lynn, Mass. Shoes for All the Family. For Boxes. 41,673; Jan. 17.

Marysville Home Bakery. (See Carlson, Carl.)

Mead Johnson & Company, Evansville, Ind. Mead's Viosterol in Halibut Liver Oil. For Viosterol—Namely, Activated Ergosterol, in Halibut Liver Oil. 41,674; Jan. 17.

Peerless Paint & Varnish Corp., Brooklyn, N. Y. Peercraft Finishes. For Flat White Paint. 41,675; Jan. 17.

Rosenfeld, M. C., Laboratories, Boston, Mass. Fixed. For Flavors. 41,676; Jan. 17.

Schwartzberg, Louis, Chicago, Ill. Checker Butter Carton. For Butter Cartons. 41,677; Jan. 17.

Schwartzberg, Louis, Chicago, Ill. Domino Butter Carton. For Butter Cartons. 41,678; Jan. 17.

Union Oil Company of California, Los Angeles, Calif. Union Top-Tone. For Substance for Renovating and Water Proofing Black Auto Tops and Imitation Leathers. 41,679; Jan. 17.

Union Oil Company of California, Los Angeles, Calif. Union Solvent Spirit. For Household Spot Remover. 41,680; Jan. 17.

Union Oil Company of California, Los Angeles, Calif. Union Lustre Wax. For Lustre Wax for Floors, Furniture, Linoleum, Tile. 41,681; Jan. 17.

Worcester Salt Company, New York, N. Y. Worcester Iodized Salt. For Salt. 41,682; Jan. 17.

LIST OF REGISTRANTS OF PRINTS

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Assorted Drops. For Assorted Drops. 14,023; Jan. 17.

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Brand Chewing Gum. For Chewing Gum. 14,024; Jan. 17.

Comey, R. H., Brooklyn Company, Inc., Brooklyn, N. Y. Cleartone Colors 1933. For Straw Braids and Body Hats. 14,025; Jan. 17.

Cream of Wheat Corporation, The, Minneapolis, Minn. 85% of This Heavy Toll is Exacted from Little Children. For Wheat Breakfast Food. 14,026; Jan. 17.

Davis, F. A., & Sons, Baltimore, Md. Our New-Day Cigar Stand. For Cigars, Cigarettes, Tobaccos, Knives, Pipes, Flashlights, Smokers' Articles, Etc. 14,027; Jan. 17.

Dorman, Jack, Cincinnati, Ohio. Dorman Modern Engineering Assembly Chart. For Automotive Parts. 14,028; Jan. 17.

General Mills, Inc., Minneapolis, Minn. Ferm-A-Sured. For Flour. 14,029; Jan. 17.

Hills Bros., San Francisco, Calif. Hills Bros. Coffee Thrills Your Taste—(Adform 124). For Coffee. 14,030; Jan. 17.

Hills Bros., San Francisco, Calif. Hills Bros. Coffee Ends Your Search for Fine Coffee Adform 128. For Coffee. 14,031; Jan. 17.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Seeds, bulbs, and plants, Garden and field. Associated Seed Growers, Incorporated. 300,456; Jan. 17; Serial No. 328,211; published Nov. 15, 1932.

CLASS 2

Bags and transparent containers, Waxed paper. Newark Paraffine & Parchment Paper Co. 300,410; Jan. 17; Serial No. 328,247; published Nov. 8, 1932.

Crates and boxes. General Box Company. 300,433; Jan. 17; Serial No. 327,586; published Nov. 8, 1932.

CLASS 4

Hanes, Razor. Wisconsin Abrasive Co. 300,364–5; Jan. 17; Serial Nos. 330,501–2; published Nov. 1, 1932.

CLASS 5

Cement, Adhesive. Stark Metal Products Company, The. 300,430; Jan. 17; Serial No. 329,809; published Nov. 8, 1932.

Cement, Rubber. United States Rubber Company. 300,420; Jan. 17; Serial No. 330,768; published Nov. 8, 1932.

Glue, Marine. Alfred Jeffery & Co. 300,425; Jan. 17; Serial No. 330,370; published Nov. 8, 1932.

CLASS 6

Compound for radiators. G. M. Ferguson. 300,362; Jan. 17; Serial No. 329,664; published Nov. 1, 1932.

Cream, Cleansing, tissue, foundation, etc. Contoure Laboratories, Inc. 300,360; Jan. 17; Serial No. 329,887; published Nov. 1, 1932.

Dentifrice. I. Schuman. 300,354; Jan. 17; Serial No. 326,304; published Nov. 1, 1932.

Hair tonic. E. J. Tate. 300,356; Jan. 17; Serial No. 330,671; published Nov. 1, 1932.

Medicinal compound. J. J. Amick. 300,385; Jan. 17; Serial No. 324,278; published Nov. 1, 1932.

Powder, Laundry blue. Jesse C. Stewart Co. 300,376; Jan. 6; Serial No. 313,396; published Nov. 1, 1932.

Preparation for holding artificial teeth. J. H. Tuvin. 300,367; Jan. 17; Serial No. 329,206; published Nov. 1, 1932.

Preparations for skin irritations. P. Murdock. 300,412; Jan. 17; Serial No. 330,349; published Nov. 8, 1932.

Salve. Redding & Co. 89,772; renewed Jan. 7, 1933.

Shampoo. E. A. Horton. 300,359; Jan. 17; Serial No. 330,064; published Nov. 1, 1932.

Shampoo preparation. John H. Breck, Inc. 300,357; Jan. 17; Serial No. 330,392; published Nov. 1, 1932.

CLASS 8

Cigarette papers and booklets. Larus & Brother Company. 300,379; Jan. 17; Serial No. 320,981; published Nov. 8, 1932.

CLASS 9

Dynamite. Hercules Powder Company. 300,445; Jan. 17; Serial No. 330,424; published Nov. 8, 1932.

CLASS 12

Asbestos-cement product. Keasbey & Mattison Company. 300,366; Jan. 17; Serial No. 329,424; published Nov. 1, 1932.

Board, Wall. J. Dean. 300,378; Jan. 17; Serial No. 320,493; published Nov. 1, 1932.

CLASS 13

Fixtures, Wall bathroom. Walfix Specialities, Inc. 300,383; Jan. 17; Serial No. 323,734; published Nov. 1, 1932.

Fluid mixing heads and throats for aeration, purification, and treatment. Vogt Brothers Mfg. Co. 300,351; Jan. 17; Serial No. 327,240; published Nov. 8, 1932.

Percolators. Enterprise Aluminum Company. 300,413; Jan. 17; Serial No. 330,342; published Nov. 1, 1932.

Screening, Tinned bronze wire insect. Pacific Wire Products Company. 300,414; Jan. 17; Serial No. 330,350; published Nov. 1, 1932.

Sinks. International Nickel Company. 300,392; Jan. 17; Serial No. 330,016; published Nov. 1, 1932.

Tubing, Seamless brass and copper. Phelps Dodge Copper Products Corporation. 300,443; Jan. 17; Serial No. 330,565; published Nov. 8, 1932.

Valves, Plumbing, steam-fitting, etc. Safety Car Heating & Lighting Company. 300,371; Jan. 17; Serial No. 292 012; published Nov. 1, 1932.

CLASS 14

Metal forgings and castings. Fried. Krupp Aktiengesellschaft Grusonwerk. 89,337; renewed Jan. 14, 1933.

Solder, Plastic. Angier & Earle, Inc. 300,361; Jan. 17; Serial No. 329,781; published Nov. 8, 1932.

CLASS 16

Carbon black. Wilckes, Martin, Wilckes Company. 300,419; Jan. 17; Serial No. 330,770; published Nov. 8, 1932.
Finish in the nature of a paint or varnish. E. D. Wolbert. 300,434; Jan. 17; Serial No. 327,383; published Nov. 8, 1932.

CLASS 17

Cigarettes. J. Josephs. 300,363; Jan. 17; Serial No. 330,658; published Nov. 8, 1932.
Cigarettes, cigars, and smoking tobacco. Excelsior Tobacco Co. Inc. 300,382; Jan. 17; Serial No. 323,575; published Nov. 8, 1932.

CLASS 22

Bowling pins. Brunswick-Balke-Collender Company. 300,432; Jan. 17; Serial No. 329,396; published Nov. 8, 1932.
Game. American Record Corporation. 300,451; Jan. 17; Serial No. 330,151; published Nov. 8, 1932.
Game. Faness Industries. 300,444; Jan. 17; Serial No. 330,510; published Nov. 8, 1932.
Reels, Fishing. Horton Manufacturing Company. 300,441; Jan. 17; Serial No. 330,598; published Nov. 8, 1932.

CLASS 23

Clutches, clutch plates, and parts thereof, Mechanical. Borg & Beck Company. 300,396; Jan. 17; Serial No. 329,931; published Nov. 1, 1932.
Dies, Button covering machines, eyelet setting machines, etc., Metal stamping. American Brass & Steel Products Co. 300,370; Jan. 17; Serial No. 289,306; published Nov. 8, 1932.
Engines, pumps, windmills, etc., Internal combustion. Fairbanks, Morse & Co. 300,399; Jan. 17; Serial No. 329,631; published Nov. 8, 1932.
Furniture, Industrial. W. A. Adams. 300,397; Jan. 17; Serial No. 329,732; published Nov. 1, 1932.
Handles for hoes, hay forks, manure forks, etc. Bryant Manufacturing Company. 300,395; Jan. 17; Serial No. 329,935; published Nov. 1, 1932.
Irons, chisels, knives, and tongs, Plane. E. A. Bergs Fabriks Aktiebolag. 300,454; Jan. 17; Serial No. 328,835; published Nov. 1, 1932.
Oil well supplies. E. Gray. 300,447; Jan. 17; Serial No. 330,257; published Nov. 8, 1932.
Razor blades. Cooper Products Corporation. 300,424; Jan. 17; Serial No. 330,419; published Nov. 1, 1932.
Razor blades. F. Kassekert. 300,400; Jan. 17; Serial No. 329,583; published Nov. 8, 1932.
Razors, safety razors, razor blades, scissors, etc. S. H. Kress & Co. 300,389; Jan. 17; Serial No. 330,265; published Nov. 1, 1932.
Sharpeners, Razor. Zigzag Sharpener Co. 300,390; Jan. 17; Serial No. 330,137; published Nov. 1, 1932.
Slicing machines, Bread. Gellman Manufacturing Co. 300,381; Jan. 17; Serial No. 322,691; published Nov. 1, 1932.
Suction cleaning machines. British Vacuum Cleaner & Engineering Co. Ltd. 300,453; Jan. 17; Serial No. 330,007; published Nov. 8, 1932.
Switch strands. Ramapo Ajax Corporation. 300,373; Jan. 17; Serial No. 304,888; published Nov. 1, 1932.

CLASS 25

Safes. Gunite Foundries Corporation. 300,440; Jan. 17; Serial No. 330,656; published Nov. 8, 1932.

CLASS 26

Cameras and parts thereof. Utility Manufacturing Company. 300,417; Jan. 17; Serial No. 328,747; published Nov. 1, 1932.
Condenser testing instruments, Electrical. United American Bosch Corporation. 300,402; Jan. 17; Serial No. 329,542; published Nov. 8, 1932.
Controls comprising a pyro-recording composition. Sterilometer Laboratories. 300,401; Jan. 17; Serial No. 329,565; published Nov. 8, 1932.
Gas mixing control apparatus, Automatic thermo-electric. Cutler-Hammer, Inc. 300,416; Jan. 17; Serial No. 327,344; published Nov. 1, 1932.
Lenses, Ophthalmic. Bausch & Lomb Optical Company. 300,387–8; Jan. 17; Serial Nos. 330,287–8; published Nov. 1, 1932.
Meter and tone indicator, Electric. Duovac Radio Tube Corp. 300,352; Jan. 17; Serial No. 327,051; published Nov. 8, 1932.
Pumps, Metered dispensing. Universal Lubricating Systems, Inc. 300,415; Jan. 17; Serial No. 327,034; published Nov. 1, 1932.
Sensitized gelatine coated paper sheets for use in photographic and colo-type printing. Pinchot-Neumann Holding Corp. 300,369; Jan. 17; Serial No. 288,980; published Nov. 1, 1932.

CLASS 33

Globes, shades and reflectors. Safety Car Heating & Lighting Company. 300,372; Jan. 17; Serial No. 292,013; published Nov. 8, 1932.

CLASS 34

Gas burning units and controlling devices therefor, Automatic. Lennox Furnace Company. 300,386; Jan. 17; Serial No. 312,713; published Nov. 8, 1932.
Heating and lighting apparatus, parts of and accessories therefor. Mantle Lamp Company of America. 300,350; Jan. 17; Serial No. 328,560; published Nov. 1, 1932.
Registers. Hart & Cooley Mfg. Company. 300,405; Jan. 17; Serial No. 328,609; published Nov. 8, 1932.

CLASS 35

Fabric cups. Darling Valve & Manufacturing Company. 300,442; Jan. 17; Serial No. 330,571; published Nov. 8, 1932.
Packings, belting, hose, plastic packings, etc., Mechanical. Armor Products Inc. 300,429; Jan. 17; Serial No. 329,846; published Nov. 8, 1932.

CLASS 37

Books, note books, index books, etc., Blank. Wilson-Jones Company. 300,452; Jan. 17; Serial No. 330,136; published Nov. 8, 1932.
Devices and appliances for moistening and/or serving adhesive or gummed tape, etc. Nashua Package Sealing Co. Inc. 330,437–9; Jan. 17; Serial Nos. 330,661–3; published Nov. 8, 1932.
Envelopes, Correspondence and mailing. Buffalo Envelope Company. 300,431; Jan. 17; Serial No. 329,441; published Nov. 8, 1932.
Envelopes, Mailing. Samuel Cupples Envelope Company. 300,377; Jan. 17; Serial No. 313,771; published Nov. 8, 1932.
Paper excelsior. Pioneer Paper Stock Company. 300,406; Jan. 17; Serial No. 330,831; published Nov. 8, 1932.
Paper sheets, Sanitary. L. Van Wagner. 300,446; Jan. 17; Serial No. 330,353; published Nov. 8, 1932.
Papers, Bond, ledger, linen and manuscript cover. Worth Paper Company Association. 300,448; Jan. 17; Serial No. 330,173; published Nov. 8, 1932.
Pens of all kinds. Esterbrook Steel Pen Manufacturing Company. 300,421–3; Jan. 17; Serial Nos. 330,698–700; published Nov. 8, 1932.
Pens of all kinds, Writing. Esterbrook Steel Pen Manufacturing Company. 300,407; Jan. 17; Serial No. 330,743; published Nov. 8, 1932.
Pens of all kinds, Writing. Esterbrook Steel Pen Manufacturing Company. 300,436; Jan. 17; Serial No. 300,097; published Nov. 8, 1932.
Tissue, Packets of absorbent. Tachette Manufacturing Corporation. 300,427–8; Jan. 17; Serial Nos. 330,054–5; published Nov. 8, 1932.

CLASS 38

Column of humor in newspaper publications. Curtis-Martin Newspapers, Inc. 300,450; Jan. 17; Serial No. 330,159; published Nov. 8, 1932.
Magazine. A. J. Buttitta. 300,408; Jan. 17; Serial No. 329,071; published Nov. 8, 1932.
Magazine. Reserve Officers' Association of the United States. 300,411; Jan. 17; Serial No. 330,711; published Nov. 8, 1932.
Periodical. Standard Rate & Data Service. 300,449; Jan. 17; Serial No. 330,168; published Nov. 8, 1932.
Publication, Periodical. Wilson-Hall Printing Company. 300,409; Jan. 17; Serial No. 330,771; published Nov. 8, 1932.
Published articles, Featured. E. J. Herbert. 300,457; Jan. 17; Serial No. 308,508; published Nov. 8, 1932.

CLASS 39

Uniforms, aprons and house garments. Morris & Company. 300,455; Jan. 17; Serial No. 329,833; published Nov. 1, 1932.

CLASS 42

Silk goods in the piece. Louis Roessel & Co. 300,426; Jan. 17; Serial No. 330,101; published Oct. 11, 1932.

CLASS 44

Bandage compress, dental floss, gauze, etc. Kendall Company. 300,349; Jan. 17; Serial No. 325,099; published Nov. 1, 1932.
Pads, Hair waving. Zotos Corporation. 300,368; Jan. 17; Serial No. 328,112; published Nov. 1, 1932.

CLASS 45

Ginger ale. Loft, Inc. 300,418; Jan. 17; Serial No. 330,792; published Nov. 8, 1932.

CLASS 46

Edible white oil. Carmel Oil Co. 300,404; Jan. 17; Serial No. 329,040; published Nov. 1, 1932.
Fruits, citrus and decidous and vegetables, Fresh. J. T. Melton. 300,353; Jan. 17; Serial No. 326,892; published Nov. 1, 1932.
Ice cream. Alpine Ice Cream Co. Inc. 300,398; Jan. 17; Serial No. 329,666; published Nov. 1, 1932.
Liver food preparations and tonic food preparations, malt and fodder. Nordmark-Werke G. m. b. H. 300,355; Jan. 17; Serial No. 325,287; published Nov. 1, 1932.

Macaroni. Kansas City Macaroni & Importing Company. 300,393; Jan. 17; Serial No. 329,951; published Nov. 1, 1932.
Macaroni and beans, Combination of. Kansas City Macaroni & Importing Company. 300,394; Jan. 17; Serial No. 329,950; published Nov. 1, 1932.
Oranges, grape-fruit, tangerines, lemons, and lime. Terra Cela Citrus Growers Association. 89,517; renewed Dec. 17, 1932.
Oranges, lemons, grape-fruit, etc. Citra Packing Co. 300,403; Jan. 17; Serial No. 329,420; published Nov. 1, 1932.
Oranges, melons and vegetables, Fresh. A. Arena & Co. 300,374; Jan. 17; Serial No. 305,025; published Oct. 25, 1932.
Peanuts, Shelled. De Leon Peanut Company. 300,391; Jan. 17; Serial No. 330,039; published Nov. 1, 1932.
Syrup, Malt. Union Malt Products Company. 300,384; Jan. 17; Serial No. 324,236; published Nov. 1, 1932.
Vegetables, citrus fruits and melons, etc., Fresh. Corn & Ware. 300,375; Jan. 17; Serial No. 311,322; published Nov. 1, 1932.

CLASS 48

Beer, and bottled beer, Lager. Terre Haute Brewing Co. 39,906; renewed Mar. 10, 1933.
Malt beverage. Premier Malt Products Co. 300,435; Jan. 17; Serial No. 330,381; published Nov. 8, 1932.

CLASS 49

Whisky. Tanqueray, Gordon & Co. Limited. 39,651; renewed Jan. 20, 1933.

CLASS 50

Composition sheet material. Behr-Manning Corporation. 300,358; Jan. 17; Serial No. 330,242; published Nov. 8, 1932.
Packing pads and wrappers, insulating mat or sheet for packing pads, etc. Cottonwood Products, Inc. 300,380; Jan. 17; Serial No. 321,679; published Nov. 8, 1932.

LIST OF LABELS

Big Boy. For Bread. C. Carlson. 41,666; Jan. 17.
Burnett's Skin Salve. For Skin Salve. J. Burnett. 41,665; Jan. 17.
Checker Butter Carton. For Butter Cartons. L. Schwartzberg. 41,677; Jan. 17.
Choice Roasted Coffee. For Coffee. Dayton Spice Mills Co. 41,668; Jan. 17.
Da-Ko. For Washing and Cleaning Compound. Chlorine Chemical Corp. 41,667; Jan. 17.
Domino Butter Carton. For Butter Cartons. L. Schwartzberg. 41,678; Jan. 17.
Eclipse. For Food Products. Eclipse Food Products Co. 41,669; Jan. 17.
Fenmode. For Boxes. Hoague-Sprague Corporation. 41,671; Jan. 17.
Filene's. For Boxes. Hoague-Sprague Corporation. 41,670; Jan. 17.
Fixed. For Flavors. M. C. Rosenfeld Laboratories. 41,676; Jan. 17.
Mead's Viosterol in Halibut Liver Oil. For Viosterol—Namely, Activated Ergosterol in Halibut Liver Oil. Mead Johnson & Company. 41,674; Jan. 17.
Model Mode Footwear. For Boxes. Hoague-Sprague Corporation. 41,672; Jan. 17.
Peercraft Finishes. For Flat White Paint. Peerless Paint & Varnish Corp. 41,675; Jan. 17.
B/Doctor's Prescription Powder. For Preparation for the Relief of Athlete's Foot, Prickly Heat, Etc. Bo-Kay Perfume Co. 41,664; Jan. 17.
Shoes for All the Family. For Boxes. Hoague-Sprague Corporation. 41,673; Jan. 17.
Union Lustre Wax. For Lustre Wax for Floors, Furniture, Linoleum, Tile. Union Oil Company of California. 41,681; Jan. 17.
Union Solvent Spirit. For Household Spot Remover. Union Oil Company of California. 41,680; Jan. 17.
Union Top-Tone. For Substance for Renovating and Water Proofing Black Auto Tops and Imitation Leathers. Union Oil Company of California. 41,679; Jan. 17.
Worcester Iodized Salt. For Salt. Worcester Salt Company. 41,682; Jan. 17.

LIST OF PRINTS

Beech-Nut Assorted Drops. For Assorted Drops. Beech-Nut Packing Company. 14,023; Jan. 17.
Beech-Nut Brand Chewing Gum. For Chewing Gum. Beech-Nut Packing Company. 14,024; Jan. 17.
Cleartone Colors 1933. For Straw Braids and Body Hats. R. H. Comey Brooklyn Company. 14,025; Jan. 17.
Dorman Modern Engineering Assembly Chart. For Automotive Parts. J. Dorman. 14,028; Jan. 17.
85% of This Heavy Toll is Exacted From Little Children. For Wheat Breakfast Food. Cream of Wheat Corporation. 14,026; Jan. 17.
Ferm-A-Sured. For Flour. General Mills, Inc. 14,029; Jan. 17.
Hills Bros. Coffee Thrills Your Taste—(Adform 124). For Coffee. Hills Bros. 14,030; Jan. 17.
Hills Bros. Coffee Ends Your Search For Fine Coffee Adform 128. For Coffee. Hills Bros. 14,031; Jan. 17.
Our New-Day Cigar Stand. For Cigars, Cigarettes, Tobaccos, Knives, Pipes, Flashlights, Smokers' Articles, Etc. F. A. Davis & Sons. 14,027; Jan. 17.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 17TH DAY OF JANUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abramson, Richard E. (See Victor, B., and Abramson.)
Abrasive Wheel and Equipment Co. Inc. (See Mason, James M., assignor.)
Adams, Porter H., Thetford, Vt. Golf club. 1,894,841; Jan. 17.
Adams, Robert E., New York, N. Y. Golf game apparatus. 1,894,722; Jan. 17.
Adarteraft, Incorporated. (See Shaw, Louis E., assignor.)
Adde and Company. (See Ek, Emil, assignor.)
Aero Supply Manufacturing Corporation. (See Hiester, Theodore M., assignor.)
Agate, Charlton S., South Croydon, and W. A. J. Thorn, London England, assignors to Columbia Phonograph Company, Inc., Bridgeport, Conn. Electric switch gear. 1,894,747; Jan. 17.
Aikman, Harry S. (See Meisel, R. M., and Aikman.)
Ainsworth, Howard D., Berkeley, assignor to F. A. B. Manufacturing Company, Oakland, Calif. Flexible coupling. 1,894,507; Jan. 17.
Akers, Bertha B., Chadron, Nebr. Gate operating device. 1,894,549; Jan. 17.
Aktiebolaget Birka Regulator. (See Appleberg, Carl W., assignor.)
Aktiebolaget Birka Regulator. (See Appleberg, C. W., and Borgström, assignors.)
Aktiebolaget Gerh. Arehns Mekaniska Verkstad. (See Johnson, Bror A. E., assignor.)
Aktiengesellschaft Brown, Boveri & Cie. (See Hunsiker, Emil, assignor.)
Allmanna Svenska Elektriska Aktiebolaget. (See Lamm, Uno, assignor.)
Altgelt, Herman E., South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company. Control lock. 1,894,458; Jan. 17.
American Anode Incorporated. (See Murphy, Edward A., James, and Twiss, assignors.)
American Brass Company, The. (See Stowe, Eric L., assignor.)
American Car and Foundry Company. (See Auchincloss, William K., assignor.)
American Car and Foundry Company. (See Black, A. R., and Clade, assignors.)
American Car and Foundry Company. (See Christiansen, John, assignor.)
American Car and Foundry Company. (See Clarke, Allen W., assignor.)
American Car and Foundry Company. (See Dietrichson, William F., assignor.)
American Car and Foundry Company. (See Folmsbee, Clyde H., assignor.)
American Car and Foundry Company. (See Lehman, Arthur E., assignor.)
American Car and Foundry Company. (See Rohlfing, John M., assignor.)
American Car and Foundry Company. (See Seiler, John D., assignor.)
American Car and Foundry Company. (See Walp, Charles F., assignor.)
American Car and Foundry Company. (See Willoughby, Victor, assignor.)
American Chemical Paint Company. (See Wood, Benjamin F., assignor.)
American Cyanamid Company. (See Christmann, L. J., and Falconer, assignors.)
American Cyanamid Company. (See Woolsey, Claude, assignor.)
American Lurgi Corporation. (See von Girsewald, C., Baron, and Siecke, assignors.)
American Smelting & Refining Company. (See Bartholomew, George P., assignor.)
American Telephone and Telegraph Company. (See Nyquist, Harry, assignor.)
American Telephone and Telegraph Company. (See Zinn, Manvel K., assignor.)
American Thermos Bottle Company, The. (See Schlumbohm, Peter, assignor.)
American Throttle Company. (See Ringel, C., and Carter, assignors.)
American "Z" Corporation. (See Zarotschenseff, Mikail T., assignor.)
Amos, Frances C., Stratford, Conn. Curtain stretcher. 1,894,748; Jan. 17.
Anderson, Muir, Chicago Heights, Ill. Loom. 1,894,336; Jan. 17.
Anderson, Per A. H., Chicago, Ill. Sash construction. 1,894,529; Jan. 17.
Anderson, William T., jr., and L. F. Bird, assignors to Hanovia Chemical and Manufacturing Company, Newark, N. J. Integral unilateral conductor of electric currents. 1,894,260; Jan. 17.
Andrews, Champe S., Chattanooga, Tenn. Merchandise package. 1,894,337; Jan. 17.
Anschutz, Alfred, Brooklyn, N. Y. Bottle cap remover. 1,894,261; Jan. 17.
Appelberg, Carl W., assignor to Aktiebolaget Birka Regulator, Stockholm, Sweden. Thermostat switch. 1,894,842; Jan. 17.
Apple, Edward M. et al., executors. (See Apple, Vincent G.)
Apple, Edward M. et al., executors. (See Apple, Vincent G.)
Apple, Vincent G., deceased, Dayton, Ohio; H. F. Apple, E. M. Apple, and G. Darroch, executors. Armature. 1,894,723; Jan. 17.
Apple, Vincent G., deceased, Dayton, Ohio; H. F. Apple, E. M. Apple, and G. Darroch, executors. Stator with built-in condenser. 1,894,724; Jan. 17.
Appleberg, Carl W., Stockholm, and Harry O. Borgström, Huvudsta, assignors to Aktiebolaget Birka Regulator, Stockholm, Sweden. Thermal switch. 1,894,843; Jan. 17.
Arden, Elizabeth, Inc. (See Gubing, Frank, assignor.)
Art Metal Company, The. (See Glatthar, George E., assignor.)
Asp, Nels, Chicago, Ill. Radiator. 1,894,436; Jan. 17.
Associated Electric Laboratories, Inc. (See Ide, Harry H., assignor.)
Associated Electric Laboratories, Inc. (See Obergfell, Herbert F., assignor.)
Atlantic Lithographic and Printing Company, The. (See Carmichael, David M., assignor.)
Auchincloss, William K., assignor to American Car and Foundry Company, New York, N. Y. Tank car dome closure. 1,894,656; Jan. 17.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Connection for high voltage lines. 1,894,838; Jan. 17.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Electric switch. 1,894,839; Jan. 17.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Insulator pin. 1,894,840; Jan. 17.
Auto Research Corporation. (See Bijur, Joseph, assignor.)
Autogiro Company of America. (See de la Cierva, Juan, assignor.)
Autogiro Company of America. (See Pitcairn, Harold F., assignor.)
Avery, John M., Flushing, N. Y., assignor, by mesne assignments, to Radio Corporation of America. Method and apparatus for amplifying radiofrequency currents. 1,894,578; Jan. 17.
Aviation Patent and Research Corporation, The. (See De Bell, George W., assignor.)
Babcock & Wilcox Company, The. (See Kerr, H. J., and Savoye, assignors.)
Bacon, Joseph B., Macomb, Ill. Speculum. 1,894,726; Jan. 17.
Bader, Walter, Spondon, near Derby, England, assignor to Celanese Corporation of America. Saponification of esters of organic acids. 1,894,479; Jan. 17.
Bailey, Ervin G., Cleveland Heights, Ohio, assignor, by mesne assignments, to Bailey Meter Company. Automatic control system. 1,894,616; Jan. 17.
Bailey Meter Company. (See Bailey, Ervin G., assignor.)
Baily, Thaddeus F., Alliance, Ohio. Method and apparatus for refining metals. 1,894,657; Jan. 17.
Baker, Merle E., Des Moines, Iowa. Registering golf target. 1,894,814; Jan. 17.
Balga, Louis, Bridgeport, Conn. Aircraft propulsion mechanism. 1,894,844; Jan. 17.
Ball, George E., Cranston, R. I., and P. B. Ball, Attleboro, Mass., assignors to Chesebrough Manufacturing Co., Consolidated, New York, N. Y. Ring. Des. 89,031; Jan. 17.
Ball, Percy B. (See Ball, George E. and P. B.)
Bank, Albert M., assignor to S. Bank, Jersey City, N. J. Upholstery construction. 1,894,262; Jan. 17.
Bank, Sylvia. (See Bank, Albert M., assignor.)
Banks, Charles G., Los Angeles, Calif. Joint for oil metal rotary hose for oil wells. 1,894,390; Jan. 17.
Barker, Guy S., London, England. Pocket lighter. 1,894,800; Jan. 17.
Barnes, Edward J., Sawston, assignor to Spicers Limited, London, England. Film casting machine. 1,894,845; Jan. 17.

Barone, Salvatore A., Lakewood, Ohio, assignor to Wired Radio, Inc., New York, N. Y. Hum elimination system. 1,894,656; Jan. 17.
Barrett Company, The. (See Harvey, Edward W., assignor.)
Barrett Company, The. (See McCloskey, Gregory E., assignor.)
Barrett, Joseph M., Fostoria, assignor to The Swartout Company, Cleveland, Ohio. Heater control. 1,894,437; Jan. 17.
Barrett, Joseph M., Cleveland, and G. M. Fritze, Orville, assignors to The Swartout Company, Cleveland, Ohio. Desuperheater. 1,894,391; Jan. 17.
Barthelemy, Henri L., Milan, Italy, assignor to Ruth Aldo Company (Inc.), New York, N. Y. Absorbing and recovering vapors of volatile liquids. 1,894,508; Jan. 17.
Bartholomew, George P., Essex Fells, N. J., assignor to American Smelting & Refining Company, New York, N. Y. Coking process. 1,894,438; Jan. 17.
Bartlett Hayward Company, The. (See Santos, John R. L., assignor.)
Bartley, Joseph A., Charleston, W. Va., assignor of one-half to W. M. Thomas. Coasting sled. 1,894,550; Jan. 17.
Batterton Coffee Co. Inc. (See Stayton, Frank J., assignor.)
Baudisch, Oskar, Maffersdorf, Czechoslovakia. Gamma ferric oxide hydrate and making same. 1,894,749; Jan. 17.
Baudisch, Oskar, Maffersdorf, Czechoslovakia. Gamma ferric oxide and making same. 1,894,750; Jan. 17.
Baum, Henry J., Clarion, Iowa. Connecter for electrical appliances. 1,894,751; Jan. 17.
Bear Manufacturing Company. (See Wochner, Henry, assignor.)
Becker, Edward P., Grand Tower, Ill. Material for and protecting conduits. 1,894,341; Jan. 17.
Beckman, Hilding W., Malmo, Sweden. Rotating paper bag machine. 1,894,726; Jan. 17.
Becotte, Rene, Lawrence, Mass. Toy. Des. 89,032; Jan. 17.
Bell Telephone Laboratories, Incorporated. (See Hoyt, Frederick A., assignor.)
Bellingham Chain and Forge Company. (See Swalls, James L., assignor.)
Bendix-Cowdrey Brake Tester, Inc. (See Bigelow, Harry K., assignor.)
Benner, Lloyd E., Minneapolis, Minn. Article for transferring color and other material. 1,894,727; Jan. 17.
Bennett, James H., deceased, assignor of one-half to E. Donovan, Detroit, Mich.; M. J. B. Pennoyer, administratrix. Toilet bowl. 1,894,846; Jan. 17.
Bennett, Morris H., assignor to Scovill Manufacturing Company, Waterbury, Conn. Flash light. 1,894,606; Jan. 17.
Berger, Morris W., and F. H. Vivian, San Francisco, Calif. Rotating neon illuminated unit for barber poles. 1,894,842; Jan. 17.
Bergman, Anna H., et al. (See Bergman, Ernest C., assignor.)
Bergman, Ernest C., assignor of one-half to A. H. Bergman, and one-half to C. F. Stroman, York, Nebr. Carburetor. 1,894,847; Jan. 17.
Bergstrand, Frank O., Worcester, Mass. Gauge for concrete floors. 1,894,392; Jan. 17.
Bernardo, Leonardo, Philadelphia, Pa. Marking machine. 1,894,530; Jan. 17.
Benoy, George H., Cedar Vale, Kans. Rotary engine. 1,894,480; Jan. 17.
Bigelow, George E., Huntington Park, Calif. Turbine pump. 1,894,393; Jan. 17.
Bigelow, Harry K., Toledo, Ohio, assignor, by mesne assignments, to Bendix-Cowdrey Brake Tester, Inc., New York, N. Y. Brake testing equipment. 1,894,935; Jan. 17.
Bigelow Sanford Carpet Co. Inc. (See Travis, John S., assignor.)
Biggert, Florence C., jr., Crafton, and J. A. Smitmans, assignors to United Engineering & Foundry Company, Pittsburgh, Pa. Control system. 1,894,815; Jan. 17.
Bijur, Joseph, New York, N. Y., assignor to Auto Research Corporation. Lubrication. 1,894,658; Jan. 17.
Bijur, Joseph, New York, N. Y., assignor to Auto Research Corporation. Lubrication. 1,894,659; Jan. 17.
Bird Lester F. (See Anderson, W. T., jr., and Bird.)
Black, Alexander R., and R. Clade, Detroit, Mich., assignors to American Car and Foundry Company, New York, N. Y. Valve lock. 1,894,660; Jan. 17.
Blanchod, Jules, and A. Wirz, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Sulphurised dyestuff and making same. 1,894,848; Jan. 17.
Blankner, William, Cleveland, Ohio. Knife sharpener. 1,894,579; Jan. 17.
Bloomer Bros. Company. (See Inman, Harry A., assignor.)
Bock Laundry Machine Company, The. (See Bock, William E., assignor.)
Bock William E., assignor to The Bock Laundry Machine Company, Toledo, Ohio. Mechanical movement. 1,894,290; Jan. 17.
Bockmühl, Max, and G. Ehrhart, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Producing tertiary nitriles. 1,894,801; Jan. 17.
Boehler, Raymond F., jr. (See Robbins, W. H., and Boehler.)
Bohn Aluminum & Brass Corporation. (See Fiegel, William J., assignor.)
Bohn Aluminum & Brass Corporation. (See Radigan, John E., assignor.)
Bollweg, Bernhard, Leverkusen-on-the-Rhine, L. Zeh, Wiesdorf-on-the-Rhine, and E. Kramer, Cologne-Deutz, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Binaphthylenedioxide compounds. 1,894,365; Jan. 17.
Bone, Herbert L., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway braking apparatus. 1,894,728; Jan. 17.
Bonney-Floyd Company, The. (See Gregg, A. W., and Frank, assignors.)
Book, Frank J., Huntington, Ind. Chest. 1,894,849; Jan. 17.
Booth, David N., New York, N. Y. Toothbrush. 1,894,509; Jan. 17.
Borgström, Harry O. (See Appleberg, C. W., and Borgström.)
Bowman, Carl O., assignor of one-half to L. H. Swank, Johnstown, Pa. Toy parachute. 1,894,901; Jan. 17.
Bowman, Kiel B. (See Cape, A. T., and Bowman.)
Bozard, John C., Kokomo, and J. L. Summers, Flora, assignors, by mesne assignments, to J. L. Summers, J. C. Bozard, and R. T. Wakefield, Kokomo, Ind. Treating gray castiron and malleable iron. 1,894,752; Jan. 17.
Bozath, William H., Vineland, N. J., assignor to Eastern Cap Spraying Co. Machine for and method of spray coating. 1,894,729; Jan. 17.
Bradbury, Albert W., Cliftondale, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe and making the same. 1,894,291; Jan. 17.
Brady, Edward J., assignor to The United Gas Improvement Company, Philadelphia, Pa. Gas apparatus. 1,894,459; Jan. 17.
Bräuer, Hans. (See Nesselmann, K., and Bräuer.)
Bretz, John S. (See Gabel, W. J., and Bretz.)
Brittain, Monroe, Chickasha, Okla. Locomotive oil burner. 1,894,481; Jan. 17.
Broillet, Jean, New York, N. Y. Dress. Des. 89,033; Jan. 17.
Bronander, Wilhelm B., Montclair, N. J. Fire extinguisher support. 1,894,917; Jan. 17.
Brooks, Benjamin T., Stamford, Conn., assignor to Petroleum Chemical Corporation. Generating useful products from hydrocarbon mixtures containing olefines. 1,894,661; Jan. 17.
Brooks, Benjamin T., Greenwich, Conn., assignor to Petroleum Chemical Corporation. Acetylating olefines. 1,894,662; Jan. 17.
Brown & Bigelow. (See Bruning, William L., assignor.)
Brown, Davis, Los Angeles, Calif. Shingle machine. 1,894,394; Jan. 17.
Brown Instrument Company, The. (See Pearce, Walter H., assignor.)
Brown, Thomas H. (See Daggett, Edward H., assignor.)
Bruning, William L., New York, N. Y., assignor to Brown & Bigelow, Saint Paul, Minn. Deck of playing cards. Des. 89,034; Jan. 17.
Brunner, John, Chicago, Ill. Heat treatment of steel rails. 1,894,551; Jan. 17.
Bruntsch, Carl G., Portland, Oreg., assignor to Schmidt Lithograph Company, San Francisco, Calif. Fruit box liner. 1,894,531; Jan. 17.
Bruson, Herman A., Philadelphia, Pa., assignor to The Resinous Products & Chemical Co. Inc. Salts of ketonic acids derived from petroleum hydrocarbons and preparing same. 1,894,460; Jan. 17.
Bunger, Howard P. (See Howell, C. H., and Bunger.)
Burke, Alfred, assignor to The Parchlite Corporation, New York, N. Y. Lamp shade. 1,894,302; Jan. 17.
Burnett, Charles S., Presidio, San Francisco, Calif. Poppet valve control. 1,894,663; Jan. 17.
Burns, Fred J., assignor to The Columbia Mills, Incorporated, Saginaw, Mich. Anchor bracket. 1,894,730; Jan. 17.
Burrell, William C., Kankakee, assignor of one-half to Robert R. Robertson, Chicago Heights, Ill. Dowel bar device. 1,894,895; Jan. 17.
Busse, Edwin G., assignor to Chicago Railway Equipment Company, Chicago, Ill. Brake beam suspension. 1,894,263; Jan. 17.
Butler-Kuhn Corporation. (See Kuhn, George, assignor.)
Butts, George W., Wynnewood, Pa., assignor to Pennsylvania Railroad Company. Container for stacked articles. 1,894,664; Jan. 17.
Butzer, Eugene, Basel, Switzerland, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,894,343; Jan. 17.
Byrnes, Clarence P., trustee. (See James, Joseph H., assignor.)
Cahoon, Ernest L., Westfield, N. J., assignor to Foster Wheeler Corporation, New York, N. Y. Condenser. 1,894,753; Jan. 17.
Calwis Industries, Ltd. (See Orkin, Samuel, assignor.)
Cambridge Rubber Co. (See Joy, Walter, assignor.)

Campbell, Max E., Los Angeles, Calif., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Waterproof construction material. 1,894,754; Jan. 17.
Cantacuzene, Servan G., Paris, France. Pressure gauge automatically correcting the temperature. 1,894,366; Jan. 17.
Cape, Arthur T., and K. B. Bowman, Massillon, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio. Preservation of metallurgical furnace bottoms. 1,894,755; Jan. 17.
Cardwell Westinghouse Company. (See Sproul, Donald F., assignor.)
Carley, Clarence J. (See Lessig, C., and Carley.)
Carlson, Charles S., Dumont, N. J. Attachment for printing presses. 1,894,850; Jan. 17.
Carmichael, David M., Maplewood, N. J., assignor to The Atlantic Lithographic & Printing Company, New York, N. Y. Display stand. 1,894,902; Jan. 17.
Carr, John, deceased, Cleveland, Ohio; George H. Forrier, executor. Carburation apparatus. 1,894,607; Jan. 17.
Carr, Kenneth W., Oak Park, assignor to Ditto, Inc., Chicago, Ill. Stencil paper. 1,894,731; Jan. 17.
Carter Carburetor Corporation. (See Kommer, F. A., and Henning, assignors.)
Carter, William K. (See Ringel, C., and Carter, assignors.)
Celanese Corporation. (See Bader, Walter, assignor.)
Centrifix Corporation. (See Hawley, Charles G., assignor.)
Chain Belt Company. (See Shafer, Samuel, jr., assignor.)
Chalk, Maurice. (See Chalk, Roy, assignor.)
Chalk, Roy, assignor of one-half to M. Chalk, New York, N. Y. Amusement device. Des. 89,035; Jan. 17.
Chapman, Leo M., Chicago, Ill. Street sign frame for lamp posts. Des. 89,036; Jan. 17.
Chemical Construction Corporation. (See Hechenbleikner, Ingenuin, assignor.)
Chemical Industry in Basle. (See Hartmann, M., and Isler, assignors.)
Chemische Fabrik von Heyden, A. G. (See Mirau, Hans, assignor.)
Cheney, John F., West Palm Beach, Fla. Sealing and dispensing device for oil drums and the like. 1,894,732; Jan. 17.
Cherry, Oscar A., and F. Kurath, assignors to Economy Fuse & Manufacturing Company, Chicago, Ill. Reaction product of rosin, aromatic amines, and furfural. 1,894,580; Jan. 17.
Chesebrough Manufacturing Co., Consolidated. (See Ball, George E. and P. B., assignors.)
Chicago Railway Equipment Company. (See Busse, Edwin G., assignor.)
Chicago Telephone Supply Company. (See Schellenger, Newton C., assignor.)
Chisholm, George F., San Diego, Calif. Adjustable and collapsible wheel chock. 1,894,439; Jan. 17.
Chisholm, Lester B., Providence, R. I. Rubber thread and making the same. 1,894,461; Jan. 17.
Chrétien, Henri, Saint-Cloud, France. Apparatus for printing synthetic films. 1,894,264; Jan. 17.
Chrétien, Henri, Saint-Cloud, France. Apparatus for printing synthetic anamorphosed films. 1,894,265; Jan. 17.
Christiansen, John, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Articulated car. 1,894,665; Jan. 17.
Christiansen, Walter G., Bloomfield, N. J., and A. E. Jurist, assignors to E. R. Squibb & Sons, New York, N. Y. Amidopyrin borate in combination with acetone and preparation thereof. 1,894,666; Jan. 17.
Christmann, Ludwig J., Jersey City, and S. A. Falconer, Elizabeth, N. J., assignors to American Cyanamid Company, New York, N. Y. Flotation of oxides. 1,894,344; Jan. 17.
Church, Harold D., and F. Jehle, assignors to The White Motor Company, Cleveland, Ohio. Internal combustion engine. 1,894,667; Jan. 17.
Churchill Machine Tool Company Limited. (See Mawer, Llywelyn, assignor.)
Clade, Robert. (See Black, A. R., and Clade.)
Clampet, William V., et al. (See Mortimer, Samuel E.)
Clark, David W., Montreal, Quebec, Canada, assignor to John A. Roebling's Sons Company, Trenton, N. J. Wire rope and strand preforming device. 1,894,756; Jan. 17.
Clarke, Allen W., Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Buffer mechanism for car doors. 1,894,668; Jan. 17.
Cleveland Rock Drill Company. (See Greve, Louis W., assignor.)
Cockrill, Lawrence M., and H. D. Couch, Yakima, Wash. Automatic packing stand. 1,894,851; Jan. 17.
Codish, Abraham, Brooklyn, N. Y. Fastening footwear welts. 1,894,440; Jan. 17.
Colas Roads Inc. (See Gabriel, Leonard G., assignor.)
Columbia Mills, Incorporated, The. (See Burnes, Fred J., assignor.)
Columbia Phonograph Company. (See Agate, C. S., and Thorn, assignors.)
Columbia Phonograph Company. (See Youhouse, Joseph, assignor.)
Columbus Auto Parts Company. (See Flumerfelt, William A., assignor.)
Columbus McKinnon Chain Corporation, The. (See Stahl, Frank E., assignor.)

Conlin, Frederick, New York, N. Y. Electroplating and compositions for use therein. 1,894,669; Jan. 17.
Conlin, Frederick, New York, N. Y. Electrocleaning. 1,894,670; Jan. 17.
Continental-Diamond Fibre Company. (See Hollingworth, D. W., and Tarr, assignors.)
Cooper, Jesse E. (See Ruby, W. H., and Cooper.)
Cooper, Simon, assignor to Cooper Tea Packet Co. Inc., Brooklyn, N. Y. Making tea bags. 1,894,345; Jan. 17.
Cooper, Simon, assignor to Cooper Tea Packet Co. Inc., Brooklyn, N. Y. Making tea bags. 1,894,346; Jan. 17.
Cooper Tea Packet Co., Inc. (See Cooper, Simon, assignor.)
Copp, Ralph, assignor to Pevely Dairy Company, St. Louis, Mo. Liquid cooler. 1,894,441; Jan. 17.
Corcoran, Lewis L., Sellersville, Pa., assignor to United States Gauge Company, New York, N. Y. Automatic control device. 1,894,367; Jan. 17.
Cords, Otto, assignor to Felton & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Coil piece for deep sea signaling cables. 1,894,852; Jan. 17.
Couch, Harold D. (See Cockrill, L. M., and Couch.)
Covey, Howard M., et al. (See Mathers, Harry M., assignor.)
Cox, Thomas K., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Coating articles. 1,894,671; Jan. 17.
Crabtree, George W., Cleveland Heights, Ohio. Vehicle spring clip. 1,894,757; Jan. 17.
Cramer, Walter, Charlottenburg, Germany, assignor to Locke Insulator Corporation, Baltimore, Md. Strain insulator. 1,894,292; Jan. 17.
Creagmile, John C., Oakland, Calif. Wheel aligning device. 1,894,532; Jan. 17.
Crowley, Henry L., & Company, Inc. (See Crowley, Henry L., assignor.)
Crowley, Henry L., assignor to Henry L. Crowley & Company, Inc., West Orange, N. J. Molding ceramic materials. 1,894,368; Jan. 17.
Cruse, George R., Danville, Pa. Fastening device for auto license tags or the like. 1,894,552; Jan. 17.
Cushing, George H., Washington, D. C. Focusing machine. 1,894,733; Jan. 17.
Cutler-Hammer, Inc. (See Kuhn, Clarence W., assignor.)
Dacon, Charles H., and V. Stults, assignors to St. Louis Tire Retreading Machine Company, St. Louis, Mo. Apparatus for retreading tires. 1,894,347; Jan. 17.
Daggett, Edward H., Glen Ridge, assignor of one-half to T. H. Brown, Chatham, N. J. Alarm device and operating mechanism. 1,894,581; Jan. 17.
Darroch, Gourley, et al., executors. (See Apple, Vincent G.)
Davies, David B., Didsbury, England, assignor to General Electric Company. Electrical switch gear. 1,894,816; Jan. 17.
Davis, Chester L., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Luminous energy control. 1,894,462; Jan. 17.
Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Actuating mechanism for pressing machines. 1,894,929; Jan. 17.
Dawson, Elma N. (See Dawson, James C., assignor.)
Dawson, James C., assignor to E. N. Dawson, Webster Groves, Mo. Ring bookbinder. 1,894,734; Jan. 17.
Dawson, James C., assignor to E. N. Dawson, Webster Groves, Mo. Check bookbinder. 1,894,735; Jan. 17.
Dawson, James C., assignor to E. N. Dawson, Webster Groves, Mo. Loose leaf binder bar. 1,894,736; Jan. 17.
Dawson, James F., Galveston, Tex., assignor to Triple "XXX" Company. Mixing faucet. 1,894,903; Jan. 17.
Dean, Dion K., Rahway, N. J., assignor to Foster Wheeler Corporation, New York, N. Y. Heat recovery. 1,894,758; Jan. 17.
De Bell, George W., Farmingdale, assignor to the Aviation Patent and Research Corporation, New York, N. Y. Retractible landing gear. 1,894,582; Jan. 17.
Deere & Company. (See Neighbour, Leonard B., assignor.)
De Groote, Melvin, St. Louis, and A. F. Wirtel, assignors to Tretolite Company, Webster Groves, Mo. Flooding process for recovering oil from sand beds. 1,894,769; Jan. 17.
De la Cierva, Juan, London, England, assignor to Autogiro Company of America, Philadelphia, Pa. Aircraft with rotative wings. 1,894,673; Jan. 17.
Delco-Light Company. (See Lee, Ralph L., assignor.)
Deller, Anthony W., et al. (See Kahn, Samuel, assignor.)
Delpech, Gaston, Nemours, assignor to The Societe "Quarts & Silice," Paris, France. Apparatus for the drawing of tubular articles. 1,894,853; Jan. 17.
Del Valle y Desvernine, Andreas, Habana, Cuba. Signaling device for vehicles. 1,894,737; Jan. 17.
Dempsey, William T., Philadelphia, Pa. Bookmark. 1,894,533; Jan. 17.
Denoyer, Levinus P., Kenilworth, Ill. Globe-mounting means. 1,894,854; Jan. 17.
De Rabot, John L., Philadelphia, Pa. Motor mount. 1,894,904; Jan. 17.
Deutsch, Fritz, Memphis, Tenn. Oil ring for pistons. 1,894,672; Jan. 17.
Deutsche Gold- und Silber-Scheideanstalt vormals Roessler. (See Varga, Josef, assignor.)
Diamond Power Specialty Corporation. (See Snow, N. L., and Thomas, assignors.)

Diamond Power Specialty Corporation. (See Vennum, George C., assignor.)
Dietrichson, William F., Webster Groves, Mo., assignor to American Car and Foundry Company, New York, N. Y. Portable cooling apparatus. 1,894,674; Jan. 17.
Dietzgen, Eugene, Company. (See Langmer, Adolph, assignor.)
Ditto, Inc. (See Carr, Kenneth W., assignor.)
Dixon, Albert C., Santa Monica, Calif. Fuel tank. 1,894,675; Jan. 17.
Dixson, Harry, assignor to Rolscreen Company, Pella, Iowa. Plaster-channel installation for screen guides. Re18,716; Jan. 17.
Dodd, Gerald D., Plainfield, N. J., assignor to Foster Wheeler Corporation, New York, N. Y. Feed water heater. 1,894,760; Jan. 17.
Doherty Research Company. (See Laird, Wilbur G., assignor.)
Dolan, David J., Cleveland Heights, Ohio. Automobile railway car. 1,894,534; Jan. 17.
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Slide buckle. 1,894,803; Jan. 17.
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Slide buckle. 1,894,804; Jan. 17.
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Slide buckle. 1,894,855; Jan. 17.
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Loop slide buckle. 1,894,856; Jan. 17.
Donovan, Edward. (See Bennett, James H., assignor.)
Dorsey, Melvin D., Waldport, Oreg. Luggage carrier. 1,894,482; Jan. 17.
Dowd, Bernard J., West Hartford, Conn., assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriter cabinet. 1,894,483; Jan. 17.
Drallmeier, Erwin. (See Dwyer, L. B., and Drallmeier.)
Draper Corporation, The. (See LeDoux, Hector, assignor.)
Dresser, Revere W., San Diego, Calif. Wall construction. 1,894,676; Jan. 17.
Dudew, Christo D., Sofia, Bulgaria. Safety razor. 1,894,553; Jan. 17.
Duecker, Werner. (See Esmond, L. B., and Duecker.)
Duffing, Georg, Hamburg, Germany. Viscometer. 1,894,369; Jan. 17.
Du-Gas Fire Extinguisher Corporation. (See Gugas, Lodias J., assignor.)
Dugas, Lodias J., Chicago, Ill., assignor to The Du-Gas Fire Extinguisher Corporation, New York, N. Y. Fire extinguisher container. 1,894,761; Jan. 17.
Dumler, Charles, Canton, Okla. Cotton harvester. 1,894,305; Jan. 17.
Du Pont, E. I., de Nemours & Co. (See Rintelman, William L., assignor.)
Durgin, Charles B., and R. L. Jenkins, Anniston, Ala., assignors to Swann Research, Inc. Diaryl containing wax-like solid. 1,894,266; Jan. 17.
Duryea, O. C., Corporation. (See Duryea, Ortho C., assignor.)
Duryea, Ortho C., Waterbury, Conn., assignor to O. C. Duryea Corporation, Wilmington, Del. Car construction. 1,894,554; Jan. 17.
Dwyer, Leo B., and E. Drallmeier, Hinsdale, Ill. Illuminated sign. 1,894,857; Jan. 17.
Dyal, Edward C., Lincoln Park, Mich. Latch mechanism. 1,894,555; Jan. 17.
Eastern Cap Spraying Co. (See Bosarth, William H., assignor.)
Eastlack, Joseph G., Pasadena, Calif. Butcher's tool rack for meat blocks. 1,894,258; Jan. 17.
Eastley, Caroline G. (See Gueth, C. H., and Eastley.)
Eclipse Aviation Corporation. (See Hyland, Lawrence A., assignor.)
Economy Fuse & Manufacturing Company. (See Cherry, O. A., and Kurath, assignors.)
Eddy, William, Springfield, Ohio. Automobile signal. 1,894,484; Jan. 17.
Edlund, Henry J., Burlington, Vt. Device for removing screw tops. 1,894,556; Jan. 17.
Edo Aircraft Corporation. (See Korin-Kroukovsky, Boris V., assignor.)
Egloff, Hans C., Bern, assignor to Firm Sulzer Frères Societe Anonyme, Winterthur, Switzerland. Water tube steam generator. 1,894,762; Jan. 17.
Ehrhart, Gustav. (See Bockmühl, M., and Ehrhart.)
Elfert, Roy W., Bushnell, Ill. Rake. 1,894,306; Jan. 17.
Eisenhut, Otto, Heidelberg, and H. Schilling Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Purification of gases containing acetylene. 1,894,763; Jan. 17.
Ek, Emil, assignor to Adde and Company, Portland, Me. Measuring and control apparatus. 1,894,307; Jan. 17.
Electric Service Supplies Company. (See Lewis, Henry G., assignor.)
Elliott-Fisher Company. (See Fowler, Ewell E., assignor.)
Ensign, Roy F., South Pasadena, assignor to Ensign Carburetor Co., Ltd., Huntington Park, Calif. Fuel injection system. 1,894,510; Jan. 17.
Eppensteiner, William F., Woodbridge, assignor to United States Metals Refining Company, Carteret, N. J. Mold. 1,894,511; Jan. 17.
Epstein, Albert A., New York, N. Y. Heating device. 1,894,348; Jan. 17.
Erbach, Frederick R., Detroit, Mich., assignor, by mesne assignments, to The Guardian Trust Company, Cleveland, Ohio, as trustee. Vaporizer. 1,893,349; Jan. 17.
Erickson, Fred M., Pasadena, Calif. Wheel aligning gauge. 1,894,370; Jan. 17.
Eschenbach, Gustavus W., Los Angeles, Calif. Apparatus for displaying advertising. 1,894,512; Jan. 17.
Esmond, Lewis B., Boston, Mass., and W. W. Duecker, Pittsburgh, Pa., assignors to Essex Gelatine Company, Boston, Mass. Preparing edible emulsions of solid in fat and product thereof. 1,894,677; Jan. 17.
Essex Gelatine Company. (See Esmond, L. B., and Duecker, assignors.)
Evans Elevator Equalizer Company. (See Frost, William P., assignor.)
Exact Weight Scale Company, The. (See Flanagan, Thomas B., assignor.)
F. A. B. Manufacturing Company. (See Ainsworth, Howard D., assignor.)
Falconer, Stuart A. (See Christmann, L. J., and Falconer.)
Falk Corporation, The. (See Schmitter, Walter P., assignor.)
Fassett, George H., Ashtabula, Ohio. Refrigerating apparatus. 1,894,557; Jan. 17.
Fausse, Joseph, Melrose, assignor, by mesne assignments, to The Littleway Process Company, Boston, Mass. Manufacture of shoes. 1,894,678; Jan. 17.
Fechtenburg, Jörgen F. H., Cheltenham Township, Montgomery County, Pa. Suction comb. 1,894,905; Jan. 17.
Federal Merchandise Company. (See Hueglin, Herman C., assignor.)
Feigenbaum & Adelson, Inc. (See Fields, Minna, assignor.)
Felten & Guilleaume Carlswerk Actien-Gesellschaft. (See Corde, Otto, assignor.)
Felten & Guilleaume Carlswerk Actiengesellschaft. (See Zapf, Georg, assignor.)
Fender, Harold W., Wednesbury, England, assignor to Prodorite, S. A., Geneva, Switzerland. Acidproof tank. 1,894,371; Jan. 17.
Feneis, George. (See Manikowske, G., Feneis, and Manikowske.)
Ferree, Clarence E. and G. R., Baltimore, Md. Lighting unit. 1,894,583; Jan. 17.
Ferree, Gertrude R. (See Ferree, Clarence E. and G. R.)
Fiegel, William J., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich. Babbitting double connecting rods. 1,894,558; Jan. 17.
Fields, Minna, assignor to Feigenbaum & Adelson, Inc., New York, N. Y. Dress or similar article. Des. 89,037; Jan. 17.
Fisher, Leo H., Huntingburg, Ind. Body fitting writing board. 1,894,559; Jan. 17.
Flanagan, Thomas B., assignor to The Exact Weight Scale Company, Columbus, Ohio. Weighing scale. 1,894,442; Jan. 17.
Fleck, Harry M. (See Fleck, Paul C. and H. M.)
Fleck, Paul C. and H. M., Cleveland, Ohio. Pressure indicating valve. 1,894,372; Jan. 17.
Fleischmann, Frederick A., Drexel Hill, and A. L. Marsh, Philadelphia, Pa. Speedometer. 1,894,308; Jan. 17.
Flintkote Corporation, The. (See Campbell, Max E., assignor.)
Fluegge, Robert H., Elmhurst, assignor to W. C. Ritchie and Company, Chicago, Ill. Machine for making windowed receptacles. 1,894,259; Jan. 17.
Flumerfelt, William A., Columbus, Ohio, assignor to Columbus Auto Parts Company. Joint. 1,894,309; Jan. 17.
Folmsbee, Clyde H., Cranford, N. J., assignor to American Car and Foundry Company, New York, N. Y. Doming for welded tanks. 1,894,679; Jan. 17.
Ford, Harry E., Jersey City, N. J. Sampling and gauging device. 1,894,817; Jan. 17.
Foresman, Robert A., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Ash handling apparatus. 1,894,267; Jan. 17.
Forrler, George H., executor. (See Carr, John.)
Forsyth, Milo G., Indianapolis, and B. Lasiter, Greenwood, Ind. Oven rack shifting device. 1,894,268; Jan. 17.
Fort, Clarence E., Rockford, Ill. Tile. 1,894,584; Jan. 17.
Foster Wheeler Corporation. (See Cahoon, Ernest L., assignor.)
Foster Wheeler Corporation. (See Dean, Dion K., assignor.)
Foster Wheeler Corporation. (See Dodd, Gerald D., assignor.)
Fowler, Ewell E., East Point, Ga., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Combined typewriting and computing machine. 1,894,350; Jan. 17.
Frankl, Jacques, Vienna, Austria. Clothes trunk. 1,894,485; Jan. 17.
Fray, Peter. (See Richter, W., and Fray.)
Freeman, Benjamin W., Cincinnati, Ohio. Cut-out machine. 1,894,486; Jan. 17.
Freeman, Benjamin W., Cincinnati, Ohio. Ornamenting shoes. 1,894,818; Jan 17.

Frick Company. (See Small, Norman M., assignor.)
Frick, Julius, Milwaukee, Wis. Stair structure. 1,894,463; Jan. 17.
Friedman, Monroe, et al. (See Kahn, Samuel, assignor.)
Frigidaire Corporation. (See King, Jesse G., assignor.)
Fritze, George M. (See Barrett, J. M., and Fritze.)
Fromm, Herbert, Hamburg, Wis. Fruit juice extractor. 1,894,858; Jan. 17.
Frost, William P., Jackson Heights, N. Y., assignor to Evans Elevator Equaliser Company, Bedford, Ind. Device for equalising strains upon a group of cables connected to a stress-receiving element. 1,894,351; Jan. 17.
Gabel, William J., and J. B. Bretz, Great Falls, Mont.; said Gabel assignor of five per cent to said Bretz. Valve. 1,894,859; Jan. 17.
Gabriel, Leonard G., London, England, assignor, by mesne assignments, to Colas Roads, Inc., Boston, Mass. Bituminous emulsion. 1,894,617; Jan. 17.
Gagné, Arthur L., and J. A. Snyder, San Francisco, Calif., assignors to Intertype Corporation, Brooklyn, N. Y. Linerless mold cap. 1,894,860; Jan. 17.
Gallagher, Edward J., jr., Baltimore, Md. Windshield heater. 1,894,861; Jan. 17.
Galvin, Dennis C., Des Moines, Iowa. Disk holder for disk sharpeners. 1,894,585; Jan. 17.
Gardner, George D., San Jose, assignor to Gardner Manufacturing Company, Ltd., Sunnyvale, Calif. Drainer apparatus. 1,894,758; Jan. 17.
Gardner, George H., assignor to The Menasha Products Company, Chicago, Ill. Cutter package. 1,894,896; Jan. 17.
Gardner Manufacturing Company, Ltd. (See Gardner, George D., assignor.)
Gase, Theodor, Brooklyn, N. Y. Combination stand. Des. 89,038; Jan. 17.
Gebrüder Bubler. (See Mezger, Jacques, assignor.)
Gedeon, Rudolph. (See Goebl, A., and Gedeon.)
General Aniline Works, Inc. (See Bollweg, B., Zeh, and Kramer, assignors.)
General Aniline Works, Inc. (See Kuns, M. A., and Koeberle, assignors.)
General Electric Company. (See Davies, David R., assignor.)
General Electric Company. (See Harty, Edgar A., assignor.)
General Electric Company. (See Hewlett, R. M., and Willard, assignors.)
General Electric Company. (See Kelley, Floyd C., assignor.)
General Electric Company. (See Mallett, Montville B., assignor.)
General Electric Company. (See Otis, Albert N., assignor.)
General Electric Company. (See Sykes, Wesley P., assignor.)
General Electric Company. (See Thompson, Louis W., assignor.)
General Electric Company. (See Weaver, William E., assignor.)
General Electric Company. (See Whitaker, Frank P., assignor.)
General Electric Company. (See Winter, Fred H., assignor.)
General Utilities Mfg. Co. (See Tinkham, Guy L., assignor.)
Gesellschaft fur Elektrische Apparate. (See Hort, Hermann, assignor.)
Gessner, Ernst, Worcester, Mass. Variable speed transmission mechanism. 1,894,897; Jan. 17.
Gilbert, Levi L., Muskegon, Mich. Surgical operating support. 1,894,739; Jan. 17.
Girard Model Works, Inc., The. (See Smith, Anthony N., assignor.)
Glatthar, George E., Cleveland Heights, assignor to The Art Metal Company, Cleveland, Ohio. Lighting fixture. 1,894,586; Jan. 17.
Glidden Company. (See O'Brien, William J., assignor.)
Globar Corporation, The. (See Hedirer, Ernst, assignor.)
Goebert, Elmer C., U. S. Army, Philadelphia, Pa. Gun carriage. 1,894,680; Jan. 17.
Goebl, Adolph and R. Gedeon, Egleston Township, Muskegon County, Mich. Milk-cooling and temperature stabilizing device. 1,894,448; Jan. 17.
Goodall, Howard W., Aldan, Pa. Hose. 1,894,269; Jan. 17.
Goodman Manufacturing Company. (See Sloane, William W., assignor.)
Grady, Charles B., West Orange, N. J., assignor to Metropolitan Engineering Company. Furnace. 1,894,270; Jan. 17.
Gray, Harry, Galveston, Tex. Load carrying vehicle. 1,894,311; Jan. 17.
Green, Earl F., assignor to The Manley Manufacturing Company, York, Pa. Trestle. 1,894,293; Jan. 17.
Greene, Francie R., assignor to C. H. D. Robins Co., Inc., New York, N. Y. Dress or similar article. Des. 89,039; Jan. 17.
Gregg, Alfred W., and R. H. Frank, assignors to The Bonney-Floyd Company, Columbus, Ohio. Wear resisting ferrous alloy. 1,894,819; Jan. 17.
Gregg, Alfred W., and R. H. Frank, assignors to The Bonney-Floyd Company, Columbus, Ohio. Wear resisting ferrous alloy. 1,894,820; Jan. 17.
Greider, James B., South Milwaukee, Wis. Slipper. 1,894,681; Jan. 17.
Greve, Edgar R., Bellevue, assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa. Automatic releasing tong. 1,894,560; Jan. 17.
Greve, Louis W., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Rock drill. 1,894,398; Jan. 17.
Groenig, August and J. W. Woodruff, Rupert, Idaho. Machine for harvesting beans and peas. 1,894,740; Jan. 17.
Grondahl, Lars O., Pittsburgh, assignor to the Union Switch & Signal Company, Swissvale, Pa. Railway car retarder. 1,894,513; Jan. 17.
Grosskinsky, Otto, Ludwigshafen-on-the-Rhine, and M. Treppenhauer, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of carbon black. 1,894,764; Jan. 17.
Grudnicki, Emilia W., Ashley, Pa. Clear vision attachment for motor vehicles. 1,894,862; Jan. 17.
Guardian Trust Company, The. (See Erbach, Frederick R., assignor.)
Guardian Trust Company, The. (See Karasinski, Romuald, assignor.)
Gubing, Frank, Brooklyn, assignor to Elizabeth Arden, Inc., New York, N. Y. Device for repointing lip sticks or the like. 1,894,863; Jan. 17.
Gueth, Charles H., East McKeesport, and C. G. Eastley, Pittsburgh, Pa. Window garden shelf. 1,894,810; Jan. 17.
Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,040; Jan. 17.
Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,041; Jan. 17.
Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,066; Jan. 17.
Guiffre, Gaetano, Washington, D. C. Sandal. 1,894,561; Jan. 17.
Gunther, Samuel, Carey, Ohio. Bottle opener. 1,894,487; Jan. 17.
Haas, Frank, Philadelphia, Pa. Preventing clinker. 1,894,682; Jan. 17.
Haeuber, Hans, and E. Linckh, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of acetylene. 1,894,765; Jan. 17.
Hajny, Vaclav J., Brookfield, Ill. Casket bier. Des. 89,067; Jan. 17.
Hall, Charles L., Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass. Pad for motor vehicle fender wells. 1,894,608; Jan. 17.
Hall, Hugh M., Eaton Rapids, assignor of one-half to Charles L. Sprinkle, Lansing, Mich. Air humidifier and washer. 1,894,864; Jan. 17.
Hallward, Michael, Pasadena, Calif., assignor, by mesne assignments, to Wonderland Furniture, Ltd. Child's dressing table or similar article. Des. 89,042; Jan. 17.
Hallward, Michael, Pasadena, Calif., assignor, by mesne assignments, to Wonderland Furniture, Ltd. Child's chest of drawers. Des. 89,043; Jan. 17.
Hallward, Michael, Pasadena, Calif., assignor, by mesne assignments, to Wonderland Furniture, Ltd. Child's bed or similar article. Des. 89,044; Jan. 17.
Hankins, Frederick W., Philadelphia, Pa. Locking attachment for cranes. 1,894,688; Jan. 17.
Hannon, John J. (See O'Connor, B. J., and Hannon.)
Hanovia Chemical and Manufacturing Company. (See Anderson, W. T., jr., and Bird, assignors.)
Hänsel, Günther, Berlin-Charlottenburg, and E. Michael, Berlin-Siemensstadt, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Electrolytic treatment of solutions containing a high percentage of chlorine ions. 1,894,271; Jan. 17.
Harman, Stingby D., Woodhull, Ill. Power mower. 1,894,312; Jan. 17.
Harris, Albert, Toronto, Ontario, Canada. Luggage carrier. 1,894,464; Jan. 17.
Harris, Carroll, Luling, Tex. Holder. 1,894,488; Jan. 17.
Harrison, Arthur D., Brooklyn, N. Y. Inert gas production. 1,894,766; Jan. 17.
Hartenstein, Herman L., Chicago, Ill. Manufacture of fertilizer. 1,894,587; Jan. 17.
Harter, Evan C., Sturgis, Mich. Supporting structure. 1,894,742; Jan. 17.
Harter, Evan C., Sturgis, Mich. Supporting structure. 1,894,743; Jan. 17.
Hartman, Max, and H. Isler, Riehen, assignors to Firm Society of Chemical Industry in Basle, Basel, Switzerland. Basic ether of aromatic ketones. 1,894,865; Jan. 17.
Hartog, Paul D., Long Island City, N. Y. Portable faucet. 1,894,741; Jan. 17.
Harty, Edgar A., Lynn, Mass., assignor to General Electric Company. Alternating current rectier. 1,894,821; Jan. 17.
Harvey, Edward W., New Brunswick, N. J., assignor to The Barrett Company, New York, N. Y. Applying aqua-ammonia to fertiliser mixtures. 1,894,767; Jan. 17.
Hawk, Walter D., Los Angeles, Calif. Automatic advertising station announcing system and method. 1,894,684; Jan. 17.
Hawley, Charles G., Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio. Gas conditioner. 1,894,744; Jan. 17.

Haseltine Corporation. (See Walsh, Lincoln, assignor.)
Haselton, George, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,894,399; Jan. 17.
Heat Treating Company. (See Laird, Wilbur G., assignor.)
Heather Handkerchief Works. (See Metzger, Emil, assignor.)
Hechenbleikner, Ingenuin, Charlotte, N. C., assignor, by mesne assignments, to Chemical Construction Corporation. Phosphoric acid manufacture. 1,894,514; Jan. 17.
Hechenbleikner, Ingenuin, Charlotte, N. C., assignor, by mesne assignments, to Chemical Construction Corporation. Catalytic apparatus. 1,894,768; Jan. 17.
Hediger, Ernst, assignor to The Globar Corporation, Niagara Falls, N. Y. Electrical resistor and manufacture thereof. 1,894,685; Jan. 17.
Heelan, Adelaide, assignor of one-half to J. G. Jones, jr., St. Louis, Mo. Stocking protector. 1,894,866; Jan. 17.
Heene, George W., Cleveland, Ohio. Embossing and vending apparatus. 1,894,465; Jan. 17.
Heintz, William J., Utica, N. Y. Headrest. 1,894,444; Jan. 17.
Hennies, Carl E., et al. (See Mortimer, Samuel E.)
Henning, Otto. (See Kommer, F. A., and Henning.)
Henry, George W., jr., assignor to Soabar Company, Frankford, Philadelphia, Pa. Sales ticket and clip. 1,894,906; Jan. 17.
Hensler, Julius P. (See Sutton, W. F., and Hensler.)
Herbsman, Abraham M., Huntington Park, Calif. Making a molded article. 1,894,400; Jan. 17.
Hewlett, Edward M., and W. W. Willard, Schenectady, N. Y., assignors to General Electric Company. System of gun fire control. 1,894,822; Jan. 17.
Hexcel Radiator Company. (See Opits, Fred M., assignor.)
Heyman, Oscar, New York, N. Y. Brooch. 1,894,686; Jan. 17.
Hiester, Theodore M., Dayton, Ohio, assignor, by mesne assignments, to Aero Supply Manufacturing Corporation, Corry, Pa. Plating barrel. 1,894,609; Jan. 17.
Hilgers, Gerrit. (See van der Schans, M., and Hilgers.)
Hill-Independent Manufacturing Company. (See Rantsch, Edward J., assignor.)
Hilscher, Curt, and A. Loimann, Chemnitz, Germany. Knock-over bit apparatus. 1,894,588; Jan. 17.
Hirose, Jun, Tokyo-Fu, and N. Ishimizu, Kanda-Ku, Japan, assignors to Kito Hirose, Tokyo-Fu, Japan. Folding stool-ladder. 1,894,489; Jan. 17.
Hirose, Kito. (See Hirose, J., and Ishimizu, assignors.)
Hobson, Arthur W., San Francisco, Calif. Pneumatic tire pressure gauge. 1,894,490; Jan. 17.
Hoffman, Earl W., Dubuque, Iowa, assignor to Johnson High Test Oil Company, Freeport, Ill. Safety shield. 1,894,867; Jan. 17.
Hoffmann, August, Leipsig, Germany. Thread guide advancing device for bobbin winding machines. 1,894,313; Jan. 17.
Hoffmann, Kurt, Dresden, Germany. Revolving fire preventing shutter for cinematographic projection apparatus. 1,894,769; Jan. 17.
Hokerk, Lynde D., Utica, N. Y. Sewing basket. 1,894,868; Jan. 17.
Hollingworth, Duncalf W., and L. W. Tarr, assignors to Continental-Diamond Fibre Company, Newark, Del. Indurated cellulosic product and making the same. 1,894,907; Jan. 17.
Hollos, August A., Toledo, Ohio. Anchor post. 1,894,401; Jan. 17.
Holveck, Joseph E., Pittsburgh, Pa. Pump. 1,894,869; Jan. 17.
Hooker Electrochemical Company. (See Rowland, Jasper M., assignor.)
Hookless Fastener Company. (See Yengst, Charles R., assignor.)
Hoover Company, The. (See Butzer, Eugene, assignor.)
Hoover Company, The. (See Shank, Charles L., assignor.)
Hoover Steel Ball Company. (See Pew, Thomas C., assignor.)
Hopkins, Eugene, Glen Cove, N. Y. Automatic tire pump. 1,894,908; Jan. 17.
Holt, Hermann, Berlin-neu-Westend, assignor to Gesellschaft fur Elektrische Apparate, Marienfelde, near Berlin, Germany. Ship stabilizer. 1,894,272; Jan. 17.
Horwitt, Paul H., Hartsdale, N. Y., assignor to The Menasha Products Company, Menasha, Wis. Dispenser. 1,894,589; Jan. 17.
Howell, Cleves H., Albuquerque, N. Mex., and H. P. Bunger Wheat Ridge, Colo. Valve. 1,894,314; Jan. 17.
Hoyt, Frederick A., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Coin receptacle. 1,894,823; Jan. 17.
Hubbell, Minott P., Ashburnham, Mass. Chuck. 1,894,515; Jan. 17.
Hudson, H. D., Manufacturing Company. (See Keating, Maurice H., assignor.)
Hueglin, Herman C., assignor to Federal Merchandise Company, Chicago, Ill. Ventilator cabinet. 1,894,930; Jan. 17.
Huffman, Samuel C., Lincoln, Nebr. Drawer. 1,894,445; Jan. 17.
Hunter, Thomas W., Alhambra, Calif. Oil burner. 1,894,466; Jan. 17.
Hunsiker, Emil, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Electric machine rotor. 1,894,273; Jan. 17.
Hussmann-Ligonier Company. (See Strait, Ralph H., assignor.)
Hutchens, Edward A., La Grande, assignor of one-half to M. G. Hutchens, Baker, Oreg. Leveling device. 1,894,870; Jan. 17.
Hutchens, Melvin G. (See Hutchens, Edward A., assignor.)
Hutchinson, Frank C., deceased, Rutherford, N. J., by The F. B. Shuster Company, New Haven, Conn., assignee. Machine for straightening and shearing long stock. Re18,715; Jan. 17.
Hyland, Lawrence A., Washington, D. C., assignor to Eclipse Aviation Corporation, East Orange, N. J. Piezo-electrical crystal temperature control. 1,894,687; Jan. 17.
I. G. Farbenindustrie Aktiengesellschaft. (See Eisenhut, O., and Schilling, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Grosskinsky, O., and Treppenhauer, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Haeuber, H., and Linckh, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Jacqué, Heinrich, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Muench, E., and Nicolai, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schlecht, L., and Roetger, assignors.)
Icre, Jean B., New York, N. Y. Oven. 1,894,688; Jan. 17.
Ide, Harry H., assignor to Associated Electric Laboratories, Inc., Chicago, Ill. Switchboard doorlatch. 1,894,824; Jan. 17.
Ingersoll-Rand Company. (See Smith, William A., jr., assignor.)
Ingersoll-Rand Company. (See Terry, Edward F., assignor.)
Ingersoll, Roy C., Galesburg, Ill., assignor to Ingersoll Steel and Disc Co. Apparatus for mechanical and heat treatment of metal articles. 1,894,590; Jan. 17.
Ingersoll, Roy C., assignor to Ingersoll Steel & Disc Co., Galesburg, Ill. Method of and apparatus for rolling metal articles. 1,894,689; Jan. 17.
Ingersoll Steel and Disc Co. (See Ingersoll, Roy C., assignor.)
Inman, Harry A., assignor to Bloomer Bros. Company, Newark, N. Y. Egg container. 1,894,402; Jan. 17.
Instograph Ltd. (See Sutton, Charles Z., assignor.)
International Precipitation Company. (See Liesman, Marcel A., assignor.)
Intertype Corporation. (See Gagne, A. L., and Snyder, assignors.)
Ishimizu, Nagahiro. (See Hirose, J., and Ishimizu.)
Iskin, Herman, Jamaica, N. Y. Combined costume falsehead and child's play-hat. 1,894,690; Jan. 17.
Isler, Hans. (See Hartmann, M., and Isler.)
Iverson, Joseph L., Helena, Mont. Land leveler. 1,894,871; Jan. 17.
Jackson, Wayne, Paola, Kans. Electrical wire swivel. 1,894,872; Jan. 17.
Jacqué, Heinrich, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of foils and apparatus therefor. 1,894,467; Jan. 17.
Jacques, Raynaldo P., Woonsocket, R. I. Lubricating apparatus. 1,894,274; Jan. 17.
James, Joseph H., Pittsburgh, assignor to C. P. Byrnes, trustee, Sewickley, Pa. Treating complex liquid partial oxidation products and articles produced thereby. 1,894,352; Jan. 17.
James, Robert G. (See Murphy, E. A., James, and Twiss.)
Jansen, Marinus J., R. Vermeulen, and N. A. J. Voorhoeve, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Installation for the regulation of the angular velocity of a shaft. 1,894,562; Jan. 17.
Jehle, Ferdinand. (See Church, H. D., and Jehle.)
Jenkins, W. B. (See Pinto, Julian F., assignor.)
Jenkins, Russell L. (See Durgin, C. B., and Jenkins.)
Jennings, James M., Baton Rouge, La., assignor to Standard-I. G. Company. Destructive hydrogenation of carbonaceous materials. 1,894,770; Jan. 17.
Jensen, Louis, assignor to United Autographic Register Co., Chicago, Ill. Portable autographic register. 1,894,745; Jan. 17.
Johann, Arthur C. (See Manahan, E. H., and Johann.)
Johnson, Bror A. E., Alsten, assignor to Aktiebolaget Gerh. Arehns Mekaniska Verkstad, Stockholm, Sweden. Packing for ammunition and the like. 1,894,873; Jan. 17.
Johnson, Glen A., assignor to Stant Manufacturing Co., Connersville, Ind. Radiator ornament. Des. 89,045; Jan. 17.
Johnson High Test Oil Company. (See Hoffman, Earl W., assignor.)
Johnson, John C. (See Nenning, G. H., and Johnson.)
Johnson, John M., Kansas City, Mo. Thermostat for fire alarm systems. 1,894,746; Jan. 17.
Jones, Frank E., Santa Ana, Calif. Sanitary automatic poultry fountain. 1,894,563; Jan. 17.
Jones, James G., jr. (See Heelan, Adelaide, assignor.)

Joy, Walter, Somerville, assignor to Cambridge Rubber Co., Cambridge, Mass. Overshoe and making same. 1,894,610; Jan. 17.
Jung, Louis. (See Schmidt, H. F., and Jung.)
Junge, Reuben D., New York, N. Y., assignor to Keyes Fibre Company, Inc., Waterville, Me. Egg packing device. 1,894,591; Jan. 17.
Jurist, Alfred E. (See Christiansen, W. G., and Jurist.)
Kahn, Samuel, assignor of one-third to M. Friedman and two-thirds to A. W. Deller, New York, N. Y. Sound recording system. 1,894,373; Jan. 17.
Kalbach, Raymond B., Philadelphia, Pa. Apparatus for making chenille fabric. 1,894,468; Jan. 17.
Karasinski, Romuald, assignor to The Guardian Trust Company, Cleveland, Ohio. Piston. 1,894,771; Jan. 17.
Karrick, Lewis Cass, Salt Lake City, Utah. Destructive distillation of carbonaceous material. 1,894,691; Jan. 17.
Karstedt, Lurance C., Watsonville, Calif. Brush cutter. 1,894,516; Jan. 17.
Kask, Alexander, San Mateo, Calif. Swimming appliance. 1,894,874; Jan. 17.
Kaumagraph Company. (See Lawrence, Winthrop S., assignor.)
Keating, Maurice H., assignor to H. D. Hudson Manufacturing Company, Minneapolis, Minn. Chicken feeder. 1,894,772; Jan. 17.
Kelley, Floyd C., Schenectady, N. Y., assignor to General Electric Company. Annealing process. 1,894,825; Jan. 17.
Kempton, Herbert E., assignor to Tuthill Pump, Chicago, Ill. Rotary engine. 1,894,353; Jan. 17.
Kennedy, Homer R. (See Zens, J., and Kennedy.)
Kern, Walter. (See Tobler, R., and Kern.)
Kerr, Howard J., Westfield, and C. U. Savoye, Hackensack, assignors to The Babcock & Wilcox Company, Bayonne, N. J. Tube support. 1,894,692; Jan. 17.
Kesler, Carl C., Cedar Rapids, Iowa, assignor to Pine Institute of America Incorporated. Varnish. 1,894,374; Jan. 17.
Keyes Fibre Company. (See Junge, Reuben D., assignor.)
Kilmer, Charles B., River Forest, Ill. Insulating unit. 1,894,592; Jan. 17.
Kimmel, Isaiah B., and J. V. Stewart, Johnstown, Pa. Parallel throw switch stand. 1,894,693; Jan. 17.
King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,894,918; Jan. 17.
King, Joseph M., Detroit, Mich. Rubber mill cooling device. 1,894,618; Jan. 17.
King Manufacturing Corporation. (See Senauke, Alexander, assignor.)
Knapp, Andrew S., assignor to Knapp-Monach Company, Belleville, Ill. Baking oven. 1,894,875; Jan. 17.
Knapp-Monarch Company. (See Knapp, Andrew S., assignor.)
Knapp-Monarch Company. (See Starr, Alden B., assignor.)
Knickerbocker, George S., Minneapolis, Minn. Vehicle with endless track tensioning means. 1,894,619; Jan. 17.
Knoll, Robert, Hornau in Taunus, Germany, assignor, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y. Basic product and making it. 1,894,375; Jan. 17.
Knutsen, Elmer, Bellingham, Wash. Laundry dry-cleaning machine. 1,894,694; Jan. 17.
Kocha, Theo A., Company. (See Schwarskopf, Arthur R., assignor.)
Koeberle, Karl. (See Kunz, M. A., and Koeberle.)
Kohut, Alexander, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,046; Jan. 17.
Kohut, Alexander, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,068; Jan. 17.
Kohut, Alexander, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,069; Jan. 17.
Kohut, Alexander, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,070; Jan. 17.
Kommer, Fred A., and O. Henning, assignors to Carter Carburetor Corporation, St. Louis, Mo. Carburetor. 1,894,354; Jan. 17.
Konopak, Lothar T., Toledo, Ohio. Machine for filling containers with fluid. 1,894,403; Jan. 17.
Korvin-Kroukovsky, Boris V., Beechhurst, assignor to Edo Aircraft Corporation, College Point, N. Y. Seaplane. 1,894,919; Jan. 17.
Kramer, Erwin. (See Bollweg, B., Zeh, and Kramer.)
Krause, Paul, assignor, by direct and mesne assignments, of one-third to W. E. Sprague, deceased, and one-third to H. Taylor, Babylon, N. Y.; L. A. Sprague, administratrix of said W. E. Sprague. Liquid pump. 1,894,275; Jan. 17.
Krejci, Frank, Chicago, Ill. Automatic chuck operating device. 1,894,773; Jan. 17.
Kress, Otto, Appleton, Wis. Producing a white filler product from sulphate pulp lime mud. 1,894,620; Jan. 17.
Kubin, Josef. (See Stern, K., and Kubin.)
Kuhn, Clarence W., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric control device. 1,894,404; Jan. 17.
Kuhn, George, Silver Spring, Md., assignor to Butler-Kuhn Corporation, Washington, D. C. Illuminating device. 1,894,876; Jan. 17.
Kuns, Max A., Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Derivative of polymerized cyanoanthraquinone compounds. 1,894,491; Jan. 17.
Kurath, Franz. (See Cherry, O. A., and Kurath.)
Kurse, Wilhelm, Hanover, assignor to Lange and Geilen, Halle, Saale, Germany. Centrifugal mold filling apparatus. 1,894,877; Jan. 17.
Kutzner, James C., South Pasadena, assignor to Monarch Investment Company Limited (a trust estate), Los Angeles, Calif. Water feed regulator. 1,894,517; Jan. 17.
Lacroux, Germaine. (See Pechin, Germaine.)
La Grange, William, Brooklyn, N. Y. Safety window seat. 1,894,878; Jan. 17.
Laird, Wilbur G., assignor to Heat Treating Company, New York, N. Y. Method and apparatus for treating oils. 1,894,355; Jan. 17.
Laird, Wilbur G., Pleasantville, assignor to Doherty Research Company, New York, N. Y. Gas holder. 1,894,535; Jan. 17.
Laird, Wilbur G., Pleasantville, assignor to Doherty Research Company, New York, N. Y. Gas holder. 1,894,536; Jan. 17.
Laird, Wilbur G., Pleasantville, assignor to Doherty Research Company, New York, N. Y. Gas holder. 1,894,537; Jan. 17.
La Maida, Thomas, University Heights, Ohio. One-piece bathing suit. 1,894,920; Jan. 17.
Lamm, Uno, Ludvika, assignor to Allmanna Svenska Elektriska Aktiebolaget, Vasteras, Sweden. Cooling device for anodes in metal vapor rectifiers. 1,894,593; Jan. 17.
Lampton, Glen T., Pittsburgh, Pa. Airplane propeller. 1,894,276; Jan. 17.
Lanchester, Frederick W., Moseley, Birmingham, England. Loud speaker and like horn. 1,894,376; Jan. 17.
Landis Machine Company. (See Shearer, H. T., and Reimschissel, assignors.)
Lane, Isaac J., Topeka, Kans. Mail pouch catching and delivering means. 1,894,315; Jan. 17.
Langhein, Harold W., Los Angeles, Calif. Brake tester. 1,894,405; Jan. 17.
Lange and Geilen. (See Kurse, Wilhelm, assignor.)
Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Slide rule. 1,894,294; Jan. 17.
Larkwood Silk Hosiery Mills, Inc. (See Sachsenmaier, Elwood W., assignor.)
Lasiter, Roy. (See Forsyth, M. G., and Lasiter.)
Lawrence, Winthrop S., assignor to Kaumagraph Company, New York, N. Y. Transfer. 1,894,774; Jan. 17.
Lay, Joseph C., Rosiclare, Ill. Air gun. 1,894,879; Jan. 17.
LeDoux, Hector, Hyde Park, Mass., assignor, by mesne assignments, to The Draper Corporation, Hopedale, Mass. Filling-feeler mechanism for looms. 1,894,316; Jan. 17.
Lee, Ralph L., assignor to Delco-Light Company, Dayton, Ohio. Domestic appliance. 1,894,564; Jan. 17.
Lehman, Arthur E., St. Charles, Mo., assignor to American Car and Foundry Company, New York, N. Y. Folding armrest for seats. 1,894,621; Jan. 17.
Lenhart, Joseph B., Roseville, Ohio. Pottery bird house. 1,894,406; Jan. 17.
Leonhauser, Henry A., Baltimore, Md. Automatic slack adjuster. 1,894,565; Jan. 17.
Lerner, Samuel S., Chicago, Ill. Preparing a food product. 1,894,377; Jan. 17.
Lesage, Alfred, Schweinfurt, Germany. Starting device for outboard motors. 1,894,378; Jan. 17.
Lessig, Carl, and C. J. Carley, Dalton, Nebr. Game board. Des. 89,047; Jan. 17.
Levenson, Herbert S., Brooklyn, N. Y. Thermal composition of matter. 1,894,776; Jan. 17.
Lewis Bolt & Nut Company. (See Sardeson, Robert, assignor.)
Lewis Differential Company. (See Tatter, John W., assignor.)
Lewis, George K., assignor to Met-L-Wood Corporation, Chicago, Ill. Vehicle body construction. 1,894,356; Jan. 17.
Lewis, George W., Grinnell, Iowa. Wringer. 1,894,594; Jan. 17.
Lewis, Henry G., assignor to Electric Service Supplies Company, Philadelphia, Pa. Terminal connections for lamp guard sockets or the like. 1,894,538; Jan. 17.
Ley, George Albert, Chicago, Ill. Tripod. 1,894,695; Jan. 17.
Liang, Ming T., Tientsin, China. Spring suspension for automobile chassis. 1,894,776; Jan. 17.
Linckh, Eduard. (See Haeuber, H., and Linckh.)
Lindbladh Corporation, The. (See Lindbladh, Harmon E., assignor.)
Lindbladh, Harmon E., Brookline, assignor to The Lindbladh Corporation, Boston, Mass. Sheet feeding machine. 1,894,622; Jan. 17.

Lindemann, Otto A., Wyncote, assignor to Schutte and Koerting Company, Philadelphia, Pa. Vapor condenser. 1,894,696; Jan. 17.

Lines, John. (See Steele, A. B., and Lines.)

Link, Louis, New York, N. Y., assignor, by mesne assignments, to Nashua Gummed & Coated Paper Co., Nashua, N. H. Tape serving machine. 1,894,317; Jan. 17.

Link, Louis, New York, N. Y., assignor, by mesne assignments, to Nashua Gummed & Coated Paper Co., Nashua, N. H. Gummed tape serving machine. 1,894,379; Jan. 17.

Linney, Albert T., Lexington, Ky. Toy gun. Des. 89,048; Jan. 17.

Lippstadt, Isabel G., et al. (See Lippstadt, Sigmund, assignor.)

Lippstadt, Sigmund, assignor to Isabel G. Lippstadt, New York, N. Y., and Frank S. Velardi. Motor driven alarm and signal device. 1,894,611; Jan. 17.

Lissman, Marcel A., assignor to International Precipitation Company, Los Angeles, Calif. Elutriating means. 1,894,623; Jan. 17.

Littleway Process Company, The. (See Fausse, Joseph, assignor.)

Locke Insulator Corporation. (See Cramer, Walter, assignor.)

Loimann, Anton. (See Hilscher, C., and Loimann.)

Long, John E., Multnomah, Oreg. Panel unit sign. 1,894,380; Jan. 17.

Lothrop, Marcus. (See Tucker, John T., assignor.)

Lucchese, Dominick A., San Francisco, Calif. Aeroplane. 1,894,518; Jan. 17.

Lukas, Julia, New York, N. Y. Textile fabric or the like. Des. 89,049; Jan. 17.

Lulki, Alexander, Berlin, Germany. Indicator. 1,894,697; Jan. 17.

Lutsky, Bernard, Brooklyn, N. Y. Valve fitting for plumbing fixtures. 1,894,407; Jan. 17.

Lynch, Silas H., Dallas, Tex. Game board. 1,894,469; Jan. 17.

MacKenzie, Leon R., Des Moines, Iowa. Inpacting machine. 1,894,408; Jan. 17.

Magidson, Frank, Pittsburgh, Pa., assignor to Pittsburgh Tag Company. Safety ticket. 1,894,826; Jan. 17.

Magidson, Frank, assignor to Pittsburgh Tag Company, Pittsburgh, Pa. Automatic machine for making marking tag clips. 1,894,880; Jan. 17.

Mallett, Montville B., Pittsfield, Mass., assignor to General Electric Company. Polyphase system. 1,894,827; Jan. 17.

Manahan, Edward H., Mountain Lake, N. J., and A. C. Johann, Richmond Hill, N. Y. Bleaching composition and process. 1,894,277; Jan. 17.

Manikowske, Ethel P. (See Manikowske, G., Feneis, and Manikowske, assignors.)

Manikowske, George, Minneapolis, Minn., and G. Feneis and W. Manikowske, Mooreton, N. Dak., assignors to E. P. Manikowske, Minneapolis, Minn. Wind electric plant. 1,894,357; Jan. 17.

Manikowske, Wallace. (See Manikowske, G., Feneis, and Manikowske.)

Manley Manufacturing Company. (See Green, Earl F., assignor.)

Manson Chemical Company. (See Manson, George J., assignor.)

Manson, George J., Hawkesbury, Ontario, Canada, assignor, by mesne assignments, to Manson Chemical Company, Montclair, N. J. Waterproofing paper. 1,894,566; Jan. 17.

Manson, George J., Hawkesbury, Ontario, Canada, assignor, by mesne assignments, to Manson Chemical Company, Montclair, N. J. Fibrous product. 1,894,567; Jan. 17.

Marcel, Francois R., Brooklyn, N. Y. Permanent waving device. 1,894,624; Jan. 17.

Markham, Byron, Martinez, Calif. Automatic differential for four-wheel attachments. 1,894,698; Jan. 17.

Markle, Mathew G., Oak Park, Ill. Valve tag. 1,894,881; Jan. 17.

Marsh, Alpha L. (See Fleischmann, F. A., and Marsh.)

Martin, Perry S., Harrisonburg, Va. Adjustable feeder. 1,894,278; Jan. 17.

Mason, James M., assignor to Abrasive Wheel and Equipment Co., Inc., Philadelphia, Pa. Expansible wheel. 1,894,909; Jan. 17.

Mason, William H., assignor to Masonite Corporation, Laurel, Miss. Production of vegetable fiber sheets. 1,894,777; Jan. 17.

Mason, William H., assignor to Masonite Corporation, Laurel, Miss. Multiple fiber board production. 1,894,778; Jan. 17.

Masonite Corporation. (See Mason, William H., assignor.)

Mathers, Harry M., assignor of thirty-nine one-hundredths to H. M. Covey, nineteen one-hundredths to F. L. Matter and three one-hundredths to A. Ruegger, Portland, Oreg. Date indicating calendar. 1,894,470; Jan. 17.

Mathewson, Wilfred B., North Weymouth, assignor to United Mattress Machinery Co. Inc., Boston, Mass. Mattress-tufting machine. 1,894,409; Jan. 17.

Mathieson Alkali Works, Inc. (See Taylor, M. C., and White, assignors.)

Matter, Frank L., et al. (See Mathers, Harry M., assignor.)

Mattice, William J., Primghar, Iowa. Blade for road maintainers. 1,894,410; Jan. 17.

Mawer, Llywelyn, Bishopston, Bristol, assignor of one-half to The Churchill Machine Tool Company Limited, Manchester, England. Cam and like grinding machine. 1,894,382; Jan. 17.

Mayer, Josef, Karlsbad, Czechoslovakia, assignor to The Philad Company, Cleveland, Ohio. Hair waving apparatus. 1,894,612; Jan. 17.

Mayo John, Carnegie, Pa. Leer feeding device. 1,894,881; Jan. 17.

Mazzella, Salvatore, Princeton, N. J. Removable brush head. 1,894,882; Jan. 17.

McCarthy, Charles M., Minneapolis, Minn. Table for stretching fabric. 1,894,625; Jan. 17.

McCloskey, Gregory E., South Orange, N. J., assignor to The Barrett Company, New York, N. Y. Method and apparatus for distilling tar and simultaneously producing high and low melting point pitches. 1,894,471; Jan. 17.

McCoy, James P. A., Milwaukee, Wis. Varnish-like material and producing the same. 1,894,626; Jan. 17.

McGill Manufacturing Company. (See Popp, Rudolf, assignor.)

McGogy, Donald H., McMinnville, Oreg. Valve for liquid meters. 1,894,492; Jan. 17.

McKenny, Van S., assignor to Ne Page McKenny Company, Seattle, Wash. Conduit driving mechanism. 1,894,446; Jan. 17.

McLaine, William L., assignor of one-third to R. A. Sperry and one-third to E. M. Smith Company, Los Angeles, Calif. Drill pipe protector. 1,894,519; Jan. 17.

McLaughlin, F. L., Corporation. (See Mitchel, Edward W., assignor.)

McLoughlin, James J. R., Poland, N. Y. Casing for a motor oil dispenser. Des. 89,050; Jan. 17.

McNulty, Thomas E., Alameda, Calif. Roller shade guide and holder. 1,894,627; Jan. 17.

Megros, Roger, Bronxville, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,071; Jan. 17.

Meisel, Robert M., and H. S. Aikman, Port Huron, Mich. Motion poster advertising device. 1,894,568; Jan. 17.

Menasha Products Company, The. (See Gardner, George H., assignor.)

Menasha Products Company, The. (See Horwitt, Paul H., assignor.)

Messick, John C., Venice, assignor of one-third to Frank H. Tull, Culver, Calif. Automatic variable speed transmission. 1,894,818; Jan. 17.

Met-L-Wood Corporation. (See Lewis, George K., assignor.)

Metropolitan Engineering Company. (See Grady, Charles B., assignor.)

Metzger, Emil, Weehawken, assignor to Heather Handkerchief Works, Jersey City, N. J. Handkerchief or similar article. Des. 89,051; Jan. 17.

Meyer, Frank A., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condenser. 1,894,279; Jan. 17.

Meyer, Friedrich W., assignor to Ural-Maschinen-Vertriebsgesellschaft m. b. H., Vienna, Austria. Motor for tree saws. 1,894,883; Jan. 17.

Metzger, Jacques, St. Gall, assignor to Firm Gebrüder Buhler, Uswil, Switzerland. Roller mill. 1,894,569; Jan. 17.

Michael, Erwin. (See Hansel, G., and Michael.)

Mill Engineering and Supply Company. (See Satterquist, John, assignor.)

Miller, Charles, New York, N. Y. Shoe. Des. 89,052; Jan. 17.

Mills, Robert K., Sherwood, Nottingham, England. Producing knitted fabrics. 1,894,319; Jan. 17.

Mine & Smelter Supply Company, The. (See Wells, Sidney D., assignor.)

Mirau, Hans, Radebeul, assignor to Chemische Fabrik von Heyden, A. G., Radebeul near Dresden, Germany. Composition for disinfecting and bleaching and making the same. 1,894,539; Jan. 17.

Mitchel, Edward W., assignor to F. L. McLaughlin Corporation, Detroit, Mich. Roller bearing cage and forming the same. 1,894,695; Jan. 17.

Mitchell, Henry C., Naturita, Colo., assignor of one-half to P. S. Seeley. Ore concentrator. 1,894,779; Jan. 17.

Mitchell, John E., and O., Dallas, Tex. Bearing and mounting therefor. 1,894,699; Jan. 17.

Mitchell, Leonard O. (See Mitchell, Ossian K. and L. O.)

Mitchell, Orville. (See Mitchell, John E. and O.)

Mitchell, Ossian K. and L. O., Oak Park, Ill. Floor reading stand. Des. 89,053; Jan. 17.

Monarch Investment Company Limited (a trust estate). (See Kutmer, James C., assignor.)

Monark Battery Company. (See Radle, Henry J., assignor.)

Moore, David P., Avon Park, Fla. Apparatus for and making knitted pile fabrics. 1,894,596; Jan. 17.

Morgan, Raymond, and E. E. Witmer, Philadelphia, Pa. Headlight testing apparatus. 1,894,910; Jan. 17.

Morgan, Raymond, and E. E. Witmer, Philadelphia, Pa. Headlight testing apparatus. 1,894,911; Jan. 17.

Morse, Robert V., New York, N. Y. Pneumatic valve. 1,894,780; Jan. 17.

Mortimer, Samuel E., Lorain, assignor of one-fourth to W. V. Clampet, Dayton, one-fourth to C. E. Hennies, Cleveland, and one-fourth to J. F. Glidden, Lakewood, Ohio. Drill and hole cleaner. 1,894,358; Jan. 17.

Mortland, James A., and H. L. Smith, Tampa, Fla. Composition of matter. 1,894,628; Jan. 17.

Motor Wheel Corporation. (See Van Halteren, Andrew S., assignor.)

Muchenberger-Wittlinger, Karl, Riehen, near Basel, Switzerland. Single axle tipping trailer. 1,894,320; Jan. 17.

Muench, Eduard, and F. Nicolai, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of compositions resembling celluloid. 1,894,781; Jan. 17.

Muller, George J., Baltimore, Md. Steam boiler. 1,894,782; Jan. 17.

Murphy, Edward A., Erdington, Birmingham, R. G. James, Belly Oak, Birmingham, and D. F. Twiss, Wylde Green, England, assignors to American Anode Incorporated, Akron, Ohio. Manufacture of articles of/or containing rubber or similar materials. 1,894,629; Jan. 17.

Murray, Kay H., Chicago, Ill. Bag holder. 1,894,597; Jan. 17.

Nanfeldt, William, assignor to World Bestos Corporation, Paterson, N. J. Yarn forming machine. 1,894,411; Jan. 17.

Nashua Gummed & Coated Paper Co. (See Link, Louis, assignor.)

National Laundry Machinery Company. (See Reeps, Charles O., assignor.)

National Pressure Cooker Company. (See Nelson, Carl, assignor.)

National-Standard Company. (See Pierce, Robert C., assignor.)

Neher, Leroy P., assignor to Neher-Whitehead & Company, St. Louis, Mo. Bottle collar. Des. 89,072; Jan. 17.

Neher-Whitehead & Company. (See Neher, Leroy P., assignor.)

Neighbour, Leonard B., assignor to Deere & Company, Moline, Ill. Stalk shredding implement. 1,894,412; Jan. 17.

Nelson, Carl, assignor to National Pressure Cooker Company, Eau Claire, Wis. Pressure cooker. 1,894,280; Jan. 17.

Nelson, Emil A., Detroit, Mich. Making a brake band. 1,894,821; Jan. 17.

Nenning, George H., Bellmore, and J. C. Johnson, Glen Cove, N. Y. Toothbrush. 1,894,413; Jan. 17.

Ne Page McKenny Company. (See McKenny, Van S., assignor.)

Nesselmann, Kurt, and H. Brauer, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Absorption refrigerating apparatus. 1,894,359; Jan. 17.

Neuberger Chemical Corporation. (See Neuberger, Harry C., assignor.)

Neuberger, Harry C., assignor to Neuberger Chemical Corporation, New York, N. Y. Making bituminous material. 1,894,630; Jan. 17.

Nicolai, Fritz. (See Muench, E., and Nicolai.)

Noishiki, Yoshitoshi, Kojimachi Ku, Tokyo, Japan. Electric terminal. 1,894,598; Jan. 17.

Nordberg Manufacturing Company. (See Symons, Edgar B., assignor.)

Nyquist, Harry, Millburn, N. J., assignor to American Telephone and Telegraph Company. Eliminating distortion in repeaters. 1,894,822; Jan. 17.

Oberdorfer, Max, and J. E. Ryberg, St. Helens, Oreg. Combined light and heavy weight paper making machine. 1,894,472; Jan. 17.

Obergfell, Herbert F., River Forest, assignor, by mesne assignments, to Associated Laboratories, Inc., Chicago, Ill. Substation telephone set. 1,894,828; Jan. 17.

O'Brien, P. F. (See Sherry, Phillip G., assignor.)

O'Brien, William J., Baltimore, Md., assignor to Glidden Company, Cleveland, Ohio. Pigment and producing the same. 1,894,931; Jan. 17.

Ochiltree, Ned A., assignor to W. H. Sommer, Peoria, Ill. Fence post. 1,894,783; Jan. 17.

O'Connor, Bernard J., and J. J. Hannon, assignors to Steel and Tubes, Inc., Cleveland, Ohio. Device for cutting off tubing. 1,894,784; Jan. 17.

Ohio Brass Company, The. (See Austin, Arthur O., assignor.)

O'Hira, William S. (See Shiraishi, H., and O'Hira.)

Ohmer Fare Register Company. (See Vlahov, George, assignor.)

Oil Well Supply Company. (See Greve, Edgar E., assignor.)

Oliver Farm Equipment Company. (See Altgelt, Herman E., assignor.)

Olson, Arthur E., Clarks, Nebr. Corn tipper and putter. 1,894,493; Jan. 17.

Olson, Gunter, Medford, Mass. Bearing. 1,894,414; Jan. 17.

Onstad, Albert H., assignor to Weyerhaeuser Timber Company, Tacoma, Wash. Lumber retrimming machine. 1,894,415; Jan. 17.

Optiz, Fred M., assignor to Hexcel Radiator Company, Milwaukee, Wis. Air conditioning device. Des. 89,054; Jan. 17.

Orkin, Samuel, assignor to Calwis Industries, Ltd., Beverly Hills, Calif. Stop device for toy motors. 1,894,416; Jan. 17.

Osterstrom, Rudolph C., assignor to The Pure Oil Company, Chicago, Ill. Purifying oils. 1,894,823; Jan. 17.

Otis, Albert N., Schenectady, N. Y., assignor to General Electric Company. Furnace conveyer drive. 1,894,829; Jan. 17.

Otis, Herbert C., Shreveport, La. Process and apparatus for inserting tubing in wells. 1,894,912; Jan. 17.

Owen, Clarence E., Minneapolis, Minn. Nut lock. 1,894,631; Jan. 17.

Pacific Electric Manufacturing Corporation. (See Rea, James C., assignor.)

Padis, George, Norfolk, Va. Marine propeller having a transverse motion. 1,894,494; Jan. 17.

Page, Charles R., Los Angeles, Calif. Drip coffee maker. Des. 89,055; Jan. 17.

Page, Warren E., San Francisco, Calif. Vacuum cleaner bag attachment. 1,894,884; Jan. 17.

Parchlite Corporation. (See Burke, Alfred, assignor.)

Parker, Arthur La Rue, Cleveland, Ohio. Coupling and washer assembly. 1,894,700; Jan. 17.

Parkin, Robert N., assignor to Southern Textile Machinery Company, Paducah, Ky. Sewing machine and method of forming stitches. 1,894,885; Jan. 17.

Parks, Paul B. (See Russell, E. A., and Parks.)

Parsons, Philip D., Swarthmore, Pa., assignor to Scott Paper Company. Making tight rolls. 1,894,281; Jan. 17.

Paskowski, Adolf, New Britain, Conn. Mathematical instrument. 1,894,886; Jan. 17.

Patent and Licensing Corporation. (See Wettlaufer, Jules L., assignor.)

Paul, René, Colombes, France. Compressor. 1,894,701; Jan. 17.

Pearce, Walter H., assignor to The Brown Instrument Company, Philadelphia, Pa. Pen and pen treatment. 1,894,632; Jan. 17.

Pechin, Germaine, née Lacroux, Bois-Colombes, France. Preparing transparent phenol-formaldehyde resins. 1,894,702; Jan. 17.

Peck, Edward B., Elizabeth, N. J., assignor to Standard-I. G. Company. Reactivation of catalyst used for the hydrogenation of hydrocarbon oils. 1,894,785; Jan. 17.

Peckerman, Charles, New York, N. Y. Lamp bulb. Des. 89,056; Jan. 17.

Peerless Motor Car Corporation. (See Thomas, Stanley R., assignor.)

Peirce, August D., Oakland, Calif. Handcuff holster. 1,894,540; Jan. 17.

Pennoyer, Mary J. B., administratrix. (See Bennett, James H.)

Pennsylvania Railroad Company. (See Butts, George W., assignor.)

Pesbout, Anton, San Francisco, Calif. Christmas tree stand. 1,894,473; Jan. 17.

Peterson, Walter E., Inglewood, Calif. Tank car valve locking device. 1,894,830; Jan. 17.

Petroleum Chemical Corporation. (See Brooks, Benjamin T., assignor.)

Pevely Dairy Company. (See Copp, Ralph, assignor.)

Pew, Thomas C., assignor to Hoover Steel Ball Company, Ann Arbor, Mich. Washing machine for bearings. 1,894,786; Jan. 17.

Phelps, Clyde H., Mount Vernon, N. Y., assignor to Riess Manufacturing Company, Kokomo, Ind. Caster-maintaining shim. 1,894,495; Jan. 17.

Phenix, Maurice C., Los Angeles, Calif. Rolled edge construction. 1,894,831; Jan. 17.

Philad Company, The. (See Mayer, Josef, assignor.)

Philips', N. V., Gloeilampenfabrieken. (See Jansen, M. J., Vermeulen, and Voorhoeve, assignors.)

Phillips, Nathan C., assignor to Russia Cement Company, Gloucester, Mass. Method and apparatus for the conversion of starch to dextrine and the like. 1,894,570; Jan. 17.

Phillips, Nathan C., assignor to Russia Cement Company, Gloucester, Mass. Apparatus for heat treating materials. 1,894,571; Jan. 17.

Pickett, Arthur B., Haines City, Fla. Fertilizer and making same. 1,894,496; Jan. 17.

Piepgras, Stanley S., Chicago, Ill. Generator for hydrocarbon burners. 1,894,417; Jan. 17.

Pierce, Robert C., assignor to National-Standard Company, Niles, Mich. Wire straightening apparatus. 1,894,703; Jan. 17.

Pine Institute of America Incorporated. (See Kesler, Carl C., assignor.)

Pingrey, Wilson H., Blairstown, Iowa. Crank case oil heater. 1,894,887; Jan. 17.

Pinto, Julian F., assignor of one-half to W. B. Jenkins, Sacramento, Calif. Elastic supporter and clasp. 1,894,541; Jan. 17.

Piper, William B., assignor of twenty-five per cent to B. C. Welch, Memphis, Tenn. Illuminated sign. 1,894,704; Jan. 17.

Pitcairn, Harold F., Bryn Athyn, assignor to Autogiro Company of America, Philadelphia, Pa. Aircraft with rotative sustaining blades or wings. 1,894,418; Jan. 17.

Pittsburgh Tag Company. (See Magidson, Frank, assignor.)

Pleiss, Walter H., Ludington, Mich. Fruit squeezer. Des. 89,057; Jan. 17.

Ponton, Richard, Central Falls, R. I. Shoulder strap. 1,894,888; Jan. 17.

Popp, Rudolf, Valparaiso, Ind., assignor to McGill Manufacturing Company. Switch movement. 1,894,382; Jan. 17.

Pott, Alfred, Essen-on-the-Ruhr, Germany. Purification of coal distillation gases. 1,894,419; Jan. 17.
Prodorite, S. A. (See Fender, Harold W., assignor.)
Prosperity Company, The. (See Davis, Ernest, assignor.)
Prosperity Company, The. (See Zimarik, John, assignor.)
Pure Oil Company, The. (See Osterstrom, Rudolph C., assignor.)
Pure Oil Company, The. (See Watson, Cornelius B., assignor.)
Putt, Earl B., New York, N. Y. Phenolphthalein composition and making same. 1,894,889; Jan. 17.
Quiroz, Francisco A., Brooklyn, N. Y. Apparatus for separation. 1,894,520; Jan. 17.
Radigan, John E., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich. Apparatus for forming molds. 1,894,324; Jan. 17.
Radio Corporation of America. (See Avery, John M., assignor.)
Radio Corporation of America. (See Round, Henry J., assignor.)
Radle, Henry J., Evanston, Ill., assignor to Monark Battery Company, Inc. Grid pasting machine. 1,894,705; Jan. 17.
Ranish, Harry, Los Angeles, Calif. Mopping, spreading, and polishing device. 1,894,420; Jan. 17.
Rantsch, Edward J., Hollis, N. Y., assignor to Hill Independent Manufacturing Company, Germantown, Pa. Seal press. 1,894,921; Jan. 17.
Raub, Edgar M., Philadelphia, Pa. Combination cigarette dispenser and lighter. Des. 89,058; Jan. 17.
Raub, Frederic H., South Orange, assignor to J. Wiss & Sons Co., Newark, N. J. Tinner's snips. 1,894,787; Jan. 17.
Rea, James C., assignor to Pacific Electric Manufacturing Corporation, San Francisco, Calif. Electrical switch. 1,894,421; Jan. 17.
Reach, William F., Springfield, Mass., assignor to A. G. Spalding & Bros., New York, N. Y. Golf club with metallic shaft and hosel. 1,894,706; Jan. 17.
Reach, William F., Springfield, Mass., assignor to A. G. Spalding & Bros., New York, N. Y. Golf club with metallic shaft and hosel. 1,894,707; Jan. 17.
Reeps, Charles O., deceased, by H. E. Reeps, executrix, Waukegan, Ill., assignor to National Laundry Machinery Company Inc., Syracuse, N. Y. Ironing and aerating press. 1,894,422; Jan. 17.
Reeps, Harriette E., executrix. (See Reeps, Charles O., assignor.)
Reimschissel, Charles A. (See Shearer, H. T., and Reimschissel.)
Reiter, Daniel I., New York, N. Y. Fastener socket. 1,894,521; Jan. 17.
Republic Steel Corporation. (See Cape, A. T., and Bowman, assignors.)
Resch, Charles H., Akron, Ohio. Demountable rim for wire wheels. 1,894,572; Jan. 17.
Resinous Products & Chemical Co. Inc., The. (See Bruson, Herman A., assignor.)
Riberolles, René, Paris, France. Aiming apparatus for antiaircraft fire. 1,894,788; Jan. 17.
Rich, Chester A., Cincinnati, Ohio. Ironing board structure. 1,894,423; Jan. 17.
Rich, Chester A., Cincinnati, Ohio. Ironing stand with stabilizing means. 1,894,424; Jan. 17.
Richter, William and P. Fray, Tampa, Fla. Fire extinguisher. 1,894,325; Jan. 17.
Riess, Hermann, Berlin-Schoneberg, Germany. Pressure fluid generator. 1,894,922; Jan. 17.
Riess Manufacturing Company. (See Phelps, Clyde H., assignor.)
Ringel, Charles, Hawthorne, N. J., and W. K. Carter, Brooklyn, assignors to American Throttle Company, Inc., New York, N. Y. Throttle. 1,894,789; Jan. 17.
Rintelman, William L., Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. 2, 6-diamino-anthraquinone sulphides and preparing the same. 1,894,790; Jan. 17.
Ritchie, W. C., and Company. (See Fluegge, Robert H., assignor.)
Rivington, John A., Carp, Ontario, Canada. Dividing attachment for mowing machines. 1,894,542; Jan. 17.
Robbins, William H., and R. F. Boehler, jr., Springfield, assignors to The Williams Company, London, Ohio. Steel wool machine. 1,894,447; Jan. 17.
Robbins, William H., and R. F. Boehler, jr., Springfield, assignors to The Williams Company, London, Ohio. Steel wool machine. 1,894,448; Jan. 17.
Robertson, Robert R. (See Burrell, William C., assignor.)
Robin, Philip T., Erie, Pa., assignor, by mesne assignments, to The Wellman Engineering Company, Cleveland, Ohio. Vehicle. 1,894,633; Jan. 17.
Robins, C. H. D., Co. (See Greene, Francie R., assignor.)
Robinson, John C., Pittsburgh, Pa. Comb. 1,894,882; Jan. 17.
Roebling's, John A., Sons and Company. (See Clark, David W., assignor.)
Roessner, William L., Denver, Colo. Thermoresponsive restraining device. 1,894,425; Jan. 17.
Roetger, Hans. (See Schlecht, L., and Roetger.)
Rohling, John M., Plainfield, N. J., assignor to American Car and Foundry Company, New York, N. Y. Portable electric tool. 1,894,634; Jan. 17.
Rolscreen Company. (See Dixson, Harry, assignor.)
Rossi, Antonio, Silver Lake, N. J. Combined automatic clutch and transmission mechanism for automobiles. 1,894,890; Jan. 17.
Round, Henry J., Westfield, Muswell Hill, London, England, assignor to Radio Corporation of America. Four-electrode valve. 1,894,590; Jan. 17.
Rowe, Raymond N., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Electric switch. 1,894,543; Jan. 17.
Rowland, Jasper M., Niagara Falls, assignor to Hooker Electrochemical Company, New York, N. Y. Gas-dispensing apparatus. 1,894,497; Jan. 17.
Royal Typewriter Company. (See Dowd, Bernard J., assignor.)
Royle, Robert N., Ossining, N. Y. Bookmark. Des. 89,073; Jan. 17.
Ruben Patents Company. (See Ruben, Samuel, assignor.)
Ruben, Samuel, New Rochelle, assignor to Ruben Patents Company, New York, N. Y. Electrical discharge device. Re18,713; Jan. 17.
Ruby, William H., and J. E. Cooper, assignors to Western Venetian Blind Co., Los Angeles, Calif. Lifting and locking device for Venetian blinds. 1,894,833; Jan. 17.
Rudolph, Corrie F., Washington, D. C. Variable inductance system. 1,894,498; Jan. 17.
Rudorff, Dagobert W., assignor to The Superheater Company, New York, N. Y. Desuperheater. 1,894,791; Jan. 17.
Rueger, Anna, et al. (See Mathers, Harry M., assignor.)
Rupnow, William L., Columbus, Ohio. Elevator brake. 1,894,426; Jan. 17.
Russell, Edward A., Chicago, and P. B. Parks, Oak Park, assignors to Vapor Car Heating Company, Inc., Chicago, Ill. Vapor regulator. 1,894,360; Jan. 17.
Russia Cement Company. (See Phillips, Nathan C., assignor.)
Russian, Michael, Binghamton, N. Y. Safety loop for brake beams. 1,894,522; Jan. 17.
Ruth Aldo Company (Inc.). (See Barthelemy, Henri L., assignor.)
Ryan, Commodore D., Los Angeles, Calif., assignor to Ralph C. Whitlock Patents, Inc., Las Vegas, Nev. Envelope moistener. 1,894,427; Jan. 17.
Ryberg, Josef E. (See Oberdorfer, Max., assignor.)
Sachsenmaier, Elwood W., assignor to Larkwood Silk Hosiery Mills, Inc., Charlotte, N. C. Hosiery. 1,894,891; Jan. 17.
Sadler, Leo M., Canova, S. Dak. Sliding doorlatch. 1,894,913; Jan. 17.
St. Louis Tire Retreading Machine Company. (See Dacon, C. H., and Stults, assignors.)
Salm, Alfred, assignor to Salm & Bruns, Ludwig Stolberg Nachf., Brunswick, Germany. Hair-drying apparatus. 1,894,709; Jan. 17.
Salm & Bruns, Ludwig Stolberg Nachf. (See Salm, Alfred, assignor.)
Samuel, John M., Douglas, Ariz. Container for hot comminuted material. 1,894,523; Jan. 17.
Samuelson, Charles B., Peninsula Township, Grand Traverse County, Mich. Outboard propelling motor for boats. 1,894,710; Jan. 17.
Sandvoss, Hermann, Frankfort-on-the-Main, Germany. Meter for heat quantities. 1,894,449; Jan. 17.
Santos, John R. L., assignor to The Bartlett Hayward Company, Baltimore, Md. Gas holder. 1,894,635; Jan. 17.
Sardeson, Robert, Minneapolis, Minn., assignor to Lewis Bolt & Nut Company. Bolt. 1,894,708; Jan. 17.
Satterquist, John, Olympia, assignor of one-half to Mill Engineering and Supply Company, Seattle, Wash. Unloading apparatus. 1,894,326; Jan. 17.
Savoye, Charles U. (See Kerr, H. J., and Savoye.)
Scandore, Nicholas, Brooklyn, N. Y. Container construction. 1,894,295; Jan. 17.
Schacht, Clifford A., Huntington, Ind. Faucet connecter. 1,894,711; Jan. 17.
Scheibell, Gordon B., Newark, N. J., assignor to Wired Radio, Inc., New York, N. Y. Oscillation generator. 1,894,636; Jan. 17.
Scheibell, Gordon B., Newark, N. J., assignor to Wired Radio, Inc., New York, N. Y. Oscillation system. 1,894,637; Jan. 17.
Schell, Charles, assignor to Schell Leather Goods Company, Cincinnati, Ohio. Brief case. 1,894,544; Jan. 17.
Schell Leather Goods Company. (See Schell, Charles, assignor.)
Schellenger, Newton C., assignor to Chicago Telephone Supply Company, Elkhart, Ind. Fixed clamp. 1,894,327; Jan. 17.
Schilling, Heinrich. (See Eisenhut, O., and Schilling.)
Schlecht, Leo, and H. Roetger, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of valuable products from gaseous unsaturated hydrocarbons. 1,894,792; Jan. 17.
Schleicher, Frank J., University City, Mo. Box. 1,894,450; Jan. 17.
Schlumberger, Conrad, Paris, France. Electrical device for the determination of specific resistivity. 1,894,328; Jan. 17.
Schlumbohm, Peter, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn. Regulating the cooling effect of refrigerant. 1,894,638; Jan. 17.

Schlumbohm, Peter, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn. Mirror. 1,894,639; Jan. 17.
Schlumbohm, Peter, Berlin, Germany. Apparatus for absorbing aqueous vapors by means of a hygroscopic liquid such as sulphuric acid in a vacuum. 1,894,893; Jan. 17.
Schmidt, Charles D., Jamaica, N. Y. Chain. 1,894,600; Jan. 17.
Schmidt, Hugo F., and L. Jung, Milwaukee, Wis. Workholder. 1,894,451; Jan. 17.
Schmidt Lithograph Company. (See Bruntsch, Carl G., assignor.)
Schmitter, Walter P., assignor to The Falk Corporation, Milwaukee, Wis. Gear set. 1,894,927; Jan. 17.
Schoenfeld, Joseph, San Francisco, Calif. Ice cream cone. 1,894,545; Jan. 17.
Schomer, Henry J., assignor to Waite Carpet Company, Oshkosh, Wis. Bracket for funeral drapes. 1,894,793; Jan. 17.
Schrader's, A., Son, Incorporated. (See Wahl, John, assignor.)
Schutte and Koerting Company. (See Lindemann, Otto A., assignor.)
Schwarzenbach Huber Company, The. (See Schweizer, Pack, assignor.)
Schwarzkopf, Arthur R., assignor to Theo. A. Kochs Company, Chicago, Ill. Barber's pole. 1,894,640; Jan. 17.
Schweiter, Walter, Horgen, near Zurich, Switzerland. Warping frame. 1,894,712; Jan. 17.
Schweizer, Jack, Rye, assignor to The Schwarzenbach Huber Company, New York, N. Y. Textile fabric or the like. Des. 89,059; Jan. 17.
Sckowska, Henry G., Blue Mound, Ill. Ridge cutter for disk harrows. 1,894,474; Jan. 17.
Scott Paper Company. (See Parsons, Philip D., assignor.)
Scott, Thomas J., Foley, Ala., assignor to Swann Research, Inc. Process and apparatus for the production of diphenyl. 1,894,283; Jan. 17.
Scovill Manufacturing Company. (See Bennett, Morris H., assignor.)
Searle, Clarence C., Taft, Calif. Self cleaning centrifugal sieve. 1,894,718; Jan. 17.
Seeley, Paul S. (See Mitchell, Henry C., assignor.)
Seiler, John D., Milton, Pa., assignor to American Car and Foundry Company, New York, N. Y. Forming tank domes. 1,894,842; Jan. 17.
Senauke, Alexander, New York, assignor to King Manufacturing Corporation, Buffalo, N. Y. Double action volume control. 1,894,794; Jan. 17.
Seward, Robert B., Guilford, Conn., assignor to Zotos Corporation, New York, N. Y. Hair waving device. 1,894,795; Jan. 17.
Seward, Robert B., Guilford, Conn., assignor to Zotos Corporation, New York, N. Y. Hair waving device. 1,894,796; Jan. 17.
Seward, Robert B., Guilford, Conn., assignor to Zotos Corporation, New York, N. Y. Hair waving device. 1,894,797; Jan. 17.
Seward, Robert B., Guilford, Conn., assignor to Zotos Corporation, New York, N. Y. Hair waving device. 1,894,798; Jan. 17.
Sexton, Thomas J., Henryetta, Okla. Drinking fountain. 1,894,573; Jan. 17.
Shafer, Samuel, jr., assignor to Chain Belt Company, Milwaukee, Wis. Agitating attachment for vehicle bodies. 1,894,475; Jan. 17.
Shank, Charles L., North Canton, Ohio, assignor to The Hoover Company. Suction cleaner agitator. 1,894,361; Jan. 17.
Shaw, John W., San Francisco, Calif. Gearless transmission. 1,894,574; Jan. 17.
Shaw, Louis E., East Orange, N. J., assignor to Adartcraft, Incorporated, New York, N. Y. Steel rule die. 1,894,641; Jan. 17.
Shearer, Harry T., and C. A. Reimschissel, assignor to Landis Machine Company, Waynesboro, Pa. Die head. 1,894,296; Jan. 17.
Sherman, Roger W., Needham, Mass. Container cover plate. 1,894,575; Jan. 17.
Sherry, Phillip G., Oklahoma City, Okla., assignor to P. F. O'Brien, Shreveport, La. Device for pumping oil from a well. Re18,717; Jan. 17.
Shiraishi, Hikokuma, Wilmington, and W. S. O'Hira, Terminal Island, Calif. Fishing bridge. 1,894,428; Jan. 17.
Shultz, Reno O., Montevideo, Minn. Brake equalizer. 1,894,714; Jan. 17.
Shuster, F. B., Company, The. (See Hutchinson, Frank C., assignor.)
Siecke, Wolfhart. (See von Giraewald, C., Baron, and Siecke.)
Siegel, Chester A., Newark, N. J. Locomotive boiler. 1,894,613; Jan. 17.
Siemens & Halske Aktiengesellschaft. (See Hansel, G., and Michael, assignors.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Nesselmann, K., and Bräuer, assignors.)
Sillince, William P., London, assignor to Alfred Wiseman Limited, Birmingham, England. Pump mechanism for effecting a pressure feed of liquids. 1,894,834; Jan. 17.
Simpson Motor Corporation. (See Simpson, Napoleon B., assignor.)
Simpson, Napoleon B., assignor to Simpson Motor Corporation, San Francisco, Calif. Valve. 1,894,546; Jan. 17.
Slavek, Frederick, New York, N. Y. Automatic power transmission. 1,894,894; Jan. 17.
Sloane-Blabon Corporation. (See Whitney, William R., assignor.)
Sloane, William W., assignor to Goodman Manufacturing Company, Chicago, Ill. Drive mechanism for shaker conveyors. 1,894,923; Jan. 17.
Small, Norman N., assignor to Frick Company, Waynesboro, Pa. Carbon-dioxide ice machine. 1,894,892; Jan. 17.
Smith, Anthony N., assignor to The Girard Model Works Inc., Girard, Pa. Toy cash register. 1,894,524; Jan. 17.
Smith, E. M., Company. (See McLaine, William L., assignor.)
Smith, Edwin W., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Last. 1,894,452; Jan. 17.
Smith, Frank H., Kent, and H. A. Stringfellow, Akron, Ohio. Method of and apparatus for joining pipes. 1,894,835; Jan. 17.
Smith, George L., Hyde Park, Mass. Automobile shield and grille. 1,894,715; Jan. 17.
Smith, Herbert L. (See Mortland, J. A., and Smith.)
Smith, John A., Spokane, Wash. Automobile body construction. 1,894,883; Jan. 17.
Smith, John H., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condensing system. 1,894,284; Jan. 17.
Smith, William A., jr., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Distributing valve. 1,894,799; Jan. 17.
Smitmans, John A. (See Biggert, F. C., jr., and Smitmans.)
Snow, Norman L., New Canaan, and W. P. Thomas, assignors to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,894,297; Jan. 17.
Snyder, Joseph A. (See Gagne, A. L., and Snyder.)
Soabar Company. (See Henry, George W., jr., assignor.)
Societe of Chemical Industry in Basle. (See Blanchod, J., and Wirs, assignors.)
Societe "Quartz & Silice". (See Delpech, Gaston, assignor.)
Society of Chemical Industry in Basle. (See Tobler, R., and Kern, assignors.)
Sommer, William H. (See Ochiltree, Ned A., assignor.)
Southern Textile Machinery Company. (See Parkin, Robert N., assignor.)
Spalding, A. G., & Bros. (See Reach, William F., assignor.)
Sperry, Richard A. (See McLaine, William L., assignor.)
Spicers Limited. (See Barnes, Edward J., assignor.)
Sprague, Lucy A., administratrix. (See Krause, Paul.)
Sprague, William E., et al. (See Krause, Paul, assignor.)
Sprinkle, Charles L. (See Hall, Hugh M., assignor.)
Sproul, Donald F., Chicago, Ill., assignor to Cardwell Westinghouse Company. Cushioning device. 1,894,716; Jan. 17.
Sproul, Donald F., Chicago, Ill., assignor to Cardwell Westinghouse Company. Cushioning device. 1,894,717; Jan. 17.
Squibb, E. R., & Sons. (See Christiansen, W. G., and Jurist, assignors.)
Stahl, Frank E., assignor to The Columbus McKinnon Chain Corporation, Tonawanda, N. Y. Antiskid tire chain. 1,894,914; Jan. 17.
Standard Car Truck Company. (See Webb, Edwin W., assignor.)
Standard-I. G. Company. (See Jennings, James M., assignor.)
Standard-I. G. Company. (See Peck, Edward B., assignor.)
Standard Oil Company. (See Voorhees, Vanderveer, assignor.)
Stant Manufacturing Co. (See Johnson, Glen A., assignor.)
Stanton Ironworks Company, The. (See Wilson, Percy H., assignor.)
Starr, Alden B., Brooklyn, N. Y., assignor to Knapp-Monarch Company. Electromagnet. 1,894,429; Jan. 17.
Starr, Alden B., Brooklyn, N. Y., assignor to Knapp-Monarch Company. Toaster device. 1,894,430; Jan. 17.
Stayton, Frank J., Birmingham, Ala., assignor to Batterton Coffee Co. Inc. Jar. Des. 89,074; Jan. 17.
Steel and Tubes, Inc. (See O'Connor, B. J., and Hannon, assignors.)
Steele, Arthur B., Beltinge, Herne Bay, and J. Lines, Betteshanger, near Deal, England; said Lines assignor to said Steele. Detachable suspension or gripping device. 1,894,895; Jan. 17.
Stern, Karl, Baden, near Vienna, and J. Kubin, Mollersdorf, Austria; said Kubin assignor to said Stern. Stamp and drawing press. 1,894,718; Jan. 17.
Stewart, John V. (See Kimmel, I. B., and Stewart.)
Stine, Anna D., Chicago, Ill. Combination furniture. 1,894,362; Jan. 17.
Stinis, Wed C. (See van der Schans, M., and Hilgers, assignors.)
Stowe, Eric L., Torrington, assignor to The American Brass Company, Waterbury, Conn. Feed mechanism for swaging machines. 1,894,800; Jan. 17.

Strait, Ralph H., Ligonier, Ind., assignor to Hussmann-Ligonier Company, St. Louis, Mo. Decorating refrigerated containers. 1,894,476; Jan. 17.
Stringfellow, Henry A. (See Smith, F. H., and Stringfellow.)
Stroman, Charles F., et al. (See Bergman, Ernest C., assignor.)
Stroud, Ernest, London, England. Luminair. 1,894,915; Jan. 17.
Stukenborg, Louis C., Memphis, Tenn. Brake testing means and methods for automobiles. 1,894,643; Jan. 17.
Stults, Virgil. (See Dacon, C. H., and Stults.)
Sturdevant, Earl G., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Coating metallic bodies. 1,894,644; Jan. 17.
Sullivan, Timothy J., Butte, Mont. Wall shield, shelf, and ventilator. 1,894,896; Jan. 17.
Sulzer Frères Société Anonyme of Winterthur. (See Egloff, Hans C., assignor.)
Summers, James L. (See Bozard, J. C., and Summers.)
Superheater Company, The. (See Rudorff, Dagobert W., assignor.)
Sutton, Charles Z., Piedmont, assignor to Instograph Ltd., Oakland, Calif. Machine base. 1,894,453; Jan. 17.
Sutton, Wiley F., Gladewater, and J. P. Hensler, Corsicana, Tex. Hydraulic belt stretcher. 1,894,298; Jan. 17.
Svenson, Ernest J., Rockford, Ill. Cam milling attachment for lathes and other machine tools. 1,894,719; Jan. 17.
Swails, James L., Portland, Oreg., assignor to Bellingham Chain and Forge Company, South Bellingham, Wash. Oar or canoe paddle. 1,894,499; Jan. 17.
Swank, Luke H. (See Bowman, Carl O., assignor.)
Swann Research, Inc. (See Durgin, C. B., and Jenkins, assignors.)
Swann Research, Inc. (See Scott, Thomas J., assignor.)
Swartwout Company, The. (See Barrett, Joseph M., assignor.)
Swartwout Company, The. (See Barrett, J. M., and Fritze, assignors.)
Sweeney, Floyd De C., Fresno, Calif. Fishing lure. 1,894,500; Jan. 17.
Swesey, William F., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Refrigerating apparatus. 1,894,285; Jan. 17.
Sykes, Wesley P., Cleveland Heights, Ohio, assignor to General Electric Company, New York, N. Y. Metal working alloy. 1,894,836; Jan. 17.
Symons, Edgar B., Hollywood, Calif., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Crushing machine. 1,894,601; Jan. 17.
Tallmadge, Andrew P., Washington, D. C. Cable armor cutter. 1,894,329; Jan. 17.
Tarr, Lester W. (See Hollingworth, D. W., and Tarr.)
Tatter, John W., assignor to Lewis Differential Company, Chicago, Ill. Brake. 1,894,525; Jan. 17.
Taylor, Harry, et al. (See Krause, Paul.)
Taylor, Maurice C., and J. F. White, Niagara Falls, assignors to The Mathieson Alkali Works, Inc., New York, N. Y. Manufacture of wood pulp. 1,894,501; Jan. 17.
Taylor, Pleasant L. B., Booneville, Miss. School desk. 1,894,502; Jan. 17.
Terry, Edward F., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Water connection. 1,894,801; Jan. 17.
Thomas, Stanley R., assignor to Peerless Motor Car Corporation, Cleveland, Ohio. Vehicle frame. 1,894,602; Jan. 17.
Thomas, W. M. (See Bartley, Joseph A., assignor.)
Thomas, Willis P. (See Snow, N. L., and Thomas.)
Thompson, Louis W., Schenectady, N. Y., assignor to General Electric Company. Electrical regulation. 1,894,837; Jan. 17.
Thorn, William A. J. (See Agate, C. S., and Thorn.)
Tinkham, Guy L., assignor to General Utilities Mfg. Co., Detroit, Mich. Ice tray. 1,894,897; Jan. 17.
Tobler, Richard, Riehen, near Basel, and W. Kern, Sissach, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Manufacture of 1-amino-2-alkoxynaphthalenes. 1,894,330; Jan. 17.
Todt, Edward G., Chicago, Ill. Welding clamp. 1,894,454; Jan. 17.
Toledo Machine & Tool Company, The. (See Williamson, Larkin R., assignor.)
Towne, Leland J., Oklahoma City, Okla. Double check valve. 1,894,603; Jan. 17.
Trane, Reuben N., La Crosse, Wis. Humidifier. 1,894,898; Jan. 17.
Travis, John S., Long Island City, N. Y., assignor to Bigelow Sanford Carpet Co. Inc. Carpet. Des. 89,060; Jan. 17.
Tremblay, Albert F., Winchester, Ind. Bottle conveying and cooling machine. 1,894,576; Jan. 17.
Treppenhauer, Max. (See Groenkinsky, O., and Treppenhauer.)
Tretolite Company. (See De Groote, M., and Wirtel, assignors.)
Tripe "XXX" Company. (See Dawson, James F., assignor.)
Troemer, Arthur M., Maplewood, N. J., assignor to Wired Radio, Inc., New York, N. Y. Selective filter system. 1,894,645; Jan. 17.
Trogner, Arthur M., Maplewood, N. J., assignor to Wired Radio, Inc., New York, N. Y. Remote control for space and wired radio systems. 1,894,646; Jan. 17.
Trambulle Electric Manufacturing Company, The. (See Rowe, Raymond N., assignor.)
Trebochner, Hermann, Komotau, Czechoslovakia. Method and apparatus for machining rolls such as pilger rolls and the like. 1,894,899; Jan. 17.
Tucker, John T., assignor to M. Lothrop, Berkeley, Calif. Can feeder. 1,894,547; Jan. 17.
Tull, Frank H. (See Messick, John C., assignor.)
Tuthill Pump Company. (See Kempton, Herbert E., assignor.)
Tuttle, William R., Rochester, N. Y. Display stand. Des. 89,061; Jan. 17.
Twiss, Douglas F. (See Murphy, E. A., James, and Twiss.)
Union Switch & Signal Company, The. (See Bone, Herbert L., assignor.)
Union Switch & Signal Company, The. (See Grondahl, Lars O., assignor.)
United Autographic Register Co. (See Jensen, Louis, assignor.)
United-Carr Fastener Corporation. (See Hall, Charles L., assignor.)
United Engineering and Foundry Company. (See Biggert, F. C., jr., and Smithans, assignors.)
United Gas Improvement Company, The. (See Brady, Edward J., assignor.)
United Mattress Machinery Co. Inc. (See Mathewson, Wilfred B., assignor.)
United Shoe Machinery Corporation. (See Bradbury, Albert W., assignor.)
United Shoe Machinery Corporation. (See Hazelton, George, assignor.)
United Shoe Machinery Corporation. (See Smith, Edwin W., assignor.)
United States Gauge Company. (See Corcoran, Lewis L., assignor.)
United States Metals Refining Company. (See Eppensteiner, William F., assignor.)
Universal Draft Gear Attachment Co. (See Wilson, Jack, assignor.)
Ural-Maschinen-Vertriebegesellschaft m. b. H. (See Meyer, Friedrich W., assignor.)
Urschel, William E., Valparaiso, Ind. Beet harvester. 1,894,802; Jan. 17.
Vaghelatos, James, Toledo, Ohio. Hair waver. 1,894,431; Jan. 17.
Vanderbilt, Isaac S., Maplewood, N. J. Bathtub. Des. 89,062; Jan. 17.
Vanderlip, Louis C., Elkhart, Ind. Engine oiling device. 1,894,477; Jan. 17.
Van der Schans, Martien, Krimpen A. D. Ijssel, and G. Hilgers, Rotterdam, assignors to the Firm of Wed. C. Stinis, Krimpen-on-the-Lek, South-Holland, Netherlands. Guide block, pulley block and the like. 1,894,286; Jan. 17.
Van Halteren, Andrew S., East Lansing, assignor to Motor Wheel Corporation, Lansing, Mich. Wheel demounting means. 1,894,287; Jan. 17.
Vapor Car Heating Company. (See Russell, E. A., and Parks, assignors.)
Varga, Josef, Budapest, Hungary, assignor to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Hydrogenation of naphthalene. 1,894,924; Jan. 17.
Varga, Josef, Budapest, Hungary, assignor to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Hydrogenation of naphthalene. 1,894,925; Jan. 17.
Varga, Josef, Budapest, Hungary, assignor, by mesne assignments, to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Destructive hydrogenation of carbonaceous substances. 1,894,926; Jan. 17.
Velardi, Frank S., et al. (See Lipstadt, Sigmund, assignor.)
Vennum, George C., Wilmington, Del., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,894,299; Jan. 17.
Vensie, Edmond F., assignor to Frederick M. Vensie, Philadelphia, Pa. Building construction. 1,894,932; Jan. 17.
Vensie, Edmond F., assignor to Frederick M. Vensie, Philadelphia, Pa. Building construction. 1,894,933; Jan. 17.
Vensie, Frederick M. (See Vensie, Edmond F., assignor.)
Vermeulen, Roelof. (See Jansen, M. J., Vermeulen, and Voorhoeve.)
Victor, Benjamin, and R. B. Abramson, New York, N. Y. Burner control and pilot light for gas stoves. 1,894,900; Jan. 17.
Vivian, Frank H. (See Berger, M. W., and Vivian.)
Vlahov, George, New York, N. Y., assignor to Ohmer Fare Register Company, Dayton, Ohio. Flag locking mechanism for taximeters. 1,894,384; Jan. 17.
Von Esdorf, Richard, Oneida, N. Y. Combination telephone stand and telephone bookholder. Des. 89,063; Jan. 17.

Von Girsewald, Conway, Baron, and W. Siecke, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y. Eliminating arsenic from acids, particularly sulphuric acid. 1,894,720; Jan. 17.
Voorhees, Vanderveer, Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill. Insectifuge. 1,894,604; Jan. 17.
Voorhoeve, Nicholas A. J. (See Jansen, M. J., Vermeulen, and Voorhoeve.)
Wagner Electric Corporation. (See Weichsel, Hans, assignor.)
Wagner, Theodore B., Brooklyn, N. Y. Metal organic phosphate and making same. 1,894,647; Jan. 17.
Wahl, John, Rosedale, assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y. Pressure gauge. 1,894,648; Jan. 17.
Wahlstrom, Fred D., Chicago, Ill. Frame for displaying advertising cards. 1,894,803; Jan. 17.
Waite Carpet Company. (See Schomer, Henry J., assignor.)
Wakefield, R. T., et al. (See Bozard, J. C., and Summers, assignors.)
Walp, Charles F., Berwick, Pa., assignor to American Car and Foundry Company, New York, N. Y. Skid box. 1,894,649; Jan. 17.
Walsh, Lincoln, Elizabeth, assignor to Haseltine Corporation, Jersey City, N. J. Radio frequency amplifier. 1,894,503; Jan. 17.
Waterbury Farrel Foundry and Machine Company, The. (See Wilcox, Richard L., assignor.)
Watson, Cornelius B., assignor to The Pure Oil Company, Chicago, Ill. Liquid phase polymerization of hydrocarbon oils. 1,894,831; Jan. 17.
Watson, George R., Waterloo, Iowa. Well drilling machine. 1,894,432; Jan. 17.
Weaver, William E., Toronto, Ontario, Canada, assignor to General Electric Company. Electrical control system. 1,894,888; Jan. 17.
Webb, Edwin W., assignor to Standard Car Truck Company, Chicago, Ill. Spring damping car truck. 1,894,385; Jan. 17.
Webb, Edwin W., assignor to Standard Car Truck Company, Chicago, Ill. Spring damping truck. 1,894,386; Jan. 17.
Weichsel, Hans, assignor to Wagner Electric Corporation, St. Louis, Mo. Alternating current motor. 1,894,804; Jan. 17.
Weichsel, Hans, assignor to Wagner Electric Corporation, St. Louis, Mo. Single phase motor. 1,894,805; Jan. 17.
Weigel, Hans, Ecking Germany. Rolling process. 1,894,288; Jan. 17.
Weis, Andrew L., Fort Lauderdale, Fla. Child's comfort toilet seat. 1,894,387; Jan. 17.
Weiss, John M., New York, N. Y. Production of resins of the coumarone-indene type. 1,894,934; Jan. 17.
Welch, Ben C. (See Piper, William B., assignor.)
Wellman Engineering Company, The. (See Robin, Philip T., assignor.)
Wells, Sidney D., Quincy, Ill., assignor to The Mine & Smelter Supply Company, Denver, Colo. Production of fiber. 1,894,577; Jan. 17.
Wempe, Fridolin J., St. Marys, Kans. Bottle cap. 1,894,504; Jan. 17.
Werner, Charles. (See Werner, Theodore and C.)
Werner, John, & Sons, Inc. (See Werner, Theodore and C., assignors.)
Werner, Karl, Nuremberg-Eibach, Germany. Suspension spring. 1,894,839; Jan. 17.
Werner, Theodore and C., assignors to John Werner & Sons, Inc., Rochester, N. Y. Molding candy centers. 1,894,651; Jan. 17.
Wesche, Bjarne A., Cincinnati, Ohio. Variable speed reactor control. 1,894,928; Jan. 17.
Westerberg, Jennie M., Boring, Oreg. Sanitary milk pail. 1,894,382; Jan. 17.
Westerman, Claude C. and G. L., Bremen, Ohio. Valve. 1,894,505; Jan. 17.
Westerman, Guy L. (See Westerman, Claude C. and G. L.)
Western Electric Company. (See Cox, Thomas K., assignor.)
Western Electric Company. (See Sturdevant, Earl G., signor.)
Western Venetian Blind Co. (See Ruby, W. H., and Cooper, assignors.)
Westinghouse Electric & Manufacturing Company. (See Foresman, Robert A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Meyer, Frank A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Smith, John H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Swezey, William F., assignor.)
Wettlaufer, Jules L., Belmont, assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Strip shingle. 1,894,614; Jan. 17.
Wettlaufer, Jules L., Belmont, assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Strip shingle. 1,894,615; Jan. 17.
Weyerhaeuser Timber Company. (See Onstad, Albert H., assignor.)
Whitaker, Frank P., Rugby, England, assignor to General Electric Company. Arc discharge device. 1,894,806; Jan. 17.
White, James F. (See Taylor, M. C., and White.)
White Motor Company, The. (See Church, H. D., and Jehle, assignors.)
Whiting, Rufus, Palestine, Tex. Cotton hoe and reaper. 1,894,840; Jan. 17.
Whitlock, Ralph G., Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev. Resettable register. 1,894,483; Jan. 17.
Whitlock, Ralph G., Patents, Inc. (See Ryan, Commodore D., assignor.)
Whitlock, Ralph G., Patents, Inc. (See Whitlock G., assignor.)
Whitney, William E., Philadelphia, Pa., assignor, by mesne assignments, to Sloane-Blabon Corporation, New York, N. Y. Linoleum roller. 1,894,548; Jan. 17.
Wiedmann, Henry E., San Francisco, Calif. Polisher. 1,894,807; Jan. 17.
Wilcox, Richard L., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Header mechanism. 1,894,526; Jan. 17.
Willard, Waldo W. (See Hewlett, E. M., and Willard.)
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,064; Jan. 17.
Willheim, William, Co. (See Guhl, Maclyn, assignor.)
Willheim, William, Co. (See Kohut, Alexander, assignor.)
Willheim, William, Co. (See Megros, Roger, assignor.)
Williams Company, The. (See Robbins, W. H., and Boehler, assignors.)
Williams, Lee B., Pittsburgh, Pa. Toy projectile. 1,894,338; Jan. 17.
Williamson, Larkin R., assignor to The Toledo Machine & Tool Company, Toledo, Ohio. Hydraulic control device. 1,894,434; Jan. 17.
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Car tank closure. 1,894,652; Jan. 17.
Wilson, Clarence E., Manchester, Conn. Wrapping for plants. 1,894,506; Jan. 17.
Wilson, Jack, assignor to Universal Draft Gear Attachment Co., Chicago, Ill. Car coupler controller. 1,894,363; Jan. 17.
Wilson, Percy H., Carlton, Nottingham, assignor of one-half to The Stanton Ironworks Company, Limited, Nottingham, England. Jointing of pipe. 1,894,388; Jan. 17.
Wine, William E., Toledo, Ohio. Railway car. 1,894,721; Jan. 17.
Winter, Fred H., Schenectady, N. Y., assignor to General Electric Company. Speed responsive system. 1,894,810; Jan. 17.
Winter, Fred H., Schenectady, N. Y., assignor to General Electric Company. Electrical relay. 1,894,811; Jan. 17.
Winthrop Chemical Company. (See Bochmühl, M., and Ehrhardt, assignors.)
Winthrop Chemical Company. (See Knoll, Robert, assignor.)
Wire Novelty Manufacturing Company, The. (See Domkee, John H., assignor.)
Wired Radio, Inc. (See Barone, Salvatore A., assignor.)
Wired Radio, Inc. (See Davis, Chester L., assignor.)
Wired Radio, Inc. (See Scheibell, Gordon B., assignor.)
Wired Radio, Inc. (See Trogner, Arthur M., assignor.)
Wirtel, Arthur F. (See De Groote, M., and Wirtel.)
Wirth, Dorsey M., Bucyrus, Ohio. Belt buckle. 1,894,653; Jan. 17.
Wirth, Dorsey M., Bucyrus, Ohio. Belt buckle. 1,894,654; Jan. 17.
Wirs, Adolf. (See Blanchod, J., and Wirs.)
Wiseman, Alfred, Limited. (See Sillince, William P., assignor.)
Wiss, J. and Sons Co. (See Rauh, Frederic H., assignor.)
Witmer, Enos E. (See Morgan, E., and Witmer.)
Witte, Martin, Breslau, Germany. Rapid determination of the percentages of light and black constituents of finely grained mixtures. 1,894,808; Jan. 17.
Witte, Martin, Breslau, Germany. Testing of coal dust-mineral dust mixtures. 1,894,809; Jan. 17.
Wochner, Henry, assignor to Bear Manufacturing Company, Rock Island, Ill. Axle straightening mechanism. Re18,714; Jan. 17.
Wonderland Furniture, Ltd. (See Hallward, Michael, assignor.)
Wood, Benjamin F., Ridley Park, assignor to American Chemical Paint Company, Ambler, Pa. Purifying phosphoric acid. 1,894,289; Jan. 17.
Wood, Garfield A., Algonac, Mich. Propeller construction. 1,894,478; Jan. 17.
Woodruff, Joseph W. (See Groenig, A., and Woodruff.)
Woolsey, Claude, Washington, D. C., assignor to American Cyanamid Company, New York, N. Y. Hand fertiliser distributor. 1,894,864; Jan. 17.
World Bestos Corporation. (See Hanfeldt, William, assignor.)
Wright, John L., Michigan City, Ind. Building block. 1,894,605; Jan. 17.
Wuest, William O., Van Nuys, Calif. Battery plate filling machine. 1,894,812; Jan. 17.
Xavier, William J., Cliftondale, Mass. Combination blackboard and desk or the like. 1,894,334; Jan. 17.
Yengst, Charles R., Meadville, Pa., assignor to Hookless Fastener Company. Vehicle curtain. 1,894,527; Jan. 17.

Youhouse, Joseph, Fairfield, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Synchronous motor. 1,894,455; Jan. 17.
Zapf, Georg, Cologne, assignor to Felten & Guilleaume Carlswerk Actiengesellschaft, Cologne-Mulheim, Germany. Finishing the ends and fixing ropes. 1,894,389; Jan. 17.
Zarotschenzeff, Mikail T., London, England, assignor to American "Z" Corporation, New York, N. Y. Chilling and freezing foodstuffs. 1,894,813; Jan. 17.
Zeh, Ludwig. (See Bollweg, B., Zeh, and Kramer.)
Zenz, John and H. R. Kennedy, Los Angeles, Calif., said Zenz assignor to said Kennedy. Vehicle brake tester. 1,894,916; Jan. 17.
Zerk, Oscar U., Chicago, Ill. Universal panoramic tripod head. 1,894,456; Jan. 17.
Zerk, Oscar U., Chicago, Ill. Supporting means. 1,894,457; Jan. 17.
Zicke, Antonio, San Francisco, Calif. Electric sign. Des. 89,065; Jan. 17.
Zimarik, John, Akron, Ohio, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Hosiery press. 1,894,435; Jan. 17.
Zimmerman, Archie C., Los Angeles, Calif. Building construction. 1,894,528; Jan. 17.
Zinn, Manvel K., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Phantom telephone circuit. 1,894,335; Jan. 17.
Zotos Corporation. (See Seward, Robert B., assignor.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 17TH DAY OF JANUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acetylene. Production of. H. Haeuber and E. Linckh. 1,894,765; Jan. 17.
Acid manufacture, Phosphoric. I. Hechenbleikner. 1,894,514; Jan. 17.
Acidproof tank. H. W. Fender. 1,894,371; Jan. 17.
Acid, Purifying phosphoric. B. F. Wood. 1,894,289; Jan. 17.
Actuating mechanism for pressing machines. E. Davis. 1,894,929; Jan. 17.
Adjustable feeder. P. S. Martin. 1,894,278; Jan. 17.
Advertising, Apparatus for displaying. G. W. Eschenbach. 1,894,512; Jan. 17.
Advertising station announcing system and method, Automatic. W. D. Hawk. 1,894,684; Jan. 17.
Aeroplane. D. A. Lucchese. 1,894,518; Jan. 17.
Agitating attachment for vehicle bodies. S. Shafer, jr. 1,894,475; Jan. 17.
Aiming apparatus for antiaircraft fire. R. Riberolles. 1,894,788; Jan. 17.
Air conditioning device. F. M. Opitz. Des. 89,054; Jan. 17.
Aircraft propulsion mechanism. L. Balga. 1,894,844; Jan. 17.
Aircraft with rotative sustaining blades or wings. H. F. Pitcairn. 1,894,418; Jan. 17.
Aircraft with rotative wings. J. de la Cierva. 1,894,673; Jan. 17.
Air gun. J. C. Lay. 1,894,879; Jan. 17.
Air humidifier and washer. H. M. Hall. 1,894,864; Jan. 17.
Airplane propeller. G. T. Lampton. 1,894,276; Jan. 17.
Alarm and signal device, Motor driven. S. Lippstadt. 1,894,611; Jan. 17.
Alarm device and operating mechanism therefor. E. H. Daggett. 1,894,581; Jan. 17.
Alloy, Metal working. W. P. Sykes. 1,894,836; Jan. 17.
Alloy, Wear resisting ferrous. A. W. Gregg and R. H. Frank. 1,894,819-20; Jan. 17.
Amidopyrin borate in combination with acetone and preparation thereof. W. G. Christiansen and A. E. Jurist. 1,894,606; Jan. 17.
Amusement device. R. Chalk. Des. 89,035; Jan. 17.
Anchor bracket. F. J. Burns. 1,894,730; Jan. 17.
Anchor post. A. A. Hollos. 1,894,401; Jan. 17.
Annealing process. F. C. Kelley. 1,894,825; Jan. 17.
Apparatus for mechanical and heat treatment of metal articles. R. C. Ingersoll. 1,894,590; Jan. 17.
Aqua-ammonia to fertilizer mixtures, Applying. E. W. Harvey. 1,894,767; Jan. 17.
Arc discharge device. F. P. Whitaker. 1,894,806; Jan. 17.
Arm rest for seats, Folding. A. E. Lehman. 1,894,621; Jan. 17.
Armature. V. G. Apple. 1,894,723; Jan. 17.
Arsenic from acids, particularly sulphuric acid, Eliminating. C. Baron von Girsewald and W. Siecke. 1,894,720; Jan. 17.
Article for transferring color and other material. L. E. Benner. 1,894,727; Jan. 17.
Article, Making a molder. A. M. Herbsman. 1,894,400; Jan. 17.
Articles, Coating. T. K. Cox. 1,894,671; Jan. 17.
Articles of/or containing rubber or similar materials, Manufacture of. E. A. Murphy, R. G. James and D. F. Twiss. 1,894,629; Jan. 17.
Ash handling apparatus. R. A. Foresman. 1,894,267; Jan. 17.
Autographic register, Portable. L. Jensen. 1,894,745; Jan. 17.
Automatic machine for making marking tag clips. F. Magidson. 1,894,880; Jan. 17.
Automobile body construction. J. A. Smith. 1,894,383; Jan. 17.
Automobile signal. W. Eddy. 1,894,484; Jan. 17.
Axle straightening mechanism. H. Wochner. Re18,714; Jan. 17.
Bag holder. K. H. Murray. 1,894,597; Jan. 17.
Bar: *See*—
Binder bar.
Barber's pole. A. R. Schwarzkopf. 1,894,640; Jan. 17.
Barrell, Plating. T. M. Hiester. 1,894,609; Jan. 17.
Basic product and making it. R. Knoll. 1,894,375; Jan. 17.
Basket, Sewing. L. D. Hokerk. 1,894,868; Jan. 17.
Bathtub. I. S. Vanderbilt. Des. 89,062; Jan. 17.
Battery plate filling machine. W. O. Wuest. 1,894,812; Jan. 17.
Bearing. G. Olson. 1,894,414; Jan. 17.
Bearing and mounting therefor. J. E. and O. Mitchell. 1,894,699; Jan 17.
Bearing cage and forming the same, Roller. E. W. Mitchell. 1,894,595; Jan. 17.
Bed or similar article, Child's. M. Hallward. Des. 89,044; Jan. 17.
Bier, Casket. V. J. Hajny. Des. 89,067; Jan. 17.
Binaphthylenedioxide compounds. B. Bollweg, L. Zeh and E. Kramer. 1,894,365; Jan. 17.
Binder bar, Loose leaf. J. C. Dawson. 1,894,736; Jan. 17.
Bit apparatus, Knock-over. C. Hilscher and A. Loimann. 1,894,588; Jan. 17.
Bituminous material, Making. H. C. Neuberger. 1,894,630; Jan. 17.
Blackboard and desk or the like, Combination. W. J. Xavier. 1,894,334; Jan. 17.
Blade for road maintainers. W. J. Mattice. 1,894,410; Jan. 17.
Bleaching composition and process. E. H. Manahan and A. C. Johann. 1,894,277; Jan. 17.
Block: *See*—
Building block.
Board: *See*—
Game board. Writing board.
Board production, Multiple fiber. W. H. Mason. 1,894,778; Jan. 17.
Boiler: *See*—
Locomotive boiler. Steam boiler.
Boiler cleaner. N. L. Snow and W. P. Thomas. 1,894,297; Jan. 17.
Boiler cleaner. G. C. Vennum. 1,894,299; Jan. 17.
Bolt. R. Sardeson. 1,894,706; Jan. 17.
Bookbinder, Check. J. C. Dawson. 1,894,735; Jan. 17.
Bookbinder, Ring. J. C. Dawson. 1,894,734; Jan. 17.
Bookmark. W. T. Dempsey. 1,894,533; Jan. 17.
Bookmark. R. N. Royle. Des. 89,073; Jan. 17.
Bottle cap. F. J. Wempe. 1,894,504; Jan. 17.
Bottle cap remover. A. Anschutz. 1,894,261; Jan. 17.
Bottle collar. L. P. Neher. Des. 89,072; Jan. 17.
Bottle conveying and cooling machine. A. F. Tremblay. 1,894,576; Jan. 17.
Bowl, Toilet. J. H. Bennett. 1,894,846; Jan. 17.
Box: *See*—
Skid box.
Box. F. J. Schleicher. 1,894,450; Jan. 17.
Box liner, Fruit. C. G. Bruntsch. 1,894,531; Jan. 17.
Bracket: *See*—
Anchor bracket.
Bracket for funeral drapes. H. J. Schomer. 1,894,793; Jan. 17.
Brake: *See*—
Elevator brake.
Brake. J. W. Tatter. 1,894,525; Jan. 17.
Brake band, Making a. E. A. Nelson. 1,894,321; Jan. 17.
Brake beam suspension. E. G. Busse. 1,894,263; Jan. 17.
Brake equalizer. R. O. Shults. 1,894,714; Jan. 17.
Brake tester. H. W. Langbein. 1,894,405; Jan. 17.
Brake tester, Vehicle. J. Zenz and H. R. Kennedy. 1,894,916; Jan. 17.
Brake testing equipment. H. K. Bigelow. 1,894,935; Jan. 17.
Brake testing means and methods for automobiles. L. C. Stukenborg. 1,894,643; Jan. 17.
Bridge, Fishing. H. Shiraishi and W. S. O'Hira. 1,894,428; Jan. 17.
Brief case. C. Schell. 1,894,544; Jan. 17.
Brooch. O. Heyman. 1,894,686; Jan. 17.
Brush cutter. L. C. Karstedt. 1,894,516; Jan. 17.
Brush head, Removable. S. Mazzella. 1,894,682; Jan. 17.
Buckle, Belt. D. M. Wirth. 1,894,653-4; Jan. 17.
Buckle, Loop slide. J. H. Domkee. 1,894,856; Jan. 17.
Buckle, Slide. J. H. Domkee. 1,894,803-4; Jan. 17.
Buckle, Slide. J. H. Domkee. 1,894,855; Jan. 17.
Buffer mechanism for car doors. A. W. Clarke. 1,894,668; Jan. 17.
Building block. J. L. Wright. 1,894,605; Jan. 17.
Building construction. E. F. Vensie. 1,894,932-3; Jan. 17.
Building construction. A. C. Zimmerman. 1,894,528; Jan. 17.
Burner: *See*—
Oil burner.
Burner control and pilot light for gas stoves. B. Victor and R. E. Abramson. 1,894,900; Jan. 17.
Cabinet, Ventilator. H. C. Huegiin. 1,894,930; Jan. 17.
Cable armor cutter. A. P. Tallmadge. 1,894,829; Jan. 17.
Calendar, Date indicating. H. M. Mathers. 1,894,470; Jan. 17.
Cam and like grinding machine. L. Mawer. 1,894,882; Jan. 17.
Can feeder. J. T. Tucker. 1,894,547; Jan. 17.

Candy centers, Molding. T. and C. Werner. 1,894,651; Jan. 17.
Car, Articulated. J. Christiansen. 1,894,665; Jan. 17.
Car, Automobile railway. D. J. Dolan. 1,894,534; Jan. 17.
Car construction. O. C. Duryea. 1,894,554; Jan. 17.
Car coupler controller. J. Wilson. 1,894,363; Jan. 17.
Car, Railway. W. E. Wine. 1,894,721; Jan. 17.
Car retarder, Railway. L. O. Grondahl. 1,894,513; Jan. 17.
Carbon black, Production of. O. Grosskinsky and M. Treppenhauer. 1,894,764; Jan. 17.
Carbon-dioxide ice machine. N. N. Small. 1,894,892; Jan. 17.
Carbonaceous material, Destructive distillation of. L. C. Karrick. 1,894,691; Jan. 17.
Carbonaceous materials, Destructure hydrogenation of. J. M. Jennings. 1,894,770; Jan. 17.
Carbonaceous materials, Destructure hydrogenation of. J. Varga. 1,894,926; Jan. 17.
Carburation apparatus. J. Carr. 1,894,607; Jan. 17.
Carburetor. E. C. Bergman. 1,894,847; Jan. 17.
Carburetor. F. A. Kommer and O. Henning. 1,894,354; Jan. 17.
Carpet. J. S. Travis. Des. 89,060; Jan. 17.
Carrier: *See*—
Luggage carrier.
Case: *See*—
Brief case.
Casing for a motor oil dispenser. J. J. R. McLoughlin. Des. 89,959; Jan. 17.
Cast iron and malleable iron. Treating gray. J. C. Bozard and J. L. Summers. 1,894,752; Jan. 17.
Catalyst used for the hydrogenation of hydrocarbon oils, Reactivation of. E. B. Peck. 1,894,785; Jan. 17.
Catalytic apparatus. I. Hechenbleikner. 1,894,768; Jan. 17.
Cellulosic product and making the same, Indurated. D. W. Hollingworth and L. W. Tarr. 1,894,907; Jan. 17.
Ceramic materials, Molding. H. L. Crowley. 1,894,368; Jan. 17.
Chain: *See*—
Tire chain.
Chain. C. P. Schmidt. 1,894,600; Jan. 17.
Chenille fabric, Apparatus for making. R. B. Kalbach. 1,894,468; Jan. 17.
Chest. F. J. Book. 1,894,849; Jan. 17.
Chest of drawers, Child's. M. Hallward. Des. 89,043; Jan. 17.
Chicken feeder. M. H. Keating. 1,894,772; Jan. 17.
Christmas tree stand. A. Peshout. 1,894,478; Jan. 17.
Chuck. M. P. Hubbell. 1,894,515; Jan. 17.
Chuck operating device, Automatic. F. Krejci. 1,894,773; Jan. 17.
Cigarette dispenser and lighter, Combination. E. M. Rauh. Des. 89,058; Jan. 17.
Clamp: *See*—
Fixed clamp. Welding clamp.
Cleaner: *See*—
Boiler cleaner. Drill and hole cleaner.
Cleaner agitator, Suction. C. L. Shank. 1,894,361; Jan. 17.
Clinker, Preventing. F. Haas. 1,894,682; Jan. 17.
Clip: *See*—
Spring clip.
Clutch and transmission mechanism for automobiles, Combined automatic. A. Rossi. 1,894,890; Jan. 17.
Coal dust-mineral dust mixtures, Testing of. M. Witte. 1,894,809; Jan. 17.
Coffee maker, Drip. C. E. Page. Des. 89,055; Jan. 17.
Coil piece for deep sea signaling cables. O. Cords. 1,894,852; Jan. 17.
Coin receptacle. F. A. Hoyt. 1,894,823; Jan. 17.
Coking process. G. P. Bartholomew. 1,894,438; Jan. 17.
Comb. J. C. Robinson. 1,894,832; Jan. 17.
Comb, Suction. J. F. H. Fechtenburg. 1,894,905; Jan. 17.
Combination stand. T. Gass. Des. 89,038; Jan. 17.
Composition for disinfecting and bleaching and making the same. H. Miran. 1,894,539; Jan. 17.
Composition of matter. J. A. Mortland and H. L. Smith. 1,894,628; Jan. 17.
Compositions resembling celluloid, Production of. E. Muench and F. Nicolai. 1,894,781; Jan. 17.
Compressor. R. Paul. 1,894,701; Jan. 17.
Condenser: *See*—
Vapor condenser.
Condenser. E. L. Cahoon. 1,894,753; Jan. 17.
Condenser. F. A. Meyer. 1,894,279; Jan. 17.
Condensing system. J. H. Smith. 1,894,284; Jan. 17.
Conductor of electric currents, Integral unilateral. W. T. Anderson, jr., and L. F. Bird. 1,894,260; Jan. 17.
Conduit driving mechanism. V. S. McKenny. 1,894,446; Jan. 17.
Connecter: *See*—
Faucet connecter.
Connecter for electrical appliances. H. A. Baum. 1,894,751; Jan. 17.
Connecting rods, Babbitting double. W. J. Fiegel. 1,894,558; Jan. 17.
Connection for high voltage lines. A. O. Austin. 1,894,338; Jan. 17.
Connection, Water. E. F. Terry. 1,894,801; Jan. 17.
Connections for lamp guard sockets or the like, Terminal. H. G. Lewis. 1,894,538; Jan. 17.
Container: *See*—
Egg container. Fire extinguisher container.
Container construction. N. Scandore. 1,894,295; Jan. 17.
Container cover plate. R. W. Sherman. 1,894,575; Jan. 17.
Container for hot comminuted material. J. M. Samuel. 1,894,528; Jan. 17.
Container for stacked articles. G. W. Butts. 1,864,664; Jan. 17.
Containers, Decorating refrigerated. R. H. Strait. 1,894,476; Jan. 17.
Control device, Automatic. L. L. Corcoran. 1,894,367; Jan. 17.
Control device, Hydraulic. L. R. Williamson. 1,894,434; Jan. 17.
Control lock. H. E. Altgelt. 1,894,458; Jan. 17.
Control system. F. C. Biggert, jr., and J. A. Smitmans. 1,894,815; Jan. 17.
Control system, Automatic. E. G. Bailey. 1,894,616; Jan. 17.
Cooker, Pressure. C. Nelson. 1,894,280; Jan. 17.
Cooler: *See*—
Liquid cooler.
Cooling apparatus, Portable. W. F. Dietrichson. 1,894,674; Jan. 17.
Cooling device for anodes in metal vapor rectifiers. U. Lamm. 1,894,598; Jan. 17.
Cooling effect of refrigerants, Regulating the. P. Schlumbohm. 1,894,638; Jan. 17.
Corn tipper and butter. A. E. Olson. 1,894,493; Jan. 17.
Costume false-head and child's play-hat, Combined. H. Iskin. 1,894,690; Jan. 17.
Coupling: *See*—
Flexible coupling.
Coupling and washer assembly. A. L. Parker. 1,894,700; Jan. 17.
Crushing machine. E. B. Symons. 1,894,601; Jan. 17.
Current motor, Alternating. H. Weichsel. 1,894,804; Jan. 17.
Current rectifier, Alternating. E. A. Harty. 1,894,821; Jan. 17.
Curtain, Vehicle. C. R. Yengst. 1,894,527; Jan. 17.
Cushioning device. D. F. Sproul. 1,894,716–17; Jan. 17.
Cut out machine. B. W. Freeman. 1,894,486; Jan. 17.
Cutter: *See*—
Brush cutter. Cable armor cutter.
Cutter package. G. H. Gardner. 1,894,396; Jan. 17.
Deck of playing cards. W. L. Bruning. Des. 89,034; Jan. 17.
Derivative of polymerized cyanoanthraquinone compounds. M. A. Kuns and K. Koeberle. 1,894,491; Jan. 17.
Desk, School. P. L. B. Taylor. 1,894,502; Jan. 17.
Desuperheater. J. M. Barrett and G. M. Fritze. 1,894,891; Jan. 17.
Desuperheater. D. W. Rudorff. 1,894,791; Jan. 17.
Diaryl containing wax-like solid. C. B. Durgin and R. L. Jenkins. 1,894,266; Jan. 17.
Die: *See*—
Steel rule die.
Die head. H. T. Shearer and C. A. Reimschissel. 1,894,296; Jan. 17.
Differential for four-wheel attachments, Automatic. B. Markham. 1,894,698; Jan. 17.
Diphenyl, Process and apparatus for the production of. T. J. Scott. 1,894,283; Jan. 17.
Dispenser. P. H. Horwitt. 1,894,589; Jan. 17.
Display stand. D. M. Carmichael. 1,894,902; Jan. 17.
Display stand. W. R. Tuttle. Des. 89,061; Jan. 17.
Distortion in repeaters, Eliminating. H. Nyquist. 1,894,322; Jan. 17.
Distributing valve. W. A. Smith, jr. 1,894,799; Jan. 17.
Dome ring for welded tanks. C. H. Folmsbee. 1,894,679; Jan. 17.
Domestic appliance. R. L. Lee. 1,894,564; Jan. 17.
Doorlatch, Sliding. L. M. Sadler. 1,894,913; Jan. 17.
Doorlatch, Switchboard. H. H. Ide. 1,894,824; Jan. 17.
Double check valve. L. J. Towne. 1,894,603; Jan. 17.
Dowel bar device. W. C. Burrell. 1,894,395; Jan. 17.
Drainer apparatus. G. D. Gardner. 1,894,788; Jan. 17.
Drawer. S. C. Huffman. 1,894,445; Jan. 17.
Drawing of tubular articles, Apparatus for the. G. Delpech. 1,894,853; Jan. 17.
Dress. J. Broillet. Des. 89,033; Jan. 17.
Dress or similar article. M. Fields. Des. 89,037; Jan. 17.
Dress or similar article. F. R. Greene. Des. 89,039; Jan. 17.
Drill: *See*—
Rock drill.
Drill and hole cleaner. S. E. Mortimer. 1,894,858; Jan. 17.
Drill pipe protector. W. L. McLaine. 1,894,519; Jan. 17.
Drinking fountain. T. J. Sexton. 1,894,573; Jan. 17.
Drive, Furnace conveyer. A. N. Otis. 1,894,829; Jan. 17.
Drive mechanism for shaker conveyers. W. W. Sloane. 1,894,923; Jan. 17.
Dyestuff and making same, Sulphurized. J. Blanchod and A. Wirz. 1,894,848; Jan. 17.
Edge construction, Rolled. M. C. Phenix. 1,894,831; Jan. 17.
Egg container. H. A. Inman. 1,894,402; Jan. 17.
Egg packing device. R. D. Junge. 1,894,591; Jan. 17.
Electric control device. C. W. Kuhn. 1,894,404; Jan. 17.

Electric discharge device. S. Ruben. Re18,713; Jan. 17.
Electric machine rotor. E. Hunsiker. 1,894,273; Jan. 17.
Electric plant, Wind. G. Manikowske, G. Feneis and W. Manikowske. 1,894,357; Jan. 17.
Electric switch. A. O. Austin. 1,894,339; Jan. 17.
Electric switch. E. N. Rowe. 1,894,548; Jan. 17.
Electric switch gear. C. S. Agate and W. A. J. Thorn. 1,894,747; Jan. 17.
Electric tool, Portable. J. M. Rohling. 1,894,634; Jan. 17.
Electrical control system. W. E. Weaver. 1,894,638; Jan. 17.
Electrical device for the determination of specific resistivity. C. Schlumberger. 1,894,828; Jan. 17.
Electrical regulation. L. W. Thompson. 1,894,857; Jan. 17.
Electrical relay. F. H. Winter. 1,894,811; Jan. 17.
Electrical resistor and manufacture thereof. E. Hediger. 1,894,685; Jan. 17.
Electrical switch. J. C. Rea. 1,894,421; Jan. 17.
Electrical wire swivel. W. Jackson. 1,894,872; Jan. 17.
Electrocleaning. F. Conlin. 1,894,670; Jan. 17.
Electrolytic treatment of solutions containing a high percentage of chlorine ions. G. Hansel and B. Michael. 1,894,271; Jan. 17.
Electromagnet. A. B. Starr. 1,894,429; Jan. 17.
Electroplating and compositions for use therein. F. Conlin. 1,894,669; Jan. 17.
Elevator brake. W. L. Rupnow. 1,894,426; Jan. 17.
Elutriating means. M. A. Lissman. 1,894,623; Jan. 17.
Embossing and vending apparatus. G. W. Heene. 1,894,485; Jan. 17.
Emulsion, Bituminous. L. G. Gabriel. 1,894,617; Jan. 17.
Emulsions of solid in fat and product thereof, Preparing edible. L. B. Esmond and W. W. Duecker. 1,894,677; Jan. 17.
Energy control, Luminous. C. L. Davis. 1,894,462; Jan. 17.
Engine: *See*—
Internal-combustion engine. Rotary engine.
Engine oiling device. L. C. Vanderlip. 1,894,477; Jan. 17.
Envelope moistener. C. D. Ryan. 1,894,427; Jan. 17.
Equalizing strains upon a group of cables connected to a stress-receiving element. W. P. Frost. 1,894,351; Jan. 17.
Esters of organic acids, Saponification of. W. Bader. 1,894,479; Jan. 17.
Ether of aromatic ketones, Basic. M. Hartmann and H. Isler. 1,894,865; Jan. 17.
Expansible wheel. J. M. Mason. 1,894,909; Jan. 17.
Extractor: *See*—
Fruit juice extractor.
Fabrics, Producing knitted. R. K. Mills. 1,894,819; Jan. 17.
Fastening device for auto license tags or the like. G. R. Cruse. 1,894,552; Jan. 17.
Faucet connecter. C. A. Schacht. 1,894,711; Jan. 17.
Faucet, Mixing. J. F. Dawson. 1,894,908; Jan. 17.
Faucet, Portable. P. D. Hartog. 1,894,741; Jan. 17.
Feed mechanism for swaging machines. E. L. Stowe. 1,894,800; Jan. 17.
Feed water heater. G. D. Dodd. 1,894,760; Jan. 17.
Feeder: *See*—
Adjustable feeder. Chicken feeder.
Can feeder.
Fence post. N. A. Ochiltree. 1,894,783; Jan. 17.
Fertilizer and making same. A. B. Pickett. 1,894,496; Jan. 17.
Fertilizer distributor, Hand. C. Woolsey. 1,894,864; Jan. 17.
Fertilizer, Manufacture of. H. L. Hartenstein. 1,894,587; Jan. 17.
Fiber production. S. D. Wells. 1,894,577; Jan. 17.
Fiber sheets, Production of vegetable. W. H. Mason. 1,894,777; Jan. 17.
Fibrous product. G. J. Manson. 1,894,567; Jan. 17.
Filler product from sulphate pulp lime mud, Producing a white. O. Kress. 1,894,620; Jan. 17.
Film casting machine. E. J. Barnes. 1,894,845; Jan. 17.
Films, Apparatus for printing synthetic. H. Chrétien. 1,894,264; Jan. 17.
Films, Apparatus for printing synthetic anamorphosed. H. Chrétien. 1,894,265; Jan. 17.
Filter system, Selective. A. M. Trogner. 1,894,645; Jan. 17.
Fire extinguisher. W. Richter and P. Fray. 1,894,825; Jan. 17.
Fire extinguisher container. L. J. Dugas. 1,894,761; Jan. 17.
Fire extinguisher support. W. B. Bronander. 1,894,917; Jan. 17.
Fishing lure. F. De C. Sweeney. 1,894,500; Jan. 17.
Fixed clamp. N. C. Schellenger. 1,894,327; Jan. 17.
Flashlight. M. H. Bennett. 1,894,606; Jan. 17.
Flexible coupling. H. D. Ainsworth. 1,894,507; Jan. 17.
Flooding process for recovering oil from sand beds. M. DeGroote and A. F. Wirtel. 1,894,759; Jan. 17.
Floor reading stand. O. E. and L. O. Mitchell. Des. 89,058; Jan. 17.
Focusing machine. G. H. Cushing. 1,894,732; Jan. 17.
Foils and apparatus therefor, Production of. H. Jacque. 1,894,467; Jan. 17.
Food product, Preparing a. S. S. Lerner. 1,894,877; Jan. 17.
Foodstuffs, Chilling and freezing. M. T. Zarotschenzeff. 1,894,813; Jan. 17.
Footwear welts, Fastening. A. Codish. 1,894,440; Jan. 17.
Fountain: *See*—
Drinking fountain. Poultry fountain.
Four-electrode valve. H. J. Round. 1,894,599; Jan. 17.
Frame: *See*—
Vehicle frame. Warping frame.
Frame for displaying advertising cards. F. D. Walstrom. 1,894,803; Jan. 17.
Fruit juice extractor. H. Fromm. 1,894,858; Jan. 17.
Fuel injection system. R. F. Ensign. 1,894,510; Jan. 17.
Fuel tank. A. C. Dixon. 1,894,675; Jan. 17.
Furnace. C. B. Grady. 1,894,270; Jan. 17.
Furnace bottoms, Preservation of metallurgical. A. T. Cape and K. B. Bowman. 1,894,755; Jan. 17.
Furniture, Combination. A. D. Stine. 1,894,862; Jan. 17.
Game board. C. Lessig and C. J. Carley. Des. 89,047; Jan. 17.
Game board. S. H. Lynch. 1,894,469; Jan. 17.
Gamma ferric oxide and making same. O. Baudisch. 1,894,750; Jan. 17.
Gamma ferric oxide hydrate and making same. O. Baudisch. 1,894,749; Jan. 17.
Gas apparatus. E. J. Brady. 1,894,459; Jan. 17.
Gas conditioner. C. G. Hawley. 1,894,744; Jan. 17.
Gas-dispensing apparatus. J. M. Rowland. 1,894,497; Jan. 17.
Gas holder. W. G. Laird. 1,894,535–7; Jan. 17.
Gas holder. J. R. L. Santos. 1,894,635; Jan. 17.
Gas production, Inert. A. D. Harrison. 1,894,766; Jan. 17.
Gases containing acetylene, Purification of. O. Eisenhut and H. Schilling. 1,894,763; Jan. 17.
Gases, Purification of coal distillation. A. Pott. 1,894,419; Jan. 17.
Gate operating device. B. B. Akers. 1,894,549; Jan. 17.
Gauge: *See*—
Pressure gauge. Wheel aligning gauge.
Tire pressure gauge.
Gauge automatically correcting the temperature, Pressure. S. G. Cantacusene. 1,894,366; Jan. 17.
Gauge for concrete floors. F. O. Bergstrand. 1,894,392; Jan. 17.
Gear: *See*—
Landing gear. Switch gear.
Gear set. W. P. Schmitter. 1,894,927; Jan. 17.
Generator: *See*—
Oscillation generator. Steam generator.
Pressure fluid generator.
Generator for hydrocarbon burners. S. S. Piepgras. 1,894,417; Jan. 17.
Globe-mounting means. L. P. Denoyer. 1,894,854; Jan. 17.
Golf club. P. H. Adams. 1,894,841; Jan. 17.
Golf club with metallic shaft and hosel. W. F. Reach. 1,894,706–7; Jan. 17.
Golf game apparatus. R. E. Adams. 1,894,722; Jan. 17.
Grid pasting machine. H. J. Radle. 1,894,705; Jan. 17.
Guide block, pulley block, and the like. M. van der Schans and G. Hilgers. 1,894,286; Jan. 17.
Gun carriage. E. C. Goebert. 1,894,680; Jan. 17.
Gun fire control, System of. B. M. Hewlett and W. W. Willard. 1,894,522; Jan. 17.
Hair-drying apparatus. A. Salm. 1,894,709; Jan. 17.
Hair waver. J. Vaghelatos. 1,894,431; Jan. 17.
Hair waving apparatus. J. Mayer. 1,894,612; Jan. 17.
Hair waving device. R. B. Seward. 1,894,795–8; Jan. 17.
Handkerchief or similar article. E. Metzger. Des. 89,051; Jan. 17.
Harvester, Beet. W. E. Urschel. 1,894,802; Jan. 17.
Harvester, Cotton. C. Dumler. 1,894,306; Jan. 17.
Header mechanism. R. L. Wilcox. 1,894,526; Jan. 17.
Headlight testing apparatus. E. Morgan and E. H. Witmer. 1,894,910–11; Jan. 17.
Headrest. W. J. Heints. 1,894,444; Jan. 17.
Heat recovery. D. K. Dean. 1,894,758; Jan. 7.
Heat treatment of steel rails. J. Brunner. 1,894,551; Jan. 17.
Heater: *See*—
Feed water heater. Oil heater.
Heater control. J. M. Barrett. 1,894,437; Jan. 17.
Heating device. A. A. Epstein. 1,894,348; Jan. 17.
Hoe and reaper, Cotton. R. Whiting. 1,894,840; Jan. 17.
Holder: *See*—
Bag holder. Work holder.
Gas holder.
Holder. C. Harris. 1,894,488; Jan. 17.
Holder for disk sharpeners, Disk. D. C. Galvin. 1,894,585; Jan. 17.
Holster, Handcuff. A. D. Peirce. 1,894,540; Jan. 17.
Hose. H. W. Goodall. 1,894,269; Jan. 17.
Hosiery. E. W. Sachsenmaier. 1,894,891; Jan. 17.
Hosiery press. J. Zimarik. 1,894,485; Jan. 17.
House, Pottery bird. J. B. Leuhart. 1,894,406; Jan. 17.
Hum elimination system. S. A. Barone. 1,894,856; Jan. 17.
Humidifier. R. N. Trane. 1,894,898; Jan. 17.
Ice cream cone. J. Schoenfeld. 1,894,545; Jan. 17.

Illuminated sign. L. B. Dwyer and E. Drallmeier. 1,894,857; Jan. 17.
Illuminated sign. W. B. Piper. 1,894,704; Jan. 17.
Illuminating device. G. Kuhn. 1,894,876; Jan. 17.
Impacting machine. L. R. MacKensie. 1,894,408; Jan. 17.
Indicator. A. Lulki. 1,894,697; Jan. 17.
Inductance system, Variable. C. F. Rudolph. 1,894,498; Jan. 17.
Insectifuge. V. Voorhees. 1,894,604; Jan. 17.
Installation for the regulation of the angular velocity of a shaft. M. J. Jansen, R. Vermeulen, and N. A. J. Voorhoevé. 1,894,562; Jan. 17.
Insulating unit. C. B. Kilmer. 1,894,592; Jan. 17.
Insulator pin. A. O. Austin. 1,894,340; Jan. 17.
Insulator, Strain. W. Cramer. 1,894,292; Jan. 17.
Internal combustion engine. H. D. Church and F. Jehle. 1,894,667; Jan. 17.
Ironing and aerating press. C. O. Reeps. 1,894,422; Jan. 17.
Ironing board structure. C. A. Rich. 1,894,423; Jan. 17.
Ironing board with stabilizing means. C. A. Rich. 1,894,424; Jan. 17.
Jar. F. J. Stayton. Des. 89,074; Jan. 17.
Joint. W. A. Flumerfelt. 1,894,309; Jan. 17.
Joint for all metal rotary hose for oil wells. C. G. Banks. 1,894,390; Jan. 17.
Ladder, Folding stool. J. Hirose and N. Ishimizu. 1,894,489; Jan. 17.
Lamp bulb. C. Peckerman. Des. 89,056; Jan. 17.
Land leveler. J. L. Iverson. 1,894,871; Jan. 17.
Landing gear, Retractable. G. W. De Bell. 1,894,582; Jan. 17.
Last. E. W. Smith. 1,894,452; Jan. 17.
Latch mechanism. E. C. Dyal. 1,894,555; Jan. 17.
Lathes and other machine tools, Cam milling attachment for. E. J. Svenson. 1,894,719; Jan. 17.
Laundry dry-cleaning machine. E. Knutsen. 1,894,604; Jan. 17.
Leer Feeding device. J. Mayo. 1,894,881; Jan. 17.
Leveling device. E. A. Hutchens. 1,894,870; Jan. 17.
Lifting and locking device for Venetian blinds. W. H. Ruby and J. E. Cooper. 1,894,833; Jan. 17.
Lighter, Pocket. G. S. Barker. 1,894,300; Jan. 17.
Lighting fixture. G. E. Glatthar. 1,894,586; Jan. 17.
Lighting unit. C. E. and G. R. Ferree. 1,894,583; Jan. 17.
Linoleum roller. W. E. Whitney. 1,894,548; Jan. 17.
Lip sticks or the like, Device for repointing. F. Gubing. 1,894,863; Jan. 17.
Liquid cooler. R. Copp. 1,894,441; Jan. 17.
Liquid partial oxidation products and articles produced thereby, Treating complex. J. H. James. 1,894,352; Jan. 17.
Liquid phase polymerization of hydrocarbon oils. C. B. Watson. 1,894,331; Jan. 17.
Liquid pump. P. Krause. 1,894,275; Jan. 17.
Lock: *See*—
Control lock. Valve lock.
Nut lock.
Locking attachment for cranes. F. W. Hankins. 1,894,683; Jan. 17.
Locking device, Tank car valve. W. E. Peterson. 1,894,830; Jan. 17.
Locking mechanism for taximeters, Flag. G. Vlahov. 1,894,884; Jan. 17.
Locomotive boiler. C. A. Siegel. 1,894,613; Jan. 17.
Looms, Filling-feeler mechanism for. H. Le Doux. 1,894,316; Jan. 17.
Loud speaker and like horn. F. W. Lanchester. 1,894,376; Jan. 17.
Loom. M. Anderson. 1,894,336; Jan. 17.
Lubricating apparatus. R. P. Jacques. 1,894,274; Jan. 17.
Lubrication. J. Bijur. 1,894,658–9; Jan. 17.
Luggage carrier. M. D. Dorsey. 1,894,482; Jan. 17.
Luggage carrier. A. Harris. 1,894,464; Jan. 17.
Lumber retrimming machine. A. H. Onstad. 1,894,415; Jan. 17.
Luminair. E. Stroud. 1,894,915; Jan. 17.
Machine base. C. Z. Sutton. 1,894,453; Jan. 17.
Machine for and method of spray coating. W. H. Bozarth. 1,894,729; Jan. 17.
Machine for filling containers with fluid. L. T. Konopak. 1,894,403; Jan. 17.
Machine for harvesting beans and peas. A. Groenig and J. W. Woodruff. 1,894,740; Jan. 17.
Machine for making windowed receptacles. R. H. Fluegge. 1,894,259; Jan. 17.
Machine for straightening and shearing long stock. F. C. Hutchinson. Re18,715; Jan. 17.
Mail pouch catching and delivering means. I. J. Lane. 1,894,315; Jan. 17.
Marking machine. L. Bernardo. 1,894,530; Jan. 17.
Material for and method of protecting conduits. E. P. Becker. 1,894,341; Jan. 17.
Materials, Apparatus for heat treating. N. C. Phillips. 1,894,571; Jan. 17.
Mathematical instrument. A. Paskowski. 1,894,886; Jan. 17.
Mattress-tufting machine. W. B. Mathewson. 1,894,409; Jan. 17.
Measuring and control apparatus. E. Ek. 1,894,307; Jan. 17.
Mechanical movement. W. E. Bock. 1,894,290; Jan. 17.
Merchandise package. C. S. Andrews. 1,894,837; Jan. 17.
Metal articles, Method of and apparatus for rolling. R. C. Ingersoll. 1,894,689; Jan. 17.
Metal organic phosphate and making same. T. B. Wagner. 1,894,647; Jan. 17.
Metals, Method and apparatus for refining. T. F. Baily. 1,894,657; Jan. 17.
Metallic bodies, Coating. E. G. Sturdevant. 1,894,644; Jan. 17.
Meter for heat quantities. H. Sandvoss. 1,894,449; Jan. 17.
Milk cooling and temperature stabilizing device. A. Goebl and R. Gedeon. 1,894,448; Jan. 17.
Mill: *See*—
Roller mill.
Mirror. P. Schlumbohm. 1,894,639; Jan. 17.
Mold. W. F. Eppensteiner. 1,894,511; Jan. 17.
Mold cap, Linerless. A. L. Gagné and J. A. Snyder. 1,894,860; Jan. 17.
Mold filling apparatus, Centrifugal. W. Kurze. 1,894,877; Jan. 17.
Molds, Apparatus for forming. J. E. Radigan. 1,894,324; Jan. 17.
Mopping, spreading, and polishing device. H. Ranish. 1,894,420; Jan. 17.
Motor: *See*—
Current motor. Synchronous motor.
Single phase motor. Windshield motor.
Motor for boats, Outboard propelling. C. B. Samuelson. 1,894,710; Jan. 17.
Motor for tree saws. F. W. Meyer. 1,894,883; Jan. 17.
Motor mount. J. L. De Rabot. 1,894,904; Jan. 17.
Mower, Power. S. D. Harman. 1,894,312; Jan. 17.
Mowing machines, Dividing attachment for. J. A. Rivington. 1,894,542; Jan. 17.
Naphthalene, Hydrogenation of. J. Varga. 1,894,924–5; Jan. 17.
Neon illuminated unit for barber poles, Rotating. M. W. Berger and F. H. Vivian. 1,894,842; Jan. 17.
Nitriles, Producing tertiary. M. Bockmühl and G. Ehrhart. 1,894,301; Jan. 17.
Nut lock. C. R. Owen. 1,894,631; Jan. 17.
Oil burner. T. W. Hunter. 1,894,466; Jan. 17.
Oil burner, Locomotive. M. Brittain. 1,894,481; Jan. 17.
Oil from a well, Device for pumping. P. G. Sherry. Re18,717; Jan. 17.
Oil heater, Crank case. W. H. Pingrey. 1,894,887; Jan. 17.
Oils, Method and apparatus for treating. W. G. Laird. 1,894,355; Jan. 17.
Oils, Purifying. R. C. Osterstrom. 1,894,323; Jan. 17.
Olefines, Acetylating. B. T. Brooks. 1,894,662; Jan. 17.
1-amino-2-alkoxynaphthalenes. R. Tobler and W. Kern. 1,894,330; Jan. 17.
Opener, Bottle. S. Gunther. 1,894,487; Jan. 17.
Ore concentrator. H. C. Mitchell. 1,894,779; Jan. 17.
Ornament, Radiator. G. A. Johnson. Des. 89,045; Jan. 17.
Oscillation generator. G. B. Scheibell. 1,894,636; Jan. 17.
Oscillation system. G. B. Scheibell. 1,894,637; Jan. 17.
Oven. J. B. Icre. 1,894,688; Jan. 17.
Oven, Baking. A. S. Knapp. 1,894,875; Jan. 17.
Oven rack shifting device. M. G. Forsyth and R. Lasiter. 1,894,268; Jan. 17.
Overshoe and making same. W. Joy. 1,894,610; Jan. 17.
Oxides, Flotation of. L. J. Christmann and S. A. Falconer. 1,894,344; Jan. 17.
Packing stand, Automatic. L. M. Cockrill and H. D. Couch. 1,894,851; Jan. 17.
Packings for ammunition and the like. B. A. E. Johnson. 1,894,873; Jan. 17.
Pad for motor vehicle fender wells. C. L. Hall. 1,894,608; Jan. 17.
Paddle, Oar or canoe. J. L. Swails. 1,894,499; Jan. 17.
Pail, Sanitary milk. J. M. Westerberg. 1,894,332; Jan. 17.
Panel unit sign. J. E. Long. 1,894,380; Jan. 17.
Paper bag machine, Rotating. H. W. Beckman. 1,894,726; Jan. 17.
Paper making machine, Combined light and heavy weight. M. Oberdorfer and J. E. Ryberg. 1,894,472; Jan. 17.
Paper, Stencil. K. W. Carr. 1,894,731; Jan. 17.
Paper, Waterproofing. G. J. Manson. 1,894,566; Jan. 17.
Pen and pen treatment. W. H. Pearce. 1,894,632; Jan. 17.
Percentages of light and black constituents of finely grained mixtures, Rapid determination of the. M. Witte. 1,894,808; Jan. 17.
Phenol-formaldehyde resins, Preparing transparent. G. Pechin, née Lacroux. 1,894,702; Jan. 17.
Phenolphthalein composition and making same. E. B. Putt. 1,894,889; Jan. 17.
Pigment and producing the same. W. J. O'Brien. 1,894,931; Jan. 17.
Pile fabrics, Apparatus for and method of making knitted. D. P. Moore. 1,894,596; Jan. 17.
Pin: *See*—
Insulator pin.
Pipes, Jointing of. P. H. Wilson. 1,894,388; Jan. 17.
Pipes, Method of and apparatus for joining. F. H. Smith and H. A. Stringfellow. 1,894,835; Jan. 17.
Piston. R. Karasinski. 1,894,771; Jan. 17.
Pistons, Oil ring for. F. Deutsch. 1,894,672; Jan. 17.

Plaster-channel installation for screen guides. H. Dixon. Re18,716; Jan. 17.
Pneumatic valve. R. V. Morse. 1,894,780; Jan. 17.
Polisher. H. E. Wiedmann. 1,894,807; Jan. 17.
Polyphase system. M. B. Mallett. 1,894,827; Jan. 17.
Post: *See*—
Anchor post. Fence post.
Poster advertising device, Motion. R. M. Meisel and H. S. Aikman. 1,894,568; Jan. 17.
Poultry fountain, Sanitary automatic. F. E. Jones. 1,894,563; Jan. 17.
Power transmission, Automatic. F. Slavek. 1,894,894; Jan. 17.
Press: *See*—
Hosiery press. Seal press.
Ironing and aerating press. Stamp and drawing press.
Pressure fluid generator. H. Riess. 1,894,922; Jan. 17.
Pressure gauge. J. Wahl. 1,894,648; Jan. 17.
Pressure indicating valve. P. C. and H. M. Fleck. 1,894,372; Jan. 17.
Printing presses, Attachment for. C. S. Carlson. 1,894,850; Jan. 17.
Products from hydrocarbon mixtures containing olefines, Generating useful. B. T. Brooks. 1,894,661; Jan. 17.
Propeller construction. G. A. Wood. 1,894,478; Jan. 17.
Propeller having a transverse motion, Marine. G. Padis. 1,894,494; Jan. 17.
Protector: *See*—
Drill pipe protector. Stocking protector.
Pump: *See*—
Liquid pump. Turbine pump.
Tire pump.
Pump. J. E. Holveck. 1,894,869; Jan. 17.
Pump mechanism for effecting a pressure feed of liquids. W. P. Sillince. 1,894,834; Jan. 17.
Rack for meat blocks, Butcher's tool. J. G. Eastlack. 1,894,258; Jan. 17.
Radiator. N. Asp. 1,894,436; Jan. 17.
Radio frequency amplifier. L. Walsh. 1,894,503; Jan. 17.
Radio frequency currents, Method and apparatus for amplifying. J. M. Avery. 1,894,578; Jan. 17.
Railway braking apparatus. H. L. Bone. 1,894,728; Jan. 17.
Rake. R. W. Elfert. 1,894,306; Jan. 17.
Razor, Safety. C. D. Dudew. 1,894,553; Jan. 17.
Reaction product of rosin, aromatic amines, and furfural. O. A. Cherry and F. Kurath. 1,894,580; Jan. 17.
Receptacle: *See*—
Coin receptacle.
Refrigerating apparatus. G. H. Fassett. 1,894,557; Jan. 17.
Refrigerating apparatus. J. G. King. 1,894,918; Jan. 17.
Refrigerating apparatus. W. F. Swesey. 1,894,285; Jan. 17.
Refrigerating apparatus, Absorption. K. Nesselmann and H. Brüer. 1,894,359; Jan. 17.
Register, Resettable. R. G. Whitlock. 1,894,433; Jan. 17.
Regulator: *See*—
Vapor regulator. Water feed regulator.
Remote control for space and wired radio systems. A. M. Trogner. 1,894,646; Jan. 17.
Resins of the coumarone-indene type, Production of. J. M. Weiss. 1,894,934; Jan. 17.
Ridge cutter for disk harrows. H. G. Sckowska. 1,894,474; Jan. 17.
Rim for wire wheels, Demountable. C. H. Resch. 1,894,572; Jan. 17.
Ring. G. E. and P. B. Ball. Des. 89,031; Jan. 17.
Rock drill. L. W. Greve. 1,894,398; Jan. 17.
Roller: *See*—
Linoleum roller.
Roller mill. J. Mezger. 1,894,569; Jan. 17.
Rolling process. H. Weigel. 1,894,288; Jan. 17.
Rolls, Making tight. P. D. Parsons. 1,894,281; Jan. 17.
Rolls, such as Pilger rolls and the like, Method and apparatus for machining. H. Tschochner. 1,894,899; Jan. 17.
Ropes, Finishing the ends and fixing. G. Zapf. 1,894,389; Jan. 17.
Rotary engine. G. H. Beuoy. 1,894,480; Jan. 17.
Rotary engine. H. E. Kempton. 1,894,353; Jan. 17.
Rubber mill cooling device. J. M. King. 1,894,618; Jan. 17.
Rule, Slide. A. Langsner. 1,894,294; Jan. 17.
Safety loop for brake beams. M. Russian. 1,894,522; Jan. 17.
Sales ticket and clip. G. W. Henry, jr. 1,894,906; Jan. 17.
Salts of ketonic acids derived from petroleum hydrocarbons and preparing same. H. A. Bruson. 1,894,460; Jan. 17.
Sampling and gauging device. H. B. Ford. 1,894,817; Jan. 17.
Sandal. G. Guiffre. 1,894,561; Jan. 17.
Sash construction. P. A. H. Anderson. 1,894,529; Jan. 17.
Scale, Weighing. T. B. Flanagan. 1,894,442; Jan. 17.
Screw tops, Device for removing. H. J. Edlund. 1,894,556; Jan. 17.
Seal press. E. J. Rantsch. 1,894,921; Jan. 17.
Sealing and dispensing device for oil drums and the like. J. F. Cheney. 1,894,732; Jan. 17.
Seaplane. B. V. Korvin-Kronkovsky. 1,894,919; Jan. 17.
Seat: *See*—
Toilet seat. Window seat.
Separation, Apparatus for. F. A. Quiros. 1,894,520; Jan. 17.
Sewing machine. G. Haselton. 1,894,399; Jan. 17.
Sewing machine and method of forming stitches. R. N. Parkin. 1,894,885; Jan. 17.
Shade guide and holder, Roller. T. E. McNulty. 1,894,627; Jan. 17.
Shade, Lamp. A. Burke. 1,894,302; Jan. 17.
Sharpener, Knife. W. Blankner. 1,894,579; Jan. 17.
Sheet feeding machine. H. E. Lindbladh. 1,894,622; Jan. 17.
Shelf, Window garden. C. H. Gueth and C. G. Eastley. 1,894,310; Jan. 17.
Shield and grille, Automobile. G. L. Smith. 1,894,715; Jan. 17.
Shield, Safety. E. W. Hoffman. 1,894,867; Jan. 17.
Shield, shelf, and ventilator, Wall. T. J. Sullivan. 1,894,896; Jan. 17.
Shim, Caster-maintaining. C. H. Phelps. 1,894,495; Jan. 17.
Shingle machine. D. Brown. 1,894,394; Jan. 17.
Shingle, Strip. J. L. Wettlaufer. 1,894,614–15; Jan. 17.
Ship stabilizer. H. Hort. 1,894,272; Jan. 17.
Shoe. C. Miller. Des. 89,052; Jan. 17.
Shoe and making the same. A. W. Bradbury. 1,894,291; Jan. 17.
Shoes, Manufacture of. J. Fausee. 1,894,678; Jan. 17.
Shoes, Ornamenting. B. W. Freeman. 1,894,818; Jan. 17.
Shoulder strap. E. Ponton. 1,894,888; Jan. 17.
Shutter for cinematographic projection apparatus, Revolving fire preventing. K. Hoffmann. 1,894,769; Jan. 17.
Sieve, Self cleaning centrifugal. C. C. Searle. 1,894,713; Jan. 17.
Sign: *See*—
Illuminated sign. Panel unit sign.
Sign, Electric. A. Zicke. Des. 89,065; Jan. 17.
Sign frame for lamp posts, Street. L. M. Chapman. Des. 89,036; Jan. 17.
Signal: *See*—
Automobile signal.
Signaling device for vehicles. A. del Valle y Desvernine. 1,894,737; Jan. 17.
Single phase motor. H. Weichsel. 1,894,805; Jan. 17.
Skid box. C. F. Walp. 1,894,649; Jan. 17.
Slack adjuster, Automatic. H. A. Leonhauser. 1,894,565; Jan. 17.
Sled, Coasting. J. A. Bartley. 1,894,550; Jan. 17.
Slipper. J. B. Greider. 1,894,681; Jan. 17.
Socket, Fastener. D. I. Reiter. 1,894,521; Jan. 17.
Sound recording system. S. Kahn. 1,894,373; Jan. 17.
Speculum. J. B. Bacon. 1,894,725; Jan. 17.
Speed reactor control, Variable. B. A. Wesche. 1,894,928; Jan. 17.
Speed responsive system. F. H. Winter. 1,894,810; Jan. 17.
Speed transmission, Automatic variable. J. C. Messick. 1,894,318; Jan. 17.
Speed transmission mechanism, Variable. E. Gessner. 1,894,397; Jan. 17.
Speedometer. F. A. Fleischmann and A. L. Marsh. 1,894,808; Jan. 17.
Spring: *See*—
Suspension spring.
Spring clip, Vehicle. G. W. Crabtree. 1,894,757; Jan. 17.
Spring suspension for automobile chassis. M. T. Liang. 1,894,776; Jan. 17.
Squeezer, Fruit. W. H. Pleiss. Des. 89,057; Jan. 17.
Stair structure. J. Frick. 1,894,463; Jan. 17.
Stalk shredding implement. L. B. Neighbour. 1,894,412; Jan. 17.
Stamp and drawing press. K. Stern and J. Kubin. 1,894,718; Jan. 17.
Stand: *See*—
Christmas tree stand. Packing stand.
Display stand. Switch stand.
Stand and telephone bookholder, Combination telephone. R. von Ezdorf. Des. 89,063; Jan. 17.
Starch to dextrine and the like, Method and apparatus for the conversion of. N. C. Phillips. 1,894,570; Jan. 17.
Starting device for outboard motors. A. Lesage. 1,894,378; Jan. 17.
Stator with built-in condenser. V. G. Apple. 1,894,724; Jan. 17.
Steam boiler. G. J. Muller. 1,894,782; Jan. 17.
Steam generator, Water tube. H. C. Egloff. 1,894,762; Jan. 17.
Steel rule die. L. E. Shaw. 1,894,641; Jan. 17.
Steel wool machine. W. H. Robbins and R. F. Boehler, jr. 1,894,447–8; Jan. 17.
Stocking protector. A. Heelan. 1,894,866; Jan. 17.
Stop device for toy motors. S. Orkin. 1,894,416; Jan. 17.
Strap: *See*—
Shoulder strap.
Stretcher, Curtain. F. C. Amos. 1,894,748; Jan. 17.
Stretcher, Hydraulic belt. W. F. Sutton and J. P. Hensler. 1,894,298; Jan. 17.
Suction cleaner. E. Butzer. 1,894,843; Jan. 17.

Suit, One-piece bathing. T. La Maida. 1,894,920; Jan. 17.
Support: *See*—
Fire extinguisher support. Tube support.
Supporter and clasp, Elastic. J. F. Pinto. 1,894,541; Jan. 17.
Supporting means. O. U. Zerk. 1,894,457; Jan. 17.
Supporting structure. E. C. Harter. 1,894,742–3; Jan. 17.
Surgical operating support. L. L. Gilbert. 1,894,739; Jan. 17.
Suspension or gripping device, Detachable. A. B. Steele and J. Lines. 1,894,895; Jan. 17.
Suspension spring. K. Werner. 1,894,839; Jan. 17.
Swimming appliance. A. Kask. 1,894,874; Jan. 17.
Switch: *See*—
Electric switch. Thermal switch.
Electrical switch. Thermostat switch.
Switch gear, Electrical. D. E. Davies. 1,894,816; Jan. 17.
Switch movement. R. Popp. 1,894,282; Jan. 17.
Switch stand, Parallel throw. I. B. Kimmel and J. V. Stewart. 1,894,693; Jan. 17.
Synchronous motor. J. Youhouse. 1,894,455; Jan. 17.
Table for stretching fabric. C. M. McCarthy. 1,894,625; Jan. 17.
Table or similar article, Child's dressing. M. Hallward. Des. 89,042; Jan. 17.
Tag, Valve. M. G. Markle. 1,894,381; Jan. 17.
Tank: *See*—
Acid proof tank. Fuel tank.
Tank car dome closure. W. K. Auchincloss. 1,894,655; Jan. 17.
Tank closure, Car. V. Willoughby. 1,894,652; Jan. 17.
Tank domes, Forming. J. D. Seller. 1,894,642; Jan. 17.
Tape serving machine. L. Link. 1,894,317; Jan. 17.
Tape serving machine, Gummed. L. Link. 1,894,379; Jan. 17.
Tar and simultaneously producing high and low melting point pitches, Method and apparatus for distilling. G. E. McCloskey. 1,894,471; Jan. 17.
Target, Registering golf. M. E. Baker. 1,894,814; Jan. 17.
Tea bags, Making. S. Cooper. 1,894,345–6; Jan. 17.
Telephone circuit, Phantom. M. K. Zinn. 1,894,335; Jan. 17.
Telephone set, Substation. H. F. Obergfell. 1,894,828; Jan. 17.
Temperature control, Piezo-electric crystal. L. A. Hyland. 1,894,687; Jan. 17.
Terminal, Electric. Y. Noishiki. 1,894,598; Jan. 17.
Textile fabric or similar article. M. Guhl. Des. 89,040–1; Jan. 17.
Textile fabric or similar article. M. Guhl. Des. 89,066; Jan. 17.
Textile fabric or similar article. A. Kohut. Des. 89,046; Jan. 17.
Textile fabric or similar article. A. Kohut. Des. 89,068–70; Jan. 17.
Textile fabric or similar article. R. Megroz. Des. 89,071; Jan. 17.
Textile fabric or similar article. W. Willhelm. Des. 89,064; Jan. 17.
Textile fabric or the like. J. Lukaa. Des. 89,049; Jan. 17.
Textile fabric or the like. J. Schweizer. Des. 89,059; Jan. 17.
Thermal composition of matter. H. S. Levenson. 1,894,775; Jan. 17.
Thermal switch. C. W. Appleberg and H. O. Borgström. 1,894,843; Jan. 17.
Thermoresponsive restraining device. W. L. Poessner. 1,894,425; Jan. 17.
Thermostat for fire alarm systems. J. M. Johnson. 1,894,746; Jan. 17.
Thermostat switch. C. W. Appelberg. 1,894,842; Jan. 17.
Thread and making the same, Rubber. L. B. Chisholm. 1,894,461; Jan. 17.
Thread guide advancing device for bobbin winding machines. A. Hoffmann. 1,894,313; Jan. 17.
Throttle. C. Ringel. 1,894,789; Jan. 17.
Ticket, Safety. F. Magidson. 1,894,826; Jan. 17.
Tile. C. E. Fort. 1,894,584; Jan. 17.
Tinner's snips. F. H. Rauh. 1,894,787; Jan. 17.
Tire chain, Antiskid. F. E. Stahl. 1,894,914; Jan. 17.
Tire pressure gauge, Pneumatic. A. W. Hobson. 1,894,490; Jan. 17.
Tire pump, Automatic. E. Hopkins. 1,894,908; Jan. 17.
Tires, Apparatus for retreading. C. H. Dacon and V. Stults. 1,894,347; Jan. 17.
Toaster device. A. B. Starr. 1,894,430; Jan. 17.
Toilet seat, Child's comfort. A. L. Weis. 1,894,387; Jan. 17.
Tong, Automatic releasing. E. E. Greve. 1,894,560; Jan. 17.
Tool: *See*—
Electric tool.
Toothbrush. D. N. Booth. 1,894,509; Jan. 17.
Toothbrush. G. H. Nenning and J. C. Johnson. 1,894,413; Jan. 17.
Toy. R. Becotte. Des. 89,032; Jan. 17.
Toy cash register. A. N. Smith. 1,894,524; Jan. 17.
Toy gun. A. T. Linney. Des. 89,048; Jan. 17.
Toy parachute. C. O. Bowman. 1,894,901; Jan. 17.
Toy projectile. L. B. Williams. 1,894,333; Jan. 17.
Trailer, Single axle tipping. K. Muchenberger-Wittlinger. 1,894,820; Jan. 17.
Transfer. W. S. Lawrence. 1,894,774; Jan. 17.
Transmission, Gearless. J. W. Shaw. 1,894,574; Jan. 17.
Tray, Ice. G. L. Tinkham. 1,894,897; Jan. 17.
Trestle E. F. Green. 1,894,293; Jan. 17.
Tripod. G. A. Ley. 1,894,695; Jan. 17.
Tripod head, Universal panoramic. O. U. Zerk. 1,894,456; Jan. 17.
Truck, Spring damping.. E. W. Webb. 1,894,386; Jan. 17.
Truck, Spring damping car. E. W. Webb. 1,894,385; Jan. 17.
Trunk, Clothes. J. Frankl. 1,894,485; Jan. 17.
Tube support. H. J. Kerr and C. U. Savoye. 1,894,692; Jan. 17.
Tubing, Device for cutting off. B. J. O'Connor and J. J. Hannon. 1,894,784; Jan. 17.
Tubing in wells, Process and apparatus for inserting. H. C. Otis. 1,894,912; Jan. 17.
Turbine pump. G. E. Bigelow. 1,894,393; Jan. 17.
2, 6-diamino-anthraquinone sulphides and preparing the same. W. L. Rintelman. 1,894,790; Jan. 17.
Typewriter cabinet. B. J. Dowd. 1,894,483; Jan. 17.
Typewriting and computing machine, Combined. E. E. Fowler. 1,894,350; Jan. 17.
Unloading apparatus. J. Satterquist. 1,894,326; Jan. 17.
Upholstery construction. A. M. Bank. 1,894,262; Jan. 17.
Vacuum cleaner bag attachment. W. E. Page. 1,894,884; Jan. 17.
Valuable products from gaseous unsaturated hydrocarbons, Manufacture of. L. Schlecht and H. Roetger. 1,894,792; Jan. 17.
Valve: *See*—
Distributing valve. Pneumatic valve.
Double check valve. Pressure indicating valve.
Four-electrode valve.
Valve. W. J. Gabel and J. S. Bretz. 1,894,859; Jan. 17.
Valve. C. H. Howell and H. P. Bunger. 1,894,314; Jan. 17.
Valve. N. B. Simpson. 1,894,546; Jan. 17.
Valve. C. C. and G. L. Westerman. 1,894,505; Jan. 17.
Valve control, Poppet. C. S. Burnett. 1,894,663; Jan. 17.
Valve fitting for plumbing fixtures. B. Lutsky. 1,894,407; Jan. 17.
Valve for liquid meters. D. H. McGogy. 1,894,492; Jan. 17.
Valve lock. A. R. Black and R. Clade. 1,894,660; Jan. 17.
Vapor condenser. O. A. Lindemann. 1,894,696; Jan. 17.
Vapor regulator. E. A. Russell and P. B. Parks. 1,894,360; Jan. 17.
Vaporizer. F. R. Erbach. 1,894,349; Jan. 17.
Vapors by means of a hydroscopic liquid such as sulphuric acid in a vacuum, Apparatus for absorbing aqueous. P. Schlumbohm. 1,894,893; Jan. 17.
Vapors of volatile liquids, Absorbing and recovering. H. L. Barthelemy. 1,894,508; Jan. 17.
Varnish. C. C. Kesler. 1,894,374; Jan. 17.
Varnish-like material and producing the same. J. P. A. McCoy. 1,894,626; Jan. 17.
Vehicle body construction. G. K. Lewis. 1,894,356; Jan. 17.
Vehicle frame. S. R. Thomas. 1,894,602; Jan. 17.
Vehicle, Load carrying. H. Gray. 1,894,311; Jan. 17.
Vehicle with endless track tensioning means. G. S. Knickerbocker. 1,894,619; Jan. 17.
Vehicles, Clear vision attachment for motor. E. W. Grudnicki. 1,894,862; Jan. 17.
Viscometer. G. Duffing. 1,894,369; Jan. 17.
Volume control, Double action. A. Senauke. 1,894,794; Jan. 17.
Wall construction. R. W. Dresser. 1,894,676; Jan. 17.
Warping frame. W. Schweiter. 1,894,712; Jan. 17.
Washing machine for bearings. T. C. Pew. 1,894,786; Jan. 17.
Water feed regulator. J. C. Kutzner. 1,894,517; Jan. 17.
Waterproof construction material. M. E. Campbell. 1,894,754; Jan. 17.
Waving device, Permanent. F. R. Marcel. 1,894,624; Jan. 17.
Welding clamp. E. G. Todt. 1,894,454; Jan. 17.
Well drilling machine. G. R. Watson. 1,894,432; Jan. 17.
Wheel: *See*—
Expansible wheel.
Wheel aligning device. J. C. Creagmile. 1,894,532; Jan. 17.
Wheel aligning gauge. F. M. Erickson. 1,894,370; Jan. 17.
Wheel chock, Adjustable and collapsible. G. F. Chisholm. 1,894,439; Jan. 17.
Wheel demounting means. A. S. Van Halteren. 1,894,287; Jan. 17.
Windshield heater. E. J. Gallagher, jr. 1,894,861; Jan. 17.
Window seat, Safety. W. La Grange. 1,894,878; Jan. 17.
Wire rope and strand preforming device. D. W. Clark. 1,894,756; Jan. 17.
Wire straightening apparatus. R. C. Pierce. 1,894,703; Jan. 17.
Wood pulp, Manufacture of. M. C. Taylor and J. F. White. 1,894,501; Jan. 17.
Work-holder. H. F. Schmidt and L. Jung. 1,894,451; Jan. 17.
Wrapping for plants. C. E. Wilson. 1,894,506; Jan. 17.
Wringer. G. W. Lewis. 1,894,594; Jan. 17.
Writing board, Body fitting. L. H. Fisher. 1,894,559; Jan. 17.
Yarn forming machine. W. Nanfeldt. 1,894,411; Jan. 17.

CLASSIFICATION OF PATENTS

ISSUED JANUARY 17, 1933

NOTE.—First number—class, second number—subclass, third number—patent number

2— 67: 1,894,920
206: 1,894,660
290: 1,894,891
4— 213: 1,894,846
239: 1,894,387
287: 1,894,407
5— 17: 1,894,362
8— 2: 1,894,277
1,894,639
9— 21: 1,894,874
24: 1,894,499
10— 100: 1,894,206
12— 135: 1,894,452
142: 1,894,291
1,894,440
145: 1,894,678
15— 18: 1,894,361
176: 1,894,882
201: 1,894,509
227: 1,894,413
255: 1,894,861
257: 1,894,343
18— 16: 1,894,467
1,894,845
47.5: 1,894,400
58: 1,894,629
59: 1,894,644
20— 4: 1,894,562
56.4: 1,894,520
22— 36: 1,894,677
45: 1,894,324
146: 1,894,511
23— 3: 1,894,763
5: 1,894,775
49: 1,894,620
165: 1,894,289
1,894,514
172: 1,894,720
200: 1,894,749
1,894,750
236: 1,894,785
262: 1,894,706
288: 1,894,708
24— 73: 1,894,856
85: 1,894,686
163: 1,894,683
1,894,654
200: 1,894,308
1,894,304
1,894,855
220: 1,894,531
261: 1,894,541
25— 21: 1,894,894
131: 1,894,676
156: 1,894,268
27— 27: 1,894,793
29— 4.5: 1,894,447
1,894,448
34: 1,894,526
38: 1,894,773
148: 1,894,389
148.4: 1,894,595
152.1: 1,894,321
156.5: 1,894,558
30— 12: 1,894,558
17: 1,894,787
31— 51: 1,894,332
33— 98: 1,894,858
123: 1,894,397
208: 1,894,370
1,894,532
207: 1,894,670
34— 26: 1,894,709
35— 5: 1,894,854
36— 2: 1,894,868
7.8: 1,894,610
9: 1,894,681
11.5: 1,894,561
37— 143: 1,894,410
146: 1,894,671
39— 55: 1,894,849
40— 23: 1,894,906
26: 1,894,826
42: 1,894,684
118: 1,894,470
128: 1,894,552
40— 126: 1,894,342
1,894,568
1,894,640
130: 1,894,280
1,894,704
132: 1,894,512
133: 1,894,857
140: 1,894,476
156: 1,894,803
41— 38.6: 1,894,731
43— 46: 1,894,500
44— 4: 1,894,682
45— 7: 1,894,445
24: 1,894,625
1,894,748
50: 1,894,739
59: 1,894,559
75: 1,894,334
46— 35: 1,894,605
52: 1,894,533
1,894,901
48— 80: 1,894,459
176: 1,894,535
1,894,536
1,894,635
177: 1,894,557
180: 1,894,847
49— 14: 1,894,576
17.1: 1,894,553
51— 89: 1,894,807
101: 1,894,382
190: 1,894,900
213: 1,894,579
55— 10: 1,894,308
62: 1,894,740
82: 1,894,474
108: 1,894,902
56— 15: 1,894,412
33: 1,894,305
257: 1,894,312
318: 1,894,542
1,894,722
60— 46: 1,894,522
52: 1,894,296
54.6: 1,894,525
62— 1: 1,894,497
4: 1,894,286
91.5: 1,894,674
104: 1,894,513
108.5: 1,894,897
117: 1,894,457
119.5: 1,894,389
121: 1,894,902
126: 1,894,340
1,894,918
141: 1,894,441
153: 1,894,888
170: 1,894,536
64— 90: 1,894,507
65— 46: 1,894,457
47: 1,894,261
66— 9: 1,894,566
100: 1,894,558
198: 1,894,319
67— 7.1: 1,894,900
50: 1,894,417
68— 9: 1,894,432
10: 1,894,423
1,894,424
21: 1,894,564
1,894,694
32: 1,894,594
70— 90: 1,894,660
71— 6: 1,894,567
9: 1,894,797
10: 1,894,496
72— 14: 1,894,371
18: 1,894,584
46: 1,894,882
1,894,933
90: 1,894,463
122: 1,894,392
73— 90: 1,894,492
81: 1,894,396
1,894,490
51: 1,894,643
82: 1,894,517
73— 111: 1,894,648
184: 1,894,440
74— 1: 1,894,663
7: 1,894,927
14: 1,894,290
26: 1,894,308
32: 1,894,600
34: 1,894,397
1,894,890
39: 1,894,458
59: 1,894,504
109: 1,894,672
1,894,771
75— 1: 1,894,819
1,894,820
22.5: 1,894,657
87: 1,894,755
76— 14: 1,894,378
89.2: 1,894,585
77— 6: 1,894,634
64: 1,894,642
78— 98: 1,894,800
80— 10: 1,894,689
63: 1,894,288
81— 8.1: 1,894,564
8.1: 1,894,388
9.8: 1,894,329
53: 1,894,560
100: 1,894,784
82— 18: 1,894,899
83— 10: 1,894,601
12: 1,894,559
73: 1,894,475
85— 9: 1,894,708
88— 1: 1,894,639
14: 1,894,808
1,894,809
1,894,910
1,894,911
19.3: 1,894,709
24: 1,894,264
1,894,265
61: 1,894,462
89— 40: 1,894,650
1,894,680
41: 1,894,188
1,894,822
90— 13.4: 1,894,719
91— 14.5: 1,894,317
36: 1,894,420
43: 1,894,427
44: 1,894,729
45: 1,894,579
70: 1,894,671
92— 9: 1,894,801
20: 1,894,577
21: 1,894,596
40: 1,894,259
39: 1,894,408
50: 1,894,548
51: 1,894,395
15: 1,894,840
47: 1,894,516
98— 37: 1,894,898
43: 1,894,930
10: 1,894,845
11: 1,894,877
1,894,677
8: 1,894,221
101— 8: 1,894,318
32: 1,894,870
114: 1,894,530
267: 1,894,496
407: 1,894,451
103— 5: 1,894,308
126: 1,894,353
234: R. 18,717
105— 4: 1,894,665
186: 1,894,395
1,894,396
388: 1,894,534
105— 406: 1,894,721
108— 34: 1,894,628
51: 1,894,630
57: 1,894,781
107— 54: 1,894,651
67: 1,894,668
108— 7: 1,894,614
1,894,615
1,894,754
110— 165: 1,894,297
171: 1,894,267
112— 2: 1,894,408
3: 1,894,409
25: 1,894,865
47: 1,894,869
113— 42: 1,894,718
114— 0.5: 1,894,428
122: 1,894,272
115— 28: 1,894,494
34: 1,894,478
116— 112: 1,894,861
119: 1,894,533
117— 20: 1,894,756
34: 1,894,411
53: 1,894,461
119— 23: 1,894,406
52: 1,894,772
53: 1,894,278
76: 1,894,563
84: 1,894,905
120— 109: 1,894,632
94: 1,894,863
121— 9: 1,894,398
10: 1,894,901
30: 1,894,799
38: 1,894,929
42: 1,894,379
66: 1,894,618
114: 1,894,782
235: 1,894,270
302: 1,894,299
441: 1,894,457
451.1: 1,894,517
1,894,762
450: 1,894,791
462: 1,894,789
479: 1,894,901
123— 15: 1,894,480
51: 1,894,546
119: 1,894,510
130: 1,894,834
171: 1,894,883
101: 1,894,667
126— 52: 1,894,900
340: 1,894,268
127— 23: 1,894,571
38: 1,894,570
128— 3: 1,894,725
129— 1: 1,894,735
12: 1,894,736
24: 1,894,734
120— 10: 1,894,498
132— 14: 1,894,332
33: 1,894,795
1,894,797
173— 318: 1,894,262
211— 51: 1,894,807
73: 1,894,992
212— 69: 1,894,668
213— 8: 1,894,554
17: 1,894,248
215— 46: 1,894,804
217— 3: 1,894,331
5: 1,894,439
26.5: 1,894,891
60: 1,894,849
219— 17: 1,894,454
24: 1,894,431
41: 1,894,267
42: 1,894,575
220— 1: 1,894,649
32: 1,894,575
55: 1,894,682
1,894,679
61: 1,894,289
● 75: 1,894,675
86: 1,894,665
221— 1: 1,894,782
140— 145: R. 18,715
141— 1: 1,894,786
143— 33: 1,894,415
105: 1,894,326
144— 309: 1,894,341
146— 3: 1,894,858
148— 12: 1,894,551
15: 1,894,752
21.5: 1,894,526
150— 1.6: 1,894,544
2: 1,894,884
151— 33: 1,894,631
152— 11: 1,894,908
11.5: 1,894,372
14: 1,894,914
21: 1,894,572
153— 36: R. 18,714
154— 34: 1,894,907
155— 3: 1,894,502
94: 1,894,742
1,894,743
172— 218: 1,894,282
221: 1,894,340
222: 1,894,898
224: 1,894,751
1,894,872
263: 1,894,908
175— 182: 1,894,328
204: 1,894,404
208: 1,894,816
341: 1,894,429
366: 1,894,260
1,894,831
176— 7: 1,894,723
177— 229: 1,894,484
178— 44: 1,894,845
45: 1,894,226
46: 1,894,852
179— 2.5: 1,894,646
1,894,686
1,894,838
179—5 171: 1,894,578
1,894,704
180— 5: 1,894,619
18: 1,894,888
181— 27: 1,894,376
183— 24: 1,894,744
114.6: 1,894,419
184— 6: 1,894,477
7: 1,894,658
1,894,659
185— 37: 1,894,416
187— 1: 1,894,351
188— 32: 1,894,430
62: 1,894,513
1,894,728
170: 1,894,434
174: 1,894,426
202: 1,894,565
204: 1,894,714
210: 1,894,522
213: 1,894,263
189— 1.5: 1,894,528
91: 1,894,401
190— 41: 1,894,485
192— 1.01: 1,894,780
58: 1,894,318-
1,894,574
196— 10: 1,894,661
49: 1,894,335
53: 1,894,770
1,894,926
147: 1,894,328
1,894,331
197— 6: 1,894,466
198— 31: 1,894,547
127: 1,894,881
220: 1,894,928
199— 55: 1,894,909
200— 5: 1,894,747
48: 1,894,421
64: 1,894,252
138: 1,894,842
1,894,843
142: 1,894,746
150: 1,894,329
161: 1,894,727
163: 1,894,543
167: 1,894,697
201— 63: 1,894,327
76: 1,894,655
202— 6: 1,894,498
7: 1,894,601
30: 1,894,471
204— 1: 1,894,909
4: 1,894,271
7: 1,894,670
11: 1,894,909
206— 8: 1,894,287
46: 1,894,506
88: 1,894,306
209— 44: 1,894,779
130: 1,894,623
168: 1,894,244
210— 68: 1,894,713
211— 51: 1,894,807
73: 1,894,992
212— 69: 1,894,668
213— 8: 1,894,554
17: 1,894,248
215— 46: 1,894,804
217— 3: 1,894,331
5: 1,894,439
26.5: 1,894,891
60: 1,894,849
219— 17: 1,894,454
24: 1,894,431
41: 1,894,267
42: 1,894,575
220— 1: 1,894,649
32: 1,894,575
55: 1,894,682
1,894,679
61: 1,894,289
● 75: 1,894,675
86: 1,894,665
221— 1: 1,894,782

221— 47.3: 1,894,274
1,894,741
95: 1,894,275
100: 1,894,867
223— 17: 1,894,435
53: 1,894,868
224— 2: 1,894,540
29: 1,894,464
1,894,482
1,894,608
225— 26: 1,894,903
226— 22: 1,894,738
39: 1,894,705
1,894,812
53: 1,894,345
1,894,346
68: 1,894,403
129: 1,894,851
228— 24: 1,894,489
229— 28: 1,894,402
33: 1,894,873
230— 24: 1,894,869
187: 1,894,701
232— 15: 1,894,823
233— 20: 1,894,520
22: 1,894,524
30: 1,894,284
60: 1,894,350
70: 1,894,294

233— 144: 1,894,433
236— 14: 1,894,616
40: 1,894,360
240—10.66: 1,894,606
41.1: 1,894,876
78: 1,894,583
1,894,586
106: 1,894,915
108: 1,894,302
241— 12: 1,894,888
242— 31: 1,894,313
65: 1,894,253
1,894,281
131: 1,894,712
244— 2: 1,894,582
1,894,919
14: 1,894,844
19: 1,894,418
1,894,673
21: 1,894,518
246— 411: 1,894,693
248— 2: 1,894,293
14.1: 1,894,710
16: 1,894,453
16.5: 1,894,483
18: 1,894,310
20: 1,894,258
32: 1,894,895
38: 1,894,473

248— 43: 1,894,695
47: 1,894,456
1,894,457
250— 27.5: R. 18,713
1,894,593
1,894,599
1,894,806
36: 1,894,636
1,894,637
1,894,687
251— 118: 1,894,603
144: 1,894,254
1,894,859
252— 4: 1,894,508
254— 29: 1,894,835
193: 1,894,286
255— 1: 1,894,446
16: 1,894,432
42: 1,894,358
256— 57: 1,894,783
257— 43: 1,894,279
1,894,753
47: 1,894,284
95: 1,894,618
132: 1,894,715
139: 1,894,436
212: 1,894,443
240: 1,894,692
1,894,760

258— 11: 1,894,315
260— 2: 1,894,352
1,894,580
4: 1,894,702
7: 1,894,934
11: 1,894,647
19: 1,894,848
38: 1,894,792
45: 1,894,666
54: 1,894,365
59: 1,894,790
60: 1,894,491
106: 1,894,662
108: 1,894,301
1,894,460
112: 1,894,479
124: 1,894,375
127: 1,894,865
130.5: 1,894,330
168: 1,894,266
1,894,283
1,894,924
1,894,925
170: 1,894,765
261— 21: 1,894,758
26: 1,894,607
52: 1,894,354
91: 1,894,864
104: 1,894,898

261— 116: 1,894,696
263— 8: 1,894,529
265— 1: 1,894,916
11: 1,894,369
22: 1,894,814
25: 1,894,935
47: 1,894,405
59: 1,894,442
266— 1: 1,894,523
3: 1,894,825
5: 1,894,590
267— 9: 1,894,716
1,894,717
47: 1,894,839
52: 1,894,495
53: 1,894,757
271— 48: 1,894,622
273— 32: 1,894,722
77: 1,894,841
80: 1,894,706
1,894,707
121: 1,894,469
275— 11: 1,894,364
279— 61: 1,894,515
280— 16: 1,894,550
81: 1,894,633
102: 1,894,311
104: 1,894,776
106: 1,894,602

282— 12: 1,894,745
285— 9: 1,894,390
86: 1,894,700
163: 1,894,711
287— 90: 1,894,309
290— 44: 1,894,357
292— 136: 1,894,913
224: 1,894,555
241: 1,894,324
254: 1,894,668
294— 67: 1,894,664
296— 28: 1,894,356
1,894,383
84: 1,894,862
138: 1,894,527
298— 5: 1,894,320
299— 8: 1,894,573
301— 9: 1,894,287
304— 27: 1,894,878
308— 4: 1,894,519
11: 1,894,904
72: 1,894,699
236: 1,894,414
312— 61: 1,894,589

U. S. GOVERNMENT PRINTING OFFICE: 1933

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Albers Bros. Milling Company, Portland, Oreg. Animal food. Serial No. 332,484; Jan. 24. Class 46.

American Cable Company, Inc., Bridgeport, Conn. Wire rope and wire strand. Serial No. 330,051; Jan. 24. Class 7.

Anre, Cosmetician. (See Koenig, Harry D.)

Arden, Elizabeth, Inc., New York, N. Y. Perfumes and perfumery. Serial No. 331,884; Jan. 24. Class 6.

Ballantine, P., & Sons, Newark, N. J. Malt syrup. Serial No. 330,191; Jan. 24. Class 46.

Baltimore Belting Company, Baltimore, Md. Leather belting. Serial No. 321,093; Jan. 24. Class 35.

Barbasol Company, The, Indianapolis, Ind. Razor blades. Serial No. 332,830; Jan. 24. Class 28.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 332,573; Jan. 24. Class 42.

Bond Manufacturing Corporation, Wilmington, Del. Shaving soap. Serial No. 332,834; Jan. 24. Class 4.

Brogirot, Incorporated, New York, N. Y. Pharmaceutical preparation. Serial No. 332,084; Jan. 24. Class 6.

Brook Hill Laboratories, Inc., Genesse Depot, Wis., and Chicago, Ill. Medicine. Serial No. 331,541; Jan. 24. Class 6.

Caliente Food Products Co., San Bernardino, Calif. Smoked fish, salads, pickles, etc. Serial No. 328,887; Jan. 24. Class 46.

California Fruit Chimes Co. (See Johnson, W. A.)

California Fruit Growers Exchange, Los Angeles, Calif. Maltless fruit juices, fruit juice concentrates, etc. Serial No. 332,397; Jan. 24. Class 45.

California Fuel & Utilities, Inc., Los Angeles, Calif. Fuel briquettes. Serial Nos. 332,398–400; Jan. 24. Class 1.

Campbell Laboratories, Inc., New York, N. Y. Cosmetics. Serial No. 331,142; Jan. 24. Class 6.

Columbia Tool Steel Company, Chicago Heights, Ill. Tool steel. Serial No. 332,646; Jan. 24. Class 14.

Davis, Mrs. Dr. John L., Irvine, Fla. Preparation to be applied locally for the treatment of groundditch, ringworm, burns, etc. Serial No. 332,334; Jan. 24. Class 6.

Davison-Paxon Company, Atlanta, Ga. Shoes. Serial No. 331,777; Jan. 24. Class 39.

De Ciny Paris. (See Sinykin, J. L.)

Dental Laboratory Supply Company, Inc., New York, N. Y. Molding composition. Serial No. 314,198. Jan. 24. Class 44.

Eby-Loser Company, Rockford, Ill. Cigars. Serial No. 331,222; Jan. 24. Class 17.

Ellers, Paula S., doing business as Sani-Skalp Co., Beverly Hills, Calif. Oil shampoo. Serial No. 331,922; Jan. 24. Class 6.

Electric Moth Bomb Co., The. (See Riley, Herbert E., and Tannenbaum.)

Emdee Laboratories Co. (See Sontag Chain Stores Co. Ltd.)

Empire State Products Co., Yonkers, N. Y. Preparation for use as a carbon remover. Serial No. 331,820; Jan. 24. Class 6.

Europa Sales Corporation, New York, N. Y. Candy. Serial No. 332,088; Jan. 24. Class 46.

Everlastik, Inc., Chelsea, Mass. Yarn. Serial No. 332,480; Jan. 24. Class 43.

Farrow, Cary, Houston, Tex. Advertising sign frames. Serial No. 312,908; Jan. 24. Class 50.

Federal Mill, Inc., Lockport, N. Y. Wheat flour and bread made from wheat flour. Serial No. 330,124; Jan. 24. Class 46.

Finch, Jos. S., & Company, New York, N. Y. Whiskey, or other potable spirits. Serial Nos. 332,215–16; Jan. 24. Class 49.

Florida Fruit Canners, Inc., Frostproof, Fla. Canned orange and grapefruit sections. Serial No. 321,203; Jan. 24. Class 46.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial No. 330,042; Jan. 24. Class 42.

Frank and Company, Milwaukee, Wis. Canned and prepared food products. Serial No. 331,225; Jan. 24. Class 46.

Fraser, Alexander, doing business as A. Fraser & Co., Manchester, England. Whiskey. Serial No. 331,779; Jan. 24. Class 40.

G. C. Medicine Company. (See Werner, John H.)

Gar-Herba-A Co., The. (See Garner, George W.)

Garner, George W., doing business as The Gar-Herba-A Co., North Wales, Pa. Compound of herbs. Serial No. 331,780; Jan. 24. Class 6.

General Mills, Inc., Minneapolis, Minn. Poultry, dairy, and stock feed. Serial No. 332,038; Jan. 24. Class 46.

Geuting, A. H., Company, Philadelphia, Pa. Boots and shoes. Serial No. 332,567; Jan. 24. Class 39.

Gnome Bakery, Inc., New York, N. Y. Bread. Serial No. 329,680; Jan. 24. Class 46.

Goldberg, Bowen & Co., San Francisco, Calif. Canned vegetables. Serial No. 331,308; Jan. 24. Class 46.

Golden Bird Inc., The, Chicago, Ill. Seeds for birds. Serial No. 323,328; Jan. 24. Class 46.

Goldstein, S., Monument Works, Inc., New York, N. Y. Finished monument stones. Serial No. 331,871; Jan. 24. Class 50.

Gray, Jean, Washington, D. C. Preparation for the treatment of the hair. Serial No. 331,378; Jan. 24. Class 6.

Hagler, Sam, doing business as Perbodent Laboratories, New York, N. Y. Tooth paste, tooth powder, and mouth wash. Serial No. 332,090; Jan. 24. Class 6.

Haller Baking Company, Pittsburgh, Pa. Bread. Serial No. 311,780; Jan. 24. Class 46.

Hammond Paint & Chemical Co., Inc., The, Beacon, N. Y. Insecticide chemicals. Serial Nos. 331,430–1; Jan. 24. Class 6.

Hays, Harold M., New York, N. Y. Medicines and pharmaceutical preparations. Serial No. 331,083; Jan. 24. Class 6.

Heller, Robert, Inc., New York, N. Y. Upholstery and drapery fabrics. Serial No. 332,410; Jan. 24. Class 42.

Henning, Dr. Georg Friedrich, Chemische Fabrik, Berlin, Germany. Preparation for producing narcosis and for anæsthetizing. Serial No. 327,793; Jan. 24. Class 6.

Houbigant, Inc., New York, N. Y. Perfume, toilet water, face powder, etc. Serial No. 332,454; Jan. 24. Class 6.

Johnson, W. A., doing business as California Fruit Chimes Co., San Gabriel, Calif. Toffy. Serial No. 322,047; Jan. 24. Class 46.

Kelly-Springfield Tire Company, The, New York, N. Y. Resilient vehicle tires and inner tubes. Serial No. 333,158; Jan. 24. Class 35.

Kenny, C. D., Co., Baltimore, Md. Coffee. Serial No. 332,650; Jan. 24. Class 46.

Kin-Septic Company, doing business as York Pharmacal Company, St. Louis, Mo. Antiseptic preparation. Serial No. 332,302; Jan. 24. Class 6.

Klein, Friedrich, Berlin-Neukolln, Germany. Pharmaceutical preparations. Serial No. 325,101; Jan. 24. Class 6.

Klein, Friedrich, Berlin-Neukolln, Germany. Pharmaceutical preparations. Serial No. 325,103; Jan. 24. Class 6.

Koenig, Harry D., doing business as Anre, Cosmetician, New York, N. Y. Face powder, lipstick, face rouge, etc. Serial No. 331,865; Jan. 24. Class 6.

Lachoy Food Products, Inc., Detroit, Mich. Bean sprouts, water chestnuts, bamboo shoots, etc. Serial No. 331,646; Jan. 24. Class 46.

Lande & Miskend, Inc., New York, N. Y. Laces. Serial No. 331,829; Jan. 24. Class 42.

Lay & Way Company, The, New York, N. Y. Corsets, girdles, corselettes, etc. Serial No. 330,631; Jan. 24. Class 39.

Little, Samuel A., Charlotte, N. C. Hand lotion, cold and vanishing cream, etc. Serial No. 326,864; Jan. 24. Class 6.

Lock, John E., Milwaukee, Wis. Shoes. Serial No. 332,844; Jan. 24. Class 39.

Lockhart Bros. (See Vaughan, Erin L.)

Maley, Edna H., Long Beach, Calif. Face cream, hair tonics and dressing, hair shampoo, etc. Serial No. 324,619; Jan. 24. Class 6.

Mayer, H. J., & Sons Co., Chicago, Ill. Meat curing compound. Serial No. 331,622; Jan. 24. Class 6.

Mayo Woolen Mills Co., Millbury, Mass. Woolen piece goods. Serial No. 332,376; Jan. 24. Class 42.

Moffat Incorporated, Boston, Mass. Cooking chocolate. Serial No. 332,196; Jan. 24. Class 46.

Mongelli, Caesar G., Brooklyn, N. Y. Spaghetti sauce. Serial No. 332,262; Jan. 24. Class 46.

Nelson, William R., Dallas, Tex. Preparation for scalp diseases, rheumatism, and skin diseases. Serial No. 331,604; Jan. 24. Class 6.

Newday Seeds, Inc., Fargo, N. Dak. Garden, flower, and field seeds. Serial No. 332,137; Jan. 24. Class 1.

Newmarket Leather Co., Inc., New York, N. Y. Leather. Serial No. 332,348; Jan. 24. Class 1.

New Yorker Cosmetic Corp., The, New York, N. Y. Astringents, bleach creams, cold creams, etc. Serial No. 332,462; Jan. 24. Class 6.

Package Machinery Company, Springfield, Mass. Machines for applying hoods to bottles. Serial No. 332,381; Jan. 24. Class 28.

Page Perfumer. (See Talcum Puff Co. Inc.)

Park Drug Company, Inc., doing business as Park Laboratories, New York, N. Y. Liquid dentifrice and antiseptic. Serial No. 332,264; Jan. 24. Class 6.

Penney, J. C., Company, Wilmington, Del., and New York, N. Y. Rouge, cleansing cream, bleach cream, etc. Serial Nos. 331,590–1; Jan. 24. Class 6.

Perbodent Laboratories. (See Hagler, Sam.)

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Phillips, J. M., doing business as Phillips Food Products Company, Tulsa, Okla. Blended breakfast cereal. Serial No. 321,610; Jan. 24. Class 46.
Rex-Hide Rubber Manufacturing Company, East Brady, Pa. Molded friction linings, and mineral wear-resisting materials. Serial No. 332,860; Jan. 24. Class 35.
Richards, Lester S., White Haven, Pa. Coal, charcoal, coke, and firewood. Serial No. 331,267; Jan. 24. Class 1.
Riley, Herbert E., and Harry J. Tannenbaum, doing business as The Electric Moth Bomb Co., New York, N. Y. Fumigating apparatus. Serial No. 331,292; Jan. 24. Class 6.
Roseth Corporation, Brooklyn, N. Y. Moth and vermin repellent bags and boxes. Serial No. 327,986; Jan. 24. Class 2.
Sandeman, Geo. G., Sons & Co. Limited, London, England. Wines. Serial No. 331,705; Jan. 24. Class 47.
Sani-Skalp Co. (See Ellers, Paula S.)
Seagram, Joseph E., & Sons Limited, Waterloo, Ontario, Canada. Potable spirits, whiskey, and liquors. Serial No. 333,084; Jan. 24. Class 49.
Sears, Roebuck and Co., Chicago, Ill. Linoleum and oil cloth. Serial No. 333,202; Jan. 24. Class 20.
Shuron Optical Company, Inc., Geneva, N. Y. Spectacles, eyeglasses, and parts thereof. Serial No. 332,788; Jan. 24. Class 26.
Sinykin, J. L., doing business as De Ciny Paris, St. Paul, Minn. Perfumes, toilet water, face powder, etc. Serial No. 331,875; Jan. 24. Class 6.
Skat-A-Rat Corporation, Providence, R. I. Preparation for use as a rodent exterminator. Serial No. 331,625; Jan. 24. Class 6.
Skoot Company, The, Hamilton and Dayton, Ohio. Liniment. Serial No. 331,654; Jan. 24. Class 6.
Slesinger, Stephen, Inc., New York, N. Y. Games. Serial No. 332,700; Jan. 24. Class 22.
Smith, Elizur G., Portland, Oreg. Medicine. Serial No. 329,723; Jan. 24. Class 6.
Sontag Chain Stores Co. Ltd., doing business as Emdee Laboratories Co., Los Angeles, Calif. Medicinal preparations. Serial No. 315,938; Jan. 24. Class 6.
Talcum Puff Co. Inc., doing business as Page Perfumer, New York, N. Y. Face creams, face and hand lotions, rouge, etc. Serial No. 331,270; Jan. 24. Class 6.
Texaco Salt Products Company, New York, N. Y. Calcium chloride. Serial No. 332,273; Jan. 24. Class 6.
Thiophene Products Company, Chicago, Ill. Protein compound. Serial No. 332,353; Jan. 24. Class 6.
Thiophene Products Company, Chicago, Ill. Colorless hydrocarbon sulphur preparation. Serial No. 332,356; Jan. 24. Class 6.
Tustin, Clinton, Denver, Colo. Hair oil. Serial No. 331,879; Jan. 24. Class 6.
Valencia Heights Orchards, Inc., Covina, Calif. Fresh citrus fruits. Serial No. 332,558; Jan. 24. Class 46.
Vamp-Eez Company, New York, N. Y. Guard applied to shoes in the nature of an instep protector. Serial No. 331,965; Jan. 24. Class 40.
Vaughan, Erin L., doing business as Lockhart Bros., Selma, Ala. Preparation for use as a blood purifier. Serial No. 331,939; Jan. 24. Class 6.
Victor Flour Mills, Inc., Pittsford, N. Y. Wheat flour. Serial No. 332,501; Jan. 24. Class 46.
Weddle Tea Company, New York, N. Y. Tea. Serial No. 330,941; Jan. 24. Class 46.
Weinrich Pickle Co., Los Angeles, Calif. Pickles. Serial No. 332,561; Jan. 24. Class 46.
Werner, John H., doing business as G. C. Medicine Company, Clarksville, Ark. Preparation for the treatment of gonorrhea. Serial No. 331,971; Jan. 24. Class 6.
Wesco Foods Company, Cincinnati, Ohio. Brooms. Serial No. 332,939; Jan. 24. Class 29.
Whitaker, Fred A., Columbus, Ga. Toy. Serial No. 332,793; Jan. 24. Class 22.
Williamson Candy Company, Chicago, Ill. Peanut butter. Serial No. 332,317; Jan. 24. Class 46.
Wohl Shoe Company, St. Louis, Mo. Arch support shoes. Serial No. 332,799; Jan. 24. Class 39.
Wray, Carl E., Salina, Kans. Medicinal preparation for the treatment of tubercular and lung diseases. Serial No. 330,076; Jan. 24. Class 6.
York Pharmacal Company. (See Kin-Septic Company.)
Young, Homer N., doing business as Zingo Products Company, Spokane, Wash. Breakfast cereals, pancake or waffle syrups, and pancake and waffle flour. Serial No. 331,802; Jan. 24. Class 46.
Zahoray, Julia, South St. Paul, Minn. Palliative for the treatment of lung diseases. Serial No. 332,287; Jan. 24. Class 6.
Zingo Products Company. (See Young, Homer N.)

LIST OF REGISTRANTS OF TRADE-MARKS

American Oil Company, The, Baltimore, Md. Petroleum solvent and cleaning naphtha. 300,461; Jan. 24; Serial No. 327,965; published Aug. 9, 1932. Class 4.
American Oil Company, The, Baltimore, Md. Insecticide, disinfectant, and deodorant. 300,594; Jan. 24; Serial No. 327,966; published Aug. 16, 1932. Class 6.
Arden Box Toe Company, Watertown, Mass. Shoe stiffener parts. 300,526; Jan. 24; Serial No. 327,644; published Oct. 25, 1932. Class 39.
Archa, A., & Co., Ltd., Los Angeles, Calif. Fresh vegetables and fruits. 300,568; Jan. 24; Serial No. 305,024; published Nov. 8, 1932. Class 46.
Associated Oil Company, San Francisco, Calif. Gasoline. 300,629; Jan. 24. Class 15.
Athleve Company, The. (See Cohn, Aaron B.)
Baldwin City Mills Company. (See Santangelo, Sylvester E.)
Beatrice Creamery Company, Chicago, Ill. Confection. 300,488; Jan. 24; Serial No. 330,289; published Nov. 8, 1932. Class 46.
Bee Bee Confection Company, The, Dayton, Ohio. Chewing gum. 300,564; Jan. 24; Serial No. 316,229; published Nov. 8, 1932. Class 46.
Ben Hur Food Products. (See Van Camp Hardware & Iron Company.)
Berth, Levi & Co. Inc., New York, N. Y. Sausage casings. 300,506; Jan. 24; Serial No. 330,774; published Nov. 15, 1932. Class 1.
Best & Company, Inc., New York, N. Y. Overcoats, hats, caps, etc. 300,623; Jan. 24. Class 39.
Bio Medico, Inc., New York, N. Y. Medicinal preparation. 300,597; Jan. 24; Serial No. 330,080; published Nov. 1, 1932. Class 6.
Bob, H. D., Company, Inc., New York, N. Y. Shirts, pajamas, undershirts, etc. 300,540; Jan. 24; Serial No. 329,593; published Nov. 1, 1932. Class 39.
Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Soap preparations. 300,467; Jan. 24; Serial No. 329,495; published Nov. 8, 1932. Class 4.
Bonttoo Corn Salve Company, The, Toledo, Ohio. Salve. 300,573; Jan. 24; Serial No. 327,086; published Nov. 1, 1932. Class 6.
Boon Manufacturing Co., Inc., New York, N. Y. Ointment and cream. 300,605; Jan. 24; Serial No. 329,765; published Nov. 1, 1932. Class 6.
Boon Manufacturing Co., Inc., New York, N. Y. Cream and ointment. 300,606; Jan. 24; Serial No. 329,764; published Nov. 1, 1932. Class 6.
Borden's Produce Company, Inc., Omaha, Nebr. Condensed buttermilk. 300,493; Jan. 24; Serial No. 330,444; published Nov. 8, 1932. Class 46.
Bradstone Rubber Company, Woodbine, N. J. Rubber heels, soles, and half soles. 300,511; Jan. 24; Serial No. 330,157; published Nov. 1, 1932. Class 39.
Bronston Hat Co., Plainfield, N. J. Straw hats. 300,610; Jan. 24; Serial No. 329,851; published Oct. 25, 1932. Class 39.
Brown Shoe Company, Inc., St. Louis, Mo. Shoes. 300,554; Jan. 24; Serial No. 321,269; published Nov. 15, 1932. Class 39.
Brown, William S., doing business as Louisiana Yeast-Bran Products Company, New Orleans, La. Cereal breakfast food. 300,482; Jan. 24; Serial No. 328,000; published Nov. 15, 1932. Class 46.
Brownie's Corn Shop. (See Roschman, Emil C.)
Bruckheimer, Sydney M., doing business as Susco Sales Co., Buffalo, N. Y. Chemical powder. 300,534; Jan. 24; Serial No. 330,197; published Nov. 8, 1932. Class 6.
Bugge, P. O., Bisbee, N. Dak. Medicinal preparation. 300,576; Jan. 24; Serial No. 329,870; published Nov. 8, 1932. Class 6.
Burkman, George, Omaha, Nebr. Repaired and rebuilt shoes. 300,522; Jan. 24; Serial No. 328,544; published Oct. 18, 1932. Class 39.
Burnol Petroleum Co., Los Angeles, Calif. Chemical compounds to be added to gasoline to improve combustion. 300,571; Jan. 24; Serial No. 326,276; published Nov. 1, 1932. Class 6.
Canada Tea Ltd. (See Lavers, Herbert J., assignor.)
Carbide and Carbon Chemicals Corporation, New York, N. Y. Denatured alcohol and alcohol other than pure ethyl alcohol. 300,602; Jan. 24; Serial No. 329,886; published Nov. 1, 1932. Class 6.
Carborundum Company, The, Niagara Falls, N. Y. Artificial abrasive grains. 300,470; Jan. 24; Serial No. 330,245; published Nov. 8, 1932. Class 4.
Carder & Carter, New Orleans, La. Moisture and odor absorbent chemical compound to be placed in refrigerators and the like. 300,469; Jan. 24; Serial No. 330,119; published Nov. 15, 1932. Class 6.
Central Import Company, Chicago, Ill. Gelatine sheets. 300,539; Jan. 24; Serial No. 329,829; published Nov. 15, 1932. Class 50.
Chabot. (See Manahan, D. F.)
Charlain Co., The. (See Jackson, Charles E.)

Chicago Mail Order Company, Chicago, Ill. Hats and caps. 300,510; Jan. 24; Serial No. 330,337; published Nov. 15, 1932. Class 39.
Citra Packing Company, The, Citra, Fla. Oranges, lemons, grape-fruit, etc. 300,489; Jan. 24; Serial No. 329,421; published Nov. 8, 1932. Class 46.
Citrovite Tooth Paste Co. (See Mattison, Charles W.)
Clapp, Otis, & Son, Inc., Boston, Mass. Antacid antipyretic tablet. 300,577; Jan. 24; Serial No. 329,177; published Nov. 8, 1932. Class 6.
Cohn, Aaron B., doing business as The Athleve Company, Toledo, Ohio. Powder for treatment of epidermophyton, etc. 300,592; Jan. 24; Serial No. 328,050; published Aug. 16, 1932. Class 6.
Corrugated Container Company, Philadelphia, Pa. Corrugated boxes. 300,567; Jan. 24; Serial No. 311,996; published Nov. 15, 1932. Class 2.
Cover Lawn Seed Company. (See Goldberg, Benjamin S.)
Cressey, Dockham & Co., Inc., Salem, Mass. Canned sardines, shrimp, tuna fish, etc. 300,624; Jan. 24. Class 46.
Dalton Hat Co., Inc., Yonkers, N. Y. Hats. 300,632. Jan. 24. Class 39.
Deinzer, John C., doing business as The Hy-Ca-Mel Remedy Co., Hamilton, Ohio. Tonic and cough medicine. 300,561; Jan. 24; Serial No. 318,905; published Nov. 8, 1932. Class 6.
Desbecker, Harold C., doing business as Tic Toc Toy Company, Buffalo, N. Y. Teething rings or infant pacifiers. 300,574; Jan. 24; Serial No. 302,214; published Nov. 8, 1932. Class 44.
Drug Products Co., Inc., The, Long Island City, N. Y. Iodine mouth and throat lozenges. 300,477; Jan. 24; Serial No. 325,572; published May 3, 1932. Class 6.
Duncan, Donald F., Inc., Chicago, Ill. Bandelore toy spinning tops. 300,504; Jan. 24; Serial No. 330,924; published Nov. 15, 1932. Class 22.
Duncan, Donald F., Inc., Chicago, Ill. Bandelore toy spinning tops. 300,518; Jan. 24; Serial. No. 327,628; published Nov. 15, 1932. Class 22.
Dunwoody, Esl., Co., Philadelphia, Pa. Cod liver oil. 300,475; Jan. 24; Serial No. 330,610; published Nov. 8, 1932. Class 6.
Dure. (See Glatzer, Frances.)
Eagle Knitting Mills, Milwaukee, Wis. Knitted caps, hats, and sweaters. 300,616; Jan. 24; Serial No. 329,327; published Nov. 8, 1932. Class 39.
Endicott Johnson Corporation, Endicott, N. Y. Sneakers and tennis shoes. 300,560; Jan. 24; Serial No. 319,137; published June 7, 1932. Class 39.
Escalante, Jose, & Co., Chicago, Ill. Cigars. 300,497; Jan. 24; Serial No. 330,993; published Nov. 15, 1932. Class 17.
Fabrique de Chocolat et de Produits Alimentaires de Villars, S. A., Fribourg, Switzerland. Food preparation and ingredient containing malt, milk, etc. 300,479; Jan. 24; Serial No. 325,749; published Nov. 8, 1932. Class 46.
Fankhauser, Walter A., doing business as Walters Shoe Company, New York, N. Y. Leather shoes. 300,545; Jan. 24; Serial No. 328,983; published Nov. 1, 1932. Class 39.
Federal Composition & Paint Company, Inc., The, New York, N. Y. Nitrocellulose liquid solution. 300,595; Jan. 24; Serial No. 327,957; published Nov. 8, 1932. Class 6.
Felters Company, The, Boston, Mass. Felt. 300,495; Jan. 24; Serial No. 331,045; published Nov. 15, 1932. Class 50.
Flaten, Helen G. Los Angeles and Huntington Park, Calif. Hair dressing preparations and brilliantine. 300,581; Jan. 24; Serial No. 329,046; published Nov. 1, 1932. Class 6.
Foss Schneider Company, Cincinnati, Ohio. Maltless beverages, syrups, extracts, etc. 300,626; Jan. 24. Class 45.
France Corset Company, New York, N. Y. Corsets, corselettes, etc. 300,590; Jan. 24; Serial No. 323,239; published June 14, 1932. Class 39.
Fretwell, Charles B., doing business as Spartan Grain & Mill Co. and also as Sparco Laboratories, Spartanburg, S. C. Worm tablets, for poultry ointment, medicine, etc. 300,608; Jan. 24; Serial No. 329,443; published Nov. 1, 1932. Class 6.
Friedman Manufacturing Company, The, doing business as Pantry Maide Products Co., Chicago, Ill. Fruit jellies, apple butter, marmalade, etc. 300,583; Jan. 24; Serial No. 324,555; published Nov. 8, 1932. Class 46.
Friendly Shoe Company, Milford, Mass. Men's shoes. 300,527; Jan. 24; Serial No. 327,275; published Aug. 2, 1932. Class 39.
Gatien, Amedee M., doing business as P. W. Co., River Rouge, Mich. Cleaning compound for painted or soiled surfaces, etc. 300,468; Jan. 24; Serial No. 329,948; published Nov. 8, 1932. Class 4.
Geist & Geist, Inc., New York, N. Y. Knitted outer garments for women and children. 300,614; Jan. 24; Serial No. 330,010; published Nov. 1, 1932. Class 39.
General Mills, Inc., Minneapolis, Minn. Wheat flour. 300,558; Jan. 24; Serial No. 319,485; published Nov. 8, 1932. Class 46.
Germaine Millinery, Inc., New York, N. Y. Ladies' hats. 300,509; Jan. 24; Serial No. 330,344; published Nov. 8, 1932. Class 39.
Geuting, A. H., Company, Philadelphia, Pa. Boots and shoes, wash suits, sweaters, etc. 300,551; Jan. 24; Serial No. 322,531; published Oct. 25, 1932. Class 39.
Glatzer, Frances, doing business as Dure, New York, N. Y. Toilet articles. 300,599; Jan. 24; Serial No. 330,011; published Nov. 1, 1932. Class 6.
Glovecraft, Inc., Johnstown, N. Y. Leather gloves. 300,517; Jan. 24; Serial No. 329,894; published Nov. 8, 1932. Class 39.
Gly-Ser-Dine Chemical Company, Milwaukee, Wis. Tooth paste. 300,575; Jan. 24; Serial No. 329,414; published Nov. 1, 1932. Class 6.
Goldberg, Benjamin S., doing business as Cover Lawn Seed Company, Baltimore, Md. Lawn seeds and field and grass seeds. 300,514; Jan. 24; Serial No. 330,031; published Nov. 1, 1932. Class 1.
Goldberg, Benjamin S., doing business as Cover Lawn Seed Company, Baltimore, Md. Lawn and field grass seeds. 300,618; Jan. 24; Serial No. 330,030; published Nov. 1, 1932. Class 1.
Goodier, Elwood J., doing business as The Goodier Company, Dallas, Tex. Astringents, astringent cerates, bleach creams, etc. 300,578; Jan. 24; Serial No. 329,260; published Nov. 1, 1932. Class 6.
Goodyear Tire & Rubber Company, The, Akron, Ohio. Brake lining. 300,498; Jan. 24; Serial No. 331,080; published Nov. 15, 1932. Class 35.
Gordon, Roberta, San Francisco, Calif. Hair dressing oil and hair restorer. 300,537; Jan. 24; Serial No. 328,351; published Nov. 1, 1932. Class 6.
Gotham Silk Hosiery Company, Inc., New York, N. Y. Hosiery. 300,499; Jan. 24; Serial No. 330,950; published Nov. 8, 1932. Class 39.
Greilich, William, & Sons, Inc., Brooklyn, N. Y. Sock linings for the insides of shoes. 300,521; Jan. 24; Serial No. 328,554; published Nov. 15, 1932. Class 39.
Harper, Martha Matilda, Inc., Rochester, N. Y. Creams, astringents, face powder, etc. 300,596; Jan. 24; Serial No. 327,821; published Nov. 15, 1932. Class 6.
Hat Corporation of America, Norwalk, Conn. Hats. 300,513; Jan. 24; Serial No. 330,063; published Oct. 25, 1932. Class 39.
Heudebert, Charles, Nanterre, France. Special food preparations. 300,582; Jan. 24; Serial No. 324,789; published Nov. 8, 1932. Class 46.
Hinman, H. P., Company, Inc., assignor to Marr and Gordon, Inc., Barre, Vt. Granite monuments. 300,620; Jan. 24. Class 50.
Hollander, A., & Son., Inc., Newark, N. J. Fur skins. 300,503; Jan. 24; Serial No. 330,953; published Nov. 15, 1932. Class 1.
Hollywood Knitting Mills, Inc., Los Angeles, Calif. Knitted sweaters, dresses, bathing suits, etc. 300,615; Jan. 24; Serial No. 329,989; published Nov. 8, 1932. Class 39.
Holyoke Card & Paper Company, Springfield, Mass. Writing and printing papers. 300,635; Jan. 24. Class 37.
Hook, Ltd., Los Angeles, Calif. Leather, silk, and wool coats, jackets, breeches, capes, dresses, etc. 300,544; Jan. 24; Serial No. 329,019; published Nov. 1, 1932. Class 39.
Horwood, E. H., & Co., Hoboken, N. J., and New York, N. Y. Bandeaux and garter belts. 300,630; Jan. 24. Class 39.
Hy-Ca-Mel Remedy Co., The. (See Deinzer, John C.)
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Sensitized photographic plates and films, and cinematographic films. 300,619; Jan. 24; Serial No. 327,440; published Nov. 22, 1932. Class 26.
Ice-It Products. (See Wolf, Sidney B.)
Iowa Soap Company, Burlington, Iowa. Laundry soap. 300,476; Jan. 24; Serial No. 330,627; published Nov. 8, 1932. Class 4.
Ipswich Mills, Inc., Gloucester, Mass. Hosiery. 300,530; Jan. 24; Serial No. 326,145; published Nov. 1, 1932. Class 39.
Isrin, David S., doing business as D. Isrin Co., New York, N. Y. Tea. 300,484; Jan. 24; Serial No. 328,492; published Nov. 8, 1932. Class 46.
Jackson, Charles E., doing business as The Charlain Co., Philadelphia, Pa. Preparation for the treatment of skin diseases. 300,591; Jan. 24; Serial No. 328,063; published Nov. 1, 1932. Class 6.
Johnson-Stephens & Shinkle Shoe Company, St. Louis, Mo. Shoes. 300,512; Jan. 24; Serial No. 330,128; published Oct. 25, 1932. Class 39.
Joseph, Idelle, Chicago, Ill. Hosiery. 300,638; Jan. 24. Class 39.
Karreth, August, doing business as Luitpold-Werk, Chemisch-Pharmazeutische Fabrik, Munich, Germany. Medicines and chemical preparations. 300,585; Jan. 24; Serial No. 324,225; published Nov. 8, 1932. Class 6.
Katz, Chas., New York, N. Y. Dresses. 300,556; Jan. 24; Serial No. 319,696; published Nov. 8, 1932. Class 39.
Kendall Company, The, Chicago, Ill. Elastic bandages. 300,471; Jan. 24; Serial No. 330,261; published Nov. 8, 1932. Class 44.
Kendall Company, The, Chicago, Ill., and Boston, Mass. Aromatic spirits of ammonia, castor oil, carbolated petroleum, etc. 300,569; Jan. 24; Serial No. 325,098; published Nov. 8, 1932. Class 6.
Kiviette. (See Pomerans, Kiviette.)

Knothe Brothers Company, Inc., New York, N. Y. Paper board boxes. 300,519; Jan. 24; Serial No. 326,260; published Nov. 15, 1932. Class 2.

Koenig, Harry D., doing business as Harry D. Koenig & Co., New York, N. Y. Face powder, lip stick, face rouge, etc. 300,552; Jan. 24; Serial No. 322,465; published Oct. 11, 1932. Class 6.

La Gerardine, Inc., New York, N. Y. Preparation for restoring the color of hair. 300,466; Jan. 24; Serial No. 329,900; published Nov. 8, 1932. Class 6.

Lamm, Jacob C., Baltimore, Md. Trench and top coats, trousers, suits, etc. 300,538; Jan. 24; Serial No. 329,974; published Nov. 8, 1932. Class 39.

Lavers, Herbert J., doing business as Canada Tea Co., assignor to Canada Tea Ltd., Niagara Falls, N. Y. Tea. 300,639; Jan. 24. Class 46.

Lears, Walter, & Sons, Inc., Baltimore, Md. Beds, bed springs, mattresses and pillows. 300,641; Jan. 24. Class 32.

Leech & Rapport, Inc., New York, N. Y. Hats. 300,520; Jan. 24; Serial No. 328,756; published Oct. 18, 1932. Class 39.

Lever Brothers Company, Cambridge, Mass. Vegetable oil. 300,490–2; Jan. 24; Serial Nos. 330,374–6; published Nov. 8, 1932. Class 46.

Lewis-Leidersdorf Co., Milwaukee, Wis. Cigars. 300,508; Jan. 24; Serial No. 330,515; published Nov. 15, 1932. Class 17.

Liska, R., & Son, Chicago, Ill. Malt syrup. 300,634; Jan. 24. Class 46.

Louisiana Yeast-Bran Products Company. (See Brown, William S.)

Luitpold-Werk, Chemisch-Pharmazeutische Fabrik. (See Karreth, August.)

Macy, R. H., & Co., Inc., New York, N. Y. Books. 300,640; Jan. 24. Class 38.

Madestone Products Associates, Boston, Mass. Portland cement concrete interior finished faced sheathing and partition units. 300,637; Jan. 24. Class 12.

Maiden Form Brassière Co., Inc, New York, N. Y. Brassière, bandeaux, corsets, etc. 300,631; Jan. 24. Class 39.

Majestic Company, The, Huntington, Ind. Multiple section door. 300,642; Jan. 24. Class 12.

Manahan, D. F., doing business as Chabot, Los Angeles, Calif. Perfumes and other toilet preparations and cosmetics. 300,587; Jan. 24; Serial No. 328,953; published Nov. 8, 1932. Class 6.

Marr and Gordon, Inc. (See Hinman, H. P., Company, Inc., assignor.)

Massachusetts Knitting Mills, Boston, Mass. Hosiery. 300,584; Jan. 24; Serial No. 324,389; published Apr. 26, 1932. Class 39.

Mattison, Charles W., doing business as Citrovite Tooth Paste Co., Los Angeles, Calif. Tooth paste. 300,601; Jan. 24; Serial No. 329,997; published Nov. 1, 1932. Class 6.

Maynard, Inc., Chicago, Ill. Face creams. 300,533; Jan. 24; Serial No. 330,270; published Nov. 8, 1932. Class 6.

McCune, Gladys V., New York, N. Y. Beauty creams. 300,586; Jan. 24; Serial No. 324,215; published Nov. 1, 1932. Class 6.

McLaughlin Gormley King Co., Minneapolis, Minn. Insecticides. 300,474; Jan. 24; Serial No. 330,577; published Nov. 8, 1932. Class 6.

Menihan Company, The, Rochester, N. Y. Shoes. 300,515; Jan. 24; Serial No. 329,956; published Oct. 25, 1932. Class 39.

Menihan Company, The, Rochester, N. Y. Shoes. 300,516; Jan. 24; Serial No. 329,955; published Nov. 8, 1932. Class 39.

Menth-A-Frost Products. (See Zwick, Jack.)

Metro Chemical Products Co., Brooklyn, N. Y. Soap and metal polish preparations. 300,459; Jan. 24; Serial No. 325,027; published Nov. 1, 1932. Class 4.

Meyers, Louis, & Son, Incorporated, New York, N. Y. Leather gloves. 300,546; Jan. 24; Serial No. 328,817; published Nov. 15, 1932. Class 39.

Michigan Alkali Company, Wyandotte, Mich. Carbon dioxide. 300,603; Jan. 24; Serial No. 329,807; published Nov. 1, 1932. Class 6.

Michigan Alkali Company, Wyandotte, Mich. Calcium chloride and carbon dioxide. 300,604; Jan. 24; Serial No. 329,806; published Nov. 1, 1932. Class 6.

Montgomerie & Co. Ltd., Glasgow, Scotland. Bread, cakes, biscuit, etc. 300,480; Jan. 24; Serial No. 326,568; published Nov. 8, 1932. Class 46.

Mouknetoff, Simeon, Sofia, Bulgaria. Veterinary products. 300,464; Jan. 24; Serial No. 329,090; published Nov. 8, 1932. Class 6.

Mülhens, Ferd., Inc., New York, N. Y. Eau de Cologne. 300,579; Jan. 24; Serial No. 329,119; published Nov. 1, 1932. Class 6.

Mülhens, Ferd, Inc., New York, N. Y. Eau de Cologne, perfumery, hair tonics, etc. 300,580; Jan. 24; Serial No. 329,118; published Nov. 8, 1932. Class 6.

Municipal Service Corp., Ltd., Los Angeles, Calif. Football game. 300,507; Jan. 24; Serial No. 330,548; published Nov. 15, 1932. Class 22.

Myers, E. A., and Sons, Pittsburgh, Pa. Electrically operable hearing aids. 300,563; Jan. 24; Serial No. 318,459; published Nov. 8, 1932. Class 44.

National Biscuit Company, New York, N. Y. Bakery products. 300,485; Jan. 24; Serial No. 329,022; published Nov. 8, 1932. Class 46.

National Milling & Chemical Company, Philadelphia, Pa. Soap compound. 300,473; Jan. 24; Serial No. 330,429; published Nov. 8, 1932. Class 4.

National Paper Napkin Mfg. Co., Chicago, Ill. Paper towels. 300,549; Jan. 24; Serial No. 322,965; published Oct. 11, 1932. Class 37.

Northbilt Manufacturing Co., Minneapolis, Minn. Children's playsuits. 300,528; Jan. 24; Serial No. 330,550; published Nov. 8, 1932. Class 39.

Nu-Jul. (See Smith, Robert E.)

O-Do-Co. (See Smith, Clyde S.)

Onondaga Silk Company, Inc., Syracuse and New York, N. Y. Silk fabrics. 300,523; Jan. 24; Serial No. 328,502; published Aug. 9, 1932. Class 42.

Onthank, James F., Newton, Mass. Fruit jar rings. 300,643; Jan. 24. Class 35.

Osgood & Sons Inc., Decatur, Ill. Children's dresses, pajamas, creepers, etc. 300,525; Jan. 24; Serial No. 328,103; published Nov. 1, 1932. Class 39.

P. W. Co. (See Gatien, Amedee M.)

Pacific Lumber Company, The, San Francisco, Calif. Poultry litter. 300,505; Jan. 24; Serial No. 330,663; published Nov. 15, 1932. Class 1.

Pantry Maide Products Co. (See Friedman Manufacturing Company, The.)

Paragon Distributing Corp., New York, N. Y. Hair coloring remover. 300,588; Jan. 24; Serial No. 323,871; published Nov. 1, 1932. Class 6.

Paragon Distributing Corp., New York, N. Y. Antiseptic oil. 300,589; Jan. 24; Serial No. 323,870; published Nov. 1, 1932. Class 6.

Pearce-Duffy Company, Mount Pleasant, Mich. Hosiery, underwear, etc. 300,542; Jan. 24; Serial No. 329,315; published Nov. 1, 1932. Class 39.

Penn Tobacco Co., Wilkes-Barre, Pa. Smoking tobacco. 300,627; Jan. 24. Class 17.

Pero & Daniels, Inc., Jamaica Plain, Mass. French cord binding. 300,543; Jan. 24; Serial No. 329,239; published Nov. 8, 1932. Class 40.

Pidgeon, Mary J., Great Neck, N. Y. Bandages for use in beauty parlors. 300,460; Jan. 24; Serial No. 326,645; published Nov. 8, 1932. Class 44.

Pioneer Suspender Company, Philadelphia, Pa. Apparel belts, suspenders, and braces. 300,565; Jan. 24; Serial No. 318,017; published Sept. 22, 1930. Class 39.

Pi-Ro-Dram Company, Lubbock, Tex. Astringent for the gums. 300,598; Jan. 24; Serial No. 330,071; published Nov. 8, 1932. Class 6.

Plough, Inc., doing business as Puck Food Products Co., Memphis, Tenn. Food products. 300,483; Jan. 24; Serial No. 328,250; published Nov. 8, 1932. Class 46.

Pomeranz, Kiviette, doing business as Kiviette, New York, N. Y. Gowns, dresses, and coats. 300,617; Jan. 24; Serial No. 330,164; published Nov. 1, 1932. Class 39.

Popkin, Martin E., New York, N. Y. Preparations for treating the scalp and skin. 300,496; Jan. 24; Serial No. 328,738; published Nov. 8, 1932. Class 6.

Puck Food Products Co. (See Plough, Inc.)

Pure Food Factory "Hansa", Mamaroneck, N. Y. Dog foods. 300,486; Jan. 24; Serial No. 329,316; published Nov. 8, 1932. Class 46.

Puro Co., Inc., The, St. Louis, Mo. Deodorant. 300,458; Jan. 24; Serial No. 330,276; published Nov. 8, 1932. Class 6.

Richards, Elmer, Company, Chicago, Ill. Chemical preservative and fire extinguishing fluid. 300,465; Jan. 24; Serial No. 329,614; published Nov. 8, 1932. Class 6.

Richards, Sutton & Thornton, Inc., New York, N. Y. Union suits, waist suits, vests, etc. 300,636; Jan. 24. Class 39.

Rimmel, Inc., West Orange, N. J. Astringents, astringent cerates, bleach creams, etc. 300,462; Jan. 24; Serial No. 328,075; published Nov. 8, 1932. Class 6.

Romano, Incorporated, New York, N. Y. Shoes. 300,625; Jan. 24. Class 39.

Roschman, Emil C., doing business as Brownie's Corn Shop, Belvidere, Ill. Popcorn candy confection. 300,562; Jan. 24; Serial No. 318,810; published Nov. 8, 1932. Class 46.

Rose, William M., doing business as University Distributing Company, Boston, Mass. Puzzles. 300,494; Jan. 24; Serial No. 331,200; published Nov. 15, 1932. Class 22.

Russell Playing Card Company, Jersey City, N. J. Playing cards. 300,501–2; Jan. 24; Serial Nos. 330,968–9; published Nov. 15, 1932. Class 32.

Sandoz Chemical Works, Inc., New York, N. Y. Medicinal garlic preparations, ergot preparations, etc. 300,570; Jan. 24; Serial No. 325,920; published Nov. 1, 1932. Class 6.

Santangelo, Sylvester E., doing business as Baldwin City Mills Company, Youngstown, Ohio. Wheat flour. 300,481; Jan. 24; Serial No. 326,594; published Nov. 8, 1932. Class 46.

Scoby Sheet Glass Company, Sistersville, W. Va. Sheet glass. 300,622; Jan. 24. Class 33.

Scott & Company Limited, Boston, Mass. Suits, topcoats, overcoats, etc. 300,633; Jan. 24. Class 39.

Secret Food Specialty Co. (See Zuras, Constantine.)

Shell Chemical Company, San Francisco, Calif. Salts of ammonia for fertilizer. 300,531; Jan. 24; Serial No. 326,000; published Nov. 15, 1932. Class 10.

Silten, Dr. Ernst, Berlin, Germany. Asthma inhalant. 300,572; Jan. 24; Serial No. 326,762; published Nov. 8, 1932. Class 6.

Simpson Bros., Inc., doing busines as Wakefield Dairy, Washington, D. C. Dairy products. 300,487; Jan. 24; Serial No. 329,904; published Nov. 8, 1932. Class 46.

Sloane-Blabon Corporation, Trenton, N. J., and Nicetown, Philadelphia, Pa. Linoleum, felt base floor coverings and linoleum lining felt. 300,547; Jan. 24; Serial No. 328,878; published Nov. 15, 1932. Class 20.

Sloane-Blabon Corporation, Trenton, N. J., and Nicetown, Philadelphia, Pa. Linoleum wall covering. 300,548; Jan. 24; Serial No. 328,877; published Nov. 15, 1932. Class 20.

Smith, Clyde S., doing business as O-Do-Co., Dallas, Tex. Preparation for use as a deodorant and perspiration corrective. 300,535; Jan. 24; Serial No. 328,719; published Nov. 1, 1932. Class 6.

Smith, Frederick A. U., doing business as Upsher Smith Co., Minneapolis, Minn. Digitalis. 300,536; Jan. 24; Serial No. 328,540; published Nov. 8, 1932. Class 6.

Smith, Robert E., doing business as Nu-Jul, New York, N. Y. Jewelry cleaning solution. 300,463; Jan. 24; Serial No. 328,966; published Aug. 30, 1932. Class 4.

Sparco Laboratories. (See Fretwell, Charles B.)

Spartan Grain & Mill Co. (See Fretwell, Charles B.)

Straus, Royer & Straus, Inc., Baltimore, Md. Dresses, blouses, playsuits, etc. 300,541; Jan. 24; Serial No. 329,433; published Nov. 1, 1932. Class 39.

Sullivan, P., Shoe Co., The, Cincinnati, Ohio. Shoes. 300,612; Jan. 24; Serial No. 329,415; published Oct. 18, 1932. Class 39.

Susco Sales Co. (See Bruckheimer, Sydney M.)

Swann Chemical Company, Birmingham, Ala. Fertilizer. 300,566; Jan. 24; Serial No. 318,326; published Nov. 15, 1932. Class 10.

Syladex Products Corporation, New York, N. Y. Food preparation in the nature of a medicine. 300,593; Jan. 24; Serial No. 327,991; published Sept. 6, 1932. Class 6.

Sylph Laboratories, Inc., New York, N. Y. Medicinal herb teas. 300,607; Jan. 24; Serial No. 329,691; published Nov. 1, 1932. Class 6.

Therm-A-Mode, Inc., Orange, N. J. Electric blankets and pads. 300,472; Jan. 24; Serial No. 330,319; published Nov. 8, 1932. Class 44.

Thomas, Edward H., Philadelphia, Pa. Preparation for use in removing odors from refrigerators. 300,609; Jan. 24; Serial No. 329,484; published Nov. 8, 1932. Class 6.

Tic Toc Toy Company. (See Desbecker, Harold C.)

University Distributing Company. (See Rose, William M.)

Van Camp Hardware & Iron Company, doing business as Ben Hur Food Products, Indianapolis, Ind. Malt syrup. 300,555; Jan. 24; Serial No. 319,709; published Nov. 17, 1931. Class 46.

Vanity Fair Silk Mills, Reading, Pa. Corsets, hosiery, underwear, etc. 300,532; Jan. 24; Serial No. 329,810; published Nov. 8, 1932. Class 39.

Vanity Fair Silk Mills, Reading, Pa. Hosiery, underwear, corsets, etc. 300,611; Jan. 24; Serial No. 329,811; published Nov. 8, 1932. Class 39.

Vanity Fair Silk Mills, Reading, Pa. Hosiery and knitted and textile underwear, etc. 300,613; Jan. 24; Serial No. 329,390; published Oct. 18, 1932. Class 39.

Vesta Consolidated Corporation, Buffalo, N. Y., Philadelphia, Pa., and Chicago, Ill. Electric batteries. 300,621; Jan. 24. Class 21.

Viavi Company, The, San Francisco, Calif. Digestive tablets. 300,553; Jan. 24; Serial No. 322,343; published Nov. 8, 1932. Class 6.

Wakefield Dairy. (See Simpson Bros., Inc.)

Walters Shoe Company. (See Fankhauser, Walter A.)

Warren Refining & Chemical Company, The, Cleveland, Ohio. Lubricating oils, greases, etc. 300,628; Jan. 24. Class 15.

Wilkins, John H., Company, Washington, D. C. Coffee. 300,478; Jan. 24; Serial No. 325,670; published May 24, 1932. Class 46.

Williams Hat Stores Inc., St. Louis, Mo. Hats. 300,524; Jan. 24; Serial No. 328,343; published Oct. 25, 1932. Class 39.

Windsor Coal Company, Kansas City, Mo. Coal. 300,557; Jan. 24; Serial No. 319,558; published Nov. 15, 1932. Class 1.

Wolf, Sidney B., doing business as Ice-It Products, New York, N. Y. Antiseptic, astringent, and styptic preparations. 300,600; Jan. 24; Serial No. 330,002; published Nov. 1, 1932. Class 6.

Worthy Manufacturing Company, Chicago, Ill. Shirts. 300,529; Jan. 24; Serial No. 330,532; published Nov. 8, 1932. Class 39.

Zuras, Constantine, doing business as Secret Food Specialty Co., Washington, D. C. Peanut butter sandwiches. 300,559; Jan. 24; Serial No. 319,426; published Nov. 8, 1932. Class 46.

Zwick, Jack, doing business as Menth-A-Frost Products, Cleveland Heights, Ohio. Shaving creams. 300,550; Jan. 24; Serial No. 523,927; published Nov. 8, 1932. Class 4.

LIST OF REGISTRANTS OF LABELS

Bird & Son, Inc., East Walpole, Mass. Valor Solid Leather Shoes. For Shoes. 41,683; Jan. 24.

Engel Art Corners Mfg. Co., Chicago, Ill. Engel Poc-Ket Art Corners. For Picture Mounting Devices. 41,684; Jan. 24.

Gold Star Products Inc., Detroit, Mich. Tastee. For Liquid Malt. 41,685; Jan. 24.

Lash-Lure Research Laboratories, Inc., Los Angeles, Calif. Lash-Lure the new and improved Eye Brown and Lash Dye. For Eyebrow and Eyelash Dye. 41,686; Jan. 24.

"Pride of Ridgeway" Growers Association, The, Ridgeway, N. C. Pride of Ridgeway. For Cantaloupes. 41,687; Jan. 24.

Rogvoy, Theodore, Detroit, Mich. Luckies, a Perfect Blend, Cigarettes. For Cigarettes. 41,688; Jan. 24.

LIST OF REGISTRANTS OF PRINTS

Arden, Elizabeth, of New York Ltd., doing business as Elizabeth Arden, New York, N. Y. Thimblefuls of Beauty. For Cleansing Cream, Skin Tonic, Anti-Wrinkle Cream, Ensemble Lipstick Set, Etc. 14,032; Jan. 24.

Graham, M. L., Salt Lake City, Utah, Portland, Oreg., and Seattle, Wash. Coon-Chicken Inn. For Special Fried Quarter, Half, and Whole Chicken, Fried Chicken Sandwich, Chicken Pie, Etc. 14,033–4; Jan. 24.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Windsor Coal Company. 300,557; Jan. 24; Serial No. 319,558; published Nov. 15, 1932.

Poultry litter. Pacific Lumber Company. 300,505; Jan. 24; Serial No. 330,663; published Nov. 15, 1932.

Sausage Casings. Berth, Levi & Co. Inc. 300,506; Jan. 24; Serial No. 330,774; published Nov. 15, 1932.

Seeds, Field and grass. B. S. Goldberg. 300,514; Jan. 24; Serial No. 330,031; published Nov. 1, 1932.

Seeds, Lawn and field grass. B. S. Goldberg. 300,618; Jan. 24; Serial No. 330,030; published Nov. 1, 1932.

Skins, Fur. A. Hollander & Son, Inc. 300,503; Jan. 24; Serial No. 330,953; published Nov. 15, 1932.

CLASS 2

Boxes, Corrugated. Corrugated Container Company. 300,567; Jan. 24; Serial No. 311,996; published Nov. 15, 1932.

Boxes, Paper board. Knothe Brothers Company. 300,519; Jan. 24; Serial No. 326,260; published Nov. 15, 1932.

CLASS 4

Abrasive grains, Artificial. Carborundum Company. 300,470; Jan. 24; Serial No. 330,245; published Nov. 8, 1932.

Cleaning compound for painted or soiled surfaces, etc. A. M. Gatien. 300,468; Jan. 24; Serial No. 329,943; published Nov. 8, 1932.

Cleaning solution, Jewelry. R. E. Smith. 300,463; Jan. 24; Serial No. 328,966; published Aug. 30, 1932.

Creams, Shaving. J. Zwick. 300,550; Jan. 24; Serial No. 323,927; published Nov. 8, 1932.

Soap and metal polish preparations. Metro Chemical Products Co. 300,459; Jan. 24; Serial No. 325,027; published Nov. 1, 1932.

Soap compound. National Milling & Chemical Company. 300,473; Jan. 24; Serial No. 330,429; published Nov. 8, 1932.

Soap, Laundry. Iowa Soap Company. 300,476; Jan. 24; Serial No. 330,627; published Nov. 8, 1932.

Soap preparations. H. Th. Böhme Aktiengesellschaft. 300,467; Jan. 24; Serial No. 329,495; published Nov. 8, 1932.
Solvent and cleaning naphtha, Petroleum. American Oil Company. 300,461; Jan. 24; Serial No. 327,965; published Aug. 9, 1932.

CLASS 6

Alcohol and alcohol other than pure ethyl alcohol, Denatured. Carbide and Carbon Chemicals Corporation. 300,602; Jan. 24; Serial No. 329,886; published Nov. 1, 1932.
Ammonia, caster oil, carbolated petroleum, etc., Aromatic spirits of. Kendall Company. 300,569; Jan. 24; Serial No. 325,098; published Nov. 8, 1932.
Antacid antipyretic tablet. Otis Clapp & Son, Inc. 300,577; Jan. 24; Serial No. 329,177; published Jan. 24.
Antiseptic, astringent, and styptic preparations. S. B. Wolf. 300,000; Jan. 24; Serial No. 330,002; published Nov. 1, 1932.
Asthma inhalant. Dr. E. Silten. 300,572; Jan. 24; Serial No. 326,762; published Nov. 8, 1932.
Astringent for the gums. Pi-Ro-Dram Company. 300,598; Jan. 24; Serial No. 330,071; published Nov. 8, 1932.
Astringents, astringent creates, bleach creams, etc. E. J. Goodier. 300,578; Jan. 24; Serial No. 329,260; published Nov. 1, 1932.
Astringents, astringent creates, bleach creams, etc. Rimmel, Inc. 300,462; Jan. 24; Serial No. 328,075; published Nov. 8, 1932.
Calcium chloride and carbon dioxide. Michigan Alkali Company. 300,604; Jan. 24; Serial No. 329,806; published Nov. 1, 1932.
Carbon dioxide. Michigan Alkali Company. Michigan Alkali Company. 300,603; Jan. 24; Serial No. 329,807; published Nov. 1, 1932.
Chemical compound to be placed in refrigerators and the like, Moisture and odor absorbent. Carder & Carter. 300,469; Jan. 24; Serial No. 330,119; published Nov. 15, 1932.
Chemical compounds to improve combustion. Burnol Petroleum Co. 300,571; Jan. 24; Serial No. 326,276; published Nov. 1, 1932.
Chemical powder. S. M. Bruckheimer. 300,534; Jan. 24; Serial No. 330,197; published Nov. 8, 1932.
Chemical preservative and fire extinguishing fluid. Elmer Richards Company. 300,465; Jan. 24; Serial No. 329,614; published Nov. 8, 1932.
Cod liver oil. Ezl. Dunwoody Co. 300,475; Jan. 24; Serial No. 330,610; published Nov. 8, 1932.
Cream and ointment. Boon Manufacturing Co. 300,606; Jan. 24; Serial No. 329,764; published Nov. 1, 1932.
Creams, astringnts, face powder, etc. Martha Matilda Harper, Inc. 300,596; Jan. 24; Serial No. 327,821; published Nov. 15, 1932.
Creams, Beauty. G. V. McCune. 300,586; Jan. 24; Serial No. 324,215; published Nov. 1, 1932.
Creams, Face. Maynard, Inc. 300,533; Jan. 24; Serial No. 330,270; published Nov. 8, 1932.
Deodorant. Puro Co. 30,458; Jan. 24; Serial No. 330,276; Nov. 8, 1932.
Digestive tablets. Vivi Company. 300,553; Jan. 24; Serial No. 322,343; published Nov. 8, 1932.
Digitalis. F. A. U. Smith. 300,536; Jan. 24; Serial No. 328,540; published Nov. 8, 1932.
Eau de Cologne. Ferd. Mülhens, Inc. 300,579; Jan. 24; Serial No. 329,119; published Nov. 1, 1932.
Eau de Cologne, Perfumery, hair tonics, etc. Ferd. Mülhens, Inc. 300,580; Jan. 24; Serial No. 329,118; published Nov. 8, 1932.
Hair coloring remover. Paragon Distributing Corp. 300,588; Jan. 24; Serial No. 323,871; published Nov. 1, 1932.
Hair dressing oil and hair restorer. R. Gordon. 300,537; Jan. 24; Serial No. 328,351; published Nov. 1, 1932.
Hair dressing preparations and brilliantine. H. G. Flaten. 300,551; Jan. 24; Serial No. 329,046; published Nov. 1, 1932.
Insecticide, disinfectant, and deodorant. American Oil Company. 300,594; Jan. 24; Serial No. 327,966; published Aug. 16, 1932.
Insecticides. McLaughlin Gormley King Co. 300,474; Jan. 24; Serial No. 330,577; published Nov. 8, 1932.
Iodine mouth and throat lozenges. Drug Products Co. 300,477; Jan. 24; Serial No. 325,572; published May 3, 1932.
Medicinal garlic, ergot preparations, etc. Sandoz Chemical Works, Inc. 300,570; Jan. 24; Serial No. 325,920; published Nov. 1, 1932.
Medicinal herb teas. Sylph Laboratories, Inc. 300,607; Jan. 24; Serial No. 329,691; published Nov. 1, 1932.
Medicinal preparation. Bio Medico, Inc. 300,597; Jan. 24; Serial No. 330,080; published Nov. 1, 1932.
Medicinal preparation. P. O. Bisbee. 300,576; Jan. 24; Serial No. 329,370; published Nov. 8, 1932.
Medicines and chemical preparations. A. Karreth. 300,535; Jan. 24; Serial No. 324,225; published Nov. 8, 1932.
Nitrocellulose liquid solution. Federal Composition & Paint Company. 300,595; Jan. 24; Serial No. 327,957; published Nov. 8, 1932.
Oil, Antiseptic. Paragon Distributing Corp. 300,589; Jan. 24; Serial No. 323,870; published Nov. 1, 1932.
Ointment and cream. Boon Manufacturing Co. 300,605; Jan. 24; Serial No. 329,765; published Nov. 1, 1932.
Perfumes and other toilet preparations and cosmetics. D. F. Manahan. 300,587; Jan. 24; Serial No. 328,968; published Nov. 8, 1932.
Powder for the treatment of epidermophyton, etc. A. B. Cohn. 300,592; Jan. 24; Serial No. 328,050; published Aug. 16, 1932.
Powder, lip stick, face rouge, etc., Face. H. D. Koenig. 300,552; Jan. 24; Serial No. 322,465; published Oct. 11, 1932.
Preparation for restoring the color of hair. La Gerardine Inc. 300,466; Jan. 24; Serial No. 329,900; published Nov. 8, 1932.
Preparation for the treatment of skin diseases. C. E. Jackson. 300,591; Jan. 24; Serial No. 328,068; published Nov. 1, 1932.
Preparation for use as a deodorant and perspiration corrective. C. S. Smith. 300,535; Jan. 24; Serial No. 328,719; published Nov. 1, 1932.
Preparation for use in removing odors from refrigerators. E. H. Thomas. 300,609; Jan. 24; Serial No. 329,434; published Nov. 8, 1932.
Preparation in the nature of a medicine, Food. Syladex Products Corporation. 300,593; Jan. 24; Serial No. 327,991; published Sept. 6, 1932.
Preparations for treating the scalp and skin. M. E. Popkin. 300,496; Jan. 24; Serial No. 328,738; published Nov. 8, 1932.
Salve. Bonttoo Corn Salve Company. 300,573; Jan. 24; Serial No. 327,086; published Nov. 1, 1932.
Tablets, ointment, medicine. C. B. Fretwell. 300,608; Jan. 24; Serial No. 329,443; published Nov. 1, 1932.
Toilet articles. F. Galtzer. 300,599; Jan. 24; Serial No. 330,011; published Nov. 1, 1932.
Tonic and cough medicine. J. C. Deinzer. 300,561; Jan. 24; Serial No. 318,905; published Nov. 8, 1932.
Tooth paste. Gly-Ser-Dine Chemical Company. 300,575; Jan. 24; Serial No. 329,414; published Nov. 1, 1932.
Tooth paste. C. W. Mattison. 300,601; Jan. 24; Serial No. 329,997; published Nov. 1, 1932.
Veterinary products. S. Moukaetoff. 300,464; Jan. 24; Serial No. 329,090; published Nov. 8, 1932.

CLASS 10

Fertilizer. Swann Chemical Company. 300,566; Jan. 24; Serial No. 318,326; published Nov. 15, 1932.
Salts of ammonia for fertilizer. Shell Chemical Company, 300,581; Jan. 24; Serial No. 326,000; published Nov. 15, 1932.

CLASS 12

Door. Majestic Company. 300,642; Jan. 24.
Sheathing and partition units. Madestone Products Associates. 300,637; Jan. 24.

CLASS 15

Gasoline. Associated Oil Company. 300,629; Jan. 24.
Oils and greases, etc., Lubricating. Warren Refining & Chemical Company. 300,628; Jan. 24.

CLASS 17

Cigars. Jose Escalante & Co. 300,497; Jan. 24; Serial No. 330,993; published Nov. 15, 1932.
Cigars. Lewis-Leidersdorf Co. 300,508; Jan. 24; Serial No. 330,515; published Nov. 15, 1932.
Tobacco, Smoking. Penn Tobacco Co. 300,627; Jan. 24.

CLASS 20

Linoleum, felt base floor coverings, and linoleum lining felt. Sloane-Blabon Corporation. 300,547; Jan. 24; Serial No. 328,878; published Nov. 15, 1932.
Linoleum wall covering. Sloane-Blabon Corporation. 300,548; Jan. 24; Serial No. 328,877; published Nov. 15, 1932.

CLASS 21

Batteries, Electric. Vesta Consolidated Corporation. 300,621; Jan. 24.

CLASS 22

Cards. Russell Playing Card Company. 300,501–2, Jan. 24; Serial Nos. 330,968–9; published Nov. 15, 1932.
Football game. Municipal Service Corp. 300,507; Jan. 24; Serial No. 330,548; published Nov. 15, 1932.
Puzzles. W. M. Rose. 300,494; Jan. 24; Serial No. 331,200; published Nov. 15, 1932.
Toy spinning tops. Donald F. Duncan, Inc. 300,504; Jan. 24; Serial No. 330,924; published Nov. 15, 1932.
Toy spinning tops. Donald F. Duncan, Inc. 300,518; Jan. 24; Serial No. 327,628; published Nov. 15, 1932.

CLASS 26

Sensitized photographic plates and films, and cinematographic films. I. G. Farbenindustrie Aktiengesellschaft. 300,619; Jan. 24; Serial No. 327,440; published Nov. 22, 1932.

CLASS 32

Beds, bed springs, mattresses, and pillows. Walter Lears & Sons, Inc. 300,641; Jan. 24.

CLASS 33

Glass, Sheet. Schoy Sheet Glass Company. 300,622; Jan. 24.

CLASS 35

Brake lining. Goodyear Tire & Rubber Company. 300,498; Jan. 24; Serial No. 331,080; published Nov. 15, 1932.
Jar rings, Fruit. J. F. Onthank. 300,643; Jan. 24.

CLASS 37

Paper towels. National Paper Napkin Mfg. Co. 300,549; Jan. 24; Serial No. 322,965; published Oct. 11, 1932.
Papers, Writing and printing. Holyoke Card & Paper Company. 300,635; Jan. 24.

CLASS 38

Books. R. H. Macy & Co. 300,640; Jan. 24.

CLASS 39

Bandeaux and garter belts. E. H. Horwood & Co. 300,630; Jan. 24.
Belts, suspenders, and braces, Apparel. Pioneer Suspender Company. 300,565; Jan. 24; Serial No. 318,017; published Sept. 22, 1931.
Boots and shoes, wash suits and sweaters, etc. A. H. Geuting Company. 300,551; Jan. 24; Serial No. 322,531; published Oct. 25, 1932.
Brassières, bandeaux, corsets, etc. Maiden Form Brassière Co. 300,631; Jan. 24.
Caps, hats and sweaters, Knitted. Eagle Knitting Mills. 300,616; Jan. 24; Serial No. 329,927; published Nov. 8, 1932.
Coats, jackets, breeches, capes, dresses, etc., Leather, silk, and wool. Hood, Ltd. 300,544; Jan. 24; Serial No. 329,019; published Nov. 1, 1932.
Coats, trousers and suits, etc., French and top. J. C. Lamm. 300,538; Jan. 24; Serial No. 329,974; published Nov. 8, 1932.
Corsets, corselettes, etc. Franco Corset Company. 300,590; Jan. 24; Serial No. 323,289; published June 14, 1932.
Corsets, hosiery, underwear, etc. Vanity Fair Silk Mills. 300,532; Jan. 24; Serial No. 329,810; published Nov. 8, 1932.
Dresses. C. Katz. 300,556; Jan. 24; Serial No. 319,696; published Nov. 8, 1932.
Dresses, blouses, playsuits, etc. Straus, Rover & Strass, Inc. 300,541; Jan. 24; Serial No. 329,483; published Nov. 1, 1932.
Dresses, pajamas, creepers, etc., Children's. Osgood & Sons Inc. 300,525; Jan. 24; Serial No. 328,103; published Nov. 1, 1932.
Garments for women and children, Knitted outer. Geist & Geist, Inc. 300,614; Jan. 24. Serial No. 330,010; published Nov. 1, 1932.
Gloves, Leather. Glovecraft, Inc. 300,517; Jan. 24; Serial No. 329,894; published Nov. 8, 1932.
Gloves, Leather. Louis Meyers & Son, Incorporated. 300,546; Jan. 24; Serial No. 328,817; published Nov. 15, 1932.
Gowns, dresses and coats. K. Pomeranz. 300,617; Jan. 24; Serial No. 330,164; published Nov. 1, 1932.
Hats. Dalton Hat Co. 300,632; Jan. 24.
Hats. Hat Corporation of America. 300,513; Jan. 24; Serial No. 330,063; published Oct. 25, 1932.
Hats. Leech & Rapport Inc. 300,520; Jan. 24; Serial No. 328,756; published Oct. 18, 1932.
Hats. Williams Hat Stores Inc. 300,524; Jan. 24; Serial No. 328,343; published Oct. 25, 1932.
Hats and caps. Chicago Mail Order Company. 300,510; Jan 24; Serial No. 330,337; published Nov. 15, 1932.
Hats, Ladies'. Germaine Millinery, Inc. 300,509; Jan. 24; Serial No. 330,344; published Nov. 8, 1932.
Hats, Straw. Bronston Hat Co. 300,610; Jan. 24; Serial No. 329,851; published Oct. 25, 1932.
Heels, soles, and half soles, Rubber. Bradstone Rubber Company. 300,511; Jan. 24; Serial No. 330,157; published Nov. 1, 1932.
Hosiery. Gotham Silk Hosiery Company. 300,499; Jan. 24; Serial No. 330,950; published Nov. 8, 1932.
Hosiery. Ipswich Mills, Inc. 300,530; Jan. 24; Serial No. 326,145; published Nov. 1, 1932.
Hosiery. I. Joseph. 300,638; Jan. 24.
Hosiery. Massachusetts Knitting Mills. 300,584; Jan. 24; Serial No. 324,389; published Apr. 26, 1932.
Hosiery and knitted and textile underwear, etc. Vanity Fair Silk Mills. 300,613; Jan. 24; Serial No. 329,390; published Oct. 18, 1932.
Hosiery, underwear, etc. Pearce-Duffy Company. 300,542; Jan. 24; Serial No. 329,315; published Nov. 1, 1932.
Hosiery, underwear, corsets, etc. Vanity Fair Silk Mills. 300,611; Jan. 24; Serial No. 329,811; published Nov. 8, 1932.
Overcoats, hats, caps, etc. Best & Company. 300,623; Jan. 24.
Playsuits, Children's. Northbilt Manufacturing Co. 300,526; Jan. 24; Serial No. 330,550; published Nov. 8, 1932.
Shirts. Worthy Manufacturing Company. 300,529; Jan. 24; Serial No. 330,532; published Nov. 8, 1932.
Shirts, pajamas, undershirts, etc. H. D. Bob Company. 300,540; Jan. 24; Serial No. 329,593; published Nov. 1. 1932.
Shoe stiffener parts. Arden Box Toe Company. 300,526; Jan. 24; Serial No. 327,644; published Oct. 25, 1932.
Shoes. Brown Shoe Company. 300,554; Jan. 24; Serial No. 321,269; published Nov. 15, 1932.
Shoes. Johnson-Stephens & Shinkle Shoe Company. 300,512; Jan. 24; Serial No. 330,128; published Oct. 25, 1932.
Shoes. Menihan Company. 300,515; Jan. 24; Serial No. 329,956; published Oct. 25. 1932.
Shoes. Menihan Company. 300,516; Jan. 24; Serial No. 329,955; published Nov. 8, 1932.
Shoes. Romano, Incorporated. 300,625; Jan. 24.
Shoes. P. Sullivan Shoe Co. 300,612; Jan. 24; Serial No. 329,415; published Oct. 18, 1932.
Shoes, Leather. W. A. Fankhauser. 300,545; Jan. 24; Serial No. 328,983; published Nov. 1, 1932.
Shoes, Men's. Friendly Shoe Company. 300,527; Jan. 24; Serial No. 327,275; published Aug. 2, 1932.
Shoes, Repaired and rebuilt. G. Burkman. 300,522; Jan. 24; Serial No. 328,544; published Oct. 18, 1932.
Sneakers and tennis shoes. Endicott Johnson Corporation. 300,560; Jan. 24; Serial No. 319,137; published June 7, 1932.
Sock linings for the insides of shoes. William Grellich & Sons, Inc. 300,521; Jan. 24; Serial No. 328,554; published Nov. 15, 1932.
Suits, topcoats, overcoats, etc. Scott & Company Limited. 300,633; Jan. 24.
Suits, waist suits, vests, etc., Union. Richards, Sutton & Thornton, Inc. 300,636; Jan. 24.
Sweaters, dresses, bathing suits, etc., Knitted. Hollywood Knitting Mills, Inc. 300,615; Jan. 24; Serial No. 329,989; published Nov. 8, 1932.

CLASS 40

Cord binding, French. Pero & Daniels, Inc. 300,548; Jan. 24; Serial No. 329,289; published Nov. 8, 1932.

CLASS 42

Silk fabrics. Onondaga Silk Company. 300,523; Jan. 24; Serial No. 328,502; published Aug. 9, 1932.

CLASS 44

Bandages for use in beauty parlors. M. J. Pidgeon. 300,460; Jan. 24; Serial No. 326,645; published Nov. 8, 1932.
Elastic bandages. Kendall Company. 300,471; Jan. 24; Serial No. 330,261; published Nov. 8, 1932.
Electric blankets and pads. Therm-A-Mode, Inc. 300,472; Jan. 24; Serial No. 330,319; published Nov. 8, 1932.
Hearing aids, Electrically operable. E. A. Myers and Sons. 300,563; Jan. 24; Serial No. 318,459; published Nov. 8, 1932.
Teething rings or infant pacifiers. H. C. Desbecker. 300,574; Jan. 24; Serial No. 302,214; published Nov. 8, 1932.

CLASS 45

Beverages, syrups, extracts, etc., Maltless. Foss Schneider Company. 300,626; Jan. 24.

CLASS 46

Bakery products. National Biscuit Company. 300,485; Jan. 24; Serial No. 329,022; published Nov. 8, 1932.
Bread, cakes, biscuits, etc. Montgomerie & Co. Ltd. 300,480; Jan. 24; Serial No. 326,568; published Nov. 8, 1932.
Buttermilk, Condensed. Borden's Produce Company. 300,493; Jan. 24; Serial No. 330,444; published Nov. 8, 1932.
Canned sardines, shrimp, tuna fish, etc. Cressey, Dockham & Co. 300,624; Jan. 24.
Cereal breakfast food. W. S. Brown. 300,482; Jan. 24; Serial No. 328,000; published Nov. 15, 1932.
Coffee. John H. Wilkins Company. 300,478; Jan. 24; Serial No. 325,670; published May 24, 1932.
Confection. Beatrice Creamery Company. 300,488; Jan. 24; Serial No. 330,289; published Nov. 8, 1932.
Dairy products. Simpson Bros., Inc. 300,487; Jan. 24; Serial No. 329,904; published Nov. 8, 1932.
Flour, Wheat. General Mills, Inc. 300,558; Jan. 24; Serial No. 319,485; published Nov. 8, 1932.
Flour, Wheat. S. E. Santangelo. 300,481; Jan. 24; Serial No. 326,594; published Nov. 8, 1932.
Food preparation and ingredient containing malt, milk, etc. Fabrique de Chocolat et de Produits Alimentaires de Villars, S. A. 300,479; Jan. 24; Serial No. 325,749; published Nov. 8, 1932.
Food preparations, Special. C. Heudebert. 300,582; Jan. 24; Serial No. 324,789; published Nov. 8, 1932.
Food products. Plough, Inc. 300,483; Jan. 24; Serial No. 328,250; published Nov. 8, 1932.
Foods, Dog. Pure Food Factory "Hansa". 300,486; Jan. 24; Serial No. 329,316; published Nov. 8, 1932.
Gum, Chewing. Bee Bee Confection Company. 300,564; Jan. 24; Serial No. 316,229; published Nov. 8, 1932.
Jellies, apple butter, marmalade, etc., Fruit. Friedman Manufacturing Company. 300,583; Jan. 24; Serial No. 324,555; published Nov. 8, 1932.
Oil, Vegetable. Lever Brothers Company. 300,490–2; Jan. 24; Serial Nos. 330,374–6; published Nov. 8, 1932.
Oranges, lemons, grape-fruit, etc. Citra Packing Company. 300,489; Jan. 24; Serial No. 329,421; published Nov. 8, 1932.
Popcorn candy confection. E. C. Roschman. 300,562; Jan. 24; Serial No. 318,810; published Nov. 8, 1932.

Sandwiches, Peanut butter. C. Zuras. 300,559; Jan. 24; Serial No. 319,426; published Nov. 8, 1932.

Syrup, Malt. R. Liska & Sons. 300,634; Jan. 24.

Syrup, Malt. Van Camp Hardware & Iron Company. 300,555; Jan. 24; Serial No. 319,709; published Nov. 17, 1931.

Tea. D. S. Isrin. 300,484; Jan. 24; Serial No. 328,492; published Nov. 8, 1932.

Tea. H. J. Lavers. 300,639; Jan. 24.

Vegetables and fruits, Fresh. A. Arena & Co. 300,568; Jan. 24; Serial No. 305,024; published Nov. 8, 1932.

CLASS 50

Felt. Felters Company. 300,495; Jan. 24; Serial No. 331,045; published Nov. 15, 1932.

Gelatine sheets. Central Import Company. 300,539; Jan. 24; Serial No. 329,829; published Nov. 15, 1932.

Monuments, Granite. H. P. Hinman Company. 300,620; Jan. 24.

LIST OF LABELS

Engel Poc-Ket Art Corners. For Picture Mounting Devices. Engel Art Corners Mfg. Co. 41,684; Jan. 24.

Lash-Lure the New and Improved Eye Brow and Lash Dye. For Eyebrow and Eyelash Dye. Lash-Lure Research Laboratories, Inc. 41,686; Jan. 24.

Luckies, a Perfect Blend, Cigarettes. For Cigarettes. T. Rogvoy. 41,688; Jan. 24.

Pride of Ridgeway. For Cantaloupes. "Pride of Ridgeway" Growers Association. 41,687; Jan. 24.

Tastee. For Liquid Malt. Gold Star Products Inc. 41,685; Jan. 24.

Valor Solid Leather Shoes. For Shoes. Bird & Son, Inc. 41,683; Jan. 24.

LIST OF PRINTS

Coon-Chicken Inn. For Special Fried Quarter, Half, and Whole Chicken, Fried Chicken Sandwich, Chicken Pie, Etc. M. L. Graham. 14,033–4; Jan. 24.

Thimblefuls of Beauty. For Cleansing Cream, Skin Tonic, Anti-Wrinkle Cream, Ensemble Lipstick, Etc. Elizabeth Arden of New York Ltd. 14,032; Jan. 24.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 24TH DAY OF JANUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A. B. See Elevator Company. (See Lindstrom, Nils O., assignor.)

Abel, Frank J., Massapequa, assignor to H. Hyman, Brooklyn, N. Y. Box or similar receptacle. Des. 89,109; Jan. 24.

Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.)

Aktiengesellschaft Brown, Boveri & Cie. (See Meyer, Adolf, assignor.)

Alderson, Frederick J., assignor of one-half to John McArthur Patrick, Kingston, Ontario, Canada. Incandescent lamp. 1,895,143; Jan. 24.

Alexander, Harry S., and F. B. Pfeiffer, Akron, and J. W. White, Barberton, Ohio, assignors to Selberling Rubber Company. Bias cutting machine. 1,895,274; Jan. 24.

Allen, Albert, Winchester, assignor, by mesne assignments, to Atlantic Precision Instrument Company, Boston, Mass. Measuring material taken up by a treated web. 1,895,118; Jan. 24.

Allison, William H., Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for the manufacturing of plate glass blanks and the article produced thereby. 1,895,362; Jan. 24.

Allison, William H., Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Producing plate glass. 1,895,363; Jan. 24.

Alox Chemical Corporation. (See Burwell, Arthur W., assignor.)

American Bemberg Corporation. (See Meyer-Gaus, K., and Saure, assignors.)

American Chemical Paint Company. (See Gravell, James H., assignor.)

American Cotton Machinery Co. (See Green, Sherwood, assignor.)

American Metal Company, Limited, The. (See Eppensteiner, William F., assignor.)

American Rolling Mill Company. (See Burgess, Clyde, assignor.)

American Rolling Mill Company. (See Tytus, John B., assignor.)

American Telephone and Telegraph Company. (See Bascom, Henry M., assignor.)

American Telephone and Telegraph Company. (See Weaver, Allan, assignor.)

American Valve and Meter Company, The. (See Elmore, Paul W., assignor.)

Ancona, John F., Reading, Pa. Fishing reel. 1,895,304; Jan. 24.

Arthur, James L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition apparatus. 1,895,119; Jan. 24.

Atlantic Precision Instrument Company. (See Allen, Albert, assignor.)

Aulbach, Charles J., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Easy opening container. 1,895,386; Jan. 24.

Austin, Bascom O., Forest Hills, N. H. Willby and R. R. Brooks, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Automatic control system. 1,894,971; Jan. 24.

Austin, Dwight E., Los Angeles, Calif. Flexible tube compressing device. 1,894,936; Jan. 24.

Aviation Patent and Research Corporation, The. (See Johnson, Corydon M., assignor.)

Axe, Roy T., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y. Window-sash and weather-strip construction. 1,895,064; Jan. 24.

Axe, Roy T., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y. Window sash and guide means. 1,895,305; Jan. 24.

Babcock & Wilcox Company, The. (See Jones, William A., assignor.)

Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)

Babcock & Wilcox Company, The. (See Lucke, C. E., and Cassidy, assignors.)

Baird Machine Company, The. (See Lewis, Arthur J., assignor.)

Baker, Henry G., Des Moines, Iowa. Connecter for electrical appliances. 1,895,120; Jan. 24.

Bariquand, Georges. (See Constensoux, Robert, assignor.)

Barnes, Ronald S., Grangemouth, Duncan Service, Falkirk, and J. Thomas, Polmont, Scotland, assignors to Scotish Dyes Limited. Coloring. 1,895,019; Jan. 24.

Barrington, Frederick H., assignor to Moloney Electric Company, St. Louis, Mo. Ratio adjuster or tap changer. 1,895,306; Jan. 24.

Baruch, Milton, Los Angeles, R. E. DeCamp, Glendale, and C. P. Walker, assignors to Llewellyn Iron Works, Los Angeles, Calif. Automatic stopping elevator control system. 1,895,065; Jan. 24.

Bascom, Henry M., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Telephone system. 1,895,020; Jan. 24.

Basil, John L. (See Herschman, H. K., and Basil.)

Beard, Claude A., Chicago, Ill. Attachments for golf bags or the like. 1,895,366; Jan. 24.

Beck, Emil, Chicago, Ill. Spray. 1,895,307; Jan. 24.

Begtrup, Edward F., Jersey City, N. J. Drying mold copes. 1,895,219; Jan. 24.

Behrman, Abraham S., assignor to General Zeolite Company, Chicago, Ill. Zeolite preparation. 1,895,121; Jan. 24.

Bell, Harvey W., Ardsley on Hudson, assignor to The Beloyt Corporation, New York, N. Y. Flexible coupling. 1,894,972; Jan. 24.

Bell, Harvey W., Ardsley on Hudson, assignor to The Beloyt Corporation, New York, N. Y. Flexible connection. 1,894,973; Jan. 24.

Beloyt Corporation, The. (See Bell, Harvey W., assignor.)

Benedict, Frederic K., Grand Rapids, assignor to Hanchett Manufacturing Co., Big Rapids, Mich. Traveling wheel grinder. 1,895,122; Jan. 24.

Bergstrom, Carl J. O., Huskvarna, Sweden. Cattle drinking cup or the like. 1,895,066; Jan. 24.

Bergstrom, Obert E., et al. (See Dripps, Robert G., assignor.)

Berlin-Karlsruher Industrie-Werke Aktiengesellschaft. (See Rinkel, Otto, assignor.)

Bernhard, Robert A., Brighton, N. Y. Adhesive plastic composition. 1,895,367; Jan. 24.

Berry Bros. Tool Mfg. Co. (See Berry, Charles F., assignor.)

Berry, Charles F., assignor to Berry Bros. Tool Mfg. Co., Columbus, Kans. Reamer. 1,894,937; Jan. 24.

Bigelow Sanford Carpet Co. (See La Couture, Henry C., assignor.)

Billings, Stanley P., Pittsfield, Mass., assignor to General Electric Company. Salvaging and resintering cemented carbides. 1,895,364; Jan. 24.

Bishop, George D., assignor to Crown Paper Company, Sanford, Fla. Fruit guard. 1,895,308; Jan. 24.

Blackhall, John R., Joliet, Ill. Truck. 1,895,368; Jan. 24.

Blackley, Frederick W., East Orange, N. J. Supporting device for knives and the like. 1,894,974; Jan. 24.

Blair, James C., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Method and apparatus for producing sheet glass. 1,895,365; Jan. 24.

Blair, James C., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Method and apparatus for reducing a sheet to thickness. 1,895,405; Jan. 24.

Blatz, Francis J., New York, N. Y. Golf club. 1,895,369; Jan. 24.

Blechman, Irving, New York, N. Y. Clothing container. 1,895,406; Jan. 24.

Bone, Herbert L., assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for controlling railway switches. 1,895,067; Jan. 24.

Boomershine, Adam, Dayton, Ohio. Stretching and securing means for flexible material. 1,895,309; Jan. 24.

Borchardt, Edward C., assignor to Cosby-Wirth Manifold Book Company, Minneapolis, Minn. Manifolding record machine. 1,895,021; Jan. 24.

Borglin, Joseph N., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Refining rosin. 1,894,975; Jan. 24.

Borroughs, Joseph N., Oakland, Calif. Toy. 1,895,068; Jan. 24.

Botts, Henry W., Kenvil, and H. H. Champney, Succasunna, N. J., assignors to Hercules Powder Company, Wilmington, Del. Explosive. 1,895,144; Jan. 24.

Bovajian, Aram, Pittsfield, Mass., assignor to General Electric Company. Electric translating system. 1,895,370; Jan. 24.

Bradshaw, Lawrence, Bainbridge, N. Y. Improving the water-resistance of casein glues. 1,895,433; Jan. 24.

Briegel, Anthony J., Pittsburgh, Pa. Ventilating unit for stoves. 1,895,371; Jan. 24.

Brodie, Ralph N., Company. (See Granberg, Albert J., assignor.)

Brooks, Ralph R. (See Austin, B. O., Willby, and Brooks.)

Brotz, Frank G., Kohler, Wis. Tank and bowl connection. 1,895,145; Jan. 24.

Broun, Michael P., Gettysburg, S. Dak. Heater. 1,895,372; Jan. 24.

Brower, William M., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Dial engraving machine. 1,894,976; Jan. 24.

Brown, Frank J., assignor to National Wrought Iron Annealing Box Company, Washington, Pa. Pressure welding apparatus. 1,894,938; Jan. 24.
Brown, George E., Monrovia, Calif. Door opening safety guard. 1,895,146; Jan. 24.
Brown, Hobart B., Cedar Falls, Iowa. Heat controlling means for furnaces. 1,895,275; Jan. 24.
Brown, Lloyd W., Rochester, N. Y., and Herman T. Wood, Camp Hill, Pa. Arch supporting shoe. 1,894,939; Jan. 24.
Brown & Sharpe Manufacturing Company. (See Miner, Irving O., assignor.)
Brubaker, Jacob E., Lancaster, Pa. Toy pistol. 1,895,407; Jan. 24.
Brubaker, Peter. (See Steinour, John E.)
Brüche, Ernst, Dansig, Free city of Danzig, assignor to General Electric Company. Apparatus for measuring magnetic fields. 1,895,373; Jan. 24.
Brunsviga-Maschinenwerke Grimme Natalis & Co., Aktiengesellschaft Braunschweig. (See Hoffmeister, Hermann, assignor.)
Brunswick-Balke-Collender Company. (See Hansen, Peter, assignor.)
Brykowicz, John, Wetaskiwin, Alberta, Canada. Automobile direction indicator. 1,895,123; Jan. 24.
Bundy Tubing Company. (See Quarnstrom, Bert L., assignor.)
Burgess, Clyde, Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio. Handling metallic sheets. 1,895,310; Jan. 24.
Burgess, Frank W., Cook, Nebr. Tractor wheel lug cleaner. 1,895,147; Jan. 24.
Burns, George W., Covelo, Calif. Dispensing device. 1,894,977; Jan. 24.
Burwell, Arthur W., Niagara Falls, assignor to Alex Chemical Corporation, New York, N. Y. Penetrating oil composition. 1,895,374; Jan. 24.
Butler Manufacturing Company. (See Norquist, Victor C., assignor.)
Butler Manufacturing Company. (See Norquist, V. C., and Treanor, assignors.)
Byrne, James R., and D. J. MacIntosh, Liverpool, Nova Scotia, Canada. Automatic crossing gate. 1,894,940; Jan. 24.
Cantlon, William T., Cartwright, Manitoba, Canada. Weeding attachment to plow. 1,895,375; Jan. 24.
Card, Frederic M., Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Trimming mechanism for sewing machines. 1,894,978; Jan. 24.
Carlson, Oscar A., West Lawn, assignor to D. P. Harris Manufacturing Co., Reading, Pa. Roller skate wheel. 1,895,093; Jan. 24.
Carr, John A. (See Steuer, O. A., and Carr.)
Cary Products Company. (See McFaul, Joseph H., assignor.)
Cassedy, William F., jr., Milburn, N. J., assignor to International Communications Laboratories, Inc., New York, N. Y. Step-by-step transmitter. 1,895,094; Jan. 24.
Cassidy, Perry R. (See Lucke, C. E., and Cassidy.)
Caston, Johnnye L., assignor to The Sterling Company, Chicago, Ill. Dress. Des. 89,115; Jan. 24.
Celanese Corporation of America. (See Dort, Robert G., assignor.)
Celanese Corporation of America. (See Hale, F. C., and Kimpton, assignors.)
Champney, Hubert H. (See Botts, H. W., and Champney.)
Chandler, Homer P., assignor to The Ohio Brass Company, Mansfield, Ohio. Insulated casing. 1,895,022; Jan. 24.
Charbenau, Clarence A., Mount Clemens, Mich. Bookmarker. 1,894,941; Jan. 24.
Chemical Construction Corporation. (See Hechenbleikner, I., and Titlestad, assignors.)
Chemical Construction Corporation. (See Spangler, Samuel F., assignor.)
Chicago Hardware Foundry Company. (See Kupski, Joseph, assignor.)
Chicago Metal Mfg. Co. (See Hauf, George F., assignor.)
Chierotti, Joseph, Los Angeles, Calif. Belt and buckle. 1,895,148; Jan. 24.
Chrisman, Horace, Pittsburgh, and E. M. Kreidler, Wilkinsburg, assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Liquid meter. 1,895,023; Jan. 24.
Christiansen, Paul C., Copenhagen, Denmark. Device for pressing articles. Re18,721; Jan. 24.
Chromy, Ben J., Hopkins, Minn., assignor to Wired Radio, Inc., New York, N. Y. Light modulating device. 1,894,942; Jan. 24.
Chubb, Lewis W., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Vernier motor. 1,894,979; Jan. 24.
Cincinnati Rubber Manufacturing Company, The. (See Joseph, John F., assignor.)
Clark, Edward F. (See Fenton, R. M., and Clark.)
Clark Equipment Company. (See Clark, Eugene B., assignor.)
Clark, Eugene B., assignor to Clark Equipment Company, Buchanan, Mich. Axle. 1,895,311; Jan. 24.
Clark, Frank M., Pittsfield, Mass., assignor to General Electric Company. Electric capacitor. 1,895,376; Jan. 24.
Clark, J. R. Company. (See Kalgren, John E., assignor.)
Claus, Emil A. (See Schlegel, J. W., and Claus.)
Cleveland Rock Drill Company, The. (See Feucht, Albert, assignor.)
Cline, Allan J. (See Strand, Lody M., assignor.)
Clipper Belt Lacer Company. (See Diamond, James K., assignor.)
Cole, David, El Paso, Tex. Continuous filtration. 1,895,276; Jan. 24.
Collingham, Robert H., Rugby, England, assignor to General Electric Company. Ship propulsion system. 1,895,377; Jan. 24.
Condit Electrical Manufacturing Corporation. (See Jansson, Gustav E., assignor.)
Conkling, Lester J., Edgewood, Md. Fast burning type candle. 1,895,149; Jan. 24.
Connery, Alder F., and M. H. Woodward, Brooklyn, assignors to International Communications Laboratories, Inc., New York, N. Y. Cable code printer. 1,895,095; Jan. 24.
Constensoux, Robert, assignor to Georges Bariquand, Paris, France. Multiple carburetor. 1,895,279; Jan. 24.
Continental Can Company. (See Aulbach, Charles J., assignor.)
Continental Can Company. (See Punte, William F., assignor.)
Continental Oil Company. (See Miller, W., Henriksen, and Zurcher, assignors.)
Continental Oil Company. (See Porter, Frank, assignor.)
Continental Oil Company. (See Zurcher, Paul, assignor.)
Coquille, Emile H., Paris, assignor to Societe Anonyme des Usines Chausson, Asnieres, Seine, France. Wheel support. 1,895,024; Jan. 24.
Correll, Martin. (See Kränslein, G., Corell, Vollmann, and Hausdörfer.)
Cosby-Wirth Manifold Book Company. (See Borchardt, Edward C., assignor.)
Coughenour, John E., et al. (See Dudick, Victor, assignor.)
Cowan, Edward J., Dedham, Mass., assignor, by mesne assignments, to General Electric Company. Variable mica condenser. 1,895,242; Jan. 24.
Crafts, Curtis S., and C. A. Harless, Oak Park, assignors to The Goss Printing Press Company, Chicago, Ill. Folding mechanism. 1,895,124; Jan. 24.
Crawford, Wilbur F., Waco, Tex. Shipping jacket for perishable commodities. 1,895,277; Jan. 24.
Crawford, Wilbur F., Waco, Tex. Shipping container. 1,895,278; Jan. 24.
Creed and Company, Limited. (See Creed, F. G., and Salmon, assignors.)
Creed and Company Limited. (See Salmon, Reginald D., assignor.)
Creed and Company, Limited. (See Salmon, R. D., and Kirk, assignors.)
Creed, Frederick G., and B. D. Salmon, assignors to Creed and Company, Limited, Croydon, England. Tape controlled telegraph transmitter. 1,894,980; Jan. 24.
Crown Paper Company. (See Bishop, George D., assignor.)
Currie, Thomas D., Detroit, Mich. Wrench. 1,895,280; Jan. 24.
Currie, Thomas D., Detroit, Mich. Vise and the like. 1,895,281; Jan. 24.
Cutler, Joseph W., assignor to Cutler Mail Chute Co., Rochester, N. Y. Mail chute. 1,895,069; Jan. 24.
Cutler Mail Chute Co. (See Cutler, Joseph W., assignor.)
Czerweny, Viktor, Waltendorf, near Graz, Austria. Cardboard box and the like. 1,895,070; Jan. 24.
Da Gama, Vasco, New York, N. Y. Table light or analogous article. Des. 89,075; Jan. 24.
Darby, Samuel E., trustee. (See Parker, Richard B., assignor.)
Darnell Corporation, Ltd., The. (See Darnell, William R., assignor.)
Darnell, William R., assignor to The Darnell Corporation, Ltd., Long Beach, Calif. Adjustable wheel caster. 1,895,150; Jan. 24.
Davis, Albert G., assignor to The Production Foundry Co., Colombiana, Ohio. Bat. 1,895,408; Jan. 24.
Dean, Oscar M., Sioux City, Iowa. Cutting fur. 1,895,025; Jan. 24.
Debrie, André L. V. C., Paris, France. Film feeding device in cinematographic view taking apparatus. 1,895,026; Jan. 24.
De Camp, Ray. (See Baruch, M., De Camp, and Walker.)
Deere & Company. (See White, Charles E., assignor.)
De Laval Separator Company. (See Flowers, Alan E., assignor.)
Delco-Remy Corporation. (See Arthur, James L., assignor.)
De Long Hook and Eye Company, The. (See O'Brien, James A., assignor.)
De Mees, Jean B., Herchem-Antwerp, Belgium. Apparatus for raising liquids. 1,895,027; Jan. 24.
Dennedy, James H., Springfield, Mass., assignor to Rotorite Corporation, Chicago, Ill. Sealed coupling. 1,894,948; Jan. 24.
Dent Hardware Company, The. (See Schrader, Thomas O., assignor.)
De Vilbiss, John M., Modesto, Calif. Can punch. 1,895,378; Jan. 24.

Diamond, James K., assignor to Clipper Belt Lacer Company, Grand Rapids, Mich. Belt lacing holder. 1,894,981; Jan. 24.
Dietz, Peter, Lorain, Ohio. Screen and storm sash mounting for windows. 1,895,312; Jan. 24.
Di Figlia, Vincent, Brooklyn, N. Y. Clamp. 1,895,410; Jan. 24.
Dilts Machine Works, Inc. (See Haskell, John D., assignor.)
Ditchfield, Frank, assignor to The Youngstown Steel Door Company, Cleveland, Ohio. Door. 1,895,151; Jan. 24.
Dixon, Joseph, Crucible Company. (See Thomsen, J. E., and O'Laughlin, assignors.)
Dobson & Barlow, Limited. (See Schofield, Charles, assignor.)
Doloukhanoff, Michel, Versailles, France. Electrical machine. 1,895,096; Jan. 24.
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Loop prong buckle. 1,895,313; Jan. 24.
Donle, Harold P., Meriden, Conn., assignor to Radio Inventions, Inc. Television apparatus and method. 1,894,944; Jan. 24.
Dort, Robert G., New York, N. Y., assignor to Celanese Corporation of America. Coloring textile materials and product thereof. 1,895,248; Jan. 24.
Douglass, Charles D. (See Douglass, Henry J. and C. D., and Leve.)
Douglass, Henry J. and C. D., and M. S. Leve, assignors to Pacific Can Company, San Francisco, Calif. Multiple spindle vacuum double seamer. 1,895,184; Jan. 24.
Dow Chemical Company, The. (See Grebe, John J., assignor.)
Drew, Edward A., Delta, Iowa. Water heater for stock. 1,895,028; Jan. 24.
Drippa, Irene M., et al. (See Drippa, Robert G., assignor.)
Drippa, Robert G., assignor of one-half to I. M. Drippa, one-sixth to F. C. Wick, one-sixth to O. E. Bergstrom, and one-sixth to G. F. Thompson, Minneapolis, Minn. Pliers. 1,895,314; Jan. 24.
Drucker, Rudolf, The Hague, Netherlands. Register or index. 1,895,409; Jan. 24.
Dudick, Victor, assignor of one-third to J. E. Coughenour and one-third to L. J. Yessani, North Belle Vernon, Pa. Dynamoelectric machine and system of control therefor. 1,895,379; Jan. 24.
Du Pont, E. I., de Nemours & Company. (See Vail, Walter E., assignor.)
Durafer (Inc.). (See Geisler, William A., assignor.)
Durant, Henry T., Crawley, H. L. Sulman, and H. F. K. Picard, assignors to The General Engineering Company, Incorporated, London, England. Recovery of values from cyanide solutions. 1,895,412; Jan. 24.
Durbin, Stanley H., assignor to Gifford-Wood Company, Hudson, N. Y. Transfer conveyer. 1,895,411; Jan. 24.
Durham, Hobart N., Jackson Heights, N. Y. Planographic printing. 1,895,125; Jan. 24.
Eastman Kodak Company. (See Staud, C. J., and Fuess, assignors.)
Edgin, James E., Charlotte, Tenn. Knockdown hogshead. 1,895,428; Jan. 24.
Edwards, O. M., Company Inc., The. (See Axe, Roy T., assignor.)
Edwards, O. M., Company Inc., The. (See Levan, John F., assignor.)
Eicher, Benjamin L., Chicago, Ill., assignor, by mesne assignments, to The Dr. Gross Laboratories, Inc., Dayton, Ohio. Making cod-liver-oil tablets. Re18,719; Jan. 24.
Eilmaender, Ludwig. (See Nawaisky, P., and Eilmaender.)
Eisele, Albert, Berlin-Westend, Germany. Speedometer. 1,895,029; Jan. 24.
Ellenberger, Clarence M., Detroit, Mich., and F. A. Smith, assignors to Oakes Products Corporation, North Chicago, Ill. Spare wheel carrier and lock. 1,894,945; Jan. 24.
Elling, William E., Long Island City, N. Y. Foldable or collapsible boat. 1,895,380; Jan. 24.
Elmore, Paul W., assignor to The American Valve and Meter Company, Cincinnati, Ohio. Rail joint clamp. 1,895,030; Jan. 24.
Endersby, David P. R. (See Mayhew, George, assignor.)
Engl, Josef, Berlin-Gruenwold, Germany, assignor to Engl Products Corporation, New York, N. Y. Amplifying system. 1,895,152; Jan. 24.
Engl Products Corporation. (See Engl, Josef, assignor.)
Eppensteiner, William F., Rahway, N. J., assignor to The American Metal Company, Limited, New York, N. Y. Casting copper or equivalent metals. 1,894,982; Jan. 24.
Eppensteiner, William F., Rahway, N. J., assignor to The American Metal Company, (Limited), New York, N. Y. Apparatus for casting core molds. 1,894,983; Jan. 24.
Equitable Paper Bag Co. Inc. (See Poppe, George W., assignor.)
Ericksen, Lourits E., and A. A. Hammons, Plains, Mont. Battery terminal connection. 1,894,984; Jan. 24.
Espe, Werner, Berlin-Charlottenburg, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany. Activating glowing cathodes or the like. 1,894,946; Jan. 24.
Espe, Werner, Berlin-Charlottenburg, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany. Manufacture of vacuum tubes. 1,894,947; Jan. 24.
Espe, Werner, Berlin-Charlottenburg, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany. Activating cathodes. 1,894,949; Jan. 24.
Espe, Werner, Berlin-Charlottenburg, and H. Kolliga, Berlin, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany. Manufacture of electron discharge devices. 1,894,948; Jan. 24.
Eusey, Samuel. (See Young, L. M., Eusey, and Lindquist.)
Fanger, Herman J., Oakland, Calif. Dynamic loud speaker unit. 1,895,071; Jan. 24.
Federal Telegraph Company. (See Brower, William M., assignor.)
Federal Telegraph Company. (See Suydam, Clinton H., assignor.)
Fehrle, Alfred, Bad Soden-on-the-Taunus, and K. Streitwolf and W. Herrmann, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Stable aqueous solution of nitrogen-containing organic compounds and preparing them. 1,895,484; Jan. 24.
Fenton, Ray M., assignor to The Newton Steel Company, Youngstown, Ohio. Sheet feeding apparatus. 1,895,073; Jan. 24.
Fenton, Ray M., and E. F. Clark, Monroe, Mich. Continuous furnace for metallurgical purposes. 1,895,072; Jan. 24.
Ferguson, Jesse T., Meridian, Miss. Cotton picker. 1,895,031; Jan. 24.
Feucht, Albert, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Valve for rock drills. 1,895,153; Jan. 24.
Finley, Ansell R., and S. Smith, Mason City, Iowa. Device for distributing and packing cosettes in diffusion battery cells. 1,895,185; Jan. 24.
Fischer, Max W. (See Johnson, L. P., Westfall, and Fischer.)
Fischer, Siegfried, jr., Los Angeles, Calif. Measuring oiliness of substances. 1,895,154; Jan. 24.
Fisher, Adam, Palisades Park, N. J., assignor to International Patents Development Company, Wilmington, Del. Tension control for label pasting belts. 1,895,315; Jan. 24.
Fisher, Clement R., Terre Haute, Ind. Fruit picker. 1,895,155; Jan. 24.
Fisher, Edwin H., assignor to Fisher Scientific Company, Pittsburgh, Pa. Laboratory clamp. 1,895,156; Jan. 24.
Fisher, Raymond, Ridgewood, N. J. Shaping hedges. 1,895,282; Jan. 24.
Fisher Scientific Company. (See Fisher, Edwin H., assignor.)
Fisher, Thomas H., Chicago, Ill. Portable lighting device and fuel therefor. 1,895,032; Jan. 24.
Fitch, Benjamin F., Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del. Apparatus for transferring freight. 1,894,950; Jan. 24.
Fitch, Benjamin F., Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del. Apparatus for transferring freight. 1,894,951; Jan. 24.
Flintkote Corporation, The. (See Limburg, Hyman, assignor.)
Flowers, Alan E., Poughkeepsie, assignor to The De Laval Separator Company, New York, N. Y. Adjustable crank. 1,894,985; Jan. 24.
Foster Brothers Manufacturing Company. (See Foster, William B., assignor.)
Foster, William B., assignor to Foster Brothers Manufacturing Company, Utica, N. Y. Spring construction. 1,895,429; Jan. 24.
Four Wheel Drive Auto Company. (See Prior, Frank O., assignor.)
Franklin Equipment Co. (See Langer, Rudolph J., assignor.)
Free, John R., Limerick, Saskatchewan, Canada. Fence post. 1,895,186; Jan. 24.
Freeman, Walter R., assignor to Midwest Engineering Corporation, Tulsa, Okla. Brake control mechanism. 1,895,316; Jan. 24.
Freitag, Carl. (See Ipatieff, W., and Freitag.)
Fried. Krupp Grusonwerk Aktiengesellschaft. (See Heimrich, Friedrich, assignor.)
Fried. Krupp Grusonwerk Aktiengesellschaft. (See Mittag, Carl, assignor.)
Friedemann, Matthew M., New York, N. Y. Adjustable stepped display device. 1,895,283; Jan. 24.
Friedman, William, New York, N. Y. Toilet accessory. 1,895,187; Jan. 24.
Frigidaire Corporation. (See King, Jesse G. assignor.)
Frins, Maximilian C., Watchung, N. J., assignor to International Motor Company, New York, N. Y. Universal joint. 1,894,986; Jan. 24.
Fuess, James T. (See Staud, C. J., and Fuess.)
Fusco, Rudolph V., Brooklyn N. Y. Service water heater. 1,894,987; Jan. 24.
Gallus, George, Stillwater, Minn. Potato harvester. 1,895,157; Jan. 24.
Garbe, Herman, Glogau, Germany. Water tube boiler. 1,894,988; Jan. 24.

Geaneas, Peter, Brooklyn, N. Y. Removing carbon. 1,895,413; Jan. 24.

Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Signaling system control. 1,894,952; Jan. 24.

Geisler, William A., Newark, N. J., assignor, by mesne assignments, to Durafer (Inc.), Dover, Del. Centrifugal molding machine. 1,895,245; Jan. 24.

General Aniline Works, Inc. (See Jung, Rudolph, assignor.)

General Aniline Works, Inc. (See Kränslein, G., Corell, Vollmann, and Hausdörfer, assignors.)

General Aniline Works, Inc. (See Kunz, M. A., and Koeberle, assignors.)

General Aniline Works, Inc. (See Nawiasky, Paul, and Eiffaender, assignors.)

General Cap Co. Inc. (See Knowles, William H., assignor.)

General Electric Company. (See Billings, Stanley P., assignor.)

General Electric Company. (See Boyakian, Aram, assignor.)

General Electric Company. (See Brüche, Ernst, assignor.)

General Electric Company. (See Clark, Frank M., assignor.)

General Electric Company. (See Collingham, Robert H., assignor.)

General Electric Company. (See Cowan, Edward J., assignor.)

General Electric Company. (See Gosling, Joseph W., assignor.)

General Electric Company. (See Kempton, Leslie A., assignor.)

General Electric Company. (See Pfannkuch, Wilhelm, assignor.)

General Electric Company. (See Seiz, Walter, assignor.)

General Electric Company. (See Taylor, George F., assignor.)

General Electric Company. (See Traver, Oliver C., assignor.)

General Electric Company. (See Warrington, Albert R. van C., assignor.)

General Electric Company. (See Zecher, G., and Mellema, assignor.)

General Engineering Company. (See Durant, H. T., Sulman, and Picard, assignors.)

General Insulating and Manufacturing Company. (See Mottweiler, Oliver F., assignor.)

General Paint Corporation. (See Jansen, Emile, assignor.)

General Railway Signal Company. (See Phinney, Robert M., assignor.)

General Zeolite Company. (See Behrman, Abraham S., assignor.)

Genety, Louis M. F., Paris, France. Device for feeding explosion engines having an over-high pressure of compression. 1,895,881; Jan. 24.

Genich, Josepf, assignor to Walker Manufacturing Company, Racine, Wis. Lifting jack handle. 1,895,317; Jan. 24.

Gerkin, Henry, Oakland, Calif. Hair waving appliance. 1,895,158; Jan. 24.

Gesellschaft für Elektrische Apparate m. b. H. (See Vopel, J., and Oetker, assignors.)

Gheorghe, Tanase, Baltimore, Md. Aeroplane. 1,895,388; Jan. 24.

Gifford-Wood Company. (See Durbin, Stanley H., assignor.)

Goodrich, B. F., Company. (See Taylor, Bert S., assignor.)

Gosling, Joseph W., Schenectady, N. Y., assignor to General Electric Company. Electric fan. Des. 89,076; Jan. 24.

Goss Printing Press Company, The. (See Crafts, C. S., and Harless, assignors.)

Govare, Harry P. (See Salomon, F. M., M. B., and Govare.)

Granberg, Albert J., Berkeley, assignor to R. N. Brodie Company, Oakland, Calif. Fluid meter. 1,895,318; Jan. 24.

Grande, Joseph H., Los Angeles, Calif. Packing iced vegetables. 1,895,319; Jan. 24.

Gravell, James H., Elkins Park, assignor to American Chemical Paint Company, Ambler, Pa. Material for and process of coating metal. 1,895,320; Jan. 24.

Grebe, John J., assignor to The Dow Chemical Company, Midland, Mich. Vaporizing. 1,895,220; Jan. 24.

Green, Sherwood, assignor to American Cotton Machinery Co., Berkeley, Calif. Cotton picker. 1,895,160; Jan. 24.

Greenawalt, John E., New York, N. Y. Disposing of sewage sludge. 1,895,159; Jan. 24.

Gregg, Jacob L. (See Jones, Joseph O., assignor.)

Grigsby-Grunow Company. (See Taylor, Joseph, assignor.)

Gross, Dr., Laboratories, Inc., The. (See Eicher, Benjamin L., assignor.)

Grote, Edwin R., Wimbledon, London, England. Electric incandescent lamp and holder thereof. 1,895,033; Jan. 24.

Grulich, Anton, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,077; Jan. 24.

Grulich, Anton, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,078; Jan. 24.

Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,079; Jan. 24.

Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,080; Jan. 24.

Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,110; Jan. 24.

Guinness, Kenelm E. L., assignor of one-half to K. L. G. Sparking Plugs Limited, London, England. Sheathing spark plug electrodes. 1,895,034; Jan. 24.

Guth, Edwin F., Company, The. (See Owen, Raymond V., assignor.)

Hagerstrom, Edward R., Waterloo, Iowa. Article holster. 1,895,074; Jan. 24.

Hale, Frank C., and W. H. Kimpton, Spondon, near Derby, England, assignors to Celanese Corporation of America. Apparatus for cutting filaments into staple fibers. 1,895,246; Jan. 24.

Hall, Roy M., Valparaiso, Ind. Monthly-yearly calendar pad. 1,895,321; Jan. 24.

Hall, Roy M., Valparaiso, Ind. Universal desk calendar. 1,895,322; Jan. 24.

Hallden, Frederick G. (See Vernam, G. S., and Hallden.)

Hallden, Frederick G., Bellerose, assignor to International Communications Laboratories, Inc., New York, N. Y. Printing telegraph exchange switching system. 1,895,097; Jan. 24.

Hamant, Edward W. (See von Webern, G., and Hamant.)

Hammons, Asa A. (See Ericksen, L. E., and Hammons.)

Hanchett Manufacturing Co. (See Benedict, Frederic K., assignor.)

Hansen, Peter, Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Carom plug for tables. 1,894,989; Jan. 24.

Hanson, Dave, McCallsburgh, Iowa. Switch. 1,895,035; Jan. 24.

Harless, Charles A. (See Crafts, C. S., and Harless.)

Harris, D. P., Manufacturing Co. (See Carlson, Oscar A., assignor.)

Harris, John E. G. (See Morton, J., Jones, Wylam, and Harris.)

Harris, John E. G., Carlisle, England, assignor to Scottish Dyes, Limited, Grangemouth, Scotland. Direct dyeing water soluble stable derivatives of vat dyestuffs and making the same. 1,895,382; Jan. 24.

Harris, Leonard B., New York, N. Y., assignor, by mesne assignments, to International Oil Gas Corporation, Dover, Del. Oil gas generator. 1,894,990; Jan. 24.

Haskell, John D., assignor to Dilts Machine Works, Inc., Fulton, N. Y. Breaker and beater roll. 1,895,188; Jan. 24.

Hauf, George F., assignor to Chicago Metal Mfg. Co., Chicago, Ill. Drying tray. 1,895,323; Jan. 24.

Haughey, Leo E., Concordia, Kans. Anæsthetic dropping stand. 1,895,036; Jan. 24.

Hausdörfer, Emil. (See Kränzlein, G., Corell, Vollmann, and Hausdörfer.)

Hay, Samuel F., Metuchen, assignor to Isbell-Porter Company, Newark, N. J. Direct heated vertical retort. 1,895,284; Jan. 24.

Hayes Body Corporation. (See Nelson, A. L., and Pease, assignors.)

Hayes, John H., Kew Gardens, N. Y. Bed tray. 1,894,991; Jan. 24.

Hayhurst, Robert P., Nelson, England. Track apparatus for spectacular performances. 1,895,285; Jan. 24.

Hazeltine Corporation. (See Wheeler, Harold A., assignor.)

Heacock, Nathan A., Decatur, Ill. Irrigation and drainage system. 1,895,324; Jan. 24.

Hechenbleikner, Ingenuin, and N. Titlestad, assignors, by mesne assignments, to Chemical Construction Corporation, Charlotte, N. C. Converter. 1,894,992; Jan. 24.

Heintz Manufacturing Company. (See Lambert, Albert L., assignor.)

Hellstrom, Olaf F. (See Hult, O. O., and Hellstrom.)

Helmrich, Friedrich, Magdeburg, assignor to the Firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Eccentric or draw rod for stone crushers. 1,895,390; Jan. 24.

Helwig, Edward L., Bristol, assignor to Röhm & Haas Company, Philadelphia, Pa. Separation of ketoses from mixtures. 1,895,414; Jan. 24.

Henninger, Albert E., McAllen, Tex. Colored seedless grapefruit. Pl. Pt. 53; Jan. 24.

Henriksen, Alfred. (See Miller, W., Henriksen, and Zurcher.)

Herbert, Edward F., Cincinnati, Ohio. Vehicle unloading closure and mounting. 1,895,325; Jan. 24.

Hercules Powder Company. (See Borglin, Joseph N., assignor.)

Hercules Powder Company. (See Botts, H. W., and Champney, assignors.)

Herndon, Alton, Waltham, Mass. Cap driver. 1,895,037; Jan. 24.

Herr, Frank E., Lancaster, Pa. Valve apparatus. 1,895,326; Jan. 24.

Herrmann, Walter. (See Fehrle, A., Streitwolf, and Herrmann.)

Herschman, Harry K., Washington, D. C., and J. L. Basil, Annapolis, Md. Metal alloy. 1,895,261; Jan. 24.

Hetch, Edmond I., New York, N. Y. Ashpan and blow off muffler structure. 1,895,161; Jan. 24.

Hilgenberg, Robert, Leipzig-Marienhohe, Germany. Talking machine. 1,895,126; Jan. 24.

Hladky, Donald F., and J. F. Hladky, jr., Cedar Rapids, Iowa. Vending machine casing. Des. 89,111; Jan. 24.

Hladky, Joseph F., jr. (See Hladky, Donald F. and J. F.)

Hoffmeister, Hermann, Cliesmarode near Brunswick, assignor to Brunsviga-Maschinenwerke Grimme, Natalis & Co., Aktiengesellschaft, Braunschweig, Germany, Brunswick, Germany. Calculating machine. 1,895,189; Jan. 24.

Holcombe, Ernest H. (See Pelton, W. E., and Holcombe.)

Holst, Lodewyk J. R., Brookline, Pa. Making maps from photographs. 1,894,953; Jan. 24.

Holtzman, John, New York, N. Y. Razor blade holder. 1,895,286; Jan. 24.

Hoover Steel Ball Company. (See Lighthall, Cone W., assignor.)

Horning, George D., Washington, D. C. Arch support. 1,895,327; Jan. 24.

Horton, John B., Saugatuck, Conn. Heat circulator. 1,895,075; Jan. 24.

Howe, Victor L., Ferndale, Mich. Automatic spark control for internal combustion engines. 1,895,328; Jan. 24.

Hult, Oskar O., Stockholm, and O. F. Hellström, Gottemborg, Sweden. Sash window and sash door. 1,895,098; Jan. 24.

Hunt, John B., Penylan, Cardiff, Wales. Boat lowering gear. 1,895,076; Jan. 24.

Hurley, Roy T. (See Townsend, G. H., and Hurley.)

Huston, Arch C. (See Simonsen, I. P., and Huston.)

Hyams, L. J., and Company. (See Pienos, Jean, assignor.)

Hyman, Henry. (See Abel, Frank J., assignor.)

Hyman, Henry. (See Nathan, Alfred R., assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Kämpf, Adolf, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Meidert, Friedrich, assignor.)

International Communications Laboratories, Inc. (See Cassedy, William F., jr., assignor.)

International Communications Laboratories, Inc. (See Connery, A. F., and Woodward, assignors.)

International Communications Laboratories, Inc. (See Hallden, Frederick G., assignor.)

International Communications Laboratories, Inc. (See Ports, Earl G., assignor.)

International Communications Laboratories, Inc. (See Sundberg, Emanuel W., assignor.)

International Communications Laboratories, Inc. (See Vernam, Gilbert S., assignor.)

International Communications Laboratories, Inc. (See Vernam, G. S., and Hallden, assignors.)

International Motor Company. (See Frins, Maximilian C., assignor.)

International Oil Gas Corporation. (See Harris, Leonard B., assignor.)

International Patents Development Company. (See Fisher, Adam, assignor.)

Ipatieff, Wladimir, Berlin-Wilmersdorf, and C. Freitag, Berlin-Neukolln, Germany. Producing phosphoric acid and hydrogen. 1,895,329; Jan. 24.

Isbell, Charles B., Elkhart, Ind., assignor to Shuffleboard Equipment Co., St. Petersburg, Fla. Shuffle board cue. 1,895,393; Jan. 24.

Isbell-Porter Company. (See Hay, Samuel F., assignor.)

Isley, Gilbert W., Cleveland, Ohio. Receding compartment door. 1,895,415; Jan. 24.

Iverson, Cato. (See Sbook, F. J., and Iverson.)

Jaeger Machine Company, The. (See Mosel, Joseph H., assignor.)

Jahr, M. Rudolf, Firm. (See Keller, Peter, assignor.)

Jansen, Emile, assignor to General Paint Corporation, San Francisco, Calif. Protecting coating of structural steel. 1,895,190; Jan. 24.

Jansson, Gustav E., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electrical apparatus and insulating bushing therefor. 1,894,993; Jan. 24.

Jelen, Matt J., assignor to Stewart-Warner Corporation, Chicago, Ill. Extending frequency range of radio apparatus. 1,895,247; Jan. 24.

Jenkins Bros. (See White, James R., assignor.)

Jensen, Benton F., Exira, Iowa. Animal brooder. 1,895,127; Jan. 24.

Jensen, Benton F., Exira, Iowa. Detachable sure-footing appliance for vehicle floor compartments. 1,895,162; Jan. 24.

Jensen, William E., Chicago, assignor, by mesne assignments, to F. W. Norton, Oak Park, Ill. Can opener. 1,895,221; Jan. 24.

Johnson, Alf, Revloc, Pa. Highway guard-fence construction. 1,895,262; Jan. 24.

Johnson, Corydon M., Farmingdale, N. Y., assignor to The Aviation Patent and Research Corporation. Airplane safety belt. 1,895,222; Jan. 24.

Johnson, Francis T., Chicago, Ill. Rack. 1,895,128; Jan. 24.

Johnson, Frederick O., Long Beach Calif. Tooth paste dispenser. 1,895,163; Jan. 24.

Johnson, John E., Wilkes-Barre, Pa. Pin board. 1,895,416; Jan. 24.

Johnson, Lee P., and T. D. Westfall, U. S. Navy, and M. W. Fischer, Washington, D. C. Aerial flare. 1,894,954; Jan. 24.

Jones, David, Detroit, Mich. Magnetic work-holding device. 1,895,129; Jan. 24.

Jones, James I. M. (See Morton, J., Jones, Wylam, and Harris.)

Jones, Joseph O., assignor of one-half to Jacob L. Gregg, Kingsville, Tex. Shingle. 1,895,038; Jan. 24.

Jones, William A., Westerleigh, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Safety valve. 1,894,955; Jan. 24.

Jones, William H., Wallasey England. Box tool for automatic, and turret or capstan lathes or machines. 1,895,191; Jan. 24.

Joseph, John F., Cincinnati, assignor to The Cincinnati Rubber Manufacturing Company, Norwood, Ohio. Suction press roll for paper making machinery. 1,895,039; Jan. 24.

Josselyn, Winsor, Carmel Calif. Camera. 1,895,248; Jan. 24.

Juffa, Wilhelm, Ilmenau, Germany. Container for the packing of articles. 1,895,249; Jan. 24.

Jung, Rudolph, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Solid preparatioin yielding nitroso diazo solutions of the diphenylamine series and making same. 1,895,099; Jan. 24.

Juvet, Obel, Ferndale, Wash. Cabinet ironing board. 1,895,250; Jan. 24.

K. L. G. Sparking Plugs Limited. (See Guinness, Kenelm E. L., assignor.)

Kalgren, John E., assignor to J. R. Clark Company, Minneapolis, Minn. Ironing table. 1,895,164; Jan. 24.

Kämpf, Adolf, Dessau-Ziebigk, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Spinning cellulose solution. 1,895,192; Jan. 24.

Karfiol, Edward, New York, N. Y. Shelf paper. 1,895,040; Jan. 24.

Karfiol, Edward New York, N. Y. Shelf paper. 1,895,041; Jan. 24.

Karl, George, Altoona, Pa. Theft preventing device. 1,895,251; Jan. 24.

Kats, Russell S., Hamilton, Ohio. Merchandising or fluid dispensing structure. Des. 89,112; Jan. 24.

Keeran, Charles R., Evanston Ill. Pencil. 1,895,130; Jan. 24.

Keller, Peter, assignor to the Firm M. Rudolf Jahr, Gera, Germany. Carbonizing woolen fabrics. 1,895,263; Jan. 24.

Kelly, Hugh W., Woodbridge, N. J. Manufacturing lead tapes. 1,895,331; Jan. 24.

Kelvie, James D. Canton, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio. Interlocking skip loading system. 1,895,077; Jan. 24.

Kelvinator Corporation. (See Thomas, Charles C., assignor.)

Kempton, Leslie A., Trumbull, Conn., assignor to General Electric Company. Rotary snap switch. 1,895,330; Jan. 24.

Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Air heater. 1,894,956; Jan. 24.

Kimball, Franklin E., Long Beach, Calif. Refining gasoline with beryllium salts. 1,895,223; Jan. 24.

Kimpton, William H. (See Hale, F. C., and Kimpton.)

Kinatome Patents Corporation. (See Proctor, Barton A., assignor.)

King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,895,224; Jan. 24.

Kirk, Stanley E. (See Salmon, R. D., and Kirk.)

Knowles, William H., Port Chester, assignor, by mesne assignments, to General Cap Co. Inc., New York, N. Y. Capping and sealing machine. 1,895,225; Jan. 24.

Koch, William, and M. Rogers, McKittrick, Mo. Rail brace. 1,895,198; Jan. 24.

Koeberle, Karl. (See Kuns, M. A., and Koeberle.)

Kohn, Joseph, St. Louis, Mo. Dress. Des. 89,081; Jan. 24.

Kolligs, Hans. (See Espe, W., and Kolligs.)

Kontos, Emmanuel G., Chicago, Ill. Propeller. 1,895,252; Jan. 24.

Kränzlein, Georg, M. Corell, H. Vollman, and E. Hausdörfer, Frankfort-on-the-Main-Hochst, assignors to General Aniline Works, Inc., New York, N. Y. Orthohalogenanthraquinonecarboxylic acid and preparing it. 1,895,100; Jan. 24.

Kreidler, Earl M. (See Chrisman, H., and Kreidler.)

Kuns, Max A. Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works Inc., New York, N. Y. Vat dyestuff of the anthraquinone series. 1,895,101; Jan. 24.

Kupski, Joseph, assignor to Chicago Hardware Foundry Company, North Chicago, Ill. Stool seat positioning means. 1,895,226; Jan. 24.

Kutzner, Fred. (See Kutzner, Willy and F.)

Kutzner, Willy and F., Postsdam near Berlin, Germany. Production of dry glue. 1,895,194; Jan. 24.

La Couture, Henry C., Kearney Township, Hudson County, N. J., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 89,082; Jan. 24.

L'Air Liquide Société Anonyme pour l'Etude & l'Exploitation des Procedes Georges Claude. (See Picard, Charles, assignor.)

Lambert, Albert L., Narberth, Pa., assignor to Heintz Manufacturing Company. Fin radiator. 1,895,287; Jan. 24.

Langer, Rudolph J., assignor to Franklin Equipment Co., Monticello, Iowa. Fence post brace. 1,895,165; Jan. 24.

Langtree, Beatrice E. S., et al. (See Rice, Merrit H., assignor.)

Langtree, George R., et al. (See Rice, Merrit H., assignor.)

Lard, Allan E., Washington, D. C., assignor to The Metallic Shaft Company, Wilmington, Del. Golf club. 1,895,417; Jan. 24.

Larsh, Everett P., assignor to The Master Electric Company, Dayton, Ohio. Bearing mounting. 1,895,288; Jan. 24.

Larson, Louis C., San Jose, Calif. Ironing board. 1,895,264; Jan. 24.

Laymon, Hermon B., Spencer, Ind. Corn product and making same. 1,895,166; Jan. 24.

Leonard, Weldon C., Daisetta, assignor of one-half to Charles Lisman, Liberty County, Tex. Fluid pressure actuator. 1,895,131; Jan. 24.

Levan, John F., Elkhart, Ind., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y. Automatic adjustable weather-strip for window sashes. 1,895,289; Jan. 24.

Leve, Marcus S. (See Douglass, Henry J. and C. D., and Leve.)

Lewis, Arthur J., assignor to The Baird Machine Company, Stratford, Conn. Multiple spindle lathe. 1,895,078; Jan. 24.

Lewis, Arthur J., Stratford, assignor to The Baird Machine Company, Bridgeport, Conn. Work spindle drive for chucking machines. 1,895,079; Jan. 24.

Lewis, George S., Evanston, assignor to Metal Specialties Manufacturing Company, Chicago, Ill. Bicycle sprocket wheel ornament. Des. 89,083; Jan. 24.

Libbey-Owens-Ford Glass Company. (See Allison, William H., assignor.)

Libbey-Owens-Ford Glass Company. (See Blair, James C., assignor.)

Lighthall, Cone W., assignor to Hoover Steel Ball Company, Ann Arbor, Mich. Bearing. 1,895,167; Jan. 24.

Limburg, Hyman, Amsterdam, Netherlands, assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Producing sulphonic acids. 1,895,195; Jan. 24.

Lindquist, David E. (See Young, L. M., Eusey, and Lindquist.)

Lindsay, Myrtle, Dallas, Tex. Permanent wave clasp. 1,895,418; Jan. 24.

Lindstrom, Nils O., Nutley, N. J., assignor to A. B. See Elevator Company, Inc. Elevator control device. 1,895,253; Jan. 24.

Linn, Henry J., Zanesville, Ohio. Razor blade sharpener. 1,895,332; Jan. 24.

Linn, Holman H., assignor to The Linn Manufacturing Corporation, Morris, N. Y. Logging bolster. 1,895,387; Jan. 24.

Linn Manufacturing Corporation, The. (See Linn, Holman H., assignor.)

Lisman, Charles. (See Leonard, Weldon C., assignor.)

Llewellyn Iron Works. (See Baruch, M., De Camp, and Walker, assignors.)

Lobb, Richard J. (See Treese, Goddard, assignor.)

Lobel, Paul A., New York, N. Y. Bridge table or similar article. 1,895,290; Jan. 24.

Loewe, Siegmund, Berlin, Friedenau, Germany, assignor to Radio Corporation of America. Multiple-unit tube. 1,895,254; Jan. 24.

Loewe, Siegmund, Berlin, Friedenau, Germany, assignor to Radio Corporation of America. Multiple unit tube. 1,895,255; Jan. 24.

Lofquist, Nils, Dalton, Mass. Revolving toy bell. Des. 89,084; Jan. 24.

Long, Wilber L., Kirksville, Mo. Incubator. 1,895,042; Jan. 24.

Lorimor, John, Imogene, Iowa. Automobile gear pin. 1,895,384; Jan. 24.

Love, Frank F., San Antonio, Tex. Drop cabin plane. 1,895,256; Jan. 24.

Lucke, Charles E., New York, N. Y., and P. R. Cassidy, Short Hills, assignors to The Babcock & Wilcox Company, Bayonne, N. J. Air heater. 1,894,957; Jan. 24.

Lummus Company, The. (See Snell, Lester W., assignor.)

Lyle, Frederick W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Grid controlled mercury arc circuit controller. 1,894,994; Jan. 24.

Macaluso, Eugenio, Turin, Italy. Propeller. 1,895,043; Jan. 24.

MacArthur, Charles J., Glen Ridge, N. J. Sheet-fed relief-intaglio rotary printing press. 1,895,080; Jan. 24.

MacIntosh, Daniel J. (See Byrne, J. R., and MacIntosh.)

Macready, George A., Los Angeles, Calif. Core drill and means for ascertaining dip. 1,894,995; Jan. 24.

Macready, George A., Los Angeles, Calif. Core drill with clock operated photographic means for ascertaining dip. 1,894,996; Jan. 24.

Macready, George A., Los Angeles, Calif. Mud guard for core drills. 1,894,997; Jan. 24.

Macready, George A., Los Angeles, Calif. Rotary core drill. 1,894,998; Jan. 24.

Macready, George A., Los Angeles, Calif. Core barrel nose. 1,894,999; Jan. 24.

Macready, George A., Los Angeles, Calif. Orientation core drill. 1,895,000; Jan. 24.

Macready, George A., Los Angeles, Calif. Core drill. 1,895,001; Jan. 24.

Madden, Jesse F., Brooklyn, N. Y. Traverse button. 1,895,196; Jan. 24.

Main, John S., Wellington, Kans., assignor to Oil Reclamation Company. Purification of oil. 1,894,958; Jan. 24.

Manson, George J., Hawkesbury, Ontario, Canada, assignor, by mesne assignments, to Mansons Chemical Company, Montclair, N. J. Waterproofing fibrous products. 1,894,959; Jan. 24.

Mansons Chemical Company. (See Manson, George J., assignor.)

Markus, Joseph W., Plainview, Minn. Dirt scraping conveying tractor. 1,895,002; Jan. 24.

Marsillius, Newman M., assignor to The Producto Machine Company, Bridgeport, Conn. Milling machine. 1,895,333; Jan. 24.

Marsillus, Newman M., assignor to The Producto Machine Company, Bridgeport, Conn. Cam miller. 1,895,334; Jan. 24.

Martinson, Martin, Princeton, Ill. Shield. 1,895,197; Jan. 24.

Master Electric Company, The. (See Larsh, Everett P., assignor.)

Matthes, Samuel S., assignor to The Ohio Brass Company, Mansfield, Ohio. Crossover device. 1,895,044; Jan. 24.

Maxen, Frank, Brimsdown, England. Tine for use in soil sterilizing apparatus. 1,895,335; Jan. 24.

Mayhew, George, Collingwood, assignor to David P. R. Enderaby, Murrumbeena, Victoria, Australia. Skinning pears and other relatively soft fruit. 1,895,102; Jan. 24.

McCready, James P., Berlin, N. H. Valve spring lifter. 1,895,198; Jan. 24.

McCullough, Ira J., Huntington Park, Calif. Jarring tool. 1,895,227; Jan. 24.

McDowell, L. A., Racine, Wis. Speed governor and driving mechanism. 1,895,199; Jan. 24.

McFaul, Joseph H., Queens Village, N. Y., assignor to Cary Products Company, Inc., Chicago, Ill. Metallic matting. Des. 89,085; Jan. 24.

McNeil Boiler Company, The. (See Worley, George I., assignor.)

McNeil, Hugh J., Reading, Mass. Store front. Des. 89,086; Jan. 24.

McQuay-Norris Manufacturing Company. (See Smith, D. M., and Tapscott, assignors.)

Meidert, Friedrich, Frankfort-on-the-Main, Griesheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Stabilised solutions of siccatives. 1,895,200; Jan. 24.

Mellema, Cornelis H. G. (See Zecher, G., and Mellema.)

Mennillo, Ciro R. (See Mennillo, Edna, assignor.)

Mennillo, Edna, assignor of one-half to Ciro R. Mennillo, Hollywood, Calif. Vehicular dwelling. 1,895,228; Jan. 24.

Merk, Friedrich, Frankfort-on-the-Main, Germany. Multiple brush selector with mechanical brush selection. 1,895,265; Jan. 24.

Merkel & Kienlin G. m. b. H. (See Schllerer, Eugen, assignor.)

Metal Specialties Manufacturing Company. (See Lewis, George S., assignor.)

Metal & Thermit Corporation. (See Ronay, Bela, assignor.)

Metallic Shaft Company, The. (See Lard, Allan E., assignor.)

Meyer, Adolf, Kusnacht, near Zurich, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Steam turbine. 1,895,003; Jan. 24.

Meyer, Paul H., assignor to Solar-Sturges Mfg. Co., Bellewood, Ill. Receptacle. 1,895,291; Jan. 24.

Meyercord Company, The. (See Mitchell, J. S., and Rathke, assignors.)

Meyer-Gaus, Karl, and A. Saure, Barmen, Germany, assignors to American Bemberg Corporation, New York, N. Y. Automatic stop-motion for bobbin winding machines. 1,895,244; Jan. 24.

Midwest Engineering Corporation. (See Freeman, Walter R., assignor.)

Miller, Walter, A. Heriksen, and P. Zurcher, assignors to Continental Oil Company, Ponca City, Okla. Converting hydrocarbon materials. 1,895,081; Jan. 24.

Miner, Irving O., Providence, R. I., assignor to Brown & Sharpe Manufacturing Company. Clipper. 1,895,292; Jan. 24.

Minett, Wilfrid T., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,895,257; Jan. 24.

Minor, Burt S., San Pedro, Calif. Snubbing device for oil well tubing. 1,895,132; Jan. 24.

Mitchell, John S., and H. C. Rathke, Chicago, Ill., assignors to the Meyercord Company. Making decorated drawn metal articles. 1,895,419; Jan. 24.

Mittag, Carl, Magdeburg, assignor to the Firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Apparatus for evaporating cement slurry. 1,895,201; Jan. 24.

Moloney Electric Company. (See Barrington, Frederick H., assignor.)

Montero, Bruno, Los Angeles, Calif. Engine. 1,895,082; Jan. 24.

Montgomery, Samuel B., Tate, Ga. Damper control. 1,895,202; Jan. 24.

Moore, James L., Middleboro, Ky. Marking surfaces. 1,895,045; Jan. 24.

Morgan Construction Company. (See Morgan, Myles, assignor.)

Morgan, Mathew B., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Automotive driving axle. 1,895,168; Jan. 24.

Morgan, Myles, assignor to Morgan Construction Company, Worcester, Mass. Conveyer mechanism. 1,895,046; Jan. 24.

Morrison, Boyce T., Beaumont, Tex. Gas escape warning device. 1,895,394; Jan. 24.

Morrison, James L. D., jr., Los Angeles, Calif. Changeable sign. 1,894,960; Jan. 24.

Morterud, Einar, Oslo, Norway. Wood pulp digester with internal circulation conduit. 1,895,266; Jan. 24.

Morton, James, J. I. M. Jones, B. Wylam, Lancaster, and J. E. G. Harris, Carlisle, England, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Vat dyestuff derivatives. 1,895,336; Jan. 24.

Morton, James, West Lothian, Scotland. Supplying fibrous material for incorporation into fabrics. 1,895,298; Jan. 24.

Morton, Marcus R., Spokane, Wash. Sweeping broom and handle connection therefor. 1,895,229; Jan. 24.

Mosel, Joseph H., Lakewood, assignor to The Jaeger Machine Company, Columbus, Ohio. Closure. 1,895,169; Jan. 24.

Moto Meter Gauge & Equipment Corporation. (See Townsend, G. H., and Hurley, assignors.)

Motor Terminals Company. (See Fitch, Benjamin F., assignor.)

Motorenfabrik Deutz, Aktiengesellschaft. (See Müller, Rudolf, assignor.)

Mottweiler, Oliver F., assignor to General Insulating and Manufacturing Company, Alexandria, Ind. Pipe covering. 1,895,420; Jan. 24.

Mueller Brass Co. (See Young, L. M., Eusey, and Lindquist, assignors.)

Müller, Rudolf, Oberursel, near Frankfort-on-the-Main, Germany, assignor to Motorenfabrik Deutz, Aktiengesellschaft, Kolin-Deutz, Germany. Cam operating means. 1,895,259; Jan. 24.

Munitex Corporation. (See Sticker, Ernst, assignor.)

Nabors, William C., Mansfield, La. Vehicle. 1,895,170; Jan. 24.

Nathan, Alfred B., New York, assignor to H. Hyman, Brooklyn, N. Y. Clock case. Des. 89,087; Jan. 24.

Nathan, Alfred B., New York, assignor to H. Hyman, Brooklyn, N. Y. Box or similar receptacle. Des. 89,113; Jan. 24.

National Electric Products Corporation. (See Staples, Horace A., assignor.)

National Electric Products Corporation. (See Staples, John A., assignor.)

National Enameling & Stamping Company. (See Smith, Alva T., assignor.)

National Rubber Machinery Company. (See Shook, F. J., and Iverson, assignors.)

National Sugar Refining Company of New Jersey, The. (See Schlegel, J. W., and Claus, assignors.)

National Wrought Iron Annealing Box Company. (See Brown, Frank J., assignor.)

Nawiasky, Paul, and L. Eimaender, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of anthraquinone azines. 1,895,208; Jan. 24.

Needham, Joseph, Passaic, N. J. Rotary oven. 1,895,230; Jan. 24.

Nelson, August L., and F. W. Pease, assignors to Hayes Body Corporation, Grand Rapids, Mich. Automobile body sill. 1,895,171; Jan. 24.

Nester, Elijah T., Hillsville, Va. Gear shift lever horn button system. 1,895,337; Jan. 24.

Neumann, Georg, Berlin, Germany. Foldable traveler's table and the like. 1,895,338; Jan. 24.

Neumann, Rudolf, Berlin-Charlottenburg, Germany. Gas pressure regulator. 1,895,047; Jan. 24.

Newton Steel Company, The. (See Fenton, Ray M., assignor.)

Norquist, Victor C., assignor to Butler Manufacturing Company, Kansas City, Mo. Hot air generator. Des. 89,088; Jan. 24.

Norquist, Victor C., and E. E. Treanor, assignors to Butler Manufacturing Company, Kansas City, Mo. Filter. 1,895,088; Jan. 24.

Northrup, Edwin F., Princeton, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Electric induction furnace. 1,895,421. Jan. 24.

Norton, F. W. (See Jensen, William E., assignor.)

Nystrom, Martin, Chicago, Ill., assignor to United Research Corporation. Control device for phonographs. 1,895,004; Jan. 24.

Oakes Products Corporation. (See Ellenberger, C. M., and Smith, assignors.)

Oakley, Walter W., Corning, N. Y. Soot disposal. 1,894,961; Jan. 24.

O'Brien, James A., Rosemont, assignor to The DeLong Hook and Eye Company, Philadelphia, Pa. Hairpin package. 1,895,005; Jan. 24.

Oetker, Rudolf. (See Vopel, J., and Oetker.)

Ohio Brass Company, The. (See Chandler, Homer P., assignor.)

Ohio Brass Company, The. (See Matthes, Samuel S., assignor.)

Oil Reclamation Company. (See Main, John S., assignor.)

O'Laughlin, James J. (See Thomsen, J. E., and O'Laughlin.)

Olsen, John J., Cleveland, Ohio. Rope holder. 1,895,395; Jan. 24.

Orcutt, Leon F., Brooklyn, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,089; Jan. 24.

O'Shea, James J., Dallas, Tex. Shirt folding apparatus. 1,895,204; Jan. 24.

Ostroot, Gabriel E., Minneapolis, and S. Westerheim, St. Paul, Minn. Window construction. 1,895,339; Jan. 24.

Overmeyer, John, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,090; Jan. 24.

Owen, Raymond V., assignor to The Edwin F. Guth Company, St. Louis, Mo. Lighting fixture. Des. 89,091; Jan. 24.

Owens-Illinois Glass Company. (See Soubier, Leonard D., assignor.)

Oxford Varnish Corporation. (See von Webern, G., and Hamant, assignors.)

Pacific Can Company. (See Douglass, Henry J., C. D., and Leve, assignors.)

Parker, Richard B., Skaneateles, N. Y., assignor to Samuel E. Darby, trustee, Palisade, N. J. Condenser. 1,895,294; Jan. 24.

Parsonage, Edward E., Oakland City, Ind. Screen. 1,895,341; Jan. 24.

Pass & Seymour, Inc. (See Russell, Mark N., assignor.)

Patrick, John M. (See Alderson, Frederick J., assignor.)

Panyard, John F., assignor to M. B. Panyard, Detroit, Mich. Tire boot. 1,895,340; Jan. 24.

Panyard, Minnie B. (See Panyard, John F., assignor.)

Pearson, Oscar A., Oak Park, and C. H. Thordarson, assignors to Thordarson Electric Manufacturing Company, Chicago, Ill. Constant current transformer. 1,895,231; Jan. 24.

Pease, Frank W. (See Nelson, A. L., and Pease.)

Peets, Wilbur J., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Electric sewing machine. Des. 89,114; Jan. 24.

Peltier, Frank D., Evansville, Ind., assignor to Servel Inc., New York, N. Y. Float valve. 1,895,084; Jan. 24.

Peltier, Frank D., Evansville, Ind., assignor to Servel Inc., New York, N. Y. Water cooler. 1,895,085; Jan. 24.

Pelton, William E., and E. H. Holcombe, Canton, Pa. Ax. 1,895,342; Jan. 24.

Pent, Robert R., Jenkintown, Pa. Container for cigars. 1,895,258; Jan. 24.

Peoples Savings Bank & Trust Co., et al., executor. (See White, Charles E.)

Pfannkuch, Wilhelm, Copenick-Wendenschloss, Germany, assignor to General Electric Company. Joint for high tension electric cables. 1,895,396; Jan. 24.

Pfeiffer, Fred B. (See Alexander, H. S., Pfeiffer, and White.)

Phinney, Robert M., assignor to General Railway Signal Company, Rochester, N. Y. Centralised traffic control system for railroads. 1,895,422; Jan. 24.

Picard, Charles, Joinville Le Pont, assignor to l'Air Liquide Société Anonyme pour l'Etude & l'Exploitation des Procedes Georges Claude, Paris, France. Apparatus for the distribution of gases under pressure by means of liquefied gases. 1,895,295; Jan. 24.

Picard, Hugh F. K. (See Durant, H. T., Sulman, and Picard.)

Pickett, Britton E., Carrizo Springs, Tex. Protector for surgical operations. 1,895,343; Jan. 24.

Plénos, Jean, Lyon, France, assignor to L. J. Hyams and Company, New York, N. Y. Printed textile fabric or similar article. Des. 89,092; Jan. 24.

Pink, Clarence E., Cambridge, Md. Woven wire conveyer belt. 1,895,344; Jan. 24.

Pink, Clarence E., Cambridge, Md. Connecters for woven wire conveyer belts. 1,895,345; Jan. 24.

Piron, Fernand, Woonsocket, R. I. Yarn guide for a spinning machine. 1,894,962; Jan. 24.

Pittsburgh Equitable Meter Company. (See Chrisman, H., and Kreidler, assignors.)

Pittsburgh Equitable Meter Company. (See Weymouth, Harry G., assignor.)

Pittsburgh Research Corporation. (See Simpson, George L., assignor.)

Poppe, George W., assignor to Equitable Paper Bag Co. Inc., Brooklyn, N. Y. Paper bag construction. 1,895,267; Jan. 24.

Popper, Max, New York, N. Y. Ventilating strip for hats and the like. 1,895,392; Jan. 24.

Porter, Frank, Syracuse, N. Y., assignor to Continental Oil Company, Ponca City, Okla. Apparatus for the manufacture of benzol and valuable by-products from a gas containing either butane, propane, or ethane or portions of each. 1,895,086; Jan. 24.

Ports, Earl G., Woodside, assignor to International Communications Laboratories, Inc., New York, N. Y. Heterodyne oscillator. 1,895,103; Jan. 24.

Pouchain, Adolfo, Turin, Italy. Negative electrode for electric accumulators. 1,895,397; Jan. 24.

Prentice, George E., Berlin, Conn. Stringer for fasteners. 1,895,172; Jan. 24.

Prior, Frank O., Tulsa, Okla., assignor to Four Wheel Drive Auto Company, Clintonville, Wis. Fishtail point for augers. 1,895,205; Jan. 24.

Proctor, Barton A., assignor, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y. Photographic apparatus. 1,894,963; Jan. 24.

Production Foundry Co., The. (See Davis, Albert G., assignor.)

Producto Machine Company, The. (See Marsilius, Newman M., assignor.)

Punte, William F., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Metal container. 1,895,391; Jan. 24.

Quarnstrom, Bert L., assignor to Bundy Tubing Company, Detroit, Mich. Tubing. 1,895,133; Jan. 24.

Quiroz, Francisco A., Brooklyn, N. Y. Apparatus for separation. 1,895,104; Jan. 24.

Radio Corporation of America. (See Loewe, Siegmund, assignor.)

Radio Corporation of America. (See Smith, Theodore A., assignor.)

Radio Inventions, Inc. (See Donle, Harold P., assignor.)

Radio Patents Corporation. (See Richter, Rudolf, assignor.)

Ramsey, John C., assignor to Ramsey Package Corp., Suffolk, Va. Fruit basket. 1,895,423; Jan. 24.

Ramsey Package Corp. (See Ramsey, John C., assignor.)

Randall, Meredith S. (See Woodall, H. J., and Randall.)

Rapp, Axel G. J., assignor to H. S. Simpson, Chicago, Ill. Sand milling machine. 1,895,006; Jan. 24.

Räth, Curt, Leverkusen-on-the-Rhine, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Pyracridone and making same. 1,895,105; Jan. 24.

Ratbke, Harry C. (See Mitchell, J. S., and Ratbke.)

Ray, Oscar, Dallas, Tex. Game board or analogous article. Des. 89,093; Jan. 24.

Recktenwald, geb. (See Theusner, M., geb. Recktenwald.)

Reeves, Beauford H., assignor to Rockbestos Products Corporation, New Haven, Conn. Insulated conductor and making the same. 1,895,400; Jan. 24.

Republic Steel Corporation. (See Kelvie, James D., assignor.)

Rewald, Bruno, Hamburg, Germany. Light colored mixture of vegetable phosphatides and fatty oil. 1,895,424; Jan. 24.

Rhodes, Marcus H., assignor to M. H. Rhodes, Inc., New Haven, Conn. Switch. 1,895,398; Jan. 24.

Rhodes, Marcus H., assignor to M. H. Rhodes, Inc., New Haven, Conn. Signal. 1,895,399; Jan. 24.

Rhodes, M. H., Inc. (See Rhodes, Marcus H., assignor.)

Ricardo, Harry R., London, England. Swash plate internal combustion engine operating on the two-stroke cycle. 1,895,206; Jan. 24.

Rice, Arthur E., assignor to Rice, Trew & Rice Co. Inc., Bigierville, Pa. Packing fruit and the like. 1,895,430; Jan. 24.

Rice, Arthur E., assignor to Rice, Trew & Rice Co. Inc., Bigierville, Pa. Packing liner. 1,895,431; Jan. 24.

Rice, Cyrus W., Pittsburgh, Pa. Control apparatus for blowdown water. 1,895,346; Jan. 24.

Rice, Merrit H., assignor of one-half to G. R. and B. E. S. Langtree, Pasadena, Calif. Elevator and lateral shift appliance for motor vehicles. 1,895,134; Jan. 24.

Rice, Trew & Rice Co. Inc. (See Rice, Arthur E., assignor.)

Richter, Rudolf, Durlach, Germany, assignor to Radio Patents Corporation, New York, N. Y. Alternating current motor. 1,895,007; Jan. 24.

Rinkel, Otto, assignor to Berlin-Karlsruher Industrie-Werke Aktiengesellschaft, Baden, Germany. Forming projectiles. 1,895,207; Jan. 24.

Robinson, Wallace N., Minneapolis, Minn. Grating structure for windows. 1,895,008; Jan. 24.

Rockbestos Products Corporation. (See Reeves, Beauford H., assignor.)

Rogers, Mack. (See Koch, W., and Rogers.)

Röhm & Haas Company. (See Helwig, Edward L., assignor.)

Rohn, Wilhelm, Hanau-on-the-Main, Germany. Water-cooled mold. 1,895,135; Jan. 24.

Ronay, Bela, Annapolis, Md., assignor to Metal & Thermit Corporation, Carteret, N. J. Pattern for rail welding molds. 1,895,232; Jan. 24.

Rose, Alfred G., assignor to Rose Brothers, Gainsborough) Limited, Gainsborough, England. Apparatus for cutting strips or bars of material into separate portions. 1,895,048; Jan. 24.

Rose Brothers (Gainsborough) Limited. (See Rose, Alfred G., assignor.)

Rose, Bruce E., Porterville, Calif. Offset harrow. 1,895,136; Jan. 24.

Rosenberg, Emanuel, Weis, Austria. Regulating pole for electric machines. 1,895,049; Jan. 24.

Rossen, Maurice A., Akron, Ohio. Package. 1,895,233; Jan. 24.

Rother, Louis J., Westwood, N. J., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,094; Jan. 24.

Rotorite Corporation. (See Dennedy, James H., assignor.)

Russ, Harley W., Haverhill, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Doweling machine. 1,895,106; Jan. 24.

Russell, Mark N., Syracuse, assignor to Pass & Seymour, Inc., Solvay, N. Y. Electric fixture. 1,895,050; Jan. 24.

Salavsky, Keva, Brooklyn, N. Y. Garment carrying container for use with closed vehicles. 1,895,208; Jan. 24.

Salmon, Reginald D. (See Creed, F. G., and Salmon.)

Salmon, Reginald D., assignor to Creed and Company Limited, Croydon, England. Telegraphic signal reproducing apparatus. 1,895,107; Jan. 24.

Salmon, Reginald D., and S. E. Kirk, assignors to Creed and Company, Limited, Croydon, England. Telegraph keyboard controlled apparatus. 1,895,108; Jan. 24.

Salomon, François M. M. B., and H. P. Govare, Paris, France. Device for producing a movement following a logarithmic law. 1,895,347; Jan. 24.

Sande, Anders J., Brooklyn, N. Y. Apparatus for splicing cables and ropes. 1,895,234; Jan. 24.

Sandford, Philip P., Teddington, England, assignor, by mesne assignments, to Jonathan C. Stimson, St. Louis, Mo. Reflecting device. 1,895,173; Jan. 24.

Saure, Albert. (See Meyer-Gaus, K., and Saure.)

Saville Perfumery Limited. (See Worssam, George S., assignor.)

Schaffert, Frederick, Carlstadt, N. J. Pulley stile for window frames. 1,895,209; Jan. 24.

Schermerhorn, George D., Reading, Mich. Chair element. 1,895,210; Jan. 24.

Scherr, Samuel, assignor of one-half to H. Tiralla, Baltimore, Md. Cake. Des. 89,095; Jan. 24.

Schlegel, John W., New York, N. Y., and E. A. Claus, Arlington, assignors to The National Sugar Refining Company of New Jersey, Edgewater, N. J. Air seal for rotary drums. 1,895,348; Jan. 24.

Schlierer, Eugen, assignor to the Firm: Merkel & Kienlin G. m. b. H., Esslingen-on-the-Neckar, Germany. Impregnating wool. Re18,718; Jan. 24.

Schneider, Valentine A., St. Louis, Mo. Meat block cleaner and evener. 1,895,051; Jan. 24.

Schoenfeld & Wolf, Inc. (See Wolf, Charles, assignor.)

Schofield, Charles, assignor to Dobson & Barlow Limited, Bolton, England. Apparatus for supplying fibrous material such as cotton during preparation for spinning. 1,895,052; Jan. 24.

Schrader, Thomas O., Allentown, assignor to The Dent Hardware Company, Fullerton, Pa. Latch and keeper combination. Des. 89,096; Jan. 24.

Scottish Dyes Limited. (See Barnes, R. S., Service, and Thomas.)

Scottish Dyes, Limited. (See Harris, John E. G., assignor.)

Scottish Dyes, Limited. (See Morton, J., Jones, Wylam, and Harris, assignors.)

Seiberling Rubber Company. (See Alexander, H. S., Pfeiffer, and White, assignors.)

Seiz, Walter, Baden, Switzerland, assignor to General Electric Company. Regulation of asynchronous machines. 1,895,349; Jan. 24.

Semet-Solvay Engineering Corporation. (See Steere, George R., assignor.)

Servel Inc. (See Peltier, Frank D., assignor.)

Service, Duncan. (See Barnes, R. S., Service, and Thomas.)

Sguerso, John, Brooklyn, N. Y. Permanent waving. 1,894,964; Jan. 24.

Shonts, Leroy C., Chicago, Ill. File folder. 1,895,174; Jan. 24.

Shook, Florain J., and C. Iverson, assignors to National Rubber Machinery Company, Akron, Ohio. Vulcanizer. 1,895,296; Jan. 24.

Short, Frank, Poughkeepsie, N. Y. Motion picture camera. 1,895,211; Jan. 24.

Shuffleboard Equipment Co. (See Isbell, Charles B., assignor.)

Sielaff, Herbert F., Chicago, Ill. Liquid receptacle and sprinkler. 1,895,009; Jan. 24.

Sielaff, Herbert F., Chicago, Ill. Molded garbage receptacle. 1,895,010; Jan. 24.

Siemens & Halske Aktiengesellschaft. (See Espe, Werner, assignor.)

Siemens & Halske Aktiengesellschaft. (See Espe, W., and Kolligs, assignors.)

Silver, James W., Ogden, Utah. Leaf catcher for beet dumps, etc. 1,895,268; Jan. 24.

Simon, Georges, Brussels, assignor to Société anonyme d'Ougree Marihaye, Ougree, Belgium. Heat recuperating apparatus of the cowper type and a brick for the honeycomb structure. 1,895,235; Jan. 24.

Simonsen, Irving P., and A. C. Huston, Los Angeles, Calif., said Simonsen assignor to said Huston. Magnetic die. 1,895,401; Jan. 24.

Simpson, George L., Coraopolis, assignor to Pittsburgh Research Corporation, Pittsburgh, Pa. Electric furnace. 1,895,269; Jan. 24.

Simpson, Herbert S. (See Papp, Axel G. J., assignor.)

Singer Manufacturing Company, The. (See Card, Frederic M., assignor.)

Singer Manufacturing Company, The. (See Peets, Wilbur J., assignor.)

Siragusa, Josephine, New York, N. Y. Infant's shoe. 1,895,270; Jan. 24.

Smith, Alva T., assignor to National Enameling & Stamping Company, Milwaukee, Wis. Heat insulated cooking vessel. 1,895,212; Jan. 24.

Smith, Christen Oslo, Norway. Boat launching gear. 1,895,011; Jan. 24.

Smith, Dallas M., St. Louis County, and C. C. Tapscott, assignors to McQuay-Norris Manufacturing Company, St. Louis, Mo. Package and forming same. 1,895,236; Jan. 24.

Smith, Frederick A. (See Ellenberger, C. M., and Smith.)

Smith, Sam. (See Finley, A. R., and Smith.)

Smith, Theodore A., Ridgewood, N. J., assignor to Radio Corporation of America. Scanning element for use in television systems. 1,895,087; Jan. 24.

Smith, William G. (See Wheeler, B. P., and Smith.)

Snay, Carl, Berlin-Schmargendorf, Germany. Time switch. 1,895,350; Jan. 24.

Snell, Lester W., Alton, Ill., assignor, by mesne assignments, to The Lummus Company, Boston, Mass. Recovering products from fractionating condensers. Re18,722; Jan. 24.

Snodgrass, Tyler F., Denver, Colo. Self-serve food case. 1,895,089; Jan. 24.

Sobey, Melville M., Hudson, N. Y. Propeller and shaft coupling. 1,895,402; Jan. 24.

Societe Anonyme des Usines Chausson. (See Coquille, Emilie H., assignor.)

Société Anonyme d'Ougree Marihaye. (See Simon, Georges, assignor.)

Solar-Sturges Mfg. Co. (See Meyer, Paul H., assignor.)

Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass blowing machine. 1,895,137; Jan. 24.

Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glassware forming machine. 1,895,138; Jan. 24.

Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass blowing machine. 1,895,139; Jan. 24.

Spangler, Samuel F., Philadelphia, Pa., assignor to Chemical Construction Corporation, Charlotte, N. C. Nitric acid concentration. 1,895,012; Jan. 24.

Stage, Darrell L., Palo Alto, Calif. Airplane. 1,895,140; Jan. 24.

Staley, John J., Brereton, near Rugeley, England. Prop for mines and means for withdrawing the same. 1,895,053; Jan. 24.

Staley, Joseph H., Columbus, Ind. Gas filling and sealing of tubes. 1,895,177; Jan. 24.

Staples, Horace A., Plainfield, N. J., assignor to National Electric Products Corporation, New York, N. Y. Protective coating and producing the same. 1,895,175; Jan. 24.

Staples, John A., Plainfield, N. J., assignor to National Electric Products Corporation, New York, N. Y. Protective coating and producing the same. 1,895,176; Jan. 24.

Staud, Cyril J., and J. T. Fuess, assignors to Eastman Kodak Company, Rochester, N. Y. The hydrolysis of cellulose esters using neutral salts as inhibitors. 1,895,351; Jan. 24.

Staw, Morris, New Brunswick, N. J. Garment. 1,895,237; Jan. 24.

Steere, George R., Owosso, Mich., assignor to Semet-Solvay Engineering Corporation, New York, N. Y. Weighing mechanism adapted for use in charging machines. 1,895,297; Jan. 24.

Steinmeyer, William, Elgin, Ill. Woodworking machine. 1,895,054; Jan. 24.

Steinour, John E., and P. Brubaker, Los Angeles, Calif. Push hoe. 1,895,055; Jan. 24.

Sterling Company, The. (See Caston, Johnnye L., assignor.)

Steuer, Otto A., and J. A. Carr, Los Angeles, Calif. Drum for reenforcing cage machines. 1,895,427; Jan. 24.

Stewart-Warner Corporation. (See Jelen, Matt J., assignor.)

Stimson, Jonathan C. (See Sandford, Philip P., assignor.)

Stindl, Edward, Beloit, Wis. Stepladder extension. 1,895,213; Jan. 24.

Stocker, Ernst, Basel, Switzerland, assignor to Munitex Corporation, Paterson, N. J. Treating cellulosic fibers. 1,895,298; Jan. 24.

Stoker, Paul P., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. 1,895,013; Jan. 24.

Stokes, John S., Huntingdon Valley, assignor to Stokes and Smith Company, Philadelphia, Pa. Box. 1,895,090; Jan. 24.

Stokes and Smith Company. (See Stokes, John S., assignor.)

Stone, Thomas W., Fort Wayne, Ind., assignor to The Western Gas Construction Company. Tar batter. 1,895,218; Jan. 24.

Stork, Richard, Greenwich, Conn. Transplanter. 1,895,214; Jan. 24.

Strand, Loyd M., assignor to A. J. Cline, Chicago, Ill. Method and apparatus for making pasters between the webs of successive rolls of paper supplying a printing press. 1,895,425; Jan. 24.

Streitwolf, Karl. (See Febrle, A., Streitwolf, and Hermann.)

Strong, Eunice, Stockton, Calif. Air deflector. 1,895,352; Jan. 24.

Sturm, Erwin, Stuttgart-Botnang, Germany. Rotary engine. 1,895,353; Jan. 24.

Suddards, Thomas D., New Barnet, England. Car ventilator. 1,895,109; Jan. 24.

Sullivan, Horace W. (See Sullivan, Roy M., assignor.)

Sullivan, Roy M., assignor of one-half to H. W. Sullivan, Atlanta, Ga. Stringed musical instrument. 1,895,283; Jan. 24.

Sulman, Henry L. (See Durant, H. T., Sulman, and Picard.)

Sundberg, Emanuel W., Brooklyn, assignor to International Communications Laboratories, Inc., New York, N. Y. Step-by-step transmitter. 1,895,110; Jan. 24.

Suydam, Clinton H., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Signaling system. 1,895,111; Jan. 24.

Swanson, Ernest R., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Supply-holder. 1,895,215; Jan. 24.

Swanson, Oscar A., Erie, Pa. Wringer. 1,895,403; Jan. 24.

Taneki, Frank, Maspeth, N. Y. Knitting machine. 1,894,965; Jan. 24.

Tapscott, Charles C. (See Smith, D. M., and Tapscott.)

Taylor, Bert S., Stow, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Colored rubber product and coloring rubber. 1,895,088; Jan. 24.

Taylor, George F., Schenectady, N. Y., assignor to General Electric Company. Resintered hard metal composition. 1,895,354; Jan. 24.

Taylor, Joseph, assignor to Grigsby-Grunow Company, Chicago, Ill. Radiocabinet. Des. 89,097; Jan. 24.

Thalmann, Frank A., Milwaukee, Wis. Toy hoop. 1,895,216; Jan. 24.

Theusner, Margarete, Geb. Rectenwald, Berlin-Steglitz, Germany. Heel protecting cap. 1,895,389; Jan. 24.

Thomas, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Refrigerator cabinet. Des. 89,098; Jan. 24.

Thomas, John. (See Barnes, R. S., Service, and Thomas.)

Thompson, Gustav F., et al. (See Dripps, Robert G., assignor.)

Thomsen, Jorgen E., and J. J. O'Laughlin, assignors to Joseph Dixon Crucible Company, Jersey City, N. J. Lubricating composition and making the same. 1,895,014; Jan. 24.

Thordarson, Chester H. (See Pearson, O. A., and Thordarson.)

Thordarson Electric Manufacturing Company. (See Pearson, O. A., and Thordarson, assignors.)

Thresher, Charles A., Schofield, Wis. Flue coupling. 1,895,179; Jan. 24.

Timken-Detroit Axle Company, The. (See Morgan, Mathew B., assignor.)

Timken Roller Bearing Company, The. (See Wood, Frederick, assignor.)

Tiralla, H. Merryman. (See Scherr, Samuel, assignor.)

Titlestad, Nicolay. (See Hechenbleikner, I., and Titlestad.)

Tönnies, Hans F., Altona-Grossflottbek, Germany. Photographic exposuremeter. 1,895,271; Jan. 24.

Tough, John S., Kansas City, Mo. Grain feeding device. 1,895,180; Jan. 24.

Townsend, George H., Greenwich, Conn., and R. T. Hurley, Dobbs Ferry, assignors, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y. Motor heat indicator. 1,895,385; Jan. 24.

Townsend, Ralph H., Mount Vernon, assignor, by mesne assignments, to United Research Corporation, Long Island City, N. Y. Arrangement for producing phonograph records. 1,895,178; Jan. 24.

Traver, Oliver C., Drexel Hill, Pa., assignor to General Electric Company. Protective apparatus. 1,895,355; Jan. 24.

Treanor, Earl E. (See Norquist, V. C., and Treanor.)

Treese, Goddard, assignor of one-half to Richard J. Lobb, Globe, Ariz. Gear-shift lever switch. 1,895,260; Jan. 24.

Trent Process Corporation, The. (See Trent, Walter E., assignor.)

Trent, Walter E., New York, N. Y., assignor to The Trent Process Corporation. Preparing oil and coal amalgam. 1,895,056; Jan. 24.

Tretbar, Walter E., Govans, Md. Transmission lock for automobiles. 1,895,404; Jan. 24.

Trout, Walter C., Lufkin, Tex. Pumping unit. 1,895,181; Jan. 24.

Tytus, John B., assignor to The American Rolling Mill Company, Middletown, Ohio. Rolling sheet metal. 1,895,299; Jan. 24.

Tytus, John B., assignor to The American Rolling Mill Company, Middletown, Ohio. Furnace charger. 1,895,800; Jan. 24.
Unger, Paul O., Glen Ellyn, assignor to Wilson-Jones Company, Chicago, Ill. Paper fastener. 1,895,182; Jan. 24.
Union Switch & Signal Company, The. (See Bone, Herbert L., assignor.)
Union Switch & Signal Company, The. (See Stoker, Paul P., assignor.)
United Research Corporation. (See Nystrom, Martin, assignor.)
United Research Corporation. (See Townsend, Ralph H., assignor.)
United Shoe Machinery Corporation. (See Minett, Wilfrid T., assignor.)
United Shoe Machinery Corporation. (See Russ, Harley W., assignor.)
Universal Winding Company. (See Swanson, Ernest R., assignor.)
Vail, Walter E., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Preparation of formic acid. 1,895,238; Jan. 24.
Vandermark, Chris W., St. Paul, Minn. Fishhook and link. 1,895,301; Jan. 24.
Van Vorst, John, Schenectady, N. Y. Reel carrier. 1,895,217; Jan. 24.
Vasta, José, Buenos Aires, Argentina. Novel device to wave the hair and steam chamber to maintain the permanent wave or curl. 1,895,272; Jan. 24.
Venzie, Walter H., Philadelphia, Pa. Camera-silhouette machine. 1,895,239; Jan. 24.
Vernam, Gilbert S., Hackensack, N. J., and F. G. Hallden, Bellerose, assignors to International Communications Laboratories, Inc., New York, N. Y. Telegraph repeater. 1,895,015; Jan. 24.
Vernam, Gilbert S., River Edge, N. J., assignor to International Communications Laboratories, Inc., New York, N. Y. Printing telegraph exchange system. 1,895,112; Jan. 24.
Vernam, Gilbert S., River Edge, N. J., assignor to International Communication Laboratories, Inc., New York, N. Y. Automatic telegraph switching system. 1,895,113; Jan. 24.
Vezzani, Louis J. (See Dudick, Victor, assignor.)
Vollmann. Heinrich. (See Kränzlein, G., Corell, Vollmann, and Hausdörfer.)
Von Frommer, Rudolf, Budapest, Hungary. Tool holder. 1,895,057; Jan. 24.
Von Webern, Guido, and E. W. Hamant, Dayton, Ohio, assignors to Oxford Varnish Corporation, Detroit, Mich. Graining machine. 1,894,966; Jan. 24.
Vopel, Johannes, Berlin-Zehlendorf-Mitte, and R. Oetker, Berlin, assignors to Gesellschaft für Elektrische apparate m. b. H., Marienfelder near Berlin, Germany. Electrical distant control system. 1,895,240; Jan. 24.
Wahl Clipper Corporation. (See Wahl, Leo J., assignor.)
Wahl, Leo J., assignor to Wahl Clipper Corporation, Sterling, Ill. Clipper blade control. 1,895,183; Jan. 24.
Walker, Cranford P. (See Baruch, M., De Camp, and Walker.)
Walker Manufacturing Company. (See Genich, Josepf, assignor.)
Warren, Henry E., assignor to Warren Telechron Company, Ashland, Mass. Alternating current motor. 1,895,356; Jan. 24.
Warren Telechron Company. (See Warren, Henry E., assignor.)
Warrington, Albert R. van C., Drexel Hill, Pa., assignor to General Electric Company. Protective apparatus. 1,895,357; Jan. 24.
Watanabe, Chikazo, Los Angeles, Calif. Shoe guard. 1,895,141; Jan. 24.
Watts, Cecil F., Miami, Fla. Telegravure apparatus. 1,894,967; Jan. 24.
Weaver, Allan, Port Washington, N. Y., assignor to American Telephone and Telegraph Company. Combined telegraphy and telephony. 1,895,058; Jan. 24.
Wedberg, Axel G. W., Chicago, Ill. Door frame construction. 1,895,358; Jan. 24.
Westerheim, Sam. (See Ostroot, G. E., and Westerheim.)
Western Gas Construction Company. (See Stone, Thomas W., assignor.)
Westfall, Theodore D. (See Johnson, L. P., and Westfall, and Fischer.)
Westinghouse Electric and Manufacturing Company. (See Austin, B. D., Willby, and Brooks, assignors.)
Westinghouse Electric & Manufacturing Company. (See Chubb, Lewis W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Lyle, Frederick W., assignor.)
Weston, Edward F., assignor to Western Electrical Instrument Corporation, Newark, N. J. Electrical measuring instrument. 1,895,114; Jan. 24.
Weston Electrical Instrument Corporation. (See Weston, Edward F., assignor.)
Weymouth, Harry G., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Meter reverse control mechanism. 1,895,059; Jan. 24.
Wheeler, Bradley P., Buffalo, and W. G. Smith, Wanakah, N. Y. Fire brick for checker work regenerators. 1,895,302; Jan. 24.
Wheeler, Harold A., Jackson Heights, N. Y., assignor to Hazeltine Corporation. Electric coupling circuits. 1,895,091; Jan. 24.
White, Charles E., deceased, by C. H. White and Peoples Savings Bank & Trust Co. of Moline, joint executors, Moline, Ill.; said White assignor to Deere & Company. Agricultural implements. 1,895,432; Jan. 24.
White, Charles H., et al., executors. (See White, Charles E.)
White, Edwin H., Worcester, Mass. Playing card. Des. 89,099; Jan. 24.
White, James R., Flushing, assignor to Jenkins Bros., New York, N. Y. Box. Des. 89,100; Jan. 24.
White, John W. (See Alexander, H. S., Pfeiffer, and White.)
Whitford, William H., Tulsa, Okla. Pencil sharpener. 1,895,359; Jan. 24.
Whiting, Maurice T., Duxbury, Mass. Shingle sawing machine. 1,895,016; Jan. 24.
Whitten, Horace E., Somerville, Mass. Drum. 1,894,968; Jan. 24.
Wildhaber, Ernest, Brooklyn, N. Y. Gearing. 1,895,360; Jan. 24.
Willby, Norman H. (See Austin, B. O., Willby, and Brooks.)
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,101; Jan. 24.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,102; Jan. 24.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,103; Jan. 24.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,104; Jan. 24.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,105; Jan. 24.
Willheim, William, New York, N. Y. Textile fabric or similar article. 89,106; Jan. 24.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,107; Jan. 24.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,108; Jan. 24.
Willheim, William, Co. (See Grulich, Anton, assignor.)
Willheim, William, Co. (See Guhl, Maclyn, assignor.)
Willheim, William, Co. (See Orcutt, Leon F., assignor.)
Willheim, William, Co. (See Overmeyer, John, assignor.)
Willheim, William, Co. (See Rother, Louis J., assignor.)
Williams, Edward T., New Rochelle, N. Y. System and method of lubricating compressors. 1,895,092; Jan. 24.
Williams, Lewis S., Berrien Springs, Mich. Folding chair. 1,895,115; Jan. 24.
Wilsey, Irven H., Chicago, Ill. Exercising and massaging device. 1,895,116; Jan. 24.
Wilson-Jones Company. (See Unger, Paul O., assignor.)
Wilson, Parker F., Wheeling, W. Va. Method and apparatus for metal rolling. 1,895,303; Jan. 24.
Winans, Daniel M., assignor to Daniel M. Winans Corporation, Binghamton, N. Y. Coin slot device. 1,895,017; Jan. 24.
Winans, Daniel M., Corporation. (See Winans, Daniel M., assignor.)
Winthrop Chemical Company. (See Fehrle, A., Streitwolf, and Herrmann, assignors.)
Winthrop Chemical Company, Inc. (See Räth, Curt, assignor.)
Wire Novelty Manufacturing Company, The. (See Domkee, John H., assignor.)
Wired Radio, Inc. (See Chromy, Ben J., assignor.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wolf, Charles, assignor to Schoenfeld & Wolf, Inc., New York, N. Y. Hand bag. 1,895,018; Jan. 24.
Wolf, Darrell F., Punxsutawney, Pa. Window washer. 1,895,273; Jan. 24.
Wolfe, John M., Poland, Ohio. Pumping jack. 1,895,060; Jan. 24.
Wood, Cyrus B., Takoma Park, D. C. Disinfectant of water. 1,894,969; Jan. 24.
Wood, Frederick, Aston, Birmingham, England, assignor to The Timken Roller Bearing Company, Canton, Ohio. Bearing for armature shafts of electric motors and dynamos. 1,895,142; Jan. 24.
Wood, Herman T. (See Brown, L. W., and Wood.)
Woodall, Herbert J., and M. S. Randall, assignors to Woodall Industries Incorporated, Detroit, Mich. Automobile closed body construction. Re18,720; Jan. 24.
Woodall Industries Incorporated. (See Woodall, H. J., and Randall, assignors.)
Woodard, Marion H. (See Connery, A. F., and Woodward.)
Worley, George I., assignor to The McNeil Boiler Company, Akron, Ohio. Tractor attachment for trucks. 1,895,241; Jan. 24.
Worssam, George S., assignor of one-half to Saville Perfumery Limited, Watford, England. Box of slide-and-shell type. 1,895,061; Jan. 24.
Wylam, Birkett. (See Morton, J., Jones, Wylam, and Harris.)
Young, Leon M., S. Busey, and D. E. Lindquist, assignors to Mueller Brass Co., Port Huron, Mich. Pipe coupling. 1,895,426; Jan. 24.
Youngstown Steel Door Company, The. (See Ditchfield, Frank, assignor.)

Zecher, Gustav, and C. H. G. Mellema, Eindhoven, Netherlands, assignors, by mesne assignments, to General Electric Company. Electric discharge tube energising circuit. 1,895,361; Jan. 24.
Zeiger, Felix W., New York, N. Y. Gear shifting mechanism. 1,894,970; Jan. 24.
Zuck, Nicholas, Rochester, N. Y. Shoulder pad and making same. 1,895,117; Jan. 24.
Zurcher, Paul. (See Miller, W., Henriksen, and Zurcher.)
Zurcher, Paul, Florence, Colo., assignor, by mesne assignments, to Continental Oil Company, Ponca City, Okla. Revivification of carbons. 1,895,062; Jan. 24.
Zurcher, Paul, Florence, Colo., assignor, by mesne assignments, to Continental Oil Company, Ponca City, Okla. Cracking process. 1,895,063; Jan. 24.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 24TH DAY OF JANUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acid and hydrogen, Producing phosphoric. W. Ipatieff and C. Freitag. 1,895,329; Jan. 24.
Acid and preparing it, Ortho-halogenanthraquinonecarboxylic. G. Kränslein, M. Corell, H. Vollmann, and E. Hausdörfer. 1,895,100; Jan. 24.
Acid concentration, Nitric. S. F. Spangler. 1,895,012; Jan. 24.
Acid, Preparation of formic. W. E. Vail. 1,895,238; Jan. 24.
Acids, Producing sulphonic. H. Limburg. 1,895,195; Jan. 24.
Adhesive plastic composition. R. A. Bernhard. 1,895,367; Jan. 24.
Aeroplane. T. Gheorghe. 1,895,388; Jan. 24.
Agricultural implement. C. E. White. 1,895,482; Jan. 24.
Air deflector. E. Strong. 1,895,352; Jan. 24.
Air heater. H. J. Kerr. 1,894,956; Jan. 24.
Air heater. C. E. Lucke and R. Cassidy. 1,894,957; Jan. 24.
Airplane. D. L. Stage. 1,895,140; Jan 24.
Alternating current motor. R. Richter. 1,895,007; Jan. 24.
Alternating current motor. H. E. Warren. 1,895,356; Jan. 24.
Amplifying system. J. Engl. 1,895,152; Jan. 24.
Anæsthetic dropping stand. L. E. Haughey. 1,895,036; Jan. 24.
Anthraquinone azines, Production of. P. Nawiasky and L. Eitlaender. 1,895,203; Jan. 24.
Arch support. G. D. Horning. 1,895,327; Jan. 24.
Articles, Device for pressing. P. C. Christiansen. Re18,721; Jan. 24.
Ashpan and blow off muffler structure. E. I. Hetch. 1,895,161; Jan. 24.
Asynchronous machines, Regulation of. W. Seiz. 1,895,349; Jan. 24.
Automobile body sill. A. L. Nelson and F. W. Pease. 1,895,171; Jan. 24.
Automobile closed body construction. H. J. Woodall and M. S. Randall. Re18,720; Jan. 24.
Ax. W. E. Pelton and E. H Holcombe. 1,895,342; Jan. 24.
Axle. E. B. Clarke. 1,895,311; Jan. 24.
Axle, Automotive driving. M. B. Morgan. 1,895,168; Jan. 24.
Bag: *See*—
Hand bag.
Bag construction, Paper. G. W. Poppe. 1,895,267; Jan. 24.
Basket, Fruit. J. C. Ramsey. 1,895,423; Jan. 24.
Bat. A. G. Davis 1,895,408; Jan. 24.
Bearing. C. W. Lighthall. 1,895,167; Jan. 24.
Bearing for armature shafts of electric motors and dynamos. F. Wood. 1,895,142; Jan. 24.
Belt, Airplane safety. C. M. Johnson. 1,895,222; Jan. 24.
Belt and buckle. J. Chierotti. 1,895,148; Jan. 24.
Belt lacing holder. J. K. Diamond. 1,894,981; Jan. 24.
Belt, Woven wire conveyor. C. E. Pink. 1,895,344; Jan. 24.
Bensol and valuable by-products from a gas containing either butane propane or ethane or portions of each, Apparatus for the manufacture of. F. Porter. 1,895,086; Jan. 24.
Bias cutting machine. H. S. Alexander, F. B. Pfeiffer, and J. W. White. 1,895,274; Jan. 24.
Board: *See*—
Cabinet ironing board. Pin board.
Ironing board.
Boat, Foldable or collapsible. W. E. Elling. 1,895,380; Jan. 24.
Boat launching gear. C. Smith. 1,895,011; Jan. 24.
Boat lowering gear. J. B. Hunt. 1,895,076; Jan. 24.
Boiler: *See*—
Water tube boiler.
Bolster, Logging. H. H. Linn. 1,895,387; Jan. 24.
Bookmarker. C. A. Charbenau. 1,894,941; Jan. 24.
Box. J. S. Stokes. 1,895,090; Jan. 24.
Box. J. R. White. Des. 89,100; Jan. 24.
Box and the like, Cardboard. V. Czerweny. 1,895,070; Jan. 24.
Box of slide-and-shell type. G. S. Worssam. 1,895,061; Jan. 24.
Box or similar receptacle. F. J. Abel. Des. 89,109; Jan. 24.
Box or similar receptacle. A. R. Nathan. Des. 89,113; Jan. 24.
Brace: *See*—
Fence post brace. Rail brace.
Brake control mechanism. W. R. Freeman. 1,895,316; Jan. 24.
Breaker and beater roll. J. D. Haskell. 1,895,188; Jan. 24.
Brick for checker work regenerators, Fire. B. P. Wheeler and W. G. Smith. 1,895,302; Jan. 24.
Brooder, Animal. B. F. Jensen. 1,895,127; Jan. 24.
Broom and handle connection therefor, Sweeping. M. R. Morton. 1,895,229; Jan. 24.
Brush selector with mechanical brush selection, Multiple. F. Merk. 1,895,265; Jan. 24.
Buckle, Loop prong. J. H. Domkee. 1,895,313; Jan. 24.
Button, Traverse. J. F. Madden. 1,895,196; Jan. 24.
Cabin plane, Drop. F. F. Love. 1,895,256; Jan. 24.
Cabinet ironing board. O. Juvet. 1,895,250; Jan. 24.
Cable code printer. A. F. Connery and M. H. Woodward. 1,895,095; Jan. 24.
Cables and ropes, Apparatus for splicing. A. J. Sande. 1,895,284; Jan. 24.
Cake. S. Scherr. Des. 88,095; Jan. 24.
Calculating machine. H. Hoffmeister. 1,895,189; Jan. 24.
Calendar pad, Monthly-yearly. R. M. Hall. 1,895,321; Jan. 24.
Calendar, Universal desk. R. M. Hall. 1,895,322; Jan. 24.
Cam miller. N. M. Marsilius. 1,895,334; Jan. 24.
Cam operating means. R. Müller. 1,895,259; Jan. 24.
Camera. W. Josselyn. 1,895,248; Jan. 24.
Camera, Motion picture. F. Short. 1,895,211; Jan. 24.
Camera-silhouette machine. W. H. Venzie. 1,895,239; Jan. 24.
Candle, Fast burning type. L. J. Conkling. 1,895,149; Jan. 24.
Cap driver. A. Herndon. 1,895,037; Jan. 24.
Capping and sealing machine. W. H. Knowles. 1,895,225; Jan. 24.
Car ventilator. T. D. Suddards. 1,895,109; Jan. 24.
Carbides, Salvaging and resintering cemented. S. P. Billings. 1,895,364; Jan. 24.
Carbon, Removing. P. Geaneas. 1,895,413; Jan. 24.
Carbons, Revivification of. P. Zurcher. 1,895,062; Jan. 24.
Carburetor, Multiple. R. Constensoux. 1,895,279; Jan. 24.
Card, Playing. E. H. White. Des. 89,099; Jan. 24.
Carpet. H. C. La Couture. Des. 89,082; Jan. 24.
Carrier: *See*—
Heel carrier.
Case: *See*—
Hood case.
Casing, Insulated. H. P. Chandler. 1,895,022; Jan. 24.
Casing, Vending machine. D. F. and J. F. Hladky. Des. 89,111; Jan. 24.
Caster, Adjustable wheel. W. R. Darnell. 1,895,150; Jan. 24.
Cathodes, Activating. W. Espe. 1,894,949; Jan. 24.
Cathodes or the like, Activating glowing. W. Espe. 1,894,946; Jan. 24.
Cellulose esters using neutral salts as inhibitors, Hydrolysis of. C. J. Staud and J. T. Fuess. 1,895,351; Jan. 24.
Cellulose solution, Spinning. A. Kämpf. 1,895,192; Jan. 24.
Cellulosic fibers, Treating. E. Stocker. 1,895,298; Jan. 24.
Cement slurry, Apparatus for evaporating. C. Mittag. 1,895,201; Jan. 24.
Chair: *See*—
Folding chair.
Chair element. G. D. Schermerhorn. 1,895,210; Jan. 24.
Changeable sign. J. L. D. Morrison, jr. 1,894,960; Jan. 24.
Chute, Mail. J. W. Cutler. 1,895,069; Jan. 24.
Circuit controller, Grid controlled mercury arc. F. W. Lyle. 1,894,994; Jan. 24.
Circuit, Electric coupling. H. A. Wheeler. 1,895,091; Jan. 24.
Circuit, Electric discharge tube energizing. G. Zecher and C. H. G. Mellema. 1,895,361; Jan. 24.
Clamp: *See*—
Laboratory clamp. Rail joint clamp.
Clamp. V. Di Figlia. 1,895,410; Jan. 24.
Clasp, Permanent wave. M. Lindsay. 1,895,418; Jan. 24.
Cleaner: *See*—
Wheel lug cleaner.
Cleaner and evener, Meat block. V. A. Scneider. 1,895,051; Jan. 24.
Clipper. I. O. Miner. 1,895,292; Jan. 24.
Clipper blade control. L. J. Wahl. 1,895,183; Jan. 24.
Clock case. A. R. Nathan. Des. 89,087; Jan. 24.
Closure. J. H. Mosel. 1,895,169; Jan. 24.

Closure and mounting, Vehicle unloading. E. F. Herbert. 1,895,325; Jan. 24.
Clothing container. I. Blechman. 1,895,406; Jan. 24.
Coating and producing the same, Protective. H. A. Staples. 1,895,175; Jan. 24.
Coating and producing the same, Protective. J. A. Staples. 1,895,176; Jan. 24.
Coating of structural steel, Protecting. E. Jansen. 1,895,190; Jan. 24.
Cod-liver-oil tablets, Making. B. L. Eicher. Re18,719; Jan. 24.
Coin slot device. D. M. Winans. 1,895,017; Jan. 24.
Coloring. R. S. Barnes, D. Service, and J. Thomas. 1,895,019; Jan. 24.
Compressors, System and method of lubricating. E. T. Williams. 1,895,092; Jan. 24.
Condenser: *See*—
Mica condenser.
Condenser. R. B. Parker. 1,895,294; Jan. 24.
Conductor and making the same, Insulated. B. H. Reeves. 1,895,400; Jan. 24.
Connecter for electrical appliances. H. G. Baker. 1,895,120; Jan. 24.
Connecters for woven wire conveyer belts. C. E. Pink. 1,895,345; Jan. 24.
Connection, Battery terminal. L. E. Ericksen and A. A. Hammons. 1,894,984; Jan. 24.
Connection, Flexible. H. W. Bell. 1,894,973; Jan. 24.
Connection, Tank and bowl. F. G. Brotz. 1,895,145; Jan. 24.
Container: *See*—
Clothing container. Metal container.
Easy opening container. Shipping container.
Container for cigars. R. E. Pent. 1,895,258; Jan. 24.
Container for the packing of articles. W. Juffa. 1,895,249; Jan. 24.
Container for use with closed vehicles, Garment carrying. K. Salavsky. 1,895,208; Jan. 24.
Control apparatus for blowdown water. C. W. Rice. 1,895,346; Jan. 24.
Control system, Automatic. B. O. Austin, N. H. Willby, and R. R. Brooks. 1,894,971; Jan. 24.
Converter. I. Hechenbleikner and N. Titlestad. 1,894,992; Jan. 24.
Conveyer mechanism. M. Morgan. 1,895,046; Jan. 24.
Conveyer, Transfer. S. H. Durbin. 1,895,411; Jan. 24.
Cooler: *See*—
Water cooler.
Copper or equivalent metals, Casting. W. F. Eppensteiner. 1,894,982; Jan. 24.
Core barrel nose. G. A. Macready. 1,894,999; Jan. 24.
Core drill. G. A. Macready. 1,895,001; Jan. 24.
Core drill and ascertaining drip. G. A. Macready. 1,894,995; Jan. 24.
Core drill, Orientation. G. A. Macready. 1,895,000; Jan. 24.
Core drill, Rotary. G. A. Macready. 1,894,998; Jan. 24.
Core drill with clock operated photographic means for ascertaining dip. G. A. Macready. 1,894,996; Jan. 24.
Corn product and making same. H. B. Laymon. 1,895,166; Jan. 24.
Cotton picker. J. T. Ferguson. 1,895,031; Jan. 24.
Cotton picker. S. Green. 1,895,160; Jan. 24.
Coupling: *See*—
Flexible coupling. Propeller and shaft coupling.
Flue coupling.
Pipe coupling. Sealed coupling.
Cracking process. P. Zurcher. 1,895,063; Jan. 24.
Crank, Adjustable. A. E. Flowers. 1,894,985; Jan. 24.
Crossover device. S. S. Matthes. 1,895,044; Jan. 24.
Crossing gate, Automatic. J. R. Byrne and D. J. MacIntosh. 1,894,940; Jan. 24.
Cup or the like, Cattle drinking. C. J. O. Bergstrom. 1,895,096; Jan. 24.
Current transformer, Constant. O. A. Pearson and C. H. Thordarson. 1,895,231; Jan. 24.
Damper control. S. E. Montgomery. 1,895,202; Jan. 24.
Derivatives of vat dyestuffs and making the same, Direct dyeing water soluble stable. J. E. G. Harris. 1,895,382; Jan. 24.
Device for distributing and packing cossettes in diffusion battery cells. A. E. Finley and S. Smith. 1,895,185; Jan. 24.
Dial engraving machine. W. M. Brower. 1,894,976; Jan. 24.
Die: *See*—
Magnetic die.
Direction indicator, Automobile. J. Brykowicz. 1,895,123; Jan. 24.
Dispenser: *See*—
Toothpaste dispenser.
Dispensing device. G. W. Burns. 1,894,977; Jan. 24.
Display device, Adjustable stepped. M. M. Friedemann. 1,895,283; Jan. 24.
Door. F. Ditchfield. 1,895,151; Jan. 24.
Door frame construction. A. G. W. Wedberg. 1,895,358; Jan. 24.
Door, Receding compartment. G. W. Isley. 1,895,415; Jan. 24.
Doweling machine. H. W. Russ. 1,895,106; Jan. 24.
Dress. L. L. Caston. Des. 89,115; Jan. 24.
Dress. J. Kohn. Des. 89,081; Jan. 24.
Drill: *See*—
Core drill.
Drum. H. E. Whitten. 1,894,968; Jan. 24.
Drum for reenforcing cage machines. O. A. Steuer and J. A. Carr. 1,895,427; Jan. 24.
Dwelling, Vehicular. E. Mennillo. 1,895,228; Jan. 24.
Dyestuff derivatives, Vat. J. Morton, J. I. M. Jones, B. Wylam, and J. E. G. Harris. 1,895,396; Jan. 24.
Dyestuffs of the anthraquinone series, Vat. M. A. Kunz and K. Koeberle. 1,895,101; Jan. 24.
Easy opening container. C. J. Aulbach. 1,895,386; Jan. 24.
Eccentric or draw rod for stone crushers. F. Helmrich. 1,895,890; Jan. 24.
Electric capacitor. F. M. Clark. 1,895,376; Jan. 24.
Electric fixture. M. N. Russell. 1,895,050; Jan. 24.
Electric furnace. G. L. Simpson. 1,895,269; Jan. 24.
Electric induction furnace. E. F. Northrup. 1,895,421; Jan. 24.
Electric machine and system of control therefor, Dynamo. V. Dudick. 1,895,879; Jan. 24.
Electric translating system. A. Boyajian. 1,895,370; Jan. 24.
Electrical apparatus and insulating bushing therefor. G. E. Jansson. 1,894,998; Jan. 24.
Electrical distant control system. J. Vopel and R. Oetker. 1,895,240; Jan. 24.
Electrical machine. M. Doloukhanoff. 1,895,096; Jan. 24.
Electrical measuring instrument. E. F. Weston. 1,895,114; Jan. 24.
Electrode for electric accumulators, Negative. A. Pouchain. 1,895,397; Jan. 24.
Electrodes, Sheathing spark plug. K. E. L. Guinness. 1,895,034; Jan. 24.
Electron discharge devices, Manufacture of. W. Espe and H. Holliga. 1,894,948; Jan. 24.
Elevator and lateral shift appliance for motor vehicles. M. H. Rice. 1,895,134; Jan. 24.
Elevator control device. N. O. Lindstrom. 1,895,253; Jan. 24.
Elevator control system, Automatic stopping. M. Baruch, R. E. De Camp, and C. P. Walker. 1,895,065; Jan. 24.
Engine: *See*—
Rotary engine.
Engine. B. Montero. 1,895,082; Jan. 24.
Engine operating on the two-stroke cycle, Swash plate internal combustion. H. R. Ricardo. 1,895,206; Jan. 24.
Engines, Automatic spark control for internal combustion. V. L. Howe. 1,895,328; Jan. 24.
Engines having an over-high pressure of compression, Device for feeding explosion. L. M. F. Genety. 1,895,381; Jan. 24.
Exercising and massaging device. I. H. Wilney. 1,895,116; Jan. 24.
Explosive. H. W. Botts and H. W. Champney. 1,895,144; Jan. 24.
Fan, Electric. J. W. Gosling. Des. 89,076; Jan. 24.
Fastener: *See*—
Paper fastener.
Fence construction, Highway guard. A. Johnson. 1,895,262; Jan. 24.
Fence post. J. R. Free. 1,895,186; Jan. 24.
Fence post brace. R. J. Langer. 1,895,165; Jan. 24.
Fibrous material for incorporation into fabrics, Supplying. J. Morton. 1,895,293; Jan. 24.
Fibrous material such as cotton during preparation for spinning, Apparatus for supplying. C. Schofield. 1,895,052; Jan. 24.
Fibrous products, Waterproofing. G. J. Manson. 1,894,959; Jan. 24.
Filaments into staple fibers, Apparatus for cutting. F. C. Hale and W. H. Kimpton. 1,895,246; Jan. 24.
Film feeding device in cinematographic view taking apparatus. A. L. V. C. Debrie. 1,895,026; Jan. 24.
Filter. V. C. Norquist and E. E. Treanor. 1,895,083; Jan. 24.
Filtration, Continuous. D. Cole. 1,895,276; Jan. 24.
Fishhook and link. C. W. Vandermark. 1,895,301; Jan. 24.
Fishing reel. J. F. Ancona. 1,895,304; Jan. 24.
Fishtail point for augers. F. O. Prior. 1,895,205; Jan. 24.
Flare, Aerial. L. P. Johnson, T. D. Westfall, and M. W Fischer. 1,895,954; Jan. 24.
Flexible coupling. H. W. Bell. 1,894,972; Jan. 24.
Float valve. F. D. Peltier. 1,895,064; Jan. 24.
Flue coupling. C. A. Thresher. 1,895,179; Jan. 24.
Fluid meter. A. J. Granberg. 1,895,318; Jan. 24.
Fluid pressure actuator. W. C. Leonard. 1,895,131; Jan. 24.
Folder, File. L. C. Shonts. 1,895,174; Jan. 24.
Folding chair. L. S. Williams. 1,895,115; Jan. 24.
Folding mechanism. C. S. Crafts and C. A. Harless. 1,895,124; Jan. 24.
Food case, Self-serve. T. F. Snodgrass. 1,895,069; Jan. 24.
Freight, Apparatus for transferring. B. F. Fitch. 1,894,950–1; Jan. 24.
Fruit and the like, Packing. A. E. Rice. 1,895,430; Jan. 24.
Fruit picker. C. R. Fisher. 1,895,158; Jan. 24.
Fur, Cutting. O. M. Dean. 1,895,025; Jan. 24.

Furnace: *See*—
Electric furnace. Electric induction furnace.
Furnace charger. J. B. Tytus. 1,895,300; Jan. 24.
Furnace for metallurgical purposes, Continuous. R. M. Fenton and E. F. Clark. 1,895,072; Jan. 24.
Furnaces, Heat controlling means for. H. B. Brown. 1,895,275; Jan. 24.
Game board or analogous article. O. Ray. Des. 89,093; Jan. 24.
Garbage receptacle, Molded. H. F. Sielaff. 1,895,010; Jan. 24.
Garment. M. Staw. 1,895,237; Jan. 24.
Gas escape warning device. B. T. Morrison. 1,895,394; Jan. 24.
Gas filling and sealing of tubes. J. H. Staley. 1,895,177; Jan. 24.
Gas pressure regulator. R. Neumann. 1,895,047; Jan. 24.
Gases under pressure by means of liquefied gases, Apparatus for the distribution of. C. Picard. 1,895,295; Jan. 24.
Gasoline with beryllium salts, Refining. F. E. Kimball. 1,895,223; Jan. 24.
Gate: *See*—
Crossing gate.
Gear: *See*—
Boat launching gear. Boat lowering gear.
Gear pin, Automobile. J. Lorimer. 1,895,384. Jan. 24.
Gear shift lever horn button system. E. T. Nester. 1,895,337; Jan. 24.
Gear-shift lever switch. G. Treese. 1,895,260; Jan. 24.
Gear shifting mechanism. F. W. Zelcer. 1,894,970; Jan. 24.
Gearing. E. Wildhaber. 1,895,360; Jan. 24.
Generator: *See*—
Oil gas generator.
Glass blanks and article produced thereby, Apparatus for the manufacturing of plate. W. H. Allison. 1,895,362; Jan. 24.
Glass blowing machine. L. D. Soubier. 1,895,137; Jan. 24.
Glass blowing machine. L. D. Soubier. 1,895,139; Jan. 24.
Glass. Method and apparatus for producing sheet. J. C. Blair. 1,895,365; Jan. 24.
Glass, Producing plate. W. H. Allison. 1,895,363; Jan. 24.
Glassware forming machine. L. D. Soubier. 1,895,138; Jan. 24.
Glue, Production of dry. W. and F. Kutsner. 1,895,194; Jan. 24.
Glues. Improving the water-resistance of casein. L. Bradshaw. 1,895,433; Jan. 24.
Golf bags or the like, Attachments for. C. A. Beard. 1,895,366; Jan. 24.
Golf club. F. J. Blatz. 1,895,869; Jan. 24.
Golf club. A. E. Lard. 1,895,417; Jan. 24.
Governor and driving mechanism, Speed. La M. A. McDowell. 1,895,199; Jan. 24.
Grain feeding device. J. S. Tough. 1,895,180; Jan. 24.
Graining machine. G. von Webern and E. W. Hamant. 1,894,966; Jan. 24.
Grapefruit, Colored seedless. A. E. Henninger. Pl. Pt. 53; Jan. 24.
Grating structure for windows. W. N. Robinson. 1,895,008; Jan. 25.
Grinder, Traveling wheel. F. K. Benedict. 1,895,122; Jan. 24.
Guard, Door opening saftey. G. E. Brown. 1,895,146; Jan. 24.
Guard for core drills, Mud. G. A. Macready. 1,894,997; Jan. 24.
Guard, Fruit. G. D. Bishop. 1,895,308; Jan. 24.
Guard, Shoe. C. Watanabe. 1,895,141; Jan. 24.
Hair and steam chamber to maintain the permanent wave or curl, Novel device to wave the. J. Vasta. 1,895,272; Jan. 24.
Hairpin package. J. A. O'Brien. 1,895,005; Jan. 24.
Hair waving appliance. H. Gerkin. 1,895,158; Jan. 24.
Hand bag. C. Wolf. 1,895,018; Jan. 24.
Handle: *See*—
Lifting jack handle.
Harrow, Offset. B. E. Rose. 1,895,136; Jan. 24.
Harvester, Potato. G. Gallus. 1,895,157; Jan. 24.
Heat circulator. J. B. Horton. 1,895,075; Jan. 24.
Heat recuperating apparatus of the Cowper type and a brick for the honeycomb structure. G. Simon. 1,895,235; Jan. 24.
Heater: *See*—
Air heater. Water heater.
Heater. M. P. Broun. 1,895,372; Jan. 24.
Heater for stock, Water. E. A. Drew. 1,895,028; Jan. 24.
Hedges, Shaping. R. Fisher. 1,895,282; Jan. 24.
Heel protecting cap. M. Thensner. 1,895,389; Jan. 24.
Heterodyne oscillator. E. G. Ports. 1,895,103; Jan. 24.
Hoe, Push. J. E. Steinour and P. Brubaker. 1,895,055; Jan. 24.
Hogshead, Knockdown. J. E. Edgin. 1,895,428; Jan. 24.
Holder: *See*—
Belt lacing holder. Supply-holder.
Razor blade holder. Tool holder.
Rope holder.
Holster, Article. E. R. Hagerstrom. 1,895,074; Jan. 24.
Hot air generator. V. C. Norquist. Des. 89,088; Jan. 24.
Hydrocarbon materials, Converting. W. Miller, A. Henriksen and P. Zurcher. 1,895,081; Jan. 24.
Ignition apparatus. J. L. Arthur. 1,895,110; Jan. 24.
Incubator. W. L. Long. 1,895,042; Jan. 24.
Indicator: *See*—
Direction indicator. Motor heat indicator.
Ironing board. L. C. Larson. 1,895,264; Jan. 24.
Ironing table. J. E. Kalgren. 1,895,164; Jan. 24.
Irrigation and drainage system. N. A. Heacock. 1,895,324; Jan. 24.
Jack: *See*—
Pumping jack.
Jarring tool. I. J. McCullough. 1,895,227; Jan. 24.
Joint: *See*—
Universal joint.
Joint for high tension electric cables. W. Pfannkuch. 1,895,396; Jan. 24.
Ketoses from mixtures, Separation of. E. L. Helwig. 1,895,414; Jan. 24.
Knitting machine. F. Tanski. 1,894,965; Jan. 24.
Laboratory clamp. E. H. Fisher. 1,895,150; Jan. 24.
Lamp and holder thereof, Electric incandescent. E. R. Grote. 1,895,083; Jan. 24.
Lamp, Incandescent. F. J. Alderson. 1,895,148; Jan. 24.
Latch and keeper combination. T. O. Schrader. Des. 89,096; Jan. 24.
Lead tapes, Manufacturing. H. W. Kelly. 1,895,331; Jan. 24.
Leaf catcher for beet dumps, etc. J. W. Silver. 1,895,268; Jan. 24.
Lifter: *See*—
Valve spring lifter.
Lifting jack handle. J. Genich. 1,895,317; Jan. 24.
Light modulating device. B. J. Chromy. 1,894,942; Jan. 24.
Light or analogous article, Table. V. Da Gama. Des. 89,075; Jan. 24.
Lighting device and fuel therefor, Portable. T. H. Fisher. 1,895,032; Jan. 24.
Lighting fixture. R. V. Owen. Des. 89,091; Jan. 24.
Liquid meter. H. Chrisman and E. M. Kreidler. 1,895,023; Jan. 24.
Liquids, Apparatus for raising. J. B. De Mees. 1,895,027; Jan. 24.
Lock for automobiles, Transmission. W. R. Tretbar. 1,895,404; Jan. 24.
Loud speaker unit, Dynamic. H. J. Fanger. 1,895,071; Jan. 24.
Lubricating composition and making the same. J. E. Thomsen and J. J. O'Laughlin. 1,895,014; Jan. 24.
Magnetic die. I. P. Simonsen and A. C. Huston. 1,895,401; Jan. 24.
Magnetic fields, Apparatus for measuring. E. Brüche. 1,895,373; Jan. 24.
Manifolding record machine. E. C. Borchardt. 1,895,021; Jan. 24.
Maps from photographs, Making. L. J. R. Holst. 1,894,953; Jan. 24.
Material for and process of coating metal. J. H. Gravell. 1,895,320; Jan. 24.
Material taken up by a treated web, Measuring. A. Allen. 1,895,118; Jan. 24.
Matting, Metallic. J. H. McFaul. Des. 89,085; Jan. 24.
Measuring oiliness of substances. S. Fischer, jr. 1,895,154; Jan. 24.
Merchandising or fluid dispensing structure. R. S. Kats. Des. 89,112; Jan. 24.
Metal alloy. H. K. Herschman and J. L. Basil. 1,895,261; Jan. 24.
Metal articles, Making decorated drawn. J. S. Mitchell and H. C. Rathke. 1,895,419; Jan. 24.
Metal composition, Resintered hard. G. F. Taylor. 1,895,354; Jan. 24.
Metal container. W. F. Punte. 1,895,391; Jan. 24.
Metal rolling, Method and apparatus for. P. F. Wilson. 1,895,308; Jan. 24.
Metal, Rolling sheet. J. B. Tytus. 1,895,299; Jan. 24.
Metallic sheets, Handling. C. Burgess. 1,895,310; Jan. 24.
Meter: *See*—
Fluid meter. Photographic exposure meter.
Liquid meter.
Meter reverse control mechanism. H. G. Weymouth. 1,895,059; Jan. 24.
Mica condenser, Variable. E. J. Cowan. 1,895,242; Jan. 24.
Milling machine. N. M. Marsilius. 1,895,333; Jan. 24.
Mixture of vegetable phosphatides and fatty oil, Light colored. B. Rewald. 1,895,424; Jan. 24.
Mold: *See*—
Water-cooled mold.
Mold copes, Drying. E. F. Begtrup. 1,895,219; Jan. 24.
Molding machine, Centrifugal. W. A. Geisler. 1,895,245; Jan. 24.
Molds, Apparatus for casting core. W. F. Eppensteiner. 1,894,983; Jan. 24.
Motor: *See*—
Alternating current motor. Vernier motor.
Motor heat indicator. G. H. Townsend and R. T. Hurley. 1,895,385; Jan. 24.
Mounting, Bearing. E. P. Larsh. 1,895,288; Jan. 24.
Mounting for windows, Screen and storm sash. P. Dietz. 1,895,312; Jan. 24.

Movement following a logarithmic law, Device for producing a. F. M. M. B. Salomon and H. P. Govare. 1,895,347; Jan. 24.
Multiple-unit tube. S. Loewe. 1,895,254–5; Jan. 24.
Musical instrument, Stringed. R. M. Sullivan. 1,895,383; Jan. 24.
Oil and coal amalgam, Preparing. W. B. Trent. 1,895,056; Jan. 24.
Oil composition, Penetrating. A. W. Burwell. 1,895,374; Jan. 24.
Oil gas generator. L. B. Harris. 1,894,990; Jan. 24.
Oil, Purification of. J. S. Main. 1,894,958; Jan. 24.
Opener, Can. W. E. Jensen. 1,895,221; Jan. 24.
Ornament, Bicycle sprocket wheel. G. S. Lewis. Des. 89,083; Jan. 24.
Oven, Rotary. J. Needham. 1,895,230; Jan. 24.
Package. M. A. Rossen. 1,895,233; Jan. 24.
Package and forming same. D. M. Smith and C. C. Tapscott. 1,895,236; Jan. 24.
Packing liner. A. E. Rice. 1,895,431; Jan. 24.
Pad: *See*—
Calendar pad.
Pad and making same, Shoulder. N. Zuck. 1,895,117; Jan. 24.
Paper fastener. P. O. Unger. 1,895,182; Jan. 24.
Paper making machinery, Suction press roll for. J. F. Joseph. 1,895,039; Jan. 24.
Paper, Shelf. E. Karfiol. 1,895,040–1; Jan. 24.
Pasters between the webs of successive rolls of paper supplying a printing press, Method and apparatus for making. L. M. Strand. 1,895,425; Jan. 24.
Patterns for rail welding molds. B. Romay. 1,895,232; Jan. 24.
Pears and other relatively soft fruit, Skinning. G. Mayhew. 1,895,102; Jan. 24.
Pencil. C. R. Keeran. 1,895,130; Jan. 24.
Phonograph records, Arrangement for producing. R. H. Townsend. 1,895,178; Jan. 24.
Phonographs, Control device for. M. Nystrom. 1,895,004; Jan. 24.
Photographic apparatus. B. A. Proctor. 1,894,963; Jan. 24.
Photographic exposure meter. H. F. Tönnies. 1,895,271; Jan. 24.
Pin: *See*—
Gear pin.
Pin board. J. E. Johnson. 1,895,416; Jan. 24.
Pipe coupling. L. M. Young, S. Busey, and D. E. Lindquist. 1,895,426; Jan. 24.
Pipe covering. O. F. Mottweiler. 1,895,420; Jan. 24.
Planographic printing. H. N. Durham. 1,895,125; Jan. 24.
Pliers. R. G. Dripps. 1,895,314; Jan. 24.
Plug for tables, Carom. P. Hansen. 1,894,989; Jan. 24.
Pole for electric machines, Regulating. E. Rosenberg. 1,895,049; Jan. 24.
Post: *See*—
Fence post.
Preparation yielding nitroso diazo solutions of the diphenylamine series and making same, Solid. R. Jung. 1,895,099; Jan. 24.
Press: *See*—
Rotary printing press.
Pressure welding apparatus. F. J. Brown. 1,894,938; Jan. 24.
Printing telegraph exchange system. G. S. Vernam. 1,895,112; Jan. 24.
Products from fractionating condensers, Recovering. L. W. Snell. Re18,722; Jan. 24.
Projectiles, Forming. O. Rinkel. 1,895,207; Jan. 24.
Prop for mines and withdrawing the same. J. J. Staley. 1,895,053; Jan. 24.
Propeller. E. G. Kontos. 1,895,252; Jan 24.
Propeller. E. Macaluso. 1,895,043; Jan. 24.
Propeller and shaft coupling. M. Sobey. 1,895,402; Jan. 24.
Protective apparatus. O. C. Traver. 1,895,355; Jan. 24.
Protective apparatus. A. R. van C. Warrington. 1,895,357; Jan. 24.
Protector for surgical operations. B. E. Pickett. 1,895,343; Jan. 24.
Pulley stile for window frames. F. Schaffert. 1,895,209; Jan. 24.
Pumping jack. J. M. Wolf. 1,895,060; Jan. 24.
Pumping unit. W. C. Trout. 1,895,181; Jan. 24.
Punch, Can. J. M. De Vilbiss. 1,895,378; Jan. 24.
Pyracridone and making same. C. Räth. 1,895,105; Jan. 24.
Rack. F. T. Johnson. 1,895,128; Jan. 24.
Radiator, Fin. A. L. Lambert. 1,895,287; Jan. 24.
Radio apparatus, Extending frequency range of. M. J. Jelen. 1,895,247; Jan. 24.
Radiocabinet. J. Taylor. Des. 89,097; Jan. 24.
Rail brace. W. Koch and M. Rogers. 1,895,193; Jan. 24.
Rail joint clamp. P. W. Elmore. 1,895,030; Jan. 24.
Ratio adjuster or tap changer. F. H. Barrington. 1,895,306; Jan. 24.
Razor blade holder. J. Holtzman. 1,895,286; Jan. 24.
Reamer. C. F. Berry. 1,894,937; Jan. 24.
Receptacle: *See*—
Garbage receptacle.
Receptacle. P. H. Meyer. 1,895,291; Jan. 24.
Receptacle and sprinkler, Liquid. H. F. Sielaff. 1,895,009; Jan. 24.
Reel: *See*—
Fishing reel.
Reel carrier. J. Van Vorst. 1,895,217; Jan. 24.
Reflecting device. P. P. Sandford. 1,895,173; Jan. 24.
Refrigerating apparatus. J. G. King. 1,895,224; Jan. 24.
Refrigerator cabinet. C. C. Thomas. Des. 89,098; Jan. 24.
Register or index. R. Drucker. 1,895,409; Jan. 24.
Regulator: *See*—
Gas pressure regulator.
Retort, Direct heated vertical. S. F. Hay. 1,895,284; Jan. 24.
Rope holder. J. J. Olsen. 1,895,395; Jan. 24.
Rosin, Refining. J. N. Borglin. 1,894,975; Jan. 24.
Rotary engine. E. Sturm. 1,895,353; Jan. 24.
Rotary printing press, Sheet-fed relief-intaglio. C. J. MacArthur. 1,895,080; Jan. 24.
Rubber product and coloring rubber, Colored. B. S. Taylor. 1,895,088; Jan. 24.
Safety valve. W. A. Jones. 1,894,955; Jan. 24.
Sand mulling machine. A. G. J. Rapp. 1,895,006; Jan. 24.
Sash and guide means, Window. R. T. Axe. 1,895,305; Jan. 24.
Sash and weather-strip construction, Window. R. T. Axe. 1,894,064; Jan. 24.
Scanning element for use in television systems. T. A. Smith. 1,895,087; Jan. 24.
Screen. E. B. Parsonage. 1,895,341; Jan. 24.
Seal for rotary drums, Air. J. W. Schlegel and E. A. Claus. 1,895,348; Jan. 24.
Sealed coupling. J. H. Dennedy. 1,894,943; Jan. 24.
Separation, Apparatus for. F. A. Quiros. 1,895,104; Jan. 24.
Sewage sludge, Disposing of. J. E. Greenawalt. 1,895,159; Jan. 24.
Sewing machine. W. T. Minett. 1,895,257; Jan. 24.
Sewing machine, Electric. W. J. Peets. Des. 89,114; Jan. 24.
Sewing machines, Trimming mechanism for. F. M. Card. 1,894,978; Jan. 24.
Sharpener, Pencil. W. H. Whitford. 1,895,359; Jan. 24.
Sharpener, Razor blade. H. J. Linn. 1,895,332; Jan. 24.
Sheet feeding apparatus. R. M. Fenton. 1,895,073; Jan. 24.
Sheet to thickness, Method and apparatus for reducing a. J. C. Blair. 1,895,405; Jan. 24.
Shield. M. Martinson. 1,895,197; Jan. 24.
Shingle. J. O. Jones. 1,895,038; Jan. 24.
Shingle sawing machine. M. T. Whiting. 1,895,016; Jan. 24.
Ship propulsion system. R. H. Collingham. 1,895,377; Jan. 24.
Shipping container. W. F. Crawford. 1,895,278; Jan. 24.
Shipping jacket for perishable commodities. W. F. Crawford. 1,895,277; Jan. 24.
Shirt folding apparatus. J. J. O'Shea. 1,895,204; Jan. 24.
Shoe, Arch supporting. L. W. Brown and H. T. Wood. 1,894,939; Jan. 24.
Shoe, Infant's. J. Siragusa. 1,895,270; Jan. 24.
Shuffle board cue. C. B. Isbell. 1,895,398; Jan. 24.
Sign: *See*—
Changeable sign.
Signal. M. H. Rhodes. 1,895,399; Jan. 24.
Signaling, Railway. P. P. Stoker. 1,895,018; Jan. 24.
Signaling system. C. H. Suydam. 1,895,111; Jan. 24.
Signaling system control. L. A. Gebhard. 1,894,952; Jan. 24.
Skate wheel, Roller. O. A. Carlson. 1,895,093; Jan. 24.
Skip loading system, Interlocking. J. D. Kelvie. 1,895,077; Jan. 24.
Snap switch, Rotary. L. A. Kempton. 1,895,330; Jan. 24.
Snubbing device for oil well tubing. B. S. Minor. 1,895,132; Jan. 24.
Solution of nitrogen-containing organic compounds and preparing them, Stable aqueous. A. Fehrle, K. Streitwolf, and W. Herrmann. 1,895,434; Jan. 24.
Solutions of siccatives, Stabilized. F. Meidert. 1,895,200; Jan. 24.
Soot disposal. W. W. Oakley. 1,894,961; Jan. 24.
Speedometer. A. Eisele. 1,895,029; Jan. 24.
Spindle drive for chucking machines, Work. A. J. Lewis. 1,895,079; Jan. 24.
Spindle lathe, Multiple. A. J. Lewis. 1,895,078; Jan. 24.
Spindle vacuum double seamer, Multiple. H. J. and C. D. Douglass, and M. S. Leve. 1,895,184; Jan. 24.
Spray. E. Beck. 1,895,307; Jan. 24.
Spring construction. W. B. Foster. 1,895,429; Jan. 24.
Stand: *See*—
Anesthetic dropping stand
Stepladder extension. E. Stindl. 1,895,213; Jan. 24.
Stool seat positioning means. J. Kupski. 1,895,226; Jan. 24.
Stop-motion for bobbin winding machines, Automatic. K. Meyer-Gaus and A. Saure. 1,895,244; Jan. 24.
Store front. H. J. McNeil. Des. 89,086; Jan. 24.
Stretching and securing means for flexible material. A. Boomershine. 1,895,309; Jan. 24.

Stringer for fasteners. G. E. Prentice. 1,895,172; Jan. 24.
Strips or bars of material into separate portions, Apparatus for cutting. A. G. Rose. 1,895,048; Jan. 24.
Supply-holder. E. R. Swanson. 1,895,215; Jan. 24.
Support: *See*—
Arch support. Wheel support.
Supporting device for knives and the like. F. W. Bleckley. 1,894,974; Jan. 24.
Sure-footing appliance for vehicle floor compartments, Detachable. B. F. Jensen. 1,895,162; Jan. 24.
Surfaces, Marking. J. L. Moore. 1,895,045; Jan. 24.
Switch: *See*—
Gear-shift lever switch. Time switch.
Snap switch.
Switch. D. Hanson. 1,895,035; Jan. 24.
Switch. M. H. Rhodes. 1,895,398; Jan. 24.
Switches, Apparatus for controlling railway. H. L. Bone. 1,895,067; Jan. 24.
Table: *See*—
Ironing table.
Table and the like, Foldable traveler's. G. Neumann. 1,895,338; Jan. 24.
Table or similar article, Bridge. P. A. Lobel. 1,895,290; Jan. 24.
Talking machine. B. Hilgenberg. 1,895,126; Jan. 24.
Tar batter. T. W. Stone. 1,895,218; Jan. 24.
Telegraph exchange switching system, Printing. F. G. Halliden. 1,895,097; Jan. 24.
Telegraph keyboard controlled apparatus. R. D. Salmon and S. E. Kirk. 1,895,108; Jan. 24.
Telegraph repeater. G. S. Vernam and F. G. Halliden. 1,895,015; Jan. 24.
Telegraph switching system, Automatic. G. S. Vernam. 1,895,113; Jan. 24.
Telegraph transmitter, Tape controlled. F. G. Creed and R. D. Salmon. 1,894,980; Jan. 24.
Telegraphic signal reproducing apparatus. R. D. Salmon. 1,895,107; Jan. 24.
Telegraphy and telephony, Combined. A. Weaver. 1,895,058; Jan. 24.
Telegravure apparatus. C. F. Watts. 1,894,967; Jan. 24.
Telephone system. H. M. Bascom. 1,895,020; Jan. 24.
Television apparatus and method. H. P. Donle. 1,894,944; Jan. 24.
Tension control for label pasting belts. A. Fisher. 1,895,315; Jan. 24.
Textile fabric or similar article. A. Grulich. Des. 89,077–8; Jan. 24.
Textile fabric or similar article. M. Guhl. Des. 89,079–80; Jan. 24.
Textile fabric or similar article. M. Guhl. Des. 89,110; Jan. 24.
Textile fabric or similar article. L. F. Orcutt. Des. 89,089; Jan. 24.
Textile fabric or similar article. J. Overmeyer. Des. 89,090; Jan. 24.
Textile fabric or similar article. L. J. Rother. Des. 89,094; Jan. 24.
Textile fabric or similar article. W. Willhelm. Des. 89,101–8; Jan. 24.
Textile fabric or similar article, Printed. J. Plénoz. Des. 89,092; Jan. 24.
Textile materials and product thereof, Coloring. R. G. Dort. 1,895,243; Jan. 24.
Theft preventing device. G. Karl. 1,895,251; Jan. 24.
Time switch. C. Snay. 1,895,350; Jan. 24.
Tine for use in soil sterilising apparatus. F. Maxen. 1,895,335; Jan. 24.
Tire boot. J. F. Panyard. 1,895,340; Jan. 24.
Toilet accessory. W. Friedman. 1,895,187; Jan. 24.
Tool: *See*—
Jarring tool.
Tool for automatic, and turret or capstan lathes or machines, Box. W. H. Jones. 1,895,191; Jan. 24.
Tool holder. R. von Frommer. 1,895,057; Jan. 24.
Toothpaste dispenser. F. O. Johnson. 1,895,163; Jan. 24.
Toy. J. N. Borroughs. 1,895,068; Jan. 24.
Toy bell, Revolving. N. Lofquist. Des. 89,084; Jan. 24.
Toy hoop. F. A. Thalmann. 1,895,216; Jan. 24.
Toy pistol. J. E. Brubaker. 1,895,407; Jan. 24.
Track apparatus for spectacular performances. R. P. Hayhurst. 1,895,285; Jan. 24.
Tractor attachment for trucks. G. I. Worley. 1,895,241; Jan. 24.
Tractor, Dirt scraping conveying. J. W. Markus 1,895,002; Jan. 24.
Traffic control system for railroads, Centralized. R. M. Phinney. 1,895,422; Jan. 24.
Transmitter, Step-by-step. W. F. Cassedy, jr. 1,895,094; Jan. 24.
Transmitter, Step-by-step. E. W. Sundberg. 1,895,110; Jan. 24.
Transplanter. R. Stork. 1,895,214; Jan. 24.
Tray, Bed. J. H. Hayes. 1,894,991; Jan. 24.
Tray, Drying. G. F. Hauf. 1,895,323; Jan. 24.
Truck. J. E. Blackhall. 1,895,368; Jan. 24.
Tube: *See*—
Multiple-unit tube.
Tube compressing device, Flexible. D. E. Austin. 1,894,936; Jan. 24.
Tubing. B. L. Quarnstrom. 1,895,183; Jan. 24.
Turbine, Steam. A. Meyer. 1,895,003; Jan. 24.
Universal joint. M. C. Frins. 1,894,986; Jan. 24.
Vacuum tubes, Manufacture of. W. Espe. 1,894,947; Jan. 24.
Values from cyanide solutions, Recovery of. H. T. Durant, H. L. Sulman, and H. F. K. Picard. 1,895,412; Jan. 24.
Valve: *See*—
Float valve. Safety valve.
Valve apparatus. F. E. Herr. 1,895,326; Jan. 24.
Valve for rock drills. A. Feucht. 1,895,153; Jan. 24.
Valve spring lifter. J. P. McCready. 1,895,198; Jan. 24.
Vaporizing. J. J. Grebe. 1,895,220; Jan. 24.
Vegetables, Packing iced. J. H. Grande. 1,895,319; Jan. 24.
Vehicle. W. C. Nabors. 1,895,170; Jan. 24.
Ventilating strip for hats and the like. M. Popper. 1,895,392; Jan. 24.
Ventilating unit for stoves. A. J. Briegel. 1,895,371; Jan. 24.
Ventilator: *See*—
Car ventilator.
Vernier motor. L. W. Chubb. 1,894,979; Jan. 24.
Vessel, Heat insulated cooking. A. T. Smith. 1,895,212; Jan. 24.
Vise and the like. T. D. Currie. 1,895,281; Jan. 24.
Vulcanizer. F. J. Shook and C. Iverson. 1,895,296; Jan. 24.
Washer: *See*—
Window washer.
Water-cooled mold. W. Rohn. 1,895,185; Jan. 24.
Water cooler. F. D. Peltier. 1,895,085; Jan. 24.
Water, Disinfectant of. C. B. Wood. 1,894,969; Jan. 24.
Water heater, Service. R. V. Fusco. 1,894,987; Jan. 24.
Water tube boiler. H. Garbe. 1,894,968; Jan. 24.
Waving, Permanent. J. Sguerso. 1,894,964; Jan. 24.
Weather-strip for window sashes, Automatic adjustable. J. F. Levan. 1,895,289; Jan. 24.
Weeding attachment to plows. W. T. Cantlon. 1,895,375; Jan. 24.
Weighing mechanism adapted for use in charging machines. G. R. Steere. 1,895,297; Jan. 24.
Wheel: *See*—
Skate wheel.
Wheel carrier and lock, Spare. C. M. Ellenberger and F. A. Smith. 1,894,945; Jan. 24.
Wheel lug cleaner, Tractor. F. W. Burgess. 1,895,147; Jan. 24.
Wheel support. E. H. Coquille. 1,895,024; Jan. 24.
Window and sash door, Sash. O. O. Hult and O. F. Hellstrom. 1,895,098; Jan. 24.
Window construction. G. E. Ostroot and S. Westerheim. 1,895,339; Jan. 24.
Window washer. D. F. Wolf. 1,895,273; Jan. 24.
Wood pulp digester with internal circulation conduit. E. Morterud. 1,895,266; Jan. 24.
Woodworking machine. W. Steinmeyer. 1,895,054; Jan. 24.
Wool, Impregnating. E. Schlierer. Re18,718; Jan. 24.
Woolen fabrics, Carbonising. P. Keller. 1,895,263; Jan. 24.
Work-holding device, Magnetic. D. Jones. 1,895,129; Jan. 24.
Wrench. T. D. Currie. 1,895,280; Jan. 24.
Wringer. O. A. Swanson. 1,895,403; Jan. 24.
Yarn guide for a spinning machine. F. Piron. 1,894,962; Jan. 24.
Zeolite preparation. A. S. Behrman. 1,895,121; Jan. 24.

CLASSIFICATION OF PATENTS

ISSUED JANUARY 24, 1933

NOTE.—First number—class, second number—subclass, third number—patent number

1—	56: 1,894,981	45—	82: 1,894,901	90—	13.4: 1,895,334	150—	1.5: 1,895,306	198—	198: 1,895,245	248—	2: 1,895,063
2—	93: 1,895,237		128: R. 18,720		15: 1,895,333		35: 1,895,018	200—	16: 1,895,208		20: 1,895,156
	182: 1,895,392	47—	1: Pl. Pt. 53		24.4: 1,894,967		52: 1,895,277		33: 1,895,350		1,895,419
	224: 1,895,343		4: 1,895,282	91—	54: 1,895,315		1,895,278		39: 1,895,398		31: 1,895,262
	268: 1,895,117		49: 1,895,335		68: R. 18,718	152—	26: 1,895,340		51: 1,895,035		58: 1,894,977
4—	14: 1,895,145	48—	94: 1,894,990		70: 1,895,320	154—	28: 1,895,420		59: 1,895,260	249—	2: 1,895,297
	150: 1,895,307	49—	5: 1,895,138	92—	7: 1,895,266	155—	95: 1,895,226		1,895,337	250—	8: 1,895,111
5—	269: 1,895,429		1,895,139		21: 1,894,950		140: 1,895,115		66: 1,895,330		17: 1,894,963
8—	5: 1,895,019		9: 1,895,137		22: 1,895,188		186: 1,895,210		152: 1,895,177		20: 1,895,108
	6: 1,895,009		33: 1,895,362		53: 1,895,030	164—	35: 1,895,274	202—	215: 1,895,284		1,895,247
	12: 1,895,263		1,895,365	95—	32: 1,895,248		60: 1,895,245		256: 1,895,218		27: 1,895,361
	20: 1,895,296		1,895,405		82: 1,895,239		119: 1,895,378	204—	9: 1,895,414		27.5: 1,894,946
9—	2: 1,895,280		57: 1,895,363	97—	40: 1,895,375	167—	55: R. 18,719	206—	7: 1,895,208		1,894,947
	22: 1,895,011	50—	24: 1,895,047		68: 1,895,055	170—	159: 1,895,252		10: 1,895,406		1,894,948
	1,895,076	51—	56: 1,895,122	98—	2: 1,895,109		162: 1,895,043		37: 1,895,061		1,894,949
13—	20: 1,895,249		185: 1,895,232		99: 1,895,252	171—	95: 1,895,114		1,895,223		1,895,254
	27: 1,895,421		218: 1,895,286	99—	10: 1,895,166		119: 1,895,231		46: 1,895,236		1,895,255
15—	250: 1,895,273	52—	13: 1,895,144		11: 1,895,424		227: 1,895,040		65: 1,895,240	252—	8: 1,895,062
16—	35: 1,895,150	55—	56: 1,895,157	101—	148: 1,895,125	172—	8: 1,895,377		66: 1,895,005	253—	39: 1,895,003
18—	8: 1,895,192		66: 1,895,214		152: 1,895,080		179: 1,894,971	207—	2: 1,895,331	254—	44: 1,895,030
	17: 1,895,296		83: 1,895,126		154: 1,894,966		1,895,379	208—	181: 1,895,023	255—	1: 1,895,122
	50: 1,895,088	56—	10: 1,895,432		409: 1,895,124		239: 1,895,240	209—	114: 1,895,288		27: 1,895,227
19—	69: 1,895,052		48: 1,895,031	102—	24: 1,894,954		240: 1,894,994		307: 1,895,241		61: 1,895,205
	130: 1,894,962		1,895,160		36: 1,895,149		274: 1,895,006	210—	28: 1,894,989		72: 1,894,995
20—	12: 1,895,209		333: 1,895,155	103—	99: 1,895,027		1,895,349		164: 1,895,346		1,894,997
	20: 1,895,415	60—	24: 1,895,062		160: 1,895,353		275: 1,894,979		177: 1,895,083		1,894,998
	52: 1,895,339		62.6: 1,895,131	105—	119: 1,895,368		278: 1,895,356		200: 1,895,376		1,894,999
	52.1: 1,895,098	61—	10: 1,895,324	106—	24: 1,895,159		280: 1,895,007	211—	80: 1,894,974		1,895,000
	71: 1,895,008	62—	1: 1,895,295	107—	22: 1,895,048	173—	259: 1,894,984		137: 1,895,283		1,895,001
22—	65: 1,895,245		99: 1,895,224		60: 1,895,230		264: 1,895,400	214—	17: 1,895,185	256—	35: 1,895,166
	87: 1,895,219		141: 1,895,085	108—	33: 1,895,038		268: 1,895,306		18: 1,895,300	257—	130: 1,895,287
	152: 1,894,983	64—	102: 1,894,966	110—	1: 1,894,961		332: 1,895,120		38: 1,894,950		167: 1,895,075
	158: 1,895,232	66—	85: 1,895,293	112—	127: 1,894,978		334: 1,895,080		1,894,951		224: 1,894,966
	177: 1,895,135		93: 1,894,965		232: 1,895,257	175—	41: 1,894,993		40: 1,895,077		1,894,967
	212: 1,894,982	68—	10: 1,895,164	113—	1: 1,895,184		1,895,376	216—	20: 1,895,045		1,894,987
23—	113: 1,895,121		1,895,259		50: 1,895,401		41.5: 1,895,242	217—	3: 1,895,208		230: 1,895,294
	160: 1,895,012		1,895,294		52: R. 18,721		183: 1,895,118		1,895,431	260—	1: 1,895,236
	165: 1,895,329		32: 1,895,409	115—	94: 1,895,402		1,895,378		5: 1,895,319		1,895,023
	230: 1,895,154	70—	75: 1,895,404	116—	70: 1,895,304		294: 1,895,255		124: 1,895,423		31: 1,895,288
	262: 1,895,086		90: 1,894,945		119: 1,894,941		1,895,357		40: 1,895,105		
	288: 1,894,992		1,895,251		155: 1,895,309		363: 1,895,370	220—	5: 1,895,438		57: 1,895,100
24—	73: 1,895,313	72—	98: 1,895,358	117—	6: 1,895,234		367: 1,895,129		32: 1,895,010		61: 1,895,101
	134: 1,895,395		109: 1,895,190	119—	28: 1,895,162	176—	16: 1,895,143		1,895,291		102: 1,895,351
	153: 1,895,152	73—	1: 1,895,059		34: 1,895,127	177—	329: 1,895,123		38: 1,895,364		105: 1,895,434
	180: 1,895,148		30: 1,895,318		37: 1,895,042	178—	2: 1,895,097		53: 1,895,396		114: 1,895,288
	205: 1,895,172		37: 1,895,023		73: 1,895,028		1,895,112		61: 1,895,301		159: 1,895,196
25—	142: 1,895,408		118: 1,895,385		74: 1,895,066		1,895,113	261—	41: 1,895,379		
29—	1.22: 1,895,207	74—	1: 1,895,259	120—	94: 1,895,130		6: 1,894,944	263—	8: 1,895,072		
	17: 1,895,310		5: 1,895,060		96: 1,895,359	221—	60: 1,894,936		19: 1,895,235		
	18: 1,895,299		7: 1,895,108	121—	18: 1,895,153		17: 1,894,980		1,895,163		51: 1,895,302
	38: 1,895,078		14: 1,895,181	122—	33: 1,895,220		1,895,094	222—	5: 1,895,201	264—	13: 1,895,029
	1,895,079		17: 1,895,200		331: 1,894,988		1,895,105	223—	15: 1,895,204	267—	20: 1,894,972
	49: 1,895,057		32: 1,894,985		382: 1,895,161		1,895,110	224—	26: 1,895,074		1,894,973
	86.3: 1,895,198		34: 1,895,199	123—	51: 1,895,206		28: 1,895,095		29: 1,895,024	271—	55: 1,895,073
	155.5: 1,895,034		41: 1,895,360		117: 1,895,119		44: 1,895,091	226—	17: 1,895,430	272—	3: 1,895,285
30—	1: 1,895,183		58: 1,894,970		1,895,326		70: 1,895,107		30: 1,895,225		85: 1,895,216
	3: 1,895,221	75—	1: 1,895,201		119: 1,895,331		71: 1,895,015		88: 1,895,037	273—	4: 1,894,989
33—	1: 1,894,983		1,895,354	126—	73: 1,895,372	179—	4: 1,895,058	228—	29: 1,895,213		80: 1,895,417
	19: 1,894,976		1,895,364		202: 1,895,202		6.3: 1,895,020	229—	23: 1,895,090		81: 1,895,389
34—	17: 1,895,322		185: 1,895,412		318: 1,895,179		27.53: 1,895,265		33: 1,895,070		129: 1,895,393
35—	9: 1,895,093	77—	75.5: 1,894,937	128—	57: 1,895,116		100.4: 1,895,178		68: 1,895,267	274—	28: 1,895,126
36—	11: 1,895,270	78—	89: 1,894,938	129—	1: 1,895,174		115.5: 1,895,071	230—	114: 1,895,371	280—	23.1: 1,895,170
	55: 1,895,141	80—	35: 1,895,303	131—	11: 1,895,258		- 171: 1,895,152	233—	20: 1,895,104		145: 1,895,287
	71: 1,894,939	81—	20: 1,895,281	132—	36: 1,894,964	180—	1: 1,895,134	234—	1: 1,894,996		186: 1,895,147
	1,895,227		51: 1,895,214		1,895,158	184—	6: 1,895,092	235—	61: 1,895,347	282—	19: 1,895,021
			53: 1,895,280		1,895,272	187—	29: 1,895,055		88: 1,895,271	285—	118: 1,895,436
37—	7: 1,895,092	82—	35: 1,895,191		36.1: 1,895,418		1,895,253		144: 1,895,189	286—	8: 1,895,288
40—	22: 1,894,960	83—	45: 1,895,006		83: 1,895,187	189—	28: 1,895,186	236—	16: 1,895,275		11: 1,894,943
	104: 1,895,409	84—	263: 1,895,353	134—	26: 1,895,200		46: 1,895,151	238—	50: 1,895,193		1,895,348
	107: 1,895,321		411: 1,894,968	136—	31: 1,895,307		65: 1,895,054	240—	6: 1,895,033		
	1,895,322	87—	2: 1,894,975	137—	21: 1,895,326		1,895,264	242—	26: 1,895,244	287—	86: 1,895,220
41—	10: 1,895,040		5: 1,895,413		53: 1,894,965	191—	37: 1,895,044		56: 1,895,425		88: 1,895,217
	1,895,041		9: 1,895,014		75: 1,895,133	192—	13: 1,895,216		85: 1,895,217	292—	228: 1,895,146
	26: 1,895,243		1,895,374		108: 1,895,084		123: 1,895,004		130: 1,895,216		300: 1,895,312
	33: 1,895,419		17: 1,895,194	140—	92.2: 1,895,437	193—	8: 1,895,089		1,895,416	296—	21: 1,895,228
42—	57: 1,895,407		1,895,267	143—	5: 1,895,016	194—	97: 1,895,017	244—	1: 1,895,222		26: 1,895,171
43—	20: 1,895,304		1,895,433	144—	136: 1,895,054	196—	36: 1,895,223		12: 1,895,140		44: 1,895,305
	28: 1,895,301	88—	1: 1,895,173		278: 1,895,166		52: 1,895,083		14: 1,895,388	301—	57: 1,895,338
44—	8: 1,895,032		16: 1,895,211	145—	2: 1,895,342		96: 1,895,081		21: 1,895,256	302—	124: 1,895,311
	10: 1,895,056		17: 1,894,963		47: 1,895,051		189: R. 18,722	246—	3: 1,895,013	305—	63: 1,895,120
45—	11: 1,895,280		18.4: 1,895,026	146—	219: 1,895,102		140: 1,894,958		1,895,422	308—	3: 1,895,241
	24: 1,895,309		61: 1,894,942	149—	7: 1,895,175	198—	21: 1,895,046		258: 1,895,057		178: 1,895,142
	46: 1,895,338	89—	36: 1,895,197		1,895,176		23: 1,895,411		272: 1,894,940		187: 1,895,167
				149—	28: 1,895,025		193: 1,895,344	247—	38: 1,895,022	312—	128: 1,895,099
											176: 1,895,128

U. S. GOVERNMENT PRINTING OFFICE: 1933

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Abel, George H., Roslyn, Pa. Metallic arc welding electrodes and oxy-acetylene welding wire. Serial No. 333,136; Jan. 31. Class 14.

Aderer, Julius, Inc., New York, N. Y. Dental wire. Serial No. 332,673; Jan. 31. Class 44.

Aeronautical Industries Research. (See Sabor, Russell.)

Allen, Robert S. (See Pearson, Andrew R., and Allen.)

American Disinfecting Company, Sedalia, Mo. Liquid wax preparation. Serial No. 331,720; Jan. 31. Class 16.

Bayuk Cigars Incorporated, Philadelphia, Pa. Cigars. Serial No. 333,181; Jan. 31. Class 17.

Bellemere, Stanley L., doing business as Layne Hosiery Company, Reading, Pa. Hosiery. Serial No. 330,443; Jan. 31. Class 39.

Belle Rose Chocolate Co. (See Daggett Chocolate Company.)

Blumenthal, Sadie, New York, N. Y. Machine threads. Serial No. 331,848. Jan. 31. Class 48.

Borun Bros., doing business as Rite Laboratories, Los Angeles, Calif. Pharmaceutical preparations. Serial No. 332,515; Jan. 31. Class 6.

Bowman, George J., Rochester, N. Y. Partially printed forms. Serial No. 331,769; Jan. 31. Class 37.

California Medicinal Wine Co., Los Angeles, Calif. Medicinal and pharmaceutical preparations. Serial No. 332,752; Jan. 31. Class 6.

Celanese Corporation of America, New York, N. Y. Fabrics. Serial No. 318,096; Jan. 31. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics. Serial No. 322,412; Jan. 31. Class 42.

Chattanooga Medicine Company, The, Chattanooga, Tenn. Cod liver oil and cod liver oil emulsions. Serial No. 332,031; Jan. 31. Class 6.

Chittenden, Turner & Company, Inc., Boston, Mass. Granular or powdered preparation for liquids to produce body, viscosity, etc. Serial No. 315,134; Jan. 31. Class 46.

Cloverdale Spring Co., Baltimore, Md. Malt beverages. Serial No. 333,312; Jan. 31. Class 48.

Creco Company, Inc., Long Island City, N. Y. Paper towels, toilet paper. Serial No. 332,401; Jan. 31. Class 37.

Crosley Radio Corporation, The, Cincinnati, Ohio. Radio receiving sets. Serial No. 332,332; Jan. 31. Class 21.

Daggett Chocolate Company, doing business as Belle Rose Chocolate Co., Cambridge, Mass. Candy. Serial No. 332,647; Jan. 31. Class 46.

Deahler Broom Factory, The, Deahler, Nebr. Whisk brooms. Serial No. 320,085; Jan. 31. Class 29.

Du Barry & Company. (See Marvin, S. Stephen.)

Edison, Thomas A., Incorporated, West Orange, N. J. Electrolyte and electrolyte material. Serial No. 331,252; Jan. 31. Class 6.

Egry Register Company, The, Dayton, Ohio. Autographic registers and paper filers therefor. Serial No. 332,369; Jan. 31. Class 37.

Elmi Waters, Inc., Lincoln Park, Mich. Artificial mineralized water. Serial No. 332,560; Jan. 31. Class 6.

Fear, Ernest D., Kansas City, Mo. Milk powder. Serial No. 327,684; Jan. 31. Class 46.

Glendale Distributing Company. (See Sackett, Leon A.)

Great Atantic & Pacific Tea Company, The, New York, N. Y. Coffee. Serial No. 332,827; Jan. 31. Class 46.

Guilbert, Emery J., doing business as Springdale Mayonnaise Company, Springdale, Conn. Mayonnaise. Serial No. 331,989; Jan. 31. Class 46.

Hampden Sales Corporation, Springfield, Mass. Filling or sizing material for textiles. Serial Nos. 331,858-9; Jan. 31. Class 6.

Hering, Ardo, New York, N. Y. Dry cleaner, metal cleaner, metal polish, etc. Serial No. 322,425; Jan. 31. Class 4.

Hipwell Manufacturing Company, Pittsburgh, Pa. Drain pipe solvent. Serial No. 332,411; Jan. 31. Class 6.

Holland Pharmacal Company, Philadelphia, Pa. Skin lotion. Serial No. 331,954; Jan. 31. Class 6.

Howlett & Hockmeyer Co. Inc., New York, N. Y. Leggings, windbreakers, blouses, etc. Serial No. 331,582; Jan. 31. Class 39.

International Distributing Co., Janesville, Wis. Porch shades. Serial No. 332,152; Jan. 31. Class 32.

Jacobs, Grossman & Rosenberg, Inc., Philadelphia, Pa. Dresses and suits. Serial No. 322,338; Jan. 31. Class 39.

K B Beverage Company, Bay City, Mich. Malt beverages. Serial No. 332,888; Jan. 31. Class 48.

Kelly, Geo. J., Inc., Lynn, Mass. Shoe polish creams. Serial No. 290,182; Jan. 31. Class 4.

Kelvinator Corporation, Detroit, Mich. Oil burners and parts thereof. Serial No. 328,429; Jan. 31. Class 34.

Kennedy Valve Mfg. Co., The, Elmira, N. Y. Hydrants. Serial No. 330,750; Jan. 31. Class 13.

Knapp-Monarch Company, Belleville, Ill. Insulated jugs and vacuum bottles. Serial No. 331,864; Jan. 31. Class 2.

Kolokraft Company. (See Wilson, Walter E.)

Kresge Department Store Corporation, Newark, N. J. Coffee, tea, candy, cocoa, etc. Serial No. 323,821; Jan. 31. Class 46.

Kuehn, Otto L., Co., Milwaukee, Wis. Herring and canned fish. Serial No. 331,644; Jan. 31. Class 46.

Larkin Refrigerating Corporation, Atlanta, Ga. Pressure control valve for refrigeration apparatus. Serial No. 331,830; Jan. 31. Class 13.

Larkin Refrigerating Corporation, Atlanta, Ga. Pressure control valves. Serial No. 331,898; Jan. 31. Class 13.

Latham, Jack, doing business as Latham and Bower, Cocob, Conn. Card tables. Serial No. 332,259; Jan. 31. Class 32.

Layne Hosiery Company. (See Bellemere, Stanley L.)

Leonhard, Theodor, Wax Co. Inc., Haledon, N. J. Beeswax. Serial No. 332,068; Jan. 31. Class 6.

Levin Brothers Paper Co., Chicago, Ill. Toilet paper. Serial No. 325,715; Jan. 31. Class 37.

M and M Chemical Corporation, Lonaconing, Md. Medicinal preparation. Serial No. 329,490; Jan. 31. Class 6.

Marvin, S. Stephan, doing business as Du Barry & Company, Burbank, Calif. Powdered food product. Serial No. 332,538; Jan. 31. Class 46.

Merkel Inc., New York, N. Y. Smoked butts. Serial No. 331,662; Jan. 31. Class 46.

Micky Malto Products Co., San Francisco, Calif. Powdered composition. Serial No. 332,780; Jan. 31. Class 46.

National Automatic Container Corporation, Baltimore, Md., and New York, N. Y. Container for packages of cigarettes. Serial No. 332,542; Jan. 31. Class 8.

National Chemical Corporation, Washington, D. C. Laxative medicine. Serial No. 332,595; Jan. 31. Class 6.

Naugatuck Chemical Company, The, New York, N. Y. Chemicals for controlling the odor of rubber and rubber compounds. Serial No. 332,959; Jan. 31. Class 6.

Nu-Ra Waxcoat Corporation, Brooklyn, N. Y. Polish. Serial No. 328,844; Jan. 31. Class 16.

Pacific Manifolding Book Company, Emeryville, Calif. Paper and stationery. Serial No. 332,820; Jan. 31. Class 37.

Pearson, Andrew R., and Robert S. Allen, Washington, D. C. News columns and special articles. Serial No. 333,168; Jan. 31. Class 38.

Pease, C. F., Company, The, Chicago, Ill. Arc lamp globes. Serial No. 332,960; Jan. 31. Class 33.

Planters Edible Oil Company, Suffolk, Va. Edible oils. Serial No. 328,702; Jan. 31. Class 46.

Plymouth Products, Company. (See Robertson, J. T., Company, The.)

Producers Diamond Quality Oil & Gas Co., Topeka, Kans. Motor fuel oils, lubricating oils, gasoline, etc. 323,840; Jan. 31. Class 15.

Pure Oil Company, The, Chicago, Ill. Lubricating oils. Serial No. 331,440; Jan. 31. Class 15.

Rainey, Clara H., Malone, N. Y. Kimonos and baby garments. Serial No. 326,269; Jan. 31. Class 39.

Raynorshine Products, Inc., San Antonio, Tex. Polish and wax. Serial No. 332,732; Jan. 31. Class 16.

Reiss-Premier Pipe Co., West New York, N. J. Tooth paste. Serial No. 331,266; Jan. 31. Class 6.

Richmond Dairy Company, Richmond, Va. Fresh milk. Serial No. 330,605; Jan. 31. Class 46.

Richter & Hoffman Harvard Gesellschaft mit beschränkter Haftung, Berlin, Germany. Wax and moulding compounds for dental surgery, filling material, and tooth polishing material. Serial No. 331,624; Jan. 31. Class 44.

Rimmel, Inc., West Orange, N. J. Astringents, astringent cerates, bleach creams, etc. Serial No. 331,164; Jan. 31. Class 6.

Rite Laboratories. (See Borun Bros.)

Robertson, J. T., Company, The, doing business as Plymouth Products Company, Syracuse, N. Y. Soaps. Serial No. 332,927; Jan. 31. Class 4.

Sabor, Russell, doing business as Aeronautical Industries Research, Minneapolis, Minn. Paints, varnishes, polishes, etc. Serial No. 326,162; Jan. 31. Class 16.

Sackett, Leon A., doing business as Glendale Distributing Company, Glendale, Long Island, N. Y. Rose bush plants. Serial No. 332,599; Jan. 31. Class 1.

Schoeneman, J., Incorporated, Baltimore, Md. Coats, vests, trousers, etc. Serial No. 332,900; Jan. 31. Class 39.

Sears, Roebuck and Co., Chicago, Ill. Smokers' pipes. Serial No. 333,203; Jan. 31. Class 8.

Segers Brothers, N. V., Lisse, Netherlands. Tulip bulbs. Serial No. 320,991; Jan. 31. Class 1.

Seguin Milling & Power Company, Seguin, Tex. Corn meal, scratch feed, laying mash, etc. Serial No. 332,439; Jan. 31. Class 46.

Settlement Cook Book Company, The, Milwaukee, Wis. Printed books. Serial No. 332,076; Jan. 31. Class 38.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Slater Rodger Company Limited, Glasgow, Scotland. Whiskey. Serial No. 331,997; Jan. 31. Class 49.
Siesinger, Stephen, Inc., New York, N. Y. Chinaware, pottery globes, etc. Serial No. 332,663; Jan. 31. Class 30.
"Société Française Hispano-Suiza", The, Bois-Colombes, France. Motor vehicles, speedboats, aeroplanes, etc., and parts thereof. Serial No. 325,442; Jan. 31. Class 19.
Springdale Mayonnaise Company. (See Guilbert, Emery J.)
Standard Brands Incorporated, New York, N. Y. Amylolytic or starch-liquefying preparation. Serial No. 331,516; Jan. 31. Class 6.
Standard Envelope Manufacturing Company, The, Cleveland, Ohio. Envelopes. Serial No. 332,472; Jan. 31. Class 37.
Strathmore Paper Company, West Springfield, Mass. Writing and printing paper. Serial No. 329,482; Jan. 31. Class 37.
Stylecraft, Los Angeles, Calif. Game. Serial Nos. 332,635–6; Jan. 31. Class 22.
Sweet-Orr & Co., Inc., Wappingers Falls, and New York, N. Y. Negligee shirts and breeches, pants, etc. Serial No. 328,283; Jan. 31. Class 39.
Tancré, Carl A., Naumburg/Saale, Germany. General Tonic. Serial No. 331,295; Jan. 31. Class 6.
Tark Electric Razor Co., Inc., Long Island City, N. Y. Electric razors and blades therefor. Serial No. 332,387; Jan. 31. Class 23.
Tinsky, Samuel, Brooklyn, N. Y. Brushless shaving cream. Serial No. 332,324; Jan. 31. Class 4.
Tremblett & Davin, Chicago, Ill. Refrigerators. Serial No. 331,386; Jan. 31. Class 31.
Union Publishing Company, Dallas, Tex. Magazine. Serial No. 332,132; Jan. 31. Class 38.
United States Ozone Company of America, The, Scottdale, Pa. Water-purifying machinery and parts thereof. Serial No. 331,599; Jan. 31. Class 23.
Walgreen Co., Chicago, Ill. Golf balls. Serial No. 327,952; Jan. 31. Class 22.
Walgreen Co., Chicago, Ill. Golf balls. Serial No. 327,954; Jan. 31. Class 22.
Warner Bros. Pictures, Inc., New York, N. Y. Series of different motion picture films. Serial No. 332,203; Jan. 31. Class 26.
Weber Coffee Company, The, Philadelphia, Pa. Canned and packaged coffee and tea. Serial No. 325,277; Jan. 31. Class 46.
Weed Destroyer Co., Inc., Aberdeen, Wash. Weed guns. Serial No. 310,317; Jan. 31. Class 23.
Wigder, Bernard, doing business as The Wigder Manufacturing Co., Newark, N. J. Manicure implements. Serial No. 332,562; Jan. 31. Class 44.
Wilson, Walter E., doing business as Kolokraft Company, Detroit, Mich. Toy paint box kits. Serial No. 332,708; Jan. 31. Class 22.
Winarick, Ar., Inc., New York, N. Y. Powder puffs, dusting mittens, dish mops, etc. Serial No. 332,288; Jan. 31. Class 29.
Winterfresh Foods, Inc., Chicago, Ill. Preserved fruits and vegetables. Serial No. 331,940; Jan. 31. Class 46.
Winthrop Chemical Company, Inc., New York, N. Y. Antimalarial preparation. Serial No. 332,745; Jan. 31. Class 6.
Yeast-Vite (U. S. A.) Inc., Niagara Falls, N. Y. Tonic. Serial No. 330,609; Jan. 31. Class 6.
Zobel, Harry L., 3rd., Seabright, N. J. Motor boats and cruisers. Serial No. 331,020; Jan. 31. Class 19.

LIST OF REGISTRANTS OF TRADE-MARKS

Abrasive Products Company, Lansdowne, Pa. Granulated abrasive materials. 300,698; Jan. 31; Serial No. 327,330; published Nov. 15, 1932. Class 4.
Alta-Vis Oil Company, Portland, Oreg. Lubricating oils. 300,668; Jan. 31; Serial No. 330,613; published Nov. 8, 1932. Class 15.
American Brassière Company. (See Byers, Nathan, The estate of.)
American Writing Ink Company, Inc. (See Solomon, Sydney E., assignor.)
Associated Motion Picture Make-Up Artists, Inc., Ltd., Los Angeles, Calif. Cosmetics. 300,684; Jan. 31; Serial No. 325,085; published Nov. 15, 1932. Class 6.
Baker, Walter, & Company, Limited, assignor to Walter Baker & Company, Inc., Boston, Mass. Milk chocolate. 300,690; Jan. 31; Serial No. 256,155; published Jan. 3, 1928. Class 46.
Beautybath, Inc., Newark, N. J. Electric blankets and heating pads. 300,692; Jan. 31; Serial No. 324,869; published Nov. 15, 1932. Class 44.
Belvedere Coffee & Tea Co. (See Caplan, H. L., & Co. Inc.)
Bettoney, Harry, doing business as The Cundy-Bettoney Co., Boston, Mass. Soprano clarinets, bass and alto clarinets, flutes, piccolos, oboes, and bassoons. 300,666; Jan. 31; Serial No. 330,677; published Nov. 8, 1932. Class 36.
Buchanan, James, London, England, and Glasgow, Leith, and Glenlivet, Scotland, assignor to James Buchanan & Co., Limited, London, England. Whisky. 40,166; renewed Apr. 21, 1933.
Burris, S. George, trustee. (See Byers, Nathan, The estate of.)
Byers, Nathan, The estate of: S. George Burris, trustee, doing business as American Brassière Company, New York, N. Y. Corselettes, girdles, corsets, and brassières. 300,707; Jan. 31. Class 39.
California Consumers Company, Los Angeles, Calif. Ice vending machines. 300,675; Jan. 31; Serial No. 329,735; published Nov. 15, 1932. Class 23.
California Fruit Exchange, Sacramento, Calif. Fresh fruits. 300,681; Jan. 31; Serial No. 330,009; published Nov. 15, 1932. Class 46.
Cameron Machine Company, Brooklyn, N. Y. Machines and parts thereof and therefor for slitting, rewinding, etc., flexible materials. 300,674; Jan. 31; Serial No. 330,035; published Nov. 15, 1932. Class 23.
Caplan, H. L., & Co. Inc., doing business as Belvedere Coffee & Tea Co., Baltimore, Md. Coffee. 300,676; Jan. 31; Serial No. 330,569; published Nov. 15, 1932. Class 46.
Carey, Philip, Manufacturing Company, The, Lockland, Ohio. Construction materials. 90,965; renewed Apr. 8, 1933.
Chemical Foundation, Incorporated, The. (See Deckel, Friedrich, G. m. b. H., assignor.)
Chemical Foundation, Incorporated, The. (See Gebrüder, Bandekow, assignor.)
Chemical Foundation, Incorporated, The. (See Labusen, Ad. F., assignor.)
Chemical Foundation, Incorporated, The. (See Lechler, Paul, assignor.)
Chemical Foundation, Incorporated, The. (See Prenzlau, Louis, assignor.)
Chemical Foundation, Incorporated, The. (See Schimmel & Co., assignor.)
Church, John, Company, The, Cincinnati, Ohio, to Everett Piano Company, South Haven, Mich., successor. Pianos. 89,925; renewed Jan. 21, 1933.
Clinkenbeard, Laforest D., doing business as Lee's Beauty Shop, Sioux City, Iowa. Hair waving pads. 300,695; Jan. 31; Serial No. 328,753; published Nov. 15, 1932. Class 44.
Coal Carburetor Company, The. (See Price, Thornton W.)
Colcombet Fois & Co., assignor to Colcombet Fois & Co-Societe Anonyme, St. Etienne, France. Velvet ribbons. 88,734–5; renewed Oct. 22, 1932.
Columbia Protektosite Co., Inc., Carlstadt, N. J. Sun glasses, snow glasses, leather goggles, and eye protectors. 300,670; Jan. 31; Serial No. 330,619; published Nov. 15, 1932. Class 26.
Conndwel Laboratories, Inc., New York, N. Y. Reconstructive tonic. 300,704; Jan. 31; Serial No. 330,742; published Nov. 15, 1932. Class 6.
Corn Products Refining Company, New York, N. Y. Fruit jelly. 90,171; renewed Feb. 11, 1933.
Cundy-Bettoney Co., The. (See Bettoney, Harry.)
Davis, Joel B., Company, Philadelphia, Pa. Underwear. 89,528; renewed Dec. 24, 1932.
Deckel, Friedrich, G. m. b. H., Munich, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Photographic apparatus and supplies therefor. 90,299; renewed Feb. 18, 1933.
Deere & Company, Moline, Ill. Cutlery, machinery, and tools. 91,859–61; renewed June 3, 1933.
Deming, William L., Salem, Ohio. Identification-tags. 89,347; renewed Dec. 10, 1932.
Disston, Henry, & Sons Incorporated, Philadelphia, Pa. Steel sheets, bars and forgings. 90,100; renewed Feb. 4, 1933.
Disston, Henry, & Sons Incorporated, Philadelphia, Pa. Steel sheets, bars, and forgings. 90,303; renewed Feb. 18, 1933.
Douglas, B. M. (See Société des Caves et des Producteurs réunis de Roquefort, (Aveyron), assignor.)
Drackett Chemical Company, The, Cincinnati, Ohio. Liquid cleaner for glass and vitreous surfaces. 300,651; Jan. 31; Serial No. 329,258; published Nov. 15, 1932. Class 4.
Dreher's, Anton, Export-Brauerei Gesellschaft mit beschränkter Haftung Saaz. (See "Saazer Genossenschaftsbrauerei, Reg. Genossenschaft mit beschränkter Haftung, Saaz.")
Eaton, Orrin O., Watsonville, Calif. Fresh lettuce. 300,683; Jan. 31; Serial No. 325,091; published Nov. 15, 1932. Class 46.

Electric Auto-Lite Company, The, Toledo, Ohio. Electric generating, storage, and starting systems, etc., and parts therefor. 310,687; Jan. 31; Serial No. 312,905; published Nov. 8, 1932. Class 21.
Electrofoam Corporation, Ltd., Pasadena, Calif. Lather, foam, and emulsion forming machines. 300,688; Jan. 31; Serial No. 310,915; published Nov. 15, 1932. Class 23.
Electromaster, Inc., Detroit, Mich. Electric stoves and ranges. 300,699; Jan. 31; Serial No. 326,206; published Nov. 8, 1932. Class 21.
Evans, C. H., & Sons, assignor to C. H. Evans & Sons, Hudson, N. Y. Ale. 47,951; renewed Nov. 28, 1925.
Everett Piano Company. (See Church, John, Company, The.)
Fairbanks, Morse & Co., Chicago, Ill. Generators, motors, domestic lighting plants, and magnetos. 300,649; Jan. 31; Serial No. 329,630; published Nov. 15, 1932. Class 21.
Fieg, Bernard, Brooklyn, N. Y. Food products. 300,693; Jan. 31; Serial No. 324,509; published Nov. 15, 1932. Class 46.
Fitzgerald Manufacturing Co., The, Torrington, Conn. Electric sadirons. 300,645; Jan. 31; Serial No. 330,473; published Nov. 15, 1932. Class 21.
Foster Packing Company, Chicago, Ill. Condensed skimmed milk. 90,008; renewed Jan. 28, 1933.
Gamewell Company, The, Newton and Newton Upper Falls, Mass. Electrical fire alarm systems, electrical police signaling systems, etc., and parts therefor. 300,644; Jan. 31; Serial No. 330,475; published Nov. 15, 1932. Class 21.
Gaseteria Incorporated, Indianapolis, Ind. Lubricating oils and greases and gasoline. 300,665; Jan. 31; Serial No. 330,786; published Nov. 8, 1932. Class 15.
Gebrüder Bandekow, Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Drop-glasses. 90,154; renewed Feb. 11, 1933.
General Dyestuff Corporation, New York, N. Y. Oil for finishing leather. 300,669; Jan. 31; Serial No. 330,511; published Nov. 15, 1932. Class 4.
General Electric X-Ray Corporation, Chicago, Ill. Cassettes holding photographic films for X-ray pictures. 300,673; Jan. 31; Serial No. 330,403; published Nov. 15, 1932. Class 26.
General Refining Company, The, Baltimore, Md. Oils and greases. 300,648; Jan. 31; Serial No. 329,679; published Nov. 8, 1932. Class 15.
Gideons, The, Chicago, Ill. Books and printed publications. 89,839; renewed Jan. 14, 1933.
Gleam Products Corporation, New York, N. Y. Polishing powder. 300,701; Jan. 31; Serial No. 329,807; published Nov. 15, 1932. Class 4.
Grady-Travers Company, Incorporated, The. (See Kelley, Henry C., Company, assignor.)
Gross, Benjamin & Edward J., Co., Inc., New York, N. Y. Finger rings and mountings therefor. 300,667; Jan. 31; Serial No. 330,702; published Nov. 8, 1932. Class 28.
Hadley Company, Inc., The, Providence, R. I. Bracelets. 300,664; Jan. 31; Serial No. 330,815; published Nov. 8, 1932. Class 28.
Hare Mfg. Co., Philadelphia, Pa. Electric heating pads. 300,646; Jan. 31; Serial No. 330,087; published Nov. 8, 1932. Class 21.
Heathcoat, John, & Co., Tiverton and London, to John Heathcoat & Co., Tiverton, England, successor. Nets and veilings. 89,747; renewed Jan. 7, 1933.
Hill, Thomson & Company, Edinburgh, Scotland. Scotch whisky. 39,438; renewed Dec. 9, 1932.
Hooper Sons Mfg. Co., Philadelphia, Pa. Cordage. 39,629; renewed Jan. 13, 1933.
International Milling Company. (See New Prague Flouring Mill Company, assignor.)
Jockey Razor Blade Co. (See Kaplan, Alexander.)
Johnson, Nestor, assignor to Nestor Johnson Mfg. Co., Chicago, Ill. Ice-skates. 89,852; renewed Jan. 14, 1933.
Kahn's, E., Sons Company, The, Cincinnati, Ohio. Meat and meat products. 300,705; Jan. 31; Serial No. 330,659; published Nov. 15, 1932. Class 46.
Kaplan, Alexander, doing business as Jockey Razor Blade Co., New York, N. Y. Safety razor blades. 300,671; Jan. 31; Serial No. 330,599; published Nov. 15, 1932. Class 23.
Kelley, Henry C., Company, assignor to The Grady-Travers Company, Incorporated, New York, N. Y. Cords, twines, ropes and lines of certain named materials. 91,971; renewed June 10, 1933. Class 7.
Kessler Foods, Brooklyn, N. Y. Chocolate malt syrup. 300,682; Jan. 31; Serial No. 329,350; published Nov. 15, 1932. Class 46.
Keyes Fibre Company, Inc., Waterville, Me. Jackets and fillers. 300,661; Jan. 31; Serial No. 325,403; published May 24, 1932. Class 2.
Lahusen, Ad. F., Hamburg, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Starch and starch compounds. 39,841; renewed Feb. 24, 1933.
Lechler, Paul, Stuttgart, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Water-repelling preservative paints. 90,353; renewed Feb. 18, 1933.
Lederle Laboratories, Inc., New York, N. Y. Pharmaceutical preparation. 300,703; Jan. 31; Serial No. 330,821; published Nov. 15, 1932. Class 6.
Leef, Sommer & Co., New York, N. Y. Fresh vegetables. 300,677; Jan. 31; Serial No. 330,229; published Nov. 15, 1932. Class 46.
Lee's Beauty Shop. (See Clinkenbeard, Laforest D.)
Lewis, Samuel, Co. Inc., New York, N. Y. Folding chairs. 300,659; Jan. 31; Serial No. 328,770; published Nov. 8, 1932. Class 32.
Mason, Au & Magenheimer Confectionery Manufacturing Company, New York, N. Y. Candy. 89,680; renewed Dec. 31, 1932.
Mathieson Alkali Works, Inc., The, New York, N. Y. Technical grade calcium hypochlorite. 300,702; Jan. 31; Serial No. 330,854; published Nov. 15, 1932. Class 6.
Mendelsohn, Mendel R., doing business as The Mendum Laboratories, Newark, N. J. Internal medicine. 300,663; Jan. 31; Serial No. 330,928; published Nov. 15, 1932. Class 6.
Mendum Laboratories, The. (See Mendelsohn, Mendel R.)
Meyer, H. H., Packing Company, The, Cincinnati, Ohio. Shoulders, dried beef, sausage, etc. 300,691; Jan. 31; Serial No. 316,605; published Nov. 15, 1932. Class 46.
National-Acme Manufacturing Company, The, to The National Acme Company, successor, Cleveland, Ohio. Multiple-spindle automatic lathes. 89,765; renewed Jan. 7, 1933.
National Carbon Company, Inc. (See Nungesser Carbon & Battery Co., The, assignor.)
New Prague Flouring Mill Company, New Prague, assignor to International Milling Company, Minneapolis, Minn. Wheat flour. 91,507; renewed May 6, 1933.
Norton Pike Company, Pike, N. H. Scythe stones, whetstones, and abrasive stones, etc. 300,662; Jan. 31; Serial No. 331 003; published Nov. 15, 1932. Class 4.
Norton, Willis, & Co., assignor to The Wichita Flour Mills Company, doing business as The Willis Norton Company, Topeka, Kans. Wheat flour. 91,867; renewed Apr. 29, 1933.
Nungesser Carbon & Battery Co., The, Cleveland, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. Y. Battery cells. 91,893; renewed June 3, 1933.
Odorono Company, Inc., The, New York, N. Y. Deodorants and preparations for preventing excessive perspiration. 300,652; Jan. 31; Serial No. 322,264; published Nov. 1, 1932. Class 6.
Oelerich & Berry Company, doing business as Oelerich & Berry Co., Chicago, Ill. Syrup. 300,678; Jan. 31; Serial No. 330,207; published Nov. 15, 1932. Class 46.
Oneidacraft, Inc., Oneida, N. Y. Combination telephone stands and book holders. 300,658; Jan. 31; Serial No. 330,827; published Nov. 15, 1932. Class 32.
Oriental Oil Company, Dallas, Tex. Packing for steam, ammonia, and hydraulic purposes. 91,510; renewed May 6, 1933.
Panther Oil & Grease Mfg. Co., Fort Worth, Tex. Lubricating oils. 300,689; Jan. 31; Serial No. 302,329; published Nov. 1, 1932. Class 15.
Perfection Overgaiter Co., to Perfection Overgaiter Company, Inc., Burlington, Vt., successor. Overgaiters and leggings. 87,920; renewed Aug. 13, 1932.
Plough, Inc., Memphis, Tenn. Razor blades. 300,657; Jan. 31; Serial No. 330,898; published Nov. 15, 1932. Class 23.
Polk Miller Products Corp., Richmond, Va. Preparation used as an antiseptic, germicide, etc.; liniment, an expectorant medicine, etc. 300,694; Jan. 31; Serial No. 324,191; published May 3, 1932. Class 6.
Poulides Bros., New York, N. Y. Cigarettes. 91,691; renewed May 20, 1933.
Pratt-Mallory Company. (See Warfield-Pratt-Howell Co., assignor.)
Prenzlau, Louis, Hamburg, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Tanning extracts and tanning liquors. 39,849; renewed Feb. 24, 1933.
Price, Thornton W., doing business as The Coal Carburetor Company, New Brunswick, N. J. Furnace-controlling device. 300,685; Jan. 31; Serial No. 305,825; published Nov. 4, 1930. Class 34.
Renou Chemical Corporation, The, Akron, Ohio. Dry cleaning and spot-removing preparations. 300,697; Jan. 31; Serial No. 327,604; published July 12, 1932. Class 4.
Richards, Elmer, Company, Chicago, Ill. Dry cleaning solvent. 300,650; Jan. 31; Serial No. 329,615; published Nov. 15, 1932. Class 4.
Ruberoid Co., The. (See Standard Paint Company.)
"Saazer Genossenschaftsbrauerei, Reg. Genossenschaft mit beschränkter Haftung, Saaz," Saaz, Austria-Hungary, to Anton Dreher's Export Brauerei Gesellschaft mit beschränkter Haftung Saaz, Saaz, Czechoslovakia, successor. Beer. 39,436; renewed Dec. 9, 1932.
Saltzer & Weinsier, Inc., Brooklyn, N. Y. Radiator valves. 300,655; Jan. 31; Serial No. 330,970; published Nov. 15, 1932. Class 13.
Schimmel & Co., Miltitz-Leipzig, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Product of the condensation of tannic acid with thymol. 90,256; renewed Feb. 11, 1933.

Schleicher, Carl, & Schüll, Düren, Germany, assignor to Carl Schleicher & Schull Co., New York, N. Y. Filtering paper. 89,956; renewed Jan. 21, 1933.
Scophony Limited, London, England. Unitary television transmitting and receiving equipment and parts thereof, etc. 300,696; Jan. 31; Serial No. 328,227; published Nov. 8, 1932. Class 21.
Seth Thomas Clock Company, Thomaston, Conn. Electrical motors. 300,686; Jan. 31; Serial No. 315,479; published Nov. 8, 1932. Class 21.
Sleeper Products, Inc., Wilmington, Del., and Philadelphia, Pa. Box-springs and mattresses. 300,660; Jan. 31; Serial No. 330,678; published Nov. 8, 1932. Class 32.
Société des Caves et de Producteurs réunis de Roquefort, (Aveyron), Roquefort, France, assignor to B. M. Douglas, New York, N. Y. Cheese. 40,060; renewed Apr. 7, 1933.
Solomon, Sydney E., assignor, by mesne assignments, to American Writing Ink Company, Inc., Boston, Mass. Writing ink. 300,653; Jan. 31; Serial No. 319,515; published Dec. 8, 1931. Class 11.
Spalding, A. G., & Bros., Jersey City, N. J., and New York, N. Y. Clothing. 92,007; renewed June 10, 1933.
Spalding, A. G., & Bros., Jersey City, N. J., and New York, N. Y. Sporting goods. 92,279; renewed June 24, 1933.
Spartan Saw Works, Springfield, Mass. Metal cutting saws and particularly hack-saw blades. 300,656; Jan. 31; Serial No. 330,902; published Nov. 15, 1932. Class 23.
Standard Paint Company, by change of name to The Ruberoid Co., Boundbrook, N. J., and New York, N. Y. Composition for making construction materials waterproof. 92,008; renewed June 10, 1933.
Stork Company, The. (See Sweetser, Arthur L.)
Sun Oil Company, Philadelphia, Pa. Gasoline, motor oil, transmission lubricant, etc. 300,654; Jan. 31; Serial No. 319,376; published Nov. 15, 1932. Class 15.
Sweetzer, Arthur L., Boston, Mass., to The Stork Company, East Weymouth, Mass., successor. Antiseptic waterproof sheetings, diapers and waterproof undergarments. 39,227; renewed Nov. 11, 1932.
Swift and Company, Chicago, Ill. Ice cream and sherbet. 300,680; Jan. 31; Serial No. 330,108; published Nov. 15, 1932. Class 46.
Swift Fertilizer Works, Chicago, Ill., and Atlanta, Ga., assignor to Swift and Company, Chicago, Ill. Manufactured fertilizers. 40,329; renewed May 12, 1933.
Thompson Products, Incorporated, Detroit, Mich. Joints for vehicle drag links, tie rods, and shock absorber links. 300,700; Jan. 31; Serial No. 325,698; published Nov. 15, 1932. Class 19.
Union Condensed Milk Company, assignor, by mesne assignments, to Union Condensed Milk Company, Chicago, Ill. Evaporated milk. 89,891; renewed Jan. 14, 1933.
Valentine's Meat-Juice Company, Richmond, Va. Dog food. 300,679; Jan. 31; Serial No. 330,110; published Nov. 15, 1932. Class 46.
Wallpaper Manufacturing Limited, assignor to The Wallpamur Company, Limited, London, England. Paper hangings. 89,521; renewed Dec. 17, 1932.
Wallpamur Company, The. (See Wallpaper Manufacturing Limited, assignor.)
Warfield-Pratt-Howell Co., Des Moines, Sioux City, and Cedar Rapids, assignor, by mesne assignments, to Pratt-Mallory Company, Sioux City, Iowa. Canned fruits, vegetables and soups. 39,236; renewed Nov. 11, 1932.
Warren, Northam, assignor to Northam Warren Corporation, New York, N. Y. Chemical preparations. 92,021; renewed June 10, 1933.
Weeks, D., & Co., Des Moines, Iowa. Remedy for piles. 40,401; renewed May 19, 1933.
Whitcomb Locomotive Co., The, Rochelle, Ill. Gasoline, oil, Diesel, and mechanical locomotives, and parts therefor, road building machinery. 300,708; Jan. 31. Class 23.
White Sewing Machine Corporation, Cleveland, Ohio. Sewing machines. 300,672; Jan. 31; Serial No. 330,588; published Nov. 15, 1932. Class 23.
White Star Refining Company, Detroit, Mich. Motor lubricating oil. 300,647; Jan. 31; Serial No. 329,694; published Nov. 15, 1932. Class 15.
Wichita Flour Mills Company, The. (See Norton, Willis, & Co., assignor.)
Wright, John Lloyd, Inc., Chicago, Ill. Toy-sets of building stones. 300,706; Jan. 31. Class 22.

LIST OF REGISTRANTS OF LABELS

Bloomer Bros. Company, Newark, N. Y. Design 757. For Eggs. 41,689; Jan. 31.
Bloomer Bros. Company, Newark, N. Y. Design 512. For Ice Cream. 41,690; Jan. 31.
Bloomer Bros. Company, Newark, N. Y. Design 513. For Ice Cream. 41,691; Jan. 31.
Bloomer Bros. Company, Newark, N. Y. Design 536. For Ice Cream. 41,692; Jan. 31.
Franco-American Baking Co., Los Angeles, Calif. Hi-Jinks, Double Baked. For Bread. 41,693; Jan. 31.
Hoague-Sprague Corporation, Lynn, Mass. Concentrated Power Line. For Boxes. 41,694; Jan. 31.
Kuchle, Gustav E., doing business as Okay Distributing Service, Lakewood, Ohio. Wonder Cleaner. For Cleaning Compound. 41,695; Jan. 31.
Michigan Bean Jobbers Association, Inc., Saginaw, Mich. Certified Choice Hand Picked Michigan (Navy) Pea Beans. For Beans. 41,696; Jan. 31.
National Breweries, Limited, The, Montreal, Canada. N. B. Yeast Flakes. For Yeast. 41,697; Jan. 31.
Newark Paramine & Parchment Paper Co., Newark, N. J. Attaboy Bread. For Bread. 41,698; Jan. 31.
New York Dugan Brothers, Inc., Brooklyn, N. Y. Dugans Rye Bread No Seeds. For Rye Bread. 41,699; Jan. 31.
New York Dugan Brothers, Inc., Brooklyn, N. Y. Dugans Rye Bread Seeds. For Rye Bread. 41,700; Jan. 31.
New York Dugan Brothers, Inc., Brooklyn, N. Y. Dugans Chocolate Fudge Bar. For Chocolate Fudge Bars. 41,701; Jan. 31.
Okay Distributing Service. (See Kuchle, Gustav E.)
Oshkosh Brewing Co., Oshkosh, Wis. Chief Oshkosh Special. For Cereal Beverage. 41,702; Jan. 31.
Pastene, P., & Co. Inc., Boston, Mass. Pastene. For Ripe Olives. 41,703; Jan. 31.
Riverside Products Company, Cincinnati, Ohio. Guardsman. For Malt Syrup. 41,704; Jan. 31.
Scheyer-Loveless Service, New York, N. Y. Gold Kup Bread. For Bread. 41,705; Jan. 31.
Shils, Benjamin, Philadelphia, Pa. Franklin Club. For Cigars. 41,706; Jan. 31.
Soft-Lite Lens Company, Inc., New York, N. Y. Soft-Lite Lenses. For Lenses. 41,707–8; Jan. 31.
Storey, W. H., & Co. (America) Inc., New York, N. Y. Sorry. For a Card Game. 41,709; Jan. 31.
Strickler, Ellis B., Yorkana, Pa. Five Grand. For Cigars. 41,710; Jan. 31.
Union Oil Company of California, Los Angeles, Calif. Motor Oil. For Motor Oils. 41,711; Jan. 31.
Union Oil Company of California, Los Angeles, Calif. Union Clean-Lube. For Pure Mineral Lubricant for Automobiles, Households, and Sport Kits. 41,712; Jan. 31.
Union Oil Company of California, Los Angeles, Calif. Union Re-Tone Cloth. For Cloth—Hot Wax Treated. 41,713; Jan. 31.
Zotos Corporation, New York, N. Y. No. 6035—One Quart of Zotion Q. M. For Waving Lotion. 41,714; Jan. 31.
Zotos Corporation, New York, N. Y. No. 6045—One Quart of Zotion QS. For Waving Lotion. 41,715; Jan. 31.

LIST OF REGISTRANTS OF PRINTS

Brown & Williamson Tobacco Corporation, Louisville, Ky. Bugler. For Tobacco. 14,035; Jan. 31.
Brown & Williamson Tobacco Corporation, Louisville, Ky. Catcher. For Tobacco. 14,036; Jan. 31.
General Mills, Inc., Minneapolis, Minn. Cap'n Kidd's Treasure Chest. For Flour. 14,037; Jan. 31.
Hills Bros., San Francisco, Calif. Where's the Fire?—Adform 129. For Coffee. 14,038; Jan. 31.
Keller, D. F., & Co., Chicago, Ill. K. For Beverages. 14,039; Jan. 31.
Keller, D. F., & Co., Chicago, Ill. Q. For Beverages. 14,040; Jan. 31.
Keller, D. F., & Co., Chicago, Ill. J. For Beverages. 14,041; Jan. 31.
Rochelle Asparagus Company, Rochelle, Ill. Asparagus. For Canned Asparagus. 14,042; Jan. 31.
Zotos Corporation, New York, N. Y. Zotos. For Permanent Wave Pads. 14,043; Jan. 31.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 2

Jackets and fillers. Keyes Fibre Company. 300,661; Jan. 31; Serial No. 325,403; published May 24, 1932.

CLASS 4

Abrasive materials, Granulated. Abrasive Products Company. 300,698; Jan. 31; Serial No. 327,330; published Nov. 15, 1932.
Cleaning and spot-removing preparations, Dry. Renou Chemical Corporation. 300,697; Jan. 31; Serial No. 327,604; published July 12, 1932.
Liquid cleaner for glass and vitreous surfaces. Drackett Chemical Company. 300,651; Jan. 31; Serial No. 329,258; published Nov. 15, 1932.
Oil for finishing leather. General Dyestuff Corporation. 300,669; Jan. 31; Serial No. 330,511; published Nov. 15, 1932.
Polishing powder. Gleam Products Corporation. 300,701; Jan. 31; Serial No. 329,307; published Nov. 15, 1932.
Scythe stones, whetstones, and abrasive stones, etc. Norton Pike Company. 300,662; Jan. 31; Serial No. 331,003; published Nov. 15, 1932.
Solvent, Dry cleaning. Elmer Richards Company. 300,650; Jan. 31; Serial No. 329,615; published Nov. 15, 1932.

CLASS 6

Calcium hypochlorite. Mathieson Alkali Works, Inc. 300,702; Jan. 31; Serial No. 330,854; published Nov. 15, 1932.
Chemical preparations. N. Warren. 92,021; renewed June 10, 1933.
Cosmetics. Associated Motion Picture Make-Up Artists, Inc. 300,684; Jan. 31; Serial No. 325,085; published Nov. 15, 1932.
Deodorants and preparations for preventing excessive perspiration. Odorono Company. 300,652; Jan. 31; Serial No. 322,264; published Nov. 1, 1932.
Medicine, Internal. M. R. Mendelsohn. 300,663; Jan. 31; Serial No. 330,928; published Nov. 15, 1932.
Pharmaceutical preparation. Lederle Laboratories, Inc. 300,703; Jan. 31; Serial No. 330,821; published Nov. 15, 1932.
Preparation used as an antiseptic, germicide, etc.; liniment, an expectorant medicine, etc. Polk Miller Products Corp. 300,694; Jan. 31; Serial No. 324,191; published May 3, 1932.
Product of the condensation of tannic acid with thymol. Schimmel & Co. 90,256; renewed Feb. 11, 1933.
Remedy for piles. D. Weeks & Co. 40,401; renewed May 19, 1933.
Starch and starch compounds. A. F. Lahusen. 39,841; renewed Feb. 24, 1933.
Tanning extracts and liquors. L. Prenzlau. 39,849; renewed Feb. 24, 1933.
Tonic, Reconstructive. Conadwel Laboratories, Inc. 300,704; Jan. 31; Serial No. 330,742; published Nov. 15, 1932.

CLASS 7

Cordage. Hooper Sons Mfg. Co. 39,629; renewed Jan. 13, 1933.
Cords, Twines, ropes and lines of certain named materials. Henry C. Kelley Company. 91,971; renewed June 10, 1933.

CLASS 10

Fertilizers, Manufactured. Swift Fertilizer Works. 40,329; renewed May 12, 1933.

CLASS 11

Ink, Writing. S. E. Solomon. 300,653; Jan. 31; Serial No. 319,515; published Dec. 8, 1931.

CLASS 12

Composition for making construction materials waterproof. Standard Paint Company. 92,008; renewed June 10, 1933.
Materials, Construction. Philip Carey Manufacturing Company. 90,965; renewed Apr. 8, 1933.

CLASS 13

Valves, Radiator. Saltser & Weinsier, Inc. 300,655; Jan. 31; Serial No. 330,970; published Nov. 15, 1932.

CLASS 14

Sheets, bars, and forgings, Steel. Henry Disston & Sons Incorporated. 90,100; renewed Feb. 4, 1933.
Sheets, bars, and forgings, Steel. Henry Disston & Sons Incorporated. 90,303; renewed Feb. 18, 1933.

CLASS 15

Gasoline, motor oil, transmission lubricant, etc. Sun Oil Company. 300,654; Jan. 31; Serial No. 319,376; published Nov. 15, 1932.
Oil, Motor lubricating. White Star Refining Company. 300,647; Jan. 31; Serial No. 329,694; published Nov. 15, 1932.
Oils and greases. General Refining Company. 300,648; Jan. 31; Serial No. 329,679; published Nov. 8, 1932.
Oils and greases and gasoline, Lubricating. Gaseteria Incorporated. 300,665; Jan. 31; Serial No. 330,786; published Nov. 8, 1932.
Oils, Lubricating. Alta-Vis Oil Company. 300,668; Jan. 31; Serial No. 330,613; published Nov. 8, 1932.
Oils, Lubricating. Panther Oil & Grease Mfg. Co. 300,689; Jan. 31; Serial No. 302,329; published Nov. 1, 1932.

CLASS 16

Paints, Water-repelling preservative. P. Lechler. 90,353; renewed Feb. 18, 1933.

CLASS 17

Cigarettes. Poulides Bros. 91,691; renewed May 20, 1933.

CLASS 19

Joints for vehicle drag links, tie rods, and shock absorber links. Thompson Products, Incorporated. 300,700; Jan. 31; Serial No. 325,698; published Nov. 15, 1932.

CLASS 21

Battery cells. Nungesser Carbon & Battery Co. 91,898; renewed June 8, 1933.
Electric generating, storage, and starting systems, etc., and parts therefor. Electric Auto-Lite Company. 300,687; Jan. 31; Serial No. 312,905; published Nov. 8, 1932.
Electric heating pads. Hare Mfg. Co. 300,646; Jan. 31; Serial No. 330,087; published Nov. 8, 1932.
Electric sadirons. Fitzgerald Manufacturing Co. 300,645; Jan. 31; Serial No. 330,473; published Nov. 15, 1932.
Electric stoves and ranges. Electromaster, Inc. 300,699; Jan 31; Serial No. 326,206; published Nov. 8, 1932.
Electrical fire alarm systems, police signaling systems, etc., and parts therefor. Gamewell Company. 300,644; Jan. 31; Serial No. 330,475; published Nov. 15, 1932.
Electrical motors. Seth Thomas Clock Company. 300,686; Jan. 31; Serial No. 315,479; published Nov. 8, 1932.
Generators, motors, domestic lighting plants, and magnetos. Fairbanks, Morse & Co. 300,649; Jan. 31; Serial No. 329,630; published Nov. 15, 1932.
Television transmitting and receiving equipment, and parts therefor, etc., Unitary. Scophony Limited. 300,696; Jan. 31; Serial No. 328,227; published Nov. 8, 1932.

CLASS 22

Skates, Ice. N. Johnson. 89,852; renewed Jan. 14, 1933.
Sporting goods. A. G. Spalding & Bros. 92,279; renewed June 24, 1933.
Toy-sets of building stones. John Lloyd Wright, Inc. 300,706; Jan. 31.

CLASS 23

Cutlery, machinery, and tools. Deere & Company. 91,859–61; renewed June 8, 1933.
Ice vending machines. California Consumers Company. 300,675; Jan. 31; Serial No. 329,735; published Nov. 15, 1932
Lather, foam, and emulsion forming machines. Electrofoam Corporation. 300,688; Jan. 31; Serial No. 310,915; published Nov. 15, 1932.
Lathes, Multiple-spindle automatic. National-Acme Manufacturing Company. 89,765; renewed Jan. 7, 1933.
Locomotives and parts therefor, road building machinery. Whitcomb Locomotive Co. 300,708; Jan. 31.
Machines and parts thereof and therefor, for slitting, rewinding, etc., Flexible materials. Cameron Machine Company. 300,674; Jan. 31; Serial No. 330,035; published Nov. 15, 1932.
Razor blades. Plough, Inc. 300,657; Jan. 31; Serial No. 330,898; published Nov. 15, 1932.
Razor blades, Safety. A. Kaplan. 300,671; Jan. 31; Serial No. 330,599; published Nov. 15, 1932.
Saws and particularly hacksaw blades, Metal cutting. Spartan Saw Works. 300,656; Jan. 31; Serial No. 330,902; published Nov. 15, 1932.
Sewing machines. White Sewing Machine Corporation. 300,672; Jan. 31; Serial No. 330,588; published Nov. 15, 1932.

CLASS 26

Cassettes. General Electric X-Ray Corporation. 300,673; Jan. 31; Serial No. 330,403; published Nov. 15, 1932.
Glasses, leather goggles and eye protectors, Sun and snow. Columbia Protektosite Co. 300,670; Jan. 31; Serial No. 330,619; published Nov. 15, 1932.
Photographic apparatus and supplies therefor. Friedrich Deckel G. m. b. H. 90,299; renewed Feb. 18, 1933.

CLASS 28

Bracelets. Hadley Company. 300,664; Jan. 31; Serial No. 330,815; published Nov. 8, 1932.
Rings and mountings therefor, Finger. Benjamin & Edward J. Gross Co. 300,667; Jan. 31; Serial No. 330,702; published Nov. 8, 1932.

CLASS 32

Box-springs and mattresses. Sleeper Products, Inc. 300,660; Jan. 31; Serial No. 330,678; published Nov. 8, 1932.
Chairs, Folding. Samuel Lewis Co. Inc. 300,659; Jan. 31; Serial No. 328,770; published Nov. 8, 1932.
Stands and book holders, Combination telephone. Oneida-craft, Inc. 300,658; Jan. 31; Serial No. 330,827; published Nov. 15, 1932.

CLASS 34

Furnace controlling device. T. W. Price. 300,685; Jan. 31; Serial No. 305,825; published Nov. 4, 1930.

CLASS 35

Packing for steam, ammonia, and hydraulic purposes. Oriental Oil Company. 91,510; renewed May 6, 1933.

CLASS 36

Clarinets, flutes, piccolos, oboes, bassoons, Soprano, bass and alto. H. Bettoney. 300,666; Jan. 31; Serial No. 330,677; published Nov. 8, 1932.
Pianos. John Church Company. 89,925; renewed Jan. 21, 1933.

CLASS 37

Paper, Filtering. Carl Schleicher & Schüll. 89,956; renewed Jan. 21, 1933.
Paper hangings. Wallpaper Manufacturing Limited. 89,521; renewed Dec. 17, 1932.
Tags, Identification. W. L. Deming. 89,347; renewed Dec. 10, 1932.

CLASS 38

Books and printed publications. The Gideons. 89,839; renewed Jan. 14, 1933.

CLASS 39

Clothing. A. G. Spalding & Bros. 92,007; renewed June 10, 1933.
Corselettes, girdles, corsets, and brassières. N. Byers. 300,707; Jan. 31.
Overgaiters and leggings. Perfection Overgaiter Co. 89,920; renewed Aug. 13, 1932.
Sheetings, diapers and waterproof undergarments, Antiseptic waterproof. A. L. Sweetser. 89,227; renewed Nov. 11, 1932.
Underwear. Joel Baily Davis Company. 89,528; renewed Dec. 24, 1932.

CLASS 42

Nets and veilings. John Heathcoat & Co. 89,747; renewed Jan. 7, 1933.
Ribbons, Velvet. Colcombet Fois & Co. 88,734–5; renewed Oct. 22, 1932.

CLASS 44

Electric blankets and heating pads. Beautybath, Inc. 300,692; Jan. 31; Serial No. 324,869; published Nov. 15, 1932.
Glasses, Drop. Gebrüder Bandekow. 90,154; renewed Feb. 11, 1933.
Hair waving pads. L. D. Clinkenbeard. 300,695; Jan. 31; Serial No. 328,753; published Nov. 15, 1932.

CLASS 46

Candy. Mason, Au & Magenheimer Manufacturing Company. 89,680; renewed Dec. 31, 1932.
Canned fruits, vegetables, and soups. Warfield-Pratt-Howell Co. 89,236; renewed Nov. 11, 1932.
Cheese. Société des Caves et des Producteurs reunis de Roquefort, (Aveyron). 40,060; renewed Apr. 7, 1933.
Chocolate, Milk. Walter Baker & Company. 300,690; Jan. 31; Serial No. 256,155; published Jan. 3, 1928.
Coffee. H. L. Caplan & Co. Inc. 300,676; Jan. 31; Serial No. 330,569; published Nov. 15, 1932.
Flour, Wheat. New Prague Flouring Mill Company. 91,507; renewed May 6, 1933.
Flour, Wheat. Willis Norton & Co. 91,367; renewed Apr. 29, 1933.
Food, Dog. Valentine's Meat-Juice Company. 300,679; Jan. 31; Serial No. 330,110; published Nov. 15, 1932.
Food product. B. Fleg. 300,693; Jan. 31; Serial No. 324,509; published Nov. 15, 1932.
Fruits, Fresh. California Fruit Exchange. 300,681; Jan. 31; Serial No. 330,009; published Nov. 15, 1932.
Ice cream and sherbet. Swift and Company. 300,680; Jan. 31; Serial No. 330,108; published Nov. 15, 1932.
Jelly, Fruit. Corn Products Refining Company. 90,171; renewed Feb. 11, 1933.
Lettuce, Fresh. O. O. Eaton. 300,683; Jan. 31; Serial No. 325,091; published Nov. 15, 1932.
Meat and meat products. E. Kahn's Sons Company. 300,705; Jan. 31; Serial No. 330,659; published Nov. 15, 1932.
Milk, Condensed skimmed. Foster Packing Company. 90,008; renewed Jan. 28, 1933.
Milk, Evaporated. Union Condensed Milk Company. 89,891; renewed Jan. 14, 1933.
Shoulders, dried beef, sausage, etc. H. H. Meyer Packing Company. 300,691; Jan. 31; Serial No. 316,605; published Nov. 15, 1932.
Syrup. Oelerich & Berry Company. 300,678; Jan. 31; Serial No. 330,207; published Nov. 15, 1932.
Syrup, Chocolate malt. Kessler Foods. 300,682; Jan. 31; Serial No. 329,350; published Nov. 15, 1932.
Vegetables, Fresh. Leef, Summer & Co. 300,677; Jan. 31; Serial No. 330,229; published Nov. 15, 1932.

CLASS 48

Ale. C. H. Evans & Sons. 47,951; renewed Nov. 28, 1925.
Beer. "Saazer Genossenschaftsbrauerei, Reg. Genossenschaft. mit beschränkter Haftung, Saaz"; 39,436; renewed Dec. 9, 1932.
Whisky. J. Buchanan. 40,166; renewed Apr. 21, 1933.
Whisky, Scotch. Hill, Thomson & Company. 39,438; renewed Dec. 9, 1932.

LIST OF LABELS

Attaboy Bread. For Bread. Newark Paraffine & Parchment Paper Co. 41,698; Jan. 31.
Certified Choice Hand Picked Michigan (Navy) Pea Beans. For Beans. Michigan Bean Jobbers Association, Inc. 41,696; Jan. 31.
Chief Oshkosh Special. For Cereal Beverage. Oshkosh Brewing Co. 41,702; Jan. 31.
Concentrated Power Line. For Boxes. Hoague-Sprague Corporation. 41,694; Jan. 31.
Design 512. For Ice Cream. Bloomer Bros. Company. 41,690; Jan. 31.
Design 513. For Ice Cream. Bloomer Bros. Company. 41,691; Jan. 31.
Design 536. For Ice Cream. Bloomer Bros. Company. 41,692; Jan. 31.
Design 757. For Eggs. Bloomer Bros. Company. 41,689; Jan. 31.
Dugans Chocolate Fudge Bar. For Chocolate Fudge Bars. New York Dugan Brothers, Inc. 41,701; Jan. 31.
Dugans Rye Bread No Seeds. For Rye Bread. New York Dugan Brothers, Inc. 41,699; Jan. 31.
Dugans Rye Bread Seeds. For Rye Bread. New York Dugan Brothers, Inc. 41,700; Jan. 31.
Five Grand. For Cigars. E. B. Strickler. 41,710; Jan. 31.
Franklin Club. For Cigars. B. Shils. 41,706; Jan. 31.
Gold Kup Bread. For Bread. Scheyer-Loveless Service. 41,705; Jan. 31.
Guardsman. For Malt Syrup. Riverside Products Company. 41,704; Jan. 31.
Hi-Jinks, Double Baked. For Bread. Franco-American Baking Co. 41,693; Jan. 31.
Motor Oil. For Motor Oils. Union Oil Company of California. 41,711; Jan. 31.
N. B. Yeast Flakes. For Yeast. National Breweries, Limited. 41,697; Jan. 31.
No. 6035—One Quart of Zotion Q. M. For Waving Lotion. Zotos Corporation. 41,714; Jan. 31.
No. 6045—One Quart of Zotion QS. For Waving Lotion. Zotos Corporation. 41,715; Jan. 31.
Pastene. For Ripe Olives. P. Pastene & Co. Inc. 41,708; Jan. 31.
Soft-Lite Lenses. For Lenses. Soft-Lite Lens Company. 41,707–8; Jan. 31.
Sorry. For a Card Game. W. H. Storey & Co. (America) Inc. 41,709; Jan. 31.
Union Clean-Lube. For Pure Mineral Lubricant for Automobiles, Households and Sport Kits. Union Oil Company of California. 41,712; Jan. 31.
Union Re-Tone Cloth. For Cloth—Hot Wax Treated. Union Oil Company of California. 41,713; Jan. 31.
Wonder Cleaner. For Cleaning Compound. G. E. Kuehle. 41,695; Jan. 31.

LIST OF PRINTS

Asparagus. For Canned Asparagus. Rochelle Asparagus Company. 14,042; Jan. 31.
Bugler. For Tobacco. Brown & Williamson Tobacco Corporation. 14,035; Jan. 31.
Cap'n Kidd's Treasure Chest. For Flour. General Mills, Inc. 14,037; Jan. 31.
Catcher. For Tobacco. Brown & Williamson Tobacco Corporation. 14,036; Jan. 31.
J. For Beverages. D. F. Keller & Co. 14,041; Jan. 31.
K. For Beverages. D. F. Keller & Co. 14,039; Jan. 31.
Q. For Beverages. D. F. Keller & Co. 14,040; Jan. 31.
Where's the Fire?—Adform 129. For Coffee. Hills Bros. 14,038; Jan. 31.
Zotos. For Permanent Wave Pads. Zotos Corporation. 14,043; Jan. 31.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 31ST DAY OF JANUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbott Laboratories. (See Raisiss, G. W., and Kremens, assignors.)
Agte, Curt, Berlin-Lichterfelde-Ost, and K. Moers, Berlin-Charlottenburg, assignors to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Hard alloys. 1,895,959; Jan. 31.
Ahlbin, John. (See Kellogg, H. M., and Ahlbin.)
Ahrens, Henry W., South Amana, Iowa. Feeder for little pigs. 1,895,435; Jan. 31.
Aikman, Everett M., Indianapolis, Ind. Regulating dropper. 1,895,436; Jan. 31.
Air Way Electric Appliance Corporation. (See Riebel, Frederick, Jr., assignor.)
Albany Corrugated Container Corp. (See Nuckols, Claude C., assignor.)
Albright, Wilhelm, Voorburg, Netherlands, assignor to Radio Corporation of America. Degassing cathodes of electron discharge tubes. 1,895,437; Jan. 31.
Allen, Ivan, Atlanta, Ga. Folder. 1,895,960; Jan. 31.
Allen, W. D., Manufacturing Company. (See Meng, Harry E., assignor.)
Alther, Joseph G., assignor to Universal Oil Products Company, Chicago, Ill. Cracking hydrocarbon oils. 1,895,873; Jan. 31.
Aluminum Company of America. (See Horner, G. W., and Sharp, assignors.)
Amaru, Orazio, Astoria, N. Y. Resurfacing tool for butcher's blocks. 1,895,961; Jan. 31.
American Air Filter Company, Inc. (See Fedder, John H., assignor.)
American Air Filter Company, Inc. (See Gagen, Charles H., assignor.)
American Air Filter Company. (See Preble, James J., assignor.)
American Air Filter Company, Inc. (See Williams, Charles W., assignor.)
American Blower Corporation. (See Cassell, William L., assignor.)
American Brass Company, The. (See Coe, James R., assignor.)
American Cable Company. (See Rosenberg, Ralph H., assignor.)
American Engineering Company. (See Johnson, Oscar A., assignor.)
American Fabrics Company. (See Philips, Hans A., assignor.)
American Multigraph Co. (See Phillips, Reginald G. A., assignor.)
American Potash & Chemical Corporation. (See Gales, W. A., and Ritchie, assignors.)
American Safety Device Company. (See Bates, Sidney E., assignor.)
American Sheet and Tin Plate Company. (See Jenks, S. M., and Sutherland, assignors.)
American Telephone and Telegraph Company. (See Deardorff, Ralph W., assignor.)
American Telephone and Telegraph Company. (See Weaver, Allan, assignor.)
Amundson, Charles J., Osseo, Wis. Violin gluing form. 1,895,743; Jan. 31.
Anciens Etablissements R. Cornely & Cie., Société Anonyme. (See Jalbert, Georges, assignor.)
Anderson, Elmer B. (See Rueckart, W. G., and Anderson.)
Andrews, Champe S., North Chattanooga, Tenn. Hinged container. 1,895,778; Jan. 31.
Angla, Bernard M. R. (See Gault, H., and Angla.)
Anglemyer, Carl M., assignor to The Edgemont Machine Company, Dayton, Ohio. Friction clutch. 1,895,600; Jan. 31.
Anschütz-Kaempfe, Hermann, Munich, Germany, assignor to Nederlandsche Technische Handel Maatschappij, "Giro", The Hague, Netherlands. Gyroscopic instrument. 1,895,628; Jan. 31.
Anthes, Eugen. (See Pier, M., Anthes, and Winkler.)
Apple, Vincent G. (See Bendix, V., and Apple.)
Appleton Wire Works, Inc. (See Buchanan, William E., assignor.)
Arbuckle, Samuel F., Highland Park, assignor to Monogram Lens Corporation, Detroit, Mich. Beam adjusting means. 1,895,906; Jan. 31.
Armstrong, Frank H., assignor to Safety Mining Company, Chicago, Ill. Blasting cartridge charged with a compressed gas. 1,895,568; Jan. 31.
Arnold, Max, New York, N. Y. Satchel. 1,895,744; Jan. 31.
Arvey Corporation. (See Blum, Sidney J., assignor.)
Asenbaum, Ernest, assignor to "Frecaldo" Automaten-Handelsgesellschaft Richter & Co., Vienna, Austria. Automatic selling machine. 1,895,745; Jan. 31.
Atwater Kent Manufacturing Company. (See Macnabb, Vernon C., assignor.)
Atwood Machine Company, The. (See Rowe, Irving R., assignor.)
Aubert, Pierre F. M., and A. J. P. and H. A. M. Duval, Paris, France, assignors, by mesne assignments, to The Nitralloy Corporation. Hardening metal articles by nitrogenization. 1,895,439; Jan. 31.
Aubert, Pierre F. M., Boulogne-sur-Seine, A. J. P. Duval, Paris, and H. A. M. Duval, Neuilly-sur-Seine, France, assignors to Nitralloy Corporation, The. Hardening metal articles by nitriding. 1,895,847; Jan. 31.
Aurien, George, and P. F. Gutmann, St. Louis, Mo., assignors to Mississippi Glass Company, New York, N. Y. Method and apparatus for cross cutting wire glass. 1,895,779; Jan. 31.
Autogiro Company of America. (See Pitcairn, H. F., and Larsen, assignors.)
Bäckström, Sven, Helsingfors, Finland. Buffer. 1,895,532; Jan. 31.
Bagley, Glen D., Great Neck, N. Y., assignor to Electro Metallurgical Company, Composite metal article and making same. 1,895,533; Jan. 31.
Baker, Stewart E., South Pasadena, Calif. Pastry mixer. 1,895,833; Jan. 31.
Barab, Jacob, assignor to Hercules Powder Company, Wilmington, Del. Blasting cap. 1,895,438; Jan. 31.
Barberou, Marius J-B., Neuilly-sur-Seine, France. Driving arrangement for aircraft propellers. 1,895,874; Jan. 31.
Barber Asphalt Company, The. (See Smith, Preston R., assignor.)
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Web feeding mechanism. 1,895,842; Jan. 31.
Barclay, Earle H. (See Patrick, W. A., and Barclay.)
Barney, Freeman, assignor to Challenge Machinery Company, Grand Haven, Mich. Paper cutter. 1,895,440; Jan. 31.
Barrett Company, The. (See Miller, Stuart P., assignor.)
Barrett, Joseph M., Cleveland, Ohio. Curtain fixture. 1,895,780; Jan. 31.
Basile, Joseph. (See Frank, B. M., and Basile.)
Bassick Company, The. (See Herold, Walter F., assignor.)
Bassick Company, The. (See Moore, Raymond G., assignor.)
Bateman, Fred H., Grenloch, N. J., and I. Trolley, York, assignors to The Fred H. Bateman Company, Philadelphia, Pa. Planting potatoes. 1,895,962; Jan. 31.
Bateman, Fred H., Company. (See Bateman, F. H., and Trolley, assignors.)
Bateman, Louis. (See Mathers, F. C., and Bateman.)
Bates, Henry W., Jackson Township, Porter County, assignor of one-half to George Haga, Marshall, Ind. Antitheft device for fluid containers. 1,895,968; Jan. 31.
Bates, Sidney E., Chicago, Ill., assignor to American Safety Device Company, New York, N. Y. Coupling device. 1,895,746; Jan. 31.
Bath, John. (See Walker, Ernest A., assignor.)
Baum, Frank G., San Francisco, Calif. High voltage electrical switch. 1,895,907; Jan. 31.
Beall, Orville H., and O. De Cardy, Chicago, Ill. Paper weight or similar article. Des. 89,116; Jan. 31.
Beeman, Andrew A., Boyne City, Mich. Hoe. 1,895,875; Jan. 31.
Beldimano, Alexander, Berlin-Charlottenburg, Germany. Pressure accumulator for gases and liquids. 1,895,747; Jan. 31.
Bell Telephone Laboratories, Incorporated. (See Bostwick, Lee G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gent, Edgar W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Heising, Raymond A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Hunt Franklin L., assignor.)
Bell Telephone Laboratories, Incorporated. (See Kuntz, Frank A., assignor.)
Bell Telephone Laboratories, Incorporated. See Van Inwagen, Charles L., jr., assignor.)
Bell, William D., Columbus, assignor to Surface Combustion Corporation, Toledo, Ohio. Gas fired revolving heater. 1,895 564; Jan. 31.
Bell, William D., Columbus, assignor, by mesne assignments, to Surface Combustion Corporation, Toledo, Ohio. Rotating heat radiator. 1,895,565; Jan. 31.

Bell, William D., Columbus, assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio. Lubricant delivery apparatus. 1,896,036; Jan. 31.

Bellowons, William, Mays Landing, N. J. Shipping basket cover. 1,859,964; Jan. 31.

Bemis, Kenneth E., Glendale, Calif. Building structure. Des. 89,117; Jan. 31.

Bendix Brake Company. (See Bendix, V., and Apple, assignors.)

Bendix Brake Company. (See Dodge, Adiel Y., assignor.)

Bendix Brake Company. (See Hirschler, Horace L., assignor.)

Bendix, Vincent, Chicago, Ill., and V. G. Apple, Dayton, Ohio, assignors to Bendix Brake Company, South Bend, Ind. Magnetic automotive brake. 1,895,965; Jan. 31.

Bennett, Irving T., Brooklyn, and F. C. Reynolds, New York, N. Y., assignors, by mesne assignments, to Metropolitan Engineering Company. Heating and cooling system. 1,895,876; Jan. 31.

Berenstein, Frank, assignor to Panco Rubber Company, Chelsea, Mass. Shoe heel. Des. 89,118; Jan. 31.

Berlinger, Joseph, Company. (See Solomon, Sophia, assignor.)

Berlinger, Joseph, Company. (See Van der Does, Jean, assignor.)

Bernfus, Erich, Vienna, Austria. Forming the top layer of packed fruit. 1,895,877; Jan. 31.

Bertell, Paul, and W. La Hodny, assignors to Standard Mirror Company, Inc., Buffalo, N. Y. Rear view mirror assembly. 1,895,566; Jan. 31.

Best Foods, Inc. (See Schaub, Jacob, assignor.)

Beuthner, Kurt, Krefeld, Germany. Purification of gases and apparatus therefor. 1,895,601; Jan. 31.

Birtwisle, William, Hartford, Northwich, England. Motor vehicle lamp. 1,895,748; Jan. 31.

Bishop, Peter S., Pasadena, Calif. Violin holder. 1,895,749; Jan. 31.

Blair, James C., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Surfacing sheet glass. 1,895,908; Jan. 31.

Blaker, Ernest, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Method of and apparatus for loosening and removing articles from molds. 1,895,909; Jan. 31.

Blood, Harold L., Hinsdale, Ill. Thermostatic control for internal combustion engines. 1,895,534; Jan. 31.

Bluemel, Gustave, assignor to Drying Systems, Inc., Chicago, Ill. Air heater. 1,895,966; Jan. 31.

Blum, Sidney J., assignor to Arvey Corporation, Detroit, Mich. Lining panel for vehicle bodies. 1,895,567; Jan. 31.

Boeye, Paul F., St. Paul, Minn., assignor to Waldorf Paper Products Company. Composite corrugated and solid fiber board. 1,896,037; Jan. 31.

Bone, Herbert L., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway braking apparatus. 1,896,050; Jan. 31.

Borden Company, The. (See Lockwood, Edwin J., assignor.)

Boss, Arthur E., Fairlawn, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber composition. 1,895,910; Jan. 31.

Bosson, George C., jr., Cambridge, Mass. Combined tent and hood-garment. 1,895,911; Jan. 31.

Bostwick, Lee G., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound translating device. 1,895,441; Jan. 31.

Bowen, Charles W., Augusta, Ga. Burglar and fire alarm. 1,895,967; Jan. 31.

Bowers, Edward W., Medina, N. Y. Mail box. 1,895,912; Jan. 31.

Bowker, William R., Coronado, Calif. Sound control and transmission system. 1,895,442; Jan. 31.

Bowman, Lee M., Los Angeles, Calif., assignor to Dawn Motors, Ltd. Connecting rod construction for radial engines. 1,895,700; Jan. 31.

Boyd, Fred S., assignor of one-third to H. J. Ward, Laurens, and one-third to C. C. Rush, Greenville, S. C. Machine for cutting and shearing float or bridge threads. 1,895,843; Jan. 31.

Bradley, Linn, Montclair, N. J., and E. P. McKeefe, Plattsburgh, assignors to Bradley-McKeefe Corporation, New York, N. Y. Manufacture of pulp, etc. 1,896,038; Jan. 31.

Bradley-McKeefe Corporation. (See Bradley, L., and McKeefe, assignors.)

Brecht, George F., assignor to Weston Paper and Manufacturing Co., Dayton, Ohio. Display rack on stand. 1,895,535; Jan. 31.

Bright Star Battery Company, The. (See Buchholz, Max E., assignor.)

Britton, Frederick C., sr., Petersburg, Ind. Flue opening stop or closer. 1,895,536; Jan. 31.

Broadmeyer, Albert assignor to W. O. Hickok Manufacturing Company, Harrisburg, Pa. Pen operating mechanism for ruling machines. 1,895,537; Jan. 31.

Brockman, Arthur, Woodridge, N. J., assignor to Eberhard Faber Pencil Co., Brooklyn, N. Y. Carton. 1,895,443; Jan. 31.

Brodsky, Michel, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,119; Jan. 31.

Brooksbank, Harry P. (See Martin, M. J., and Brooksbank.)

Brown Instrument Company, The. (See Brown, Richard P., assignor.)

Brown Instrument Company. (See Pearce, Walter H., assignor.)

Brown, Richard P., assignor to The Brown Instrument Company, Philadelphia, Pa. Oil heater control. 1,895,701; Jan. 31.

Brown, Theophilus, assignor to Deere & Company, Moline, Ill. Cultivator. 1,895,648; Jan. 31.

Brown, William L., Philadelphia, Pa. Fender iron. 1,895,647; Jan. 31.

Brown, William R., Chicago, Ill. Diaphragm compressor. 1,895,602; Jan. 31.

Brown, Wolstan C., New York, N. Y. Vehicle. 1,895,750; Jan. 31.

Brownsdon, Henry W., Moseley, Birmingham, W. R. Nimmo, Bushey Heath, and G. P. Pollitt, Millbank, London, England, assignors to Imperial Chemical Industries Limited. Shot gun cartridge. 1,896,051; Jan. 31.

Brubaker, Jacob E., assignor to The Hubley Manufacturing Co., Lancaster, Pa. Toy vehicle. 1,895,968; Jan. 31.

Bruening, Francis J. (See Weed, Fred E., assignor.)

Brundage, James W., assignor to The Summit Mold & Machine Company, Akron, Ohio. Molding press. 1,895,603; Jan. 31.

Brundage, James W., assignor to The Summit Mold & Machine Company, Akron, Ohio. Molding press. 1,895,604; Jan. 31.

Brundage, Seth W. (See Miller, Charles F., assignor.)

Buchanan, William E., assignor to Appleton Wire Works, Inc., Appleton, Wis. Producing seams in wire fabrics. 1,895,605; Jan. 31.

Buchholz, Max E., assignor to The Bright Star Battery Company, Hoboken, N. J. Vest pocket type flash light. 1,895,913; Jan. 31.

Büchi, Alfred, Winterthur, Switzerland. Internal combustion engine. 1,895,538; Jan. 31.

Bülow, August, Stettin, Germany. Steering gears for motor vehicles. 1,895,751; Jan. 31.

Bunce, Earl H., and H. M. Haslam, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y. Metallurgical furnace. 1,895,878; Jan. 31.

Bunting Brass and Bronze Company, The. (See Yager, George F., assignor.)

Burley, Emmett, Zanesville, Ohio. Bird bath. 1,895,702; Jan. 31.

Burns, Edward J., Fall River, assignor to S. B. Condit, Boston, Mass. Fuse plug or the like. 1,895,914; Jan. 31.

Burns, James E., Bridgeport, Conn, assignor to Remington Arms Company. Priming mixture. 1,895,752; Jan. 31.

Burns, Joseph F., Los Angeles, Calif. Device for computing spherical triangles. 1,895,606; Jan. 31.

Burton, Harry H., Webster, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread holder for weft replenishing looms. 1,895,781; Jan. 31.

Burvenick, Benjamin, assignor to Lalance & Grosjean Manufacturing Company, Woodhaven, N. Y. Nipple attaching means and method. 1,896,028 Jan. 31.

Bustanoby, Damaris, Teaneck, N. J. Combined serving tray and game board. Des. 89,120; Jan. 31.

Butts, George W., Wynnewood, Pa., assignor to Pennsylvania Railroad Company. Lifting grab. 1,895,649; Jan. 31.

Buxton, Warner R., Longmeadow, Mass. Pass case. 1,895,782; Jan. 31.

Byrnes, Clarence P., trustee. (See James, Joseph H., assignor.)

Caldwell, Charles H., Brockton, assignor to Geo. E. Keith Company, Campello, Mass. Shoe. Des. 89,121; Jan. 31.

Calhoun, Willis A., Mascot, Tenn. Flexible belt fastener. 1,895,969; Jan. 31.

Callaghan, George H., et al. (See Fricker, Carl J., assignor.)

Camel Company. (See Madland, Gabriel, assignor.)

Cameron Machine Company. (See Johnstone, Robert McC., assignor.)

Campbell, Rodney B. (See Herbsman, A. M., and Campbell.)

Camps, Harold E. J., London, England. Hull structure of ships and the like. 1,895,879; Jan. 31.

Canepa, Christopher, Bronx, N. Y. Clock case. Des. 89,122; Jan. 31.

Capshaw, Clyde C., Dallas, Tex. Windshield attachment. 1,895,970; Jan. 31.

Carlson, George, Bridgeport, Conn., assignor to General Electric Company. Outlet box. 1,895,915; Jan. 31.

Carmean, James H., and R. M. Curphey, Kansas City, Mo. Snap mechanism. 1,895,650; Jan. 31.

Carpenter, E. W., Manufacturing Company, The. (See Kellogg, H. M., and Ahlbin, assignors.)

Carpenter, Howard H., Pasadena, Calif. Refrigerating device. 1,895,971; Jan. 31.

Carr, Moses F., Lexington, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Snap fastener. 1,896,044; Jan. 31.

Cartier, Societe Anonyme. (See Lenfant, Louis, assignor.)

Case, Francis M., Cleveland, Ohio, assignor to The Hoover Company. Suction cleaner. 1,895,507; Jan. 31.

Casey, Edward R., Brockton, Mass. Shoe. Des. 89,123; Jan. 31.

Cassell, William L., Kansas City, Mo., assignor to American Blower Corporation, Detroit, Mich. Heating, ventilating, and air conditioning. 1,895,444; Jan. 31.

Celanese Corporation of America. (See Dreyfus, C., and Whitehead, assignors.)

Challenge Machinery Company. (See Barney, Freeman, assignor.)

Charplot, John B., jr., Houston, Tex. Tong. 1,895,445; Jan. 31.

Chassey, Lesime C., New Bedford, Mass. Bleeder valve lock and release. 1,895,783; Jan. 31.

Chauvin, André A., Paris, France. Index card. 1,895,784; Jan. 31.

Chicago Pneumatic Tool Company. (See Neil, Gustave M., assignor.)

Childs, Lorene W. (See Childs, Wesley M., assignor.)

Childs, Wesley M., assignor to L. W. Childs, Eldorado, Kans. Binder. 1,895,972; Jan. 31.

Christopher, Edward F., and F. L. De Beukelaer, assignors to Swift & Company, Chicago, Ill. Glue product and preparing the same. 1,895,446; Jan. 31.

Christopher, Edward F., and F. L. De Beukelaer, assignors to Swift & Company, Chicago, Ill. Glue preparation and product. 1,895,447; Jan. 31.

Chrysler Corporation. (See Humphrey, C. L., and Lee, assignors.)

Cincinnati Ball Crank Company, The. (See Bell, William D., assignor.)

Clark Equipment Company. (See Spatta, George, assignor.)

Clark Tractor Company. (See Contois, Ely J., assignor.)

Claudel, Charles H., assignor to Societe Anonyme la Cooperation Agricole & Industrielle, Veuxhaulles, France. Carburetor. 1,895,785; Jan. 31.

Claussen, Jurgen. (See Rostock, O., and Claussen.)

Clem, Elmer, Baytown, Tex. Spring wheel. 1,895,539; Jan. 31.

Cobb, Arthur T., assignor to Exeter Brass Works, Exeter, N. H. Flush valve. 1,895,786; Jan. 31.

Coe, James R., assignor to The American Brass Company, Waterbury, Conn. Rolling mill. 1,895,607; Jan. 31.

Cofrin, Austin E., Green Bay, Wis. Folded napkin. 1,895,973; Jan. 31.

Cohen, Samuel, Brooklyn, assignor to General Instrument Corporation, New York, N. Y. Variable condenser. 1,895,540; Jan. 31.

Cohen, William, assignor to L. & E. Stirn, Inc., New York, N. Y. Textile fabric or similar article. Des. 89,124; Jan. 31.

Cohen, William, assignor to L. & E. Stirn, Inc., New York, N. Y. Textile fabric or similar article. Des. 89,125; Jan. 31.

Cohen, William, assignor to L. & E. Stirn, Inc., New York, N. Y. Textile fabric or similar article. Des. 89,148; Jan. 31.

Colby, Allan B., assignor of one-half to E. E. Weller, Providence, R. I. Tassel. 1,896,060; Jan. 31.

Colman, Howard D. (See Cummings, Preston W., assignor.)

Columbus Auto Parts Company, The. (See Flumerfelt, William A., assignor.)

Commerce Guardian Trust & Savings Bank, The, trustee. (See Replogle, Daniel B., assignor.)

Condit Electrical Manufacturing Corporation. (See O'Keeffe, George W., assignor.)

Condit Electrical Manufacturing Corporation. (See Pinkham, Henry P., assignor.)

Condit, Sears B. (See Burns, Edward J., assignor.)

Cone, Carroll, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Method and apparatus for forming sheet glass. 1,895,916; Jan. 31.

Conley, Hugh A., Lynwood, Calif., assignor to Conley Plastering Machine Company, Incorporated, Bisbee, Ariz. Plastering machine. 1,895,608; Jan. 31.

Conley Plastering Machine Company. (See Conley, Hugh A., assignor.)

Connolly, Gerald C. (See Miller, E. B., and Connolly.)

Contois, Ely J., Battle Creek, assignor to Clark Tructractor Company, Buchanan, Mich. Trailer. 1,895,844; Jan. 31.

Copeland Products, Inc. (See Muffly, Glenn, assignor.)

Cornwell, Arthur L., Wellsville, N. Y. Wheel puller. 1,895,448; Jan. 31.

Cory, Chas., Corporation. (See Shoradt, Frederick W. B., assignor.)

Cottrell, C. B., & Sons Company. (See Barber, Howard M., assignor.)

Cowles, George P., assignor to Waterbury Clock Company, Waterbury, Conn. Electrically-wound clock. 1,895,787; Jan. 31.

Coyle, Joseph L., London, Ontario, Canada, assignor to Coyle Safety Carton Company, Chicago, Ill. Egg carton. 1,895,974; Jan. 31.

Coyle Safety Carton Company. (See Coyle, Joseph L., assignor.)

Cracker Jack Co. (See Fay, Joseph W., assignor.)

Cranwill, Thomas J., Olathe, Kans. Silent alarm clock. 1,895,703; Jan. 31.

Crompton & Knowles Loom Works. (See Burton, Harry H., assignor.)

Crompton & Knowles Loom Works. (See Holmes, Elbridge R., assignor.)

Crompton & Knowles Loom Works. (See Lindegren, Carl J., assignor.)

Crompton & Knowles Loom Works. (See Vose, Lewis S., assignor.)

Cronenberg, Abbey, assignor of one-half to N. Phillips, Toronto, Ontario, Canada. Folding couch. 1,895,541; Jan. 31.

Crosby, Frank F., Hughesville, Pa. License holder. 1,895,704; Jan. 31.

Crowley, John C., Cleveland Heights, assignor to The Dill Manufacturing Company, Cleveland, Ohio. Valve mechanism. 1,895,449; Jan. 31.

Crowley, John C., Cleveland Heights, assignor to The Dill Manufacturing Company, Cleveland, Ohio. Valve stem. 1,895,450; Jan. 31.

Cummings, Preston W., assignor to H. D. Colman, Rockford, Ill. Power operator. 1,895,880; Jan. 31.

Curphey, Ralph M. (See Carmean, J. H., and Curphey.)

Curtin, Leo P., Cranbury, N. J., and B. L. Kline, Brooklyn, assignors to The Western Union Telegraph Company, New York, N. Y. Rust proofing iron and steel articles. 1,895,568; Jan. 31.

Curtin, Leo P., Cranbury, N. J., and B. L. Kline, Brooklyn, assignors to The Western Union Telegraph Company, New York, N. Y. Production of protective coatings on iron and steel articles. 1,895,569; Jan. 31.

Daniels, Lloyd C., Buffalo, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Making anthraquinones. 1,895,788; Jan. 31.

Daugherty, Fount F., assignor of one-third to W. H. Scheer, St. Louis, Mo. Coin sorting machine. 1,895,975; Jan. 31.

Davey, Mason, Mapua, Nelson, New Zealand. Means for the support, protection and training of fruit and other trees. 1,895,753; Jan. 31.

Davis, Goodman R., jr., New York, N. Y. Flower holder. 1,895,609; Jan. 31.

Dawn Motors, Ltd. (See Bowman, Lee M., assignor.)

Dawson, George H., Cambridge, Mass., E. A. Dunn, Plainfield, N. J., and A. M. Nickerson, jr., Wollaston, assignors to Service Bureau, Inc., Cambridge, Mass. Index. 1,895,651; Jan. 31.

Day, Albert R. (See Regan, G. P., and Day.)

Dayton Malleable Iron Company, The. (See Langenheim, Albert H., assignor.)

Deardorff, Ralph W., Seattle, Wash., assignor to American Telephone and Telegraph Company. Pilot channel indicating system. 1,895,542; Jan. 31.

De Beukelaer, Frank L. (See Christopher, E. F., and De Beukelaer.)

Debski, Frank, Brooklyn, N. Y. Chaise lounge. Des. 89,126; Jan. 31.

De Cardy, Otto. (See Beall, O. H., and De Cardy.)

Deere & Company. (See Brown, Theophilus, assignor.)

Del'Homme, Daniel L., Oklahoma City, Okla., assignor to Reed Roller Bit Company, Houston, Tex. Drill. 1,895,610; Jan. 31.

Dellinger, Martin C. (See Kulp, H. W., and Dellinger.)

DeLuca, Pasquale, Pittston, Pa. Support for accordions. 1,895,705; Jan. 31.

Dewey and Almy Chemical Company. (See Neiley, Stephen B., assignor.)

D'Halloy, Audoin, Paris, France, assignor to International Safety Lock Nut Corporation, New York, N. Y. Screw stud locking device. 1,895,845; Jan. 31.

Diebold Safe & Lock Company. (See Miller, William C., assignor.)

Dill Manufacturing Company, The. (See Crowley, John C., assignor.)

Doak, John H., Seaside, Oreg. Building blocks. 1,895,611; Jan. 31.

Dodge, Adiel Y., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,895,917; Jan. 31.

Dodge, Adiel Y., South Bend, Ind. Electric switch. 1,895,918; Jan. 31.

Doering, Frank F. W., Los Angeles, Calif., assignor of one-half to W. R. Hearn. Manifold attachment for internal combustion engines. 1,895,789; Jan. 31.

Donahue, Joseph F., Providence, R. I. Garment stay fastening means. 1,895,612; Jan. 31.

Dormoy, Jules M. J., Paris, France, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake mechanism. 1,895,451; Jan. 31.

Dormoy, Jules M. J., Paris, France, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake for aircraft. 1,895,452; Jan. 31.

Dornier, Claude, assignor of one-half to Dornier-Metallbauten G. m. b. H., Friedrichshafen-on-the-Bodensee, Germany. Storage of liquids in aircraft. 1,895,976; Jan. 31.

Dornier-Metallbauten G. m. b. H. (See Dornier, Claude, assignor.)

Dorr Company, The. (See Lund, Nels B., assignor.)

Dorris, Herbert F., Vincennes, Ind. Adjustable light. 1,895,706; Jan. 31.

Doughty, Alfred H. (See Williams, Andrew C., assignor.)

Douglas Aircraft Company. (See Raymond, Arthur E., assignor.)

Dow Chemical Company, The. (See Gann, J. A., and Reid, assignors.)

Down, Sidney G., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,895,453; Jan. 31.

Downer, Raymond H., assignor to Frigidrinks, Inc., San Francisco, Calif. Beverage dispenser. Des. 89,149; Jan. 31.

Dressel, John W., Goldendale, Wash. Liver concentrate. 1,895,977; Jan. 31.

Drew, Richard G., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn. Adhesive sheeting and masking for painting. 1,895,978; Jan. 31.

Dreyfus, Camille, New York, N. Y., and W. Whitehead, Cumberland, Md., assignors to Celanese Corporation of America. Saponification of cellulose esters. 1,895,919; Dreyfus, Camille, New York, N. Y., and W. Whitehead, Cumberland, Md., assignors to Celanese Corporation of America. Saponification of cellulose esters. 1,895,920; Jan. 31.

Drying Systems, Ind. (See Bluemel, Gustave, assignor.)

Dubbs, Arthur A., Denver Colo. Hanger. 1,895,613; Jan. 31.

Ducat, George, Rochester, N. Y. Golf bag. 1,895,454; Jan. 31.

Dunham, Henry V., Bainbridge, N. Y. Glue and making same. 1,895,979; Jan. 31.

Dunn, Edward A. (See Dawson, G. H., Dunn, and Nickerson.)

Dunsheath, Percy, Sidcup, Kent, assignor to W. T. Henley's Telegraph Works Company Limited, London, England. Extrusion of metal pipes and the like. 1,895,881; Jan. 31.

Dupeyron, Auguste, Paris, France. Safety rasor. 1,895,980; Jan. 31.

Du Pont, E. I., de Nemours & Company. (See Lazier, Wilbur A., assignor.)

Du Pont, E. I., de Nemours & Company. (See Lewis, Harold A., assignor.)

Du Pont, E. I. de Nemours & Company. (See Taylor, H. S., and Lazier, assignors.)

"Durand & Huguenin S. A." (See Hug, E., and Werdenberg, assignors.)

Duval, Adrien J. P., et al. (See Aubert, Pierre F. M., and A. J. P. and H. A. M. Duval.)

Duval, Henri A. M., et al. (See Aubert, Pierre F. M., and A. J. P. and H. A. M. Duval.)

Ebeling, Charles W., assignor to General Talking Pictures Corporation, New York, N. Y. Exciter lamp mounting for sound-on-film reproducers. 1,895,455; Jan. 31.

Eberhard Faber Pencil Co. (See Brockman, Arthur, assignor.)

Eclipse Machine Company. (See Lansing, Raymond P., assignor.)

Edgemont Machine Company, The. (See Anglemyer, Carl M., assignor.)

Edwards, Charles K., assignor to Morris Commercial Cars Limited, Birmingham, England. Internal combustion engine. 1,895,981; Jan. 31.

Edwards, Ellis J., Scranton, Pa. Bobbin spindle lock. 1,895,707; Jan. 31.

Egyesült Izzólámpa és Villamossagi részvénytársasdy. (See Theiss, Emil, assignor.)

Electro Metallurgical Company. (See Bagley, Glen D., assignor.)

Elliott, Harold F., Palo Alto, assignor of one-fourth to John Flam, Los Angeles, Calif. Automatic phonograph. 1,895,614; Jan. 31.

Elliott, Walter, Long Beach, Calif. Crooked hole indicator. 1,895,615; Jan. 31.

Ellis, Howard G., Waltham, Mass., assignor to The B. F. Goodrich Company, New York, N. Y. Apparatus for rolling and pressing rubber shoes. 1,895,921; Jan. 21.

Emanuell, Luigi, assignor to Società Italiana Pirelli, Milan, Italy. Device for reducing the current in the lead sheaths of cables. 1,895,982; Jan. 31.

Emanuell, Luigi, Milan, Italy, assignor to Società Italiana Pirelli. Apparatus for degasifying liquids. 1,895,983; Jan. 31.

Emerson Electric Mfg. Co. The. (See Persons, Lawrence M., assignor.)

Emerson, George Y., Rochester, N. H. Inner sole. 1,895,709; Jan. 31.

Emmert, George. (See Johnson, Charles J., assignor.)

Ericsson, John E. (See Lindgren, Waldemar L., assignor.)

Ernst, Walter, and H. F. MacMillin, assignors to The Hydraulic Press Mfg. Co., Mount Gilead, Ohio. Hydraulic press. 1,895,710; Jan. 31.

Eule, Martin, Berlin-Spandau, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Tubular steam boiler. 1,895,790; Jan. 31.

Evans, Benjamin A., and W. B. Freeman, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Belt-making apparatus. 1,895,922; Jan. 31.

Evans Case Company. (See Reilly, Alfred F., assignor.)

Exeter Brass Works, (See Cobb, Arthur T., assignor.)

Faber, Guy S. (See Wilde, Frederick H., assignor.)

Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Vacuum brake apparatus. 1,895,456; Jan. 31.

Farmer, Earl W., assignor to Fawcett Publications, Inc., Minneapolis, Minn. Package magazine. 1,895,616; Jan. 31.

Farrington, Ray P., Philadelphia, Pa., assignor to Heintz Manufacturing Company. Refrigerator. 1,896,046; Jan. 31.

Fawcett Publications, Inc. (See Farmer, Earl W., assignor.)

Fay, Joseph W., Villa Park, assignor to The Cracker Jack Co., Chicago, Ill. Sealing apparatus for cartons. 1,895,617; Jan. 31.

Fazekas, Anton, San Francisco, Calif. Letter box plate. Des. 89,127; Jan. 31.

Fedeler, John H., New York, N. Y., assignor to American Air Filter Company, Inc., Louisville, Ky. Air filter device. 1,895,618; Jan. 31.

Ferris, Walter, assignor to The Oilgear Company, Milwaukee, Wis. Hydraulic transmission. 1,896,052; Jan. 31.

Fidler, Robert H., North Arlington, assignor to Tung-Sol Lamp Works, Inc., Newark, N. J. Radiotube. 1,895,506; Jan. 31.

Finch, Brent S. and R. S., Cincinnati, Ohio. Revoluble illuminated signal. 1,895,543; Jan. 31.

Finch, Robert S. (See Finch, Brent S. and R. S.)

Finkenwirth, Max, Dahlen, Germany. Measuring stick. 1,895,764; Jan. 31.

Fisher, Ernest F., St. Louis, Mo. Cooling system. 1,895,652; Jan. 31.

Fisher, Sol, Cleveland, Ohio. Hair waving and curling rod. 1,895,653; Jan. 31.

Fisk, Ernest T., Sydney, New South Wales, Australia. Sound suppressing ventilator. 1,896,053; Jan. 31.

Flam, John. (See Elliott, Harold F., assignor.)

Flumerfelt, William A., Columbus, Ohio, assignor to The Columbus Auto Parts Company. Shackle. 1,895,846; Jan. 31.

Fogelberg, Edith M., Ozone Park, assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,150; Jan. 31.

Foley, Andrew W. (See Hummel, F. E., and Foley.)

Foley, Charles E., assignor to Nashua Gummed & Coated Paper Company, Nashua, N. H. Coated sheet material. 1,895,711; Jan. 31.

Forrest, Frederick C., Sacramento, Calif. Photocopying apparatus. 1,895,654; Jan. 31.

Foutz, Clinton E., Baltimore, Md. Cooling system for internal combustion engines. 1,895,509; Jan. 31.

Fowler, Thomas J., Chicago, Ill. Compressor housing. 1,895,508; Jan. 31.

Fraim, Samuel R., Lancaster, Pa. Padlock. 1,895,655; Jan. 31.

Frank, Benjamin M., and J. Basile, New York, assignors to Greenpoint Metallic Bed Co., Inc., Brooklyn, N. Y. Bed structure. Re18,725; Jan. 31.

"Frecaldo" Automaten-Handelsgesellschaft Richter & Co. (See Asenbaum, Ernest, assignor.)

Freeman, Ernest B., Newton, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Heat exchange apparatus. 1,895,765; Jan. 31.

Freeman, Walter B. (See Evans, B. A., and Freeman.)

Fricker, Carl J., New York, assignor of 30 per cent to G. H. Callaghan, New York, N. Y., and 10 per cent to D. P. Moore, Avon Park, Fla. Heel protector. 1,895,598; Jan. 31.

Fried. Krupp Aktiengesellschaft. (See Agte, C., and Moers, assignors.)

Fried. Krupp Aktiengesellschaft. (See Voigtländer, H., and Kaufels, assignors.)

Frigidrinks, Inc. (See Downer, Raymond H., assignor.)

Frost, William M., Spokane, Wash. Electric insect destroyer. 1,895,570; Jan. 31.

Fuller Company. (See Pfeiffer, César, assignor.)

Fuller, Frederick P., Yonkers, N. Y. Collector ring brush. 1,895,756; Jan. 31.

Funk, George W., Elgin, Ill. Hot dish pad or similar article. Des. 89,128; Jan. 31.

Fyr-Fyter Company, The. (See Thomas, C. A., and Hochwalt, assignors.)

Gadke, William, Philadelphia, Pa. Clip for attaching electric lights to Christmas trees. 1,895,656; Jan. 31.

Gagen, Charles H., Montclair, N. J., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky. Air cleaner. 1,895,619; Jan. 31.

Gale, William A., and C. F. Ritchie, assignors to American Potash & Chemical Corporation, Trona, Calif. Double salt and producing same. 1,895,620; Jan. 31.

Gann, John A., and J. B. Reid, assignors to The Dow Chemical Company, Midland, Mich. Casting magnesium and alloys thereof. 1,896,045; Jan. 31.

Gardner-Richardson Company, The. (See Swan, Joseph H., 3d., assignor.)

Garford, Arthur L., Elyria, Ohio. Conduit fitting. 1,895,791; Jan. 31.

Garnett, Henry J. (See Smith, W. S., Garnett, and Randall.)

Gault, Henry, and B. M. R. Angla, Lyon, assignor to Societe des Usines Chimiques Rhone-Poulenc, Paris, France. Manufacture of cellulose butyric esters. 1,896,039; Jan. 31.

Geiger, Ernst, Irvington, N. J. Building and building section. 1,895,657; Jan. 31.

Gemmer Manufacturing Company. (See Koerner, Theodore W., assignor.)

General Aniline Works, Inc. (See Hentrich, W., Hilger, and Knoche, assignors.)

General Electric Company. (See Carlson, George, assignor.)

General Electric Company. (See Hammond, John H., jr., assignor.)

General Electric Company. (See Hoyt, Samuel L., assignor.)

General Electric Company. (See Hull, Clifford O., assignor.)

General Electric Company. (See Junggren, Oscar, assignor.)

General Electric Company. (See Merriam, Ezra B., assignor.)

General Electric Company. (See Rowell, Ralph M., assignor.)

General Electric Company. (See Stein, Herbert, assignor.)

General Electric Company. (See Unger, Magnus, assignor.)

General Instrument Corporation. (See Cohen, Samuel, assignor.)

General Plate Company. (See Spencer, John A., assignor.)

General Research Corporation. (See Lotts, Delbert L., assignor.)

General Talking Pictures Corporation. (See Eberling, Charles W., assignor.)

Gent, Edgar W., Morristown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Translating device. 1,895,757; Jan. 31.

George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Rolling mill housing. Re18,724; Jan. 31.

Geske, Carl, Grand Rapids, assignor to Winters & Crampton Company, Grandville, Mich. Hinge construction. 1,895,658; Jan. 31.

Gibbs, James A., assignor to The McCaskey Register Company, Alliance, Ohio. Automatic salesbook register. 1,895,621; Jan. 31.

Gibson Refrigerator Company. (See Smith, Charles H., assignor.)

Giles, H. R., et al. (See Pippin, John W., assignor.)

Glenny, Arthur H. T., London, England. Indexing or like apparatus. 1,895,993; Jan. 31.

Goddu, George, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening inserting mechanism. 1,895,457; Jan. 31.

Goldberg, Harry. (See Goldberg, Hymen and Harry.)

Goldberg, Hymen and H., Schenectady, N. Y. Separable button. 1,895,984; Jan. 31.

Goldsborough, John B., Croton-on-the-Hudson, N. Y. Construction of retaining walls. 1,895,985; Jan. 31.

Goldsmith, Bertram J., Allentown, Pa. Ribbon package. 1,895,758; Jan. 31.

Gooch, Stapleton D. (See Memminger, C. G., Waggaman, Gooch, and Kerschbaum.)

Goodrich, B. F., Company, The. (See Blaker, Ernest, assignor.)

Goodrich, B. F., Company, The. (See Boss, Arthur E., assignor.)

Goodrich, B. F., Company, The. (See Ellis, Howard G., assignor.)

Goodrich, B. F., Company, The. (See Evans, B. A., and Freeman, assignors.)

Goodrich, B. F., Company, The. (See Merrill, Allan B., assignor.)

Goodrich, B. F., Company, The. (See Ritchey, Roscoe V., assignor.)

Goodrich, B. F., Company, The. (See Sapp, John P., assignor.)

Goodrich, B. F., Company, The. (See Semon, W. L., and Sloan, assignors.)

Goodrich, Chauncey M., Windsor, Ontario, Canada. Transmission tower arms. 1,895,712; Jan. 31.

Grant, Frederick C., Harvey, Ill. Pedal pad. 1,895,986; Jan. 31.

Graves, George A. (See Lutts, W. E., and Graves.)

Gray, Willis R., Oakton, Va. Evergreen plant. Pl. Pt. 54; Jan. 31.

Grebe, Alfred H., Hollis, N. Y. Radio receiving apparatus. 1,895,792; Jan. 31.

Green, Charlie C., Plano, Tex. Adjustment lever. 1,895,987; Jan. 31.

Green, Matthew J., Portsmouth, Va. Individual ash receptacle. 1,895,988; Jan. 31.

Greenleaf, William H., Chicago, assignor to Western Clock Company, Peru, Ill. Electric clock. 1,895,923; Jan. 31.

Greenpoint Metallic Bed Co. (See Frank, B. M., and Basile, assignors.)

Grieb, Alfred, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Needle-clamp for sewing machines. 1,896,047; Jan. 31.

Grimditch, William H., Glenside, assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Nonmicrophonic radio apparatus. 1,895,989; Jan. 31.

Grinnell, Albert A., assignor to Le G. S. Whedon, Medina, N. Y. Reclining chair. 1,896,048; Jan. 31.

Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,896,024; Jan. 31.

Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle clutch. 1,896,025; Jan. 31.

Gubelmann, William S., Buffalo, N. Y. Calculating machine. 1,895,848; Jan. 31.

Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,129; Jan. 31.

Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,151; Jan. 31.

Gunther, Henry, Chicago, Ill. Collar holder. 1,896,029; Jan. 31.

Gutmann, Paul F. (See Aurien, G., and Gutmann.)

Haga, George. (See Bates, Henry W., assignor.)

Hagebusch, Robert, Brooklyn, N. Y. Bottle closure with means for removing the paper seals. 1,895,759; Jan. 31.

Hagedorn, Henry C., Lynbrook, N. Y. Adjustable window shade support. 1,895,793; Jan. 31.

Hague, Morton, Chicago, Ill. Shrine. 1,895,659; Jan. 31.

Hall, Donald A., San Diego, Calif. Aircraft. 1,895,456; Jan. 31.

Hall, W. F., et al. (See Pippin, John W., assignor.)

Haller, Robert, Riehen, near Basel, and A. Heckendorn, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Cellulose derivative and making same. 1,895,544; Jan. 31.

Hamilton, Earl A., St. Louis, Mo. Combination implement. 1,895,884; Jan. 31.

Hammond, John H., jr., Gloucester, Mass. Radio transmission system. 1,895,459; Jan. 31.

Hammond, John H., jr., Gloucester, Mass., assignor to General Electric Company. Electrical control system. 1,895,924; Jan. 31.

Hammond, John H., jr., Gloucester, Mass., assignor to General Electric Company. Electrical control system. 1,895,925; Jan. 31.

Hanley, John A., Irvington, N. J. Electromagnetic coil for toy electric motors. 1,895,460; Jan. 31.

Hannon, Albert H., Springfield, Ohio. Electroprocessing machine. 1,895,622; Jan. 31.

Hannold, Leland S., Camden, N. J., assignor to Radio Corporation of America. Acoustic panel for vehicles. Des. 89,130; Jan. 31.

Hansen, Carl F. (See Smets, F. E. A., and Hansen.)

Harcharick, Emro, Wilkes Barre, Pa. Hand drill. 1,895,990; Jan. 31.

Haslam, Harry M. (See Bunce, E. H., and Haslam.)

Haubroe, Charles A., Baltimore, Md. Key cutting machine. 1,895,849; Jan. 31.

Hauck, Charles J., assignor to The Selby Shoe Company, Portsmouth, Ohio. Shoe shank stiffener. 1,895,660; Jan. 31.

Hayden, Arthur C., Brockton, Mass. Motion picture projector apparatus. 1,895,794; Jan. 31.

Haynes, Artemas J. (See Vernet, S., and Haynes.)

Hazel-Atlas Glass Co. (See Stenhouse, Thomas, assignor.)

Hearn, Walter R. (See Doering, Frank F. W., assignor.)

Heckendorn, Alphouse. (See Haller, R., and Heckendorn.)

Hegenberger, Albert F., Dayton, Ohio. Sextant for aircraft. 1,895,510; Jan. 31.

Hein, John, New York, N. Y. Structural iron work climber. 1,895,571; Jan. 31.

Heintz Manufacturing Company. (See Farrington, Ray P., assignor.)

Heising, Raymond A., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Combined radio telephone and telegraph system. 1,895,461; Jan. 31.

Heltzel, John N., Warren, Ohio. Road building machine and method. 1,895,991; Jan. 31.

Hendriksen, John, and J. Heran, New York, N. Y. Lamp base or similar article. Des. 89,131; Jan. 31.

Henkel, Adolph A., assignor to K. W. Wonnell, Ravinia, Ill. Advertising display sign. 1,896,030; Jan. 31.

Henley's, W. T., Telegraph Works Company. (See Dunsheath, Percy, assignor.)

Henning, George E., Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y. Braiding machine. 1,895,462; Jan. 31.

Henning, George E., Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y. Self-aligning strand carrier for braiders. 1,895,463; Jan. 31.

Hentrich, Winfrid, Leverkusen-on-the-Rhine, J. Hilger, Cologne-Mulheim-on-the-Rhine, and E. Knoche, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. β-naphthyl-aminoarylhydroxy fatty acids. 1,895,713; Jan. 31.

Hepburn, Stuart M., Pampa, Tex. Trailer hitch. 1,895,992; Jan. 31.

Heran, Josef. (See Hendriksen, J., and Heran.)

Herbsman, Abraham M., Huntington Park, and R. B. Campbell, Walnut Park, Calif.; said Campbell assignor to said Herbsman. Hand spray device. Des. 89,152; Jan. 31.

Hercules Motors Corporation. (See La Salle, George W., assignor.)

Hercules Powder Company. (See Barab, Jacob, assignor.)

Hercules Powder Company. (See Shapleigh, James H., assignor.)

Herold, Walter F., assignor to The Bassick Company, Bridgeport, Conn. Caster. 1,895,882; Jan. 31.

Hewitt, Ellis E., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake device. 1,895,464; Jan. 31.

Hewitt, Ellis E., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,895,465; Jan. 31.

Hewitt, William R., New York, N. Y. Pump. 1,895,628; Jan. 31.

Hickok, W. O., Manufacturing Company. (See Broadmeyer, Albert, assignor.)

Hilger, Joseph. (See Hentrich, W., Hilger, and Knoche.)

Hingston, Philip, Everett, Wash. Assembled crate. 1,895,624; Jan. 31.

Hintsches, Karl. (See Schweizer, Franz, assignor.)

Hirschler, Horace L., San Francisco, Calif., assignor to Bendix Brake Company, Chicago, Ill. Brake operating mechanism. Re18,723; Jan. 31.

Hlava, Alois, Pilsen, Czechoslovakia. Riveting machine. 1,895,883; Jan. 31.

Drew, Richard G., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn. Adhesive sheeting and masking for painting. 1,895,978; Jan. 31.
Dreyfus, Camille, New York, N. Y., and W. Whitehead, Cumberland, Md., assignors to Celanese Corporation of America. Saponification of cellulose esters. 1,895,919; Dreyfus, Camille, New York, N. Y., and W. Whitehead, Cumberland, Md., assignors to Celanese Corporation of America. Saponification of cellulose esters. 1,895,920; Jan. 31.
Drying Systems, Ind. (See Bluemel, Gustave, assignor.)
Dubbs, Arthur A., Denver Colo. Hanger. 1,895,613; Jan. 31.
Ducat, George, Rochester, N. Y. Golf bag. 1,895,454; Jan. 31.
Dunham, Henry V., Bainbridge, N. Y. Glue and making same. 1,895,979; Jan. 31.
Dunn, Edward A. (See Dawson, G. H., Dunn, and Nickerson.)
Dunsheath, Percy, Sidcup, Kent, assignor to W. T. Henley's Telegraph Works Company Limited, London, England. Extrusion of metal pipes and the like. 1,895,881; Jan. 31.
Dupeyron, Auguste, Paris, France. Safety razor. 1,895,980; Jan. 31.
Du Pont, E. I., de Nemours & Company. (See Lazier, Wilbur A., assignor.)
Du Pont, E. I., de Nemours & Company. (See Lewis, Harold A., assignor.)
Du Pont, E. I. de Nemours & Company. (See Taylor, H. S., and Lazier, assignors.)
"Durand & Huguenin S. A." (See Hug, E., and Werdenberg, assignors.)
Duval, Adrien J. P., et al. (See Aubert, Pierre F. M., and A. J. P. and H. A. M. Duval.)
Duval, Henri A. M., et al. (See Aubert, Pierre F. M., and A. J. P. and H. A. M. Duval.)
Ebeling, Charles W., assignor to General Talking Pictures Corporation, New York, N. Y. Exciter lamp mounting for sound-on-film reproducers. 1,895,455; Jan. 31.
Eberhard Faber Pencil Co. (See Brockman, Arthur, assignor.)
Eclipse Machine Company. (See Lansing, Raymond P., assignor.)
Edgemont Machine Company, The. (See Anglemyer, Carl M., assignor.)
Edwards, Charles K., assignor to Morris Commercial Cars Limited, Birmingham, England. Internal combustion engine. 1,895,961; Jan. 31.
Edwards, Ellis J., Scranton, Pa. Bobbin spindle lock. 1,895,707; Jan. 31.
Egyesült Izzólámpa és Villamossagi részvénytársasdy. (See Theiss, Emil, assignor.)
Electro Metallurgical Company. (See Bagley, Glen D., assignor.)
Elliott, Harold F., Palo Alto, assignor of one-fourth to John Flam, Los Angeles, Calif. Automatic phonograph. 1,895,614; Jan. 31.
Elliott, Walter, Long Beach, Calif. Crooked hole indicator. 1,895,615; Jan. 31.
Ellis, Howard G., Waltham, Mass., assignor to The B. F. Goodrich Company, New York, N. Y. Apparatus for rolling and pressing rubber shoes. 1,895,921; Jan. 21.
Emanuell, Luigi, assignor to Società Italiana Pirelli, Milan, Italy. Device for reducing the current in the lead sheaths of cables. 1,895,982; Jan. 31.
Emanuell, Luigi, Milan, Italy, assignor to Società Italiana Pirelli. Apparatus for degasifying liquids. 1,895,983; Jan. 31.
Emerson Electric Mfg. Co. The. (See Persons, Lawrence M., assignor.)
Emerson, George Y., Rochester, N. H. Inner sole. 1,895,709; Jan. 31.
Emmert, George. (See Johnson, Charles J., assignor.)
Ericsson, John E. (See Lindgren, Waldemar L., assignor.)
Ernst, Walter, and H. F. MacMillin, assignors to The Hydraulic Press Mfg. Co., Mount Gilead, Ohio. Hydraulic press. 1,895,710; Jan. 31.
Eule, Martin, Berlin-Spandau, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Tubular steam boiler. 1,895,790; Jan. 31.
Evans, Benjamin A., and W. B. Freeman, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Belt-making apparatus. 1,895,922; Jan. 31.
Evans Case Company. (See Reilly, Alfred F., assignor.)
Exeter Brass Works. (See Cobb, Arthur T., assignor.)
Faber, Guy S. (See Wilde, Frederick H., assignor.)
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Vacuum brake apparatus. 1,895,456; Jan. 31.
Farmer, Earl W., assignor to Fawcett Publications, Inc., Minneapolis, Minn. Package magazine. 1,895,616; Jan. 31.
Farrington, Ray P., Philadelphia, Pa., assignor to Heintz Manufacturing Company. Refrigerator. 1,896,046; Jan. 31.
Fawcett Publications, Inc. (See Farmer, Earl W., assignor.)
Fay, Joseph W., Villa Park, assignor to The Cracker Jack Co., Chicago, Ill. Sealing apparatus for cartons. 1,895,617; Jan. 31.
Fazekas, Anton, San Francisco, Calif. Letter box plate. Des. 89,127; Jan. 31.
Fedeler, John H., New York, N. Y., assignor to American Air Filter Company, Inc., Louisville, Ky. Air filter device. 1,895,618; Jan. 31.
Ferris, Walter, assignor to The Oilgear Company, Milwaukee, Wis. Hydraulic transmission. 1,896,052; Jan. 31.
Fidler, Robert H., North Arlington, assignor to Tung-Sol Lamp Works, Inc., Newark, N. J. Radiotube. 1,895,506; Jan. 31.
Finch, Brent S. and R. S., Cincinnati, Ohio. Revoluble illuminated signal. 1,895,543; Jan. 31.
Finch, Robert S. (See Finch, Brent S. and R. S.)
Finkenwirth, Max, Dahlen, Germany. Measuring stick. 1,895,754; Jan. 31.
Fisher, Ernest F., St. Louis, Mo. Cooling system. 1,895,652; Jan. 31.
Fisher, Sol, Cleveland, Ohio. Hair waving and curling rod. 1,895,653; Jan. 31.
Fisk, Ernest T., Sydney, New South Wales, Australia. Sound suppressing ventilator. 1,896,053; Jan. 31.
Flam, John. (See Elliott, Harold F., assignor.)
Flumerfelt, William A., Columbus, Ohio, assignor to The Columbus Auto Parts Company. Shackle. 1,895,846; Jan. 31.
Fogelberg, Edith M., Ozone Park, assignor to William Willhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,150; Jan. 31.
Foley, Andrew W. (See Hummel, F. E., and Foley.)
Foley, Charles E., assignor to Nashua Gummed & Coated Paper Company, Nashua, N. H. Coated sheet material. 1,895,711; Jan. 31.
Forrest, Frederick C., Sacramento, Calif. Photocopying apparatus. 1,895,654; Jan. 31.
Fouts, Clinton R., Baltimore, Md. Cooling system for internal combustion engines. 1,895,509; Jan. 31.
Fowler, Thomas J., Chicago, Ill. Compressor housing. 1,895,508; Jan. 31.
Fraim, Samuel R., Lancaster, Pa. Padlock. 1,895,655; Jan. 31.
Frank, Benjamin M., and J. Basile, New York, assignors to Greenpoint Metallic Bed Co., Inc., Brooklyn, N. Y. Bed structure. Re18,725; Jan. 31.
"Frecaldo" Automaten-Handelsgesellschaft Richter & Co. (See Asenbaum, Ernest, assignor.)
Freeman, Ernest B., Newton, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Heat exchange apparatus. 1,895,755; Jan. 31.
Freeman, Walter B. (See Evans, B. A., and Freeman.)
Fricker, Carl J., New York, assignor of 80 per cent to G. H. Callaghan, New York, N. Y., and 10 per cent to D. P. Moore, Avon Park, Fla. Heel protector. 1,895,598; Jan. 31.
Fried. Krupp Aktiengesellschaft. (See Agte, C., and Moers, assignors.)
Fried. Krupp Aktiengesellschaft. (See Voigtländer, H., and Kaufels, assignors.)
Frigidrinks, Inc. (See Downer, Raymond H., assignor.)
Frost, William M., Spokane, Wash. Electric insect destroyer. 1,895,570; Jan. 31.
Fuller Company. (See Pfeiffer, César, assignor.)
Fuller, Frederick P., Yonkers, N. Y. Collector ring brush. 1,895,756; Jan. 31.
Funk, George W., Elgin, Ill. Hot dish pad or similar article. Des. 89,128; Jan. 31.
Fyr-Fyter Company, The. (See Thomas, C. A., and Hochwalt, assignors.)
Gadke, William, Philadelphia, Pa. Clip for attaching electric lights to Christmas trees. 1,895,656; Jan. 31.
Gagen, Charles H., Montclair, N. J., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky. Air cleaner. 1,895,619; Jan. 31.
Gale, William A., and C. F. Ritchie, assignors to American Potash & Chemical Corporation, Trona, Calif. Double salt and producing same. 1,895,620; Jan. 31.
Gann, John A., and J. B. Reid, assignors to The Dow Chemical Company, Midland, Mich. Casting magnesium and alloys thereof. 1,896,045; Jan. 31.
Gardner-Richardson Company, The. (See Swan, Joseph H., 3d., assignor.)
Garford, Arthur L., Elyria, Ohio. Conduit fitting. 1,895,791; Jan. 31.
Garnett, Henry J. (See Smith, W. S., Garnett, and Randall.)
Gault, Henry, and B. M. R. Angla, Lyon, assignor to Societe des Usines Chimiques Rhone-Poulenc, Paris, France. Manufacture of cellulose butyric esters. 1,896,039; Jan. 31.
Geiger, Ernst, Irvington, N. J. Building and building section. 1,895,657; Jan. 31.
Gemmer Manufacturing Company. (See Koerner, Theodore W., assignor.)
General Aniline Works, Inc. (See Hentrich, W., Hilger, and Knoche, assignors.)
General Electric Company. (See Carlson, George, assignor.)
General Electric Company. (See Hammond, John H., jr., assignor.)
General Electric Company. (See Hoyt, Samuel L., assignor.)
General Electric Company. (See Hull, Clifford O., assignor.)
General Electric Company. (See Junggren, Oscar, assignor.)
General Electric Company. (See Merriam, Ezra B., assignor.)

General Electric Company. (See Rowell, Ralph M., assignor.)
General Electric Company. (See Stein, Herbert, assignor.)
General Electric Company. (See Unger, Magnus, assignor.)
General Instrument Corporation. (See Cohen, Samuel, assignor.)
General Plate Company. (See Spencer, John A., assignor.)
General Research Corporation. (See Lotts, Delbert L., assignor.)
General Talking Pictures Corporation. (See Eberling, Charles W., assignor.)
Gent, Edgar W., Morristown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Translating device. 1,895,767; Jan. 31.
George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Rolling mill housing. Re18,724; Jan. 31.
Geske, Carl, Grand Rapids, assignor to Winters & Crampton Company, Grandville, Mich. Hinge construction. 1,895,658; Jan. 31.
Gibbs, James A., assignor to The McCaskey Register Company, Alliance, Ohio. Automatic salesbook register. 1,895,621; Jan. 31.
Gibson Refrigerator Company. (See Smith, Charles H., assignor.)
Giles, H. B., et al. (See Pippin, John W., assignor.)
Glenny, Arthur H. T., London, England. Indexing or like apparatus. 1,895,993; Jan. 31.
Goddu, George, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening inserting mechanism. 1,895,457; Jan. 31.
Goldberg, Harry. (See Goldberg, Hymen and Harry.)
Goldberg, Hymen and H., Schenectady, N. Y. Separable button. 1,895,984; Jan. 31.
Goldsborough, John B., Croton-on-the-Hudson, N. Y. Construction of retaining walls. 1,895,985; Jan. 31.
Goldsmith, Bertram J., Allentown, Pa. Ribbon package. 1,895,758; Jan. 31.
Gooch, Stapleton D. (See Memminger, C. G., Waggaman, Gooch, and Kerschbaum.)
Goodrich, B. F., Company, The. (See Blaker, Ernest, assignor.)
Goodrich, B. F., Company, The. (See Bose, Arthur E., assignor.)
Goodrich, B. F., Company, The. (See Ellis, Howard G., assignor.)
Goodrich, B. F., Company, The. (See Evans, B. A., and Freeman, assignors.)
Goodrich, B. F., Company, The. (See Merrill, Allan B., assignor.)
Goodrich, B. F., Company, The. (See Ritchey, Roscoe V., assignor.)
Goodrich, B. F., Company, The. (See Sapp, John P., assignor.)
Goodrich, B. F., Company, The. (See Semon, W. L., and Sloan, assignors.)
Goodrich, Chauncey M., Windsor, Ontario, Canada. Transmission tower arms. 1,895,712; Jan. 31.
Grant, Frederick C., Harvey, Ill. Pedal pad. 1,895,986; Jan. 31.
Graves, George A. (See Lutts, W. E., and Graves.)
Gray, Willis R., Oakton, Va. Evergreen plant. Pl. Pt. 54; Jan. 31.
Grebe, Alfred H., Hollis, N. Y. Radio receiving apparatus. 1,895,792; Jan. 31.
Green, Charlie C., Plano, Tex. Adjustment lever. 1,895,987; Jan. 31.
Green, Matthew J., Portsmouth, Va. Individual ash receptacle. 1,895,988; Jan. 31.
Greenleaf, William H., Chicago, assignor to Western Clock Company, Peru, Ill. Electric clock. 1,895,923; Jan. 31.
Greenpoint Metallic Bed Co. (See Frank, B. M., and Basile, assignors.)
Grieb, Alfred, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Needle-clamp for sewing machines. 1,896,047; Jan. 31.
Grimditch, William H., Glenside, assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Nonmicrophonic radio apparatus. 1,895,989; Jan. 31.
Grinnell, Albert A., assignor to Le G. S. Whedon, Medina, N. Y. Reclining chair. 1,896,048; Jan. 31.
Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,896,024; Jan. 31.
Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle clutch. 1,896,025; Jan. 31.
Gubelmann, William S., Buffalo, N. Y. Calculating machine. 1,895,848; Jan. 31.
Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,129; Jan. 31.
Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,151; Jan. 31.
Gunther, Henry, Chicago, Ill. Collar holder. 1,896,029; Jan. 31.
Gutmann, Paul F. (See Aurien, G., and Gutmann.)
Haga, George. (See Bates, Henry W., assignor.)
Hagebusch, Robert, Brooklyn, N. Y. Bottle closure with means for removing the paper seals. 1,895,759; Jan. 31.
Hagedorn, Henry C., Lynbrook, N. Y. Adjustable window shade support. 1,895,793; Jan. 31.
Hague, Morton, Chicago, Ill. Shrine. 1,895,659; Jan. 31.
Hall, Donald A., San Diego, Calif. Aircraft. 1,895,458; Jan. 31.
Hall, W. F., et al. (See Pippin, John W., assignor.)
Haller, Robert, Riehen, near Basel, and A. Heckendorn, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Cellulose derivative and making same. 1,895,544; Jan. 31.
Hamilton, Earl A., St. Louis, Mo. Combination implement. 1,895,834; Jan. 31.
Hammond, John H., jr., Gloucester, Mass. Radio transmission system. 1,895,459; Jan. 31.
Hammond, John H., jr., Gloucester, Mass., assignor to General Electric Company. Electrical control system. 1,895,924; Jan. 31.
Hammond, John H., jr., Gloucester, Mass., assignor to General Electric Company. Electrical control system. 1,895,925; Jan. 31.
Hanley, John A., Irvington, N. J. Electromagnetic coil for toy electric motors. 1,895,460; Jan. 31.
Hannon, Albert H., Springfield, Ohio. Electroprocessing machine. 1,895,622; Jan. 31.
Hannold, Leland S., Camden, N. J., assignor to Radio Corporation of America. Acoustic panel for vehicles. Des. 89,130; Jan. 31.
Hansen, Carl F. (See Smets, F. E. A., and Hansen.)
Harcharick, Emro, Wilkes Barre, Pa. Hand drill. 1,895,990; Jan. 31.
Haslam, Harry M. (See Bunce, E. H., and Haslam.)
Haubrow, Charles A., Baltimore, Md. Key cutting machine. 1,895,849; Jan. 31.
Hauck, Charles J., assignor to The Selby Shoe Company, Portsmouth, Ohio. Shoe shank stiffener. 1,895,660; Jan. 31.
Hayden, Arthur C., Brockton, Mass. Motion picture projector apparatus. 1,895,794; Jan. 31.
Haynes, Artemas J. (See Vernet, S., and Haynes.)
Hazel-Atlas Glass Co. (See Stenhouse, Thomas, assignor.)
Hearn, Walter R. (See Doering, Frank F. W., assignor.)
Heckendorn, Alphonse. (See Haller, R., and Heckendorn.)
Hegenberger, Albert F., Dayton, Ohio. Sextant for aircraft. 1,895,510; Jan. 31.
Hein, John, New York, N. Y. Structural iron work climber. 1,895,571; Jan. 31.
Heintz Manufacturing Company. (See Farrington, Ray P., assignor.)
Heising, Raymond A., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Combined radio telephone and telegraph system. 1,895,461; Jan. 31.
Heitzel, John N., Warren, Ohio. Road building machine and method. 1,895,991; Jan. 31.
Hendriksen, John, and J. Heran, New York, N. Y. Lamp base or similar article. Des. 89,131; Jan. 31.
Henkel, Adolph A., assignor to K. W. Wonnell, Ravinia, Ill. Advertising display sign. 1,896,030; Jan. 31.
Henley's, W. T., Telegraph Works Company. (See Dunsheath, Percy, assignor.)
Henning, George E., Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y. Braiding machine. 1,895,462; Jan. 31.
Henning, George E., Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y. Self-aligning strand carrier for braiders. 1,895,463; Jan. 31.
Hentrich, Winfrid, Leverkusen-on-the-Rhine, J. Hilger, Cologne-Mulheim-on-the-Rhine, and R. Knoche, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. β-naphthyl-aminoaryl-hydroxy fatty acids. 1,895,713; Jan. 31.
Hepburn, Stuart M., Pampa, Tex. Trailer hitch. 1,895,992; Jan. 31.
Heran, Josef. (See Hendriksen, J., and Heran.)
Herbsman, Abraham M., Huntington Park, and R. B. Campbell, Walnut Park, Calif.; said Campbell assignor to said Herbsman. Hand spray device. Des. 89,152; Jan. 31.
Hercules Motors Corporation. (See La Salle, George W., assignor.)
Hercules Powder Company. (See Barab, Jacob, assignor.)
Hercules Powder Company. (See Shapleigh, James H., assignor.)
Herold, Walter F., assignor to The Bassick Company, Bridgeport, Conn. Caster. 1,895,882; Jan. 31.
Hewitt, Ellis E., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake device. 1,895,464; Jan. 31.
Hewitt, Ellis E., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,895,465; Jan. 31.
Hewitt, William R., New York, N. Y. Pump. 1,895,623; Jan. 31.
Hickok, W. O., Manufacturing Company. (See Broadmeyer, Albert, assignor.)
Hilger, Joseph. (See Hentrich, W., Hilger, and Knoche.)
Hingston, Philip, Everett, Wash. Assembled crate. 1,895,624; Jan. 31.
Hintsches, Karl. (See Schweizer, Franz, assignor.)
Hirschler, Horace L., San Francisco, Calif., assignor to Bendix Brake Company, Chicago, Ill. Brake operating mechanism. Re18,723; Jan. 31.
Hlava, Alois, Pilsen, Czechoslovakia. Riveting machine. 1,895,883; Jan. 31.

Hochwalt, Carroll A. (See Thomas, C. A., and Hochwalt.)
Holden, Fenn M., Pontiac, assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich. Harmonic balancer with coil springs. 1,896,026; Jan. 31.
Hollowell, James S., Cranford, assignor to Natural Products Refining Co., Jersey City, N. J. Kiln. 1,895,795; Jan. 31.
Hollowell, Oliver H., Russellville, Ark. Trap. 1,895,714; Jan. 31.
Holmes, Elbridge B., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle for narrow ware looms. 1,895,796; Jan. 31.
Holtzman, John. (See Vlahov, George, assignor.)
Holtzman, John, New York, assignor of one-half to Max D. Ordmann, Brooklyn, N. Y. Fountain pen. 1,895,850; Jan. 31.
Hoover Company, The. (See Case, Francis M., assignor.)
Horner, George W., Tonbridge, England, and J. E. Sharp, New Kensington, assignors to Aluminum Company of America, Pittsburgh, Pa. Sealing closure caps on bottles and other containers. 1,895,884; Jan. 31.
Horwitt, Paul H., Springfield, Mass., assignor to The Menasha Products Company, Chicago, Ill. Dispenser. 1,895,661; Jan. 31.
Horwitt, Paul H., Springfield, Mass., assignor to The Menasha Products Company, Chicago, Ill. Combination table dispenser. 1,895,662; Jan. 31.
Houle, Joseph H. E., Worcester, Mass. Selective calendar. 1,895,797; Jan. 31.
Hoyt, Samuel L., Schenectady, N. Y., assignor to General Electric Company. Forming diamond charged cutting tool bits. 1,895,926; Jan. 31.
Hubley Manufacturing Co., The. (See Brubaker, Jacob E., assignor.)
Hug, Ernst, and H. Werdenberg, Neu-Allschwil, near Basel, assignor to the Firm Durand & Huguenin S. A., Basel, Switzerland. Gallocyanine dyestuffs. 1,895,545; Jan. 31.
Hull, Clifford O., Stratford, Conn., assignor to General Electric Company. Rubber insulated electrical cable. 1,895,927; Jan. 31.
Hulson, Arthur W., Keokuk, Iowa. Furnace grate. 1,895,511; Jan. 31.
Hummel, Frederick E., and A. W. Foley, Hopewell, Va. Grain door. 1,895,625; Jan. 31.
Humphrey, Carroll L., Detroit, and R. K. Lee, Highland Park, assignors to Chrysler Corporation, Detroit, Mich. Oscillating joint. 1,895,663; Jan. 31.
Hunt, Franklin L., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Fluid-treating apparatus. 1,895,760; Jan. 31.
Huntbach, James, Nottingham, England. Embroidery machine. 1,895,994; Jan. 31.
Hydraulic Press Mfg. Co., The. (See Ernst, W., and MacMillin, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Mittasch, A., and Zorn, assignors.)
Illingworth Carbonization Company, The. (See Illingworth, Stewart R., assignor.)
Illingworth, Stewart R., Radyr, Wales, assignor to The Illingworth Carbonization Company, Limited, Manchester, England. Apparatus for feeding coal or other granular material. 1,895,798; Jan. 31.
Imperial Chemical Industries Limited. (See Brownsdon, H. W., Nimmo, and Pollitt, assignors.)
International Safety Lock Nut Corporation. (See D'Halloy, Audion, assignor.)
Irwin, James C., jr. (See Tranin, S., and Irwin.)
Jakoubek, Frank J., Elmwood Park, and E. Pachowicz, assignors to Templeton, Kenly & Co., Limited, Chicago, Ill. Rail puller and expander. 1,895,664; Jan. 31.
Jalbert, Georges, assignor to Anciens Etablissements R. Cornely & Cie., Société Anonyme, Paris, France. Machine for drawing threads from fabrics. 1,895,995; Jan. 31.
James, Anna M., Protem, Mo. Quilting frame. 1,895,715; Jan. 31.
James, Joseph H., Pittsburgh, assignor to C. P. Byrnes, trustee, Sewickley, Pa. Treating partial oxidation products. 1,895,799; Jan. 31.
Jannin, Marcel, Meudon, France. Internal combustion engine. 1,895,851; Jan. 31.
Jarvis, Harold R., Rives Junction, Mich. Broken axle shaft remover. 1,895,928; Jan. 31.
Jenks, Stephen M., and H. H. Sutherland, Gary, Ind., assignors to American Sheet and Tin Plate Company. Heating furnace. 1,895,716; Jan. 31.
Jessen, John A., assignor to Whitin Machine Works, Whitinville, Mass. Guiding device for long draft aprons. 1,895,800; Jan. 31.
Johnson, Charles J., assignor of one-half to G. Emmert, Corpus Christi, Tex. Cotton chopper. 1,895,665; Jan. 31.
Johnson, Charles S., Champaign, Ill. Material handling apparatus. 1,895,626; Jan. 31.
Johnson, Frederick G., London, England. Photographic flash-light apparatus. 1,895,835; Jan. 31.
Johnson, Oscar A., Glenside, assignor to American Engineering Company, Philadelphia, Pa. Automatic reversing control mechanism. 1,895,627; Jan. 31.
Johnstone, Robert McC., Short Hills, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y. Slitting device. 1,895,852; Jan. 31.
Jones, Albert F., Salem, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me. Graining machine. 1,895,512; Jan. 31.
Jones Chemical Company. (See Jones, Coulter W., assignor.)
Jones, Coulter W., Shreveport, assignor to Jones Chemical Company, Inc., McDade, La. Purifying iodine. 1,895,929; Jan. 31.
Jones & Lamson Machine Company. (See Lovely, John E., assignor.)
Jones, Stephen, Leonia, N. J. Brake device. 1,895,996; Jan. 31.
Joseph, Walter. (See Lewis, B., and Joseph.)
Joyce, Lyndon W., assignor to Joyce-Venning Manufacturing Company, Inc., Greensboro, N. C. Suspender assembling tool. 1,895,836; Jan. 31.
Joyce-Venning Manufacturing Company. (See Joyce, Lyndon W. assignor.)
Juhn, Martin, Lakewood, Ohio. Slide saxophone. 1,895,761; Jan. 31.
Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Shaft packing. 1,895,930; Jan. 31.
Junghans, Helmut, Schramberg, Wurtemberg, Germany. Anchor escapement for clocks and the like. 1,895,666; Jan. 31.
Junkers, Hugo, Dessau, Germany. Structural member. 1,895,667; Jan. 31.
Junkers, Hugo, Dessau, Germany. Riveting device. 1,895,668; Jan. 31.
Karpen, S. & Bros. (See Lofman, Charles, assignor.)
Katches Inc. (See Loughman, William F., assignor.)
Kaufels, Otto. (See Voigtländer, H., and Kaufels.)
Keith, Geo. E., Company. (See Caldwell, Charles H., assignor.)
Keller, Auguste V., Thundersley, England. Tile. 1,895,801; Jan. 31.
Keller, Robert, Ink Company, The. (See Wilson, Walter E., assignor.)
Kelley, John E., Bangor, Me. Holder. 1,895,717; Jan. 31.
Kelley, John Robert, assignor to The Kelley-Koett Manufacturing Company, Covington, Ky. Radiographic apparatus. 1,895,546; Jan. 31.
Kelley, Koett Manufacturing Company, The. (See Kelley, John B., assignor.)
Kellogg, Henry M., Stratford, and J. Ahlbin, Fairfield, assignors to The E. W. Carpenter Manufacturing Company, Bridgeport, Conn. Loose leaf binder. 1,895,629; Jan. 31.
Kellogg, Homer G., assignor to Motor Products Corporation, Detroit, Mich. Hinge. 1,895,572; Jan. 31.
Kemp, Irving, assignor to Kemp Lock Inc., New York, N. Y. Lock. 1,895,630; Jan. 31.
Kemp, Irving, assignor, by mesne assignments, to Kemp Lock Inc., New York, N. Y. Lock. 1,895,631; Jan. 31.
Kemp Lock Inc. (See Kemp, Irving, assignor.)
Kennedy, William T., New York, N. Y. Actinometer. 1,895,853; Jan. 31.
Kenney, Edward G., Willimantic, Conn. Silk reed machine. 1,895,997; Jan. 31.
Kerschbaum, Friedrich P. (See Memminger, C. G., Waggaman, Gooch, and Kerschbaum.)
King, John M., Dover, N. J. Fuse. 1,895,513; Jan. 31.
Kintzing, Reese T., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Synchronous motor control system. 1,895,931; Jan. 31.
Kiser, Stanley T., Youngstown, Ohio. Welding electrode holder. 1,895,573; Jan. 31.
Kleinschmidt, Edward E., assignor to Teletype Corporation, Chicago, Ill. Selective signaling and control system. 1,895,718; Jan. 31.
Kline, Bernard L. (See Curtin, L. P., and Kline.)
Klyce, Winniford W., Pontiac, Mich. Pressure gauge. 1,895,802; Jan. 31.
Knaebel, Wendel, Sanquoit, N. Y. Combined cigarette and match box. 1,895,574; Jan. 31.
Knerr, Horace C., Philadelphia, Pa. Method of and apparatus for heat-treating magnetic materials. 1,895,998; Jan. 31.
Knoche, Rudolf. (See Hentrich, W., Hilger, and Knoche.)
Koch, Lydia B., New York, N. Y. Closure cap for paper milk bottles. 1,895,575; Jan. 31.
Koch, William A., Chicago, Ill. Wrapper. 1,895,932; Jan. 31.
Koerner, Theodore W., assignor to Gemmer Manufacturing Company, Detroit, Mich. Shimmy shock absorber for motor vehicle steering gears. 1,895,576; Jan. 31.
Kohler, Franklin W., Chicago, Ill. Chair construction. 1,895,803; Jan. 31.
Kohler, Franklin W., Chicago, Ill. Chair construction. 1,895,804; Jan. 31.
Kolsters, John, Oakland, Calif. Direction signal. 1,895,669; Jan. 31.
Kremens, Abraham I. (See Raisiss, G. W., and Kremens.)
Kuhlemann, Stig O. C., assignor to Carl H. Lundholm Aktiebolag, Stockholm, Sweden. Parachute device. 1,895,999; Jan. 31.
Kuhlemann, Stig O. C., assignor to C. H. Lundholm Aktiebolag, Stockholm, Sweden. Parachute device. 1,896,000; Jan. 31.
Kulp, Harry W., and M. C. Dellinger, Lancaster, Pa. Valve keeper inserter. 1,896,001; Jan. 31.

Kunz, Ray F., Madisonville, Ohio. Camping trailer. 1,895,933; Jan. 31.
Kunts, Frank A., Woodhaven, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Hinge. 1,895,466; Jan. 31.
Kusserow, Reinhold E., Oakland, Calif. Grain malting unit. 1,895,514; Jan. 31.
Kusterle, Frank, Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Crib. 1,895,885; Jan. 31.
La Hodny, William. (See Bertell, P., and La Hodny.)
La Hodny, William, New York, assignor to Standard Mirrow Company, Inc., Buffalo, N. Y. Combined mirror and instrument. 1,895,578; Jan. 31.
Lahti, Almo J., Jyvaskyla, Finland. Automatic firearm. 1,895,719; Jan. 31.
Lalance & Grosjean Manufacturing Company. (See Burvenick, Benjamin, assignor.)
Land, Charles H., Grosse Pointe, and W. H. Wilson, Detroit, Mich. Coupling trailers to a tractor. 1,895,762; Jan. 31.
Langenheim, Albert H., assignor to The Dayton Malleable Iron Company, Dayton, Ohio. Fence post. 1,895,670; Jan. 31.
Lansing, Raymond P., Montclair, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y. Electrical apparatus. 1,895,837; Jan. 31.
Lant, Richard, Vienna, Austria. Waterproofing and to the treatment of materials with a view to rendering them resistant to the action of atmospheric conditions. 1,896,002; Jan. 31.
Larsen, Agnew E. (See Pitcairn, H. F., and Larsen.)
La Salle, George W., assignor to Hercules Motors Corporation, Canton, Ohio. Pump and ignition drive unit. 1,895,632; Jan. 31.
Lauterbur, Edward J. (See Lauterbur, Frank X and E. J.)
Lauterbur, Frank X., and E. J., Sidney, Ohio. Fuel supporting device for furnaces. 1,895,633; Jan. 31.
Lauterbur, Frank X., and E. J., Sidney, Ohio. Dough molding machine. 1,895,634; Jan. 31.
Lazier, Wilbur A. (See Taylor, H. S., and Lazier.)
Lazier, Wilbur A., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Catalytic hydrogenation process. 1,895,515; Jan. 31.
Lazier, Wilbur A., Elmhurst, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Catalytic process of producing ketones. 1,895,516; Jan. 31.
Lebel, Henry, assignor to Societe Anonyme des Manufactures des Glaces & Produits Chimiques de Saint Gobain, Chauny & Cirey, Paris, France. Apparatus for annealing glass. 1,895,547; Jan. 31.
Lebel, Henry, assignor to Societe Anonyme des Manufactures des Glaces & Produits Chimiques de Saint Gobain, Chauny & Cirey, Paris, France. Method of and apparatus for tempering glass sheets. 1,895,548; Jan. 31.
Lee, Roger K. (See Humphrey, C. L., and Lee.)
Lenfant, Louis, assignor to Cartier, Societe Anonyme, Paris, France. Gold alloy. 1,896,003; Jan. 31.
Lessin, Morris E., assignor to Maurice Levy, New York, N. Y. Hand bag. 1,895,671; Jan. 31.
Levy, Maurice. (See Lessin, Morris E., assignor.)
Lewis, Benjamin, Woodside, and W. Joseph, Long Island City, N. Y. Pipe cleaner. 1,896,004; Jan. 31.
Lewis, George S., Evanston, assignor to Metal Specialties Manufacturing Company, Chicago, Ill. Bicycle frame. Des. 89,132; Jan. 31.
Lewis, George S., Evanston, assignor to Metal Specialties Manufacturing Company, Chicago, Ill. Bicycle frame. Des. 89,133; Jan. 31.
Lewis, George S., Evanston, assignor to Metal Specialties Manufacturing Company, Chicago, Ill. Bicycle front fork. Des. 89,134; Jan. 31.
Lewis, George S., Evanston, assignor to Metal Specialties Manufacturing Company, Chicago, Ill. Bicycle lower rear fork. Des. 89,135; Jan. 31.
Lewis, Harold A., Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Manufacture of polyhydric alcohols. 1,895,517; Jan. 31.
Leyland, Thomas J., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Washing and cleaning glass sheets. 1,895,934; Jan. 31.
Libbey-Owens-Ford Glass Company. (See Blair, James C., assignor.)
Libbey-Owens-Ford Glass Company. (See Cone, Carroll, assignor.)
Libbey-Owens-Ford Glass Company. (See Leyland, Thomas J., assignor.)
Lindegren, Carl J., Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Leno jumper saddle. 1,895,805; Jan. 31.
Lindgren, Waldemar L., Waukegan, assignor of one-half to John B. Ericsson, Chicago, Ill. Dishwashing apparatus. 1,896,005; Jan. 31.
Lipman, Carl B. L., Beloit, Wis., assignor to Lipman Patents Corporation, Chicago, Ill. Refrigerating apparatus. 1,895,549; Jan. 31.
Lipman, Carl E. L., assignor to Lipman Patents Corporation, Chicago, Ill. Refrigerator. 1,895,806; Jan. 31.
Lipman Patents Corporation. (See Lipman, Carl E. L., assignor.)
Lipshitz, George, New York, N. Y. Dispensing device. 1,895,854; Jan. 31.
Little, Earl W., Indianapolis, Ind. Automatic welding machine. 1,895,577; Jan. 31.
Lockwood, Edwin J., Peekskill, assignor to The Borden Company, New York, N. Y. Apparatus for manufacturing solid carbon dioxide. 1,895,886; Jan. 31.
Lockwood, Lloyd D., Madison, N. J., assignor to Westinghouse Lamp Company. Lamp manufacture. 1,895,855; Jan. 31.
Lofman, Charles, Riverside, assignor to S. Karpen & Bros., Chicago, Ill. Eyelet machine. 1,895,550; Jan. 31.
Lonza Elektrizitatswerke und Chemische Fabriken Aktiengesellschaft. (See Ruoech, Samuel, assignor.)
Lorens, Charles F., East Orange, N. J., assignor to Westinghouse Lamp Company. Incandescent electric lamp. 1,895,887; Jan. 31.
Lotts, Delbert L., assignor to General Research Corporation, Chicago, Ill. Transmission. 1,895,888; Jan. 31.
Loughman, William F., Barre, assignor to Katches Inc., Boston, Mass. Fastening device. 1,895,672; Jan. 31.
Lovely, John E., assignor to Jones & Lamson Machine Company, Springfield, Vt. Internal driving fixture. 1,895,807; Jan. 31.
Lowe, James P., Lima, Peru. Telephone repeater. 1,895,808; Jan. 31.
Lowrey, George, et al. (See Pippin, John W., assignor.)
Lübbertsmeier, Adolf, Barmen, Germany. Safety razor blade. 1,895,763; Jan. 31.
Lukas, Julia, assignor to L. & E. Stirn, Inc., New York, N. Y. Textile fabric or similar article. Des. 89,136; Jan. 31.
Lukas, Julia, assignor to L. & E. Stirn, Inc., New York, N. Y. Textile fabric or similar article. Des. 89,137; Jan. 31.
Luke, Hobert E. (See Luke, Thomas A., assignor.)
Luke, Thomas A., McComas, assignor of one-half to H. E. Luke, Bluefield, W. Va. Shaker conveyer. 1,895,673; Jan. 31.
Lund, Nels B., Seaford, assignor to The Dorr Company, Inc., New York, N. Y. Detritor. 1,895,674; Jan. 31.
Lundholm, Carl H., Aktiebolag. (See Kuhlemann, Stig, O. C., assignor.)
Lupton's, David, Sons Company. (See Sheard, Joseph H., assignor.)
Lussier, Alphonse L., Springfield, Mass. Cushion assembly of resilient wheels. 1,895,579; Jan. 31.
Lutts, Wilford E., and G. A. Graves, Newton Center, assignors to Sani-Fil, Inc., Boston, Mass. Waste receptacle. 1,895,904; Jan. 31.
Lyth, Paul W., Lidingo, Sweden. Receiving apparatus for electrical impulses. 1,895,889; Jan. 31.
MacDonald, David B., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Making shoe stiffeners. 1,895,467; Jan. 31.
Maclennan, Frank W., Miami, Ariz. Classifier. 1,895,468; Jan. 31.
MacMillin, Howard F. (See Ernst, W., and MacMillin.)
Macnabb, Vernon C., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Radio receiving system. 1,895,809; Jan. 31.
Madland, Gabriel, Chicago, Ill., assignor to Camel Company. Doorcheck means. 1,895,856; Jan. 31.
MaGirl, P. H., Foundry and Furnace Works. (See MaGirl, Willis J., assignor.)
MaGirl, Willis J., assignor to P. H. MaGirl Foundry and Furnace Works, Bloomington, Ill. Boiler. 1,895,720; Jan. 31.
Magnesium Development Corporation. (See Mond, Albert L., assignor.)
Magnesium Development Corporation. (See Wagner, Karl F., assignor.)
Magrath, George H., Whitinsville, Mass. Bobbin clutch. 1,895,810; Jan. 31.
Makrusin, Herman, assignor to Louis Necho, Philadelphia, Pa. Detachable lift for the heel of a shoe. 1,895,469; Jan. 31.
Martin, Michael J., Armadale, Victoria and H. P. Brooksbank, Merlynston, North Coburg, Victoria, assignors to Sulphates Proprietary Limited, Melbourne, Victoria, Australia. Treatment of bauxite, alunite, and like aluminous material. 1,895,580; Jan. 31.
Mathers, Frank C., Bloomington, Ind., and L. Bateman, East Lansing, Mich., assignors to United States Smelting, Refining & Mining Company, Portland, Me. Electrodeposition of metals. 1,895,675; Jan. 31.
Mathieu, Eugene, Neuilly-sur-Seine, France. Carburetor. 1,895,470; Jan. 31.
Mathieu, Eugene, Neuilly-sur-Seine, France. Carburetor. 1,895,471; Jan. 31.
Matthes, Samuel S., assignor to The Ohio Brass Company, Mansfield, Ohio. Trolley support. 1,895,581; Jan. 31.
Mavor & Coulsons, Limited. (See Mavor, John B., assignor.)
Mavor, John B., Mile End, Glasgow, assignor to Mavor & Coulsons, Limited, Glasgow, Scotland. Conveyer. 1,895,551; Jan. 31.
Mayer, Hans. (See Straub, F., and Mayer.)
Mayo, Florence E., Jamaica, N. Y. Trapese and flying rings. 1,895,721; Jan. 31.
McCaskey Register Company, The. (See Gibbs, James A., assignor.)
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Release valve. 1,895,472; Jan. 31.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,895,473; Jan. 31.

McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car equipment. 1,895,474; Jan. 31.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car equipment. 1,895,475; Jan. 31.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car control device. 1,895,476; Jan. 31.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake valve device. 1,895,477; Jan. 31.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Airplane brake. 1,895,478; Jan. 31.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,895,479; Jan. 31.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Compressor unloader. 1,895,480; Jan. 31.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,895,481; Jan. 31.
McDonald, William, River Forest, Ill. Boiler water treatment. 1,895,635; Jan. 31.
McKaig, Jesse F., Oklahoma City, Okla. Adjustable choke nipple. 1,895,636; Jan. 31.
McKeefe, Edward P. (See Bradley, L., and McKeefe.)
McLearn, Herbert M., Waukegan, Ill. Gear selector. 1,895,722; Jan. 31.
McPherson, John B., 4th, Abington, Pa. Aircraft. 1,895,679; Jan. 31.
McQuay-Norris Manufacturing Co. of Indiana, Inc. (See Wainwright, Harry A., assignor.)
Mechanical Devices Company. (See Sperry, Frank E., assignor.)
Meissner Manufacturing Company. (See Meissner, William O., assignor.)
Meissner, William O., Hinsdale, assignor to Meissner Manufacturing Company, Chicago, Ill. Synchronous motor. 1,895,637; Jan. 31.
Melling, Joseph, Jackson, Mich. Wrench. 1,895,638; Jan. 31.
Memminger, Christopher G., Asheville, N. C.; W. H. Waggaman, Lakeland; S. D. Gooch, Lake Wales, and F. P. Kerschbaum, Winter Haven, Fla. Production of phosphoric acid. 1,896,006; Jan. 31.
Menasha Products Company, The. (See Horwitt, Paul H., assignor.)
Meng, Harry E., Oak Park, assignor to W. D. Allen Manufacturing Company, Chicago, Ill. Lawn sprinkler. 1,895,890; Jan. 31.
Merriam, Ezra B., Swarthmore, Pa., assignor to General Electric Company. Electric circuit breaker. 1,895,935; Jan. 31.
Merrill, Allan B., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber shaft-bearing. 1,895,936; Jan. 31.
Metal Specialties Manufacturing Company. (See Lewis, George S., assignor.)
Metropolitan Engineering Company. (See Bennett, I. T., and Reynolds, assignors.)
Metzner, Albert W. (See Sherman, J. Q., and Metzner.)
Miller, Charles F., and S. W. Brundage, Miami, Fla. Convertible awning and shutter. 1,895,723; Jan. 31.
Miller, Ernest B., and G. C. Connolly, Baltimore, Md., assignors to The Silica Gel Corporation, Baltimore, Md. Removing sulphur compounds from gas mixtures. 1,895,724; Jan. 31.
Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Coal distillation by-product recovery system. 1,895,676; Jan. 31.
Miller, William C., Canton, Ohio, assignor to Diebold Safe & Lock Company. Safe. 1,896,007; Jan. 31.
Miller, William H. (See Vanstory, William J., assignor.)
Millican, Frank A., Vancouver, British Columbia, Canada. Tubeless pneumatic tire. 1,895,582; Jan. 31.
Mineral's Beneficiation Incorporated. (See Wuensch, Charles E., assignor.)
Minnesota Mining & Manufacturing Company. (See Drew, Richard G., assignor.)
Mitchell Specialty Company. (See Seitz, Joseph J., assignor.)
Mittasch, Alwin, Mannheim, and H. Zorn, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of catalysts. 1,895,764; Jan. 31.
Mockbee, Louis R., Hartford, Conn. Percolator. 1,895,857; Jan. 31.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heat exchange device. 1,895,891; Jan. 31.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Moers, Kurt. (See Agte, C., and Moers.)
Mond, Albert L., London, England, assignor, by mesne assignments, to Magnesium Development Corporation. Producing castings of magnesium and high grade magnesium alloys. 1,895,639; Jan. 31.
Monogram Lens Corporation. (See Arbuckle, Samuel F., assignor.)
Moore, David P., et al. (See Fricker, Carl J., assignor.)
Morecroft, John H., Palisade, N. J. Electrical measuring instrument. 1,895,812; Jan. 31.
Morgan Construction Company. (See George, Jerome R., assignor.)
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Latch. 1,895,892; Jan. 31.
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Latch. 1,895,893; Jan. 31.
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Latch. 1,895,894; Jan. 31.
Moran, William G., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Vapor electric device. 1,895,858; Jan. 31.
Morgan, Harry, Walnut Park, Calif. Treating ores. 1,895,811; Jan. 31.
Morris Commercial Cars Limited. (See Edwards, Charles K., assignor.)
Morse, Ralph L., Springfield, Mass. Map. 1,895,937; Jan. 31.
Motor Products Corporation. (See Kellogg, Homer G., assignor.)
Motor Wheel Corporation. (See Stough, Charles R., assignor.)
Mudd, Rolla E., Chicago, Ill. Cigarette case. 1,896,008; Jan. 31.
Muffly, Glenn, Detroit, Mich., assignor to Copeland Products, Inc. Refrigerating mechanism. 1,895,859; Jan. 31.
Müller, Ulrich, Kiel, Germany. Artificial production of fog. 1,895,765; Jan. 31.
Murphy, George W., Wangaratta, Victoria, Australia. Attaching the uprights and members of scaffolding and other structures. 1,895,766; Jan. 31.
Murray, John F., et al., executors. (See Murray, Thomas E.)
Murray, Joseph B., et al., executors. (See Murray, Thomas E.)
Murray, Thomas E., deceased, Brooklyn, N. Y.; J. B. Murray, T. E. Murray, jr., and J. F. Murray, executors. Radiator. 1,895,482; Jan. 31.
Murray, Thomas E., jr., et al., executors. (See Murray, Thomas E.)
Mutschler, Henry G., Rochester, N. Y. Frame. 1,895,938; Jan. 31.
Myers, Abram L., Chicago, Ill. Dial telephone operating means. 1,895,552; Jan. 31.
Nash, Douglas E., assignor to Nash Engineering Company, South Norwalk, Conn. Vacuum steam heating system. 1,895,813; Jan. 31.
Nash Engineering Company. (See Nash, Douglas E., assignor.)
Nashua Gummed & Coated Paper Company. (See Foley, Charles E., assignor.)
National Aniline & Chemical Company. (See Daniels, Lloyd C., assignor.)
National Aniline & Chemical Company. (See Punnett, Elton B., assignor.)
National Electric Products Corporation. (See Robinson, William C., assignor.)
National Standard Company. (See Pierce, Robert C., assignor.)
National-Standard Company. (See Reum, William A., assignor.)
National Tube Company. (See Offutt, John W., assignor.)
National Tube Company. (See Rosenkranz, Max, assignor.)
Natural Products Refining Co. (See Hollowell, James S., assignor.)
Necho, Louis. (See Makursin, Herman, assignor.)
Nederlandsche Technische Handel Maatschappij "Giro". (See Anschütz-Kaempfe, Hermann, assignor.)
Nelley, Stephen B., Winchester, assignor to Dewey and Almy Chemical Company, Cambridge, Mass. Coagulation of latex. 1,896,054; Jan. 31.
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Rotation control mechanism for drills. 1,895,860; Jan. 31.
Nelson, Victor B., Rockford, Ill. Educational device. 1,895,814; Jan. 31.
Neveu, Anselme, Ivry-Gargan, France, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Load brake apparatus. 1,895,483; Jan. 31.
New Jersey Zinc Company, The. (See Bunce, E. H., and Haslam, assignors.)
Nickerson, Archer M., jr. (See Dawson, G. H., Dunn, and Nickerson.)
Nimmo, Walter R. (See Brownsdon, H. W., Nimmo, and Pollitt.)
Nitralloy Corporation, The. (See Aubert, Pierre F. M., and A. J. P. and H. A. M. Duval, assignors.)
Nordell, Carl H., Chicago, Ill. Door or screen and fastening means. 1,895,553; Jan. 31.
Norling, Oscar, Tacoma, Wash. Clamp truck. 1,895,640; Jan. 31.
Northcott, Robert A., Los Angeles, Calif. Shampoo lavatory. Des. 89,138; Jan. 31.
Norton Lasier Co. (See Norton, Lewis C., assignor.)
Norton, Lewis C., Los Angeles, Calif., assignor to Norton-Lasier Co., Chicago, Ill. Connection for doorchecks. 1,895,895; Jan. 31.
Nuckols, Claude C., Menands, assignor to Albany Corrugated Container Corp., Albany, N. Y. Collapsible display stand. 1,895,725; Jan. 31.
O'Brien, Thomas D., Vancouver, British Columbia, Canada, assignor, by mesne assignments, to Steiner Sales Company, Salt Lake City, Utah. Towel cabinet. Re18,726; Jan. 31.

Offutt, John W., Ellwood City, Pa., assignor to National Tube Company. Heating furnace. 1,895,726; Jan. 31.
Ohio Brass Company, The. (See Matthes, Samuel S., assignor.)
Oilgear Company, The. (See Ferris, Walter, assignor.)
O'Keeffe, George W., Milton, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch and contact structure therefor. 1,895,767; Jan. 31.
Ordmann, Max D. (See Holtzman, John, assignor.)
Ottesen, Otto, Los Angeles, Calif. Automobile wheel puller. 1,896,009; Jan. 31.
Ottinger, Nathan, New York, N. Y. Folding box. 1,895,768; Jan. 31.
Outboard Motors Corporation. (See Witke, Elmer A., assignor.)
Overly, Elmer G., Greensburg, Pa. Envelope construction. 1,895,484; Jan. 31.
Overly, Elmer G., Greensburg, Pa. License plate envelope. 1,895,485; Jan. 31.
Overly, Elmer G., Greensburg, Pa. Envelope construction. 1,895,486; Jan. 31.
Overmeyer, John, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,139; Jan. 31.
Pachowicz, Edmund. (See Jakoubek, F. J., and Pachowicz.)
Packard Motor Car Company. (See Griswold, Walter R., assignor.)
Packard Motor Car Company. (See Holden, Fenn M., assignor.)
Packard Motor Car Company. (See Summers, Caleb E., assignor.)
Paddock, Levi S., assignor to Swift & Company, Chicago, Ill. Branding meat products. 1,895,641; Jan. 31.
Panco Rubber Company. (See Berenstein, Frank, assignor.)
Patrick, Walter A., Baltimore, Md., and E. H. Barclay, Hamilton, Ohio, assignors to The Silica Gel Corporation, Baltimore, Md. Plural gels and preparing same. 1,896,055; Jan. 31.
Pearce, Walter H., Churchville, assignor to The Brown Instrument Company, Philadelphia, Pa. Recording instrument fountain pen. 1,895,727; Jan. 31.
Peck, Garrette W., San Diego, Calif. Dirigible aircraft. 1,895,518; Jan. 31.
Peerless Motor Car Corporation. (See Thomas, Stanley R., assignor.)
Pennsylvania Railroad Company. (See Butts, George W., assignor.)
Pepper, Byron J., Fort Wayne, Ind., assignor to Tokheim Oil Tank and Pump Company. Fluid dispensing apparatus. 1,896,056; Jan. 31.
Perry, Edward R., Hartsville, S. C. Agricultural implement. 1,896,611; Jan. 31.
Persons, Lawrence M., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo. Exercising apparatus. 1,896,010; Jan. 31.
Peters, Orville S., Chevy Chase, Md. Preparing carbon resistance stacks. 1,895,519; Jan. 31.
Peterson, Gust W., Long Beach, Calif. Permanent wave apparatus. 1,895,815; Jan. 31.
Pfeiffer, César, Asnieres, France, assignor to Fuller Company. Compressor and vacuum pump. 1,895,816; Jan. 31.
Pfueger, Albert, Miami, Fla. Mounting fish and various specimens hollow. 1,895,720; Jan. 31.
Philadelphia Storage Battery Company. (See Grindlitch, William H., assignor.)
Philips, Hans A., Stratford, assignor to The American Fabrics Company, Bridgeport, Conn. Waterproof sweatband structure. 1,895,861; Jan. 31.
Philips, Hans A., Stratford, assignor to The American Fabrics Company, Bridgeport, Conn. Waterproof sweatband structure. 1,895,862; Jan. 31.
Phillips, Nathan. (See Cronenberg, Abbey, assignor.)
Phillips, Reginald G. A., Cleveland Heights, Ohio, assignor, by mesne assignments, to American Multigraph Co., Wilmington, Del. System of justifying type lines. 1,895,520; Jan. 31.
Pier, Mathias, Heidelberg, and E. Anthes and K. Winkler, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Production of valuable hydrocarbons from carbonaceous materials which are in the liquid state. 1,895,769; Jan. 31.
Pierce, Robert C., assignor to National Standard Company, Niles, Mich. Floor lamp. Des. 89,153; Jan. 31.
Pinheiro, John B., Oakland, Calif. Vehicular traveling bag. 1,895,677; Jan. 31.
Pinkham, Henry P., Wollaston, assignor to Condit Electrical Manufacturing Corporation, Hyde Park, Mass. Switch operating mechanism. 1,895,770; Jan. 31.
Pinkham, Henry P., Wollaston, assignor to Condit Electrical Manufacturing Corporation, Hyde Park, Mass. Electric switch. 1,895,817; Jan. 31.
Pippin, John W., Corpus Christi, assignor of one-half to H. R. Giles, Nueces County, and one-half to W. F. Hall and G. Lowrey, Harris County, Tex. Well plunger and packing. 1,895,728; Jan. 31.
Pirani, N. (See Young, Guy M., assignor.)
Pitcairn, Harold F., Bryn Athyn, and A. E. Larsen, Huntingdon Valley, assignors to Autogiro Company of America, Philadelphia, Pa. Aircraft. 1,895,521; Jan. 31.
Pitter Trust, The. (See Pitter, Walter C., assignor.)
Pitter, Walter C., Epping, England, assignor to The Pitter Trust, Chicago, Ill. Clutch. 1,895,678; Jan. 31.
Pollak, Abraham, Far Rockaway, N. Y. Weighing scale. 1,895,863; Jan. 31.
Pollitt, George P. (See Brownsdon, H. W., Nimmo, and Pollitt.)
Pope, Elmer R., Hamilton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating upon the heel-portions of shoes. 1,895,896; Jan. 31.
Powers, James, Los Angeles, Calif., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Automatic total-taking mechanism for accounting machines. Re18,727; Jan. 31.
Preble, James J., Newton, Mass., deceased; L. Stebbins, administrator, assignor, by mesne assignments, to American Air Filter Company, Louisville, Ky. Filter unit. 1,895,642; Jan. 31.
Prentice, Miller, Louisville, Ky. Grease gun filler. 1,895,730; Jan. 31.
Prensel, Adam H., Halifax, Pa. Ironing board pad. 1,895,731; Jan. 31.
Presbrey, Otis F., Brooklyn, N. Y. Article handling machine. 1,895,939; Jan. 31.
Prosperity Company Inc., The. (See Zimarik, John, assignor.)
Prüfert, Hermann, Hohenlimburg, Germany. Apparatus for and the cooling of annealed goods in cooled vessels. 1,895,680; Jan. 31.
Prutzman, Paul W. (See Roth, Ernest W., and Prutzman.)
Punnett, Elton B., Buffalo, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Production of maleic anhydride. 1,895,522; Jan. 31.
Putnam, Joseph F., Berkeley, assignor to Standard Oil Company of California, San Francisco, Calif. Method of and apparatus for measuring the thickness of metal. 1,895,643; Jan. 31.
Quinlan, Amos L., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for constructing electrical coils. 1,895,487; Jan. 31.
Rabbit, Frank, Baltimore, Md. Adjustable glare shield bracket. 1,895,583; Jan. 31.
Radio Corporation of America. (See Albright, Wilhelm, assignor.)
Radio Corporation of America. (See Hannold, Leland S., assignor.)
Radio Corporation of America. (See Snow, Harold A., assignor.)
Raizess, George W., and A. I. Kremens, Philadelphia, Pa., assignors to Abbott Laboratories, North Chicago, Ill. Nonacid salt of diamino dihydroxy-arsenobenzene dimethylene sulphonic acid. 1,895,681; Jan. 31.
Randall, Edison E., Kankakee, Ill. Draft regulator. 1,895,554; Jan. 31.
Randall, Walter F. (See Smith, W. S., Garnett, and Randall.)
Rastetter, William C., Fort Wayne, Ind. Folding chair. 1,895,897; Jan. 31.
Raymond, Albert V., Grenoble, France. Slider operating closures. 1,896,012; Jan. 31.
Raymond, Arthur E., assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif. Tail wheel construction. 1,895,682; Jan. 31.
Raymond Concrete Pile Company. (See Smith, Herman R., assignor.)
Reasoner, James A., Lancaster, Ohio. Brake shoe. 1,896,013; Jan. 31.
Reckmeier, Emil, Berlin, Germany. Three-color photographic camera. 1,895,555; Jan. 31.
Reed Roller Bit Company. (See Del'Homme, Daniel L., assignor.)
Reeves, Cuthbert E., Buffalo, N. Y. Interlocking switch. 1,895,820; Jan. 31.
Regan, George P., and A. R. Day, Oakland, Calif. Producing sound pictures. 1,895,644; Jan. 31.
Regan, Paul H., Fitchburg, Mass. Display frame. 1,895,818; Jan. 31.
Reid, James B. (See Gann, J. A., and Reid.)
Reilly, Alfred F., assignor to Evans Case Company, North Attleboro, Mass. Combined brush and comb construction. 1,895,940; Jan. 31.
Reisinger, James C., Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y. Power-driven fan. 1,895,488; Jan. 31.
Remington, Alfred M., assignor to Simonds Saw & Steel Co., Fitchburg, Mass. Convex cutting method and apparatus. 1,895,819; Jan. 31.
Remington Arms Company. (See Burns, James E., assignor.)
Remington Rand Inc. (See Powers, James, assignor.)
Replogle, Daniel B., Berkeley, Calif., assignor to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Air-way cleaning tool and end closure therefor. 1,895,684; Jan. 31.
Reum, William A., assignor to National-Standard Company, Niles, Mich. Tire cover. 1,896,014; Jan. 31.
Reynolds, Blythe M., Utica, N. Y. Increasing the activity of oxidation catalysts. 1,896,031; Jan. 31.
Reynolds, Frank C. (See Bennett, I. T., and Reynolds.)
Ribera, Lucien, New York, N. Y. Cigarette holder. 1,896,015; Jan. 31.

Ricci, Alvaro, Philadelphia, Pa. Automobile trunk. 1,895,864; Jan. 31.
Richards, Edgar W., Jackson Heights, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,154; Jan. 31.
Riebel, Frederick, jr., assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio. Vacuum cleaner. 1,895,585; Jan. 31.
Ritchey, Roscoe V., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Shoe pressing apparatus. 1,895,941; Jan. 31.
Ritchie, Charles F. (See Gale, W. A., and Ritchie.)
Roalfe, George A., Long Beach, assignor to Isabel D. Roalfe, Los Angeles, Calif. Classifying and separating machine. 1,895,771; Jan. 31.
Roalfe, Isabel D. (See Roalfe, George A., assignor.)
Robinson, Preston. (See Shugg, C., and Robinson.)
Robinson, William C., Sewickley, Pa., assignor to National Electric Products Corporation, New York, N. Y. Flameproof cable. 1,895,898; Jan. 31.
Rosenberg, Ralph H., Syracuse, N. Y., assignor to American Cable Company, Inc. Equalized disk brake. 1,895,772; Jan. 31.
Rosenkranz, Max, Library, Pa., assignor to National Tube Company. Pipe welding apparatus. 1,895,732; Jan. 31.
Rostock, Otto, and J. Claussen, Elmshorn, Germany. Device for cleaning matrices. 1,895,645; Jan. 31.
Roth, Ernest W., and P. W. Prutsman, Los Angeles, Calif. Apparatus for treating an oily liquid with an aqueous liquid. 1,895,683; Jan. 31.
Rowe, Irving R., assignor to The Atwood Machine Company, Stonington, Conn. Winding machine. 1,895,865; Jan. 31.
Rowell, Ralph M., Lynn, Mass., assignor to General Electric Company. Telemetric summation system. 1,895,942; Jan. 31.
Royle, Robert N., Ossining, N. Y. Bookmark. Des. 89,142; Jan. 31.
Ruben Patents Company. (See Ruben, Samuel, assignor.)
Ruben Rectifier Corporation. (See Ruben, Samuel, assignor.)
Ruben, Samuel, New York, assignor to Ruben Patents Company, New Rochelle, N. Y. Method and an apparatus for electrically effecting synthetic reactions. 1,895,489; Jan. 31.
Ruben, Samuel, New Rochelle, N. Y. Gas absorption element. 1,895,490; Jan. 31.
Ruben, Samuel, New York, N. Y., assignor to Ruben Rectifier Corporation, Englewood, N. J. Electric current rectifier. 1,895,684; Jan. 31.
Ruben, Samuel, New York, N. Y., assignor to Ruben Rectifier Corporation, Englewood, N. J. Electric current rectifier. 1,895,685; Jan. 31.
Ruben, Samuel, New Rochelle, N. Y., assignor to Ruben Rectifier Corporation, Englewood, N. J. Electric current rectifier. 1,895,686; Jan. 31.
Ruben, Samuel, New Rochelle, N. Y., assignor to Vega Manufacturing Corporation, Wilmington, Del. Insulated wire and process therefor. 1,896,040; Jan. 31.
Ruben, Samuel, New Rochelle, N. Y., assignor to Vega Manufacturing Corporation, Wilmington, Del. Insulated wire. 1,896,041; Jan. 31.
Ruben, Samuel, New Rochelle, N. Y., assignor to Vega Manufacturing Corporation, Wilmington, Del. Insulated wire. 1,896,042; Jan. 31.
Ruben, Samuel, New Rochelle, N. Y., assignor to Vega Manufacturing Corporation, Wilmington, Del. Insulated wire and process therefor. 1,896,043; Jan. 31.
Rubino, Carlo, Flushing, N. Y. Self-opening envelope. 1,895,646; Jan. 31.
Rueckart, Walter G., and E. B. Anderson, Big Spring, Tex. Clutch mechanism for use in motor vehicle transmissions. 1,895,821; Jan. 31.
Rueckart, Walter G., and E. B. Anderson, Big Spring, Tex. Clutch. 1,895,822; Jan. 31.
Ruosch, Samuel, Visp, assignor to Firm: Lonza Elektrizitatswerke und Chemische Fabriken Aktiengesellschaft, Gampel and Basel, Switzerland. Preparation of mixed manures containing ammonium nitrate. 1,895,733; Jan. 31.
Rush, Allan C., Los Angeles, Calif. Triadic, interlocking strut and truss, catenary and suspension bridge. 1,895,734; Jan. 31.
Rush, C. C., et al. (See Boyd, Fred S., assignor.)
Ruth Company, The. (See Ruth, Joseph P., jr., assignor.)
Ruth, Joseph P., jr., assignor to The Ruth Company, Denver, Colo. Impeller for flotation machines. 1,895,523; Jan. 31.
Rutishauser, Arnold, Zurich, Switzerland. Process of and device for manufacturing hollow bodies by means of fibrous materials. 1,895,687; Jan. 31.
Sack, Melvin, assignor to Henry Vogt Machine Co., Louisville, Ky. Floating head and test ring. 1,895,735; Jan. 31.
Safety Car Heating & Lighting Company, The. (See Scbepmoes, Lindsley, assignor.)
Safety Mining Company. (See Armstrong, Frank H., assignor.)
Sager, Solomon M., Glencoe, Ill. Electric advertising and demonstrating machine. 1,896,016; Jan. 31.
St. Joseph Iron Works. (See Schmidtke, Albert H., assignor.)
Sandt, Julius, Pirmasens, Germany. Smoothing shoe parts. 1,896,017; Jan. 31.
Sani-Fil, Inc. (See Lutts, W. E., and Graves, assignors.)
Sapp, John P., Kent, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Method of and apparatus for removing tires from molds. 1,895,943; Jan. 31.
Sargent, Irva H., Lawrenceburg, Tenn. Movable automobile headlight. 1,896,018; Jan. 31.
Schaub, Jacob, Westfield, N. J., assignor to Best Foods, Inc., New York, N. Y. Packaging machine. 1,895,899; Jan. 31.
Scheer, William H. (See Daugherty, Fount F., assignor.)
Schenkel, Mortiz, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Anode for mercury vapor rectifiers. 1,895,944; Jan. 31.
Schepmoes, Lindsley, New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. Advertising display. 1,895,773; Jan. 31.
Schlegel, Charles P., assignor to The Schlegel Manufacturing Company, Rochester, N. Y. Window channel. 1,895,688; Jan. 31.
Schlegel, Charles P., assignor to The Schlegel Manufacturing Company, Rochester, N. Y. Molding. 1,895,689; Jan. 31.
Schlegel Manufacturing Company, The. (See Schlegel, Charles P., assignor.)
Schmidtke, Albert H., assignor to St. Joseph Iron Works, St. Joseph, Mo. Basket. 1,895,586; Jan. 31.
Schnell, Conrad, Woodhaven, N. Y. Motor truck. 1,895,866; Jan. 31.
Schnell, Julius L., Arlington, N. J. Fountain pen. 1,895,736; Jan. 31.
Schoenky, August R., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Box toe conditioning machine. 1,895,524; Jan. 31.
Schorndt, Frederick W. B., assignor to Chas. Cory Corporation, New York, N. Y. Indicator. 1,895,838; Jan. 31.
Schweitzer, Edmund O., Northbrook, Ill. Electric cut-out. 1,895,491; Jan. 31.
Schweizer, Franz, Hof, assignor to Karl Hintsches, Oberkotzau, Germany. Device for preventing carburetor fires. 1,896,019; Jan. 31.
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,140; Jan. 31.
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,143; Jan. 31.
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,144; Jan. 31.
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,155; Jan. 31.
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,156; Jan. 31.
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,157; Jan. 31.
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,158; Jan. 31.
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,159; Jan. 31.
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,160; Jan. 31.
Seitz, Joseph J., assignor to Mitchell Specialty Company, Philadelphia, Pa. Door retainer. 1,895,525; Jan. 31.
Selby-Hele, John, Santa Monica, Calif. Sewing cabinet. Des. 89,145; Jan. 31.
Selby Shoe Company, The. (See Hauck, Charles J., assignor.)
Semon, Waldo L., Cuyahoga Falls, and A. W. Sloan, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Making aldehyde-amines. 1,895,945; Jan. 31.
Service Bureau, Inc. (See Dawson, G. H., Dunn, and Nickerson, assignors.)
Shapleigh, James H., Mount Lakes, N. J., assignor to Hercules Powder Company, Wilmington, Del. Method of and apparatus for concentrating nitric acid. 1,895,492; Jan. 31.
Sharp, John E. (See Horner, G. W., and Sharp.)
Shaw, Lloyd, Colorado Springs, Colo. Balancing coaster wagon with airplane controls. 1,895,787; Jan. 31.
Sheard, Joseph H., assignor to David Lupton's Sons Company, Philadelphia, Pa. Pivot window. 1,896,057; Jan. 31.
Sherman, John Q., and A. W. Metsner, Dayton, Ohio, assignors to The Standard Register Company. Electrical manifolder. 1,896,032; Jan. 31.
Sherman, Morris, New York, N. Y. Radio apparatus. 1,895,493; Jan. 31.
Shimadzu, Genso, Kioto, Japan. Apparatus for the continuous production of lead oxides in the dry state. 1,896,020; Jan. 31.
Shively, Elmer W., Carleton, Nebr. Fence wire fastener. 1,895,839; Jan. 31.

Shugg, Carleton, and P. Robinson, North Adams, assignors to Sprague Specialties Co., Quincy, Mass. Combined hard and soft rubber article. 1,895,738; Jan. 31.
Siemens and Halske Aktiengesellschaft. (See Stolp, Franz, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Eule, Martin, assignor.)
Silica Gel Corporation, The. (See Miller, R. B., and Connolly, assignors.)
Silica Gel Corporation, The. (See Patrick, W. A., and Barclay, assignors.)
Simmons Company. (See Kusterle, Frank, assignor.)
Simonds Saw & Steel Co. (See Remington, Alfred M., assignor.)
Sinden, Roger H., Caldwell, N. J., assignor to Westinghouse Lamp Company. Getter capsule. 1,895,867; Jan. 31.
Singer Manufacturing Company, The. (See Grieb, Alfred, assignor.)
Sloan, Arthur W. (See Semon, W. L., and Sloan.)
Smallwood, Albert A., Martinsburg, W. Va. Freight car hand brake. 1,895,823; Jan. 31.
Smets, Florent E. A., and C. F. Hansen, Paris, France, assignors to Western Electric Company, Incorporated, New York, N. Y. Signal shaping circuit. 1,895,774; Jan. 31.
Smith, A. O., Corporation. (See Ziska, Adam, jr., assignor.)
Smith, Charles H., Greenville, assignor to Gibson Refrigerator Company, Greenville, Mich. Evaporator. 1,895,587; Jan. 31.
Smith, Edward A., West Englewood, N. J. Snow removal. 1,895,900; Jan. 31.
Smith, Henry C., Forest Hill, London, England. Locking washer and nut. 1,895,588; Jan. 31.
Smith, Herman R., Douglaston, assignor to Raymond Concrete Pile Company, New York, N. Y. Kelly bar. 1,895,901; Jan. 31.
Smith, Preston R., Rahway, N. J., assignor to The Barber Asphalt Company, Philadelphia, Pa. Bituminous emulsion. 1,895,775; Jan. 31.
Smith, William R., Chicago, Ill. Water heating attachment for boilers. 1,895,868; Jan. 31.
Smith, Willoughby S., Newton Poppleford, H. J. Garnett, Sevenoaks, and W. F. Randall, Ewell, England. Magnetic alloy. 1,895,556; Jan. 31.
Smythe, Edwin H., Evanston, Ill., assignor to Western Electric Company, New York, N. Y. Sound reproducer. 1,895,494; Jan. 31.
Snidow, Samuel W., Roanoke, Va. Combination curtain and shade bracket. 1,895,557; Jan. 31.
Snow, Harold A., Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Screen-grid amplifier. 1,895,902; Jan. 31.
Società Italiana Pirelli. (See Emanuelli, Luigi, assignor.)
Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint Gobain, Chauny & Cirey. (See Lebel, Henry, assignor.)
Societe Anonyme in Cooperation Agricole & Industrielle. (See Claudel, Charles H., assignor.)
Societe des Usines Chimiques Rhone-Poulenc. (See Gault, H., and Angla, assignors.)
Society of Chemical Industry in Basle. (See Haller, R., and Heckendorn, assignors.)
Society of Chemical Industry in Basle. (See Straub, F., and Mayer, assignors.)
Solomon, Sophia, Brooklyn, assignor to Joseph Berlinger Company, New York, N. Y. Textile fabric. Des. 89,161; Jan. 31.
Solomon, Sophia, Brooklyn, N. Y. Textile fabric. Des. 89,161; Jan. 31.
Solum, Conrad R., Huntington Park, Calif. Earth drilling bit. 1,895,526; Jan. 31.
Spatta, George, assignor to Clark Equipment Company, Buchanan, Mich. Blotting tubes. 1,895,589; Jan. 31.
Spencer, John A., Newton, assignor to The Spencer Thermostat Company, Cambridge, Mass. Snap acting device. 1,895,590; Jan. 31.
Spencer, John A., Newtonville, assignor to General Plate Company, Attleboro, Mass. Snap acting device. 1,895,591; Jan. 31.
Spencer, John A., Newtonville, assignor to General Plate Company, Attleboro, Mass. Snap acting device. 1,895,592; Jan. 31.
Spencer Thermostat Company, The. (See Spencer, John A., assignor.)
Sperry, Frank E., Batavia, assignor to Mechanical Devices Company, Bloomington, Ill. Rotary pump. 1,896,033; Jan. 31.
Spies, George, Oak Creek, Wis. Ironing board. 1,895,558; Jan. 31.
Spindt, Alvin E., Chelan County, Wash. Combined orchard spraying and sprinkling system. 1,895,739; Jan. 31.
Sprague Specialties Co. (See Shugg, C., and Robinson, assignors.)
Standard-I. G. Company. (See Pier, M., Anthes, and Winkler, assignors.)
Standard Mirror Company. (See Bertell, P., and La Hodny, assignors.)
Standard Mirror Company. (See La Hodny, William, assignor.)
Standard Mirror Company. (See Weir, James B., assignor.)
Standard Oil Company of California. (See Putnam, Joseph F., assignor.)
Standard Oil Company of California. (See Thompson, Erskine D., assignor.)
Standard Register Company. (See Sherman, J. Q., and Metsner, assignors.)
Standard Stoker Company, The. (See Turner, Edwin A., assignor.)
Stebbis, Livingston, administrator. (See Preble, James J.)
Steele, James W., Kansas City, Mo. Fabric tensioning and fastening device. 1,895,495; Jan. 31.
Stein, Herbert, Berlin, Germany, assignor to General Electric Company. Control system. 1,895,946; Jan. 31.
Steiner Sales Company. (See O'Brien, Thomas D., assignor.)
Stenhouse, Thomas, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Transfer apparatus for glassware. 1,895,824; Jan. 31.
Stephens, Percy W., Chicago, Ill. Steel wool holder. 1,895,496; Jan. 31.
Stern, Albert R., New York, N. Y. Uniform cap. 1,895,593; Jan. 31.
Stevens, Robert H., Larchmont, N. Y. Electromagnetic coil. 1,895,869; Jan. 31.
Stiefel, Ernst, Bauma, assignor to Swiss Locomotive and Machine Works, Winterthur, Switzerland. Packing. 1,895,497; Jan. 31.
Stirn, L. & E., Inc. (See Cohen, William, assignor.)
Stirn, L. & E., Inc. (See Lukas, Julia, assignor.)
Stoefen, Robert R., Los Angeles, Calif. Color light projector. 1,895,690; Jan. 31.
Stoller, Hugh M., assignor to Western Electric Company, New York, N. Y. Electric regulator. 1,895,498; Jan. 31.
Stolp, Franz, Berlin-Pankow, assignor to Siemens and Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Spool for electrical coils. 1,895,776; Jan. 31.
Stone, Nathaniel B., Washington, D. C. Recoil buffer for cutter bars. 1,895,840; Jan. 31.
Stough, Charles R., assignor to Motor Wheel Corporation, Lansing, Mich. Pressed steel hub. 1,895,499; Jan. 31.
Strandt, Gustave E., Milwaukee, Wis. Locking device for doors. 1,895,594; Jan. 31.
Strandt, Gustav E., Milwaukee, Wis. Gate structure. 1,895,595; Jan. 31.
Straub Fritz, and H. Mayer, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Dyestuff containing metal and making same. 1,895,559; Jan. 31.
Sturtevant, B. F., Company. (See Freeman, Ernest B., assignor.)
Sulphates Proprietary Limited. (See Martin, M. J., and Brooksbank, assignors.)
Summers, Caleb E., Dayton, Ohio, assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich. Counteracting torsional vibration. 1,896,027; Jan. 31.
Summit Mold & Machine Company, The. (See Brandage, James W., assignor.)
Surface Combustion Corporation. (See Bell, William D., assignor.)
Sutherland, Harry H. (See Jenks, S. M., and Sutherland.)
Swan, Joseph E., 3d, assignor to The Gardner-Richardson Company, Middletown, Ohio. Paper manufacture. 1,895,527; Jan. 31.
Swanson, Ernest R., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Winding machine. 1,895,741; Jan. 31.
Swift & Company. (See Christopher, E. F., and De Beukelaer, assignors.)
Swift & Company. (See Paddock, Levi S., assignor.)
Swift & Company. (See Zeigler, Clarence C., assignor.)
Swiss Locomotive and Machine Works. (See Stiefel, Ernst, assignor.)
Taylor, Eugene S., assignor of one-half to H. E. Young, Chicago, Ill. Storage apparatus. 1,896,021; Jan. 31.
Taylor, Hugh S., Princeton, N. J., and W. A. Lazier, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Catalytic dehydration and dehydrogenation process. 1,895,528; Jan. 31.
Taylor, Hugh S., Princeton, N. J., and W. A. Lazier, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Catalytic dehydration. 1,895,529; Jan. 31.
Teletype Corporation. (See Kleinschmidt, Edward E., assignor.)
Templeton, Kenly & Co. Limited. (See Jakoubek, F. J., and Pachowicz, assignors.)
Textile Machine Works. (See Zwicky, Melchior, assignor.)
Theiss, Emil, Budapest, assignor to Egyesült Izzólámpa és Villamossági részvenytársaság Uj-Pest, Hungary. Plated metal body and producing same. 1,896,022; Jan. 31.
Thomas, Charles A., and C. A. Hochwalt, assignors to The Fyr-Fyter Company, Dayton, Ohio. Fire extinguisher. 1,895,530; Jan. 31.
Thomas, Charles A., and C. A. Hochwalt, assignors to Fyr-Fyter Company, Dayton, Ohio. Fire extinguisher. 1,895,691; Jan. 31.
Thomas, Charles A., and C. A. Hochwalt, assignors to The Fyr-Fyter Company, Dayton, Ohio. Fire extinguishing composition. 1,895,692; Jan. 31.
Thomas, Stanley R., assignor to Peerless Motor Car Corporation, Cleveland, Ohio. Torsional vibration damper. 1,895,825; Jan. 31.

Thompson, Erskine D., Burlingame, assignor to Standard Oil Company of California, San Francisco, Calif. Certificate and record holders. 1,895,903; Jan. 31.

Todd, Charles W., Schenectady, N. Y. Locomotive. 1,895,500; Jan. 31.

Tokheim Oil Tank and Pump Company. (See Pepper, Byron J., assignor.)

Tracy, Lott R., Seattle, Wash. Weed killer. 1,895,698; Jan. 31.

Tranin Egg Products Co. (See Tranin, S., and Irwin, assignors.)

Tranin, Samuel and J. C. Irwin, jr., Kansas City, Mo., assignors to Tranin Egg Products Co. Edible compound including egg products. 1,895,694; Jan. 31.

Tresouthick, Joseph L., Jersey City, N. J. Window. 1,896,023; Jan. 31.

Trolley, Isaac. (See Bateman, F. H., and Trolley.)

Tropic-Aire, Incorporated. (See Will, Carl H., assignor.)

Trudeau, Leonel J. A., Waltham, Mass. Bolt and application thereof. 1,895,826; Jan. 31.

Tung-Sol Lamp Works, Inc. (See Fidler, Robert H., assignor.)

Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Locomotive boiler. 1,896,058: Jan. 31.

Turner Tanning Machinery Company, The. (See Jones, Albert F., assignor.)

Ukropina, Bozidar J., Los Angeles, Calif. Making concrete pipe. 1,895,740; Jan. 31.

Unger, Magnus, Pittsfield, Mass., assignor to General Electric Company. Heat radiator. 1,895,947: Jan. 31.

Union Switch & Signal Company, The. (See Bone, Herbert L., assignor.)

United-Carr Fastener Corporation. (See Carr, Moses F., assignor.)

United Shoe Machinery Corporation. (See Goddu, George, assignor.)

United Shoe Machinery Corporation. (See MacDonald, David B., assignor.)

United Shoe Machinery Corporation. (See Pope, Elmer R., assignor.)

United Shoe Machinery Corporation. (See Schoneky, August R., assignor.)

United States Smelting, Refining & Mining Company. (See Mathers, F. C., and Bateman, assignors.)

Universal Oil Products Company. (See Alther, Joseph G., assignor.)

Universal Winding Company. (See Swanson, Ernest R., assignor.)

Van den Broek, John A., Ann Arbor, Mich. Spiral spring. 1,895,948: Jan. 31.

Vandercook & Sons. (See Vandercook, Edward O., D. D., and F. R., assignors.)

Vandercook, David D. (See Vandercook, Edward O., D. D., and F. R.)

Vandercook, Edward O., D. D., and F. R., Evanston, assignors to Vandercook & Sons, Chicago, Ill. Proof press cylinder adjustment. 1,895,501; Jan. 31.

Vandercook, Frederick R. (See Vandercook, Edward O., D. D., and F. R.)

Van der Does, Jean, assignor to Joseph Berlinger Company, New York, N. Y. Textile fabric. Des. 89,163; Jan. 31.

Van Hecke, Charles E., Stevens Point, Wis. Main and lateral connection and forming same. 1,895,827; Jan. 31.

Van Inwagen, Charles L., jr., Rutherford, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Wire splicing machine. 1,895,828; Jan. 31.

Vanstory, William J., assignor of one-half to W. H. Miller, Booneville, Miss. Milk cooler. 1,895,949; Jan. 31.

Vega Manufacturing Corporation. (See Ruben, Samuel, assignor.)

Vernet, Sergius, Brooklyn, and A. J. Haynes, Forest Hills, N. Y. Weighing scale. 1,895,502; Jan. 31.

Visel, August C., Bronson, Mich. Electric water heater. 1,895,870; Jan. 31.

Vlahov, George, assignor to John Holtzman, New York, N. Y. Aeroplane. 1,895,871; Jan. 31.

Vogt, Henry, Machine Co. (See Sack, Melvin, assignor.)

Voigtländer, Hermann, and O. Kaufels, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Shaped body having a predominating percentage of tungsten or molybdenum and producing it. 1,895,950; Jan. 31.

Von Ficht, Katharine, Chicago, Ill. Curtain fastener. 1,895,951; Jan. 31.

Vose, Lewis S., Needham, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Timer for weft detectors of box looms. 1,895,829; Jan. 31.

Wachenheimer, Harry, Providence, R. I. Clasp. 1,895,952; Jan. 31.

Waggaman, William H. (See Memminger, C. G., Waggaman, Gooch, and Kerschbaum.)

Wagner, Karl F., Stuttgart, Germany, assignor, by mesne assignments, to Magnesium Development Corporation, Newark, N. J. Automatic die-casting apparatus. 1,895,596; Jan. 31.

Wainwright, Harry A., assignor to McQuay-Norris Manufacturing Co. of Indiana, Inc., Connersville, Ind. Drilling or reaming machine. 1,896,059; Jan. 31.

Waldorf Paper Products Company. (See Boeye, Paul F., assignor.)

Walker, Charles, Knoxville, Tenn. Multiple vending machine. 1,895,953; Jan. 31.

Walker, Ernest A., assignor to J. Bath, Worcester, Mass. Work table and relieving mechanism for grinding machines. 1,895,830; Jan. 31.

Ward, H. J., et al. (See Boyd, Fred S., assignor.)

Warren, Thomas S., Hermosa Beach, Calif. Casing for a hand manipulated therapeutic device. Des. 89,146; Jan. 31.

Waterbury Clock Company. (See Cowles, George P., assignor.)

Weaver, Allan, Port Washington, N. Y., assignor to American Telephone and Telegraph Company. Electrooptical system. 1,895,531; Jan. 31.

Weed, Fred E., Columbia, assignor of one-eighth to F. J. Bruening, St. Louis, Mo. Automatic ink agitator for printing machines. 1,896,034; Jan. 31.

Weir, James B., Oakwood Heights, assignor to Standard Mirror Company, Inc., Buffalo, N. Y. Combined rear view mirror and instrument. 1,895,560; Jan. 31.

Weller, Ernest E. (See Colby, Allan B., assignor.)

Wellton, Otto G., Saltsjobaden, Sweden. Continually variable change speed gear. 1,895,841; Jan. 31.

Werdenberg, Heinrich. (See Hug, E., and Werdenberg.)

West, Raymond L., Santa Ana, Calif. Hitch for offset tandem disk harrows and the like. 1,895,831; Jan. 31.

Western Clock Company. (See Greenleaf, William H., assignor.)

Western Electric Company. (See Henning, George E., assignor.)

Western Electric Company. (See Quinlan, Amos L., assignor.)

Western Electric Company. (See Reisinger, James C., assignor.)

Western Electric Company. (See Smets, F. E. A., and Hansen, assignors.)

Western Electric Company. (See Smythe, Edwin H., assignor.)

Western Electric Company. (See Stoller, Hugh M., assignor.)

Western Union Telegraph Company. (See Curtin, L. P., and Kline, assignors.)

Westinghouse Air Brake Company. (See Dormoy, Jules M. J., assignor.)

Westinghouse Air Brake Company, The. (See Down, Sidney G., assignor.)

Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)

Westinghouse Air Brake Company, The. (See Hewitt, Ellis E., assignor.)

Westinghouse Air Brake Company, The. (See McCune, Joseph C., assignor.)

Westinghouse Air Brake Company, The. (See Neveu, Anselme, assignor.)

Westinghouse Electric & Manufacturing Company. (See Kintzing, Reese T., assignor.)

Westinghouse Electric & Manufacturing Company. (See Schenkel, Moritz, assignor.)

Westinghouse Lamp Company. (See Lockwood, Lloyd D., assignor.)

Westinghouse Lamp Company. (See Lorenz, Charles F., assignor.)

Westinghouse Lamp Company. (See Moran, William G., assignor.)

Westinghouse Lamp Company. (See Sinden, Roger H., assignor.)

Weston Paper and Manufacturing Co. (See Brecht, George F., assignor.)

Whedon, Le Grand S. (See Grinnell, Albert A., assignor.)

White, John W., Detroit, Mich. Vehicle brake. 1,895,561; Jan. 31.

White, Oliver L., St. Helens, Oreg. Clothes hanger. 1,895,695; Jan. 31.

Whitehead, George F., Sioux City, Iowa. Receptacle for ice manufacture. 1,895,742; Jan. 31.

Whitehead, William. (See Dreyfus, C., and Whitehead.)

Whittin Machine Works. (See Jessen, John A., assignor.)

Wilde, Frederick H., Chicago, Ill., assignor to Guy S. Faber. Air conditioning aparatus. 1,895,954; Jan. 31.

Will, Carl H., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Heating apparatus for automotive vehicles. 1,895,503; Jan. 31.

Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,147; Jan. 31.

Willheim, William, Co. (See Brodsky, Michel, assignor.)

Willheim, William, Co. (See Fogelberg, Edith M., assignor.)

Willheim, William, Co. (See Guhl, Maclyn, assignor.)

Willheim, William, Co. (See Overmeyer, John, assignor.)

Willheim, William, Co. (See Richards, Edgar W., assignor.)

Willheim, William, Co. (See Schweizer, Jack, assignor.)

Williams, Andrew C., asignor of one-half to A. H. Donghty, Lansing, Mich. Electric brake mechanism. 1,896,035; Jan. 31.

Williams, Charles W., assignor to American Air Filter Company, Inc., Louisville, Ky. Automatic flushing device. 1,895,597; Jan. 31.

Williams, Frank R., Philadelphia, Pa. Polishing composition. 1,895,872; Jan. 31.

Wilson, Walter E., assignor to The Robert Keller Ink Company, Detroit, Mich. Bottle. Des. 89,141; Jan. 31.

Wilson, William H. (See Land, C. H., and Wilson.)

Winkler, Karl. (See Pier, M., Anthes, and Winkler.)

Winters & Crampton Company. (See Geske, Carl, assignor.)

Witke, Elmer A., assignor to Outboard Motors Corporation, Milwaukee, Wis. Outboard motor mounting. 1,895,696; Jan. 31.

Wonnell, Kent W. (See Henkel, Adolph A., assignor.)

Wuensch, Charles E., assignor to Mineral's Beneficiation Incorporated, Joplin, Mo. Apparatus for classifying materials. 1,895,504; Jan. 31.

Wuensch, Charles E., assignor to Mineral's Beneficiation Incorporated, Joplin, Mo. Classifying materials. 1,895,505; Jan. 31.

Wygodsky, Leon, Baltimore, Md. Solid fuel and making the same. 1,895,955; Jan. 31.

Wygodsky, Leon, Baltimore, Md. Solid fuel and making same. 1,895,956; Jan. 31.

Yager, George F., assignor to The Bunting Brass and Bronze Company, Toledo, Ohio. Facing and chamfering machine. 1,895,562; Jan. 31.

York, Bertrand L., Piedmont, Calif. Supporting element for confections. 1,895,607; Jan. 31.

Young, Edward E., Parkersburg, W. Va. Well packer. 1,895,905; Jan. 31.

Young, Guy M., assignor of fifty-two and on-half per cent to N. Pirani, Memphis, Tenn. Combination tobacco, match, and cigarette paper case. 1,895,957; Jan. 31.

Young, Hugh E. (See Taylor, Eugene S., assignor.)

Zeigler, Clarence C., Maplewood, N. J., assignor to Swift & Company, Chicago, Ill. New gelatine product and preparing the same. 1,896,049; Jan. 31.

Zellhoefer, Glenn F., Bloomington, Ill. Regenerative refrigerating system. 1,895,698; Jan. 31.

Zimarik, John, Akron, Ohio, assignor, by mesne assignments, to The Prosperity Company Inc., Syracuse, N. Y. Press. 1,895,958; Jan. 31.

Zimmer, Otto, M.-Gladbach, Germany. Corner holder. 1,895,599; Jan. 31.

Ziska, Adam, jr., assignor to A. O. Smith Corporation, Milwaukee, Wis. Arc welding apparatus. 1,895,699; Jan. 31.

Zorn, Hermann. (See Mittasch, A., and Zorn.)

Zucca, Joseph, Kingston, N. Y. Rumble seat and mechanism for operating the same. 1,895,832; Jan. 31.

Zwicky, Melchior, Berkshire Heights, assignor to Textile Machine Works, Wyomissing, Pa. Fashioning mechanism for full fashioned knitting machines. 1,895,777; Jan. 31.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 31ST DAY OF JANUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accounting machines, Automatic total-taking mechanism for. J. Powers. Re18,727; Jan. 31.
Acid, Method of and apparatus for concentrating nitric. J. H. Shapleigh. 1,895,492; Jan. 31.
Acid, Production of phosphoric. C. G. Memminger, W. H. Waggaman, S. D. Gooch, and F. P. Kerschbaum. 1,896,006; Jan. 31.
Acids, β-naphthyl-aminoaryl-hydroxy fatty. W. Hentrich, J. Hilger, and R. Knoche. 1,895,713; Jan. 31.
Acoustic panel for vehicles. L. S. Hannold. Des. 89,130; Jan. 31.
Actinometer. W. T. Kennedy. 1,895,853; Jan. 31.
Adjustable light. H. F. Dorris. 1,895,706; Jan. 31.
Advertising display. L. Schepmoes. 1,895,773; Jan. 31.
Aeroplane. G. Vlahov. 1,895,871; Jan. 31.
Agricultural implement. E. R. Perry. 1,896,011; Jan. 31.
Air cleaner. C. H. Gagen. 1,895,619; Jan. 31.
Air conditioning apparatus. F. H. Wilde. 1,895,954; Jan. 31.
Air filter device. J. H. Fedeler. 1,895,618; Jan. 31.
Air heater. G. Bluemel. 1,895,966; Jan. 31.
Aircraft. D. A. Hall. 1,895,458; Jan. 31.
Aircraft. J. B. McPherson. 1,895,679; Jan. 31.
Aircraft. H. F. Pitcairn and A. E. Larsen. 1,895,521; Jan. 31.
Aircraft, Sextant for. A. F. Hegenberger. 1,895,510; Jan. 31.
Airplane brake. J. C. McCune. 1,895,478; Jan. 31.
Alarm, Burglar and fire. C. W. Bowen. 1,895,967; Jan. 31.
Alcohols, Manufacture of polyhydric. H. A. Lewis. 1,895,517; Jan. 31.
Aldehyde-amines, Making. W. L. Semon and A. W. Sloan. 1,895,945; Jan. 31.
Alloy, Gold. L. Lenfant. 1,896,003; Jan. 31.
Alloy, Magnetic. S. S. Smith, H. J. Garnett, and W. F. Randall. 1,895,556; Jan. 31.
Alloys, Hard. C. Agte and K. Moers. 1,895,959; Jan. 31.
Amplifier, Screen-grid. H. A. Snow. 1,895,902; Jan. 31.
Anchor escapement for clocks and the like. H. Junghans. 1,895,666; Jan. 31.
Anhydride, Production of maleic. E. B. Punnett. 1,895,522; Jan. 31.
Anode for mercury vapor rectifiers. M. Schenkel. 1,895,944; Jan. 31.
Anthraquinones, Making. L. C. Daniels. 1,895,788; Jan. 31.
Antitheft device for fluid containers. H. W. Bates. 1,895,963; Jan. 31.
Article handling machine. O. F. Presbrey. 1,895,939; Jan. 31.
Articles from molds, Method of and apparatus for loosening and removing. E. Blaker. 1,895,909; Jan. 31.
Ash receptacle, Individual. M. J. Green. 1,895,988; Jan. 31.
Awning and shutter, Convertible. C. F. Miller and S. W. Brundage. 1,895,728; Jan. 31.
Axle shaft remover, Broken. H. R. Jarvis. 1,895,928; Jan. 31.
Bag: *See*—
Golf bag. Traveling bag.
Hand bag.
Balancer with coil springs, Harmonic. F. M. Holden. 1,896,026; Jan. 31.
Bar: *See*—
Kelly bar.
Basket. A. H. Schmidtke. 1,895,586; Jan. 31.
Basket cover, Shipping. W. Bellowons. 1,895,964; Jan. 31.
Bauxite alunite and like aluminous material, Treatment of. M. J. Martin and H. P. Brooksbank. 1,895,580; Jan. 31.
Beam adjusting means. S. F. Arbuckle. 1,895,906; Jan. 31.
Bearing: *See*—
Shaft-bearing.
Bed structure. B. M. Frank and J. Basile. Re18,725; Jan. 31.
Belt fastener, Flexible. W. A. Calhoun. 1,895,969; Jan. 31.
Belt-making apparatus. B. A. Evans and W. B. Freeman. 1,895,922; Jan. 31.
Beverage dispenser. R. H. Downer. Des. 89,149; Jan. 31.
Bicycle frame. G. S. Lewis. Des. 89,132–3; Jan. 31.
Bicycle front fork G. S. Lewis. Des. 89,134; Jan. 31.
Bicycle lower rear fork. G. S. Lewis. Des. 89,135; Jan. 31.
Binder. W. M. Childs. 1,895,972; Jan. 31.
Binder, Loose leaf. H. M. Kellogg and J. Ahlbin. 1,895,629; Jan. 31.
Bird bath. E. Burley. 1,895,702; Jan. 31.
Bit: *See*—
Earth drilling bit.
Bituminous emulsion. P. R. Smith. 1,895,775; Jan. 31.
Blasting cap. J. Barab. 1,895,438; Jan. 31.
Bobbin clutch. G. H. Magrath. 1,895,810; Jan. 31.
Board: *See*—
Fiber board. Ironing board.
Bobbin spindle lock. E. J. Edwards. 1,895,707; Jan. 31.
Body having a predominating percentage of tungsten or molybdenum and producing it, Shaped. H. Voigtländer and O. Kaufels. 1,895,950; Jan. 31.
Boiler: *See*—
Locomotive boiler. Steam boiler.
Boiler. W. J. Ma Girl. 1,895,720; Jan. 31.
Bolt and application thereof. L. J. A. Trudeau. 1,895,826; Jan. 31.
Bookmark. R. N. Royle. Des. 89,142; Jan. 31.
Bottle. W. E. Wilson. Des. 89,141; Jan. 31.
Bottle closure with means for removing the paper seals. R. Hagebusch. 1,895,759; Jan. 31.
Box: *See*—
Cigarette and match box. Mail box.
Folding box. Outlet box.
Box plate, Letter. A. Fazekas. Des. 89,127; Jan. 31.
Box toe conditioning machine. A. R. Schoenky. 1,895,524; Jan. 31.
Bracket: *See*—
Curtain and shade bracket. Glare shield bracket.
Braiding machine. G. E. Henning. 1,895,462; Jan. 31.
Brake: *See*—
Airplane brake. Freight car hand brake.
Disk brake. Magnetic automotive brake.
Fluid pressure brake. Vehicle brake.
Brake. A. Y. Dodge. 1,895,917; Jan. 31.
Brake apparatus, Load. A. Neveu. 1,895,483; Jan. 31.
Brake apparatus, Vacuum. C. C. Farmer. 1,895,456; Jan. 31.
Brake device. S. Jones. 1,895,996; Jan. 31.
Brake device, Fluid pressure. E. E. Hewitt. 1,895,464; Jan. 31.
Brake for aircraft. J. M. J. Dormoy. 1,895,452; Jan. 31.
Brake mechanism. J. M. J. Dormoy. 1,895,451; Jan. 31.
Brake mechanism, Electric. A. C. Williams. 1,896,035; Jan. 31.
Brake operating mechanism. H. L. Hirschler. Re18,723; Jan. 31.
Brake shoe. J. A. Reasoner. 1,896,013; Jan. 31.
Braking apparatus, Railway. H. L. Bone. 1,896,050; Jan. 31.
Bridge, Triadic, interlocking strut and truss, catenary, and suspension. A. C. Rush. 1,895,734; Jan. 31.
Brush and comb construction, Combined. A. F. Reilly. 1,895,940; Jan. 31.
Brush, Collector ring. F. P. Fuller. 1,895,756; Jan. 31.
Buffer. S. Bäckström. 1,895,532; Jan. 31.
Buffer for cutter bars, Recoil. N. B. Stone. 1,895,840; Jan. 31.
Building and building section. E. Geiger. 1,895,657; Jan. 31.
Building blocks. J. H. Doak. 1,895,611; Jan. 31.
Building structure. K. E. Bemis. Des. 89,117; Jan. 31.
Button, Separable. H. and H. Goldberg. 1,895,984; Jan. 31.
Cabinet, Sewing. J. Selby-Hele. Des. 89,145; Jan. 31.
Cabinet, Towel. T. D. O'Brien. Re18,726; Jan. 31.
Cable, Flameproof. W. C. Robinson. 1,895,898; Jan. 31.
Cable, Rubber insulated electrical. C. O. Hull. 1,895,927; Jan. 31.
Calculating machine. W. S. Gubelmann. 1,895,848; Jan. 31.
Calendar, Selective. J. H. E. Houle. 1,895,797; Jan. 31.
Camera, Three-color photographic. E. Reckmeier. 1,895,555; Jan. 31.
Cap, Uniform. A. R. Stern. 1,895,593; Jan. 31.
Capsule, Getter. E. H. Sinden. 1,895,867; Jan. 31.
Car control device, Safety. J. C. McCune. 1,895,476; Jan. 31.
Car equipment, Safety. J. C. McCune. 1,895,474–5; Jan. 31.
Carbon dioxide, Apparatus for manufacturing solid. E. J. Lockwood. 1,895,886; Jan. 31.
Carbon resistance stacks, Preparing. O. S. Peters. 1,895,519; Jan. 31.
Carburetor. C. H. Claudel. 1,895,785; Jan. 31.
Carburetor. E. Mathieu. 1,895,470; Jan. 31.
Carburetor. E. Mathieu. 1,895,471; Jan. 31.
Carton. A. Brockman. 1,895,448; Jan. 31.
Carton, Egg. J. L. Coyle. 1,895,974; Jan. 31.
Cartridge charged with a compressed gas, Blasting. F. H. Armstrong. 1,895,563; Jan. 31.

Cartridge, Shot gun. H. W. Brownsdon, W. R. Nimmo, B. Heath, and G. P. Pollitt. 1,896,051; Jan. 31.
Case: *See*—
Cigarette case. Tobacco, match, and cigarette paper case.
Pass case.
Casing for a hand manipulated therapeutic device. T. S. Warren. Des. 89,146; Jan. 31.
Caster. W. F. Herold. 1,895,882; Jan. 31.
Castings of magnesium and high grade magnesium alloys. A. L. Mond. 1,895,639; Jan. 31.
Catalysts, Increasing the activity of oxidation. B. M. Reynolds. 1,896,031; Jan. 31.
Catalysts, Production of. A. Mittasch and H. Zorn. 1,895,764; Jan. 31.
Catalytic dehydration. H. S. Taylor and W. A. Lazier. 1,895,529; Jan. 31.
Catalytic dehydration and dehydrogenation process. H. S. Taylor and W. A. Lazier. 1,895,528; Jan. 31.
Catalytic hydrogenation process. W. A. Lazier. 1,895,515; Jan. 31.
Catalytic process of producing ketones. W. A. Lazier. 1,895,516; Jan. 31.
Cathodes of electron discharge tubes, Degassing. W. Albright. 1,895,437; Jan. 31.
Cellulose derivative and making same. R. Haller and A. Heckendorn. 1,895,544; Jan. 31.
Cellulose esters, Saponification of. C. Dreyfus and W. Whitehead. 1,895,919–20; Jan. 31.
Certificate and record holder. E. D. Thompson. 1,895,903; Jan. 31.
Chair: *See*—
Folding chair. Reclining chair.
Chair construction. F. W. Kohler. 1,895,803; Jan. 31.
Chair construction. F. W. Kohler. 1,895,804; Jan. 31.
Chaise lounge. F. Debski. Des. 89,126; Jan. 31.
Change speed gear, Continually variable. O. G. Wellton. 1,895,841; Jan. 31.
Chopper, Cotton. C. J. Johnson. 1,895,665; Jan. 31.
Cigarette and match box, Combined. W. Knaebel. 1,895,574; Jan. 31.
Cigarette case. R. E. Mudd. 1,896,008; Jan. 31.
Cigarette holder. L. Ribera. 1,896,015; Jan. 31.
Circuit breaker, Electric. E. B. Merriam. 1,895,935; Jan. 31.
Circuit, Signal shaping. F. E. A. Smets and C. F. Hansen. 1,895,774; Jan. 31.
Clasp. H. Wachenheimer. 1,895,952; Jan. 31.
Classifier. F. W. Maclennan. 1,895,468; Jan. 31.
Classifying and separating machine. G. A. Roalfe. 1,895,771; Jan. 31.
Cleaner: *See*—
Air cleaner. Suction cleaner.
Pipe cleaner. Vacuum cleaner.
Clip for attaching electric lights to Christmas trees. W. Gadke. 1,895,656; Jan. 31.
Clock case. C. Canepa. Des. 89,122; Jan. 31.
Clock, Electric. W. H. Greenleaf. 1,895,923; Jan. 31.
Clock, Electrically-wound. G. P. Cowles. 1,895,787; Jan. 31.
Clock, Silent alarm. T. J. Cranwill. 1,895,703; Jan. 31.
Closure cap for paper milk bottles. L. B. Koch. 1,895,575; Jan. 31.
Closures, Slider operating. A. V. Raymond. 1,896,012; Jan. 31.
Clothes hanger. O. L. White. 1,895,695; Jan. 31.
Clutch: *See*—
Bobbin clutch. Motor vehicle clutch.
Friction clutch.
Clutch. W. C. Pitter. 1,895,678; Jan. 31.
Clutch. W. G. Rueckart and E. B. Anderson. 1,895,822; Jan. 31.
Clutch mechanism for use in motor vehicle transmissions. W. G. Rueckart and E. B. Anderson. 1,895,821; Jan. 31.
Coal distillation by-product recovery system. S. P. Miller. 1,895,676; Jan. 31.
Coal or other granular material, Apparatus for feeding. S. R. Illingworth. 1,895,798; Jan. 31.
Coatings on iron and steel articles, Production of protective. L. P. Curtin and B. L. Kline. 1,895,569; Jan. 31.
Coil for toy electric motors, Electromagnetic. J. A. Hanley. 1,895,460; Jan. 31.
Coils, Method of and apparatus for constructing electrical. A. L. Quinlan. 1,895,487; Jan. 31.
Coin sorting machine. F. F. Daugherty. 1,895,975; Jan. 31.
Collar holder. H. Gunther. 1,896,029; Jan. 31.
Color light projector. R. R. Stoefen. 1,895,690; Jan. 31.
Combination implement. E. A. Hamilton. 1,895,834; Jan. 31.
Compound including egg products, Edible. S. Tranin and J. C. Irwin, jr. 1,895,694; Jan. 31.
Compressor and vacuum pump. C. Pfeiffer. 1,895,816; Jan. 31.
Compressor, Diaphragm. W. R. Brown. 1,895,602; Jan. 31.
Compressor unloader. J. C. McCune. 1,895,480; Jan. 31.
Condenser: *See*—
Variable condenser.
Conduit fitting. A. L. Garford. 1,895,791; Jan. 31.
Connecting rod construction for radial engines. L. M. Bowman. 1,895,700; Jan. 31.
Connection and forming the same, Main and lateral. C. E. Van Hecke. 1,895,827; Jan. 31.
Connection for doorchecks. L. C. Norton. 1,895,895; Jan. 31.
Container: *See*—
Hinged container.
Control mechanism, Automatic reversing. O. A. Johnson. 1,895,627; Jan. 31.
Control system. H. Stein. 1,895,946; Jan. 31.
Convex cutting method and apparatus. A. M. Remington. 1,895,819; Jan. 31.
Conveyer. J. B. Mayor. 1,895,551; Jan. 31.
Conveyer, Shaker. T. A. Luke. 1,895,673; Jan. 31.
Cooler: *See*—
Milk cooler.
Cooling of annealed goods in cooled vessels, Apparatus for and the. H. Prüfert. 1,895,680; Jan. 31.
Cooling system. E. F. Fisher. 1,895,652; Jan. 31.
Cooling system for internal combustion engines. C. R. Fouts. 1,895,509; Jan. 31.
Corner holder. O. Zimmer. 1,895,599; Jan. 31.
Couch, Folding. A. Cronenberg. 1,895,541; Jan. 31.
Coupling device. S. E. Bates. 1,895,746; Jan. 31.
Cover: *See*—
Basket cover. Tire cover.
Crate, Assembled. P. Hingston. 1,895,624; Jan. 31.
Crib. F. Knsterle. 1,895,885; Jan. 31.
Cultivator. T. Brown. 1,895,648; Jan. 31.
Current in the lead sheaths of cables, Device for reducing the. L. Emanueli. 1,895,982; Jan. 31.
Current rectifier, Electric. S. Ruben. 1,895,684–6; Jan. 31.
Curtain and shade bracket, Combination. S. W. Snidow. 1,895,557; Jan. 31.
Curtain fastener. K. Von Ficht. 1,895,951; Jan. 31.
Cushion assembly of resilient wheels. A. L. Lussier. 1,895,579; Jan. 31.
Cutter: *See*—
Paper cutter.
Damper, Torsional vibration. S. R. Thomas. 1,895,825; Jan. 31.
Detritor. N. B. Lund. 1,895,674; Jan. 31.
Die-casting apparatus, Automatic. K. F. Wagner. 1,895,596; Jan. 31.
Direction signal. J. Kolsters. 1,895,669; Jan. 31.
Dirigible aircraft. G. W. Peck. 1,895,518; Jan. 31.
Dishwashing apparatus. W. L. Lindgren. 1,896,005; Jan. 31.
Disk brake, Equalized. R. H. Rosenberg. 1,895,772; Jan. 31.
Dispenser: *See*—
Table dispenser.
Dispenser. P. H. Horwitt. 1,895,661; Jan. 31.
Dispensing device. G. Lipshitz. 1,895,854; Jan. 31.
Display frame. P. H. Regan. 1,895,818; Jan. 31.
Display sign, Advertising. A. A. Henkel. 1,896,030; Jan. 31.
Display stand, Collapsible. C. C. Nuckols. 1,895,725; Jan. 31.
Door, Grain. F. E. Hummel and A. W. Foley. 1,895,625; Jan. 31.
Door or screen and fastening means. C. H. Nordell. 1,895,553; Jan. 31.
Door retainer. J. J. Seitz. 1,895,525; Jan. 31.
Doorcheck means. G. Madland. 1,895,856; Jan. 31.
Dough molding machine. F. X. and E. J. Lauterbur. 1,895,684; Jan. 31.
Draft regulator. E. E. Randall. 1,895,554; Jan 31.
Drill: *See*—
Hand drill.
Drill. D. L. Del'Homme. 1,895,610; Jan. 31.
Drills, Rotation control mechanism for. G. M. Nell. 1,895,860; Jan. 31.
Drilling or reaming machine. H. A. Wainwright. 1,896,059; Jan. 31.
Driving arrangement for aircraft propellers. M. J-B. Barbarou. 1,895,874; Jan. 31.
Driving fixture, Internal. J. E. Lovely. 1,895,807; Jan. 31.
Dropper, Regulating. E. M. Aikman. 1,895,436; Jan. 31.
Dyestuff containing metal and making same. F. Straub and H. Mayer. 1,895,559; Jan. 31.
Dyestuff, Gallocyanine. E. Hug and H. Werdenberg. 1,895,545; Jan. 31.
Earth drilling bit. C. R. Solum. 1,895,526; Jan. 31.
Educational device. V. B. Nelson. 1,895,814; Jan. 31.
Electric advertising and demonstrating machine. S. M. Sager. 1,896,016; Jan. 31.
Electric cut-out. E. O. Schweitzer. 1,895,491; Jan. 31.
Electric regulator. H. M. Stoller. 1,895,498; Jan. 31.
Electric switch. A. Y. Dodge. 1,895,918; Jan. 31.
Electric switch. H. P. Pinkham. 1,895,817; Jan. 31.
Electrical apparatus. R. P. Lansing. 1,895,837; Jan. 31.
Electrical control system. J. H. Hammond, jr. 1,825,924–5; Jan. 31.
Electrical switch, High voltage. F. G. Baum. 1,895,907; Jan. 31.
Electrode holder, Welding. S. T. Kiser. 1,895,573; Jan. 31.
Electromagnetic coil. R. H. Stevens. 1,895,869; Jan. 31.
Electrooptical system. A. Weaver. 1,895,531; Jan. 31.
Electroprocessing machine. A. H. Hannon. 1,895,622; Jan. 31.
Embroidery machine. J. Huntbach. 1,895,994; Jan. 31.
Engine: *See*—
Internal combustion engine.
Engines, Thermostatic control for internal combustion. H. L. Blood. 1,895,534; Jan. 31.

Envelope construction. E. G. Overly. 1,895,484; Jan. 31.
Envelope construction. E. G. Overly. 1,895,486; Jan. 31.
Envelope, License plate. E. G. Overly. 1,895,485; Jan. 31.
Envelope, Self-opening. C. Rubino. 1,895,646; Jan. 31.
Esters, Manufacture of butyric, Cellulose. H. Gault and B. M. R. Angla. 1,896,039; Jan. 31.
Evaporator. C. H. Smith. 1,895,587; Jan. 31.
Exercising apparatus. L. M. Persons. 1,896,010; Jan. 31.
Eyelet machine. C. Lofman. 1,895,550; Jan. 31.
Fabric tensioning and fastening device. J. W. Steele. 1,895,495; Jan. 31.
Facing and chamfering machine. G. F. Yager. 1,895,562; Jan. 31.
Fan, Power-driven. J. C. Reisinger. 1,895,488; Jan. 31.
Fastener: *See*—
Belt fastener. Fence wire fastener.
Curtain fastener. Snap fastener.
Fastening device. W. F. Loughman. 1,895,672; Jan. 31.
Fastening inserting mechanism. G. Goddu. 1,895,457; Jan. 31.
Feeder for little pigs. H. W. Ahrens. 1,895,435; Jan. 31.
Fence post. A. H. Langenheim. 1,895,670; Jan. 31.
Fence wire fastener. E. W. Shively. 1,895,839; Jan. 31.
Fiber board, Composite corrugated and solid. P. F. Boeye. 1,896,037; Jan. 31.
Filter unit. J. J. Preble. 1,895,642; Jan. 31.
Firearm, Automatic. A. J. Lahti. 1,895,719; Jan. 31.
Fire extinguisher. C. A. Thomas and C. A. Hochwalt. 1,895,530; Jan. 31.
Fire extinguisher. C. A. Thomas and C. A. Hochwalt. 1,895,691; Jan. 31.
Fire extinguishing composition. C. A. Thomas and C. A. Hochwalt. 1,895,692; Jan. 31.
Fires, Device for preventing carburetor. F. H. Schweizer. 1,896,019; Jan. 31.
Fish and various specimens hollow, Mounting. A. Pflueger. 1,895,729; Jan. 31.
Fixture, Curtain. J. M. Barrett. 1,895,780; Jan. 31.
Flash-light apparatus, Photographic. F. G. Johnson. 1,895,835; Jan. 31.
Flash light, Vest pocket type. M. E. Buchholz. 1,895,913; Jan. 31.
Floating head and test ring. M. Sack. 1,895,735; Jan. 31.
Flower holder. G. R. Davis, jr. 1,895,609; Jan. 31.
Fluid dispensing apparatus. B. J. Pepper. 1,896,056; Jan. 31.
Fluid pressure brake. S. G. Down. 1,895,453; Jan. 31.
Fluid pressure brake. E. E. Hewitt. 1,895,465; Jan. 31.
Fluid pressure brake. J. C. McCune. 1,895,473; Jan. 31.
Fluid pressure brake. J. C. McCune. 1,895,479; Jan. 31.
Fluid pressure brake. J. C. McCune. 1,895,481; Jan. 31.
Fluid-treating apparatus. F. L. Hunt. 1,895,760; Jan. 31.
Flush valve. A. T. Cobb. 1,895,786; Jan. 31.
Flushing device, Automatic. C. W. Williams. 1,895,597; Jan. 31.
Fog, Artificial production of. U. Müller. 1,895,765; Jan. 31.
Folder. I. Allen. 1,895,960; Jan. 31.
Folding box. N. Ottinger. 1,895,768; Jan. 31.
Folding chair. W. C. Rastetter. 1,895,897; Jan. 31.
Fruit, Forming the top layer of packed. E. Bernfus. 1,895,877; Jan. 31.
Frame: *See*—
Display frame. Quilting frame.
Frame. H. G. Mutschler. 1,895,938; Jan. 31.
Freight car hand brake. A. A. Smallwood. 1,895,823; Jan. 31.
Friction clutch. C. M. Anglemyer. 1,895,600; Jan. 31.
Fuel and making the same, Solid. L. Wygodsky. 1,895,955–6; Jan. 31.
Fuel supporting device for furnaces. F. X. and E. J. Lauterbur. 1,895,633; Jan. 31.
Furnace: *See*—
Heating furnace. Metallurgical furnace.
Fuse. J. M. King. 1,895,513; Jan. 31.
Fuse plug or the like. E. J. Burns. 1,895,914; Jan. 31.
Garment stay fastening means. J. F. Donahue. 1,895,612; Jan. 31.
Gas absorption element. S. Ruben. 1,895,490; Jan. 31.
Gases and apparatus therefor, Purification of. K. Beuthner. 1,895,601; Jan. 31.
Gate structure. G. S. Strandt. 1,895,595; Jan. 31.
Gauge: *See*—
Pressure gauge.
Gear: *See*—
Change speed gear.
Gear selector. H. M. McLearn. 1,895,722; Jan. 31.
Gelatine product and preparing the same, New. C. C. Zeigler. 1,896,049; Jan. 31.
Gels and preparing same, Plural. W. A. Patrick and E. H. Barclay. 1,896,055; Jan. 31.
Glare shield bracket, Adjustable. F. Rabbitt. 1,895,583; Jan. 31.
Glass, Apparatus for annealing. H. Lebel. 1,895,547; Jan. 31.
Glass, Method and apparatus for cross cutting wire. G. Adrien and P. F. Gutmann. 1,895,779; Jan. 31.
Glass, Method and apparatus for forming sheet. C. Cone. 1,895,916; Jan. 31.
Glass sheets, Method of and apparatus for tempering. H. Lebel. 1,895,548; Jan. 31.
Glass sheets, Washing and cleaning. T. J. Leyland. 1,895,934; Jan. 31.
Glass, Surfacing sheet. J. C. Blair. 1,895,908; Jan. 31.
Glue and making same. H. V. Dunham. 1,895,979; Jan. 31.
Glue preparation and product. E. F. Christopher and F. L. De Beukelaer. 1,895,447; Jan. 31.
Glue product and preparing the same. E. F. Christopher and F. L. De Beukelaer. 1,895,446; Jan. 31.
Golf bag. G. Ducat. 1,895,454; Jan. 31.
Grain malting unit. R. E. Kusserow. 1,895,514; Jan. 31.
Graining machine. A. F. Jones. 1,895,512; Jan. 31.
Grate, Furnace. A. W. Hulson. 1,895,511; Jan. 31.
Grease gun filler M. Prentice. 1,895,730; Jan. 31.
Guiding device for long draft aprons. J. A. Jessen. 1,895,800; Jan. 31.
Gyroscopic instrument. H. Anschütz-Kaempfe. 1,895,628; Jan. 31.
Hair waving and curling rod. S. Fisher. 1,895,653; Jan. 31.
Hand bag. M. E. Lessin. 1,895,671; Jan. 31.
Hand drill. E. Harcharick. 1,895,990; Jan. 31.
Hanger: *See*—
Clothes hanger.
Hanger. A. A. Bubbs. 1,895,613; Jan. 31.
Headlight, Movable automobile. I. H. Sargent. 1,896,018; Jan. 31.
Heat exchange apparatus. E. B. Freeman. 1,895,755; Jan. 31.
Heat exchange device. A. B. Modine. 1,895,891; Jan. 31.
Heat-treating magnetic materials, Method of and apparatus for. H. C. Knerr. 1,895,998; Jan. 31.
Heater: *See*—
Air heater. Water heater.
Revolving heater.
Heating and cooling system. I. T. Bennett and F. C. Reynolds. 1,895,876; Jan. 31.
Heating apparatus for automotive vehicles. C. H. Will. 1,895,503; Jan. 31.
Heating furnace. S. M. Jenks and H. H. Sutherland. 1,895,716; Jan. 31.
Heating furnace. J. W. Offutt. 1,895,726; Jan. 31.
Heating, ventilating, and air conditioning. W. L. Cassell. 1,895,444; Jan. 31.
Heel protector. C. J. Fricker. 1,895,598; Jan. 31
Hinge. H. G. Kellogg. 1,895,572; Jan. 31.
Hinge. F. A. Kuntz. 1,895,466; Jan. 31.
Hinge construction. C. Geske. 1,895,658; Jan. 31.
Hinged container. C. S. Andrews. 1,895,778; Jan. 31.
Hitch for offset tandem disk harrows and the like. R. L. West. 1,895,831; Jan. 31.
Hoe. A. A. Beeman. 1,895,875; Jan. 31.
Holder: *See*—
Certificate and record holder. Electrode holder.
Cigarette holder. Flower holder.
Collar holder. License holder.
Corner holder. Steel wool holder.
Violin holder.
Holder. J. E. Kelley. 1,895,717; Jan. 31.
Hole indicator, Crooked. W. Elliott. 1,895,615; Jan. 31.
Hollow bodies by means of fibrous materials, Process of and device for manufacturing. A. Rutishauser. 1,895,687; Jan. 31.
Housing, Compressor. T. J. Fowler. 1,895,508; Jan. 31.
Housing, Rolling mill. J. R. George. Re18,724; Jan. 31.
Hub, Pressed steel. C. B. Stough. 1,895,499; Jan. 31.
Hull structure of ships and the like. H. E. J. Camps. 1,895,879; Jan. 31.
Hydraulic press. W. Ernst and H. F. MacMillin. 1,895,710; Jan. 31.
Hydrocarbons from carbonaceous materials which are in the liquid state, Production of valuable. M. Pier, E. Anthes, and K. Winkler. 1,895,769; Jan. 31.
Impeller for flotation machines. J. P. Ruth, jr. 1,895,523; Jan. 31.
Index. G. H. Dawson, E. A. Dunn, and A. M. Nickerson, jr. 1,895,651; Jan. 31.
Index card. A. A. Chauvin. 1,895,784; Jan. 31.
Indexing or like apparatus. A. H-T. Glenny. 1,895,993; Jan. 31.
Indicator: *See*—
Hole indicator.
Indicator. F. W. B. Schoradt. 1,895,838; Jan. 31.
Ink agitator for printing machines, Automatic. F. E. Weed. 1,896,034; Jan. 31.
Insect destroyer, Electric. W. M. Frost. 1,895,570; Jan. 31.
Interlocking switch. C. E. Reeves. 1,895,820; Jan. 31.
Internal combustion engine. A. Büchi. 1,895,538; Jan. 31.
Internal combustion engine. C. K. Edwards. 1,895,981; Jan. 31.
Internal combustion engine. W. R. Griswold. 1,896,024; Jan. 31.
Internal combustion engine. M. Jannin. 1,895,851; Jan. 31.
Iodine, Purifying. C. W. Jones. 1,895,929; Jan. 31.
Iron and steel articles, Rust proofing. L. P. Curtin and B. L. Kline. 1,895,568; Jan. 31.
Iron, Fender. W. L. Brown. 1,895,647; Jan. 31.
Iron work climber, Structural. J. Hein. 1,895,571; Jan. 31.
Ironing board. G. Spies. 1,895,558; Jan. 31.

Ironing board pad. A. H. Prenzel. 1,895,731; Jan. 31.
Joint: *See*—
Oscillating joint.
Kelly bar. H. R. Smith. 1,895,901; Jan. 31.
Key cutting machine. C. A. Haubroe. 1,895,849; Jan. 31.
Kiln. J. S. Hollowell. 1,895,795; Jan. 31.
Knitting machines, Fashioning mechanism for full fashioned. M. Zwicky. 1,895,777; Jan. 31.
Lamp base or similar article. J. Hendriksen and J. Heran. Des. 89,131; Jan. 31.
Lamp, Floor. R. C. Pierce. Des. 89,153; Jan. 31.
Lamp, Incandescent electric. C. F. Lorenz. 1,895,887; Jan. 31.
Lamp manufacture. L. D. Lockwood. 1,895,855; Jan. 31.
Lamp, Motor vehicle. W. Birtwisle. 1,895,748; Jan. 31.
Latch. R. G. Moore. 1,895,892–4; Jan. 31.
Latex, Coagulation of. S. B. Neiley. 1,896,054; Jan. 31.
Lavatory, Shampoo. R. A. Northcott. Des. 89,138; Jan. 31.
Lead oxides in the dry state, Apparatus for the continuous production of. G. Shimadzu. 1,896,020; Jan. 31.
Lever, Adjustment. C. C. Green. 1,895,987; Jan. 31.
License holder. F. F. Crosby. 1,895,704; Jan. 31.
Lift for the heel of a shoe, Detachable. H. Makrusin. 1,895,469; Jan. 31.
Lifting grab. G. W. Butts. 1,895,649; Jan. 31.
Light: *See*—
Adjustable light. Flash light.
Lining panel for vehicle bodies. S. J. Blum. 1,895,567; Jan. 31.
Liquid with an aqueous liquid, Apparatus for treating an oily. E. W. Roth and P. W. Prutzman. 1,895,683; Jan. 31.
Liquids, Apparatus for degasifying. L. Emanuell. 1,895,983; Jan. 31.
Liquids in aircraft, Storage of. C. Dornier. 1,895,976; Jan. 31.
Liver concentrate. J. W. Dressel. 1,895,977; Jan. 31.
Lock: *See*—
Bobbin spindle lock.
Lock. I. Kemp. 1,895,630; Jan. 31.
Lock. I. Kemp. 1,895,631; Jan. 31.
Lock and release, Bleeder valve. L. C. Chassey. 1,895,783; Jan. 31.
Locking device for doors. G. E. Strandt. 1,895,594; Jan. 31.
Locomotive. C. W. Todd. 1,895,500; Jan. 31.
Locomotive boiler. E. A. Turner. 1,896,058; Jan. 31.
Looms, Thread holder for weft replenishing. H. H. Burton. 1,895,781; Jan. 31.
Looms, Timer for weft detectors of box. L. S. Vose. 1,895,829; Jan. 31.
Lubricant delivery apparatus. W. D. Bell. 1,896,036; Jan. 31.
Machine for cutting and shearing float or bridge threads. F. S. Boyd. 1,895,843; Jan. 31.
Machine for drawing threads from fabrics. G. Jalbert. 1,895,995; Jan. 31.
Machine for operating upon the heel-portions of shoes. E. R. Pope. 1,895,896; Jan. 31.
Magazine, Package. E. W. Farmer. 1,895,616; Jan. 31.
Magnesium and alloys thereof, Casting. J. A. Gann and J. B. Reid. 1,896,045; Jan. 31.
Magnetic automotive brake. V. Bendix and V. G. Apple. 1,895,965; Jan. 31.
Mail box. E. W. Bowers. 1,895,912; Jan. 31.
Manifold attachment for internal combustion engines. F. F. W. Doering. 1,895,789; Jan. 31.
Manifolder, Electrical. J. Q. Sherman and A. W. Metzner. 1,896,032; Jan. 31.
Manures containing ammonium nitrate, Preparation of mixed. S. Ruosch. 1,895,783; Jan. 31.
Map. R. L. Morse. 1,895,937; Jan. 31.
Material handling apparatus. C. S. Johnson. 1,895,626; Jan. 31.
Materials, Apparatus for classifying. C. E. Wuensch. 1,895,504; Jan. 31.
Materials, Classifying. C. E. Wuensch. 1,895,505; Jan. 31.
Matrices, Device for cleaning. O. Rostock and J. Claussen. 1,895,645; Jan. 31.
Measuring instrument, Electrical. J. H. Morecroft. 1,895,812; Jan. 31.
Measuring stick. M. Finkenwirth. 1,895,754; Jan. 31.
Meat products, Branding. L. S. Paddock. 1,895,641; Jan. 31.
Metal article and making same, Composite. G. D. Bagley. 1,895,533; Jan. 31.
Metal articles by nitrogenization, Hardening. P. F. M. Aubert, and A. J. P. and H. A. M. Duval. 1,895,439; Jan. 31.
Metal articles by nitriding, Hardening. P. F. M. Aubert and A. J. P. and H. A. M. Duval. 1,895,847; Jan. 31.
Metal body and producing same, Plated. E. Theiss. 1,896,022; Jan. 31.
Metal, Method of and apparatus for measuring the thickness of. J. F. Putnam. 1,895,643; Jan. 31.
Metals, Electrodeposition of. F. C. Mathers and L. Bateman. 1,895,675; Jan. 31.
Metallurgical furnace. E. H. Bunce and H. M. Haslam. 1,895,878; Jan. 31.
Milk cooler. W. J. Vanstory. 1,895,949; Jan. 31.
Mill: *See*—
Rolling mill.
Mirror and instrument, Combined. W. La Hodny. 1,895,578; Jan. 31.
Mirror and instrument, Combined rear view. J. B. Weir. 1,895,560; Jan. 31.
Mirror assembly, Rear view. P. Bertell and W. La Hodny. 1,895,566; Jan. 31.
Mixer. *See*—
Pastry mixer.
Molding. C. P. Schlegel. 1,895,689; Jan. 31.
Molding press. J. W. Brundage. 1,895,603–4; Jan. 31.
Motor: *See*—
Synchronous motor.
Motor control system, Synchronous. R. T. Kintsing. 1,895,931; Jan. 31.
Motor vehicle clutch. W. R. Griswold. 1,896,025; Jan. 31.
Mounting for sound-on-film reproducers, Exciter lamp. C. W. Ebeling. 1,895,455; Jan. 31.
Mounting, Outboard motor. E. A. Witke. 1,895,696; Jan. 31.
Multiple vending machine. C. Walker. 1,895,953; Jan. 31.
Napkin, Folded. A. E. Cofrin. 1,895,973; Jan. 31.
Nipple, Adjustable choke. J. F. McKaig. 1,895,636; Jan. 31.
Nipple attaching means and method. B. Burvenick. 1,896,028; Jan. 31.
Oil heater control. R. P. Brown. 1,895,701; Jan. 31.
Oils, Cracking hydrocarbon. J. G. Alther. 1,895,878; Jan. 31.
Ores, Treating. H. Morgan. 1,895,811; Jan. 31.
Oscillating joint. C. L. Humphrey and R. K. Lee. 1,895,663; Jan. 31.
Outlet box. G. Carlson. 1,895,915; Jan. 31.
Packaging machine. J. Schaub. 1,895,899; Jan. 31.
Packing. E. Stiefel. 1,895,497; Jan. 31.
Packing, Shaft. O. Junggren. 1,895,930; Jan. 31.
Pad: *See*—
Ironing board pad. Pedal pad.
Pad or similar article, Hot dish. G. W. Funk. Des. 89,128; Jan. 31.
Padlock. S. R. Fraim. 1,895,655; Jan. 31.
Paper cutter. F. Barney. 1,895,440; Jan. 31.
Paper manufacture. J. H. Swan, 3d. 1,895,527; Jan. 31.
Paper weight or similar article. O. H. Beall and O. De Cardy. Des. 89,116; Jan. 31.
Parachute device. S. O. C. Kuhlemann. 1,895,999–000; Jan. 31.
Pass case. W. R. Burton. 1,895,782; Jan. 31.
Pastry mixer. S. E. Baker. 1,895,833; Jan. 31.
Pedal pad. F. C. Grant. 1,895,986; Jan. 31.
Pen, Fountain. J. Holtzman. 1,895,850; Jan. 31.
Pen, Fountain. J. L. Schnell. 1,895,736; Jan. 31.
Pen operating mechanism for ruling machines. A. Broadmeyer. 1,895,537; Jan. 31.
Pen, Recording instrument fountain. W. H. Pearce. 1,895,727; Jan. 31.
Percolator. L. R. Mockbee. 1,895,857; Jan. 31.
Permanent wave apparatus. G. W. Peterson. 1,895,815; Jan. 31.
Phonograph, Automatic. H. F. Elliott. 1,895,614; Jan. 31.
Photocopying apparatus. F. C. Forrest. 1,895,654; Jan. 31.
Picture projector apparatus, Motion. A. C. Hayden. 1,895,794; Jan. 31.
Pilot channel indicating system. R. W. Deardorff. 1,895,542; Jan. 31.
Pipe cleaner. B. Lewis and W. Joseph. 1,896,004; Jan. 31.
Pipe, Making concrete. B. J. Ukropina. 1,895,740; Jan. 31.
Pipe welding apparatus. M. Rosenkranz. 1,895,732; Jan. 31.
Pipes and the like, Extrusion of metal. P. Dunsheath. 1,895,881; Jan. 31.
Plant, Evergreen. W. R. Gray. Pl. Pt. 54; Jan. 31.
Plastering machine. H. A. Conley. 1,895,608; Jan. 31.
Plunger and packing, Well. J. W. Pippin. 1,895,728; Jan. 31.
Polishing composition. F. R. Williams. 1,895,872; Jan. 31.
Post: *See*—
Fence post.
Potatoes, Planting. F. H. Bateman and I. Trolley. 1,895,962; Jan. 31.
Power operator. P. W. Cummings. 1,895,880; Jan. 31.
Press: *See*—
Hydraulic press. Molding press.
Press. J. Zimarik. 1,895,958; Jan. 31.
Press cylinder adjustment, Proof. E. O., D. D., and F. R. Vandercook. 1,895,501; Jan. 31.
Pressure accumulator for gases and liquids. A. Beldimano. 1,895,747; Jan. 31.
Pressure gauge. W. W. Klyce. 1,895,802; Jan. 31.
Priming mixture. J. E. Burns. 1,895,752; Jan. 31.
Protector: *See*—
Heel protector.
Puller: *See*—
Wheel puller.
Pulp, etc., Manufacture of. L. Bradley and E. P. McKeefe. 1,896,038; Jan. 31.

Pump: *See*—
Rotary pump.
Pump. W. R. Hewitt. 1,895,623; Jan. 31.
Pump and ignition drive unit. G. W. La Salle. 1,895,632; Jan. 31.
Quilting frame. A. M. James. 1,895,715; Jan. 31.
Rack or stand, Display. G. F. Brecht. 1,895,535; Jan. 31.
Radiator. T. E. Murray. 1,895,482; Jan. 31.
Radiator, Heat. M. Unger. 1,895,947; Jan. 31.
Radiator, Rotating heat. W. D. Bell. 1,895,565; Jan. 31.
Radio apparatus. M. Sherman. 1,895,493; Jan. 31.
Radio apparatus, Nonmicrophonic. W. H. Grimditch. 1,895,989; Jan. 31.
Radiographic apparatus. J. R. Kelley. 1,895,546; Jan. 31.
Radio receiving apparatus. A. H. Grebe. 1,895,792; Jan. 31.
Radio receiving system. V. C. Macnabb. 1,895,809; Jan. 31.
Radio telephone and telegraph system, Combined. R. A. Heising. 1,895,461; Jan. 31.
Radio transmission system. J. H. Hammond, jr. 1,895,459; Jan. 31.
Radiotube. R. H. Fidler. 1,895,506; Jan. 31.
Rail puller and expander. F. J. Jakoubek and E. Pachowicz. 1,895,664; Jan. 31.
Razor blade, Safety. A. Lübbertsmeier. 1,895,763; Jan. 31.
Razor, Safety. A. Dupeyron. 1,895,980; Jan. 31.
Receiving apparatus for electrical impulses. P. W. Lyth. 1,895,889; Jan. 31.
Receptacle: *See*—
Ash receptacle. Waste receptacle.
Receptacle for ice manufacture. G. F. Whitehead. 1,895,742; Jan. 31.
Reclining chair. A. A. Grinnell. 1,896,048; Jan. 31.
Refrigerating apparatus. C. E. L. Lipman. 1,895,549; Jan. 31.
Refrigerating device. H. H. Carpenter. 1,895,971; Jan. 31.
Refrigerating mechanism. G. Muffly. 1,895,859; Jan. 31.
Refrigerating system, Regenerative. G. F. Zellhoefer. 1,895,698; Jan. 31.
Refrigerator. R. P. Farrington. 1,896,046; Jan. 31.
Refrigerator. C. E. L. Lipman. 1,895,806; Jan. 31.
Register, Automatic salesbook. J. A. Gibbs. 1,895,621; Jan. 31.
Regulator: *See*—
Draft regulator. Electric regulator.
Release valve. J. C. McCune. 1,895,472; Jan. 31.
Revoluble illuminated signal. B. S. and R. S. Finch. 1,895,543; Jan. 31.
Revolving heater, Gas fired. W. D. Bell. 1,895,564; Jan. 31.
Ribbon package. B. J. Goldsmith. 1,895,758; Jan. 31.
Riveting device. H. Junkers. 1,895,668; Jan. 31.
Riveting machine. A. Hlavn. 1,895,883; Jan. 31.
Road building machine and method. J. N. Heltzel. 1,895,991; Jan. 31.
Rod: *See*—
Hair waving and curling rod.
Rolling mill. J. R. Coe. 1,895,607; Jan. 31.
Rotary pump. F. E. Sperry. 1,896,033; Jan. 31.
Rubber article, Combined hard and soft. C. Shugg and P. Robinson. 1,895,738; Jan. 31.
Rubber composition. A. E. Boss. 1,895,910; Jan. 31.
Saddle, Leno jumper. C. J. Lindegren. 1,895,805; Jan. 31.
Safe. W. C. Miller. 1,896,007; Jan. 31.
Salt and producing same, Double W. A. Gale and C. F. Ritchie. 1,895,620; Jan. 31.
Salt of diamino-dihydroxy-arsenobenzene dimethylene sulphonic acid, Nonacid. G. W. Raizies and A. I. Kremens. 1,895,681; Jan. 31.
Satchel. M. Arnold. 1,895,744; Jan. 31.
Saxophone, Slide. M. Juhn. 1,895,761; Jan. 31.
Scale, Weighing. A. Pollak. 1,895,863; Jan. 31.
Scale, Weighing. S. Vernet and A. J. Haynes. 1,895,502; Jan. 31.
Sealing apparatus for cartons. J. W. Fay. 1,895,617; Jan. 31.
Sealing closure caps on bottles and other containers. G. W. Horner and J. E. Sharp. 1,895,884; Jan. 31.
Seams in wire fabrics, Producing. W. E. Buchanan. 1,895,605; Jan. 31.
Seat and mechanism for operating the same, Rumble. J. Zucca. 1,895,832; Jan. 31.
Selling machine, Automatic. E. Asenbaum. 1,895,745; Jan. 31.
Sewing machines, Needle-clamp for. A. Grieb. 1,896,047; Jan. 31.
Shackle. W. A. Flumerfelt. 1,895,846; Jan. 31.
Shade support, Adjustable window. H. C. Hagedorn. 1,895,793; Jan. 31.
Shaft-bearing, Rubber. A. B. Merrill. 1,895,936; Jan. 31.
Sheet material, Coated. C. E. Foley. 1,895,711; Jan. 31.
Sheeting and masking for painting, Adhesive. R. G. Drew. 1,895,978; Jan. 31.
Shock absorber for motor vehicle steering gears, Shimmy. T. W. Koerner. 1,895,576; Jan. 31.
Shoe. C. H. Caldwell. Des. 89,121; Jan. 31
Shoe. E. R. Casey. Des. 89,123; Jan. 31
Shoe heel. F. Berenstein. Des. 89,118; Jan. 31.
Shoe parts, Smoothing. J. Sandt. 1,896,017; Jan. 31.
Shoe pressing apparatus. R. V. Ritchey. 1,895,941; Jan. 31.
Shoe shank stiffener. C. J. Hauck. 1,895,660; Jan 31.
Shoe stiffeners, Making. D. B. MacDonald. 1,895,467; Jan. 31.
Shoes, Apparatus for rolling and pressing rubber. H. G. Ellis. 1,895,921; Jan. 31.
Shrine. M. Hague. 1,895,659; Jan. 31.
Shuttle for narrow ware looms. E. R. Holmes. 1,895,796; Jan. 31.
Sign: *See*—
Display sign.
Signal: *See*—
Direction signal.
Revoluble illuminated signal.
Signaling and control system, Selective. E. E. Kleinschmidt. 1,895,718; Jan. 31.
Silk reed machine. E. G. Kenney. 1,895,997; Jan. 31.
Slitting device. R. McC. Johnstone. 1,895,852; Jan. 31.
Snap acting device. J. A. Spencer. 1,895,590–2; Jan. 31.
Snap fastener. M. F. Carr. 1,896,044; Jan. 31.
Snap mechanism. J. H. Carmean and R. M. Curphey. 1,895,650; Jan. 31.
Snow removal. E. A. Smith 1,895,900; Jan 31.
Sole, Inner. G. Y. Emerson. 1,895,709; Jan. 31.
Sound control and transmission system. W. R. Bowker. 1,895,442; Jan. 31.
Sound pictures, Producing. G. P. Regan and A. R. Day. 1,895,644; Jan. 31.
Sound reproducer. E. H. Smythe. 1,895,494; Jan. 31.
Sound suppressing ventilator. E. T. Fisk. 1,896,053; Jan. 31.
Sound translating device. L. G. Bostwick. 1,895,441; Jan. 31.
Spiral spring. J. A. Van den Broek. 1,895,948; Jan. 31.
Spool for electrical coils. F. Stolp. 1,895,776; Jan. 31.
Spray device, Hand. A. M. Herbsman and R. B. Campbell. Des. 89,152; Jan. 31.
Spraying and sprinkling system, Combined orchard. A. E. Spindt. 1,895,739; Jan. 31.
Spring: *See*—
Spiral spring.
Spring wheel. E. Clem. 1,895,539; Jan. 31.
Sprinkler, Lawn. H. E. Meng. 1,895,890; Jan. 31.
Stand: *See*—
Display stand.
Steam boiler, Tubular. M. Eule. 1,895,790; Jan. 31.
Steam heating system, Vacuum. D. E. Nash. 1,895,813; Jan. 31.
Steel wool holder. P. W. Stephens. 1,895,496; Jan. 31.
Steering gear for motor vehicles. A. Billow. 1,895,751; Jan. 31.
Stop or closer, Flue opening. F. C. Britton, sr. 1,895,536; Jan. 31.
Storage apparatus. E. S. Taylor. 1,896,021; Jan. 31.
Strand carrier for braiders, Self-aligning. G. E. Henning. 1,895,463; Jan. 31.
Structural member. H. Junkers. 1,895,667; Jan. 31.
Stud locking device, Screw. A. D'Halloy. 1,895,845; Jan. 31.
Suction cleaner. F. M. Case. 1,895,507; Jan. 31.
Sulphur compounds from gas mixtures, Removing. E. B. Miller and G. C. Connolly. 1,895,724; Jan. 31.
Support: *See*—
Shade support. Trolley support.
Support for accordions. P. DeLuca. 1,895,705; Jan. 31.
Supporting element for confections. B. L. York. 1,895,697; Jan. 31.
Suspender assembling tool. L. W. Joyce. 1,895,886; Jan. 31.
Sweatband structure, Waterproof. H. A. Philips. 1,895,861–2; Jan. 31.
Switch: *See*—
Electric switch. Interlocking switch.
Electrical switch.
Switch operating mechanism. H. P. Pinkham. 1,895,770; Jan. 31.
Switch and contact structure therefor, Electric. G. W. O'Keeffe. 1,895,767; Jan. 31.
Synchronous motor. W. O. Meissner. 1,895,637; Jan. 31.
Synthetic reactions, Method and an apparatus for electrically effecting. S. Ruben. 1,895,489; Jan. 31.
Table dispensing, Combination. P. H. Horwitt. 1,895,662; Jan. 31.
Tassel. A. B. Colby. 1,896,060; Jan. 31.
Telemetric summation system. R. M. Rowell. 1,895,942; Jan. 31.
Telephone operating means, Dial. A. L. Myers. 1,895,552; Jan. 31.
Telephone repeater. J. P. Lowe. 1,895,808; Jan. 31.
Tent and hood-garment, Combined. G. C. Bosson, jr. 1,895,911; Jan. 31.
Textile fabric. S. Solomon. Des. 89,161–2; Jan. 31.
Textile fabric. J. van der Does. Des. 89,163; Jan. 31.
Textile fabric or similar article. M. Brodsky. Des. 89,119; Jan. 31.
Textile fabric or similar article. W. Cohen. Des. 89,124–5; Jan. 31.
Textile fabric or similar article. W. Cohen. Des. 89,148; Jan. 31.
Textile fabric or similar article. E. M. Fogel. Des. 89,150; Jan. 31.

Textile fabric or similar article. M. Guhl. Des. 89,129; Jan. 31.
Textile fabric or similar article. M. Guhl. Des. 89,151; Jan. 31.
Textile fabric or similar article. J. Lukas. Des. 89,136–7; Jan. 31.
Textile fabric or similar article. J. Overmeyer. Des. 89,139; Jan. 31.
Textile fabric or similar article. E. W. Richards. Des. 89,154; Jan. 31.
Textile fabric or similar article. J. Schweizer. Des. 89,140; Jan. 31.
Textile fabric or similar article. J. Schweizer. Des. 89,143–4; Jan. 31.
Textile fabric or similar article. J. Schweizer. Des. 89,155–60; Jan. 31.
Textile fabric or similar article. W. Willheim. Des. 89,147; Jan. 31.
Tile. A. V. Keller. 1,895,801; Jan. 31.
Tire cover. W. A. Reum. 1,896,014; Jan. 31.
Tire, Tubeless pneumatic. F. A. Millican. 1,895,582; Jan. 31.
Tires from molds, Method of and apparatus for removing. J. P. Sapp. 1,895,943; Jan. 31.
Tobacco, match, and cigarette paper cases, Combination. G. M. Young. 1,895,957; Jan. 31.
Tong. J. B. Charpiot, jr. 1,895,445; Jan. 31.
Tool: *See*—
Calendar assembling tool.
Tool and end closure therefor, Air-way cleaning. D. B. Replogle. 1,895,584; Jan. 31.
Tool bits, Forming diamond charged cutting. S. L. Hoyt. 1,895,926; Jan. 31.
Tool for butcher's blocks, Resurfacing. O. Amaru. 1,895,961; Jan. 31.
Torsional vibration, Counteracting. C. E. Summers. 1,896,027; Jan. 31.
Toy vehicles. J. E. Brubaker. 1,895,968; Jan. 31.
Trailer. E. J. Contois. 1,895,844; Jan. 31.
Trailer, Camping. R. F. Kuns. 1,895,933; Jan. 31.
Trailer hitch. S. M. Hepburn. 1,895,992; Jan. 31.
Trailers to a tractor, Coupling. C. H. Land and W. H. Wilson. 1,895,762; Jan. 31.
Transfer apparatus for glassware. T. Stenhouse. 1,895,824; Jan. 31.
Translating device. E. W. Gent. 1,895,757; Jan. 31.
Transmission. D. L. Lotts. 1,895,888; Jan. 31.
Transmission, Hydraulic. W. Ferris. 1,896,052; Jan. 31.
Transmission tower arms. C. M. Goodrich. 1,895,712; Jan. 31.
Trap. O. H. Hollowell. 1,895,714; Jan. 31.
Trapeze and flying rings. F. E. Mayo. 1,895,721; Jan. 31.
Traveling bag, Vehicular. J. B. Pinheiro. 1,895,677; Jan. 31.
Tray and game board, Combined serving. D. Bustanoby. Des. 89,120; Jan. 31.
Treating partial oxidation products. J. H. James. 1,895,799; Jan. 31.
Trees, Support, protection and training of fruit and other. M. Davey. 1,895,758; Jan. 31.
Triangles, Device for computing spherical. J. F. Burns. 1,895,606; Jan. 31.
Trolley support. S. S. Matthes. 1,895,581; Jan. 31.
Truck, Clamp. O. Norling. 1,895,640; Jan. 31.
Truck, Motor. C. Schnell. 1,895,866; Jan. 31.
Trunk, Automobile. A. Ricci. 1,895,864; Jan. 31.
Tubes, Slotting. G. Spatta. 1,895,589; Jan. 31.
Type lines, System of justifying. R. G. A. Phillips. 1,895,520; Jan. 31.
Uprights and members of scaffolding and other structures, Attaching the. G. W. Murphy. 1,895,766; Jan. 31.
Vacuum cleaner. F. Riebel, jr. 1,895,585; Jan. 31.
Valve: *See*—
Flush valve. Release valve.
Valve device, Brake. J. C. McCune. 1,895,477; Jan. 31.
Valve keeper inserter. H. W. Kulp and M. C. Dellinger. 1,896,001; Jan. 31.
Valve mechanism. J. C. Crowley. 1,895,449; Jan. 31.
Valve stem. J. C. Crowley. 1,895,450; Jan. 31.
Vapor electric device. W. G. Moran. 1,895,858; Jan. 31.
Variable condenser. S. Cohen. 1,895,540; Jan. 31.
Vehicle. W. C. Brown. 1,895,750; Jan. 31.
Vehicle brake. J. W. White. 1,895,561; Jan. 31.
Ventilator: *See*—
Sound suppressing ventilator.
Violin gluing form. C. J. Amundson. 1,895,743; Jan. 31.
Violin holder. P. S. Bishop. 1,895,749; Jan. 31.
Wagon with airplane controls, Balancing coaster. L. Shaw. 1,895,737; Jan. 31.
Walls, Construction of retaining. J. Goldsbrough. 1,895,985; Jan. 31.
Washer and nut, Locking. H. C. Smith. 1,895,588; Jan. 31.
Waste receptacle. W. E. Lutts and G. A. Graves. 1,895,904; Jan. 31.
Water heater, Electric. A. C. Visel. 1,895,870; Jan. 31.
Water heating attachment for boilers. W. R. Smith. 1,895,868; Jan. 31.
Waterproofing and to the treatment of materials with a view to rendering them resistant to the action of atmospheric conditions. R. Lant. 1,896,002; Jan. 31.
Water treatment, Boiler. W. McDonald. 1,895,635; Jan. 31.
Web feeding mechanism. H. M. Barber. 1,895,842; Jan. 31.
Weed killer. L. R. Tracy. 1,895,693; Jan. 31.
Welding apparatus, Arc. A. Ziska, jr. 1,895,699; Jan. 31.
Welding machine, Automatic. E. W. Little. 1,895,577; Jan. 31.
Well packer. E. E. Young. 1,895,905; Jan. 31.
Wheel. *See*—
Spring wheel.
Wheel construction, Tail. A. E. Raymond. 1,895,682; Jan. 31.
Wheel puller. A. L. Cornwell. 1,895,448; Jan. 31.
Wheel puller, Automobile. O. Ottesen. 1,896,009; Jan. 31.
Winding machine. I. R. Rowe. 1,895,865; Jan. 31.
Winding machine. E. R. Swanson. 1,895,741; Jan. 31.
Window. J. L. Tresouthick. 1,896,023; Jan. 31.
Window channel. C. P. Schlegel. 1,895,688; Jan. 31.
Window, Pivot. J. H. Sheard. 1,896,057; Jan. 31.
Windshield attachment. C. C. Capshaw. 1,895,970; Jan. 31.
Wire and process therefor, Insulated. S. Ruben. 1,896,040; Jan. 31.
Wire and process therefor, Insulated. S. Ruben. 1,896,043; Jan. 31.
Wire, Insulated. S. Ruben. 1,896,041; Jan. 31.
Wire, Insulated. S. Ruben. 1,896,042; Jan. 31.
Wire splicing machine. C. L. Van Inwagen, jr. 1,895,828; Jan. 31.
Worktable and relieving mechanism for grinding machines. E. A. Walker. 1,895,830; Jan. 31.
Wrapper. W. A. Koch. 1,895,932; Jan. 31.
Wrench. J. Meiling. 1,895,638; Jan. 31.

CLASSIFICATION OF PATENTS

ISSUED JANUARY 31, 1933

NOTE.—First number—class, second number—subclass, third number—patent number

1— 33: 1,895,896
49: 1,895,457
2— 89: 1,895,911
181: 1,895,851
1,895,892
195: 1,895,893
257: 1,895,612
4— 57: 1,895,709
5— 11: 1,895,895
21: R. 18,725
27: 1,895,541
8— 20: 1,895,919
1,895,920
12— 1: 1,895,921
142: 1,895,017
146: 1,895,467
1,895,709
14— 18: 1,895,734
15— 8: 1,895,507
77: 1,895,645
1,895,934
155: 1,895,584
210: 1,895,496
230: 1,895,532
16— 21: 1,895,882
49: 1,895,895
86: 1,895,525
87: 1,895,856
126: 1,895,466
1,895,656
140: 1,895,057
18— 2: 1,895,909
1,895,941
1,895,943
17: 1,895,608
19: 1,895,604
50: 1,895,064
59: 1,895,736
19— 131: 1,895,900
20— 20: 1,895,635
35: 1,895,553
40.5: 1,895,970
49: 1,895,023
59: 1,895,728
22— 69: 1,895,896
188: 1,895,639
1,895,045
203: 1,895,533
23— 3: 1,895,724
6: 1,895,765
9: 1,895,530
1,895,691
1,895,092
19: 1,895,811
50: 1,895,620
52: 1,895,580
160: 1,895,492
165: 1,895,005
216: 1,895,929
233: 1,895,784
238: 1,895,031
277: 1,895,878
286: 1,895,020
24— 23: 1,895,989
68: 1,895,405
81: 1,895,656
1,895,962
1,895,029
105: 1,895,984
205: 1,895,012
213: 1,895,044
25— 155: 1,895,740
26— 11: 1,895,843
29— 85: 1,895,448
1,895,009
148.2: 1,895,028
30— 12: 1,895,763
1,895,980
33— 1: 1,895,606
39: 1,895,537
106: 1,895,834
205: 1,895,615
226: 1,895,628
35— 1: 1,895,611
6: 1,895,937
12: 1,895,729
35— 12: 1,895,737
1,895,814
16: 1,895,016
36— 42: 1,895,469
70: 1,895,598
76: 1,895,680
37— 12: 1,895,900
38— 65: 1,895,595
40— 10: 1,895,704
1,895,903
19.5: 1,895,993
77: 1,895,080
113: 1,895,797
126: 1,895,773
152: 1,895,818
156: 1,895,599
1,895,938
42— 3: 1,895,719
43— 73: 1,895,714
112: 1,895,570
44— 7: 1,895,955
1,895,956
45— 24: 1,895,718
97: 1,895,560
1,895,566
1,895,578
46— 48: 1,895,908
50: 1,895,871
47— 1: Pl. Pt. 54
41: 1,895,609
42: 1,895,753
49: 1,895,663
49— 33: 1,895,916
47: 1,895,547
48: 1,895,779
89: 1,895,548
51— 94: 1,895,530
110: 1,895,619
278: 1,895,908
52— 3: 1,895,753
53— 3: 1,895,857
55— 83: 1,895,831
56— 206: 1,895,940
58— 41: 1,895,723
117: 1,895,906
60— 13: 1,895,538
52: 1,895,627
1,895,052
61— 39: 1,895,935
62— 8: 1,895,695
31: 1,895,264
91.5: 1,895,971
98: 1,895,557
110: 1,895,742
115: 1,895,905
116: 1,895,549
1,895,559
121: 1,895,886
64— 101: 1,895,032
65— 89: 1,895,777
66— 9: 1,895,958
10: 1,895,558
1,895,731
70— 74: 1,895,894
1,895,630
1,895,631
90: 1,895,953
108: 1,895,655
71— 7: 1,895,733
72— 14: 1,895,747
40: 1,895,957
130: 1,895,905
73— 109: 1,895,932
74— 6: 1,895,525
1,895,024
1,895,027
14: 1,895,650
1,895,551
17: 1,895,700
39: 1,895,751
34: 1,895,941
1,895,888
38: 1,895,026
81: 1,895,986
97: 1,895,722
109: 1,895,728
75— 1: 1,895,959
1,895,003
76— 101: 1,895,926
77— 19: 1,895,990
63: 1,895,059
78— 46: 1,895,883
103: 1,895,668
80— 38: 1,895,007
55: R. 18,724
81— 3.1: 1,895,638
5.1: 1,895,001
53: 1,895,445
82— 2: 1,895,502
43: 1,895,807
84— 279: 1,895,749
386: 1,895,761
85— 6: 1,895,672
87— 5: 1,895,872
17: 1,895,446
1,895,447
1,895,979
88— 1: 1,895,555
2.4: 1,895,510
16.2: 1,895,644
23: 1,895,853
24: 1,895,654
1,895,887
61: 1,895,757
90— 13.2: 1,895,849
91— 43: 1,895,617
46: 1,895,524
68: 1,895,711
1,895,978
1,896,002
92— 11: 1,896,038
54: 1,895,687
93— 2: 1,895,809
94— 46: 1,895,991
95— 89: 1,895,760
96— 3: 1,895,462
13: 1,895,463
97— 15: 1,896,011
19: 1,895,665
47: 1,895,648
71: 1,895,875
157: 1,895,987
98— 1: 1,896,053
99— 11: 1,895,694
1,896,049
16: 1,895,697
101— 269: 1,895,501
364: 1,896,034
403: 1,895,520
102— 6: 1,895,563
10: 1,895,438
15: 1,896,051
39: 1,895,513
103— 38: 1,895,623
126: 1,896,033
105— 82: 1,895,500
106— 22: 1,895,708
23: 1,895,910
107— 9: 1,895,634
109— 1: 1,896,007
111— 14: 1,895,962
112— 66: 1,895,550
78: 1,895,996
93: 1,896,994
226: 1,896,047
114— 78: 1,895,879
219: 1,895,647
115— 18: 1,895,696
116— 5: 1,895,967
126: 1,895,638
117— 2: 1,895,997
118— 65: 1,895,707
119— 1: 1,895,702
52: 1,895,435
120— 43: 1,895,727
46: 1,895,736
1,895,850
121— 7: 1,895,980
122— 20: 1,895,988
250: 1,895,790
356: 1,895,720
398: 1,895,635
123— 493: 1,896,058
124: 1,895,789
174: 1,895,509
1,895,534
179: 1,895,320
195: 1,895,632
1,895,981
198: 1,895,456
126— 110: 1,895,564
1,895,565
163: 1,895,511
1,895,633
319: 1,895,536
129— 16: 1,895,651
16.7: 1,895,784
1,895,980
23: 1,895,972
24: 1,895,629
131— 51: 1,895,966
1,896,015
132— 33: 1,895,653
36: 1,895,815
86: 1,895,940
133— 3: 1,895,975
134— 1: 1,895,775
30: 1,895,641
137— 73: 1,895,827
78: 1,895,739
162: 1,896,019
138— 17: 1,895,710
139— 51: 1,895,805
198: 1,895,796
232: 1,895,829
247: 1,895,781
140— 113: 1,895,828
142— 69: 1,895,025
144— 259: 1,895,743
145— 47: 1,895,961
148— 4: 1,895,996
6.5: 1,895,568
1,895,569
185— 40: 1,895,787
188— 62: 1,895,050
73: 1,895,772
75: 1,895,906
79.5: 1,895,561
149— 19: 1,895,512
150— 1.5: 1,895,454
29: 1,895,671
34: 1,895,744
39: 1,895,782
54: 1,896,014
151— 19: 1,895,845
21: 1,895,588
152— 12: 1,895,449
1,895,450
13: 1,895,582
32: 1,895,579
52: 1,895,530
154— 3: 1,895,922
46: 1,895,547
50: 1,895,527
55: 1,895,037
155— 6: 1,895,803
1,895,804
116: 1,895,048
142: 1,895,807
184: 1,895,689
156— 10: 1,895,951
21: 1,895,780
23: 1,895,557
24: 1,895,793
40: 1,895,060
161— 8: 1,895,554
164— 59: 1,895,440
70: 1,895,852
73: 1,895,754
106: 1,895,589
119: 1,895,914
150: 1,895,491
166— 10: 1,895,905
167— 74: 1,895,977
170— 177: 1,895,874
171— 95: 1,895,812
97: 1,895,982
118: 1,895,931
119: 1,895,408
226: 1,895,837
325: 1,895,756
172— 36: 1,895,880
274: 1,895,946
172— 275: 1,895,637
293: 1,895,924
1,895,926
173— 264: 1,895,808
1,895,927
1,895,040
1,895,041
1,895,042
1,895,043
175— 21: 1,895,460
1,895,556
1,895,776
183: 1,895,643
336: 1,895,889
366: 1,895,694
1,895,695
1,895,698
176— 2: 1,895,855
177— 327: 1,895,609
351: 1,895,942
353: 1,895,718
178— 44: 1,895,542
1,895,774
46: 1,895,457
179— 2.5: 1,895,461
90: 1,895,552
115.5: 1,895,441
170: 1,895,808
171: 1,895,792
1,895,902
180— 1: 1,895,780
181— 31: 1,895,494
183— 2.5: 1,895,983
4: 1,895,601
7: 1,895,676
21: 1,895,897
51: 1,895,585
52: 1,895,618
1,895,619
69: 1,895,642
185— 40: 1,895,787
188— 62: 1,895,050
73: 1,895,772
75: 1,895,906
79.5: 1,895,561
189— 33: 1,895,712
34: 1,895,667
36: 1,895,746
85: 1,895,301
190— 41: 1,895,677
191— 38: 1,895,581
192— 41: 1,895,678
45: 1,895,822
48: 1,895,821
68: 1,895,600
194— 88: 1,895,953
195— 21: 1,895,514
196— 46: 1,895,683
51: 1,895,573
53: 1,895,789
132: 1,895,701
198— 220: 1,895,551
1,895,673
229: 1,895,905
200— 35: 1,895,708
50: 1,895,317
89: 1,895,770
119: 1,895,914
150: 1,895,491
1,895,907
1,895,935
202— 152: 1,895,918
166: 1,895,767
201— 51: 1,895,519
204— 1: 1,895,676
1,895,022
5: 1,895,622
31: 1,895,489
205— 10: 1,895,732
206— 19: 1,895,659
83.5: 1,895,574
39: 1,895,057
41: 1,895,098
51: 1,895,728
57: 1,895,973
207— 2: 1,895,851
10: 1,895,899
209— 18: 1,895,674
139: 1,895,771
173: 1,895,804
1,895,805
208: 1,895,498
211— 149: 1,895,835
186: 1,895,725
214— 1: 1,895,624
16.1: 1,895,021
18: 1,895,798
65: 1,895,899
65.5: 1,895,640
130: 1,895,638
215— 43: 1,895,894
55: 1,895,759
217— 36: 1,895,634
122: 1,895,896
124: 1,895,954
219— 4: 1,895,577
8: 1,895,573
1,895,699
38: 1,895,482
41: 1,895,570
220— 9: 1,895,046
63: 1,895,904
221— 23: 1,895,436
47.1: 1,895,088
60: 1,895,854
103: 1,895,056
223— 50: 1,895,836
64: 1,895,613
1,895,695
225— 12: 1,895,004
226— 17: 1,895,577
19: 1,895,745
126: 1,895,739
227— 8: 1,895,571
229— 5.6: 1,895,575
27: 1,895,443
28: 1,895,974
34: 1,895,778
51: 1,895,983
52: 1,895,788
72: 1,895,494
1,895,495
1,895,496
86: 1,895,646
230— 22: 1,895,499
58: 1,895,508
134: 1,895,488
170: 1,895,602
210: 1,895,516
232— 35: 1,895,913
235— 58: R. 18,737
60: 1,895,846
237— 9: 1,895,512
12.3: 1,895,858
240— 3.1: 1,895,690
10.65: 1,895,913
37.1: 1,895,548
41.6: 1,895,748
1,895,673
52: 1,895,455
1,895,535
62.7: 1,895,913
242— 18: 1,895,585
43: 1,895,741
44.6: 1,895,510
244— 2: 1,895,482
1,895,662
10: 1,895,513
19: 1,895,831
21: 1,895,999
1,895,000
29: 1,895,488
1,895,679
31: 1,895,976
245— 10: 1,895,605

247—	15: 1,895,791	254—	43: 1,895,664	260—	109: 1,895,713	265—	68: 1,895,863	292—	349: 1,895,894	303—	22: 1,895,483
	25: 1,895,915	255—	28: 1,895,901		116: 1,895,799	266—	6: 1,895,680		354: 1,895,893		26: 1,895,473
248—	38: 1,895,717		71: 1,895,610		123: 1,895,522	267—	1: 1,895,948	294—	100: 1,895,928		37: 1,895,464
	41: 1,895,705		72: 1,895,526		130: 1,895,945		54: 1,895,663		104: 1,895,649		40: 1,895,465
	43: 1,895,794	256—	48: 1,895,670		134: 1,895,516		1,895,826	296—	23: 1,895,933		46: 1,895,453
250—	8: 1,895,459		57: 1,895,839		1,895,528		1,895,846		44.5: 1,895,668		54: 1,895,477
	14: 1,895,969	257—	9: 1,895,444		156: 1,895,515	271—	2.3: 1,895,842		63: 1,895,532		72: 1,895,479
	30: 1,895,809		136: 1,895,891		156.5: 1,895,517	272—	61: 1,895,721		92: 1,895,572		80: 1,895,472
	27.5: 1,895,437		137: 1,895,876		170: 1,895,529	274—	1: 1,895,442		97: 1,895,583		1,895,783
	1,895,490		1,895,966	261—	12: 1,895,954		10: 1,895,614	297—	15: 1,895,590	304—	40: 1,895,766
	1,895,506		191: 1,895,947		30: 1,895,949	280—	33.1: 1,895,762		1,895,591	308—	178: 1,895,540
	1,895,858		230: 1,895,735		41: 1,895,785		33.15: 1,895,992		1,895,592		238: 1,895,936
	1,895,867		241: 1,895,755		79: 1,895,652		49: 1,895,844	298—	20: 1,895,866	312—	38: R. 18,726
	1,895,944	259—	144: 1,895,833		87: 1,895,523		89: 1,895,576	299—	141: 1,895,800		61: 1,895,661
	33: 1,895,493	260—	11: 1,895,559		121: 1,895,470	281—	29: 1,895,616	301—	105: 1,895,499		1,895,662
	34: 1,895,546		15: 1,895,681		1,895,471	282—	8: 1,895,621	303—	6: 1,895,478		189: 1,896,010
	41.5: 1,895,531		28: 1,895,545	263—	6: 1,895,716	286—	10: 1,895,930		6.1: 1,895,474		
	1,895,869		57: 1,895,788		1,895,726		11: 1,895,497		1,895,475		
251—	77: 1,895,636		100: 1,895,544		33: 1,895,795	287—	14: 1,895,706		1,895,481		
252—	2: 1,896,055		101: 1,896,039	265—	47: 1,895,502	292—	164: 1,895,892		19: 1,895,476		

U. S. GOVERNMENT PRINTING OFFICE: 1933

Patents Nos. 1,892,663 to 1,893,480

THE OFFICIAL GAZETTE OF THE United States Patent Office

Vol. 426—No. 1 TUESDAY, JANUARY 3, 1933 Price—$16 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscriptions, $16.00 per annum, including annual index, $18.20; single numbers, 35 cents each.

PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
Issue of January 3, 1933	1
Adjudicated Patents	1
Interference Notices	1
Applications Under Examination	2
Decisions of the U. S. Courts—	
General Electric Company and Carboloy Company, Inc., v. The Marvel Rare Metals Company, The Ohio Instrument Manufacturing Company, Charles L. Gebauer, et al.	2
In re Creveling	4
In re Mortimer	5
In re McGrath	6
Patent Suits	7
Adverse Decisions in Interference	8
Disclaimers	8
Trade-Marks Published (162 Applications)	9
Trade-Mark Registrations Granted	20
Trade-Mark Registrations Renewed	20
Labels	41
Prints	42
Reissues	43
Designs	44
Patents Granted	65

Issue of January 3, 1933

Trade-Marks	218—No.	399,926 to No.	400,143, inclusive.
T. M. Renewals	47		
Labels	23—No.	41,600 to No.	41,622, inclusive.
Prints	23—No.	13,990 to No.	14,012, inclusive.
Reissues	4—No.	18,705 to No.	18,708, inclusive.
Designs	100—No.	88,847 to No.	88,946, inclusive.
Patents	813—No.	1,892,663 to No.	1,893,480, inclusive.
Total	1,223		

Adjudicated Patents

(D. C. La.) Stroud patent, No. 1,575,945, for application of mud-laden fluid to oil or gas wells, *Held* valid and infringed. *National Pigments & Chemical Co.* v. *Shreveport Chemical Co.*, 1 F. Supp. 417.

(D. C. N. Y.) Jones patent, No. 1,620,661, for radio frequency amplifying system, claims 5–7 *Held* valid and infringed. *Technidyne Corporation* v. *McPhilben-Kestor, Inc.*, 1 F. Supp. 423.

(C. C. A. N. J.) Fahrenwald patent, No. 1,623,469, for metallurgical furnace, evidence *Held* to establish that the applicant was not the sole inventor. *Fahrenwald* v. *Republic Iron & Steel Co.*, 61 F.(2d) 285.

(D. C. N. Y.) Jones patent, No. 1,673,287, for electron-discharge-tube amplifier system, claims 1–3, 8, 10, and 14 *Held* not infringed. *Technidyne Corporation* v. *McPhilben-Kestor, Inc.*, 1 F. Supp. 423.

(D. C. N. Y.) Bonine patent, No. 1,696,263 for radio apparatus, claims 3, 5, 12, and 15 *Held* invalid. *Id.*

(D. C. N. Y.) Jones patent, No. 1,713,180, for method of and means for controlling energy feed-back in electron-discharge devices, claims 3, 4, and 6 *Held* invalid. *Id.*

(D. C. N. Y.) Jones patent, No. 1,732,927, for transformer and coil system, *Held* invalid. *Id.*

(D. C. N. Y.) Jones patent, No. 1,770,525, for radio receiving apparatus, claims 1–3, 12–14, 20, and 27 *Held* invalid and claims 25, 27–29 *Held* valid, but not infringed. *Id.*

(D. C. N. Y.) Jones patent, No. 1,779,831, for amplifier, claims 1, 10, 17, 19, and 22 *Held* valid and infringed. *Id.*

(D. C. N. Y.) Jones patent No. 1,788,197, for radio-frequency circuits, claims 1, 5, 8, 18, 21, and 26 *Held* valid and infringed. *Id.*

(D. C. N. Y.) Jones patent No. 1,791,030, for radio receiving system, *Held* invalid. *Id.*

(D. C. N. Y.) Clements reissue patent, No. 15,627, for vacuum cleaner, claims 6, 7, 12, and 13 *Held* not infringed. *Clements Mfg. Co.* v. *Eureka Vacuum Cleaner Co.*, 1 F. Supp. 384.

(D. C. N. Y.) Jones reissue patent, No. 17,915, for radio frequency amplifying system, claims 1, 3, 5, 7, 10, 13–15, and 25 *Held* valid and infringed. *Technidyne Corporation* v. *McPhilben-Kestor, Inc.*, 1 F. Supp. 423.

Interference Notices

U. S. Patent Office, *Washington, December 5, 1932.*

James De Villa, his assigns or legal representatives, take notice:

An interference having been declared by this Office between an application for patent filed by James De Villa, 290 Grove Street, Jersey City, N. J., and an application for patent filed by Christ T. Petkoff, 3037 College Avenue, Kansas City, Mo., and the Office having failed to secure service on De Villa, notice is hereby given that unless said De Villa, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. Patent Office, *Washington, Dec. 6, 1932.*

Pierre Jerome de Saint Andre Meynardie, his assigns or legal representatives, take notice:

An interference between the patent of Pierre Jerome de Saint Andre Meynardie, 84 Boulevard Exelmans, Paris, France, No. 1,661,489, granted March 6, 1928, and an application for patent filed by Douglas Kent Warner, Watkins Glen, N. Y., having been redeclared by this Office, and the notice of such redeclaration sent by registered mail to said Meynardie at said address having been returned by the post office undeliverable, notice is hereby given that unless said Meynardie, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

W. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business December 17, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 60,274; Trade-Mark Division, 1,023. Oldest new case, June 20, 1932; oldest amended, June 28, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Oct. 24	Nov. 7	209
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Aug. 18	Aug. 22	908
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Sept. 22	Sept. 17	679
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Sept. 26	Nov. 4	274
3626	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Aug. 26	Sept. 29	296
4908C	6. LEWERS, A. M., Carbon Chemistry	July 8	July 5	1,660
6725	7. JARBOE, O. G., Optics; Photography	Aug. 15	Aug. 15	1,176
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Aug. 26	Sept. 10	706
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Sept. 26	Oct. 11	567
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	July 29	Aug. 18	648
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Aug. 20	Aug. 17	589
7701	12. HENRY, O. C., Machine Elements	Oct. 6	Oct. 17	296
8006	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Aug. 20	Aug. 24	879
8007	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Sept. 19	Sept. 19	614
4807	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Aug. 2	Aug. 2	1,574
5612	16. SPENCER, O. J., Telegraphy; Telephony	Sept. 8	Sept. 8	676
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	June 28	June 28	1,334
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Sept. 20	Sept. 22	482
4006	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	July 17	July 18	1,578
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Oct. 1	Oct. 4	402
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Aug. 16	Aug. 26	842
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Oct. 16	Oct. 26	369
7802	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	July 8	July 11	770
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Oct. 15	Oct. 8	492
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	July 22	July 23	1,352
5803	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	July 29	July 29	706
5706	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Sept. 17	Sept. 12	769
4628	28. BENSON, A. R., Internal-Combustion Engines	July 3	July 3	1,252
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	July 1	July 5	598
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	Aug. 17	Aug. 18	747
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	July 23	July 23	1,360
4066	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Sept. 12	Sept. 17	701
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	July 19	July 18	1,941
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	July 23	July 23	812
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Oct. 27	Nov. 12	271
7024	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	July 2	July 11	1,430
5089	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Aug. 16	Aug. 11	835
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Oct. 15	Nov. 4	129
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	July 2	July 2	1,218
7880	40. OBERLIN, J. J., Receptacles	Aug. 4	Aug. 4	2,025
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Oct. 14	Oct. 19	425
5982	42. CUTTING, H. O., Electric Signaling	June 27	July 6	1,304
4936B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	July 11	July 20	1,518
4067B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	July 1	July 1	1,576
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Sept. 19	Sept. 19	748
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Sept. 16	Sept. 30	433
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	July 18	July 18	1,766
5731	48. ROEPKE, O. B., Electricity, General Applications	Aug. 15	Aug. 19	610
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	July 9	July 5	1,335
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	July 8	July 8	1,906
5628	51. BACKUS, C. D., Radiant Energy	Aug. 24	Aug. 24	993
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Oct. 10	Oct. 10	494
6807	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Oct. 6	Oct. 17	367
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	July 23	July 23	1,003
6887	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	Oct. 4	Oct. 4	312
	55. BOWEN, S. T.—Designs	Nov. 20	Dec. 3	271
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Aug. 1	Aug. 1	1,160
3623	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Aug. 18	Aug. 18	628
5605	58. DOWELL, E. F., Abrading; Typewriting	July 21	July 21	1,134
4700	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	July 11	July 11	1,401
5806	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	July 11	July 11	1,285
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	July 19	July 23	1,205
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Aug. 15	Aug 13	1,199
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	July 16	July 16	1,266
4706	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Oct. 8	Oct. 3	361
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	June 20	July 8	1,419
3099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	Nov. 17	Dec. 3	924
	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Labels and Prints	Nov. 28	Dec. 10	99

DECISIONS IN PATENT AND TRADE-MARK CASES

Supreme Court of the United States

GENERAL ELECTRIC COMPANY AND CARBOLOY COMPANY, INC., *v.* THE MARVEL RARE METALS COMPANY, THE OHIO INSTRUMENT MANUFACTURING COMPANY, CHARLES L. GEBAUER, ET AL.

No. 57. Decided December 12, 1932

1. FEDERAL COURTS — SUIT IN EQUITY — DISMISSAL OF COUNTERCLAIM — APPEAL.

Where the district court dismissed a counterclaim for lack of jurisdiction, *Held* that by such dismissal the court necessarily decided that upon the facts alleged in the counterclaim the defendants were not entitled to an injunction and the order of the district court was therefore reviewable on appeal to the circuit court of appeals.

2. SAME — SUIT ON PATENT — WHERE TO BE BROUGHT — DEFENDANT MAY WAIVE PRIVILEGE.

Section 48 of the Judicial Code relates to venue, it confers upon defendants in patent cases a privilege in respect to the places in which suits may be maintained against them. And that privilege may be waived.

3. SAME — SAME — JURISDICTION OF COURT ON COUNTERCLAIM.

"One who sues in a Federal court of equity to enjoin the infringement of his patent, thereby submits himself to the jurisdiction of the court with respect to all the issues of the case, including those pertaining to a counterclaim praying that he be restrained from infringing a patent of the defendant."

ON writ of certiorari to the United States Circuit Court of Appeals for the Sixth Circuit.

Mr. Lawrence Bristol and *Mr. Charles Neave* for petitioners.

Mr. William C. McCoy, *Mr. Lloyd L. Evans*, and *Mr. Frank S. Greene* for respondents.

Mr. Justice BUTLER delivered the opinion of the Court.

Petitioners, New York corporations having their principal offices in that State, brought this suit in the northern district of Ohio against defendants, two corporations having regular and established places of business in that district and two individuals residing there. The complaint alleges that the defendants infringed plaintiffs' rights under certain patents relating to the manufacture of hard-metal products by making, using and selling tools and parts thereof embodying such inventions. The answer avers that the patents are invalid and denies infringement alleging that all manufacture by defendants has been under one or more of five patents granted defendant Gebauer. And the answer sets up a counterclaim against plaintiffs for the infringement of one of these patents and prays injunction against such infringement and an accounting. But it does not allege that plaintiffs are inhabitants of the district or that they infringed defendants' patent and have a regular and established place of business there. The plaintiffs moved to dismiss the counterclaim for want of jurisdiction. The district court granted their motion. Defendants appealed. Plaintiffs moved to dismiss the appeal on the ground that the dismissal of the counterclaim does not amount to the refusal of an injunction under section 129, Judicial Code, and was not appealable under that section. The circuit court of appeals denied the motion and reversed the order appealed from. 56 F.(2d) 823.

Plaintiffs insist that the court erred in refusing to dismiss the appeal. Equity Rule 30 declares:

> The defendant by his answer shall set out . . . his defense to each claim asserted in the bill . . . The answer must state in short and simple form any counterclaim arising out of the transaction which is the subject matter of the suit, and may, without cross bill, set up any set-off or counterclaim against the plaintiff which might be the subject of an independent suit in equity against him, and such set-off or counterclaim, so set up, shall have the same effect as a cross suit, so as to enable the court to pronounce a final decree in the same suit both on the original and the cross claims. 268 U. S. 709.

It is clear that in this suit the court in a single decree may finally determine the merits of the cause of action alleged in the complaint and the counterclaim set up in the answer. The order dismissing the counterclaim is interlocutory. *Winters* v. *Ethell*, 132 U. S. 207, 210. *Ex parte Railroad Co.*, 95 U. S. 221, 225. *Ayres* v. *Carver*, 17 How. 591, 595. The general rule is that review of interlocutory orders must await appeal from the final decree. But in proceedings for injunctions and receivers exceptions have been made by section 129, Judicial Code:

> "Where, upon a hearing in a district court, or by a judge thereof in vacation, an injunction is granted, continued, modified, refused, or dissolved by an interlocutory order or decree, or an application to dissolve or modify an injunction is refused, or an interlocutory order or decree is made appointing a receiver, or refusing an order to wind up a pending receivership or to take the appropriate steps to accomplish the purposes thereof, such as directing a sale or other disposal of property held thereunder, an appeal may be taken from such interlocutory order or decree to the circuit court of appeals . . . The appeal . . . must be applied for within thirty days from the entry of such order or decree, and shall take precedence in the appellate court; and the proceedings in other respects in the district court shall not be stayed during the pendency of such appeal unless otherwise ordered by the court, or the appellate court, or a judge thereof. . . ." 28 U. S. C., § 227.

[1] The reasons suggested by plaintiffs in support of the contention that the order is not appealable are that there was no hearing upon any application for an injunction and that the dismissal of the counterclaim was not the refusal of an injunction. But by their motion to dismiss, plaintiffs themselves brought on for hearing the very question that, among others, would have been presented to the court upon formal application for an interlocutory injunction. That is, whether the allegations of the answer are sufficient to constitute a cause of action for injunction. And the court necessarily decided that upon the facts alleged in the counterclaim defendants were not entitled to an injunction. It cannot be said, indeed plaintiffs do not claim, that the dismissal did not deny to defendants the protection of the injunction prayed in their answer. The ruling of the circuit court of appeals that an injunction has been denied by an interlocutory order which is reviewable under section 129 is sustained by reason and supported by

the weight of judicial opinion. *Emery* v. *Central Trust & Safe Deposit Co.*, 204 Fed. 965, 968. *Ward Baking Co.* v. *Weber Bros.*, 280 Fed. 142. *Historical Pub. Co.* v. *Jones Bros. Pub. Co.*, 231 Fed. 638, 643. *Naivette* v. *Philad Co.*, 54 F.(2d) 623. Cf. *Banco Mercantil* v. *Taggart Coal Co.*, 276 Fed. 385, 390.* Plaintiffs' motion to dismiss the appeal was rightly denied.

Plaintiffs maintain that the circuit court of appeals erred in sustaining the counterclaim.

They call attention to Equity Rule 30 and cite section 48 of the Judicial Code:

> In suits brought for the infringement of Letters Patent the district courts . . . shall have jurisdiction, in law or in equity, in the district of which the defendant is an inhabitant, or in any district in which the defendant . . . shall have committed acts of infringement and have a regular and established place of business . . . . 28 U. S. C., § 109.

They argue that a counterclaim for patent infringement cannot be maintained over plaintiffs' objection if it does not contain allegations showing that plaintiffs are inhabitants of or committed acts of infringement and have a regular place of business within the district in which they commenced their suit. And they insist that to construe the rule more broadly would make it repugnant to the statute.

Rule 30 is without force as against conflicting statutory provisions. *Wash'n-Southern Co.* v. *Baltimore Co.*, 263 U. S. 629. It deals with counterclaims of two classes. The first includes every counterclaim arising out of the transaction which is the subject matter of the suit and which must be set up in the answer. The second class includes counterclaims not so arising but which might be the subject of an independent suit in equity and which may but need not be so set up. *Amer. Mills Co.* v. *Amer. Surety Co.*, 260 U. S. 360, 364. We may assume that the counterclaim in question does not arise out of the subject matter of plaintiffs' suit. But, unless section 48 prevents, it may be set up in the answer. *Marconi Wireless Telegraph Co.* v. *National E. S. Co.*, 206 Fed. 295. *Electric Boat Co.* v. *Lake Torpedo Boat Co.*, 215 Fed. 377. *United States Expansion Bolt Co.* v. *Kroncke Co.*, 216 Fed. 186; 234 Fed. 868. *Buffalo Specialty Co.* v. *Vancleef*, 217 Fed. 91. *Champion Spark Plug Co.* v. *Champion Ignition Co.*, 247 Fed. 200. *Victor Talk. Mach. Co.* v. *Brunswick-Balke-Collender Co.*, 279 Fed. 758.

[2, 3] Section 24 (7) of the Judicial Code is the source from which district courts derive jurisdiction of cases arising under the patent laws. Under that clause and until the enactment of section 48 a suit for infringement might have been maintained in any district in which jurisdiction of defendant could be obtained. *In re Hohorst, petitioner*, 150 U. S. 653, 661. And see *In re Keasbey & Mattison Co., petitioner*, 160 U. S. 221–230. Section 48 relates to venue. It confers upon defendants in patent cases a privilege in respect of the places in which suits may be maintained against them. And that privilege may be waived. *Lee* v. *Chesapeake & Ohio Ry.*, 260 U. S. 653. *Gulf Smokeless Coal Co.* v. *Sutton, Steele & Steele*, 35 F.(2d) 433, 438. The section does not, as to counterclaims, purport to modify the rule, prevailing prior to its enactment. The setting up of a counterclaim against one already in a court of his own choosing is very different, in respect to venue, from hailing him into that court. Section 48, taken according to the meaning ordinarily given to the words used, applies only to the latter, and we find no warrant for a construction that would make it include the former. This Court has recently declared that one who sues in a Federal court of equity to enjoin the infringement of his patent, thereby submits himself to the jurisdiction of the court with respect to all the issues of the case, including those pertaining to a counterclaim praying that he be restrained from infringing a patent of the defendant. *Leman* v. *Krentler-Arnold Co.*, 284 U. S. 448, 451, 416 O. G. 1039. And that rule applies here.

Affirmed.

*Contra: Radio Corporation v. J. H. Bunnell & Co., 298 Fed. 62. Allied Metal Stamping Co. v. Standard Electric Equipment Corp., 55 F.(2d) 221.

U. S. Court of Customs and Patent Appeals

IN RE CREVELING

No. 2,800. Decided December 5, 1932

1. PATENTABILITY—CLAIMS COPIED FROM A PATENT—CONSTRUCTION.

   Where claims of a patent contain certain expressly defined limitations, those limitations can not be disregarded in determining the question whether those claims read upon the disclosure of a later application in which they have been presented.

2. SAME—LUBRICANT COMPRESSOR.

   Claims for a lubricant compressor *Held* properly rejected on the ground that they are not readable upon applicant's disclosure.

APPEAL from the Patent Office. Affirmed.

Mr. John A. Watson and *Mr. Loyd H. Sutton* for Creveling.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

The appellant filed application for a patent upon improvements in that type of lubricating means commonly known as grease guns. His application was filed January 28, 1925. A reissue patent was granted on November 22, 1927, to Wallace, No. Re. 16,787, upon an application filed October 8, 1925, on a similar device. On July 3, 1929, appellant copied from the Wallace patent certain claims and presented the same as a part of his application. Among these were claims 25 and 26, which were claims 12 and 14 of the Wallace patent. These claims are as follows:

> 25. A lubricant compressor comprising a container for lubricant, a cylinder communicating with said container, elements at opposite ends of said compressor for receiving oppositely directed thrusts, one of said elements having a passageway communicating with said cylinder, means actuated by a thrust imposed upon one of said elements, for discharging lubricant from said cylinder through said passageway, and means surrounding one of said elements, and movable with respect to said cylinder for pressing the lubricant in said container toward said cylinder.
>
> 26. A lubricant compressor comprising a container for lubricant, a cylinder communicating with said container, means for displacing lubricant from said cylinder including a member in said container, and a piston, movable with respect to and surrounding said member, for displacing lubricant from said container into said cylinder.

The Examiner refused to allow these claims upon the ground that they did not read on appellant's disclosure. The Board of Appeals took the same view of the matter and the appellant has appealed.

Appellant's device consists of an ordinary cylindrical container for grease. At one end of this container is a removable cap. Extending through the center of this cap is a threaded rod, with a transverse bar handle on its outer extremity. The drawing (Figure 1) shows in dotted lines, in the interior of the container, what appears to be a piston, with one end of the threaded push rod attached to or resting against the upper side thereof. Attached to the lower end of this container is a cylinder, with a slidably movable member capable of telescoping within the cylinder, and held in place by shoulders on the interior surface of the cylinder and by a spiral spring. The upper end of this cylinder is closed by a ball valve and the lower end of the slidable member contains a gasketed recess, capable of engaging with an ordinary Alemite nipple.

In operating the device, the container is filled with grease and the handle is turned until the grease enters the cylinder and approaches the recess in the opposite end. The recess is then applied to a nipple and by a forward pressure upon the grease container, the slidable element telescopes into the cylinder, and grease is forced into the receiving nipple.

The tribunals of the Patent Office rest their decisions herein upon the theory that appellant's application does not disclose "means surrounding one of said elements, and movable with respect to said cylinder," as stated in claim 25, and "a piston, movable with respect to and surrounding said member," in claim 26. They contend that the expression "one of said elements" in claim 25, and "said member," in claim 26, can refer only to the threaded rod which forces forward the piston in appellant's device. This latter contention is admitted by appellant's argument.

As to the operation of this rod and piston, appellant's specification states:

> 5 is a lubricant compressor adapted to hold either oil or grease and provided with a piston, indicated in dotted lines at 6, which may be moved so as to force the lubricant out of the compressor by rotating the screw-threaded stem 9 carried by the cap 8 and rotatable as by means of the handle indicated at 9.

Giving the broadest interpretation possible, we are unable to discern wherein these two disputed claims read upon appellant's said disclosure. If we assume, as do counsel on both sides, that the element described in the latter part of claim 25 is the threaded rod 7, and the "means surrounding one of said elements," later mentioned in said claim, is the piston 6, there is no showing in either drawings or specification that said piston surrounds said rod, either in whole or in part. Nor is there any such showing that the "piston" member is "movable with respect to * * * said member," as described in claim 26. The rod 7 may be separate from or integral with the piston 6, so far as the disclosure goes. If it is integral with said piston, then it is not movable with respect thereto, or surrounded by it.

Many patents are cited by appellant to show the preexisting state of the art. This state of the art shows, as contended by appellant, that it was well known to extend the end of the rod through the piston and to make it movable with respect thereto. This is doubtless true, but we are unable to discern wherein this aids appellant's rejected claims. These claims, which read plainly upon Wallace's disclosure, contain certain expressly defined limitations, which limitations are not disclosed by appellant's application. We are not at liberty to disregard them. *In re O'Dowd*, 18 C. C. P. A. (Patents) 1002; 47 F.(2d) 392, 408 O. G. 830; *In re Bijur*, 17 C. C. P. A. (Patents) 1134, 40 F.(2d) 999, 398 O. G. 355; *Field* v. *Stow* 18 C. C. P. A. (Patents) 1502, 49 F.(2d) 1072, 413 O. G. 283; *Sweetland* v. *Cole*, 19 C. C. P. A. (Patents) 751, 53 F.(2d) 709, 415 O. G. 4; *Mudd* v. *Schoen*, 19 C. C. P. A. (Patents) 840, 54 F.(2d) 959, 417 O. G. 847; *Bragg et al.* v. *Besler*, 19 C. C. P. A. (Patents) 1084, 56 F.(2d) 881, 420 O. G. 572; *In re Fischer*, 19 C. C. P. A. (Patents) 1231, 58 F.(2d) 1058, 423 O. G. 931.

Finally, it is argued that the piston 6 "surrounds" the rod 7, even if the rod 7 is disclosed only as resting upon and against said piston or, in the alternative, as penetrating the same. Webster's New International Dictionary, 1932, thus defines the verb "surround":

> 1. To inclose on all sides; to encompass; as, a wall surrounds the city.

Accepting this definition, which is also quoted by appellant's counsel in his brief, the piston 6 does not surround the rod 7. Even if the rod 7 may be considered as penetrating the said piston, the piston may be said to surround the rod only partially.

For the reasons assigned, it is though the rejection of said claims 25 and 26 was not in error, and the decision of the Board of Appeals of the United States Patent Office is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE MORTIMER

No. 3019. Decided December 5, 1932

PATENTABILITY—SHINGLE STRIP.

Claims for a shingle strip *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

Mr. Forbes Silsby and *Mr. Benjamin Sweedler* for Mortimer.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

Mortimer filed his application in the United States Patent Office for a patent on improvements in shingle strips, such as are usually made by saturating a felt base with a waterproofing material, coating the same with a plastic material and applying thereto a layer of mineral wear-resisting material. The Examiner and Board of Appeals rejected all the claims, but on different grounds. The Board of Appeals based its rejection on reference to Heppes (Design) No. 57,126.

Three claims are involved, as follows:

> 10. A shingle strip having one longitudinal edge formed with spaced triangular tabs, the sum of the areas of the

tabs being substantially equal to the sum of the areas of the spaces upon said edge, said shingle strip having the other edge formed with shingle-like spaced extensions each comprising two rectangular portions joined by sloping lines, the sum of the areas of the shingle-like extensions being substantially equal to the sum of the areas of the intervening spaces, said triangular tabs being oppositely disposed with respect to said shingle-like extensions.

11. A shingle strip having one longitudinal edge formed with spaced narrow triangular tabs, said shingle strip having the other edge formed with shingle-like spaced extensions each comprising two rectangular portions joined by sloping lines, said triangular tabs being oppositely disposed with respect to said shingle-like extensions.

13. A shingle strip having one longitudinal edge formed with spaced tabs, the sum of the areas of said tabs being substantially equal to the sum of the areas of the spaces upon said edge, said shingle strip having the other edge formed with spaced shingle-like extensions of a shape different from the shape of said tabs, the sum of the areas of the shingle-like extensions being substantially equal to the sum of the areas of the spaces on said other edge, said shingle-like extensions being oppositely disposed with respect to said tabs.

Appellant's shingle strip, as disclosed, consists of a strip of material having triangularly-shaped tabs on one edge and rectangularly-shaped tabs or extensions on the other edge, disposed opposite to said triangularly-shaped tabs, which rectangularly-shaped tabs consist of rectangularly-shaped portions and larger basic rectangularly-shaped portions, the smaller and larger rectangularly-shaped portions being joined by diagonally-disposed margins. The area of each of the respective tabs on both surfaces is equal to the area of the space intervening between said tab and the next tab adjacent thereto.

These shingle strips are made by cutting the same from a strip of material, wide enough for the cutting of two or more shingle strips, and, in such cutting, there is no waste of material except that portion used to make the triangular tabs where the last shingle strip made by the cutting process arrives at the edge of the sheet of material used.

As thus constructed, appellant's shingle strip may be laid with either triangular or rectangular tabs exposed to the weather, and when so laid, the strips overlap so that the respective tabs overlie the respective cut-out portions of the underlying strip. At the same time, by the opposite placing of the triangular and rectangular tabs, a great saving of material is effected by the cut-out portion of an underlying strip being immediately beneath a tab upon an overlying strip.

The Board of Appeals was of opinion that appellant's application was anticipated by the design patent to Heppes. Heppes shows a design for a shingle strip, having triangular tabs on one edge. Whether these tabs are of the same area as the intervening spaces is not stated, but for the purposes hereof it may be assumed they are. The other edge of the shingle strip is a straight line, with narrow rectangular slits and cut-out portions opposite the apex of each cut-out portion on the first mentioned edge.

It is stated by the Board that the Heppes shingle strip may be laid with either the straight or the triangular surface exposed to the weather and that when so laid, the square tabs or the triangular tabs, as the case may be, will cover the cut-out portion of the layer beneath. This, it must be conceded, will be the case. However, in so doing, it will be found that a large amount of material is wasted by reason of the large area of the rectangular tabs, separated only by narrow slits. The advantage which the appellant's shingle strip enjoys of substituting for the larger rectangular tab a relatively smaller triangular one, is entirely lost in Heppes. Appellant points out in his brief, that this saving amounts to approximately 75 square feet of fabric per 100 shingles over the Heppes' shingle strip.

The Board of Appeals states:

> The cutting of the edges of the strip in a manner to save material is shown in Heppes' patent as to one edge and to cut the opposite edge in like manner is simply an extension of this old idea.

The difficulty with this position is quite apparent. If the rectangular tabs of Heppes are narrowed until they equal the adjacent cut-out spaces, and an attempt to lay these strips with staggered tabs is made, it will be found that at certain points there will be no head lap, because of the cut-out portions of the respective strips coinciding at such points. It goes without saying that such a shingle strip would be inoperative and leaky.

It cannot properly be said that the change of shape from the preexisting art, made by appellant, is obvious and not inventive. By using this shape, he has produced a new and useful result, not known to the art, and no reason is apparent why he should not have the protection which the law gives in such cases.

The decision of the Board of Appeals is reversed as to its rejection of appellant's claims 10, 11, and 13.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE MCGRATH

No. 3,011. Decided December 5, 1932

PATENTABILITY—ENGINE STARTER.

A claim for an engine starter *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

Messrs. Cameron, Kerkam & Sutton, Mr. W. B. Kerkam, and *Mr. R. H. Hudson* for McGrath.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner, rejecting, upon the ground of lack of invention in view of the prior art, claim 21 of appellant's application, filed October 20, 1920, said claim reading as follows:

> 21. An engine starter apparatus including a shaft, a driving member movable longitudinally thereon for engagement with a member of the engine to be started, manually operated means for moving such driving member longitudinally into such engagement, and means separate from the driving member and movable relative to the shaft cooperating with the shaft and driving member for establishing driving relation between the driving member and the shaft after such driving member has reached a positive limit in its longitudinal movement.

The reference relied upon is Deutsch, 1,254,213, January 22, 1918.

The alleged invention herein involved is described by the Board of Appeals as follows:

> This application discloses an engine starter of the Bendix type comprising a motor, on the shaft of which is loosely mounted a threaded sleeve, the sleeve being driven from the motor shaft through a spring 8. The outer end of the threaded sleeve is provided with a stop member 7, and slidably mounted on the sleeve is a pinion, adapted when in contact with the stop to mesh with teeth on the flywheel. Threaded on the sleeve is a member 14. A manual means is provided for sliding the pinion on the sleeve and for closing a switch to operate the motor. In operation, as the manual means shifts the pinion against the stop 7 and into mesh with the teeth on the flywheel and closes the switch, the sleeve is rotated and member 14, by reason of its threaded connection with the sleeve, is moved along the sleeve and clamps the pinion against the stop 7. Continued rotation of the motor drives the pinion and, in turn, the flywheel.

With respect to the Deutsch reference, the Board stated:

> Deutsch, relied upon by the Examiner, discloses an engine starter comprising a motor the shaft of which has a clutch member 33 mounted on it and connected to it by a spring. Also slidably mounted on the motor shaft is a pinion provided at one side with a flange 36 and at the opposite side with clutch member 32, adapted to cooperate with clutch member 33. The pinion is adapted to be moved along the motor shaft by the manually operated rod 20. In operation, the pinion is moved along the shaft into mesh with the teeth of the flywheel and the cooperating clutch members 32 and 33 brought together. Movement of the motor shaft through the spring and clutch members drives the pinion and, in turn, the flywheel. * * *

It is admitted by appellant that the claim here in issue reads upon said reference, with the exception of the last element of said claim, beginning with the words "and means separate from the driving member."

Appellant contends that the claim requires that the pinion be moved to a positively limited position before driving relation between the pinion and the shaft referred to in the claim is established, and that the Deutsch reference establishes such driving relation between the pinion and the shaft *before* the pinion has reached a positive limit in its longitudinal movement.

The Board in its decision impliedly admitted that appellant's contention in this respect is correct, but stated that it is immaterial in what order the driving connection and the stopping occur. Appellant insists that the Board is in error as to this, and states in his brief as follows:

> In Deutsch, the full starting torque is taken by the ends of the clutch teeth just as they engage initially, because the driving relation is established at this instant. This operation would lead to excessive wear on the ends of the teeth. In the McGrath invention, the teeth of the flywheel gear and pinion, which are the only meshing parts, are fully engaged before any driving relation is established.

We can not agree with the Board of Appeals that the order in which driving connection and stopping of the longitudinal movement of the pinion occur is immaterial, for it seems to us that there is a decided advantage in having meshing parts engaged before rotary motion is applied to the transmission. Inasmuch as appellant accomplishes this, and the reference Deutsch does not, we are of the opinion that, while the improvement in appellant's structure over that of the reference may not be of major importance, it is an improvement that constitutes a patentable distinction over said reference. Having come to this conclusion, it is unnecessary to consider other contentions made by appellant.

For the reason stated, the decision of the Board of Appeals is reversed.

Reversed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,119,826, J. E. Thropp et al., Machine for making or building up pneumatic tires; 1,131,173, J. E. Thropp, Bead adjusting device; 1,721,842, P. D. Thropp et al., Tire marking machine, D. C., N. D. Ohio, E. Div., Doc. E 2606, *The De Laski & Thropp Circular Woven Tire Co.* v. *The Goodyear Tire & Rubber Co.* Claims 17, 32, 33, 35, 50, 75, 76, 80, 84, 85, 88 to 96, inclusive, 136, 137, 138, 139, 145, 146, 147, and 148 of 1,119,826; Patent 1,131,173; and claims 12 and 13 of 1,721,842 held valid and infringed Nov. 4, 1932.

1,131,173. (See 1,119,826.)

1,222,144, 1,225,362, W. M. Ruthrauff, Dentifrice, appeal filed Apr. 7, 1932, C. C. A., 3d Cir., Doc. 4892, *F. P. Hoover et al.* v. *Eckerd's Out Rate Medicine Co., Inc.*

1,225,362. (See 1,222,144.)

1,272,056, C. F. Kettering, Ignition system; 1,286,803, H. G. Schwarse, Hydrocarbon motor; 1,305,165, W. H. Ratcliff, Circuit breaker; 1,556,901, C. E. Berkdoll, Ignition device; 1,593,339, 1,557,207, F. C. Kroeger, same; 1,687,040, W. D. Schrope, same; 1,825,720, J. T. Fitzsimmons, Ignition timer; Re. 18,276, C. H. Kindl, same, filed Nov. 3, 1932, D. C., S. D. N. Y., Doc. E 72/154, *Delco-Remy Corp.* v. *Apollo Magneto Corp.*

1,286,803. (See 1,272,056.) 1,305,165. (See 1,272,056.)

1,307,734. (See 1,459,662.)

1,459,662, C. E. Mansel, Lubricating system; 1,475,980, O. Zerk, Lubricating apparatus; 1,676,626, O. U. Zerk, Lubricating dispensing apparatus; Re. 16,757 (of 1,494,652), C. F. Wallace, Grease container; 1,619,126, W. F. Hundemer, Lubricating device; Re. 18,278, 1,816,022, Re. 18,128 (of 1,749,330), W. L. Morris, Grease feeder; 1,307,734, A. V. Gullborg, Lubricating means, filed Oct. 31, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E X-21-J, *Alemite Corp. et al.* v. *D. L. Yunt et al.*

1,474,152, 1,474,597, A. A. Kent, Induction coil, filed Nov. 3, 1932, D. C., S. D. N. Y., Doc. E 72/155, *Delco-Remy Corp. et al.* v. *Apollo Magneto Corp.*

1,474,597. (See 1,474,152.) 1,475,980. (See 1,459,662.)

1,480,914, S. J. Poplawski, Beverage mixer; 1,639,370, H. D. Flegal, Dispenser, D. C., E. D. Wis. (Milwaukee), Doc. 3565, *Hamilton Beach Mfg. Co.* v. *Green Mfg. Co.* Decree for defendant Nov. 8, 1932.

1,494,652. (See 1,459,662.) 1,556,901. (See 1,272,056.)

1,557,207. (See 1,272,056.) 1,589,339. (See Re. 16,339.)

1,593,339. (See 1,272,056.) 1,619,126. (See 1,459,662.)

1,630,639, T. M. Taylor, Drip sheet, D. C., S. D. N. Y., Doc. E 56/184, *Keystone Roofing Mfg. Co.* v. *Barton Co.* Consent decree for plaintiff Nov. 7, 1932.

1,639,370. (See 1,480,914.)

1,641,374, W. A. Chryst, Induction coil; 1,647,417, W. G. Schneider, same, filed Nov. 3, 1932, D. C., S. D. N. Y., Doc. E 72/156, *Delco-Remy Corp.* v. *Apollo Magneto Corp.*

1,647,417. (See 1,641,374.) 1,676,626. (See 1,459,662.)

1,687,040. (See 1,272,056.)

1,687,282, H. S. Cook, Medicament cartridge and hypodermic syringe embodying same; 1,715,771, J. MacGregor, Hypodermic syringe and cartridge therefor, filed Nov. 8, 1932, D. C., S. D. N. Y., Doc. E 72/171, *Cook Laboratories, Inc.*, v. *H. Epstein et al.*

1,715,771. (See 1,687,323.) 1,721,842. (See 1,119,826.)

1,749,330. (See 1,459,662.) 1,816,022. (See 1,459,662.)

1,825,720. (See 1,272,056.)

1,879,799, M. Glaesel, Ornament, filed Nov. 5, 1932, D. C., S. D. N. Y., Doc. E 72/183, *F. Glaesel, Inc.*, v. *M. Hollander Co., Inc.*

1,881,324, H. E. Metcalf, Signal reproducer, filed Nov. 7, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4506, *The Magnavox Co.* v. *The Rola Co.*

1,882,563, W. D. Bartlett, Coin controlled vending machine, filed Oct. 15, 1932, D. C., E. D. N. C. (Raleigh), Doc. E 639, *W. D. Bartlett* v. *E. Hennies et al.*

Re. 16,787. (See 1,459,662.)

CARNEGIE LIBRARY OF ATLANTA

Re. 16,869 (of 1,589,339), R. H. Goldman, Manicuring instrument, D. C., E. D. Mo., E. Div., Doc. 9146, *H. L. Hughes Co., Inc.*, v. *Professional Products Co.* Decree for defendant Nov. 2, 1932.

Re. 18,123. (See 1,459,662.) Re. 18,276. (See 1,272,056.)

Re. 18,278. (See 1,459,662.)

Des. 75,568, A. R. Kanne, Lamp supporting bracket, appeal filed June 18, 1932, C. C. A., 3d Cir., Doc. 4937, *Amiesite Asphalt Co. of America* v. *Interstate Amiesite Co.*

Des. 81,303, W. Schnell, Radiator cap for automobile; Des. 84,659, Schnell & Giuntini, same, D. C., S. D. N. Y., Doc. E 72/122, *Tornstedt Mfg. Co.* v. *S. Kenney (Chrome Products Co.) et al.* Consent decree for plaintiff (notice Nov. 4, 1932).

Des. 84,659. (See Des. 81,303.)

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,598,225, L. A. Walker, Solid lubricating compounds, decided December 5, 1932, claims 1 and 2.

Pat. 1,787,952, G. A. Richter and R. B. Hill, Manufacture of rubber-impregnated fibrous material, decided July 23, 1932, claims 1, 2, 3, 4, 12, and 13.

Pat. 1,791,212, Louis Jensen, Web-control mechanism, decided December 7, 1932, claims 7, 8, and 9.

Pat. 1,795,088, O. E. Jorgensen, Internal combustion engine, decided November 17, 1932, claims 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 20.

Pat. 1,859,338, W. P. Murphy, Tank for railway car, decided December 7, 1932, claims 3, 5, and 7.

Disclaimers

1,687,013.—*Otto A. Frederickson*, Wethersfield, Conn. ARMORED ELECTRIC CABLE. Patent dated October 9, 1928. Disclaimer filed December 8, 1932, by the patentee, the assignee, *National Electric Products Corporation*, acquiescing.

Hereby enters this disclaimer to that part of the claim in said Letters Patent which is in the following words, to wit: claims numbered 1, 3, 4, 5, and 6, said claims reading as follows:

"1. An armored electric conductor comprising, an insulated wire, a protecting covering of insulating material surrounding the insulated wire, a metallic sheath or jacket enclosing the protecting covering and insulated wire, and a bushing interposed between the insulated wire and the metallic sheath or jacket to protect the wire insulation from the edge formed at the end of the metallic sheath or jacket."

"3. An armored electric conductor comprising, an insulated wire, a protecting covering of insulating material surrounding the insulated wire, a metallic sheath enclosing said covering and insulated wire, and a split bushing interposed between the insulated wire and the metallic sheath to protect the wire insulation from the edge formed at the end of the metallic sheath.

"4. An armored electric conductor comprising, an insulated wire, a protecting covering of insulating material wrapped around the insulated wire, a metallic sheath enclosing said covering and insulated wire, a bushing interposed between the insulated wire and the metallic sheath to protect the wire insulation from the edge formed at the end of the metallic sheath, and a flange at the outer end of the bushing adapted to abut against the end of the metallic sheath.

"5. An armored electric cable comprising, insulated electric conductors laid side by side, a protecting covering of insulating material surrounding the insulated conductors, a metallic sheath enclosing said protecting covering and conductors, and a bushing interposed between the insulated conductors and the metallic sheath to protect the insulation of the conductors from the edge formed at the end of the metallic sheath.

"6. An armored electric cable comprising, insulated electric conductors laid side by side, a protecting covering of insulating material surrounding and uniting the insulated conductors, a spirally wound metallic sheath enclosing said protecting covering and conductors, and a bushing interposed between the insulated conductors and metallic sheath to protect the insulation of the conductors from the edge formed at the end of the metallic sheath."

1,801,549.—*Otto Arthur Frederickson*, Ben Avon, Pa. ANTISHORT BUSHING. Patent dated April 21, 1931. Disclaimer filed December 8, 1932, by the patentee, the assignee, *National Electric Products Corporation* acquiescing.

Hereby enters this disclaimer to that part of the claim in said Letters Patent which is in the following words, to wit: claims numbered 1, 2, 3, and 7, said claims reading as follows:

"1. An anti-short bushing adapted for insertion in the end of a conduit formed of flexible yielding fibrous material and provided with a curved over lip at one end thereof for the purpose described.

"2. An anti-short bushing adapted for insertion in the end of a conduit formed of flexible yielding fibrous material and having a tapered shank portion.

"3. An anti-short bushing adapted for insertion in the end of a conduit and formed of flexible yielding fibrous material having one end portion provided with a curved over lip and having a tapered shank portion."

"7. An anti-short bushing adapted for insertion in the end of a conduit, said bushing being formed of flexible sheet insulating material so as to yield when inserted in the conduit and to afterwards expand to grip the conduit, said bushing having a tapering shank portion which is longitudinally open and provided with marginal edges adapted to overlap to a greater extent when inserted in a conduit."

TRADE-MARKS

OFFICIAL GAZETTE, JANUARY 3, 1933

[VOL. 426. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

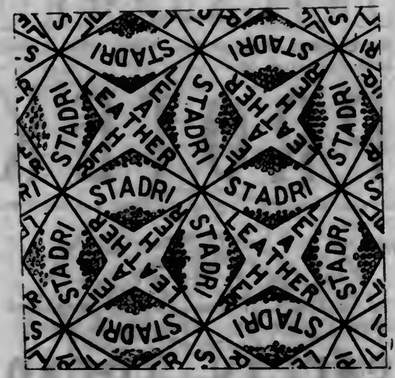
Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 330,178. J. GREENEBAUM TANNING COMPANY, Chicago, Ill.; Boston, Mass., and Milwaukee, Wis. Filed Sept. 8, 1932.



The descriptive word "Leather," and the word "Stadri," so far as it has any descriptive significance, being disclaimed apart from the mark shown.

For Various Kinds of Leathers.

Claims use since 1925.

Ser. No. 330,851. JABURG BROTHERS, INC., New York, N. Y. Filed Oct. 1, 1932.

JAY J BEE

For Rubber, Vegetable and Synthetic Gums in Their Raw or Partly Prepared State, and Hops.

Claims use since Apr. 1, 1915.

Ser. No. 331,301. ERINOID LIMITED, London, England. Filed Oct. 17, 1932.

ERINOFORT

For Synthetic Material Derived from Cellulose Acetate and Sold in Plastic and Powder Form for Moulding Purposes, and in the Form of Rods, Tubes, and Sheets.

Claims use since July 1, 1932.

Ser. No. 331,667. BROWN COMPANY, Portland, Me., and Berlin, N. H. Filed Oct. 29, 1932.

SOLKA

For Cellulose Pulps, and Felts Made Therefrom.

Claims use since Mar. 2, 1932.

CLASS 2

Receptacles

Ser. No. 331,619. INDIVIDUAL DRINKING CUP CO., INC., Easton, Pa. Filed Oct. 27, 1932.

DIXILITE

For Cups and Containers Made of Treated Paper or a Paper-Like Material.

Claims use since Oct. 5, 1932.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 319,068. THE LIKLY AND ROCKETT TRUNK COMPANY, Cleveland, Ohio. Filed Sept. 15, 1931.

Likly

For Trunks and Wardrobes, Traveling Bags, Overnight Bags, Hat Boxes, Gladstone Bags, Brief Cases, Catalogue Cases, Sample Cases and Pullman Cases.

Claims use since Jan. 1, 1892.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 321,243. FISCHER'S SURFA-SAVER, INC., Cincinnati, Ohio. Filed Nov. 18, 1931.

ACCELEROL

For Saponaceous Material Used as an Ingredient of Soap.
Claims use since Oct. 7, 1931.

Ser. No. 328,193. JOHN F. LABRANAGA, doing business as Ultralyn Essential Products Company, New York, N. Y. Filed June 21, 1932.

ULTRALYN

For Dry Cleaning Fluids and Cleaners for Wood, Metal, and the Like, Such Cleaners Having Incidental Polishing Properties.
Claims use since Nov. 12, 1930.

Ser. No. 331,220. DE-O-EZ PRODUCTS CORPORATION, Rochester, N. Y. Filed Oct. 18, 1932.



The lining on the drawing represents the colors blue and yellow. Applicant hereby disclaims the words "Cleanser" and "A Cleaner that Cleans" apart from the mark as shown on the drawing.
For Polishing and Cleaning Powder for General Household and Laundry Use.
Claims use since Oct. 5, 1932.

Ser. No. 331,925. GOLDBLATT BROS., INC., Chicago, Ill. Filed Nov. 5, 1932.

BODYGARD

For Toilet Soap.
Claims use since Dec. 15, 1931.

Ser. No. 331,926. GOLDBLATT BROS., INC., Chicago, Ill. Filed Nov. 5, 1932.

Goldblatt Bond

For Shaving Cream.
Claims use since July 15, 1932.

CLASS 5

Adhesives

Ser. No. 331,034. KOHLER CO., Kohler, Wis. Filed Oct. 7, 1932.

PROTEK

For Paste Used for Pasting Paper to Enameled and the Like Surfaces.
Claims use since Mar. 15, 1932.

Ser. No. 331,363. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio. Filed Oct. 19, 1932.

SAFETY TREAD

For Liquid Preparation for Application to the Under Surface of Rugs to Produce a Non-Skidding Surface.
Claims use since Oct. 15, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 322,338. THE VIAVI COMPANY, San Francisco, Calif. Filed Dec. 21, 1931.

VIAVI

For Medicines—Namely, Liquid Preparation for Inflammatory Conditions of the Mucous Membranes, Rectal Suppositories, Laxative, Capsules of Gelatine Encasing Vaginal Suppositories, Cerate Ointment for Application to Inflamed and Injured Surfaces, Iron Tonic in Tablet Form, Elixir Iron Tonic in Liquid Form.
Claims use since 1897 on viavi liquid; 1898 on viavi liquid and cerate; 1897 on viavi suppositories; 1897 on viavi suppositories double strength; 1897 on viavi suppositories and cerate; 1897 on viavi laxative; 1890 on viavi capsules; 1896 on viavi capsules double strength; 1895 on viavi capsules and cerate; 1896 on viavi capsules double strength and cerate; 1893 on viavi cerate; 1897 on viavi tonic; 1895 on viavi royal (tonic); 1898 on viavi elixir.

Ser. No. 327,320. ONOTA CHEMICAL COMPANY, Pittsfield, Mass. Filed May 21, 1932.

GERMIFUME

For Germicide, Disinfectant, and Deodorant.
Claims use since Oct. 1, 1916.

Ser. No. 327,940. LOUIS HERZBERG, Los Angeles, Calif. Filed June 13, 1932.

MOON GLOW

For Nail Polish, Nail Polish Remover, Cuticle Oil, Cuticle Remover in Liquid and Paste Form, Nail White.
Claims use since May 15, 1928.

Ser. No. 329,096. PORTH AND HAAS COMPANY, New York, N. Y. Filed July 26, 1932.



All the wording on the drawing except the words "Notiksom" and "Porth & Haas" is hereby disclaimed apart from the mark shown.
For Preparation for the Relief of Insect Bites.
Claims use since Apr. 14, 1932.

Ser. No. 330,544. ABRAHAM L. GELBART, doing business as Gelco Co., Brooklyn, N. Y. Filed Sept. 21, 1932.

FAIM

For Insecticides in Liquid, Powder, and Paste Form.
Claims use since September, 1929.

Ser. No. 331,012. CLYDE S. SMITH, doing business as O-Do Company, Dallas, Tex. Filed Oct. 6, 1932.

O-DO-SEPTIC

For Deodorant and Astringent.
Claims use since Mar. 1, 1932.

Ser. No. 331,060. B. J. MOORE SONS' CO., Utica, N. Y. Filed Oct. 7, 1932.

RAT-BOMBS
"BLAST THE RATS!"

For Rat Poison.
Claims use since Dec. 27, 1931.

Ser. No. 331,084. HOLLYWOOD LABORATORIES, Los Angeles, Calif. Filed Oct. 8, 1932.



The color lining appearing on the drawing represents green and orange.
The words "Hollywood Dandruff Remover" are hereby disclaimed apart from the other features of the mark as shown on the drawing.
For Dandruff Remover and Hair Restorer.
Claims use since Sept. 1, 1931.

Ser. No. 331,088. PHILIP KRUPIN, doing business as Proven Products Company, Newark, N. J. Filed Oct. 8, 1932.

halibar

For Compositions for Eliminating Offensive Breath Odors.
Claims use since Sept. 4, 1932.

Ser. No. 331,122. DOMINICK M. ROPPO, doing business as Cardo Laboratories, New York, N. Y. Filed Oct. 10, 1932.



CARDO
SOLUTION

No claim is made to the words "Water is Nature's Way" and "Solution" apart from the mark shown.
For Mineral Solution Containing Calcium and Phosphorus, Taken Internally, and is Especially Useful in Hay Asthma, Tardy Kidney Function, and Intestinal Stasis.
Claims use since May 1, 1932.

Ser. No. 331,129. TAJ PERFUME CO., Detroit, Mich. Filed Oct. 10, 1932.



HINDU
LUCKY INCENSE

The words "Hindu" and "Incense" are disclaimed apart from the mark as shown in the drawing.
For Incense.
Claims use since February, 1932.

Ser. No. 331,201. JOSEPH W. SPIKER, doing business as Melatol Laboratories, San Francisco, Calif. Filed Oct. 12, 1932.

NAZ-OL

For Medicinal Preparation in Liquid Form for the Treatment of Sinus Trouble, Catarrh, Hay Fever, Asthma, and Cold in the Head.
Claims use since May 15, 1932.

Ser. No. 331,224. FALKENHAGEN MILLS, Philadelphia, Pa. Filed Oct. 13, 1932.

THRIFTY
CRYSTALS

The word "Crystals" is disclaimed apart from the other features of the mark shown in the drawing.
For Chemical Preparation for Water Softening Purposes Having Incidental Cleaning Properties.
Claims use since Aug. 23, 1932.

Ser. No. 331,269. THE SUNDAY COMPANY, New York, N. Y. Filed Oct. 14, 1932.

SUNDAY
TOOTH WHITENER

Exclusive use of the descriptive words "Tooth Whitener" is disclaimed apart from the mark shown.
For Tooth Whitener in the Nature of a Dentifrice or Tooth Paste.
Claims use since Aug. 15, 1932.

Ser. No. 331,527. CHARLES MCFADDEN, doing business as Dr. H. Vickrey Remedy Co., Chicago, Ill. Filed Oct. 20, 1932.



The portrait comprising a part of the mark is that of Dr. Vickrey, now deceased, the founder of this business.
For Salves, Liniments, and Medicinal Preparations for Internal Use, Primarily Designed to be Used in the Treatment of Ailments of Horses.
Claims use since June 1, 1910.

Ser. No. 331,534. BAHAMA ISLES FOODS CORPORATION, Dover, Del., and Miami, Fla. Filed Oct. 25, 1932.

MAREVĒTA

For Tonic Composed of Extracts of Palmetto and Conch Juice.
Claims use since Sept. 17, 1932.

Ser. No. 331,535. BAHAMA ISLES FOODS CORPORATION, Dover, Del., and Miami, Fla. Filed Oct. 25, 1932.



For Tonic Composed of Extracts of Palmetto and Conch Juice.
Claims use since Sept. 17, 1932.

Ser. No. 331,719. ALDA'S LABORATORIES, Long Beach, Calif., assignor to Alda H. Adams, Long Beach, Calif. Filed Oct. 31, 1932.



For Cold Cream, Tissue Cream, Vanishing Cream, Foundation Cream, Face Powder, Hand Lotion, Astringent, Liquid Whitener.
Claims use since Jan. 1, 1932.

Ser. No. 331,734. GREMAL PRODUCTS COMPANY, INC., New York, N. Y. Filed Oct. 31, 1932.



The words "New York City" appearing in the drawing are disclaimed.
For Preparation Useful for a Mouth Wash, Toothpowder, and in Oral Hygiene.
Claims use since Sept. 5, 1932.

Ser. No. 331,757. SUN-A-SUBED, INC., Minneapolis, Minn. Filed Oct. 31, 1932.

SUN A SOL

For Medicinal Preparation Containing Vitamin D.
Claims use since Sept. 7, 1932.

Ser. No. 331,764. TROPONWERKE DINKLAGE & CO., Cologne-Mulheim, Germany. Filed Oct. 31, 1932.

Ophinal

For Compound for Use in the Treatment of Headaches, Neuralgia, Toothache, Rheumatism, and Similar Complaints.
Claims use since July 23, 1928.

Ser. No. 331,778. BEN FERSHTMAN, Philadelphia, Pa. Filed Nov. 1, 1932.

CITRE-TABS

For Laxative in the Form of Tablets.
Claims use since Oct. 15, 1932.

Ser. No. 331,839. AARON V. WEINBERGER, doing business as The Medical Foundation, New York, N. Y. Filed Nov. 2, 1932.

CORPORA

For Medical Preparation for the Treatment of Adiposity.
Claims use since Sept. 15, 1932.

Ser. No. 331,851. HARRY T. CHIANTIS, Boston, Mass. Filed Nov. 3, 1932.



For Liniments for External Use to Relieve All Rheumatic Pains.
Claims use since July 1, 1929.

Ser. No. 332,077. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland. Filed Nov. 11, 1932.

ROTYL

For Pharmaceutical Product for the Treatment of Affections of the Respiratory Organs.
Claims use since Mar. 30, 1932.

Ser. No. 332,227. FOLEY & COMPANY, Chicago, Ill. Filed Nov. 17, 1932.

Citrolax

For Laxatives.
Claims use since Sept. 20, 1911.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 332,043. JESSE M. JENKINS, doing business as Jenkins Associated Industries, New York, N. Y. Filed Nov. 10, 1932.

JENKINS TRULY DRY

The words "Truly Dry" are disclaimed apart from the mark as shown.
For Pipes.
Claims use since Oct. 28, 1932.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 331,228. REMINGTON ARMS COMPANY, INC., Bridgeport, Conn., and Ilion and New York, N. Y. Filed Oct. 18, 1932. Under section 5b of the act of 1905 as amended in 1920.

REMINGTON UMC

For Firearms—Namely, Military and Sporting Rifles, Shotguns, Pistols, and Parts Thereof; Metallic Cartridges, Metallic Shot Shells, Paper Shot Shells, Empty Metallic and Paper Shells, Blank Cartridges, Caps, Primers, Wads, Shot, Bullets, and Air Rifles.
Claims use since Oct. 9, 1928, on air rifles; June 1, 1911, on remaining goods.

CLASS 12

Construction Materials

Ser. No. 313,199. NATIONAL CORNSTALK PROCESSES, INC., Chicago, Ill. Filed Apr. 10, 1931.

CORN-TEX

The exclusive right to the use of the word "Corn" is not claimed apart from the mark as shown.
For Fiber Composition Board to be Used for Building and Acoustical Purposes, Insulating Material, and Other Structures.
Claims use since Mar. 7, 1931.

Ser. No. 330,990. CENTRAL FIBRE PRODUCTS CO., INC., Hutchinson, Kans. Filed Oct. 6, 1932.

SHAMROCK

For Wall Board.
Claims use since Dec. 1, 1931.

Ser. No. 331,000. JOHNS-MANVILLE CORPORATION, New York, N. Y. Filed Oct. 6, 1932.

ZEROLITE

For Thermal Insulation Materials.
Claims use since July 10, 1932.

Ser. No. 331,057. ORVILLE V. MCGREW, doing business as McGrew Paint and Asphalt Co., Chicago, Ill. Filed Oct. 7, 1932.

Insul-Mastic

The word "Mastic" is disclaimed apart from the mark shown.
For Asphaltic Compound for Sealing and Waterproofing Exterior Surfaces.
Claims use since June 24, 1932.

CLASS 15

Oils and Greases

Ser. No. 331,665. FITCH J. BAUMEISTER, Chicago, Ill. Filed Oct. 29, 1932.

FIRE-FLY GASOLINE

The word "Gasoline" and the double edge circle is disclaimed apart from the mark as shown.
For Gasoline.
Claims use since Oct. 12, 1932.

Ser. No. 331,747. LINCOLN OIL REFINING COMPANY, Robinson, Ill. Filed Oct. 31, 1932.

LINCO

For Gasoline, Kerosene, Lubricating Oils, and Lubricating Greases.
Claims use since June 1, 1924.

Ser. No. 331,972. ASSOCIATED OIL COMPANY, San Francisco, Calif. Filed Nov. 5, 1932.

FLYING A ASSOCIATED "AERO-TYPE" GASOLINE

Applicant disclaims exclusive right to the words "Aero-type," "Gasoline," and "Flying," and to the letter "A" apart from the mark shown in the drawing.
For Gasoline.
Claims use since June 25, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 332,313. NATHAN SMUKLER, New York, N. Y. Filed Nov. 19, 1932.

Alycar Duo-Enamel

No claim is made to the words "Duo-Enamel" apart from the mark shown on the drawing.
For Enamel Paint.
Claims use since Nov. 1, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 319,509. CONSOLIDATED WIRE & ASSOCIATED CORPORATIONS, Chicago, Ill. Filed Sept. 28, 1931.

CONSOLIDATED

For Cord, Bare, Insulated Wire, Cables, for General Electrical Uses, and Radio Antenna Wire.
Claims use since Aug. 30, 1919.

Ser. No. 327,708. W. S. ROCKWELL COMPANY, New York, N. Y. Filed June 3, 1932.

W.S.ROCKWELL CO.

For Industrial Electric Furnaces and Parts Thereof.
Claims use since 1909.

Ser. No. 328,405. WALTER CECIL RAWLS, doing business as W. C. Rawls & Company, Norfolk, Va., assignor to W. C. Rawls & Company, Incorporated, Norfolk, Va. Filed June 29, 1932.

Rawls

For Radio Receiving Sets, Television Receiving Sets and Combination Radio and Television Receiving Sets, and Radio Tubes.
Claims use since Mar. 1, 1932.

Ser. No. 331,251. THOMAS A. EDISON, INCORPORATED, West Orange, N. J. Filed Oct. 14, 1932. Under section 5b of the act of 1905, as amended in 1920.

EDISON

For Storage Batteries.
Claims use since 1902.

Ser. No. 331,652. SAFETY ELECTRICAL APPLIANCES, INC., Detroit, Mich. Filed Oct. 28, 1932.



The flash in the drawing is lined to indicate the color red. No claim is made to the words "Cordless" and "Safety" apart from the mark shown in the drawing.
For Electric Sad Irons.
Claims use since May 1, 1931.

Ser. No. 331,653. SAFETY ELECTRICAL APPLIANCES, INC., Detroit, Mich. Filed Oct. 28, 1932.



The flash in the drawing is lined to indicate the color red.
For Electric Sad Irons.
Claims use since Dec. 1, 1931.

Ser. No. 331,697. OTIS ELEVATOR COMPANY, Jersey City, N. J., and New York, N. Y. Filed Oct. 29, 1932. Under section 5b of the act of 1905, as amended in 1920.

OTIS

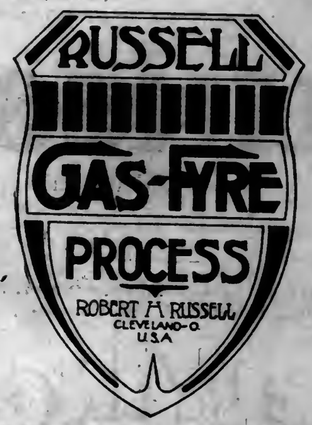
For Electric Motors, Electric Generators; Switching Equipment Used in Connection with Electric Elevators, Dumb Waiters, Hoists, and Escalators; Visual and Audible Electric Signal Devices Used in Connection with Electric Elevators, Dumb Waiters, and Hoists; Fittings for Conduits Used for the Electric Wiring of Elevators, Dumb Waiters, Hoists, and Escalators.
Claims use since Aug. 15, 1922.

Ser. No. 331,700. OTIS ELEVATOR COMPANY, Jersey City, N. J., and New York, N. Y. Filed Oct. 29, 1932.



For Electric Motors, Electric Generators; Switching Equipment Used in Connection with Electric Elevators, Dumb Waiters, Hoists, and Escalators; Visual and Audible Electric Signal Devices Used in Connection with Electric Elevators, Dumb Waiters, and Hoists.
Claims use since Aug. 15, 1922.

Ser. No. 331,873. ROBERT H. RUSSELL, Cleveland, Ohio. Filed Nov. 3, 1932.



No claim is made to the words "Gas Fyre," "Process," and "Cleveland, O., U. S. A.," apart from the mark shown.
For Electric Motors, Electric Rheostats, Electric Switches, and Electric Motor Controllers.
Claims use since Oct. 14, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 329,450. DONALD MCLEOD, doing business as D. McLeod & Company, Glasgow, Scotland. Filed Aug. 10, 1932.

MORRISCA

For Gut Cast Lines and Traces, Silk Lines, Cast Lines and Traces in Metal, Lines and Traces Made of Gut Substitutes, Artificial Bait, Fishing Hooks Mounted and Unmounted, and Other Fishing Tackle.
Claims use since Apr. 8, 1911.

Ser. No. 331,581. HORACE W. HALL, Newton, Mass. Filed Oct. 26, 1932.



The drawing is lined for brown. The mark consists of a narrow brown stripe between two white triangular areas in the throat of the racket. No claim is made to the representation of a part of a tennis racket shown on the drawing.
For Tennis Rackets.
Claims use since May 10, 1932.

Ser. No. 332,408. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed Nov. 23, 1932.

AUTOPLA

For Fishing Reels.
Claims use since Nov. 1, 1932.

Ser. No. 332,448. DR. DOROGI ÉS TÁRSA GUMMIGYÁR R. T., Budapest, Hungary. Filed Nov. 25, 1932.

Aquador

For Rubber Toys.
Claims use since Aug. 13, 1932.

Ser. No. 332,481. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Nov. 26, 1932.

Ben Chapman

The trade-mark is the facsimile signature of Ben Chapman, permission granted.
For Baseball Bats.
Claims use since Apr. 24, 1929.

Ser. No. 332,482. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Nov. 26, 1932.

Chick Hafey

The trade-mark is the facsimile signature of Chick Hafey, permission granted.
For Baseball Bats.
Claims use since Apr. 26, 1926.

Ser. No. 332,483. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Nov. 26, 1932.

Dale Alexander

The trade-mark is the facsimile signature of Dale Alexander, permission granted.
For Baseball Bats.
Claims use since Mar. 25, 1927.

Ser. No. 332,484. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Nov. 26, 1932.

Don Hurst

The trade-mark is the facsimile signature of Don Hurst, permission granted.
For Baseball Bats.
Claims use since Mar. 29, 1927.

Ser. No. 332,485. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Nov. 26, 1932.

Frank "Lefty" O'Doul

The trade-mark is the facsimile signature of Frank "Lefty" O'Doul, permission granted.
For Baseball Bats.
Claims use since Apr. 14, 1927.

Ser. No. 332,486. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Nov. 26, 1932.

Joe Vosmik

The trade-mark is the facsimile signature of Joe Vosmik, permission granted.
For Baseball Bats.
Claims use since Mar. 9, 1931.

Ser. No. 332,487. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Nov. 26, 1932.

"Pepper" Martin

The trade-mark is the facsimile signature of "Pepper" Martin, permission granted.
For Baseball Bats.
Claims use since Mar. 23, 1928.

Ser. No. 332,488. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Nov. 26, 1932.

Red Worthington

The trade-mark is the facsimile signature of Red Worthington, permission granted.
For Baseball Bats.
Claims use since Sept. 29, 1930.

Ser. No. 332,489. HILLERICH & BRADSBY CO., Louisville, Ky. Filed Nov. 26, 1932.

Carl Reynolds

The trade-mark is the facsimile signature of Carl Reynolds, permission granted.
For Baseball Bats.
Claims use since Feb. 2, 1928.

Ser. No. 332,532. CHANDLER IDE, doing business as Educational Molds Company, Los Angeles, Calif. Filed Nov. 28, 1932.

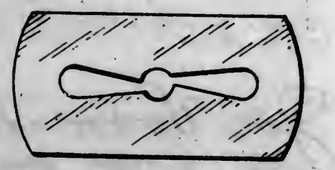
DR. DOOLITTLE'S ANIMOLDS

For Toy Molds.
Claims use since Oct. 12, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 288,454. MARTIN E. GREENHOUSE, Philadelphia, Pa. Filed Aug. 18, 1929.



The representation of the razor blade is disclaimed. The trade-mark consists in two scorings of the razor blade uniting the three lug holes in such a manner as to give the appearance of an airplane propeller.
For Safety Razor Blades.
Claims use since July 1, 1929.

CLASS 27

Horological Instruments

Ser. No. 329,526. BULOVA WATCH COMPANY, INC., New York, N. Y. Filed Aug. 13, 1932.

TWENTIETH CENTURY LIMITED

For Bracelet Watches and Their Attached Bracelets.
Claims use since June 22, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 330,388. TRIFARI, KRUSSMAN & FISHEL, INC., New York, N. Y. Filed Sept. 15, 1932.

Gainsborough

The mark is the surname of the English painter, Thomas Gainsborough, now deceased.
For Pearls.
Claims use since Sept. 7, 1932.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 321,043. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed Nov. 11 1931.

HY TEST

No claim is made to the exclusive use of the word "Hy" and "Test" apart from the combination shown.
For High Pressure Hose Made of Rubber, Fibre, and Metallic Reinforcement.
Claims use since Sept. 17 1931.

Ser. No. 327,998. FLOYD R. BIGGS, doing business as Pioneer Asbestos Company, St. Louis, Mo. Filed June 15, 1932.

PIONEER ASBESTOS

No exclusive claim is made to the word "Asbestos" apart from the mark shown.
For Brake-Linings.
Claims use since Oct. 1, 1930.

Ser. No. 330,800. TRIPLEX TIRE CO., LTD., Oakland, Calif. Filed Sept. 29, 1932.

TRIPLEX

For Pneumatic Rubber Tires.
Claims use since Aug. 17, 1932.

Ser. No. 332,491. THE KELLY-SPRINGFIELD TIRE COMPANY, New York, N. Y. Filed Nov. 26, 1932.

Envoy

For Resilient Vehicle Tires and Inner Tubes Composed in Whole or in Part of Rubber.
Claims use since April, 1931.

CLASS 37

Paper and Stationery

Ser. No. 328,839. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY, Camden, N. J. Filed July 16, 1932.

Esterbrook

The trade-mark consists of the name "Esterbrook" in the handwriting of Richard Esterbrook, deceased, the founder of applicant's business.
For Fountain Pens, Feeds, Caps, Barrels, Gold and Other Nibs, and Parts Thereof.
Claims use since Apr. 29, 1932.

Ser. No. 330,899. RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y. Filed Oct. 3, 1932.

"BUTCHWRAP"

For Greaseproof Wrapping Paper.
Claims use since Sept. 1, 1932.

Ser. No. 331,466. INTERNATIONAL PAPER COMPANY, New York, N. Y. Filed Oct. 22, 1932.



The words "No. 2 White Manila" appearing on the drawing are disclaimed apart from the mark as shown.
For Wrapping Paper in Sheets or Rolls.
Claims use since Jan. 1, 1921.

Ser. No. 331,836. THE SEMINOLE PAPER CORPORATION, Chicago, Ill. Filed Nov. 2, 1932.

SEMINOLE

For Toilet Paper.
Claims use since Nov. 15, 1917.

Ser. No. 331,907. PRATT-MALLORY COMPANY, Sioux City, Iowa. Filed Nov. 4, 1932.



For Toilet Tissue.
Claims use since April, 1902.

Ser. No. 332,149. HOLYOKE CARD & PAPER COMPANY, Springfield, Mass. Filed Nov. 15, 1932.

PARCHMENTEX

The word "Parchment" is disclaimed apart from the mark as shown.
For Writing, Printing, and Cover Paper.
Claims use since July, 1932.

Ser. No. 332,184. THE COOKE & COBB COMPANY, Brooklyn, N. Y. Filed Nov. 16, 1932.

EXPAN-TEX

For Expanding Files, Expanding Envelopes, File Pockets, Folders, and Pocket Wallets (Filing Devices), for Holding Letters, Documents, and the Like.
Claims use since Oct. 1, 1932.

Ser. No. 332,285. WESTERN TABLET AND STATIONERY CORPORATION, Dayton, Ohio. Filed Nov. 18, 1932.

WESTAB

For Writing Paper, Including Tablets for Ink and Pencil Use, Composition Books, Note Books, Loose Leaf Fillers, Loose Leaf Note Books, Envelopes, and Papeteries.
Claims use since Sept. 1, 1932.

Ser. No. 332,371. FORT HOWARD PAPER COMPANY, Green Bay, Wis. Filed Nov. 22, 1932.

PAKTEX

For Toilet Paper, Paper Towels, Paper Napkins, and Colored Crepe Paper.
Claims use since Nov. 2, 1932.

Ser. No. 332,465. THE PERKINS-GOODWIN COMPANY, New York, N. Y. Filed Nov. 25, 1932.

PENROD

For Paper to be Used for the Printing of Books and Magazines.
Claims use since Nov. 1, 1930.

Ser. No. 332,631. ROYAL CARD & PAPER CO., INC., New York, N. Y. Filed Nov. 30, 1932.

COUNTY

For Writing and Printing Papers.
Claims use since June, 1914.

CLASS 38

Prints and Publications

Ser. No. 323,164. COSSITT & COMPANY, INC., San Francisco, Calif. Filed Jan. 19, 1932.

Lithostat Re-production

No claim is made to the word "Re-Production" apart from the other features of the mark shown on the drawing.
For Photographic Reproductions, Photostatic Prints, and Photo-Lithograph Work.
Claims use since Dec. 1, 1930.

Ser. No. 331,085. INTERNATIONAL NEWS SERVICE, INC., New York, N. Y. Filed Oct. 8, 1932.

INS

For Printed News Messages, Printed News Despatches, and Newspapers.
Claims use since June 1, 1915.

Ser. No. 331,242. CHARLES C. ASBELL, St. Louis, Mo. Filed Oct. 14, 1932.



The words "Income Saving Stamp", "¼ Cent", and "St. Louis, Mo." appearing on the drawing are disclaimed apart from the mark.
For Income Saving Stamps.
Claims use since June 6, 1932.

Ser. No. 332,014. TOPICS PUBLISHING COMPANY, INC., New York, N. Y. Filed Nov. 9, 1932.

FOOD FIELD REPORTER

For Periodical Publication.
Claims use since Nov. 1, 1932.

Ser. No. 332,047. THE SETTLEMENT COOK BOOK COMPANY, Milwaukee, Wis. Filed Nov. 10, 1932.

The Way To A Man's Heart

For Printed Books.
Claims use since Apr. 15, 1901.

Ser. No. 332,072. ANDREW R. PEARSON and ROBERT S. ALLEN, Washington, D. C. Filed Nov. 11, 1932.

WASHINGTON MERRY-GO-ROUND

For News Columns and Special Articles Appearing Daily or from Time to Time.
Claims use since Oct. 1, 1932.

Ser. No. 332,414. I. W. PHILLIPS, Chicago, Ill. Filed Nov. 23, 1932.

BEST LIFE.

For Cartoons Published from Time to Time.
Claims use since May, 1932.

Ser. No. 332,604. HENRY A. SCHUBART, New York, N. Y. Filed Nov. 29, 1932.

DIVORCE

For Periodical Publication.
Claims use since Nov. 15, 1932.

CLASS 39

Clothing

Ser. No. 319,556. JOHN WEERENDONCK, New York, N. Y. Filed Sept. 29, 1931.

Silhouette

For Hosiery.
Claims use since 1910.

Ser. No. 320,692. PANTHER RUBBER MANUFACTURING COMPANY, Stoughton, Mass. Filed Oct. 31, 1931.

PANTHER TREAD



No claim is made to the exclusive right to the word "Tread" except in connection with the mark shown.
For Rubber Heels.
Claims use since Mar. 1, 1900.

Ser. No. 320,730. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J. Filed Nov. 2, 1931.



No claim is made to the words "Sheer" and "Service" apart from the mark shown in the drawing.
For Hosiery, Lingerie—Namely, Step-Ins and Chemises, Silk Night Gowns, and Pajamas.
Claims use since Sept. 1, 1931.

Ser. No. 321,983. BROWN & WELLS, INC., Boston, Mass. Filed Dec. 10, 1931.

DUOTEX

For Four-in-Hand Neckties for Men.
Claims use since Oct. 5, 1931.

Ser. No. 328,494. ETHELBRICK SHOE MANUFACTURING CO., Casey, Ill. Filed July 1, 1932.

LITTLE TEACHER

For Infants' Shoes of Leather, Fabric, or Combination of Such Materials.
Claims use since Apr. 1, 1932.

Ser. No. 329,468. HARRINGTON & WARING, New York, N. Y. Filed Aug. 11, 1932.

KAN'T RUN

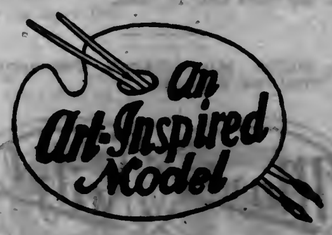
No claim is made to the words "Kan't Run" apart from the mark shown in the drawing.
For Hosiery.
Claims use since July 7, 1932.

Ser. No. 329,961. QUAKER HOSIERY COMPANY, INC., Philadelphia, Pa. Filed Aug. 29, 1932.

QUAKER

For Hosiery.
Claims use since February, 1901.

Ser. No. 330,194. THE APPLEBAUM-MAUTNER COMPANY, INC., Madison, Wis. Filed Sept. 9, 1932



The words "An Art-Inspired Model" are disclaimed apart from the mark shown in the drawing.
For Boots, Shoes, and Slippers of Rubber, Leather, Fabric, or Combinations Thereof, and Ladies' Hosiery.
Claims use since July 1, 1932.

Ser. No. 331,264. HENRY POLLAK, INC., New York, N. Y. Filed Oct. 14, 1932.

BURRI

For Women's Hats.
Claims use since Sept. 24, 1932.

Ser. No. 331,275. HILTON CLOTHES CORPORATION, New York, N. Y., and Newark, N. J. Filed Oct. 14, 1932.

BG

For Men's and Boys' Clothing and Haberdashery—Namely, Men's and Boys' Suits and Overcoats, Bathing Shirts, Bathing Suits, Bathing Trunks, Bathing Belts, Collars, Caps, Cravats, Garters; Leather, Calfskin, and Suede Gloves; Golf Coats, Hats, Hosiery, Mufflers, Neckties, Pajamas, Sport and Dress Trousers and Knickers, Sport Coats, Surf Pants; Dress, Negligee, and Work Shirts; Knitted, Netted, and Textile Underwear; Vests, Waistcoats, and Sweaters.
Claims use since Aug. 30, 1932.

Ser. No. 331,482. BELCRAFT SALES CORPORATION, New York, N. Y. Filed Oct. 22, 1932.

BELCRAFT

For Hosiery and Lingerie—Namely, Bloomers, Brassières, Camisoles, Chemises, Combination Garments, Corsets, Drawers, Dressing Gowns, Dressing Sacks, Kimonos, Knitted Underwear, Muslin Underwear, Negligees, Night Robes, Pajamas, Petticoats, Sleeping Garments.
Claims use since Oct. 13, 1932.

Ser. No. 331,509. MARVIN-NEITZEL CORPORATION, Troy, N. Y. Filed Oct. 24, 1932.

Marvin Neitzel

For Nurses' Apparel—Namely, Aprons, Bibs, Bath Robes, Caps, Collars, Cuffs, and Uniforms.
Claims use since Nov. 1, 1931.

Ser. No. 331,550. GOLD MAID HOSIERY MILLS, INC., Chicago, Ill. Filed Oct. 25, 1932.

MONA LISA

For Hosiery.
Claims use since Feb. 2, 1932.

Ser. No. 331,811. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa. Filed Nov. 1, 1932.

The Junior Stepper

For Misses' Dresses.
Claims use since Oct. 6, 1932.

Ser. No. 331,816. OSCAR BROCKMAN, Louisville, Ky. Filed Nov. 2, 1932.

DI·MON·EX

For Composition Rubber Shoe Soles.
Claims use since Sept. 8, 1932.

Ser. No. 331,823. GORDON-EAST COAST COMPANY, Moundsville, W. Va. Filed Nov. 2, 1932.

MILE WIDE

For Mens' Work and Flannel Shirts.
Claims use since October, 1931.

Ser. No. 331,854. DOVEDOWN HOSIERY MILLS, Griffin, Ga. Filed Nov. 3, 1932.

Lavendeur

For Hosiery.
Claims use since Oct. 24, 1932.

Ser. No. 332,040. HEATH-SWEETSER, INC., New York, N. Y. Filed Nov. 10, 1932.

BANDRIDGE

For Men's and Boys' Shirts—Namely, Dress, Negligee, and Work, and Collars.
Claims use since Sept. 8, 1932.

Ser. No. 332,109. BERKSHIRE KNITTING MILLS, Wyomissing, P. O. Reading, Pa. Filed Nov. 14, 1932.

BERKANTRUN

For Hosiery.
Claims use since Oct. 10, 1932.

Ser. No. 332,110. BERKSHIRE KNITTING MILLS, Wyomissing, P. O. Reading, Pa. Filed Nov. 14, 1932.

BERNONRUN

For Hosiery.
Claims use since Oct. 10, 1932.

Ser. No. 332,111. BERKSHIRE KNITTING MILLS, Wyomissing, P. O. Reading, Pa. Filed Nov. 14, 1932.

BERUNPRUF

For Hosiery.
Claims use since Oct. 20, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 330,396. W. L. M. CLARK, INCORPORATED, St. Louis, Mo. Filed Sept. 16, 1932.



Grandmother Clark's

The picture shown in the drawing is merely fanciful.
For Packet or Package Containing Quilt Patches, Designs, and Patterns for Cutting said Patches, All Sold as a Unit.
Claims use since Jan. 15, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 329,889. DAVISON-PAXON COMPANY, Atlanta, Ga. Filed Aug. 27, 1932.

COTTON TOWN PRINTS

No claim being made to the word "Prints" apart from the mark as shown.
For Cotton Goods in the Piece.
Claims use since June 1, 1930.

Ser. No. 330,828. PHOENIX TRIMMING CO., Chicago, Ill. Filed Sept. 30, 1932.

COR-VAL

For Drapes, Curtains, Portières and Attachable Materials for Suspending or Hanging the Same, Said Drapes, Curtains, Portières, and Suspending Materials Being Made of Silk, Wool, Lace, Velvet, and the Like.
Claims use since Apr. 5, 1932.

Ser. No. 332,099. NEISLER MILLS INC., Kings Mountain, N. C. Filed Nov. 12, 1932.

En famille

For Table Napkins.
Claims use since July 6, 1932.

CLASS 43

Thread and Yarn

Ser. No. 329,068. W. WARREN THREAD WORKS, Westfield, Mass. Filed July 25, 1932.

W. WARREN'S

The drawing is lined to indicate the color gold, no claim being made to the representation of the label apart from the mark shown in the drawing.
For Thread.
Claims use since 1908.

Ser. No. 332,177. THE CLARK THREAD COMPANY, Newark, N. J. Filed Nov. 16, 1932.

C.R.

For Thread and Yarn.
Claims use since June 4, 1930.

Ser. No. 332,178. THE CLARK THREAD COMPANY, Newark, N. J. Filed Nov. 16, 1932.

ELDER

For Thread and Yarn.
Claims use since Mar. 18, 1932.

Ser. No. 332,179. THE CLARK THREAD COMPANY, Newark, N. J. Filed Nov. 16, 1932.

ELF

For Thread and Yarn.
Claims use since Feb. 24, 1932.

Ser. No. 332,180. THE CLARK THREAD COMPANY, Newark, N. J. Filed Nov. 16, 1932.

FOX

For Thread and Yarn.
Claims use since Sept. 26, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 313,987. WITT AND HAMM, Boston, Mass. Filed Apr. 29, 1931.

NEBULETTE

For Atomizers for Medicines, Antiseptics, Perfumes, and the Like.
Claims use since Apr. 4, 1931.

Ser. No. 331,052. THE MARTIN BROTHERS ELECTRIC COMPANY, Cleveland, Ohio. Filed Oct. 7, 1932.

TIMATIC

For Driers for the Hair or Other Parts of the Body.
Claims use since Mar. 20, 1932.

Ser. No. 331,053. THE MARTIN BROTHERS ELECTRIC COMPANY, Cleveland, Ohio. Filed Oct. 7, 1932.

DRYETTOR

For Driers for the Hair or Other Parts of the Body.
Claims use since May 18, 1929.

Ser. No. 331,752. THE PERFECTION RUBBER COMPANY, Akron, Ohio. Filed Oct. 31, 1932.

1932 SAFE-TEX PROTECTION

No claim is made for the figures "100%" and/or the word "Protection" and/or the word "Safe" when used apart from the mark as shown in said drawing.
For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Apr. 1, 1930.

Ser. No. 332,046. PHARMAZEUTISCHE INDUSTRIE A. G., Vienna, Austria. Filed Nov. 10, 1932.

KEPHRIN

For Medicated Blood-Stopping Gauze, Wadding, and Bandage Gauze.
Claims use since Oct. 13, 1932.

Ser. No. 332,493. KOPS BROTHERS, INC., New York, N. Y. Filed Nov. 26, 1932.

Medial

For Abdominal Supporting Belts.
Claims use since Nov. 17, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 309,182. WASON BROS. CO., INC., Seattle, Wash. Filed Dec. 19, 1930.



The trade-mark consists of the representation of the sun and sun rays, adjacent which is the representation of an oriental with the words "Say Wah Sun" to emphasize the proper pronounciation of the petitioner's name.
For Coffee, Tea, Powder for Making Gelatin Desserts and Puddings, Table Syrup, Food Flavoring Syrups, Food Flavoring Extracts, Salad and Cooking Oils.
Claims use since 1924, on coffee; since September, 1928, on remaining goods.

Ser. No. 312,614. MISSOURI STATE CHICKERIES, Jefferson City, Mo. Filed Mar. 27, 1931.

Poussinette

For Dressed Chickens.
Claims use since January, 1930.

Ser. No. 323,724. STERLING PRODUCTS COMPANY, Evansville, Ind. Filed Feb. 1, 1932.



For Malt Extract.
Claims use since Dec. 21, 1931.

Ser. No. 326,994. EMILIO TUDELA, New York, N. Y. Filed May 11, 1932.

GANSONEJ

For Canned Sardines.
Claims use since June 1, 1929.

Ser. No. 327,136. ESKIMO PIE CORPORATION, New York and Brooklyn, N. Y. Filed May 16, 1932.

ESKIMO BOAT

For Frozen Confections.
Claims use since Mar. 1, 1932.

Ser. No. 327,780. IOWA CHEMICAL COMPANY, Cedar Rapids, Iowa. Filed June 2, 1932.



For Feeds for Livestock and Poultry.
Claims use since Mar. 4, 1931.

Ser. No. 328,883. B-VITE COMPANY, Philadelphia, Pa. Filed July 19, 1932.

B-VITE

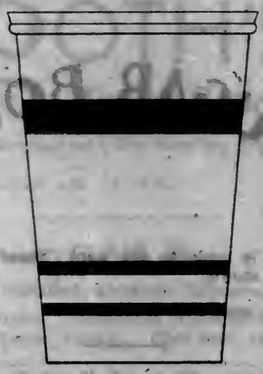
For Vitamin-Containing Syrup to be Used in Food Products.
Claims use since on or about June 2, 1932.

Ser. No. 329,385. POSTUM COMPANY, INC., New York, N. Y. Filed Aug. 6, 1932.



Applicant disclaims the representation of the label and all the wording appearing upon the drawing with the exception of the words "Postum," "Post," "Grape Nuts," "Post Toasties," "Post's," the facsimile signature "C. W. Post" and the name "Postum Company, Inc.", apart from the mark as shown.
For Cereal Foods Consisting of Wheat and Molasses, for Beverage-Making Purposes.
Claims use since July 2, 1932.

Ser. No. 330,422. G. CLIFFORD FOOTE, one of the executors of the estate of Henry C. Rowe, deceased, doing business as H. C. Rowe & Company, New Haven, Conn. Filed Sept. 17, 1932.



No claim is made to the container per se. The shading indicates blue.
For Oysters.
Claims use since Oct. 15, 1931.

Ser. No. 330,427. JULIUS LOEWITH, INC., New York, N. Y. Filed Sept. 17, 1932.



Applicant disclaims the word "Brand" apart from the trade-mark shown.
For Food Flavoring Extracts Including Butter Flavor Emulsion, Orange Emulsion, Lemon Emulsion, Pure Vanilla, Concentrated Vanilla, Walnut Emulsion, Almond Emulsion.
Claims use since August, 1930.

Ser. No. 330,513. GOLDBERG, BOWEN & Co., San Francisco, Calif. Filed Sept. 20, 1932.



For Olive Oil.
Claims use since July 1, 1887.

Ser. No. 330,739. CALIFORNIA AND HAWAIIAN SUGAR REFINING CORPORATION, LIMITED, San Francisco, Calif. Filed Sept. 28, 1932.

SUGAR BOWL

No claim is made to the word "Sugar" apart from the mark as shown.
For Sugar.
Claims use since Aug. 2, 1932.

Ser. No. 331,389. WILLIAM G. MAYER, New York, N. Y. Filed Oct. 14, 1932.



For Solid Chocolate and Chocolate Filled Candies and Confectionery in Package Form.
Claims use since Oct. 1, 1931.

Ser. No. 331,533. BAHAMA ISLES FOODS CORPORATION, Dover, Del., and Miami, Fla. Filed Oct. 25, 1932.



Applicant disclaims under said trade-mark the following words: "Bahama Isles Carne de Cobo Conch Chowder."
For Canned and Bottled Combinations of Sea Foods and Vegetables—Namely, Conch Chowder and/or Broth.
Claims use since Sept. 17, 1932.

Ser. No. 331,536. BAHAMA ISLES FOODS CORPORATION, Dover, Del., and Miami, Fla. Filed Oct. 25, 1932.



Applicant disclaims the following words: "Bahama Isles Cocktail."
For Bottled Sea Foods—Namely, a Cocktail Made of Conch Juice.
Claims use since Sept. 17, 1932.

Ser. No. 331,537. BAHAMA ISLES FOODS COPORATION, Dover, Del., and Miami, Fla. Filed Oct. 25, 1932.



For Bottled Sea Foods—Namely, a Cocktail Made of Conch Juice.
Claims use since Sept. 17, 1932.

Ser. No. 331,876. SOUTHERN COFFEE MILLS, LTD., New Orleans, La. Filed Nov. 3, 1932.

CDM

For Roasted and Ground Coffee—Namely, a Blend of Coffee and Chicory.
Claims use since Sept. 26, 1932.

Ser. No. 331,951. THE FORT LUPTON CANNING COMPANY, Fort Lupton, Colo. Filed Nov. 7, 1932.

Lone Pine

For Canned Tomatoes, Peas, and Beans.
Claims use since Sept. 17, 1929.

CLASS 47

Wines

Ser. No. 332,427. SMITH, WOODHOUSE & Co. LTD., London, England, and Oporto, Portugal. Filed Nov. 28, 1932.

OLD LODGE

For Port Wine.
Claims use since 1895.

CLASS 48

Malt Beverages and Liquors

Ser. No. 332,415. F. A. POTH'S SONS, INC., Philadelphia, Pa. Filed Nov. 28, 1932. Under 10-year proviso.

POTH'S

For Malt Beverage with Not Over the Legal Alcoholic Content.
Claims use since Jan. 1, 1863.

Ser. No. 332,416. F. A. POTH'S SONS, INC., Philadelphia, Pa. Filed Nov. 28, 1932. Under 10-year proviso.

POTH'S
DARK

For Malt Beverage with Not Over the Legal Alcoholic Content.
Claims use since Jan. 1, 1863.

Ser. No. 332,417. F. A. POTH'S SONS, INC., Philadelphia, Pa. Filed Nov. 28, 1932. Under 10-year proviso.

POTH'S
Extra

For Malt Beverage with Not Over the Legal Alcoholic Content.
Claims use since Jan. 1, 1887.

Ser. No. 332,418. F. A. POTH'S SONS, INC., Philadelphia, Pa. Filed Nov. 28, 1932. Under 10-year proviso.

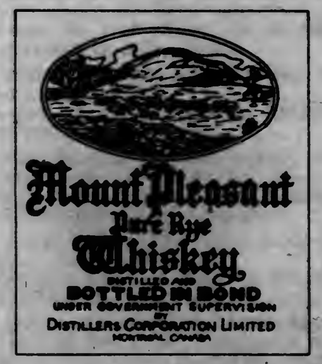
POTH'S
TIVOLI *Export*

For Malt Beverage with Not Over the Legal Alcoholic Content.
Claims use since Apr. 18, 1882.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 330,468. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Sept. 19, 1932.



No claim is made to the representation of the label per se nor to the words "Mount Pleasant" except in association with the trade-mark as shown. All other wording appearing on the label with the exception of applicant's name is disclaimed.
For Potable Spirits, Whiskey, and Liquors.
Claims use since February, 1930.

Ser. No. 330,494. JOSEPH E. SEAGRAM & SONS LIMITED, Waterloo, Ontario, Canada. Filed Sept. 19, 1932. Under 10-year proviso.

Seagram

For Whiskey and Potable Spirits.
Claims use since 1857.

Ser. No. 332,450. THE GLENDRONACH DISTILLERY COMPANY, LIMITED, Glendronach, Scotland. Filed Nov. 25, 1932.

GLENDRONACH

For Whiskey.
Claims use since 1930.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 331,036. BOLTA RUBBER CO., INC., Lawrence, Mass. Filed Oct. 7, 1932.

BOLTALITE

For Composition Sheet Material Made of Rubber, Acetate-Cellulose or Other Non-Inflammable Moldable Compounds.
Claims use since September, 1929.

Ser. No. 331,176. BROCKTON LAST MANUFACTURING CO., Brockton, Mass. Filed Oct. 12, 1932.

LA-RITE

For Shoe Lasts, Shoe Trees, and Followers—Namely, Second Lasts.
Claims use since May 1, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JANUARY 3, 1933

299,926. PLASTIC CEMENT. THE STARK METAL PRODUCTS COMPANY, Massillon, Ohio.
Filed August 18, 1932. Serial No. 329,657. PUBLISHED OCTOBER 18, 1932. Class 5.

299,927. POCKET RECEPTACLES, INCLUDING KEY CASES, BILLFOLDS, AND FOR PORTFOLIOS AND LADIES' HANDBAGS AND PURSES MADE OF LEATHER, FABRIC, OR LEATHER AND FABRIC, OR FLEXIBLE MATERIALS, INCLUDING ANY OF SAID SUBSTANCES OR MATERIALS. PRINCE A. GARDNER, Jr., doing business as Gardner Pocket Book Mfg. Co., St. Louis, Mo.
Filed August 12, 1932. Serial No. 329,545. PUBLISHED OCTOBER 18, 1932. Class 3.

299,928. AUTOGRAPHIC REGISTERS. AMERICAN SALES BOOK COMPANY, LIMITED, Toronto, Ontario, Canada, and Niagara Falls and Elmira, N. Y.
Filed August 9, 1932. Serial No. 329,419. PUBLISHED OCTOBER 18, 1932. Class 37.

299,929. READY MIXED PAINTS, FLOOR AND PREPARED WAXES AND VARNISHES. THE CROMAR COMPANY, Williamsport, Pa.
Filed July 28, 1932. Serial No. 329,014. PUBLISHED OCTOBER 18, 1932. Class 16.

299,930. BILL FILES, FILING BOOKS, FILE SIGNALS, ETC. LIBRARY EFFICIENCY CORPORATION, New York, N. Y.
Filed July 12, 1932. Serial No. 328,786. PUBLISHED OCTOBER 25, 1932. Class 37.

299,931. TOILET PAPER. THE PEERLESS PAPER MILLS, INC., Oaks, Pa.
Filed June 21, 1932. Serial No. 328,182. PUBLISHED OCTOBER 25, 1932. Class 37.

299,932. AUTOMOBILE BODY POLISH, RUBBER PAINT ENAMEL, TOUCH-UP ENAMEL, AND BLACK TIRE ENAMEL AND PAINT. STRAUSS STORES CORPORATION, doing business as Admiral Products Company, Brooklyn, N. Y.
Filed June 20, 1932. Serial No. 328,143. PUBLISHED OCTOBER 18, 1932. Class 16.

299,933. ADHESIVE CEMENT FOR WATCH GLASSES. ALBERT SPLETTER, Washington, D. C.
Filed June 15, 1932. Serial No. 328,021. PUBLISHED OCTOBER 18, 1932. Class 5.

299,934. TOILET PAPER. NORTHERN PAPER MILLS, Green Bay, Wis.
Filed June 8, 1932. Serial No. 327,880. PUBLISHED JULY 19, 1932. Class 37.

299,935. LIGHT MODIFYING LACQUER FOR THE WINDOWS OF POULTRY HOUSES. LEWIS I. FOX, doing business as Fox Poultry Farm, Metuchen, N. J., assignor to Irvin Kreielsheimer, Perth Amboy, N. J.
Filed April 6, 1932. Serial No. 325,847. PUBLISHED OCTOBER 18, 1932. Class 16.

299,936. TYPE METAL ALLOYS. IMPERIAL TYPE METAL COMPANY, Philadelphia, Pa.
Filed September 10, 1932. Serial No. 330,228. PUBLISHED OCTOBER 25, 1932. Class 14.

299,937. PRINTING INK. INKS INC., New York, N. Y.
Filed September 2, 1932. Serial No. 330,065. PUBLISHED OCTOBER 25, 1932. Class 11.

299,938. WOMEN'S HATS. R. H. MACY & CO., INC., New York, N. Y.
Filed August 20, 1932. Serial No. 329,717. PUBLISHED OCTOBER 11, 1932. Class 39.

299,939. MEN'S FELT HATS. FERRY HATS, INC., Newark, N. J.
Filed August 20, 1932. Serial No. 329,707. PUBLISHED OCTOBER 11, 1932. Class 39.

299,940. STOKER CASTINGS AND FORGINGS IN THE ROUGH. DETROIT STOKER COMPANY, Monroe and Detroit, Mich.
Filed August 8, 1932. Serial No. 329,397. PUBLISHED OCTOBER 25, 1932. Class 14.

299,941. CHILDREN'S, MISSES', AND LADIES' SHOES MADE FROM LEATHER, FABRIC, AND/OR COMBINATIONS OF LEATHER AND FABRIC. J. EDWARDS & CO., INC., Philadelphia, Pa.
Filed July 30, 1932. Serial No. 329,224. PUBLISHED OCTOBER 11, 1932. Class 39.

299,942. SHOE HEELS. AMERICAN NEW FASHION HEEL CORPORATION, Brooklyn, N. Y.
Filed July 30, 1932. Serial No. 329,216. PUBLISHED OCTOBER 11, 1932. Class 39.

299,943. CERTAIN NAMED WEARING APPAREL. AMERICAN LADY CORSET CO., INC., Detroit, Mich.
Filed July 28, 1932. Serial No. 329,128. PUBLISHED OCTOBER 11, 1932. Class 39.

299,944. BUTTONS, BUCKLES, AND PINS MADE FROM IVORY, BONE, METAL, OR IMITATIONS THEREOF, BUT NOT OF ANY PRECIOUS METAL. STERLING BUTTON CO. INC., New York, N. Y.
Filed July 26, 1932. Serial No. 329,125. PUBLISHED OCTOBER 18, 1932. Class 40.

299,945. BROKEN EGGS IN LIQUID AND DRIED FORM. TRANIN EGG PRODUCTS CO., Kansas City, Mo.
Filed March 17, 1932. Serial No. 325,244. PUBLISHED OCTOBER 18, 1932. Class 46.

299,946. WAX PREPARATIONS FOR FLOORS. CONGOLEUM-NAIRN, INC., Kearny, N. J.
Filed August 22, 1932. Serial No. 329,768. PUBLISHED OCTOBER 18, 1932. Class 16.

299,947. TRAVELING BAGS, SUIT CASES, PORTABLE WARDROBE CASES AND FITTING CARRIERS THEREFOR. K. KAUFMANN & CO., INC., Newark, N. J.
Filed August 24, 1932. Serial No. 329,798. PUBLISHED OCTOBER 18, 1932. Class 3.

299,948. TOILET TISSUE. THE MENASHA PRODUCTS COMPANY, Menasha, Wis.
Filed August 24, 1932. Serial No. 329,808. PUBLISHED OCTOBER 25, 1932. Class 37.

299,949. WRITING AND PRINTING PAPER. THE HARDING-JONES PAPER COMPANY, Excello, Ohio.
Filed September 6, 1932. Serial No. 330,125. PUBLISHED OCTOBER 25, 1932. Class 37.

299,950. BOND PAPER. FOX RIVER PAPER COMPANY, Appleton, Wis.
Filed September 13, 1932. Serial No. 330,295. PUBLISHED OCTOBER 25, 1932. Class 37.

299,951. FIELD, GARDEN, AND VEGETABLE SEEDS. FARM SERVICE STORES, INC., Minneapolis, Minn.
Filed July 11, 1932. Serial No. 328,697. PUBLISHED OCTOBER 25, 1932. Class 1.

299,952. PEAT MOSS FOR POULTRY BEDDING AND MULCHING FOR TREES AND PLANTS. READING POULTRY FOOD COMPANY, Reading, Pa.
Filed August 10, 1932. Serial No. 329,468. PUBLISHED OCTOBER 25, 1932. Class 1.

299,953. SPONGES. ESTATE OF CHARLES SAUNDERS; Nellie L. Saunders and Charles Mortimer Saunders, administrators, doing business as Charles Saunders, Key West, Fla.
Filed July 21, 1932. Serial No. 328,934. PUBLISHED OCTOBER 25, 1932. Class 1.

299,954. CELLULOSE FIBER. COTTENTEX PRODUCTS CO., Milwaukee, Wis.
Filed March 14, 1932. Serial No. 325,088. PUBLISHED OCTOBER 25, 1932. Class 1.

299,955. CRAYONS OF ALL KINDS. KOH-I-NOOR BLEISTIFTFABRIK L. & C. HARDTMUTH, Budweis, Czechoslovakia.
Filed August 26, 1932. Serial No. 329,859. PUBLISHED OCTOBER 18, 1932. Class 37.

299,956. PAPER TOWELS, PAPER NAPKINS, TOILET PAPER, CREPE PAPER, FACIAL TISSUE, AND TISSUE PAPER. FORT HOWARD PAPER COMPANY, Green Bay, Wis.
Filed August 27, 1932. Serial No. 329,893. PUBLISHED OCTOBER 18, 1932. Class 37.

299,957. COMPOSITION SUITABLE FOR USE AS A BINDER WITH SAND OR THE LIKE IN FORMING CORES AND MOLDS FOR USE IN METAL FOUNDING OR SIMILAR ARTICLES. THE AMERICAN DIAMALT COMPANY, Cincinnati, Ohio, assignor to Standard Brands Incorporated, a Corporation of Delaware.
Filed August 26, 1932. Serial No. 329,845. PUBLISHED OCTOBER 18, 1932. Class 5.

299,958. TUFTS OF ARTIFICIAL STAPLE FIBERS FROM WHICH THE THREAD IS SPUN. "SNIA-VISCOSA" SOCIETÁ NAZIONALE INDUSTRIA APPLICAZIONI VISCOSA, Milan, Italy.
Filed May 19, 1932. Serial No. 327,262. PUBLISHED OCTOBER 25, 1932. Class 1.

299,959. CHEESE. SCHWENDEMANS, Algoma, Wis.
Filed June 16, 1932. Serial No. 328,039. PUBLISHED OCTOBER 18, 1932. Class 46.

299,960. PORCELAIN ENAMELED SHEET METAL. THE TOLEDO PORCELAIN ENAMEL PRODUCTS COMPANY, Toledo, Ohio.
Filed June 29, 1932. Serial No. 328,463. PUBLISHED OCTOBER 25, 1932. Class 14.

299,961. COFFEE. DUNCAN COFFEE CO., Houston, Tex.
Filed July 14, 1932. Serial No. 328,781. PUBLISHED OCTOBER 25, 1932. Class 46.

299,962. COFFEES. SANKA COFFEE CORPORATION, New York, N. Y.
Filed July 28, 1932. Serial No. 329,155. PUBLISHED OCTOBER 18, 1932. Class 46.

299,963. NURSERY STOCK. C. E. WILSON & COMPANY, INC., Manchester, Conn.
Filed August 15, 1932. Serial No. 329,568. PUBLISHED OCTOBER 25, 1932. Class 1.

299,964. SMOKING TOBACCO, CHEWING TOBACCO, AND CIGARETTES. LARUS & BROTHER COMPANY, INCORPORATED, Richmond, Va.
Filed August 18, 1932. Serial No. 329,639. PUBLISHED OCTOBER 25, 1932. Class 17.

299,965. TOMATO SAUCE. JAMES SAVARESE, New York, N. Y.
Filed August 18, 1932. Serial No. 329,656. PUBLISHED OCTOBER 18, 1932. Class 46.

299,966. CIGARS. BAYUK CIGARS INCORPORATED, Philadelphia, Pa.
Filed August 23, 1932. Serial No. 329,761. PUBLISHED OCTOBER 25, 1932. Class 17.

299,967. MEAT—NAMELY, PORK, VEAL, AND BEEF COOKED ON A STICK. HARRY G. MUSTARD, Dallas, Tex.
Filed August 25, 1932. Serial No. 329,834. PUBLISHED OCTOBER 18, 1932. Class 46.

299,968. CHEESE. HERMANN RUDOLFF, doing business as Novato French Cheese Factory, Novato, Calif.
Filed September 7, 1932. Serial No. 330,167. PUBLISHED OCTOBER 25, 1932. Class 46.

299,969. GARDEN AND FIELD SEEDS, BULBS, AND PLANTS. ASSOCIATED SEED GROWERS, INCORPORATED, New Haven, Conn.
Filed September 8, 1932. Serial No. 330,175. PUBLISHED OCTOBER 25, 1932. Class 1.

299,970. CIGARETTES. INTERNATIONAL TOBACCO COMPANY, LIMITED, London, England.
Filed September 13, 1932. Serial No. 330,297. PUBLISHED OCTOBER 25, 1932. Class 17.

299,971. FIRE RESISTANT FABRICS. FIRE PROOF FABRICS SALES CORPORATION, Philadelphia, Pa.
Filed September 14, 1932. Serial No. 330,343. PUBLISHED OCTOBER 25, 1932. Class 50.

299,972. COATED TEXTILE FABRICS IN THE PIECE USEFUL FOR WINDOW SHADES AND ALL OTHER PURPOSES FOR WHICH FABRICS HAVING WATERPROOF, WATER RESISTING, OR WATER SHEDDING QUALITIES MAY BE USED. THE PANTASOTE LEATHER COMPANY, Passaic, N. J.
Filed September 14, 1932. Serial No. 330,351. PUBLISHED OCTOBER 25, 1932. Class 50.

299,973. VEHICLE RADIATOR AND GASOLINE FILLER CAPS. STANT MANUFACTURING COMPANY, Connersville, Ind.
Filed May 7, 1932. Serial No. 326,963. PUBLISHED OCTOBER 18, 1932. Class 19.

299,974. SPARK PLUGS. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed May 16, 1932. Serial No. 327,125. PUBLISHED OCTOBER 18, 1932. Class 21.

299,975. SIX WHEEL VEHICLES EQUIPPED WITH BODIES FOR TRANSPORT PURPOSES. FEDERAL MOTOR TRUCK COMPANY, Detroit, Mich.
Filed June 6, 1932. Serial No. 327,784. PUBLISHED OCTOBER 25, 1932. Class 19.

299,976. LIQUID SOLDER (A FLUID, METALLIZED, ADHESIVE CEMENT.) CARL W. RENSTROM, doing business as Tip-Top Products Co., Omaha, Nebr.
Filed June 15, 1932. Serial No. 328,016. PUBLISHED OCTOBER 25, 1932. Class 5.

299,977. BATTERY CLAMPS, TERMINALS AND CONNECTORS, ELECTRICAL CABLES, AND STORAGE BATTERY PARTS, CONSISTING OF POSITIVE AND NEGATIVE PLATES, WOOD SEPARATORS, RUBBER SEPARATORS, BATTERY CASES, CONNECTING BARS, CELL COVERS, VENT PLUGS, TERMINAL POSTS, AND BATTERY HANDLES. FIRESTONE BATTERY COMPANY, Akron, Ohio.
Filed June 18, 1932. Serial No. 328,090. PUBLISHED OCTOBER 18, 1932. Class 21.

299,978. PENETRATING AND LUBRICATING OILS FOR AUTOMOBILE LEAF SPRINGS. STRAUSS STORES CORPORATION, doing business as Admiral Products Company, Brooklyn, N. Y.
Filed June 20, 1932. Serial No. 328,142. PUBLISHED OCTOBER 25, 1932. Class 15.

299,979. ELECTRIC WELDING MACHINES. EDWARD G. BUDD MANUFACTURING COMPANY, Philadelphia, Pa.
Filed July 28, 1932. Serial No. 329,129. PUBLISHED OCTOBER 25, 1932. Class 21.

299,980. RADIO RECEIVING SETS, STORAGE BATTERIES, ELECTRIC VACUUM CLEANERS, ELECTRIC FANS, UNITARY ELECTRIC LIGHT FIXTURES. HARRISON WHOLESALE COMPANY, Chicago, Ill.
Filed July 29, 1932. Serial No. 329,187. PUBLISHED OCTOBER 18, 1932. Class 21.

299,981. RAILWAY TRUCKS AND SIDE FRAMES. NATIONAL MALLEABLE AND STEEL CASTINGS COMPANY, Cleveland, Ohio.
Filed August 10, 1932. Serial No. 329,452. PUBLISHED OCTOBER 18, 1932. Class 19.

299,982. ELECTRIC FLOOR, TABLE, WALL, AND CEILING LAMPS AND ELECTRIC FIXTURES, STANDARDS, BASES, BODIES, AND ARMS THEREFOR. WALTER A. ADAMS, doing business as Adams Machine Company, Rochester, N. Y.
Filed August 22, 1932. Serial No. 329,781. PUBLISHED OCTOBER 25, 1932. Class 21.

299,983. ELECTRIC READING LAMPS ADAPTED TO BE COMBINED WITH ALARM CLOCKS. FESS AND FISCHER, Chicago, Ill.
Filed August 22, 1932. Serial No. 329,776. PUBLISHED OCTOBER 25, 1932. Class 21.

299,984. A PUBLICATION. TOPICS PUBLISHING COMPANY, INC., New York, N. Y.
Filed August 23, 1932. Serial No. 329,780. PUBLISHED OCTOBER 18, 1932. Class 38.

299,985. MILD ADHESIVE PREPARATION FOR APPLICATION TO THE HANDS TO ASSURE SECURE GRIPPING OF TOOLS, GOLF-CLUBS, TENNIS RACQUETS, AND OTHER HAND MANIPULATED IMPLEMENTS. MARTIN DENNIS COMPANY, Newark, N. J.
Filed August 24, 1932. Serial No. 329,802. PUBLISHED OCTOBER 25, 1932. Class 5.

299,986. MAGAZINE PUBLISHED MONTHLY AND AT OTHER INTERVALS. DELL PUBLISHING CO. INC., New York, N. Y.
Filed August 30, 1932. Serial No. 329,962. PUBLISHED OCTOBER 18, 1932. Class 38.

299,987. SPARK PLUGS. AMERICAN AUTO ACCESSORIES STORES, INC., Wilkes-Barre, Pa.
Filed August 31, 1932. Serial No. 330,006. PUBLISHED OCTOBER 18, 1932. Class 21.

299,988. BLANK BOOKS AND LOOSE LEAF BINDERS. MCCRORY STORES CORPORATION, New York, N. Y.
Filed September 1, 1932. Serial No. 330,047. PUBLISHED OCTOBER 18, 1932. Class 37.

299,989. JEWELRY FOR PERSONAL WEAR, NOT INCLUDING WATCHES, ALL MADE OR PLATED WITH PRECIOUS METAL. GAMMA PHI BETA, Chicago, Ill.
Filed September 8, 1932. Serial No. 330,085. PUBLISHED OCTOBER 25, 1932. Class 28.

299,990. PERIODICAL. BROWN AND FINDEISEN, INC., Miami, Fla.
Filed September 7, 1932. Serial No. 330,158. PUBLISHED OCTOBER 25, 1932. Class 38.

299,991. WRAPPING PAPER, BOND PAPER, AND PAPER TOWELS. BROWN COMPANY, Portland, Me., and Berlin, N. H.
Filed September 9, 1932. Serial No. 330,196. PUBLISHED OCTOBER 18, 1932. Class 37.

299,992. LUBRICATING OILS. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del.
Filed September 9, 1932. Serial No. 330,209. PUBLISHED OCTOBER 25, 1932. Class 15.

299,993. FINGER RINGS AND BRACELETS. HENRY PAULSON, doing business as Henry Paulson & Company, Chicago, Ill.
Filed December 26, 1931. Serial No. 322,471. PUBLISHED OCTOBER 25, 1932. Class 28.

299,994. LUBRICANTS IN OIL AND GREASE FORM. VIKING OIL CORPORATION, Clarendon, Pa.
Filed September 11, 1931. Serial No. 318,961. PUBLISHED OCTOBER 25, 1932. Class 15.

299,995. PAPER—NAMELY, RAG PAPER AND STRAW PAPER; AND BOARDS—NAMELY, BOXBOARD, CHIPBOARD, STRAWBOARD, PULPBOARD, NEWSBOARD, FIBREBOARD, KRAFTBOARD, SULPHITEBOARD, MANILABOARD, BINDERSBOARD, BRISTOLBOARD, TAGBOARD, AIR DRIED CHIPBOARD, TARBOARD, AND TRUNKBOARD. FIBREBOARD PRODUCTS INC., San Francisco, Calif.
Filed September 8, 1931. Serial No. 318,829. PUBLISHED OCTOBER 25, 1932. Class 37.

299,996. MAGAZINE PUBLISHED MONTHLY AND AT OTHER INTERVALS. POPULAR PUBLICATIONS, INC., New York, N. Y.
Filed Sept. 3, 1931. Serial No. 318,719. PUBLISHED OCTOBER 25, 1932. Class 38.

299,997. FERTILIZER IN THE FORM OF CRUSHED LUMPS OF HARD NON-SEGREGABLE AGGREGATE. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed August 25, 1931. Serial No. 318,418. PUBLISHED OCTOBER 18, 1932. Class 10.

299,998. FERTILIZER OF MIXED SPRAY DRIED GRANULES. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed August 22, 1931. Serial No. 318,335. PUBLISHED OCTOBER 18, 1932. Class 10.

299,999. FERTILIZER IN THE FORM OF SMALL HARD GRANULAR PARTICLES. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed August 22, 1931. Serial No. 318,334. PUBLISHED OCTOBER 18, 1932. Class 10.

300,000. HIGH POTASH FERTILIZER OF UNIFORM DIAMETER HARD NON-SEGREGABLE SECTIONS. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed August 22, 1931. Serial No. 318,333. PUBLISHED OCTOBER 18, 1932. Class 10.

300,001. DRILLABLE CONCENTRATED FERTILIZER. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed August 22, 1931. Serial No. 318,329. PUBLISHED OCTOBER 18, 1932. Class 10.

300,002. HIGH POTASH ACCURATELY SIZED DRILLABLE FERTILIZER. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed August 22, 1931. Serial No. 318,330. PUBLISHED OCTOBER 18, 1932. Class 10.

300,003. BLOTTING PAPER. DISTRICT OF COLUMBIA PAPER MANUFACTURING COMPANY, Washington, D. C.
Filed August 19, 1930. Serial No. 304,754. PUBLISHED OCTOBER 18, 1932. Class 37.

300,004. COFFEE. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed July 11, 1930. Serial No. 303,391. PUBLISHED OCTOBER 18, 1932. Class 46.

300,005. WAFERS FOR USE IN MAKING ICE CREAM SANDWICHES AND FOR ICE CREAM SANDWICHES. CHICAGO BISCUIT & CONE CO., Chicago, Ill.
Filed June 28, 1930. Serial No. 302,930. PUBLISHED OCTOBER 18, 1932. Class 46.

300,006. BLOWER AND ELECTRIC HEATING ELEMENT UNIT SPACE HEATERS, RADIATOR REFLECTOR ELECTRIC SPACE HEATERS, AND ELECTRIC HEATING ELEMENTS THEREFOR. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio.
Filed May 12, 1930. Serial No. 300,316. PUBLISHED OCTOBER 18, 1932. Class 21.

300,007. GLUE, PASTE, ANHYDROUS CEMENT, AND ANHYDROUS PASTE. PAUL OMER ALEXIS RIAU, Glenay (Deux-Sevres), France.
Filed April 19, 1930. Serial No. 299,154. PUBLISHED OCTOBER 18, 1932. Class 5.

300,008. CANNED SALMON. KADIAK FISHERIES COMPANY, Seattle, Wash.
Filed April 19, 1930. Serial No. 299,186. PUBLISHED OCTOBER 18, 1932. Class 46.

300,009. LADIES' AND CHILDREN'S DRESSES, SUITS, AND LINGERIE. MARCEL BLUMB, doing business as Fairyland, Paris, France, assignor to Societe a Responsabilite Limitee Fairyland, Paris, France, a Corporation of France.
Filed July 10, 1929. Serial No. 286,854. PUBLISHED OCTOBER 1, 1929. Class 39.

300,010. INHALANT PREPARATION. MEYER BROTHERS DRUG COMPANY, St. Louis, Mo.
Filed September 16, 1932. Serial No. 330,408. PUBLISHED OCTOBER 25, 1932. Class 6.

300,011. LYE. CHAMPION CHEMICAL WORKS, Chicago, Ill.
Filed September 14, 1932. Serial No. 330,336. PUBLISHED OCTOBER 25, 1932. Class 6.

300,012. FINGER RINGS. ALBERT S. SAMUELS CO., San Francisco, Calif.
Filed September 6, 1932. Serial No. 330,129. PUBLISHED OCTOBER 25, 1932. Class 28.

300,013. HYPNOTIC ANTI-SPASMODIC SEDATIVE. ALEX MO COMPOUND CO., Redondo, Calif.
Filed August 31, 1932. Serial No. 330,005. PUBLISHED OCTOBER 25, 1932. Class 6.

300,014. MEDICINAL TABLETS. THE HENNEPH CORPORATION, Kingston, N. Y.
Filed August 29, 1932. Serial No. 329,947. PUBLISHED OCTOBER 18, 1932. Class 6.

300,015. COSMETIC AND MANICURE PREPARATIONS, ETC. THE DURALS CO., INC., St. Louis, Mo.
Filed August 27, 1932. Serial No. 329,890. PUBLISHED OCTOBER 25, 1932. Class 6.

300,016. INSECTICIDE. BRAZILIAN INSECTICIDE COMPANY, Brooklyn, N. Y.
Filed August 26, 1932. Serial No. 329,850. PUBLISHED OCTOBER 25, 1932. Class 6.

300,017. HAIR GROWER. ANNA RUDOLPH, Cincinnati, Ohio.
Filed August 22, 1932. Serial No. 329,778. PUBLISHED OCTOBER 25, 1932. Class 6.

300,018. DENTAL POWDER, NAIL POWDER, ETC. SAMUEL ALBERT, New York, N. Y.
Filed August 18, 1932. Serial No. 329,728. PUBLISHED OCTOBER 18, 1932. Class 6.

300,019. PREPARATION FOR REMOVING WRINKLES. MRS. JOSEPH R. SEGALL, doing business as Mrs. J. R. Segall, El Paso, Tex.
Filed August 16, 1932. Serial No. 329,588. PUBLISHED OCTOBER 18, 1932. Class 6.

300,020. ANTISEPTIC FOR ATHLETE'S FOOT, ETC. R. F. R. CHEMICAL CO., doing business as Fownide Laboratories, Los Angeles, Calif.
Filed August 8, 1932. Serial No. 329,408. PUBLISHED OCTOBER 18, 1932. Class 6.

300,021. ANTISEPTIC AND GERMICIDE. HACHMEISTER-LIND COMPANY, McKees Rocks, Pa.
Filed August 1, 1932. Serial No. 329,261. PUBLISHED OCTOBER 11, 1932. Class 6.

300,022. STANDARDIZED, OVARIAN HORMONE PREPARATION. G. W. CARNRICK CO., Newark, N. J.
Filed July 27, 1932. Serial No. 329,110. PUBLISHED OCTOBER 18, 1932. Class 6.

300,023. PILLS FOR HEADACHE, DIZZINESS, BILIOUSNESS, ETC. THE GRANGER MEDICINE CO. INC., doing business as Coal Roller Pill Company, New Iberia, La.
Filed June 28, 1932. Serial No. 328,352. PUBLISHED OCTOBER 25, 1932. Class 6.

300,024. RADIATOR STOP-LEAK PREPARATION, ETC. STRAUSS STORES CORPORATION, doing business as Admiral Products Company, Brooklyn, N. Y.
Filed June 20, 1932. Serial No. 328,141. PUBLISHED OCTOBER 18, 1932. Class 6.

300,025. ANTISEPTIC AND GERMICIDE. GRACE G. OAR, San Pedro, Calif.
Filed June 11, 1932. Serial No. 327,960. PUBLISHED OCTOBER 18, 1932. Class 6.

300,026. LAXATIVE TONIC. JOSEPH LUNTZ, Brooklyn, N. Y.
Filed June 8, 1932. Serial No. 327,825. PUBLISHED OCTOBER 25, 1932. Class 6.

300,027. COSMETIC PREPARATIONS. MONROE PRODUCTS CO., Los Angeles, Calif.
Filed June 3, 1932. Serial No. 327,699. PUBLISHED OCTOBER 25, 1932. Class 6.

300,028. RECONSTRUCTIVE TONIC AND APPETITE STIMULATOR. CARROLL DUNHAM SMITH PHARMACAL CO., doing business as Smith Pharmacal Co., New York, N. Y.
Filed March 16, 1932. Serial No. 325,190. PUBLISHED OCTOBER 25, 1932. Class 6.

300,029. TYPEWRITING MACHINES AND PARTS THEREOF AND THEREFOR. ROYAL TYPEWRITER COMPANY, INC., New York, N. Y.
Filed September 9, 1932. Serial No. 330,208. PUBLISHED OCTOBER 18, 1932. Class 28.

300,030. METAL FENCE POSTS. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio, Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J.
Filed September 7, 1932. Serial No. 330,154. PUBLISHED OCTOBER 25, 1932. Class 13.

300,031. RAZOR BLADES. WORLD'S PRODUCTS CO., doing business as Home Run Razor Blade Co., Spencer, Ind.
Filed September 3, 1932. Serial No. 330,113. PUBLISHED OCTOBER 25, 1932. Class 23.

300,032. TYPEWRITERS AND TYPEWRITER PARTS. MASS PRODUCTION CORPORATION, New York, N. Y.
Filed September 1, 1932. Serial No. 330,045. PUBLISHED OCTOBER 18, 1932. Class 28.

300,033. STORM WINDOW FASTENERS AND STORM WINDOW FASTENERS AND OPERATORS. CHESTER O. GOSERUD, St. Paul, Minn.
Filed August 31, 1932. Serial No. 330,012. PUBLISHED OCTOBER 25, 1932. Class 13.

300,034. RAZORS AND RAZOR BLADES. PRYBRANDS, INC., Long Island City, N. Y.
Filed August 25, 1932. Serial No. 329,839. PUBLISHED OCTOBER 18, 1932. Class 23.

300,035. SCYTHES. EMERSON & STEVENS MFG. CO., INC., Oakland, Me.
Filed August 20, 1932. Serial No. 329,705. PUBLISHED OCTOBER 25, 1932. Class 28.

300,036. LATHES AND DRILL PRESSES. DELTA MANUFACTURING COMPANY, doing business as Delta Specialty Company, Milwaukee, Wis.
Filed August 19, 1932. Serial No. 329,674. PUBLISHED OCTOBER 25, 1932. Class 28.

300,037. GLARE ELIMINATORS FOR AUTOMOBILE HEAD LAMPS. JOHN R. TATE, Boston, Mass.
Filed August 12, 1932. Serial No. 329,512. PUBLISHED OCTOBER 25, 1932. Class 34.

300,038. PUMPS, COMPRISING CENTRIFUGAL, TURBINE, AND ROTARY OR IMPELLER PUMPS AND PARTS THEREFOR. BYRON JACKSON CO., Los Angeles, Calif.
Filed July 29, 1932. Serial No. 329,192. PUBLISHED OCTOBER 25, 1932. Class 23.

300,039. PUMPS, COMPRISING CENTRIFUGAL, TURBINE, AND ROTARY OR IMPELLER PUMPS, AND PARTS THEREFOR. BYRON JACKSON CO., Los Angeles, Calif.
Filed July 29, 1932. Serial No. 329,191. PUBLISHED OCTOBER 25, 1932. Class 23.

300,040. SAWS AND SAW BLADES. VICTOR SAW WORKS, INC., Middletown, N. Y.
Filed January 18, 1932. Serial No. 323,151. PUBLISHED OCTOBER 18, 1932. Class 23.

300,041. CONCENTRATED FERTILIZER. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed October 12, 1931. Serial No. 320,014. PUBLISHED OCTOBER 25, 1932. Class 10.

300,042. DRILLABLE FERTILIZER. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed October 6, 1931. Serial No. 319,787. PUBLISHED OCTOBER 18, 1932. Class 10.

300,043. LAWN GRASS SEED MIXTURE. ANDREW R. KENNEDY, INC., New York, N. Y.
Filed January 28, 1932. Serial No. 323,457. PUBLISHED OCTOBER 25, 1932. Class 1.

300,044. BROOCHES, BRACELETS, RINGS, ETC. S. H. KRESS & Co., New York, N. Y.
Filed January 23, 1932. Serial No. 323,339. PUBLISHED OCTOBER 18, 1932. Class 28.

300,045. CANNED VEGETABLES, TOMATO PUREE, SAUER KRAUT, CHILI SAUCE, TOMATO CATSUP, PORK AND BEANS, HOMINY, CRANBERRY SAUCE, TOMATO JUICE. STOKELY BROTHERS & COMPANY, doing business as Fame Canning Company, Louisville, Ky.
Filed June 24, 1932. Serial No. 328,282. PUBLISHED OCTOBER 25, 1932. Class 46.

300,046. CANDY. LOUIS POSSENHEIM, doing business as Nu-Ray Health Products Co., New York, N. Y.
Filed June 18, 1932. Serial No. 328,105. PUBLISHED OCTOBER 25, 1932. Class 46.

300,047. POWDERED WHEY TO BE USED AS A DIETARY SUPPLEMENT. E. R. SQUIBB & SONS, New York, N. Y.
Filed August 27, 1932. Serial No. 329,905. PUBLISHED OCTOBER 25, 1932. Class 46.

300,048. CANNED SAUER KRAUT AND CANNED TOMATOES. CARL R. HIRSEL, doing business as Hirsel Canning Company, Toledo, Ohio.
Filed August 24, 1932. Serial No. 329,797. PUBLISHED OCTOBER 25, 1932. Class 46.

300,049. CEREAL BREAKFAST FOOD—NAMELY, WHEAT FLAKES. TENNESSEE CEREAL COMPANY, Nashville, Tenn.
Filed August 13, 1932. Serial No. 329,540. PUBLISHED OCTOBER 25, 1932. Class 46.

300,050. PREPARED SANDWICHES AND BOX LUNCHES PACKED TO INCLUDE SUCH ARTICLES AS SANDWICHES, A DRINK OR BEVERAGE, PIE, CAKE, CANDY, POTATO CHIPS, AND THE LIKE. ALEX W. PORTER, Atlantic City, N. J.
Filed July 8, 1932. Serial No. 328,645. PUBLISHED OCTOBER 25, 1932. Class 46.

300,051. FRESH CITRUS FRUITS. TAPO CITRUS ASSOCIATION, Simi, Calif.
Filed August 12, 1932. Serial No. 329,511. PUBLISHED OCTOBER 18, 1932. Class 46.

300,052. MAYONNAISE, SALAD DRESSING, SANDWICH SPREAD, FRENCH DRESSING, AND THOUSAND ISLAND DRESSING. JOHN F. JELKE COMPANY, Chicago, Ill.
Filed August 27, 1932. Serial No. 329,898. PUBLISHED OCTOBER 25, 1932. Class 46.

300,053. FROZEN CONFECTIONS. BAKER ICE MACHINE CO. INC., Omaha, Nebr.
Filed April 11, 1932. Serial No. 325,979. PUBLISHED OCTOBER 18, 1932. Class 46.

300,054. CANNED VEGETABLES AND CANNED TOMATO SAUCE COMMONLY KNOWN AS TOMATO PASTE. SCARAMELLI & COMPANY, INC., doing business as Paesana Packing Co., New York, N. Y., and Boston, Mass.
Filed May 24, 1932. Serial No. 327,417. PUBLISHED OCTOBER 18, 1932. Class 46.

300,055. FROZEN CONFECTIONS. ESKIMO PIE CORPORATION, New York and Brooklyn, N. Y.
Filed July 18, 1932. Serial No. 328,867. PUBLISHED OCTOBER 18, 1932. Class 46.

300,056. POWDERED PREPARATION USED IN MAKING MALTED MILK BEVERAGES. SKAGIT COUNTY DAIRYMEN'S ASSOCIATION, doing business as Consolidated Dairy Products Co., Burlington and Seattle, Wash.
Filed July 26, 1932. Serial No. 329,100. PUBLISHED OCTOBER 18, 1932. Class 46.

300,057. OLIVE-OIL, CANNED TUNNY FISH, TOMATO SAUCE, MACARONI, CANNED FRUITS, CANNED VEGETABLES, EVAPORATED MILK, MUSTARD, AND SALAD OIL. DAVID LOMBARDY, Cleveland, Ohio.
Filed July 7, 1932. Serial No. 328,614. PUBLISHED OCTOBER 25, 1932. Class 46.

300,058. FEATHER AND DOWN BED PILLOWS AND CUSHIONS. AMERICAN FEATHER PRODUCTS CORPORATION, Chicago, Ill.
Filed April 25, 1932. Serial No. 326,451. PUBLISHED OCTOBER 18, 1932. Class 32.

300,059. COMBINATION FOLDING OR COLLAPSIBLE TABLE AND SEATS FOR LAWN AND GENERAL OUTDOOR USE. IAN MACDONALD, Modesto, Calif.
Filed August 16, 1932. Serial No. 329,584. PUBLISHED OCTOBER 18, 1932. Class 32.

300,060. CHILDREN'S OVERALLS, PLAYSUITS, AND SUNSUITS. THE STAR UNION OVERALL CO., INC., South Norwalk, Conn.
Filed July 26, 1932. Serial No. 329,102. PUBLISHED OCTOBER 4, 1932. Class 39.

300,061. WATCHES AND CLOCKS. THE WALLENSTEIN MAYER COMPANY, Cincinnati, Ohio.
Filed March 21, 1932. Serial No. 325,356. PUBLISHED OCTOBER 18, 1932. Class 27.

300,062. BED SPRINGS. FORT PITT BEDDING COMPANY, Pittsburgh, Pa.
Filed September 15, 1932. Serial No. 330,390. PUBLISHED OCTOBER 25, 1932. Class 32.

300,063. MISSES' AND LADIES' COATS. KENGLO COATS, INC., New York, N. Y.
Filed August 30, 1932. Serial No. 329,994. PUBLISHED OCTOBER 25, 1932. Class 39.

300,064. HOUSEHOLD CHAIRS AND TABLES. EDWARD A. CLORE, doing business as E. A. Clore & Sons, Madison, Va.
Filed August 22, 1932. Serial No. 329,787. PUBLISHED OCTOBER 18, 1932. Class 32.

300,065. FLEXIBLE ABRASIVES. BEHR-MANNING CORPORATION, Troy, N. Y.
Filed September 12, 1932. Serial No. 330,243. PUBLISHED OCTOBER 18, 1932. Class 4.

300,066. FARM MACHINE FOR SOIL CULTIVATION. ROTOTILLER, INC., Wilmington, Del., and Long Island City, N. Y.
Filed April 27, 1932. Serial No. 326,600. PUBLISHED OCTOBER 25, 1932. Class 28.

300,067. PREPARED LIQUID LATEX AND THE LIKE USED AS A TEMPORARY COVERING FOR ARTICLES DURING SHIPPING, HANDLING, AND STORAGE. COPEMAN PROTEX COMPANY, Flint, Mich.
Filed March 1, 1932. Serial No. 324,659. PUBLISHED OCTOBER 18, 1932. Class 6.

300,068. MEDICINE FOR USE IN THE RELIEF OF ASTHMA, BRONCHITIS, AND HAY FEVER. ASBRON, INCORPORATED, Cleveland, Ohio.
Filed January 12, 1932. Serial No. 322,926. PUBLISHED OCTOBER 11, 1932. Class 6.

300,069. MEDICINAL IODINE PREPARATION. CLEMENS LAGEMAN, doing business as H. Trommsdorff Chemische Fabrik, Aachen, Germany.
Filed December 2, 1931. Serial No. 321,687. PUBLISHED OCTOBER 11, 1932. Class 6.

300,070. PENETRATING OILS FOR LUBRICATING, LIGHT LUBRICATING OILS, AND TOP CYLINDER LUBRICATING OILS. CALUMET REFINING CO., Chicago, Ill.
Filed February 8, 1932. Serial No. 323,934. PUBLISHED OCTOBER 25, 1932. Class 15.

300,071. TABLETS, A MEDICINAL PREPARATION FOR CLEARING THE CLOGGED COLON. SOCIETY OF THE COLONAIDS, INCORPORATED, New York, N. Y.
Filed January 26, 1932. Serial No. 323,509. PUBLISHED OCTOBER 25, 1932. Class 6.

300,072. WHEAT FLOUR. BLACK BROS. FLOUR MILLS, Beatrice, Nebr.
Filed February 25, 1932. Serial No. 324,454. PUBLISHED OCTOBER 11, 1932. Class 46.

300,073. GASOLINE. THE TEXAS COMPANY, New York, N. Y.
Filed September 9, 1932. Serial No. 330,213. PUBLISHED OCTOBER 25, 1932. Class 15.

300,074. TOILET PAPER. CAPITAL PAPER COMPANY, Indianapolis, Ind.
Filed September 10, 1932. Serial No. 330,221. PUBLISHED OCTOBER 18, 1932. Class 37.

300,075. TOILET PAPER. CAPITAL PAPER COMPANY, Indianapolis, Ind.
Filed September 10, 1932. Serial No. 330,223. PUBLISHED OCTOBER 18, 1932. Class 37.

300,076. RACING CARDS AND NEWSPAPER COLUMNS PUBLISHED FROM TIME TO TIME. LOUIS KAPLAN, Baltimore, Md.
Filed September 15, 1932. Serial No. 330,372. PUBLISHED OCTOBER 18, 1932. Class 38.

300,077. OLIVE OIL. José Sola Acero, Malaga, Spain.
Filed September 29, 1931. Serial No. 319,518. PUBLISHED OCTOBER 25, 1932. Class 46.

300,078. RAVIOLI AND FOOD FLAVORING SAUCE FOR USE ON SPAGHETTI, MEATS, FISH, ETC. DELRAY CORPORATION, San Francisco, Calif.
Filed February 6, 1932. Serial No. 323,891. PUBLISHED OCTOBER 18, 1932. Class 46.

300,079. JAMS, JELLIES, MARMALADE, AND OTHER FRUIT PRESERVES, CANDIED CITRUS FRUIT PEELS, PLUM PUDDINGS, AND MINCE MEAT. WAGSTAFFE LIMITED, Hamilton, Ontario, Canada.
Filed March 4, 1932. Serial No. 324,811. PUBLISHED OCTOBER 25, 1932. Class 46.

300,080. ANCHOVIES AND ANTIPASTO. ROMANOFF CAVIAR COMPANY, New York, N. Y.
Filed February 9, 1932. Serial No. 324,008. PUBLISHED OCTOBER 25, 1932. Class 46.

300,081. EDIBLE SALTED NUTS. ROBERT A. KERR & JAMES F. HOPKINS, Detroit, Mich.
Filed February 16, 1932. Serial No. 324,226. PUBLISHED OCTOBER 25, 1932. Class 46.

300,082. MACARONI. INDEPENDENT MACARONI CO., INC., Mount Vernon, N. Y.
Filed May 4, 1931. Serial No. 314,158. PUBLISHED OCTOBER 25, 1932. Class 46.

300,083. ROTARY FOLDERS, MATRIX ROLLERS, MAT ROLLERS, ETC. DUPLEX PRINTING PRESS CO., Battle Creek, Mich.
Filed April 17, 1931. Serial No. 313,469. PUBLISHED OCTOBER 25, 1932. Class 23.

300,084. TABLE KNIVES AND CARVERS, CAN OPENERS, RAZORS, ETC. FRIEDR. HERDER ABR. SOHN, Solingen, Germany.
Filed June 4, 1931. Serial No. 315,400. PUBLISHED NOVEMBER 24, 1931. Class 23.

300,085. BOOKS OF NOTES, DRAFTS, RECEIPTS, AND CHECKS, PRINTED FORMS, LOOSE LEAF COVERS, ETC. ASSOCIATED STATIONERS SUPPLY COMPANY, Chicago, Ill.
Filed June 17, 1931. Serial No. 315,960. PUBLISHED OCTOBER 25, 1932. Class 37.

300,086. WRENCHES, WRENCH HANDLES, SCREW DRIVERS, VALVE SPRING COMPRESSING TOOLS, CHISELS, WRENCH SOCKETS, AND SOCKET WRENCHES. SNAP-ON TOOLS, INC., Kenosha, Wis.
Filed June 22, 1931. Serial No. 316,137. PUBLISHED OCTOBER 25, 1932. Class 23.

300,087. CREAM TARTAR. GEO. RASMUSSEN CO., Chicago, Ill.
Filed June 30, 1931. Serial No. 316,505. PUBLISHED OCTOBER 18, 1932. Class 6.

300,088. HAND BAGS. ATLANTIC PRODUCTS CORPORATION, Trenton, N. J.
Filed August 13, 1931. Serial No. 317,918. PUBLISHED OCTOBER 18, 1932. Class 3.

300,089. JEW'S HARP. NEW YORK MERCHANDISE CO. INC., New York, N. Y.
Filed August 21, 1931. Serial No. 318,285. PUBLISHED OCTOBER 18, 1932. Class 36.

300,090. PRESSURE CORRECTING GAS METERS. PITTSBURGH EQUITABLE METER COMPANY, Pittsburgh, Pa.
Filed August 22, 1931. Serial No. 318,322. PUBLISHED OCTOBER 25, 1932. Class 26.

300,091. CONCENTRATED FERTILIZER. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed August 22, 1931. Serial No. 318,327. PUBLISHED OCTOBER 18, 1932. Class 10.

300,092. DRILLABLE FERTILIZER. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed August 22, 1931. Serial No. 318,328. PUBLISHED OCTOBER 18, 1932. Class 10.

300,093. CENTRIFUGAL PUMPS. GOULDS PUMPS, INCORPORATED, Seneca Falls, N. Y.
Filed July 27, 1932. Serial No. 329,113. PUBLISHED OCTOBER 25, 1932. Class 23.

300,094. CHECK VALVES FOR VACUUM CONTROL DEVICES. ROBERT V. MORSE, New York, N. Y.
Filed July 26, 1932. Serial No. 329,089. PUBLISHED OCTOBER 25, 1932. Class 13.

300,095. CUTLERY OF BASE METAL—NAMELY, RAZORS, KNIVES. CHICAGO MAIL ORDER COMPANY, Chicago, Ill.
Filed May 31, 1932. Serial No. 327,580. PUBLISHED OCTOBER 25, 1932. Class 23.

300,096. MEDICINAL PREPARATION HAVING LAXATIVE QUALITIES AND BEING RECOMMENDED FOR THE TREATMENT OF CORYZA AND COUGHS AND COLDS GENERALLY. SCHERING & GLATZ, INC., New York, N. Y.
Filed September 21, 1932. Serial No. 330,552. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,097. WEEKLY PUBLICATION. PARENTS' PUBLISHING ASSOCIATION, INC., New York, N. Y.
Filed June 21, 1932. Serial No. 326,181. PUBLISHED OCTOBER 18, 1932. Class 38.

300,098. GARDEN AND FIELD SEEDS, BULBS, AND PLANTS. ASSOCIATED SEED GROWERS, INCORPORATED, New Haven, Conn.
Filed July 27, 1932. Serial No. 329,106. PUBLISHED NOVEMBER 1, 1932. Class 1.

300,099. GARDEN AND FIELD SEEDS, BULBS, AND PLANTS. ASSOCIATED SEED GROWERS, INCORPORATED, New Haven, Conn.
Filed June 22, 1932. Serial No. 328,208. PUBLISHED NOVEMBER 1, 1932. Class 1.

300,100. EVAPORATED, DEHYDRATED, OR SUN DRIED APPLES AND FRUITS. DE HOFF & GAYLORD, Sodus, N. Y.
Filed August 20, 1931. Serial No. 318,193. PUBLISHED OCTOBER 18, 1932. Class 46.

CARNEGIE LIBRARY OF ATLANTA

[ACT OF MARCH 19, 1920, SEC. 1 (b)]
THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

300,101. (CLASS 15. OILS AND GREASES.) THE TULSA PETROLEUM COMPANY, Scranton, Pa. Filed Oct. 1, 1932. Serial No. 330,871.

TULSA

For Lubricating Greases, Refined, Semi-Refined and Unrefined Oils Made from Petroleum, both with and without Admixture of Animal, Vegetable, or Mineral Oils, for Heating, Lighting, and Power Purposes.
Claims use since June 23, 1930.

300,102. (CLASS 27. HOROLOGICAL INSTRUMENTS.) BULOVA WATCH COMPANY, INC., New York, N. Y. Filed Aug. 13, 1932. Serial No. 329,525.

TRAIN TIMER

For Bracelet Watches and Their Attached Bracelets.
Claims use since Mar. 27, 1931.

300,103. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) ERNEST FREIBERG, Brooklyn, N. Y. Filed Sept. 17, 1932. Serial No. 330,423.

BANDATG - HOLDA

For Surgical Devices for Holding Bandages in Place.
Claims use since Jan. 2, 1931.

300,104. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NELSON A. MOWRY, doing business as Dee-Moth Products, Edgewood, Pa. Filed Sept. 9, 1932. Serial No. 330,204.

DEE-MOTH
"Demoth with DEE-MOTH"

For Liquid for Destroying Moths and Preventing Destruction of Furniture and Carpets.
Claims use since Nov. 2, 1931.

300,105. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) A. R. WILFLEY AND SONS, INC., Denver, Colo. Filed Aug. 26, 1932. Serial No. 329,378.

CENTRIFUGAL WILFLEY PUMPS

For Centrifugal Pumps.
Claims use since March, 1920.

300,106. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) H. M. CHEMICAL COMPANY, LTD., Los Angeles, Calif. Filed Aug. 8, 1932. Serial No. 329,402.

Dr. MaComb's

For Shaving Cream.
Claims use since Sept. 15, 1931.

300,107. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HINDU INCENSE MANUFACTURING CO., Chicago, Ill. Filed June 10, 1932. Serial No. 327,874.

Rajah

For Incense.
Claims use since July 1, 1921.

300,108. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) ROBERT MCNEIL, Philadelphia, Pa. Filed Apr. 22, 1932. Serial No. 326,387.

INDIVIDUALS

For Surgical Dressings.
Claims use since 1917.

300,109. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) THE PHARIS TIRE AND RUBBER COMPANY, Newark, Ohio. Filed Apr. 19, 1932. Serial No. 326,266.

Ample — Aire
CUSHION CAPPED

For Pneumatic Rubber Tires for Vehicles.
Claims use since Mar. 1, 1931.

300,110. (CLASS 39. CLOTHING.) J. SCHOENEMAN, INCORPORATED, Baltimore, Md. Filed Mar. 8, 1932. Serial No. 324,909.

BRITISH SACK

For Coats, Vests, Trousers, Knickerbockers, Topcoats, and Overcoats for Men, Youths, and Boys.
Claims use since August, 1931.

300,111. (CLASS 39. CLOTHING.) NORWICH KNITTING COMPANY, Norwich, N. Y. Filed Nov. 24, 1931. Serial No. 321,471.

XXILO-NESE

For Knitted Underwear for Men, Women, Children, and Infants.
Claims use since Sept. 10, 1931.

300,112. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GENSIE JENIOUS & COMPANY, Montclair, N. J. Filed Nov. 17, 1931. Serial No. 321,231.

MAKASAR

For Hair Pomade, Vegetable Oil Preparation for the Treatment of Scalp Diseases, and a Preparation for Removing Dandruff.
Claims use since October, 1930.

300,113. (CLASS 39. CLOTHING.) MERIT UNDERWEAR CO., Shoemakersville, Pa. Filed Oct. 24, 1931. Serial No. 320,440.

Sport Mode

For Ladies', Men's, and Boys' Underwear.
Claims use since Oct. 1, 1931.

300,114. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LUCILE MCKINSTRY, Los Angeles, Calif. Filed Oct. 6, 1931. Serial No. 319,780.

BEAUTY SHOP TO YOUR HOME

For Cosmetics—Namely, Face Powder, Face Creams, Rouge, Astringents, and Eye-Brow and Eye-Lash Coloring.
Claims use since Sept. 26, 1931.

300,115. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BORUN BROS., Los Angeles, Calif. Filed Sept. 25, 1931. Serial No. 319,392.

Betty Woods

For Cosmetics—Namely, Hand Cream, Tissue Cream, Youth Cream, Avocado Cream, Turtle Oil Cream, Freckle Cream, Muscle Oil, Waving Fluid, Almond Lotion, Shampoo, Cleansing Cream, Nail Polish, Face Powder; Pharmaceutical Preparations—Namely, Deodorant and Tonic Astringent.
Claims use since Dec. 30, 1930.

300,116. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) LIQUID VENEER CORPORATION, Buffalo, N. Y. Filed Sept. 2, 1931. Serial No. 318,666.

DRY-DIP

For A Liquid Cleanser for Cleaning and Wearing Apparel of All Kinds, Furniture, Rugs, Tapestries, and Various Other Household Articles, and It Also May be Used for Cleaning Other Articles and Removing Oil, Grease, Dirt Spots, and Stains of Various Kinds.
Claims use since July 15, 1931.

300,117. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ELTON R. SHAW, doing business as Sunny Slope Farm, San Jose, Calif. Filed Aug. 28, 1931. Serial No. 318,535.

POMME d'AMOUR

For Tomato Juice Packed in Tins and Glass.
Claims use since June 26, 1931.

300,118. (CLASS 37. PAPER AND STATIONERY.) COPY PAPERS INC., Chicago, Ill. Filed July 17, 1931. Serial No. 317,028.

FASTBRITE

For Certain-Named Papers.
Claims use since June 29, 1931.

300,119. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LEONARD E. LISNER, New York, N. Y. Filed June 6, 1931. Serial No. 315,494.

French Balm

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Liquid Face Powders, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Lip Sticks, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hasel, Witch Hasel Salves, Camphor Creams, Foot Powders, Corn Salves, and Bay Rum.
Claims use since May 18, 1931.

300,120. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y. Filed Nov. 15, 1930. Serial No. 307,917.

MADRID

For Ophthalmic Frames and Mountings.
Claims use since Oct. 17, 1930.

300,121. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) E. R. SQUIBB & SONS, New York, N. Y. Filed Nov. 7, 1930. Serial No. 307,639.

BICARBS

For Effervescent Antacid, Laxative, and Diuretic Tablets.
Claims use since Oct. 29, 1930.

300,122. (CLASS 37. PAPER AND STATIONERY.) SEMINOLE PAPER CORPORATION, Chicago, Ill. Filed Nov. 29, 1932. Serial No. 332,600.

"Cotton-Soft"

For Toilet Paper.
Claims use since August, 1931.

300,123. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) BERNARD KANSTOROOM, Washington, D. C. Filed Nov. 1, 1932. Serial No. 331,793.

TRUVIEW LENSES

For Ophthalmic Lenses.
Claims use since July, 1928.

300,124. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) NATIONAL ELECTRIC PRODUCTS CORPORATION, Pittsburgh, Pa. Filed Oct. 24, 1932. Serial No. 331,511.

METAL XTENSIONDUCT

For Electrical House-Wiring Fixtures and Apparatus Consisting in Conductor Conduits, Elbows Therefor, Receptacles, Outlet-Boxes, Outlet-Box Extensions, and Wall Plates.
Claims use since Sept. 1, 1931.

300,125. (CLASS 37. PAPER AND STATIONERY.) SCHWABACHER BROS. & CO., INCORPORATED, Seattle, Wash. Filed Oct. 20, 1932. Serial No. 331,414.

PAISLEY

For Toilet Tissue.
Claims use since Jan. 2, 1931.

300,126. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JAMES G. MORAN, doing business as James G. Moran Co., Philadelphia, Pa. Filed Oct. 12, 1932. Serial No. 331,189.

NU-BLU

For Blueing Preparation to be Added to Soapy Water in Which Clothes and Wearing Apparel and Similar Articles are Washed.
Claims use since January, 1911.

300,127. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE MARTIN BROTHERS ELECTRIC COMPANY, Cleveland, Ohio. Filed Oct. 7, 1932. Serial No. 331,054.

MARTIN

For Driers and Steamers and Therapeutic Lamps for the Hair and Other Parts of the Body.
Claims use since Jan. 26, 1925.

300,128. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) B. HELLER & COMPANY, Chicago, Ill. Filed Oct. 7, 1932. Serial No. 331,047.

$1000.00 GUARANTEED

For Insecticides and Preparations for the Extermination of Vermin Such as Roach Killer, Rat and Mouse

Killer, Ant Killer, Bedbug Killer, Fly Killer, Body-Lice Killer, Flea Killer, Moth Killer, Plant Spray, Water Softener, and Live-Stock Spray.

Claims use since Jan. 15, 1905, on roach killer; July 29, 1911, on mouse killer, ant killer, and bedbug killer; December, 1915, on fly killer; December, 1921, on body-lice killer; Oct. 3, 1922, on flea killer; Nov. 23, 1922, on moth killer; May 18, 1932, on plant spray; August, 1932, on live-stock spray; Apr. 20, 1931, on water softener.

300,129. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE CHIEFTAIN MANUFACTURING COMPANY, Baltimore, Md. Filed Oct. 7, 1932. Serial No. 331,038.

Color Shine

For Shoe Polishes, Shoe Dyes, Stove Polishes, Glove Cleaners, and White Cloth Cleaner Preparation for Cleaning and Whitening Canvas and Buckskin Footwear.

Claims use since 1927.

300,130. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) AMERICAN SALES COMPANY, New York, N. Y. Filed Sept. 10, 1932. Serial No. 330,281.

American

For Electrical Apparatus and Appliances Consisting in—Radio Receiving and Transmitting Sets and Parts Thereof; Batteries and Parts Thereof, Battery Chargers, Battery Eliminators, "Power Packs", Coils, Condensers, Antenna Equipment, Crystal Detectors, Dials, Filters, Grid Leaks, Lightning Arresters, Ground Clamps, Headphones, Inductors, Insulators, Potentiometers, Shield Cans, Short Wave Converters, Transformers, Tuners, Wave Traps, Radio Receiving Sets Adapted for Combination with Phonographs, Radio Loud Speakers, Public Address Equipment, Microphones, Television Receiving and Transmitting Equipment, Bells and Buzzers, Cigar Lighters, Cord Sets, Cord, Wire, and Cable Connectors, Drills and Portable Tools; Fire Extinguishers, Flashlights and Bulbs and Batteries Therefor, Flood Lights, Spot Lights, Light Bulbs, Fuses, Food Mixers and Choppers, Toasters, Immersion Heaters, Food and Water Heaters and Heating Elements Therefor, Generators, Illuminating, Reading, and Christmas Tree Lamps, Motors, Neon Glow Lamps, Photo-Electric Cells, Space Discharge Tubes, Rectifiers, Relays, Resistors, Sockets, Tubing, Spark Coils, Spark Plugs, Friction Tape, Subscribers' Telephone Sets, Vacuum Cleaners, Voltage Regulators, and Wire.

Claims use since Mar. 19, 1920.

300,131. (CLASS 43. THREAD AND YARN.) THE NATIONAL SILK COMPANY, INC., South Coventry, Conn. Filed Aug. 18, 1932. Serial No. 329,649.

TIOCA

For Threads, Yarns, and Novelty Yarns Composed of Worsted, Wool, Cotton, Silk, Rayon or a Combination of Such Textures.

Claims use since November, 1927.

300,132. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROXY O. BUDD, Vermillion, S. Dak. Filed July 18, 1932. Serial No. 328,899.

R. O. BUDD

For Hair Grower.

Claims use since March, 1900.

300,133. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) WEST DISINFECTING COMPANY, Long Island City, New York. Filed Feb. 24, 1932. Serial No. 324,452.

KWYKWAX

For Floor Wax.

Claims use since Nov. 1, 1931.

300,134. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) CALBAR PAINT & VARNISH CO., Philadelphia, Pa. Filed Jan. 11, 1932. Serial No. 322,877.

SHOWER PROOF

For Exterior Paint.

Claims use since Nov. 24, 1931.

300,135. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SUPERIOR PACKING CORP., New York, N. Y. Filed Jan. 8, 1932. Serial No. 322,835.

TASTY-MALT

For Malted Milk.

Claims use since Nov. 23, 1931.

300,136. (CLASS 38. PRINTS AND PUBLICATIONS.) G. & C. MERRIAM COMPANY, Springfield, Mass. Filed Nov. 10, 1931. Serial No. 320,983.

A Merriam-Webster

For Certain Named Books.

Claims use since Nov. 2, 1931.

300,137. (CLASS 39. CLOTHING.) JACK LISS DRESS CORP., New York, N. Y. Filed Nov. 10, 1931. Serial No. 320,982.

PROPER-SIZE

For Women's and Misses' Dresses.

Claims use since Oct. 15, 1931.

300,138. (CLASS 37. PAPER AND STATIONERY.) BAY WEST PAPER COMPANY, Green Bay, Wis. Filed Nov. 6, 1931. Serial No. 320,853.

KITCH-N-TOWLS

For Paper Towels.

Claims use since Apr. 17, 1931.

300,139. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) WALGREEN CO., Chicago, Ill. Filed Apr. 18, 1931. Serial No. 313,518.

Master-Craft

For Electric Heating Pads for General Use, Electric Waffle Irons, Electric Hot Plates, Electric Cord Sets, Electric Percolators, Electric Heat Blankets for General Use, Electric Hand Ironers, Electric Radiant Heaters, Electric Toasters, Electric Fans, Electric Corn-Poppers, Electric Automatic Cigar Lighters, Electric Grills.

Claims use since Mar. 10, 1931.

300,140. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) H. P. HINMAN COMPANY, INC., Barre, Vt. Filed Sept. 21, 1928. Serial No. 272,757.

STONECRAFT

For Granite Monuments.

Claims use since June 2, 1928.

300,141. (CLASS 15. OILS AND GREASES.) AMERICAN SUPPLY CO., INC., Washington, D. C. Filed Oct. 19, 1932. Serial No. 331,364.

Servis

For Gasoline, Motor Fuel Oils, and Lubricating Oils.

Claims use since October, 1926.

300,142. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) D. H. BAGDASARIAN & SONS INC., Fresno, Calif. Filed Oct. 11, 1932. Serial No. 331,137.

Sweet Bunch

For Fresh Grapes.

Claims use since Aug. 2, 1931.

300,143. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) FRED. HASLAM & CO., INC., Brooklyn, N. Y. Filed Oct. 3, 1932. Serial No. 330,896.

HASLAM

For Dissecting, Post Mortem and General Operating Instruments—Namely, Knives, Forceps, Hooks, Chisels, Lancets, Scissors, Scalpels, Perforators, Trocars and Canulæ, Sponge Rings, Curettes, Spatulæ, Dressing Shears, Saws, Extension Apparatus, Tongs and Bone Instruments, Diagnostic Instruments, Percussors, Pleximeters, Directors, Probes, Sounds, Sphygmomanometers, Spirometers, Stethoscopes, Ampliphones, Microscopes and Accessories and Instruments, Vacuum Apparatus, Blood Transfusion Apparatus, Hypodermic and Other Syringes, Ligature Needles and Needle Holders, Head Bands and Mirrors, Tongue Depressors, Apparatus for Urinalyses, Douches, Aspirators, Cauteries, Anæsthetic Apparatus and Instruments, Mouth Gags, Eye, Ear, Mastoid, Hearing, Mouth, Nasal, Dermal, Dental, Oral, Tonsil, Laryngeal, Stomach and Intestinal, Abdominal, Rectal, Urethal, Prostatic, Vesicle, Gynæcic and Obstetric Instruments.

Claims use since July 1, 1917.

TRADE-MARK REGISTRATIONS RENEWED

39,305. CONFECTIONERY. Registered November 18, 1902. MASON, AU & MAGENHEIMER CONFECTIONERY MANUFACTURING COMPANY, Brooklyn, N. Y., a Corporation of West Virginia. Renewed November 18, 1932.

39,447. CARBON PAPER. Registered December 9, 1902. MITTAG & VOLGER. Renewed December 9, 1932, to Mittag & Volger, Incorporated, Parkridge, N. J., a Corporation of New Jersey, assignee.

39,791. SEWING MACHINES AND SEWING MACHINE ATTACHMENTS AND PARTS THEREOF. Registered February 10, 1903. THE SINGER MANUFACTURING CO., New York, N. Y. Renewed February 10, 1933, to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey.

40,006. MALTED WHEAT FLAKE FOOD. Registered March 31, 1903. R. T. DAVIS MILL & MFG. CO., St. Joseph, Mo. Renewed March 31, 1933, to The Quaker Oats Company, Chicago, Ill., a Corporation of New Jersey, successor.

40,311. A MEDICINAL PREPARATION FOR CURE OF CERTAIN NAMED DISEASES. Registered May 12, 1903. HOUCHENS MEDICINE COMPANY, Baltimore, Md., a Corporation of Delaware. Renewed May 12, 1933.

40,368. CLOTHS AND STUFFS OF WOOL, WORSTED OR HAIR. Registered May 12, 1903. WILLIAM FULTON & SONS LIMITED, Paisley, Scotland, a Corporation of Great Britain. Renewed May 12, 1933.

40,405. HOT-WATER BAGS AND ICE-BAGS AND STOPPERS FOR SAME. Registered May 19, 1903. MEINECKE & Co., New York, N. Y., a Corporation of New Jersey. Renewed May 19, 1933.

40,406. BATTERY CELLS. Registered May 19, 1903. AMERICAN HARD RUBBER CO., New York, N. Y. Renewed May 19, 1933, to American Hard Rubber Company, Hempstead and New York, N. Y., a Corporation of New York.

88,332. STRAIGHT SCOTCH WHISKEY. Registered September 10, 1912. D. P. MCDONALD & SONS, LIMITED, Fort William, Scotland. Renewed September 10, 1932, to Long John Distilleries Limited, London, England, a Corporation of Great Britain, assignee.

89,067. FILTERS AND FILTERING-PAPER. Registered November 5, 1912. CARL SCHLEICHER & SCHÜLL, Düren, Germany. Renewed November 5, 1932, to Carl Schleicher & Schuil Co., New York, N. Y., a Corporation of Delaware, assignee.

89,252. REMEDIES AND LINIMENTS FOR CERTAIN NAMED DISEASES AND AILMENTS. Registered December 3, 1912. HANCE BROS. & WHITE. Renewed December 3, 1932, to Hance Brothers and White, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania, assignee by mesne assignments.

89,262. EYE-SALVE. Registered December 3, 1912. HOWARD BROS. CHEMICAL CO., Buffalo, N. Y., a Corporation of New York. Renewed December 3, 1932.

89,264. PILE REMEDY. Registered December 3, 1912. HOWARD BROS. CHEMICAL CO., Buffalo, N. Y., a Corporation of New York. Renewed December 3, 1932.

89,308. ARTIFICIAL BUTTER (OLEOMARGARIN). Registered December 3, 1912. THE UTRECHT EXPORT CY. "GRIENDT BROTHERS," LTD., Utrecht, Netherlands, a Corporation of the Netherlands. Renewed December 3, 1932.

89,362. CHINAWARE. Registered December 10, 1912. THE HOMER LAUGHLIN CHINA CO., Newell, W. Va., a Corporation of West Virginia. Renewed December 10, 1932.

89,363. REMEDIES FOR CERTAIN NAMED DISEASES. Registered December 10, 1912. HOWARD BROS. CHEMICAL CO., Buffalo, N. Y., a Corporation of New York. Renewed December 10, 1932.

89,364. EYE-SALVE, PILE REMEDY, CATHARTIC TABLETS, AND EYE-WATER. Registered December 10, 1912. HOWARD BROS. CHEMICAL CO., Buffalo, N. Y., a Corporation of New York. Renewed December 10, 1932.

89,414. AN EXTERNAL REMEDY FOR RHEUMATISM, GOUT, AND NEURALGIA. Registered December 10, 1912. NELATON REMEDY CO., Baltimore, Md., a Corporation of Maryland. Renewed December 10, 1932.

89,422. A MEDICINAL POWDER USED AS A REMEDY FOR HEADACHES AND INDIGESTION. Registered December 10, 1912. SALVATORE CAVALLARO-FERRARA. Renewed December 10, 1932, to Frances Cavallaro-Ferrara, Baltimore, Md., successor.

89,518. CIGARS. Registered December 17, 1912. H. UPMANN & CO. Renewed December 17, 1932, to La Compania Frankau de Tabacos, S. A., Habana, Cuba, a Corporation of Cuba, successor.

89,752. JAPANESE SAKE. Registered January 7, 1913. HON KANO SHOTEN. Renewed January 7, 1933, to Kabushikikaisha Honkano Shoten, Mikage Town, Japan, a Corporation of Japan, successor.

89,933. PRINTING-INK. Registered January 21, 1913. MARKEM MACHINE CO., Boston, Mass. Renewed January 21, 1933, to Markem Machine Company, Keene, N. H., a Corporation of New Hampshire, successor.

89,961. THREAD. Registered January 21, 1913. THE SPOOL COTTON COMPANY, Newark, N. J., and New York, N. Y. Renewed January 21, 1933, to The Clark Thread Company, Newark, N. J., a Corporation of New Jersey, assignee.

89,969. KNITTED UNDERWEAR, HOSIERY, AND CAPS. Registered January 21, 1913. THE WILLIAM CARTER COMPANY, Needham Heights, Mass., a Corporation of Massachusetts. Renewed January 21, 1933.

89,997. STOCKINGS. Registered January 28, 1913. ELLEN W. DECKER, New York, N. Y. Renewed January 28, 1933, to Ellen W. Decker, South Orange, N. J.

90,138. HANDKERCHIEFS. Registered February 4, 1913. RUSCH & CO., New York, N. Y. Renewed February 4, 1933, to Tootal Broadhurst Lee Company Limited, Manchester, England, a Corporation of Great Britain, assignee.

90,188. PREPARATIONS FOR DESTROYING CERTAIN NAMED VERMIN, RODENTS, AND INSECTS. Registered February 11, 1913. BUFFALO SPECIALTY COMPANY, as assignee of Fulton Chemical Company, New York, N. Y. Renewed February 11, 1933, to Liquid Veneer Corporation, Buffalo, N. Y., a Corporation of New York, assignee.

90,729. PORTER, ALE, AND LAGER-BEER. Registered March 18, 1913. OLD COLONY BREWERIES CO., Fall River, Mass. Renewed March 18, 1933, to Forest Hills Company, Boston, Mass., a Corporation of Massachusetts, successor.

91,048. VARNISHES AND ENAMELS. Registered April 8, 1913. TWIN CITY VARNISH COMPANY, St. Paul, Minn. Renewed April 8, 1933, to The Glidden Company, Cleveland, Ohio, a Corporation of Ohio, assignee.

91,085. CERTAIN NAMED FOODS. Registered April 15, 1913. GORDON, SEWALL & CO., INC., Houston, Tex., a Corporation of Texas. Renewed April 15, 1933.

91,167. CANNED FRUITS, DRIED FRUITS, AND RAISINS. Registered April 22, 1913. CALIFORNIA FRUIT CANNERS ASSOCIATION. Renewed April 22, 1933, to California Packing Corporation, San Francisco, Calif., a Corporation of New York, assignee.

91,179. ELECTRIC AIR-DOUCHES AND HAIR-DRYING APPARATUS. Registered April 22, 1913. ELECTRICITÄTSGESELLSCHAFT "SANITAS" MIT BESCHRÄNKTER HAFTUNG, Berlin, Germany, a Corporation of Germany. Renewed April 22, 1933.

91,218. CERTAIN NAMED PHARMACEUTICAL PREPARATIONS. Registered April 22, 1913. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed April 22, 1933.

91,214. ORANGE-WOOD STICKS AND NAIL-BOARDS. Registered April 22, 1913. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed April 22, 1933.

91,215. SOAPS (SOLID AND LIQUID). Registered April 22, 1913. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed April 22, 1933.

91,314. CERTAIN BRUSHES HAVING HANDLES OR BACKS COMPOSED PARTLY OF PYROXYLIN. Registered April 29, 1913. GEO. BORGFELDT & CO., New York, N. Y., a Corporation of New Jersey. Renewed April 29, 1933.

91,338. CERTAIN NAMED MECHANICAL RUBBER GOODS. Registered April 29, 1913. THE GUTTA PERCHA & RUBBER MFG. CO., New York, N. Y. Renewed April 29, 1933, to Hewitt-Gutta Percha Rubber Corporation, Buffalo, N. Y., a Corporation of New York, assignee.

91,343. A BROMIN COMPOUND USED AS A SEDATIVE IN NERVOUS AFFECTIONS, EPILEPSY, AND RELATED DISORDERS. Registered April 29, 1913. THE HOFFMANN-LA ROCHE CHEMICAL WORKS, New York, N. Y. Renewed April 29, 1933, to Hoffmann-La Roche Inc., Nutley, N. Y., a Corporation of New York, assignee.

91,471. A WEEKLY PERIODICAL. Registered May 6, 1913. FLORIDA GROWERS PUBLISHING COMPANY. Renewed May 6, 1933, to Florida Grower Magazine, Inc., Tampa, Fla., a Corporation of Florida, assignee.

91,475. CERTAIN NAMED PAINTS AND PAINTERS' MATERIALS. Registered May 6, 1913. GERSTENDORFER BROS. Renewed May 6, 1933, to Sapolin Co. Inc., New York, N. Y., a Corporation of New York, by change of name.

91,478. PAINTERS' SIZE AND DRESSINGS AND POLISHES FOR WOOD AND IRON. Registered May 6, 1913. THE GUM TRAGASOL SUPPLY COMPANY LIMITED. Renewed May 6, 1933, to Tragasol Products Ltd., Hooton, England, a Corporation of Great Britain, by change of name.

91,479. PAINTERS' SIZE AND DRESSINGS AND POLISHES FOR WOOD AND IRON. Registered May 6, 1913. THE GUM TRAGASO SUPPLY COMPANY LIMITED. Renewed May 6, 1933, to Tragasol Products Ltd., Hooton, England, a Corporation of Great Britain, by change of name.

91,492. WAXED PAPER. Registered May 6, 1913. KUHMARKER MANUFACTURING COMPANY. Renewed May 6, 1933, to Kuhmarker Waxed Paper Co. Inc., New York, N. Y., a Corporation of New York, assignee.

91,530. CERTAIN ELECTRICAL APPARATUS, MACHINES AND SUPPLIES. Registered May 6, 1913. VICTOR ELECTRIC COMPANY. Renewed May 6, 1933, to General Electric X-Ray Corporation, Chicago, Ill., a Corporation of New York, assignee by mesne assignments.

91,534. DIARIES AND CALENDARS. Registered May 6, 1913. SAMUEL WARD COMPANY. Renewed May 6, 1933, to Samuel Ward Manufacturing Company, Boston, Mass., a Corporation of Massachusetts, by change of name.

91,548. WRITING AND PRINTING PAPER. Registered May 13, 1913. AMERICAN WRITING PAPER COMPANY. Renewed May 13, 1933, to American Writing Paper Company, Inc., Holyoke, Mass., a Corporation of Delaware, assignee.

91,807. SARDINES. Registered May 27, 1913. SEACOAST CANNING CO., Eastport, Me. Renewed May 27, 1933, to Seacoast Canning Company, Lubec, Me., a Corporation of New Jersey.

LABELS

REGISTERED JANUARY 3, 1933

41,600.—*Title:* ALICE AND EVELYN. For Women's Apparel. ALICE & EVELYN, New York, N. Y. Published August 28, 1932.

41,601.—*Title:* DAIRY LANE—GOOD FOOD, QUICK! For Chicken Pies, Meat Pies, Sandwiches, Salads, Pies, Cakes, Etc. B/G SANDWICH SHOPS, INC., doing business as Dairy Lane, Chicago, Ill. Published October 19, 1932.

41,602.—*Title:* SHOT THROUGH WITH QUALITY! WITH EVERY SHOT OF THE LOOM, LIVELY WOOL IS ANCHORED FIRMLY IN PLACE BY THE BIGELOW TRUE-TENSION WEAVE. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published December 1, 1932.

41,603.—*Title:* COROCO TIRE CHAINS. For Tire Chains. COLUMBIAN ROPE COMPANY, Auburn, N. Y. Published October 25, 1932.

41,604.—*Title:* DUO-RAA-CO. For Embalming Fluid. THE EMBALMERS' SUPPLY COMPANY, Westport, Conn. Published September 29, 1932.

41,605.—*Title:* CAVOS. For Embalming Fluid. THE EMBALMERS' SUPPLY COMPANY, Westport, Conn. Published September 29, 1932.

41,606.—*Title:* DUO-ESCOHOL. Embalming Fluid. THE EMBALMERS' SUPPLY COMPANY, Westport, Conn. Published September 29, 1932.

41,607.—*Title:* EURASIAN HEALTH TEA. For Health Tea. EURASIAN HEALTH PRODUCTS CO., Denver, Colo. Published September 6, 1932.

41,608.—*Title:* ROSE SKIN FOOD. For Skin Food, a Cold Cream and Massage Cream. A. J. KRANK COMPANY, St. Paul, Minn. Published August 25, 1932.

41,609.—*Title:* PINK OIL MASSAGE CREAM. For Massage Cream, Skin Softener and Skin Cleanser. A. J. KRANK COMPANY, St. Paul, Minn. Published August 25, 1932.

41,610.—*Title:* MYNDERSE—SINCE 1885. For Ginger Ale. ANDREW W. MYNDERSE, doing business as Mynderse and Mynderse Beverage Company, Schenectady, N. Y. Published March 3, 1932.

41,611.—*Title:* A NAR-O-FOLD PRODUCT. For Paper Folded Napkins. NATIONAL PAPER NAPKIN MFG. COMPANY, Chicago, Ill. Published March 22, 1932.

41,612.—*Title:* MORSO. For Soap. PUROL MANUFACTURING CO., Newark, N. J. Published October 6, 1932.

41,613.—*Title:* ROSCO SHEET FABRICS. For Sheer Fabrics. ROSEN BROTHERS FROCKS, INC., New York, N. Y. Published October 7, 1932.

41,614.—*Title:* ROUX SUPERTINT—THE SCIENTIFIC HAIR COLORING THAT YIELDS ACCURATE AND DEPENDABLE RESULTS. For Hair Coloring. ROUX LABORATORIES, INC., New York, N. Y. Published October 25, 1932.

41,615.—*Title:* JOHN ALDEN. For Butter. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published April 20, 1932.

41,616.—*Title:* TETLEY SUNFLOWER BRAND. For Tea. JOSEPH TETLEY & CO., INC., New York, N. Y. Published November 22, 1931.

41,617.—*Title:* ARDMORE CHOCOLATES. For Chocolates. THE UNITED PAPER BOX MFG. CO., Cleveland, Ohio. Published October 11, 1932.

41,618.—*Title:* TINCTURE DIGISMITH. For Digitalis. F. A. UPSHER SMITH, doing business as Upsher Smith Co., Minneapolis, Minn. Published August 18, 1932.

41,619.—*Title:* VITAMINIZED. For Candy. WILLIAMSON CANDY COMPANY, Chicago, Ill. Published March 10, 1932.

41,620.—*Title:* KOPY-KAT, LOTS OF FUN. For Pictures. WALTER E. WILSON, doing business as Kolorkraft Company, Detroit, Mich. Published April 20, 1932.

41,621.—*Title:* KOPY-KAT, WATERCOLOR PAINT SET. For Water Color Paint Sets. WALTER E. WILSON, doing business as Kolorkraft Company, Detroit, Mich. Published April 20, 1932.

41,622.—*Title:* WRIGHT BLOCKS. For Toy Building Blocks. JOHN LLOYD WRIGHT, Long Beach, Michigan City, Ind. Published November 19, 1932.

PRINTS

REGISTERED JANUARY 3, 1933

13,990.—*Title:* THE DAYS. For Cleansing Cream, Skin Tonic, Skin Cream, Orange Skin Food. ELIZABETH ARDEN OF NEW YORK, LTD., doing business as Elizabeth Arden, New York, N. Y. Published September 28, 1932.

13,991.—*Title:* ALL THE RICHNESS AND FLAVOR OF 8 HALF-PINTS OF TABLE CREAM ARE IN EVERY POUND OF ARMOUR'S FULL CREAM CLOVERBLOOM BUTTER. For Butter, Canned Meats, and Bacon. ARMOUR AND COMPANY, Chicago, Ill. Published May 13, 1932.

13,992.—*Title:* NOW—HERE'S A FINER TASTING, MILDER AND MORE TENDER HAM . . . IT'S ARMOUR'S FIXED FLAVOR STAR HAM. For Ham and Bacon. ARMOUR AND COMPANY, Chicago, Ill. Published May 10, 1932.

13,993.—*Title:* IT'S RICHER . . . IT'S FRESHER . . . AND THE DELICIOUS GOODNESS OF ARMOUR'S FULL CREAM CLOVERBLOOM BUTTER NEVER VARIES. For Butter, Lard, and Canned Meats. ARMOUR AND COMPANY, Chicago, Ill. Published February 10, 1932.

13,994.—*Title:* FOR UNRIVALED TASTE AND TENDERNESS! ARMOUR'S FIXED FLAVOR STAR HAM FOR YOUR EASTER DINNER. For Ham and Bacon. ARMOUR AND COMPANY, Chicago, Ill. Published February 12, 1932.

13,995.—*Title:* DELICIOUS FLAVOR AND UNUSUAL NOURISHMENT THAT'S WHAT YOU GET WHEN YOU COOK AND BAKE WITH ARMOUR'S PURE LARD. For Lard, Bacon, and Butter. ARMOUR AND COMPANY, Chicago, Ill. Published February 15, 1932.

13,996.—*Title:* MILD? . . . YES!—BUT IF YOU WANT MILDNESS WITH FLAVOR JUST TRY ARMOUR'S FIXED FLAVOR STAR BACON. For Bacon, Lard, and Canned Meats. ARMOUR AND COMPANY, Chicago, Ill. Published March 10, 1932.

13,997.—*Title:* TENDERNESS! MILDNESS! MATCHLESS FLAVOR! ARMOUR'S STAR BACON FIXED FLAVOR. For Bacon, Butter, and Canned Meats. ARMOUR AND COMPANY, Chicago, Ill. Published March 11, 1932.

13,998.—*Title:* ALL THE RICHNESS AND FLAVOR OF 8 HALF-PINTS OF TABLE CREAM ARE IN EVERY POUND OF ARMOUR'S FULL CREAM CLOVERBLOOM BUTTER. For Butter, Canned Meats, and Ham. ARMOUR AND COMPANY, Chicago, Ill. Published March 15, 1932.

13,999.—*Title:* SAVE MONEY . . . SAVE TIME . . . AND MAKE A MEAL A SUCCESS WITH ARMOUR'S VERIBEST CORNED BEEF. For Corned Beef, Butter, and Bacon. ARMOUR AND COMPANY, Chicago, Ill. Published March 25, 1932.

14,000.—*Title:* FOR VARIETY . . . CONVENIENCE . . . AND ECONOMY ARMOUR'S VERIBEST CORNED BEEF . . . OX TONGUE . . . VIENNA SAUSAGE. For Canned Meats, Ham, and Butter. ARMOUR AND COMPANY, Chicago, Ill. Published April 10, 1932.

14,001.—*Title:* 5 WAYS TO USE ARMOUR'S FIXED FLAVOR STAR HAM LEFTOVERS. For Ham, Bacon, and Lard. ARMOUR AND COMPANY, Chicago, Ill. Published January 8, 1932.

14,002.—*Title:* TENDERNESS! MILDNESS! MATCHLESS FLAVOR! ARMOUR'S STAR BACON FIXED FLAVOR. For Bacon, Butter, and Ham. ARMOUR AND COMPANY, Chicago, Ill. Published January 20, 1932.

14,003.—*Title:* IT'S RICHER . . . IT'S FRESHER . . . AND THE DELICIOUS GOODNESS OF ARMOUR'S FULL CREAM CLOVERBLOOM BUTTER NEVER VARIES. For Butter, Lard, and Canned Meats. ARMOUR AND COMPANY, Chicago, Ill. Published January 25, 1932.

14,004.—*Title:* MILD? . . . YES!—BUT IF YOU WANT MILDNESS WITH FLAVOR JUST TRY ARMOUR'S FIXED FLAVOR STAR BACON. For Bacon, Lard, and Ham. ARMOUR AND COMPANY, Chicago, Ill. Published April 20, 1932.

14,005.—*Title:* YOUR PIES . . . YOUR BISCUITS . . . WILL TASTE SO MUCH BETTER WHEN YOU USE ARMOUR'S STAR PURE LARD. For Lard, Bacon, and Ham. ARMOUR AND COMPANY, Chicago, Ill. Published January 10, 1932.

14,006.—*Title:* OUTLAWED: THE RULE OF THUMB! For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published October 1, 1932.

14,007.—*Title:* ON A ROOF IN MANHATTAN. For Clothing. BRADLEY KNITTING COMPANY, Delavan, Wis. Published June 1, 1932.

14,008.—*Title:* "OUR BEST-DRESSED BEACHES ARE ALL OF A STRIPE." For Clothing. BRADLEY KNITTING COMPANY, Delavan, Wis. Published June 15, 1932.

14,009.—*Title:* WE'RE ALWAYS CHASING RAINBOWS. For Clothing. BRADLEY KNITTING COMPANY, Delavan, Wis. Published July 1, 1932.

14,010.—*Title:* CHILTON PEN. For Fountain Pens. THE CHILTON PEN COMPANY, INC., New York, N. Y. Published November 6, 1932.

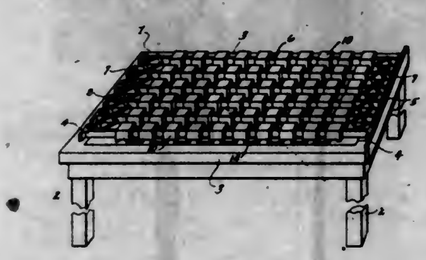
14,011.—*Title:* CHORES . . FOR CHILDREN UNDER SEVEN? For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published November 5, 1932.

14,012.—*Title:* NOW! ANYBODY A PERFECT BISCUIT MAKER. For Biscuit Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published October 10, 1932.

REISSUES

JANUARY 3, 1933

18,705. FABRIC FORMING MACHINE. ZENE R. MAULSBY and JOHN R. MAULSBY, Everett, Wash., assignors to Maulsby Machine Company, Inc., Everett, Wash. Original No. 1,733,353, dated Oct. 29, 1929, Serial No. 58,354, filed Sept. 24, 1925. Reissue No. 18,146, dated Aug. 4, 1931, Serial No. 431,038, filed Feb. 24, 1930. This application for reissue filed Aug. 28, 1931. Serial No. 560,025. 7 Claims. (Cl. 223—52.)



1. In a fabric forming machine of the character described, a frame, a bed of fabric shaping elements mounted in the frame and movable from and toward each other, both lengthwise and transversely of the frame and spaced from each other, and over which a fabric piece may be spread, means associated therewith for drawing the said fabric piece about all sides of said shaping elements except their mounting surfaces, incident to their being moved together, thereby to cause the fabric to conform to the shape of the elements.

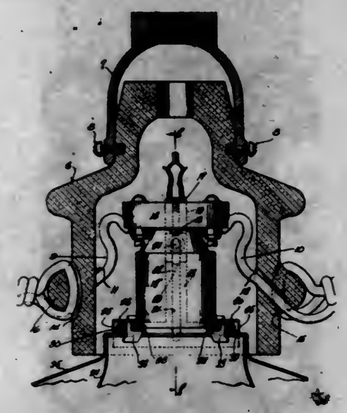
18,706. RIFLE LOADING MECHANISM. REGINALD F. SEDGLEY, Philadelphia, Pa. Original No. 1,850,729, dated Mar. 22, 1932, Serial No. 554,332, filed July 31, 1931. Application for reissue filed Apr. 9, 1932. Serial No. 604,342. 9 Claims. (Cl. 42—18.)



1. In a rifle loading mechanism, the combination with the bolt bodily rotatable into locked position and a fixed and stationary barrel, of a cartridge pick-up movably carried by said bolt and effective on the forward movement of the bolt to feed a cartridge into said barrel.

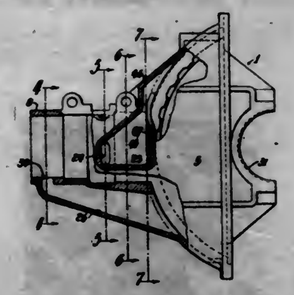
18,707. STREET-LIGHTING FIXTURE. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Original No. 1,734,056, dated Nov. 5, 1929, Serial No. 157,194, filed Dec. 27, 1926. Application for reissue filed Oct. 15, 1931. Serial No. 569,095. 8 Claims. (Cl. 240—78.)

5. A lamp structure, comprising an inverted cup-shaped insulator having substantially radial apertures adjacent its lower portion and having a top wall, a socket support located within said cup-shaped insulator, a frame supporting said socket support, means passing substantially radially



through said apertures for securing said frame in place, and exteriorly located means rigid with said cup-shaped insulator for anchoring wires thereto.

18,708. AXLE. GEORGE W. HARPER, Cleveland, Ohio, assignor to The Columbia Axle Company, Cleveland, Ohio, a Corporation of Ohio. Original No. 1,760,356, dated May 27, 1930, Serial No. 729,505, filed Aug. 1, 1924. Application for reissue filed May 14, 1932. Serial No. 611,422. 8 Claims. (Cl. 184—13.)

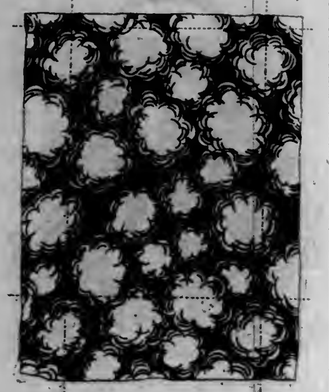


1. In an axle of the character described, the combination of an enlarged housing, a cover plate therefor provided with a tubular extension, bearings mounted in spaced relation in said extension, a shaft mounted in said bearings, means for conveying the lubricant from said housing to said extension between said bearings, said bearings being adapted to permit lubricant to flow therethrough longitudinally of said extension, and said extension having a separate passage extending from said housing to a point beyond the most distant of said two bearings to return lubricant passing therethrough.

DESIGNS

JANUARY 3, 1933

88,847. TEXTILE FABRIC OR THE LIKE. BEATRICE ALTMAN, Brooklyn, N. Y., assignor to L. J. Hyams and Company, New York, N. Y. Filed Nov. 23, 1932. Serial No. 46,120. Term of patent 3½ years.



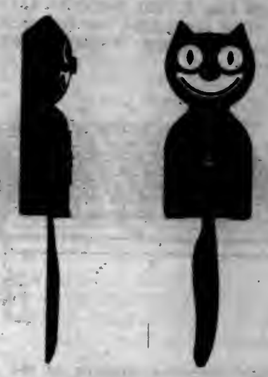
The ornamental design for a textile fabric or the like, as shown and described.

88,848. TEXTILE FABRIC OR THE LIKE. BEATRICE ALTMAN, Brooklyn, N. Y., assignor to L. J. Hyams and Company, New York, N. Y. Filed Nov. 23, 1932. Serial No. 46,121. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,849. WALL CLOCK. EARL T. ARNAULT, Tacoma, Wash. Filed July 27, 1932. Serial No. 44,455. Term of patent 3½ years.



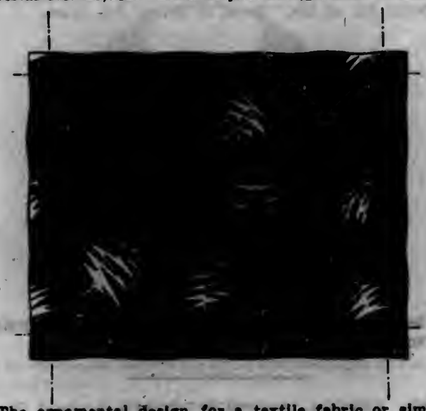
The ornamental design for a wall clock, as shown.

88,850. INK OR OTHER FLUID CONTAINER. ELMER BABB, New York, and ANTHONY W. ZABOROWSKI, Jamaica, N. Y. Filed Sept. 21, 1932. Serial No. 45,014. Term of patent 14 years.



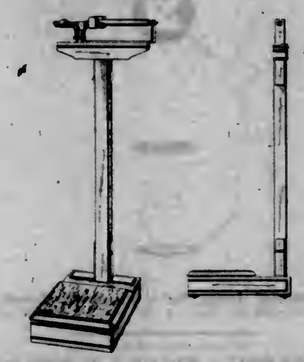
The ornamental design for an ink or other fluid container, substantially as shown.

88,851. TEXTILE FABRIC OR SIMILAR ARTICLE. AUGUST BACOLINI, Brooklyn, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,262. Term of patent 3½ years.



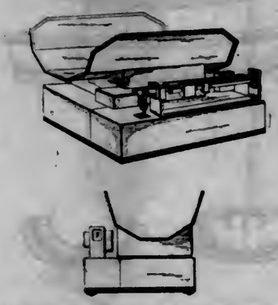
The ornamental design for a textile fabric or similar article as shown and described.

88,852. HEALTH SCALE. ALFRED BOUSFIELD, St. Johnsbury, Vt. Filed Nov. 11, 1932. Serial No. 45,889. Term of patent 14 years.



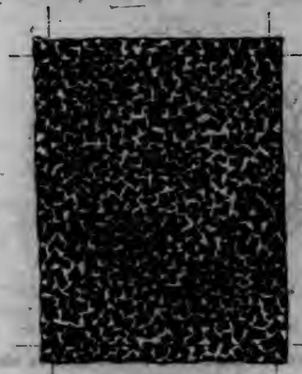
The ornamental design for a health scale, as shown.

88,853. INFANT SCALE. ALFRED BOUSFIELD, St. Johnsbury, Vt. Filed Nov. 11, 1932. Serial No. 45,890. Term of patent 14 years.



The ornamental design for an infant scale, as shown.

88,854. TEXTILE FABRIC OR SIMILAR ARTICLE. FERNAND BRIDIER, Paris, France. Filed Dec. 1, 1932. Serial No. 46,223. Term of patent 3½ years.



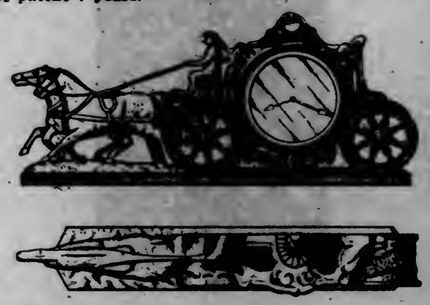
The ornamental design for a textile fabric or similar article as shown and described.

88,855. TEXTILE FABRIC OR SIMILAR ARTICLE. MICHEL BRODSKY, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,249. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,856. CLOCK CASE. PAUL BUHALB, Bronx, N. Y., assignor to United Metal Goods Mfg. Co. Inc., Brooklyn, N. Y. Filed Nov. 10, 1932. Serial No. 45,867. Term of patent 7 years.



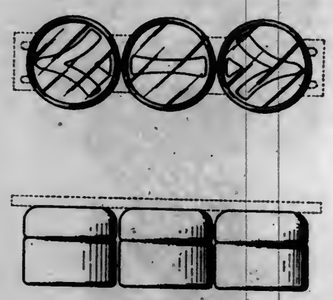
The ornamental design for a clock case, as shown and described.

88,857. PRAYER CARD. PAUL T. CAREW, Orange, N. J. Filed Sept. 27, 1932. Serial No. 45,075. Term of patent 7 years.



The ornamental design for a prayer card as shown and described.

88,858. DIRECTIONAL SIGN FOR MOTOR VEHICLES. EDWARD T. CONDON, New York, N. Y. Filed Sept. 27, 1932. Serial No. 45,080. Term of patent 7 years.



The ornamental design for a directional sign for motor vehicles, as shown and described.

88,859. IMPLEMENT HANDLE. HARRY B. CURTIS, Huntington, Conn., assignor to The Bridgeport Hardware Manufacturing Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 30, 1932. Serial No. 45,175. Term of patent 7 years.



The ornamental design for an implement handle substantially as shown.

88,860. MATCH AND ASH TRAY OR SIMILAR ARTICLE. ALEXANDER JASON DENISOFF, Ardsley, N. Y., assignor to The Diamond Match Company, Baltimore, Md., a Corporation of Maryland. Filed Oct. 29, 1932. Serial No. 45,638. Term of patent 3½ years.



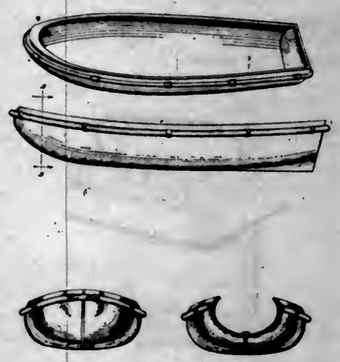
The ornamental design for a match and ash tray or similar article as shown and described.

88,861. BUTTON. ARTHUR F. DONOVAN, Hartford, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Oct. 5, 1932. Serial No. 45,220. Term of patent 7 years.



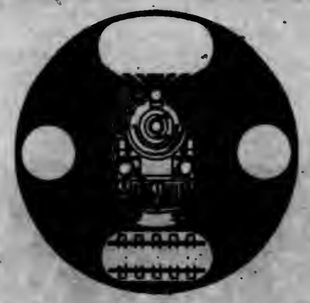
The ornamental design for a button as shown.

88,862. BOAT HULL. WILLIAM J. H. DYER, Providence, R. I. Filed Feb. 12, 1932. Serial No. 42,837. Term of patent 3½ years.



The ornamental design for a boat hull substantially as shown.

88,863. ADVERTISING SIGN. ALBERT W. ECKBLOM, St. Paul, Minn. Filed Nov. 7, 1932. Serial No. 45,806. Term of patent 3½ years.



The ornamental design for an advertising sign, as shown and described.

88,864. SHOE. NEWTON ELKIN, Philadelphia, Pa. Filed Oct. 28, 1932. Serial No. 45,599. Term of patent 3½ years.



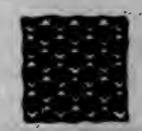
The ornamental design for a shoe, as shown.

88,865. SHOE SOLE. FRED D. FOWLER, Newton, Mass., assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Nov. 2, 1932. Serial No. 45,705. Term of patent 14 years.



The ornamental design for a shoe sole as shown.

88,866. TEXTILE FABRIC OR SIMILAR ARTICLE. NATHANIEL GARFINKEL, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,260. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,867. STOCKING. GUSTAV GASTRICH, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed May 6, 1932. Serial No. 43,728. Term of patent 14 years.



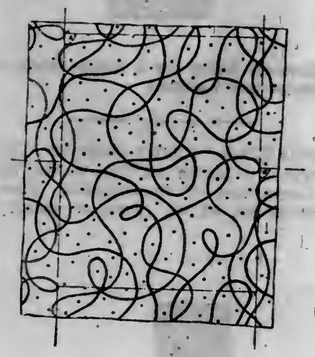
The ornamental design for a stocking as shown and described.

88,868. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Oct. 24, 1932. Serial No. 45,518. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,869. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Nov. 12, 1932. Serial No. 45,935. Term of patent 3½ years.



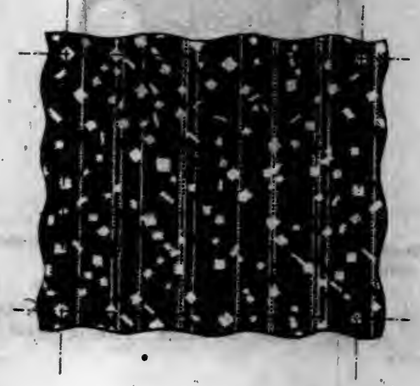
The ornamental design for a textile fabric, substantially as shown and described.

88,870. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,212. Term of patent 3½ years.



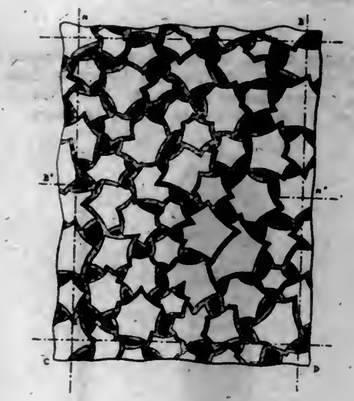
The ornamental design for a textile fabric or similar article as shown and described.

88,871. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,213. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,872. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,215. Term of patent 3½ years.



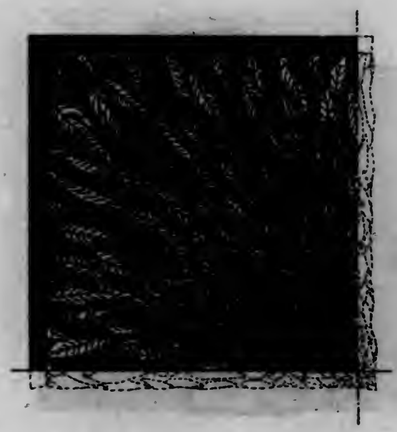
The ornamental design for a textile fabric or similar article as shown and described.

88,873. CASING FOR A CONTROL MECHANISM FOR TIME CONTROLLED COOKING. JOHN H. GRAYSON, Lynwood, Calif., assignor to Grayson Appliance Company, Ltd., Lynwood, Calif., a Corporation of California. Filed Oct. 8, 1932. Serial No. 45,195. Term of patent 14 years.



The ornamental design for a casing for a control mechanism for time controlled cooking as shown.

88,874. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,225. Term of patent 3½ years.



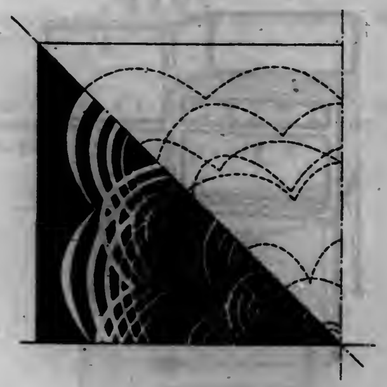
The ornamental design for a textile fabric or similar article as shown and described.

88,875. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,256. Term of patent 3½ years.



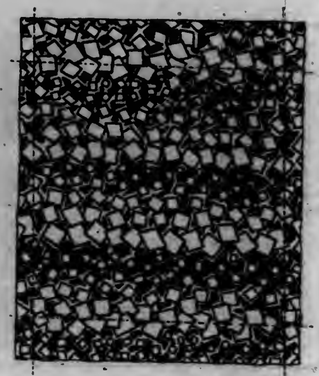
The ornamental design for a textile fabric or similar article as shown.

88,876. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 14, 1932. Serial No. 45,958. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,877. PRINTED TEXTILE FABRIC OR SIMILAR ARTICLE. PIERRE JOURNOUD, Lyon, France, assignor to L. J. Hyams and Company, New York, N. Y. Filed Nov. 23, 1932. Serial No. 46,126. Term of patent 3½ years.



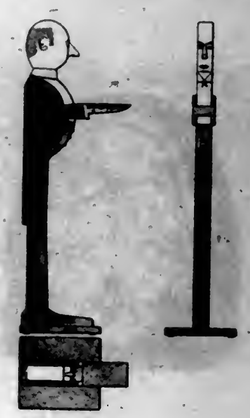
The ornamental design for a printed textile fabric or similar article, as shown and described.

88,878. GAS RANGE. HENRY LANGE, Quincy, Ill., assignor to Quincy Stove Manufacturing Co., Quincy, Ill. Filed Oct. 17, 1932. Serial No. 45,380. Term of patent 14 years.



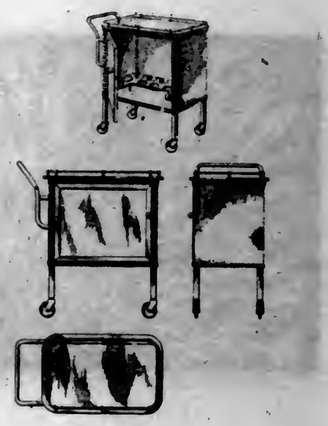
The ornamental design for a gas range, as shown and described.

88,879. HOLDER FOR ASH TRAYS OR OTHER ARTICLES. FRED F. LEMOINE, Maynard, Mass. Filed Nov. 3, 1932. Serial No. 45,726. Term of patent 14 years.



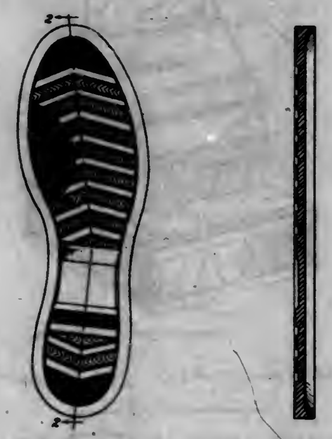
The ornamental design for a holder for ash trays or other articles, substantially as shown and described.

88,880. REFRESHMENT CART OR SIMILAR ARTICLE. HERMAN LEVENSON, Brooklyn, N. Y. Filed Oct. 26, 1932. Serial No. 45,587. Term of patent 7 years.



The ornamental design for a refreshment cart or similar article, as shown.

88,881. SHOE SOLE. LESLIE H. L'HOLLIER, Waltham, Mass., assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Oct. 27, 1932. Serial No. 45,595. Term of patent 14 years.



The ornamental design for a shoe sole as shown.

88,882. TEXTILE FABRIC OR THE LIKE. HENRY JULES LOUN, Brooklyn, N. Y., assignor to Wullschleger & Co., New York, N. Y. Filed Nov. 8, 1932. Serial No. 45,826. Term of patent 3½ years.



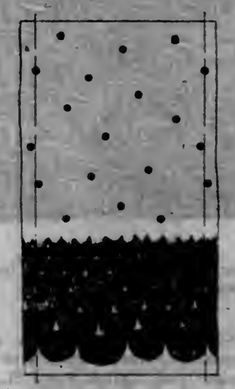
The ornamental design for textile fabric or the like, as shown and described.

88,883. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Nov. 30, 1932. Serial No. 46,201. Term of patent 3½ years.



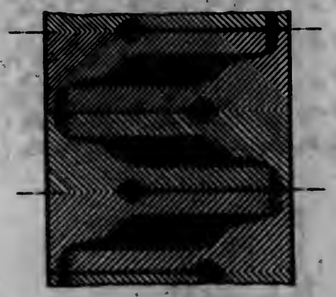
The ornamental design for a textile fabric or the like, as shown and described.

88,884. TEXTILE FABRIC OR THE LIKE. JACQUES MAISCH, New York, N. Y. Filed Nov. 25, 1932. Serial No. 46,144. Term of patent 3½ years.



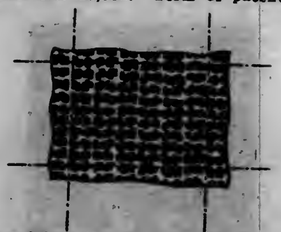
The ornamental design for a textile fabric or the like, as shown and described.

88,885. TEXTILE FABRIC OR THE LIKE. JACQUES MAISCH, New York, N. Y. Filed Dec. 3, 1932. Serial No. 46,292. Term of patent 3½ years.



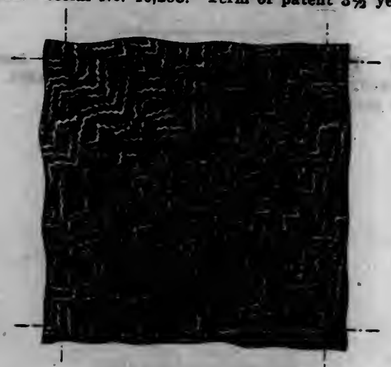
The ornamental design for a textile fabric or the like, as shown and described.

88,886. TEXTILE FABRIC OR SIMILAR ARTICLE. ROGER MEGROZ, Bronxville, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,251. Term of patent 3½ years.



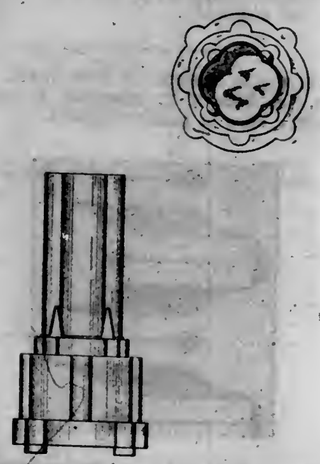
The ornamental design for a textile fabric or similar article as shown and described.

88,887. TEXTILE FABRIC OR SIMILAR ARTICLE. ROGER MEGROZ, Bronxville, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,253. Term of patent 3½ years.



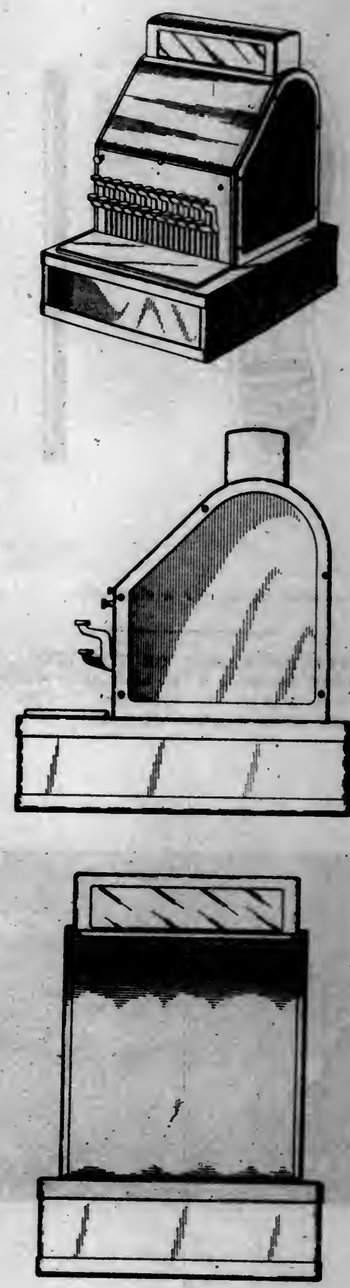
The ornamental design for a textile fabric or similar article as shown and described.

88,888. DRINK MIXER. FREDERICK J. OSIUS and MAURICE SEIDERMAN, Miami, Fla.; said Seiderman assignor to said Osius. Filed Sept. 27, 1932. Serial No. 45,086. Term of patent 14 years.



The ornamental design for a drink mixer, as shown.

88,889. CASH REGISTER. WALTER J. PASINSKI, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 17, 1932. Serial No. 45,878. Term of patent 14 years.



The ornamental design for a cash register as shown.

88,890. SADIRON. EDWARD D. PERRY, Watertown, Conn., and GEORGE E. BALL, Cranston, R. I., assignors to The Beardsley & Wolcott Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Oct. 13, 1932. Serial No. 45,326. Term of patent 7 years.



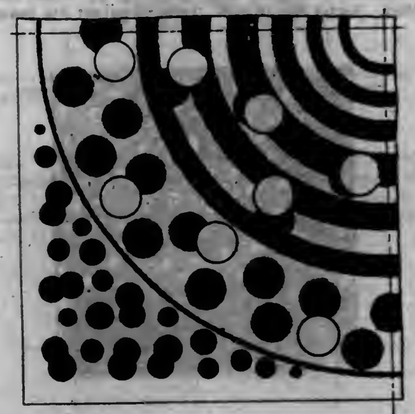
The ornamental design for a sadiron as shown.

88,891. BURIAL CASKET. PETER H. RAAP, Oak Park, Ill., assignor to Central Metallic Casket Company, a Corporation of Illinois. Filed July 15, 1932. Serial No. 44,343. Term of patent 14 years.



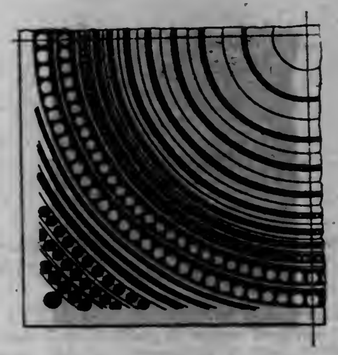
The ornamental design for a burial casket as shown.

88,892. TEXTILE FABRIC. JEAN VAN DER DOES, New York, N. Y., assignor to Joseph Berlinger Company, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1932. Serial No. 46,198. Term of patent 3½ years.



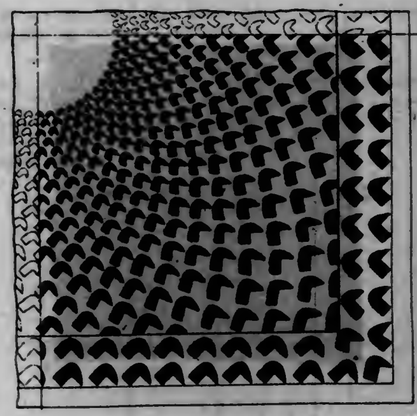
The ornamental design for a textile fabric, substantially as shown and described.

88,893. TEXTILE FABRIC. JEAN VAN DER DOES, New York, N. Y., assignor to Joseph Berlinger Company, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1932. Serial No. 46,199. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

88,894. TEXTILE FABRIC. JEAN VAN DER DOES, New York, N. Y., assignor to Joseph Berlinger Company, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1932. Serial No. 46,200. Term of patent 3½ years.



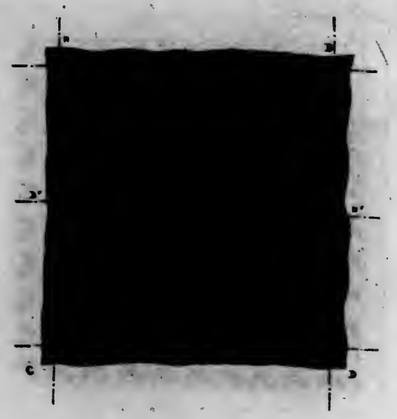
The ornamental design for a textile fabric, substantially as shown and described.

88,895. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,238. Term of patent 3½ years.



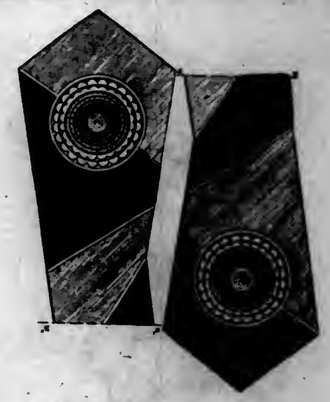
The ornamental design for a textile fabric or similar article as shown and described.

88,896. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,239. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,897. TEXTILE FABRIC COLLAR OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,242. Term of patent 3½ years.

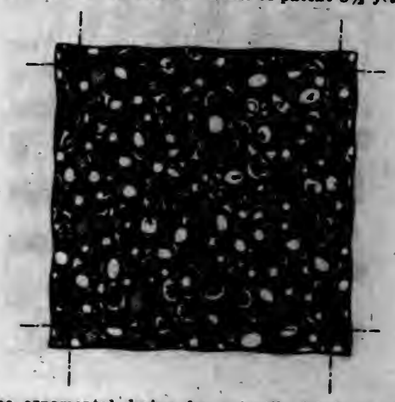


The ornamental design for a textile fabric collar or similar article as shown and described.

88,898. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,244. Term of patent 3½ years.

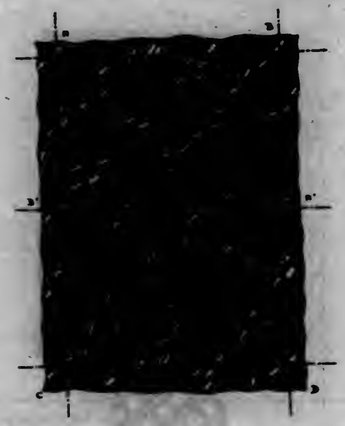
The ornamental design for a textile fabric or similar article as shown and described.

88,899. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,248. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,900. TEXTILE FABRIC OR SIMILAR ARTICLE. GABRIEL VIRGILE, Long Beach, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,254. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,901. PRINTED TEXTILE FABRIC OR SIMILAR ARTICLE. MICHEL BEBOUTOFF, Lyon, France, assignor to L. J. Hyams and Company, New York, N. Y. Filed Nov. 23, 1932. Serial No. 46,125. Term of patent 3½ years.



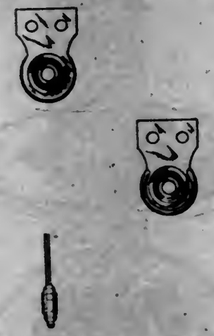
The ornamental design for a printed textile fabric or similar article, as shown and described.

88,902. NARROW WEBBING. GEORGE H. BECKER, Bridgeport, Conn., assignor to The Bridgeport Coach Lace Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Oct. 29, 1932. Serial No. 45,636. Term of patent 3½ years.



The ornamental design for a narrow webbing substantially as shown.

88,903. CASING FOR A BEARING. WALTER A. BOHN, Lakewood, Ohio, assignor to Master Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 15, 1932. Serial No. 44,857. Term of patent 14 years.



The ornamental design for a casing for a bearing substantially as shown.

88,904. CASING FOR A BEARING. WALTER A. BOHN, Lakewood, Ohio, assignor to Master Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 16, 1932. Serial No. 44,870. Term of patent 14 years.



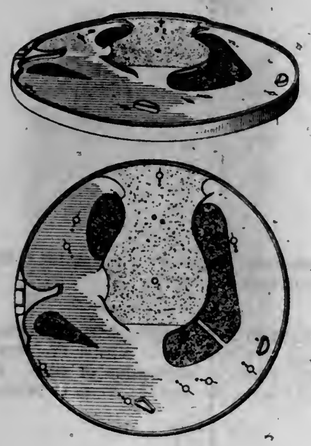
The ornamental design for a casing for a bearing substantially as shown.

88,905. JAR OR SIMILAR ARTICLE. HENRY DREYFUSS, New York, N. Y., assignor to Capstan Glass Company, Connellsville, Pa., a Corporation of Delaware. Filed Oct. 29, 1932. Serial No. 45,680. Term of patent 14 years.



The ornamental design for a jar or similar article, substantially as shown.

88,906. GAME BOARD. WALTER S. DUWELIUS, Cincinnati, Ohio. Filed May 18, 1932. Serial No. 43,793. Term of patent 7 years.



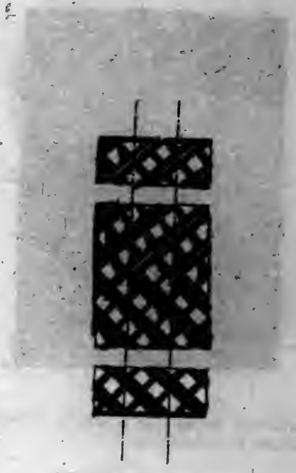
The ornamental design for a game board, as shown.

88,907. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 16, 1932. Serial No. 44,862. Term of patent 3½ years.



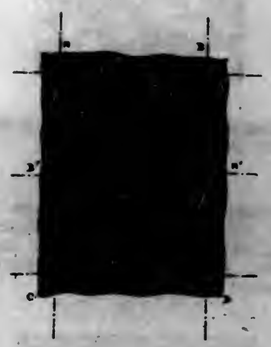
The ornamental design for a textile fabric, substantially as shown and described.

88,908. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,210. Term of patent 3½ years.



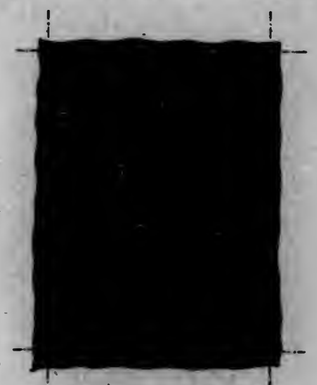
The ornamental design for a textile fabric or similar article as shown and described.

88,909. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,216. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,910. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,218. Term of patent 3½ years.



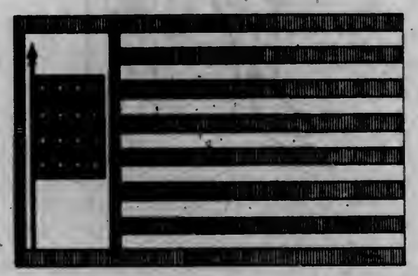
The ornamental design for a textile fabric or similar article as shown and described.

88,911. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932 Serial No. 46,228. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,912. FLAG. HENRY E. GUYN, Philadelphia, Pa., assignor of one-half to George L. H. Guyn, Philadelphia, Pa. Filed May 12, 1932. Serial No. 43,789. Term of patent 14 years.



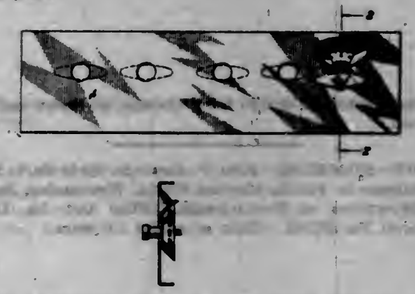
The ornamental design for a flag, as shown.

88,913. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J. Filed Nov. 25, 1932. Serial No. 46,141. Term of patent 3½ years.



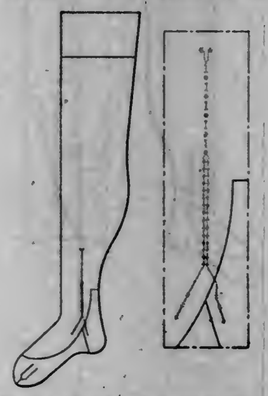
The ornamental design for a textile fabric or the like, as shown and described.

88,914. GAS STOVE COMBINED MANIFOLD COVER AND CONTROLS. WAYNE JENKINS, Los Angeles, Calif. Filed Mar. 22, 1932, Serial No. 43,261. Term of patent 14 years.



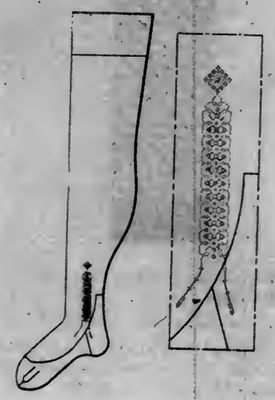
The ornamental design for a gas stove combined manifold cover and controls as shown and described.

88,915. STOCKING. PAUL F. KROENER, Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,858. Term of patent 14 years.



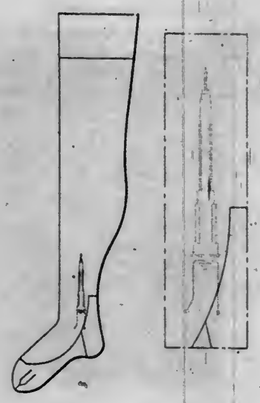
The ornamental design for a stocking as shown and described.

88,916. STOCKING. PAUL F. KROENER, Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,359. Term of patent 14 years.



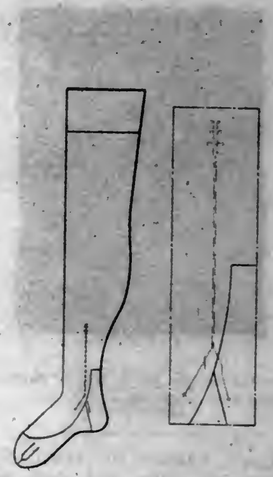
The ornamental design for a stocking as shown and described.

88,917. STOCKING. PAUL F. KROENER, Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,361. Term of patent 14 years.



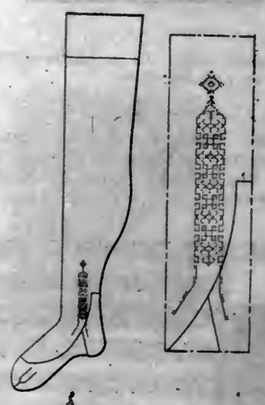
The ornamental design for a stocking as shown and described.

88,918. STOCKING. PAUL F. KROENER, Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,363. Term of patent 14 years.



The ornamental design for a stocking as shown and described.

88,919. STOCKING. PAUL F. KROENER, Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,346. Term of patent 14 years.



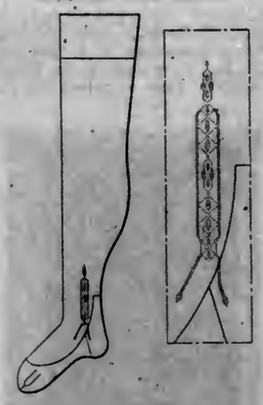
The ornamental design for a stocking as shown and described.

88,920. STOCKING. PAUL F. KROENER, Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,347. Term of patent 14 years.



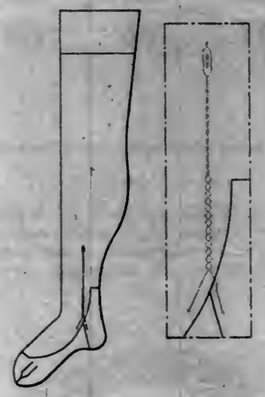
The ornamental design for a stocking as shown and described.

88,921. STOCKING. PAUL F. KROENER, Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,350. Term of patent 14 years.



The ornamental design for a stocking as shown and described.

88,922. STOCKING. PAUL F. KROENER, Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,351. Term of patent 14 years.



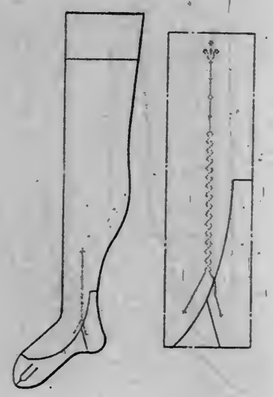
The ornamental design for a stocking as shown and described.

88,923. STOCKING. PAUL F. KROENER, Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,352. Term of patent 14 years.



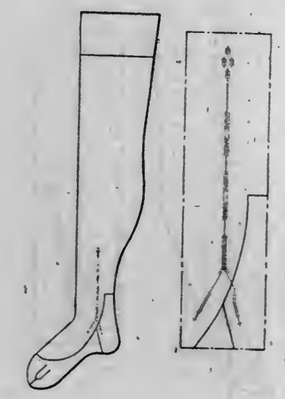
The ornamental design for a stocking as shown and described.

88,924. STOCKING. PAUL F. KROENER, Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporatio nof Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,353. Term of patent 14 years.



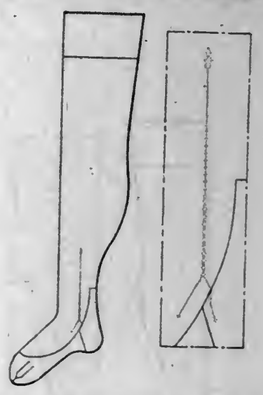
The ornamental design for a stocking as shown and described.

88,925. STOCKING. PAUL F. KROENER, Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,356. Term of patent 14 years.



The ornamental design for a stocking as shown and described.

88,926. STOCKING. PAUL F. KROENER, Hyde Park, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,357. Term of patent 14 years.



The ornamental design for a stocking as shown and described.

88,927. CARPET. CHARLES LEHNER, Long Island City, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Nov. 1, 1932. Serial No. 45,690. Term of patent 7 years.



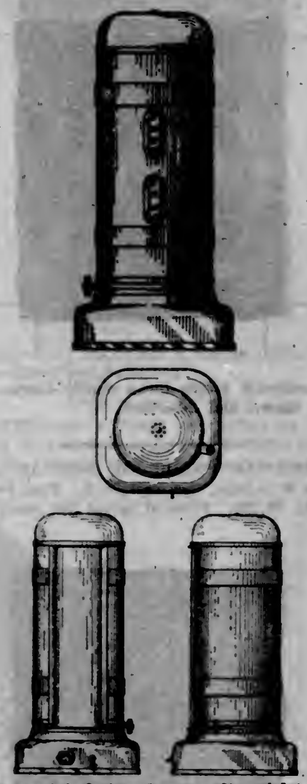
The ornamental design for a carpet substantially as shown and described.

88,928. TEXTILE FABRIC OR SIMILAR ARTICLE. ROGER MEGROZ, Bronxville, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,252. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,929. ULTRA-VIOLET STERILIZING APPARATUS. OTTO J. MOEHLER, Newark, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Nov. 2, 1932. Serial No. 45,711. Term of patent 14 years.



The ornamental design for an ultra-violet sterilising apparatus, substantially as shown.

88,930. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN OVERMEYER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,258. Term of patent 3½ years.



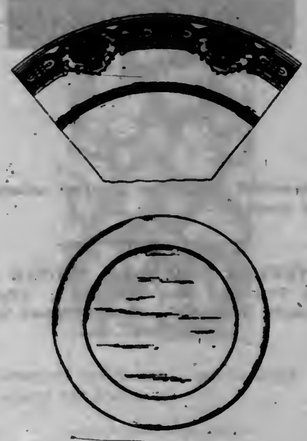
The ornamental design for a textile fabric or similar article as shown and described.

88,931. BURIAL CASKET. PETER H. RAAP, Oak Park, Ill., assignor to Central Metallic Casket Company, a Corporation of Illinois. Filed July 15, 1932. Serial No. 44,342. Term of patent 14 years.



The ornamental design for a burial casket as shown.

88,932. PLATE OR SIMILAR ARTICLE. ANGELO C. SCAVULLO, Great Kills, N. Y., assignor to New Yorker Hotel Corporation, a Corporation of New York. Filed Nov. 1, 1932. Serial No. 45,689. Term of patent 7 years.



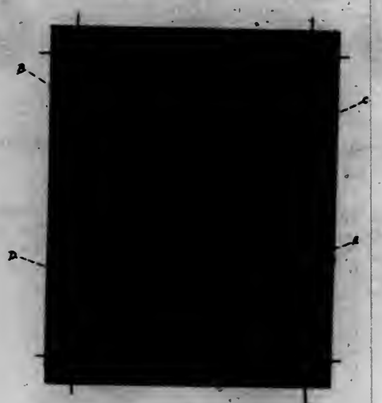
The ornamental design for a plate or similar article as shown, and described.

88,933. TEXTILE FABRIC OR THE LIKE. JACK SCHWEIZER, Rye, N. Y. Filed Nov. 8, 1932. Serial No. 45,810. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,934. CARPET. JOHN S. TRAVIS, Long Island City, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Nov. 12, 1932. Serial No. 45,943. Term of patent 7 years.



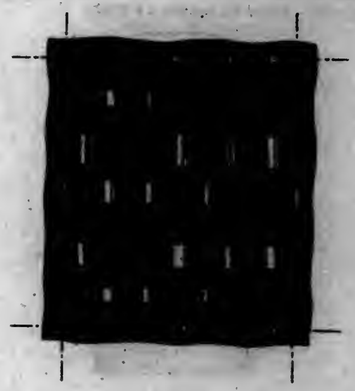
The ornamental design for a carpet substantially as shown and described.

88,935. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 22, 1932. Serial No. 46,107. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,936. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Nov. 22, 1932. Serial No. 46,108. Term of patent 3½ years.



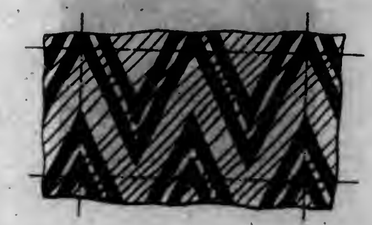
The ornamental design for a textile fabric or similar article as shown and described.

88,937. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,229. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,938. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,230. Term of patent 3½ years.



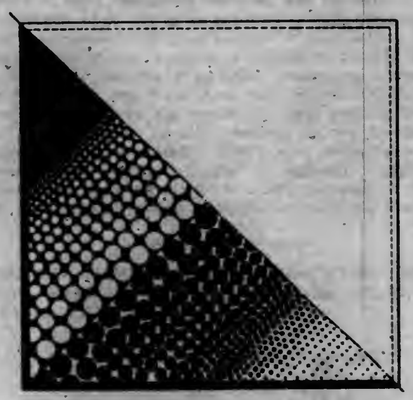
The ornamental design for a textile fabric or similar article as shown and described.

98,939. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,231. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,940. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,233. Term of patent 3½ years.



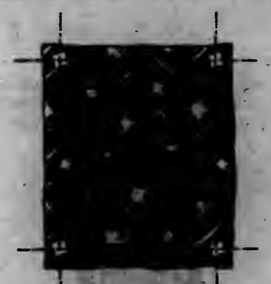
The ornamental design for a textile fabric or similar article as shown and described.

88,941. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,234. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,942. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,235. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,943. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,240. Term of patent 3½ years.



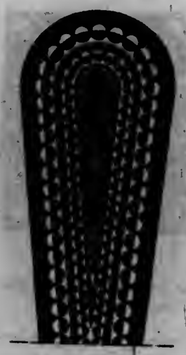
The ornamental design for a textile fabric or similar article as shown and described.

88,944. TEXTILE FABRIC COLLAR OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,241. Term of patent 3½ years.



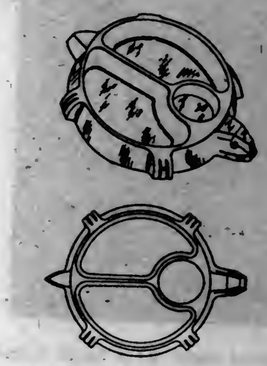
The ornamental design for a textile fabric collar or similar article as shown and described.

88,945. TEXTILE FABRIC COLLAR OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,243. Term of patent 3½ years.



The ornamental design for a textile fabric collar or similar article as shown and described.

88,946. COMPARTMENT PLATE OR SIMILAR ARTICLE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Nov. 12, 1931. Serial No. 41,700. Term of patent 7 years.

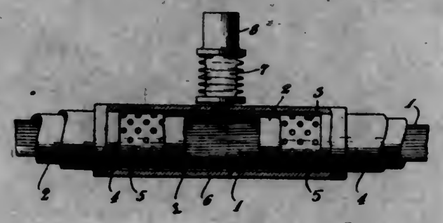


The ornamental design for a compartment plate or similar article, as shown.

PATENTS

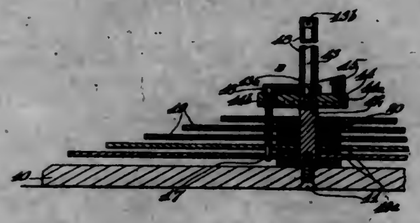
GRANTED JANUARY 3, 1933

1,892,663. METHOD OF AND APPARATUS FOR IMPROVING THE ELECTRICAL PROPERTIES OF CABLES. WILLIAM A. DEL MAR, Greenwich, Conn., assignor to Habirshaw Cable & Wire Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 3, 1929. Serial No. 352,156. 2 Claims. (Cl. 173—266.)



1. Method of increasing the break-down voltage of an electric cable including an electrical conductor, an envelope of solid insulating material, and an outer protective sheath, after said cable has been installed and spliced, which comprises removing portion of said sheath intermediate the splices, applying a permeable metallic shield to said solid insulating material, connecting a pressure reservoir with the interior of said sheath through the aperture formed by the removal of said portion thereof, applying a closure to said aperture in the sheath but spaced from said metallic shield, and confining a continuous body of liquid insulating material within said sheath and reservoir under sufficient pressure to diminish the tendency toward formation of ionisable voids.

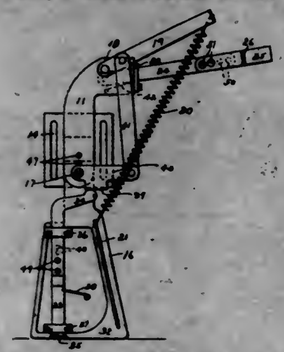
1,892,664. SPINNING GAME. HARRY EYLES, Chicago, Ill. Filed Jan. 21, 1930. Serial No. 422,394. 13 Claims. (Cl. 273—143.)



1. A game apparatus comprising a stationary base and a vertical center post, and vertically-spaced series of disks freely centered on the post, said disks being perforated in registration, a vertically movable pin insertible through the row of perforations, said pin being movable to impart joint rotary motion to the series of disks, and means to engage and raise the pin from engagement with the disks as it is moved to rotate them.

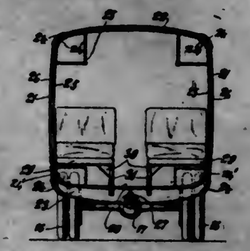
1,892,665. AUTOMOBILE JACK. GEORGE W. GIEFERS, Brooklyn, N. Y. Filed Dec. 29, 1930. Serial No. 505,225. 2 Claims. (Cl. 254—94.)

1. In a device of the class described, a pedestal swingably mounted on a bracket secured on the chassis of an automobile, a series of levers mounted on said bracket, means attached between one end of one of said levers and the pedestal for holding the pedestal in its upper or inactive position, a latch mounted on the bracket for



locking said lever in its upper position, and a lever for releasing said latch to move the pedestal into operative position.

1,892,666. BUS BODY WITHOUT CHASSIS. ERVING R. GURNEY, Allentown, Pa., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed May 3, 1930. Serial No. 449,896. 2 Claims. (Cl. 296—28.)

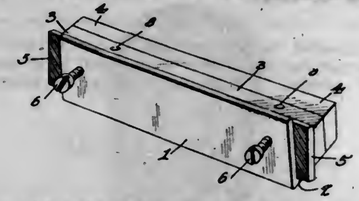


1. A vehicle body comprising a plurality of transverse body sections comprising floor beams, posts, and roof trusses, said sections being formed with an outward curvature upon each of the four sides thereof, the curvature of any side being symmetrical about the median plane of that side, a plurality of curved, longitudinally extending frame members at each of the four corners of the transverse body sections for connecting said sections, each frame member being a transversely curved plate for providing a stiffening web which is secured to the transverse body sections for substantially its area of contact with said body section, said stiffening web, by reason of its curvature, and its engagement with the body sections serving to resist bending stresses from a plurality of directions, said curved longitudinally extending frame members carrying the major portion of the bending and loading stresses, the assembly providing a rigid body without the use of longitudinally extending beams placed below the floor as in the usual vehicle body.

1,892,667. SHARPENER FOR SHARPENING BLADES OF LAWN MOWERS OR SHEARS. EDWIN C. HARNDEN, Waverly, N. Y. Filed Apr. 19, 1932. Serial No. 606,201. 1 Claim. (Cl. 51—186.)

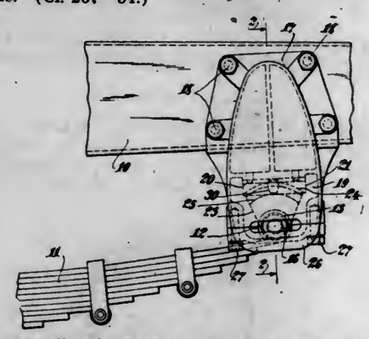
A blade sharpener comprising a length of angle bar having elongated plate-like portions extending at sub-

stantially right angles to each other, an abutment block secured to one plate-like portion and formed with a flat surface spaced from and arranged at a slight angle to the plane of the other plate-like portion, a sharpening plate secured against the face of said abutment block and



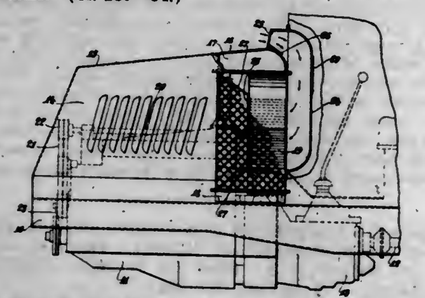
provided with a sharpening surface in a plane at a slight angle to the plane of the plate-like portion opposed thereto to form a wedge-shaped blade receiving space between the sharpening plate and one plate-like portion of the angle bar.

1,892,668. ROLLING SPRING SHACKLE. JOHN W. HEINEY, Allentown, Pa., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 26, 1931. Serial No. 559,431. 5 Claims. (Cl. 267—54.)



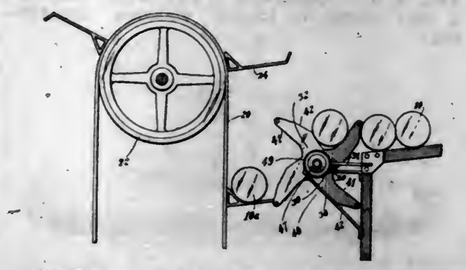
1. A connection between a vehicle spring and frame comprising a bracket on the frame, a bearing surface on the bracket, a shackle bolt on the spring, a shackle connection journaled on the bolt and formed with a curved surface about the axis of the bolt to engage the bearing surface, spaced depending flanges on the bearing surface parallel to the spring, bearing surfaces on the connection cooperating with the flanges to prevent twisting of the connection, and means to secure the connection to the bracket.

1,892,669. ENGINE COOLING DEVICE. JOHN W. HEINEY, Allentown, Pa., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 24, 1932. Serial No. 594,801. 6 Claims. (Cl. 180—54.)



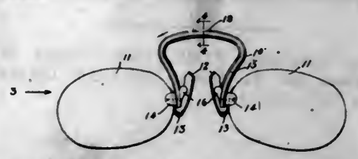
1. A cooling system for an engine having a hood and side radiators mounted adjacent the rear of the engine, a fan for circulating air through the radiators, and means to direct air selectively from outside and from within the hood to the fan.

1,892,670. APPARATUS FOR HANDLING ARTICLES. FRED JAEGER, Rutherford, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 22, 1928. Serial No. 301,297. 6 Claims. (Cl. 198—103.)



1. Mechanism of the character described comprising in combination, a substantially horizontal chute, a vertical conveyor having spaced supporting brackets extending at an angle to the line of travel thereof and means actuable by direct contact with the free ends of said supporting brackets for automatically transferring articles from the horizontal chute to the vertical conveyor, said means comprising a rotatable carrier having a plurality of troughs for receiving the articles in succession from the horizontal chute.

1,892,671. OPHTHALMIC MOUNTING. FRANCIS M. JAHN and CECIL C. ATKINSON, Philadelphia, Pa. Filed July 8, 1930. Serial No. 466,479. 7 Claims. (Cl. 88—42.)



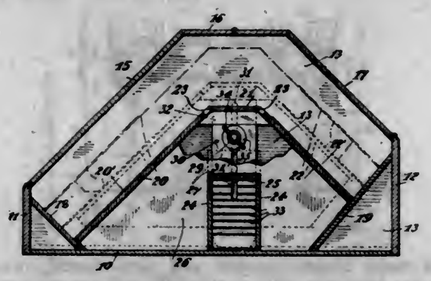
1. An ophthalmic mounting comprising resilient nose clamping members, cams adapted to move said members against their resiliency to nose clamping positions, rigid means interconnecting the cams as a unit, and a lens carrying frame supporting said several parts.

1,892,672. METHOD FOR TREATING SHINGLES. WALTER S. JOHNSTON, Blue Island, Ill., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 9, 1928. Serial No. 318,278. 8 Claims. (Cl. 91—70.)



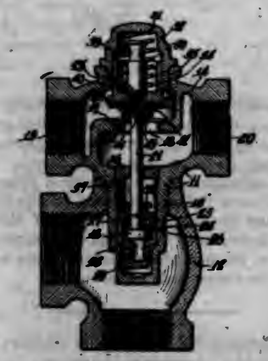
1. A process of treating imperfectly surfaced prepared roofing shingles to improve the surfacing thereof, which comprises feeding the imperfect shingles through a heating zone to warm the coating of the shingle sufficiently to soften the same, subjecting only the warmed original shingles to pressure immediately as they leave the heating zone, and repeating the operations until the surface of the shingles is smoothened to the desired extent.

1,892,673. DISPLAY CABINET. CLAUDE W. KRESS, New York, N. Y. Filed Jan. 14, 1932. Serial No. 586,538. 8 Claims. (Cl. 312—114.)



1. In a display cabinet, in combination, a casing, a cover to said casing consisting of a plurality of glass elements angularly positioned with respect to the vertical and with respect to each other; a vertically movable false bottom within said casing consisting of a plurality of floor elements respectively parallel to the cover elements, whereby the spacing of said floor elements from the cover elements will be varied by said vertical movement, said floor elements being capable of retaining their parallelism with the cover elements during said vertical movement and means for retaining said false bottom in any desired vertical position.

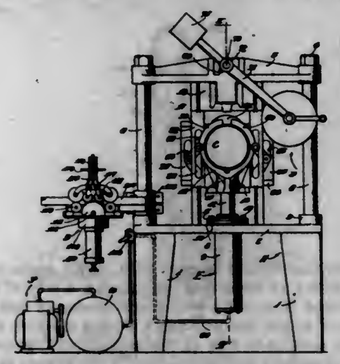
1,892,674. COLD WATER INLET CONTROL VALVE. LUTHER D. LOVEKIN, Villa Nova, Pa., assignor to Kitson Company, Philadelphia, Pa., a Corporation of West Virginia. Filed June 10, 1930. Serial No. 460,163. 2 Claims. (Cl. 137—162.)



1. A T, an emergency shut-off valve having a hollow shank threading into the T and projecting into the interior thereof, a fusible element inside the shank and adapted to soften at high temperature, a valve assembly including a stem supported upon the fusible element, a valve and a spring pressing the assembly against the fuse element and a valve seat normally spaced from the valve and adapted to be closed by movement of the valve incident to softening of the element and responsive to the spring.

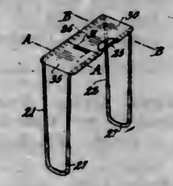
1,892,675. METHOD OF AND APPARATUS FOR FORMING SULPHURIZED FIBER BOARD CONTAINERS. RUSSELL F. LYON, Menasha, and PETER J. CHRISTMAN, Green Bay, Wis., assignors to Marathon Paper Mills Company, Rothschild, Wis., a Corporation of Wisconsin. Filed Oct. 15, 1931. Serial No. 569,099. 14 Claims. (Cl. 93—39.)

1. In a machine of the class described, a supporting frame, an anvil attached to and depending from the top of said frame, a guide member at the rear of said frame, a mandrel slidably mounted on said guide member for movement toward and away from said anvil, a forming member having wings for folding a sheet of material about said



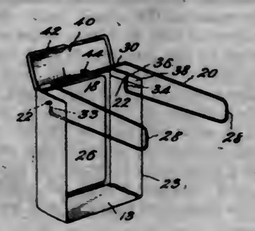
mandrel, means for raising said mandrel and forcing it against said anvil and means cooperating with said raising means for folding said wings about said mandrel.

1,892,676. ADAPTER OR ATTACHMENT FOR CIGARETTE PACKAGES OR THE LIKE. JOSEPH P. MCENERY, Flushing, N. Y. Filed May 11, 1928. Serial No. 276,971. 11 Claims. (Cl. 206—41.)



11. A cigarette package attachment comprising oppositely arranged substantially parallel interconnected legs for insertion in a cigarette package between the contents of said package and a wrapper thereof, a normally closed cover associated with said legs and means including one of said legs yieldable under pressure to permit opening of said cover.

1,892,677. CIGARETTE PACKAGE CASE. JOSEPH P. MCENERY, Flushing, N. Y. Filed Feb. 18, 1930. Serial No. 429,861. 3 Claims. (Cl. 206—41.)



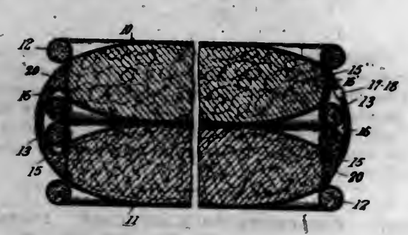
1. A cigarette package case, comprising a body-portion adapted to receive a cigarette package, means adapted to extend into and engage said package on at least two opposite sides and to thereby hold said package extended within said body-portion, a pivoted connection between said latter means and said case, and an opening in said body-portion through which said pivoted means may be swung to a position within and to a position outside of said body portion.

1,892,678. ATTACHING FIXTURE. GEORGE E. McINTYRE and LOUIS J. SMITH, Kansas City, Mo. Filed Jan. 26, 1931. Serial No. 511,805. 1 Claim. (Cl. 24—237.)



An attaching fixture formed of a single piece of material comprising an elongated body having a pair of opposed sides disposed in parallel contiguous planes; a coil formed in said body at the meeting point of said sides; a shoulder formed by each body side at the end thereof opposite said coil, said shoulders intersecting when the fixture is closed; a rebent arm extending from each shoulder respectively, said arms being in parallel, contiguous planes transverse to the plane of said body; an arch formed in each arm respectively, said arches being in opposed register when the fixture is closed; and a kink formed in each of said rebent arms between the said arch thereof and its inwardly extending end, said kinks being in the same plane as its forming arm and in opposed, spaced apart relation when said fixture is closed, said kinks being arch-shaped whereby to position the free inwardly extending end of each rebent arm respectively in register with the body of the opposite rebent arm, whereby the said kinks restrict to a limited degree the opening between said arms.

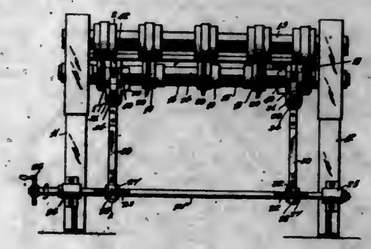
1,892,679. MATTRESS. DANIEL PENNER and ISRAEL FEINTUCH, Kingston, N. Y. Filed Oct. 22, 1930. Serial No. 490,348. 1 Claim. (Cl. 5—357.)



A bed mattress comprising two substantially equal stuffed rectangular portions, each having padded rolls extending circumambiently along their upper and lower peripheral edges, a pair of fabric hinge strips of uniform width attached at the junction of each roll and its corresponding peripheral edge to extend from one portion to the other along one of their side edges, separate fabric strips attached at one of their edges in paired relation at the junction of each roll and its corresponding peripheral edge to extend around the opposite side edge and both end edges, padding interposed between the strips on said sides and edges, and slidable means for connecting and disconnecting the unsecured edges of said separate strips.

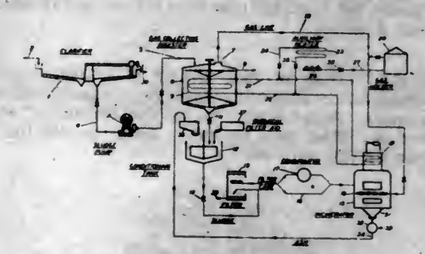
1,892,680. CUTTING MECHANISM FOR COMPOSITION CONSTRUCTIONAL MATERIAL. EDWIN S. PETERSEN, Jamaica Plain, Mass., assignor to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed June 11, 1931. Serial No. 543,552. 1 Claim. (Cl. 164—70.)

In a mechanism of the class described, the combination of a cutting mechanism comprising a main frame having a shaft mounted therein and a series of cutter heads on said shaft, the terminal cutter heads of the series being arranged to operate upon the work, and means on



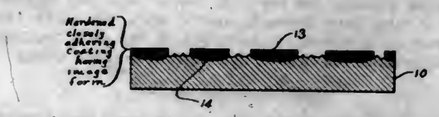
said frame adapted to shift said cutter heads towards or away from each other on the shaft, said means comprising a yoke associated with each of said cutter heads and a common actuating means associated with the yokes.

1,892,681. SEWAGE DISPOSAL. RENVILLE S. RANKIN, Hastings upon Hudson, N. Y., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 27, 1930. Serial No. 484,722. 2 Claims. (Cl. 210—8.)



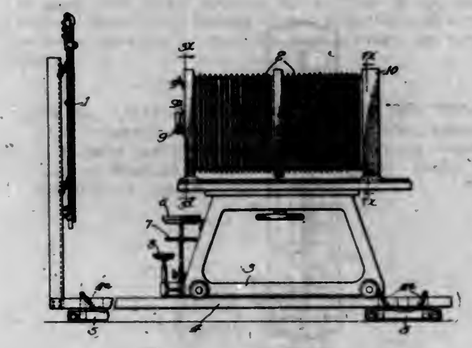
1. The process of disposing of sewage sludge which comprises subjecting the sludge to a combustible-gas-producing digestion, heating the sludge during digestion, dewatering the digested sludge to remove a portion of its moisture content, incinerating the dewatered sludge, and collecting and utilizing the gas produced by digestion to effect said heating and incineration, said step of digestion being carried to a degree less than that of complete digestion but sufficient to produce the quantity of gas necessary for effecting said warming and incineration.

1,892,682. METHOD OF MAKING A PRINTING PLATE. THOMAS ERNEST RICHARDS, Auckland, New Zealand. Original application filed Oct. 20, 1927, Serial No. 227,623, and in New Zealand Nov. 22, 1926. Divided and this application filed June 4, 1929, Serial No. 368,424. Renewed May 21, 1932. 4 Claims. (Cl. 95—5.4.)



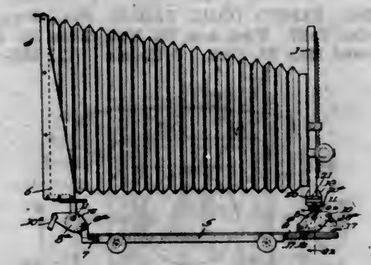
1. The method of preparing lithographic printing plates, which comprises applying a film of bichromate emulsion to a grained metallic plate, photographically exposing and developing said film so that the portions which remain provide a matrix of a desired image form, applying an ink-absorbing coating containing a metal-penetrating agent, heating said plate so that said agent penetrates the metal and produces a bond, and thereafter removing the matrix form.

1,892,683. SINGLE PLATE MULTIPLE PHOTOGRAPHIC REPRODUCTION. ROBERT R. ROBERTSON, Evanston, Ill. Filed June 27, 1929. Serial No. 374,250. 1 Claim. (Cl. 88—24.)



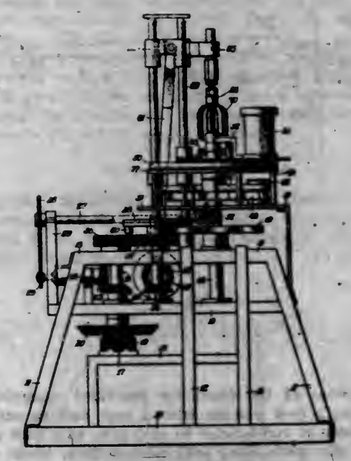
The improvement in the art of photographically exposing different portions of a single sensitised surface to a corresponding number of separate copy subjects, which consists in preparing a master chart having designated positions corresponding to the respective copy subjects, then mounting the copy subjects upon a copy board having designations capable of defining positions corresponding to the positions designated upon the chart, then manipulating the lens of a camera into a plurality of positions designated similarly to the positions of the copy subjects on the copy board and from which the lens projects images upon portions of the sensitised surface corresponding to the chart, and successively exposing the lens in the respective positions to which it is adjusted while masking the portions of the sensitised surface other than that upon which the image is to be projected.

1,892,684. CAMERA. ROBERT R. ROBERTSON, Evanston, Ill. Filed Oct. 20, 1930. Serial No. 489,762. 7 Claims. (Cl. 95—89.)



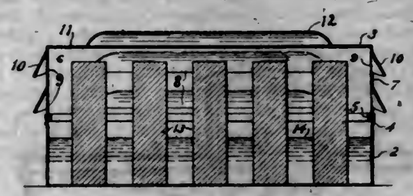
1. In a photographic camera, a bed, a frame-member adjustable in the manipulation of the camera, and ball and socket means mounting said frame-member upon said bed located intermediate the sides of the frame-member, said ball and socket means permitting a rocking movement in a plane transverse to the focal axis of the camera also an angular movement in a plane perpendicular to the bed and parallel with the focal axis through an angle of substantially ninety degrees, whereby the frame member may be folded down upon the bed.

1,892,685. PINEAPPLE TIDBIT MACHINE. GEORGE K. SHOJI, Honolulu, Territory of Hawaii, assignor to Libby, McNeill & Libby, Chicago, Ill., a Corporation of Maine. Filed Jan. 9, 1930. Serial No. 419,523. 9 Claims. (Cl. 226—69.)



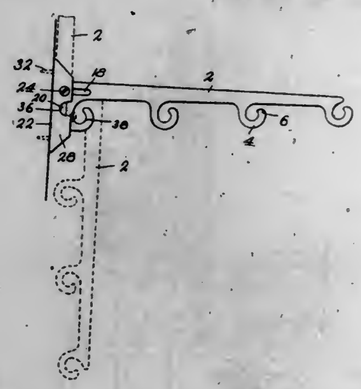
5. In a device of the character described in combination with a cutting knife, means for reciprocating said knife, means for presenting material to be cut by said knife during a portion of its reciprocating movement, and other means for locating receptacles into position to receive the cut material.

1,892,686. HUMIDIFIER. JAY V. STEWART, Perry Township, Stark County, Ohio, assignor of one-half to D. D. Miller, Canton, Ohio. Filed July 16, 1931. Serial No. 551,180. 1 Claim. (Cl. 299—24.)



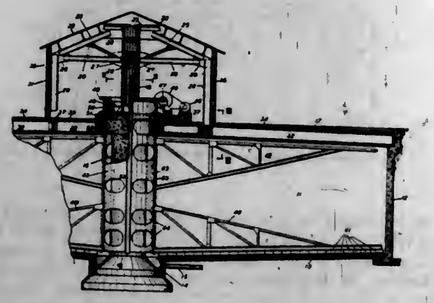
A humidifier of the character described comprising a pan having sides, ends, and a bottom and adapted to contain water, a cover having sides, ends, and a top, removably supported by said pan, said pan and cover adapted to form a casing, a lineal series of transversely disposed, spaced air-moistening slabs of porous material within said casing, said slab standing on said bottom and extending upwardly into said cover, the sides of said cover provided with slotted air intake openings extending horizontally, parallel to the line of said series and having louvres extending outwardly and downwardly from the top edges of said openings, the top of said cover provided on both sides of the median line thereof with slotted air exhaust openings extending parallel to said air intake openings and provided with louvres extending upwardly and inwardly from the outer edges of said openings and toward said median line, whereby air ascending outside said cover will be deflected inwardly through said intake openings.

1,892,687. ADJUSTABLE SUPPORTING DEVICE. OTTO CARL TEUFEL, Eldon, Iowa. Filed Apr. 18, 1932. Serial No. 605,917. 2 Claims. (Cl. 211—99.)



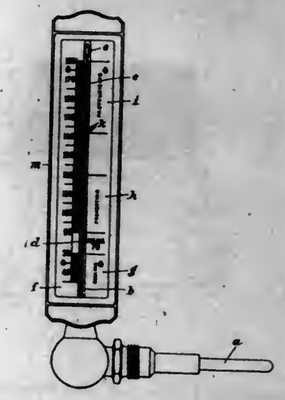
1. A device of the character described comprising an arm having a heel portion with a rear surface extending substantially at rightangles to said arm, said heel portion having a slot paralleling said rear surface, hooks spaced upon said arm, a bracket having oppositely-disposed flanges between which the heel portion projects, and a pivot carried by said flanges and extending through the slot so that the arm may be adjusted either to a horizontal or a downward position, said flanges having oppositely-disposed recesses which register with a portion of the surface of the rearmost hook when the arm is in lowered position.

1,892,688. SEWAGE TREATING APPARATUS. CLARENCE E. KEEFER and FRANK C. WACHTER, Baltimore, Md., assignors to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed June 9, 1931. Serial No. 543,131. 12 Claims. (Cl. 210—2.)



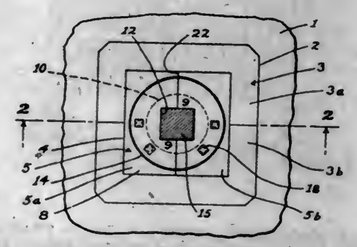
1. A digester having in combination, a boundary wall, a bottom provided with a sludge outlet, a stationary pier upstanding from the digester bottom, a frame element supported from said pier above the digester, a plurality of tension members depending from said frame, a plurality of beams with one end thereof supported by said boundary wall and the other end thereof secured to one of said tension members, digester top sustained by said beams, rotatable settled sludge raking mechanisms encircling said pier, and a motor mechanism supported from said pier above said digester for driving said sludge raking means.

1,892,689. UNIVERSAL SCALE DAIRY THERMOMETER. ROBERT M. WILHELM, Brooklyn, and DONALD C. LIGHTNER, Valley Stream, N. Y., assignors to Charles J. Tagliabue Mfg. Co., Brooklyn, N. Y., a Corporation of New York. Filed Oct. 28, 1931. Serial No. 571,530. 2 Claims. (Cl. 73—52.)



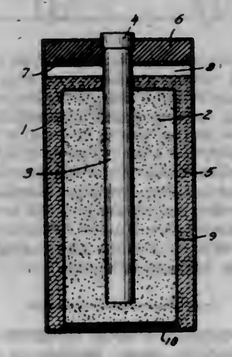
1. A dairy thermometer comprising a bulb for placement in a vat, a thermometer tube connected with said bulb having a capillary bore for an expansible temperature-indicating fluid, said bore having an enlargement positioned in the regions between 50° and 90°, the 70° point being within the limits of said enlargement and having a further enlargement above the 180° point ample to accommodate the expanded temperature-indicating fluid in the sterilizing temperatures up to approximately 220° and a scale plate bearing a graduated scale in single degree divisions of not less than $\frac{1}{8}$ inch and bearing temperature indications in numerals for the ranges of temperatures used in dairy work for cooling, preheating, and pasteurizing, respectively, a line at 70° opposite the first named enlargement of the thermometer tube to indicate the temperature appropriate for ageing, and panels delimiting and marked to identify them respectively with at least cooling and pasteurizing ranges, all arranged and assembled within a scale case of limited length of the order of 9 inches.

1,892,690. SAFETY DRILL TABLE. ZARA WITKIN, Los Angeles, Calif. Filed Aug. 28, 1929, Serial No. 388,936. Renewed May 23, 1932. 6 Claims. (Cl. 255—23.)



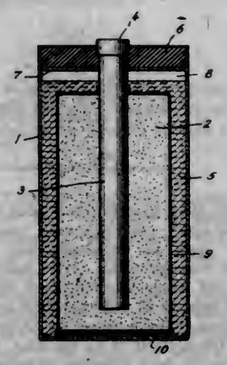
1. In a safety rotary drill table to prevent twist-offs of a drill stem in drilling a deep well, the combination of a pair of inside bushings supported by, and at the center of the table said inside bushings having means formed between their meeting faces, for rotating the drill stem, each inside bushing consisting of an outer section of substantially rectangular form to fit into the opening in the table and a sectional liner having a semi-cylindrical neck with a flange at its upper end supported on the upper end of the outer section, said outer sections forming a cylindrical bore between them receiving and centering the said necks of the inner sections and frangible means passing through the flange and seating in the outer section of the inner bushing, said frangible means operating to shear and permit rotation of the liner in the outer sections of the inner bushing when a predetermined torque is being imparted to the drill stem through the rotary table.

1,892,691. COATING COMPOSITION FOR DRY CELLS. JAMES GARFIELD ZIMMERMAN, Madison, Wis., assignor to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed Apr. 19, 1929. Serial No. 356,819. 3 Claims. (Cl. 134—1.)



1. A composition for coating dry cell cores comprising a liquid suspension of starch in a water solution of gelatinized starch, casein and casein-dissolved reagent.

1,892,692. DRY CELL. JAMES GARFIELD ZIMMERMAN, Madison, Wis., assignor to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Original application filed Apr. 19, 1929, Serial No. 356,819. Divided and this application filed May 2, 1932. Serial No. 608,695. 5 Claims. (Cl. 136—123.)

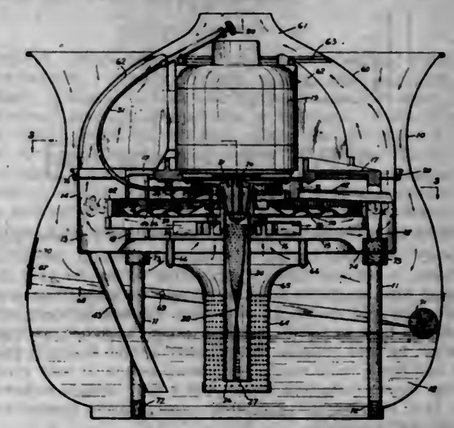


1. A dry cell core having a coating comprising a coherent layer of casein.

1,892,693. PREPARATION OF TITANIUM PIGMENTS. JOSEPH BLUMENFELD, Paris, France, and MAX MAYER, Karlsbad, Czechoslovakia, assignors, by mesne assignments, to Krebs Pigment and Color Corporation, Newark, N. J., a Corporation of Delaware. Continuation of applications filed Jan. 13, 1925, Serial Nos. 2,283 and 2,284, and in Germany Aug. 11, 1924. Division of application filed May 15, 1930, Serial No. 452,810. This application filed May 15, 1930. Serial No. 452,811. 14 Claims. (Cl. 134—58.)

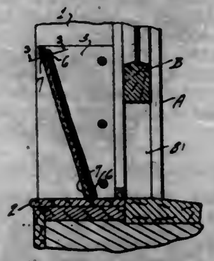
1. In the preparation of a titanium pigment, the steps comprising mixing moist titanium oxide with less than 2% of alkali carbonate in the presence of sulphate ions, calcining the mixture and washing the calcined materials to remove the water soluble residue.

1,892,694. HUMIDIFIER. WILLIAM DOUGLAS CARTER, Caldwell, N. J., assignor to Airite Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 22, 1930. Serial No. 490,382. 11 Claims. (Cl. 261—91.)



1. A liquid atomizing device comprising a main reservoir for liquid, an auxiliary reservoir, means comprising a pump extending within the main reservoir for conducting liquid therefrom to the auxiliary reservoir, said pump comprising a tube extending within the main reservoir having means therein for preventing slippage between the liquid and the tube, a rotating disc adapted to receive liquid from said auxiliary reservoir, means positioned adjacent the periphery of said disc whereby liquid received therefrom is broken up into a mist, and means for routing gas through said mist and discharging it from said device.

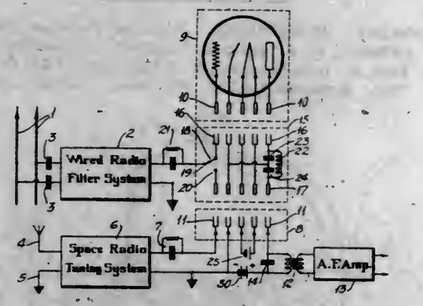
1,892,695. WINDOW VENTILATOR. WESLEY T. CROUSE, St. Louis, Mo. Filed Jan. 29, 1931. Serial No. 512,020. 2 Claims. (Cl. 98—99.)



1. A window ventilator comprising a pair of rigid companion oblong rectangular sections disposed in lengthwise overlapping relation, strips U-shaped in section permanent-

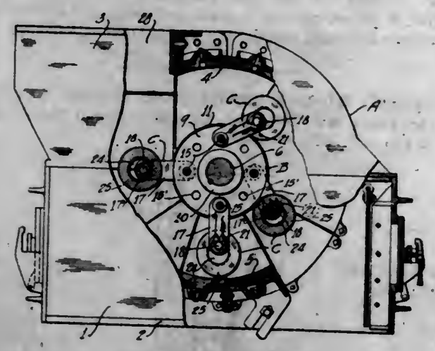
ly fixed lengthwise upon the respective transverse inner ends of said sections, and extensions on the inner leg of the respective strips bent over in opposed relation upon the opposite outer faces of said sections in the formation of slide-ways engaging the respective sections upon their longitudinal margins for securing the sections together in lengthwise overlapping shiftable relation.

1,892,696. MEANS FOR RECEIVING WIRED RADIO SIGNALS ON SPACE RADIORECEIVERS. ROBERT D. DUNCAN, Jr., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 3, 1931. Serial No. 541,770. 3 Claims. (Cl. 179—2.5.)



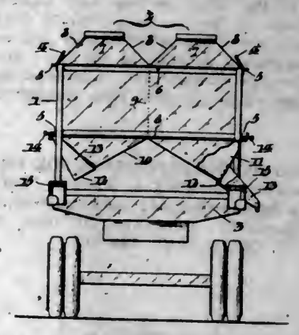
1. A radio receiving system, comprising, a space radio energy collecting system, a wired radio energy collecting system, a detector tube, a supporting socket for said detector tube, an audio frequency amplifier operatively connected to said socket, an adapter interposed between said detector tube and said socket, a single pole two position switch in said adapter for connecting said detector tube to said space radio energy collecting system or said wired radio energy collecting system and a filter system included in said adapter for excluding super-audible frequencies from said amplifier.

1,892,697. CRUSHING OR PULVERIZING MACHINE. EDWIN E. ELZEMEYER and HENRY GRIESEDIECK, Webster Groves, Mo., assignors to American Pulverizer Company, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 20, 1930. Serial No. 503,749. 21 Claims. (Cl. 83—11.)



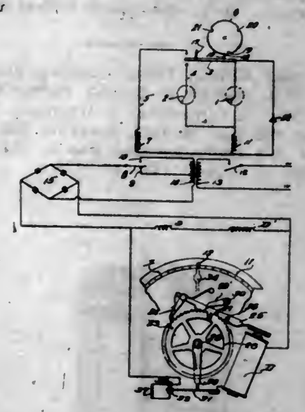
1. A hammer assembly for machines of the class described comprising, in combination, a bail including a pair of spaced links, a hammer support projecting from each link for abutting cooperation with the other, means for connecting said links, and a hammer loosely mounted on said hammer-support.

1,892,698. TRANSPORTATION CONTAINER. FREDERICK K. FILDES, Altoona, Pa. Filed Nov. 6, 1931. Serial No. 573,338. 1 Claim. (Cl. 298—7.)



A container comprising a box-like frame of a width corresponding to a vehicle platform, and bins fitting snugly within said frame on each side of its center line, each of said bins having vertical walls, a bottom slope sheet extending from the center line of the frame to an opening at the side thereof, and a door pivoted at said opening and overlapping opposite walls of the bin, said door being normally locked substantially within the confines of the frame and being adapted when released to fall to a position extending outward beyond the platform upon which the container rests to serve as a chute facilitating the discharge by gravity of the contents of the bin.

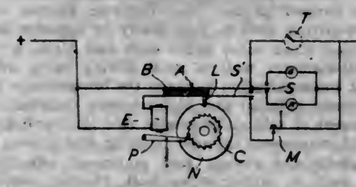
1,892,699. ELECTRIC CLOCK SYSTEM. GEORGE F. HARTER, Springfield, Mass., assignor to The Standard Electric Time Company, Springfield, Mass., a Corporation of Connecticut. Filed May 2, 1929. Serial No. 359,330. 4 Claims. (Cl. 58—24.)



1. An electric clock system comprising secondary clocks of the impulse type, control means operable through a predetermined cycle for intermittently advancing the clocks through corresponding cycles, said control means sending one kind of driving impulses during each cycle and a starting impulse of different kind at the end of each cycle, stop means in each clock for stopping its advance at the end of its cycle if it be too fast, said stop means being responsive to said starting impulse to restart the clock when the control means reaches the end of its cycle, the control means then advancing the clock with driving impulses during the major portion of the cycle, and a controller for sending a starting impulse not only at the end

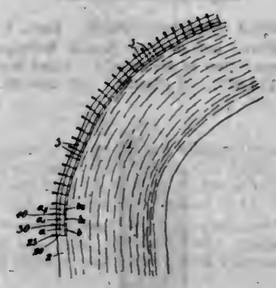
of each cycle but also after a series of intermediate driving impulses so that any stopped clock which fails to respond to the first starting impulse will receive another such impulse before it has lost time corresponding to a full cycle.

1,892,700. ELECTRICAL CONTROL SYSTEM. GEORGE F. HARTER, Springfield, Mass., assignor to The Standard Electric Time Company, Springfield, Mass., a Corporation of Connecticut. Filed Feb. 10, 1928. Serial No. 253,891. 11 Claims. (Cl. 161—1.)



1. An electrical control system comprising a plurality of operating circuits, switching means for closing said circuits in sequence, a rotor for actuating said switching means, the rotor turning only in one direction, an electromagnet for driving said rotor in said direction, a branched control circuit for said electromagnet, one branch containing means for transmitting impulses to said electromagnet at a predetermined rate and the other branch containing an auxiliary switch, and a two-way switch controlled by said rotor for connecting either branch to the electromagnet.

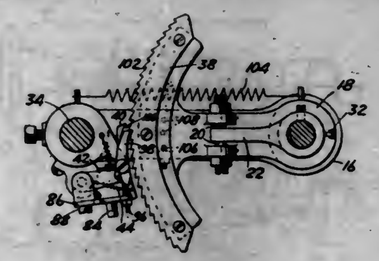
1,892,701. REVETMENT AND PROCESS OF LAYING THE SAME. GEORGE M. HOFFMAN, Upper Montclair, N. J. Filed Feb. 5, 1930. Serial No. 425,985. 28 Claims. (Cl. 61—38.)



1. In combination, a revetment slab having a plurality of guide clips for one side and one for the other side and guide cables, said slab being adapted to slide on said guide cables.

1,892,702. KNITTING MECHANISM. HAROLD E. HOUSEMAN, Edge Moor, Del., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 23, 1930. Serial No. 422,818. 27 Claims. (Cl. 66—135.)

27. A knitting mechanism including a circle of needles and devices cooperating therewith to form stitches, at least one wrap finger, a carrier therefor, means for actuating the wrap finger to cause it to cooperate with a needle, and means for shogging the carrier to carry the wrap finger into cooperation with various needles, said shogging means including a spring constantly urging the carrier in one direction, a toothed plate moving with the carrier, the angular spacing of the teeth corresponding to the angular spacing between the needles, means occupying a fixed angular operative position with respect to the needle cylinder engaging the teeth of said plate whereby the wrap finger

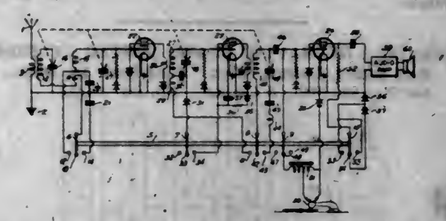


is registered with various needles, and means for releasing the teeth engaging means to initiate movement of the carrier under the action of the spring.

1,892,703. PROCESS OF PRODUCING PLASTIC COMPOSITION. CARL T. GUNNAR LINDH, Highland Park, Mich., assignor to American Rubber Products Company, Detroit, Mich., a Corporation of Michigan. Filed May 7, 1928. Serial No. 275,977. 4 Claims. (Cl. 106—2.)

1. A process of producing plastic composition for battery boxes consisting in mixing fifty percent bituminous material, twenty-five percent fibrous material and twenty-five percent fillers in a dry state, and subsequently applying heat and continuing the mixing until the mass becomes plastic.

1,892,704. RADIO RECEIVING SYSTEM. WILLIAM WALTER MACALPINE, East Orange, N. J. Filed Apr. 12, 1932. Serial No. 604,710. 5 Claims. (Cl. 179—100.11.)

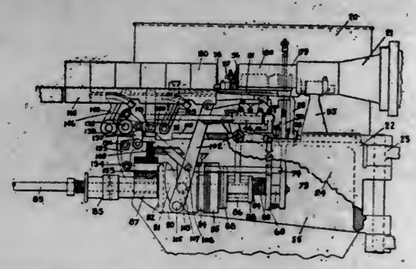


1. A radio receiving system comprising, a plurality of electron tubes, a plurality of tuned circuits, switching means for rendering certain of said tuned circuits operatively in circuit with certain of said tubes whereby received signaling energy is amplified to a smaller or greater extent depending upon the connections of said tuned circuits with said tubes, other switching means for changing the transmission response of said tuned circuits for receiving a narrower or wider band width of signal frequencies and means for controlling said switching means to cause said receiving system to produce greater amplification of a narrower band of frequencies of signals received from certain stations or to produce smaller amplification of a wider band of frequencies from certain other stations the selection of which depends upon the tuning of said tuned circuits.

1,892,705. AUTOMATIC MACHINE FOR CUTTING PLASTIC PRODUCTS. GERHARDT J. PATTE, Peekskill, and RALPH W. BUNGE, Bronxville, N. Y., assignors to Standard Brands Incorporated, New York, N. Y., a Corporation of Delaware. Filed Nov. 19, 1931. Serial No. 576,100. 19 Claims. (Cl. 107—21.)

4. In an automatic machine for forming cakes from an extruded bar of plastic material, the combination

comprising an extruding nozzle, a cutter arm pivotally mounted for reciprocatory motion through an arc, means to operate said cutter including a biased rotary member



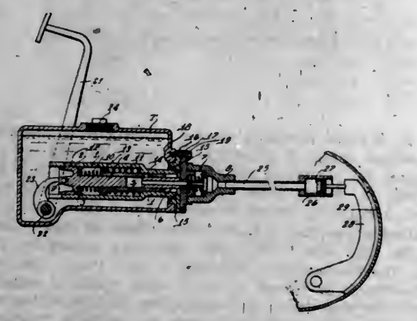
to which said cutter arm is eccentrically connected and means in the path of the bar of plastic material extruded from said nozzle and actuated by the movement thereof to release periodically said biased rotary member.

1,892,706. SURGICAL BANDAGE AND METHOD OF PREPARING SAME. RAYMOND E. REED, Chicago, Ill., assignor to The Kendall Company, Chicago, Ill., a Corporation of Massachusetts. Filed June 15, 1931. Serial No. 544,697. 14 Claims. (Cl. 128—91.)

1. In the preparation of a plaster of Paris bandage the step which comprises treating a foundation fabric before the application of plaster thereto, to incorporate in the fabric an agent for regulating the setting time of the plaster.

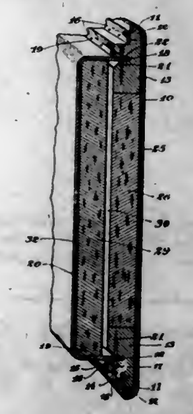
11. As an article of manufacture a plaster of Paris bandage comprising a foundation fabric having incorporated therein an agent for accelerating the setting time of the plaster, and a quantity of unaccelerated plaster of Paris distributed in a thin layer over the body of the fabric.

1,892,707. HYDRAULIC BRAKE MASTER CYLINDER. MAX RUEGG, Detroit, Mich. Filed Sept. 16, 1929. Serial No. 392,819. 5 Claims. (Cl. 60—54.6.)



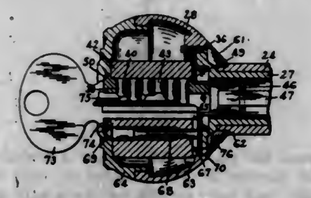
1. A device for developing high fluid pressure in hydraulic braking systems, comprising an open-ended two-diameter master-compressor cylinder body having in wall thereof a normally open inlet port accommodating flow of braking fluid into the low pressure end thereof, said cylinder body being radially flanged at its outlet end, passages formed in the attaching flange accommodating a non-actuating inflow and outflow of braking fluid, a braking-fluid supply tank enclosing said cylinder body and detachably supporting it at its radially-flanged outlet end, said cylinder body projecting into said tank and braking fluid therein, means for attaching said compressor cylinder body to said fluid supply tank, a reciprocable two-diameter or differential piston within said cylinder body, a piston-head sealing member preventing leakage of fluid when piston passes inlet port in wall of low-pressure end of cylinder, ports formed in piston head behind sealing member, said ports being closed by said sealing member when piston moves inwardly on its compression stroke and opened by pressure of fluid when piston moves outwardly, a two-diameter ported sleeve-type sliding valve surrounding the inward end of small-diameter portion of said differential piston and movable therewith and independently thereof, a removable stop projecting through compressor cylinder wall to limit outward retractive movement of said sliding valve, a hollow fluid-conducting port-closing stationary piston opposite small-diameter end of said differential piston and projecting into said sliding valve, passages formed in the large-diameter portion of said valve permitting fluid to flow freely to opposite sides of said portion when valve slides back and forth, a port in the small-diameter wall of said sliding valve affording means of communication between the low-pressure section of compressor cylinder and high-pressure chamber created by movement of said sliding valve into the small-diameter portion of compressor cylinder to point just beyond end of hollow stationary piston, said movement effecting closure of port in sliding-valve wall, thereby cutting off communication with low-pressure end of compressor cylinder, further inward movement of differential piston and slide valve serving to increase pressure on braking fluid, a hardened lever-end contacting-button inserted in outer end of reciprocable piston where externally-derived piston-moving pressure is applied, compression springs for controlling fluid pressure up to time when movement of sliding valve effects transfer from low to high pressure operation of break-cylinder pistons and for returning reciprocable piston and sliding valve to normally inactive positions, an outlet control valve providing for a two-way flow of braking fluid, and an outlet-valve cover or cap serving as a detachably-applied leakless housing for said outlet control valve, said housing being in communication with axially disposed passage in stationary port-closing piston within high pressure chamber and having threaded openings for brake-cylinder pipe-line connections, substantially as shown and described.

1,892,708. DOOR CONSTRUCTION. EMIL P. SCHWARZ, St. Paul, Minn., assignor to Seeger Refrigerator Company, a Corporation of Minnesota. Filed Mar. 31, 1927. Serial No. 179,877. 12 Claims. (Cl. 20—35.)



12. A refrigerator door comprising, inner and outer faces of sheet material, a retaining flange on one of said faces, a sectional insulating frame connecting said faces, a lip on said frame sections extendable under said flange, and insulation within said frame in line with said lip on said frame sections to space the assembled frame sections apart holding said lip on said frame sections under said flange and preventing removal of said sections.

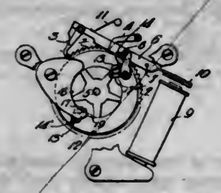
1,892,709. SEPARABLE KNOB LOCK. JOHN H. SHAW, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn. Filed May 17, 1928. Serial No. 278,545. 33 Claims. (Cl. 70—91.)



1. In a lock, a case, a tumbler mechanism mounted in said case, a cover for the lock case separable from the tumbler mechanism, said cover securing the tumbler mechanism in the case, and means normally locking the cover to the case, said means including a part engageable by a key inserted into the lock to be moved in cover unlocking position.

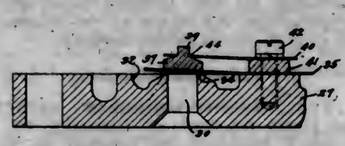
28. In a lock mechanism for a door, a two part door handle, lock mechanism mounted between the handle parts, and means normally securing one part of the handle to the other, said means being controlled by said lock mechanism.

1,892,710. IMPULSE CLOCK. ROY F. SMITH, El Paso, Tex., assignor of one-half to William Fred Kitchens, El Paso, Tex. Filed Aug. 16, 1930. Serial No. 475,816. 12 Claims. (Cl. 58—26.)



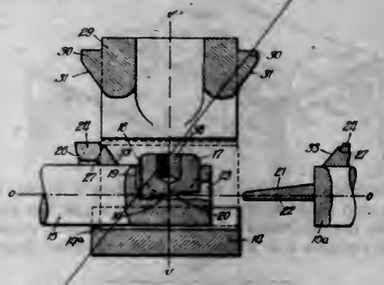
1. A secondary clock having a clock-train and comprising driving means movable back and forth for advancing the clock-train step by step in response to impulses from a master clock, and resetting means in the clock for automatically rendering said driving means ineffective at predetermined intervals, said resetting means including a stop for physically obstructing said back-and-forth movement.

1,892,711. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed May 25, 1925. Serial No. 32,560. 5 Claims. (Cl. 277—46.)



3. A valve device comprising in combination a valve seat, a valve cooperating with said seat and including a leaf spring, a second spring yieldingly holding the valve against the seat, and a thrust member formed of vibration-absorbing material interposed between the springs.

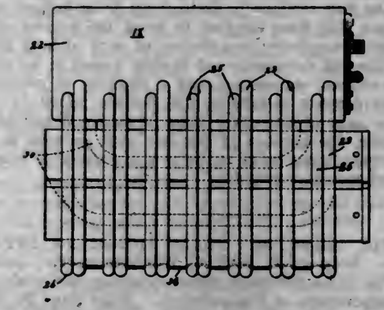
1,892,712. METHOD OF AND MEANS FOR FORMING PIPE T'S. JAMES HALL TAYLOR, Oak Park, Ill. Filed June 20, 1930. Serial No. 462,514. 13 Claims. (Cl. 153—2.)



1. The method of making a pipe T from a tubular blank, which comprises first re-forming less than half the cross-section of said blank to one side of the trunk of the T, and then forming the remainder of said blank over a T-shaped die to form the other side of the trunk and the branch of the T.

5. In die mechanism for forming pipe T's two co-axial mandrel dies movable toward and away from each other, saddles mounted upon said mandrel dies for movement longitudinally thereof, a co-operating external die, and means for moving said saddles when said external die is moved toward said mandrel dies.

1,892,713. REFRIGERATING APPARATUS. HAROLD B. WALLIS, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Jan. 31, 1927. Serial No. 164,712. 21 Claims. (Cl. 62—126.)

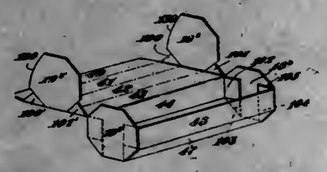


19. A cooling unit for refrigerators comprising a header, a plurality of conduit loops disposed one outside of the other and having their ends connected with said header, said conduit loops being arranged to provide a row of conduits extending longitudinally with respect to the axis of the header to provide at least a portion of a wall of a freezing zone or compartment adapted to receive a receptacle to be cooled, and refrigerant conveying means communicating with said header and spaced laterally from said row of conduits to provide at least one other wall of said freezing zone or compartment.

1,892,714. RECEPTACLE. CHARLES P. WELLMAN, West Medford, Mass. Filed Mar. 4, 1930. Serial No. 433,008. 4 Claims. (Cl. 229—33.)

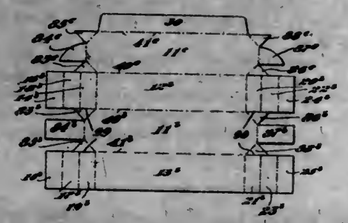
1. An octagonal receptacle comprising an integral sheet of foldable material formed into a group of eight rectangular wall sections defined by intervening lines of increased flexibility, opposite octagonal end walls comprising exten-

sions of said group of rectangular wall sections, glue laps cooperating with said octagonal end sections to retain five of the eight rectangular wall sections in place, transverse to said two end sections thus forming a tray-like structure,



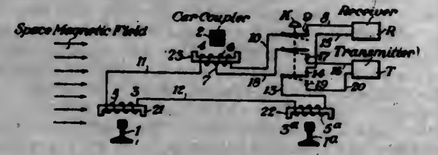
the remaining three wall sections forming a flexible cover for the said tray-like structure, and a tuck-in flap extending from the outermost of said three remaining rectangular wall sections and adapted to hold the cover closed.

1,892,715. RECEPTACLE. CHARLES P. WELLMAN, West Medford, Mass. Filed Mar. 4, 1930. Serial No. 433,009. 6 Claims. (Cl. 229—16.)



1. Receptacle-forming blank of foldable material comprising an end section having more than four sides, a plurality of side wall sections, substantially equal in width to respective sides of said end section, said side wall sections being arranged in two groups of flexibly joined sections the said sections in each group being defined by intervening fold lines adapted to mark the corners of the completed receptacle, one section of each of said groups being directly, integrally and flexibly joined at an end to a side of said end section, and a plurality of connecting sections directly integrally and flexibly joined at their ends to each of the other sides of said end section, respectively, the number of the side wall sections in said two groups being equal to twice the number of sides of said end section minus two.

1,892,716. ELECTRIC TRAIN SIGNALING APPARATUS. RICHARD P. BALLOU, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 28, 1932. Serial No. 589,398. 10 Claims. (Cl. 246—63.)



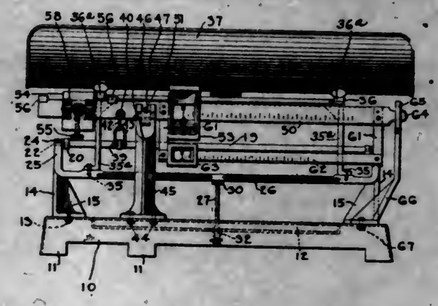
1. Train signaling apparatus of the type comprising three windings on a train disposed in inductive relation to the two track rails and a train coupler respectively and adapted to either receive or transmit by electromagnetic induction, said apparatus being characterized by the fact that the winding associated with the coupler has twice as many effective turns as either of the other two windings during receiving and substantially the same number of effective turns as each of the other two windings during transmission.

1,892,717. SPOOL FOR PHOTOGRAPHIC FILMS. THOMAS GEORGE BAXENDEN, Watford, and JOHN ROBERT COLLYEAR, Bushey, England. Filed Oct. 20, 1930, Serial No. 489,960, and in Great Britain July 28, 1930. 1 Claim. (Cl. 242—71.)



In a spool for photographic films, a cylindrical sheet metal body portion, a disc mounted on each end of the body portion, said body portion having a pair of diametrically opposed longitudinal slots of unequal length, the longer slot having inturned edges forming a guide, and a longitudinal rib formed in said body adjacent both edges of the shorter slot for a purpose specified.

1,892,718. INFANT SCALE. ALFRED BOUSFIELD, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed July 31, 1929. Serial No. 382,489. 11 Claims. (Cl. 265—27.)



1. In a device of the character described, in combination, a base having lever stands fixed thereto, a lever having transverse arms fulcrumed on said stands, a weigh pan disposed above and in the same longitudinal plane as the lever and mounted on supporting means pivotally connected to said lever, and weight offsetting means connected to said lever.

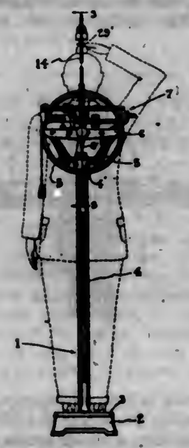
1,892,719. VULCANIZATION OF RUBBER. GIUSEPPE BRUNI and TULLIO GUIDO LEVI, Milan, Italy, assignors to Societa Italiana Pirelli, Milan, Italy. Filed Feb. 17, 1931, Serial No. 516,497, and in Italy Mar. 3, 1930. 4 Claims. (Cl. 18—53.)

1. The process of vulcanising rubber which comprises heating a mixture of rubber and a vulcanising agent in the presence of an accelerator comprising a derivative of bisubstituted dithiocarbamates of quaternary ammonium bases in which the four hydrogen atoms of the ammonium group are substituted by two residues of an aliphatic aldehyde, formaldehyde included.

1,892,720. HEIGHT MEASURING ATTACHMENT. ERNEST EDWIN BURROWS, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed Aug. 1, 1927. Serial No. 209,969. 6 Claims. (Cl. 33—147.)

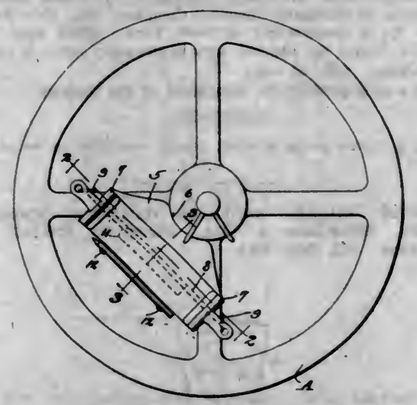
1. In a device of the character described, a support having an opening therein, an indicator on said support and extending into said opening, a shaft mounted in said support, a wheel on said shaft, said wheel having

indicia thereon cooperating with said indicator, means for rotating said wheel from its normal position, spring actuated braking means for permitting the wheel to be



rotated and for holding the wheel in any position with relation to the said indicator and means for returning said wheel to said normal position.

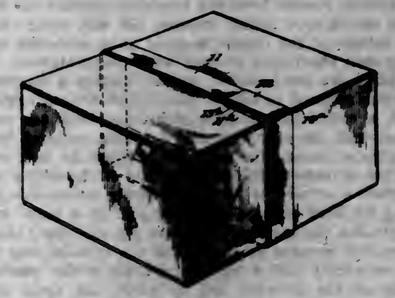
1,892,721. WRITING PAD HOLDER. VICTOR ANTHONY CARDARELLI, Quincy, Mass. Filed Sept. 28, 1931. Serial No. 565,655. 1 Claim. (Cl. 281—44.)



A memorandum pad holder for motor vehicle steering wheels, comprising a body portion constructed of sheet material, clamps at the ends of the body portion for clamping a memorandum sheet thereto, a downwardly curved flange extending from one side of the body portion, and yieldable means on the body portion and engaging the spokes of the steering wheel for securing the body portion on the wheel, and said yieldable means adapted to urge the body portion laterally forcing the flange into engagement with the hub of the steering wheel to securely hold the body portion against movement.

1,892,722. METHOD AND MEANS FOR PACKAGING ARTICLES. MILO C. DODGE, Auburn, N. Y., assignor to Columbian Rope Company, Auburn, N. Y., a Corporation of New York. Filed Sept. 5, 1931. Serial No. 561,433. 3 Claims. (Cl. 24—17.)

1. A package comprising a bundled object having a tendency to expand or come apart, and a band of adjustable size inextensibly encircling and snugly binding said object, said band comprising a ribbon of thin flexible material folded lengthwise upon itself a plurality of



times to constitute a flat narrow tape of uniformly convoluted multi-ply construction, said tape having its end portions tightly telescopically interlaminated.

1,892,723. POLISHING DEVICE. JOSHUA DRUKER, Dorchester, Mass. Filed Nov. 19, 1931. Serial No. 576,169. 2 Claims. (Cl. 15—137.)



1. A manual polishing device comprising a plate having a substantially rectangular main body portion and an integral constricted portion and a polishing material overlying the underface of said main body portion, said material extending beyond the borders of said main body portion and having a portion thereof rolled over the forward edge of the main body portion and attached to the upper face of said plate adjacent said forward edge, and having its rear corners folded over the constricted portion and attached thereto, said main body portion having a plurality of passages and a polish reservoir integrally attached to the upper face of said main body portion feeding polish through said passages.

1,892,724. FIRE EXTINGUISHER. SAMUEL M. GREEN, Springfield, Mass. Filed Feb. 9, 1931. Serial No. 514,533. 4 Claims. (Cl. 169—26.)



1. A fire extinguisher which comprises a shatterable container adapted to hold a quantity of fire extinguishing liquid, a cylinder having a shallow cup shaped flange upon

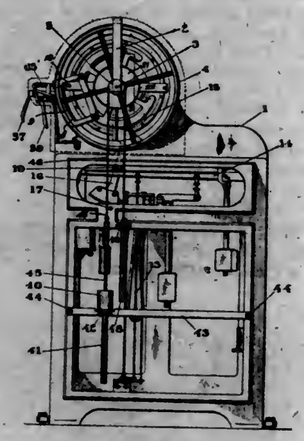
which the container seats, narrow strap members attached to said flange and embracing the container to hold the flanged cylinder against the container, a spring positioned in the cylinder, and a bolt normally held in the cylinder remote from the container against the action of the spring by a fusible member, the bolt being adapted upon failure of the fusible member to be projected by the spring into shattering contact with the container.

4. In a fire extinguisher which includes a shatterable container adapted to hold a quantity of fire extinguishing liquid, a cylindrical member positioned with one end in contact with the container and a spring actuated bolt in the cylinder, means for normally holding the bolt remote from the container against the action of the spring which comprises a cotter pin formed of easily deformable metal having its head engaged with the bolt at a point within the cylinder, the arms of the cotter pin extending through a restricted opening at the end of the cylinder and being bent outwardly and a mass of fusible solder positioned outside of the cylinder and in which the arms of the cotter pin are imbedded and thereby held in outwardly bent bolt retaining formation.

1,892,725. PRODUCTION OF PHOTOSENSITIVE EMULSIONS. ROBERT GRIESSBACH, Wolfen, and THEODOR KOLLMANN, Mannheim, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Aug. 6, 1929, Serial No. 383,972, and in Germany Aug. 14, 1928. 16 Claims. (Cl. 95—7.)

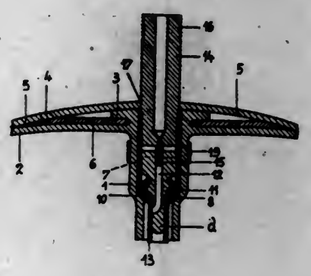
1. A process for the production of photosensitive emulsions which comprises incorporating a photosensitive metal compound with a water-insoluble metal salt of a vegetable polymer aldehyde carboxylic acid.

1,892,726. RECORDING SCALE. HARLAN A. HADLEY, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed May 28, 1928. Serial No. 281,117. 16 Claims. (Cl. 265—5.)



1. In a device of the character described, the combination with a weighing mechanism including a shaft having an indicator thereon adapted to cooperate with a chart, of a recording means comprising a rotatably mounted type wheel, said shaft having means co-axially disposed thereon for determining the position of said type wheel for a recording operation.

1,892,727. VALVE FOR FOOTBALLS AND OTHER INFLATABLE ARTICLES. WILHELM HAUBENSAK and WALTER AUGUST WETTERWALD, Zurich, Switzerland. Filed Mar. 12, 1930, Serial No. 435,202, and in Switzerland Oct. 24, 1929. 3 Claims. (Cl. 273—65.)



1. In an inflatable ball in combination, an inner elastic bladder, an internally projecting flexible tube formed integral with said bladder, a sleeve within said tube, a reinforcing ring surrounding said flexible tube and adapted to press the tube wall against said sleeve, and a valve structure within said sleeve.

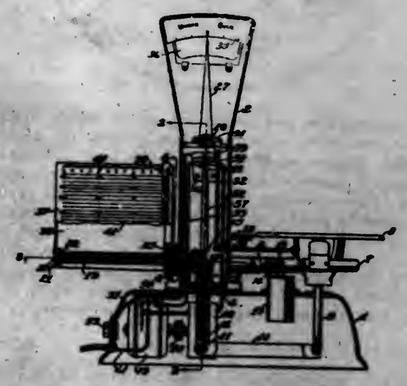
1,892,728. CUPRIC CYANIC COMPOUND AND PROCESS FOR ITS MANUFACTURE. HERMANN HAGENBST, Wiesdorf-on-the-Rhine, and FRIEDRICH WILHELM STAUF, Cologne-Deutz, Germany, assignors, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 24, 1929, Serial No. 388,259, and in Germany Sept. 3, 1928. 1 Claim. (Cl. 23—75.)

As a new product the compound of the formula:

$$CuNH_3(CN)_2$$

being a stable green powder, nearly insoluble in water.

1,892,729. SCALE. NATHAN A. HALLWOOD, Columbus, Ohio. Filed May 9, 1931. Serial No. 536,225. 4 Claims. (Cl. 265—56.)

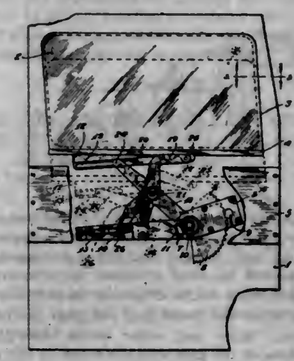


1. In a weighing scale, a base, a beam pivotally mounted on said base for limited oscillatory movement in a vertical plane, a weight receiver carried by said beam, a weight member shiftable longitudinally of and carried by said beam, motor operated means for effecting the movement of said weight, a switch automatically controlled by the movement of said beam for effecting the operation of said motor, and a manually controlled switch for breaking the circuit to said automatic switch and for closing a second circuit leading to said motor.

1,892,730. PROCESS OF PREPARING DERIVATIVES OF THE NAPHTHAZARINE SERIES. GEORG KRAENZLEIN, Frankfort-on-the-Main, ROBERT WELDE, deceased, Frankfort-on-the-Main-Hochst, by Anna Welde, administratrix, Frankfort-on-the-Main, and PAUL OCHWAT, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 5, 1930, Serial No. 493,686, and in Germany Nov. 28, 1929. 3 Claims. (Cl. 260—56.)

1. The process which comprises causing a saturated aldehyde of the lower aliphatic series to act upon a solution of a naphthazarine intermediate product obtainable by treating a compound of the group consisting of 1.5- and 1.8-dinitronaphthalene with sulfuric acid in the presence of a reducing agent according to known processes in sulfuric acid.

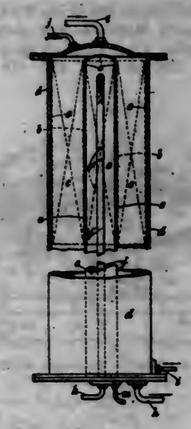
1,892,731. WINDOW REGULATOR. JOHN W. LAKIN, Detroit, Mich., and HERBERT C. FIELD, Windsor, Ontario, Canada, assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 3, 1931. Serial No. 578,754. 11 Claims. (Cl. 268—176.)



1. The combination with a window glass adapted to be reciprocated upwardly and downwardly for closing and opening a window opening, a regulator mechanism comprising an element connected to the glass, another element having sliding connection with the glass at a point spaced from the first connection, said elements serving to stabilize the glass from cocking in the plane in which it is normally positioned, and means for actuating said elements to raise and lower the same at the points of connection with the glass for shifting the glass, the point of connection between the first named element and the glass being fixed relative to the glass, the fixed connection of the element with the glass being constrained to raise and lower in a straight line path whereby sidewise motion of the glass in its plane is prevented.

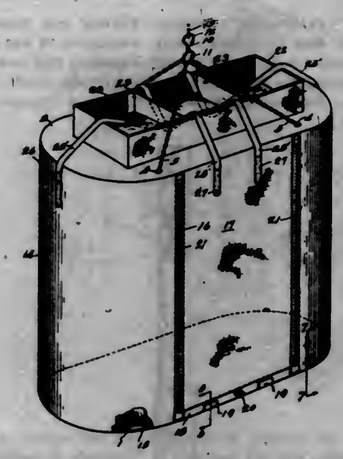
7. A window regulator comprising a support member, a pair of pivotally connected arms, one adapted to have a fixed pivotal connection and the other a movable connection with a window, the one arm being looped about the other, and guide means operatively connected to the one arm causing the fixed pivotal connection to travel in a straight line path.

1,892,732. HYDROGENATING APPARATUS. ERNEST JOSEPH LUSH, London, England. Filed May 21, 1930, Serial No. 454,498, and in India May 28, 1929. 3 Claims. (Cl. 23—288.)



1. In hydrogenating apparatus, a reaction vessel, a plurality of cylindrical tubular cages of acid resisting metal within said vessel, each of said tubular cages containing pure nickel turnings forming a compact reticulated catalytic element and each of such elements not materially exceeding six inches in thickness, said elements being anodically oxidized preparatory to their use in said hydrogenating vessel.

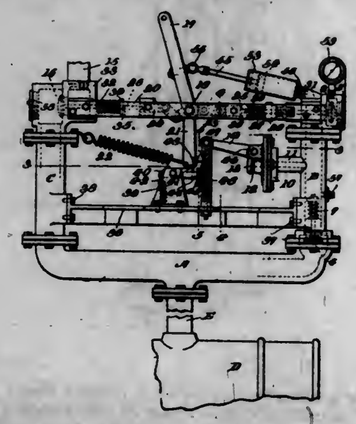
1,892,733. SUSPENDED CAMP COOLER. J. HOWARD MENDENHALL and THOMAS T. SHOAF, San Francisco, Calif. Filed Sept. 16, 1931. Serial No. 563,204. 4 Claims. (Cl. 45—132.)



1. A collapsible cooler comprising a base and a top, flexible supporting members extending from the base and passing through the top, a flexible wall connecting the base and the top, a portion of the wall constituting a door, shelves adjustably connected to the supporting members, clips car-

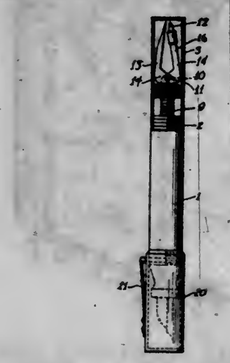
ried by the base, a bar carried by the bottom of the door, and being receivable by the clips, and fastening means for securing the entire lengths of the side edges of the door to the edges of the flexible wall.

1,892,734. AIR CONTROL DEVICE WITH AUTOMATIC RELEASE. DANIEL MURPHY and GEORGE FRED LEHBERGER, New Castle, Pa. Filed May 26, 1931. Serial No. 540,190. 12 Claims. (Cl. 137—78.)



12. A device for discharging the contents of a container comprising a conduit having communication with the container and a valve inlet in communication with a source of fluid pressure supply, a valved vent outlet for said container, means to operate said valves to open the pressure inlet and close the vent, means for holding said valves in said positions, and a pressure responsive means operated by the fall in fluid pressure in said container when the contents thereof are completely discharged for automatically releasing said valve holding means, and means to automatically close the pressure inlet valve and open the vent valve when said holding means is released.

1,892,735. COMPASS. URBANO PINEDA and TIOFILO L. ANABISA, San Francisco, Calif., assignors of one-half to said Pineda, one-fourth to said Anabisa, and one-fourth to Felomino V. Langland, San Francisco, Calif. Filed Jan. 12, 1932. Serial No. 586,180. 3 Claims. (Cl. 33—149.)



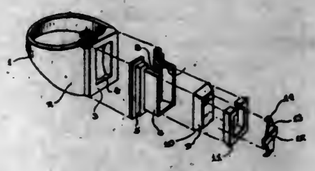
1. In combination, a holder, an insert carried by the holder and having a square opening, a screw having a square head received in the opening and a bifurcated end, compass members having cam-shaped portions, a pin for pivotally securing the portions to the bifurcated end, a knurled nut mounted on the screw, and a spring disposed in the bifurcated member and having its ends bearing against the compass members for causing the cam portions to contact with the nut.

1,892,736. COMPACT. CHARLES S. ROOT, Springfield, Mass. Filed Feb. 1, 1932. Serial No. 590,028. 6 Claims. (Cl. 132—88.)



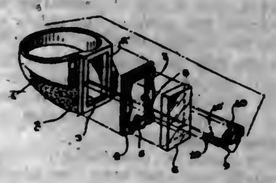
1. As a new article of manufacture, a container having a lower wall and side walls extending upwardly therefrom to provide an open upper side, a disc between said side walls which is rotatable therein and is provided with openings therethrough, a grip on the upper side of said disc, portions of said side walls at the upper ends thereof extending inwardly in the form of a lip and a spring around the inner sides of said side walls between said disc and lip at the upper ends of said walls.

1,892,737. RING. EDWARD J. SCHNARR, Rochester, N. Y., assignor to Bastian Brothers Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 6, 1932. Serial No. 585,069. 4 Claims. (Cl. 63—15.)



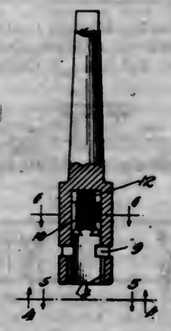
1. The combination with a body, a frame secured to the body and having a bezel provided with an inner tapering wall, the frame also having an internal shoulder, a gem or the like seated on said shoulder and having beveled edges, a supplemental frame disposed on said shoulder and interposed between the bezel and the gem or the like and having tapering inner and outer walls corresponding to the beveled edges of the gem and the taper of the inner wall of the bezel, and an ornament secured to the supplemental frame, the outer edge of the bezel being directed over onto the supplemental frame.

1,892,738. RING. EDWARD J. SCHNARR, Rochester, N. Y., assignor to Bastian Brothers Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 6, 1932. Serial No. 585,071. 4 Claims. (Cl. 63—15.)



1. The combination with a body provided with a cut away portion, a frame mounted upon the body in line with the cut away portion thereof, said frame having notches at opposite points, a gem seated within the frame, and an ornament applied to the face of the gem and provided at opposite points with tongues which are bent about the gem and are received in the notches of the frame and secured to the frame.

1,892,739. TOOL AND TOOL HOLDER. J. HUGO SMITH, Detroit, Mich. Filed Dec. 13, 1928. Serial No. 325,756. 8 Claims. (Cl. 279—93.)



1. A tool and holder therefor, comprising cooperating elements forming a part of each whereby they may be moved relatively in longitudinal alignment, an opening formed in the holder and extending entirely through the wall thereof to form a square shoulder to receive one of the cooperating elements of the tool in locking position, and means for automatically giving one of said members a relative twisting movement during their relative longitudinal movement and when said cooperating elements of the tool reach the opening in the holder.

1,892,740. METALS REDUCED FROM THEIR OXIDES WITHOUT MELTING. WILLIAM H. SMITH, Detroit, Mich., assignor to General Reduction Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 22, 1929. Serial No. 401,607. 8 Claims. (Cl. 75—17.)

1. The method of treating and recovering gangue from metals reduced from their oxides without melting which comprises mixing a "fluxing" agent, having a fluxing temperature below the melting point of iron with the finely divided reduced metal, forming the same into briquets and subjecting the briquets to temperatures less than the melting point of the metal.

1,892,741. REFRIGERANT. EDWARD E. SORENSEN, Detroit, Mich., assignor, by direct and mesne assignments, to Paul F. Scholbe, Detroit, Mich. Filed Aug. 24, 1928, Serial No. 301,938. Renewed June 29, 1931. 3 Claims. (Cl. 252—5.)

1. A new product for use as a refrigerant, comprising nitrous ether and ethyl alcohol.

1,892,742. PRODUCTION OF ACETONE. HANS WALTER and HERMANN SCHULZ, Mains-Mombach, Germany, assignors to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 19, 1931, Serial No. 517,014, and in Germany Jan. 26, 1928. 14 Claims. (Cl. 260—184.)

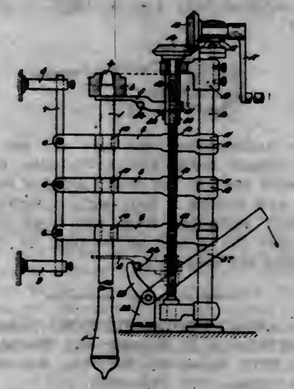
1. A process of manufacturing acetone from a ketonizable compound of the group consisting of acetic acid, acetylene, acetaldehyde, ethyl acetate, which comprises mixing the vapor of the initial substance with steam, and passing the mixture into a reaction chamber at a temperature between 400 and 500° C. in the presence of a ketonizing catalyst of carbonaceous material, the walls of the reaction chamber consisting of a substance selected from the group consisting of copper; copper alloys of zinc, tin, silver or nickel; aluminum; steel alloy containing 18% chrominum with nickel; ceramic masses.

1,892,743. CLOSURE FASTENER FOR RECEPTACLES. DAVID M. WENGER, Leola, Pa. Filed May 18, 1930. Serial No. 452,103. 3 Claims. (Cl. 220—55.)



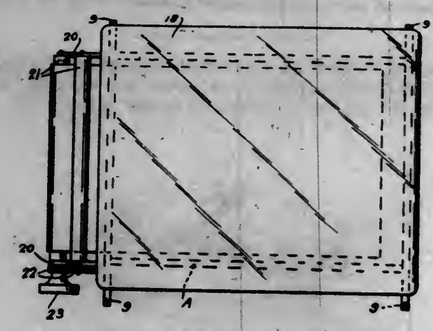
1. In combination with a receptacle having an open end provided with inturned flange, a closure for said end having a rim fitting slidably in said flange and also having an outturned flange extending from said rim to seat upon the open end, a guide secured diametrically across said closure, bolts slidable in opposite directions in said guide, each of said bolts having the outer end thereof slidable through said rim, under the inturned flange of said receptacle, yielding means for forcing said bolts into locking engagement with said inturned flange, and means on the adjacent ends of said bolts for withdrawing them from locking engagement with said inturned flange.

1,892,744. DEVICE FOR STRINGING GLASS BODIES ON A MANDREL. JOHANNES ANINGA, Eindhoven, Netherlands, assignor to N. V. Maatschappij tot Exploitatie van Uitvindingen, Rotterdam, Netherlands. Filed June 15, 1931, Serial No. 544,631, and in the Netherlands June 27, 1930. 5 Claims. (Cl. 49—17.1.)



5. A device for piling up glass objects on a mandrel, comprising a plurality of devices for the support of the mandrel and being successively removable from the mandrel, whereby the next successive support serves as the support for said mandrel, a movable cam, for effecting the opening and closing of the supporting devices, and a carrier for the objects to be piled on the mandrel, said carrier being movably secured to said cam, and being adapted for movement perpendicularly to the mandrel.

1,892,745. READING STAND. DANIEL B. BOLICH, Skidmore, Mo. Filed Mar. 29, 1932. Serial No. 601,832. 3 Claims. (Cl. 120—30.)



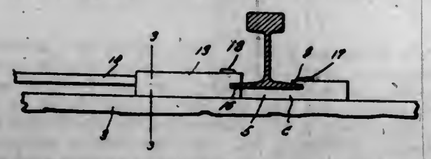
1. A device of the class described comprising a main frame, legs connected therewith, three of the legs being adjustable as to their length, the end members of the main frame projecting beyond a side member thereof at one side of the device, sockets carried by the projecting portions of the end pieces, sockets carried by the other side of the main frame, rods passing thru the sockets and adjustably held therein, a rectangular frame pivotally connected at its upper end to the rods, a strip carried by the said frame projecting upwardly beyond the same, a reading glass of inverted dish shape resting on the strip and having its flange engaging the outer edge of the rectangular frame, said end members having slots therein, a top forming portion located between the side and end members and spaced below the upper edges thereof with its top face in alinement with the lower walls of the slots, an extension at the front of the main frame, feeding rollers located therein and geared together, and means for rotating one of the rollers to feed a strip between them and through the front slot upon the top forming portion.

1,892,746. FLOAT STRUCTURE. VITTORINO COLONNESE, Rome, Italy. Filed Jan. 9, 1930, Serial No. 419,637, and in Italy Jan. 8, 1929. 2 Claims. (Cl. 244—2.)



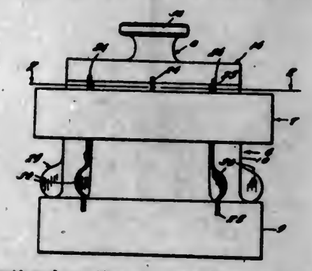
1. In an undercarriage for land and sea planes with resiliently hinged floats and antifriction devices in a small chamber open to the water along a portion of the float keel and having a float step, a decidedly curved endless track extending from the front float section, which touches the ground on landing, to the rear keel section behind the float step.

1,892,747. ANTICREEPING DEVICE. FORREST H. GILMORE and HERMAN H. KRUGER, San Pierre, Ind. Filed May 16, 1931, Serial No. 537,918. Renewed Aug. 16, 1932. 6 Claims. (Cl. 238—288.)



1. A tie plate provided with a transverse groove and a longitudinal groove intersecting the transverse groove, said plate adapted to receive in the transverse groove thereof the base flange of a rail, a gauge rod having an end portion received in the longitudinal groove and provided with a cross head located in the transverse groove and engaging an adjacent edge portion of the base flange of the rail for retaining said base flange within said transverse groove, and a hood plate engaging the tie plate and bridging the longitudinal groove, said hood plate serving to retain said end of the gauge rod within said longitudinal groove.

1,892,748. CORE BOX. MYNARD L. HOLLOWAY, La Porte, and CLYDE STEPHENSON, Hanna, Ind. Filed June 22, 1932. Serial No. 618,736. 3 Claims. (Cl. 22—18.)



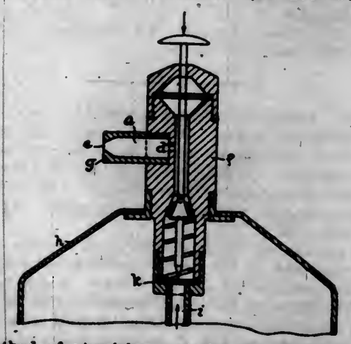
1. A sectional casting or core box comprising a sectional body portion, a cap seatable upon the body portion, cap engaging locking members carried by the body portion, and annular means for maintaining said locking means in cap engaging position and for maintaining the sections of the body portion together.

1,892,749. COMB. NELS PHILAJA, El Paso, Tex. Filed May 10, 1932. Serial No. 610,471. 2 Claims. (Cl. 132—11.)



1. A comb of the class described having two rows of teeth with a central space between the rows, the teeth of one row being alternately arranged with those of the other and the teeth of the two rows converging to their free ends with said free ends of the teeth of one row being spaced laterally from the ends of the teeth of the other row.

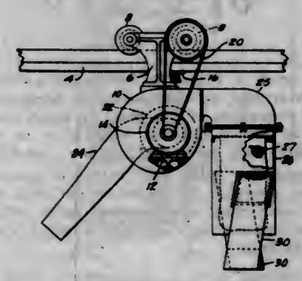
1,892,750. METHOD AND APPARATUS FOR ATOMIZING MATERIALS. ERIK ROTHEIM, Oslo, Norway. Filed Nov. 12, 1928, Serial No. 318,878, and in Norway Nov. 23, 1927. 5 Claims. (Cl. 299—95.)



1. Method of atomizing materials in which a solution of the material in a liquefied gas is caused to flow in the form of a confined stream from a body of the solution maintained under a pressure not less than the liquefaction pressure of the said gas under the prevailing conditions towards a point of discharge into the atmosphere, subjecting the confined stream to a substantial and sudden release of pressure to below the liquefaction pressure of the said gas before the stream reaches the point of discharge, the said release of pressure being only partial but sufficient to result in converting the solution into a dispersion of non-gaseous material in a flowing compressed gas, and discharging this dispersion through a restricted orifice into the atmosphere.

5. As a new article of manufacture an apparatus for atomizing materials comprising a hermetically sealed can charged with a solution of a material to be atomised in a liquefied gas under a pressure not less than the liquefaction pressure of the said gas under the prevailing conditions, an atomizer nozzle having a channel, means for placing said channel in communication with the charge in the can, an expansion chamber in the said channel immediately adjacent to the exit opening of said nozzle, perforated wall in the channel at the entrance end of the expansion chamber, the said wall having at least one short restricted passage admitting fluid into the expansion chamber from the body of solution, the said passage in the wall being so arranged as to cause the entering flow to be directed substantially parallel to a straight line from the center of the entrance opening to the exit opening of the expansion chamber.

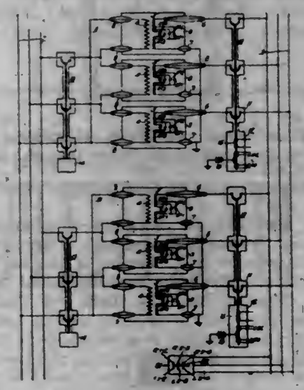
1,892,751. METHOD OF AND APPARATUS FOR OPERATING ON SPINNING FRAMES AND OTHER MACHINES. WILLIAM J. SMITH, Brockton, Mass., assignor to Firth-Smith Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 31, 1928. Serial No. 329,422. 9 Claims. (Cl. 15—269.)



1. The method of operating on spinning frames and other machines arranged in rows, which comprises creating an upwardly directed current of air, traversing the current of air in an endless path successively over the machines of the several rows so as to draw dust and other fine particles from the machines, and collecting said particles in a receptacle.

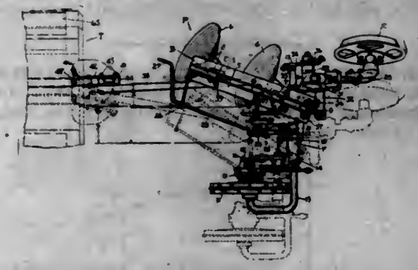
1,892,752. TRANSFORMER REGULATING SYSTEM. PHILIP SPORN, New York, N. Y. Filed June 6, 1930. Serial No. 459,457. 8 Claims. (Cl. 171—119.)

1. In a transformer regulating system, a power line, two independently operable transformers having each separate windings for connection to said power line, an independently operable circuit breaker for each transformer to selectively effect connection or disconnection of the transformer windings from or to the line, a plurality of tap connections on each transformer winding, a tap-changing mechanism on each transformer winding for changing the tap connections, independent control means for each of said circuit breakers to independently control their normal conditions, means for initiating and carrying out tap-changing operations on said transformers, said means including means actuated in response to the initiation of a tap-changing operation to alternately actuate said circuit breakers to alternately disconnect the windings of each transformer from the line while the windings of the other transformer are held connected to



the line; and to alternately cause the tap-changing mechanism on each transformer to effect a tap-changing operation on the windings while its associated circuit breaker is open and the circuit breaker of the other transformer is closed.

1,892,753. PLOW. CARL G. STRANDLUND, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed July 26, 1929. Serial No. 381,103. 18 Claims. (Cl. 97—72.)

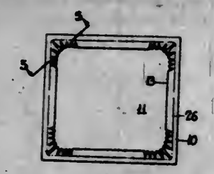


1. In a plow, the combination of a frame member, wheel means supporting the same, a beam member, plow discs carried by said beam member, means connecting said frame and beam members permitting the horizontal angle therebetween to be adjusted for varying the widths of the furrows cut by said discs, and a link extending between said members for maintaining the angular adjustments established therebetween, said link being pivotally mounted at one end thereof on the beam member for horizontal swinging movement therewith.

1,892,754. METHOD OF FORMING INTERIOR ANGLE IN SHEET METAL STAMPING. JOHN P. TARBOX, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 10, 1930. Serial No. 467,072. 3 Claims. (Cl. 113—51.)

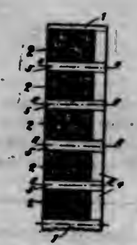
1. The method of making an angular draw which comprises pre-forming on the margin of a blank to be subjected to the draw a series of corrugations throughout

the area of the draw and laterally on each side thereof extending substantially in the direction of the draw and decreasing in size on each side of the angle of the draw,



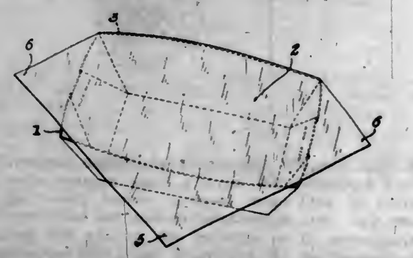
and thereafter making the draw by causing the metal to flow along the sides of the angle into the body of the angle.

1,892,755. METHOD OF MAKING ELECTRICAL CONDENSERS. WILHELM SCHEPPMANN, Berlin-Tempelhof, Germany, assignor to C. Lorenz, A. G., Berlin-Tempelhof, Germany. Filed Mar. 18, 1930, Serial No. 436,775, and in Germany May 25, 1929. 5 Claims. (Cl. 175—41.)



1. The method of manufacturing electrical condensers which consists in coating a continuous strip of dielectric material at both sides with a metallic layer with transverse sections at definite intervals left free from said coating and slicing said strips across said free sections.

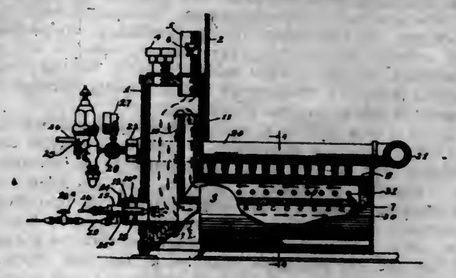
1,892,756. FOOD CONTAINER. RALPH E. VAN HORNE, Milwaukee, Wis., assignor to Josephine A. Van Horne, Milwaukee, Wis. Filed Oct. 3, 1930. Serial No. 486,093. 3 Claims. (Cl. 229—43.)



1. A container for foods comprising a preformed paper dish, and a cover sheet attached adjacent one edge of said dish, said cover sheet being formed of thin waxed paper and being normally folded into said dish with a tongue projecting from said dish.

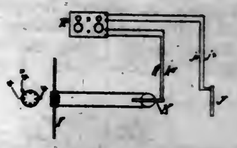
1,892,757. FLUID FUEL BURNER FOR DOMESTIC HEATING PURPOSES. WALTER W. WILLIAMS, Bloomington, Ill. Filed Sept. 26, 1929. Serial No. 395,242. 7 Claims. (Cl. 158—56.)

1. In a fluid fuel burner, the combination with means for supplying air, liquid fuel and steam thereto the said air being supplied continuously, of means for atomizing the liquid fuel in the presence of steam, means for producing flameless oxidation of the atomized fuel and for burning the vapors thereof including a refractory chamber for receiving the atomized fuel adapted to be ignited in the entrance thereof, said chamber provided with means for delivering a part of the products of combustion



and unburned vapors therefrom to be burned in the atmosphere and delivering the remaining to mix with the air and be ignited and directing the products of such combustion and unburned vapors to enter the refractory chamber with the steam and atomized oil.

1,892,758. DIRECTION FINDER. FREDERICK W. WINKLER and LOUIS L. KAESS, Jamaica, N. Y.; said Winkler assignor to said Kaess. Filed Mar. 14, 1928. Serial No. 261,566. 8 Claims. (Cl. 250—11.)



2. In a craft, a rotatable directional antenna; a stationary directional antenna mounted perpendicularly to the line of propulsion of said craft; a radio receiver when connected to either antenna responsive to signals received through said connected antenna; bearing indicator means cooperating with said rotatable antenna to determine the direction of the source of said signals and means for connecting said receiver with either antenna to make it responsive to signals received through said connected antenna.

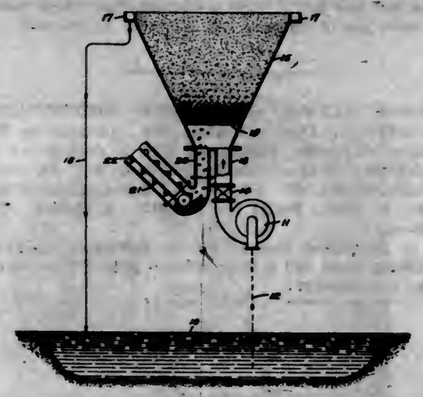
1,892,759. AMMUNITION. WATSON H. WOODFORD, Bridgeport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Mar. 19, 1930. Serial No. 436,988. 1 Claim. (Cl. 102—28.)



A projectile having applied thereto a coating of cadmium capable of forming a corrosion preventive film on the walls of a gun bore when the projectile is fired therein.

1,892,760. APPARATUS FOR OBTAINING SODIUM CHLORIDE. GEORGE B. BURNHAM, Reno, Nev. Filed Sept. 5, 1928. Serial No. 304,119. 7 Claims. (Cl. 23—273.)

1. In an apparatus for recovering salts from brine, a crystallizing tank, an inlet conduit arranged in the bottom of said tank for passing an inlet stream of brine into the tank, and a hydraulically closed collecting chamber arranged in the bottom of said tank and adja-



cent the inlet conduit for collecting substantially all the salt crystallized from the brine and falling against the inlet stream of brine.

1,892,761. STOVE CONSTRUCTION. PHILIP A. CELANDER, Bloomington, Ill., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill., a Corporation of Illinois. Filed June 17, 1929. Serial No. 371,342. 2 Claims. (Cl. 126—93.)



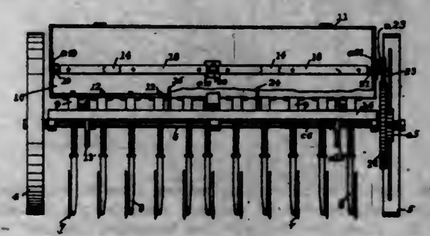
1. In a stove construction, a fluid burner therein, a casing about and spaced apart from said burner, a fluid supply reservoir supported upon the exterior of said casing, and a plurality of channels secured to the interior of the casing and about said burner, each channel opening to the atmospheric air adjacent the top and bottom of the casing, whereby when the burner is in operation the heated air will pass out of the channels at the upper openings and fresh air will be drawn therein through the lower openings.

1,892,762. RADIATOR BRACKET. CONRAD A. DIETERICH, Mount Vernon, N. Y. Filed Jan. 27, 1928. Serial No. 250,011. 10 Claims. (Cl. 248—17.)



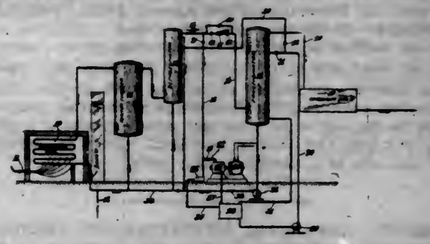
1. A radiator support comprising an arm having an upper substantially horizontal edge portion constituting a fulcrum, a movable saddle member adapted to receive and support a radiator, and means for oscillatingly poising said saddle member on said fulcrum, substantially as specified.

1,892,763. GRAIN DRILL STERILIZER-MIXING ATTACHMENT. MELVIN E. GASS, Colfax, Wash. Filed Feb. 8, 1930. Serial No. 426,910. 1 Claim. (Cl. 111—1.)



A sterilizer mixing attachment for grain drills of the type having an elongated seed hopper mounted on ground wheels, comprising bearings mounted one at each end of the hopper and one centrally of the hopper, a relatively flat mixing bar provided with cylindrical end portions and a central cylindrical portion engaging in said bearings, a gear attached to one of the ground wheels and meshing with a second gear mounted on one end of said mixing bar whereby the mixing bar may be rotated within the hopper to mix the seed and the sterilizer.

1,892,764. DISTILLING SYSTEM. PHILANDER R. GRAY, Newark, N. J.; Alanson McD. Gray, administrator of said Philander R. Gray, deceased, assignor to The Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Filed June 8, 1927. Serial No. 197,268. 1 Claim. (Cl. 196—47.)

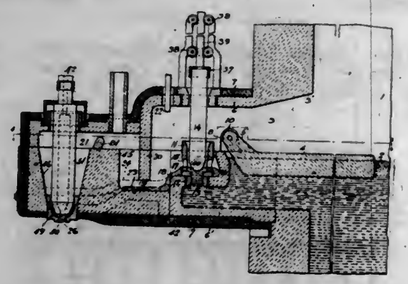


In a hydrocarbon cracking system comprising a still, reaction chamber, dephlegmator, and fractionator, means for converting the heat of the vapor under pressure in the system into mechanical work comprising a prime mover of the vapor engine type, means for introducing a part of said vapor from the dephlegmator into said prime mover at high pressure, means for by-passing the remainder of the vapor into said fractionator, means for directing the exhaust vapor from the prime mover into said fractionator and means for returning the condensate from said prime mover to said system for retreatment.

1,892,765. METHOD AND APPARATUS FOR FEEDING MOLTEN GLASS. GEORGE E. HOWARD, Butler, Pa., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Feb. 27, 1919. Serial No. 279,541. 43 Claims. (Cl. 49—55.)

1. The method of feeding molten glass from tank furnaces which comprises causing the resistance to the flow of the molten glass at the discharge point to be automatically varied in response to variations in the

level of the molten glass in the tank whereby the rate of flow of the glass at the discharge point is maintained substantially constant.



42. Apparatus for feeding molten glass in controllably shaped, suspended mold charges, comprising a container for the glass provided with an impulsion chamber having downwardly converging sides and having a discharge outlet in its bottom, and a discharge controlling implement adapted to reciprocate vertically above said outlet, and having its lower end in said well when said implement is in its lowest position but when in such position being out of contact with the walls of the well, the converging side walls of the chamber cooperating with the implement to vary the cross section of the space between the walls of the chamber and the implement to thereby vary the dynamic effect of the implement upon the discharging glass to control the rate of discharge of the glass and to thereby controllably shape charges while in free suspension from the outlet.

1,892,766. CATALYTIC REMOVAL OF HYDROGEN OR OXYGEN CONTAINING GROUPS FROM ORGANIC COMPOUNDS. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Apr. 3, 1928. Serial No. 267,134. 19 Claims. (Cl. 260—108.)

1. A method of catalytically splitting groups containing at least one of the elements hydrogen and oxygen from organic compounds containing such groups, which comprises subjecting the compounds at reaction temperatures to the action of a contact mass containing a splitting catalyst and having associated therewith substantial amounts of a permutogenetic body.

1,892,767. CATALYTIC OXIDATION OF AMMONIA. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed June 9, 1928. Serial No. 284,280. 9 Claims. (Cl. 23—162.)

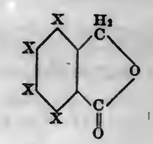
1. A method of oxidizing ammonia to oxides of nitrogen, which comprises passing ammonia admixed with an oxygen containing gas at an elevated temperature over a contact mass containing specific catalysts for the oxidation of ammonia and also containing reaction product of a base exchange body with a compound containing as an acid radical a compound of a metal of the 5th and 6th groups of the periodic system capable of reacting therewith to form a salt-like body, said reaction component containing no ingredients which are poisons for the reaction being carried out.

1,892,768. OXIDATION OF FLUORENE. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 31, 1928. Serial No. 316,364. 17 Claims. (Cl. 260—131.)

1. A method of oxidising fluorene substances to fluorenones, which comprises vaporizing the substances, admixing the vapors with an oxidizing gas and large amounts of steam in addition to that normally present and passing the mixture at reaction temperatures between 350 and 500° C. over a contact mass which favors the oxidation of fluorene substances to fluorenones.

1,892,769. PLASTIC OR COATING COMPOSITIONS. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Original application filed May 29, 1928, Serial No. 281,593. Divided and this application filed Apr. 4, 1929. Serial No. 352,610. 4 Claims. (Cl. 106—22.)

1. A plasticized composition comprising a cumarone and indene resin and a hydrogenated phthalide substance having the formula



in which X is H or H_2, at least one X being H_2.

1,892,770. PURIFICATION OF CRUDE AROMATIC COMPOUNDS. ALPHONS O. JAEGER, Mount Lebanon, and LLOYD C. DANIELS, Crafton, Pa., assignors to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 5, 1929. Serial No. 397,723. 15 Claims. (Cl. 202—46.)

1. A method of purifying solid crude aromatic compounds, which comprises fractionally vaporizing the product from the molten state at a temperature below its boiling point in a carrier gas stream containing vapors of at least one chlorinated organic compound the vaporization being effected by causing the carrier gas stream containing the vapors of the chlorinated compound to contact with the crude aromatic compound.

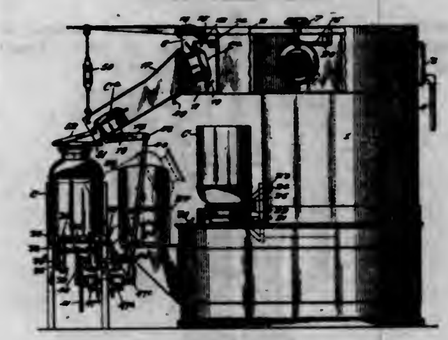
1,892,771. PURIFICATION OF CRUDE AROMATIC COMPOUNDS. ALPHONS O. JAEGER, Mount Lebanon, and LLOYD C. DANIELS, Crafton, Pa., assignors to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 5, 1929. Serial No. 397,738. 12 Claims. (Cl. 202—46.)

1. A method of purifying solid crude aromatic compounds, which comprises fractionally vaporizing the product in a carrier gas stream containing vapors of a compound containing a furane or hydrogenated furane nucleus by bringing the carrier gas stream containing the furane compound into contact with the crude aromatic compound.

1,892,772. PURIFICATION OF CRUDE AROMATIC COMPOUNDS. ALPHONS O. JAEGER, Mount Lebanon, and LLOYD C. DANIELS, Crafton, Pa., assignors to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Nov. 1, 1929. Serial No. 404,202. 12 Claims. (Cl. 202—46.)

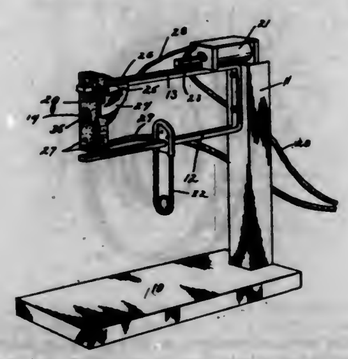
1. A method of purifying solid crude aromatic compounds, which comprises fractionally vaporizing the product in a carrier gas stream containing vapors of at least one compound included within the group consisting of unchlorinated aromatic hydrocarbons, phenols, amines, alicyclic hydrocarbons and their unchlorinated derivatives, the carrier gas stream containing the vapors being caused to contact with the crude aromatic compound to be purified.

1,892,773. CAN WASHING MACHINE. IRA H. KENDALL, Potsdam, N. Y., assignor to Genevieve A. Kendall, Potsdam, N. Y. Filed June 21, 1929. Serial No. 372,594. 30 Claims. (Cl. 29—84.)



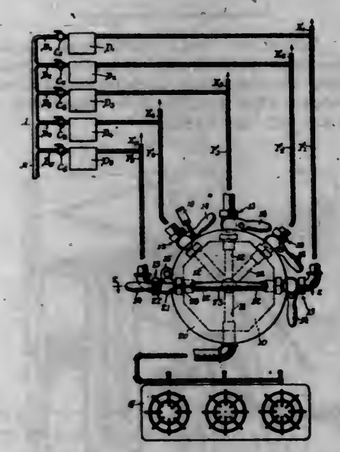
1. In a can washing machine, a revoluble conveyor adapted to hold a plurality of cans thereon, means adapted to turn said conveyor so that it moves in unison with said cans, automatic ejecting means adapted to eject cans from said conveyor at a predetermined point, and automatic inverting mechanism adjacent said ejecting means and adapted to invert the ejected cans.

1,892,774. LAUNDRY ASSORTING DEVICE. CHARLES F. MILLER, Cincinnati, Ohio, assignor to The National Marking Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 13, 1930. Serial No. 488,458. 7 Claims. (Cl. 40—19.5.)



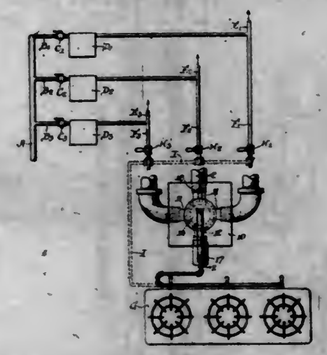
1. The combination of a tag accumulator having a tag supporting arm adapted to support a series of tags each having the same identification mark, a tag rejector, electrically operated means for rendering said rejector inoperative, said electrically operated means including a normally open circuit, and means carried by each of said tags for closing said circuit when a tag carrying said identification mark is placed in operative relation with said arm, whereby all tags having said identification mark will be accepted.

1,892,775. FLUID CONTROL DEVICE. MARTIN I. MIX and HIRAM E. HEIL, Chicago, Ill. Filed July 8, 1929. Serial No. 376,762. 10 Claims. (Cl. 137—78.)



1. A gas control device comprising, in combination, a member having a radial outlet passage and a plurality of radial inlet passages converging toward a common center and communicating with said outlet passage, lock valves attached to the member in each of said inlet passages and controlling the flow of gas therethrough, a circular plate rotatably attached to said member and having a notch in its periphery, and handles on said valves arcuately cut to fit snugly around the periphery of said plate, said cut edge being at a lesser distance from the turning axis of the handle than any other point on the periphery of the handle to prevent said handle being turned when fitting around said plate, said notch in the plate permitting any one of said handles to be turned only when the notch is positioned opposite the turning axis of said handle.

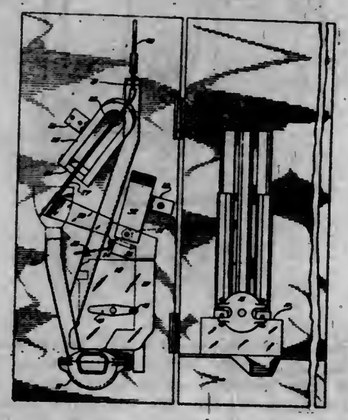
1,892,776. FLUID CONTROL DEVICE. MARTIN I. MIX and HIRAM E. HEIL, Chicago, Ill. Filed July 8, 1929. Serial No. 376,763. 2 Claims. (Cl. 137—78.)



2. A control device for a gas appliance to which gas may be supplied from a plurality of branch lines comprising, in combination, a plurality of lock valves respectively connected to said branch lines, and means connecting

said lock valves to the appliance, said means including a valve permitting gas to flow to the appliance from only one of said lock valves at a time and closing off each of the other lock valves one from another.

1,892,777. SPURIOUS COIN DETECTOR. ANDREW M. ROBINSON, New York, N. Y., assignor to Consolidated Automatic Merchandising Corporation, a Corporation of Delaware. Filed Aug. 17, 1929. Serial No. 386,582. 8 Claims. (Cl. 194—101.)



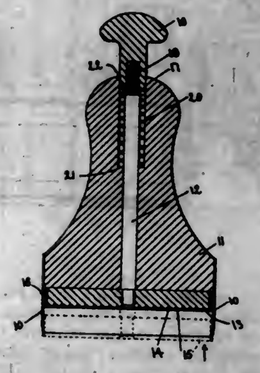
8. The combination in a spurious coin detector of means for eliminating spurious coins that are magnetic; means for producing a magnetic field, means for eliminating the remaining non-magnetic coins that are deflected more than a certain amount in sliding through said magnetic field; and means for eliminating the remaining coins that are below a certain weight and are not retarded a certain amount.

1,892,778. HEAT TRANSFER DEVICE. JOHN E. BLACK, Rumson, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Apr. 8, 1931. Serial No. 528,589. 12 Claims. (Cl. 257—227.)



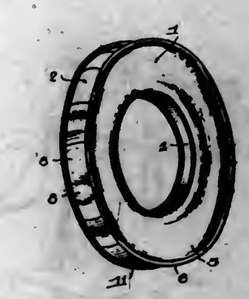
1. In a heat transfer device, a cylindrical casing with drums disposed in the upper and lower parts thereof and connected by tubes arranged circumferentially thereabout, a cylindrical displacer member located on the inside portion of the tube group, a superheated steam inlet to the upper drum, a steam outlet from the lower drum, and steam inlets and outlets in the casing so located that the steam admitted thereto by the inlet flows along the tubes in contact therewith and passes through the outlet.

1,892,779. MOLD FOR MEAT PATTIES. AUSTIN A. COLE, Cambridge, Mass. Filed Jan. 13, 1932. Serial No. 586,447. 2 Claims. (Cl. 107—19.)



2. In a mold for forming meat patties, a plunger axially movable therein provided with a grooved major face; an element formed from wire netting secured to and forming the operative face of the plunger, and the major face of the mold.

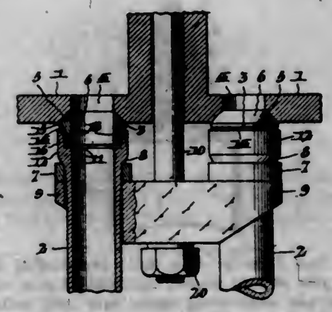
1,892,780. COVERING MEANS. HARRY F. GEORGE, Chicago, Ill. Filed Oct. 20, 1930. Serial No. 489,753. 2 Claims. (Cl. 150—54.)



1. A tire cover comprising a face plate, a plurality of tread covering members flexibly connected to the edge of said plate and projecting laterally therefrom, each of said members having a lip portion overlapped by the edge of an adjacent member, each of said members having a beaded edge, and resilient means passing through the bead of said members for holding said members in position.

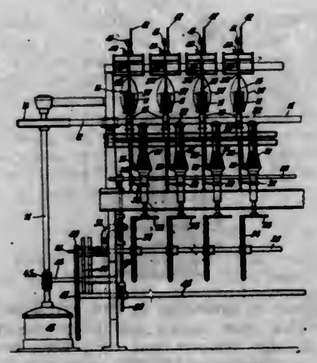
1,892,781. JOINT FOR SUPERHEATERS OR THE LIKE. EARLE E. HOENSTINE, Altoona, Pa. Filed Sept. 3, 1930. Serial No. 479,518. 1 Claim. (Cl. 285—25.)

In a superheater, a header, a tube leading to said header, said tube having an expanded end forming an annular socket and terminating in an end face inclined to the axis of the tube, a ball joint connection between said tube and header, said connection fitting within said annular socket and having a substantially right angled



shoulder opposite the inclined face of said tube end, and a sealing member of relatively soft metal interposed between the shoulder of said ball joint connection and the inclined face of said tube end.

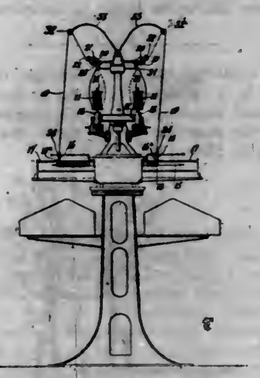
1,892,782. TWISTING AND WINDING MACHINE. HUGO HOFMANN and MAX E. KOBFF, Johnson City, Tenn., assignors to American Bemberg Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 440,909. 4 Claims. (Cl. 117—23.)



1. In an apparatus for twisting and winding yarn, the combination with an uptwister, of a bottle bobbin rotated at varying speeds to maintain a constant yarn speed and means between said twister and bottle bobbin for compensating for variations in tension upon the yarn as it is drawn from the twister.

1,892,783. TWISTING AND WINDING MACHINE. HUGO HOFMANN and MAX E. KOBFF, Johnson City, Tenn., assignors to American Bemberg Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 440,910. 4 Claims. (Cl. 117—23.)

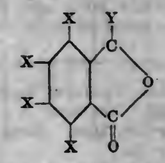
1. An apparatus for twisting and winding yarn, comprising a twister, a drawing roller to draw yarn from the twister at a constant speed, a winder to wind the yarn at varying yarn speeds, an idling roller and a resiliently



supported guide between the drawing roller and the winder to take up slack in the yarn.

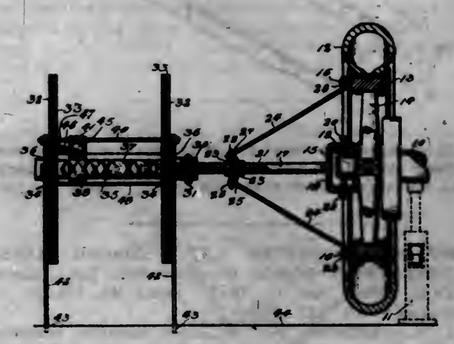
1,892,784. PLASTIC OR COATING COMPOSITION. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Original application filed May 29, 1928, Serial No. 281,598. Divided and this application filed Apr. 6, 1929. Serial No. 353,268. 8 Claims. (Cl. 106—37.)

3. A plasticized composition comprising a cellulose ester plastic and a hydrogenated phthalid substance having the formula



in which at least one X equals H_2 and the remaining X's are H or H_2 and Y is H_2, H-alkyl, dialkyl, H-aryl, diaryl or alkylidine.

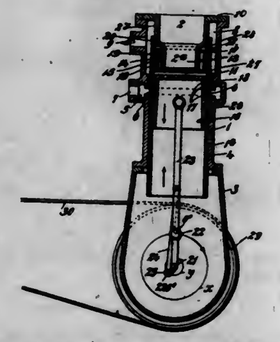
1,892,785. BARBED WIRE REEL. HERMAN L. KEISER, Omaha, Nebr. Filed Nov. 26, 1930. Serial No. 498,455. 5 Claims. (Cl. 242—95.)



1. In a barbed wire reel, a drum for receiving the wire, means whereby said drum may be driven from a jacked-up automobile wheel, arms extending pivotally from the

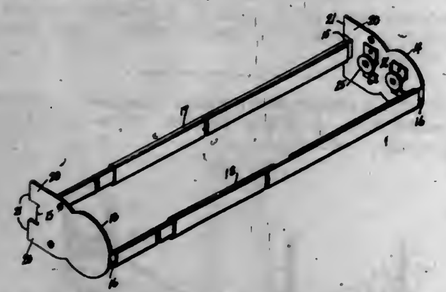
drum, a worm shaft carried pivotally in said arms, means for driving said worm shaft from the drum, a follower movable on said worm shaft and receiving the wire therethrough, and supports connected to said arms and extending down from the worm shaft to the ground.

1,892,786. COMPRESSOR. LEONARD OCHTMAN, JR., Plainfield, N. J., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa., a Corporation of Pennsylvania. Filed May 22, 1931. Serial No. 539,189. 18 Claims. (Cl. 230—179.)



1. The combination with a cylinder provided with a discharge passage, and a plurality of annularly disposed discharge ports located in different transverse planes spaced apart from each other in a direction longitudinally of the cylinder, of a reciprocating piston in said cylinder, and a reciprocating sleeve valve interposed between the cylinder and piston and provided with means for placing the interior of the cylinder within the sleeve valve in communication with said discharge passage, through all of said discharge ports simultaneously.

1,892,787. ROLLING WINDOW SCREEN AND SUSPENSION FRAME. ABRAHAM M. RUBIN, Brooklyn, N. Y. Filed Aug. 18, 1932. Serial No. 629,253. 5 Claims. (Cl. 156—39.)



2. A suspension frame for rolling window screens, comprising side plates and a bar carried by the said plates and spaced from their rear ends for the purpose specified.

1,892,788. CONTAINER AND CLOSURE MEANS THEREFOR. ARTHUR H. SCHWARTZ, Los Angeles, Calif. Filed Jan. 17, 1931. Serial No. 509,332. 8 Claims. (Cl. 221—60.)

1. In combination with a hollow container including a reduced collar having an aperture therein, a discharge nozzle and a cap, said discharge nozzle being made of a resilient material and including a conical shaped body portion converging to a reduced tip, there being an aperture in said nozzle, a reduced neck extending from the base of said conical body, said neck of said nozzle being positioned in said collar aperture, means to retain said nozzle in position on said container, the end of said container collar engaging the under surface of the base of said nozzle body, said cap being made of a resilient material and comprising a conically shaped hollow body



portion of less diameter than the corresponding diameter of the outside of said nozzle, the apex of said cap being closed and the base being open, said cap including a lower portion adapted to be stretched and positioned to engage the under surface of the base of said conical body while the inner surface of said cap tightly engages the outer surface of said nozzle body.

1,892,789. HOT EXTRUSION METHOD. FRITZ SINGER, Nuremberg, Germany. Filed Sept. 28, 1931, Serial No. 565,709, and in Germany May 31, 1929. 1 Claim. (Cl. 207—10.)

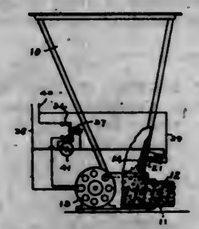


The method of producing by hot extrusion solid and hollow articles from metals and alloys requiring to be extruded at high temperatures comprising the steps of placing in a container a billet of such metal the length of which is from two to two and one-half times its diameter and applying pressure thereto by means of an extruding tool moving at an average speed in excess of five inches per second, thereby to extrude the metal of the billet from the container at an average speed in excess of five inches of billet length per second.

1,892,790. STOKER SHUT-OFF DEVICE. CHASE D. SMELSER, South Bend, Ind. Filed Mar. 9, 1932. Serial No. 597,761. 8 Claims. (Cl. 198—37.)

1. In a stoker having a hopper and a motor a frame having outturned flanges, a movable plate disposed along a wall of the hopper toward the bottom thereof said plate having back turned and bottom flanges cooperating with the flanges of the frame to prevent the entrance of coal back of the plate, electrical contacting members back of the plate normally separated, a motor control switch,

an electromagnet coil adapted to close said switch upon energization of the coil, an electric circuit including said contacting members and said coil, and connecting means



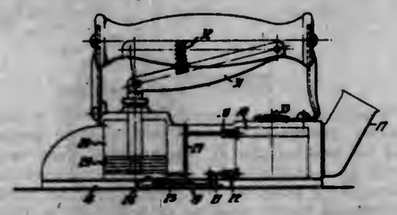
between said plate and said members, said members being respectively contacted with each other upon movement of the plate under pressure thereon of coal in the hopper.

1,892,791. OVERSHOE. JOHN E. TABER, South Bend, Ind., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed June 15, 1931. Serial No. 544,420. 4 Claims. (Cl. 12—142.)



1. The method of making an overshoe which comprises applying a form fitting lining on the foot and leg portion of the last, adhesively securing a leg covering blank onto the lining with the ends joined together at the back and with a loose section of the leg covering blank at each side of the leg portion of the lining in the form of a fold, then joining the folds across the front of the leg portion, then vulcanising the overshoe and after vulcanising slitting the lining at each side of the leg portion at the location of said folds.

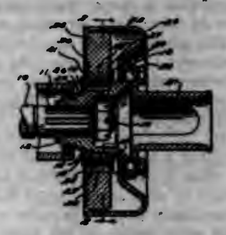
1,892,792. SPOT CLEANING DEVICE. JOSEPH S. THOMPSON, San Francisco, Calif. Filed Sept. 28, 1931. Serial No. 565,449. 13 Claims. (Cl. 68—26.)



1. In a cleaning device of the character described, a plane base portion having a depression therein, said device adapted to be placed over the material to be cleaned whereby a chamber is defined by said depression and the surface of said material, and means for circulating a cleaning liquid through the chamber thus formed.

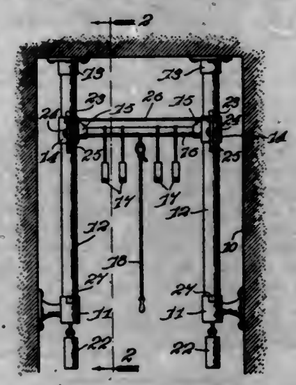
7. In an electric flat iron, a cleaning device for circulating a heated cleaning fluid into contact with the surface of the material to be cleaned, the heating element of said flat iron serving to heat said cleaning fluid.

1,892,793. VIBRATION DAMPER. ARCHIBALD A. WARNER, Dearborn, Mich. Filed Apr. 15, 1931. Serial No. 530,892. 18 Claims. (Cl. 74—6.)



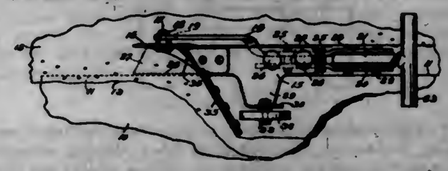
1. A vibration damper comprising a driven hub member, a brake drum mounted on said hub, said drum having an axially directed portion in spaced concentric relation to the hub, an inertia member mounted within the drum in spaced relation to its axially directed portion and yielding means connecting and disposed between axially directed portions of the hub and inertia member for permitting relative rotational movement therebetween.

1,892,794. WARDROBE HANGER. BOROHILD WERTZLER, Chicago, Ill. Filed Oct. 3, 1931. Serial No. 566,621. 4 Claims. (Cl. 312—176.)



4. In a wardrobe hanger device adapted to utilize the upper part of a wardrobe storage chamber, said device comprising a pair of spaced vertical track members depending from the ceiling of the chamber, a slide freely movable on each track, means individual to each slide and connected thereto to exert a force to hold the slides in an elevated position on the tracks, a hanger arm loosely supported on the slides, means connecting the slides together, and a pull line connected to the hanger arm for lowering the arm and slides on the tracks.

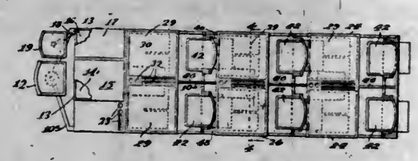
1,892,795. LAWN EDGING TOOL. PETER WOLF, Omaha, Nebr., assignor of one-half to John Stepan, Omaha, Nebr. Filed Nov. 12, 1931. Serial No. 574,624. 1 Claim. (Cl. 97—227.)



A lawn edging tool, comprising a frame bar inclined downwardly at its forward end, a frame plate secured to the inner side of the frame bar and curved slightly

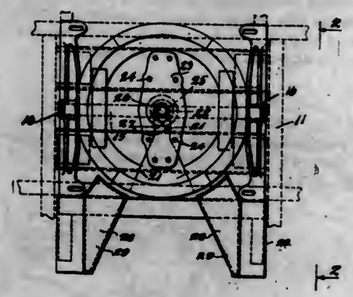
upwardly at its forward end to provide a plow point and adapted to extend into the ground, said forward end of the plate being substantially of uniform width rearwardly of the point to provide a gauge for locating the curved end of the plate in the lawn adjacent the edge of a side walk, a cutting disc mounted on the forward end of said frame bar adjacent to and at one side of the forward end of said plate to sever in a vertical plane the strip of sod beneath which said plate is adapted to project, a mold board mounted diagonally across the plate and extending inwardly therefrom for projecting over a side walk and for carrying a strip of cut sod laterally on the plate to the side walk, a supporting wheel adjustably connected to said plate in rear of the mold board for movement over the pavement and to support and determine the height of said plow point in the lawn, a depending scraper on said mold board forwardly of said wheel to deflect sod and dirt disposed on the edge portion of the side walk inwardly out of the path of said wheel, and a handle connected to said plate for propelling the tool.

1,892,796. INSTRUCTION DESK ASSEMBLY. EVAN E. WYATT, Los Angeles, Calif. Filed Mar. 4, 1931. Serial No. 519,959. 4 Claims. (Cl. 155—124.)



1. In an instruction desk assembly, a base, a plurality of transversely disposed desk structures supported in spaced relation upon said base, seat supporting frames projecting upwardly from the base to the rear of said desk structures, a pair of folding seats hinged to each seat supporting frame, an instructor's desk structure mounted upon the front end of said base, a post projecting upwardly from the base in front of the instructor's desk structure, a seat swiveled on said post, a post supporting one corner of the instructor's desk structure, an arm mounted for swinging movement on said post and a seat carried by said swinging arm.

1,892,797. FIFTH WHEEL CONSTRUCTION FOR TRACTORS AND SEMITRAILERS. DURREL H. DAVIS, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation. Filed Mar. 18, 1931. Serial No. 523,558. 2 Claims. (Cl. 280—33.1.)



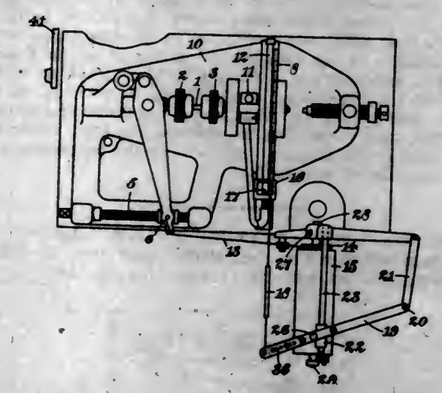
1. The combination with a vehicle frame having a normally horizontal fifth wheel member tiltably mounted thereon and adapted to cooperate with a mating coupling on another vehicle, of a rigid inclined guiding instrumentality mounted on the first mentioned vehicle adjacent the fifth wheel member for guiding the mating coupling onto the fifth wheel member, and spring parts coacting with the fifth wheel member for resiliently holding the said fifth wheel member yieldingly in horizontal position so that its surface is about in the plane of the upper end of the said guiding instrumentality.

1,892,798. CABLE RIDER. WILLIAM B. ELMER and CHARLES F. AVILA, Cambridge, Mass., assignors to Charles B. Elmer, White Plains, N. Y. Filed Aug. 3, 1931. Serial No. 554,806. 11 Claims. (Cl. 173—28.)



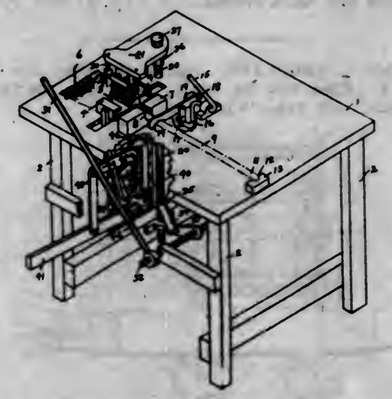
5. In combination with a support, of a rider for receiving a cable, which comprises a block of insulating material adapted to be positioned on the support, a longitudinal channel formed on the underside of the block for engagement with the support, lips projecting inwardly from the sides of said channel for engagement beneath the edges of the support, the distance between said lips being sufficient to permit one of the lips to be passed over one edge of the support when the opposite lip is closely engaged about the opposite edge of the support, and a transverse cable seat formed on the upper side of the block, the sides of the block being cut away sufficiently to position the cable contacting edges of the seat between the vertical planes passing through the edges of the support, when the rider is positioned on the support.

1,892,799. GRAPH-RECORDING APPARATUS. LESLIE HAYWOOD HOUNSFIELD, London, England. Filed Oct. 21, 1931, Serial No. 570,242, and in Great Britain Mar. 25, 1931. 14 Claims. (Cl. 265—2.)



1. Graph recording apparatus for use with a scientific measuring instrument provided with positive mechanical means for altering one of two interdependent variables and with an indicator and scale for showing resultant alterations in the other variable, which apparatus comprises an adjustable cursor adapted to be moved to positions corresponding to positions of the said indicator, a movable support for sheet material on which the graph is to be recorded, and a recording tool movable across the said support for recording the graph, with the said movable support and recording tool connected one to be moved in one direction in proportion to changes in the first said variable and the other to be moved in another direction in proportion to movements of the said cursor, which two directions are such as to determine the formation of the graph.

1,892,800. BROOM MACHINE. ADAM KAMMER, Youngstown, Ohio. Filed June 6, 1932. Serial No. 615,588. 2 Claims. (Cl. 300—12.)

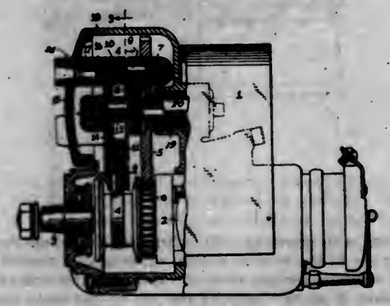


1. In a device of the class described comprising a table, means for holding a broom handle in a non-rotating position, means for clamping a metal casing about broom straws, in combination with a nailing device comprising a slidable vertical shaft, a support plate pivotally hung at upper end of said slidable vertical shaft, a base portion secured to under side of said support plate, a plurality of plungers, a nail block functioning with said plurality of plungers, a plurality of channels formed in said nail block for the reception of nails, means for holding said nail block under spring action, lever means for moving said slidable vertical shaft upwardly and downwardly.

1,892,801. PROCESS OF REFINING GASOLINE. FRANKLIN E. KIMBALL, Long Beach, Calif. Filed Apr. 23, 1931. Serial No. 532,280. 4 Claims. (Cl. 196—36.)

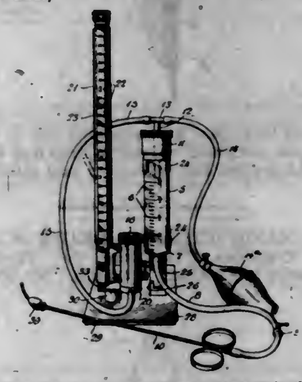
1. A method of refining gasoline comprising, heating mineral oil thereby forming hot gasoline vapors, passing the vapors into contact with a hot maintained treating mixture of water, calcium chloride and magnesium chloride, separating the vapors from the treating mixture, withdrawing the vapors, passing the vapors through a fractionating tower thereby removing high boiling-point constituents from the vapors, and cooling the withdrawn vapors to condense the vapors to form gasoline.

1,892,802. MAGNETO DISTRIBUTOR CONSTRUCTION. GUSTAVE J. LANG, Longmeadow, Mass., assignor to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed Dec. 4, 1930. Serial No. 499,960. 1 Claim. (Cl. 200—24.)



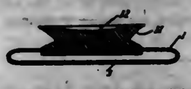
A distributor including a stator having the form of a plate, hollow bosses extending through said plate, a member of non-carbonising insulation material having contact pieces embedded therein engaging the inner ends of said bosses, hollow metallic bushings at the inner ends of said bosses and screws passing through the inner ends of said bushings and engaging said contact pieces to secure the member and plate together and enable the contact pieces to be connected to conductors having their ends inserted into said bosses and engaging the bushings.

1,892,803. INJECTION DEVICE. ERROL R. LAWSHE, Rutherford, N. J., assignor to Becton, Dickinson & Co., East Rutherford, N. J., a Corporation of New Jersey. Filed Dec. 10, 1930. Serial No. 501,271. 1 Claim. (Cl. 128—224.)



An injection device comprising a reservoir for the fluid to be injected, means for developing injecting pressure, a pressure indicating device, a pressure transmitting connection extending between said pressure developing means and said reservoir for conducting pressure medium thereto to develop injecting pressure on the fluid in said reservoir, a continuing pressure transmitting connection communicating with said pressure indicating device and connected with said first mentioned pressure transmitting connection at a point on the inlet side of said reservoir whereby pressure medium is conducted to said indicating device for indicating the injecting pressure developed on the fluid in said reservoir without bringing said fluid into contact with said indicating device, and an outlet for the injecting fluid connected with said reservoir.

1,892,804. TRUSS PAD CONSTRUCTION. ISAAC M. PEASE, Cincinnati, Ohio, assignor to The Ohio Truss Company, a Corporation of Ohio. Filed Jan. 14, 1930. Serial No. 420,702. 1 Claim. (Cl. 128—112.)



A truss pad comprising a resilient filler, an elastic cover adapted to fit around said filler, said cover having an opening, an independently constructed head, said head being undercut to form a contacting portion, a base of area substantially coextensive with said contacting portion and adapted to rest flatly against said filler, and a resilient connector between said base and contacting portion, said base being provided with a peripheral groove adapted to receive the edge of said cover around said opening whereby said head is secured in said cover by the compression of said filler.

1,892,805. TRUSS PAD. ISAAC M. PEASE, Cincinnati, Ohio, assignor to The Ohio Truss Company, a Corporation of Ohio. Filed July 8, 1930. Serial No. 465,564. 1 Claim. (Cl. 128—105.)

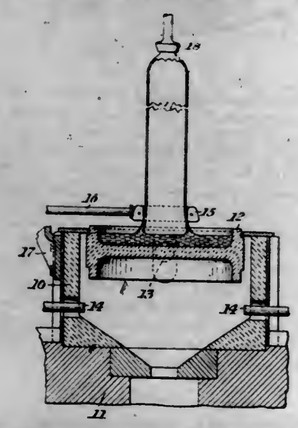
In a truss pad in combination with a back plate, a pad of unitary resilient construction and having an elongated

extension, and a tubular channel formed in said pad and extension, said channel having an opening at the back of the pad arranged to be disposed under the back plate when



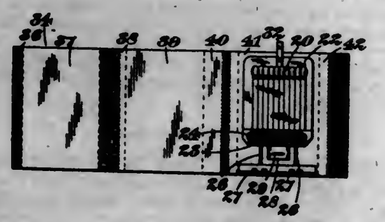
said pad and back plate are assembled and an opening at the end of said extension, whereby a strap may be threaded through said channel and secured by said plate.

1,892,806. MANUFACTURE OF DRAWN GLASS. INGVALD O. PEDERSEN, Wilkinsburg, Pa. Filed Aug. 31, 1929. Serial No. 389,822. 2 Claims. (Cl. 49—83.1.)



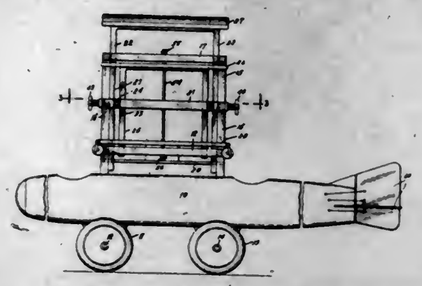
1. In the manufacture of glass articles, the steps consisting of continuously drawing tubular glass in contact with a forming die, cutting said drawn tube into sections, slowly raising the temperature of each section above the critical point, and then reducing it slowly below the critical point.

1,892,807. CARTON OR BOX FOR CIGARETTES AND THE LIKE. STEPHEN NOEL HAMILTON PHILLIPS, London, England. Filed Jan. 27, 1932, Serial No. 589,255, and in Great Britain Jan. 29, 1931. 2 Claims. (Cl. 206—48.)



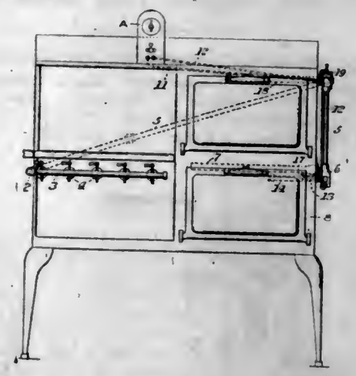
1. A blank for use in erecting a case having two compartments, in combination with a strip of matches lying on a face of one section of the blank which will be within one of said compartments, and elastic means attaching said strip of matches to said section to permit of its removal from the case when erected.

1,892,808. AEROPLANE. JOSEPH PREATKA, New York, N. Y. Filed Jan. 19, 1931. Serial No. 509,743. 2 Claims. (Cl. 244—13.)



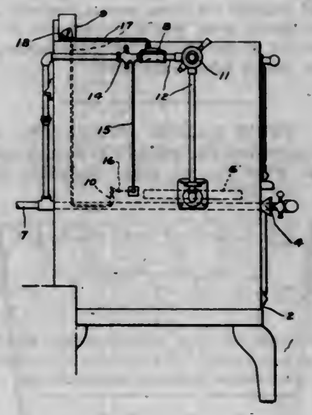
1. An aeroplane comprising a wheeled undercarriage, a fuselage mounted on said carriage, a tower-like frame rising from said fuselage, horizontally disposed aerofoils reciprocatably mounted on said frame, a horizontal aerofoil mounted on said frame to reciprocate above the same, said last-mentioned aerofoil extending over said frame and over said first-mentioned aerofoils so as to co-operate with the latter, a driving connection between said upper aerofoil and said first-mentioned aerofoils for reciprocating the same in opposite directions, propellers mounted on said frame, a motor, a driving connection between said propellers and said motor, a driving connection between said motor and all of said aerofoils, and clutches inserted into said connections whereby said aerofoils and the propellers are adapted to be actuated independently of one another or together, at will.

1,892,809. HEAT CONTROL DEVICE FOR OVENS AND THE LIKE. CLARENCE W. ROBERTSHAW, Youngwood, Pa., assignor to Robertshaw Thermostat Company, Youngwood, Pa., a Corporation of Pennsylvania. Filed Sept. 19, 1928. Serial No. 306,835. 6 Claims. (Cl. 158—117.1.)



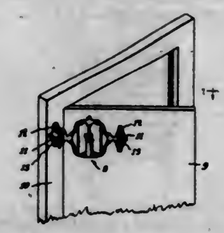
1. An oven provided with a burner, a conduit for supplying gas to the burner, a main valve in said conduit, auxiliary conduits leading from the main conduit and adapted to convey a portion only of the gas in the main conduit, a clock mechanism for controlling the flow of gas in the auxiliary conduits, and means dependent upon flow of gas in said auxiliary conduits for operating said main valve, said means including a thermostatic element.

1,892,810. AUTOMATIC FUEL CONTROLLER. GEORGE A. ROBERTSHAW, Youngwood, Pa. Filed Nov. 1, 1927, Serial No. 230,823. Renewed Apr. 1, 1931. 6 Claims. (Cl. 158—117.1.)



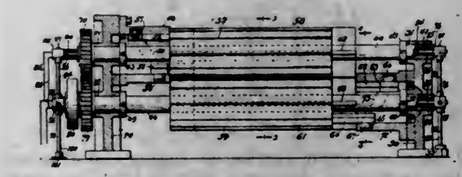
1. The combination with a burner, of means for controlling the supply of fuel to the burner comprising a pressure operated valve, and a clock-controlled valve and a thermal-responsive device in series connection for releasing the pressure in the pressure operated valve to permit it to open when the clock-controlled valve and the thermal-responsive device are both in their open position and for creating a back pressure to close the pressure operated valve when either or both is in its closed position.

1,892,811. DOORCHECK AND CONTROL DEVICE THEREFOR. CLARENCE T. ROGERS, New York, N. Y. Filed Dec. 29, 1930. Serial No. 505,301. 5 Claims. (Cl. 16—49.)



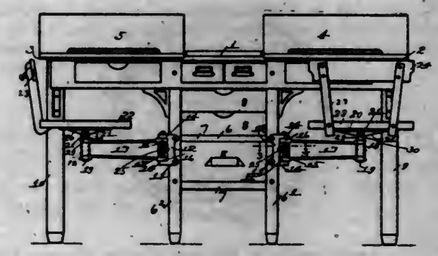
1. As a new article of manufacture a gravity controlled lever having an opening therethrough defining the fulcrum point thereof, one arm of said lever being comparatively light and terminating in a downwardly projecting spur-like extension, and the other arm of said lever being relatively heavy to cause said lever to be unbalanced when fulcrumed whereby it is tilted so that the walls of the said opening frictionally engage the fulcruming means to lock the lever thereon in such a manner that the spur-like extension projects below the horizontal plane passing through the lever fulcrum.

1,892,812. CORRUGATING MACHINE. BERNARD ROUS, Brooklyn, N. Y. Filed Aug. 8, 1931. Serial No. 555,904. 10 Claims. (Cl. 154—30.)



1. In a corrugating machine the combination of a pair of shafts, a corrugated drum for each shaft, each drum comprising a portion slidably supported on its shaft, means to reciprocate said portions in the direction of the longitudinal axes of said shafts and means to rotate said shafts.

1,892,813. DESK STRUCTURE. EDGAR H. SHELDON, Muskegon, Muskegon County, Mich. Filed Sept. 6, 1929. Serial No. 390,696. 3 Claims. (Cl. 155—81.)



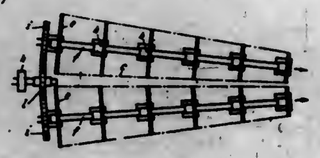
1. Fittings for articles of furniture comprising a supporting member, a pintle carried by the supporting member, a swinging arm pivotally connected with the supporting member by means of the said pintle, and a stop member pivotally mounted on the pintle and having a limited turning movement relatively to the arm but engageable with the arm to swing therewith, and having projecting stop portions to engage with the supporting member to limit the movements of the arm.

1,892,814. CAPPING GLASS CYLINDER. ERIK G. STAHLE, Lumberport, W. Va., assignor to Clarence P. Byrnes, trustee. Filed Dec. 2, 1929. Serial No. 411,192. 2 Claims. (Cl. 49—50.)



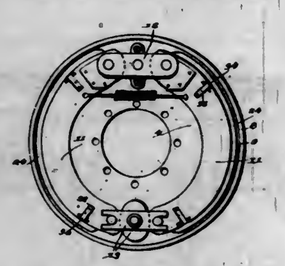
1. In the cutting of glass cylinders into sections, the steps consisting of heating a narrow circumferential zone of the cylinder, and then moving a cooling stream along a substantial portion of the heated circumferential zone.

1,892,815. CENTRIFUGAL MACHINE FOR MAKING CONICAL HOLLOW BODIES, PARTICULARLY REENFORCED CONCRETE POLES. MARTIN STÜHLER, Cologne, Germany. Filed Sept. 4, 1931, Serial No. 561,181, and in Germany Sept. 26, 1930. 8 Claims. (Cl. 25—30.)



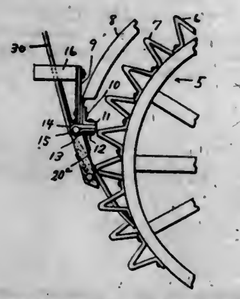
1. In a centrifugal machine for making conical hollow bodies, particularly reenforced concrete poles, the combination of two cones arranged in a horizontal plane and driven in the same direction at equal circumferential speed, the vertices of the said cones coinciding in a common point, and a third cone serving as centrifugal molding box and lying on the said cones while touching them each in one line, the said third cone coinciding with its vertex in the same point as the first two cones and being rotated by the driven cones in a direction opposite to the direction of the said driven cones.

1,892,816. BRAKE LINING ANCHORAGE AND ARTICLE. BERT C. THORNBURGH, Yakima, Wash. Filed Feb. 21, 1931. Serial No. 517,485. 4 Claims. (Cl. 188—251.)



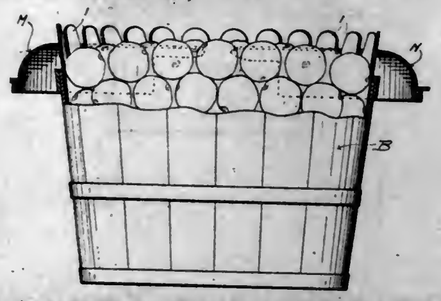
1. In a useful article of manufacture, an internal brake shoe, a rigid composite brake lining section for said shoe, said shoe having transversely disposed anchoring grooves opening at one side of said shoe and of dove-tailed cross section and convergingly tapering toward that side opposite the opening side of said grooves, and said lining section having correspondingly shaped and sized tapering anchoring bars for lateral insertion into said grooves to anchor said section on said shoe against displacement from braking stress.

1,892,817. TRACTOR SCRAPER. HENRY TONJES, JR., Wisner, Nebr. Filed June 19, 1931. Serial No. 545,594. 3 Claims. (Cl. 280—158.)



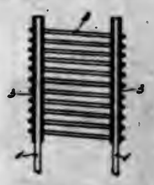
1. A tractor wheel scraper of the type described comprising a fender mounting adjacent one of the wheels of the tractor, a swingable scraper bar carried by the mounting, friction retaining means on the mounting adapted to be engaged by the upper end of the scraper bar for maintaining the scraper bar in positions in or out of engagement with the tractor wheel between ground engaging elements thereof, and means connecting the scraper bar with said mounting which permit the bar to swing bodily out of its normal sphere of action upon its being contacted and moved by an extraordinary obstacle on the wheel, said friction retaining means comprising a member having spring arms which are adapted to be spread by engagement of the scraper bar therebetween whereby the scraper bar is frictionally held.

1,892,818. FRUIT FACING APPARATUS. JAMES W. TREW, Gettysburg, Pa., assignor to John S. Rice, Biglerville, Pa. Filed Nov. 12, 1931. Serial No. 574,604. 5 Claims. (Cl. 226—17.)



1. An apparatus for bending inwardly an end portion of a package liner after the liner has been placed in the container and the container has been filled, comprising a member adapted to have a surrounding position with respect to the container and having an inwardly disposed substantially rigid portion for contact with the liner to bend the same inwardly as said member is moved inwardly of the container, said member when in a position to move the liner inwardly of the container constituting a means to protect the content of the container against injury upon application of a cover to the container.

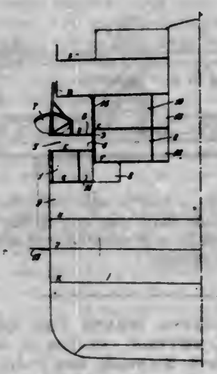
1,892,819. METHOD OF SOLDERING TOGETHER METAL PARTS. KAREL MARINUS VAN GESSEL, Eindhoven, Netherlands, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Filed Mar. 3, 1930, Serial No. 432,880, and in the Netherlands Apr. 27, 1929. 8 Claims. (Cl. 29—155.5.)



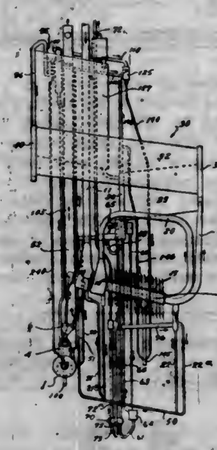
1. A method of joining together refractory metal bodies, according to which method one of said bodies is at least partly coated with zirconium, another refractory metal body being welded to said zirconium.

1,892,820. PASSENGER SHIP. JAN BLOKLAND VISSER, Flushing, Netherlands, assignor to Naamlooze Vennootschap: Koninklijke Maatschappij "de Schelde," Scheepsbouw en Werktuigenfabriek, Flushing, Netherlands, a Corporation of the Netherlands. Filed Oct. 24, 1931, Serial No. 570,944, and in the Netherlands Nov. 1, 1930. 5 Claims. (Cl. 114—71.)

1. A passenger ship or cargo- and passenger ship with outer and inner cabins arranged athwartships with regard to each other one or more rows of inner cabins being raised in their entirety by about one half of the height of the cabin above the outer cabins so that the inner cabins have direct communication with the open air and the daylight across the relative outer cabins and in this way also obtain the character of outer cabins.

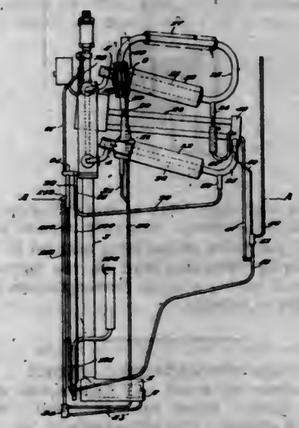


1,892,821. REFRIGERATION. EASTMAN A. WEAVER, Winchester, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc., a Corporation of Delaware. Filed Nov. 9, 1929, Serial No. 405,948. Renewed Sept. 23, 1932. 18 Claims. (Cl. 62—115.)



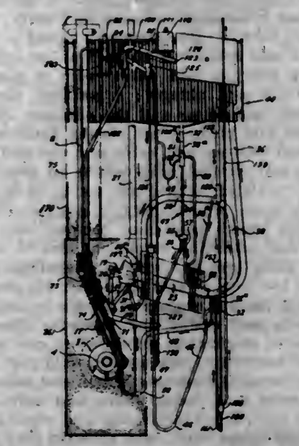
1. Apparatus of the class described comprising a propellant circuit including a boiler and a propellant condenser, a refrigerant circuit including a cooler and a refrigerant condenser, said circuits having a common part in which vaporized propellant causes the circulation of refrigerant through its circuit, means for receiving the condensed propellant from the propellant condenser and lifting the same to a region above the common part of said circuit, said means being connected to a measuring factor, a propellant return pipe connected to said measuring factor and having its lower end connected to the boiler, a purger employing the energy of the lifted propellant to effect the exhaustion of noncondensable gases from the system, said measuring factor being connected to said purger and arranged to shunt a portion of the propellant to said purger.

1,892,822. FLUID PUMPING. LYMAN F. WHITNEY, Boston, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc., Boston, Mass., a Corporation of Delaware. Filed Apr. 13, 1928. Serial No. 269,712. 29 Claims. (Cl. 62—115.)



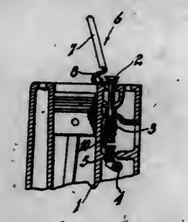
1. Apparatus of the class described, comprising two fluid circuits with two portions in common, a propellant in one of said circuits and a pumped fluid in the other circuit, a vaporizer for the propellant, means whereby the vaporized propellant may pump vapor of the other fluid in one of said common parts, and means whereby liquid propellant may pump the other fluid in its liquid phase in another common part of the two circuits.

1,892,823. FLUID PRESSURE APPARATUS. LYMAN F. WHITNEY, Boston, Mass., assignor to Comstock & Wescott, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Dec. 17, 1930. Serial No. 503,006. 36 Claims. (Cl. 62—115.)



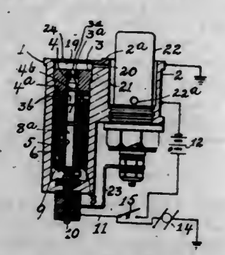
1. Apparatus of the class described comprising a vaporiser, a heating factor associated therewith, a condenser connected to the vaporiser, a secondary boiler adjoining the heating factor, said boiler including an elongate passage of restricted cross section, a return pipe having its lower end connected to the vaporiser, and a lifter pipe of restricted cross section adapted to receive liquid from the condenser and connected to the upper end of the return pipe, said passage being connected to said pipe so that vapor from the boiler lifts condensed fluid to the upper end of the pipe.

1,892,824. VALVE LIFTER. WALTER L. ZIEGLER and JOSEPH W. DURNELL, Long Beach, Calif. Filed Jan. 17, 1931. Serial No. 509,353. 4 Claims. (Cl. 29—86.3.)



1. A valve tool comprising a semi-cylindrical body, an inwardly extending flange integrally formed on the top of said body, the valve spring being adapted to rest thereon, an inwardly extending wall on the bottom of said body, said wall having a notch formed therein into which the cam follower extends.

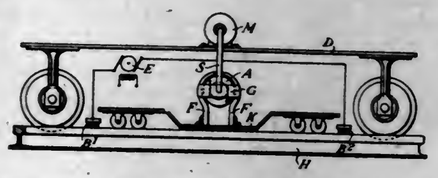
1,892,825. ELECTROMAGNETIC VALVE. IRVING E. ASKE, WILLIAM F. ASKE, and LEONARD E. ASKE, Minneapolis, Minn. Filed Apr. 15, 1929. Serial No. 355,362. 4 Claims. (Cl. 137—139.)



1. An electro-magnetic valve comprising a casing provided with intake and exhaust ports; a valve seat extending across said casing between said ports; a tubular spool; a reciprocable valve plunger adapted to extend at one end into said spool and adapted at its opposite end to close the port in said valve seat; a magnetizable collar encircling said plunger; a resilient means interposed between said collar and the adjacent end of said spool to force said plunger into closing position; spacing pins positioned between said valve seat and said spool and extending loosely through said collar; an electric circuit including an insulated electric coil wound on said spool, a switch and a source of electricity; a magnetizable electric conductor coil sheath positioned between said coil and said casing and extending across one end of said spool; said sheath being provided with a magnetizable core extending into the bore of said spool and adapted to limit the descent of the valve plunger therein; a binding post extending into said casing and insulated therefrom; a spring contactor electrically connected to one terminal of said coil and adapted to bear against said post, said contactor being insulated from said sheath and casing; means extending across said casing above said valve seat and spaced from said seat for forming and closing a chamber above said valve seat, said exhaust port extending through the wall of said casing from the space between said valve seat and said chamber closing means.

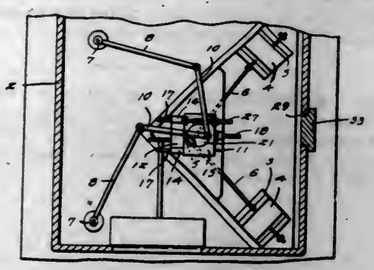
1,892,826. RAIL FISSURE DETECTOR. DAVID C. BETTISON and FRANK H. KEATON, Omaha, Nebr. Filed Aug. 26, 1931. Serial No. 559,380. 15 Claims. (Cl. 175—183.)

1. Apparatus for detecting flaws in rails comprising a test car movable along the rail, means carried upon the car for passing a direct current through a section of the rail being tested, a movable winding carried by said car, means for imparting a motion to said winding independent of the motion of said car for cutting lines of flux associated with said current when and only when the current



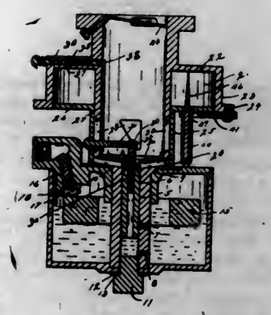
becomes diverted by a flaw in said rail whereby a voltage of greater magnitude than that due to the motion of the car alone is induced in said winding, and indicating means responsive to said voltage.

1,892,827. ADJUSTING MEANS FOR THE TANGENT POST OF GAS METERS. CLAUDE R. BROWER, Santa Ana, and DOYLE Z. KIRKHAM, San Pedro, Calif. Filed July 14, 1931. Serial No. 550,746. 4 Claims. (Cl. 73—1.)



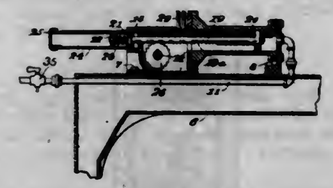
1. In a gas meter, a valve actuating crank shaft, a tangent arm section secured to the shaft, a second tangent arm section carried by said first section for adjustment toward and away from the shaft, means for adjusting saaid second section, a tangent post mounted upon said second section for adjustment therewith to vary the radius of the tangent post and for adjustment thereon to vary its angular position with relation to the shaft, and means for adjusting the position of the post on said second section, said latter means being disposed in parallel relation to said first adjusting means.

1,892,828. CARBURETOR. ARTHUR DICKERSON, Logan, Utah. Filed June 16, 1931. Serial No. 544,825. 2 Claims. (Cl. 261—50.)



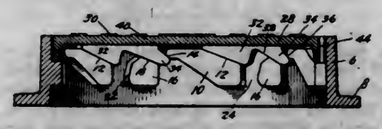
1. In a carburetor of the class described for internal combustion engines the combination of a mixing chamber having an extension thereunder adapted to receive a metering fuel jet; a float chamber and cover carried under said chamber; a jet carried in said extension; an annular chamber formed around said mixing chamber; a suction controlled secondary air control valve carried around said mixing chamber, said valve having a portion forming the lower wall of said annular chamber; means for communicating the suction from said engine to said annular chamber; openings through said mixing chamber to form secondary air openings and to be opened or closed by said air control valve; radial primary air ports leading through the base of said mixing chamber into the interior thereof at approximately the level of the metering jet; a metering valve carried in said metering jet and supported and actuated by said secondary air control valve; means to partially rotate said air control valve to shut off all of the secondary air openings to said chamber and all or part of said primary air to start the motor; and a needle valve carried between said annular chamber and said float chamber cover adapted to control the opening or closing of ports into said annular chamber as necessary for control of the movement of the secondary air control valve.

1,892,829. HYDRAULIC HOIST. ROY E. CHOATE, Cedar Rapids, Iowa. Filed June 24, 1929. Serial No. 373,450. 7 Claims. (Cl. 254—186.)



1. A hydraulic hoist comprising a pressure cylinder, a piston and its rod mounted therein, one side of the rod being formed as a rack, an engaging pinion imparting rotary motion to a cross-shaft and hoisting drum, an abutment traversed by the piston rod, and a compression spring carried by the piston rod and adapted to cushion the back-stroke thereof in conjunction with said abutment.

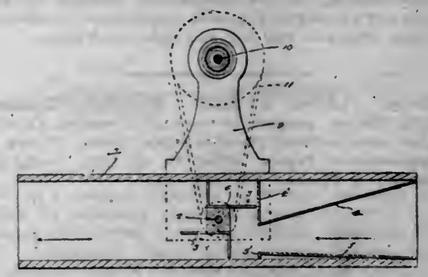
1,892,830. MANHOLE AND COVER. OWEN T. DOUGHERTY, St. Paul, Minn. Filed Dec. 30, 1930. Serial No. 505,633. 5 Claims. (Cl. 94—35.)



1. A manhole comprising an outer housing having a series of inwardly projecting spaced apart cover seating members, the said members each having an upper seat surface inclined to the horizontal plane, said members having each an inclined interlocking under surface, and a series of lugs arranged near the top of the housing and having upper inclined surfaces, a cover adapted to be interlocked with the housing against vertical movement of the cover, the said cover having lugs constructed to bear against the upper inclined surfaces of said members and lugs and against said interlocking under surfaces of said members when the cover is rotated into closing position.

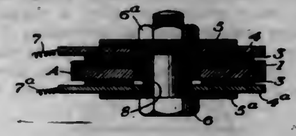
1,892,831. WATER PRESSURE DRIVEN MOTOR. JOSEPH M. GEGA, Portland, Oreg. Filed Mar. 11, 1932. Serial No. 598,250. 1 Claim. (Cl. 170—104.)

A water motor comprising a tube of circular shape in cross section, a lower plate located in the lower part of the front end of the tube, said plate being of arcuate shape in cross section with its concave face uppermost, a narrow flange depending from the inner end of the plate and engaging a portion of the lower part of the tube, an upper plate sloping downwardly and rearwardly from the front end of the tube, said plate last mentioned being of arcuate shape in cross section with its concave face



lowermost, a flange of considerable length connected with the inner end of the upper plate and extending upwardly and contacting portions of the upper part of the tube and a water wheel located in the tube in rear of the flanges of the plates and having straight blades thereon which are engaged by the water flowing from the passage formed by the plates.

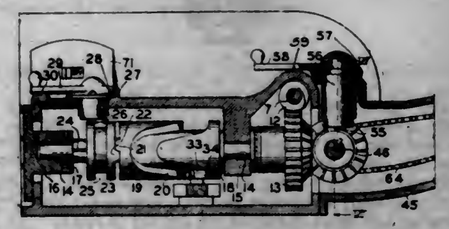
1,892,832. PROCESS OF PREPARING UNI-DIRECTIONAL CURRENT CARRYING DEVICES. PAUL H. GEISER, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 10, 1925. Serial No. 55,523. 15 Claims. (Cl. 175—366.)



3. The process of preparing metal for use in a unidirectional current-carrying device which consists in cleaning a metallic blank, successively heating the blank a number of times to form cuprous oxide thereon, and quenching the blank after each heating.

8. In the process of preparing metal for use in a unidirectional current-carrying device the steps of heating a metallic blank to form oxide thereon, gradually cooling the blank to substantially 600° centigrade, and quenching the blank.

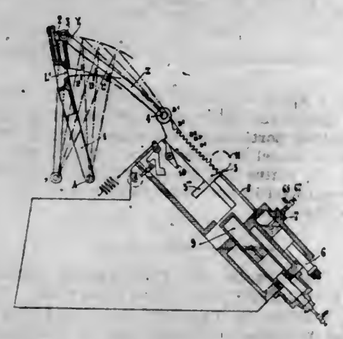
1,892,833. POWER UNIT. REGINALD GILBERT, San Francisco, Calif. Filed May 7, 1930. Serial No. 450,577. 2 Claims. (Cl. 74—7.)



1. A power unit comprising an enclosing housing; a motor driven reduction gear mounted within said housing; a revolving shaft driven by said reduction gear; an os-

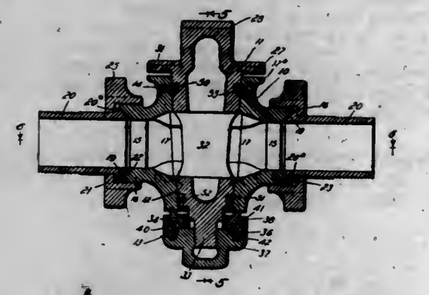
cillatory shaft projecting through said casing; a segment driven by said revolving shaft and adapted to impel said oscillatory shaft; a bevel gear mounted on said revolving shaft; a shaft transverse to said revolving shaft; right and left bevel gears rotatably mounted on said transverse shaft; a sprocket fixed to said transverse shaft; a clutch collar splined to said transverse shaft; a spindle journaled in said housing; a stud eccentrically mounted on said spindle and adapted to slide said clutch collar to selectively engage either of said left and right bevel gears.

1,892,834. FLYING SHEARS. ALPHONSE GROSBOST, Paris, France, assignor of one-half to Société d'Etudes & de Constructions Metallurgiques, Paris, France, a Corporation of France. Filed Oct. 12, 1929. Serial No. 399,339. 4 Claims. (Cl. 164—49.)



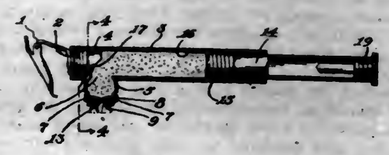
1. In a device for shearing moving bodies, a source of motive power, a shaft adapted to rotate alternately and to be energized from the source of motive power, a plurality of shearing blades adapted to effect a shearing operation, said blades being actuated by the rocking of the shaft, and means for storing the kinetic energy of the movable parts of the apparatus during the shearing operation and for restoring it to the movable parts during the return operation.

1,892,835. STOPCOCK. LELAND S. HAMER, Long Beach, Calif. Filed Oct. 30, 1929. Serial No. 403,441. 3 Claims. (Cl. 251—103.)



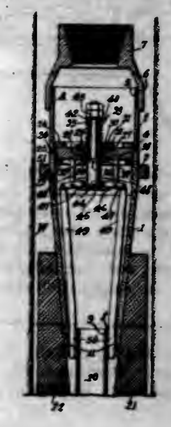
2. A stop cock of the character described including, a body having a fluid passage and a tapered opening, a tapered plug in the opening having a transverse opening, the plug being operable to bring the transverse opening into and out of register with the fluid passage, the plug having annular grooves at opposite sides of the transverse opening, and rings of expansible packing in the grooves to seal with the walls of the tapered opening, there being annular grooves in the inner sides of the rings, the inner walls of the grooves in the plug being beveled to admit fluid into the grooves in the rings.

1,892,836. COMBINATION RAZOR AND SHAVING BRUSH. GEORGE R. HARVEY, La Fayette, Ind. Filed Apr. 29, 1932. Serial No. 608,303. 5 Claims. (Cl. 30—12.)



1. A combination shaving outfit, including a safety razor provided with a hollow handle, a brush having a hollow portion in communication with the hollow handle and disposed in advance of the cutting edge of the blade, and means for forcing an emollient onto the bristles of the brush.

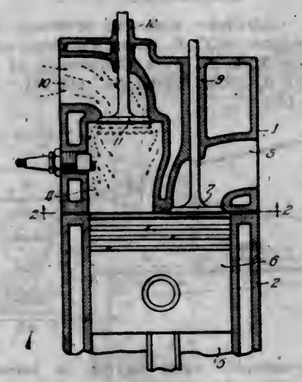
1,892,837. TESTING TOOL. LOU BRESWELL HEARLE and HENRY GAYLE HUDSON, Wilson, Okla., assignors of one-half to Jones Everett Machine Co., Ardmore, Okla. Filed Apr. 30, 1931. Serial No. 534,118. 4 Claims. (Cl. 166—1.)



1. A tool of the class described including a tapered mandrel having a compartment therein provided with an inlet opening, a pipe extending from the mandrel having an inlet, an expansible packing sleeve supported about the mandrel, a slidable connection between said sleeve and the pipe, means connected to the sleeve for limiting the downward movement of the sleeve within a well, said sleeve being expansible into sealing contact with the wall of a well by the mandrel when lowered relative thereto, and means within the mandrel and extended outside of the pipe for operation by the downward movement of the mandrel relative to the packing sleeve for establishing communication between the lower end of the mandrel and the compartment.

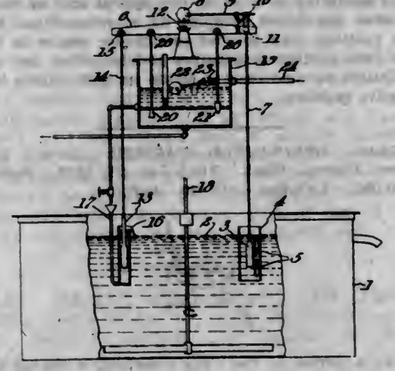
1,892,838. INTERNAL COMBUSTION ENGINE. HARRY L. HORNING, Waukesha, Wis., assignor to Waukesha Motor Company, Waukesha, Wis., a Corporation of Wisconsin. Filed Aug. 22, 1928. Serial No. 301,224. 11 Claims. (Cl. 123—191.)

1. In an internal combustion engine, a cylinder, a piston reciprocating in the cylinder, a head having a combustion chamber overlying a portion of the cylinder area, said head having a portion overlying the remainder of the cylinder area and defining with the piston, when raised, a shielded area, a combustible gas intake passage opening into the combustion chamber, an inlet valve overlying the cylinder



area and controlling said passage, a burned gas exhaust passage, and an exhaust valve in said shielded area controlling the exhaust passage.

1,892,839. MEANS FOR MEASURING AND CONTROLLING THE DENSITY OF SUSPENSIONS OF SOLIDS IN LIQUIDS. HENRY HOWARD, Newport, R. I. Filed Feb. 16, 1931. Serial No. 516,270. 7 Claims. (Cl. 23—253.)

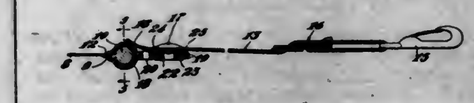


1. A float-actuated device for effectuating the control of the density of slurries and the like, comprising a float member, means for rotating said float member, and a control-effectuating mechanism actuated by the movement of said float member.

1,892,840. ALUMINIUM ALLOY. OTTO KAMPS, Aachen, Germany. Filed Dec. 5, 1929, Serial No. 411,973, and in Germany Oct. 5, 1927. 1 Claim. (Cl. 148—21.1.)

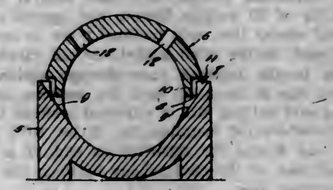
A heat treated aluminium alloy consisting of an alloy containing 5% copper, 0.3% nickel, 0.1% thorium, 6.8% binary copper-cerium alloy containing 90% copper and 10% cerium, having a fine crystalline structure and the remainder aluminium quenched from a temperature of from 535 to 480° C. to room temperature in a barium chloride bath and subsequently submitted to a heating treatment between 300 and 50° C. to produce steel hardness.

1,892,841. MATTRESS PROTECTOR. HENRY L. KAUFMANN, Newton, Mass. Filed May 24, 1932. Serial No. 613,182. 5 Claims. (Cl. 24—72.5.)



2. In a mattress protector of the type described, a coupling for separably attaching a retaining strap to the margin of a flexible sheet, the coupling comprising a pair of complemental plates having clamp portions applied to opposite sides of the sheet margin and substantially flat wing portions, means for clamping said plates together thereby to grip the sheet margin and to hold the wing portions in juxtaposed relation, the respective wing portions having registering openings therethrough and outwardly offset, annular shoulders bordering said openings, thereby to form a double-ended socket and a peripheral channel between said annular shoulders, a spring in said channel, and a complemental stud member attached to the strap and detachably engageable in said socket through the opening in either of the wing portions, whereby the strap may be fastened to the outermost side of the coupling plates whether the obverse or reverse surface of the sheet is uppermost.

1,892,842. UNDER DRAIN FOR SEWER FILTERING PLANTS. HENRY R. KIMBERLING, St. Louis, Mo. Filed Feb. 27, 1931. Serial No. 518,828. 2 Claims. (Cl. 210—148.)

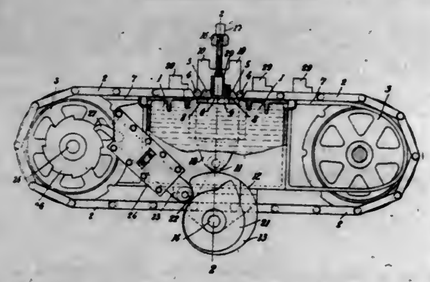


1. An under drain construction comprising a trough like bottom section provided on its opposite sides, and inwardly and downwardly from the top edges thereof with spaced seats, and a cover section having its opposite longitudinal edges adapted to engage said seats for supporting said cover section, and seepage passages formed in the opposite sides of said bottom sections between adjacent seats, said seepage passages opening out thru the top edges of the sides of said bottom section.

1,892,843. APPARATUS FOR SURFACE HARDENING OF THE INNER WALL OF HOLLOW BODIES. FRIEDRICH KLOPP, Solingen-Wald, Germany. Filed Feb. 7, 1931, Serial No. 514,295, and in Germany Feb. 24, 1930. Renewed Oct. 18, 1932. 3 Claims. (Cl. 266—4.)

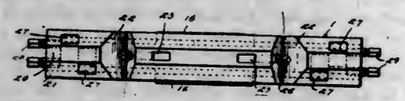
1. An apparatus for surface hardening of the inner wall of hollow bodies, comprising in combination with a tank filled with hardening liquid, an endless double link chain, carrying the bodies to be hardened, guided across said tank, a table like plate having a central aperture and adapted to receive one of said hollow bodies from said endless chain, means for lowering said plate into

and lifting the same out of the hardening liquid, and a bridge carrying burners adapted to be lowered and raised relatively to said tank so that said burners at the lower-



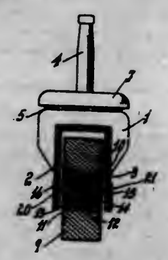
ing of the plate heat the inner walls of said hollow bodies from below upward, the heated portions being instantaneously cooled by the hardening liquid.

1,892,844. COAL CUTTER. JOHN R. LAWSON, Denver, Colo. Filed Mar. 21, 1931. Serial No. 524,354. 2 Claims. (Cl. 262—33.)



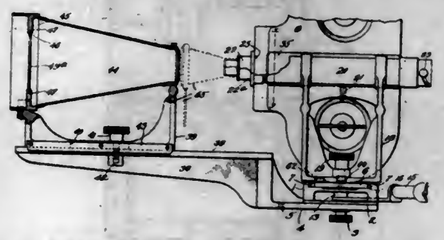
1. A cutter of the character described comprising a relatively long flat body of reduced thickness through a longitudinal central area of substantial width, forming a relatively wide head longitudinally of one edge, and a longitudinally extending portion at the opposite edge of the same thickness as said head, said head having the longitudinal corners beveled off to provide two longitudinally extending inclined faces separated by a longitudinally extending central face, said central face having a plurality of bit sockets therein and spaced along a longitudinal center line, said inclined faces at each end of the head each having a bit socket therein extending at right angles to the inclined face through which it opens, a cutting bit in each of said bit sockets, means for securing said cutting bits in adjusted position in the sockets, link members for coupling the cutter with adjacent cutters, and means for securing an end of a link member in each end of the cutter body between the faces of the said central area.

1,892,845. REMOVABLE WHEEL CASTER. ALLEN G. MCGRATH, Long Beach, Calif., assignor to The Darnell Corporation, Ltd., Long Beach, Calif., a Corporation of Delaware. Filed Mar. 5, 1932. Serial No. 596,949. 5 Claims. (Cl. 16—30.)



1. A removable wheel caster comprising a yoke, a pin rising from the yoke, a pair of spaced wings depending from the yoke, a wheel, an axle on which the wheel is mounted, each of said wings having a recess formed therein, and an indentation extending to said recess, the ends of said axle being adapted to fit into the recesses whereby the wheel is removably mounted between the wings.

1,892,846. CAMERA. EMIL M. MUELLER, New York, N. Y., assignor to C. P. Goerz American Optical Company, New York, N. Y., a Corporation of New York. Filed July 5, 1928. Serial No. 290,351. 15 Claims. (Cl. 88—16.)



1. A photographic outfit having, in combination, a base; a complete photographic moving picture camera including a photographic lens supported by said base so as to be movable in its entirety back and forth thereon in a direction cross-wise of the optical axis of said camera; means for limiting the movement of said camera in one direction to locate the optical axis of its lens in a definite operative position; means for limiting the movement of said camera in the opposite direction to locate the optical axis of its lens in an inoperative position, and focusing finder means whose optical axis is disposed cross-wise with respect to the direction of movement of the camera, said finder means being also supported by said base and connected with said camera so as to be movable back and forth thereon with the latter so that its optical axis coincides with the aforementioned operative position of the optical axis of the camera when the latter occupies its aforementioned inoperative position, and so that said finder means is shifted aside into another inoperative position when the camera is adjusted on said base to locate its optical axis in said operative position.

1,892,847. WINDSHIELD WARMER. GEORGE H. OSGOOD, Tacoma, Wash. Filed Jan. 21, 1931. Serial No. 510,096. 3 Claims. (Cl. 20—40.5.)

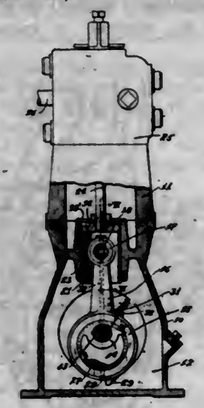


1. In a device of the class described, a heated engine chamber; a windshield; a transverse conduit adjacent said windshield and having openings therein adjacent said windshield; a valve chamber; passages connecting said valve chamber with said heated engine chamber, and with said transverse conduit, and with the interior of said car; and a valve in said valve chamber and adapted to control the several passages to direct the warm air from the engine chamber to the windshield or to the car.

1,892,848. MANUFACTURE OF PHENOL FORMALDEHYDE CONDENSATION PRODUCTS. ALFONS OSTERSETZER, Klosterneuburg, and FRANZ RIESENFELD, Vienna, Austria, assignors to Pollopas Limited, Nottingham, England, a Company of England. Filed May 18, 1929, Serial No. 364,312, and in Austria June 1, 1928. 1 Claim. (Cl. 260—4.)

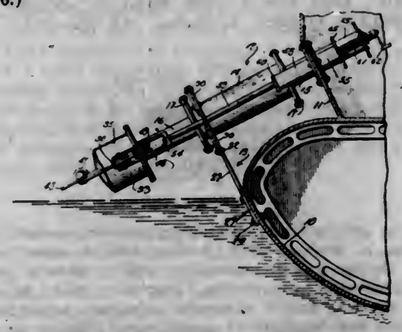
A process for the manufacture of phenol formaldehyde condensation products which comprises condensing one mol of phenol with more than one mol of formaldehyde in a strongly alkaline solution and adding toward the end of the condensation a further quantity of phenol such that the total phenol stands in the molecular ratio of 2 to 5 with respect to the formaldehyde.

1,892,849. LUBRICATING SYSTEM. FREDERICK J. RAYFIELD, Chicago, Ill., assignor to Champion Pneumatic Machinery Co., Chicago, Ill., a Corporation of Illinois. Filed July 9, 1931. Serial No. 549,712. 5 Claims. (Cl. 184—24.)



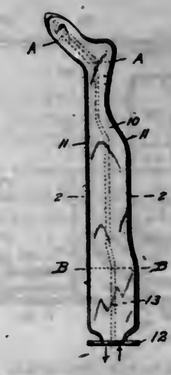
1. In combination, a casing forming an oil well, a shaft rotatable in said casing, an eccentric member rotatable with said shaft, a connecting rod having a head surrounding said eccentric member, there being an oil channel extending completely around between said eccentric member and head entirely inwardly from the sides thereof, there being an inlet passage through the surrounding head at the lower part thereof for conducting oil from the well into the said channel, said connecting rod having a duct extending longitudinally therethrough communicating at its lower end with the channel, the relative movement of said eccentric member and head causing propulsion of oil through said channel from said inlet toward said duct, a member extending through said head and projecting into said channel adjacent to the end of said duct for deflecting the oil from said channel to flow into and through said duct, said member being adjustable whereby part of the oil may flow past said member and back toward said well.

1,892,850. ESCAPE ATTACHMENT FOR SUBMARINES. ALVIN SAEDER, St. Louis, Mo. Filed July 29, 1932. Serial No. 625,821. 10 Claims. (Cl. 114—16.6.)



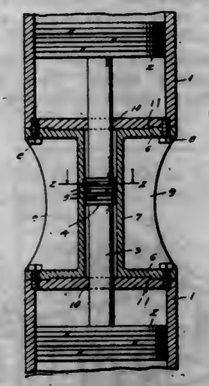
1. In an escape attachment for submarines, a tube assembly supported on the side of a submarine and extending therein, closures for opposite ends of the tube assembly, primary operating means for the closure at the outer end of the tube assembly operable from within the submarine, the tube assembly including an intermediate enlarged tube section and an outer end tube section of reduced diameter whereby when the inner end of the tube assembly is closed and the outer end opened, air in the intermediate tube section will be compressed and prevent the entry of water therein.

1,892,851. INSULATED DRYING FORM. JULIUS O. V. STETTEN, Philadelphia, Pa., assignor to Paramount Textile Machinery Company, Kankakee, Ill., a Corporation of Illinois. Filed Apr. 24, 1929. Serial No. 357,677. 11 Claims. (Cl. 223—17.)



1. A hollow drying form for shaping articles to be dried, arranged for passing a heating fluid therethrough, and insulating material on portions of the inside of the form, whereby said insulated portions will not be heated to as high a temperature as the portions on which no insulating material has been placed.

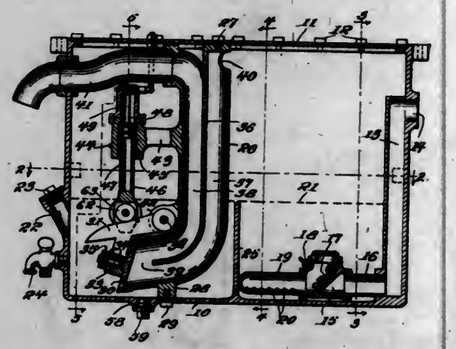
1,892,852. CYLINDER CONSTRUCTION. GARNETT R. RAWLES and ALVIN TEDDER, Memphis, Tenn. Filed Oct. 28, 1930. Serial No. 491,772. 1 Claim. (Cl. 74—108.)



1. The combination with a pair of power cylinders arranged in end opposed relation and each having a piston therein, of a body disposed between the cylinders and connecting the same and consisting of a pair of plates each being secured to an end of a cylinder and a sleeve connecting said plates and opening at each end through one of the same against the adjacent end of the cylinder, a piston rod having each end connected with a piston and passing from the cylinders through said sleeve, fixed ring

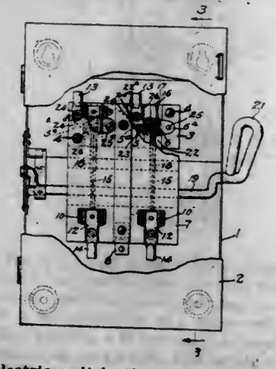
members surrounding and in spaced relation on said rod midway of its ends said rod being of materially smaller diameter than the interior of the sleeve, packing rings carried by said rod and disposed between said fixed rings and located in said sleeve for engagement with the surrounding wall thereof, and a reinforcing web extending longitudinally of the sleeve and formed integral therewith and further connecting said plates.

1,892,853. MUFFLER. EUGENE H. RUSTIN and DANIEL J. IULO, Brooklyn, N. Y.; said Eugene H. Rustin assignor of two-thirds to Marie Rustin and said Daniel J. Iulo assignor of one-third to Rena Iulo, Brooklyn, N. Y. Filed Jan. 8, 1931. Serial No. 507,444. 8 Claims. (Cl. 261—123.)



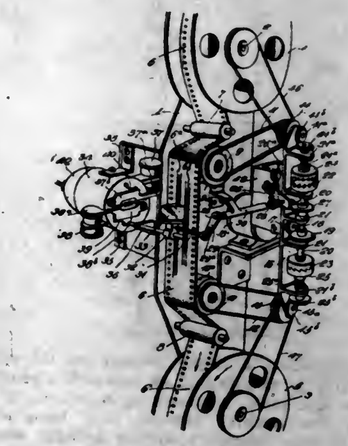
1. A muffler for internal combustion engines comprising a casing having an inlet adapted for communication with the exhaust manifold of the engine, the casing being partly filled with a liquid, means having one end in communication with the inlet and its other end submerged within the liquid and having outlet openings to discharge the gases into the liquid, a submerged separating chamber within the casing, means extending above the top of the liquid to receive and direct the gases into the separating chamber, a normally closed pressure opened valve forming one wall of the separating chamber to permit the escape of moisture, means other than gravity for resisting opening of the valve and means to direct dry gases to the atmosphere.

1,892,854. ELECTRIC CIRCUIT CONTROLLING APPLIANCE. JOSEPH SACHS, West Hartford, Conn. Filed Oct. 14, 1931. Serial No. 568,807. 5 Claims. (Cl. 200—163.)



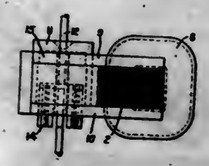
1. In an electric switch, the combination of a movable switch contact having two opposite parallel contact faces, two stationary switch contacts at opposite sides of the path of movement of the movable contact with the longitudinal lines of the said contacts substantially perpendicular to the direction of such movement, the said stationary contacts having opposite parallel contact faces adapted to be engaged and disengaged by the respective contact faces of the movable contact, and means at opposite ends of the respective stationary contacts for supporting them in such manner as to leave them free for transverse flexure in substantial parallelism.

1,892,855. SOUND RECORDING APPARATUS. GORDON BROWN SCHEIBELL, Newark, N. J. Filed Mar. 12, 1931. Serial No. 522,096. 5 Claims. (Cl. 179—100.3.)



1. Sound recording apparatus comprising a light sensitive film, reel mechanism for moving said film to a limiting position in one direction and automatically reversing the movement of said film for moving said film to a limiting position in the opposite direction, a stationary light recording head and a light reflecting device interposed between said light recording head and said film for subjecting said film to the action of variable light rays in one longitudinally extending track while said film is being moved in one direction, and means for automatically shifting the position of said light reflecting device for exposing said light sensitive film to light in an adjacent track when said film is being moved in an opposite direction.

1,892,856. SYNCHRONOUS MOTOR. HARRY P. SPARKES, Edgewood Park, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 5, 1920, Serial No. 421,882. Renewed Dec. 17, 1929. 12 Claims. (Cl. 172—278.)



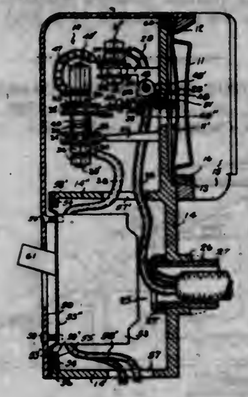
5. A self-starting alternating-current motor comprising a field member having salient polar members having axially extending splits therein, means for producing a rotating magnetic field in said field member, and a composite armature mounted for rotation and longitudinal displacement relative to said field member, said armature comprising a portion constituting an induction-motor secondary member tending to accelerate said motor almost to full synchronous speed corresponding to the number of salient polar members of said field member, and a longitudinally removed portion constituting a salient-pole synchronous-motor member having a relatively large number of salient poles adapted to lock into step with respect to the split portions of said field polar members at a definite sub-synchronous speed, said armature being normally biased to a position in which said induction-motor portion is in a strong magnetic field, and the magnetic attraction between said salient-pole portion and the field being sufficient to displace said induction-motor portion into a weaker magnetic field during running conditions.

1,892,857. COMPOSITION FOR PREVENTING BOILER PRIMING OR FROTHING. ERWIN F. SPELLMEYER, East Orange, N. J. Filed Dec. 15, 1931. Serial No. 581,272. 6 Claims. (Cl. 87—27.)

3. The method of treating boiler waters for retarding boiler priming or frothing, consisting in adding a fatty acid amide to the boiler waters.

4. The method of treating boiler waters for retarding boiler priming or frothing, consisting in adding stearamide to the boiler waters.

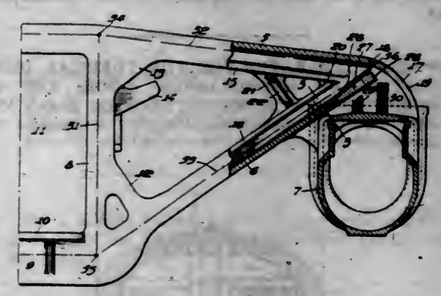
1,892,858. THERMOSTATIC ELECTRIC SWITCH. MILES E. STALEY, Tacoma, Wash., assignor to Red Spot Electric Co. Inc., Tacoma, Wash., a Corporation of Washington. Filed Sept. 3, 1929. Serial No. 389,950. 9 Claims. (Cl. 200—140.)



1. A thermostatic electric switch embodying a base frame, a subbase secured to said base frame, means for securing the subbase and the base frame to an object of variable temperature, a thermostat cell held between the subbase and the base frame in close proximity to the object and responsive to variations in temperature of the object, a cover cooperating with said base frame to form a housing having an upper and a lower compartment, switch means in the upper compartment actuated by said thermostat, and manually controlled switch means in the lower compartment in series connection with said switch means in said upper compartment.

1,892,859. TRUCK SIDE FRAME. THOMAS H. SYMINGTON, deceased, Baltimore, Md., by Edith R. Symington and Thomas R. Symington, executors, Baltimore, Md., assignors to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed Nov. 11, 1931. Serial No. 574,435. 7 Claims. (Cl. 105—205.)

1. In a side frame, compression and tension members converging at their outer ends and merging into each other and into an integral journal box, the tension member being of channel shape in cross section with its open side uppermost, the web or bottom wall of the tension member extending above the upper inner edge of the journal box and being free therefrom.

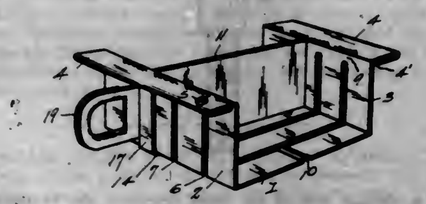


1,892,860. VEHICLE TRAFFIC INDICATOR. ARTHUR J. WEHR, San Francisco, Calif.; JOHN W. SHEERES, Jackson Heights, N. Y.; and AMORY V. ELIOT, Fort Sam Houston, Tex. Filed July 1, 1929. Serial No. 375,256. 3 Claims. (Cl. 88—1.)



1. A vehicle signal adapted for attachment to a vehicle and serving to give direction indication by light reflection and comprising a plurality of reflecting devices angularly disposed to each other, each of said devices including a reflector in a plane angularly disposed to the vertical, and a colorless transparent member and a colored transparent member disposed substantially at right angles to each other and positioned to transmit incident and reflected rays of light to and from said reflector, the colored members of the different devices being of different colors.

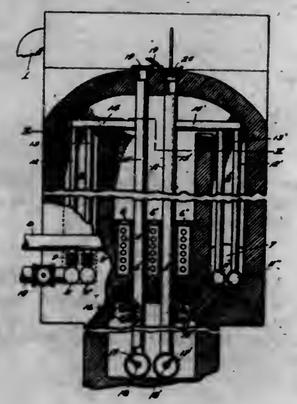
1,892,861. SLICING MOLD. HELEN E. WELTY, Seattle, Wash. Filed Sept. 29, 1931. Serial No. 565,855. 3 Claims. (Cl. 31—32.)



2. The combination in a reversible slicing mold comprising only a horizontal plate, a pair of perpendicular side walls and a pair of lateral flanges parallel with the horizontal plate, said mold having a plurality of

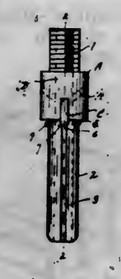
slots in the horizontal plate extending into the side walls and terminating adjacent the edges of said walls, of a removable gage plate fitted into one of said slots and having cut-away ends to compensate for the fore-shortened slot.

1,892,862. APPARATUS FOR THE THERMAL DISSOCIATION OF HYDROCARBON GASES AND VAPORS. WILLIAM D. WILCOX, Lawrence, Kans. Filed June 28, 1930. Serial No. 464,688. 6 Claims. (Cl. 23—7.)



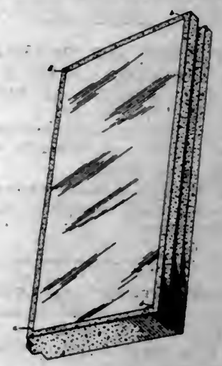
1. In apparatus for the thermal dissociation of hydrocarbon gases and vapors, the combination of a dissociation chamber, a preheating chamber, a cross connection between the upper extremities of these chambers, gas and air inlets to the lower extremities of the dissociation chamber and a combustion gas outlet from the lower extremity of the preheating chamber, whereby an active combustion may be maintained and the combustion gases caused to pass to the lower extremity of the preheating chamber, a series of conduits within these chambers extending from the lower extremity of the preheating chamber to the lower extremity of the dissociation chamber, inlets for the admission of gas and air to the conduits at the lower extremity of the preheating chamber and an outlet for the withdrawal of gases from the conduits at the lower extremity of the dissociation chamber, substantially as described.

1,892,863. CUTTING TOOL. FRANCIS E. BLANC, Park City, Utah. Filed Nov. 18, 1930. Serial No. 496,462. 1 Claim. (Cl. 255—173.)



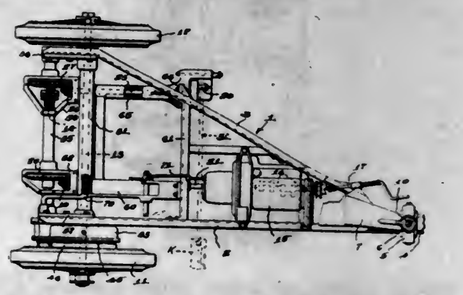
In a cutting tool of the class described the combination of a cylindrical body having the top end of smaller diameter and externally threaded and with a transverse slot across said body at the lower end thereof with the lower end extended into a guide core; longitudinal slots in the core of said body; a cutting blade carried in diametrically opposed slots through said body, said blade having the opposed lower edges sharpened; a tapered pin driven through a hole in said body under said blade and at right angles thereto to hold the blade fixed in relation to said body; ports through said body above said blade to direct water currents therethrough; and means to allow water to be pumped through the ports and the longitudinal slots to carry off the cuttings of the blade.

1,892,864. CONCRETE SILO WALL MEMBER. WALTER O. BRASSERT, Kalamazoo, Mich. Filed Jan. 12, 1931. Serial No. 508,108. 5 Claims. (Cl. 72—6.)



1. A concrete silo wall member having its inside surface infused with an ensilage moisture resistant, except at its marginal areas where contacted by a joint-closing material.

1,892,865. MOTOR IMPLEMENT. CHARLES S. BROWN, Syracuse, N. Y. Filed Oct. 28, 1930. Serial No. 491,804. 15 Claims. (Cl. 180—27.)



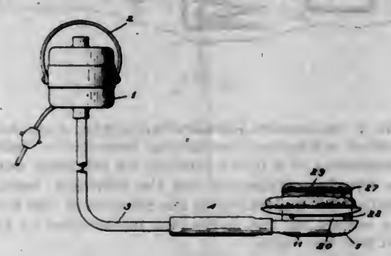
1. In a motor implement, the combination of a frame, front and rear supporting wheels, an axle supported by and extending transversely of the frame near the rear end thereof, and on which the rear wheels are mounted, a jack shaft supported by and extending transversely of the frame in the rear of the axle, motion transmitting means between the jack shaft and the rear wheels, an engine mounted on the forward part of the frame, a propeller shaft, means connecting the front end of the propeller shaft and the engine shaft, the propeller shaft extending lengthwise of the frame, and under the axle to the rear thereof, and gearing between the rear end of the propeller shaft and the jack shaft, an implement shaft extending lengthwise of the frame and supported thereby, the implement shaft being substantially parallel to and spaced apart from the propeller shaft, and extending from the jack shaft forwardly under the rear axle, gearing between the jack shaft and the implement shaft, and an implement member actuated by said shaft, and connections between the implement member and the implement shaft.

1,892,866. THERMIONIC AMPLIFYING DEVICE. STANLEY W. BROWN, Buffalo, N. Y. Filed May 2, 1929. Serial No. 359,813. 1 Claim. (Cl. 250—27.5.)



A thermionic amplifying device, comprising an electron emitting cathode, an anode, a signal grid located between the cathode and the anode, an inner screen located between the anode and the signal grid, a cathode screen between the signal grid and the cathode, and an outer anode screen surrounding the anode.

1,892,867. ELECTRIC FINGER NAIL FILE AND BUFFER. WILLIAM H. BURR, San Francisco, Calif. Filed June 1, 1931. Serial No. 541,420. 6 Claims. (Cl. 132—74.)



1. In combination, a movable handle, a casing carried thereby, a reciprocable support carried by the side of the casing and having a wedge-shaped groove, and a block removably receivable in the groove and carrying a tool, said tool being reciprocated in the direction of the length of the handle.

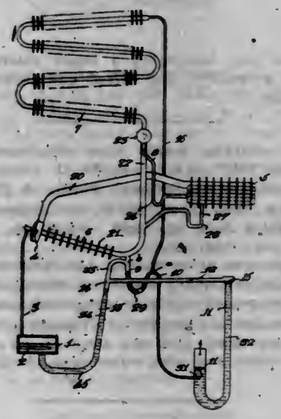
1,892,868. LOAD DISCHARGING GONDOLA CAR. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed July 16, 1931. Serial No. 551,158. 11 Claims. (Cl. 105—244.)

11. In a railway car, the combination with car construction including a side wall, side stake and crossbeam member; of a discharge door having its free edge adjacent the side wall of the car; a door supporting shaft mounted in said crossbeam member, said supporting shaft being movable by a rotary movement to a supporting position beneath the door; and means for preventing movement of the shaft beyond the free edge of the door, said means including: a locking pawl pivoted above the



shaft and a locking dog adapted to prevent movement of the pawl, said dog being located outwardly beyond the car side wall.

1,892,869. HEAT EXCHANGE METHOD AND APPARATUS. DANIEL F. COMSTOCK, Brookline, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc., a Corporation of Delaware. Filed June 14, 1927, Serial No. 198,715. Renewed Aug. 23, 1929. 19 Claims. (Cl. 62—115.)

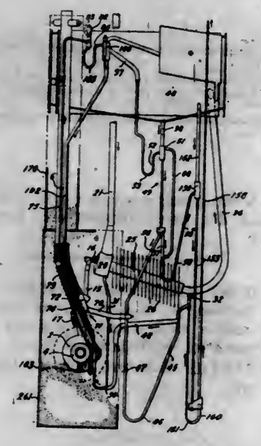


1. In a system of the class described, means for purging the system of non-condensing gases, comprising a duct, liquid circulating in said duct, a capillary tube forming a part of said duct, a pipe joining said tube, said pipe being adapted to supply non-condensing gases to said duct, whereby gas is entrained by the liquid, a vessel, said capillary tube having a fixed outlet continually in connection with the vessel, said vessel containing liquid exposed to the air whereby gas may rise to the surface of the liquid in the vessel and pass into the atmosphere, and an upstanding outlet pipe connected to said vessel and adapted to receive liquid therefrom to form a liquid column balancing liquid pressure in the vessel and the air pressure thereabove, and means for returning liquid from said column to the duct when the column reaches a predetermined height.

1,892,870. FLUID SYSTEM. DANIEL F. COMSTOCK, Boston, Mass., assignor to Comstock & Wescott, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Dec. 17, 1930. Serial No. 502,955. 7 Claims. (Cl. 62—115.)

1. Apparatus of the class described comprising a propellant circuit and a refrigerant circuit, a boiler in the former and a cooler in the latter, said circuits having a common part where vaporized propellant causes the re-

frigerant to circulate, means receiving the propellant from said common part and lifting it to a region above the same, and a return pipe forming part of the propel-

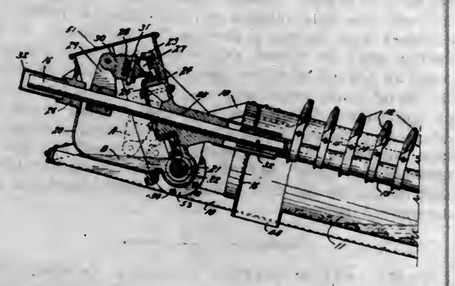


lant circuit and containing a liquid column which receives the propellant thus lifted and returns the same to the boiler.

1,892,871. COLOR BASE AND COMPOSITION CONTAINING THE SAME. JOYCE H. CROWELL, Buffalo, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed June 21, 1928. Serial No. 287,358. 29 Claims. (Cl. 134—26.)

5. The process of producing an oil-soluble color base which comprises heating a mixture containing a plurality of polyhydroxy-anthraquinone compounds, one of which is chlorquinizarine, a plurality of aromatic primary amines in excess, and boric acid at a temperature of about 145° to 180° C. while removing water from the field of the reaction.

1,892,872. ORE CLASSIFIER. ARTHUR C. DAMAN and WILLIAM E. SMITH, Denver, Colo., assignors to The Denver Equipment Co., Denver, Colo., a Corporation of Colorado. Filed Oct. 24, 1930. Serial No. 490,920. 11 Claims. (Cl. 74—14.)



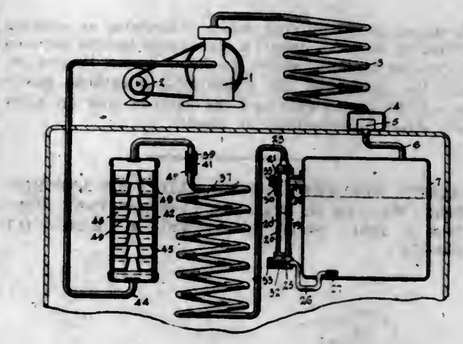
1. Means for rotating and reciprocating a shaft comprising: a rotating element adapted to rotate in a plane at an angle to the axis of said shaft; and an operative connection between said element and said shaft so that the rotation of the former will be imparted to the latter and the angular placement of said element will reciprocate said shaft longitudinally.

1,892,873. PROCESS OF SURFACING BOARD AND ARTICLE THEREFOR. WILLIAM A. DARRAH, Chicago, Ill. Filed June 9, 1928. Serial No. 284,222. 11 Claims. (Cl. 92—40.)



1. An article of manufacture consisting of a board of material thickness composed mainly of cellulose material having an absorbent core and with a hard surface containing chemically altered cellulose.

1,892,874. COMPRESSION TYPE REFRIGERATING SYSTEM. PHILIP W. DES ROCHES, Detroit, Mich. Filed Sept. 9, 1927. Serial No. 218,306. 26 Claims. (Cl. 62—115.)



1. In a compression refrigerating system, a compressor, a liquefied refrigerant containing reservoir, a lubricant trap consisting of a liquid retainer for retaining mixtures of the liquefied refrigerant and the lubricant, means for permitting the evaporation of the refrigerant, the retainer having outlets for the continuous introduction of the lubricant into the vapor.

1,892,875. PLANOGRAPHIC PRINTING PROCESS. VALENTIN DIETZ, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to Multigraph Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 1, 1930. Serial No. 472,490. 4 Claims. (Cl. 101—149.)

1. The process of printing comprising treating plate with a solution of ammonium nitrate, ammonium phosphate and glycerine and using on such treated plate an ink containing ammonium nitrate, ammonium phosphate and glycerine.

1,892,876. OIL PUMP. EUGENE W. DODGE, Long Beach, Calif. Filed Nov. 25, 1929. Serial No. 409,457. 2 Claims. (Cl. 103—721.)

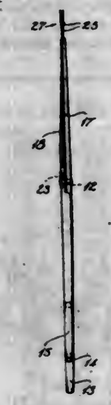
1. In a pump including a standing valve shoe, a barrel rising from the shoe, a plunger in the barrel, a ball check in said shoe, a washout cage in the shoe, engaging said

ball, and a coiled spring bearing against the top of said washout cage whereby the cage is urged downwardly, and a chain secured to said cage, and to the barrel, said



washout cage being adapted to be lifted, against the tension of the spring, and simultaneously lift the ball check from its seat.

1,892,877. SCISSORS. CHARLES DRIEST, Marlboro, N. J. Filed June 3, 1931. Serial No. 541,751. 8 Claims. (Cl. 30—13.)

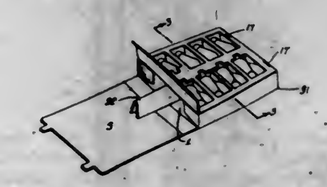


1. A tool of the class described comprising pivotally coupled handle members, jaw members extending from the pivot of the handle members, cutter blades detachably coupled with said jaw members, the jaw members having grooves arranged longitudinally thereof, opposed walls of said grooves being parallel, said blades being formed from strips of sheet metal of the same width and thickness throughout the major portion of their length to provide relatively straight cutting edges, and backing walls substantially parallel to said cutting edges, said blades fitting snugly in said grooves with approximately one half of the blades projecting beyond the side edges of said jaw members to provide lateral spring flexing of the blades with respect to each other in the use of the shears, and means for retaining the blades against displacement from the jaw members and the grooves thereof.

1,892,878. PRODUCTION OF BLACK COLORATIONS ON MIXED MATERIALS CONTAINING ORGANIC DERIVATIVES OF CELLULOSE. GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Dec. 21, 1928, Serial No. 327,758, and in Great Britain Jan. 7, 1928. 6 Claims. (Cl. 8—5.)

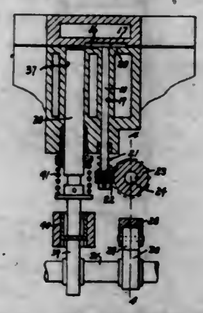
1. The production of uniform black colorations on mixed materials containing organic substitution derivatives of cellulose and cotton which comprises oxidizing on the materials a mixture containing para-aminodiphenylamine and aniline as the sole oxidizable constituents for imparting color.

1,892,879. CASE FOR RADIOTUBES. PARK S. FLOREA, Jersey City, N. J., and IRVING J. HENRY, Garden City, N. Y. Filed Nov. 25, 1931. Serial No. 577,214. 1 Claim. (Cl. 229—29.)



In an assembly of the character described, a body portion having top, bottom and side walls, the top being provided with cuts forming a plurality of flaps adapted to be infolded into the interior of the body to contact with the bottom and form a series of spaced apart pockets or compartments open at their tops, and a cover hinged to the body and foldable over the top of said body to cover and conceal the several compartments and form a closure for all of them, one flap of the flaps of each compartment being perforated to receive and hold the prongs of a radio tube, the remaining flaps of such compartment serving to hold the tubes against sidewise movement, and a spacer positioned between the top and the bottom interiorly of the body and adapted to occupy a position between the ends of tubes supported in the said compartments to preclude the ends of adjacent tubes from contacting with one another in an axial direction.

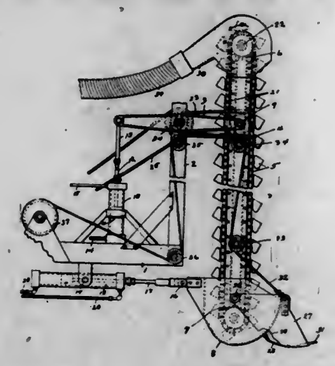
1,892,880. LIQUID FUEL INTERNAL COMBUSTION ENGINE. LOUIS O. FRENCH, Milwaukee, Wis. Filed Jan. 2, 1930. Serial No. 417,984. 6 Claims. (Cl. 123—33.)



4. In an internal combustion engine, the combination of a cylinder, a removable cylinder head, a piston working in said cylinder, a chamber in restricted communication with said cylinder, a rotary fuel-feeding-and-metering member seating on the end face of the cylinder wall,

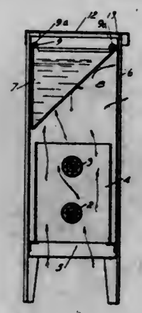
a chamber in restricted communication with the cylinder and supplied with fuel in the form of a non-kinetic film on the movement of said member on its seat, means for supplying fuel to the seating face of said member, an auxiliary cylinder communicating with said chamber, and a piston working in said last-named cylinder for forcing gases therethrough near the end of the compression stroke.

1,892,881. ELEVATING POWER SHOVEL. CHARLES M. FULLER and ARTHUR C. DENISON, Visalia, Calif., assignors, by direct and mesne assignments, to Chas. M. Fuller Corporation Ltd., Stockton, Calif., a Corporation of California. Filed Dec. 23, 1930. Serial No. 504,290. 5 Claims. (Cl. 214—90.)



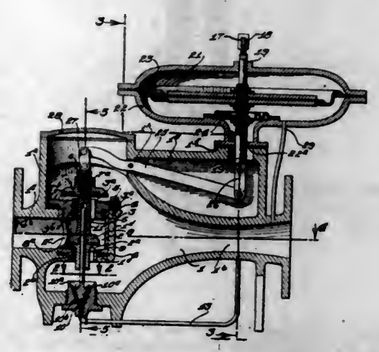
1. An elevating power shovel comprising a vertically arranged bucket elevator provided with a discharge chute at its upper end, means whereby said elevator may be swung bodily on a horizontal axis, a boot at the lower end of the elevator arranged to swing with the elevator, and a shovel carried by the boot arranged to discharge into the same.

1,892,882. ELECTRIC RADIATOR. JAMES E. GANNON and JOSEPH M. WINTER, Erie, Pa., assignors to American Electric Heating Company, Erie, Pa., a Corporation of Pennsylvania. Filed Aug. 26, 1929. Serial No. 388,400. 2 Claims. (Cl. 219—34.)



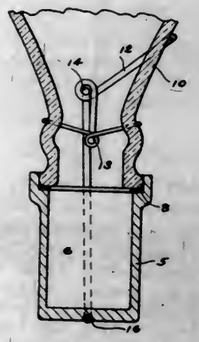
2. In an electric radiator, the combination of a case having air circulated from its heating surfaces discharging from the upper side of the case; an electric heating element in the case; a liquid receptacle arranged in the top of the case, said receptacle having a deflector directing the air rising from the element through the upper side face of the case; and a removable frame in the case in which is mounted the receptacle and the electric heating element, said frame with the receptacle and heating element being removable as a unit from the case.

1,892,883. FLUID PRESSURE CONTROLLING MEANS. OTTO B. GOLDKAMP, San Diego, Calif., assignor of one-half to San Diego Consolidated Gas and Electric Company, San Diego, Calif., a Corporation of California. Filed Nov. 21, 1928. Serial No. 320,791. 13 Claims. (Cl. 137—78.)



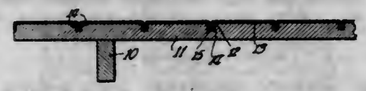
1. In a fluid pressure regulator, a valve mechanism, means in conjunction with said valve mechanism positioned for receiving the impact of a portion of fluid issuing therefrom, means for converting the impact of said fluid into a fluctuating pressure force, a variable weight means varied by said fluctuating pressure force, and lever means operated by said variable weight means, said lever means operatively connected with said valve mechanism.

1,892,884. SEDIMENT COLLECTING STOPPER. FRANK A. GRAUMAN and ARTHUR H. GRAUMAN, Seattle, Wash. Filed June 19, 1928. Serial No. 286,625. 2 Claims. (Cl. 215—37.)



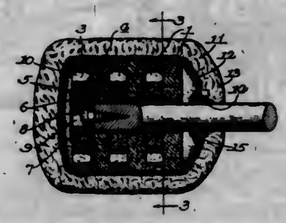
1. A bottle stopper adapted to be secured to the mouth of a bottle, a cylindrical sediment collecting cavity disposed wholly without and co-axially with the bottle, a circular shelf formed as part of the stopper, disposed between the bottle engaging portion of the stopper and the said cavity adapted to retard the sediment returning to the bottle when the bottle is held in a slanting position.

1,892,885. TILED WALL OR THE LIKE. OWEN E. GRIGSBY, Park Ridge, Ill., assignor, by mesne assignments, to Porcelain Tile Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 21, 1930. Serial No. 437,680. 6 Claims. (Cl. 72—18.)



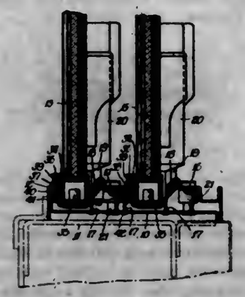
1. A connected set of tiles formed from a single sheet of metal and attached to a wall as a unit, each tile having flanges on its sides with laterally extending links connecting said flanges at spaced points with the flanges of the adjacent tiles, said links being arranged to space said tiles apart to receive cement in a grouting operation.

1,892,886. DRUMSTICK FOR BASS DRUMS. JOHN T. HAIGHT, Rockford, Ill. Filed Oct. 7, 1930. Serial No. 486,990. 11 Claims. (Cl. 84—422.)



1. In a drumstick of the character described, the combination of a handle member, and a beater head rotatably mounted on said handle member for rotation upon striking a drum head.

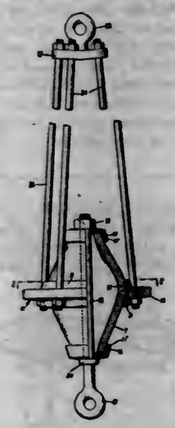
1,892,887. SASH CONSTRUCTION. WILLIAM S. HAMM, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 5, 1930. Serial No. 433,255. 5 Claims. (Cl. 189—73.)



1. In sash construction, the combination with a vertically slidable sash, of a side plate having a projecting guide portion in lapped relation to one face of the sash and two spaced positioning grooves beyond the other face of the sash, and a sheet metal guide strip of U-shaped cross section detachably secured to the plate with the edges of the strip seated in the grooves.

1,892,888. STRAIN INSULATOR. KENT A. HAWLEY, Baltimore, Md., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Mar. 25, 1929. Serial No. 349,802. 2 Claims. (Cl. 173—318.)

1. A strain insulator comprising a double ended frusto-conical hollow dielectric body of maximum diameter at its center and open at its ends, a metallic collar extending about and secured to the maximum diameter central portion of said body, metal caps closing the ends of the body, a tie bolt extending axially through the body and confining said caps thereto, an attaching member located in spaced relation to one end of the body, and a plurality of elongated connecting elements connected with said attaching member and said collar.



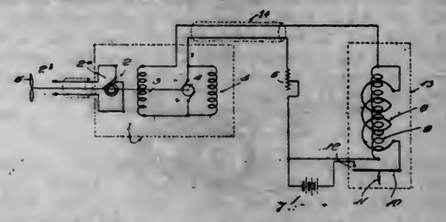
1,892,889. PROCESS OF PURIFYING ABIETENE-SULPHONIC ACID COMPOUNDS. CLYDE O. HENKE, South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed May 25, 1931. Serial No. 540,008. 10 Claims. (Cl. 260—159.)

1. The process of purifying sulphonation compounds of the abietene family which comprises extracting aqueous solutions of the said sulphonation compounds with a water immiscible inert organic liquid which is a solvent for hydrocarbons of the abietene family.

1,892,890. SUBSTITUTION PRODUCTS OF AMINO BENZOYL ORTHO BENZOIC ACID AND PROCESS OF PREPARING THE SAME. EDWARD T. HOWELL and IVAN GUBELMANN, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed July 2, 1928. Serial No. 290,032. 10 Claims. (Cl. 260—64.)

6. As new articles of manufacture, N-substituted p'-amino-benzoyl-ortho-benzoic acid which is the reaction product of p'-amino-benzoyl-ortho-benzoic acid and an acidylating agent which introduces readily hydrolysable protective groups into the N-atom.

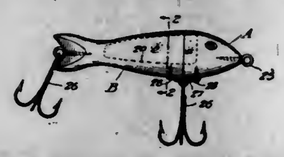
1,892,891. BATTERY CHARGING SYSTEM FOR AIRPLANES. LAWRENCE A. HYLAND, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 9, 1929. Serial No. 345,864. 1 Claim. (Cl. 171—314.)



A battery charging system comprising in combination with a storage battery, an alternator, means for driving said alternator, means for exciting the field winding of

said alternator comprising a shunt connected exciting generator mechanically connected to said alternator, means connecting the field winding of said alternator, said shunt connected exciting generator, and said storage battery in series relation, whereby the exciting current from said generator is supplied to the field of said alternator through said storage battery for charging said storage battery, and a relay in circuit with said last mentioned means for automatically opening the circuit to said storage battery for preventing discharge thereof through the field winding of said alternator and the exciting generator when the driving means is not operating.

1,892,892. ARTIFICIAL MINNOW. MITCHELL F. JAMAR, Jr., Dowagiac, Mich., assignor to James Heddon's Sons, Dowagiac, Mich., a Corporation of Michigan. Filed Dec. 5, 1931. Serial No. 579,145. 4 Claims. (Cl. 43—46.)



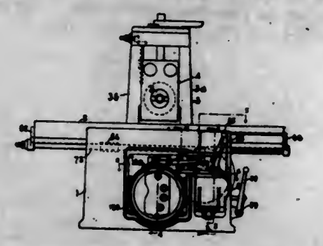
1. A fish bait comprising a chambered body made from two separately formed end units with open ends provided with meeting surfaces disposed in a plane transverse to the bait axis, the walls of the body being of non-buoyant material and having an excess of thickness along the bottom of the bait to position the center of bait gravity below its axis, and means connecting the end units of the bait along their meeting surfaces in a manner to form a seal therebetween.

1,892,893. OPTICAL SYSTEM. JAMES C. KARNES, Buffalo, N. Y. Filed Apr. 25, 1928. Serial No. 272,773. 11 Claims. (Cl. 88—33.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



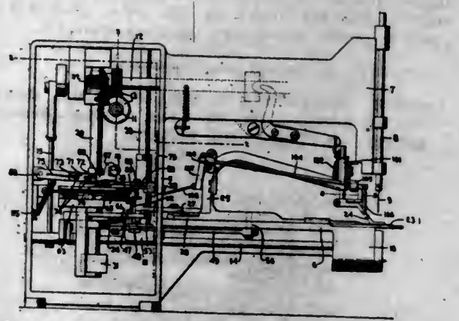
1. An optical system for the transmission of an image consisting of a plurality of total reflecting prisms, each prism shaped to conform in cross-sectional area with the cone of usable light rays at all complementary points in the focal length of the system.

1,892,894. MACHINE TOOL. EDWARD J. KEARNEY and JOSEPH B. ARMITAGE, Wauwatosa, Wis., assignors to Kearney & Trecker Corporation, West Allis, Wis., a Corporation of Wisconsin. Filed Nov. 8, 1928. Serial No. 317,922. 16 Claims. (Cl. 90—21.)



1. In a machine tool having a movable support and transmission mechanism for the movement thereof and including rate change and reversing means, the combination of a carrier, a drive train therefor including a second rate change means and driven from said transmission at a point unaffected by said reversing means, a dog on said carrier, trip mechanism operable from said dog for the control of said transmission, a second dog on said carrier, and trip mechanism operable from said second dog for the control of said second rate change means.

1,892,895. SEWING MACHINE. JOHN KIEWICZ, Boston, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed Aug. 14, 1930. Serial No. 475,197. 15 Claims. (Cl. 112—70.)



1. In a sewing machine the combination with work-holding means, of stitch forming mechanism, means to give the work-holding means and stitch forming mechanism a relative movement in one direction to form long underlying stitches and means to give said work-holding means and stitch forming mechanism a relative movement in another direction prior to the formation of the long underlying stitches, thereby to form anchoring stitches and also subsequent to the formation of said underlying stitches to form short overlying stitches.

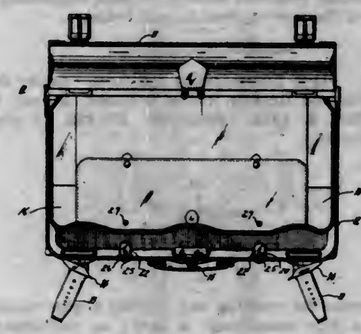
1,892,896. PIVOTAL CONNECTION. JAMES B. KIRBY, West Richfield, Ohio. Filed Feb. 14, 1929. Serial No. 339,969. 5 Claims. (Cl. 306—11.)



1. In a device of the character described, in combination, a device adapted to be moved about a supporting surface, an operating handle pivoted to said device upon a horizontal axis which is transverse to said handle, and means for securing said handle to said device, comprising a removable pin, a coiled spring surrounding said pin, and having one of its ends fastened to said device, and a fitting operatively secured to the other end of said spring, and mounted for rotation about said axis and having a part detachably interengaged with said handle.

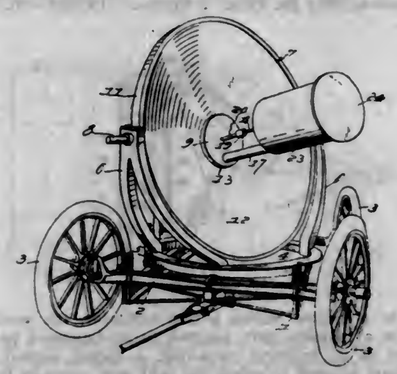
1,892,897. PARTITION STOP FOR LUGGAGE. SAMUEL LACHER, New York, N. Y., assignor to Max Damm Company, Inc., Newark, N. J., a Corporation of New Jersey. Filed June 4, 1930. Serial No. 459,184. 2 Claims. (Cl. 190—41.)

1. In an article of luggage having an interior partition provided with a snap fastener element thereon, in combination, a partition jamb, a stop member having a body portion overlying said jamb in fixed relation thereto and a projecting end portion extending inwardly of said article beyond the inner marginal edge of said jamb, to underlie and brace the snap fastener element of said partition when the latter is closed over said jamb, and a strap holding a snap fastener element to cooperate with the



snap fastener element of said partition, said strap being secured to said jamb by being confined between the body portion of said stop member and said jamb.

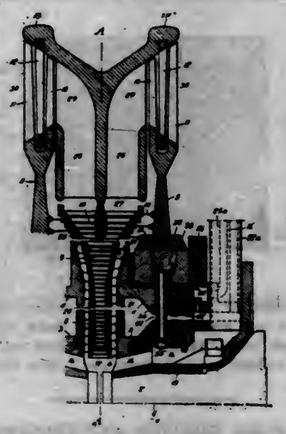
1,892,898. LIGHT PROJECTOR. RICHARD W. LEWIS, New York, N. Y. Filed Apr. 21, 1921. Serial No. 468,350. 28 Claims. (Cl. 176—51.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A light projector comprising in combination, a frame, means for adjusting said frame in azimuth and elevation said frame having a central tubular extension, a reflector seated in the frame, a shield supported on the free end of said extension and an arc mechanism partially inclosed by the shield and including control rods extending to the rear of the reflector, one of the rods passing through the tubular member.

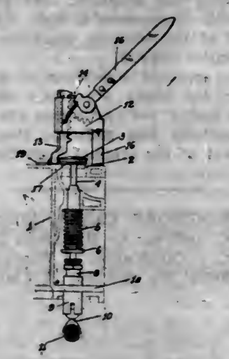
1,892,899. ELASTIC FLUID TURBINE OF THE COMBINED RADIAL-AXIAL FLOW TYPE. ALF LYSHOLM, Stockholm, Sweden, assignor to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden, a Joint-Stock Company of Sweden. Filed Apr. 18, 1929, Serial No. 356,218, and in Sweden Apr. 21, 1928. 25 Claims. (Cl. 253—16.5.)

1. A turbine rotor for radial flow elastic fluid turbines having an axial flow blade system, comprising a number of rotary parts disposed one within the other, the outermost of said rotary parts connected to the adjacent inner part and guided in relation thereto by means of bolts, said outermost part being formed symmetrically with



respect to a plane passing through said bolts, at least two blade rings pertaining to said axial flow blade system being arranged on said outermost part.

1,892,900. VALVE PULLER. CLARENCE M. MARSHALL and JAMES E. MAHIN, Stockton, Calif., assignors of one-third to Martin D. Murphy, Stockton, Calif. Filed Apr. 11, 1930. Serial No. 443,853. 2 Claims. (Cl. 29—86.3.)

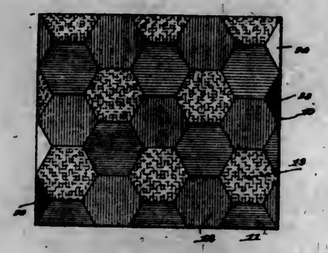


1. A device for pulling a gas engine valve, said valve having a head and a stem, said device comprising a member for engagement with the underside of the valve-head, a vertical stem upstanding from said member to one side of the same, means mounted in connection with the stem for raising the same relative to the cylinder block in which the valve is mounted, whereby to lift the valve and a flap hinged on the lower end of the stem for swinging movement in a vertical plane; the flap being adapted when depending vertically to engage the cylinder block and hold the stem supported in a raised position.

1,892,901. COLOR SCREENS AND PROCESS OF MAKING SAME. AUGUSTINE G. O'NEILL, Tulsa, Okla. Filed Sept. 6, 1929, Serial No. 390,769. 10 Claims. (Cl. 95—81.5.)

8. The method of forming mosaic color screens for use in photography which comprises melting colored glass

or siliceous material, passing said material through a die to produce rods of small diameter, forming bundles of the rods of various colors, heating the bundle of rods until such rods become soft and viscous and welding



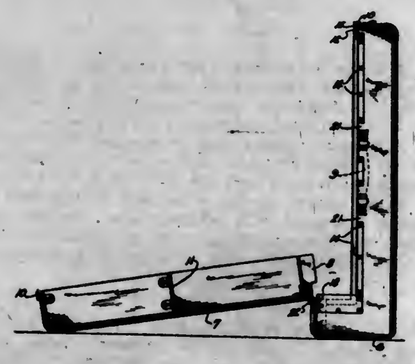
said rods together to form a mass; then drawing the welded mass out while reducing the cross sectional area of the welded mass, annealing the drawn out rods, then sawing the welded mass transversely into thin sheets.

1,892,902. FOOD PRODUCT AND PROCESS OF PRODUCING THE SAME. DAVID RASKY, Duluth, Minn., assignor, by mesne assignments, to The International Honey-Butter Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 29, 1930. Serial No. 424,451. 4 Claims. (Cl. 99—13.)

1. The herein described method of mixing extracted honey and butter comprising first preparing the honey by heating same in partial vacuum to avoid over-heating, then partially cooling and uniting with butter which had been separately slowly mixed until it lost a portion of its contained moisture and then rapidly mixed until it again absorbed said moisture, then mixing the honey and butter until it assumes a fluffy consistency, when the conclusion of the working operation is governed by the desired relative density.

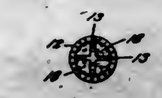
4. An edible emulsion consisting of butter and liquid honey wherein the honey constitutes the discontinuous phase and the butter the continuous phase, said product having substantially less moisture than the combined moisture content of the original ingredients.

1,892,903. WARDROBE CASE. JULIUS RITTER, Jr., Racine, Wis., assignor to Hartmann Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Oct. 15, 1930. Serial No. 488,714. 7 Claims. (Cl. 190—28.)



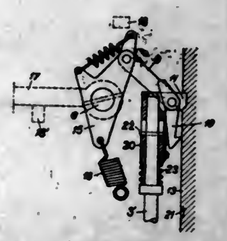
1. In a carrier case, body and cover sections formed of non-metallic sheet material, a metal channel supported by one of said sections and forming an elongated recess extending along an edge of said section and adapted to receive the edge of the other section, said channel having an integral locally interrupted flange secured to the inner surface of the wall of said supporting section, and a handle having retainers secured to said supporting section within the interruptions in said flange.

1,892,904. PIPE THREADING DEVICE. QUINT ORVAL ROBINSON and GEORGE HENRY GOULDEN, Denver, Colo. Filed Nov. 6, 1931. Serial No. 573,332. 6 Claims. (Cl. 10—107.)



1. A device for starting and guiding a pipe threading die onto a pipe comprising: a shell; an expansible extremity formed on said shell; teeth formed on said expansible extremity; a series of die receiving threads surrounding and spaced from said expansible extremity; means for expanding said expansible extremity so as to cause said teeth to grip the interior of said pipe; and a tapered portion formed on said shell between said teeth and said threads arranged to automatically center said threads with said pipe.

1,892,905. CONTROL MEANS FOR FARE INDICATORS. EDMUND ROSENBERG, Brunn, Czechoslovakia. Filed June 27, 1931, Serial No. 547,438, and in Czechoslovakia and Germany May 30, 1930. 2 Claims. (Cl. 235—30.)

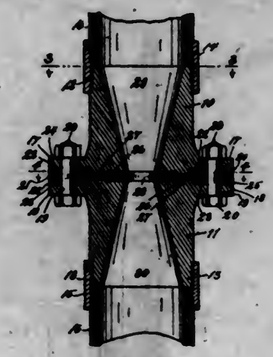


1. In a vehicle having a fare indicator, the combination of a movable part adapted to be depressed by the weight of an entering passenger, a spring beneath the said part adapted to retain the said part normally in the raised position, a casing about the said fare indicator, a recess in the wall of the said casing, a rotatable switching shaft in the said fare indicator, an actuating rod within the said casing, a head piece on the said rod, a nose on the said head piece adapted to slide along the said wall and to engage in the said recess, a crank-lever attached to the said switching shaft, coupling means (9) between the outer end of the said crank-lever and the said head piece, and means for transmitting the movement of the said movable part to the said actuating rod.

1,892,906. FLOW CHECK. SYLVESTER B. SCHNITTER, Maracaibo, Venezuela. Filed July 10, 1930. Serial No. 466,915. 1 Claim. (Cl. 137—75.)

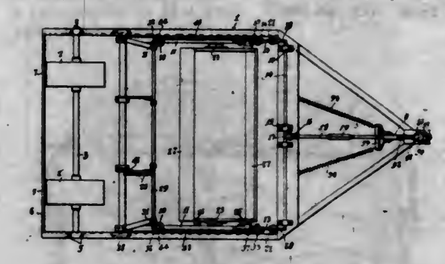
A flow check including a pair of pipe fittings having threaded ends by which they can be connected by pipe couplings to adjacent ends of a flow pipe, annular flanges at the other ends of said fittings by which they can be detachably secured together, each of said fittings having a tapered passage therethrough that is gradually reduced in diameter from the threaded end to the flanged end, a

baffle plate secured between said fittings, said plate having a relatively small cylindrical passage therethrough in alignment with the axis of said pipe, and gaskets arranged



in annular recesses in said flanges on opposite sides of the marginal edge portion of said baffle plate for the purpose specified.

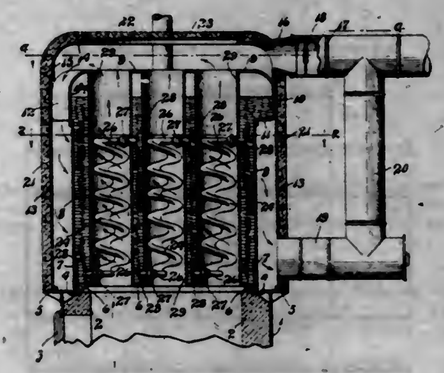
1,892,907. REVOLVING SCRAPER OF THE WHEEL TYPE. OSCAR W. SJOGREN, Huntington Park, and JESSE A. VAUGHN, Los Angeles, Calif., assignors to Killefer Manufacturing Corporation, Ltd., Los Angeles, Calif., a Corporation of California. Filed July 20, 1932. Serial No. 623,516. 18 Claims. (Cl. 37—129.)



1. In a scraper, a frame, traction wheels journaled upon the rear end of said frame, a pair of lifting arms pivotally mounted upon opposite sides of said frame, means including a sliding draw-bar for actuating said lifting arms, a scraper bowl rotatably mounted upon said lifting arms intermediate the ends thereof, stop brackets carried by said bowl, and a movable stop means operatively mounted upon said lifting arms and positioned to engage the bowl stop brackets.

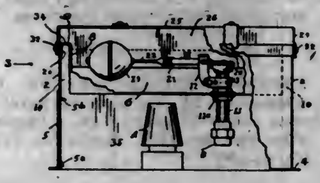
1,892,908. BOILER. LAWRENCE E. STEAR, Detroit, Mich., assignor to Norman L. Upper, Detroit, Mich. Filed Feb. 19, 1929. Serial No. 341,084. 2 Claims. (Cl. 122—169.)

1. A boiler comprising, a vertical drum, a head of larger cross sectional area attached to the upper end of said drum having a horizontal upper side, a plate closing the lower end of the drum, a plurality of vertical flues disposed between the upper side of the head and said bottom plate and secured at their ends thereto, a spiral coil located vertically in each flue and attached at its ends to the sides of the flue to communicate with the interior of said drum and head, a casing surrounding said drum and head, the inner dimension of the casing being substantially equal to the outer dimension of said head and said head at one point being inwardly recessed to provide communication between the space above said head and the space below the same around the drum, and an outlet pipe for



products of combustion connected with and leading from the lower end of the casing at the side thereof substantially opposite where the recessed portion of the head is located.

1,892,909. WATERING DEVICE. ROBERT W. STRADLING, Eaton, Ind. Filed Oct. 9, 1929. Serial No. 398,434. 2 Claims. (Cl. 119—73.)

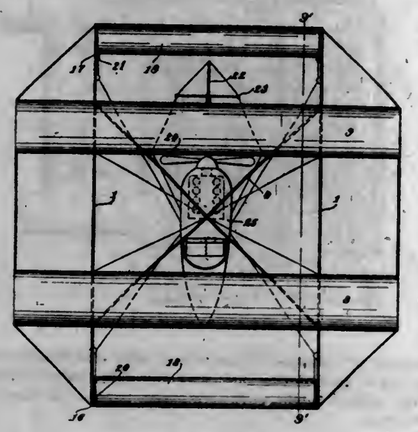


1. A watering device of the kind described, comprising a flanged water receptacle having perforations in the flanges of its ends, a supply pipe, a float controlled valve device in said receptacle for automatically controlling the flow of water through said pipe to compensate for the amount of water drawn from said receptacle, a canopy structure to cover the valve device and to span said receptacle, the bottom edges of whose sides are below the plane of the top of the receptacle, and a casing to support said receptacle and the walls thereof being spaced from the ends of the receptacle to provide flues to communicate through the aforesaid perforations, with the portions of the water receptacle that are covered by the canopy.

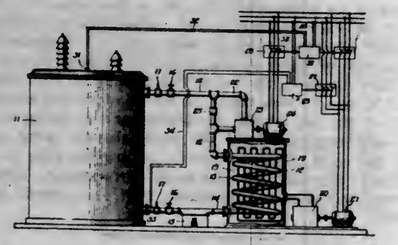
1,892,910. AIRCRAFT. HOWARD TERRY, Baltimore, Md. Filed Aug. 12, 1929, Serial No. 385,213. Renewed Nov. 22, 1932. 7 Claims. (Cl. 244—12.)

1. In an aircraft a structure extending longitudinally and at the fore and aft ends thereof extending at right-angles in both lateral directions and supporting surfaces, said surfaces being spaced apart over twice the width of each of such supporting surfaces, said structure and surfaces being in two series, upper and lower, the breadth of the surface of the upper plane being equal to seven times the width of said plane with an elevation between them of one and one-half times of their width, the upper of such surfaces extending laterally beyond the lower surfaces to permit a dihedral surface to connect with such supporting surfaces at both sides thereof at their ends and at an angle of approximately 45 degrees

from the upper surfaces, the area of each such dihedral surface being less than one-half of such lower supporting surface to which it is attached, the whole structure forming a design with four equal major horizontal and four lesser dihedral surfaces, and having four equal areas of suspension, lift and dihedral surface resistance.

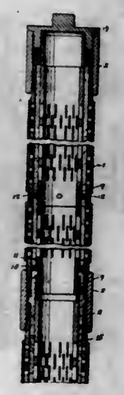


1,892,911. REFRIGERATION APPARATUS. CYRIL H. THOMAS, Flossmoor, Ill., assignor to Royal Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 29, 1928. Serial No. 315,773. 5 Claims. (Cl. 62—7.)



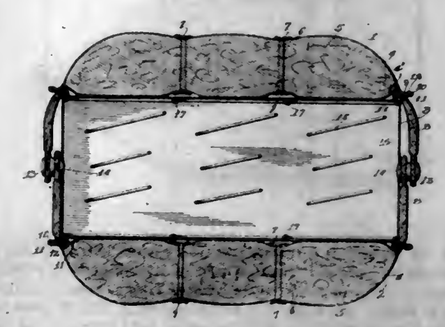
1. In combination with a device to be cooled, a cooling medium, means forming a thermo syphon circulating system for the cooling medium, said system having a portion extending in the device to be cooled and having a bypass, normally inoperative means for circulating the cooling medium, said means being arranged in said bypass, normally inoperative means for cooling a portion of the system, means for operating the cooling means when the temperature of the cooling medium exceeds a predetermined value, and means for operating the circulating means when the temperature in the device exceeds a predetermined maximum.

1,892,912. WELL SCREEN. LYLE C. TILBURY, Houston, Tex. Filed Nov. 22, 1930. Serial No. 497,864. 9 Claims. (Cl. 166—5.)



7. A well screen including an outer tubular screen pipe and an inner tubular screen pipe within and spaced from said outer pipe, hard granular material in the space between said pipes, said inner pipe being formed of detachable sections, connected by left hand threads and adjustable spacers spacing the screen pipe from the jacket.

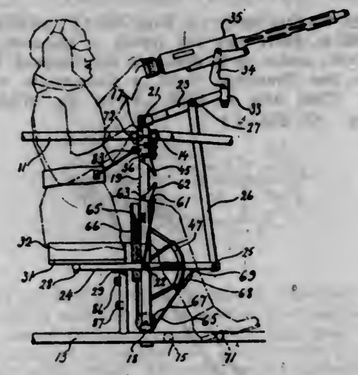
1,892,913. MATTRESS. SUMNER C. TIMM, Eau Claire, Wis. Filed June 11, 1930. Serial No. 460,437. 1 Claim. (Cl. 5—352.)



A mattress comprising like top and bottom sections and a removable intermediate coil spring section, each of the top and bottom sections including an outer sheet of ticking and an inner sheet of ticking, and padding interposed between said sheets of ticking, stitching securing the ticking together about the padding, said padding terminating at the stitching, one of said sheets of ticking being extended beyond the padding and folded upon itself defining pockets engaging the sides of the intermediate section, padding in said pockets terminating short of the first padding, stitching securing the edges of the extended portion of the ticking to the edges of the other sheet of ticking, the ticking being in facial contact at the point of stitching, whereby to form a hinge connection between the pockets and the body portions of the ticking, the pockets of the bottom and top sections overlapping one another when the sections are placed together, and means detachably connecting the overlapping portions together.

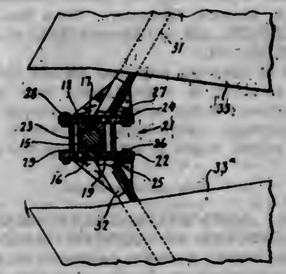
CARNEGIE LIBRARY OF ATLANTA

1,892,914. MACHINE GUN MOUNT FOR AIRCRAFT. CLEM G. TRIMBACH, Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Mar. 27, 1930. Serial No. 439,298. 6 Claims. (Cl. 89—40.)



1. In a mount for a machine gun for an airplane, a lever upon which said mount is fastened, a second lever arranged to bear the weight of the gunner, a link for connecting said levers and resilient means for partially counter-balancing the weight of the gunner.

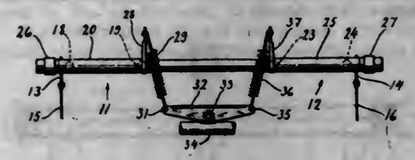
1,892,915. AIRCRAFT CONTROL SURFACE ADJUSTING MECHANISMS. ARNE F. VINJE, Freeport, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 436,966. 2 Claims. (Cl. 244—29.)



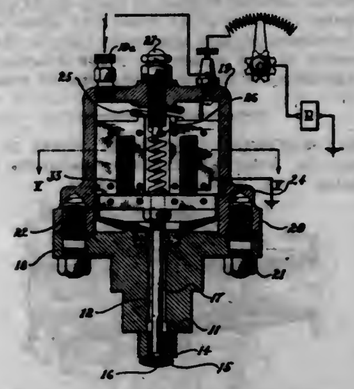
1. In an airplane, a substantially horizontal control surface, a pivot for said control surface arranged adjacent to the trailing edge thereof, a pair of diagonally arranged braces attached to said control surface, a pair of plates secured to said braces, a pair of channel members interposed between and secured to said plates so that said channel members and said plates form a pair of grooves, a pair of trunnions mounted for sliding movement in said grooves, a nut block mounted on said trunnions, a substantially vertical screw threaded through said nut block, a pair of bearings in which the ends of said screw are mounted, and means for rotating said screw comprising a sprocket wheel and a sprocket chain.

1,892,916. AIRCRAFT CONTROLS. ARNE F. VINJE, Freeport, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 436,967. 7 Claims. (Cl. 244—29.)

1. In a system of controls for an aerial vehicle an axle, a pair of pedals pivoted thereon, a pair of cables connected to the said pedals, arms also connected to the said pedals and arranged on opposite sides of the said axle, springs connected to the said arms and interconnected by a walking beam pivoted on a line drawn longitudinally of the aerial vehicle intermediate the two arms.



1,892,917. MAGNETIC VALVE. BROOKS WALKER, Piedmont, and HARRY E. KENNEDY, Berkeley, Calif. Filed May 31, 1930. Serial No. 458,739. 8 Claims. (Cl. 137—139.)



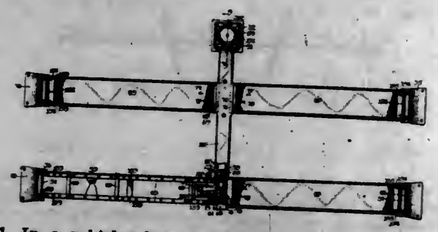
1. In a fuel injection valve including a housing, an electro-magnetic structure mounted within the housing and including a magnet and an armature, supporting means supporting said magnet in the housing and preventing distortion of the housing from changing the relative positions of the magnet and armature.

1,892,918. FINDING FOR A CLASP. ANTHONY E. WALLER, Providence, R. I. Filed Apr. 8, 1931. Serial No. 528,639. 20 Claims. (Cl. 24—252.)



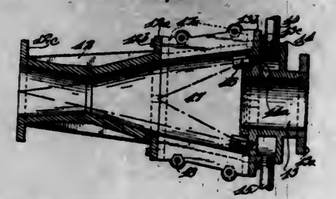
1. A finding for a clasp comprising a jaw member having a work-engaging portion, a mounting member for receiving the other jaw of the clasp, means for pivotally mounting said members together spring means carried by one of said members and engaging the other member to relatively move said members about the pivotal mounting and one of said members being provided with a stop spaced from said work-engaging portion longitudinally of the jaw member and located adjacent the pivotal mounting means to engage the other member and limit the pivotal movement of the members toward each other caused by said spring means.

1,892,919. VEHICLE-WHEEL BRAKE TESTER. IRA A. WEAVER, Springfield, Ill., assignor to Weaver Manufacturing Company, Springfield, Ill., a Corporation of Illinois. Filed May 9, 1931. Serial No. 536,185. 17 Claims. (Cl. 73—51.)



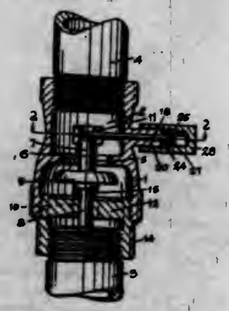
1. In a vehicle-wheel brake-tester, the combination of a movable member on which the vehicle-wheel is adapted to roll in either of opposite directions, means to restrain movement of said member in either of the opposite directions of movement thereof, means to lock said member automatically against travel from its neutral position in the direction opposite that of the travel of the wheel thereon while allowing freedom of travel of the member in the direction of travel of the wheel, and means actuated by the movement of said member to indicate the extent of movement of said member in either direction caused by the application of the vehicle-brake to the wheel.

1,892,920. MATERIAL CONVEYER. HARRY H. WEISS, Chicago, Ill. Filed Nov. 24, 1930. Serial No. 497,946. 5 Claims. (Cl. 302—25.)



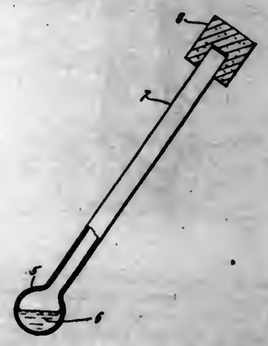
1. A material conveyer comprising an inlet, a pressure chamber surrounding the inlet, a plurality of removable discharge nozzles communicating with said chamber, a casing providing an expansion chamber and having a removable wall portion arranged about the nozzles, and a Venturi tube secured to said casing and extending from the expansion chamber, said removable wall portion being so arranged whereby the nozzles are accessible for replacement.

1,892,921. SAFETY VALVE. CHARLES A. WHITE, Toledo, Ohio. Filed Feb. 18, 1932. Serial No. 593,813. 8 Claims. (Cl. 137—162.)



1. In a valve, a valve member for closing the valve, said valve member having a tendency to move in one direction, a slidable means for engaging the valve member, a plug formed of material of a low melting point for holding the slidable means in an engaging position with the valve member, and an elastic means for moving said slidable means to release the valve member when said plug is fused.

1,892,922. ACID BOTTLE FOR WELL SURVEYING. EDWARD H. ZEITFUCHS and HENRY N. HERRICK, Berkeley, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Aug. 4, 1930. Serial No. 472,981. 2 Claims. (Cl. 234—1.)

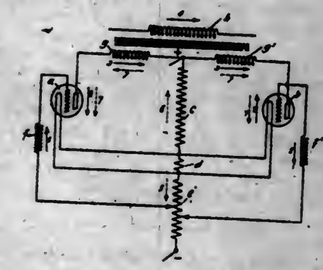


2. A container provided with a spherical transparent portion of acid etchable material, and an acid in said spherical portion capable of etching said portion.

1,892,923. PROCESS OF DRAWING CELLULOSE ACETATE THREADS. ALFONS ASCHERL and WOLFGANG GRUBER, Burghausen, Germany, assignors to Dr. Alexander Wacker Gesellschaft fur Elektrochemische Industrie, Munich, Bavaria, Germany. Filed Nov. 14, 1931, Serial No. 575,156, and in Germany Nov. 21, 1930. 17 Claims. (Cl. 18—54.)

14. Process of drawing cellulose acetate threads comprising wet spinning in a precipitate bath an acetone soluble acetylation reaction mixture containing a chlorine substituted aliphatic hydrocarbon containing less than three carbon atoms, which is insoluble in the precipitate bath.

1,892,924. AMPLIFYING ARRANGEMENT WITH TUBES CONNECTED IN COUNTER CADENCE. JUSTUS BÄBLER, Berlin, Germany, assignor to Allgemeine Elektricitats-Gesellschaft, Berlin, Germany, a Corporation of Germany. Filed Sept. 11, 1929, Serial No. 391,760, and in Germany Oct. 13, 1928. 3 Claims. (Cl. 179—171.)



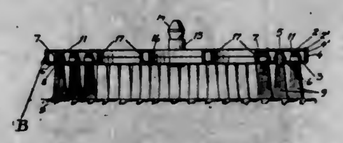
1. The combination of a push-pull amplifier, and a resistance network adapted to be connected in parallel with a direct current source, means for connecting the filaments of said tubes in parallel with each other and with a portion of said network, means for connecting the anodes of said tubes to a point on said network and means for connecting each of the grids of said tubes to different predetermined points on said network.

1,892,925. COLLAPSIBLE FUSELAGE FOR AIRPLANES AND THE LIKE. FRANK V. BARICE, Los Angeles, Calif. Filed Sept. 8, 1931. Serial No. 561,543. 1 Claim. (Cl. 244—30.)



In an airplane structure, a fuselage comprising of the front section and the rear section, a front section adapted to receive the motor and the landing gear, the rear section adapted to receive the wings, steering gear and the supporting wheel, hingeable means associated with said front section and said rear section of said fuselage, and adjustable means associated with said hingeable means so that said sections may be adjusted to any desired angular position, and means for controlling said adjustable means.

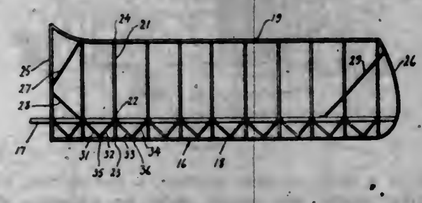
1,892,926. BRUSH MEMBER. TORD ERIK DANIEL BILDT, Stockholm, Sweden, assignor to Inventia Patent-Verwertungs-Gesellschaft, Schaffhausen, Switzerland, a Corporation of Switzerland. Filed Nov. 30, 1929, Serial No. 410,687, and in Sweden Dec. 4, 1928. 1 Claim. (Cl. 15—180.)



A brush member comprising a first circular sheet metal disc having a plane portion, a second circular sheet metal disc having a plane portion, said discs having telescoping edge flanges, the flange on either disc extending toward the other disc, said flanges holding the disc together with the plane portions thereof in parallel spaced relation to form a thin cylindrical structure, said first disc having holes therein and flanges surrounding said holes, said last-mentioned flanges extending inwardly toward but terminating short of the second disc, bristle bunches in said holes having inner ends between the ends of the last-mentioned flanges and the second disc, said second disc having holes therein, fastening means for said bristle bunches extending through the last-mentioned holes, said discs having centrally disposed registering openings, flanges formed on each of said discs around said openings, the last mentioned flanges extending toward, and abutting against each other to form a smooth walled passageway, and means comprising similarly formed passageways for gripping the brush members between the centrally disposed openings and the bristle bunches.

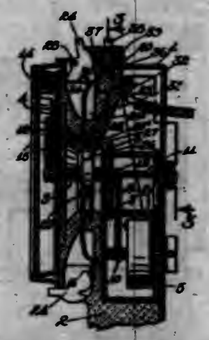
1,892,927. CONTROL SURFACE FOR AIRCRAFT. RAYMOND C. BLAYLOCK, Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 436,962. 8 Claims. (Cl. 244—29.)

1. In an airplane, a symmetrical aileron comprising a front spar, a rear spar, an intermediate spar about which said aileron is arranged to pivot, a plurality of ribs connecting the said spars and extending a greater distance to the rear of said pivot spar than in front thereof so that a greater area surface of the aileron is exposed to the wind stream to the rear of said pivot than there is in front thereof and means, comprising a diagonal truss structure positioned, for the major part,



in front of said pivot spar, fastened to said spar at the junctions of the ribs with the pivot spar and also fastened to the front spar, for providing extra weight to counter-balance the weight and moment of the aileron structure in the rear of said pivot spar and also for withstanding the torque strains which would otherwise be imposed upon said pivot spar.

1,892,928. TIMING MECHANISM. FRANK A. BOOTH, El Segundo, Calif. Filed Jan. 13, 1931. Serial No. 508,429. 4 Claims. (Cl. 161—5.)

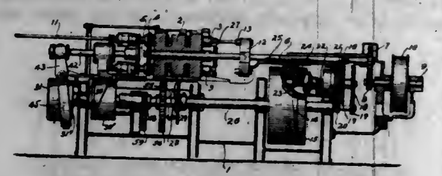


1. In a mechanism of the class described, a casing, a clock mechanism mounted in the casing and provided with a uniformly rotating spindle, a plurality of contacts positioned around the spindle, spaced from the spindle and circumferentially from each other and radiating outwardly from the spindle, a switch member carried by the spindle and adapted to engage each of the contacts during the rotation of the spindle, an annular distributing ring positioned to one side of and adjacent the outer ends of the contacts, and a plurality of switch members, one being provided for each of the contacts at the outer ends thereof, each of the latter switch members being shiftably mounted on the casing in connection with each of the contacts, said latter switch members being so mounted as to force the respective contacts into engagement with the distributing ring.

1,892,929. METAL WORKING MACHINE. ROBERT S. BROWN, New Britain, Conn., assignor, by mesne assignments, to The New Britain-Gridley Machine Company, New Britain, Conn., a Corporation of Connecticut. Filed Oct. 12, 1926, Serial No. 141,118. Renewed MAR. 2, 1932. 42 Claims. (Cl. 1—8.)

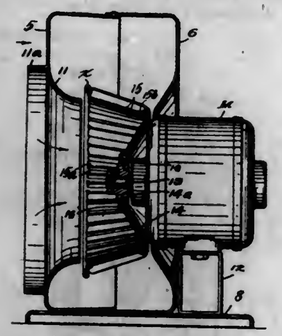
29. In a metal working machine, a chuck, a tool, actuating means for said tool, actuating means for said chuck, means including separate cams for operating said

actuating means, and means including variable speed driving mechanism between said cams for moving the latter relatively to each other at variable rates of speed during movement of said cams.



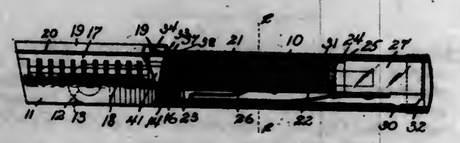
87. In a metal working machine, a tool carrier, work carrying means, two coaxial cams for actuating said tool carrier and work carrying means, and means including variable speed driving mechanism for moving said cams at variable rates of speed relatively to each other during movement of said cams.

1,892,930. IMPELLER FOR BLOWERS. FRANK V. BURMAN, St. Paul, Minn. Filed Feb. 3, 1930. Serial No. 425,438. 2 Claims. (Cl. 230—134.)



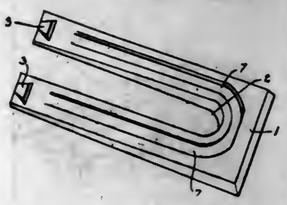
1. An impeller comprising a symmetrical rim constructed of sheet metal and provided with a series of longitudinal slits intermediate its edges, the portions of said rim between said slits being bent out of the curve of said rim providing spaced blades connected with the rim only at their ends, the ends of the bent portions between said longitudinal slits being uncut and drawn in said bending to form triangular-shaped ends for the blades angled with respect to the main portions of the blades and bent out of the periphery of the rim.

1,892,931. MAGAZINE RAZOR. EDWARD A. CONNER, Stratford, Conn., assignor to Magazine Repeating Razor Company, New York, N. Y. Filed Mar. 5, 1932. Serial No. 596,941. 9 Claims. (Cl. 30—12.)



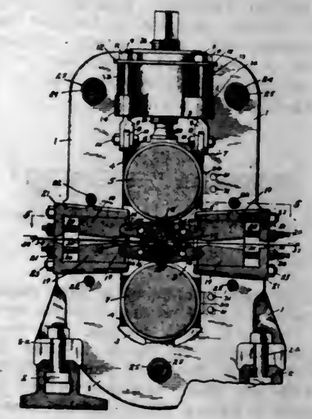
9. In a blade delivery device, a slide having spring tongue projecting from its end, said tongue having a normal tendency to project from the plane of the slide, the slide being recessed to allow the tongue to lie in the plane of the slide.

1,892,932. SHIM. FRED A. COOK, Rock Island, Ill. Filed July 7, 1928. Serial No. 290,928. 8 Claims. (Cl. 267—52.)



1. A device of the class described, comprising a wedge-shaped centrally channeled plate and a self-acting catch on the small end thereof.

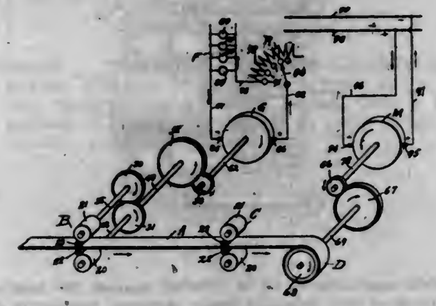
1,892,933. ROLLING MILL. WILLIAM C. CORYELL, Youngstown, Ohio, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed Oct. 1, 1928. Serial No. 309,531. 14 Claims. (Cl. 80—38.)



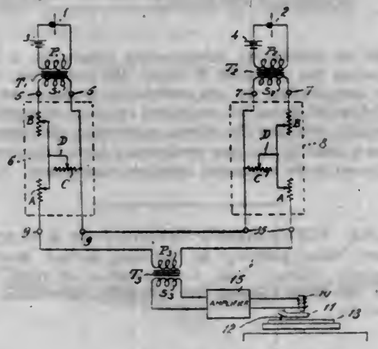
14. In a mill having backed-up working rolls, side bearing members for said rolls contacting with rolling surfaces of the same, blocks for backing-up said members, means for adjusting said blocks toward said rolls to press said members against said rolls, and compression springs between said members to allow for vertical adjustment of the same in response to vertical movements of said rolls.

1,892,934. TENSION CONTROL FOR ROLLING MILLS. WILLIAM C. CORYELL, Youngstown, Ohio, assignor to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed Jan. 8, 1930. Serial No. 419,276. 2 Claims. (Cl. 80—4.)

1. In a cold rolling strip mill, working rolls for engaging and operating upon the strip as it passes between them, means cooperating with said rolls to produce a high substantially constant tension in the outgoing portion of the strip, means for restraining the ingoing portion of the strip, a loaded electric generator driven by said restraining means and operative through the latter to exert an even retarding tension in the ingoing portion of the strip, and means for regulating the load on said generator to nicely adjust the retarding tension in said strip whereby the retarding tension in the strip may be raised to, and maintained in, proximity to the ultimate rupturing tension of the strip.

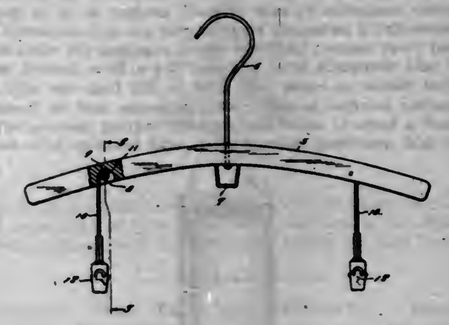


1,892,935. ELECTRICAL ATTENUATOR NETWORK. MATTHEW J. DE FOREST, Jackson Heights, N. Y., assignor, by mesne assignments, to United Research Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Aug. 10, 1929. Serial No. 385,054. 8 Claims. (Cl. 179—1.)



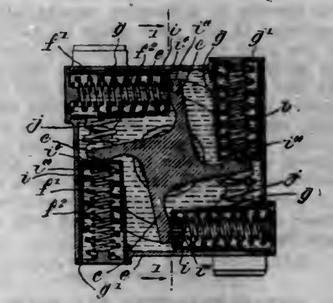
1. In combination, a plurality of sound translating devices for producing electrical waves corresponding to sound waves, lines connecting said devices respectively to a common output circuit, a variable attenuator in each of said lines, each of said attenuators comprising a plurality of impedance elements in series in the line and an impedance element in shunt thereto, each of said attenuators having a single movable element for interposing in the corresponding line selected amounts of each impedance element for varying the energy transferred to said output circuit while substantially matching the impedance at the input terminal of each attenuator to the impedance of the line with its sound translating device therein, and while substantially matching the combined impedances at the output terminals of all said attenuators to the impedance of said output circuit.

1,892,936. GARMENT-HANGER. SAMUEL DWORKIN, Passaic, N. J., assignor to Passaic Kiddy Shop, Inc., a Corporation of New Jersey. Filed Jan. 20, 1932. Serial No. 587,824. 8 Claims. (Cl. 223—64.)



1. A garment hanger of the class described including, in combination, a body, rods swingably mounted on the body, fastening elements on the free ends of the rods, a loop on the body between the rods with which the fastening elements may be engaged.

1,892,937. SUSPENSION FOR VEHICLES. ANDRÉ DUBONNET, Neuilly sur Seine, France. Filed Dec. 20, 1929, Serial No. 415,510, and in Belgium Oct. 23, 1929. 4 Claims. (Cl. 267—34.)

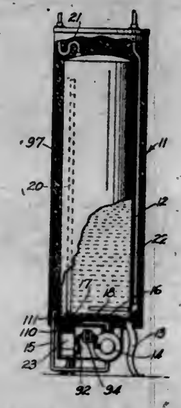


1. In a vehicle provided with a wheel, a chassis, and a wheel supporting element oscillatably supported at one extremity on said chassis and carrying said wheel at its free extremity, means for diminishing the amplitude of oscillation of said wheel supporting element comprising an arm mounted to rotate about the axis of oscillation of the wheel supporting element and to react on the latter, and a dash-pot bearing against said arm and including a pair of hollow telescoping elements, one of said telescoping elements having a passage of gradually increasing section formed therethrough, whereby a fluid moving through said passage encounters a greater resistance when flowing in one direction than in the direction opposite.

1,892,938. THERMOSTATIC SWITCH. HARRISON H. FOGWELL, Los Angeles, Calif., assignor to Everhot Electric & Mfg. Co., Los Angeles, Calif., a Corporation of California. Filed Nov. 23, 1931. Serial No. 576,677. 16 Claims. (Cl. 200—138.)

1. A thermostatic switch of the character described including: a primary contact; a secondary contact; ther-

mostatic means connected to said contacts so as to move them in unison, said thermostatic means comprising a pair of bimetallic thermostats having their inner ends connected to said contacts and their outer ends secured in stationary relationship, said bimetallic thermostats flexing in unison in response to temperature changes; pivot means connected to said primary contact so as to move therewith; a swingable strut having one end connected to said pivot means; yieldable means engaging the other end of said swingable strut and exerting a force toward said pivot means to cause said strut to tilt from one side to another relative to said yieldable means and to thereby exert a force to move said primary contact independently of said secondary contact when said contacts have been



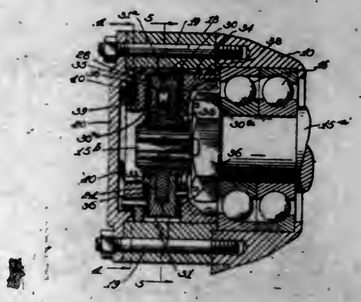
moved into predetermined positions by said bimetallic thermostats; a support for said yieldable means, said support being movable in a direction substantially parallel to the movement of said pivot means for the purpose of adjusting the point of swing-over of said strut; a lever swingably mounted; an adjustable link connecting said lever with said support whereby to move said support; a latch mounted on said support for engaging and holding said primary contact in open position relative to said secondary contact when said primary contact has been moved into relatively open position by said strut; and a member connected to said latch, such member being selectively operable to hold said latch in inoperative position to make the operation of the thermostatic switch fully automatic during such time.

1,892,939. GREASE-RESISTING BOX BOARD. CARLTON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Aug. 22, 1927. Serial No. 214,781. 8 Claims. (Cl. 91—70.)

1. Paper carrying nitrocellulose and a polybasic acid-polyhydric alcohol synthetic resin, the materials being present in an amount to give substantial grease repellant properties to the paper.

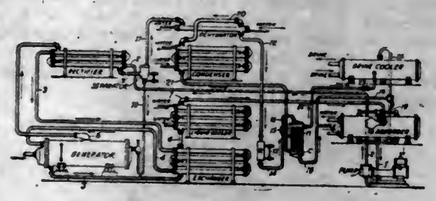
1,892,940. BRAKE. NICHOLAI M. ERDAHL, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed Jan. 19, 1931. Serial No. 509,567. 7 Claims. (Cl. 188—82.)

2. In a brake mechanism, a housing, two spaced apart non-rotatable brake elements in said housing having opposed braking surfaces, two normally stationary brake elements interposed between said spaced apart brake elements, and having co-operating braking surfaces, said normally stationary brake elements being adapted for rotation relative to their co-operating non-rotative elements, means for yieldingly urging the brake elements toward each other with their braking surfaces in engagement for resisting rotation of one of said elements relative to another, a rotatable member having a portion extending into the housing, an operating cam mounted on said rotatable member and having one or more non-radial cam surfaces, and a roller associated with each cam



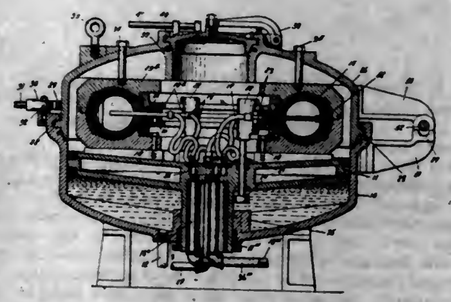
surface and adapted to be crowded against the internal surfaces of said rotatable brake elements, tending to rotate the same.

1,892,941. REFRIGERATING APPARATUS OF THE ABSORPTION TYPE. PERCY CHARLES FREY, Louisville, Ky., assignor to Henry Vogt Machine Co., Louisville, Ky., a Corporation of Kentucky. Filed May 5, 1932. Serial No. 609,485. 6 Claims. (Cl. 62—119.)



1. In an absorption refrigerating apparatus, a method of treating the gas after it leaves the generator, consisting in dehydrating the gas sufficiently to condense a substantial quantity of its moisture content, expanding the condensate resulting therefrom, condensing the dehydrated gas, and passing the gas condensate into heat exchange relation with the expanded moisture condensate.

1,892,942. VULCANIZING PRESS. JOHN R. GAMMETER, Akron, Ohio, assignor to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 23, 1928. Serial No. 263,999. 12 Claims. (Cl. 18—17.)



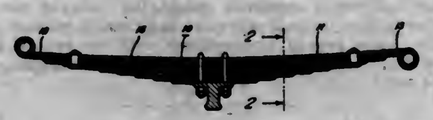
1. An autoclave press including a pot, a ram reciprocable in the pot, a lid adapted to be releasably locked on the pot, a lower tire mold section on the ram an upper tire mold section on the lid, said sections being adapted to be pressed together between the ram and lid, said ram carrying rotatable rods formed at their upper ends to be rotated into engagement with a portion of the mounting on which the tire is vulcanized, and abutments in the pot for engaging said rods when the ram is lowered to separate the tire from the lower mold section.

1,892,943. VIBRATION-ABSORBING CONNECTER. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 6, 1932. Serial No. 591,438. 2 Claims. (Cl. 248—30.)



1. In combination, a support base, a member supported by said base by a yielding resilient connection, said connection comprising: a resilient non-metallic bushing inserted snugly through a hole in said member and projecting on each side thereof, a metal cup inserted within said bushing and having an outwardly extending flange extending beyond the edges of said hole in said member, said cup having a depth less than the axial length of said bushing when in non-compressed state, and means for clamping the bottom of said cup against said support base and thereby compress and outwardly distort said bushing substantially equally on both sides of said member between said cup flange and said base.

1,892,944. RUBBER COVERED LEAF SPRING. HARVEY D. GEYER and ARTHUR H. FLOWER, Dayton, Ohio, assignors to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 27, 1930. Serial No. 431,805. 2 Claims. (Cl. 267—37.)



2. In combination, a multiple leaf spring having a projecting long leaf, a one-piece close-fitting casing of elastic rubber vulcanized in situ thereupon, the two ends of said rubber casing being bonded to the projecting portions of said long leaf to provide a seal between said spring and casing, said casing being also bonded to the top face of said long leaf but being free from the edges of the spring leaves whereby to permit relative sliding between said leaves and casing when the spring is flexed.

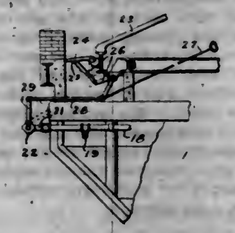
1,892,945. TRACTOR LUG. HERMAN GRIEBAT, Lodi, Calif. Filed Mar. 14, 1932. Serial No. 598,596. 4 Claims. (Cl. 301—44.)

2. A tractor lug including a core member to project radially from the tread face of a wheel, means to rigidly secure the core on the wheel, a ground engaging sheath slidably mounted on and covering the core, means to limit radially outward sliding movement of the sheath, and a



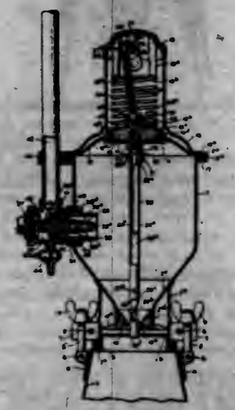
continuous resilient pad supported on said wheel face and surrounding the base of the core; the base of the sheath resting throughout its peripheral extent on said pad.

1,892,946. ASH DISCHARGING DEVICE. EUGENE HAHN, Philadelphia, Pa. Filed Nov. 30, 1926, Serial No. 151,743. Renewed May 25, 1932. 1 Claim. (Cl. 110—171.)



The combination with a furnace, of a hopper adapted to receive ashes direct from under said furnace, adjustable means for controlling the passage of the ashes to the hopper, apparatus associated with the hopper for projecting water to quench the ashes as they enter the hopper, a valve controlling said quenching apparatus, and common actuating means for the said adjustable controlling means and the valve whereby they are opened and closed simultaneously through operation of a single element.

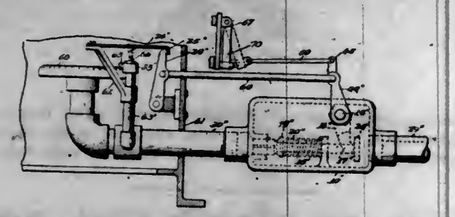
1,892,947. ACETYLENE GENERATOR. WILLIAM W. HARRIS, Brockton, Mass. Filed Oct. 5, 1929. Serial No. 397,620. 7 Claims. (Cl. 48—53.3.)



6. In an acetylene generating apparatus comprising a carbide container provided with a restricted carbide delivery opening and a yieldable gas wall, a plunger having

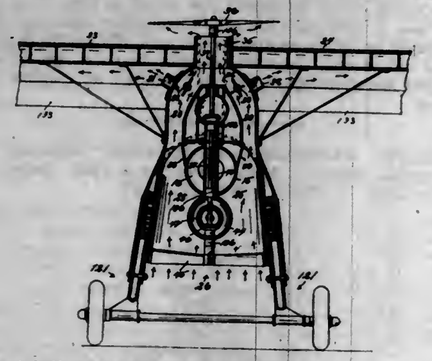
a hollow stem portion and provided with a spirally formed carbide feeding portion for cooperation with the carbide delivery opening and means for moving the plunger axially whereby to cause a reciprocating motion of the spirally formed feeding portion at the carbide delivery opening.

1,892,948. AUTOMATIC CONTROL. PAUL D. HARVEY, Chicago, Ill. Filed Nov. 7, 1927. Serial No. 231,411. 3 Claims. (Cl. 158—117.1.)



1. In an automatic control device, a casing, having an elongated opening, a valve member, means for supporting said valve member including a guide portion disposed in said opening and a supporting portion in said casing, means for urging said valve member into position to prevent passage through said opening, a shaft rotatably supported by said casing, means carried by said shaft engaging said valve member, a lever connected to said shaft, a pivotally mounted trip lever, a link connecting said trip lever and said first named lever, a thermostatic element heated by the combustion of fuel passing through said opening, said thermostatic element when heated serving to hold said trip lever and the parts connected thereto against the action of the urging means for said valve member to hold said valve member in open position.

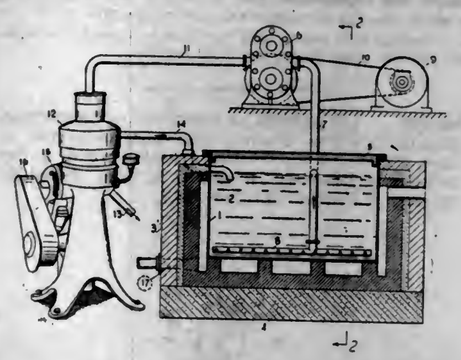
1,892,949. HELICOPTER-AIRCRAFT. CHRISTOPHER C. HOLMES, Los Angeles, Calif. Filed Nov. 17, 1931. Serial No. 575,508. 14 Claims. (Cl. 244—15.)



3. A helicopter-aircraft including a body having a compressed air compartment therein, a shell forming an air chamber around said body and having an air passage into said chamber, a propeller arranged in said passage that is normally idle, wings pivotally connected to said shell that in a closed position cover said air passage, a motor, and means for utilizing compressed air from said compartment to open said wings and establish a driving connection between said propeller and motor.

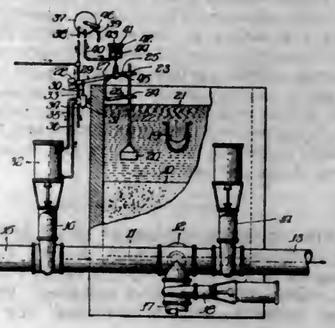
1,892,950. REMOVING OF ENAMEL FROM A METAL BASE. CLAYTON S. HOUPT, Detroit, Mich. Filed Mar. 5, 1931. Serial No. 520,426. 5 Claims. (Cl. 87—5.)

5. A method for removing enamel from a metal base comprising immersing the base in a heated bath of caustic soda solution, the said bath reacting with the enamel to remove the same and to form a sludge, separating a portion of the bath during the de-enameling operation, removing the sludge from such separated portion by centrifugal



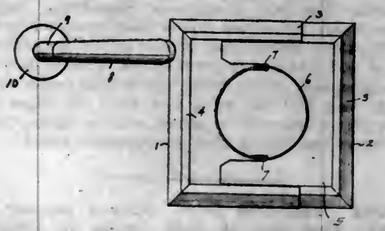
action, returning the clarified portion of the solution to the bath and discarding the sludge whereby the de-enameling process may be carried on continuously.

1,892,951. AUTOMATIC FILTER WASH CONTROL. WALTER J. HUGHES, Chicago, Ill., assignor to General Zeolite Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 29, 1931. Serial No. 560,198. 10 Claims. (Cl. 210—130.)



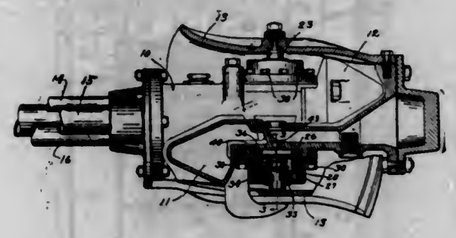
10. The method of washing a filter having an expansible filter bed, which comprises causing an outward flow of water to pass through said filter bed, thereby causing said filter bed to expand in accordance with the rate of said flow, and controlling the rate of flow by the expansion of said bed.

1,892,952. VERMIN TRAP. HENRY F. HYMAN, Houston, Tex. Filed June 5, 1931. Serial No. 542,336. 2 Claims. (Cl. 43—121.)



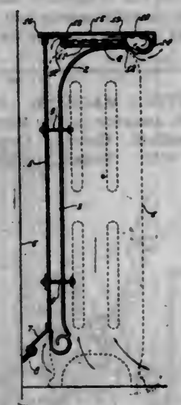
1. A vermin trap having an outer wall and an inner wall spaced apart forming a chamber between them, an inwardly extending baffle around the upper margin of the outer wall, said outer and inner walls being formed of two independent sections, the sections of the outer wall being shaped to dovetail together and the sections of the inner wall being formed, one with vertical grooves into which the adjacent margins of the other fit when the sections are in assembled relation.

1,892,953. AUTOMATIC FLUID PIPE CONNECTER TRAIN COUPLING. ALBERT S. JOHNSON, Los Angeles, Calif. Filed Aug. 27, 1929. Serial No. 388,717. 11 Claims. (Cl. 285—24.)



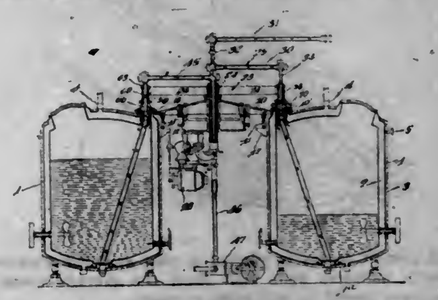
1. In train line pressure fluid couplers adapted to conduct more than one pressure fluid, separate lines for conveying the pressure fluids to said couplers, pressure actuated means to maintain said couplers in positive engagement under action of said fluids, and automatic means to direct the fluid having predominating pressure to actuate said pressure means to maintain said couplers in sealed relation.

1,892,954. RADIATOR SHIELD. SAMUEL KAUFFMAN, St. Louis, Mo., assignor to American Metal Products Corporation, (Delaware), St. Louis, Mo. Filed May 17, 1928. Serial No. 278,448. 3 Claims. (Cl. 237—79.)



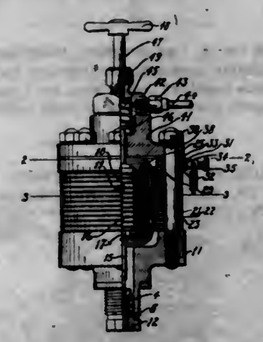
1. A radiator shield comprising, a pair of imperforate end brackets each having a long vertical portion and a short forward horizontal extension, a back plate connecting said vertical portions and arranged to extend upwardly from near the floor back of a radiator, a top plate extending between and connecting said forward extensions to lie over the top of the radiator and terminating at its forward end in a dust-collecting trough, said top plate being formed to provide a water pan over the radiator, and a top overlying said top plate and the pan formed thereby and hinged at its rear to the back plate.

1,892,955. PASTEURIZING APPARATUS. FRANK W. KELLY and ALEX. H. LUNDICKE, Milwaukee, Wis., assignors to Gridley Dairy Company, Incorporated, Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 9, 1929. Serial No. 412,640. 15 Claims. (Cl. 137—21.)



1. A pasteurizing apparatus including a plurality of holding tanks, means for emptying one of said tanks and simultaneously filling another of said tanks and including suction and filling arms adapted to have interior operative connections with the tanks and means for transferring heated air from the interior of the tank being filled to the interior of the tank being emptied, said means including an air transferring pipe connected at its ends to the tanks being filled and emptied and provided with a shielded opening leading to the exterior so that a defined heated air transferring passage is provided and yet foam or milk reaching said passage will be carried to the exterior and will not be transferred from one tank to the other.

1,892,956. MAGNETIC STRUCTURE. HARRY E. KENNEDY, Berkeley, Calif. Filed July 8, 1931. Serial No. 548,834. 19 Claims. (Cl. 175—341.)

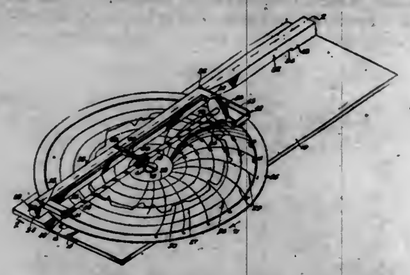


1. In an electromagnetic structure, a stator, an armature associated therewith and movable in an axial path, the coacting pole faces of the armature and stator being formed with complemental magnetic and non-magnetic regions alternately arranged axially of the path of movement of the armature to create alternate areas of high and low flux density.

1,892,957. PLANIMETER. PAUL E. LEHR, Oilfields, Calif. Filed Apr. 23, 1930. Serial No. 446,619. 19 Claims. (Cl. 33—122.)

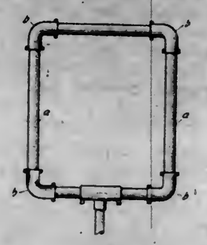
1. In combination in a planimeter adapted to determine the average value of a curve drawn on a circular chart: a base adapted to hold said chart; an indicator movably mounted relative to said base and positioned a short distance from said chart in a manner to move over the calibrations thereon in indicating relationship; pointer means extending adjacent said chart; and means drivably con-

nected to said indicator and adapted by engagement with said chart for moving said indicator relative to said calibrations when a relative movement between said chart and



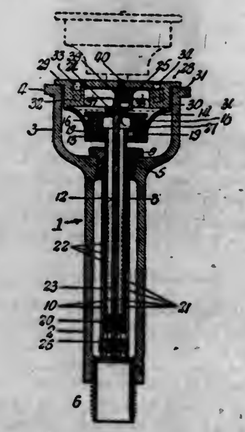
said pointer means is effected so that said indicator constantly indicates upon said chart the average value of the curve traced by said pointer means.

1,892,958. WEATHERPROOF DIRECTION-FINDING ANTENNA. AUGUST LEIB, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Apr. 5, 1930, Serial No. 441,947, and in Germany May 8, 1929. 2 Claims. (Cl. 250—33.)



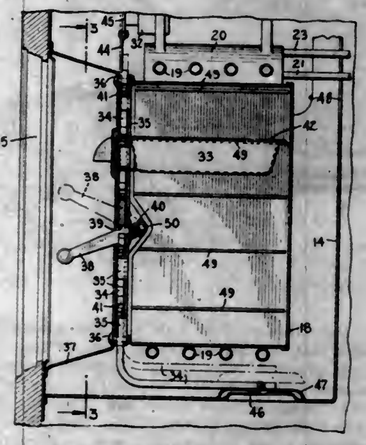
1. A shield for a loop antenna including a plurality of metallic tubular members, and means for joining said tubular members together comprising split members adapted to be clamped over the ends of said tubular members.

1,892,959. SPRINKLER. PAUL LIPPERT, Chicago, Ill. Filed Jan. 28, 1929. Serial No. 335,515. 9 Claims. (Cl. 299—71.)



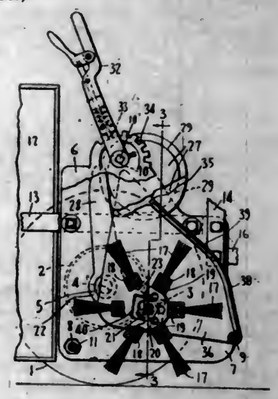
8. In a sprinkler, a nozzle member having nozzle openings therein facing in the same direction and an oscillatable lever pivoted off center of said member and having rigidly connected together arms of unequal length, one associated with each nozzle opening, each arm having means thereon operating in the oscillation of the lever to close and open its associated nozzle opening.

1,892,960. REFRIGERATION. HENRY G. MCCOMB, Chicago, Ill., and WILLIAM D. COLLINS, Evansville, Ind., assignors to Servel Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 27, 1930. Serial No. 478,060. 16 Claims. (Cl. 62—116.)



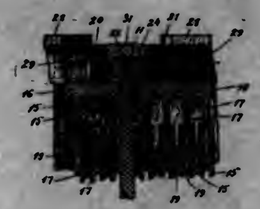
1. In a refrigerating apparatus, an evaporator member, means to supply refrigerant to said evaporator member, means to withdraw vaporous refrigerant from said evaporator member, normally operable means for controlling the withdrawal of vaporous refrigerant from said evaporator member to control temperature, freezing trays removably positioned adjacent to said evaporator member, and manually operable means to control the withdrawal of vaporous refrigerant from the evaporator member independently of said normally operable means and for simultaneously preventing removal of said freezing trays.

1,892,961. SWEEPING MACHINE. EDWIN D. PARKER, Springfield, Ohio, assignor to The Parker Pattern Works Company, Springfield, Ohio, a Corporation of Ohio. Filed Oct. 31, 1930. Serial No. 492,537. 4 Claims. (Cl. 15—83.)



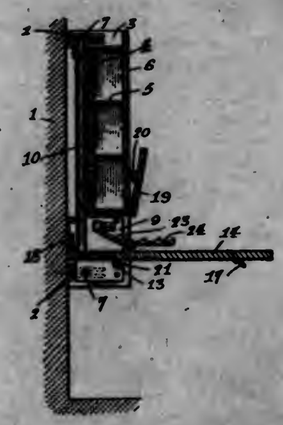
1. In a machine of the character described, a main frame, carrying wheels therefor, a rotary sweeper mounted in said frame and rotating in a direction opposite to said wheels, a hood partly surrounding the periphery of said sweeper and spaced therefrom, the lower forward edge of which is pivotally connected with said frame at a point near the ground forward of said sweeper to coact therewith to discharge the sweepings rearwardly of the sweeper, a lever, means operated by said lever for raising and lowering said sweeper with relation to the frame, and means also operated by said lever for simultaneously adjusting the position of the hood with relation to the frame without altering the location of the lower edge of the hood with respect to the frame.

1,892,962. STORAGE BATTERY. LUTHER M. PATTERSON, Jr., New Philadelphia, Ohio. Filed Apr. 28, 1929. Serial No. 357,385. 2 Claims. (Cl. 136—134.)



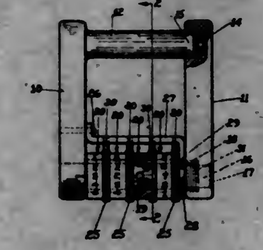
1. A storage battery comprising a unitary cellular container including an impervious inter-cell partition having a depressed upper edge and preformed with a conductor-receiving notch, plates in the cells, a U-shaped, inter-cell, plate-connecting conductor including portions substantially in non-sealing contact with the container portions defining the notch and with adjacent side portions of the partition for mechanically anchoring the conductor against horizontal movement in all directions, individual cell covers having the upper sides of the edges thereof wholly below the notch, and cover-sealing plastic material overlying the partition and conductor and forming therewith a permanently sealed inter-cell joint.

1,892,963. CONCEALED IRONING BOARD. MEDERIC RACINE, Montreal, Quebec, Canada, assignor of one-fourth to Aldege Thibault, Montreal, Canada. Filed June 21, 1930. Serial No. 462,811. 4 Claims. (Cl. 68—10.)



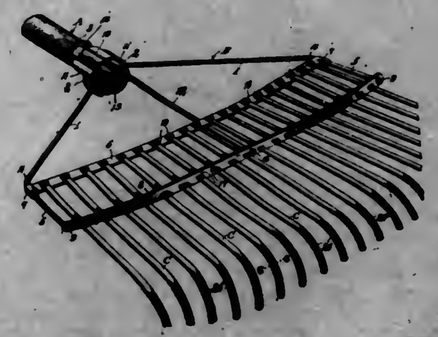
1. An ironing board construction comprising a pair of vertical tracks, horizontal extensions at the lower ends thereof, a board having one of its ends adapted to slide in said tracks; and a transverse rest carried by said extensions for supporting said board.

1,892,964. PADLOCK. DAVID M. RAINEY, Stratford, Conn. Filed Nov. 16, 1931. Serial No. 575,244. 9 Claims. (Cl. 70—118.)



1. In a combination padlock, a pair of opposed side plates, a bar rigid with the first of said plates and extending toward the second thereof, a bolt rigid with the second of said side plates and extending toward the first thereof, said first plate having a recess to receive the end portion of the bolt when the padlock is locked, a series of pins extending radially of and carried by the bar, a series of tumblers on the bar, a member having a flange encircling the bar at one end of the series of tumblers and said member rigidly secured to the second plate to limit movement of the tumblers away from said second plate, a coil spring surrounding the bar and arranged between the flange and the first plate, said bar having its free end slidably received in the second plate, one of said tumblers being arranged over each of said pins, and each of said tumblers containing an annular recess and a slot leading into the recess whereby the tumblers may be rotated and the slots aligned with the pins and the bar drawn outwardly through the tumblers to release the bolt from the recess in the first plate.

1,892,965. RAKE. CAMILLE J. ROCQUIN, New Orleans, La. Filed Jan. 12, 1932. Serial No. 586,201. 8 Claims. (Cl. 55—114.)



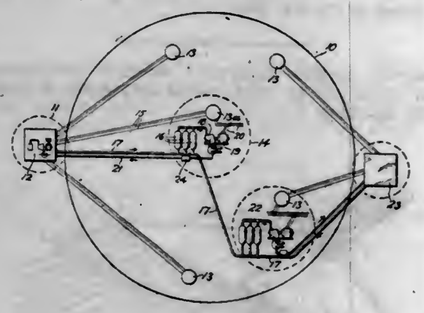
1. In a rake, the combination with a handle; of a frame connected to the handle and including a pair of spaced side arms; spaced front and rear cross bars connected to said side arms, the front cross bar being provided intermediate its length with an aperture lying in a vertical plane; and a frame stiffening arm secured to the handle and extending below and in contact with the rear cross bar and projecting through the aperture in the front cross bar; and a plurality of forwardly extending tines connected to said cross bars.

1,892,966. BRAKING DEVICE. LOUIS ROUANET, Ivry-Port, France, assignor, by mesne assignments, to Hubert Menard, St. Maurice, France. Filed Oct. 31, 1927, Serial No. 230,121, and in France Dec. 2, 1926. 13 Claims. (Cl. 188—130.)



3. A braking device for damping the relative movements between two moving bodies, comprising a member associated to one of the moving bodies and having a frictional surface thereon, another member associated to the other moving body and having a frictional surface thereon, an intermediate member having a surface complementary to the first named frictional surface and forming therewith a friction device and a surface complementary to the second named frictional surface and forming therewith a friction device, one of the said friction devices having a coefficient of friction of lower value and means to lock against relative movement the elements of said last named friction device.

1,892,967. ENERGY DISTRIBUTION SYSTEM. JOHANNES RUTHS, Djursholm, Sweden, assignor to Ruths-accumulator A. B., Berlin, Germany, a Corporation of Sweden. Filed May 26, 1930, Serial No. 455,939, and in Germany June 26, 1929. 5 Claims. (Cl. 290—4.)



1. The combination with a network for supplying a variable demand for electrical energy in a given locality and a central power station remote from said network including a steam producer, a prime mover driven by steam from said steam producer, and an electric generator driven by said prime mover, of a sub-station adjacent to said network comprising a steam accumulator, a prime mover driven from said steam accumulator and an electric generator driven by the last mentioned prime mover and connected with said network, long electric transmission lines connecting the electric generator of the central station with said network of less capacity than necessary to carry the total load and of sufficient capacity to carry the base load, and a long pipe line between the central station and the accumulator of such size as to conduct steam in a continuous stream to furnish a total supply sufficient to care for peak load requirements and smaller than sufficient to care for the maximum peak load.

1,892,968. METHOD OF AND MEANS FOR IMPROVEMENTS IN MECHANICAL OSCILLATORS. GEORG HEINRICH SCHIEFERSTEIN, Berlin-Charlottenburg, Germany. Filed Feb. 20, 1930, Serial No. 430,090, and in Germany Nov. 11, 1929. 10 Claims. (Cl. 74—85.)

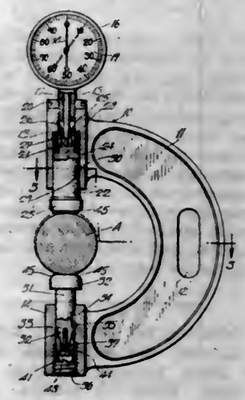


2. Apparatus describing mechanical circular oscillations consisting of an eccentric or crankshaft, of a mass and of elastic means accumulating potential energy, and initially tensioned about the eccentric or crank thrust, whereby the individual means are so arranged with respect to each other that the potential energy

$$\frac{Po \cdot f}{2}$$

is stored up in the elastic means in the operative state, as well as in any desired rotational or oscillating rate.

1,892,969. INDICATOR SNAP GAUGE. JOHN N. SCHNEIDER, New Brunswick, N. J. Filed Oct. 1, 1931. Serial No. 566,340. 1 Claim. (Cl. 33—147.)



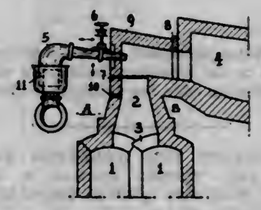
An indicating instrument comprising a yoke frame having axially alined tubular housings at the ends thereof, an indicating mechanism mounted on said frame and having an actuating rod extending into one of said housings, a slidable anvil mounted in the housing and engageable with said actuating rod upon inward movement thereof, spring means acting upon said slidable anvil to normally move the same to an extended position, and a stationary anvil mounted in the other of said housings, and means for fixedly adjusting said stationary anvil relative to said slidable anvil, said means including an adjustable screw threaded into said last mentioned housing and having expansible walls, a conical seat in said adjusting screw, the inner end of said stationary anvil being tapered and engaging said seat, and means for forcing and securing the tapered end upon said seat to cause a wedging action therebetween to expand the expansible walls of said screw into engagement with the inner walls of said housing.

1,892,970. PRODUCTION OF CYANIDES OF CALCIUM. CURT SCHUMANN, REINHOLD FICK, and ERWIN OBERREIT, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 14, 1928, Serial No. 277,788, and in Germany May 20, 1927. 4 Claims. (Cl. 23—79.)

1. The process which comprises passing a gaseous mixture of hydrocyanic acid and so much of a gas capable of taking up substantial amounts of water vapor and not reacting with the initial materials over a compound of calcium selected from the group of its oxid and hydroxid at a temperature not exceeding 100° C. that the water of reaction is carried away with the gas added.

4. A process for producing calcium cyanide diammoniate which comprises passing a mixture of hydrocyanic acid gas and at least ten times its volume of ammonia saturated to at the most 50 per cent with water vapor over calcium hydroxid at ordinary temperature.

1,892,971. REGENERATIVE REVERBERATORY FURNACE. OTTO SCHWEITZER, Dortmund, Germany. Filed Aug. 20, 1930, Serial No. 476,656, and in Germany Apr. 23, 1928. 2 Claims. (Cl. 263—15.)



2. In a regenerative reverberatory furnace heated with cold combustible gas, the combination of a plurality of regenerative chambers at an end of the furnace for heating the air supplied for combustion, a slag chamber common to said regenerative chambers, and a tapering vertical passage common to said regenerative chambers and leading directly from the slag chamber to the upper part of the furnace, the wall of said passage next to the furnace and the wall of the passage most remote from the furnace sloping upward toward each other, said passage serving alternatively as the inlet for air required for combustion and as the outlet for waste gases for heating said chambers.

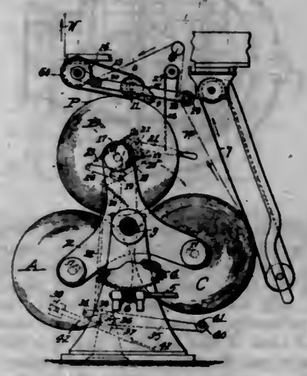
1,892,972. WATER PURIFICATION PROCESS. OLIVER M. URBAIN, Columbus, Ohio, assignor to Charles H. Lewis, Harpster, Ohio. Filed Oct. 12, 1931. Serial No. 568,528. 5 Claims. (Cl. 210—2.)

1. A process for removing aldehydes from water solutions comprising treating the solution with hydrazine in the presence of ammonia or ammonium salt.

1,892,973. PRODUCTION OF UNSATURATED GASEOUS HYDROCARBONS AND HYDROGEN. GUSTAV WIETZEL, Ludwigshafen-on-the-Rhine, and ALFRED STARKE, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 9, 1927, Serial No. 182,529, and in Germany Apr. 15, 1926. 3 Claims. (Cl. 260—170.)

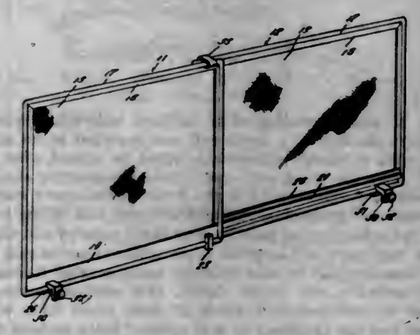
2. The process of producing unsaturated gaseous hydrocarbons and hydrogen which comprises subjecting a gas comprising saturated hydrocarbons to a treatment in the electric arc, whereby acetylene and other unsaturated hydrocarbons are formed, separating the said hydrocarbons formed from the gas mixture and converting the residual gas into a mixture substantially composed of carbon monoxid and hydrogen by treatment at a high temperature with at least 1 agent of the group consisting of steam and oxygen, the said agents being employed in such amounts that complete combustion to water and carbon dioxid does not take place.

1,892,974. WEB SPLICING DEVICE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed June 20, 1925, Serial No. 38,478. Renewed June 2, 1932. 15 Claims. (Cl. 242—58.)



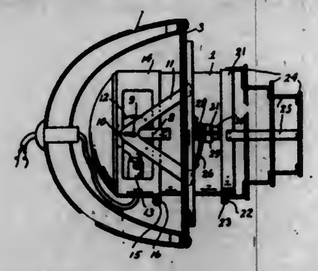
1. In a web replenishing device, the combination with a reel having means for supporting a plurality of web rolls thereon, and means for rotating the reel, of a web roll propelling device comprising a web engaging roll, means for rotating said web engaging roll at web speed, a pulley rotating with said roll, a shaft parallel with the roll, a belt for rotating the shaft from the web engaging roll, a pulley on the shaft on which said belt runs, the belt operated by said pulleys constituting a propelling means driven at the speed of the web for engaging the fresh web roll and rotating it.

1,892,975. MOTOR VEHICLE SCREEN. HARRISON A. BALLARD, Timber Lake, S. Dak. Filed May 31, 1932. Serial No. 614,543. 3 Claims. (Cl. 156—38.)



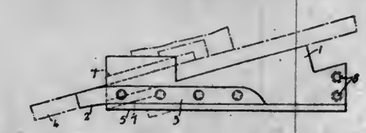
1. A sectional extensible screen comprising a pair of companion screen sections having their adjacent ends disposed in interconnecting sliding overlapping relationship, clamps fastened to the opposite ends of the lower portions of the screen sections, said clamps being adapted to engage over the upper edge of a sliding glass window, each clamp being provided with a set screw, said set screws having the additional function of knobs for adjusting the screen sections.

1,892,976. HEADLIGHT ATTACHMENT. PAUL E. BRICKER, Michigan City, Ind. Filed Apr. 19, 1932. Serial No. 606,256. 2 Claims. (Cl. 240—41.3.)



1. A headlight attachment of the class described comprising a barrel, lenses carried thereby, means for supporting the barrel in a lamp casing, a supporting member clamped to the front end of said barrel, spaced brackets carried by said last mentioned supporting member and extending forwardly thereof, a flat member connected with the forward ends of said brackets having a circular opening therein of less diameter than the diameter of the barrel with the outer periphery of said member extending beyond the outer walls of the barrel, a plurality of spaced brackets supported from the last mentioned member, an intermediate flat member fastened to the last mentioned bracket and having a circular opening therein of less diameter than the opening in the first flat member, a plurality of brackets connected with the intermediate member and extending forwardly therefrom and a third flat member connected with the forward ends of the last mentioned brackets and having a circular hole therein of less diameter than the hole in the intermediate member.

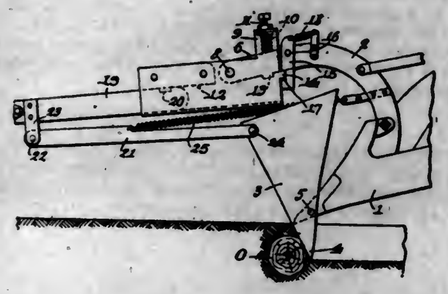
1,892,977. RAMP FOR USE IN RERAILING VEHICLES. HENRY BROSCOMBE, Leeds, England, assignor of one-half to Albert Fieldhouse Kellett, Leeds, England. Filed June 8, 1931, Serial No. 542,958, and in Great Britain June 24, 1930. 3 Claims. (Cl. 104—268.)



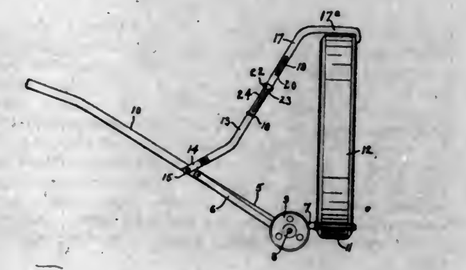
1. A ramp consisting of an inclined body adapted to fit against the side of a track rail and provided at its upper end with a lateral extension adapted to extend over and rest upon the track rail, and a wheel-supporting element extending longitudinally of the body on the upper surface thereof and projecting beyond the upper end of the body, the projecting end of said element being tapered and alined with the track rail to guide a car wheel onto the rail and the opposite end of said element being beveled to engage and deflect a car wheel flange, said element having a plane top surface of a width at least equal to a wheel tread and the thickness of said element being greater than the height of a car wheel flange whereby the wheel flange will be relieved of an imposed weight.

1,892,978. PLOW. CLARENCE P. BURCH, Louisville, Ky. Filed Sept. 14, 1932. Serial No. 633,174. 4 Claims. (Cl. 97—184.)

1. The combination with a plowshare, a standard, and a draft beam slidably and pivotally joined to the standard, of a deflecting blade pivotally connected to the plowshare and having a forwardly extending point, fastening means for the beam releasable by excessive resistance from an obstruction to the forward movement of the plowshare to permit sliding movement of the beam, and means operated by the sliding movement of the beam for shifting the blade relative to the plowshare to lift the plowshare and present a deflecting edge for riding over the obstruction.



1,892,979. DEVICE FOR HANDLING AUTOMOBILE WHEELS AND TIRES. THOMAS N. CLARK, Rock Island, Ill. Filed Feb. 1, 1932. Serial No. 590,167. 1 Claim. (Cl. 214—65.4.)



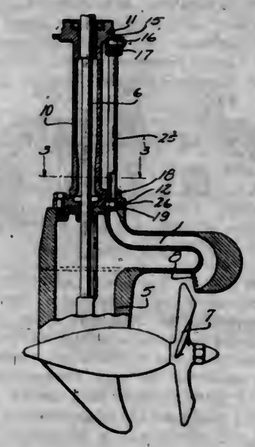
A device for handling automobile wheels and tires, consisting of a portable frame, provided with an operating handle, tire supports projected beyond said frame and provided with roller sleeves, and a grapple arm pivotally connected with said frame, and adopted to engage the upper part of a tire supported on said roller sleeves.

1,892,980. COMPOSITION FOR USE IN FORMING A GLAZING SOLUTION. HENRY HANBURY EDWARDS, Auckland, New Zealand. Filed June 11, 1931, Serial No. 543,752, and in New Zealand Aug. 2, 1930. 2 Claims. (Cl. 134—12.)

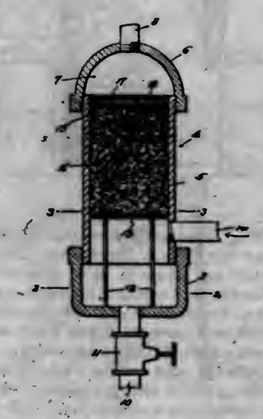
1. A composition adapted for use in forming a glazing solution, consisting of 100 lbs. (avoirdupois) of casein; 7 to 15 lbs. (avoirdupois) borax; 7 to 15 lbs. (avoirdupois) trisodium phosphate; ½ lb. to 8 lbs. (avoirdupois) hexamethylenetetramine; 1 ounce (liquid measure) of oil of sassafras; and 1 to 5 ounces (liquid measure) of a non-drying oil.

1,892,981. OUTBOARD MOTOR DRIVE SHAFT HOUSING ASSEMBLY. OLE EVINRUDE, Milwaukee, Wis., assignor to Outboard Motors Corporation, Milwaukee, Wis., a Corporation of Michigan. Filed Feb. 23, 1932. Serial No. 594,594. 17 Claims. (Cl. 115—18.)

1. An outboard motor drive shaft housing comprising a tubular shaft housing member provided with upper and lower anchorage means offset in a forward and rearward plane, and a reinforcing element connecting said upper and lower anchorage means and provided with means subjecting it to a force opposing the direction in which propeller thrust acts thereon.

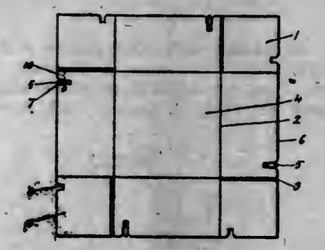


1,892,982. AIR FILTER. EDWARD A. GARTHA, Detroit, Mich. Filed Sept. 17, 1931. Serial No. 563,450. 1 Claim. (Cl. 183—49.)



An air filter comprising a tubular open-ended body, a receptacle attached to the lower end thereof and defining a sediment collecting and draining trap, a valved drain pipe connected with the bottom of said receptacle, an air delivery pipe connected to the side of the body above said receptacle, a dome-like cap on the top of said body, a dry clean air pipe connected to and leading from said cap, and filtering means supported in the body above the air delivery pipe, and comprising a pair of closely spaced upper apertured disks located in the upper end of the tubular body and having steel wool located between them, and a third apertured disk disposed just above said air delivery pipe, filtering material placed between the third disk and the lower disk of the pair of disks, and rods extending upwardly from the bottom of the trap and engaging the lower disk for supporting the same.

1,892,983. CARDBOARD BOX. ERIK MANNE HOLMER, Gottenborg, Sweden. Filed July 1, 1930, Serial No. 465,215, and in Sweden Jan. 14, 1930. 4 Claims. (Cl. 229—32.)



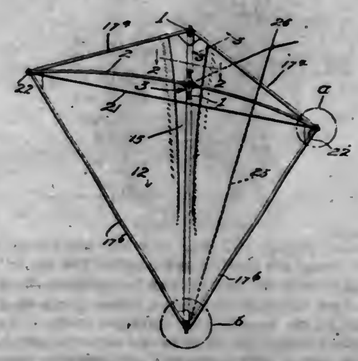
1. A cardboard blank comprising a bottom, four sides hinged to said bottom, corner flaps hinged to said sides, said flaps and sides having cooperating notches therein, and clips secured at one end below certain of said notches with the unturned end thereof terminating within the blank edge.

1,892,984. METHOD OF MANUFACTURING FILES FOR STENCILIZING STENCIL SHEETS. SHINJIRO HOSHI, Tokyo, Japan. Filed July 21, 1930, Serial No. 469,616, and in Japan Aug. 7, 1929. 1 Claim. (Cl. 76—24.)



A method of manufacturing a file for stencilising stencil sheets, comprising cutting a V-shaped groove having its center line slightly inclined from the perpendicular toward the direction of the blank portion with a chisel having its back side inclined at a greater angle than that of its front side by placing said chisel perpendicularly on the blank with its back side facing toward the blank portion, and then, upon cutting next similar groove, automatically displacing the material of the ridge just in front of the chisel by the chisel into the first groove, so that the latter is deformed into a symmetrical V-shaped groove with its center line positioned perpendicularly.

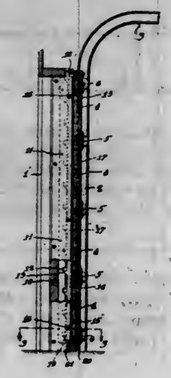
1,892,985. KITE. CHARLES W. HUGHES, Oakmont, Pa. Filed Feb. 27, 1932. Serial No. 595,617. 11 Claims. (Cl. 244—22.)



1. In a kite structure, a vertical arm, a bracket rigidly secured thereto, said bracket including a longitudinal resilient clamp element, a bow arm detachably retained in

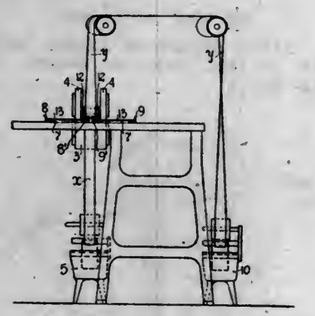
said clamp, means for maintaining said bow arm in a predetermined relation with said clamp, cross pieces rigidly secured adjacent the extremities of the bow arm, and eyelets positioned adjacent the extremities of the vertical arm.

1,892,986. MOVABLE SEALING STRIP FOR DOORS AND THE LIKE. CLARENCE G. JOHNSON, Hartford City, Ind. Filed Apr. 12, 1928, Serial No. 269,476. Renewed May 27, 1932. 9 Claims. (Cl. 20—20.)



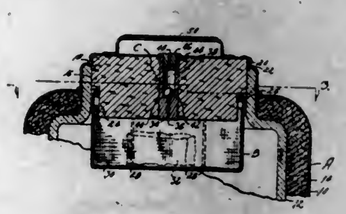
9. In a combination with a frame and a closure member slidably mounted to cover and uncover the same, a member having sloped surfaces fixed relatively to said frame, a sealing strip supported in a floating manner relatively to said frame and engaging said sloped surfaces for movement towards said closure member, and means carried by said closure member for actuating said strip when said closure member comes to closing position.

1,892,987. FLAT GLUING MACHINE. OSCAR KLEINSCHMIT, Leipzig-Plagwitz, Germany, assignor to Gebruder Brehmer Maschinenfabrik, Leipzig-Plagwitz, Germany, a Company of Germany. Filed Aug. 1, 1929, Serial No. 382,779, and in Germany Jan. 26, 1929. 6 Claims. (Cl. 154—42.)



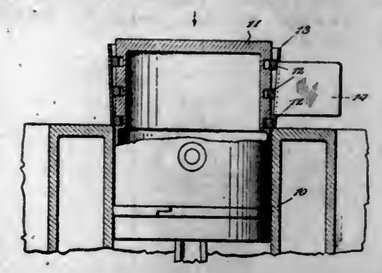
1. In flat gluing, stripping and like machines, in combination, means for feeding and guiding the work, in separate sections side by side, means for spacing the adjacent lateral edges of said sections a predetermined distance apart, means for applying an adhesive strip to the work from below, means for feeding an adhesive strip to the work from above, and means for securing the inner faces of the adhesive strips one to the other in the centre thereof and to the said sections along the said lateral edges by jointly advancing the same under compression.

1,892,988. STOPPER OR CLOSURE FOR INSULATED CONTAINERS. ANDREW S. KNAPP, St. Louis, Mo., assignor to Knapp-Monarch Company, Webster City, Iowa, a Corporation of Missouri. Filed July 21, 1930. Serial No. 469,365. 6 Claims. (Cl. 215—56.)



1. A closure for an insulated container comprising a closure element having a check valve therein, a carrier frictionally secured to the underside of the closure element for supporting and receiving a refrigerant whereby placing the closure element in the mouth of an insulated container will cool and maintain an even temperature within the container for a substantially long period of time, said valve permitting ready escape of gaseous substances which accumulate as the refrigerant is consumed.

1,892,989. PISTON RING INSERTER. MILLARD J. KOZA, Iowa City, Iowa, assignor of one-half to Edward J. Watkins, Iowa City, Iowa. Filed Aug. 3, 1931. Serial No. 554,858. 1 Claim. (Cl. 29—86.4.)



A piston ring inserter comprising a vertically split ring formed of light, thin, sheet steel and tapered uniformly from the top where it is of greatest diameter to the bottom where it is of smallest diameter, exterior fingers projecting from the ends of the split outwardly parallel with each other and formed in one piece with the ring, said fingers being adapted to be gripped by the operator's hand to compress the ring progressively upon piston rings and permit the pistons being shoved downwardly into the engine cylinder with a single push with the operator's free hand on the top thereof, said ring being so light, thin and flexible that by the force of a single hand pressure it can be made to adapt itself to pistons and piston rings of different size.

1,892,990. PROCESS FOR THE PREPARATION OF ALKYL SUBSTITUTED AROMATIC HYDROXYL COMPOUNDS. FRANZ LINNER, Vienna, Austria, assignor, by mesne assignments, to Beck, Koller & Company, Inc., Detroit, Mich., a Corporation of Delaware. Filed Oct. 16, 1929, Serial No. 400,168, and in Austria June 27, 1929. 8 Claims. (Cl. 260—154.)

1. A process for the production of alkyl substituted aromatic hydroxyl compounds which consists in causing aromatic hydroxyl compounds to react with unsaturated hydrocarbons of the olefine series in the presence of

aluminium chloride, zinc chloride, ferric chloride and similar metal chlorides acting as condensing agents and of a small quantity of a halogen compound of the type $C_nH_{2n+1}X$ where X is chlorine or bromine in addition to the metal chloride and where n may have any value from one upwards, for initiating the reaction.

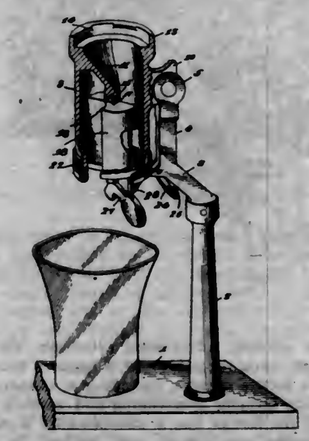
5. A new compound comprising as dominant components a benzene nucleus with a hydroxyl group, a methyl group and an aliphatic C_5H_{11} group each joined to said nucleus.

1,892,991. SPRING CONTROL. THOMAS CLARKSON MCCONKEY and GEORGES PICARD, Montreal, Quebec, Canada, assignor to The B. J. Coghlin Company Limited, Montreal, Quebec, Canada, a Corporation. Filed July 26, 1927. Serial No. 208,641. 2 Claims. (Cl. 267—48.)



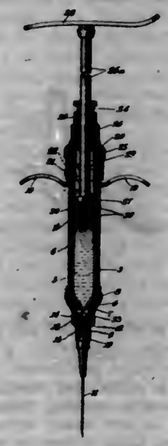
1. In a shock absorber, a leaf spring having an intermediate leaf arched at its end, its end edge bearing vertically on the adjacent leaf, adapted to form a two point base against the adjacent leaves thereunder, and a clamp about the arch and the said leaves.

1,892,992. DISPENSING DEVICE. JOHN J. MORAN and JOHN W. QUICK, New Orleans, La. Filed May 9, 1932. Serial No. 610,202. 4 Claims. (Cl. 221—108.)



1. A dispensing device comprising a base, an upright having connection with said base, a casing pivotally secured to said upright, means for latching the casing in normal position against pivotal movement, means for detachably securing a container to said casing, a partition arranged in said casing and being provided with a passageway, a closure cap for the bottom of said casing and having an outlet, means for detachably securing said closure cap to the casing, a measuring valve member mounted for reciprocation on said closure cap and being provided with material receiving spaces disposed to be alternately arranged in registration with the passageway, and means for reciprocating said measuring valve member for alternately arranging the spaces in registration with the outlet subsequent to the arrangement of the spaces with the passageway.

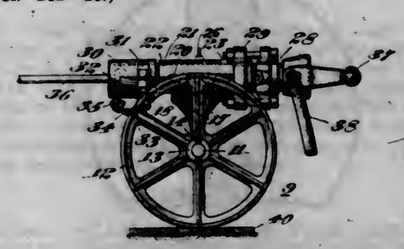
1,892,993. SYRINGE. MENDEL NEVIN, Brooklyn, N. Y. Filed May 7, 1927. Serial No. 189,489. 3 Claims. (Cl. 128—218.)



1. The combination of a syringe and an ampule, said ampule having a stopper movable therein, said stopper having a central recess therein, a plunger including a head and a shank mounted on said syringe, said plunger head being of a larger size than its shank and of less size than the bore of the ampule, said head having a flat lower extremity and having at least a portion of its sides tapered, said plunger having its end arranged to seat in said recess, and an ampule engaging member surrounding said plunger shank and including a part movable within the syringe to engage the ampule in the barrel.

2. A cartridge type ampule for bodily insertion in a hypodermic syringe, the ampule having one end of the body portion closed by a plunger, the ampule at its other end being narrowed and merging directly in a smooth curve into a weakened, narrowed, short, annular neck at the base of the ampule, the ampule enlarging slightly and being tapered for a substantial distance beyond said neck for providing a portion of sufficient length to be grasped readily by the fingers of the user, for breaking the ampule at said neck.

1,892,994. MINING APPARATUS. EDWARD J. NEWBAKER, Windber, Pa., assignor to The Berwind-White Coal Mining Company, a Corporation of Pennsylvania. Filed Jan. 3, 1930. Serial No. 418,177. 2 Claims. (Cl. 262—13.)



1. In a mining apparatus, the combination with an axle and a pair of wheels turnable thereon, of a pickhammer supporting socket carried by the axle and comprising a lower curved half socket and an upper curved half socket hinged on the lower curved half socket, a pickhammer supported in the socket, a flange on the pickhammer in rear of the socket, a split-collar on the forward end of the pickhammer in front of the socket, and means to secure the split-collar in position.

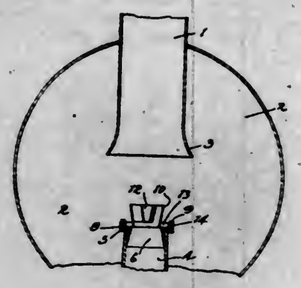
1,892,995. MARKING PLATE FOR KEYS AND METHOD OF SECURING SAME. ROBERT H. NICHOLSON, Los Angeles, Calif. Filed Jan. 25, 1932. Serial No. 588,689. 3 Claims. (Cl. 76—110.)



1. A key formed of sheet metal and adapted to be used in pin tumbler locks, comprising: a ward portion; a head, said head having a perforation extending entirely therethrough, and a cylindrical opening adapted to receive a key ring; and a marking plate (of substantially the same thickness as said head) fitting in said perforation, said perforation being so formed that the side thereof adjacent said opening is concentric with said opening, thus leaving a spring bridge between said perforation and said opening, said bridge being adapted to engage each marking plate with a yieldable pressure to retain same in place.

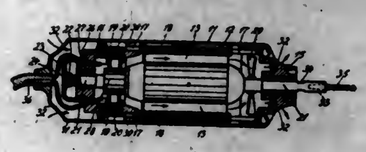
2. A method of securing a marking plate in a key head, which comprises: forming a perforation extending entirely through said head and adapted to receive a marking plate of same thickness as said head; forming a circular ring-opening entirely through said head adjacent said perforation in such a position as to leave a spring bridge between said opening and said perforation; inserting a marking plate in said perforation; and expanding said spring bridge against said marking plate by pressure applied to the wall of said opening.

1,892,996. EXHAUST STEAM SPREADER. JOHN G. NORQUAY, St. Andrews, Manitoba, Canada. Filed Feb. 16, 1931, Serial No. 515,981, and in Canada Aug. 5, 1930. 1 Claim. (Cl. 230—100.)



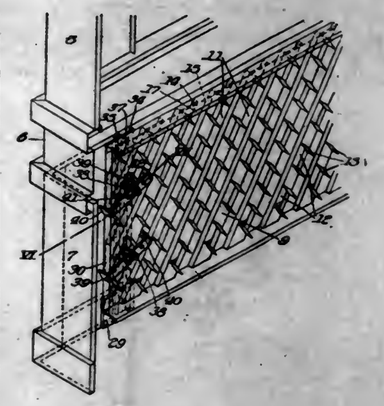
An exhaust steam spreader comprising concentrically positioned and spaced inverted frusto-conically shaped rings supported one from the other by intervening relatively thin vertically disposed webs and having the outer ring provided with a plurality of outwardly extending supporting arms provided at their outer ends with fastening means.

1,892,997. ELECTRIC TOOL WITH AN ELECTRIC MOTOR MOUNTED IN THE HANDLE. ALFRED OLDENBURG, Berlin-Charlottenburg, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Apr. 25, 1931, Serial No. 532,734, and in Germany May 3, 1930. 4 Claims. (Cl. 172—36.)



1. In an electric hand tool an electric motor located in the tool handle, said motor having a laminated stator, and elongated C-clamps for clamping the stator laminæ together, said clamps running in axial direction along the inner stator periphery between adjacent stator poles.

1,892,998. OUTDOOR ADVERTISING STRUCTURE. GEORGE D. OVERHOLTZ, Fair Oaks, Pa., assignor to McClintic-Marshall Corporation, Bethlehem, Pa., a Corporation of Pennsylvania. Filed Mar. 28, 1931. Serial No. 526,092. 6 Claims. (Cl. 40—125.)

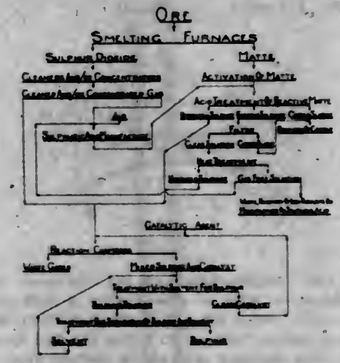


1. In an outdoor advertising structure, the combination with an upright member of a support framing, of a sheet metal lattice member including a channel-like reinforcing frame member overlapping and secured to the upper edge of the lattice and a substantially Z-shaped reinforcing member overlapping and secured to the lower edge, and spaced-apart lower and upper retaining means on the upright for cooperation with a flange of the respective lower and upper reinforcing members of the lattice.

1,892,999. PROCESS FOR RECOVERING SULPHUR. OLIVER C. RALSTON and KENNETH M. BAUM, Clarkdale, Ariz., assignors to United Verde Copper Company, Clarkdale, Ariz., a Corporation of Delaware. Filed Sept. 25, 1929. Serial No. 395,178. 21 Claims. (Cl. 23—226.)

2. The method of recovering sulphur which comprises subjecting hydrogen sulphide to the action of sulphur dioxide in the presence of a zeolite.

9. The method of recovering sulphur from ores containing sulphides of iron and copper which comprises treating the ore to form sulphur dioxide and matte, treating the matte with acid to form hydrogen sulphide, subjecting the hydrogen sulphide to the action of the sulphur dioxide in the presence of a catalyst to produce a mixture containing the catalyst and elemental sulphur, and treating the mixture with ortho-dichlorobenzene to produce a sulphur solution.



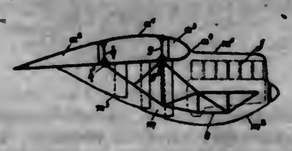
15. The method of recovering sulphur from sulphide minerals which comprises heating the minerals with access of air to form sulphur dioxide and matte incorporating metallic iron in the matte, treating the resulting matte product with acid to produce hydrogen sulphide, and subjecting the hydrogen sulphide to the action of the sulphur dioxide to produce elemental sulphur.

1,893,000. SUBMERSIBLE TOY. LEO RANNEY, New York, N. Y. Filed July 5, 1929. Serial No. 376,243. 22 Claims. (Cl. 46—40.)



1. A fisherman toy comprising a toy simulating a fisherman, a submersible toy, a flexible tube simulating a fishing line extending from the fisherman to the submersible toy, and a source of gas connected to the tube in order to supply gas to the submerged toy to increase its buoyancy and cause it to rise to the surface of the water.

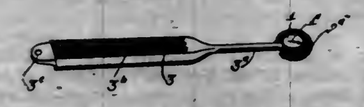
1,893,001. ARRANGEMENT OF ENGINE ON AIRCRAFT. ADOLF ROHRBACH, Berlin, Germany, assignor to Rohrbach Patents Corporation, a Corporation of Delaware. Original application filed Sept. 4, 1926, Serial No. 133,652, and in Germany Apr. 28, 1926. Divided and this application filed Aug. 4, 1928, Serial No. 297,441. Renewed Nov. 10, 1931. 13 Claims. (Cl. 244—31.)



1. In an airplane a lifting wing consisting of a frame and a covering therefor, a supporting frame suspended from the bottom surface of the said wing and extending in the direction of flight, one end of said supporting frame protruding beyond the wing edge and forming the engine bed, the protruding part being so disposed, that the engine is substantially located below the level of the wing chord, the supporting frame being directly and exclusively attached to the wing frame in the plane of the bottom surface, a special streamlined nacelle for the engine and supporting frame fairing into the wing skin, and so attached as to be easily removable, the part of the nacelle situated in beyond the wing edge fairing into the vertex of the latter.

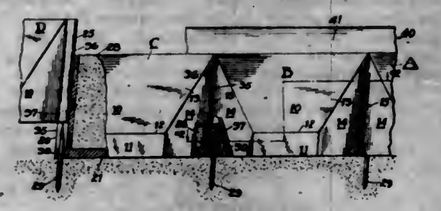
18. In an airplane provided with a wing, an airplane engine, a supporting frame for the engine attached directly to the wing structure in its bottom plane by means constituting the sole support for said frame, one end of said frame extending beyond the edge of the wing and the engine being disposed so as to be readily accessible on said extended end portion and substantially below the level of the wing chord, and a detachable nacelle for the engine and supporting frame having a part extending beyond the wing edge and fairing into the vertex thereof.

1,893,002. TOOTHBRUSH. CLAUDIA ROTHSCHILD, Ocean Park, Calif. Filed Aug. 28, 1930. Serial No. 477,230. 2 Claims. (Cl. 15—157.)



1. In a tooth brush, a disc shaped head having a reduced handle portion extending from one portion of the edge and in substantially the plane of the head, and bristles extending from the remaining portion of the edge and from a flat side of the head, the ends of all of the bristles forming a substantially unbroken cleaning surface.

1,893,003. SEA WALL. HENRY W. SCHLUETER, Beverly Hills, Calif. Filed Jan. 25, 1932. Serial No. 588,513. 8 Claims. (Cl. 61—4.)

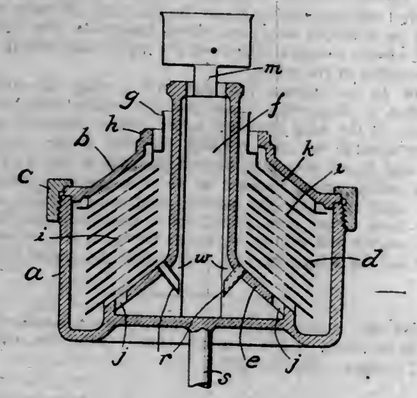


1. A sea wall comprising a plurality of hollow units arranged end to end, said units having their corresponding end faces angularly disposed, and interengaging locking means on the respective units, said locking means consisting of interengaging male and female members on the respective units, said female members having a downwardly converging dove-tail opening and said male members being correspondingly shaped.

1,893,004. SILICO-MOLYBDENUM STEEL AND ARTICLE MADE THEREFROM. WILLIAM ROBERT SHIMER and FRED C. T. DANIELS, Bethlehem, Pa., assignors to Bethlehem Steel Company. Filed Mar. 17, 1927. Serial No. 176,804. 3 Claims. (Cl. 80—58.)

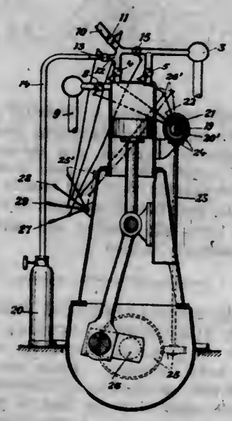
1. An article adapted to be used at both normal and elevated temperatures, and to be subjected to great stresses, made of a steel comprising carbon from .10% to 1.25%, silicon approximately 2%, molybdenum approximately .50% and chromium in substantial amounts less than 2%.

1,893,005. CENTRIFUGAL SEPARATOR BOWL. GEORGE J. STRZYNSKI, Poughkeepsie, N. Y., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 1, 1930. Serial No. 472,278. 2 Claims. (Cl. 233—21.)



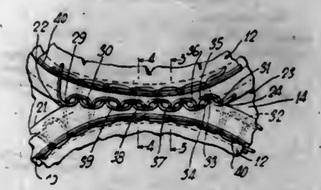
1. In a centrifugal separator bowl, the combination with a central hollow feed shaft expanded at its lower end to form a chamber in unobstructed communication with the hollow feed shaft, of a main separating receptacle surrounding the hollow feed shaft, a passage from said chamber opening into the main separating receptacle at a substantial distance from the latter's inner wall, and a separate passage for light liquid extending into the main separating chamber relatively close to the latter's inner wall and from a point within the feed shaft whose distance from the axis of the feed shaft does not exceed the radius of the non-expanded part of said shaft.

1,893,006. INTERNAL COMBUSTION ENGINE WITH SUPERCHARGING. MAX TRECHSEL, Winterthur, Switzerland, assignor to the Firm Sulzer Frères Société Anonyme, Winterthur, Switzerland. Filed May 22, 1928, Serial No. 279,694, and in Switzerland Aug. 1, 1927. 5 Claims. (Cl. 123—75.)



1. In a four-stroke internal combustion engine, an engine cylinder working-chamber having an exhaust port therein, a plurality of inlet ports in communication with a common source of compressed air, said inlet ports having a cross-sectional area substantially double that of the exhaust port.

1,893,007. SHOE CONSTRUCTION. SEYMOUR TROY, New York, N. Y. Filed Sept. 27, 1930. Serial No. 484,808. 5 Claims. (Cl. 36—18.)

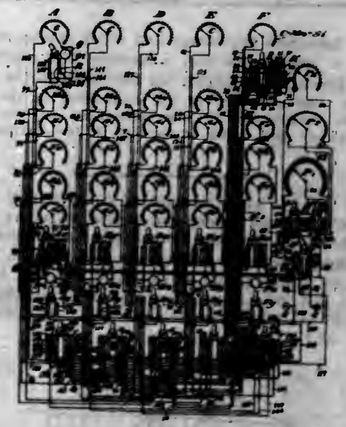


1. In shoe constructions of the character described, the combination with a sole having a ball portion, a shank portion, and a seat, said shank portion being relatively long and narrow, of an upper stitched to said sole, said stitching entering said shank portion from opposite edges and emerging therefrom in interlocked formation on one face.

1,893,008. METHOD AND MEANS FOR PREVENTION OF METALDEHYDE POISONINGS. LASZLO WAMOSCHER, Berlin-Wilmersdorf, Germany, assignor to Firm Lonza Elektrizitaetswerke und Chemische Fabriken, A. G., Basel, Switzerland. Filed May 29, 1931, Serial No. 541,103, and in Germany May 31, 1930. 5 Claims. (Cl. 44—7.)

1. A fuel tablet, comprising metaldehyde and a substance of the capsaicin group.

1,893,009. CHARGE CALCULATOR. CLEMSON H. WARD, Bethlehem, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Sept. 21, 1929. Serial No. 394,167. 13 Claims. (Cl. 235—61.)



1. In a calculating device, variable means for establishing interdependent values of resistance, current and potential in electric circuits, means for adjusting said values in terms of numerical quantities to be treated mathematically and means for evaluating the results of interaction of said values in terms of said quantities.

1,893,010. INTERNALLY TAPERED PILE SHELL SECTION. ELIHU D. WATT, La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Original application filed Aug. 12, 1930, Serial No. 474,744. Divided and this application filed Sept. 28, 1931. Serial No. 565,483. 3 Claims. (Cl. 61—57.)



1. A pile shell comprising a slightly tapered annular body of thin material and a lining fitted to the inner surface of the shell, said lining having its walls gradually increasing in thickness from the upper to the lower end thereof.

1,893,011. METHOD FOR LINING PILE SHELLS. ELIHU D. WATT, La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 1, 1932. Serial No. 602,488. 6 Claims. (Cl. 61—78.)



1. In the method of lining a stepped-taper shell having sections decreasing in diameter downwardly, the steps of inserting in each of said shell sections a similar shell section of slightly less diameter, and connecting said inserted sections end to end.

1,893,012. SELF CONTAINED OIL SEAL. ELMER A. BRADEN, Springfield, Ill. Filed June 8, 1930. Serial No. 459,046. 2 Claims. (Cl. 286—5.)

1. A self contained oil seal comprising in combination an inner and an outer channeled ring disposed in annular concentric alignment; said outer ring engaging a pair of annular end plates within annular channels thereof; said inner ring provided with a pair of annular end plates engaged within annular outer channels thereof; a central annular plate encompassing said inner ring and engaged by a sleeve encompassing said inner ring and an annular oil seal element encompassing said inner ring between said end plates and engaging said central

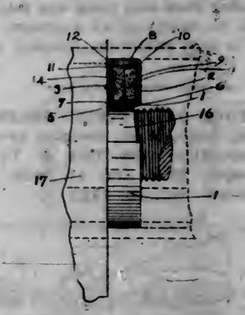
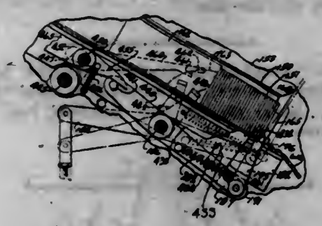


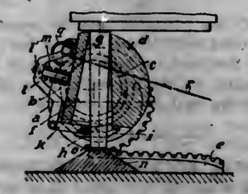
plate thereof; said end plates of said outer ring snugly engaging said oil seal element and flanked by said end plates of said inner ring, either of said rings with their engaged end plates adapted to rotate on their common center when the other is held in fixed position when in normal operation.

1,893,018. TOKEN DELIVERING MACHINE. HARRY RUSSELL BRAND, New York, N. Y. Filed May 16, 1927. Serial No. 191,805. 12 Claims. (Cl. 133—1.)



1. A token-delivering machine including in combination a magazine having a removable drawer adapted to contain tokens, means for uttering tokens from the drawer, means for locking the drawer in the magazine, and means controlled by the tokens in the drawer for unlocking said drawer when the tokens therein are nearing exhaustion.

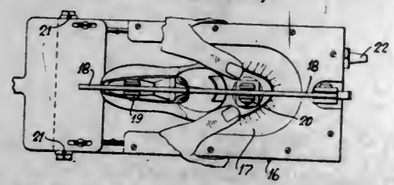
1,893,014. ECCENTRIC LIFTING DEVICE. HEINRICH BREITWIESER, Griesheim near Darmstadt, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg, A. G., Nuremberg, Germany, a Corporation of Germany. Filed May 18, 1931, Serial No. 538,061, and in Germany May 21, 1930. 1 Claim. (Cl. 14—35.)



An eccentric lifting device, especially for use in connection with the ends of pivot bridges, comprising, in combination a lifting disk having a practically vertical

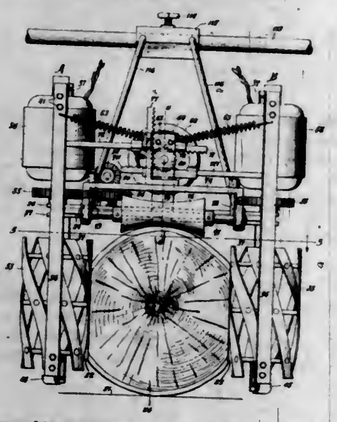
slot increasing in width from above to below; a supporting member extending through said slot and projecting forth from the same at the lower end of the same; a spring so arranged as to tend to draw said supporting member towards one of the faces of the slot; a stationary block located below the supporting member, and a projection extending from said block and being so located as to be adapted to constitute an abutment for the projecting end of the said supporting member, substantially as set forth.

1,893,015. METHOD OF AFFIXING SOLES. WILLIAM H. BRENNAHAN, Lynn, Mass., assignor to Compo Shoe Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 17, 1929. Serial No. 355,700. 7 Claims. (Cl. 12—142.)



1. A method of affixing an outer sole to a lasted upper, which includes, in combination, placing an adhesive between the adjacent surfaces of the outer sole and the lasted upper; locating the sole with respect to the upper; clamping the aforementioned parts in a pressure jack with the sole resting on a partially inflated pad; further slightly inflating the pad; and, before the adhesive has set, finally adjusting said upper with respect to said soles; and thereafter inflating said pad to substantially its final pressure to affix the sole.

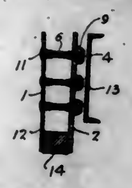
1,893,016. PORTABLE LOG TRIMMING MACHINE. JOHN LEXIE BROWN, San Bernardino, Calif. Filed Apr. 8, 1931. Serial No. 528,485. Renewed July 29, 1932. 14 Claims. (Cl. 144—114.)



1. A portable log trimming machine comprising a frame; means for moving said frame along a log; a pair of cutting members mounted on said frame and having parallel axes and adapted to trim opposite faces of said log; and means for driving said cutting members.

1,893,017. STAY BOLT CONSTRUCTION. ALFRED W. BAUCE, New York, N. Y. Filed Mar. 20, 1931. Serial No. 523,961. 3 Claims. (Cl. 85—1.5.)

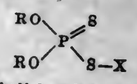
1. In a locomotive boiler having an inner fire box sheet and an outer shell sheet, said shell sheet being so positioned with respect to another part of the locomotive structure as to render the space therebetween of a breadth insufficient to permit the attachment of a cap to the sheet or the application or removal of a staybolt from the outside of the boiler after said boiler has been mounted in position, a staybolt assembly comprising a rigid staybolt, the ends of which are threaded into threaded openings in



said boiler sheets, one end of said staybolt extending at least to the outer surface of said shell sheet, said rigid staybolt being replaceable from the inside of said boiler; and a hollow leak-proof cap attached over the opening on the outside of said shell sheet prior to the initial assembly of the boiler into position on said locomotive.

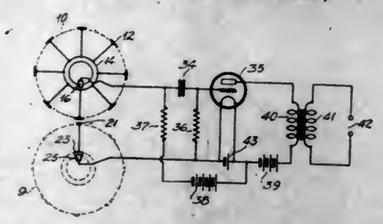
1,893,018. SALTS OF ORGANIC DI-THIOPHOSPHATES. LUDWIG J. CHRISTMANN, Jersey City, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Oct. 22, 1928. Serial No. 314,333. 8 Claims. (Cl. 260—98.)

1. A solid salt comprising substantially wholly a compound having most probably the following structural formula:



in which "X" is an alkali-forming metal and "R" represents a hydrocarbon radical.

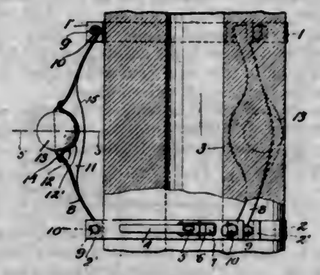
1,893,019. ELECTRICAL GENERATOR. CHARLES A. CULVER, Northfield, Minn. Filed Aug. 19, 1931. Serial No. 558,004. 4 Claims. (Cl. 175—363.)



1. The method of producing a variable current in the output circuit of a space discharge tube having an input circuit and output circuit including a source of current which comprises, producing condenser electrodes of definite configuration to produce a desired wave shape, connecting said condenser plates in said input circuit, and relatively moving said condenser electrodes to produce a variable current of predetermined wave form in said output circuit.

1,893,020. DRILL PIPE PROTECTOR. JOHN H. CUSHING, Los Angeles, Calif. Filed May 23, 1929. Serial No. 365,294. 3 Claims. (Cl. 308—6.)

1. A device for attachment to a rotary drill rod to center same in a well and prevent vibration, comprising a split ring arranged to encircle a drill rod and provided with means for locking said ring thereon against longitudinal and relatively rotary movement, a second split ring loosely encircling said drill rod and provided with means for holding the ends thereof together, each of said rings provided with a series of spaced lugs, a plurality of outwardly bowed spring members the ends of which extend between said spaced lugs, means carried by said lugs to connect said spring members removably therewith and

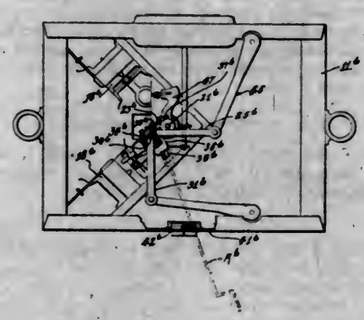


hold said rings spaced, the central portions of said spring members having depressions, balls carried in said depressions and means to retain said balls in position.

1,893,021. NONDETONATING FUEL. PHILIP S. DANNER, Point Richmond, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Original application filed June 19, 1926, Serial No. 117,153. Divided and this application filed Mar. 1, 1928, Serial No. 258,440. Renewed Dec. 21, 1931. 3 Claims. (Cl. 44—9.)

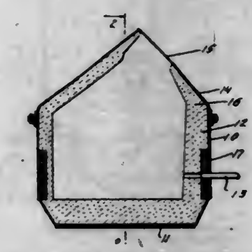
1. A non-detonating motor fuel comprising, a mineral hydrocarbon oil admixed with iron tetracarbonyl.

1,893,022. METER. FRANK T. DOUILLARD, Los Angeles, Calif., assignor of one-half to Southern California Gas Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 24, 1930. Serial No. 504,543. 2 Claims. (Cl. 73—1.)



1. In a meter having a valve-operating shaft, the combination of a crank fixed to the shaft and having a longitudinal slot, a slide guided in said slot, an adjusting screw having threaded engagement with said slide for adjusting the same in either direction longitudinally of the crank, said slide having an extension with a slot extending transversely to the crank, a second slide guided in said last-named slot, an adjusting screw having threaded engagement with the last named slide for adjusting the same in either direction along its slot, a crank pin carried on the last named slide, and means for connecting the crank-pin to a moving part of the meter for driving the shaft.

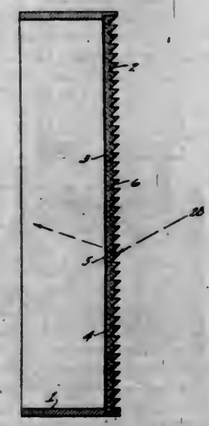
1,893,023. METALLURGICAL APPARATUS. MORRIS G. FOWLER, Clarkdale, Ariz., assignor to United Verde Copper Company. Filed Mar. 8, 1930. Serial No. 434,471. 9 Claims. (Cl. 266—43.)



1. A molten bath receptacle having a monolithic refractory lining in which about twelve to twenty-two per cent of the bonded particles are small enough to pass a 100-mesh screen, and the major portion of the remaining particles are too large to pass a 20-mesh screen.

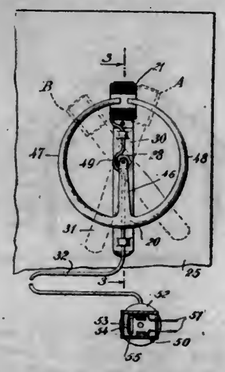
9. In a method of lining metallurgical apparatus involving the application of a wet mass comprising granular magnesite and a binder to the walls of the apparatus, the improvement which comprises subjecting the mass to the action of sulphuric acid to improve the plasticity of the mass and thereby provide for better contact between the particles by permitting more uniform distribution of the fine particles throughout the mass, the amount of acid employed being not substantially in excess of that required to neutralize alkaline impurities contained in the mass.

1,893,024. SIGN. EDWIN R. GILL, Jr., Yonkers, N. Y. Filed Dec. 31, 1928, Serial No. 329,537. Renewed May 25, 1932. 7 Claims. (Cl. 40—130.)



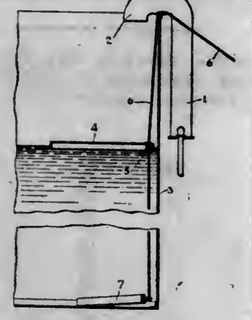
1. A sign comprising a translucent member adapted to be disposed vertically and having on its inlet surface a series of parallel prisms, each of said prisms having a surface facing upwardly and a lower surface forming an acute angle therewith, the projection of said last named surfaces in the direction of the plane of said member having an area approximately that of the surface covered by said prisms, and means for cutting off a portion of the light passing through said member to form display characters.

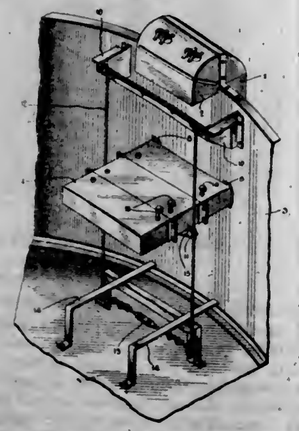
1,893,025. ELECTROMOTOR. ELI E. GREGORY, Brooklyn, and HENRY EMERSON COMINGS, Manhasset, N. Y.; said Comings assignor to said Gregory. Filed July 1, 1930. Serial No. 465,150; 20 Claims. (Cl. 172—126.)



16. An electromotor comprising an adjustably mounted solenoid, an oscillator, and means for supporting the oscillator so as to allow it to oscillate freely through the solenoid.

1,893,026. OIL TANK FIRE PROTECTION. JAMES A. HARTE, Utica, N. Y., assignor to American La France and Foamite Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 17, 1928. Serial No. 262,488. 7 Claims. (Cl. 169—4.)



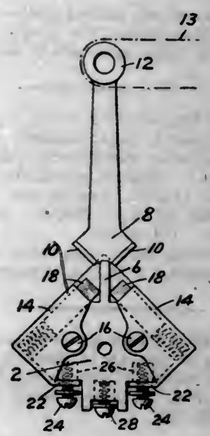


1. Foam-applying means for oil tanks, comprising a fixed foam spout having its outlet fixed in an upper position in the tank above the highest oil level therein, a buoyant foam-deflector floating on the oil and adapted to receive foam dropping from the spout and direct it horizontally onto the oil surface, and guide means for said deflector adapted to retain it in position beneath the spout under changing oil level.

4. Foam-applying means of the kind described, including a hollow foam-deflector adapted to float on the oil and having a vent means to prevent undue pressure in the deflector, said means being normally closed by a fusible material adapted to open said vent means upon an increase of temperature to a predetermined amount.

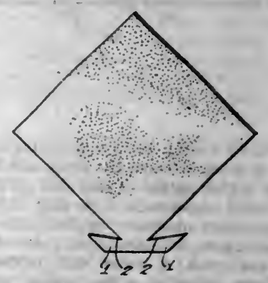
5. The method of applying foam to oil tanks, which consists in lowering an anchor into the oil, securing a foam-deflector to said anchor, and delivering foam on to said deflector so secured.

1,893,027. SWITCH. REUBEN H. HELSEL, Long Island City, N. Y., assignor to General Register Corporation, Brooklyn, N. Y., a Corporation of Pennsylvania. Filed June 7, 1930. Serial No. 459,625. 4 Claims. (Cl. 200—163.)



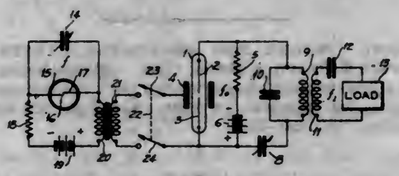
1. A switch comprising a carrying member, a plurality of slidably mounted contact elements, springs urging the contact elements in converging paths, means for limiting the movements of the elements under the actions of the springs, and an element movable to engage both contact elements with a sliding motion.

1,893,028. COMPOSITION SHINGLE. HARRY H. HONIGBAUM, Richmond Hill, N. Y. Filed Apr. 27, 1923. Serial No. 635,089. 4 Claims. (Cl. 108—7.)



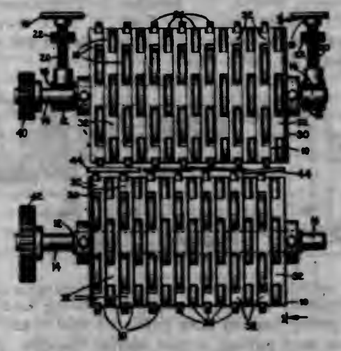
3. A flexible shingle of composition roofing material comprising a square body proper having parallel opposite edges, and provided at the weather corner thereof with integral upwardly hooked locking wings or tabs which extend laterally beyond the body proper, said body proper and wings or tabs being flat and all occupying a common plane.

1,893,029. SIGNALING SYSTEM. AUGUST HUND, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 1, 1931. Serial No. 566,229. 2 Claims. (Cl. 179—171.)



2. A signaling system comprising, an oscillation circuit for producing high frequency oscillations, a selection circuit coupled with said oscillation circuit, said selection circuit being tuned to a desired high frequency, a relaxation oscillation circuit for recurrently energizing said oscillation circuit at a frequency which is an aliquot part of said desired frequency, said relaxation oscillation circuit including a glow discharge tube having an external control electrode, a resistance, and a source of direct current all connected in series; another relaxation oscillation circuit including a glow discharge tube, a resistance, and a source of direct current connected in series; and a keying circuit connected with said control electrode, said keying circuit being inductively coupled with said second mentioned relaxation oscillation circuit.

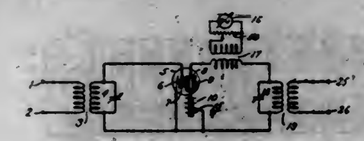
1,893,030. CRUSHER FOR GLASS AND THE LIKE. CHARLES B. KINGSLEY, Clairton, Pa. Filed Oct. 31, 1929. Serial No. 403,722. 15 Claims. (Cl. 83—11.)



1. In a crusher for glass and the like, in combination, a plurality of circular disks assembled in drum-like form, impact rollers supported by said disks and projecting beyond the outer rim thereof, means for rotating said disks, means for feeding pieces of glass within reach of said rollers while they are in motion, and means for substantially closing the circumferential spaces between said rollers, for the purpose set forth.

1,893,031. CONTROL CIRCUITS FOR SPACE DISCHARGE DEVICES. FREDERICK B. LLEWELLYN, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1930. Serial No. 443,696. 6 Claims. (Cl. 179—171.)

1. A circuit comprising a space discharge device having an anode, a cathode, a control grid and a screen grid, the anode being at the same direct current potential as the cathode, means for applying a positive direct current bias to said screen grid, a source of alternating current coupled to said anode, and means for adjusting the intensity of said alternating current whereby the ratio of useful currents to noise producing currents in said device is increased.

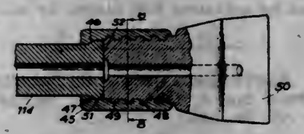


1,893,032. SIX-WHEELED MOTORIZED TRUCK. JOHN A. MCGREW, Albany, N. Y., assignor to Bethlehem Steel Company. Filed Aug. 21, 1926, Serial No. 130,593. Renewed Feb. 10, 1930. 14 Claims. (Cl. 105—195.)



1. In a six-wheeled truck, in combination, a pair of wheel pieces, a transom member, a bolster member, a span member, a bearing plate member on said span member, a pair of spaced axles, an equalizer device bearing on said axles and having its midway point disposed beneath the center line of the bolster member, a third axle, an inverted U-shaped member extending across and bearing on the latter, and springs interposed between the extending ends of said U-shaped member and said wheel pieces.

1,893,033. ROCK DRILL. RUSSELL A. MURDOCK and JOHN S. MCKENNA, Los Angeles, Calif., assignors to Elliott Core Drilling Company, a Corporation of California. Filed Dec. 15, 1931. Serial No. 581,140. 8 Claims. (Cl. 255—64.)

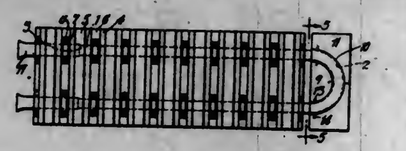


8. For use in combination with a percussion drill, a drill tool embodying: a drill bar terminating in a shoulder and a substantially flat bearing face normal to the axis of said bar; a threaded sleeve slidably and non-rotatably mounted on said bar; a bit member in threaded engagement with said sleeve and rotatable relative thereto, said bit member having a substantially flat bearing face adapted to be drawn into full-face contact with the bearing face on said bar by the advance of said bit in said threads.

1,893,034. RADIATOR. JOSEPH B. MURRAY, Brooklyn, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation, a Corporation of Delaware. Filed Dec. 13, 1929. Serial No. 413,734. 6 Claims. (Cl. 257—144.)

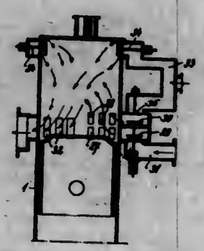
2. A radiator including in combination a tube for the heating medium, fins in engagement with the tube throughout the principal portion of its length, said tube

being of metal too thin and flexible to hold its required shape in the radiator without reinforcement and said fins serving to reinforce the tube sufficiently to hold it in the required shape and providing an extended area for heat-



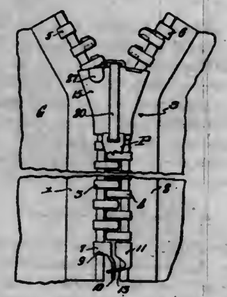
ing the air, an end of the radiator comprising a portion of the tube extending beyond said principal portion, and a separate reinforcement for substantially the full length of such extended portion.

1,893,035. INTERNAL COMBUSTION ENGINE FOR PULVERULENT FUEL. RUDOLF PAWLIKOWSKI, Goerlitz, Germany. Filed Dec. 5, 1928, Serial No. 323,996, and in Germany May 20, 1927. 7 Claims. (Cl. 123—65.)



3. In a two cycle engine, comprising a cylinder having a scavenging air port, an exhaust port above the said scavenging port, a second inlet port opposite said scavenging port and a third inlet and charging air port above said second inlet port and opposite said exhaust port, as claimed in claim 1, a duct for the high pressure air connected to the space in front of the second inlet port, a controlled air admission device associated with said space for introducing high pressure air into said space, a controlled device for the admission of high pressure air from said space into the space in front of the third inlet and charging ports, means for actuating said devices by one valve-gear shaft.

1,893,036. FASTENER. GEORGE E. PRENTICE, Berlin, Conn. Filed Jan. 7, 1931. Serial No. 507,113. 25 Claims. (Cl. 24—205.)



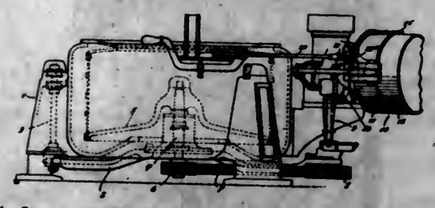
1. A separable fastener of the class described having an opposed series of interengageable fastener elements, an end stop member disposed at one end of each series, said end stop members having normally cooperating elements to prevent separation of the series at said end, a slider comprising normally assembled but separable parts mounted respectively to slide along the opposite series of fastener elements, one of said slider parts having a pull tab, said cooperating stop elements and the slider parts being so constructed and arranged that continued pull on the pull tab in the direction for separating the series after the slider has engaged the end stop simultaneously separates the slider parts and the cooperating stop elements.

1,893,037. SLIDER FOR SEPARABLE FASTENERS. GEORGE E. PRENTICE, Berlin, Conn. Original application filed June 29, 1928, Serial No. 289,288. Divided and this application filed Mar. 12, 1931. Serial No. 521,893. 6 Claims. (Cl. 24—205.)



1. A slider for fasteners of the class described, said slider comprising a body consisting of a unitary piece of sheet metal having the desired external contour and having a substantially homogeneous internal fibrous structure, said piece of metal having milled grooves in its opposite sides to provide accurately dimensioned channels of substantially rectangular cross section converging at one end of said body and diverging adjacent to the opposite end, the channels opening outwardly through said opposite sides and defining spaced front and rear wings, and a neck integrally united to said wings adjacent to one end of said body, said neck and wings retaining substantially unaltered the original fibrous structure of the piece of metal.

1,893,038. OSCILLATION LIMIT DEVICE. LE ROY C. SCHENCK, Moline, Ill., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 10, 1929. Serial No. 412,983. 6 Claims. (Cl. 210—72.)

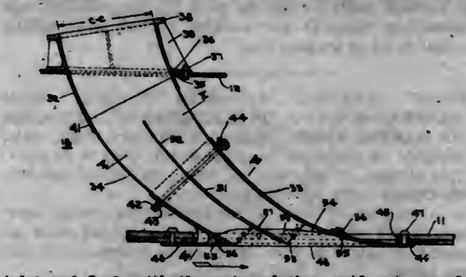


1. In a centrifugal extractor, a basket rotatably mounted on an oscillatory support, a shaft for driving said basket, a driving pulley and an idler pulley on said shaft, a driving belt for said pulleys, a belt shifter therefor, a spring adapted to move said shifter from operative to inoperative position, means responsive to a predetermined degree of oscillation of said support for releasing said belt shifter to permit movement of said shifter by said spring, manual means for returning said shifter to operative position, and means connected with said manual means for co-action with said releasing means to render said manual means effective.

1,893,039. MARINE CONDENSER CIRCULATING SYSTEM. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 30, 1931. Serial No. 547,923. 4 Claims. (Cl. 257—26.)

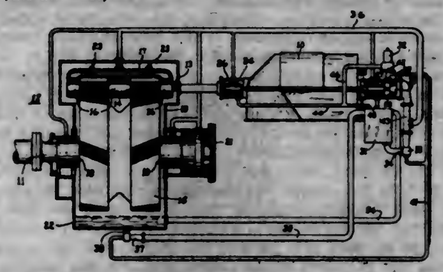
1. The combination with a ship having an inner and outer plating, of a scoop construction for the ship's condenser and having a passage which diverges inwardly and which extends inwardly from the surface of the ship and

rearwardly, said passage including an inner conduit member carried by the inner plating and extending into the space between the inner and outer plating, an outer conduit member carried by the outer plating and having its



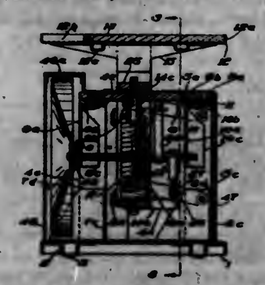
inlet end flush with the outer plating, said outer conduit member extending into the space between the inner and outer plating, and yieldable, water-tight coupling means connecting the adjacent ends of the conduit members.

1,893,040. LUBRICATING SYSTEM. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 3, 1932. Serial No. 590,762. 7 Claims. (Cl. 184—6.)



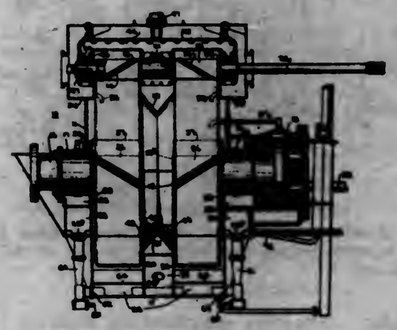
1. The combination with power plane apparatus including a pair of meshing gears and a prime mover for driving the same, of a lubricating system for the power plant apparatus including means for supplying lubricant under pressure thereto, a sump arranged below the gears for collecting lubricant discharged thereby, circulating means for supplying lubricant to said supply means including a reservoir disposed at an elevation higher than the sump and adapted to receive lubricant discharged by portions of the power plant apparatus which are elevated with respect to the reservoir, and means for conveying lubricant from the sump to the circulating means.

1,893,041. WEIGHING SCALE. FRED A. SCHMITZ, Canton, Ohio. Filed Feb, 7, 1929. Serial No. 338,153. 17 Claims. (Cl. 265—68.)



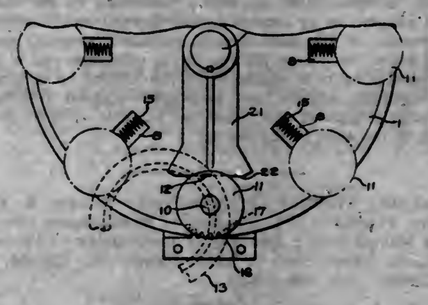
1. In a weighing scale, a frame including spaced inverted U-shaped members having transverse web portions, and a cross-member bridging the space between said U-shaped members and secured to the web portions thereof.

1,893,042. REDUCTION GEARING. IRA SHORT, Essington, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 29, 1931. Serial No. 540,897. 9 Claims. (Cl. 184—6.)



1. The combination with a pair of meshing gears enclosed by a casing, of a lubricating system for the gears including means for supplying lubricant to the gears, a sump arranged below the gears for collecting lubricant, circulating means for supplying lubricant to said supply means and including a reservoir in said casing and adapted to catch lubricant thrown off by the gears, and means for conveying lubricant from the sump to the circulating means, said reservoir being arranged above the sump in order to reduce the work of said circulating means in circulating lubricant.

1,893,043. GEAR CUTTING MECHANISM. HAROLD E. STONEBRAKER, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed May 13, 1930. Serial No. 452,001. 6 Claims. (Cl. 90—4.)

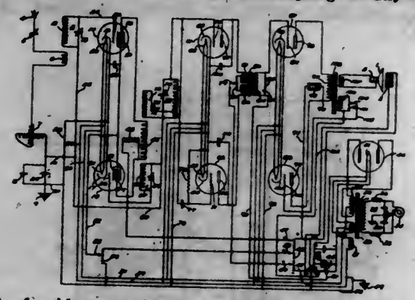


3. Gear cutting mechanism comprising a revoluble carrier, a tool holder rotatably mounted on said carrier and movable bodily thereon radially thereof, and stationary means arranged to cooperate with the tool holder when the carrier is turned to impart a compound movement to the tool holder in a non-circular curved path when the carrier moves the tool holder past the cutting point.

1,893,044. AMPLIFIER SYSTEM. PHILIP J. WALSH, San Francisco, Calif. Filed Nov. 7, 1930. Serial No. 494,047. 9 Claims. (Cl. 179—171.)

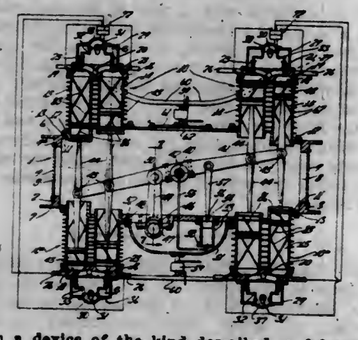
1. In an amplifier system, a pair of devices the impedances of which can be varied in accordance with sig-

naling impulses, a connection between said devices, said connection including an inductance coil, said coil being free of any substantial magnetic coupling to any other



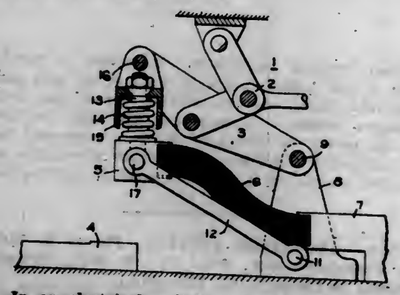
part of said connection and means for supplying a current to both devices, and connected to one of the ends of the coil.

1,893,045. INTERNAL COMBUSTION ENGINE. EARL W. WEIDNER, Reading, Pa. Filed Dec. 11, 1930. Serial No. 501,606. 5 Claims. (Cl. 123—54.)



1. In a device of the kind described, a fulcrum shaft, beams fulcrumed intermediate their ends on the fulcrum shaft, a crank-shaft operatably connected to the beams and adapted to be rotated by the upward and downward movement of the ends thereof, cylinders mounted above and below the beams, pistons in the cylinders, and a pair of connecting rods connected to the pistons in each pair of vertically aligned cylinders and extended therefrom in axial alignment and connected together at their inner ends to the ends of the beams.

1,893,046. CIRCUIT INTERRUPTER. WALTER M. AUSTIN, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 2, 1927. Serial No. 230,455. 8 Claims. (Cl. 200—165.)



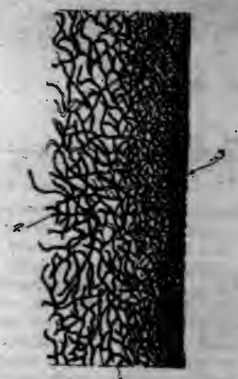
1. In an electrical switch, a fixed contact, a movable contact, a fixed terminal spaced from the movable contact, a pack of laminations having opposite end portions anchored to the movable contact and to said terminal, the spanning lengths of the laminations between the anchored portions being uniform, and means for separating the movable contact from the fixed contact, whereby said laminations maintain the movable contact substantially parallel to all of its positions.

1,893,047. REFINED MAGNESIA PRODUCT FROM MINERAL SOURCES OF MAGNESIA AND PROCESS OF MAKING SAME. HARVEY N. BARRETT, Tiffin, Ohio, assignor to Dolomite, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 31, 1930. Serial No. 440,289. 28 Claims. (Cl. 23—201.)

1. A process of treating magnesium-containing limestone, which comprises heating such material with an ammonium halide to form MgO and a water-soluble calcium halide.

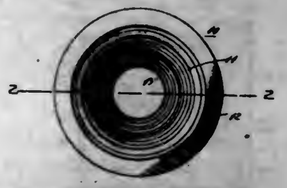
20. As a new article of manufacture, a light weight, porous, spongy product made from magnesium-containing limestone in which a substantial part of the calcium carbonate has been converted into a water-soluble anhydrous calcium halide, a substantial part of which is present as loosely cohering aggregates of anhydrous calcium halide crystals with admixed magnesium oxide.

1,893,048. FILTERING MATERIAL. HANS E. BIRKHOLZ, Chicago, Ill., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed Aug. 10, 1927. Serial No. 211,949. 8 Claims. (Cl. 183—51.)



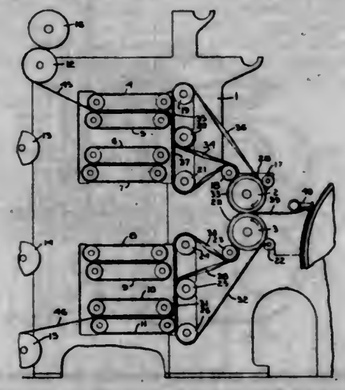
1. A filter medium comprising an integral layer of fibrous material which has the fibres adjacent one surface thereof arranged in greater compactness than those adjacent the opposite surface thereof.

1,893,049. SOUND PRODUCING DEVICE. CLAYTON M. BOUDETTE, Revere, Mass. Filed Aug. 30, 1932. Serial No. 631,089. 8 Claims. (Cl. 179—115.5.)



1. A sound-producing device comprising in combination, a cone diaphragm flexibly supported at its base, an actuating coil secured to said diaphragm, a corrugated imperforate coil-centering diaphragm-supporting disc of thin flexible material, and a support for the peripheral portion of said disc.

1,893,050. TAPE CONDENSER. HENRI BURHENNE, North Andover, Mass., assignor to Davis & Furber Machine Company, North Andover, Mass., a Corporation of Massachusetts. Filed Jan. 4, 1932. Serial No. 584,671. 4 Claims. (Cl. 19—151.)

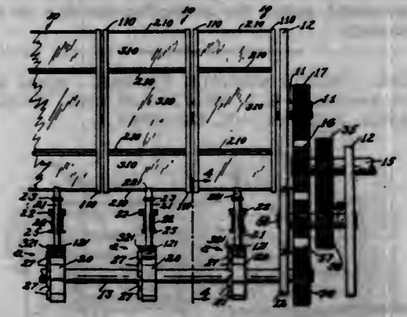


1. A tape condenser comprising a pair of dividing rolls, a series of endless tapes engaging and laterally separated by said rolls with each of said tapes carrying away from said rolls on each of two diverging runs, a detached sliver, a pair of condensing aprons mounted adjacent the runs of all of the tapes which diverge in the one direction, and adjacent the sliver carrying portions of said tape runs to cause the slivers to be taken from all of said runs by said pair of aprons, a second pair of condensing aprons mounted adjacent the runs which diverge in the other direction, and adjacent the sliver carrying portions of said tape runs to cause the slivers to be taken from all of said runs by said pair of aprons and means for guiding the sliver carrying portions of the tape runs by pairs into close proximity as they pass the condensing aprons to cause the two slivers carried by said runs to be taken together and condensed into a single roving by the aprons.

1,893,051. HEAT-ENERGY TRANSFER MEDIUM. HERBERT H. DOW, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Oct. 30, 1926. Serial No. 145,877. 6 Claims. (Cl. 252—5.)

1. A heat-transfer medium, which comprises diphenyl oxide and naphthalene.

1,893,052. PICTORIAL DISPLAY APPARATUS. GUSTAVUS W. ESCHENBACH, Los Angeles, Calif. Filed Apr. 4, 1931. Serial No. 527,766. 9 Claims. (Cl. 40—33.)



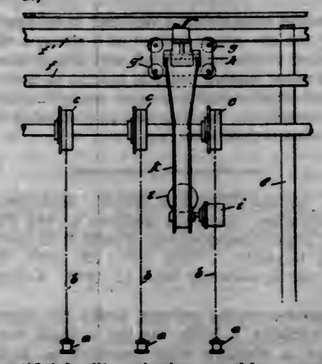
1. Pictorial display apparatus, including a shaft, a plurality of individual pictorial cylinders mounted frictionally thereon so as to revolve therewith and be capable of being individually held at rest, each of said cylinders having a corresponding plurality of pictorial faces of substantially the same angular dimension, forks normally idle that are movable toward the longitudinal axis of said shaft to engage each of said cylinders between their pictorial faces for holding the same at rest, and adjustable cam wheels for actuating said forks in a timed relationship to the rotation of said cylinders.

1,893,053. PERFORATING DEVICE FOR PRINTING PRESSES. KARL FUNCKE, Ottweiler, Germany. Filed Feb. 4, 1932, Serial No. 590,941, and in Germany Jan. 2, 1931. 8 Claims. (Cl. 164—98.)



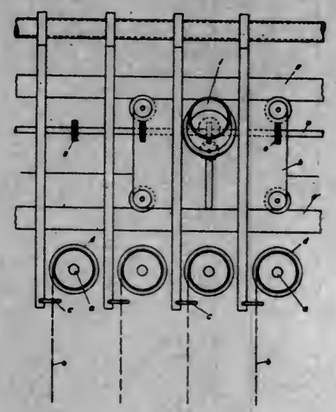
1. In a printing press, a perforating device comprising a plurality of bipartite perforating knife holders, a cushioned recessed slide having a perforating knife edge and a cushioned cam bolt disposed within each of the said bipartite knife holders, the cams of the said bolt being adapted to engage the recesses in the said slide, a pressure appliance connected with the said knife holders and bolt and consisting of a casing, a rotatable shaft herein, a toothed disc having notches differing in depth, means for connecting the said toothed disc with the said shaft and engaging the said notches, a control member actuated by the press and means connecting the said control member with the said toothed disc to render the said knives operative and inoperative.

1,893,054. RAYON SPINNING MACHINE. CONRAD HERRMANN, Wuppertal-Elberfeld, Germany, assignor to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 17, 1931, Serial No. 509,511, and in Germany Jan. 20, 1930. 9 Claims. (Cl. 18—8.)



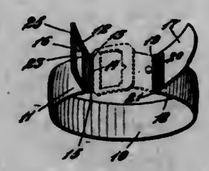
1. An artificial silk spinning machine provided with an exchange spool adapted to wind or take up the yarn produced during the changing of the take-up means, and means carrying said exchange spool and mounted for traveling from one take-up means to the next.

1,893,055. SPOOLING MACHINE. CONRAD HERRMANN, Wuppertal-Elberfeld, Germany, assignor to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 4, 1931, Serial No. 520,114, and in Germany Mar. 10, 1930. 4 Claims. (Cl. 18—8.)



1. In a spooling machine having a plurality of spaced thread receiving spools provided with a common driving means, an exchange roller provided with a cog wheel, and a driving shaft for said exchange roller having secured thereto at spaced intervals a driving gear whereby when said exchange roller is moved into operative position with a full take-up spool the said gears may mesh to drive said exchange spool.

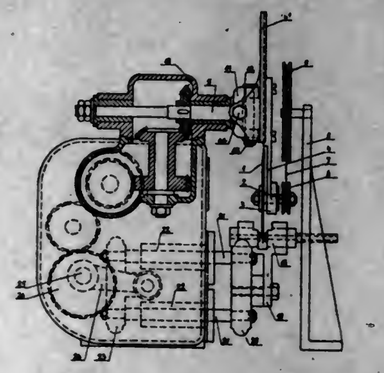
1,893,056. BRACELET. IRVING L. HODGES, Attleboro, Mass., assignor to C. A. Marsh & Co. Inc., a Corporation of Massachusetts. Filed July 2, 1932. Serial No. 620,648. 6 Claims. (Cl. 63—11.)



1. A bracelet comprising a resilient body band section, comprising the the major portion of a circle, a short band section hinged to one end thereof, and a loop member thru which said short section extends hinged to the other end thereof, and interengaging means on said loop member and short section for holding said loop member and short section in closed position.

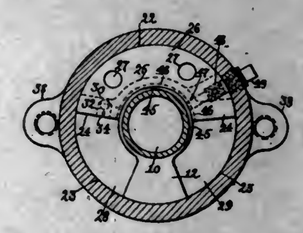
1,893,057. CIGARETTE MACHINE. MAX PAUL ERNST HOHN, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed Nov. 29, 1927, Serial No. 236,547, and in Germany Sept. 12, 1927. 4 Claims. (Cl. 131—37.)

1. A cigarette string cutting device for cigarette machines, comprising, a knife carrier, a shaft for rotating said carrier, a circular knife mounted on said carrier, outside the axis of rotation thereof, means for causing said circular knife to rotate and means for causing said carrier to vibrate with any desired amplitude as it rotates, said last named means comprising, a forked projection formed on one end of said shaft, a pivoting bolt carried by said fork, a bearing eye arranged on said carrier and adapted to project into said fork and surround said bolt, and locking means for fixing said carrier in any de-



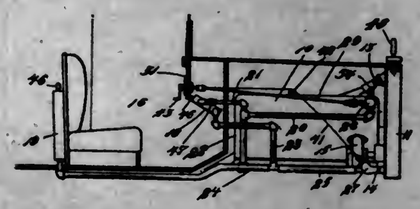
sired position about said bolt, whereby the knife edge follows the forward feeding movement of the cigarette string being fed to said machine.

1,893,058. HYDRAULIC SHOCK ABSORBER. FREDERICK O. KILGORE, Boston, Mass. Filed Nov. 7, 1929. Serial No. 405,373. 3 Claims. (Cl. 188—89.)



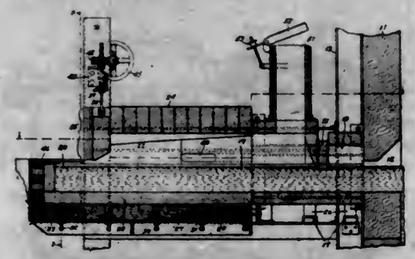
1. In a shock absorber, in combination, a casing, a rock-shaft extended into the casing, a piston secured to the rock-shaft, a partition member extending around the rock-shaft and piston, fluid-containing chambers on opposite sides of the piston, a by-pass between said chambers comprising a groove formed in said partition, a second groove formed in the piston and having tapering portions for automatically restricting the flow of liquid through the by-pass as the travel of the piston is extended under abnormal road conditions, and a device extended into the first-mentioned groove for restricting the flow of fluid therethrough.

1,893,059. MOTOR VEHICLE HEATER. PETER MAYHEW, Barrington, R. I. Filed May 26, 1931. Serial No. 540,078. 3 Claims. (Cl. 123—174.)



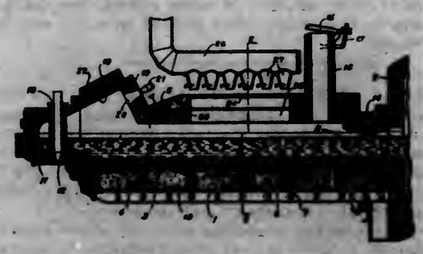
1. In combination with a vehicle body, a motor having a cooling water jacket thereabout, a radiator, upper and lower conduits connecting said water jacket to said radiator for circulation therethrough, a water pump in the lower conduit, and a control valve in said lower conduit, a radiator in the vehicle body, an auxiliary conduit connecting said body radiator to said upper conduit, a control valve in said auxiliary conduit spaced from said upper conduit, and an auxiliary conduit connecting said body radiator to said lower conduit between said control valve therein and said pump, whereby circulation through the body radiator is controlled and the upper conduit is left open at all times to permit the escape of vapor from the motor jacket.

1,893,060. FOREHEARTH FOR MOLTEN GLASS. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Aug. 21, 1929. Serial No. 387,285. 22 Claims. (Cl. 49—56.)



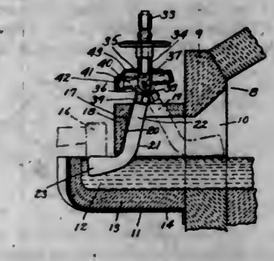
22. Apparatus for providing a pool of molten glass from the surface of which charges of glass are removed by the molds of a suction gathering machine, which comprises a glass melting furnace, a stationary forehearth, a channel for conducting glass from the furnace to the forehearth, a stationary heating chamber enclosing said forehearth, the glass containing portion of said forehearth being extended outwardly beyond said chamber to provide a stationary bay, said bay being permanently open above the surface of the glass therein for access to the glass by said molds at all times during the operation of said machine, an unobstructed glass passageway leading into said bay, a movable barrier constituting at least a portion of the front wall of said chamber extending substantially the full width of said bay, and separating the interior of the chamber from the bay, temperature controlling means within said chamber and including means effective to direct a sting-out flame from the chamber beneath the barrier and across the surface of the glass in the bay, and means for variably regulating the application of said flame to the glass in the bay including means for moving said barrier toward and away from the surface of the glass.

1,893,061. FOREHEARTH FOR MOLTEN GLASS. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 19, 1929. Serial No. 393,680. 16 Claims. (Cl. 49—55.)



10. The combination with a glass melting furnace of a forehearth projecting therefrom and having a channel along which glass may flow from the furnace, said channel having refractory bottom, side and top walls, said refractory top wall being spaced from the glass in the channel, refractory means separating the space above the glass in the channel from the space above the glass in the furnace, said refractory top wall having a vertical opening formed therein above the longitudinal median line of the channel, a metallic member completely closing the upper end of said opening in the refractory top wall of the channel to cause a relatively greater radiation of heat from the glass below said metallic member than from the glass in the side portions of said channel, means for introducing a heating medium into the space above the glass adjacent to one end of said channel, and means for controlling the distribution of flow of heated gases above the glass in the channel to cause said heated gases to travel longitudinally of the forehearth mainly above the glass in the side portions of said channel and laterally of the space beneath said metallic heat radiating member, said heat radiating member being formed to permit removable refractory blocks to be placed in position to shut off said relatively great radiation of heat through a regulable portion or all of said opening in the refractory top member.

1,893,062. METHOD OF AND APPARATUS FOR CIRCULATING MOLTEN GLASS. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed July 2, 1930. Serial No. 465,254. 18 Claims. (Cl. 49—56.)



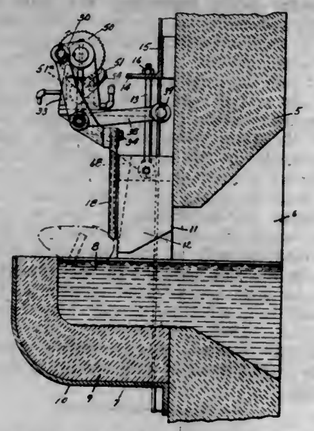
1. The method of circulating molten glass in a gathering pool, from the surface of which charges of glass are removed by a suction gathering receptacle rotating in a circular path through a gathering zone, which comprises, supporting a stirring implement from over the pool, rotating said implement in a closed path about a vertical axis to move it toward and inwardly of the gathering zone while maintaining said implement in the heated environment of said pool, and manipulating said implement to cause the glass contacting portion thereof to move through the glass in the gathering zone in a path concentric with the path of the gathering receptacle.

11. In combination with a container for molten glass from the surface of which glass charges are removed by suction in a gathering zone, an implement for circulating the glass, means for supporting said implement from over the glass, means for actuating said implement to circulate the glass, and means for holding the glass-contacting portion of the implement immersed in the glass while it is moved through the gathering zone, and for holding said implement in a position to skim the glass, said supporting and actuating means being arranged to maintain the implement in the heated environment of the pool at all times.

1,893,068. APPARATUS FOR CONDITIONING MOLTEN GLASS. ALOY J. SMITH, Bloomfield, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed July 1, 1930. Serial No. 465,137. 8 Claims. (Cl. 49—56.)

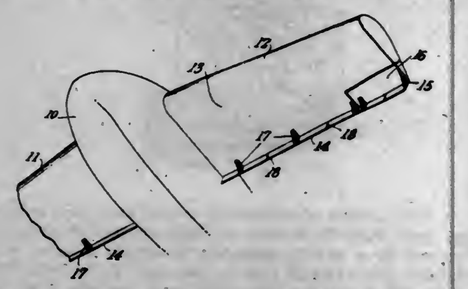
1. In combination with a container for a pool of molten glass, from the surface of which charges of glass

are removed by suction in a gathering zone, a skimmer for removing chilled glass from the gathering zone, means



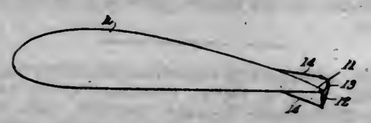
for moving said skimmer through a closed path passing through the glass, and means operating in timed intervals for interrupting the movement of said skimmer.

1,893,064. AIRCRAFT. EDWARD F. ZAPARKA, New York, N. Y., assignor to Zap Development Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 3, 1931. Serial No. 527,483. 12 Claims. (Cl. 244—12.)



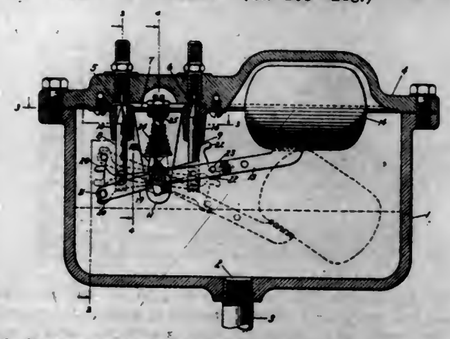
1. In an aircraft, an airfoil construction comprising an upper surface; a lower surface, said surfaces arranged to meet at a trailing edge and produce in flight a reduction of pressure above the upper surface and an increase in pressure below the lower surface; and a relatively rigid downwardly extending element connected to said airfoil and extending below said lower surface at the trailing edge thereof to increase the pressure on the lower surface and reduce the turbulence on the rearward portion of the upper surface.

1,893,065. AIRCRAFT AND CONTROL THEREOF. EDWARD F. ZAPARKA, New York, N. Y., assignor to Zap Development Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 3, 1931. Serial No. 527,482. 9 Claims. (Cl. 44—12.)



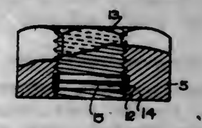
1. A sustentation body having a curved upper surface; a lower surface intersecting the same at the trailing edge, said surfaces arranged to produce in flight a reduction of pressure above the upper surface, an increase of pressure below the lower surface; a longitudinally extending surface connected at said intersecting edge of the lower surface with the upper surface, said longitudinal surface projecting substantially at right angles to said lower surface and arranged to provide an increase in pressure on the lower surface and prevent an interchange of the increased pressure on the lower surface and reduced pressure on the upper surface, and means whereby said longitudinal surface is adjusted to various positions with respect to said lower surface.

1,893,066. FLOAT-ACTUATED PUMP VALVE. GLENN F. ZELLHOEFER, Bloomington, Ill., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill., a Corporation of Illinois. Filed July 27, 1931. Serial No. 553,341. 5 Claims. (Cl. 103—248.)



1. In a pump having a casing provided with an orifice for admitting and discharging a liquid, valves for admitting and discharging pressure, respectively, above the liquid in said casing, a float actuated means for opening one valve and simultaneously closing the other including reciprocable valve stems mounted on a pivoted operating arm, a spring pressed actuator on said arm, and means controlled by the position of the float to throw the actuator against its spring from one position to the other to open one valve and close the other valve.

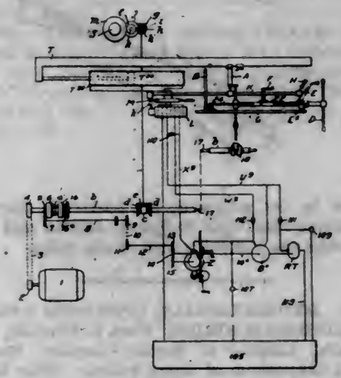
1,893,067. NUT LOCK. JOHN A. ARENE, Mount Vernon, N. Y., assignor to Lock Nut Company, a division of International Screw Company, Wilmington, Del., a Corporation of Delaware. Filed July 2, 1931. Serial No. 548,819. 2 Claims. (Cl. 151—14.)



1. The combination with a nut having a single threaded bore, of a groove in said bore, an incomplete ring of malleable metal circular in cross section positioned in the groove, said groove being parallel with the end faces of the nut.

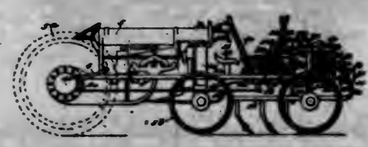
1,893,068. CONTROL FOR HYDRAULIC SYSTEMS. HANS ERNST and LESTER F. NENNINGER, Cincinnati, Ohio, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Original application filed Sept. 15, 1927, Serial No. 220,721. Divided and this application filed Dec. 18, 1928. Serial No. 326,841. 9 Claims. (Cl. 90—21.)

1. A machine tool combining work and cutter supports; a hydraulic actuator for one of said supports; a source of high constant pressure oil; a copious source of low pressure oil; a continuously running escapement device for passing oil at selective volumetrically uniform rates; a main valve; means automatically operated by the propelled support for cyclically shifting said main valve to cause said hydraulic actuator to propel its carrier at rapid



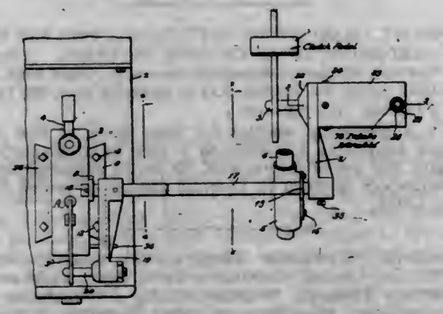
traverse and feeding rates and to reverse the direction of propulsion; and an auxiliary valve for arresting all flow to or from said hydraulic actuator.

1,893,069. TRACTOR-DRIVEN CULTIVATOR. FRANK T. COURT, Moline, Ill., assignor to Court Tractor Equipment Company, Independence, Iowa, a Corporation of Iowa. Filed Sept. 27, 1926, Serial No. 137,985. Renewed Mar. 15, 1929. 18 Claims. (Cl. 97—47.)
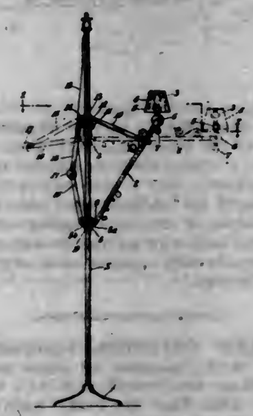


1. Combined with a tractor a gang cultivator disposed forwardly thereof, having guide-wheels and means for guiding them, a channel bar with rollers mounted therein, shafts carried on said rollers and separately and independently connecting with pairs of cultivators, levers adapted to laterally shift said gangs separately and independently and links connecting the levers with said gangs.

1,893,070. ENGINE STARTING DEVICE. JESSE O. CRAWFORD, Houston, Tex. Filed Feb. 16, 1931. Serial No. 516,263. 2 Claims. (Cl. 290—38.)



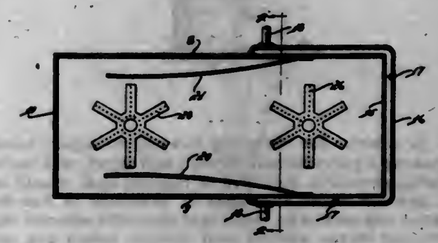
2. An engine starting device comprising a pair of upstanding brackets, a horizontally disposed shaft journalled for oscillation in the brackets, an arm fixed on one end portion of the shaft for movement therewith, a starting motor and switch therefor, a lever associated with said switch, a pin mounted on the free end portion of the arm and projecting laterally therefrom for engagement with said lever for actuating the starting motor control switch of the engine in a manner to close said switch upon actuation of the shaft in one direction, means for limiting the swinging movement of the arm in the other direction, an engine clutch pedal and disconnectable connecting means for operatively coupling the shaft to the engine clutch pedal for actuation thereby when said clutch pedal is moved to clutch disengaging position.

1,893,071. ADJUSTABLE SUPPORTING MECHANISM FOR LAMPS. WILLIAM N. DE SHERBININ, Hastings-upon-Hudson, N. Y. Filed Apr. 9, 1929, Serial No. 353,852. Renewed May 21, 1932. 9 Claims. (Cl. 240—81.)



1. The combination with a standard, of a pivoted arm slidable lengthwise of said standard, a lamp carried by said pivoted arm, and means comprising a non-resilient arm of constant length fixed to said standard and coacting with said pivoted arm for retaining it in a selected position.

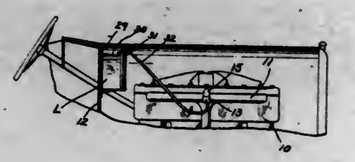
1,893,072. FUEL ECONOMIZER. BISMARCK DICK, Melvindale, Mich. Filed Mar. 17, 1930. Serial No. 436,429. 1 Claim. (Cl. 126—53.)



A device of the class described, comprising: a box-like frame having side walls and end walls and a top, said top being provided with spaced openings at opposite sides of the transverse medial line of said frame, said frame adjacent one end being double walled to provide a water receiving compartment and to provide a water jacket, said water jacket embracing one of said openings and lying wholly on the same side of the transverse medial line of said frame

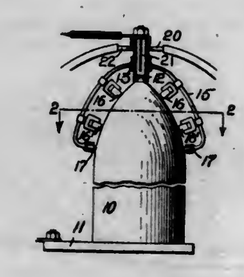
as said opening; deflecting plates mounted at one end on the inner surface of said side walls at the water jacketed portion and extending inwardly toward each other at their opposite ends and lying at opposite sides of the other of said openings for deflecting heat within said frame towards the water jacketed end.

1,893,073. VALVE CYLINDER OILER. WILLIAM H. DILKS, Los Angeles, Calif. Filed Feb. 12, 1930. Serial No. 427,791. 4 Claims. (Cl. 123—196.)



1. A valve and cylinder lubricator for internal combustion engines comprising a vacuum chamber adapted to be connected to the intake manifold of an internal combustion engine, a remote reservoir adapted to supply lubricant to the chamber, and a tube leading into the chamber through which the lubricant must pass, said tube having a wire positioned therein extending substantially its complete length, said wire serving to restrict the passage through the tube to such a degree as to afford a resistance to flow therethrough.

1,893,074. FLAW DETECTOR. HARCOURT C. DRAKE, Hempstead, N. Y., assignor, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y., a Corporation of New York. Filed June 18, 1929. Serial No. 371,891. 2 Claims. (Cl. 175—183.)



1. In a device for indicating flaws in an object, means for passing a heavy current through said object, said means including electrodes connected to opposite ends of said object, detector means responsive to variations in flux distribution and carried by one of said electrodes adjacent said object, and means whereby said detector means and said object may be relatively rotated.

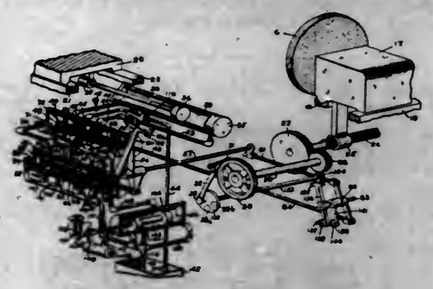
1,893,075. ACCELERATOR PEDAL FOR AUTOMOBILES. JOHN F. FISHER, Santa Cruz, Calif. Filed Oct. 13, 1931. Serial No. 568,609. 5 Claims. (Cl. 74—81.)

1. An automobile accelerator comprising a rockable pedal having a heel and toe section respectively, a friction band secured to said sections, a friction drum around which the band is wound, said sections being movable away from



each other by the weight of the operator's foot during normal driving operations to thereby tension said friction band to resist the turning action of the pedal.

1,893,076. HYDRAULICALLY OPERATED CYLINDRICAL GRINDING MACHINE. CARL G. FLYGARE, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 30, 1929. Serial No. 396,208. 14 Claims. (Cl. 51—95.)



1. A grinding machine comprising a reciprocable work table, means to mount a work piece thereon, a grinding wheel arranged to grind the work, a fluid pressure chamber and a piston therein operatively connected to reciprocate the work table, a reverse valve arranged to direct fluid pressure to either end of said fluid pressure chamber and thereby control the direction of table movement, mechanism arranged to shift the reverse valve to a neutral position and thereby positively stop the table movement when it has reached a predetermined position, a fluid pressure operated device to move the reverse valve from the neutral to a reverse position and change the direction of table movement, and means to delay the latter movement of the reverse valve to cause a predetermined dwell at the end of each table stroke.

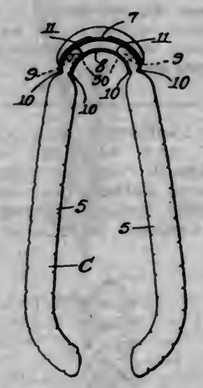
1,893,077. HARDENING MEDIUM AND PROCESS FOR HARDENING TOOLS OF IRON OR STEEL. AUGUST GARWEG, Wuppertal-Ronsdorf, Germany. Filed Sept. 26, 1931, Serial No. 565,399, and in Germany Sept. 26, 1930. 2 Claims. (Cl. 148—18.)

1. A hardening medium for tools made of iron and steel, comprising a mixture of a very small quantity of water, 250 grs of carbon dust, 75 grs of potassium-ferrocyanide and ½ ltr of oil to which 250 grs of ground slate are added.

1,893,078. SINTERED HARD METAL ALLOY. JOHN WALTER GENUIT, Huntington Park, Calif., assignor to Stoody Company, Whittier, Calif., a Corporation of California. Filed May 28, 1930. Serial No. 456,815. 9 Claims. (Cl. 75—1.)

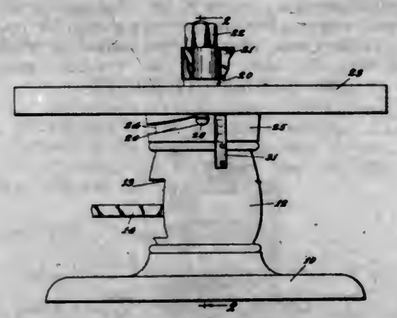
1. A sintered hard metal composition comprising a carbide of tungsten, molybdenum, and tantalum, the tungsten carbide being between 90–97 percent by weight, the molybdenum 00.5–5.0 percent by weight and the tantalum 2.0–9.5 percent by weight, respectively of the whole composition.

1,893,079. VENTILATED HORSE COLLAR CUSHION. FRANK M. HEATH, Silver Spring, Md. Original application filed Apr. 14, 1931, Serial No. 530,096. Patent 1,840,197, granted Jan. 5, 1932. Divided and this application filed Dec. 7, 1931. Serial No. 579,557. 2 Claims. (Cl. 54—65.)



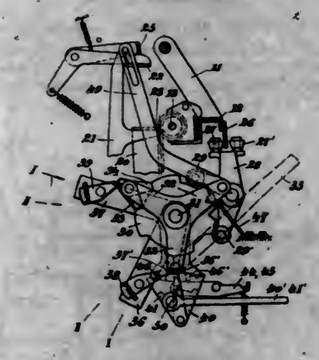
1. A horse collar cushion comprising side members connected at their upper ends by a plate having laterally-extended water-deflecting means, which discharges clear of the longitudinal edges of the side members.

1,893,080. SPINDLE SHAPER. CURTIS A. HERBERTS, Los Angeles, Calif. Filed May 16, 1932. Serial No. 611,589. 2 Claims. (Cl. 144—14.)



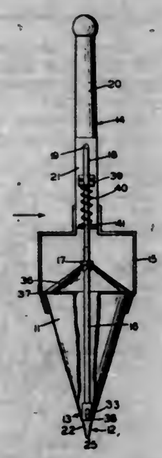
1. A spindle shaper comprising a body having an upper cylindrical portion, a spindle rotatably mounted upon the body, means for rotating the spindle, a cutter mounted upon the spindle, a table surrounding the spindle having a hub portions fitting about the cylindrical portion of the body, there being a helical slot formed in the hub portion, and a screw threaded into the cylindrical portion of the body through the slot having a head adapted to be tightened down against the hub portion whereby when the screw is loose on rotating the table the position of its top surface with respect to the cutter on the spindle may be adjusted and on tightening the screw the table may be fastened in adjusted position.

1,893,081. PRINTING OR TYPING ADDING OR SUBTRACTING MACHINE OR TYPING CALCULATING MACHINE. SAMUEL JACOB HERZSTARK, Vienna, Austria. Filed Feb. 5, 1929, Serial No. 337,685, and in Austria Feb. 7, 1928. 2 Claims. (Cl. 235—60.)



1. In a typing calculating machine with printing mechanism, a transversely moving paper carriage, a number of movable counters and actuating members therefor, said counters as well as the actuating members being fitted to the outside of the machine behind and below the fixed counters and typing mechanism, a control-disk moving the movable counters into and out of engagement, a pawl-lever operating said control-disk, pawls on said pawl-lever and engaging notches of said control-disk.

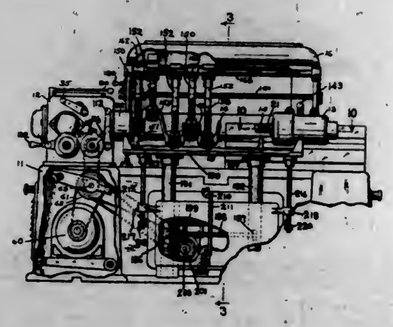
1,893,082. CRACK SEALER FOR CONCRETE PAVEMENTS. EARL T. HOWARD, Fullerton, Calif., assignor of one-half to Agnes Ruth Howard, Fullerton, Calif. Filed July 24, 1929. Serial No. 380,683. 3 Claims. (Cl. 94—39.)



1. A crack sealer, comprising in combination a metal discharge tip having a vertical nozzle therethrough, with a prong on one side to follow a crack, a conical-shaped receptacle having the apex down and with the lower end secured to the tip, a yoke connected to the upper end of the receptacle and having a handle in axial alignment with the receptacle, the tip having an upward extension in the receptacle with a valve constructed therein, hav-

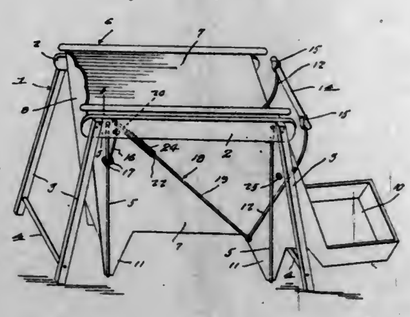
ing a lateral opening to the receptacle, a slidable stem to operate the valve extending upwardly through the receptacle and having an extension along the handle, means interconnecting the handle and the extension to normally retain the stem in a lowered position with the valve closed.

1,893,083. LAPPING MACHINE. HERBERT S. INDGE and SYDNEY PLAYER, Westboro, Mass., assignors to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 20, 1929. Serial No. 394,072. 6 Claims. (Cl. 51—73.)



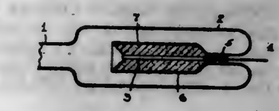
1. A lapping machine for a work piece, the surface of which is not concentric with its axis, comprising a base, a head stock including a rotatable spindle and a foot stock on said base to rotatably support the work thereon, a lapping member on said base arranged to engage and follow the work surface during rotation thereof, a power drive including a manually controlled clutch connected to rotate said headstock spindle, and means including a pawl and ratchet mechanism actuated by said power drive to automatically disconnect the clutch and stop the rotation of said work after a predetermined number of rotations thereof.

1,893,084. SWING. JULIUS JANUSZEWSKI, Middle Village, Long Island, N. Y. Filed Mar. 18, 1932. Serial No. 599,792. 3 Claims. (Cl. 155—65.)



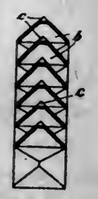
1. A swing comprising a supporting structure, hangers mounted for swinging movement on the supporting structure, a body mounted on the hangers, and means operable by an occupant of the body for causing said body to swing, said means including a resilient bell crank lever pivotally mounted on the supporting structure and operatively engaged with one of the hangers, a lever pivotally mounted for swinging movement on the body, and a pitman connecting the first named lever to the second named lever for actuation thereby.

1,893,085. LUMINOUS TUBE. STANLEY J. JOHNSON, Cleveland, Ohio, assignor to Neon Process, Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 27, 1928. Serial No. 308,663. 7 Claims. (Cl. 176—126.)



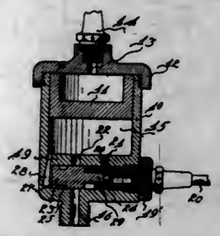
1. An illuminating device of the character described, comprising a glass tube, an electrode supported within said tube in spaced relation to the wall thereof, and a body of dehydrated silicate laterally surrounding and contacting with said electrode.

1,893,086. ARRANGEMENT FOR CONSECUTIVELY ADDRESSING ANY NUMBER OF ENVELOPES WITHOUT CARBON COPY BY MEANS OF A TYPEWRITER. GEORG KELLER, Berlin-Steglitz, Germany. Filed Oct. 10, 1930, Serial No. 487,780, and in Germany Oct. 9, 1929. 4 Claims. (Cl. 229—69.)



1. An arrangement for consecutively addressing any number of envelopes without carbon copies by means of a typewriter, comprising a plurality of envelopes arranged partly superposed to form a band, with the outside of the opened closing flap of one envelope stuck on the inner side of the preceding envelope.

1,893,087. LUBRICATOR VALVE. LEONARD R. KERNS, Battle Creek, Mich., assignor to Lubrication Devices, Inc., Battle Creek, Mich., a Corporation of Michigan. Filed Sept. 25, 1930, Serial No. 484,332. Renewed May 26, 1932. 7 Claims. (Cl. 184—7.)



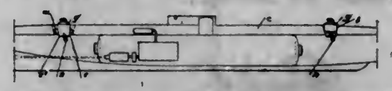
1. A measuring valve comprising a body, a piston reciprocable therein, said body having a loading opening and a discharge opening at one side of the piston, means for communicating pressure to the other side of the piston, a pressure operated slide valve adapted to obstruct said loading opening and open said discharge opening by pressure on said piston through said means and to obstruct said discharge opening and open said loading opening by pressure in said loading opening in the loading direction, intake means adapted to be connected to said loading opening by said valve, said valve having one end exposed to said intake means and the other end exposed to pressure in said body beneath said piston, the former end being of smaller cross sectional area than the latter end.

1,893,088. COMBINED SOCKET HANDLE AND LAMP GUARD. JOHN EARL KILKENNY, Portland, Oreg. Filed Apr. 3, 1931. Serial No. 527,508. 1 Claim. (Cl. 240—54.)



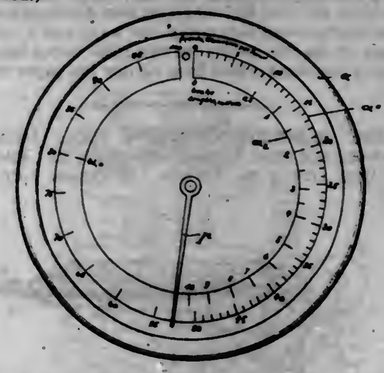
A handle for a lamp socket, a split metal sleeve surrounding the outer end of the handle and having its end fixed to the handle, means for adjustably connecting the second and outer end of the sleeve, said outer end of the sleeve having an outwardly bulged portion describing a one-half circle and having an outwardly tapered portion extending therefrom and merging into a straight portion, the tapered and straight portions providing a reflector, an open guard fixed to the outer edges of the reflector, the bulged portion of the sleeve designed to receive therein and to frictionally engage with the outer and beaded end of a lamp carrying socket and said handle having a bore for the passage of the cords of the lamp socket, and the opposed walls provided by the bore being grooved longitudinally, a split metal stop member comprising two adjustably connected sections to include a central round portion which is arranged around the cords and flanges which are guided through the grooves of the bore and which is designed to be moved into contact with the outer end walls provided by said grooves for preventing the cord being pulled through the handle.

1,893,089. BUOY FOR SAVING THE OCCUPANTS AND THE MATERIAL OF SUBMARINE BOATS. LUCIEN KLOPOTOWSKI, Paris, France. Filed May 8, 1931, Serial No. 535,972, and in France May 10, 1930. 2 Claims. (Cl. 114—16.7.)



1. A vessel having a chamber arranged exteriorly of its hull and communicating with its interior, a buoy detachably arranged in said chamber and having a tube projecting from its bottom, said tube having recesses in its exterior side, a revoluble member having a bearing in the bottom of said chamber and provided with an internally threaded opening, a screw engaged in said threaded opening, means mounted on said screw and including hooks engaging the recesses of said tube, said hooks being disengaged from said tube to release the buoy by axial movement of the screw imparted thereto by the threaded opening of the revoluble member when the latter is turned, and means in the tube active when the tube is detached by the hooks to impart launching thrust to the buoy to disengage the latter from its storage chamber.

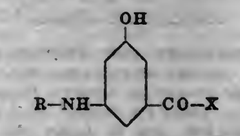
1,893,090. INDICATING DEVICE. ALFRED KREIDLER, Stuttgart, Germany. Filed June 30, 1928, Serial No. 289,377, and in Germany July 7, 1927. 7 Claims. (Cl. 73—151.)



1. An instrument for indicating the distances of stopping comprising a vehicle speedometer, a device for indicating the distances of stopping of the vehicle as functions of the speed of the vehicle, and means operatively connecting said indicating device to said speedometer.

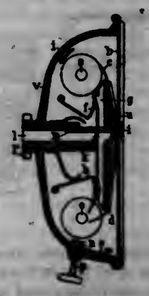
1,893,091. DERIVATIVES OF THE DIPHENYLAMINE SERIES AND PROCESS OF MAKING SAME. LEOPOLD LASKA and ARTHUR WEIDEMANN, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 29, 1930, Serial No. 492,084, and in Germany Nov. 12, 1929. 14 Claims. (Cl. 260—124.)

7. As new compounds the derivatives of the diphenylamine series of the general formula:



wherein X means —OH or —NH—R and the R's stand for benzene nuclei which may be substituted by halogen atoms, having an atomic weight greater than 19, alkyl- or alkoxy groups of low molecular weight, which compounds have a definite melting point, are soluble in caustic alkali and represent valuable intermediates for the production of dyestuffs.

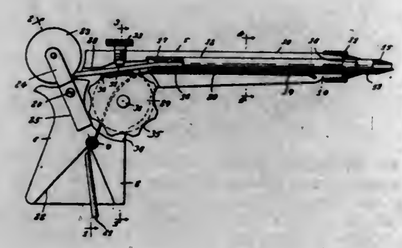
1,893,092. DEVICE FOR CUTTING OUT SECTIONS OF A PHOTOGRAPHIC FILM FOR DEVELOPMENT. ALEXANDER JEZEKIL LIBERMAN, Berlin, Germany. Filed Mar. 7, 1932, Serial No. 597,868, and in Germany Apr. 13, 1931. 8 Claims. (Cl. 95—90.5.)



1. Device for cutting any desired length out of a photographic film by daylight before developing and without

cutting the paper-strip which serves as a layer for the film, comprising a light-proof casing, two spindles, rollers arranged to turn on said spindles and fixed to the ends of a paper-strip carrying the film, ways on which the paper-strip and the film move between these two rollers, a fixed channel-wall separating the ways and a cutter in the way of the film to cut the film; the cutter being prevented by the channel-wall from cutting the paper-strip.

1,893,093. ELECTRIC SOLDERING TOOL. DARRELL B. LINVILLE and BERT C. CANTY, Rockford, Ill. Filed Nov. 15, 1929. Serial No. 407,843. 29 Claims. (Cl. 219—12.)

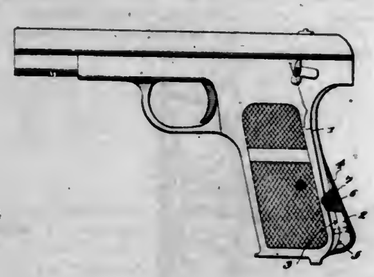


1. An electric soldering tool comprising a carbon stick soldering element having a longitudinal passage therethrough to the tip thereof adapted to be used in soldering, a holder for said stick from which the stick is extensible whereby to permit adjustment of the stick as the same is burned away at the tip, and means for supplying electric current to said stick to heat the same at the tip by contact with the work, solder in wire or equivalent form being adapted to be extended through the longitudinal passage in said stick to the tip of the latter.

1,893,094. LUBRICANT AND METHOD OF PREPARING SAME. SHINTA MATSUNAWA, Iogi, Machi, TOYOTAMA GUN, and FUSATOSHI NOZAWA, Higashi Chofu Machi, Ebara Gun, Tokyo Fu, Japan. Filed Sept. 21, 1931, Serial No. 564,248, and in Japan Oct. 4, 1930. 4 Claims. (Cl. 87—9.)

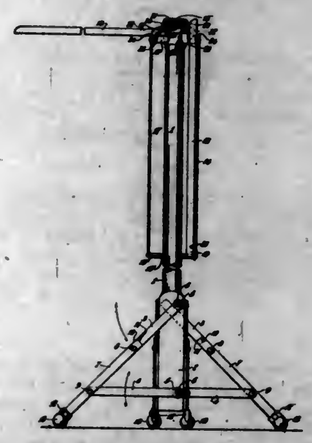
1. A lubricant consisting of lubricating mineral oil and 0.2% to 8% of petrolene.

1,893,095. ATTACHMENT FOR AUTOMATIC PISTOL HANDLES. EDGAR V. MCCARTY, Los Angeles, Calif. Filed June 20, 1931. Serial No. 545,743. 1 Claim. (Cl. 42—71.)



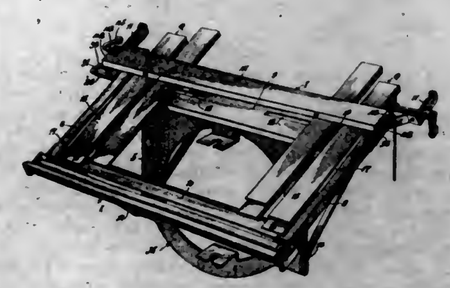
As a new article of manufacture, an elongated tapering wedge adapted to be secured to the rear face of the handle of an automatic pistol, said elongated tapering wedge provided with a curved inwardly dished lower end adapted to fit around and snugly engage the lower rear corner of a piston handle facilitating the holding of the wedge in position upon the handle of a pistol and leaving the lower end of the handle free for the insertion of cartridges.

1,893,096. CLOTHES DRIER REEL. JOHN C. MICHAUD, West Springfield, Mass. Filed Sept. 11, 1930. Serial No. 481,194. 2 Claims. (Cl. 211—172.)



1. In combination, in a clothes drying reel, a supporting post member, a plate revolubly supported on the post, a cap member formed with radially arranged rectangular openings and rotatably secured to the upper end of the post, a casing secured to the cap and plate, arm members rectangular in cross section located in the openings of the cap, said openings serving to permit the arm members to be moved into a vertical position for storage in the casing with inner ends resting on the plate, or to be withdrawn from the casing and supported in horizontal positions, said post being formed with a recessed portion to provide clearance for the ends of the arm members, the cap member having shoulders above and below said openings, against which the upper inner end surface and the lower inner end surface of the arms engage to support the same in a horizontal position, as described.
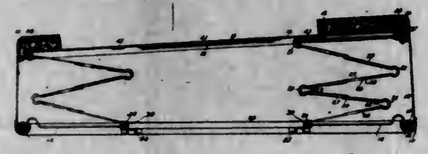
1,893,097. TYPEWRITING MACHINE. WILLIAM O. MICHELSEN, Woodhaven, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 17, 1931. Serial No. 557,682. 8 Claims. (Cl. 197—143.)



1. In a typewriting machine, the combination of a work support having a slot, and means for guiding a work sheet along the support comprising an edge guide, a normally

ineffective clamp attached to the guide and including a pair of clamping plates respectively disposed above and below the support and including guiding means extending into the slot, and a manually operable cam shaft disposed between and cooperating with the support and with one of said plates for rendering said clamp effective.

1,893,098. SPRING SEAT. WILLIAM A. MURRAY, Sr., and WILLIAM A. MURRAY, Jr., Cincinnati, Ohio, assignors to The William A. Murray Spring Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 22, 1930. Serial No. 438,045. 9 Claims. (Cl. 155—179.)



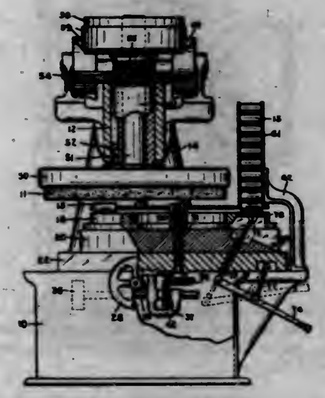
1. As a new article of manufacture a spring seat having in combination a supporting frame, a substantially non-resilient skeleton frame of malleable low carbon content metal secured to the supporting frame, said skeleton frame comprising a cushion supporting portion and leaf portions, the leaf portions consisting of folds disposed in zig-zag relation, resilient members between the folds for urging the folds apart, and cooperative means on the resilient members and the skeleton frame for precluding lateral and longitudinal movement of the resilient members relative to the skeleton frame.

1,893,099. TAPERED CENTER FOR RIDING CROPS. HANS P. NELSON, Grantwood, N. J. Filed May 16, 1931. Serial No. 537,944. 5 Claims. (Cl. 231—2.)



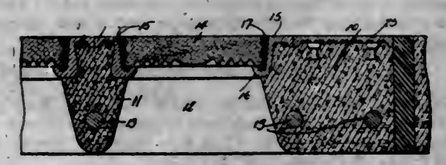
1. A tapered center for a riding crop composed of solid celluloid.

1,893,100. LAPPING OR GRINDING MACHINE. CHARLES H. NORTON, Plainville, Conn., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 14, 1928. Serial No. 261,472. 14 Claims. (Cl. 51—118.)



1. A lapping machine comprising opposed laps and a work carrying cage therebetween which are relatively movable to lap a plurality of work pieces simultaneously, a slide supporting the lower lap and cage, and means for moving the slide to remove a portion of the cage from beneath the upper lap and permit ready loading of the same.

1,893,101. SHIELD FOR SKYLIGHT, FLOOR LIGHT AND VAULT LIGHT STRUCTURES. JAMES H. OLD, Forrest Park, Ill., assignor of one-half to Julius J. Ohlis, Chicago, Ill. Filed July 22, 1930. Serial No. 469,862. 10 Claims. (Cl. 94—34.)

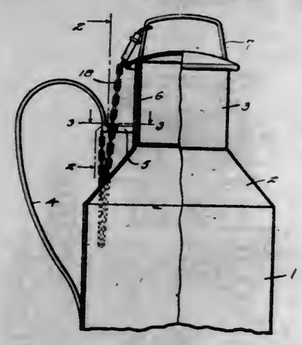


1. In a structure of the character described, a concrete frame defining adjacent rectangular openings, lens supporting frames one for each of said openings, each frame constituting a shield and embedded in the corresponding opening, the lens supporting frame being formed by a substantially vertical web having adjacent its lower end an inwardly extending lens supporting flange and at its upper end having an outwardly extending flange, the outwardly extending flanges of adjacent frames extending over, abutting against each other and completely covering the upper face of the concrete frame to thereby form a protective wearing and tread surface therefor.

1,893,102. DEVICE FOR SECURING MILK CAN COVERS. HARTLEY G. PACKER, Reno, Nev. Filed Nov. 24, 1931. Serial No. 577,091. 3 Claims. (Cl. 220—55.)

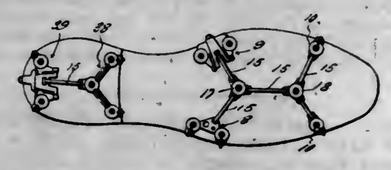
1. A device for securing a cover to a receptacle, comprising a chain, a spring, supporting means for said spring means for swivelly coupling said supporting means with

the receptacle cover, means carried by said supporting means for connecting one end of said chain with said spring whereby the spring will be compressed upon exerting a pull on the chain means for permanently connect-



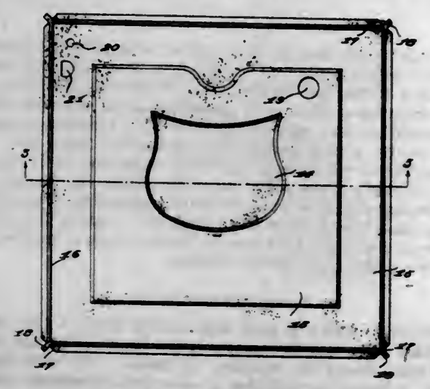
ing the other end of the chain with the can, and means carried by the body of the receptacle for facilitating the detachable connection of the chain therewith intermediate its ends with the can.

1,893,103. ANTISKID APPLIANCE FOR SHOES. ETEOCLE PASQUALI, Freeport, N. Y. Filed Dec. 9, 1931. Serial No. 579,960. 3 Claims. (Cl. 36—64.)



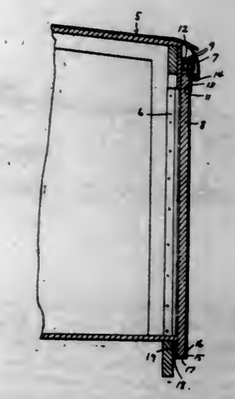
1. An anti-skid device for shoes comprising a pair of calk assemblies, each calk assembly being provided with a sole edge engaging hook, one of said assemblies being provided with a swingable spring lever having a shoulder thereon, a rib on the complementary assembly behind which the shoulder can tensionally engage, and a link member between the lever and the remaining calk assembly.

1,893,104. VEHICLE BODY TRIM PANEL. BION C. PLACE, Detroit, Mich., assignor of one-half to George E. Gagnier, Detroit, Mich. Filed July 17, 1929. Serial No. 378,965. 2 Claims. (Cl. 296—44.)



1. A trim panel comprising a body, and a fabric covering applied to one side of said body, said body and fabric having a depression pressed therein in position to receive a pocket with its outer surface approximately flush with the portions of the panel surrounding said depression, the sides of said depressions being in the outline of said pocket.

1,893,105. BOX CAR DOOR. OLE E. RAAEN, Fargo, N. Dak. Filed Apr. 21, 1931. Serial No. 531,811. 2 Claims. (Cl. 20—26.)

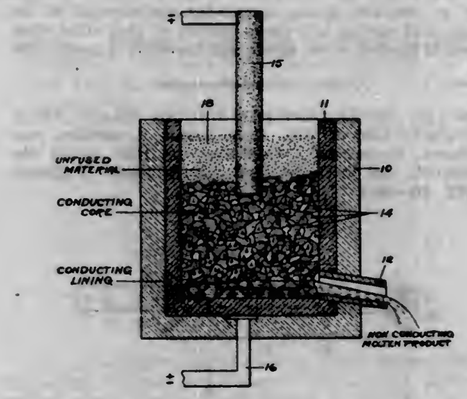


1. A box car door of the slidable type described comprising a conventional door body adapted to be moved into closed and opening position with respect to a door opening of a box car, comprising plates attached to and extending the length of the top, bottom, and side edge portions of the door and projecting therefrom and arranged to cooperate with channeled flanges attached about the door opening so as to seal the opening against the ingress of moisture and foreign particles when the door is in closed position, and rollers on each side of a vertically rising flange on the upper end of the door for riding upon the bottom within a tubular track carried over the door opening for supporting the door, the bottom having a slot for accommodating said vertical flange and a guide means on the lower end of the door for engaging a guide plate secured to the car below said door opening, and a hood over said track, a lower edge channel formation, a plate attached to the upper part of the door, a hooked formation on the upper edge thereof for engaging in said channel formation, said hood being extended to cover the door when in opened position.

1,893,106. METHOD OF AND APPARATUS FOR ELECTRICALLY FUSING NONCONDUCTING MATERIALS. RAYMOND RONALD RIDGWAY, Niagara Falls, N. Y., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 14, 1930. Serial No. 452,511. 5 Claims. (Cl. 13—34.)

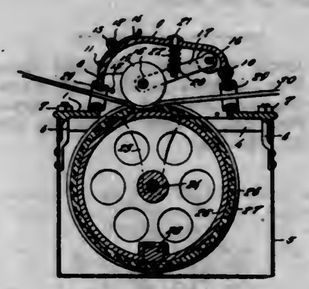
1. The method of electrically fusing a material which is a poor conductor of electricity in the liquid state comprising the steps of providing a stationary granular carbon resistance core located around an electrode in a crucible lined wholly with a carbon conductor, passing an electric current between the crucible and electrode while maintaining a power input which will attain the desired tempera-

ture conditions, charging the material to be melted onto the top of the core whereby it is melted and caused to drain downwardly through the core and continuously withdraw-



ing the molten material from the heated zone, the material being treated being caused to contact only with carbon within the furnace.

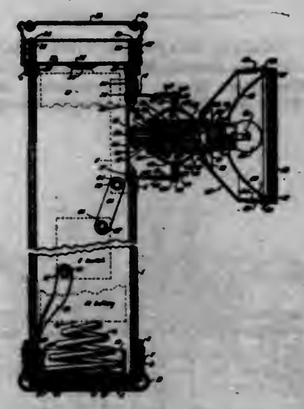
1,893,107. TWINE IMPREGNATING DEVICE. IRWIN A. SEVERSON, Soldier, Iowa. Filed June 11, 1931. Serial No. 543,695. 1 Claim. (Cl. 91—51.)



In a structure of the character described, a container having a closure, a wheel rotatably mounted within the container and having a pair of axially spaced radial flanges defining an intervening groove, a layer of absorbent material in said groove, a roller between said flanges and engaging said layer of absorbent material, an arm pivotally carried by said closure and supporting said roller, and resilient means associated with said arm and closure for urging said roller into contact with said layer of absorbent material.

1,893,108. BATTERY HAND LAMP, OR FLASH LIGHT. JAMES L. SHANNON, Longmeadow, Mass., assignor, by mesne assignments, to French Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed June 7, 1930. Serial No. 459,687. 7 Claims. (Cl. 240—10.67.)

1. In a battery hand lamp, a battery enclosing casing, a universal joint mounting for the lamp comprising a spherical shell, a threaded member secured to said casing and formed with a curved surface engaging the shell, a second threaded member formed with a curved surface engaging the shell and threaded onto the first threaded

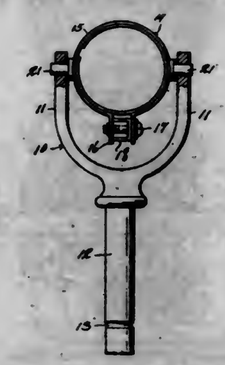


member, a split ring engaging the shell and forced into contact with the shell, when the two threaded members are moved, relative to each other.

1,893,109. METHOD OF PRODUCING FERROCHROME. KENNETH M. SIMPSON, New York, N. Y. Filed Oct. 9, 1929. Serial No. 398,579. 2 Claims. (Cl. 75—14.)

1. A method of producing ferro-chrome which consists in mixing finely divided chromite ore and carbon, heating the mixture without fusion until reduction has been substantially completed, heating the mass at a temperature sufficiently high to burn off the non-absorbed carbonaceous material, but sufficiently low so as not to affect the metallic particles, eliminating extraneous earthy material, melting the metallic residue, and maintaining the same in a molten condition, until substantially all the residual oxygen and carbon escape in the form of gas.

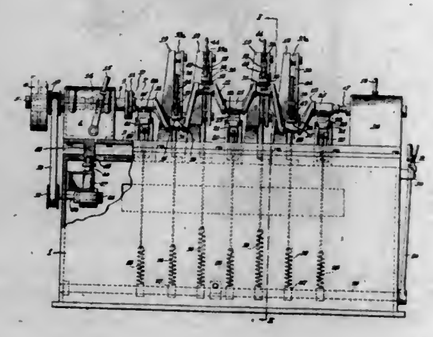
1,893,110. OAR LOCK. PETER J. STARTZ, Manitowish, Wis. Filed June 18, 1932. Serial No. 618,043. 1 Claim. (Cl. 9—26.)



A device as set forth comprising the combination of an oar lock, a split cylindrical oar engaging member, means for swingably mounting the member on the oar lock, a pair of clamping arms formed with the member and disposed in spaced relation to each other, a U-shaped

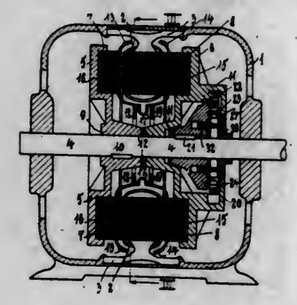
spacing member disposed between the arms, a split cylindrical bushing within the member and securing means engaging the arms and the spacing member to adjust the arms and coactively adjust the bushing relative to the oar.

1,893,111. CRANK SHAFT LAPPING MACHINE. ARTHUR J. STRONG, Detroit, Mich., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 24, 1926. Serial No. 111,271. 13 Claims. (Cl. 51—73.)



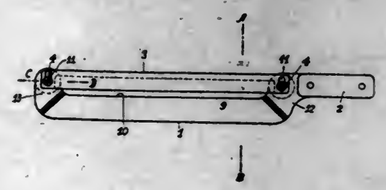
1. A machine of the character described for dressing a crank pin of a crank shaft, including means for rotating said shaft upon the axis of its bearing portion, means engaging the surface of the crank pin for removing metal therefrom, said means being supported partly on the crank pin and partly on a support upon which it is guided and partly supported for movement with the crank pin in its path of movement about said axis of rotation, means for moving said crank shaft and said engaging means, one relatively to the other in a direction longitudinally of the shaft, and means for resiliently holding said engaging means in contact with said pin and said guiding and supporting means during rotation of the shaft.

1,893,112. AN INDUCTION MOTOR WITH SHORT-CIRCUITED SECONDARY. JOHAN WALFRED SWENDSEN, Oslo, Norway. Filed Mar. 10, 1930, Serial No. 434,699, and in Germany Mar. 12, 1929. 5 Claims. (Cl. 172—280.)



1. An induction motor with short-circuited secondary, comprising a shaft, two electrically interconnected rotor elements rotatably mounted in relation to each other upon the shaft and with a restricted angle of movement, abutments on the shaft and on one or both of said elements to limit the movement of one element in relation to the other, means including a spiral spring to hold the rotor elements in maximum angular displacement in relation to each other when the motor is idle, the rotor elements due to magnetic action overcoming the strength of the spring and moving into phase relation to each other when power is applied to the motor and the shaft is under load.

1,893,113. IMPLEMENT FOR SLICING MEATS, VEGETABLES AND SO ON. HANS SYFRIG, Ruschlikon, near Zurich, Switzerland. Filed Dec. 22, 1930, Serial No. 504,093, and in Switzerland Jan. 3, 1930. 2 Claims. (Cl. 30—20.)



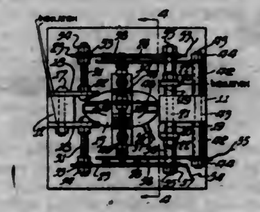
1. A cutting implement, comprising an elongated frame having its end portions offset and extended upwardly from said offset portions, a cutting blade extending between the upwardly extended portions, the bottom of the blade being spaced from the top edge of the frame, said blade having slots near its ends, plates fastened to the rear of the upwardly extended portion, internally threaded bushings slidably mounted in the plates, threaded plugs engaging the threaded bushings and extending through the slots in the cutting blade, and headed screws passing through the slots and engaging threading openings in the thread plugs to hold the blade in adjusted position with reference to the frame.

1,893,114. LOCK WASHER. WILLIAM HENRY TICE, Portland, Oreg., assignor to Tice Lock Washer Manufacturing Company, Portland, Oreg., a Corporation of Oregon. Filed Oct. 1, 1929. Serial No. 396,433. 3 Claims. (Cl. 151—52.)



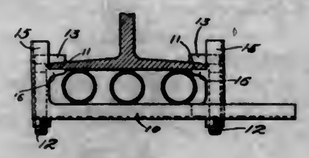
1. A lock washer for nuts and bolts comprising an annulus which is unbroken in the general circular direction in which it extends, said annulus having a plurality of spring jaws integral with it, the inner longitudinal edges of which jaws lie at distances from the center of the washer approximately that, but slightly in excess, of the minor diameter of the nut or bolt head with which the washer is to be used, said jaws being arranged in pairs with their free ends in proximity, one jaw being extended beyond one face of the washer while the other jaw is extended beyond the outer face of the washer, thereby providing a reversible washer, one jaw of which will underlie the angle of a nut or bolt head and be pressed thereby into engagement with the adjacent part being secured while the other jaw will engage with a flat face of the contiguous side wall of the nut or bolt head, each spring jaw being so located with respect to the center of the washer that it will have its inner longitudinal edge arranged to lie beyond the minimum diameter limit of the nut or bolt and within the maximum diameter limit of the same, said jaws being tapered from their bases longitudinally to their free ends and transversely from their inner longitudinal edges toward their outer peripheral edges.

1,893,115. INTERRUPTER FOR CURRENT SUPPLY SYSTEMS. BENJAMIN VILKOMERSON, Brooklyn, N. Y. Filed Feb. 2, 1932. Serial No. 590,457. 7 Claims. (Cl. 200—90.)



1. An interrupter for converting direct current into alternating current, comprising a support, an electromagnet mounted thereon and having pole pieces, a pair of stationary contacts located at opposite sides of the electro-magnet, a pair of vibratory contacts mounted adjacent the stationary contacts for cooperation therewith, an armature positioned to be acted upon by the electromagnet, and yieldable means connecting the armature with said vibratory contacts.

1,893,116. PIPE OR CONDUIT CLAMP FOR USE IN STRUCTURAL IRON. FRANK J. VOWINKEL, Drexel Hill, Pa. Filed Sept. 15, 1930. Serial No. 482,080. 11 Claims. (Cl. 248—32.)

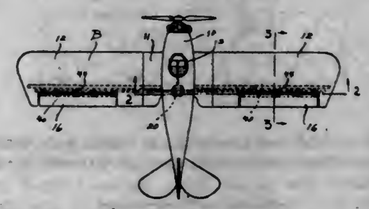


5. In combination with a clamp adapted to oppose a structural beam and having at its ends seats to engage said beam, a bolt associated with at least one of said seats and having a head overlying the same adapted to coact with said seat to clamp a flange of the beam and a guide associated with the seat preventing rotation of said bolt and abutting the outer face of the bolt head, said seats being spaced from the body of the clamp whereby the clamp when engaged with the beam combines therewith to produce a pipe-receiving space.

1,893,117. METHOD OF MAKING ARTICLES OF RESIN BONDED GRANULAR MATERIAL. DUANE E. WEBSTER and BALLIS SANFORD, Worcester, Mass., assignors to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 28, 1930. Serial No. 432,261. 4 Claims. (Cl. 51—278.)

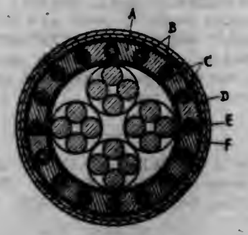
1. The method of making a resinoid bonded abrasive article comprising the steps of making a mixture of abrasive grains and a resinoid powder with a neutral, non-aqueous liquid which is miscible with the plasticiser and will wet the grains and cause the resinoid to adhere thereto, but without chemically reacting with the resinoid thereby forming a stable mixture of abrasive and resinoid, and thereafter adding to the mixture a plasticiser for the resinoid and molding and heating the mixture to convert the resinoid and form an integral structure.

1,893,118. CONTROL SYSTEM FOR AILERONS. LESTER N. YOHE, New Oxford, and MARTIN JENSEN, Harrisburg, Pa. Filed Aug. 8, 1931. Serial No. 555,982. 7 Claims. (Cl. 244—29.)



3. In an aileron control for aeroplanes, the combination with a stub wing having a rear spar, main wings having rear spars inclined upwardly from the stub wing spar, and an aileron mounted upon each main wing rear spar, of a gear casing mounted upon the stub wing spar and having axially aligning end sleeves and a front sleeve in right angular relation to the end sleeves, a pair of end bevel pinions in the gear casing including tubular hub extensions journaled in the end sleeves, an inner torque tube section fixed in each end pinion in parallel relation to the stub wing spar, an outer torque tube section journaled longitudinally upon each main wing spar and operatively connected for tilting the ailerons, a universal joint connecting each inner torque tube section with its outer section, a control bevel pinion in the gear casing in mesh with the end bevel pinions and including a tubular hub extension journaled in said front sleeve, a control rod fixed in the control pinion, and means for imparting rotation to the control rod.

1,893,119. CABLE FOR COMPARATIVELY DEEP SEAS. GEORG ZAPF, Riehlerwall, Cologne, Germany, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Filed Sept. 12, 1928, Serial No. 305,541, and in Germany Sept. 16, 1927. 2 Claims. (Cl. 173—266.)

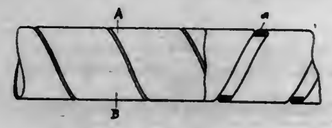


1. A cable for comparatively deep seas having a pressure protecting covering constituted by aluminium profile wires or profile strips having their sides partly in intimate contact and partly formed with recesses lying opposite each other, steel wires of a specially high tensile strength inserted in the said recesses formed in the sides of the profile wires or profile strips of the pressure protecting covering and a lead covering surrounding each of the steel wires.

1,893,120. ELECTRIC HOLLOW CONDUCTOR. GEORG ZAPF, Riehlerwall, Cologne, Germany, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Filed Jan. 30, 1929, Serial No. 336,233, and in Germany Feb. 29, 1928. 1 Claim. (Cl. 173—13.)

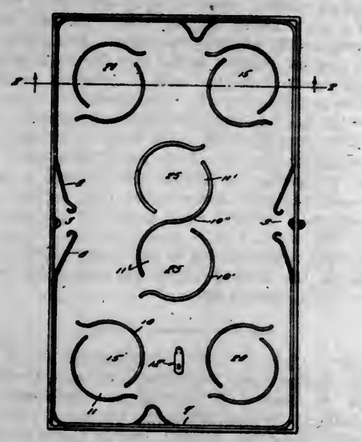
A conductor for overhead high tension electric power lines comprising a single, flat, wide strip of good con-

ducting material wound helically with its contiguous helically disposed edges folded in and interlocked to form a hollow conducting cylinder having a substantially smooth



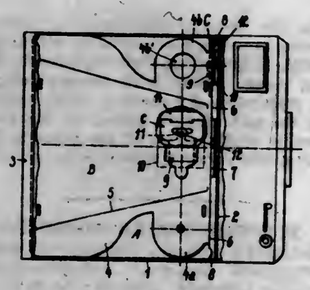
external surface and providing, in itself, both the necessary electrical conductivity and the requisite tensile strength.

1,893,121. AMUSEMENT DEVICE. DON L. ALGER, Avalon, Calif. Filed July 2, 1931. Serial No. 548,435. 3 Claims. (Cl. 273—86.)



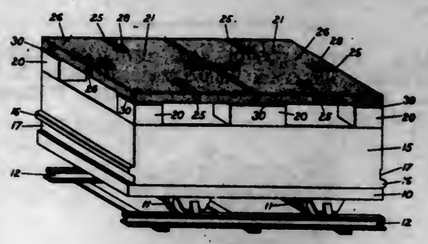
1. In a game apparatus, in combination, a plurality of curved abutments arranged to provide a plurality of substantially circular confining pens, with the corresponding ends of oppositely disposed abutments relatively spaced to provide substantially alined entrance and exit openings for each pen, and a self-propelled object adapted to travel within and outside the pens.

1,893,122. ROLL FILM BOX CAMERA. MAX BALDEWEG, Dresden, Germany. Filed Nov. 5, 1931, Serial No. 573,260, and in Germany Apr. 2, 1931. 5 Claims. (Cl. 95—32.)



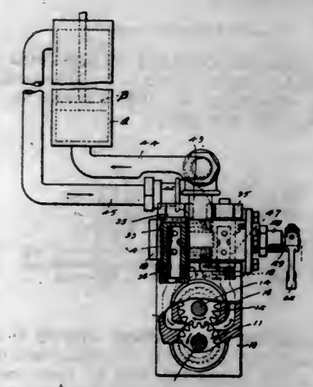
1. In a camera, a removable roll holder, a roll key pocket formed on said roll holder, and a roll key removably fitted in said pocket.

1,893,123. TUNNEL KILN CAR. HUGO W. H. BETH, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 13, 1931. Serial No. 515,606. 5 Claims. (Cl. 25—142.)



1. A ware supporting plate for tunnel kiln cars comprising a slab of refractory material having an opening therethrough which extends inwardly from the edges to compensate for expansion and contraction of the material due to thermal changes thereof.

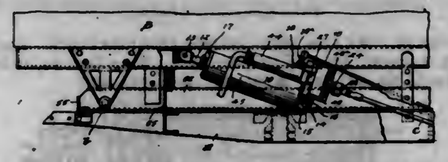
1,893,124. INVERTIBLE MANIFOLD AND VALVE FOR HYDRAULIC HOISTS. FRED BISZANTZ, Galion, Ohio, assignor to The Central Ohio Steel Products Company, Galion, Ohio, a Corporation of Ohio. Filed Feb. 25, 1930. Serial No. 431,318. 9 Claims. (Cl. 138—9.)



1. A manifold for communicatively connecting a rotary pump with a hoisting cylinder, the manifold having a pair of inlet ports, and a pair of outlet ports and having cylinder ports for communicatively connecting the interior of the manifold with opposite ends of the cylinder, and chambers communicatively connecting one cylinder port with one pair of inlet ports and the other cylinder port with the pair of outlet ports, and means for closing either one of the inlet and outlet ports and communicatively connecting the other inlet and outlet ports to the pump, and means whereby fluid may be by-passed through the manifold from one of the cylinder ports to the other cylinder port after passing through the pump ports.

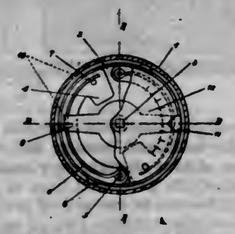
1,893,125. REVERSIBLE PUMP FOR HYDRAULIC HOISTS. FRED BISZANTZ, Galion, Ohio, assignor to The Central Ohio Steel Products Co., Galion, Ohio, a Corporation of Ohio. Filed Jan. 22, 1931. Serial No. 510,531. 4 Claims. (Cl. 138—9.)

1. In combination, a rotary pump body having intermeshing pump gears, a driving shaft engaging one of said gears, the pump body having two ports radially equi-distant from the driving gear of the pump and disposed diametrically opposite each other and extending parallel to the axis of the driving gear, and an element having two ports,



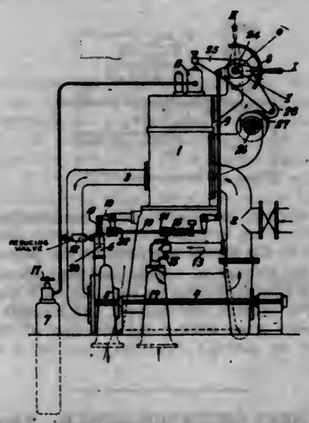
the pump body being rotatively adjustable around the axial center of the pump driving gear to bring either of its ports into register with either of the ports of said element.

1,893,126. REGULATOR DEVICE. JACQUES BOSCOPOLSKY, Geneve-Acacias, Switzerland. Filed Jan. 21, 1931, Serial No. 510,238, and in Switzerland Jan. 21, 1930. 2 Claims. (Cl. 188—184.)



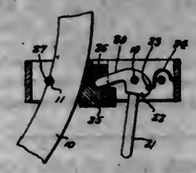
1. A centrifugally operated regulator device, comprising in combination with a brake drum an axle shaft therefor, a disc fixed to said shaft, a centrifugally acting member pivoted to said disc and forming a brake element for application to the drum, a spring tending to hold the brake element against centrifugal movement and a traverse engaging the outer side of the spring and movable longitudinally of the spring to vary the effective length thereof.

1,893,127. INTERNAL COMBUSTION ENGINE. ALFRED BUCHI, Winterthur, Switzerland. Filed Nov. 17, 1927, Serial No. 234,015, and in Switzerland Nov. 30, 1926. 6 Claims. (Cl. 60—13.)



1. In combination with an internal combustion engine, a turbo-blower for supplying combustion air to said engine, piping between said blower and said engine, piping between delivery and suction side of said blower and a valve member therein, and means independent of said engine for driving said turbo-blower prior to the starting of said engine for the purpose of heating the air.

1,893,128. CASEMENT WINDOW HOLDER. JOHN F. CALVERT, Huntington, Ind. Filed May 9, 1932. Serial No. 610,178. 2 Claims. (Cl. 292—265.)



1. Retaining means for closures comprising a bar, said bar being provided with notches in one side thereof, a stationary member against which the bar can engage at its notched side, a slidable wedge member for exerting pressure against the bar when moved in a given direction, means for actuating the wedge member, said wedge member being provided with a recess, a swingable dog engaged in the recess, and a handle for manipulating the dog to actuate the wedge member.

1,893,129. AIRPLANE CONSTITUTED BY A THREE-ELEMENT WING. JEAN FRÉDÉRIC GEORGES MARIE LÉON CHARPENTIER, St. Cloud, France. Filed May 26, 1931, Serial No. 540,178, and in France June 4, 1930. 5 Claims. (Cl. 244—12.)



1. A tail-less flying machine comprising only a central element having a wing section ensuring stability and two lateral symmetrical carrier elements having a smaller chord than the central element and an area substantially equal to half the area of said central element, the leading edges of the said elements being substantially in alinement and the different elements being separated by planes of discontinuity.

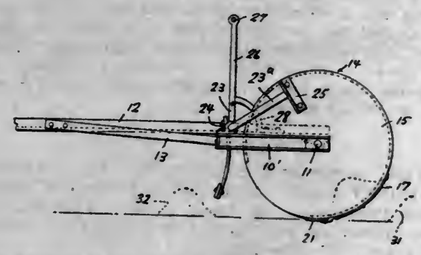
1,893,130. FOUNTAIN PEN. MIRKO CHELAZZI and DINO FRULLI, Genoa, Italy. Filed Dec. 9, 1931, Serial No. 579,966, and in Italy Dec. 9, 1930. 8 Claims. (Cl. 120—42.)



1. A twin fountain pen comprising a pair of pen carriers arranged in opposite relation, with the back of the pens outwardly, and in which the pen is constituted of a shell

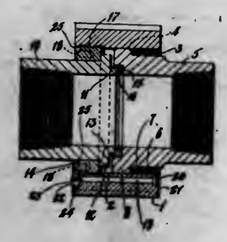
comprising a rear tubular part, a mouthpiece and a bridge piece connecting the rear part with the mouthpiece and having bores therein for the slidable insertion of the pen carriers, guide slots cut through the bores, lugs on the pen carriers engaging in the said slots and projecting above the surface of the bridge piece, a driving sleeve rotatable on this bridge piece, right-and-left handed helical grooves in the inner surface of the rotatable sleeve, each engaged by the lugs of either of the pen carriers.

1,893,131. BORDER AND PANEL CONNECTING MACHINE. OWEN COUNCIL, JOHN W. BEATY and ROY O. BAKER, Mission, Tex. Filed Mar. 3, 1932. Serial No. 596,648. 1 Claim. (Cl. 97—55.)



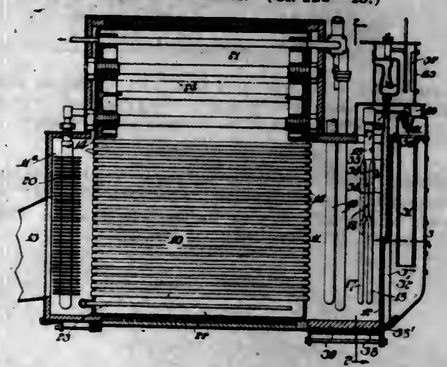
A machine of the class described comprising in combination a rotatably mounted scraper, a stop plate on said scraper, a rockably mounted trip mechanism having an arm arranged in the path of said stop plate to retard rotation of the scraper in one direction, a relatively fixed stop member cooperable with said trip and engaged by said trip when the trip arm is engaged with said stop plate, and a member connected to said trip and adapted to be engaged with and actuated by an obstruction in the path of said scraper for rotating said trip to release said scraper.

1,893,132. QUICK ACTING COUPLING. ROY C. CROSLEN, Whittier, Calif., assignor of one-half to Clarence J. Perkins, Los Angeles, Calif. Filed Nov. 12, 1929. Serial No. 406,628. 4 Claims. (Cl. 285—175.)



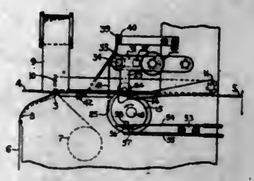
1. In a quick-acting coupling, the combination of an outer coupling member of substantially tubular form, a nipple extending into the coupling member from one side having an annular shoulder at its inner end with a tapered seat, a follower ring threaded into the outer coupling member and engaging the annular shoulder to hold the nipple in position, said outer coupling member having a plurality of lugs projecting radially inwardly toward the axis of the coupling and disposed substantially equidistant around the circumference of the coupling member, an inner coupling member constructed to be interlocked with the said outer coupling member and having a tapered metallic seat to engage the first named seat, said inner coupling having a plurality of circumferential shoulders thereon formed with gaps between the shoulders to receive the lugs when the inner coupling member is thrust into the outer coupling member and so as to permit the rotation of the inner coupling member thereafter to bring the first named lugs into position behind the said circumferential shoulders, said lugs and shoulders having interlocking means for preventing relative rotary movement of one of the coupling members with respect to the other.

1,893,133. MEANS FOR STEAM GENERATION. PAUL R. DELLING, Haddon Heights, N. J. Filed Dec. 12, 1930. Serial No. 501,792. 8 Claims. (Cl. 122—45.)



1. In a device of the character described, the combination of a straight horizontal tubular boiler arranged to facilitate the flow of heat therethrough uniformly distributed and in substantially horizontal lines of travel, a combustion chamber arranged at one end of said boiler, and a burner arranged on the opposite side of said combustion chamber from said boiler, said burner comprising a mixing chamber for air and vaporized fuel and a substantially vertical grate forming the dividing wall between the mixing chamber and the combustion chamber, said grate having a multitude of burner-vents corresponding approximately in area of distribution, with the group area of the boiler tube ends.

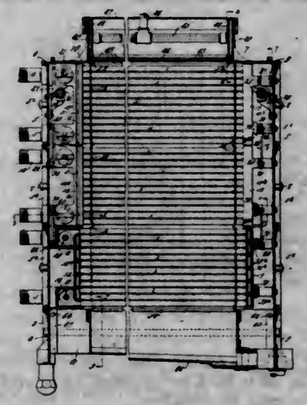
1,893,134. PYROMETER ADAPTED TO THE CONTROL OF TEMPERATURE. JAMES BRIDGES, London, England, assignor to Republic Flow Meters Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 8, 1930, Serial No. 425,612, and in Great Britain Apr. 12, 1929. 9 Claims. (Cl. 236—70.)



9. In a control instrument, the combination with a meter pointer, of an intermittently operating control member adapted to dip across the path of the pointer and to coact with the pointer in certain positions thereof, a support for said pointer during its coaction with the member, and means for causing said support and member to directly oppose each other during the coaction of the pointer and member to prevent the formation of a couple on the pointer.

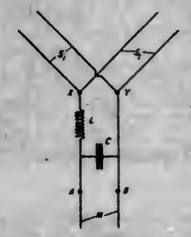
1,893,135. HEAT EXCHANGE DEVICE. HARVEY FELDMEIER and ROLAN JAY WIGHTMAN, Little Falls, and RAYMOND B. STEVES, Ilion, N. Y., assignors to Cherry-Burrell Corporation, Wilmington, Del., a Corporation of Delaware. Filed Aug. 11, 1930. Serial No. 474,472. 18 Claims. (Cl. 257—184.)

6. A heat exchanger for liquids, comprising a plurality of heat exchange units arranged side by side and relatively separable laterally from one another, a cabinet which houses said units when disposed close together, said cabinet having a closure movable to permit relative separation of said units, tracks in said cabinet for supporting said



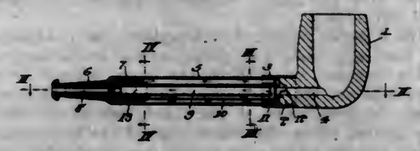
units, track extensions, and means for securing said track extensions in line with said tracks and extending through guide holes in said closure, said closure and said movable units being movable on said track extensions.

1,893,136. CIRCUIT ARRANGEMENT. CHARLES SAMUEL FRANKLIN, Buckhurst Hill, and ERNEST GREEN, Hendon, London, England, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 28, 1927, Serial No. 222,602, and in Great Britain Oct. 2, 1926. 3 Claims. (Cl. 178—44.)



1. An arrangement for matching the impedance of branched high frequency transmission lines comprising a first transmission line, other transmission lines connected in parallel, and means for coupling the first transmission line to the parallel connected transmission lines comprising a reactance of one sign connected in series with the first line, and a reactance of opposite sign connected in shunt across the first line.

1,893,137. SMOKING PIPE. NATHAN FRIEDMAN, Yonkers, N. Y. Filed Apr. 1, 1930. Serial No. 440,850. 4 Claims. (Cl. 131—12.)

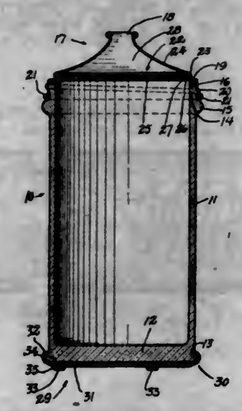


3. A smoking pipe comprising a bowl having a short shank, a mouthpiece and a stem removably engaging the bowl shank and mouthpiece, an inner absorbent tube removably engaging the mouthpiece, an outer absorbent tube loosely and wholly supported by the inner tube, and a front end closure for the outer tube carried entirely thereby, the rear end of the bowl shank and the front end of the mouthpiece having cut-away portions ensuring unobstructed passages beyond the front and rear ends of the outer tube.

1,893,138. PROCESS OF TREATING PETROLEUM. WRIGHT W. GARY, Beverly Hills, Calif., assignor of one-half to Charles O. Middleton, Beverly Hills, Calif. Filed July 16, 1928. Serial No. 293,084. 8 Claims. (Cl. 196—31.)

1. The process of treating petroleum comprising, diluting sulphuric anhydride with liquid carbon dioxide, contacting the petroleum with the diluted anhydride so as to produce filterable reaction products, and separating the same by filtration.

1,893,139. SUGAR DISPENSER. HARRY C. GESSLER, Brooklyn, N. Y. Filed Feb. 11, 1932. Serial No. 592,296. 12 Claims. (Cl. 221—61.)



1. A dispenser including a container, a cover therefor having an outlet, and means including a screen back of said outlet, said cover having a continuous recess and the first mentioned means having a marginal portion releasably sprung into said recess in substantially sealing engagement with a wall portion of the recess.

1,893,140. PROCESS OF MAKING ICE SKATES. WILLIAM F. HOERLE, Torrington, Conn., assignor to Union Hardware Company, Torrington, Conn., a Corporation of Connecticut. Original application filed June 1, 1931, Serial No. 541,377. Divided and this application filed May 25, 1932. Serial No. 613,380. 5 Claims. (Cl. 29—148.)



1. The method of making a skate blade which comprises longitudinally grooving a blank strip to form integrally connected semi-tubular portions with outwardly flaring edges and then forming the grooved portion into a tube and then directly uniting the edges to form the runner.

1,893,141. UNIVERSAL LINK. HERBERT F. KAMPFER, St. Paul, Minn. Filed May 9, 1931. Serial No. 536,129. 5 Claims. (Cl. 74—32.)

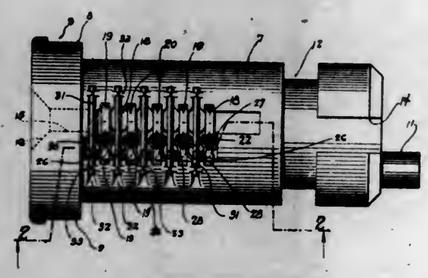
1. In a chain, a link having a pair of U-shaped side portions spaced apart and rigidly interconnected, a con-

necting member having a transverse end portion adapted to pivotally engage said U-shaped side portions and having a second transverse end portion in a plane at right



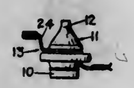
angles to that of the first end portion, said second transverse end portion being adapted to pivotally engage the U-shaped side portion of a second link similar to the first.

1,893,142. LOCK. EDWARD N. JACOBI, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 24, 1930. Serial No. 504,549. 24 Claims. (Cl. 70—46.)



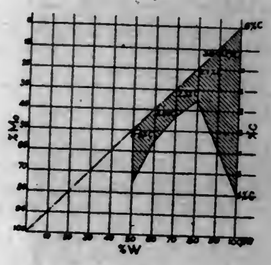
2. In a lock cylinder of the character described, a plurality of spaced locking tumblers mounted for movement transverse to the longitudinal axis of the lock cylinder, a plurality of supports fixedly mounted in said lock cylinder intermediate said tumblers, yieldable means seated on said supports and normally urging the tumblers to outermost position, and means on said tumblers providing guides for the yieldable urging means.

1,893,143. ACOUSTIC DEVICE. HENRY KOCH, Jamaica, N. Y., assignor to Dictograph Products Co., Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 3, 1931. Serial No. 566,678. 6 Claims. (Cl. 181—23.)



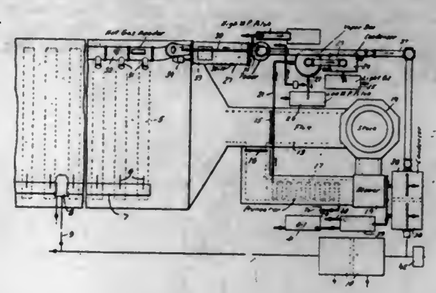
1. In an ear-phone receiver, an adjustable ear piece comprising a member having a base provided with a projecting portion adapted to fit the external auditory meatus the axis of which is offset with respect to the axis of said base and a member mounted concentric with said base, said last mentioned member being angularly adjustable with respect to said base and having an offset arm adapted to fit into the fleshy convolutions of the concha.

1,893,144. ALLOY OF HIGH FUSION POINT. ALFRED KROPF, Wetzlar, Germany, assignor to Stahlwerke Rochling-Buderus A.-G., a Stock Corporation. Filed Aug. 20, 1926, Serial No. 130,562, and in Germany Jan. 16, 1926. Renewed Nov. 22, 1932. 2 Claims. (Cl. 75—1.)



1. An alloy of high fusing point containing from 1 to 2.5% of carbon, 40 to 65% of tungsten, 10 to 40% molybdenum and 1 to 20% of tantalum.

1,893,145. DISTILLATION OF TAR. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 26, 1929. Serial No. 335,207. 14 Claims. (Cl. 202—30.)

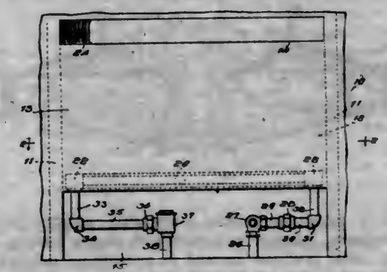


1. The method of distilling tar which comprises heating the tar in an externally heated still to a temperature sufficient at atmospheric pressure to distill part of the oil from the tar, separating vapors of lower boiling constituents from the preheated tar, separately condensing said lower boiling constituents, and then further distilling the residue from this distillation by direct contact with hot fuel gases while at a high temperature after their production from coal distillation or gasification.

1,893,146. CONCEALED RADIATOR. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed May 15, 1929. Serial No. 363,216. 7 Claims. (Cl. 257—136.)

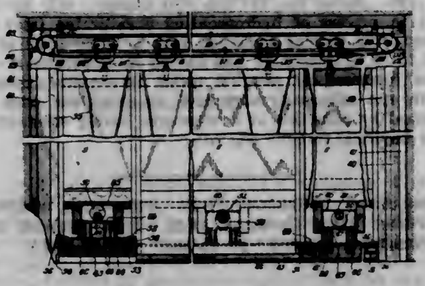
3. In a device of the class described, the combination of a vertically extending casing and a horizontally extending radiator arranged in the lower portion of the casing adjacent the lower edge of the front wall of said casing, the lower edge of the front wall of the casing being located above the lower edge of the rear wall to thereby provide an opening in the front wall of the casing, said opening providing means through which said radiator may be passed to introduce and remove said radiator from within the interior of said casing, tubular

means extending from said radiator arranged below said radiator, fluid supply and return pipes located in said casing, said tubular means of said radiator providing means connecting said radiator with said fluid supply and return pipes and including a connection providing



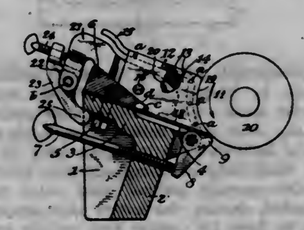
means for separably attaching said radiator with said fluid supply and return pipes, said pipes being arranged to allow said radiator to be moved across an end of said pipes into and out of said casing and into and out of functional engagement with said pipes.

1,893,147. FOLDING PARTITION. HENRY D. OBERDORFER and RONALD TRUE, Newcastle, Ind., assignors to Circle A Products Corporation, Newcastle, Ind., a Corporation of Illinois. Filed Feb. 25, 1929. Serial No. 342,484. 11 Claims. (Cl. 20—20.)



6. In a folding partition, a door mounted for movement to partially fill an opening, a slidable section at the bottom, and means including an independently operated eccentric in each door for pressing the slide resiliently against the floor.

1,893,148. ARTICULATED FOUNTAIN DIVIDER. ROBERT R. PAGE, Crestwood, N. Y. Filed Feb. 16, 1931. Serial No. 515,971. 9 Claims. (Cl. 101—210.)



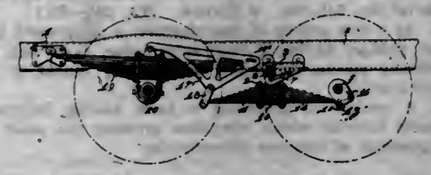
1. A fountain divider having a three part articulated construction comprising a fulcrum member, and a pivoted fountain clamp and ink divider head thereon.

1,893,149. TUBULAR AERIAL ADVERTISING DEVICE. JOHN PICCO, New York, N. Y. Filed Nov. 7, 1931. Serial No. 573,567. 5 Claims. (Cl. 40—127.)



1. The combination with an aerial vehicle, of a pull cable connected to the aerial vehicle, a tubular self inflating aerial advertising trailer connected to the pull cable by connecting cords concentrically distributing the pull on the circular forward end of the trailer, illuminating means in the trailer, means for stabilizing the trailer to present advertising matter on its opposite sides, and means carried by the pull cord for energizing the illuminating means.

1,893,150. VEHICLE SPRING. GILBERT E. PORTER, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Filed Mar. 20, 1931. Serial No. 524,048. 1 Claim. (Cl. 267—41.)

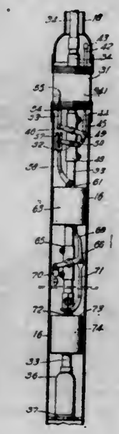


A spring comprising a plurality of leaves secured together by a clamping bolt, a centrally located lateral slot formed in the second leaf from the bottom through which said clamping bolt extends, said leaf being bent at its outer end to form an upwardly projecting loop, a bracket having a bolt which passes through said loop and which is rotatably supported thereby, the lowermost leaf of said spring being bent downwardly to form a loop having its longer dimension disposed in a plane at an angle relative to the plane of said lowermost leaf, a second bolt carried in said bracket and received in said elongated loop in a manner whereby said lowermost leaf does not resist rotation of said bracket on said first named bolt that is received in said loop in the second leaf from the bottom of the spring.

1,893,151. PNEUMATIC DISPLACEMENT PUMP. CHESTER D. RUBEL, Wichita Falls, Tex. Filed June 11, 1927, Serial No. 198,198. Renewed June 18, 1931. 19 Claims. (Cl. 103—248.)

1. The combination with an oil well casing, of a pump comprising successively arranged serially connected barrels disposed in the casing for vertical movement therein, an oil discharge pipe line leading from and through said barrels to the top of the well, a pneumatic pressure supply pipe leading from the top of the well to said barrels and surrounding said oil discharge pipe, a check valved

oil inlet in the bottom of each barrel, a pressure inlet and exhaust valve control means in each barrel, and liquid level controlled means in each barrel for operating said



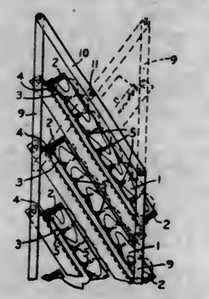
inlet and exhaust valve control means, the overall width of the assembly being less than the internal diameter of the well casing.

1,893,152. MANUFACTURE OF YEAST. ALFRED SCHULTZ and CHARLES N. FREY, New York, N. Y., assignors to Standard Brands Incorporated, New York, N. Y., a Corporation of Delaware. Filed Mar. 3, 1931. Serial No. 519,892. 6 Claims. (Cl. 195—20.)

2. As a new article of manufacture, a compressed live yeast product having normal color, odor, taste and reproducing power, and being substantially devoid of zymatic activity.

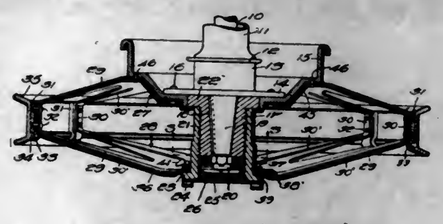
3. A method of preparing a yeast having depressed zymatic activity which comprises growing the yeast in the presence of ethylene chlorohydrin.

1,893,153. EGG TRAY FOR INCUBATORS. LA VERNE C. STURGIS, Springfield, Ohio, assignor to The Buckeye Incubator Manufacturing Company, Beachwood, Ohio, a Corporation of Ohio. Filed Oct. 9, 1930. Serial No. 487,473. 5 Claims. (Cl. 119—44.)



1. In a non-cellular egg tray for incubators in which the eggs are placed on their sides in rows in overlapping and close relation, a member on each end of the tray forming alternate abutments and recesses, the abutments and recesses of the respective members being in staggered relation, with the abutments extending into the tray a distance substantially equal to one-half the length of an egg.

1,893,154. VEHICLE WHEEL. MILTON WESLEY THOMPSON, Atlanta, Ga. Filed Sept. 2, 1930. Serial No. 479,349. 6 Claims. (Cl. 301—16.)

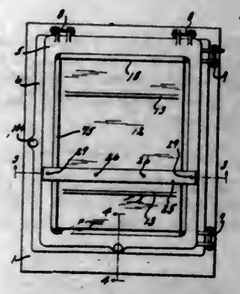


1. In a wheel structure comprising axially movable hub elements, inboard and outboard plates having their radially outer portions formed to provide an inboard and an outboard series of flexible spokes, the radially inner portions of said plates being rigidly connected respectively to said hub elements, each spoke of each series being arranged opposite a spoke of the other series to form corresponding pairs of spokes, a connection between and fixed to the radially outer ends of the spokes of each pair, and a rim engaging element mounted radially outwardly of and secured to each connection.

1,893,155. HYDROGENATION PROCESS AND CATALYST THEREFOR. OWEN G. BENNETT, Baltimore, Md., assignor to Catalyst Research Corporation, Baltimore, Md., a Corporation of Maryland. Filed June 18, 1932. Serial No. 618,023. 10 Claims. (Cl. 87—12.)

1. A process of hydrogenating unsaturated fatty oils, comprising passing hydrogen into a liquid body of the oil to be hydrogenated and having in suspension a catalyst composed of metallic nickel intimately associated with and adherently supported on chromium oxide and formed by reduction of a substance having substantially the empirical formula $Ni_3Cr_2O_5$.

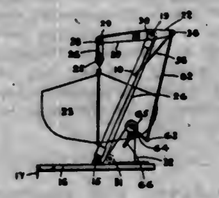
1,893,156. PHOTOGRAPHIC PRINTING DEVICE. FRANK BEAN, Cleveland, Ohio. Filed Jan. 16, 1932. Serial No. 586,985. 20 Claims. (Cl. 88—24.)



1. A photographic printing device for making bordered photographs by projection, said device comprising an outer border mask; inner border mask means; and an image mask; said outer border mask having an opaque area and a light-transmitting area, said light-transmitting area comprising an image-exposing portion and an inner border-exposing portion, said outer border mask being adapted, during the entire photographic printing operation, to have its opaque area overlie and therefore mask the outer border portion of the sensitised sheet which is to receive the bordered photograph and to have its image-exposing portion and its inner border-exposing portion respectively overlie the image portion and the

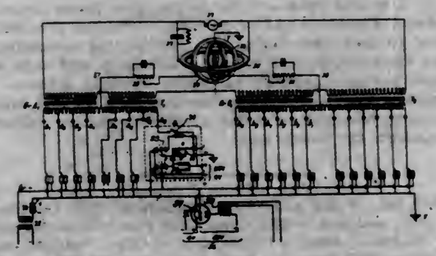
inner border portion of said sensitised sheet; said inner border mask means comprising two mask members individually movable into and out of masking relation relative to said outer border mask, one of said inner border mask members being adapted to overlie and therefore mask a part of the inner border-exposing portion of the outer border mask and the other of said inner border mask members being adapted to overlie and therefore mask the remaining part of said inner border-exposing portion of said outer border mask, both of said inner border mask members being adapted to be moved to masking position relative to the outer border mask during the printing of the image portion of the photograph; and said image mask having its entire area opaque and being movable into and out of masking relation relative to said outer border mask, said image mask, during the printing of the inner border portion of the photograph being adapted to overlie and therefore mask the image-exposing portion of the light-transmitting area of the outer border mask.

1,893,157. CRANE STRUCTURE. LENNARD CONSTANTINE BURRILL, HARRY BOCLER, and NORMAN MACLEOD HUNTER, Wallsend-upon-Tyne, England, assignors to The Optimum Davit Company Limited, Wallsend-upon-Tyne, England, a British Company. Filed May 21, 1932, Serial No. 612,768, and in Great Britain May 30, 1931. 7 Claims. (Cl. 9—22.)



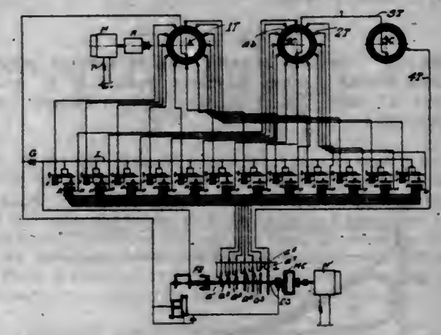
1. In a crane structure comprising a support, a strut pivoted at its foot to said support, a rocking jib eccentrically pivoted at the head of said strut and means for suspending the load from the longer arm of said jib, the combination of an actuating member pivotally attached between the end of the shorter arm of said jib and an anchorage on said support, means for lengthening and shortening said actuating member, and means for controlling said jib.

1,893,158. HIGH-SPEED PRINTING TELEGRAPH. HENRI CHIREIX and HUGUES GOUDET, Paris, France. Filed July 18, 1929, Serial No. 379,095, and in France July 28, 1928. 31 Claims. (Cl. 178—15.)



1. In a printing telegraphy system in which the symbol to be transmitted comprises the superposition of a plurality of frequencies, a receiving station including a series of resonant selector devices each thereof being singly responsive to one of the individual transmitter frequencies, a galvanometric selector, an exciting coil therefor and means controlled by said incoming signals for connecting said coil to a source of constant potential, said galvanometric selector comprising means adapted to be energized by said resonant selector devices, a transparent film carrying opaque characters operatively associated with said galvanometric selector and means controlled by said selector upon receipt of an incoming signal for displacing said film in accordance with the signal, a recording device and means controlled thereby for recording the particular signal transmitted.

1,893,159. HIGH SPEED MULTIPLEX TELEGRAPHY. HENRI CHIREIX and HUGUES GOUDET, Paris, France, assignors to Compagnie Generale de Telegraphie Sans Fil, Paris, France, a Corporation of France. Filed July 7, 1930, Serial No. 465,968, and in France July 10, 1929. 21 Claims. (Cl. 178—51.)



1. The method of signaling including the step of converting symbols into energy impulses of equal length of several frequencies, the combination of the frequencies of each impulse being characteristic of a certain symbol.

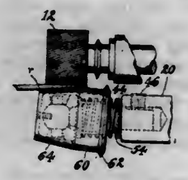
1,893,160. ELECTRODE FOR ELECTRIC ARC WELDING OR SOLDERING. EDWARD JOHN CLARKE, Charing Cross, England, assignor, by mesne assignments, to American Murex Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 28, 1929, Serial No. 403,134, and in Great Britain Mar. 18, 1929. 8 Claims. (Cl. 219—8.)

1. In an electrode for electric arc-welding and soldering wherein a stainless steel weld is produced, a core for the electrode consisting of a mild alloy steel provided with a coating of fluxing and slag-forming materials, the coating of the electrode containing an alloy, in the powdered state, of nickel and chromium in proportions adapted to be alloyed with the metal of the core for the production of a stainless alloy steel.

1,893,161. COATING APPARATUS. JOHN W. COSGROVE, deceased, Medford, Mass., by Caroline E. Cosgrove, administratrix, Medford, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 16, 1929. Serial No. 332,902. 21 Claims. (Cl. 91—50.)

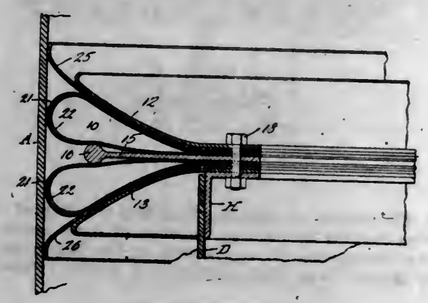
1. In a coating apparatus, a rotatable member, a work-engaging roll mounted to gyrate upon the member, yieldable means for maintaining the roll in a normal position upon its mounting member, a work-engaging member co-

operating with the gyratory roll, and means for supplying a coating substance to one of said work-engaging elements for application to the work.



18. In a cementing apparatus, a cylindrical cement-applying roll, a shaft adjacent to the axis of said cement-applying roll, a cooperating work-supporting roll, and means for tiltably mounting the work-supporting roll upon the shaft, said work-supporting roll having a frusto-conical portion opposite the cement-applying roll, thereby to minimize the tilting movement required in gripping wedge-shaped pieces of work.

1,893,162. SEALING MEANS FOR FLOATING ROOFS FOR TANKS. JAMES M. CRANZ, Buffalo, N. Y. Filed Apr. 17, 1929. Serial No. 355,756. 15 Claims. (Cl. 220—26.)

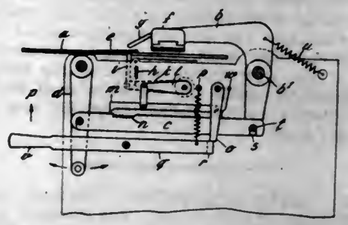


13. A floating roof for a tank, including a sealing member arranged between said roof and the wall of the tank and made of sheet rubber, and clamping means applying pressure to the edge portions of said sheet to hold said sheet in bulb-like form by its own resilience and without internal air pressure, and having clamping faces arranged in planes extending transversely with reference to the wall of the tank, said clamping faces holding the edge portions of said rubber sheet in positions to cause the intermediate portion of said sheet to assume a shape of bulb-like cross section and to be pressed by its own resiliency against the tank wall.

1,893,163. PLANOGRAPHIC PRINTING PROCESS. VALENTIN DIETZ, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to Multigraph Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 9, 1929. Serial No. 412,916. 11 Claims. (Cl. 101—149.)

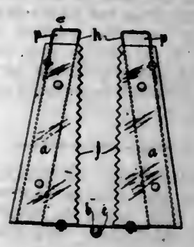
1. The process of printing, comprising forming on a plate an image which will retain a fatty ink, and treating the plate with a solution of materials which will form an ink repellent coating over the non-image surface of the plate and with an additional substance to prevent oxidisation of the plate, and repeatedly printing from such plate by using an ink treated in such manner that it will adhere to the image without adhering to the coating on the non-image portion of the plate.

1,893,164. SAFETY-DEVICE FOR PRINTING MACHINES AND THE LIKE. BRUNO FASSMANN, Berlin, Germany, assignor to Addressograph Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 17, 1929, Serial No. 414,790, and in Germany Mar. 20, 1928. 6 Claims. (Cl. 192—130.)



6. In a printing machine, an operating member, a printing member, a connecting bar having a plurality of teeth therein, means detachably connecting said connecting bar to said printing member, means for disconnecting said connecting bar from said printing member, a spring for urging said disconnecting means into disconnecting position, a detent for holding said disconnecting means against the action of said spring, a bar connected to said detent, and means operable by an obstacle in the path of said printing member for moving said bar into engagement with the teeth on said connecting member whereby said means may be moved therewith to disengage said detent from said disconnecting means.

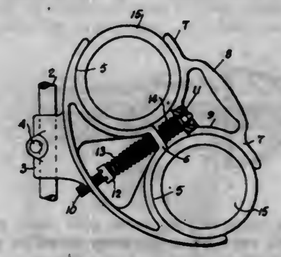
1,893,165. APPARATUS FOR ERECTING STAGING, PLATFORMS, AND THE LIKE. JAMES MCINTYRE FORTUNE, Grantwood, N. J. Filed Oct. 1, 1928, Serial No. 309,473, and in Great Britain Sept. 19, 1928. 2 Claims. (Cl. 304—5.)



1. A trestle head comprising two base plates hingeably connected together and an upwardly extending jaw portion fixed to each base plate, each jaw portion consisting of two vertical plates in spaced relationship and each base plate having a portion extending upwards between the vertical plates constituting the jaw portions and formed so as to constitute a socket adapted to receive timber to constitute the trestle legs.

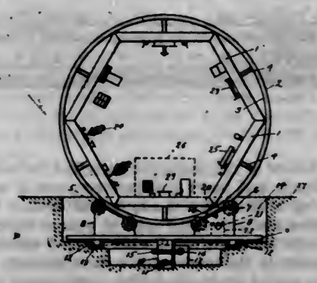
1,893,166. FIRE ENGINE. CHARLES H. FOX, Cincinnati, Ohio, assignor to The Ahrens-Fox Fire Engine Company, Cincinnati, Ohio, a Corporation of Ohio. Original application filed Nov. 14, 1930, Serial No. 495,653. Divided and this application filed Oct. 26, 1931. Serial No. 571,025. 6 Claims. (Cl. 248—20.)

1. In a fire engine having posts thereon, a bracket adjustably attached to each post, a pair of arcuate hose seats on each bracket having therebetween a yoke, a clamp having a pin thereon extending through said yoke, and a spring



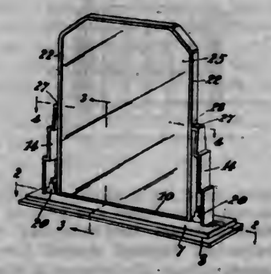
on the pin on each side of the yoke, said clamp having arcuate members thereon cooperating with the seats to grip and hold hose sections.

1,893,167. ROTATING STAGE MOUNTING. BORIS S. GLAGOLIN, New York, N. Y. Filed June 21, 1932. Serial No. 618,459. 6 Claims. (Cl. 20—1.123.)



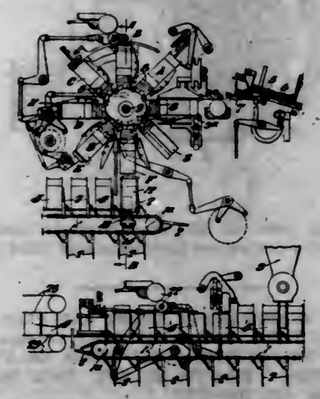
1. In a rotary stage mounting, the combination with a hollow cylinder, of means rotatively to support said cylinder on its periphery, and a plurality of platforms forming a polygon inscribed in said cylinder and supported therein, said platforms being adapted to support articles of scenery and stage settings securely attached to said platforms and adapted to retain their places for all positions of said cylinder, each of said platforms thereby forming an individual stage.

1,893,168. MOUNTING FOR PICTURES, PANELS, AND THE LIKE. SAMUEL HAMMER, Brooklyn, N. Y., assignor to United Metal Box Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 5, 1932. Serial No. 603,283. 7 Claims. (Cl. 40—148.)



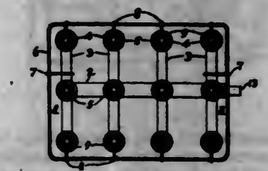
1. In combination with a base, a panel supporting frame, said base having supporting means engaged by one end of the frame, standards rising from the base exteriorly of the frame and laterally movable relative thereto, each of said standards and opposite sides of the frame having coacting manually disengageable means detachably securing the said frame in a fixed upright position upon the base.

1,893,169. CARTON FILLING APPARATUS. CARL WILHELM HARTMANN, Lyngby, near Copenhagen, Denmark. Filed July 26, 1930, Serial No. 470,836, and in Great Britain Aug. 3, 1929. 6 Claims. (Cl. 93—6.)



1. In apparatus for filling material into cartons, a number of conveyors, a corresponding number of filling devices arranged over said conveyors, a common carton shaping and supplying device for said conveyors and means for automatically delivering the cartons from the common supplying device successively to the different conveyors whereby there is obtained an increased period for the filling operation for any given rate of delivery of the packages.

1,893,170. PILLOW OR CUSHION. JOHN HILTON, Dublin, Irish Free State. Filed June 30, 1930, Serial No. 464,927, and in Great Britain Oct. 28, 1929. 1 Claim. (Cl. 5—252.)

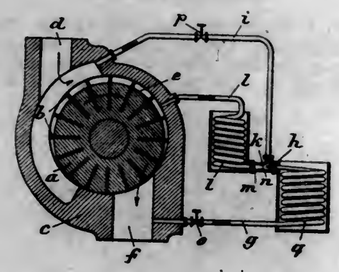


A pillow or cushion comprising, in combination, a single longitudinal flexible tempered steel lath forming a vertebra, a plurality of flexible tempered steel laths transversely anchored to said lath forming said vertebra, and a plurality of outstanding springs anchored to each side of said lath forming said vertebra and to each side of said plurality of laths, thereby producing a cantilever effect on the extensions of said plurality of laths from said lath forming said vertebra.

1,893,171. ROTARY COMPRESSOR. EMIL KÄGI, Winterthur, Switzerland, assignor to Firm Sulzer Frères Société Anonyme, Winterthur, Switzerland. Filed Nov. 14, 1931, Serial No. 574,977, and in Switzerland Nov. 17, 1930. 8 Claims. (Cl. 230—210.)

1. In a rotary compressor, in combination a rotor carrying outwardly sliding vane-type blades, a casing for said rotor provided with a crescent-shaped compression chamber, a suction chamber and a delivery chamber, an injector device having a pressure-fluid inlet, a suction inlet and a delivery discharge outlet, a pipe connecting said de-

livery chamber to said pressure fluid inlet, a second pipe connecting said suction inlet to said suction chamber, a third pipe connecting said delivery discharge outlet to an

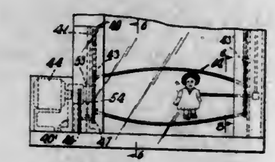


intermediate point of said crescent-shaped compression chamber and a cooling coil inserted in said third pipe connection.

1,893,172. TRANSPARENT SHEET AND PROCESS OF MANUFACTURE. EDOUARD M. KRATZ, Chicago, Ill., assignor to Marsene Products Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 21, 1925. Serial No. 10,962. 10 Claims. (Cl. 106—39.)

1. A gelatine sheet comprising gelatine, orthophosphoric acid, and sulphonated castor oil.

1,893,173. DOUBLE ROPE SKIPPING TOY. CASPER KREUTZER, Millitown, N. J. Filed June 15, 1931. Serial No. 544,303. 8 Claims. (Cl. 272—74.)



1. A toy, comprising a pair of spur gears meshing with each other, a second pair of spur gears meshing with each other and spaced from said pair of spur gears and having both axes aligning with both axes of said first pair of spur gears, all of said gears being rotatively supported on the faces remote from the adjacent faces of said pairs of spur gears, a pair of rigid arched-shaped members attached at their ends on and between all of the opposed gears of said pairs of gears, said rigid arched-shaped members being at phases differing 180° from each other, that is, for example when one arched-shaped member is at the top the other is at the bottom, means for driving said spur gears including an electric motor so as to revolve the arched-shaped members, and means for cutting of the electrical current through said motor when the rigid arch-shaped members engage against somebody, as the legs of a child skipping the arched members.

1,893,174. HEADLIGHT LENS. JOSEPH CHARLES AUGUSTE LABRECHE, Montreal, Quebec, Canada. Filed Aug. 28, 1930, Serial No. 477,250, and in Canada June 18, 1930. 2 Claims. (Cl. 240—41.4.)

1. In combination with a lamp housing having a lamp mounted therein, a reflector enclosing said lamp, a lens body inserted in one of the ends of said housing, and a pair of parallel fins extending inwardly from said lens body and disposed in planes substantially tangent to said lamp at diametrically opposite points thereof, the free ends



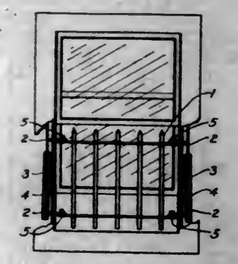
of said fins being spaced from said lamp sufficiently to permit direct rays from the lamp to strike said reflector in close proximity to the plane of said lens.

1,893,175. LOOSE LEAF BINDER. ADOLPH G. LOTTER, Milwaukee, Wis., assignor to Stationers Loose Leaf Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 10, 1931. Serial No. 529,074. 9 Claims. (Cl. 129—41.)



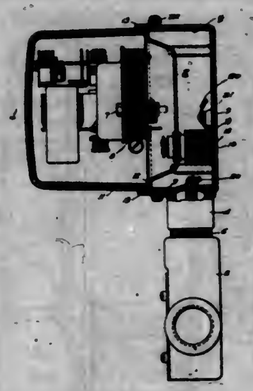
4. In a binder of the character described including a pair of binder heads and posts therebetween, one of said binder heads having a wall thereof adapted to contact the sheets of said binder and a parallel wall in spaced relation thereto, said walls being provided with aligned openings to receive the ends of the binder posts therethrough, a portion of said last named wall cooperating with means on one end of each of said binder posts to prevent withdrawal of said ends of said posts through said binder head in one direction and means slidably mounted between said walls to prevent the movement of the posts through said binder head in the opposite direction.

1,893,176. METAL WINDOW GUARD ATTACHMENT. DAVID MCDONALD, Birmingham, Ala. Filed Aug. 17, 1931. Serial No. 557,499. 4 Claims. (Cl. 20—71.)



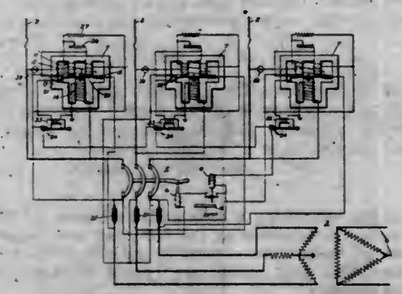
4. In a window guard for a window having upper and lower sash disposed to be raised and lowered in a frame having side frame members, bars extending crosswise of the window frame and disposed beneath the upper window sash, fasteners permanently secured to the ends of the cross bars and extending into the upright side frame members, there being holes provided in the upright side frame members to receive the fasteners, and curved ends on the fasteners disposed to point inwardly of the window.

1,893,177. WATTHOUR METER. WALTER G. MYLIUS, Summit, and BERT G. LA BAR, Union, N. J., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 18, 1928. Serial No. 305,778. 13 Claims. (Cl. 247—2.)



1. A detachable out-door meter comprising a completely encased meter mechanism having electrical contacts mounted thereupon, a conduit outlet box adapted to engage said meter in supporting relation having a plurality of contacts disposed therein and arranged to engage said first-mentioned contacts when said meter is in operative position, and means for clamping said meter to said box in weathertight relation.

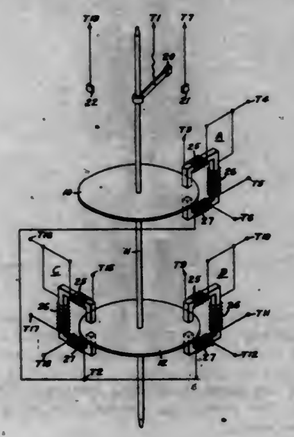
1,893,178. ELECTRICAL DISTRIBUTION SYSTEM. JOHN S. PARSONS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 27, 1925. Serial No. 39,947. 24 Claims. (Cl. 175—294.)



1. An alternating-current distribution system including a plurality of supply circuits, a plurality of transformers connected to said circuits, a work circuit connected to the secondary windings of said transformers, circuit-interrupters associated with said transformers, means including a relay controlling each interrupter, said relay having an electrical reverse-current adjustment means and including a plurality of windings cooperatively energized when the associated interrupter is closed and another winding operatively energized when said interrupter is open.

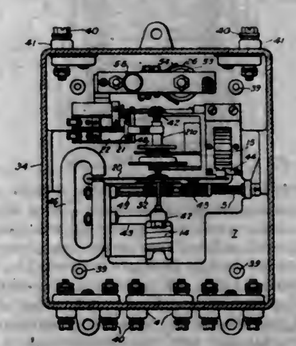
1,893,179. RELAY FOR NETWORK DISTRIBUTION SYSTEMS. JOHN S. PARSONS, East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 18, 1929. Serial No. 333,490. 6 Claims. (Cl. 200—91.)

1. A network relay responsive to alternating-current quantities having three electromagnets each energized by a current winding, a phasing winding and a voltage winding, a plurality of induction disc armatures con-



trolled by said electromagnets, a common rotatable shaft for said disc armatures, and closing and tripping contact members controlled by the rotation of said shaft.

1,893,180. ELECTRICAL DISTRIBUTION SYSTEM. JOHN S. PARSONS, East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed June 27, 1925, Serial No. 39,947. Divided and this application filed Feb. 15, 1929. Serial No. 340,801. 13 Claims. (Cl. 12—294.)



1. A relay comprising a magnetizable core member having salient opposed pole pieces, a pivoted armature member adapted to rotate in the air gap between said pole pieces, windings on said core member for actuating said armature member, a magnetizable lug mounted on said armature member to move therewith and a holding magnet in the path of travel of said lug.

1,893,181. PACKING FOR WATER GAUGE GLASSES. FRANK A. RUMATZ, Topeka, Kans. Filed Apr. 17, 1931. Serial No. 530,807. 8 Claims. (Cl. 285—122.)

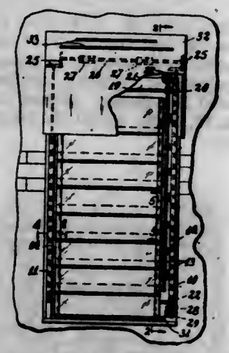
1. In a packing means for water gauge glasses, a packing nozzle and a packing, the packing nozzle comprising a cylindrical member protruding into the upper portion

of a gauge glass, the said member integral with and coaxial with an apron, the said apron encircling the outer



surface of the glass, a packing having a divided portion to receive the apron, and means to force the packing against the apron.

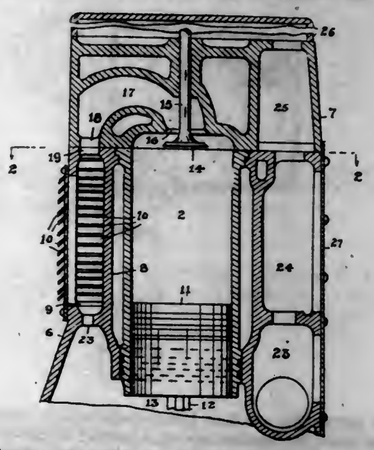
1,893,182. FOLDING SUNSHADE. ANTHONY SEREGI, New York, N. Y., assignor to Marie Seregi, New York, N. Y. Filed Mar. 12, 1932. Serial No. 598,368. 4 Claims. (Cl. 156—17.)



3. A folding sun shade, comprising a pair of vertical tracks for attachment on opposite sides of a window, sunresist glass panes between said tracks, trunnions projecting from opposite ends of said panes and slidable on said tracks, a lever pivoted on each of the trunnions and pivotally connected at its upper end to the lower side of the adjacent upper pane and pivotally connected at its lower end to the upper side of the adjacent lower pane forming a lazy tong structure with the panes held in a vertical row at inclined positions when the lazy tong structure is expanded, means for supporting the upper end of the lazy tong structure above the window, and means for collapsing the lazy tong structure to a position above the window, comprising screws rotatively mounted upon said tracks, followers threadedly engaging upon said screws and connected with the lowermost of said trunnions.

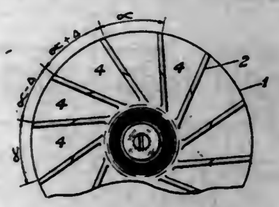
1,893,183. AIR MANIFOLD FOR INTERNAL COMBUSTION ENGINES. CHARLES C. SLEEFEL, Springfield, Ohio, assignor to Superior Engine Company, Springfield, Ohio, a Corporation of Delaware. Filed Sept. 20, 1930. Serial No. 483,198. 1 Claim. (Cl. 123—171.)

A cylinder block for internal combustion engines having parallel vertical cylinders, an air inlet chamber positioned within one side wall of the block and lying longitudinally thereof and adjacent to the cylinders, air passages leading from the chamber to each cylinder, inlet valves to close the passages at their outlets into the cylinders, and a second chamber in the opposite side wall of the block to accommodate the mechanism for operating the valves, the two opposite chambers serving to equalize the thermal



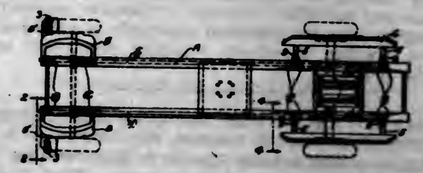
conditions in the said opposite walls, in combination with a crank chamber below the cylinders having communication with the air inlet chamber whereby air passing to the cylinders drags the hot gases and fumes in the crank chamber along therewith and whereby heat is supplied to the air entering the air inlet chamber.

1,893,184. FAN. DONALD G. SMELLIE, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Jan. 24, 1929. Serial No. 334,625. 6 Claims. (Cl. 230—134.)



1. A fan comprising a body and fan blades carried by said body, characterized by the fact that said blades are tangent at their inner ends to a common circle and by the fact that said blades are spaced unequally in a definite sequence.

1,893,185. AUTOMOBILE LIFT. EDWIN H. STEEDMAN, St. Louis, Mo., assignor to Curtis Manufacturing Company, Wellston, Mo., a Corporation of Missouri. Filed May 5, 1930. Serial No. 449,845. 7 Claims. (Cl. 254—89.)

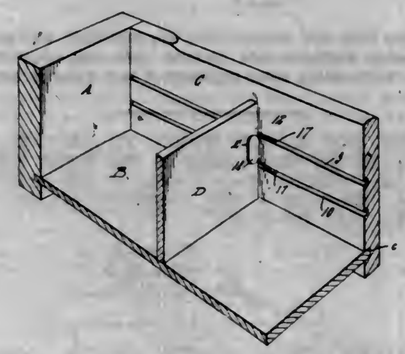


1. An automobile lift, comprising an upwardly-movable platform over which an automobile is adapted to be positioned, shiftable front and rear wheel engaging members

CARNEGIE LIBRARY OF ATLANTA

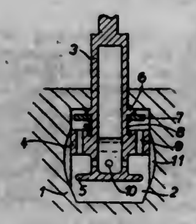
carried by the platform, one pair of said wheel engaging members being so mounted that when the platform moves upwardly said members will be moved by gravity into an inactive position, and means for utilizing the movement of said gravity-operated members for moving the other pair of wheel engaging members into an inactive position.

1,893,186. DRAWER PARTITION. CHARLES R. THOMAS, Jr., Drexel Hill, Pa., and BERNARD WICH, Herkimer, N. Y., assignors to National Desk Company, Herkimer, N. Y. Filed Dec. 26, 1931. Serial No. 583,244. 6 Claims. (Cl. 45—7.)



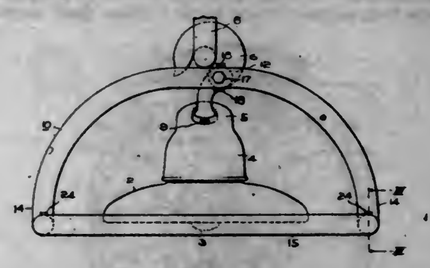
6. A clip for securing a partition to a supporting side wall having opposed substantially parallel shoulders, said clip having a body portion provided with partition engaging means, and opposed spring arms at opposite ends of said body portion formed to yieldingly engage said opposed shoulders and frictionally retain said clip on said side wall.

1,893,187. CUSHIONING MECHANISM FOR POWER HAMMERS. JULIUS URBANEK, Vienna, Austria, and ARTHUR SCHNEIDER, Duesseldorf, Germany. Filed May 10, 1928, Serial No. 276,577, and in Austria May 31, 1927. 5 Claims. (Cl. 188—96.)



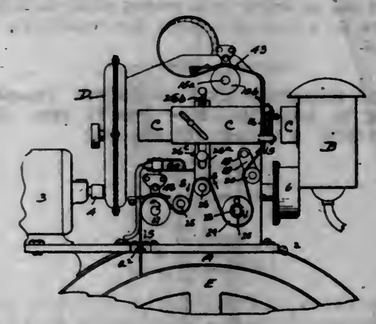
1. A cushioning device, a comprising a chamber containing a liquid, a plunger movable in said chamber and having a cavity communicating with said chamber, said chamber presenting a steadily decreasing cross sectional area to the plunger in its downward movement, said plunger comprising two flange-like projections dividing the chamber into three sections, the upper projection having ducts to establish communication between the two upper sections and a check valve for said ducts.

1,893,188. TRANSMISSION LINE DEVICE. NILS A. WAHLSTRÖM, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 29, 1927. Serial No. 216,145. 6 Claims. (Cl. 173—316.)



1. A transmission-line device comprising the combination with an insulator including metal terminals, of an electrostatic-field-controlling device therefor comprising a supporting portion distinct from either of said terminals and an arc-assuming portion telescopically fitting said supporting portion.

1,893,189. MOTION PICTURE MACHINE. FELIX J. WATTS, Bronson, and CARLOS WITTENMYER, Detroit, Mich. Filed Aug. 27, 1928. Serial No. 302,242. 11 Claims. (Cl. 88—17.)



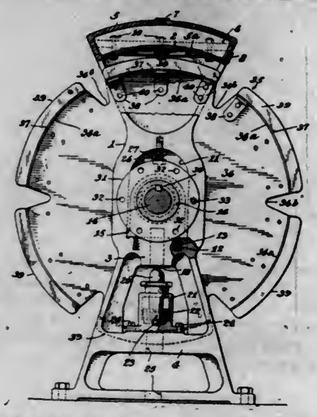
1. In combination with an apparatus of the kind described, a strip actuating wheel consisting of two discs parallel and spaced from each other and two intermediate discs of less diameter than the first named discs, a rider adapted to engage over the strip upon the discs of greater diameter and having a part adapted to be adjusted to engage over a strip upon the disc of lesser diameter, said rider consisting of a plate cut out to form an aperture between its edges and a part adapted to engage the discs of lesser diameter pivoted to said rider to swing through said aperture.

10. In an apparatus of the kind described, the combination of a sprocket wheel, a shaft extending coaxially through said wheel and angularly movable relative thereto, a spring connecting said wheel and shaft eccentrically, a pawl adapted to reciprocate diametrically on said wheel, and an eccentric engagement between said shaft and pawl, substantially as and for the purpose described.

1,893,190. IRONING MACHINE. ROBERT N. WEST, Maplewood, N. J. Filed Oct. 10, 1930. Serial No. 487,764. 5 Claims. (Cl. 68—9.)

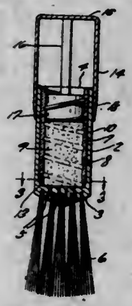
1. In a machine for pressing clothes, the combination comprising a rotatable buck-supporting member, a series of padded bucks supported thereby and spaced at intervals peripherally thereof, the pressing surfaces of the

adjacent bucks extending at an angle to each other and at least two of said bucks being exposed so as to permit of simultaneous and unobstructed access of two operatives to different bucks, whereby one of such operatives can lay an article to be pressed on one of said bucks while the other of such operatives is removing a pressed article from another of said bucks, a steam chest mounted



adjacent said support, means for mechanically stopping each buck temporarily in registration with said steam chest when the same is brought into position beneath the same and means for effecting pressure engagement between the chest and an article to be pressed while the latter is positioned on a buck so brought into registration with said chest.

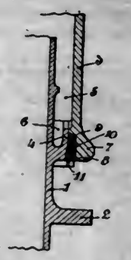
1,893,191. MAGAZINE SHAVING BRUSH. CHARLES C. WUEST, St. Louis, Mo. Filed June 17, 1932. Serial No. 617,708. 8 Claims. (Cl. 15—187.)



1. In a device of the kind described, the combination of a tubular handle open at one end, a tubular cartridge removably seated within the handle, the same having a screw groove formed upon its inner walls from end to end, a tubular cap telescopically mounted over the open end of the handle, the outer end of the cap being closed, a plunger rod extending axially within the cap from the closed end thereof, and a plunger rigidly mounted at the free end of the rod, the plunger having a screw thread complemental to the screw groove of the cartridge.

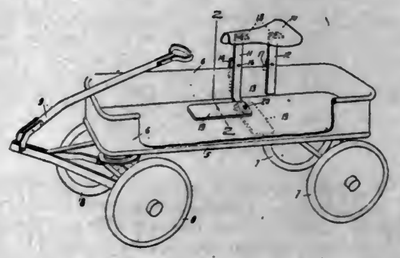
1,893,192. PACKING JOINT FOR WATER COOLED INTERNAL COMBUSTION ENGINES. MARIUS JEAN-BAPTISTE BARBAROU, Neuilly-sur-Seine, France. Filed Apr. 6, 1931, Serial No. 527,942, and in France May 3, 1930. 9 Claims. (Cl. 123—173.)

8. An internal combustion engine cylinder comprising a steel barrel, an annular part projecting from the external surface of said barrel for limiting with the latter, an annular space, an outer body, the lower end of which is disposed adjacent said annular part and limiting, with said barrel and said annular part, a water jacket in communication with said annular space, connecting means



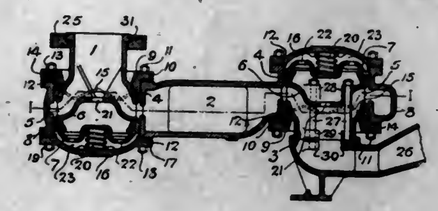
engaging both said annular part and said body, and packing means engaging said annular part and connecting means for insuring water tightness of said water jacket.

1,893,193. TOY COASTER WAGON. CHARLES C. BLACKMORE, Dayton, Ohio, assignor to The Dayton Toy & Specialty Company, Dayton, Ohio, a Corporation of Ohio. Filed July 2, 1930. Serial No. 465,406. 11 Claims. (Cl. 280—87.5.)



1. In a toy coaster wagon comprising a wagon bed, a seat, means for supporting said seat above said wagon bed near one side thereof, and a knee cushion supported on the bottom of said wagon bed and connected with said seat supporting means.

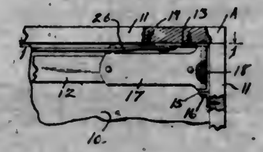
1,893,194. FLUID PRESSURE ARTICULATED CONDUIT. JAMES G. BLUNT, Schenectady, N. Y. Filed Mar. 5, 1931. Serial No. 520,328. 6 Claims. (Cl. 285—94.)



2. A fluid pressure conduit, comprising a section having an opening in a wall thereof; a section having an end portion housed in said first mentioned section and extending through said opening to form an articulated joint between said sections, the end wall of said end portion being spaced from an oppositely disposed wall of said first mentioned section; a seat for said end portion carried by said first mentioned section; and a plunger-like element within said space slidably engaged by the first mentioned section, bearing against the said end wall and spaced from said oppositely disposed wall to provide a fluid containing chamber, said chamber being

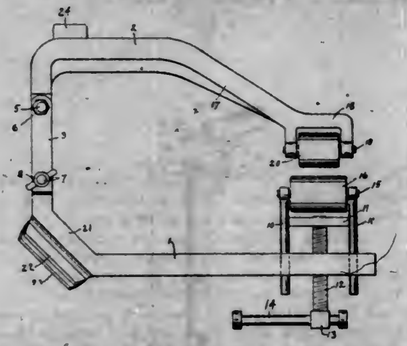
in communication at all times with the conduit to receive fluid pressure therefrom, whereby the pressure of the fluid within the chamber will force the plunger-like element against said end wall and force said end portion against said seat to provide a fluid-tight flexible joint therebetween.

1,893,195. FOLDING FURNITURE LEG. WILLIAM MICKEL BOENNING, Manitowoc, Wis. Filed Oct. 1, 1931. Serial No. 566,243. 2 Claims. (Cl. 45—11.)



1. The combination with an article of furniture including a top and a swinging leg, of means operatively connecting the leg to the top including a hinge joint, a swinging brace carried by the top having a longitudinal slot, said brace being sprung to define a substantially resilient leaf spring, a headed pin carried by the leg slidable in the slot, a locking lug carried by the leg beyond the headed pin and arranged at an angle to the leg, the brace frictionally bearing on the lug and having a keeper shoulder thereon for engaging the lug when the leg is in its set-up position, and a manipulating handle on the extreme outer end of the brace for manipulating the brace and leg.

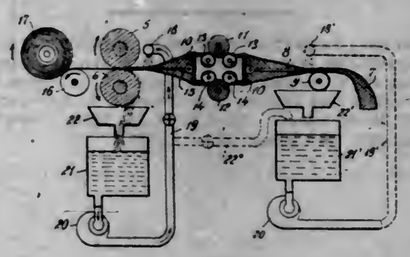
1,893,196. FENDER AND BODY STRAIGHTENING TOOL. GEORGE B. BUCK, Moline, Ill. Filed Feb. 5, 1931. Serial No. 513,648. 1 Claim. (Cl. 81—15.)



A device of the class described, comprising a pair of frames having overlapping bar portions, pivotally connected at one end of the overlap, fastening means at the other end of said overlapping portions to hold the same from pivotal action, a roller carried by one of said frames, a roller support in the other of said frames, means for adjustment of said roller support to or from the opposite frame, and a roller mounted in said support in opposition to the first-named roller, and adapted to cooperate therewith in correcting faults in sheet metal, said overlapping portions providing a rigid support for the frames when fully connected.

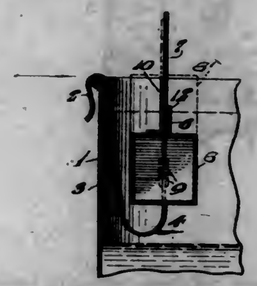
1,893,197. METHOD OF AND APPARATUS FOR TREATING TUBULAR TEXTILE FABRICS. SAMUEL COHN, New York, N. Y., assignor to Samcoe Holding Corporation, New York, N. Y., a Corporation of New York. Filed May 31, 1930. Serial No. 458,159. 12 Claims. (Cl. 8—19.)

1. The method of treating continuous lengths of tubular textile fabric while the fabric is traveling which comprises progressively opening the fabric to its tubular proportions, converging the tube into flat distended form with a simultaneous longitudinal tension, applying a treating liquid to the fabric and subjecting the distended fabric immediately to rolling pressure to remove the surplus liquid.



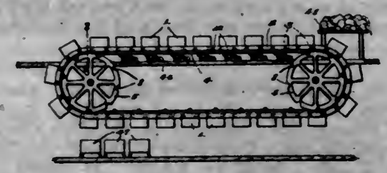
9. In an apparatus for treating tubular textile fabric, means for progressively distending and propelling the fabric, said means adapted to be inside the traveling tubular fabric, means for applying a liquid treating agent to the distended fabric, and wringer rolls spaced from the propelling means.

1,893,198. INDICATING DEVICE. RALPH CORSON, Ashland, N. J. Filed May 26, 1932. Serial No. 613,658. 2 Claims. (Cl. 116—118.)



1. An indicating device comprising a vertical arm adapted to be secured within a container, the upper end of said arm extending above the rim of said bucket and bearing any desired indicia, a float slidable on said arm, a shield carried by said float and bearing other indicia, whereby the indicia on the upper end of said arm are alternately concealed and exposed by the rise and the fall of said float owing to the rise and the fall of the liquid in said container.

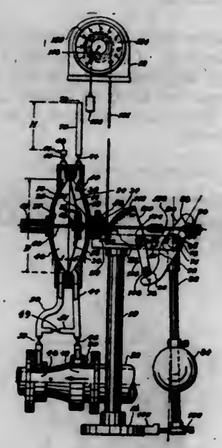
1,893,199. WASHING APPARATUS. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 12, 1927, Serial No. 183,196. Renewed Mar. 16, 1931. 9 Claims. (Cl. 68—37.)



1. A washing apparatus comprising a series of vats, each having an inlet and outlet for a washing fluid, means for moving the vats horizontally, mechanism comprising

a body having an inlet and an outlet for a fluid and means for forcing the fluid through the inlet and withdrawing the fluid from the outlet, means for lifting and lowering the body to carry the inlet and outlet into and out of connection with the inlet and outlet of the vat in juxtaposition thereto.

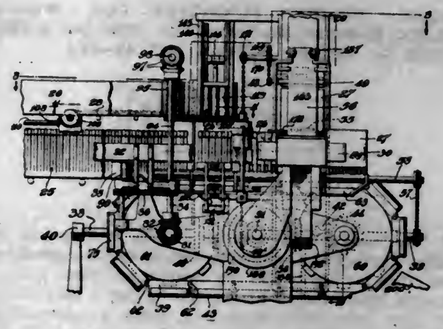
1,893,200. PRESSURE RESPONSIVE DEVICE AND DIAPHRAGM FOR USE THEREIN. HARRY S. DOLBEY and ED S. SMITH, Jr., Providence, R. I., assignors to Builders Iron Foundry, Providence, R. I., a Corporation of Rhode Island. Filed Nov. 28, 1929. Serial No. 409,270. 16 Claims. (Cl. 73—167.)



16. In a pressure responsive device, in combination, a casing comprising two flanged sections clamped together by bolts extending through bolt circles therein, a diaphragm having a larger diameter when flat than the diameter of the interior of said sections and having bolt openings of a larger circle than the bolt circles of the casing sections by a standard ratio and mounted between said flanged sections to form compartments and variable in position in accordance with the changes in pressure and having no-slack and zero positions, said sections each having stops projecting inwardly from each side wall thereof to provide standard no-slack positions for said diaphragm and said diaphragm having a standard zero position at a standard distance from its stop-abutting no-slack position, a movable member actuated by said diaphragm, a pendulum actuated by said movable member and adjustable means to vary the length of said movable member to move said diaphragm from the slack to zero position and to synchronize the zero no-slack position of the pendulum with the zero setting of the diaphragm.

1,893,201. MATCH PACKAGING MACHINE. RALPH H. GAMBLE, Moorestown, N. J., and WILLIAM J. CROWELL, Jr., Wyncote, Pa., assignors to Pullenlite Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 7, 1930. Serial No. 465,987. 33 Claims. (Cl. 93—7.)

1. In mechanism of the character indicated, an intermittent conveyor comprising a chain of blocks, a longitudinal jaw on each block spring pressing toward open position, a second jaw cooperating with the first and adapted to support the spring closure of the first, the jaws in open position being adapted to receive between



them the downwardly directed shank-end side of a match strip, and means for resiliently closing the first jaw upon an inserted match strip.

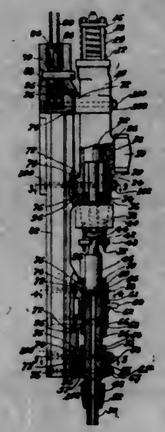
1,893,202. VALVE FOR FLUSH TANKS. ALLEN R. GILMORE, St. Louis, Mo. Filed July 7, 1930. Serial No. 466,012. 1 Claim. (Cl. 4—63.)



In a flush tank having a vertical overflow pipe therein and an outlet adjacent thereto, the combination of a bracket, clamping means for slidably fastening said bracket to the overflow pipe whereby it may be vertically adjustable, a lever arm pivotally mounted to the bracket, said lever arm having a projection extending upwardly therefrom, valve means adapted to seat in said outlet opening, means for guiding said valve means, additional means for fastening the last mentioned guiding means to the vertical overflow pipe whereby it may be vertically adjusted therealong, said valve means having a weight greater than an equal volume of water, means connecting the valve to the end of the said lever arm whereby it may be raised

and lowered from and to its seat, said connecting means permitting a limited universal movement between the valve and its supporting lever arm, a member having a track therein, means movably mounted on said track, and means to fasten the said member to the projection for the purpose described.

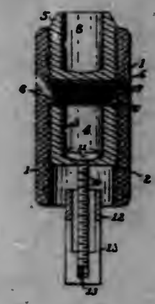
1,893,203. PERCUSSIVE DRILL UNIT. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 19, 1930. Serial No. 469,066. 1 Claim. (Cl. 255—51.)



A drill unit comprising a rock drill, a cylinder at one end of said rock drill, a guide support at the opposite end of the cylinder, a water head intermediate the cylinder and the guide support, spaced locating portions on the cylinder, the guide support and the water head having aligned contact surfaces, a saddle, transversely extending fixed lugs on the saddle interlocking with said locating portions to prevent longitudinal displacement of the drill, the guide support and the water head with respect to the saddle, longitudinally extending lugs on the saddle also interlocking with the locating portions to prevent lateral displacement of the drill, the guide support and water head with respect to the saddle, said longitudinally extending lugs having aligned contact surfaces adapted to engage the aligned contact surfaces on the drill to insure the true alignment of the drill with the saddle, and bolts extending through the locating portions on the drill, the guide support and water head and through the saddle to secure them together.

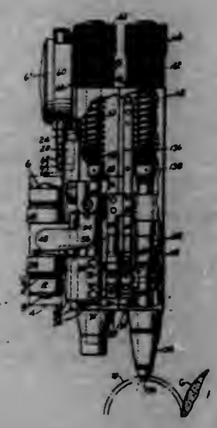
1,893,204. SPARK AMPLIFIER FOR USE IN THE IGNITION SYSTEMS OF INTERNAL COMBUSTION ENGINES. MARK G. HIBBS, Ross Township, Allegheny County, Pa. Filed June 20, 1932. Serial No. 618,898. 9 Claims. (Cl. 123—148.)

1. In a spark-amplifier for internal combustion engines, the combination of a cylindrical sleeve formed of insulating material and internally threaded, a pair of connector plugs formed of conductive material and screwed into said sleeve, and a plurality of annular electrodes and of annular dielectrics arranged in alternate relation in said sleeve and between the inner ends of said plugs, said electrodes and dielectrics being fixed in proper relation by



screwing up one of said plugs, whereby the central openings of said electrodes and dielectrics form a continuous inclosed chamber extending between said plugs.

1,893,205. GAUGING APPARATUS. FREDERICK G. HUGHES, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Oct. 25, 1930. Serial No. 491,147. 13 Claims. (Cl. 51—165.)

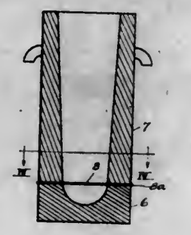


1. In apparatus for controlling the grinding to size of one of a pair of mating articles, a pair of contact members for establishing an electric circuit, gauging means co-operating with a finished article of a pair for locating said contact members in a preliminary position depending on the size of the finished article, a finger for moving one of said contact members with respect to the other to control the circuit, and gauging means co-operating with a mating article being ground for moving said finger towards said movable contact member in accordance with the changing size of the mating article; substantially as described.

1,893,206. INGOT MOLD ASSEMBLY. EUGENE L. MESSLER and JOHN J. ISHERWOOD, Pittsburgh, Pa.; said Isherwood assignor to said Messler. Filed Jan. 22, 1932. Serial No. 588,063. 6 Claims. (Cl. 22—139.)

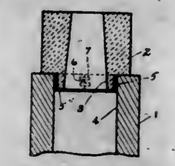
1. The herein described ingot mold assembly comprising upper and lower ingot mold elements matching horizontally to form a continuous mold cavity a substantial

portion of which is within the lower mold element, and a highly compressible sealing layer of cellular fibrous material combustible under temperature conditions exist-



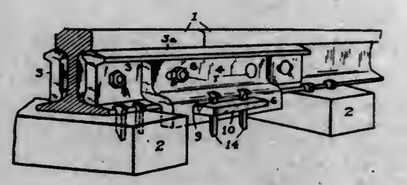
ing during the teeming of an ingot lying horizontally between the adjacent surfaces of the lower and upper mold elements.

1,893,207. HOT TOP. EUGENE L. MESSLER and JOHN J. ISHERWOOD, Pittsburgh, Pa.; said Isherwood assignor to said Messler. Continuation of application Serial No. 564,498, filed Sept. 23, 1931. This application filed Jan. 22, 1932. Serial No. 588,064. 2 Claims. (Cl. 22—147.)



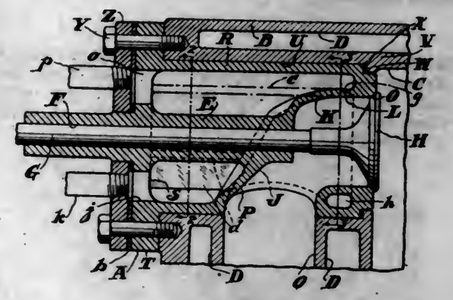
1. In combination with a hot-top including a neck adapted to project into an ingot mold, a gasket member for installation between the hot-top and the mold, said gasket member comprising a strip of cellular material and adapted to be secured upon the outer face of said neck.

1,893,208. CONNECTER FOR RAILWAY RAILS. JOHN V. PALMER, Pittsburgh, Pa., assignor of one-third to Harry I. Neaman and one-third to James M. Magee, Pittsburgh, Pa. Filed Jan. 9, 1932. Serial No. 585,702. 7 Claims. (Cl. 238—216.)



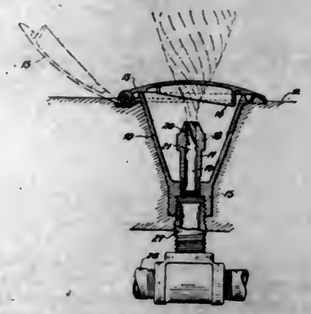
1. A connecter for rail ends, comprising a pair of fish plates bridging the rail joint and fitting adjacent the webs of the rails, a pair of clamping plates also bridging the joint and bearing inwardly against the fish plates, bolts extending through registering holes in the rails, fish plates and clamping plates to clamp the elements together, the clamping plates having skirts depending below the rails and said skirts being provided with openings, and a chair supporting the rail ends from below and having tongues engaging said openings and abutments bearing outwardly against the clamping plates.

1,893,209. VALVE CAGE. MORTIMER S. PARKHILL, Corning, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 11, 1932. Serial No. 610,748. 5 Claims. (Cl. 123—189.)



1. A valve cage comprising a guide member, a water jacket encircling the guide member, and means dividing the water jacket into a plurality of communicating compartments.

1,893,210. FLUID DISTRIBUTING DEVICE. HARRY N. RIDER, Youngstown, Ohio, assignor to "Automatic" Sprinkler Company of America, Cleveland, Ohio, a Corporation of Delaware. Filed June 22, 1931. Serial No. 545,876. 1 Claim. (Cl. 299—114.)

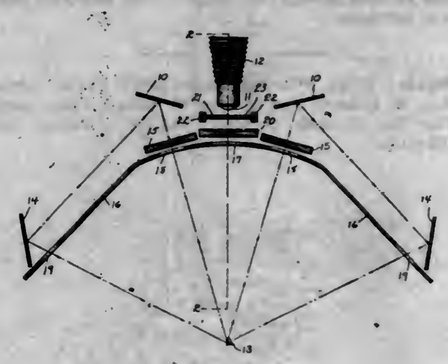


A nozzle of the character described, comprising an elongated body having an open fluid passage extending axially therethrough, said passage having a cylindrical section at the inlet end of the body and a cylindrical section of smaller diameter at the discharge end of the body and a conically tapering convergent section connecting said cylindrical sections, and a plurality of helically disposed fins on the inner surface of the second mentioned cylindrical section, the tops of said fins being tapered convergently of said passage for approximately one-half of the length of said second mentioned section and divergently for the other portion of said second mentioned section, the convergent taper of said tops being a continuation of the convergent taper of the connecting section of said passage whereby the ends of the fins merge smoothly into the wall of said connecting section.

1,893,211. POSE-REFLECTING SYSTEM FOR PHOTOGRAPHIC APPARATUS. LUTHER G. SIMJIAN, New Haven, Conn. Filed Oct. 21, 1927. Serial No. 227,731. 12 Claims. (Cl. 88—1.)

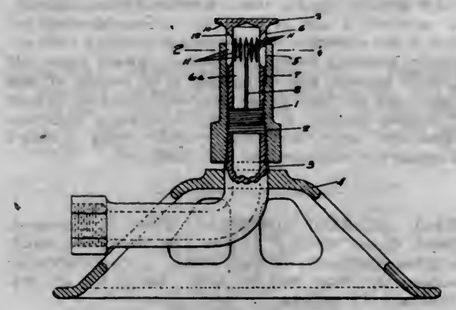
1. In a pose-reflecting system for photographic apparatus, the combination with a camera and the lens-system thereof; of an image-deflecting member positioned to one side of and closely adjacent to the axis of the outer end of said lens-system; a sight-mirror positioned forward

and to one side of the said image-deflecting member; and an image-reducing lens interposed between the person to be photographed and the said sight-mirror; whereby a person to be photographed is enabled, before his photograph



is taken, to observe in the said sight-mirror, a reduced-scale reflection of substantially the identical profile of himself which the said camera will record when the same is operated.

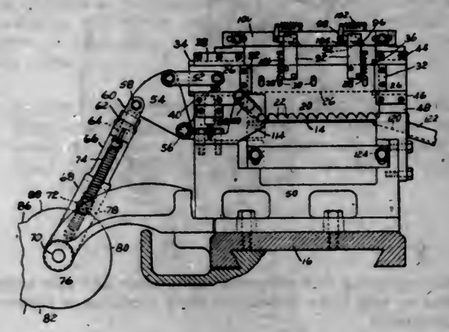
1,893,212. SPRAY NOZZLE. VINCENT V. VERNSCHOTEN, Erie, Pa. Filed Oct. 17, 1930. Serial No. 489,389. 7 Claims. (Cl. 299—74.)



1. In a spray nozzle, the combination of a body having a screw thread therein; and a spreading member screwed into the body, said member having a deflecting head, a central opening below the head and extending through the bottom of the member, and radially disposed openings extending through the wall of the member below the head and above the body, the head being adapted to spread jets issuing from the openings.

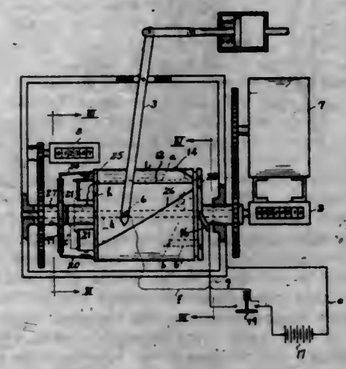
1,893,213. ABRADING MACHINE. ALBERT VUILLEUMIER, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Oct. 13, 1927. Serial No. 226,005. 13 Claims. (Cl. 51—103.)

1. In a grinding machine having opposed wheels, one wheel being a grinding wheel rotatable at high speed and the other being a regulating wheel rotating at slow speed, at least one of the wheels having a series of ball grooves, a feed plate having ball engaging members spaced twice as far apart as the ball grooves, and means for advancing



the plate two groove spaces forwardly intermittently and retracting it two spaces backwardly at one stroke; substantially as described.

1,893,214. MEASURING APPARATUS. ARCHER E. YOUNG, Pittsburgh, Pa. Filed Dec. 10, 1931. Serial No. 580,089. 8 Claims. (Cl. 285—61.)

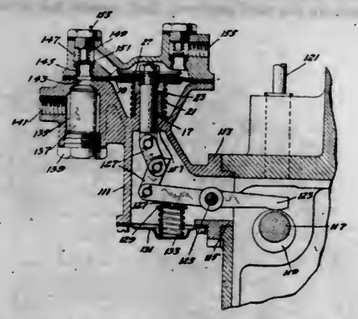


1. In apparatus for aggregating the value of a variable during a given interval of time a carrier movable in either of two opposite directions, three electric contact strips borne by such carrier and extending thereon in directions transverse to the direction of movement and diverging one from another, two of such strips being oppositely divergent from the third arranged between them, a tally, a clutch arranged between said carrier and the tally, a contact-piece movable transversely of the direction of movement of the carrier in accord with variation in the value of the variable and adapted as the carrier moves to make successive contacts with the strips borne thereby, electric means rendered effective by contact of the contact-piece with the mediately situated strip for closing said clutch, and electric means rendered effective in consequence of contact of said contact-piece with either of the said oppositely divergent strips for releasing said clutch.

1,893,215. VARIABLE STROKE FUEL PUMP. ABRAHAM M. BADITCH, Flint, Mich. Filed July 19, 1926. Serial No. 123,370. 11 Claims. (Cl. 103—38.)

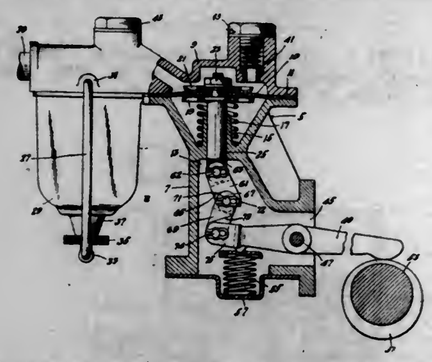
1. In a fuel pump for explosive motors, a cam shaft, a lever actuated thereby, a spring having a fixed abutment

in said pump and acting upon said lever to hold it against said cam, a reciprocating member in said pump, a pair of



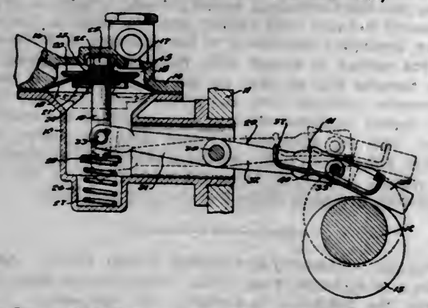
links connecting said reciprocating member and said lever, means on said links to prevent their attaining a position of alignment.

1,893,216. LINKAGE FOR FUEL PUMPS. ABRAHAM M. BABITCH, Flint, Mich. Filed Mar. 15, 1928. Serial No. 261,916. 5 Claims. (Cl. 103—38.)



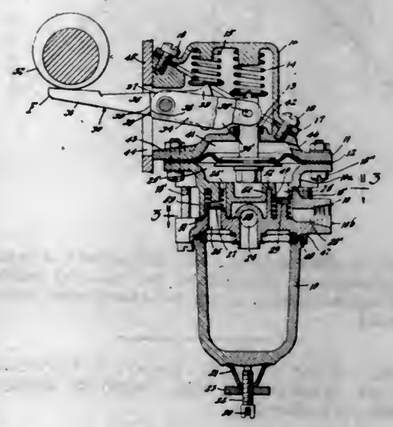
1. In a fuel pump including a reciprocable pumping member, a cam-actuated lever for conditionally moving said member in one direction by means of a lost motion connection, said connection comprising jointed links, one of said links being pivoted to said pumping member and the other of said links being pivoted to said lever, and means adjacent the common pivot between said links to prevent their alignment comprising a stop pin on one of said links and a cooperating stop surface on the other of said links.

1,893,217. FUEL PUMP WITH LOST MOTION LEVER. ABRAHAM M. BABITCH, Flint, Mich. Filed Sept. 10, 1928. Serial No. 304,847. 4 Claims. (Cl. 103—38.)



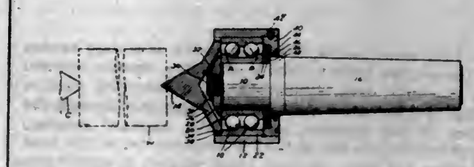
1. In combination with a fuel pump having a reciprocable pumping member resiliently advanced in one direction, means for conditionally imparting movement thereto from a rotating cam in the opposite direction comprising a lever operably connected at one end to said pumping member, and a cam-engaging extension pivotally connected to the other end of said lever with resilient means to hold said extension in constant engagement with said cam and means to limit pivotal movement of said extension relative to said lever.

1,893,218. FUEL PUMP OF REVERSED TYPE. ABRAHAM M. BABITCH and GORDON W. HARRY, Flint, Mich. Filed Dec. 13, 1929. Serial No. 413,768. 1 Claim. (Cl. 103—150.)



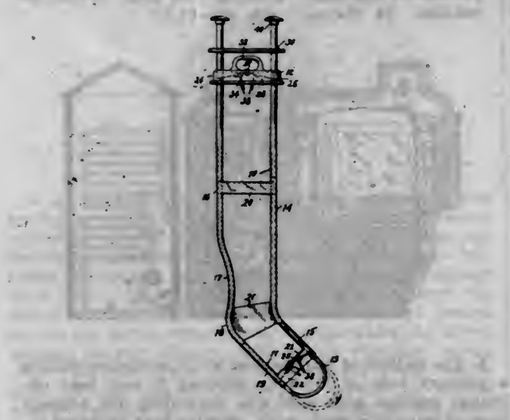
In a fuel pump for lateral application to a crankcase provided with an opening through which extends an operating member; a pair of structural elements which cooperate in the retention of a diaphragm pumping element; a slidable handling element extending upward from said diaphragm element and engageable by a section of said member; and resilient means thereabove tending to hold said member against a cam and to depress said diaphragm,—the upper structural element being provided with means for drainage into said crankcase.

1,893,219. BEARING MOUNTING. JOHN H. BANINGER, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed May 20, 1930. Serial No. 453,924. 9 Claims. (Cl. 82—83.)



1. In an antifriction mounting for lathe centers, a housing, a stud extending into the housing, rolling elements, an inner race ring supported by the stud and an outer race ring supported by the housing, one of said race rings being clamped to its supporting member and the other race ring being slidably mounted with respect to its supporting member, a stop member on the last named supporting member for holding said slidably mounted race ring against movement in one direction, and a spring urging said race ring against the stop member; substantially as described.

1,893,220. STOCKING STRETCHER. JOHN T. BLOSSOM, Shaker Heights, Ohio. Filed Nov. 24, 1930. Serial No. 497,636. 5 Claims. (Cl. 223—19.)

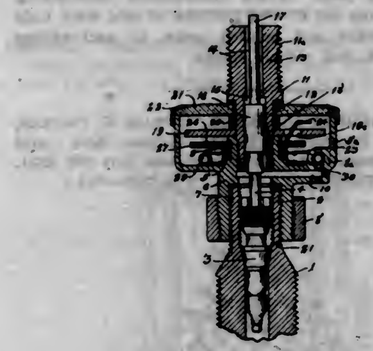


1. A stocking stretcher comprising a frame having a foot portion at one end thereof, a head slidably mounted on said frame adjacent the other end thereof, said head having tapered sides, and a clamping ring adapted to be wedged over said tapered sides.

1,893,221. METHOD FOR THE ELECTROLYTIC DEPOSITION OF METALS. HAROLD SIMMONS BOOTH, GILBERTA G. TORREY, and MENAHEM MERLUB-SOBEL, Cleveland Heights, Ohio. Filed June 26, 1930. Serial No. 464,104. 4 Claims. (Cl. 204—1.)

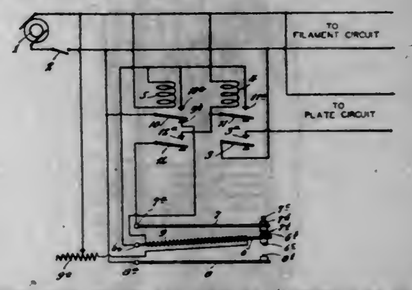
1. The method for electrodeposition of beryllium which consists in electrolyzing a solution of a salt of beryllium in ammonia.

1,893,222. PRESSURE INDICATOR. ADELBERT E. BRONSON, Cleveland, Ohio, assignor to The Dill Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 6, 1928. Serial No. 297,615. 1 Claim. (Cl. 152—11.5.)



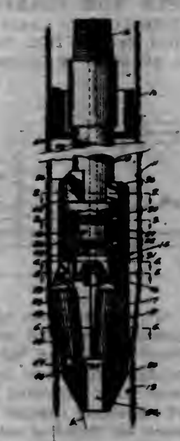
A gauge adapted to be mounted on the end of and concentrically with a valve stem having a valve insides therein, said gauge having a bore forming an air duct therethrough, a sliding member within said air duct, said bore having grooves in the wall thereof forming air passageways and adapted to be covered and uncovered by said sliding member, said sliding member normally closing said passageways and of a length such that a partial inward movement thereof unseats the valve of the valve insides without opening said passageways while further inward movement of said member uncovers said passageways, a pressure responsive device within the gauge having a portion communicating with said bore, a movable indicator within the gauge, and means connecting the pressure responsive device with the indicator to move the same.

1,893,223. ELECTRIC CONTROLLING APPARATUS. ROBERT R. BURKLE, Woodcliff, N. J., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed Dec. 24, 1930. Serial No. 504,618. 2 Claims. (Cl. 175—320.)



1. The combination of a source of current, a circuit to be controlled after a time interval, a thermostatic switch element, a contact engaged by said switch element when heated, a second contact engaged by said switch element when cooled, a device for heating said switch element, and a relay having movable and fixed contacts, said device being connected to one side of said source through a fixed contact and a movable contact of said relay to the other side of the source when said relay is de-energised, said first-named contact of the switch element being connected across said source through an exciting coil of said relay to the other side of the source when said switch element engages its first-named contact, and said second-named switch element contact being connected in the circuit to be controlled through a movable and fixed contact of said relay when said relay is energized and when said switch element engages said second-named contact thereof.

1,893,224. WELL REAMING DEVICE. ANTHONY E. CARLSON, Los Angeles, Calif. Filed Dec. 15, 1930. Serial No. 502,353. 25 Claims. (Cl. 255—74.)



2. A well reaming tool of the character described, including: a body adapted to be secured to a drilling string; cutter members having their lower ends supported in

said body and their upper ends outwardly swingable, for enlarging the wall of the well; and a spiral cam rotatably mounted in said body and operating in response to forward rotation of the drilling string for forcing the upper ends of said cutter members outwardly into operative position.

1,893,225. IDENTIFICATION SYSTEM. RICHARD H. CASSWELL, Portland, Oreg.; Julia H. Birkenbeuel administratrix of said Richard H. Casswell, deceased. Filed Feb. 16, 1931. Serial No. 516,067. 2 Claims. (Cl. 40—2.2.)

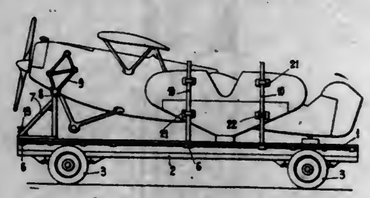


1. In an automobile identification system, the combination of a card holder arranged to be secured to the instrument board of an automobile; a card adapted to be held by said holder; a seal embossed photograph of the licensee of said car on the face of said card; and identifying information printed on said card together with a seal joining the ends of a wire passing through said card holder, said card and a portion of the car; and a transparent covering over said card.

1,893,226. WATER SOLUBLE DI-IODO-HYDROXY-MERCURY FLUORESCEIN. HOWARD M. CHILES, Champaign, Ill., assignor to Pyro-Pack Products Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 18, 1930. Serial No. 476,241. 5 Claims. (Cl. 260—13.)

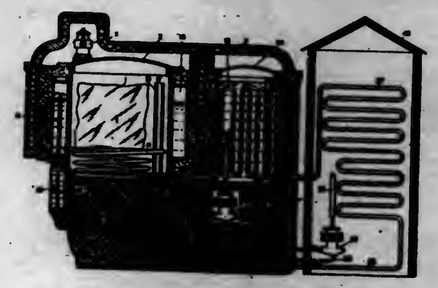
1. The herein described compound which corresponds to the chemical formula $C_{20}H_8R_2O_6HgI_2$ where R represents one of the group consisting of sodium, potassium and ammonium, substantially as set forth.

1,893,227. VEHICLE FOR CARRYING AIRCRAFT PARTS AND OTHER LOADS. CARLO COHEN-VENEZIAN, Turin, Italy. Filed Mar. 12, 1931, Serial No. 522,086, and in Italy Mar. 18, 1930. 6 Claims. (Cl. 280—29.)



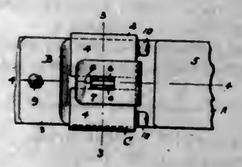
1. A vehicle for carrying members as aeroplane parts and the like comprising a wheeled structure, rows of engaging means transverse to and extending from side to side of said structure, said rows being spaced from and parallel with each other, fastening members adapted to be selectively and removably engaged with any of said engaging means, means for clamping said fastening members in said engaging means, load grasping means adjustable on each of said fastening members, and means for forcing said grasping means against said load.

1,893,228. METHOD AND APPARATUS FOR REFRIGERATING. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Apr. 16, 1931. Serial No. 530,545. 14 Claims. (Cl. 62—91.5.)



1. The method of refrigerating which comprises chilling a primary body of brine by bringing it into heat exchange relation with solid CO_2 circulating the primary body of brine in a cyclic path, effecting heat exchange between the primary body of brine and a secondary body of brine relatively remote from the solid CO_2, and circulating the secondary body of brine in a cyclic path through a relatively remote region to be refrigerated.

1,893,229. VEHICLE SPRING CLIP. GEORGE W. CRABTREE, Cleveland Heights, Ohio. Filed Mar. 5, 1931. Serial No. 520,281. 12 Claims. (Cl. 267—53.)



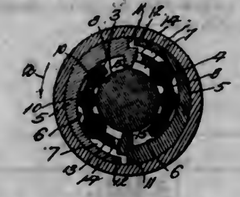
1. A box clip for laminated vehicle springs, having a divided main body, and a cambered spring plate adapted to be interposed between said body and vehicle spring, said body and plate having co-operating interlocking means for locking the divided portions of said main body separably together and holding same in anti-rattling connection with said vehicle spring.

1,893,230. WASHING MACHINE. HOWARD E. CROCKER, Malden, and WINFRED W. HARRIS, Melrose, Mass.; said Harris assignor to said Crocker. Filed July 20, 1931. Serial No. 551,832. 11 Claims. (Cl. 259—144.)



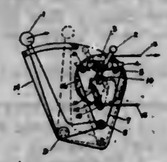
1. In a washing machine for use with a set-tub, a plurality of suction cups, a vertically reciprocated member supporting said cups, a sleeve in which said member is slidable but relatively non-rotatable, means including a crank disc effective to reciprocate said member, and means including a crank driven by said crank disc to move said sleeve angularly.

1,893,231. OVER RUNNING CLUTCH. LINEY B. FLOYD, Phoenix, Ariz. Filed Nov. 16, 1931. Serial No. 575,872. 3 Claims. (Cl. 192—45.)



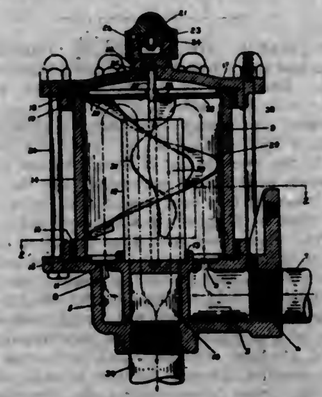
1. An over-running clutch comprising a drive member having a cylindrical chamber therein, a driven member extending axially through said chamber, arcuate concentrically arranged clutch shoes in said chamber in frictional engagement with the drive member, said arcuate shoes being shaped whereby in combination with the driven member tapered arcuate chambers are formed around the driven member and through which the driven member directly extends, said arcuate chambers having their wide and narrow ends adjacent each other, bearing cages in said tapered chambers, a plurality of bearing members carried by said cages and engaging the shoes and driven member at spaced points and springs carried by one of the ends of the cages and cooperating with said cages and forcing the same towards the narrow ends of the tapered chambers.

1,893,232. BOMB RACK AND CONTROL. ARTHUR SHERMAN HALSEY, Washington, D. C. Filed Aug. 7, 1925. Serial No. 48,762. 5 Claims. (Cl. 244—1.)



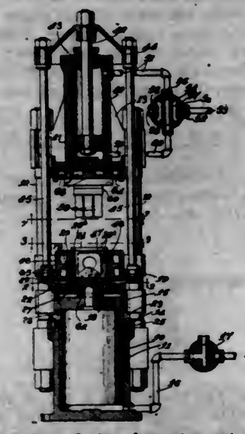
5. In a mechanism of the character described, a bomb rack, a bomb arming linkage, means for setting the linkage whereby the bombs are released in either a safe or armed condition, and means for releasing the bombs in either of said conditions by movement of said means in a single direction.

1,893,233. LIQUID FLOW INDICATOR. NATHANIEL D. HULL, La Fayette, Ind. Filed Feb. 16, 1931. Serial No. 516,003. 14 Claims. (Cl. 116—117.)



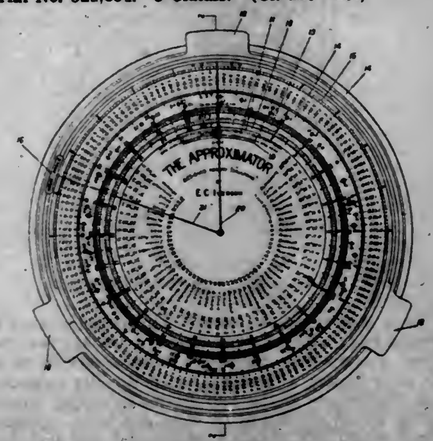
1. A liquid flow indicator comprising a casing, a transparent cylindrical side wall, a chamber within the chamber formed by said transparent side wall, means for indicating the flow of liquid into the larger chamber and means for indicating the flow of liquid out of the inner chamber.

1,893,234. PRESS FOR PLASTIC MATERIAL. JOHN L. HUNTER, Waukegan, Ill., assignor to Ahlbell Battery Container Corporation, Waukegan, Ill., a Corporation of Illinois. Filed Apr. 26, 1930. Serial No. 447,590. 16 Claims. (Cl. 18—19.)



15. In a machine of the character set forth, the combination of receptacle-forming mold and core members, the side walls of said mold member being movable toward and away from each other and fulcrumed to rock and said mold member and core member being relatively movable, means for holding said side walls against outward movement in the molding operation, a member extending outwardly beyond said side walls and relative to which said mold member is movable and operative in the movement of said mold member relative thereto to force said side walls outwardly, said side walls beyond their fulcrums being slotted, T-bars in the slots in said side walls, and springs associated with said bars and engaging said last-named member for drawing said bars in a direction to rock said side walls to closed position.

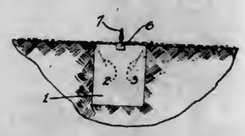
1,893,235. NAVIGATIONAL INSTRUMENT. ERLING C. IVERSON, Port Arthur, Tex. Filed Mar. 11, 1931. Serial No. 521,854. 5 Claims. (Cl. 235—83.)



4. A navigation instrument consisting of; a central disk, said disk having on its circumference a graduated

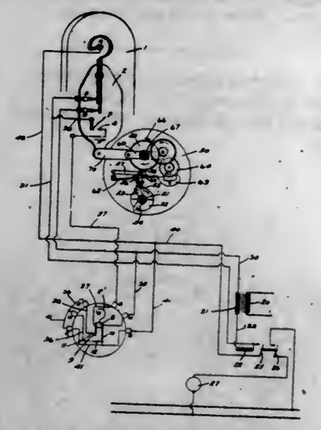
scale of 24 hours and subdivisions thereof for indicating standard zone time, a ring rotatably mounted and encircling said disk and having on its circumference a graduated scale of 24 hours and subdivisions thereof for indicating the equation of time, a second ring rotatably mounted and encircling said first ring and having on its inner circumference a scale graduated in degrees, from zero to 180 degrees in opposite directions for indicating longitude east and west of a standard meridian and having thereon on a second scale on a greater circumference a scale of 24 hours and subdivisions thereof, for indicating local apparent time, the zeros of said scales on said second ring being on the same radius, and an indicator rotatably mounted on the center of said instrument and extending beyond the outer scale, for setting on the Greenwich civil time of an observation and indicating the corresponding local apparent time.

1,893,236. ANIMAL TRAP. KAJETAN C. JAKOUBEK, Phillips, Wis. Filed Oct. 27, 1930. Serial No. 491,546. 4 Claims. (Cl. 43—70.)



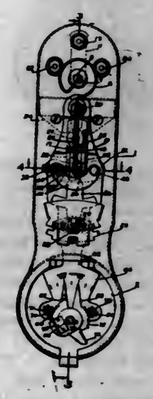
1. An animal trap comprising a box, a pair of sections hingedly connected therewith, supporting means carried by the box, props arranged to be positioned upon said supporting means, means normally positioned within the box for holding the sections in a common plane, and a release stick for holding said props in their normal positions, said release stick being moved when touched by an animal for freeing the sections.

1,893,237. HEAT REGULATING DEVICE. GEORGE D. KINGSLAND, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Mar. 23, 1931. Serial No. 524,598. 17 Claims. (Cl. 236—9.)



1. In a heating system, means for producing heat including a relay adapted when closed to initiate heat production, a thermostat responsive to temperatures in the space to be heated, a thermostat more directly responsive to the temperature of the heat producing means, circuits adapting either thermostat to close the relay, including a circuit which has therein a switch and said last mentioned thermostat, and clock-controlled means for automatically closing and opening said switch.

1,893,238. CONTROL DEVICE. GEORGE D. KINGSLAND, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed July 24, 1931. Serial No. 552,900. 12 Claims. (Cl. 200—139.)



1. A device of the class described, comprising, in combination, a thermostatic element, switching means operated thereby, movable adjusting means associated with the thermostatic element and switching means for varying the temperature at which the latter is operated by the former, a second switching means, and a mechanical connection between the second switching means and adjusting means for moving the second switching means to a control position as a result of slight movement of the adjusting means and causing that control position to be maintained on continued movement of the adjusting means.

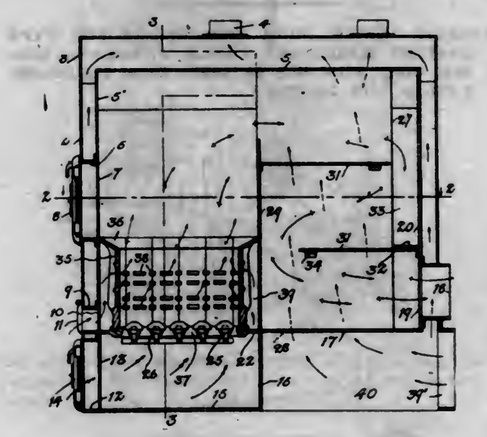
1,893,239. COLORATION OF TEXTILE MATERIAL. ALBERT MELLOR and DAVID TELFER MCLELLAN, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Jan. 29, 1931, Serial No. 512,212, and in Great Britain Apr. 2, 1930. 6 Claims. (Cl. 8—5.)

1. Process for the production of black colorations on mixed materials containing derivatives of cellulose and cellulosic fibres, comprising causing the cellulose derivatives to absorb a compound selected from the group consisting of para-aminodiphenylamine and its derivatives, mechanically impregnating the mixed material with a substance selected from the group consisting of aniline, its homologues, and its compounds, and subjecting the material to the action of an oxidising agent.

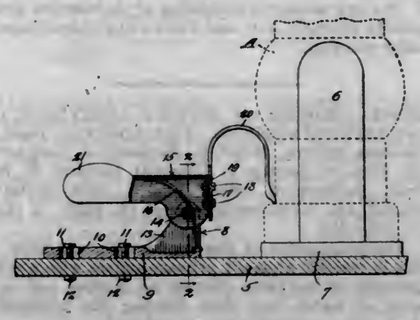
1,893,240. WARM AIR FURNACE. HAROLD JOSEPH HILLIER and RONALD GRUNDY HILLIER, Toronto, Ontario, Canada. Filed Feb. 14, 1930. Serial No. 428,376. 2 Claims. (Cl. 126—108.)

1. A warm air furnace comprising a sheet-metal casing having a fuel opening in the front side thereof and openings in the rear thereof to permit in one case the escape of waste products of combustion, and the other case to admit fresh air into said casing, and embracing a plurality of sheet-metal members which are welded to make sealed joints where they abut, thus providing for positive diffusion of heat throughout the structure and the avoidance of setting up heat centres; a central vertical transverse wall within said casing forming the back wall of the combustion chamber, said wall being composed of the end walls of a plurality of spaced substantially vertical sheet-metal air-flues communicating with said fresh air inlet and opening through the top of said casing, and substantially vertical sheet-metal baffle plates located between said flues and the side walls of said casing and terminating at their upper ends a suitable distance below

the top of said casing, the said elements where they abut one another, and abut the side walls of said casing having their joints sealed by welding, the said flues being spaced apart from the rear wall of said casing to form a passageway in connection with passageways around said flues and in communication with the opening for the escape of waste products of combustion, and an ash pit located beneath said combustion chamber.

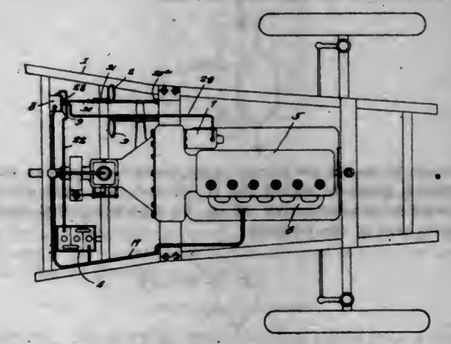


1,893,241. NOZZLE SUPPORT. FERN MONG, Greenville, Ohio. Filed Apr. 1, 1931. Serial No. 526,968. 2 Claims. (Cl. 248—29.)



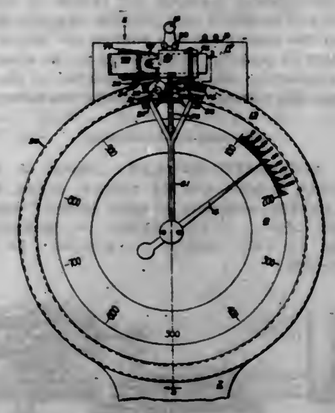
1. A device for securing a nozzle to a supporting member, comprising in combination a supporting pin on which the nozzle is mounted, a nozzle clamp comprising a base, means for adjustably mounting the base on the supporting member, a pivoted member on the base and normally lying in parallel spaced relation with the supporting member, an upwardly and downwardly curved yieldable arm adapted to agenge the nozzle and clamp the nozzle against movement on the pin and supporting member, and means for adjustably securing the arm to the pivoted member.

1,893,242. AUTOMATIC STARTER SWITCH. ARTHUR MCCLELLEN PETERS, North Baltimore, Ohio, assignor of one-half to Jacob Kulp Smith, North Baltimore, Ohio. Filed Feb. 16, 1931. Serial No. 516,266. 1 Claim. (Cl. 200—82.)



In a device of the class described, a support, a first switch carried by the support, a cylinder carried by the support, a piston operating in the cylinder, suction means connected to the cylinder for moving the piston, means for connecting the piston to the first switch mechanically, a second switch, means under the control of an operator for actuating the second switch, and a securing element connecting the second switch to the support, the securing element forming a contact terminal for the first switch and establishing a circuit through both switches when they are closed.

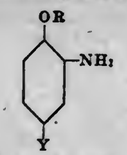
1,893,243. WEIGHING APPARATUS. WILLIAM H. REES, Berkeley, Calif. Filed Sept. 26, 1927. Serial No. 222,042. 22 Claims. (Cl. 284—1.)



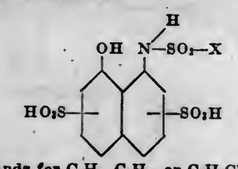
1. In an apparatus having an element movable in accordance with variable factors related to the operation of the apparatus, a movable recording mechanism, an arm mounted for movement therewith, and electrical means for operating said recording mechanism when said arm registers with the element.

1,893,244. MANUFACTURE OF MONOAZO-DYESTUFFS. BERNHARD RICHARD, Basel, Switzerland, assignor to the Firm J. R. Geigy S. A., Basel, Switzerland. Filed Oct. 8, 1929, Serial No. 397,159, and in France Oct. 15, 1928. 10 Claims. (Cl. 260—92.)

1. A process for the manufacture of monoazo-dyestuffs, consisting in coupling a diazo compound of an ortho-aminophenol-ether of the following formula:

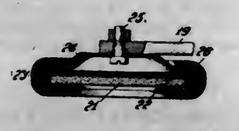


wherein R stands for phenyl, tolyl, benzyl or halogen substitution products and Y for H, Cl and CH_3, with an N-benzene-sulpho-derivative of a 1-amino-8-naphthol-disulphonic acid of the formula:



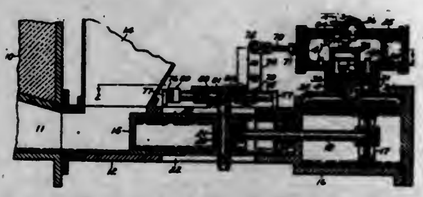
wherein X stands for C_6H_5, C_7H_7, or C_6H_4Cl.

1,893,245. MIRROR STRUCTURE FOR TRUCKS AND THE LIKE. OLIVER C. RITZ WOLLER, Chicago, Ill. Filed Jan. 15, 1930. Serial No. 420,826. 8 Claims. (Cl. 45—97.)



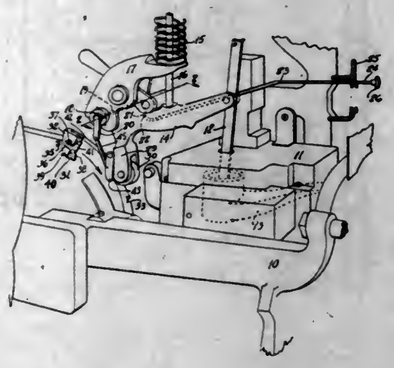
1. In a device of the type described, the combination of a mirror, a supporting member, a sheath comprising a back wall portion across the back of the mirror and a ring portion surrounding the edges of the mirror, said ring portion being of yieldable material and carried by said back wall portion and stretched into gripping engagement about the edges of the mirror thereby holding the mirror firmly but removably in position with respect to the sheath, and means for connecting said back wall portion of the sheath to said supporting member for supporting the mirror therefrom.

1,893,246. AUTOMATIC STOKER. ROBERT M. ROBERTSON, Toronto, Ontario, and MATTHEW C. ALLIN, Weston, Ontario, Canada, assignors to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 12, 1932. Serial No. 604,750. 14 Claims. (Cl. 198—226.)



1. An automatic stoker comprising a reciprocable fuel feeding ram actuated by fluid pressure, a main valve actuated by fluid pressure and arranged to control the movements of the ram, a pilot valve to control the movements of the main valve, connections whereby the pilot valve is reversed automatically at each stroke of the ram, and means to restrict the flow of fluid serving to move the main valve at the end of the fuel feeding stroke of the ram, said restricting means being so arranged as to have no effect upon the movement of the main valve in the opposite direction.

1,893,247. QUICK DROP ATTACHMENT FOR TYPE CASTING MACHINES. THOMAS W. ROBISON, Hillsdale, Oreg. Filed Mar. 24, 1931. Serial No. 524,839. 5 Claims. (Cl. 22—70.)



2. A quick drop mechanism for type casing machines comprising the combination of a pump cam having a yieldable dip with means for latching said dip into a retracted position, and means for releasing said latch by the rotation of said cam.

1,893,248. MANUFACTURE OF MERCURI-MONONITRO-PARA-CRESOL AND ITS SALTS. FRANK V. SANDER, New Brunswick, N. J., assignor to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed Feb. 20, 1930. Serial No. 430,124. 8 Claims. (Cl. 167—38.)

7. The new germicide consisting of the reaction product of soluble mercuric salts and 3-nitro-4-hydroxytoluene and a buffer solution.

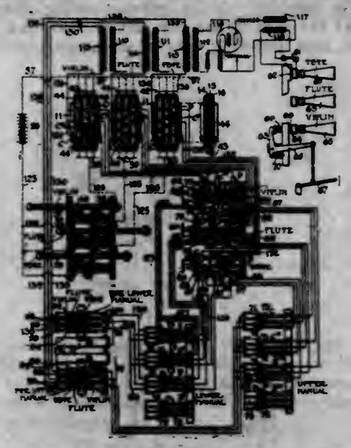
1,893,249. PROCESS OF MAKING ACETYLENE CONDENSATION PRODUCTS. PAUL SCHETELIG, Basel, and THEODOR SUTTER, Monthey, Switzerland, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed June 4, 1928, Serial No. 282,886, and in Switzerland June 16, 1927. 2 Claims. Cl. 260—38.)

1. The preparation of new condensation products, consisting in treating aromatic primary amines with acetylene in presence of mercuric chloride as catalyst and in the absence of water, and then treating the condensation products thus obtained with an aldehyde.

1,893,250. METHOD OF AND MEANS FOR PRODUCING COMPOUND TONES OF PREDETERMINED MUSICAL QUALITY. MELVIN L. SEVERY, Los Angeles, Calif., assignor to The Vocalsevro Company, Los Angeles, Calif., a Corporation of Delaware. Filed Dec. 31, 1928. Serial No. 329,647. 21 Claims. (Cl. 84—1.)

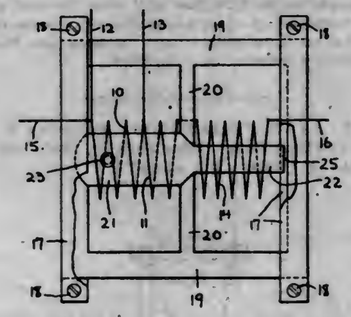
17. In a musical instrument capable of producing a plurality of tone-qualities, a multiplicity of differently speeded but relatively timed electrical pulsation-producing units each comprising a magnet and a timbre-form

movable in proximity thereto, each of said timbre-forms adapted when so moved in relation to its magnet, to generate electrical pulsations composed of a plurality of par-



tial components; means for grading said pulsations for purposes of musical expression; and means for converting said pulsations into sonorous vibrations.

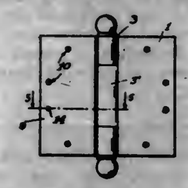
1,893,251. VOLTAGE COMPENSATOR. JOSEPH G. SOLA, Chicago, Ill., assignor to Sola Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 7, 1930. Serial No. 473,692. 6 Claims. (Cl. 171—119.)



1. In a voltage compensator, the combination of a core, primary and secondary coils mounted on said core in transformer relationship and arranged so that the voltage normally impressed on the secondary has a constant ratio to the voltage in the primary, a portion of said core means being of such reduced size as compared with the remaining portions that upon the passage of the normal current of normal voltage through the primary coil said reduced portion of the core shall have a close approach to saturation, auxiliary core means providing a shunt return path about said core portion of reduced size for carrying a portion of the flux threading said primary and secondary coils, and auxiliary coil means mounted on said auxiliary core and connected in series with said secondary coil in opposition thereto adapted by the action thereon of the magnetic flux through said auxiliary core to cut down the voltage through the connected secondary and auxiliary coils to a point well below the voltage normally impressed on said secondary coil.

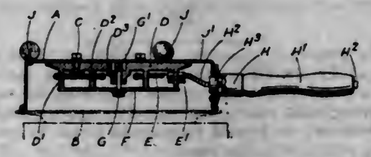
1,893,252. HINGE. REUBEN A. STABLER, Endicott, N. Y. Filed June 16, 1931. Serial No. 544,835. 1 Claim. (Cl. 16—131.)

A hinge of the class described comprising a pair of leaves, a barrel formed on one leaf, the inner edge of the other leaf having an opening therein extending from a point below the center of the leaf through the upper end thereof, said opening being formed with an inner part of circular cross sectional shape and an outer part of the form of a slot, a barrel having a tongue formed with a rounded out-



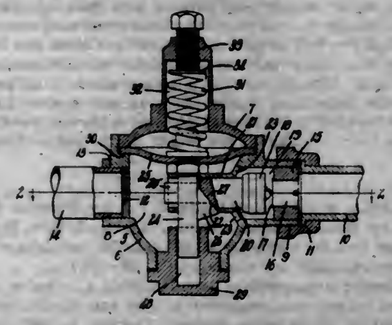
er edge fitting in the circular part of the opening and a narrow shank fitting in the slot part of the opening and a screw passing through a threaded hole in the shank of the tongue and rotatably supported in the said other leaf for adjusting the tongue in the slot of said other leaf and a pin passing through the barrels.

1,893,253. ELECTRIC HEATING OR COOKING APPARATUS FOR FOOD. IRENE THEODORA STOKES, Ripley, and ALEXANDER GEORGE IONIDES, Dunstable, England. Filed Jan. 27, 1931, Serial No. 511,600, and in Great Britain Jan. 2, 1931. 10 Claims. (219—19.)



1. Electric heating apparatus for food including, in combination, a metal cover adapted to be placed over the food to be heated, an electric heating element within the cover comprising a disc of heat-resisting electric-insulating material, inner and outer flanges formed integral with and extending from one face of said disc, an exposed resistance heating wire extending backwards and forwards across the space between and supported by the flanges, and means for connecting the resistance heating wire to a source of current supply.

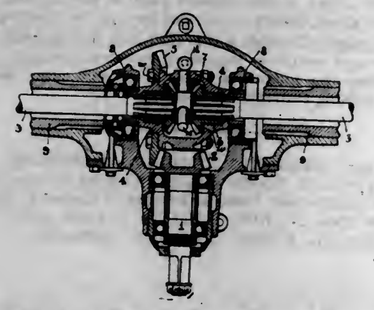
1,893,254. PRESSURE REDUCING VALVE. BERNARD J. SWEENEY, Malden, Mass. Filed July 28, 1931. Serial No. 553,497. 1 Claim. (Cl. 50—23.)



A pressure reducing valve having, in combination, a casing provided with a chamber therein having a discharge passage leading therefrom, a sleeve detachably mounted in said casing having a valve seat formed thereon and provided with an inlet passage extending therethrough

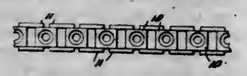
communicating with said chamber, a bifurcated valve member adapted to engage said valve seat and provided with a bevelled surface thereon, a diaphragm clamped within the casing, a valve operating member mounted upon said diaphragm and projecting between the furcations of said valve member and embodying therein a wedge adapted to engage the bevelled surface of the valve member and force the latter against the valve seat, a spring normally acting upon the diaphragm to permit the valve member to remain in its open position, and means to vary the tension of said spring.

1,893,255. AUTOMOTIVE VEHICLE DRIVE. JAMES J. TRACY, Shaker Heights, Ohio. Filed Nov. 12, 1927. Serial No. 232,800. 10 Claims. (Cl. 74—99.)



1. In differential gearing, the combination of opposite axles, a gear axially secured to the adjacent end of each axle, a differential cage, means supported by said cage for driving said axle gears, said axle gears being free to center themselves in said means, and means for rotatively driving said differential cage.

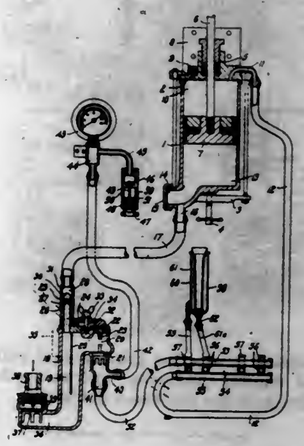
1,893,256. ORNAMENTAL CHAIN. HARRY WACHENHEIMER, Providence, R. I. Filed June 11, 1931. Serial No. 543,661. 4 Claims. (Cl. 59—80.)



1. A flexible ornamental chain comprising a plurality of block links and a connecting link between two block links, said connecting link comprising two side portions and a connecting bottom portion spaced from the ends of said side portions, said side portions having two spaced pairs of aligned apertures, each of said block links having two spaced pairs of laterally extending pivot pins on opposite sides thereof, one pair of said pins of one block link mounted in one pair of apertures in said connecting link, and one pair of said pins on another block link mounted in the other pair of apertures in said connecting link, each adjacent end of adjacent block links overlapping the connecting link to such an extent that the distance between the adjacent ends of adjacent block links is less than one-half of the length of the connecting link.

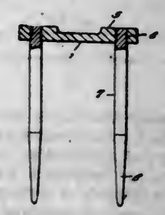
1,893,257. MILKING MACHINE. JOHN WILFRED LLEWELLYN WARREN, Mount Albert, Auckland, New Zealand. Filed Oct. 30, 1929, Serial No. 403,559, and in Australia Nov. 15, 1928. 1 Claim. (Cl. 31—73.)

In combination with a pump having a cylinder and a piston, a teat cup connected to one end of the cylinder and having an inflation element therein, a milk collecting chamber having a suction duct 22 connected to the other end of the pump cylinder and provided with a check valve constructed and arranged to permit passage of air through the suction duct in either direction and to prevent passage of milk therethrough to the pump, said chamber being further provided at the lower side with an intake duct connected for suction to the inflation element of the teat cup and provided with a check valve, said chamber being also provided with a baffle extending downwardly therein at the base of the first named duct, and with an extension pipe provided with a discharge nipple and a



check valve, the pump serving during the movement of its piston toward the end of the cylinder to which the teat cup is connected to draw the milk from the teat cup into the milk collecting chamber and during the reverse stroke of the piston to force milk under pressure out from said milk collecting chamber to atmosphere.

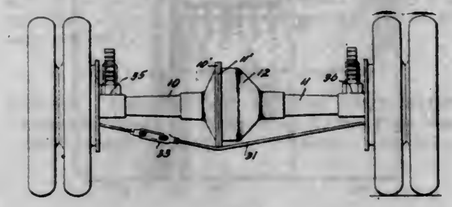
1,893,258. LAWN PERFORATOR. FRANKLIN F. WASHBURN, Portland, Oreg. Filed July 28, 1932. Serial No. 625,414. 1 Claim. (Cl. 47—57.)



A tool of the class described comprising a head made in the form of a plate having a centrally arranged socket forming member formed on its upper face for receiving a handle, spaced lugs formed on the upper face of the plate, said plate having threaded holes therein each of which passes through a lug and spikes having their upper ends threaded in said holes.

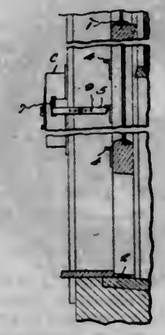
1,893,259. REAR AXLE CONSTRUCTION FOR MOTOR VEHICLES. JAMES A. WATSON, Jr., Silver Spring, Md. Filed Dec. 1, 1931. Serial No. 578,360. 5 Claims. (Cl. 180—88.)

1. In a vehicle rear axle construction, in combination, a rear axle housing having its mid-portion enlarged so as to accommodate a differential gearing and provided with annular flanges adjacent its ends, wheels rotatably mounted on the ends of said axle housing beyond said flanges respectively, each such wheel carrying an inwardly extending brake drum, brakes and brake carriers within the drums respectively, and means including a plurality of bolts for securing each brake carrier to the adjacent housing



flange, one bolt of each set extending through the associated flange, and a tension rod connecting the inner ends of said two last mentioned bolts and passing beneath and contacting with the bottom of said axle housing enlargement, for the purpose set forth.

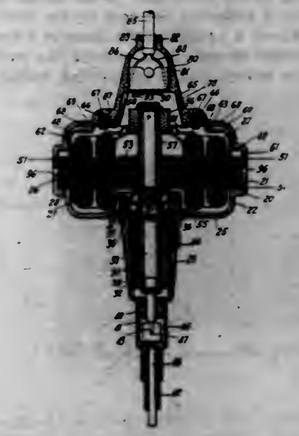
1,893,260. AUTOMATIC WINDOW CLOSER. BERNARD H. WEAVER, Hudson, N. Y. Filed Feb. 27, 1932. Serial No. 595,565. 1 Claim. (Cl. 268—122.)



In combination with a window and its sash, weights on the sash for normally holding it in closed position, a vertical row of brackets on one side of the sash, a lever pivoted to a side wall of the window frame and having one end extending under one of the brackets to hold the sash in raised position, said lever having a longitudinal row of holes therein, any one of which is adapted to receive the pivot, a lever pivoted to the front face of the frame and having one end extending over the opposite end of the first lever, and a detent extending under the opposite end of the second lever.

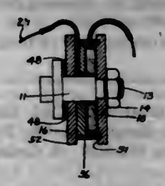
1,893,261. MOTOR FOR DRIVING FLEXIBLE SHAFTS. VINCENT G. APPLE, Dayton, Ohio; Herbert F. Apple, Edward M. Apple, and Gourley Darroch, executors of said Vincent G. Apple, deceased. Filed Sept. 19, 1929. Serial No. 393,710. 7 Claims. (Cl. 172—86.)

1. In a dynamo electric machine, a field magnet, a winding on said magnet, field terminals carried by said magnet, the ends of said winding being connected to said terminals, an end enclosing head for the end of said field magnet and terminals, field coil contacts carried within said head, and line wires extending through said head and being electrically connected to said contacts, the ends of said contacts extending under the edges of said



terminals and constituting the sole means for holding said head on said field magnet and for making electrical connection between said winding and said line wires.

1,893,262. REENFORCED ELECTRICAL COIL. VINCENT G. APPLE, Dayton, Ohio; Herbert F. Apple, Edward M. Apple, and Gourley Darroch, executors of said Vincent G. Apple, deceased. Filed Nov. 20, 1930. Serial No. 496,847. 6 Claims. (Cl. 175—21.)

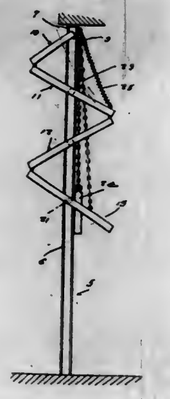


1. An electrical coil comprising a single continuous mass of impervious cementitious insulation, reenforcing washers of non-metallic fabric imbedded in and secured to said coil by said mass at the ends, a coil of insulatedly spaced apart turns of conductive wire imbedded in the same mass between said reenforcing washers, and sleeving of non-metallic fabric, also imbedded in and secured by said mass, surrounding the turns of wire comprising the entire first layer and the turns of wire comprising the entire last layer of said coil, ends of said wire surrounded by ends of said sleeving extending from said mass.

1,893,263. FOLDING DOOR. LUDWIG J. BACKES, Lyons, Ill. Filed May 24, 1929. Serial No. 365,774. 1 Claim. (Cl. 84—268.)

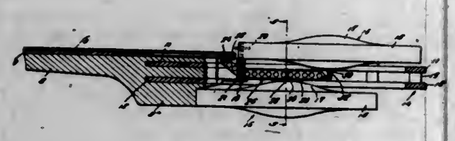
A folding door structure, comprising, a frame for disposition within a door opening or the like having open channel side members, a door comprising a plurality of hingedly connected horizontal sections vertically movable in the frame, friction reducing connections centrally projecting from the side edges of each section and slidably confined within the channel side members, the lower edge of the lowermost section being adapted to swing inwardly as the door is opened, and operating means

for the door adapted to operate and maintain the door in open and closed positions, said operating means comprising on either side of the structure, a chain secured at its upper end to a stationary support, and secured at its lower end to the lower part of the inside of the lowermost section, a pulley on the door frame, over which said chain is trained, a handle in the form of a counterweight slidably carried on the chain between the stationary support and the pulley, and a contracting spring secured at



one end to an upper part of the frame and at the other end to the lower part of the inside of an intermediate door section, for assisting in the folding of said intermediate door section and those thereabove when the door has been partially opened so as to partly fold the last mentioned section by drawing downwardly upon the counterweight handle, said door being adapted to be completely opened by drawing downwardly upon the counterweight handle.

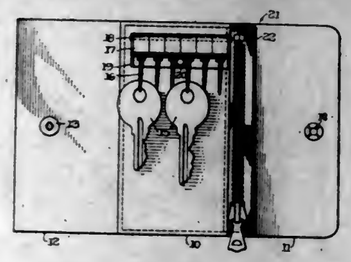
1,893,264. STRINGED MUSICAL INSTRUMENT. EDWARD F. BAKER, Shepherdstown, Pa. Filed June 11, 1932. Serial No. 616,708. 6 Claims. (Cl. 84—268.)



1. A stringed musical instrument comprising a body including upper and lower vibratory sound boxes disposed in spaced parallelism, a neck attached to the body and having a fretted fingerboard, string anchoring means carried by said body, a bridge, and means for adjustably connecting said bridge in vibratory relationship with said sound boxes.

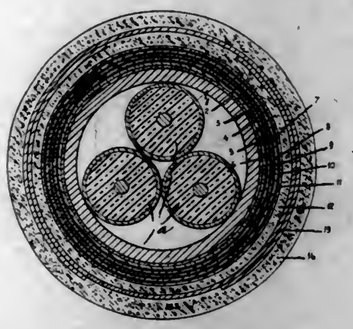
1,893,265. COMBINATION KEY AND COIN CONTAINER. LOUIS C. BALDWIN, Chicago, Ill. Filed Oct. 26, 1931. Serial No. 571,149. 2 Claims. (Cl. 150—40.)

1. An article of manufacture, comprising a key container having a back and a flap adapted to fold over said back, means for mounting keys in said container, a sheet secured to said back by three edges to form a pocket, leaving the free edge adjacent the flap, a zipper fastener secured to the free edge of the sheet and to the adjacent part of the key container, and means for opening and



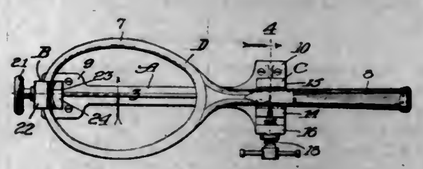
closing said flexible fastener whereby in its open position the flap may hold coins exposed to view and in its closed position the pocket may serve as a coin case.

1,893,266. ELECTRIC CABLE. MARIO BARBERIS and UGO BAGGI, Turin, Italy, assignors, by mesne assignments, to S. I. R. T. I. (Società Italiana Reti Telefoniche Interurbane), Milan, Italy, a Joint-Stock Company of Italy. Filed Mar. 2, 1931, Serial No. 519,570, and in Italy Nov. 21, 1930. 5 Claims. (Cl. 178—266.)



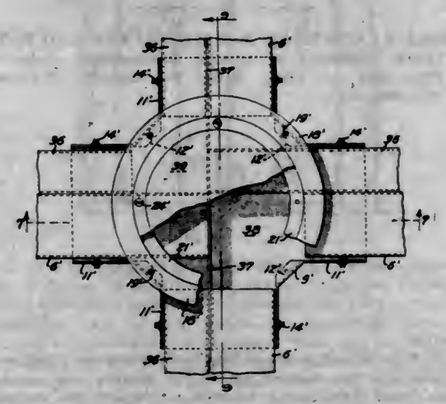
1. In an electric cable in combination with a lead sheath protecting the cable, a layer of neutral bituminous material surrounding the lead sheath, an insulating rubber band wound about said layer, a water-tight paper tape wound on the insulating band and a bitumen layer on the paper tape.

1,893,267. RACKET STRINGING VISE. WILLIAM A. BICKEL, Oak Park, Ill., assignor of one-third to Harold W. Roberts and two-thirds to Earl W. Thompson. Filed Oct. 14, 1931. Serial No. 568,826. 4 Claims. (Cl. 81—8.)



1. A racket stringing vise comprising in combination a handle-gripping member and head-gripping member; said handle-gripping member consisting of a base, a rigid jaw and an abutment extending from said base and a floating jaw controlled by a screw adapted to self-center the racket handle, said head-gripping member consisting of a rigid jaw provided with angularly related faces adapted to support the racket head on its lower side and engage it on its inner side, and a movable jaw disposed on a set screw and having surfaces adapted to engage the sides of the racket head opposite to those engaged by said rigid jaw; and means to keep the movable jaw in alignment with said rigid jaw.

1,893,268. UNDERFLOOR WIRING DUCT SYSTEM. CREED H. BOUCHER, Burlingame, Calif. Filed Dec. 9, 1929. Serial No. 412,731. 4 Claims. (Cl. 247—8.)



1. An underfloor wiring system comprising a plurality of parallel flat-topped ducts, a junction box comprising an open-topped body having trough-shaped nipples for receiving the parallel ends of the ducts, and baffles in said body having ends extending between adjacent ducts to retain said baffles in position.

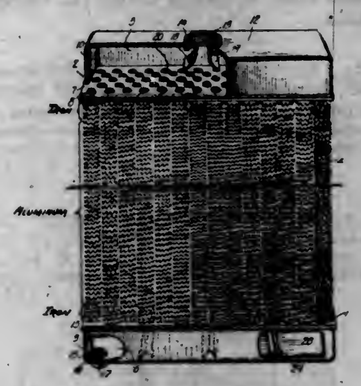
1,893,269. CIGAR AND CIGARETTE HOLDER. CLARENCE H. BURNETT, Crothersville, Ind. Filed Jan. 31, 1930. Serial No. 424,940. 2 Claims. (Cl. 131—51.)



2. As a new article of manufacture, a tobacco user's appliance comprising in combination, a split ring provided adjacent its ends with pairs of oppositely extending lateral ears for supporting the ring on a support substantially perpendicularly, and clamping jaws carried by the ring and disposed diametrically opposite to the split in the ring.

1,893,270. RADIATOR. WILLIAM J. CALDWELL, Kansas City, Mo., assignor to The National Air Control Co. Inc., Kansas City, Mo., a Corporation of Delaware. Filed June 17, 1929. Serial No. 371,500. 7 Claims. (Cl. 257—129.)

1. A radiator comprising an inlet header, an outlet header, tubes having opposite ends welded in said headers, and fins mounted on said tubes including a fin formed of relatively high conductive material spaced from the inlet header and a fin formed of material of relatively low conductivity to heat, mounted on the tube adjacent said inlet



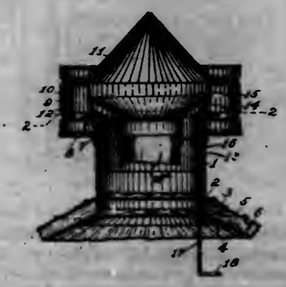
header, the fin of low conductivity to heat having a melting point unaffected by the heat of welding the tube to the headers.

1,893,271. ADJUSTABLE BRACELET STRUCTURE. EDWIN G. CARLSON, East Providence, R. I., assignor to Albert E. R. Speidel, Providence, R. I., doing business as Speidel Brothers. Filed Mar. 4, 1932. Serial No. 596,757. 20 Claims. (Cl. 24—71.)



1. In a bracelet structure, a take-up means comprising plates pivotally connected to each other and provided with interfitting portions, an extension member slidably supported by one of said plates, yieldable means engaging said extension member for moving it into extended position relative to said plate, and means for regulating the movement of said extension member relative to said plate.

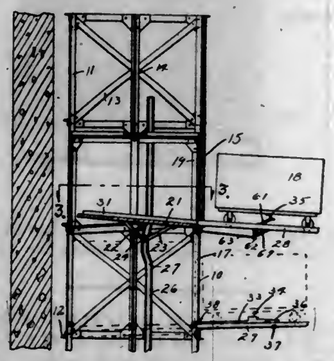
1,893,272. COMBINATION VENTILATOR AND SMOKE PIPE. JOSEPH B. CLAY, Cedar Falls, Iowa, assignor to Clay Equipment Corporation, Cedar Falls, Iowa. Filed May 26, 1930. Serial No. 455,638. 4 Claims. (Cl. 98—42.)



1. A device of the character described, comprising in combination, a hollow open-ended ventilator member in communication with a building, a wider superposed up-

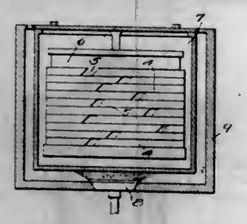
wardly flared deflector with depending sleeve spaced from said member concentrically, and rotatable means including a flared element whose flared part is parallel with the flared part of said deflector, for vertical adjustments of said sleeve either varying or closing the interspace between them.

1,893,273. TRUCK LIFT. CHARLES E. CONSTABLE, Cincinnati, Ohio, assignor to The National Marking Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 7, 1929. Serial No. 398,064. 6 Claims. (Cl. 214—126.)



1. In combination, a shaft, a cage mounted to move upwardly and downwardly in said shaft, a truck track in said cage, exterior upper and lower tracks for supporting outgoing trucks, an exterior intermediate track for supporting incoming trucks, said tracks being mounted one above the other, trucks for said tracks, means actuated by the movement of said cage for automatically delivering trucks from said cage track to one of said outgoing tracks as the cage track is moved to position in alinement with the outgoing track, and means actuated by return movement of said cake for automatically delivering trucks from said incoming tracks to the cage track as the cage track is brought into alinement with said incoming track.

1,893,274. METHOD OF TREATING PISTON RINGS. MARTIN B. COVERT, Holland, Mich., assignor to Renu Parts Corporation, Holland, Mich., a Corporation of Michigan. Filed Nov. 26, 1930. Serial No. 498,282. 3 Claims. (Cl. 29—156.6.)



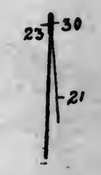
3. The process of treating cast iron piston rings and the like consisting in subjecting the rings to a temperature of approximately 1100° Fahrenheit to remove hard spots and other irregularities and prevent warping and distortion in use, and in then allowing the rings to cool to permit finishing of said rings to size as soon as they are cooled.

1,893,275. AEROPLANE CONSTRUCTION. WILLIAM F. DEUTSCHER, New York, N. Y. Filed Mar. 25, 1931. Serial No. 525,177. 10 Claims. (Cl. 244—12.)



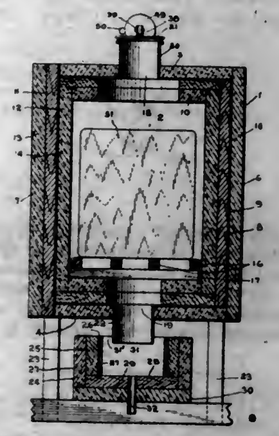
1. In aeroplane construction, a wing having a plurality of air tight pockets upon its upper and lower surfaces, and an elastic partition wall separating said pockets.

1,893,276. COMBINED MESSAGE BLANK AND ENVELOPE. RODRIGO F. DURÁN, Barranquilla, Colombia. Filed Mar. 16, 1931. Serial No. 522,997. 2 Claims. (Cl. 229—92.1.)



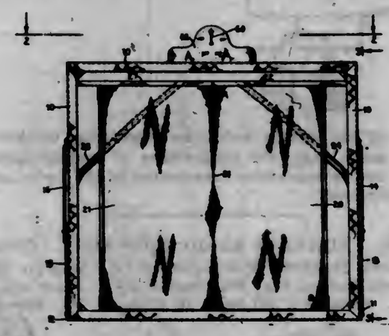
1. A combined message blank and envelope comprising a sheet having defined spaces for address and message data, said blank being foldable to enclose the message, means for sealing the folded blank along the free edges comprising a sheet in the form of a receipt glued over the free edges.

1,893,277. APPARATUS FOR CONTROLLING TEMPERATURE. LEWIS W. EGGLESTON, Detroit, Mich., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 19, 1930. Serial No. 437,084. 13 Claims. (Cl. 62—91.5.)



1. A device of the character described, comprising an insulated chamber having upper and lower flow openings for the circulation of convection gas currents through said chamber and adapted to contain a body of refrigerant medium, means to close said upper flow opening, and means at said lower flow opening operable to maintain about said lower flow opening an atmosphere of refrigerated gas whereby to prevent flow of gas into and from said chamber through said lower opening.

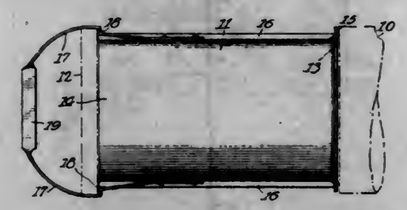
1,893,278. GOLF PRACTICING DEVICE. EINAR B. ERIKSEN, Long Beach, N. Y. Filed May 3, 1930. Serial No. 449,383. 8 Claims. (Cl. 265—22.)



2. In a golf practicing device, the combination comprising, a frame, a plurality of panels supported thereby, means associated with said frame and panels for pivotally supporting each of said panels for movement about a vertical axis and about a horizontal axis, means yieldingly restraining the movement of each panel in one direction about its vertical axis, and indicating means controlled by the panels for giving comparative indications of the effect of impacts against the panels.

3. In a golf practicing device, the combination comprising, a frame, brackets carried thereby, panels supported by said brackets, each of said brackets being mounted for pivotal movement about a vertical axis, and pivotal means for supporting each of said panels from its associated bracket for pivotal movement about a horizontal axis.

1,893,279. CAR JOURNAL PROTECTOR. MARTIN E. FITZ GERALD, Danville, Ill., assignor to Universal Draft Gear Attachment Company, a Corporation of Illinois. Filed Oct. 5, 1931. Serial No. 566,946. 3 Claims. (Cl. 308—38.)



1. In a car journal protector, a sheet metal plate conforming in length with the journal and curved transversely and spring arms projecting from the end of the plate and adapted to frictionally engage the end flange of the axle.

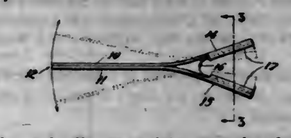
1,893,280. FOLDABLE BOOTJACK. ROYS P. GERPEN, Newark, N. J. Filed July 6, 1932. Serial No. 621,003. 4 Claims. (Cl. 182—4.)

1. A foldable bootjack comprising a front member, a rear member, a pivot pin passing through the adjacent ends of said members and pivotally connecting the same, a spring supported by said pivot and bearing at opposite ends



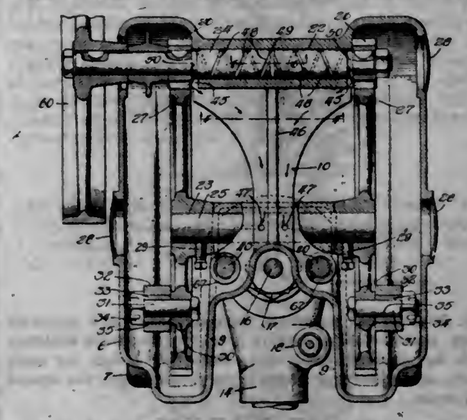
against said members to normally maintain them in extended position for use, and a leg member carried by the pivot pin.

1,893,281. HAIR CURL CLIP. JACOB GOODMAN, Brooklyn, N. Y., assignor to Emeth Financial Corporation, New York, N. Y., a Corporation of New York. Filed July 23, 1932. Serial No. 624,201. 3 Claims. (Cl. 132—31.)



1. A hair curl clip comprising a pair of jaw members having divergent portions at one end thereof, a substantially U-shaped spring disposed between said divergent portions and having each of its legs engaged with the inner faces of the respective said divergent portions, and extensions on each of the sides of each of the divergent portions and which are directed inwardly to engage the inner side faces of the legs of the spring to tightly clamp same against the inner faces of the divergent portions, said extensions extending throughout substantially the entire length of each of the legs of the spring whereby to enclose each of the side edges of the legs of the spring, and the bight of the spring being disposed adjacent to the points of convergence of the said divergent portions and forming a fulcrum point for the jaw members.

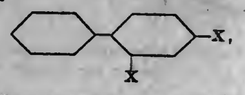
1,893,282. POWER HEAD. CHRISTOPHER GROEN, Dubuque, Iowa, assignor to A. Y. McDonald Mfg. Co., Dubuque, Iowa, a Corporation of Iowa. Filed Dec. 14, 1931. Serial No. 580,929. 17 Claims. (Cl. 74—14.)



13. A power head having a casing adapted to contain a quantity of lubricant, a gear mechanism in the casing movable through the lubricant and operatively connected to a reciprocating device, a gear shaft rotatably mounted in a bearing in said casing, means to supply lubricant from said casing to said gear shaft and bearing, and said shaft and bearing cooperating to expel lubricant therefrom under pressure to the reciprocating device.

1,893,283. CELLULOSE DERIVATIVE COMPOSITION. EMMET F. HITCH and MILES A. DAHLEN, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 28, 1931. Serial No. 577,864. 14 Claims. (Cl. 106—37.)

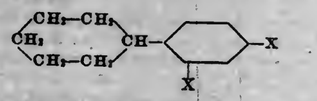
4. A composition comprising a cellulose derivative and, as a plasticizer therefor, an alkoxy derivative of diphenyl of the formula



in which one X represents a hydrogen atom and the other X an alkoxy group containing 1–7 carbon atoms, inclusive.

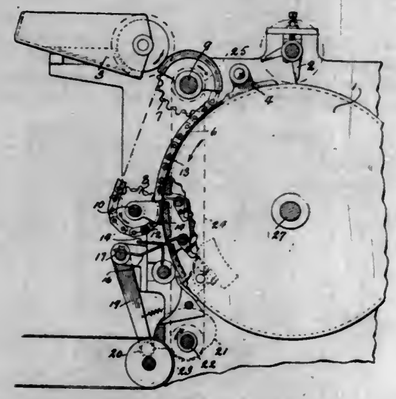
1,893,284. CELLULOSE DERIVATIVE COMPOSITION. EMMET F. HITCH and MILES A. DAHLEN, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 28, 1931. Serial No. 577,865. 14 Claims. (Cl. 106—37.)

4. A composition comprising a cellulose derivative and, as a plasticizer therefor, an alkyl ether of cyclohexyl-phenol of the formula



in which one X represents a hydrogen atom and the other X represents an alkoxy group containing from 1–10 carbon atoms, inclusive.

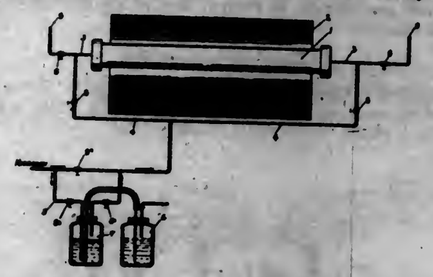
1,893,285. BAG MAKING MACHINE. PAUL HUNZIKER, Hamilton Beach, N. Y., assignor to Potdevin Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 6, 1930. Serial No. 426,285. 7 Claims. (Cl. 93—21.)



1. In paper bag machines, the combination of a rotatable drum, bottom folding chains overlying the drum adjacent each end thereof, fixed chain deflecting means for each chain, said deflecting means lying intermediate the chains and drum.

1,893,286. METHOD OF CARBONIZING METALS AND ALLOYS. CHARLES V. IREDELL, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed May 25, 1928. Serial No. 280,432. 13 Claims. (Cl. 250—27.5.)

1. The method of producing adherent carbon coatings on metal surfaces which comprises heating a metal first in an atmosphere of a gas reducing with respect to the oxygen compounds of the metal thereafter introducing into said gas atmosphere without intervening exposure of the metal to other gases a proportion of the vapor of a hydro-



carbon of the paraffin series, and continuing the heating of the metal body, the temperature of heating approximately the decomposition temperature of the hydrocarbon vapor employed.

1,893,287. AIRPLANE RADIO EQUIPMENT. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to C. Francis Jenkins, Inc., Washington, D. C. Filed Aug. 28, 1929. Serial No. 387,894. 10 Claims. (Cl. 250—33.)



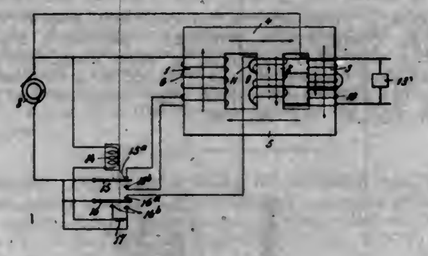
1. The combination with an airplane having a metallic structure including an engine and consequent engine system radiation, by reason of which metallic structure an interference free zone is created, of a radio set mounted on the airplane in the rear of the engine, and an antenna connected to the radio set and projecting from the airplane through the tail thereof to fly in substantially a horizontal plane and axially of the plane behind the airplane and its engine within the interference free zone whereby there is prevented interference from engine ignition radiation without shielding the magnetos, spark plugs and high tension leads.

1,893,288. HEDDLE. JOHN JACOB KAUFMANN, Elkins Park, Pa., assignor to Steel Heddle Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 22, 1931. Serial No. 552,402. 9 Claims. (Cl. 139—96.)



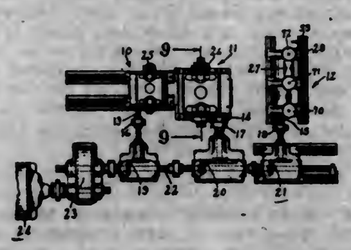
1. A heddle having members at the ends thereof for mounting the heddle on the supporting rods, said members comprising leg portions disposed in separate parallel planes, each of said leg portions having a recess therein open to the side, the recess of one leg portion opening to the side opposite that to which the recess of the other leg portion opens.

1,893,289. ELECTRIC CONTROLLING APPARATUS. HAROUTIUN K. KOUYOUMJIAN, Providence, R. I., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed June 15, 1929. Serial No. 371,186. 12 Claims. (Cl. 171—119.)



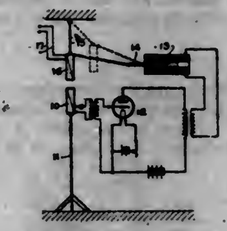
1. The combination with a supply circuit of apparatus for supplying energy to a consumption circuit, said apparatus comprising a core and a main exciting winding thereon connected in circuit with said supply circuit, an auxiliary exciting winding on said core connected in circuit across said supply circuit for affecting the voltage delivered to said consumption circuit, and means responsive to the voltage of the supply circuit for automatically causing said auxiliary winding to be inactive when the supply voltage is within a predetermined limit.

1,893,290. ROLLING MILL. AUSTIN KUHNS, Buffalo, N. Y., assignor to Farrel-Birmingham Company, Inc., Buffalo, N. Y. Filed Oct. 5, 1929. Serial No. 397,532. 7 Claims. (Cl. 80—54.)



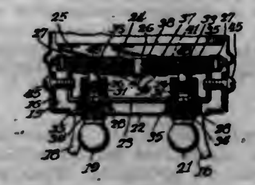
4. In a rolling mill, a stand, a pair of roll shafts in said stand one above the other, rolls on said shafts, pinions on said shafts, a back gear meshing with the upper pinion, a fixed bearing for said back gear in said stand which prevents lateral movement of said gear and holds the same stationary in said stand, said upper pinion being of less diameter than said upper back gear, means whereby said upper pinion is adjustable tangentially with respect to said upper back gear within certain limits while maintaining the driving engagement of said upper back gear with said pinion, and a lower back gear which drives the upper back gear and likewise the lower pinion.

1,893,291. VOLUME CONTROL APPARATUS FOR RECORDING AND BROADCASTING. BERNARD KWARTIN, Brooklyn, N. Y. Filed Jan. 5, 1931. Serial No. 506,522. 10 Claims. (Cl. 179—1.)



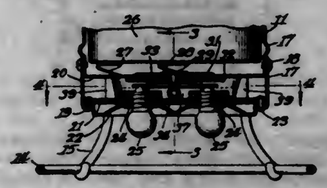
1. In a sound transmitting system, a device for converting sound vibrations into corresponding electrical current variations, and means controlled by the volume of the sound vibrations for positionally adjusting said device with respect to the source of the sound vibrations.

1,893,292. ELECTRIC HAND LANTERN. CARL H. LARSON, Elkhart, Ind., assignor to The Adlake Company, a Corporation of Illinois. Filed Oct. 18, 1930. Serial No. 489,553. 7 Claims. (Cl. 240—10.63.)



1. In a lantern, a casing for a battery, a transverse support at one end of the casing carrying a lamp socket, an insulating disk carried by the support having an annular contact for one terminal of the battery upon its upper face, a second contact thereon, a pivotally mounted disk having a strip of conductive material thereon electrically connected to said second contact adapted to make and break a circuit through the lamp and the other terminal of the battery, a base fitting over a portion of the casing, angle members upon the disk, and diametrically located handles affixed to the angle members extending through circumferential slots cut in the casing.

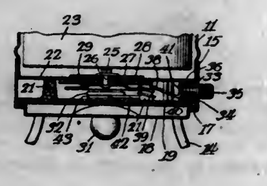
1,893,293. ELECTRIC HAND LANTERN. CARL H. LARSON, Elkhart, Ind., assignor to The Adlake Company, a Corporation of Illinois. Filed Mar. 2, 1931. Serial No. 519,428. 8 Claims. (Cl. 240—10.63.)



1. In an electric hand lantern, a cup-shaped casing of unitary construction adapted to contain a battery, a socket, means for supporting said socket beneath the cas-

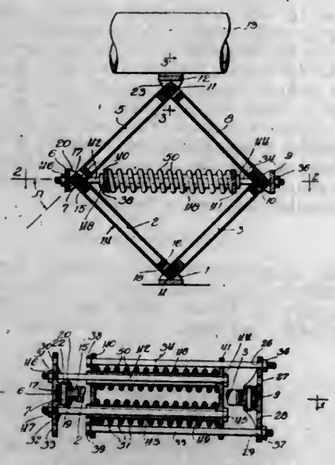
ing bottom and having a lamp therein, one terminal of which is electrically connected to one pole of the battery and the other to the socket, a conductor member to establish a circuit through the lamp electrically connected to the other pole of the battery and having a free end adapted to slide in a limited arc and a portion adapted to contact directly with the socket when the free end is displaced.

1,893,294. ELECTRIC HAND LANTERN. CARL H. LARSON, Elkhart, Ind., assignor to The Adlake Company, a Corporation of Illinois. Filed Mar. 2, 1931. Serial No. 519,429. 7 Claims. (Cl. 240—10.63.)



1. An electric hand lantern comprising a battery casing having a permanently closed end, a skirt having its open end telescoped over the closed end of the casing and maintaining an insulating plate spaced from the casing, a shoe of insulating material mounted to slide against the inner wall of the skirt, a socket carried by the insulating plate, a lamp in the socket having its central contact in electrical communication with one pole of the battery, a spring pressed contact member bearing against the socket and the shoe and contacts on the shoe electrically connected to the opposite pole of the battery.

1,893,295. SPRING SUPPORT. ANDREW R. LE BAILLY, Chicago, Ill., assignor to Sargent & Lundy, Chicago, Ill., a Corporation of Illinois. Filed Mar. 7, 1931. Serial No. 520,772. 6 Claims. (Cl. 248—34.)

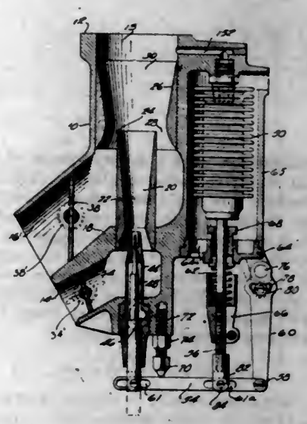


2. A support of the class described, comprising a rhombus shaped link frame, toggle saddles for pivotally securing the joints of said link frame, a spring disposed in the plane of two of said toggle saddles, a pair of plates, one anchored to each of the toggle saddles, and telescoping guide means for said spring comprising a sleeve anchored to one of said plates and slidable with respect to the other.

1,893,296. PREPARATION OF METAL PHOSPHIDES. WILLIAM C. LILLIENDAHL, Montclair, and FRANK H. DRIGGS, Bloomfield, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Nov. 27, 1929. Serial No. 410,245. 6 Claims. (Cl. 23—204.)

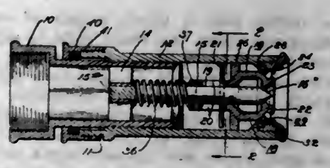
1. The method of preparing rare refractory metal phosphide compounds which comprises heating an admixture of finely divided metal and phosphorus, the latter component of the admixture being in large excess of combining weights, in a sealed container to elevated temperatures approximating the combining temperature of the metal and phosphorus.

1,893,297. FUEL METERING CONTROL FOR INTERNAL COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed July 18, 1928. Serial No. 293,703. 27 Claims. (Cl. 261—69.)



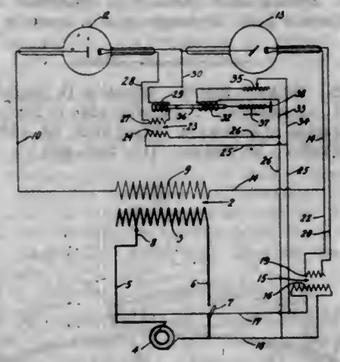
1. In charge mixing apparatus for transportation internal combustion engines, an air conduit, a primary venturi therein, a secondary venturi therein receiving the end of said primary venturi, a fuel nozzle disposed within said primary venturi, said nozzle being subject to the fuel lifting effects due to air flow through the venturi, separate air inlets to said venturis, throttles controlling said air inlets, a lost motion connection between the throttles for opening the air inlet to the primary venturi and the air inlet to the secondary venturi in succession and means for varying the fuel passage area.

1,893,298. HOSE NOZZLE. EMMETT B. MOORE, Evanston, Ill. Filed June 13, 1930. Serial No. 460,808. 7 Claims. (Cl. 299—148.)



1. A nozzle fitting comprising in combination with a coupling having a tubular extension containing an integrally completely circumferentially enclosed and axially extending flow passage, a valve member rigidly carried by said coupling extending axially through said tubular extension and having its terminal constituting a valve; a double-function member, constituting both a valve and a valve seat, mounted slidingly on said rigid valve member for cooperation of its valve seat feature with the valve terminal of said rigid valve member, means automatically stressing the double-function member in the direction for withdrawing the valve seat thereof from said valve terminal and means for limiting said withdrawal movement; the tubular extension being exteriorly threaded over the terminal portion of its length and a tubular nozzle discharge member interiorly dimensioned for encompassing the tubular extension, the double-function member and the rigid valve member, and having at its outer end an interior annular seat for the valve element of the double-function member and interiorly screw-threaded for screwing onto the tubular extension to carry said interior annular seat to seating contact with the valve element of the double-function element when the latter is seated on the terminal valve of the rigid valve member.

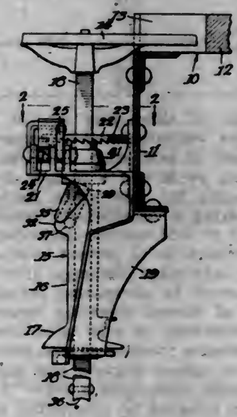
1,893,299. DISCHARGE TUBE STABILIZER SYSTEM. MONTFORD MORRISON, Montclair, N. J., assignor to Westinghouse X-Ray Company, Inc., a Corporation of Delaware. Filed Dec. 31, 1930. Serial No. 505,790. 7 Claims. (Cl. 250—34.)



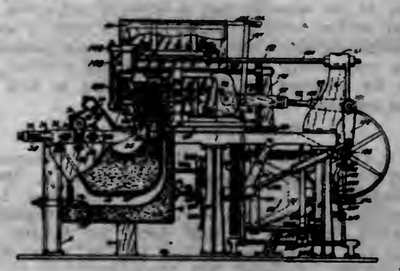
1. In an electron discharge apparatus, an electron discharge tube having main electrodes, one of which is a thermionic cathode, a high-tension transformer for supplying energy to said electrodes, a low-tension transformer for supplying heating current to said cathode, a reactance in series with said low-tension transformer and said cathode, a source of energy subject to current variations common to both of said transformers for energising the same, a reactance varying with current variations in said source and associated with said first mentioned reactance for varying the current supplied to said cathode in accordance with variations in said source.

1,893,300. RAILWAY BRAKE. WILLIAM A. NEWMAN, Montreal, Quebec, Canada, assignor to Universal Draft Gear Attachment Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 22, 1931. Serial No. 531,896. 11 Claims. (Cl. 74—113.)

1. In a railway brake operating mechanism, a brake mast comprising a lower section, an upper section rotatable with said lower section and slidably mounted therein, a holding member normally positioned by gravity in the path of movement of said upper member, and means at opposite sides of said staff for moving said member out of the path of movement of said upper section.

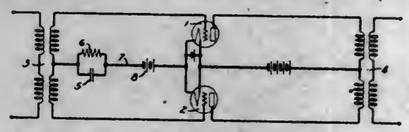


1,893,301. DIE CASTING MACHINE. OSCAR B. NORGREN, Chicago, Ill. Filed Oct. 29, 1930. Serial No. 491,882. 14 Claims. (Cl. 22—69.)



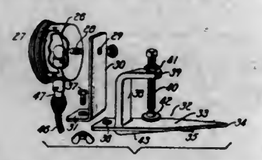
3. In a die casting machine comprising a frame, a furnace supported by said frame, a plurality of relatively movable dies, a gooseneck adapted to travel from said furnace to said dies and back again, knock-out pins associated with one of said dies, core pins associated with said dies, a cam, and means mechanically associated with and operated by said cam for operating said gooseneck, opening and closing said dies, moving said knock-out pins relative to said dies and suitably withdrawing and inserting core pins within said dies during a die casting cycle.

1,893,302. METHOD OF AND MEANS FOR CONTROLLING ELECTRIC WAVE AMPLIFIERS. EUGENE PETERSON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 20, 1928. Serial No. 286,772. 6 Claims. (Cl. 179—171.)



1. An amplifier of alternating current comprising a plurality of space discharge devices connected in push-pull relation, each of said space discharge devices having a cathode, an anode and a control electrode, input and output circuits for said space discharge devices, means for supplying a substantially constant negative biasing potential to said control electrodes, said means being of such voltage as to prevent conduction of grid current through said space discharge devices when said amplifier is actuated by alternating current within an extended range of normal operating intensities, and a grid leak and condenser in said input circuit for supplying a second biasing potential to said control electrodes responsive to grid current whereby said amplifier is prevented from causing appreciable amount of grid current modulation when actuated by alternating current of intensities in a second extended range of intensities beyond said first mentioned range.

1,893,303. SAFETY EXTENSION SIGNAL. SAMUEL C. PHILIPS, Tulsa, Okla. Filed Oct. 6, 1930. Serial No. 486,667. 3 Claims. (Cl. 248—20.)



1. In apparatus of the character described, a supporting bracket having a tapered point at one end and a seat portion at its opposite end, a laterally extending back member on the bracket intermediate its ends, a mounting bracket having a bar portion and a base portion for resting respectively on said back and seat portions, and means for securing the mounting bracket to said supporting bracket.

1,893,304. NEGATIVE GLOW LAMP. HARVEY C. RENTSCHLER, East Orange, and DONALD E. HENRY, Bloomfield, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Original application filed Mar. 20, 1929, Serial No. 348,409. Divided and this application filed May 31, 1930. Serial No. 458,771. 1 Claim. (Cl. 176—122.)



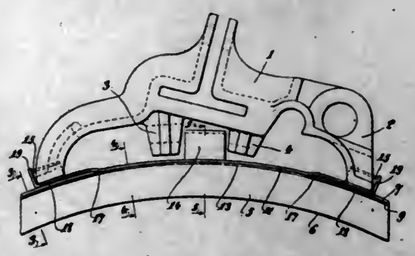
A discharge lamp comprising an enclosing envelope containing neon gas at a pressure of 5 millimeters to about 4 centimeters, a pair of electrodes therein having parallel surfaces spaced apart a distance substantially no greater than the mean free path of an electron in the gas at the pressure employed, one of said electrodes being composed of solid thorium, whereby the discharge will start below the peak voltage of an ordinary commercial 110 volt alternating current line, and the normal arcing voltage of the lamp will be above the peak voltage.

1,893,305. METHOD OF MAKING FAILURE INDICATOR LAMPS. HARVEY CLAYTON RENTSCHLER, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Dec. 13, 1930. Serial No. 502,077. 7 Claims. (Cl. 176—16.)



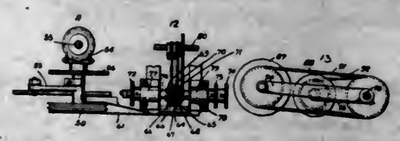
8. The method of making an incandescent electric lamp having a filament convertible into a glow discharge lamp which comprises, introducing into the bulb of the lamp a mixture of neon and argon gas, and flashing within the bulb a quantity of magnesium to cause a deposit of magnesium on portions of adjacent conductive filament supports causing said portions to constitute electrodes and produce a glow discharge upon a break in said filament.

1,893,306. BRAKE SHOE. WILLIAM D. SARGENT, Newark, N. J., assignor to Durafer (Inc.), Dover, Del., a Corporation of Delaware. Filed Sept. 13, 1930. Serial No. 481,686. 18 Claims. (Cl. 188—251.)



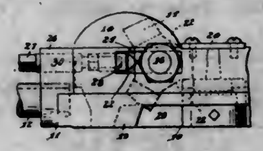
1. As an article of manufacture, a brake shoe formed of centrifugally cast metal, and having a circumferential rib formed on the back thereof and in the central plane of the shoe.

1,893,307. PACKAGE SEALING MACHINE. THOMAS W. SATTERTHWAITE, New York, N. Y., assignor to Hamilton Fish Benjamin and James D. Pell, New York, N. Y., and Richard Ely, Short Hills, N. J. Filed Apr. 10, 1931. Serial No. 529,219. 10 Claims. (Cl. 93—2.)



1. The method of closing a package which comprises pleating the closure portions, gathering the pleats, applying a clamp to hold the pleats, and applying pressure to hold the same in position.

1,893,308. STOCK AND DIE. WALTER H. STRAW, Devon, Conn. Filed Mar. 14, 1931. Serial No. 522,681. 4 Claims. (Cl. 10—115.)



1. A thread cutting stock and die comprising a stock having an opening therethrough and oppositely disposed handles, spaced apart parallel side walls extending from one face of the stock on opposite sides of said opening and having aligned slots therein, pivotal members adjustably mounted in said slots, a pair of multiple point dies rotatably mounted upon the pivotal members between the said sides, a shoe seated against the side of each of said dies, the said stock including a slotted bearing on each end, a screw threadably engaging each of said shoes and rotatably and slidably mounted in the slotted bearings to adjust the dies toward each other, the said screws carrying a projected pin adapted to slide through the slot and to engage the end of the bearing for quick adjustment of the dies.

1,893,309. METHOD OF MAKING MOLDS. EDWARD TOMAN, Chicago, Ill., assignor to E. Toman & Company, Chicago, Ill., a Corporation of Illinois. Filed July 6, 1931. Serial No. 549,097. 3 Claims. (Cl. 22—193.)

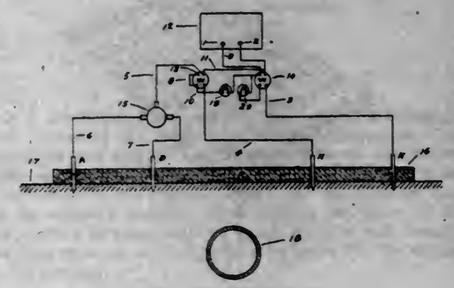
1. The method of forming a mold, which comprises, adding a plaster forming powder to a container having a pattern formed on one wall thereof, the amount of the powder being sufficient to thoroughly cover the pattern, adding a predetermined amount of water, closing the container, vigorously agitating the container and contents to cause the contents to impact against the sides and top of the container to thereby cause the powder to thoroughly absorb the water and allowing the plastic mixture to set.

1,893,310. WOOD PRESERVER COMPOSITION. FREDERICK W. VON SANDEN, Seattle, Wash. Filed Feb. 17, 1930. Serial No. 429,201. 1 Claim. (Cl. 134—786.)

A wood preserver composition resulting from the mixture of from three-quarters to one gallon of water, from one to three pounds of lime, from one and one-half to two pounds of gum, from three-quarters to one quart of unctuous substance selected from the groups consisting of mineral and vegetable oils, from one and one-half to two ounces of creolin, from three to four ounces of paraffin oil, from one and one-half to two ounces of muriatic acid, and from one-quarter to one-half pounds of poison.

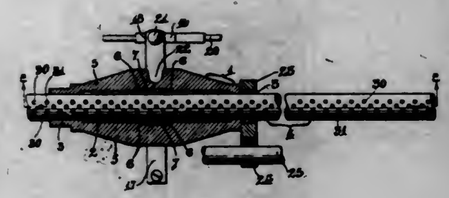
1,893,311. PROCESS OF LOCATING BURIED PIPE LINES, ETC. THOMAS S. WEST, Nowata, Okla. Filed July 28, 1932. Serial No. 625,336. 3 Claims. (Cl. 175—182.)

1. The method of determining the nature and location of buried pipe and similar bodies occurring in the earth which consists of applying electric energy to three separate points or groups of points which are in electrical connection with the earth in such a manner that the electric current flowing from one terminal of the source of electric energy is divided into two branches each one of said branches being electrically connected to one of the aforementioned points or groups of points through a means for determining the difference in electrical resistance of the said branches and in which the current flows from the said points or group of points to which said branches electrically connect with the earth through the earth to the third point or group of points and from there to the opposite terminal of the source of electric power in such a manner that said point or group of points may be moved relative to the other two said points or groups of points thereby causing a shifting of the lines of current



flow through the earth and a variation in resistance of the two said branches which is determined by the position of said third point or group of points, the nature of the subsoil, and the occurrence of bodies having a different electrical resistivity from that of associated earth, and the determination from said data of the location and nature of said bodies.

1,893,312. FRICTIONAL CONNECTING MECHANISM FOR STRAIGHT KNITTING MACHINES. LE ROY WHITE, Shillington, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Jan. 5, 1932. Serial No. 584,786. 15 Claims. (Cl. 66—126.)

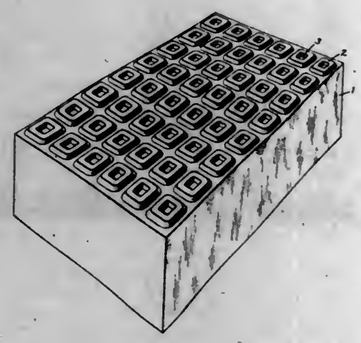


1. The combination of a reciprocable rod and a motion transmitting device connected thereto in slidable frictional gripping engagement therewith, and means for maintaining substantially uniform gripping and sliding coaction between said rod and said device, comprising a body of lubricant contained in the surface of one and contacting the adjacent surface of the other.

1,893,313. REFRACTORY. PAUL G. WILLETTE, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed July 21, 1928. Serial No. 294,601. 7 Claims. (Cl. 106—10.)

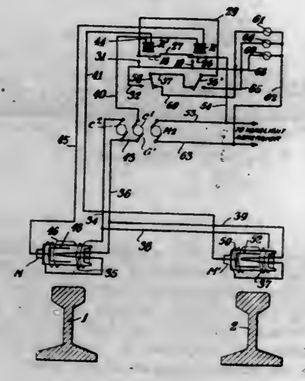
1. A batch mixture for a ceramic bauxitic refractory comprising unmelted bauxitic mineral having the characteristics of Georgia white bauxite, non-plastic kaolin having the characteristics of Georgia Klondike kaolin, and plastic clay having the characteristics of Georgia G¹ clay, all in a state of impalpable fineness, said mixture having a maturing temperature as low as approximately 2850° F.

1,893,314. MEANS FOR PRODUCING FIRED CERAMIC BLOCKS. PAUL G. WILLETTS, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 20, 1929. Serial No. 393,929. 8 Claims. (Cl. 25—153.)



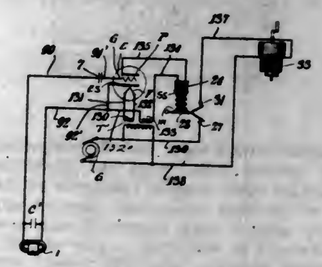
1. Means for supporting a ceramic object during firing, comprising a block of refractory material, and means provided on one side of said block for holding a plurality of piles of granular or powdered refractory material.

1,893,315. TRAIN CONTROL SYSTEM. ARBA G. WILLIAMSON, Carnegie, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Nov. 10, 1926, Serial No. 147,403. Divided and this application filed Nov. 14, 1930. Serial No. 495,722. 21 Claims. (Cl. 246—63.)



1. A train control system including: a conductor extending along the line of way so as to be capable of substantially continuously influencing train-carried equipment, trackway means to create lines of magnetic force about said conductor, a train, a charged circuit on the train, an electron tube, included in said circuit, located within the zone of influence of said lines of magnetic force and directly susceptible and substantially continuously responsive thereto to thereby vary the current flow in said circuit, and a traffic-governing translating device also included in said circuit and controlled by the current flow therein.

1,893,316. TRAIN CONTROL SYSTEM. ARBA G. WILLIAMSON, Carnegie, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Nov. 10, 1926, Serial No. 147,403. Divided and this application filed Nov. 14, 1930. Serial No. 495,723. 7 Claims. (Cl. 246—63.)



1. A train-carried train control system including: a single source of alternating current, an electron discharge device having a plate, filament and grid, a plate circuit and a filament circuit associated with said electron discharge device, means for supplying current to the filament and plate circuits from said source of alternating current, a receiving circuit including the grid of the electron discharge device for controlling the value of the current flowing in the plate circuit, and means whereby the alternating current flowing in the filament circuit will not adversely affect the said receiving circuit.

1,893,317. PROCESS FOR THE ISOLATION OF ERGOSTEROL. ADOLPH ZIMMERLI, New Brunswick, N. J., assignor to Acetol Products, Inc., a Corporation of Delaware. Filed Apr. 28, 1930. Serial No. 448,171. 10 Claims. (Cl. 260—156.)

1. The process of isolating ergosterol from mycelium of aspergillus niger, consisting in extracting the mycelium with an alcoholic alkali, and re-extracting the alcoholic residue with ether.

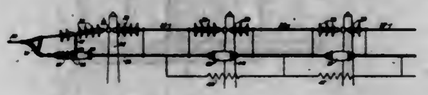
1,893,318. HIGH TENSION INSTALLATION. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Original application filed Oct. 20, 1921, Serial No. 508,933, and in Switzerland Apr. 20, 1922. Divided and this application filed Mar. 26, 1928. Serial No. 264,906. 6 Claims. (Cl. 173—251.)



3. The combination with a conductor of an insulating support for said conductor, a bar of conducting material extending along said conductor adjacent said support and electrically connected with said conductor and terminating at a point short of the end of said conductor and an insulator disposed upon and enclosing the end of said bar.

1,893,319. ELECTRICAL PROTECTIVE APPARATUS. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed June 1, 1928. Serial No. 282,213. 14 Claims. (Cl. 175—30.)

1. A high voltage transmission line, station apparatus, a cable comprising a conductor, insulating covering for said conductor and an outer metal sheath, said conductor being electrically connected between said transmission line and station apparatus, said sheath being divided into sections spaced along said cable and insulated from one another, insulators for separating the various sections of said sheath from ground, said insulators being graded to



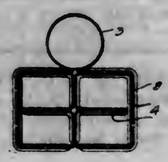
withstand different voltages for the different sections of cable sheath and graded impedances interposed between said sheath sections and ground, the impedance between each section and ground being commensurate with the insulation of that section.

1,893,320. BOBBIN AND BOBBIN REENFORCING MEANS. LUTHER C. BALDWIN, Providence, R. I., assignor to U. S. Bobbin & Shuttle Company, Providence, R. I., a Corporation of Rhode Island. Filed Aug. 5, 1929. Serial No. 383,765. 6 Claims. (Cl. 242—120.)



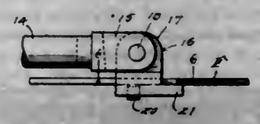
1. A bobbin having a longitudinal bore and an annular groove in its end, and a reenforce ferrule comprising concentric flanges one of which fits within the bore of the bobbin and the other of which is seated in the groove in the end of the bobbin, and means providing interengaging projections extending along the surface of at least one of said flanges substantially axially of the bobbin and between the latter and the last-mentioned flange to prevent relative rotation of the bobbin and ferrule.

1,893,321. COOLING UNIT FOR REFRIGERATING SYSTEMS. MORRIS F. BOOTH, Chicago, Ill., assignor to Mullins Manufacturing Corporation, Salem, Ohio, a Corporation of New York. Filed July 17, 1929. Serial No. 378,843. 14 Claims. (Cl. 21—26.)



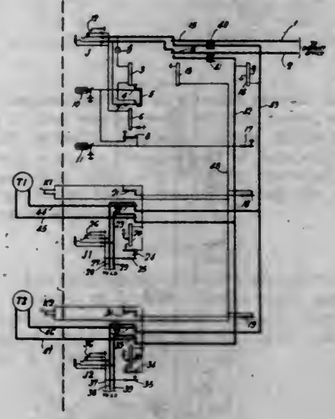
1. A cooling unit of the flooded type comprising a header chamber and a plurality of sharp freezing chambers formed substantially from one sheet of metal, the walls of the header chamber consisting of a single thickness and each wall of the sharp freezing chambers being formed of a double thickness of sheet metal to provide a thin wall of refrigerant on top, bottom, and each side of each sharp freezing chamber.

1,893,322. GIN SAW FILING MACHINE ATTACHMENT. JOHN G. BROWN, Purcell, Okla. Filed Sept. 28, 1930. Serial No. 483,940. 1 Claim. (Cl. 76—82.)



In a saw filing machine, a reciprocal shaft, a bifurcated head carried by the shaft, a file holding member, a shank carried by the member and disposed between the bifurcations of the head, means for securing the shank in adjusted position whereby to dispose the file holding member in adjusted position transverse to the plane of the saw, and an extension carried by the member and engaging one face of a file carried thereby to brace the file secured in the member.

1,893,323. TELEPHONE SYSTEM. THOMAS F. CROCKER, Chicago, Ill., assignor to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 2, 1932. Serial No. 596,303. 9 Claims. (Cl. 179—32.)

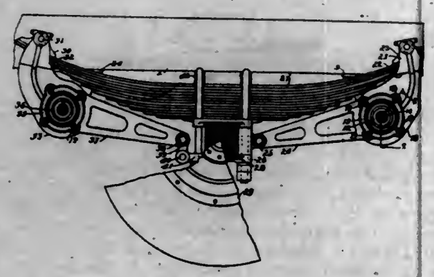


1. In a telephone system, an incoming trunk line terminating in a manual board, a plurality of subscribers' lines terminating in said board, some of said lines being entitled to secret service, means at said manual board for completing connections between said trunk line and said subscribers' lines, and means controlled from a line entitled to said secret service and to which a connection has been established for establishing a talking connection between said line and said trunk line independent of said manual board.

1,893,324. MOTOR VEHICLE CONSTRUCTION. HENRY E. CURTIS, San Jose, Calif., assignor of one-half to John H. Betts, Long Beach, Calif. Filed May 11, 1929. Serial No. 362,208. 15 Claims. (Cl. 267—19.)

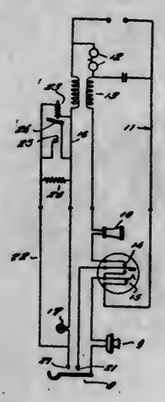
1. In a vehicle, the combination of an axle, supporting means mounted on the vehicle and symmetrically positioned on opposite sides of the axle, a lever pivotally

mounted intermediate its ends on each support for both a longitudinal and lateral rocking movement with respect thereto and having pivotal connection with the axle, a



spring mounted on the axle and extending to points adjacent the supports, and a sliding connection between each end of the spring and the adjacent end of the lever.

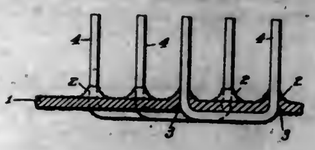
1,893,325. TELEPHONE DIAL ILLUMINATION. REUBEN FOSTER and SIGMUND K. WALDORF, Baltimore, Md.; said Waldorf assignor to said Foster. Filed July 9, 1932. Serial No. 621,716. 4 Claims. (Cl. 179—81.)



1. In combination, a telephone system including a switching device, illuminating means for the switching device, said means being in the system, and controlled incident thereto, an auxiliary circuit shunting the said illuminating means, and a device controlled by the telephone circuit to establish the auxiliary circuit for passing current around the illuminating means when the latter is defective.

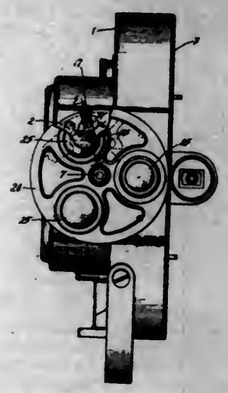
1,893,326. CLOTHING FOR CARDS AND THE LIKE. EDMOND E. FOURNIER, Shrewsbury, and MERTON I. VESTAL, Fall River, Mass. Filed Aug. 4, 1930. Serial No. 472,987. 2 Claims. (Cl. 19—114.)

1. A clothing for cards and the like, comprising a foundation member of thin flexible metal having apertures punched therein, reinforcing metal collars about said apertures and metal points in said collared apertures, said



foundation member, said collars and said points all being coated with a sealing material whereby all parts are bound to each other in unitary assembly.

1,893,327. PHOTOGRAPHIC CAMERA. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 11, 1929. Serial No. 413,160. 10 Claims. (Cl. 88—16.)

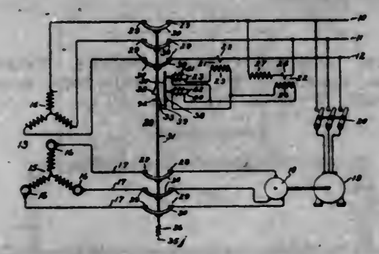


1. In a photographic camera provided with an interior revolving light shutter, the combination of a stud mounted on the camera and projecting interiorly thereof for carrying said shutter for rotation and projecting exteriorly of the camera, and a lens carrier carried for angular movement on the exteriorly projecting portion of said stud.

5. In a photographic camera provided with a manual camera operation control device, the combination of a lens carrier on the camera and movable for selectively positioning lenses, carried thereby, in operative position, and means under the control of said lens carrier and operative upon said control device for preventing operation of the camera and adapted to permit operation of the camera when a lens carried by said carrier is in operative position.

1,893,328. CONTROL OF INDUCTION APPARATUS. JOHN I. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 18, 1929. Serial No. 400,617. 16 Claims. (Cl. 175—294.)

1. In combination with an asynchronous dynamo electric machine having currents flowing in its relatively rotatable primary and secondary windings, means for obtaining a control current whose magnitude is substantially directly proportional to the current flowing in said primary winding, means for obtaining a control current whose magnitude is substantially directly proportional to the current flowing in said secondary winding, both of said control currents having the same frequency, a control device for said machine having two separate electromagnetically operated elements, either of which can effect the operation of the device, and connecting means between the first and second mentioned means and said control de-



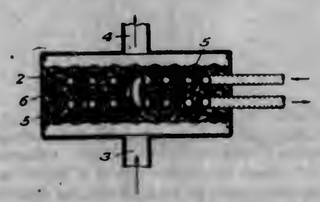
vice for energizing one of said elements with one of said control currents, and for energizing the other of said elements with the other of said control currents.

1,893,329. MOTOR-CAR HEATING AND VENTILATING SYSTEM. LEE P. HYNES, Albany, N. Y., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany N. Y., a Corporation of New York. Filed Nov. 19, 1926. Serial No. 149,509. 7 Claims. (Cl. 237—12.4.)



1. A heating and ventilating system of the character described comprising a vehicle, an internal combustion engine within the vehicle, a boiler having a water space and a fire box, means for delivering exhaust gases from said engine to said fire box, ignition means within said fire box for maintaining combustion of said exhaust gases, a condenser for heating said vehicle, a single conduit connecting the condenser with the upper part of said water space so that vapor will pass to the condenser and condensed fluid will return to the water space through the same conduit, and means for causing air to travel over the condenser from the outside to the interior of the vehicle.

1,893,330. PERMEABLE METAL AND METHOD OF MAKING THE SAME. CHARLES L. JONES, Pittsburgh, Pa. Filed Aug. 7, 1928. Serial No. 297,953. 4 Claims. (Cl. 29—157.3.)



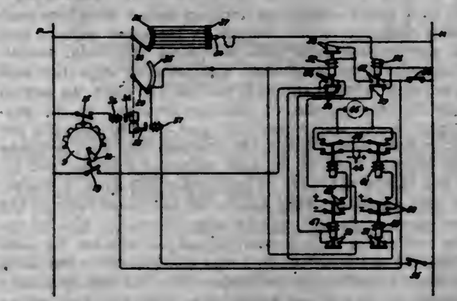
1. The method of making permeable metal which comprises providing a bed of metallic particles in a container, orienting the particles by subjecting them to the action of a magnetic field, introducing molten metal of lower melting point than the melting point of the particles into the container to bond the particles together, and draining off the excess molten metal.

4. A permeable metal comprising metallic particles bonded together, said particles being oriented before bonding by subjecting them to the action of a magnetic field.

1,893,331. PROCESS OF SEPARATING BERYLLIUM COMPOUNDS FROM BERYLLIUM CONTAINING MINERALS OR OTHER SUBSTANCES. WALTHER KANGRO and AGNES LINDNER, Brunswick, Germany. Filed July 23, 1930, Serial No. 470,224, and in Germany July 30, 1929. 13 Claims. (Cl. 23—17.)

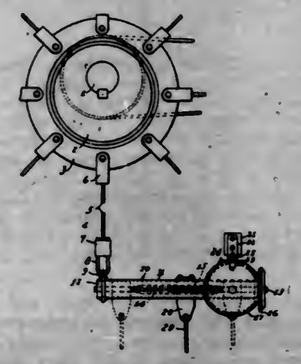
1. The process of separating beryllium compounds from ores, minerals or substances which contain beryllium, which consists in passing a chlorine-like stream of gas over the material containing the beryllium in a reaction chamber, and adjusting the temperature and the pressure in the reaction chamber in such a manner that the substances contained therein tend to attain a mixture in chemical equilibrium, in which besides chlorine there exist mainly volatile beryllium-chlorine compounds, oxygenating gases and the material.

1,893,332. CONTROL SYSTEM. VALENTIN LIND, Berlin-Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 29, 1929, Serial No. 335,760, and in Germany Feb. 15, 1928. 19 Claims. (Cl. 187—29.)



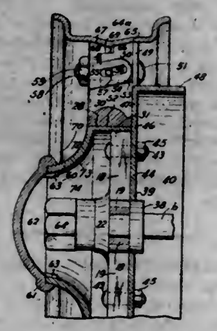
1. The combination with an elevator car and an electric motor for driving said car, of a contact device, means responsive to operation of said contact device for controlling said motor to stop said car at points determined by the number of times said device is operated, and car position responsive means for determining the direction of rotation of said motor.

1,893,333. STROKE-REGULATING DEVICE FOR PULL RODS. JOSEPH R. MAHAN, Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 4, 1932. Serial No. 596,722. 8 Claims. (Cl. 74—14.)



1. In a stroke-regulating device for pull rods, a power connection, a pull rod connection, a lever, devices for attaching one end of each connection to the lever, and means actuated by the movements of the lever for adjusting one of the devices longitudinally of the lever.

1,893,334. METAL WHEEL. PHILIP M. MILLER, Youngstown, Ohio, assignor to Miller Devices Inc., New York, N. Y., a Corporation of New York. Filed Jan. 24, 1930. Serial No. 422,993. 5 Claims. (Cl. 301—6.)



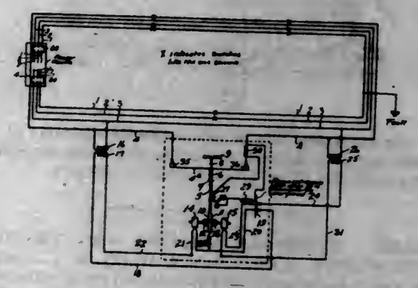
1. In a vehicle wheel, an artillery spider structure comprising radiating spokes merged at the inner ends to provide a circumferential base, a central hub body, radiating spaced columns between and integral with the said circumferential base and said central hub body, an arched deeply formed cup-shaped member arranged in the central part of the spider structure and fixed to the said circumferential base thereof, in combination with a brake drum member fixed to the said radiating columns and inner end of the hub body of the spider structure, a removable cap member having means on the inner face of the outer portion thereof engaged with the inner face of the outer end of the said arched cup-shaped member for completing the enclosure of the outer portion of the hub body and central portion of the spider structure and excluding entrance of extraneous substances thereinto, and means locking the said brakedrum member in its respective position.

1,893,335. PLANT SUPPORT. OTTO A. MULLER, Ambler, Pa. Filed Aug. 4, 1930. Serial No. 472,894. 2 Claims. (Cl. 47—44.)



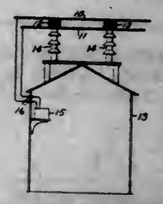
1. A plant support comprising upper and lower substantially straight wire members, the lower portion of the upper member lapping the upper portion of the lower member, the lower end portion of the upper member being bent into the form of an eye surrounding and slidably fitted to the lower member, the upper end portion of the lower member being bent into the form of an eye surrounding and slidably fitted to the upper member, said members having sufficient stiffness to support a growing plant and said members having sufficient flexibility to permit them to be twisted together between said eyes, and to be retained in twisted condition by frictional contact with each other.

1,893,336. CIRCUIT CONTROL MEANS. VERNON W. PALEN, Flushing, N. Y. Filed Jan. 14, 1929. Serial No. 332,443. 7 Claims. (Cl. 175—294.)



1. In a power system of the type described the combination comprising a main circuit breaker, a plurality of circuit wires, sectionalizing switches in said wires at predetermined points and means for maintaining each of said switches closed, said means being interconnected with the power line on each side of each of the sectionalizing switches, said means comprising two electric motors for each switch, one connected on one side of the switch to the power line and the other connected on the other side of the switch to the power line and both mechanically connected to said switch whereby when a short circuit occurs on the line causing the main circuit breaker to open, said motors will be deenergized permitting each switch to open said motors being energized by the sections to which they are connected under normal conditions.

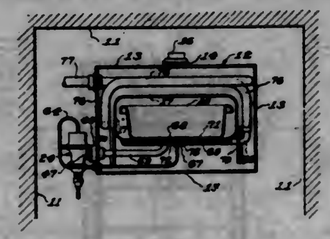
1,893,337. LIGHTNING FIELD INTENSITY RECORDER. FRANKLIN G. PATTERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 28, 1929. Serial No. 417,205. 11 Claims. (Cl. 234—5.5.)



1. Apparatus for investigating the intensity of lightning discharges comprising means for determining changes in the lightning intensity field of the atmosphere at a given location upon the occurrence of a lightning stroke at another location, together with means for determining the approximate distance between such locations.

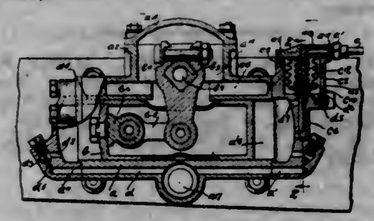
1,893,338. EVAPORATOR FOR REFRIGERATORS. LAWRENCE A. PHILIPP, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 11, 1929. Serial No. 354,820. 8 Claims. (Cl. 62—8.)

1. The combination with a refrigerant compressing mechanism having a low side pressure controller associated therewith of a refrigerant evaporating unit comprising a heat exchange plate for supporting a freezing tray upon the upper surface thereof, and means disposed



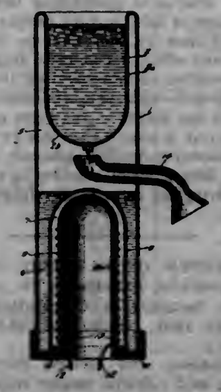
in thermal contact with the lower surface of the aforesaid plate for controlling the operation of the refrigerant evaporating unit.

1,893,339. SHOCK DAMPING DEVICE. FREDERICK HENRY ROYCE, Elmstead, West Wittering, near Chichester, England, assignor to Rolls Royce Limited, Derby, England. Filed May 24, 1930, Serial No. 455,334, and in Great Britain May 29, 1929. 6 Claims. (Cl. 188—88.)



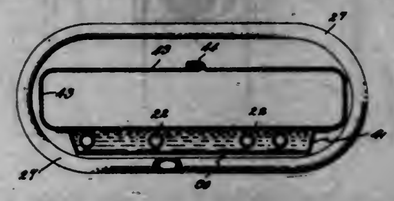
1. A hydraulic shock damper comprising a cylinder, a member reciprocating therein adapted to form therewith a compression chamber, a release for the escape of liquid from the compression chamber, a spring loaded valve controlling such release and a compressible air tight chamber forming an air spring and means for varying the pressure of the air therein.

1,893,340. DISTILLING APPARATUS. PETER SCHLUMBOHM, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed June 12, 1931. Serial No. 543,899. 2 Claims. (Cl. 202—190.)



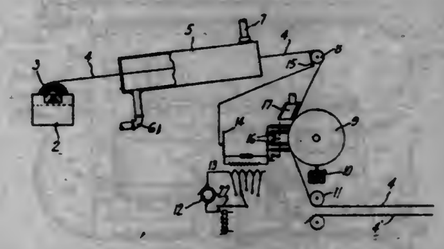
1. A device for quickly distilling small quantities of liquid comprising a glass cylinder having the upper and lower end portions thereof turned inwardly upon themselves in the form of outwardly opening cups closed at their inner ends and extending into the ends of the cylinders in spaced relation to the sides thereof, the bottom cup being adapted to receive an electric heating element and the top cup being adapted to receive a cooling medium, the annular space between the bottom cup and the cylinder being adapted to receive the liquid to be distilled, and a pipe for directing the distilled liquid from the device, said pipe extending through the side of the cylinder and having within the cylinder an upwardly opening end underlying the inner end of the top cup to receive the distilled liquid dropping from the inner end of the top cup.

1,893,341. EVAPORATOR FOR REFRIGERATORS. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 17, 1929. Serial No. 363,727. 6 Claims. (Cl. 62—95.)



1. A refrigerant evaporating unit comprising a metallic freezing tray sleeve, an open top brine tank secured to the bottom of said sleeve, and an evaporating conduit encircling said sleeve and brine tank.

1,893,342. METHOD OF PRODUCING ELECTRICAL CONDENSERS. GODFREY STEERUP, Maywood, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Mar. 29, 1929, Serial No. 350,882. Divided and this application filed June 16, 1930. Serial No. 461,285. 1 Claim. (Cl. 91—68.)

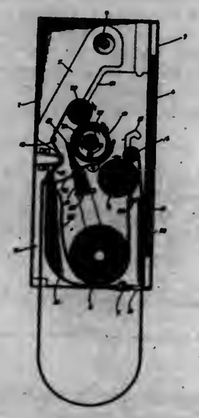


The process of applying an insulating coating to one side only of a strip of metal foil, which consists in arranging the foil in a compact roll so tightly wound that liquid insulating material cannot enter the roll between adjacent layers thereof when the roll is immersed in the said material, in partly immersing the roll in the liquid insulating material, thereby applying a coating to the outside surface of the outer layer of foil, and in drawing the foil off the roll in such a direction that the foil leaves the roll at a point above the level of the insulating material, so that the other surface of the foil does not become coated.

1,893,343. TOWEL CABINET. TRACY BROOKS TYLER, Detroit, Mich., assignor to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Filed Mar. 13, 1930. Serial No. 435,490. 18 Claims. (Cl. 312—38.)

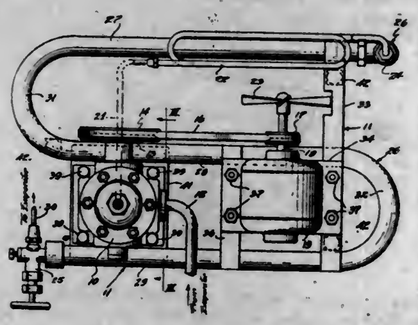
14. The combination with means operated by the towel user for delivering a length of clean towel and simul-

taneously winding up a length of soiled towel, of mechanism automatically wound up by a pull on the clean toweling and which automatically becomes operative when



the clean towel supply is exhausted and delivery by the user ceases for effecting a supplemental operation of said winding means to wind the loose end of the towel.

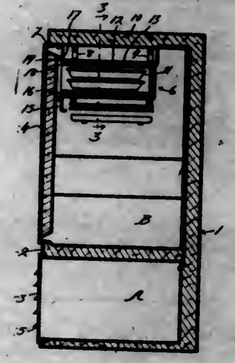
1,893,344. REFRIGERATOR CONDENSING UNIT. GEORGE A. VIS, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 14, 1929. Serial No. 332,298. 4 Claims. (Cl. 62—115.)



1. A support for a refrigeration condensing unit including a compressor, condenser and motive means; comprising an elongated tubular member having a plurality of parallel sections and having its free extremities remote from each other, and means associated with the extremities for joining refrigerant conduits thereto.

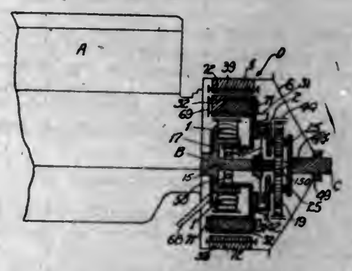
1,893,345. REFRIGERATING APPARATUS. THOMAS C. WHITEHEAD, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Oct. 14, 1929. Serial No. 399,537. 3 Claims. (Cl. 62—116.)

2. In combination, an ice tray compartment having an open forward end and provided at said end with a marginal laterally extending flange, a front piece for said compartment comprising a plate having an opening receiving the flange aforesaid, the edges of said opening and the edges of said flange being in a common vertical plane and being



secured together, and a strip of yieldable material overlapping said adjacent edges and concealing the joint therebetween.

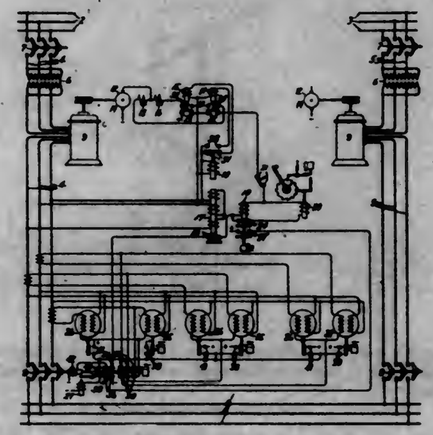
1,893,346. POWER TRANSLATOR. MARTIN PHILLIP WINTHER, Chicago, Ill., and ANTHONY WINTHER, Kenosha, Wis., assignors to The Winther Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 22, 1928. Serial No. 321,071. 7 Claims. (Cl. 172—239.)



1. A power translator comprising means for effecting a rotating generator field, a rotor having inductors adapted to be acted upon by said field to induce current in the inductors and effect a magnetic drag for driving the rotor in the direction of movement of the generator field, members in circuit with said inductors, said members being so formed and placed in the rotor as to effect per se reverse rotation of a second field due to the induced current, and stationary inductors adapted to be acted upon by said second field to effect reaction in a direction adapted to aid in driving the rotor in the direction of generator field movement.

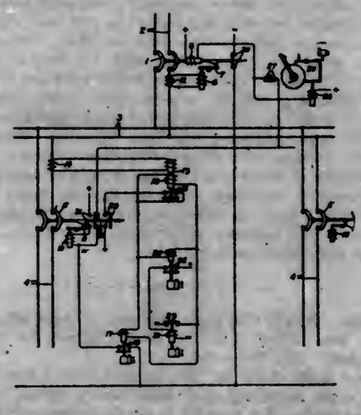
1,893,347. SYSTEM OF ELECTRIC DISTRIBUTION. ARVID E. ANDERSON, Lansdowne, Pa., assignor to General Electric Company, a Corporation of New York. Filed June 22, 1931. Serial No. 545,988. 19 Claims. (Cl. 171—97.)

1. In combination, two electric circuits, means for interconnecting said circuits, means responsive to a predetermined voltage condition of said circuits for effecting the closing of said interconnecting means, voltage regulating means for maintaining the voltage of one of said circuits at a predetermined value, and means controlled by said voltage regulating means for permitting the closing of said interconnecting means only when said circuit voltage is at said predetermined value.



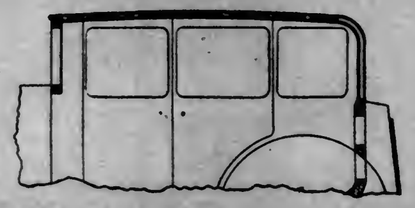
19. In combination, an alternating current network, a feeder circuit for supplying current to said network, a supply circuit, means for connecting said feeder circuit to said supply circuit, means for effecting the connection of said feeder circuit to said network, regulating means for controlling the voltage at the network end of said feeder circuit, means responsive to a predetermined condition of said feeder circuit for effecting the disconnection of said feeder circuit from said network, means for rendering said disconnecting means inoperative until said regulating means has established a predetermined voltage at the network end of said feeder circuit after the connection thereof to the network, and means responsive to another predetermined condition of said feeder circuit for effecting at any time the disconnection of said feeder circuit from said network.

1,893,348. CIRCUIT BREAKER CONTROL SYSTEM. ARVID E. ANDERSON, Lansdowne, Pa., assignor to General Electric Company, a Corporation of New York. Filed July 22, 1931. Serial No. 552,448. 9 Claims. (Cl. 175—294.)



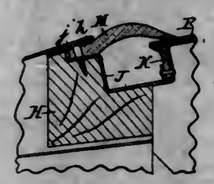
1. In combination, a bus, a supply circuit, a circuit breaker connecting said supply circuit to said bus, means for opening said circuit breaker, a load circuit, a second circuit breaker connecting said load circuit to said bus, and means controlled by said first mentioned circuit breaker and a predetermined abnormal condition of said load circuit for effecting the opening of said second circuit breaker in response to said predetermined abnormal condition of said load circuit only if said first mentioned circuit breaker is open within a predetermined time after the occurrence of said abnormal condition.

1,893,349. MOTOR VEHICLE BODY HAVING COLLAPSIBLE HEAD. HERBERT AUSTIN, Bromsgrove, England. Filed July 29, 1930, Serial No. 471,463, and in Great Britain Aug. 8, 1929. 6 Claims. (Cl. 296—107.)



1. A vehicle body roof comprising fixed longitudinal cant rails extending at each side over the doors and windows and extending also down at the rear to a fixed lower portion of the back of the vehicle, a flexible cover for the roof, transverse roof members attached to the under surface of said cover and wire coils also attached to the underface of said cover and extending along under said cover near each side edge thereof the convolutions of the coils normally touching each other so that the coils can be utilized to sustain a push but will yield somewhat in tension and said coils serving as means whereby said cover and said transverse members are moved back by the movement back of one of said transverse members which is forwards of the others.

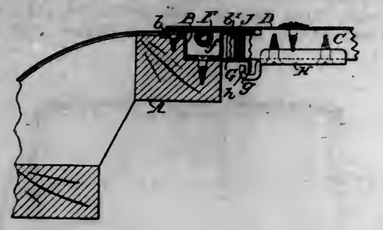
1,893,350. MOTOR VEHICLE BODY HAVING COLLAPSIBLE HEAD. HERBERT AUSTIN, Bromsgrove, England. Filed July 29, 1930, Serial No. 471,464, and in Great Britain Aug. 8, 1929. 3 Claims. (Cl. 296—137.)



2. A vehicle body comprising a roof capable of being slid back to expose the longitudinal, fixed rails at each side of the vehicle, a transverse rail at the forward end of the vehicle, a horizontally disposed strip of resilient material secured to the top surface of said transverse rail and extending over the forward edge of said roof when the latter is in its forward position and bearing downward thereon with light elastic pressure sufficient to secure a weather joint but not sufficient to interfere unduly with the endwise movement of the roof, and a strip of resilient material set up on edge vertically in position beneath the rearward edge of the horizontally disposed strip and serving to hold said edge of said horizontally disposed strip up sufficiently to allow the front edge of said roof to pass under it, when said front

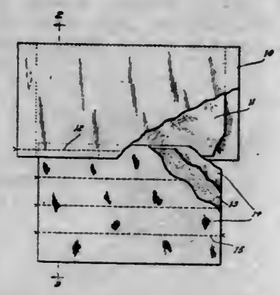
edge encounters said vertical strip bending it forward to permit said horizontally disposed strip to bear down at its rearward edge on said fabric and said strips each forming a weather joint with said cover.

1,893,351. VEHICLE BODY HAVING A COLLAPSIBLE HEAD. HERBERT AUSTIN, Bromsgrove, England. Filed Sept. 18, 1930, Serial No. 482,769, and in Great Britain Sept. 23, 1929. 1 Claim. (Cl. 269—137.)



A roof of a vehicle body comprising fixed cant rails one at each side passing over the doors and windows of the vehicle, a flexible roof cover adapted to be drawn back to the rear of the vehicle to open the top thereof, transverse roof members supporting said fabric and having their ends in slidable relationship to the cant rails, a rib in respect of each cant rail extending inwards therefrom, a downward flange on said rib, a plate secured to the under surface of the respective ends of each said roof member and together with said ends forming a groove with which said rib engages, said rib supporting the respective ends of said roof members, and an upward flange on said plate adapted to come behind said downward flange of said rib.

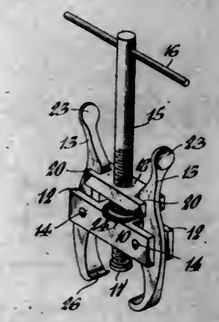
1,893,352. HAIR WAVING PAD. CHARLES A. BACKMAN, Providence, R. I. Filed Mar. 14, 1932. Serial No. 598,670. 8 Claims. (Cl. 132—36.2.)



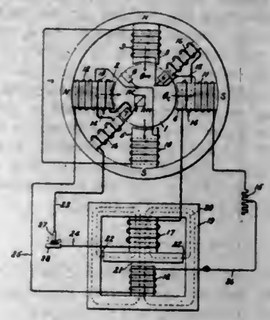
1. In a pad for the treatment of hair, a sheet of fluid resistant material, a sheet of soft metal foil secured thereto, and a sheet of asbestos textile material depending from said fluid resistant material sheet.

1,893,353. BATTERY TOOL. JEROME E. BERGMAN, Buffalo, and FREDERICK P. EGO, Kenmore, N. Y., assignors to Bergman Tool Mfg. Co., Buffalo, N. Y., a Firm composed of Caroline E. Bergman, Jerome E. Bergman and Ray W. Kempner. Filed Dec. 12, 1931. Serial No. 580,622. 5 Claims. (Cl. 29—85.)

1. A tool of the character described, comprising a yoke having an opening therein, jaws fulcrumed on said yoke at opposite sides of its opening, a screw stem extending freely through said opening, a member in threaded engagement with said screw and having means for controlling the movement of said jaws, and a spring interposed between said jaw-carrying yoke and said screw-engaging member.



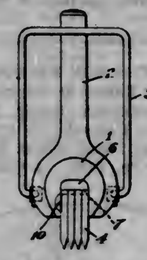
1,893,354. ARC WELDING SYSTEM. SVEN R. BERGMAN, Nahant, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 7, 1931. Serial No. 514,200. 5 Claims. (Cl. 171—228.)



1. A generator and a magnetic coupling external to said generator between the armature and field circuits of said generator opposite in effect to that between said circuits within said generator, said coupling comprising a primary winding connected in series with the armature circuit of said generator, a secondary winding connected in series with the field circuit of said generator and a magnetic core structure for said windings having two magnetic circuits with air gaps in each magnetic circuit, one magnetic circuit being common to both of said primary and secondary windings and carrying the main flux of said windings and the other magnetic circuit being associated with the primary winding for establishing a leakage flux path about said winding.

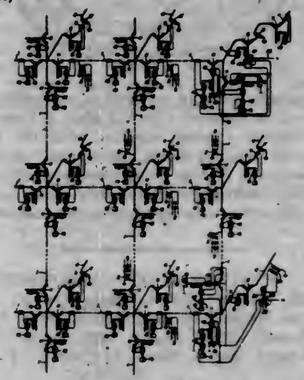
1,893,355. BUSH CHISEL. PUTNAM P. BICKNELL, Rockland, Me. Filed Feb. 24, 1931. Serial No. 517,738. 2 Claims. (Cl. 125—41.)

2. In a bush chisel or like vertical impact tool, a head having a cut receiving open sided recess defined by opposite jaws having flat parallel inner faces forming the side walls of the recess, one of said walls having a horizontal transverse open groove of rounded and tapered cross section extending across the wall face to the open sides thereof, a set of flat face cuts disposed with their ends in said recess between said jaw faces, and a wedge of half conic section fitting said tapered groove and having a flat cut



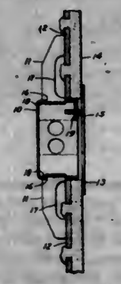
contacting face maintained parallel with the planes of the cut faces and cut ends and at right angles to the vertical axis of impact of said tool.

1,893,356. ELECTRICAL DISTRIBUTION SYSTEM. DAVID K. BLAKE, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 25, 1931. Serial No. 539,073. 7 Claims. (Cl. 175—294.)



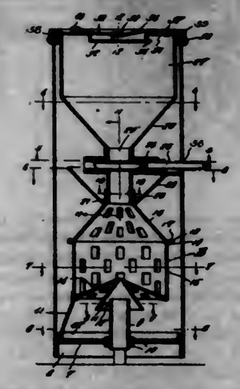
1. In combination, a network of interconnected alternating current conductors having a junction point of two conductors per phase, means for supplying energy to said network at said junction point and means operative in accordance with failure of energy supply to said junction point for breaking the connection through said junction point.

1,893,357. BRACKET FOR OUTLET BOXES. GEORGE CARLSON, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed May 28, 1931. Serial No. 540,070. 4 Claims. (Cl. 247—21.)



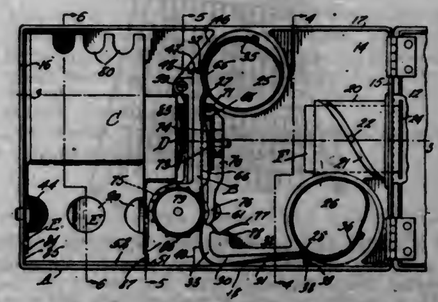
1. In combination, an outlet box having parallel spaced slots in opposite walls, brackets of U-shape adapted to be inserted in said slots with the arms projecting outwardly from the box, a plate adapted to be placed over an opening in which the outlet box is located, and a screw passing through an opening in said plate and threaded in an aperture in said outlet box to clamp the outlet box in position with the arms of the bracket engaging the rear of the wall in which the outlet box is located and the plate engaging the front of the wall to clamp the outlet box in position.

1,893,358. CHARCOAL HEATER. WILLIAM CHANTLER, Minneapolis, Minn. Filed May 12, 1931. Serial No. 536,887. 1 Claim. (Cl. 126—73.)



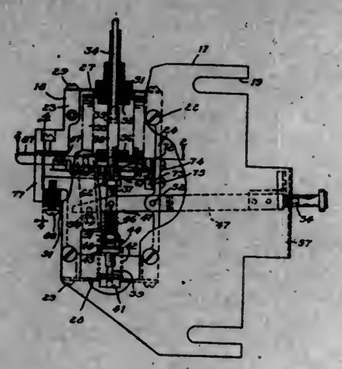
A charcoal heater of the class described including, in combination a cylindrical upright casing, a bottom in the casing, a tube rising through an opening in the bottom of the casing, a perforated fire box in the casing above the tube, a tube rising from the top of the fire box, a magazine in the upper portion of the casing communicating at its bottom end with the second tube, a slideway formed in said second tube, a valve in the slideway, a handle connected with the valve and projecting through an opening in the casing, an inverted frusto-conical baffle disposed about the upper portion of the firebox about the second tube and below the valve therein and supported in its entirety by the firebox.

1,893,359. OPTICAL PROJECTION APPARATUS. LEROY E. DAVIDSON, Buffalo, N. Y., assignor to Visual Demonstration System, Inc., Buffalo, N. Y. Filed Aug. 5, 1931. Serial No. 555,185. 18 Claims. (Cl. 88—28.)



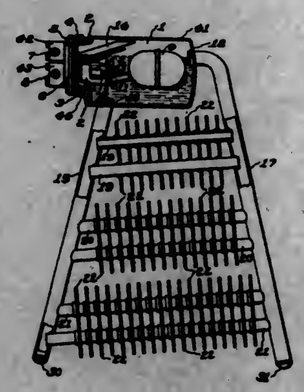
1. An optical projection apparatus having a molded housing, an optical system arranged on said housing, and integrally molded parts on said housing for accurately positioning the several parts of said optical system in correct optical relation to each other and to said housing.

1,893,360. REFRIGERATOR CONTROLLER. RALPH W. DOBB, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 17, 1930. Serial No. 468,687. 4 Claims. (Cl. 200—83.)



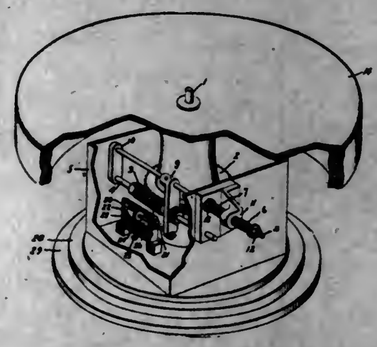
1. A pressure responsive refrigerator control mechanism comprising a substantially closed casing, snap acting switch mechanism within said casing, means for controlling the movement of said switch mechanism comprising a member movable in response to pressure variations, a rod rigidly attached to said member, permanently set spring mechanism opposing movement of the pressure responsive member and rod in one direction, additional spring mechanism also opposing movement of the pressure responsive member in the same direction, and means extending through and manually operable exteriorly of the casing for varying the effectiveness of the second named spring means, both of said spring mechanisms being so constructed and arranged as to oppose movement of the pressure responsive member under all conditions of operation.

1,893,361. EVAPORATOR. FREDERICK R. ERBACH, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Sept. 5, 1930. Serial No. 479,951. 2 Claims. (Cl. 62—95.)



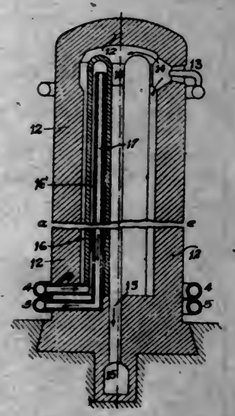
1. A cooling unit for refrigerating apparatus comprising a horisontally disposed header member, refrigerant conveying means depending from said header and comprising a plurality of pairs of conduits, each pair diverging angularly from the header so that their lower extremities project beyond the ends of the header, means for closing the lower end of each conduit, a plurality of superposed pairs of horizontally inclined conduits connecting said refrigerant conveying means, and a plurality of heat conducting fins disposed substantially perpendicularly to each set of pairs of horizontally inclined conduits, whereby to provide a plurality of superposed banks of finned conduits disposed below said header and collectively providing the greater portion of the surface of said cooling unit.

1,893,362. APPARATUS FOR RECORDING OR REPRODUCING SOUND. RALPH D. GIVEN, Leamington Spa, and HAROLD F. JEFFERSON, Rugby, England, assignors to General Electric Company, a Corporation of New York. Filed Jan. 27, 1931, Serial No. 511,594, and in Great Britain Jan. 30, 1930. 4 Claims. (Cl. 74—7.)



1. Phonograph driving apparatus comprising a turntable adapted to support a record disk, a worm gear connected therewith, a worm meshing with the worm gear, driving means for the worm, means for supporting the worm to permit a limited axial movement thereof, means for resiliently holding the worm in a predetermined position, and means for damping axial movements of the worm.

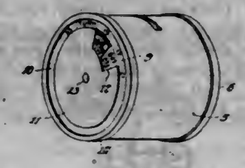
1,893,363. ACTIVATION OF CARBONACEOUS SUBSTANCES. ALBERT GODEL, Paris, France, assignor to Société de Recherches & d'Exploitations Petrolifères, Paris, France. Filed Aug. 3, 1929, Serial No. 383,392, and in France Aug. 9, 1928. 11 Claims. (Cl. 252—3.)



1. An activation process, characterised by the feature that the carbonaceous materials are suspended in activating gases circulated methodically in counter-current to the gases resulting from the activation reaction and having the active carbon formed suspended therein, and that the activating gases are preheated by said resulting gases.

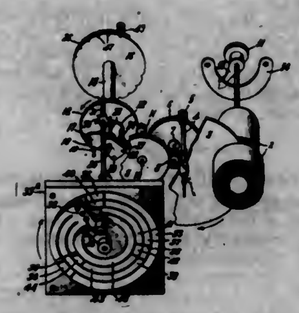
7. Apparatus for the activation of carbonaceous material, comprising a heated retort composed of a vertical outer tube closed at its upper end and of a concentric inner tube open at both ends, means for circulating a current of activating gases having carbonaceous material in suspension therein up the annular space around said inner tube, and means for discharging the resulting gases and active carbon formed so as to pass down said inner tube in counter-flow to said current of activating gases circulating up said annular space.

1,893,364. ATTACHMENT FOR SAVINGS BANKS. HARRY S. GOODMAN, Chicago, Ill. Filed Apr. 18, 1932. Serial No. 605,897. 4 Claims. (Cl. 40—70.)



1. The combination with a receptacle including a wall of an information displaying device mounted on said wall, said device comprising an indicia bearing member, a transparent cover therefor protecting said member and the indicia thereon, an indicator disk overlying said cover and having a relatively small portion thereof cut out to expose indicia on said member to view, and means securing said disk for rotation on said cover, said disk and cover having large smooth opposing surfaces for contact whereby to minimize damage to the transparency of said cover by said disk.

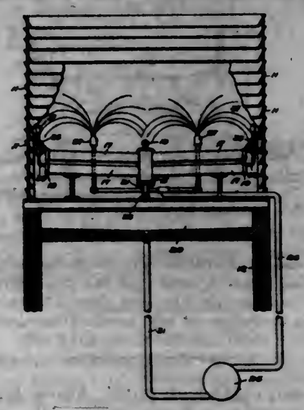
1,893,365. CIRCUIT CONTROLLER. CHESTER I. HALL, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed July 13, 1927. Serial No. 205,512. 4 Claims. (Cl. 200—25.)



1. In a circuit controller, a contact structure comprising a plurality of rings of segmental contacts, a brush structure having fingers which engage said contacts, a shaft on which one of said structures is mounted, a star wheel fixed on said shaft, a second shaft, a plurality of pins carried by said second shaft to turn therewith, said pins being adapted to engage the star wheel to impart step by step turning movement thereto, a motor for driving the second shaft, and means for adjusting said pins relatively to each other around said second shaft.

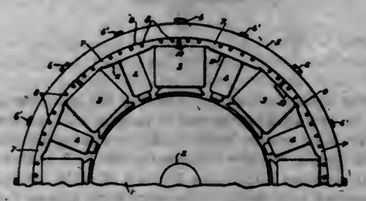
1,893,366. CONDENSER. FRANKLIN T. HARDING, Melrose, Mass. Filed Mar. 12, 1931. Serial No. 521,970. 13 Claims. (Cl. 257—85.)

1. A condenser having means for spraying a cooling fluid, a substantially horisontal central header, oppositely disposed sets of dead-ended condensing pipes extending laterally therefrom at a slight upward inclination, each set comprising an upper spaced series and a lower spaced series staggered with relation to the upper series, said pipes being distributed across an area beneath said spray, means



for supplying a gaseous medium to the header, and means for withdrawing the condensed medium from the bottom of the header.

1,893,367. DIRECT CURRENT DYNAMO-ELECTRIC MACHINE. WYLIE HESTER, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 30, 1932. Serial No. 589,957. 4 Claims. (Cl. 171—252.)



1. A direct current dynamo-electric machine having a stationary member including a magnet frame, and means comprising laminated structure extending about the periphery of said magnet frame and secured thereto for carrying sufficient alternating current magnetic flux for starting said machine as a single phase alternating current motor.

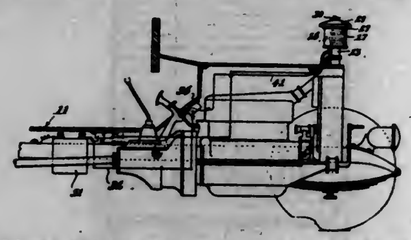
1,893,368. CADMIUM PLATING COMPOSITION. GEORGE B. HOGABOOM, New Britain, Conn., and MYRON B. DIGGIN, Matawan, N. J., assignors to Hanson-Van Winkle-Munning Company, Matawan, N. J., a Corporation of New Jersey. Filed July 21, 1932. Serial No. 623,818. 10 Claims. (Cl. 204—1.)

1. A cyanide cadmium plating composition comprising an oxyheterocyclic ring compound.

1,893,369. SIGNALING DEVICE FOR AUTOMOBILES. FRANK JAMES JAROS and EDWARD THOMAS JAROS, Chicago, Ill. Original application filed Dec. 30, 1927, Serial No. 248,499. Divided and this application filed June 19, 1929. Serial No. 372,195. 1 Claim. (Cl. 177—339.)

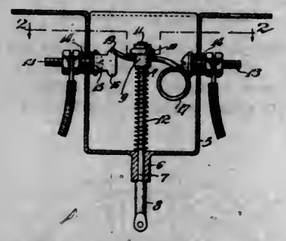
In combination with a motor vehicle, a signaling device mounted upon the forward portion of the vehicle and arranged to be visible from the front and each side of the vehicle, an electric lamp mounted within said device, a switch provided with two contacts, one being connected

to said lamp and the other to the vehicle battery, a switch lever having one end pivotally mounted adjacent said switch and adapted to electrically connect said contacts only during the intermediate portion of the depression of



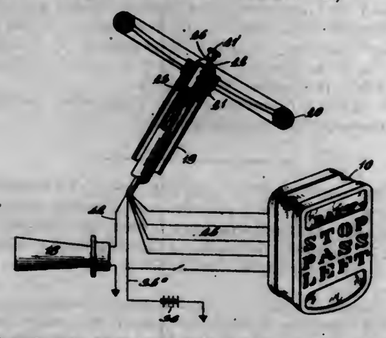
said lever, and an operative connection between the opposite end of said switch lever and the accelerating mechanism of the vehicle whereby said switch lever will be depressed upon operation of said accelerating mechanism.

1,893,370. SIGNALING SWITCH. FRANK JAMES JAROS and EDWARD THOMAS JAROS, Chicago, Ill. Original application filed Sept. 14, 1928, Serial No. 306,087. Divided and this application filed Apr. 16, 1931. Serial No. 530,550. 6 Claims. (Cl. 200—160.)



1. In a signaling switch, a casing having a tubular projection, a rod slidably mounted in said tubular projection and extending within said casing, a pair of binding posts mounted respectively on opposite sides of said casing, a resilient element supported by one of said binding posts and provided intermediate its ends with means for engaging said rod, a pair of jaws supported by the other of said binding posts, said jaws being adapted to engage clampingly said resilient element when it is drawn between said jaws, and means for maintaining normally said resilient element out of engagement by said jaws.

1,893,371. CONTROL DEVICE FOR SIGNALS. EUGENE W. KNOWLTON, Buffalo, N. Y. Filed June 29, 1931. Serial No. 547,481. 8 Claims. (Cl. 200—4.)
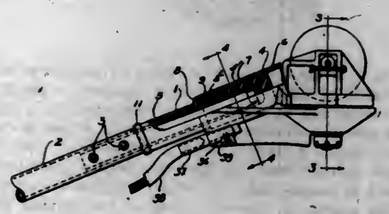


1. An electric switch of the character described, comprising a casing, a plurality of contact elements disposed circumferentially within the casing in insulated relation, a control lever mounted on said casing for universal movement relative thereto and having a contact head thereon adapted for selective and independent operative engagement with any one of said contact elements, and a socketed contact member included in the switch circuit for receiving the headed end of said lever and guided for axial movement in said casing, said socketed member including a spring for constantly urging it in firm contacting relation with the contact head of the lever in all positions thereof, whereby said lever is held in a given set position.

1,893,372. APPARATUS FOR TREATING EXHAUST GASES OF INTERNAL COMBUSTION ENGINES. CONSTANT J. KRYZANOWSKY, Baltimore, Md., assignor to Mine Safety Appliances Company, Pittsburgh, Pa., a Corporation of Pennsylvania, and H. J. Newmark, New York, N. Y. Filed Jan. 11, 1929, Serial No. 331,868. Renewed May 13, 1932. 8 Claims. (Cl. 23—288.)



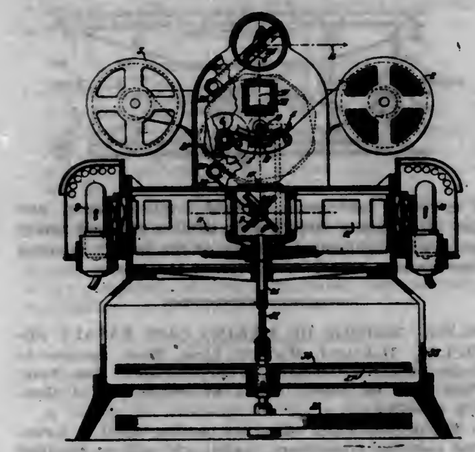
1. Apparatus for catalytically purifying exhaust gas, comprising a canister provided with an inlet for raw gas and an outlet for purified gas, an oxidising catalyst disposed in said canister in the path of said raw gas, and means for indirectly heating the catalyst from the raw gas prior to contact therewith.

1,893,373. TROLLEY HARP. SAMUEL S. MATTHES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed June 28, 1930. Serial No. 464,529. 14 Claims. (Cl. 191—00.1.)



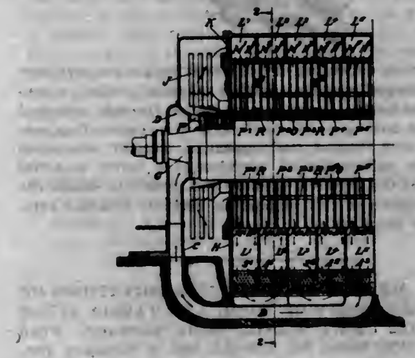
1. A trolley device comprising a support member having means to attach it to a pole, a body member positioned in overlapping relation to the support member, a turret member mounted upon the body member with a ball bearing interposed and a current collector mounted on the turret member; an elastic sleeve member closed at one end interposed between the support and body members and having a surface union with one member and the turret held in position by a pin about which the turret rotates and a spring contact member to conduct current from the turret directly to the base member.

1,893,374. MOTION PICTURE PROJECTOR. EMIL MECHAU, Berlin-Sudende, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 8, 1931, Serial No. 567,727, and in Germany Oct. 9, 1930. 3 Claims. (Cl. 88—11.8.)



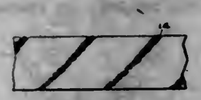
1. A motion picture projector comprising a film support, an objective in front of the support, a plurality of rocking mirrors having a common fixed axis upon which they rock arranged in front of the support and symmetrically on opposite sides of the optical axis of said objective laterally of the film and a plurality of rocking mirrors having a common axis arranged behind the support and symmetrically on opposite sides of said optical axis.

1,893,375. ELECTRICAL MACHINERY. CHARLES ALGERNON PARSONS and JESSEL ROSEN, Newcastle-upon-Tyne, England, said Rosen assignor to said Parsons; Katharine Parsons, Vincent Thompson and Frederick Gordon Hay Bedford legal representatives of said Charles Algernon Parsons, deceased. Filed July 3, 1928, Serial No. 290,225, and in Great Britain July 5, 1927. 12 Claims. (Cl. 171—252.)



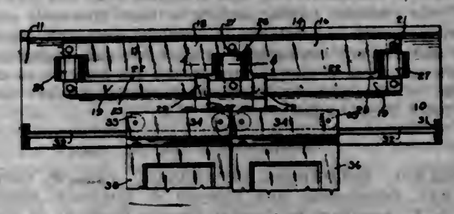
4. Ventilating system for a dynamo-electric machine, comprising a stator having a series of core sections and radial passages therebetween, a rotor member disposed within said stator with an intervening air gap, a plurality of juxtaposed ducts surrounding said core sections, each duct being in communication with a plurality of said radial passages, intercoolers connecting said ducts, directing means disposed in said air gap and means for circulating a cooling medium through said passages, said ducts and said intercoolers.

1,893,376. HIGH TENSION POWER TRANSMITTING ELECTRIC CABLE. CARL A. PIERCY, Balston Lake, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 14, 1931. Serial No. 508,780. 6 Claims. (Cl. 173—264.)



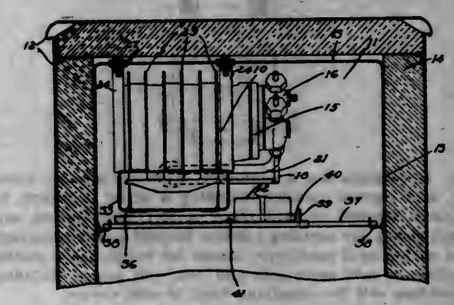
1. An electric cable comprising a conductor, spirally wrapped tape insulation thereon with small clearances between turns, said tape having a hard surface central body and a fuzzy edge, the fuzz on said edge serving to restrict the movement of impregnating fluid in the clearance between turns, a fluid for impregnating the tape, and an enclosing impervious sheath.

1,893,377. RECTILINEAR ELECTROMAGNETIC MOTOR. EDWIN L. ROSE, Cambridge, Mass., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y., a Corporation of New York. Filed May 27, 1931. Serial No. 540,360. 7 Claims. (Cl. 172—290.)



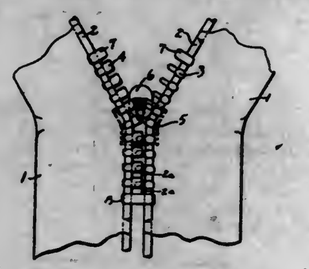
1. In a rectilinear induction motor having a field structure including a core and primary coils, said core comprising two spaced parallel rails, vertical members connecting the ends of said rails, said rails and said members forming slots adjacent the ends of one of said rails, said slots opening into the space between said rails, and a secondary coil loosely mounted on one of said rails.

1,893,378. COOLING UNIT. GEORGE L. SPRING, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 14, 1930. Serial No. 475,246. 2 Claims. (Cl. 62—95.)



1. In a mechanical cooling unit the combination with a horizontally disposed cylindrical refrigerant vaporizer of a heat transfer unit comprising a sheet metal receptacle adapted to contain a freezing tray and positioned beneath the vaporizer, and a strip of sheet metal partially encircling the vaporizer and secured to the sheet metal receptacle, whereby the latter is supported by the vaporizer, the lateral edge of the strip being bent to form fins projecting into the medium surrounding the vaporizer.

1,893,379. SEPARABLE FASTENER. GIDEON SUNDBACK, Meadville, Pa., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Original application filed Feb. 11, 1925, Serial No. 8,340. Divided and this application filed Mar. 31, 1928. Serial No. 266,862. 14 Claims. (Cl. 24—205.)



14. A fastener of the class described, comprising opposed series of spaced fastener elements, the elements of the respective series each being rigidly attached at one end thereof to flexible stringers, the other ends of said elements projecting free from the stringer edge substantially in lateral alignment with said attaching ends and certain of said elements having sockets in their free ends each provided with a substantially straight wall and others of said elements having pins on their free ends engageable with said sockets, that surface of each pin adjacent to the edge of the stringer being substantially straight and parallel to said edge.

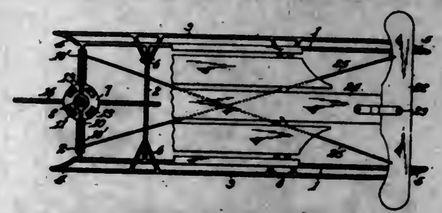
1,893,380. SOLDERING APPARATUS. CARL W. USCHMAN, Schenectady, and HOWARD W. HARTMAN, Scotia, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Oct. 31, 1930. Serial No. 492,539. 2 Claims. (Cl. 219—12.)



1. In combination, a container, a closure member therefor, said closure member including a plate, a hollow receptacle secured to said plate, a coil mounted on said plate, means for securing a device on said hollow receptacle and within said container, means for supplying a cooling medium to said receptacle and coil, and means including a coreless coil for supplying heat to said device.

1,893,381. COASTER SLED. RAYMOND R. WALKER, Follansbee, W. Va. Filed Nov. 11, 1930. Serial No. 494,891. 8 Claims. (Cl. 280—21.)

8. In a coaster vehicle including a frame and a manually shiftable steering member, a pair of pivotally related elements embodying interengageable cam surfaces, one of said elements being fixed to said frame and the other being adapted for simultaneous rotary and vertical shifting movements relative to said fixed element, resilient means normally tending to maintain said rotary element in elevated position, a rudder device movable into and out of vehicle-guiding contact with the roadway with lowering

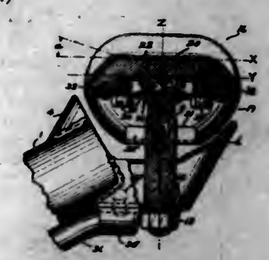


and elevating movements of said rotary element, and means intermediate said steering member and said rotary element whereby manual shifting of the former actuates rudder-lowering rotary movement of the latter.

1,893,382. METHOD OF MAKING CAST BASALT ARTICLES. HAROLD L. WATSON, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed June 16, 1930. Serial No. 461,657. 7 Claims. (Cl. 49—79.)

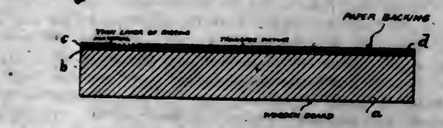
1. The method which comprises melting basalt in a controlled reducing atmosphere, casting the melt so obtained into articles of desired shape and subsequently completely devitrifying said cast articles by a definite heat treatment.

1,893,383. CURRENT COLLECTOR. CLARENCE J. WAY, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Jan. 12, 1931. Serial No. 508,090. 23 Claims. (Cl. 191—59.1.)



1. A current collecting device comprising a support having a cup shaped receptacle with a spherical surface, a contact member having a part mounted upon the said spherical surface and having a spherical surface corresponding substantially with that of the support, a member interposed between the said spherical surfaces of a softer material than that of the shoe and support and means to secure the contact member to the support in movable relation relative to the support.

1,893,384. METHOD OF PRODUCING IMITATIONS OF VALUABLE SORTS OF WOOD AND TARSIA STYLE COATINGS. JOHN WERNER, Berlin, Germany. Filed Jan. 4, 1929, Serial No. 330,434, and in Germany Jan. 10, 1928. 3 Claims. (Cl. 41—33.)

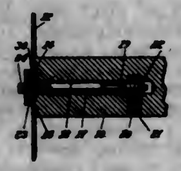


3. The method of improving the surfaces of wood of inferior value, which comprises smoothing the surface of the wood by subjecting the same to a high pressure under heat, applying a thin coating of a paste prepared from finely powdered zinc-white and a lac-varnish binding agent on the smooth surface then drying said coating, placing a transfer-print or picture on the said coating, placing a carefully polished rigid plate upon the said transfer-print or picture, and applying a pressure of at least 20 kg. per square centimeter on the said plate for the purpose of uniting the said print or picture with the said dry coating.

1,893,385. PROCESS FOR OBTAINING CONCENTRATED SULPHUR DIOXIDE. WALTER WEITSTEIN, Monthey, Switzerland, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed May 10, 1930, Serial No. 451,523, and in Switzerland May 15, 1929. 5 Claims. (Cl. 23—180.)

1. A process for obtaining concentrated sulphur dioxide from gases with which it is diluted by absorbing the sulphur dioxide by means of a suspension in water of a cyclic organic base which is liquid at ordinary temperature and is not completely miscible with water, and expelling the absorbed gas by heating the mixture.

1,893,386. SPOOL FOR AXMINSTER LOOMS. WILLIAM H. WILSON, Burlington, Vt., assignor to Vermont Spool & Bobbin Co., Burlington, Vt., a Corporation of Vermont. Filed Nov. 24, 1928. Serial No. 321,671. 3 Claims. (Cl. 242—124.)



1. In a spool having a barrel provided with grooves across the ends thereof and having a gudgeon extending from the barrel provided with a bearing surface having a portion thereon to engage a complementarily formed gudgeon on an adjacent spool, a spool head substantially perpendicular to the axis of the barrel and having corrugations on one side to enter the grooves and corresponding recesses on the opposite side, said gudgeon extending through the head and secured at its inner end with respect to the barrel and having a cylindrical bearing surface, means defining a slot in the bearing surface of the gudgeon, and a member lying within the periphery of the bearing surface and having a portion to extend into the slot to prevent angular movement between the member and gudgeon, and additional means on the member to hold said member against relative angular movement with respect to the spool.

1,893,387. METAL REENFORCEMENT FOR HIGHWAYS CONSTRUCTION. WILLIAM TAYLOR ALLAN, Shotts, Scotland. Filed Oct. 7, 1931, Serial No. 567,433, and in Great Britain Nov. 20, 1930. 1 Claim. (Cl. 94—8.)



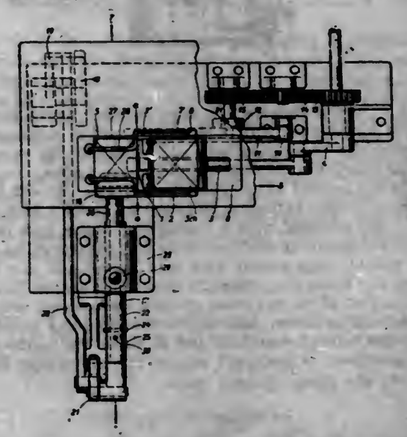
Metal reenforcement for roadways comprising interlocking foundation plates, said plates being ribbed on the upper side and apertured for receiving the surfacing material, and disposed ribbed-side-uppermost to engage the surfacing material of the roadway and to form pockets for receiving surfacing material keyed by the portions accommodated by the apertures, each plate being formed with curved edges adapted to mate with the edges of adjacent plates in all horizontal directions and allowing for the camber of the road.

1,893,388. THERMOMETER. ERNEST GUSTAVE BAYER, Middle Village, Long Island, N. Y. Filed Aug. 30, 1930. Serial No. 478,964. 3 Claims. (Cl. 73—52.)



2. In an indicator instrument, the combination with a multiply convoluted Bourdon spring, of a revolubly-mounted axially socketed support whereon said spring is fixedly mounted at its inner end, a thermostatic compensating element adjustably connected to the free end of said spring, an operating arm, an indicator, means whereby said arm and indicator are pivotally supported in the socket of the support and adapted to turn in unison, and means whereby said operating arm is controllably connected with said compensating element so that the indicator is caused to follow the movement of the operating arm as controlled by both the spring and said element.

1,893,389. APPARATUS FOR ERECTING BOX SHELLS. GEORG BELLMANN, Dresden, Germany, assignor to "Universelle" Cigarettenmaschinen-Fabrik, J. C. Muller & Company, Dresden, Germany. Filed July 7, 1931, Serial No. 549,299, and in Germany Dec. 11, 1930. 7 Claims. (Cl. 93—36.)



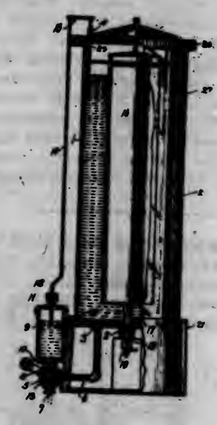
1. Apparatus for erecting box shells, comprising a lever containing a notch against which the flat shell is thrust, and thereby opened, the said lever being movable transversely to the opening movement so that the notch can follow the edge of the shell, a table on which the shell rests, and means for applying feeding pressure to raise the shell from said table so that the shell engages the notch, until the complete erection of the shell is accomplished.

1,893,390. BAIT. WILLIAM M. BENZICK and OSCAR W. ECK, St. Paul, Minn. Filed Aug. 21, 1931. Serial No. 558,550. 1 Claim. (Cl. 43—42.)



An artificial bait comprising a rod bent and looped about itself at one end thereof to form an eye to be attached to a fishing line and providing a bearing on the rod, said rod adjacent its opposite end looped to form a second eye for receiving a hook and providing a second bearing on said rod, a spinner journalled on the rod between said bearings, said rod after forming the second eye being bent upon itself to provide an elongated loop portion having the free end disposed angularly thereto and bent in hook formation to engage the rod and capable of being disconnected therefrom to permit the application of a spoon to the looped portion of the rod.

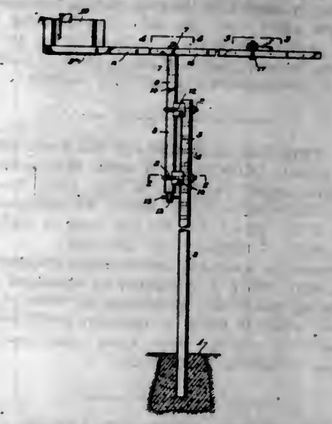
1,893,391. LIQUID DISPENSER. ROY BEARY, Olney, Ill. Filed Aug. 11, 1931, Serial No. 556,421. Renewed Nov. 15, 1932. 1 Claim. (Cl. 221—117.)



In a liquid dispenser, a reservoir for liquid provided at the top thereof with a short guide tube, a valved dispensing pipe connection with said reservoir the valve casing of which is provided with an upper orifice, a measuring vessel located at one side of said reservoir and having a lower tubular extension communicating with said orifice and a top provided with a perforation, and a vent tube located exteriorly of said reservoir and having at its lower end slidable engagement with said perforation and at its upper end having an inwardly directed U-shaped bend the free end of which has close slidable engagement with said guide tube to convey back to the reservoir any liquid that may rise in said vent tube and to guide the vertical sliding movement of said vent tube in the adjustment thereof to vary the charge in said vessel.

1,893,392. REVOLVING MAIL BOX POST. JOHN S. BLACK, Jasper, Ala. Filed Mar. 13, 1930. Serial No. 435,612. 2 Claims. (Cl. 232—40.)

1. A mounting for a mail box or the like, a cross head having a shaft, a fixed bearing sleeve slidably and revolubly supporting said shaft, said sleeve and shaft having shoulders contacting along substantially inclined planes to aid in limiting the turning movement and cause return of the cross head to normal position, and means to positively limit the sliding movement of the shaft with respect to the bearing sleeve consisting of a pin carried by the lower end

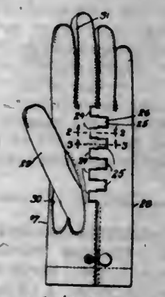


of the shaft and normally disposed below the bearing sleeve, the pin being engageable with the bearing sleeve through turning and sliding movement of the shaft.

1,893,393. PROCESS FOR THE REFINEMENT OF VEGETABLE PHOSPHATIDES. HERMANN BOLLMANN and ALBERT SCHWIEGER, Hamburg, Germany, assignors to Hanseatische Muhlenwerke Aktiengesellschaft, Hamburg, Germany, a Joint-Stock Company of Germany. Filed Sept. 23, 1930, Serial No. 483,970, and in Germany Oct. 21, 1929. 7 Claims. (Cl. 260—98.)

1. A process of refining vegetable phosphatides, consisting in treating the said phosphatides with hydrogen peroxide, and subsequently decomposing residual hydrogen peroxide, and removing the remaining water.

1,893,394. GLOVE. HUGO A. BONDY, Ridgewood, N. J. Filed May 25, 1932. Serial No. 613,538. 6 Claims. (Cl. 2—159.)

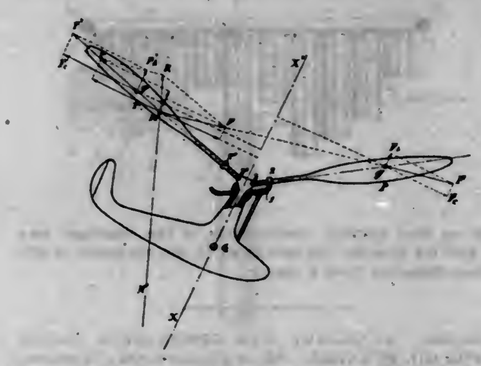


1. A glove having a back and two palm portions, each of the palm portions having flaps spaced apart, the flaps on one of the palm portions being staggered relatively to the flaps on the other palm portion, and the flaps on each palm portion being secured to the outer side of the other palm portion respectively.

1,893,395. DEVICE FOR STABILIZING AND CONTROLLING AIRCRAFT PROVIDED WITH ROTATABLE WINGS, OF THE HELICOPTER TYPE. LOUIS BREGUET, Paris, France. Filed Mar. 15, 1930, Serial No. 436,144, and in France Mar. 15, 1929. 9 Claims. (Cl. 244—19.)

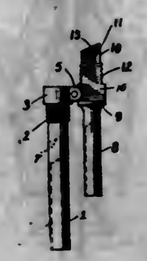
1. A flying machine of the type described, which comprises in combination, a stationary upright driving shaft,

a plurality of rods, a plurality of propeller blades connected to said rods respectively, mechanical means for keeping said rods in fixed radial planes with respect to said shaft, so as to impart the rotary movement of said shaft to said blades, and positive mechanical means for



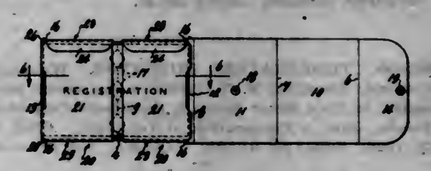
giving one point of each of said rods an oscillatory movement of adjustable amplitude and phase and having a period equal to that of said rotary movement in its radial plane about a fixed point with respect to said shaft, adapted to lift said blade above its normal path only once for each revolution of said blade about said shaft.

1,893,396. FISH ROD FERRULE. MAYNARD BULLOUGH, Ogden, Utah. Filed Apr. 30, 1931. Serial No. 534,065. 1 Claim. (Cl. 287—98.)



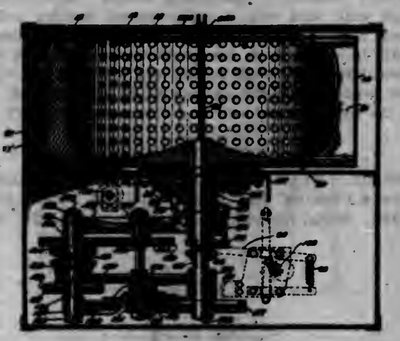
A fishing pole made up of a plurality of sections, one of said sections having a headed end provided with a pair of spaced outstanding ears, a longitudinal slot between the ears and projecting threads below the head, the cooperating section having a flanged end, a tongue extending centrally from said flange and designed to be received in the slot, said tongue at its juncture with the flange being widened to have one of its ends received between and pivotally connected to the ears, and which tongue has its edges provided with projecting threads below the widened portion thereof and which threads are designed to register with the first-named threads when the tongue is swung into the section, and the said tongue having a non-threaded portion which projects beyond the threaded edges thereof and which non-threaded portion is of a width equalling that of the slotted portion of the first-named section beyond the threads thereof, and a sleeve slidable and revoluble on the first-named section and having a partially threaded bore to engage with the threads on the tongue and with the threads on the slotted rod section and to have the non-threaded portion of its bore contact with the non-threaded edges of the tongue to lock the sections in longitudinal alinement, the end wall of the groove and the outer end of the tongue being angular for contacting engagement when the tongue is received in the groove.

1,893,397. FLEXIBLE POCKET RECEPTACLE. WARREN R. BUXTON, Longmeadow, Mass. Filed Jan. 2, 1932. Serial No. 584,523. 5 Claims. (Cl. 150—39.)



1. In a device of the class described, a pair of containers each constructed of flexible transparent material and in the form of a flattened-down open-ended tube with closely spaced front and rear walls, and a strip of flexible material passing through the open ends of both containers between said walls and bridging the space between said containers and serving to hingedly connect them so that they may be superposed or swung into a common plane, said strip having an extension beyond one end of one container of sufficient length to enable it to be wrapped completely around the superposed containers to enclose the same.

1,893,398. DRY CLEANING MACHINE. JOHN W. CHAMBERLIN, Akron, Ohio. Filed Oct. 24, 1932. Serial No. 639,290. 9 Claims. (Cl. 68—38.)



1. A cleaning and drying unit comprising a receptacle for cleaning fluid, a horizontally disposed perforated container within said receptacle, means for imparting movement to said container to accomplish the cleaning operation, means for causing relative translating up and down movement between said container and said receptacle from a washing to an extracting position, and means for extracting the cleaning fluid from the material within the container by moving the container in a continuous rotational manner while in an extracting position, said container in extracting position having its axis in a substantially horizontal plane.

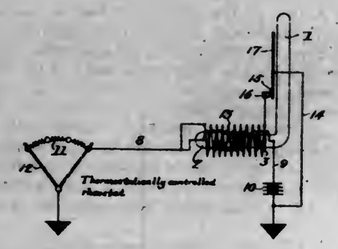
1,893,399. GASKET. STEWART HARVEY CLARK, Union City, Ind. Filed July 8, 1931. Serial No. 549,555. 5 Claims. (Cl. 20—69.)



1. A gasket including a covering fabric folded upon itself to provide a pair of filler enclosing portions and an

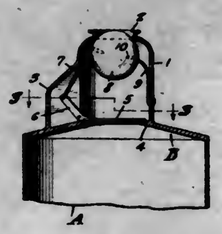
intervening web, a filler carried in each of said enclosing portions, one margin of the fabric being stitched to the web and then folded back oppositely upon itself to provide an outwardly extended tacking flange.

1,893,400. TEMPERATURE INDICATOR. WILLIAM A. COLLINS, Brooklyn, N. Y., assignor, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Feb. 27, 1926. Serial No. 91,168. 6 Claims. (Cl. 177—351.)



1. In a temperature indicating device, the combination with a thermostatic rheostat, of a heating coil and a source of current connected in series with the rheostat, temperature responsive indicating means operatively associated with said coil, a supplemental heating coil associated with the said indicating means, a thermostatic switch in series with the supplemental coil and located adjacent the indicating means, and a circuit shunting the main heating coil and the source of current and including the supplemental coil and thermostatic switch.

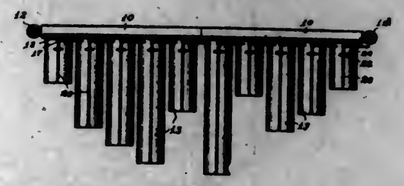
1,893,401. TUBE CLOSING DEVICE. BENJAMIN DE JESÚS-ANGELES, San Francisco, Calif. Filed Feb. 29, 1932. Serial No. 595,917. 2 Claims. (Cl. 221—60.)



1. A closing device for a collapsible tube comprising a housing of substantially cylindrical formation and being provided with a restricted outlet, said tube having an opening formed therein and being in the form of a valve seat, a disk valve arranged in said housing for closing the opening, a ball valve for closing the outlet and being arranged in said housing, an arm formed with said disk valve, a link pivotally secured to the arm and fixed to the ball valve, spring means for the ball valve to normally hold the valve in closed position, and said valves being operated to open position when pressure is applied to the contents of the tube and to closed position when the pressure is relieved.

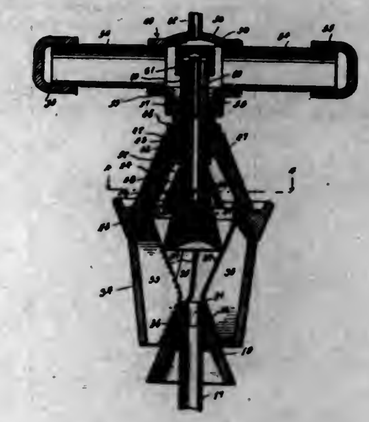
1,893,402. GOLF GAME. GUSTAV EHRLICH, New York, N. Y. Filed Feb. 5, 1930, Serial No. 426,104. Renewed July 29, 1932. 6 Claims. (Cl. 273—32.)

1. In a golf putting game apparatus, a base, a plurality of golf ball-receiving chambers removably connected with the base and extending forwardly thereof, the chambers being of variable length so that the entrances of the chambers will be at varying distances from the babe member, the removable chambers being interchange-



able so that varying combinations of the chambers may be had for locating the entrances of the chambers at different distances from a player.

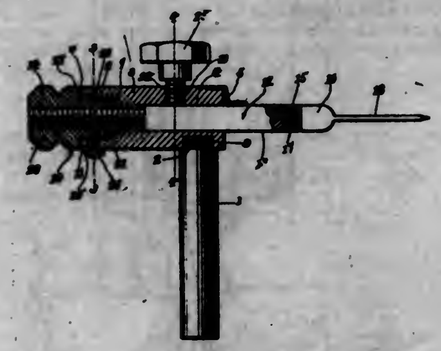
1,893,403. AUXILIARY GAS GENERATING MEANS FOR OIL BURNERS. OSCAR FALKENWALDE, Baltimore, Md., assignor of one-half to Robert H. Lyon, Baltimore, Md. Filed May 9, 1929. Serial No. 361,787. 5 Claims. (Cl.158—92.)



1. A device of the class described comprising a mixer having means whereby fuel is supplied to the mixer, a hood seated on the mixer, a tube extending through the hood, a spreader carried by the tube and extending into the mixer, and means supported on the hood and in communication with the tube to vaporize water and discharge the same through the tube onto the spreader.

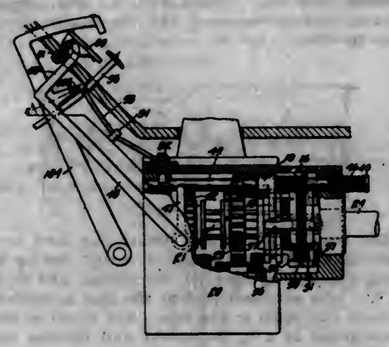
1,893,404. ADJUSTABLE REAMER GRINDING CLEARANCE GAUGE. JOSEPH C. FRIEND, Ashtabula, Ohio. Filed Dec. 2, 1931. Serial No. 578,588. 10 Claims. (Cl. 33—170.)

2. A gauge for the purpose set forth comprising, an elongated hollow carrier having an outer end and an open inner end, an adjustable gauge bar slidably mounted in the carrier and having one side provided with graduations, said bar projecting from the ends of the carrier, said gauge bar being formed with an outer part and an inner part, said inner part being peripherally threaded, said outer part being formed at its outer end with means for coupling a tool head therewith, an indicating pointer secured to and extended from the outer end of the carrier and associated with said scale, revoluble means extending into the inner end of the carrier and threadedly engaging with said inner part of said bar for adjusting the latter, said revoluble means having a peripheral groove,



means connected to the carrier and extending into said groove for revolubly connecting said bar adjusting means to the carrier, and releasable locking means for the bar.

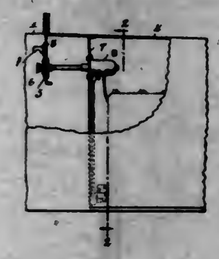
1,893,405. FREE WHEELING TRANSMISSION. JOHN F. GAYLORD, Muncie, Ind., assignor, by direct and mesne assignments, to The Gaylord Company, Inc., Homer, La., a Corporation of Louisiana. Filed June 1, 1931. Serial No. 541,443. 4 Claims. (Cl. 74—58.)



1. In an automobile gear transmission a positive clutch and a friction clutch each composed of separable clutch elements, resilient means biased to move the elements of the positive clutch to clutching engagement with each other, manually operable means for disengaging said positive clutch elements, reversing gear mechanism, and means movable with said reversing gear mechanism for moving the positive clutch elements to clutching engagement with each other, and resilient means automatically operable for disengaging said positive clutch elements when the reversing gear is moved out of reverse position, substantially as set forth.

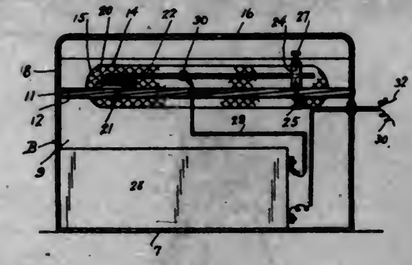
1,893,406. HOOD LOCKING DEVICE FOR AUTOMOBILES. JOHN P. GMEACHTY, Jersey City, N. J. Original application filed June 30, 1931, Serial No. 548,000. Divided and this application filed Feb. 9, 1932. Serial No. 591,903. 5 Claims. (Cl. 180—82.)

1. A safety mechanism for automobiles including a lock for locking the hood of an automobile, a manually actuated means including a rockable rod locking and unlocking said lock, an ignition circuit, a starter circuit, a switch interposed in both of said circuits, means actuated by said rockable rod for actuating said switch in one



direction, a spring for moving said switch in the opposite direction, and a combination lock for locking the rod against actuation.

1,893,407. BROODER ALARM. WILLIAM HENRY GOETTSCH, Holstein, Iowa. Filed Apr. 4, 1929. Serial No. 352,439. 1 Claim. (Cl. 200—140.)



In an alarm of the class described, a closed casing having depressions in its opposite end walls provided with resilient sides, said casing having a heat admitting opening in one of its side walls, a thermostatic switch mounted in and completely housed by said casing including a supporting member having snap engagement with said depressions, a thermoresponsive wafer secured to said supporting member and arranged adjacent said heat admitting opening, an arm fixed at one end to said wafer, a curved substantially U-shaped bracket, a contact bolt adjustable thru said supporting member and the lower end of said bracket and securing said bracket to said supporting member, a contact bolt adjustable thru the upper end of said bracket, said contact bolts being arranged in the path of movement of the free end of said arm, and an electrical alarm circuit including said arm and contact bolts.

1,893,408. SHOCK ABSORBING DERRICK MAST FOR WELL DRILLING MACHINES. THOMAS L. GOFF, Duquoin, Ill. Filed July 3, 1931. Serial No. 548,639. 1 Claim. (Cl. 254—139.)

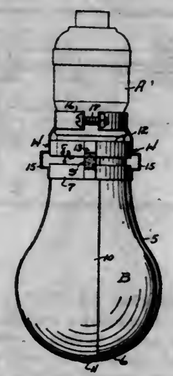
In a drilling machine, a mast, a working head guided for longitudinal movement in the mast, stop means for limiting the longitudinal movement of the working head, a crown pulley for a wire cable journaled in the working head, a rod extending from the bottom of the working head, a tubular member having a lower closed end fixedly

supported on the mast and through which the rod passes, a flanged collar on the rod at the portion thereof received in the tubular member and internested coiled springs



surrounding the rod and exerting a pressure between the bottom of the tubular member and the flanged collar on the rod.

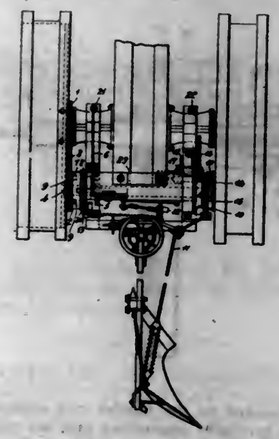
1,893,409. ELECTRIC LAMP GUARD. ROBERT LEE GRANT, Jr., Texarkana, Ark., assignor to Bessie Scott Boisseau Grant, Texarkana, Ark. Filed Feb. 15, 1932. Serial No. 593,094. 1 Claim. (Cl. 240—103.)



An electric lamp guard comprising a pair of semi-bulbous shaped members, one swingingly movable into the other and the other constituting a stationary reflector, spaced bands on the stationary reflector and one constituting a track and the other a retainer, straps spacing said bands and having intermediate outbent portions, rollers carried by the swinging member and engaged between the bands and operative upon said track, a pivot connecting the members remote from the bands, and a clamp integrally formed with certain of said straps and adapted to embrace an electric light bulb for the securing of the reflector thereto.

1,893,410. METHOD OF AND MEANS FOR RAISING AND LOWERING TRACTOR DRAWN IMPLEMENTS. GIUSEPPE GUERRI, Jesi, Ancona, Italy. Filed Sept. 10, 1931, Serial No. 562,098, and in Italy Sept. 10, 1930. 2 Claims. (Cl. 97—50.)

1. In a device for the raising and lowering of a tractor-drawn implement, comprising, in combination with said tractor and implement, means for raising said implement to a predetermined level above the ground,—a driving element secured to a tractor wheel adapted to be brought into operative engagement with said raising means so as to actuate the same when the tractor is moving forward,



and automatic means for disengaging said driving element from said raising means when the tractor is moving backward.

1,893,411. PROCESS AND APPARATUS FOR CLARIFYING OR SEPARATING THE HEAD FROM THE FERMENTING LIQUOR IN BREWING OR IN OTHER FERMENTATION PROCESSES. ADOLF HALLERMANN, Munster, Germany. Filed Feb. 7, 1931, Serial No. 514,283, and in Germany Feb. 24, 1930. 3 Claims. (Cl. 210—53.)



3. The combination with a fermenting tank arranged to hold liquid for fermenting; of a tray having an upstanding rim and openings in its bottom, and floats beneath the tray arranged to float the tray in spaced relation above the liquid in the tank, said openings each being surrounded by a frusto-conical wall forming upwardly projecting nozzles, said tray having small openings between the nozzles.

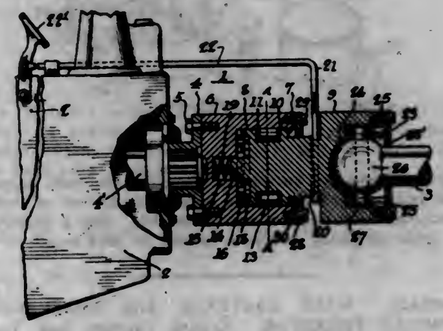
1,893,412. BOWLING ALLEY. HENRY K. HESS, Wolcott, N. Y. Filed Mar. 15, 1932. Serial No. 598,958. 9 Claims. (Cl. 273—39.)



1. In a bowling alley having an upper runway along which the balls are thrown by hand, and a lower runway underlying the upper runway along which the ball is returned, means for deflecting the ball from the distal end of the upper runway onto the adjacent end of the lower runway, in combination with power driven means between the distal ends of the lower and upper runways

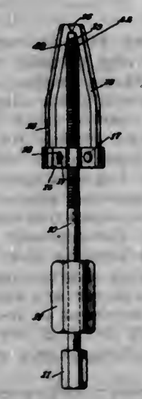
for propelling the ball along the lower runway, a pin-supporting platform at the proximal end of said runways, and means for deflecting the ball from the proximal end of the lower runway onto the pin-supporting platform for displacing the pins, said lower runway having a portion thereof directly under the propelling means adapted to yield under pressure of the ball when the latter is engaged by the propelling means to assure the propulsion of the ball by said propelling means.

1,893,413. APPARATUS FOR TRANSMITTING POWER. EDGAR M. HIRSH and JEROME H. D'ANDELET, Silver Spring, Md. Filed Apr. 15, 1931. Serial No. 530,391. 6 Claims. (Cl. 192—48.)



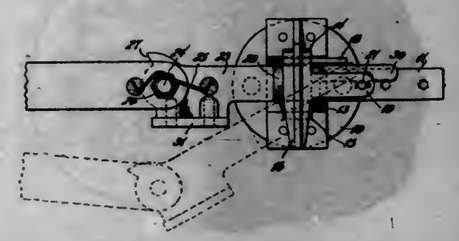
1. A power-transmission apparatus comprising a driving member, a driven member for forming with said driving member a universal coupling, a clutch device associated with said coupling, and means responsive to relative movement between said members for converting said device into an overrunning clutch.

1,893,414. COMBINATION PULLER. HARVEY P. JOHNSON, Brentwood, and PHILLIPS H. CLARKE, Hyattsville, Md. Filed Feb. 2, 1932. Serial No. 590,476. 13 Claims. (Cl. 29—85.)



1. An article pulling tool comprising a rod threaded for a substantial part of its length, a head on said rod adapted to receive a wrench, a cross bar through which said rod is adapted to be screwed, article engaging arms pivotally and reversibly secured to said cross bar, said threaded rod being adapted to be screwed down into engagement with a surface with respect to which the article is to be pulled to exert an initial tension on said article and hold the tool in axial alignment with the direction of pull, and a weight slidably mounted on said rod and adapted to be manipulated against said head with sudden force to augment said initial tension at the moment of impact, and thereby exert a cumulative stress to cause movement of said article.

1,893,415. SWITCH. TOMLINSON F. JOHNSON, Atlanta, Ga. Filed Jan. 12, 1931. Serial No. 508,309. 8 Claims. (Cl. 200—248.)



1. In an electric switch of the character described, a pair of spring jaws having associated transverse fulcrum means; and a toggle-jointed switch blade having a contact tip with an integral extension arranged to engage behind the fulcrum means upon opening and closing movement of the blade so that the contact elements are engaged and disengaged by a lever action.

1,893,416. HARROW TOOTH. GEORGE KAISER, Folcroft, Pa. Filed July 29, 1932. Serial No. 625,961. 2 Claims. (Cl. 97—203.)



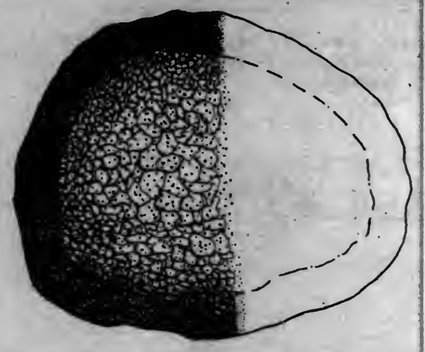
1. As an article of manufacture, a harrow tooth comprising a body V shaped in cross section to conform to and engage a V shaped edge of a supporting standard, with means passing through the tooth and through the supporting standard to secure the tooth in place and thereby prevent its turning, the opposite end portions of the tooth having flared or upturned portions provided with cutting edges converging to rounded apexes, thereby rendering the tooth reversible and consequently renewable.

1,893,417. BRIQUETTE. GUSTAV KOMAREK, Chicago, Ill., and GEORGE MACPHAIL and CHARLES CORYELL, Bay City, Mich. Filed July 16, 1926. Serial No. 122,867. 2 Claims. (Cl. 44—14.)

1. A new fuel briquette comprising comminuted bituminous and anthracite coal in which the anthracite coal had a combustible volatile content of approximately 10%, and in which the bituminous element had a combustible volatile content originally approximating 34 to 38%, the said two kinds of fuel having been mixed together and carbonized to have an outer shell with a volatile content in the neighborhood of 6% and the volatile content at the center of the core of approximately 12% and including smoke-producing hydrocarbons.

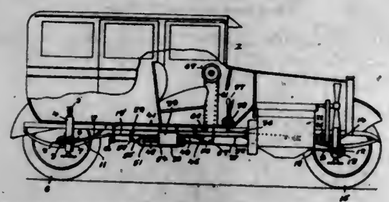
2. A new free-burning smokeless fuel briquette consisting of a mass of comminuted coking and non-coking coal in which the non-coking coal had a relatively high

original combustible volatile content, and in which the bituminous coal had a combustible volatile content of over 30%, the said two kinds of fuel having been mixed together and carbonized to have an outer shell with a



volatile content in the neighborhood of 6%, the combustible volatile content at the core of the briquette being approximately 12% and including smoke producing hydrocarbons.

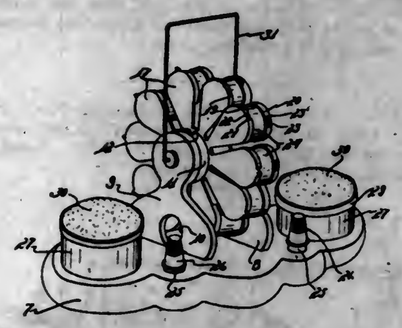
1,893,418. AUTOMOBILE JACK. ZANON VICTOR KUCHAN, Aberdeen, Wash. Filed July 9, 1928. Serial No. 291,317. 1 Claim. (Cl. 254—86.)



A means for operating screw jacks which are attached to the front and rear axles of an automobile adjacent to the sides of the frame of the said automobile, whereby the jacks at the side, front or rear, may be independently operated or all of the jacks simultaneously operated, and wherein said operating means is actuated by the engine of the automobile, the means comprising a casing, a shaft journaled through the casing, means between the shaft and the engine for driving the shaft in either of two directions and for holding the shaft from turning, said shaft having an elongated gear fixed thereon and which gear is arranged in the casing, shafts journaled through the casing extending in opposite directions therefrom, and the said shafts when operated being adapted to raise or lower the respective jacks, means connecting the jacks and jack operating shaft, spaced gears fixed on the shafts at the portions thereof in the casing, a shift shaft movable through the casing and disposed intermediate with respect to the jack operating shafts and having a gear fixed thereon, a yoke having rounded ends providing bearings for the ends of the shift shaft, flexible elements connected with the ends of the yoke, and means to which the flexible elements are connected for exerting a pulling action on either of the flexible elements to move the yoke and the shift shaft longitudinally in either of two directions whereby to bring the gear on the shift shaft to mesh with certain of the gears on the jack operating shafts to cause certain or all of the jack operating shafts to turn and to operate the jacks.

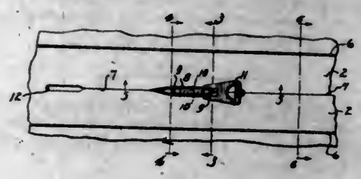
1,893,419. SEWING STAND. JAKOB KULZER, Detroit, Mich. Filed Sept. 24, 1931. Serial No. 564,844. 3 Claims. (Cl. 223—53.)

1. A device of the class described comprising a base; a pair of spaced standards projecting upwardly from said base; a bearing block on the face of each of standards adjacent the upper ends thereof, each of said blocks having a slot extending from its upper edge inwardly to a point below its center; a hub; a shaft projected through said



hub and extended outwardly from opposite ends thereof and engageable in the slots in said blocks for rotatably mounting said hub on said standards; and a plurality of spool retaining members carried by said hub.

1,893,420. SLIDE FASTENER AND CONCEALING MEANS THEREFOR. SAMUEL LACHER, New York, N. Y. Filed Feb. 2, 1932. Serial No. 590,340. 3 Claims. (Cl. 24—205.)

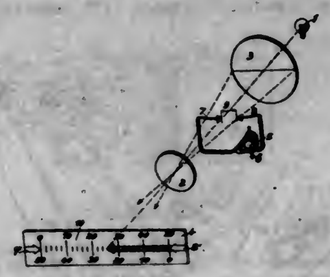


1. The combination with the opposed edge portions of an article, said edge portions normally lying in a common plane and having abutting edges, of a slide fastener for connecting said article edge portions, said slide fastener comprising opposed tapes attached respectively to said respective edge portions rearwardly of the margins thereof, said tapes having cooperable interlocking elements, said tapes and said interlocking elements being substantially hidden and protected by said edge portions, and a slider movable along said tapes for effecting the engagement and disengagement of said interlocking elements, said slider having a plow projection extending outwardly between said edge portions, said plow projection being relatively narrow and having pointed ends to facilitate the easy movement of the same between said edge portions and an operating handle attached to said plow projection exteriorly of said edge portions.

1,893,421. INDICATING AND RECORDING APPARATUS. JOHANN LATZKO, Vienna, and OTTO PLECHL, Pfaffstatten, Austria, assignors to Oesterreichische Brown-Boveri Werke A. G., Vienna, Austria, a Company of Austria. Original application filed Nov. 21, 1928, Serial No. 321,022, and in Austria Nov. 22, 1927. Divided and this application filed Apr. 10, 1931. Serial No. 529,270. 3 Claims. (Cl. 88—24.)

1. An indicating apparatus comprising a surface at least part of which is translucent, at least one body

at least part of which is opaque, the said body comprising two parts substantially in alignment and separated from each other by a blank space but rigidly connected with



each other, an optical projection apparatus adapted to project an image of such body on the translucent part of said surface and means for operatively connecting the said body with a measuring apparatus.

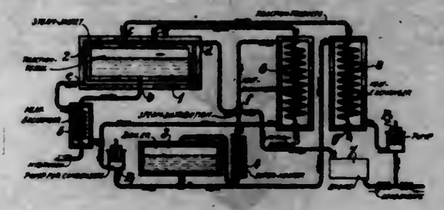
1,893,422. EMBROIDERED LETTER FOR MONOGRAMS. SIMON LEVENSON, New York, N. Y. Filed May 16, 1932. Serial No. 611,578. 1 Claim. (Cl. 2—278.)



An individual composite machine embroidered letter for monograms, consisting of a lower layer of embroidery needle-work, a superposed layer of reenforcing base fabric having an element of resiliency, one or more superposed layers of embroidery needle-work and a top layer of ornamental embroidery needle-work, the said letter being also provided with a line of closely spaced and tautly drawn stitching all around the edges for concealing and insulating said base fabric to prevent its disintegration, said edges being compressed and non-ravelling and of less height than the central portion of the letter, the cross-section of the finished letter being a segment of a circle and the letter being a completely pre-formed trimming article having shape-retaining resiliency without any visible base fabric background and adapted to project in full relief from the article which it is to identify.

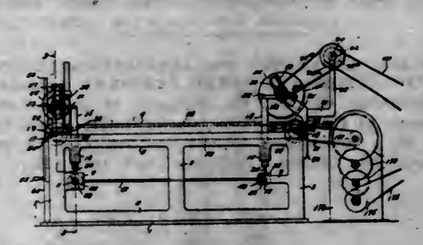
1,893,423. PROCESS FOR TREATING COALS, TARS, MINERAL OILS, AND THE LIKE, BY HYDROGENATION UNDER HIGH PRESSURE AND AT HIGH TEMPERATURE. STEPHAN LÖFFLER, deceased, Berlin-Charlottenburg, Germany, by Jenny Elfriede Löffler, sole heir, Berlin-Charlottenburg, Germany. Filed Aug. 15, 1930, Serial No. 475,643, and in Germany Nov. 27, 1926. 8 Claims. (Cl. 196—62.)

6. A process for the destructive hydrogenation of a distillable carbonaceous material, which comprises introducing a hydrogenating gas under a pressure of at least 20 atmospheres and a carbonaceous material into a reaction zone, heating water in a confined space thereby producing high pressure steam, passing the steam through a zone of a still higher temperature, passing the steam thus heated into a zone surrounding the reaction zone and being in indirect heat exchange relationship therewith, maintaining the steam in said surrounding zone at



substantially the pressure of said reaction zone, thence passing said steam into indirect heat exchange relationship with the incoming hydrogenating gas, and passing another part of said steam into indirect heat exchange relationship with the incoming carbonaceous material.

1,893,424. BUFFING MACHINE. RUDOLPH LUZARDO, New York, N. Y. Filed Apr. 30, 1927. Serial No. 187,855. 10 Claims. (Cl. 149—14.)



10. In a buffing machine, a table, means secured to said table to buff material comprising a lower cylinder and an upper cylinder, the upper cylinder being adapted to move in arcuate racks for buffing an extended surface of material positioned on the surface.

1,893,425. CHAPLET. THURE J. MAGNUSON, Chicago, Ill., assignor to The Fanner Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 18, 1932. Serial No. 611,140. 2 Claims. (Cl. 22—184.)



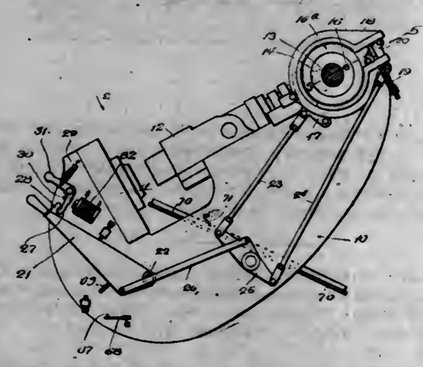
1. A chaplet having a head comprising a plate inwardly cut away at opposite peripheral points.

1,893,426. COMBINATION BROOM HOLDER AND DUSTPAN. JOHN P. MAHONEY, Amsterdam, N. Y., assignor to Gardner Broom Company, Amsterdam, N. Y., a Copartnership composed of William A. Gardner and Herbert P. Gardner. Filed Jan. 12, 1931. Serial No. 508,259. 7 Claims. (Cl. 65—20.)



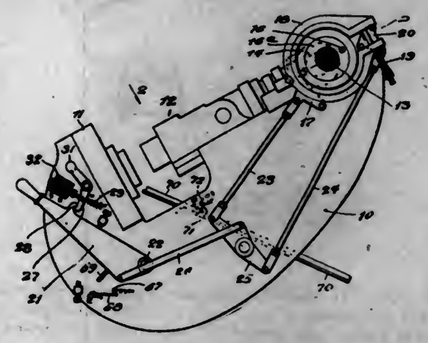
6. A combined broom holder and dust pan comprising a back plate, lateral broom clamping flange elements pivoted on the back plate, a spring resisting movement of the elements, a cross bar operatively connected to the elements, and a reversible handle pivoted to said cross bar.

1,893,427. APPARATUS FOR AUTOMATICALLY STOPPING AUTOMATIC POWER PRESSES. CHARLES D. MCDONALD, Chicago, Ill., assignor, by mesne assignments, to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 16, 1927. Serial No. 184,346. 6 Claims. (Cl. 192—127.)



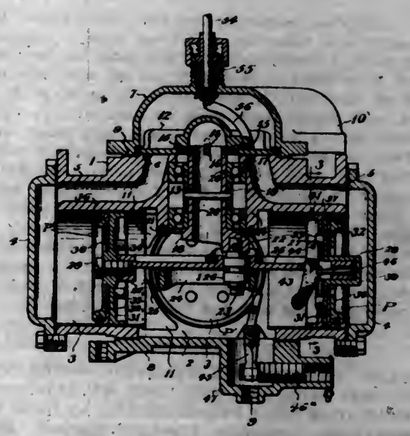
1. Stop motion mechanism for automatic power presses having press mechanisms comprising a crank shaft, a strip feed way and strip feeding mechanism, said stop motion mechanism including a manually operated clutch shifting starting and stopping lever, lever holding means engaging said lever and holding the same in its starting position, an electromagnetic device acting upon said lever holding means, when energized, to disengage said means from said lever, whereby the latter may automatically move to stopping position, said lever holding means having a member whereby it may be actuated independently of the electromagnetic device, and said electro-magnetic device being contained in an open circuit, and circuit closing means including a throw amplifying lever and a push pin associated with one of said press mechanisms, said push pin being arranged to be acted upon by superfluous material.

1,893,428. APPARATUS FOR AUTOMATICALLY STOPPING AUTOMATIC POWER PRESSES. CHARLES D. MCDONALD, Chicago, Ill., assignor, by mesne assignments, to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 18, 1929. Serial No. 340,780. 2 Claims. (Cl. 192—125.)



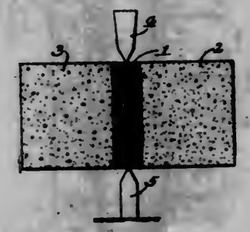
1. An automatic power press including in combination a manually operable clutch shifting starting lever movable automatically from its starting position to stopping position, a latch means for holding said lever in starting position, a spring associated with said latch means for releasing the same from said lever, a manually operated member associated with said latch means whereby the same may be released from the lever for stopping the machine and an electro-magnet associated with said latch means and operating when energized for moving the latch against the action of the spring into position for engagement with a starting lever, said spring operating to release the latch means when said magnet is deenergized for stopping the machine, and a circuit breaking means for the circuit of said electro-magnet.

1,893,429. LIQUID METER. DONALD H. MCGOGY, McMinnville, Oreg. Filed Jan. 17, 1930. Serial No. 421,483. 14 Claims. (Cl. 73—30.)



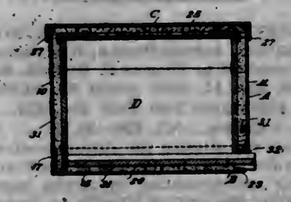
1. In a liquid meter of the character specified, and in combination with a casing including a cylinder and a piston therein, a connecting rod associated with the piston and having a limited movement independently thereof, a check lever pivoted to and movable with the connecting rod, connecting means between the check lever and piston, and a stop in the path of the check lever to rock the same and check the inward travel of the piston without affecting the continued movement of the connecting rod.

1,893,430. BUILDING UNIT AND METHOD OF MAKING THE SAME. DONALD A. MCKENZIE, Deerfield, Ill. Filed Jan. 6, 1930. Serial No. 418,772. 12 Claims. (Cl. 18—59.)



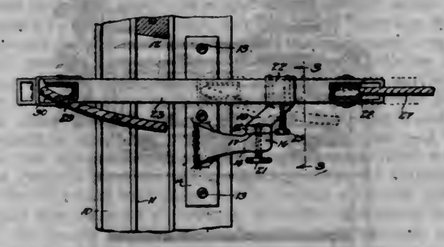
8. The process of making building units comprising molding concrete unit bodies on opposite sides of a facing member to form a single rigid object, then splitting the facing member to form two units each with a facing.

1,893,431. PACKING CASE OR BOX FOR BEEHIVES. JOHN A. MEIER, Hamilton, Ohio. Filed Mar. 6, 1931. Serial No. 520,644. 3 Claims. (Cl. 6—1.)



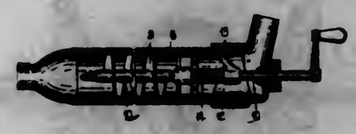
1. A box or case of the character described, comprising a body section to be disposed continuously about a bee-hive and made from fibrous material, a bottom section fitted about the bottom of the bee-hive and telescopically receiving the body section, a cover section having a marginal flange telescoped over the upper end of the body section, and flaps cut and bent from one end of the bottom section to permit a bottom slide of the bee-hive to be extracted therethrough.

1,893,432. INDOOR CLOTHESLINE EXTENSION. JOSEPH MONACO, New York, N. Y. Filed Mar. 2, 1932. Serial No. 596,380. 3 Claims. (Cl. 68—3.)



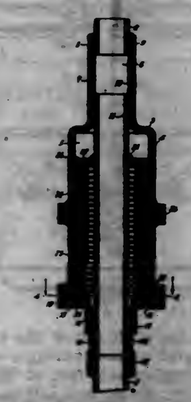
1. A clothes line extension comprising a bracket member, an arm extending angularly therefrom, a bracket arm pivotally adjustable on said angular arm, a holding member on said bracket arm, a pulley rod passing through said holding member, means for adjustably securing said bracket arm to said angular arm, means for adjustably securing said pulley rod in said holding member, a clothes line groove formed along one side of said pulley rod, a pulley member on each end of said pulley rod, and a U-member secured to said pulley rod at each pulley member, said U-member serving to hold the clothes line in position thereon.

1,893,433. PUMP. JOHN ROSS MUIRHEAD, Kirkcaldy, South Australia, and JOHN WILLIAM MILLS, Adelaide, South Australia, Australia. Original application filed Nov. 20, 1928, Serial No. 320,616, and in Australia Nov. 26, 1927. Divided and this application filed Aug. 8, 1930. Serial No. 474,004. 2 Claims. (Cl. 193—89.)



1. A pump comprising a cylinder, an inlet valve for one end thereof, a rotatable and reciprocable shaft mounted concentrically within said cylinder, a helical blade carried by and encircling a portion of said shaft within said cylinder, a liner secured within said cylinder having a cam face formed therewith, a finger carried by said shaft and engaging said cam face, and means for rotating said shaft whereby said shaft and screw will have a reciprocating motion imparted thereto upon rotation thereof due to said finger travelling over said cam face

1,893,434. SMOOTH FLOW-COMPENSATOR. KARL H. MÜLLER, Bronxville, N. Y. Filed Oct. 26, 1931. Serial No. 571,272. 8 Claims. (Cl. 285—90.)

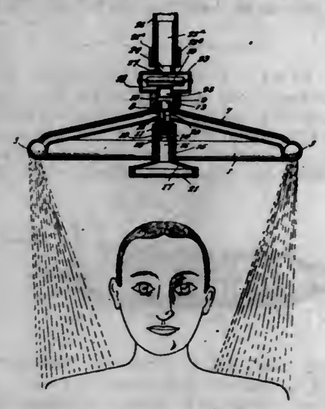


1. A compensator for connecting pipes comprising a casing having a large chamber and a small chamber, the small chamber merging into the large chamber, a tube having one end slidably fitted into said smaller chamber, said tube having its outer end extending beyond said casing, a cap slidably fitted over said tube and screwed into one end of said casing, a bellows at one end being welded to said cap, a follower welded to the opposite end of said bellows, said follower being welded also to said tube, and a protecting sleeve surrounding said bellows and extending adjacent said cap to near said follower.

1,893,435. SHOWER BATH SPRAY. THEOPHILUS E. NEAL, Prairie View, Tex. Filed Apr. 10, 1931. Serial No. 529,175. 8 Claims. (Cl. 4—145.)

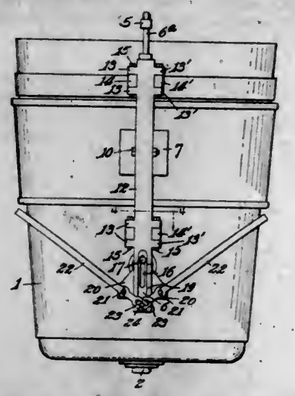
7. A bath spray comprising a perforated encircling tube, a water supply pipe operatively connected with the tube, a coupling operatively connected with the lower portion of

the water supply pipe, a nozzle adjustable vertically within the coupling, and a valve carried by the nozzle and actuated



by said nozzle to cut off the flow of water to either the tube or nozzle or to permit the flow of water to both tube and nozzle.

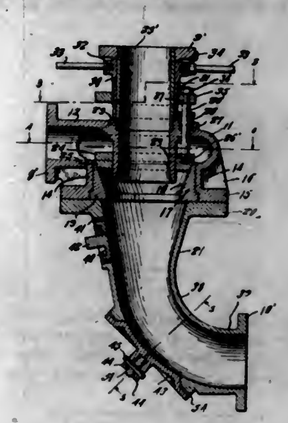
1,893,436. STOPPER OPERATING MECHANISMS FOR LADLES. MIKE JULIAN NEMES, Steubenville, Ohio, assignor of one-third to Wm. A. Hamilton, Steubenville, Ohio. Filed Mar. 19, 1931. Serial No. 523,779. 1 Claim. (Cl. 22—85.)



A mounting for the shift rod of the stopper of a ladle including an elongated member having a longitudinal socket which opens through a side face of the member for receiving the rod, means to support said member on a ladle, a second member for engagement with said side face of the first member and complemental thereto for providing a bearing for the rod, means on opposite sides of the members for hingedly and removably connecting each side of the second member to the first member, said hinging means being independent of each other and each including a removable hinge pin so that upon selective removal of either pin the second member may be swung away from the first member on either of its sides.

1,893,437. METHOD OF PRODUCING PHOSPHATIC FERTILIZERS. BEVERLY OBER, WILLIAM W. PAGON, GEORGE L. PRUETT, and WILLARD W. TROXELL, Baltimore, Md., assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md., a Corporation of Maryland. Filed Sept. 20, 1929. Serial No. 394,130. 5 Claims. (Cl. 71—7.)

1. A process of manufacturing phosphatic fertilizer comprising instituting streams of acid and phosphatic rock dust, having respectively predetermined and constant rates of flow, extenuating the stream of acid enclosing the dust

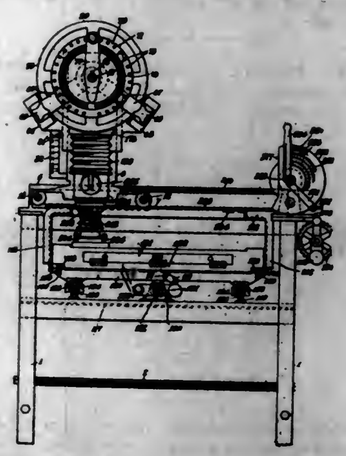


stream within the stream of acid and then impinging the streams and conveying the mixture in a confined stream out of contact with the atmosphere to a digesting stage.

1,893,438. METHOD OF PURIFYING PETROLEUM HYDROCARBONS. ALFRED OBERLE, Washington, D. C., assignor of one-half to Thomas E. Scofield, Kansas City, Mo. Filed Mar. 11, 1926, Serial No. 94,052. Divided and this application filed July 29, 1931. Serial No. 553,883. 5 Claims. (Cl. 796—44.)

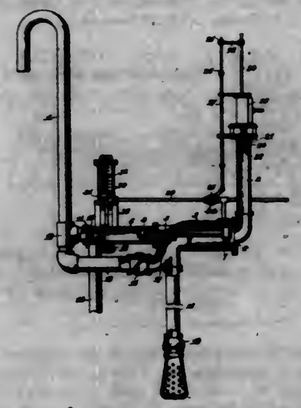
1. A process for altering the characteristics of cracked petroleum hydrocarbons in the way of purification and improving their anti-detonating properties comprising the steps of treating the cracked oil with an aqueous solution of iodine.

1,893,439. ART OF PHOTOPRINTING. ASHLEY G. OGDEN, Baltimore, Md., assignor to General Printing Ink Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 10, 1930, Serial No. 419,775. Renewed Mar. 19, 1932. 100 Claims. (Cl. 95—4.5.)



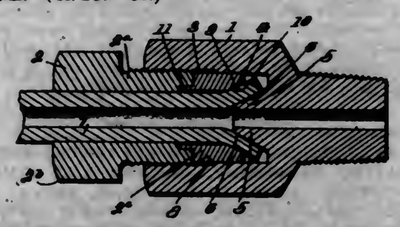
1. The improvement in the art of preparing compositions, which comprises selectively visually exposing images of successively selected master characters, and photographically fixing upon a recording medium images corresponding with the respective visually exposed images.

1,893,440. HYDROSTATIC PUMP. FRANK D. PAGLIUCHI, New York, N. Y. Filed Dec. 15, 1931. Serial No. 581,254. 10 Claims. Cl. 103—44.)



1. A hydrostatic pump comprising pipes to contain columns of liquid, a pumping element having means for connecting it to both of said pipes and also having a liquid inlet, means for producing an overbalance of hydrostatic head in the column of liquid in one pipe to produce a stroke of the pumping element and create an overbalance of hydrostatic pressure in the column of liquid in the other pipe, the latter serving as a discharge pipe, and means for permitting the liquid so overbalanced to act upon the pumping element during its return stroke and for establishing communication between said column and the pumping element during the power stroke of the latter.

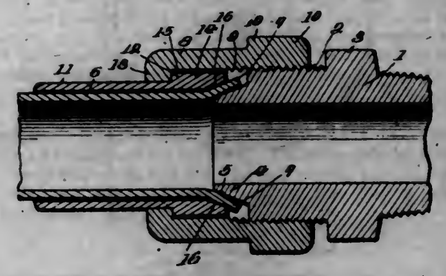
1,893,441. TUBE COUPLING. ARTHUR L. PARKER, Cleveland, Ohio. Filed July 7, 1930. Serial No. 466,282. 1 Claim. (Cl. 285—86.)



In a tube coupling, a female member having an integral portion forming a tapered seat adapted to extend into the flared end of a tube, and a cylindrical portion which is opposed to the tapered seat, and means for clamping said tube end on the seat on said female member comprising a male member having a threaded engagement with the female member and consisting of inner and outer sections, one of said sections having an annular recess therein and the other section having an annular projecting member adapted to snugly fit within the recess and hold said inner and outer sections assembled while permitting relative rotation between the members during the clamping of the tube end, said inner section having a smooth cylindrical face adapted to contact with the cylindrical face on the female member when clamping the tube end, and having a tapered seat adapted to engage the outer face of the flared end of the tube.

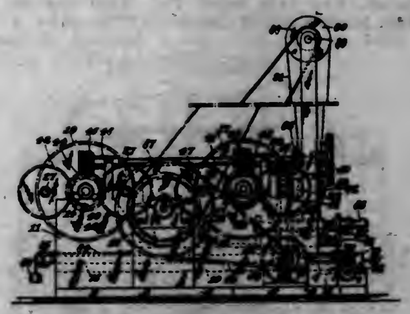
1,893,442. TUBE COUPLING. ARTHUR L. PARKER, Cleveland, Ohio. Filed July 7, 1930. Serial No. 466,283. 1 Claim. (Cl. 285—86.)

A tube coupling comprising cooperating male and female members having threaded engagement with each other, said male member having an integral portion provided on its outer face with a smooth uniform tapered seat disposed at approximately an angle of thirty degrees to the longitudinal axis of the coupling and adapted to extend into the flared end of the tube, said female member being formed with inner and outer sleeve sections, said outer sleeve section being threaded so as to engage the threaded portion on the male member, the inner face of the outer sleeve and the outer face of the inner sleeve of the female member being substantially in contact, said inner sleeve



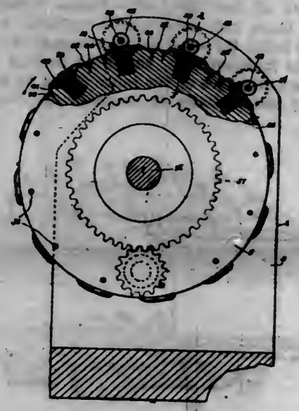
having a tapered seat disposed at approximately the same angle as the tapered seat on said male member and adapted to engage the outer face of the flared end of the tube to be clamped, said inner sleeve section of the female member having a shoulder for rotatable engagement with a shoulder on the outer sleeve section thereof, said shoulders being disposed a substantial distance from the tapered portion of the inner sleeve section whereby said outer sleeve section may force the inner sleeve section endwise against the tube for clamping the same against the tapered seat on the male member.

1,893,443. APPARATUS FOR MACHINING PROPELLER BLADES AND LIKE ARTICLES. LLEWELLYN THOMAS PEARCE, Bristol, England, assignor to The Bristol Aeroplane Company Limited, Bristol, England, a British Company. Filed Nov. 4, 1929, Serial No. 404,767, and in Great Britain Nov. 27, 1928. 22 Claims. (Cl. 90—13.4.)



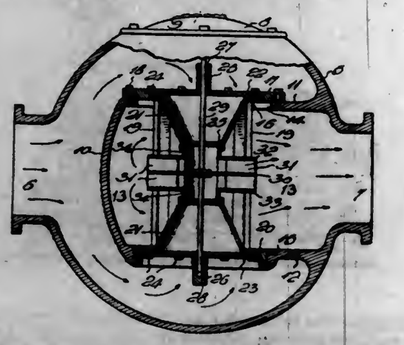
1. Apparatus for machining blade-like articles, comprising two carriers, one adapted to have a pattern and the other a blank mounted thereon, a pattern-follower and a tool, means for traversing the follower and the tool lengthwise of the pattern and blank, and means for continuously moving said carriers so as repeatedly and intermittingly to convey the pattern and the blank bodily past and in contact with the follower and the tool in a direction transverse to the traversing movement of the tool so as to form the work by a series of cuts extending entirely across the blank and produced during one stroke of the tool.

1,893,444. CASTELLATING MACHINE. HARVEY E. PRUITT, Flint, Mich., assignor of one-half to Harvey E. Wertman, Flint, Mich. Filed Sept. 30, 1931. Serial No. 566,128. 9 Claims. (Cl. 10—72.)



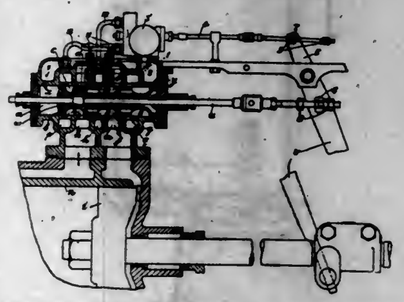
1. In a castellating machine, a magazine comprising a circular rotatable body provided in its edge with spaced revoluble carriers each carrying a spring controlled collet including a normally extended, peripherally beveled head formed with a nut receiving pocket and a plurality of normally inactive shiftable clamping jaws for the nut, said carriers including beveled seats upon which the beveled peripheries of said heads are slidably mounted, an operating shaft for said body, a supporting structure for said shaft, coacting elements carried by said structure and carriers for intermittently and successively revolving the carriers on the rotation of said body, a pair of spaced opposed presser bars carried by said body for and extending across each head, means carried by said structure for successively compressing each pair of presser bars to simultaneously shift the jaws of a head successively to successively clamp a nut to the head in position to be acted upon, and a plurality of cutters carried by said structure for successively grooving the successively clamped nut during the rotation of said body.

1,893,445. TURBINE WATER METER. WILLIAM T. RIMELE, West Palm Beach, Fla. Filed Mar. 30, 1931. Serial No. 526,493. 5 Claims. (Cl. 73—37.)



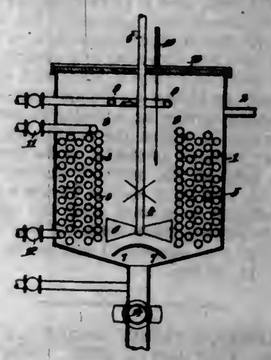
1. A turbine unit for a water meter, comprising an elongated frame having open ends, a screen mounted on each end and having a central bearing, a deflector mounted on each end of the frame and extending axially thereof and inwardly of the screens, a shaft journaled in said bearings of the screens, a turbine wheel mounted on said shaft between said deflectors, and having a central division plate, said turbine wheel having inlet passageways registering with the inner open ends of the deflectors.

1,893,446. VALVE FOR STEAM ENGINES. ALEXANDER CUNNINGHAM RUSSELL, Cathcart, Scotland, assignor to G. & J. Weir, Limited, Glasgow, Scotland. Filed June 18, 1928, Serial No. 286,460, and in Great Britain July 14, 1927. 1 Claim. (Cl. 121—154.)



A valve for distributing steam to an engine cylinder provided with a reciprocating piston, comprising, a chest, having a port at each of its ends, a ring of supply ports positioned between its ends, an annular steam supply chamber surrounding said ring of supply ports, and intermediate and end rings of ports on both sides of said ring of supply ports; connections between said intermediate rings of ports and the ends of the cylinder; exhaust connections communicating with the end rings of ports; a piston main valve movable endwise of said chest; said main valve being formed with three annular ports, the middle annular port being adapted to establish communication between said ring of supply ports and either one of said intermediate rings of ports; and each end annular port being adapted to establish communication between one of the intermediate rings of ports and one of the end rings of ports; a valve spindle extending axially through said main valve and having a lost motion connection with the latter; a lost motion connection between said spindle and the piston; passages connected to the ports at each end of said chest; passages connected respectively to said steam supply chamber and said exhaust connections; an auxiliary valve controlling said passages, admitting steam to and exhausting it from the ends of said chest, when said main valve reaches cut-off position; and, a lost motion connection between said auxiliary valve and piston.

1,893,447. PROCESS OF AND APPARATUS FOR NITRATING GLYCERINE, GLYCOL, AND SIMILAR ALCOHOLS. ARNOLD SCHMID, Vienna, Austria; Hans Schmid and Irma Schmid, administrators of said Arnold Schmid, deceased, assignors to Karl Schmid, Mannheim, Germany. Filed Jan. 25, 1928, Serial No. 249,478, and in Germany Feb. 5, 1927. 2 Claims. (Cl. 260—144.)



1. A process of continuously nitrating glycerine, glycol and similar alcohols, which consists in causing the alcohol to be nitrated to react in a previously cooled mixture of already nitrated alcohol and nitrating acid, supplying additional acid and recooling the reaction mixture and finally removing a portion of the latter and repeating the cyclic process.

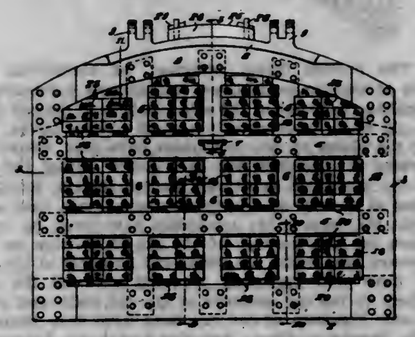
CARNEGIE LIBRARY OF ATLANTA

1,893,448. WADDING. JEAN SCHMIDT, Strasbourg, France. Filed July 24, 1926, Serial No. 124,778, and in France Jan. 29, 1926. 1 Claim. (Cl. 154—2.)



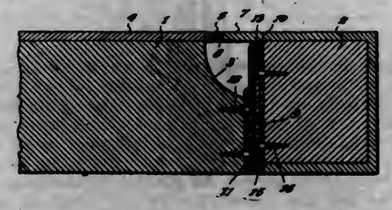
The process of manufacturing hydrofuge cellulose wadding which consists in sizing cellulose paste and then converting the sized paste into wadding.

1,893,449. FURNACE DOOR. HOWARD B. SEERY, Lincoln Place, Pa. Filed Dec. 28, 1930. Serial No. 504,354. 5 Claims. (Cl. 110—173.)



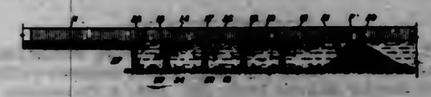
1. A furnace door comprising a frame, blocks formed from fire proof material and arranged in superposed relation with respect to each other, means for securing the blocks together and to the frame respectively, and a cap block for holding the first mentioned blocks in operative association.

1,893,450. DOOR HINGE. EVERETT E. SHIVELY, New Philadelphia, Ohio, assignor of one-third to S. E. Smith, J. H. Miller, and E. H. Miller, New Philadelphia, Ohio; Wilhelmina E. Shively administratrix of said Everett E. Shively, deceased. Filed Apr. 16, 1930. Serial No. 444,783. 3 Claims. (Cl. 20—16.)



1. A door mounting including a door, a jamb provided with an extension overhanging the inner edge of the jamb, a hinge plate secured to the inner edge of the jamb, and a coacting hinge plate secured to the inner edge of the door and movable to engage said extension for limiting the door in its travel to open position, said plates being concealed from view when the door is in closed position.

1,893,451. FLOC TREATMENT. MARSDEN C. SMITH, Richmond, Va. Filed Mar. 16, 1932. Serial No. 599,104. 11 Claims. (Cl. 210—16.)



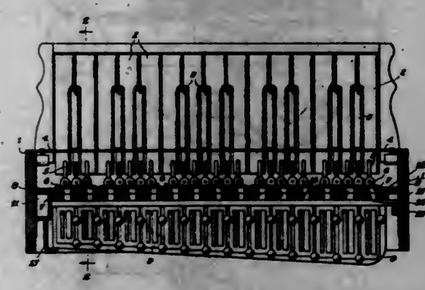
1. The method of liquid purification which comprises adding a coagulant to a liquid to produce flocs therein, agitating a body of the liquid to maintain said flocs in suspension, and substantially horizontally counter-currently and unobstructedly circulating through said liquid a supply of previously formed flocs.

1,893,452. FLEXIBLE SHAFT COUPLING FOR THE TRANSMISSION OF POWER. CHARLES ARTHUR GLENDOWER STANDAGE, London, England. Filed Nov. 1, 1930, Serial No. 492,795, and in Great Britain Nov. 9, 1929. 13 Claims. (Cl. 64—26.)



1. A flexible coupling for the transmission of power, of the kind wherein the two shafts to be coupled are provided with coupling members having corresponding series of axially extending peripheral channels, the said members being connected by means of a series of springs, each of which extends from a peripheral channel in one coupling member to a peripheral channel in the other coupling member, characterised in that the springs, which are separate from one another and are supported in a casing are provided in their longitudinal edges with transverse slots that engage with a limited amount of freedom with annular ribs arranged in the casing.

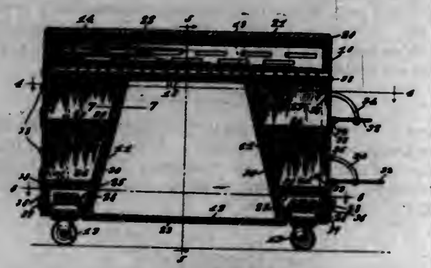
1,893,453. NONLEAK ACCORDION PAD. DEWALD STOECKER, Aberdeen, S. Dak. Filed Jan. 18, 1932. Serial No. 587,414. 1 Claim. (Cl. 84—376.)



An accordion or like instrument having reed blocks, a plate in the instrument having holes therethrough disposed opposite the air cells in the reed blocks, valves for closing the holes and keys for operating the valves, a comparatively thick soft compressible and elastic pad between the plate and the reed blocks and having openings alining with the openings in the plate, said reed blocks having one of their inner ends extended, a cleat on one side of the instrument to be contacted by said extension, blocks on the

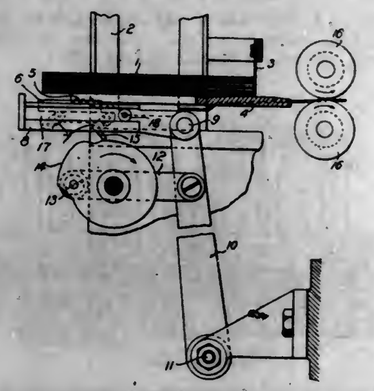
opposite sides of the extension, angle bolts screwed in said blocks and having their outer angle ends normally contacting with the reed blocks for holding the reed blocks in position and in tight engagement with the pad.

1,893,454. HEATED TABLE. FERDINAND STOLZENBURG and HENRY F. KING, San Diego, Calif., assignors to King Self-Service Electric Diner Inc., Ltd., a Corporation of California. Filed Jan. 21, 1929, Serial No. 333,996. Renewed June 2, 1932. 1 Claim. (Cl. 162—268.)



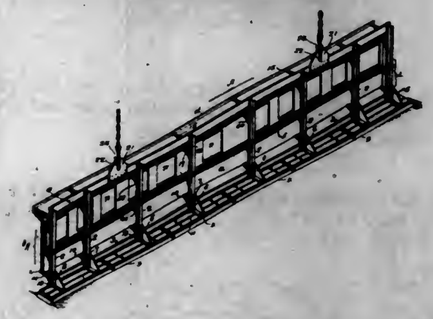
A heating table comprising a casing including a top portion and diverging leg portions extending downwardly from said top portion, said top portion having a compartment extending the full length thereof and opening outwardly through one end, a drawer mounted in said compartment and spaced from the walls thereof to provide heat passages thereabout, insulation between the passages and the top portion, said drawer having slots in the sides thereof to establish communication between the interior thereof and with the passages, partitions dividing the leg portions into compartments, insulation about the compartments of the leg portions and forming heat passages communicating with the first named heat passages, and heating mediums located in the lower ends of the leg portions and having communication with the last named heat passages.

1,893,455. SHEET FEEDING MECHANISM. ALBERT ALEXANDER STONE, London, England. Filed Nov. 4, 1930, Serial No. 493,440; and in Great Britain Nov. 23, 1929. 3 Claims. (Cl. 271—44.)



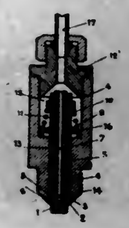
1. In apparatus for feeding sheet material from a stack, the combination with sheet feeding means, of means for engaging the lowermost sheet of the stack and delivering the same to the sheet feeding means, a support for said sheet engaging means adapted to be elevated to shift the latter to sheet engaging position, mechanism for reciprocating said support toward and from said sheet feeding means, said support being collapsible from sheet engaging position in response to tension applied to the sheet by said sheet feeding means, a pivoted lever associated with said support, and a cam for engaging said lever to elevate said support.

1,893,456. METHOD OF ERECTING LOCOMOTIVE CABS, CAR BODIES, AND JIGS THEREFOR. JOHN P. SYKES, Wallingford, and WATSON T. THOMPSON, Ridley Park, Pa. Filed Mar. 29, 1932. Serial No. 601,868. 11 Claims. (Cl. 29—84.)



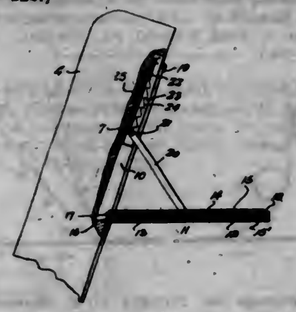
1. The process herein described, of assembling cab bodies of electric locomotives, said process consisting in assembling the plates of the side members of the cab body on a jig which is detachably secured to base plates, and after the plates of the side frame have been assembled, detaching the jig from the base plates, lifting the jig, with the assembled side frame secured thereto, bodily to a point at the side of a temporary base frame, then moving the jig towards the temporary base frame so as to position the side member of the cab in position on the temporary base frame, on which end members of the cab body have been previously mounted, securing the side members to the end members of the cab body, and after both side members of the cab body have been mounted on the temporary frame, securing transverse permanent roof sections to the assembled body so as to tie the two side frames together midway between their ends, and after the cab body has been completed, lifting the entire cab body off of the temporary frame and transferring it to the permanent base frame of an electric locomotive, to which it is permanently secured.

1,893,457. SPRAYING AND INJECTING DEVICE FOR INTERNAL COMBUSTION ENGINES EMPLOYING LIQUID FUEL. EUGÈNE HENRI TARTRAIS, Montmorency, France. Filed Nov. 26, 1929, Serial No. 409,891, and in France Nov. 26, 1928. 12 Claims. (Cl. 299—107.6.)



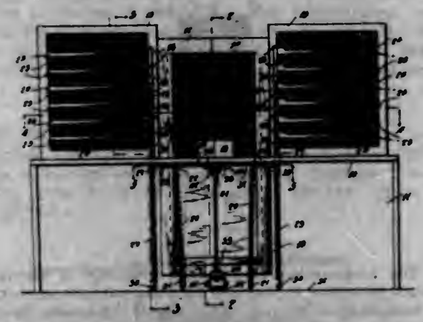
3. An injecting and spraying device of the type described comprising in combination, a casing provided with a cylindrical hole, means for conveying fuel into said casing, a valve seat at one extremity of said casing, a sleeve having a sharp edged extremity normally in the same plane as said valve seat, said sleeve being so fitted in said hole as to be capable of sliding therein, means for limiting the outward displacement of said sleeve, a stem adapted to slide within said sleeve, a valve head integral with the outer end of said stem so as to be located outside said casing, said stem being provided with a longitudinal conduit opening at one end into said casing and with a transverse passage connected with said conduit and extending throughout said stem close to the active surface of said valve head, and means for braking the outward displacement of said stem within said sleeve.

1,893,458. CAR SEAT. JOHN J. TATUM, Baltimore, Md. Filed Sept. 8, 1930. Serial No. 480,547. 6 Claims. (Cl. 155—123.)



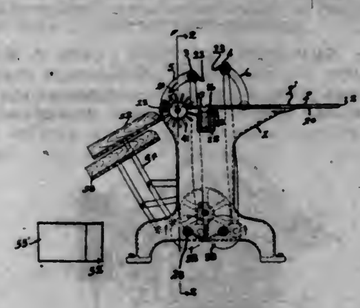
1. In a seat for passenger coaches and the like, a seat back having a compartment at the rear thereof, a dished service tray hinged to the seat back for swinging movement into and out of said compartment, a desk top hinged to the seat back for movement into and out of said compartment and adapted when in open position to lie within the space bounded by the rim of the dished service tray, means for supporting the tray and table top in open position, and means for fastening the same in closed position.

1,893,459. PROTECTED TELLER'S BOOTH. IRA L. THOMAS, Fort Madison, Iowa. Filed June 20, 1929. Serial No. 372,463. 1 Claim. (Cl. 20—1.01.)



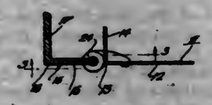
A protective device of the class described in combination with two windows and a counter adjacent the same, an upwardly movable shield for one of the windows, said counter having a slot accommodating said movement, means below the counter urging said upward movement of the shield, a series of slats to protect the other window, a downwardly movable bar pivoted to the slats, said counter having a slot through which said bar extends, means below the counter connected to the bar urging movement of the bar to close the slats, foot operable means below the counter, a flexible element leading therefrom, branch elements on said flexible element, and latches for said shield and for said bar operated by said branch elements, and guide pulleys on the under surface of the counter for said branch elements and said flexible element.

1,893,460. CUTTING, SORTING, AND CONVEYING DEVICE. EDWIN W. TILTON, Haverhill, Mass., assignor to Lewis L. Cowan, Cincinnati, Ohio. Filed July 25, 1930. Serial No. 470,644. 13 Claims. (Cl. 164—19.)



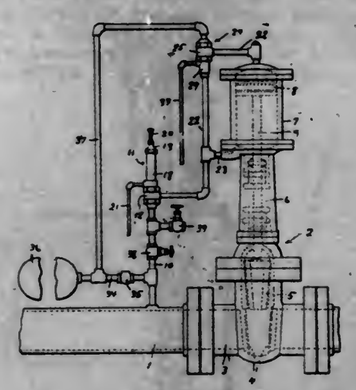
1. The combination with a shoe sole cutting machine having an apron to receive a leather strip, a receiving wheel to receive the soles cut from said strip and an inclined vibrating trough to receive said soles from said wheel.

1,893,461. LOCKER HINGE. WALTER N. VANCE, North Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed June 20, 1929. Serial No. 372,305. 2 Claims. (Cl. 16—128.)



1. A hinge comprising a pair of members having rounded inner ends provided with holes therein, an arm integral with each rounded end, one side of each arm being curved and the other side being straight, a pin on the straight side of each arm, a disk having a hole therein, and means passing through the hole in each member and engaging said disk for fastening said hinge to a door frame.

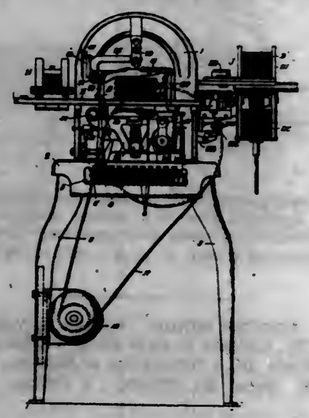
1,893,462. AUTOMATIC VALVE. CHARLES LEONARD WAIT, Tulsa, Okla. Filed July 27, 1931. Serial No. 553,432. 8 Claims. (Cl. 137—139.)



1. In a structure of the class described, a pipe line having a control member, a cylinder having a piston operatively connected to said control member, a reservoir connected to said pipe line, a connection between said

reservoir and said cylinder, a valve having means for selectively venting the cylinder and establishing communication between the cylinder and the reservoir, and a check valve between said pipe line and said reservoir.

1,893,463. EMBOSSING MACHINE. CECIL C. MCCAIN, Glen Ellyn, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed July 10, 1929. Serial No. 377,248. 31 Claims. (Cl. 101—1.)



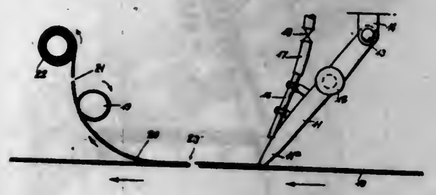
1. In a machine of the class described, the combination of mechanism for inserting embossed printing plates into a printing device frame, a magazine containing a stack of printing plate blanks to be embossed, a carriage movable between said magazine and inserting mechanism for carrying the blanks from the magazine to said inserting mechanism, means controlled by the carriage for extracting the blanks from the magazine, means operated by said inserting mechanism for removing printing plates from the carriage, and embossing mechanism intermediate the magazine and inserting mechanism for embossing the blank on the carriage.

1,893,464. LUBRICATING APPARATUS. FRANK S. BARNS, St. Louis, Mo., assignor to Lincoln Engineering Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 18, 1932. Serial No. 587,279. 12 Claims. (Cl. 103—203.)



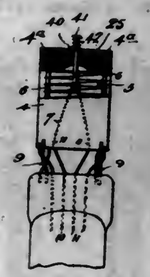
1. In apparatus of the class described, a reciprocating plunger, a cylinder, an inlet check valve associated therewith, said cylinder having an outlet, said reciprocating means drawing material into the cylinder and ejecting the same therefrom, a spreader located between the inlet and the outlet of said cylinder adapted to force said material to conform to a film corresponding to the shape of the interior of the cylinder, said cylinder having at least one opening where said film is formed, said spreader having an effective spreading portion adjacent said opening throughout the period of movement of material past said opening.

1,893,465. PROCESS AND APPARATUS FOR MAKING RUBBER OR LIKE STRIP OR THREAD MATERIAL. FRITS CREMER, Englewood, N. J., assignor to Xetal Corporation, New York, N. Y., a Corporation of Delaware. Filed May 4, 1932. Serial No. 609,250. 10 Claims. (Cl. 18—54.)



7. That process for forming strip material from a liquid thread forming material which when set or dry is self-sustaining and of substantial tensile strength comprising relatively drawing a pen containing the material in liquid form over a surface to apply a strip of the material to said surface and withdrawing the strip of material thus formed from said surface.

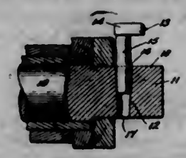
1,893,466. AUDION CONSTRUCTION. ROBERT F. GOWEN, New York, N. Y., assignor to De Forest Radio Telephone & Telegraph Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 17, 1919. Serial No. 271,556. 12 Claims. (Cl. 250—275.)



1. The combination of a base, a plurality of electrode elements including an electron emitting cathode, a control grid completely encircling said cathode, an anode having portions disposed on opposite sides of said cathode, a plurality of metallic members supporting said electrodes and separately sealed into said base, and an insulator spacer member secured to all said elements to form a rigid and unitary structure, said electrodes and insulator element being supported entirely from said base.

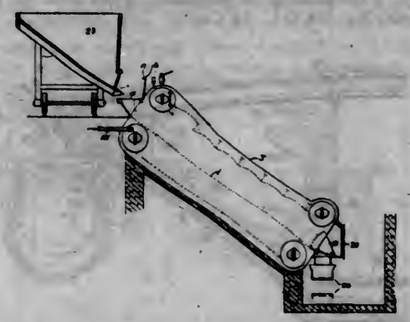
1,893,467. LOCKING PIN CONSTRUCTION. JOHN C. MEAWIN, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 12, 1931. Serial No. 543,982. 7 Claims. (Cl. 74—32.)

1. In locking-pin construction, an element having an aperture therein of varying cross sectional area; and a locking pin, originally of substantially uniform cross sectional area which is greater than the smallest cross sectional area of said aperture, forced into said aperture, whereby the material of said pin is rearranged and its



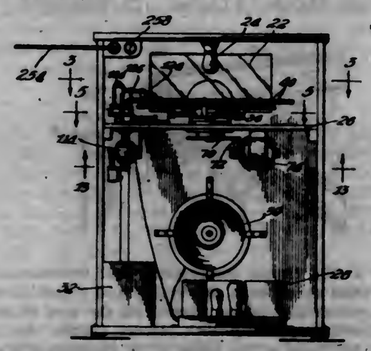
longitudinal section rearranged and its longitudinal section changed to conform substantially to that of said aperture.

1,893,468. APPARATUS FOR COOLING COKE. WILSON T. BOSLER, Philadelphia, Pa., assignor to The U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed Jan. 20, 1926. Serial No. 82,555. 11 Claims. (Cl. 202—228.)



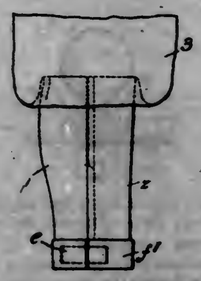
10. In a plant for cooling coke having a casing and a coke inlet at one portion of said casing and a coke outlet at another portion of said casing, a foraminous wharf for supporting coke mounted in said casing and spaced at its bottom and its top and at both sides from said casing to provide a passage for fluid therebetween, guide walls for coke adjacent said spaced sides of said wharf, and means for recirculating fluid through said casing, through said wharf, and through the coke on said wharf.

1,893,469. AUTOMATIC PHONOGRAPH. ARVID DAHLSTROM, Chicago, Ill., assignor of one-third to Frithiof Landberg and one-third to Justus P. Seeburg, Chicago, Ill. Filed May 8, 1930. Serial No. 450,749. 21 Claims. (Cl. 274—10.)



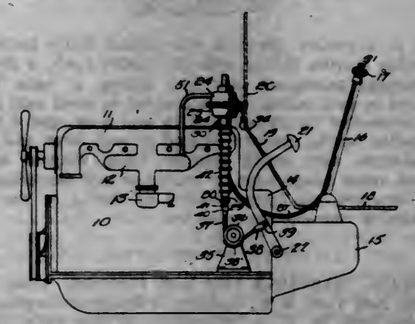
5. In a phonograph of the class described, carrier mechanism adapted to support and continuously maintain a record turntable at a certain level and a second record turntable at a different level during all shifting movements of said mechanism, means for rotatably shifting said mechanism, a single driving member for rotating each of said turn-tables, a prime mover for rotating said driving member, and reproducing mechanism adapted to cooperate with record disks mounted on said turntables.

1,893,470. JODHPUR AND LIKE GARMENT. CHARLES EMMS, London, England. Filed July 14, 1930, Serial No. 467,752, and in Great Britain July 18, 1929. 1 Claim. (Cl. 2—228.)



A plus-fours garment in which gaiter parts adapted to replace the usual stocking are combined with knicker parts shaped to sag and extend loosely beneath the knees, gaiter parts each consisting of only two main parts adapted to combine to embrace the lower part of a leg, one of said parts being considerably wider than the other, to an extent that it encircles the leg from the vertical centre line of the calf inwards around the inside and shin of the leg to the outer side of the calf, the other part merely extending over the remaining portion of the lower part of the leg so that a seamless front or shin part of the gaiter is provided, horizontal transverse upper edges to said two parts united to a horizontal lower edge of the appropriate knickers part, stitching connecting said two parts completely along two vertical edges but only partly along their other vertical edges to provide a slit to enable the wearer's foot to pass through the gaiter part, the vertical edges of said two elements being curved at their united edges to produce a loose calf fitting part, the arrangement being that a "plus fours" garment loose and baggy beneath the knees overhangs the upper ends of the gaiter parts so as to obscure their junction to the upper plus fours parts.

1,893,471. CLUTCH OPERATING MECHANISM FOR MOTOR VEHICLES. EDWARD G. HILL, Richmond, Va., assignor to Hill Engineering Corporation, Richmond, Va., a Corporation of Virginia. Filed Oct. 8, 1930. Serial No. 487,319. 17 Claims. (Cl. 192—91.)



1. Apparatus of the character described comprising a power device connected to an operating member of a motor vehicle clutch, a control device operable for rendering said power device operative to move the clutch to in-

operative position, and automatic means operative as the elements of the clutch approach operative position for retarding the movement of such elements, said control device including a member manually controllable for rendering said automatic means substantially ineffective for retarding the clutch elements.

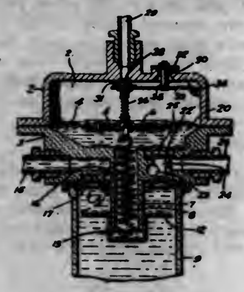
1,893,472. MIRROR SUPPORT AND METHOD OF MAKING SAME. ERWIN C. HORTON, Hamburg, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed July 18, 1929. Serial No. 379,121. 13 Claims. (Cl. 45—97.)



1. In the production of a bracket member having a member and a resilient plate attached thereto having a portion lying adjacent a receding face of said member and an ear to be clenched over an opposing face of said member, the process of flexing the plate toward the receding face to place the plate in tension and clenching the ear over said opposing face, whereby the resilience of the plate will thereafter urge the ear into close contact with said opposing face.

2. In a mirror mounting, or the like, a supporting plate having spaced attaching ears and an adjacent locating aperture, and a part having a base provided with seats for the ears and a locating lug shaped to enter the aperture for locating the seats relative to the ears.

1,893,473. FUEL PUMP. HENRY HUEBER, Buffalo, and ERWIN C. HORTON, Hamburg, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y. Filed May 15, 1930. Serial No. 452,742. 10 Claims. (Cl. 103—152.)



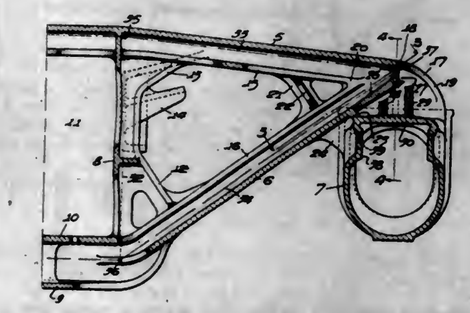
1. In a suction operated, fuel lifting device including a casing portion having inlet and outlet ports, a flexible diaphragm associated with said casing, a valve lever pivoted in said casing, valves adapted to cover said ports and connected for movement with said lever, and a valve actuating spring member secured to said lever and said diaphragm, said spring member being adapted to be placed under compression by flexing of said diaphragm in one direction and under tension by flexing of the diaphragm in the opposite direction.

1,893,474. EARPIECE FOR EAR PHONES. HUGO LIEBER, New York, N. Y., assignor to Sonotone Corporation, New York, N. Y., a Corporation of New York. Filed May 27, 1931. Serial No. 540,317. 10 Claims. (Cl. 179—182.)

1. An earpiece for earphones, comprising a body of flexible material of a size to enter the cavity of the outer ear and shaped to fit between the antihelix and the tragus of the ear and to seat on the antitragus, and having a projecting part of flexible material formed to extend behind the crus of the helix of the ear to aid in holding the earpiece in position in the ear, and having a tubular part to extend into and engage the mouth of the auditory canal of the ear.

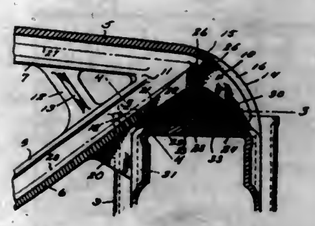


1,893,475. TRUCK SIDE FRAME. THOMAS H. SYMINGTON, deceased, Baltimore, Md., by Edith R. Symington and Thomas R. Symington, executors, Baltimore, Md., assignors to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed Nov. 11, 1931. Serial No. 574,434. 14 Claims. (Cl. 105—205.)



1. In a side frame, compression and tension members converging at their outer ends and integrally joined to a journal box, the tension member being of channel shape in cross section with its open side uppermost, the bottom or closed wall of said tension member being located appreciably above the inner edge of the top of the journal box and joined thereto by a thrust transmitting tie.

1,893,476. TRUCK SIDE FRAME. THOMAS H. SYMINGTON, deceased, Baltimore, Md., by Edith R. Symington and Thomas R. Symington, executors, Baltimore, Md., assignors to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed Nov. 11, 1931. Serial No. 574,436. 8 Claims. (Cl. 105—205.)

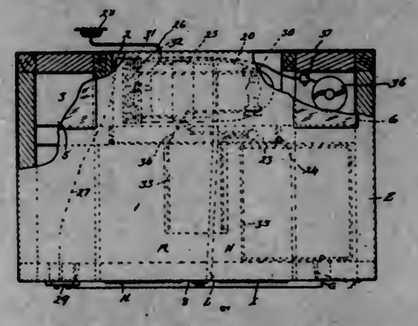


1. In a side frame, compression and tension members having their outer ends converging and joined to an integral journal box, means formed on the roof of the box and extending upwardly with respect thereto and joined to the inner faces of the sides of the juncture of the compression and tension members for transmitting vertical loads directly thereto, said means comprising a relatively heavy transverse rib located at the center of the roof and having a horisontal intermediate portion and abruptly ascending end portions joining said juncture, and auxiliary ribs arranged in pairs and rising from the journal box roof at opposite sides of the first named rib and merging into the inner faces of the juncture of the compression and tension members.

1,893,477. PROCESS FOR THE VULCANIZATION OF RUBBER LATEX OR OTHER RUBBER DISPERSIONS. FRANS CORNELIS VAN HEURN, Amsterdam, Netherlands, assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 31, 1930. Serial No. 505,980. 9 Claims. (Cl. 18—53.)

1. A process for the vulcanization of aqueous rubber dispersions, which comprises adding to a rubber dispersion which is stable in the presence of acids, a thiosulphate and a sufficient quantity of a substance having an acid character to precipitate sulphur out of the thiosulphate.

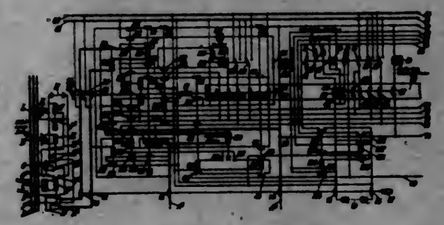
1,893,478. REFRIGERATING APPARATUS. THOMAS C. WHITEHEAD and HAROLD A. GREENWALD, Detroit, Mich., assignors, by direct and mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed June 22, 1931. Serial No. 546,090. 2 Claims. (Cl. 62—116.)



1. In a refrigerating apparatus, a relatively low flat topped refrigerator cabinet having an opening in its front vertical wall, a closure for said opening, a vertical insulating partition parallel to the front wall and dividing the cabinet into a food storage compartment located in front of said partition and a machine compartment located in back of said partition, refrigerating machinery supported by said partition with its heat absorbing portion in the food compartment and its heat dissipating portion in the machine compartment, said cabinet being provided with an opening in its top wall for permitting access to a third compartment located in the rear of the food storage compartment and communicating therewith, and being further located at one side of and insulated from the machine compartment.

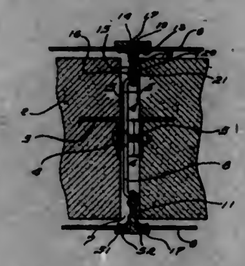
1,893,479. ELECTRIC SELECTIVE REMOTE CONTROL SYSTEM. BRUCE HAMER LEESON, Tynemouth, and DOUGLAS EDWARD LAMBERT, Harpenden, England, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England, a Company of Great Britain. Filed Mar. 25, 1930, Serial No. 438,890, and in Great Britain May 2, 1929. 10 Claims. (Cl. 177—353.)

1. A combined remote control and protective system for the selective remote control from a control station of apparatus units at an electric power substation and for the protection of a feeder or like circuit lying adjacent to such system, including in combination four pilot wires connecting the two stations and normally forming part of the remote control system two of the pilot wires being capable of being borrowed for protective purposes when required, a D. C. source of E. M. F. associated with the protective system at each end, a transfer device at each end of the protective system, means whereby each transfer device when operated by the protective gear acts to disconnect the two borrowable pilot wires from the remote control system at the adjacent end, means whereby either transfer device may act in accordance with the protective requirements to connect the borrowable pilot wires to the adjacent protective source of E. M. F., apparatus at the control station for transmitting selecting currents over the two unborrowable pilot wires to the substation, a selector at the substation to which step-by-step movements can be imparted for the successive selection of individual apparatus units, a D. C. source of E. M. F. in the substation associated with the remote control system, means at the substation



acting in response to a selecting current to cause the selector to perform one stepped movement, means whereby on completion of such movement the selector causes the remote control source of E. M. F. to be connected to the two borrowable pilot wires with a polarity opposite to that with which the adjacent protective source of E. M. F. can be connected to such pilot wires, means whereby the control station apparatus for transmitting the selecting currents remains locked against further operation after a selecting current has been transmitted, and a polarised release relay in the control station unresponsive to current received over the borrowable pilot wires from the protective source of E. M. F. but acting when energised by the current transmitted from the remote control source of E. M. F. on completion of the selector movement to unlock the control station apparatus.

1,893,480. BUILDING STRUCTURE. ALVAN C. MITCHELL, Detroit, Mich., assignor of one-half to Fenwick A. MacDaniel, Detroit, Mich. Filed Apr. 30, 1930, Serial No. 448,706. Renewed Apr. 8, 1932. 7 Claims. (Cl. 72—16.)



1. In a wall structure of the type having an inner wall unit and an outer wall unit comprising sections of sheet material which form a joint, a spring clip and a T-bar, the said spring clip and T-bar being substantially co-extensive with the joint formed by said sections of sheet material whereby the sections are yieldably held between the T-bar and the spring clip, and tie means removably securing the spring clip to the inner wall section whereby the outer wall is secured to the inner wall.

CARNEGIE LIBRARY OF ATLANTA

Patents Nos. 1,893,481 to 1,894,257

THE OFFICIAL GAZETTE

OF THE

United States Patent Office

Vol. 426—No. 2 TUESDAY, JANUARY 10, 1933 Price—$16 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscriptions, $10.00 per annum, including annual index, $12.25; single numbers, 25 cents each.

PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
Issue of January 10, 1933	237
Disclaimers	237
Adverse Decisions in Interference	237
Interference Notices	237
Applications Under Examination	238
Decisions of the U. S. Courts—	
Naivette, Inc., v. Bishinger et al. Herold Bros. Co. v. Philad Co. et al.	239
Patent Suits	243
Adjudicated Patents	244
Notice of Cancellation	244
Trade-Marks Published (154 Applications)	245
Trade-Mark Registrations Granted	264
Trade-Mark Registrations Renewed	273
Labels	274
Prints	275
Reissues	277
Plant Patent	278
Designs	278
Patents Granted	286

Issue of January 10, 1933

Trade-Marks	206	No. 300,144 to No.	300,349,	inclusive.
T. M. Renewals	31			
Labels	41	No. 41,633 to No.	41,673,	inclusive.
Prints	10	No. 14,013 to No.	14,022,	inclusive.
Reissues	4	No. 18,709 to No.	18,712,	inclusive.
Plant Patent	1	No. 52		
Designs	94	No. 83,947 to No.	84,040,	inclusive.
Patents	777	No. 1,893,481 to No.	1,894,257,	inclusive.
Total	1,163			

Disclaimers

1,533,410.—*Anton J. Haug*, Nashua, N. H. PULP-SCREENING MACHINE. Patent dated April 14, 1925. Disclaimer filed December 14, 1932, by the patentee.

Hereby disclaims from the scope of said claim 32, any process of screening pulp except processes in which an enclosed body of pulp is rapidly revolved about a horizontal axis.

Re. No. 17,857.—*Clarence L. Burgher*, New York, N. Y. MEANS OF HEATING INCLOSURES ELECTRICALLY. Patent dated November 11, 1930. Disclaimer filed December 10, 1932, by the patentee, and the assignee, *Duct Electric Heater Corporation*.

Hereby enter the following disclaimer; to wit,

We hereby disclaim such a broad interpretation of the claim in our Letters Patent Re. No. 17,857 as would include all electric space heaters consisting of a series of ascending plates of any metal and form and an electrical heating element electrically insulated from but in direct heat-conducting relation to said plates, our invention being limited to an electric space heater consisting of a series of substantially unobstructed, ascending air-heating and circulating ducts having ascending walls of high heat conductivity, spaced apart and lengthened so that their length is at least several times the width of the space between them, and an electrical element electrically insulated from but in direct heat-conducting relation to the duct walls.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,701,889, A. E. Spinasse, Process and apparatus for drawing glass, decided October 27, 1932, claims 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, and 15.

Pat. 1,716,562, J. R. Oliver, Welt sewing machine, decided November 28, 1932, claims 1 and 9.

Interference Notices

U. S. PATENT OFFICE, *Washington, Dec. 6, 1932.*

Pierre Jerome de Saint Andre Meynardie, his assigns or legal representatives, take notice:

An interference between the patent of Pierre Jerome de Saint Andre Meynardie, 84 Boulevard Exelmans, Paris, France, No. 1,661,439, granted March 6, 1928, and an application for patent filed by Douglas Kent Warner, Watkins Glen, N. Y., having been redeclared by this Office, and the notice of such redeclaration sent by registered mail to said Meynardie at said address having been returned by the post office undeliverable, notice is hereby given that unless said Meynardie, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

W. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Dec. 20, 1932.*

Leader Food Products Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of the New England Importation Company, 208 State Street, Boston, Mass., for registration of a trade-mark and trade-mark registered July 3, 1928, No. 243,997, to the Leader Food Products Co., 167 West Division St., Chicago, Illinois, and a notice of such declaration sent by registered mail to said Leader Food Products Co., at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Leader Food Products Co., their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business December 23, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 56,962; Trade-Mark Division, 999. Oldest new case, June 30, 1932; oldest amended, July 9, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Oct. 29	Nov. 11	209
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Aug. 25	Aug. 29	895
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Oct. 1	Oct. 1	694
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Oct. 8	Nov. 11	240
4806C	6. LEWERS, A. M., Carbon Chemistry	Oct. 3	Oct. 10	304
5725	7. JARBOE, C. G., Optics; Photography	Aug. 1	Aug. 1	1,509
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Aug. 20	Aug. 20	1,133
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Sept. 1	Sept. 10	681
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Sept. 26	Oct. 24	557
5067B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and River Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Aug. 30	Aug. 26	618
		Aug. 25	Aug. 29	583
7701	12. HENRY, C. O., Machine Elements	Oct. 18	Oct. 28	261
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Sept. 1	Sept. 1	850
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Sept. 29	Sept. 29	596
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Aug. 10	Aug. 10	1,542
5612	16. SPENCER, C. J., Telegraphy; Telephony	Sept. 20	Sept. 20	663
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	July 9	July 9	1,310
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Oct. 1	Oct. 1	461
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	July 26	July 27	1,578
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Oct. 3	Oct. 7	378
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Sept. 8	Sept. 10	831
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Oct. 18	Oct. 26	351
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Aug. 4	July 19	789
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Oct. 25	Oct. 25	475
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	July 28	July 30	1,324
5893	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Aug. 5	Aug. 8	678
5706	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Sept. 27	Oct. 1	751
4628	28. BENSON, A. R., Internal-Combustion Engines	July 11	July 14	1,206
5062	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	July 13	July 16	564
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	Aug. 24	Aug. 31	711
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	July 30	Aug. 2	1,351
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Sept. 24	Sept. 23	700
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Aug. 1	Aug. 1	1,873
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	July 29	Aug. 4	807
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Nov. 10	Nov. 14	274
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	July 20	July 25	1,414
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Aug. 20	Aug. 25	855
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Oct. 24	Nov. 17	146
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	July 13	July 21	1,207
7880	40. OBERLIN, J. J., Receptacles	Aug. 12	Aug. 13	1,989
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Oct. 21	Oct. 26	416
5882	42. CUTTING, H. O., Electric Signaling	July 6	July 15	1,208
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	July 12	July 27	1,508
4087B				
7097	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	July 29	Aug. 1	1,547
4613	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Sept. 29	Sept. 29	720
7600	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Oct. 3	Oct. 11	401
5731	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	July 27	July 27	1,746
7725	48. ROEPKE, O. B., Electricity, General Applications	Aug. 26	Aug. 26	605
	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	July 19	July 25	1,272
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	July 12	July 12	1,910
5628	51. BACKUS, C. D., Radiant Energy	Aug. 30	Aug. 30	973
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Oct. 24	Oct. 28	470
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Oct. 12	Oct. 24	349
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	July 30	July 30	1,012
6887	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	Oct. 4	Oct. 6	316
4725	{Designs	Nov. 25	Dec. 12	253
3623	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Aug. 6	Aug. 7	1,125
5605	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Aug. 27	Aug. 26	620
4709	58. DOWELL, E. F., Abrading; Typewriting	July 28	July 29	1,075
5806	59. RICHARD, V. L., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	July 23	July 23	1,316
6724	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	July 18	July 18	1,253
7525	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	July 28	Aug. 1	1,172
4868	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Aug. 17	Aug. 24	1,181
4708	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	July 28	Aug. 1	1,241
5624	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Oct. 8	Oct. 6	367
	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	June 30	July 16	1,416
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND—{Trade-Marks	Nov. 27	Dec. 10	886
	{Labels and Prints	Nov. 28	Dec. 10	113

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Circuit Court of Appeals—Sixth Circuit

NAIVETTE, INC., *v.* BISHINGER ET AL. HEROLD BROS. CO. *v.* PHILAD CO. ET AL.

Nos. 5,945 and 5,946. Decided October 12, 1932

[61 Fed.(2d) 423]

1. INVENTION—MONOPOLY.
Inventor is entitled to monopoly on improved method of hair waving, where it involves invention.

2. SAME—PATENTABILITY.
In addition to novelty, utility, and mechanical skill, inventive concept must be present if invention is found.

3. PATENTS—VALIDITY.
Patent No. 17,393, claims 9 and 10, for process of waving hair, *Held* valid.

4. PATENTABILITY—PROCESS.
Process may be patentable, irrespective of any particular form of machinery or mechanical device for practicing it, and converse is also true.

5. SAME—SAME.
Discovery of new process for giving hair wave was not patentable invention, unless it was reduced to practice, either by known appliances or by those newly devised.

6. SAME—INVENTION.
If means for putting discoverer's process for hair waving into practice were obvious or already disclosed by art, no invention was involved in making use of them.

7. PATENTS—VALIDITY.
Mayer reissue patent, No. 17,393, claims 5, 6, and 11, for hair engaging clamp, *Held* invalid because lacking in invention.

8. SAME—SAME.
Mayer reissue patent, No. 17,585, for permanent hair-waving appliance, *Held* invalid because lacking in invention.

9. SAME—SAME.
Decker patent, No. 1,683,531, granted September 4, 1928, for hair-waving outfit, claims 1 and 5 *Held* invalid because lacking in invention.

10. SAME—SAME.
Bishinger patent, No. 1,718,025, granted June 18, 1929, for hair-curling appliance, *Held* invalid; there being neither novelty nor invention.

11. SAME—SAME.
Patent for new and useful process is not invalidated because of lack of novelty in mechanical means disclosed for practicing it.

12. SAME—PROCESS.
Process patent will cover all means of practicing process, whether disclosed or not.

13. SAME—INFRINGEMENT.
Manufacture or sale of appliances organized into unitary device for practicing patented method constitutes "contributory infringement."

14. SAME—INFRINGEMENT.
Mayer reissue patent, No. 17,393, claims 9 and 10, for process for waving hair, *Held* infringed.

15. PATENTS REISSUE—INTERVENING RIGHTS.
Defense of intervening rights acquired between granting of original patent and reissue patent *Held* not available to dealer, where record did not disclose that any machines were sold by it which were made by or for company which had acquired such intervening rights.

APPEAL from the District Court of the United States for the Northern District of Ohio; Paul Jones, judge.

Patent infringement suits by Robert Bishinger and another against Naivette, Inc., and by the Philad Company and another against the Herold Brothers Company. From decrees for complainants, defendants appeal.

Decree in first-mentioned suit reversed, and cause remanded with instructions, and decree in the other suit affirmed in part, and in part reversed and remanded.

See, also (C. C. A.) 54 F.(2d) 623, 624.

W. B. Morton, of New York city (*Pennie, Davis, Marvin & Edmonds*, of New York city, *Kwis, Hudson & Kent*, of Cleveland, Ohio, and *W. Brown Morton* and *E. H. Merchant*, both of New York city, on the brief), for appellants.

Morris Kirschstein, of New York city (*Harvey R. Hawgood* and *Hawgood & Von Horn*, all of Cleveland, Ohio, *Morris Kirschstein*, of New York city, and *T. Paul Titus*, of Cleveland, Ohio, on the brief), for appellees.

Before MOORMAN, HICKS, and SIMONS, Circuit Judges

SIMONS, *Cir. J.*:

The four patents in suit, all held valid and infringed by the district court, relate to the so-called "permanent" hair-waving art. The appeals, while involving separate plaintiffs and defendants, are from decisions below in cases arising out of the same alleged act of infringement, tried as one, and argued and briefed together on review. The Herold Brothers Company is a dealer, and acquired the devices which it sold from Naivette, Inc. The patents in suit are Mayer reissue patent, No. 17,393, originally granted March 29, 1927 (reissue application March 11, 1929), for hair-waving appliance and method; the Mayer reissue patent, No. 17,585, originally granted March 1, 1927 (reissue application March 2, 1929), for permanent hair-waving appliance; Decker patent, No. 1,683,531, granted September 4, 1928, for hair-waving outfit, and Bishinger patent, No. 1,718,025, granted June 18, 1929, for hair-curling appliance. Appeal No. 5,945 is from decision on the Bishinger patent; appeal No. 5,946 from decision on the other three patents.

For reasons which will become apparent, we discuss first Mayer reissue patent, No. 17,393. Of the claims relied upon, claims 9 and 10 disclose a process of waving hair upon the human head. Claim 10 is perhaps the more important to our discussion, and the process there claimed is one which—

comprises gripping a flat strand of hair adjacent to the scalp with a moisture tight clamp, winding said strand spirally from its end upon a rod nearly to said clamp, enclosing said strand together with moisture in a moisture retaining envelope, enclosing said strand and envelope within a heater extending about the same to the clamp, then causing the heater to supply heat to the strand.

The art of waving hair is an ancient one. It had its beginning in the practice of wig making, wherein two methods of waving were recognized, both,

however, depending upon the effect of heat and moisture upon the hair. In the so called spindle method, described by this court in *Nestle-Le Mur Company* v. *Eugene*, 55 F.(2d) 854, the hair was wound helically, i. e., like a screw thread, on a spindle and then moistened and subjected to heat. In the croquignole method the hair was wound spirally, i. e., wrapped in overlying layers upon a rod, and then similarly treated. The modern development of waving upon the human head followed somewhat the same line. Spindle waving was first and still is largely employed in the art. In this method the strand of hair is wound helically upon the spindle, a moistened wrapper is then applied to the hair, and the spindle and hair are inserted in an electrical heater and subjected to heat for a sufficient period. The croquignole method, which is the one described by Mayer, differs from the spindle method in that the strand of hair is wound spirally on the rod beginning at the outer end of the strand instead of at the scalp. The devices employed are necessarily different in design, although they include to large extent the same essential elements.

The problem that it is claimed confronted Mayer was to produce a more natural appearing wave than had been made by the spindle process. He appreciated that the hair should be wound into a true circular or spiral form rather than into a helix. He understood that to give permanence to the wave it would be necessary not only to subject the wound strand to heat and moisture, but that while being so subjected each filament of the strand should be held under tension. The importance of a tight wind was recognized in the spindle process, as the court noted in the Nestle case, but it had been a relatively simple matter to obtain it, because in that process the strand of hair was gathered into a round bunch and the operator holding the rod and strand pulled the hair taut as he wrapped, and as the ends beyond the operator's hands were free, slippage of one filament upon another made no difference to the tension of the wind. In producing the croquignole wind, however, it is impossible to start at the scalp and work outwardly, so it became necessary to start at the outer tips of the hair and wind down toward the scalp, with the curler rod held in a horizontal position, that is, parallel to the scalp. As uniform tension was desired throughout the width of the strand, it was necessary to use both hands to hold the ends of the curling rod. This precluded possibility of holding onto the strand between the curler and the head, so that any pull exerted upon the hair had to be taken by the scalp, and since considerable pull was necessary to provide tension, if this pull were not uniformly distributed over the entire section of skin from which the strand extended, the result became painful to the person operated upon, and some of the hair might be pulled out by the roots.

Mayer overcame this difficulty by forming the strand of hair into a flat band before winding, and then engaging this band close to the scalp with a protector clamp, which gripped the hair tightly so that no hair could be moved relative to the other, and when all the filaments were combed to lie in direct lines from the scalp to the protector a pull upon the protector or upon the strand on the side of the protector clamp away from the scalp distributed the tension uniformly between all of the filaments; the force exerted upon each hair being relatively slight, and causing no discomfort. The gathering of the hair into a flat thin band by the clamp also made it possible to exert tension on each filament as it was wound, and not merely upon the outer filaments, and so improved the resulting wave. The step of forming the hair into a thin flat band before winding, and the exertion of uniform tension upon all of its filaments by means of the protector clamp, are claimed to be the bases of the entire croquignole waving art as now practiced. To the patentability of the Mayer process thus briefly described are interposed the usual defenses of anticipation and lack of invention, supported by voluminous references to the prior art.

[1] We are not impressed by the contention that Muyer was the father of the croquignole wave. Croquignole waving was old in the art of wig making, and was disclosed in numerous patents dealing with the waving of hair upon the human head, the most important references being the patent to Popin, No. 1,416,750, issued May 23, 1922, and the patent to Szlanyi, No. 1,400,637, issued December 20, 1921. In fact Mayer himself calls attention to the two styles of hair waving in use at the time of his application. The most that can be said for the process claims of the first Mayer reissue patent is that if it presented something new it disclosed merely an improvement in the art of croquignole waving, and if so he is of course entitled to a monopoly on the improved method, if it involved invention. Whatever novelty there is in the process of Mayer seems to us to be found only in the manner of forming the hair into a flat band, and in the winding and keeping of it under tension. It is true that Popin in his earlier patent, No. 1,447,997, issued March 13, 1923, discloses a flat band, surrounded by a shield intended to function as an insulating device. It is clear that while the desirability of a flat strand is indicated, the strand cannot by Popin's shield be held under tension away from the scalp, nor is the means employed useful in holding the several filaments of the strand in the exact relation to each other now considered so desirable in the art of croquignole waving. It is also true that in the spindle art tension upon the filaments was thought to be necessary to secure a satisfactory wave or curl, but in the spindle process the obtaining of tension upon the hair is relatively a simple matter. New methods of obtaining and keeping the hair under tension were necessary to be devised in giving the croquignole wave.

[2, 3] But novelty alone (utility not being questioned) does not denote invention. It is not our purpose to add to what has already been said of the inventive concept, the "something more" that in addition to novelty, utility, and mere mechanical skill must be present if invention is found. "In many cases the presence of invention is made instantly manifest to the mind of the court from the patent itself, in view of the prior art; or it may be shown by commercial success, by the fact that the device [or process] satisfies a long-felt want, or by broad acceptance and use." *Seymour* v. *Ford Motor Co.* (C. C. A. 6) 44 F.(2d) 306, 309. With this in mind, and recognizing that the question of invention is close, we are unable to ignore the impressive story, told by the record, of the reception of the Mayer method by those working in the art and by the public. The Mayer patent first came to notice of hairdressers in the United States through an announcement in a German trade paper. Metzinger, in Oakland, Calif., immediately recognized that it was something he wanted and wired Mayer at Carlsbad, ordering a machine. Kletz, of Cleveland, saw an announcement and left at once for Europe to see Mayer, and obtained the agency to sell the machines in the United States and Canada. Hyman & Oppenheim, of New York, wrote their senior partner in Europe to communicate at once with the inventor in Carlsbad. Following the arrival of the Mayer appliances, demonstrations of the method in New York, Cincinnati, and elsewhere created the keenest interest among hairdressers and in the trade. Samuel Bonat, senior member of Samuel Bonat & Brothers, controlling Naivette, Inc., appellant, witnessed a demonstration by Kletz in New York, and inquired about selling license and agency, but was too late. A very large business immediately followed the organization of the Realistic Company, first selling and later manufacturing under license from Mayer. From 1927 to 1930, upwards of three thousand machines were sold for nearly a million dollars. This public reception of Mayer's method or machine indicates that something new had been disclosed which solved some real problem, and was more than a mere trivial improvement in the art. We think such acceptance compels decision in favor of the validity of the contested process claims of the first Mayer reissue patent.

[4–8] Before dealing with infringement, it seems logical to consider the other claims in issue, and the claims of the second reissue patent, as well as the patents to Decker and Bishinger. In addition to the process claims, claims 5, 6, and 11 of the first Mayer reissue patent are for a hair engaging clamp comprising two elongated heat insulated bars, pivotally connected at one end and detachably connected together at the other end, and for rather simple variants of such clamp. The second Mayer reissue patent, of the claims of which claim 4 is typical, is for a heater comprising a pair of rigid levers pivoted intermediate their ends, an arcuate casing with straight parallel edges carried by one end of each lever, a heat insulating grip at the other end of each lever, electrical heating elements within said casings, and a spring between said levers pressing said casings toward each other. Given a process that is patentable, we are confronted with the relationship of process to machine. It is settled that there is a fundamental difference between process and machine, and the process may be patentable irrespective of any particular form of machinery or mechanical device for practicing it. The converse is also true. This has been so recently and so thoroughly discussed by this court in *Nestle-Le Mur Company* v. *Eugene*, supra, that there is no need of amplification. Having discovered a new process for giving the croquignole wave, it became necessary for Mayer to reduce it to practice, either by known appliances, or by those newly devised. Until he accomplished this his conception was not a patentable invention, because useless. *Reo Motor Car Company* v. *Gear Grinding Machine Company* (C. C. A.) 42 F.(2d) 965. If the means for putting his process into practice were obvious, or already disclosed by the art, no invention was involved in making use of them, no matter how clearly the process might disclose invention. *Nestle-Le Mur Company* v. *Eugene*, supra. Mayer, conceiving that holding a flat strand of hair under tension was a necessary step in his new process, the use of a clamp for that purpose must have been obvious. Moreover, clamps were found in the art performing substantially the same function, as in the Pauser patent, No. 1,340,788, May 18, 1920, and in the still earlier Jacob patent, No. 1,268,848. There is no contradiction in sustaining validity of a process, which includes clamping as a step in a new combination, and yet to deny validity to the patent for a clamp as a unitary device. Nor is the consideration we have given to commercial acceptance of the Mayer process persuasive of invention in the appliance, since novelty is the essence of invention, and the appliance is not new. While commercial acceptance of the Mayer machines leads us to sense invention in the process, their public reception is amply explained by the novelty and utility of the method. And so with the heater of the second Mayer reissue patent. A heater performing the same function, but in the form of a cylinder, was well known in the spindle waving art. It could not be used in that form for croquignole waving because of the necessity for clearing the strand of hair at the scalp. It certainly was not beyond the skill of the mechanic to divide the cylinder into two arcuate members for that purpose, and even if so, similar divided heaters are disclosed in the Popin and Szlanyi patents, and in the patent to De Ruvo, 1,404,587, January 24, 1922. Certainly there can be no invention in pivoting levers intermediate their ends, or in insulating grips upon electrical appliances. We conclude, therefore, that claims 5, 6, and 11, of the first Mayer reissue patent are invalid because lacking in invention, and because anticipated, and that all of the claims of the second Mayer reissue patent sued upon are invalid for the same reasons.

[9] Of the Decker patent, claims 1 and 5 are in suit. We do not recite them, for the most that is now contended is that Decker improved upon the

protector and heat insulating clamp of Mayer by combining them so that both could be applied in a single operation; that he increased the thermal insulating qualities of the combination by the inclusion of an air space between them, and provided a cam latch to press the arms of the protector clamp together so that with a relatively small pressure upon the handle of the latch a very tight grip upon the filaments of the strand was obtained. We fail to see invention in Decker. He combined old elements, but manifestly in such a way as must have been obvious to anyone skilled in the art, and the combination produced no new result. If what he did marked any improvement in the art, it solved no real problem and answered no recognized need, and such advance, if any, as was achieved was altogether too trivial to rise to the dignity of invention. *Seymour* v. *Ford Motor Company*, supra.

[10] It is claimed for Bishinger that he devised a curler rod with ratchet teeth in the ends, and spring pawls upon the protector clamp to engage the teeth. This not only facilitated the winding operation, but gave a more positive lock to the curling rod, and permitted him to increase the tension on the hair by turning the rod after it had been positioned upon the protector clamp. The ratchet and pawl are ordinary mechanical expedients commonly used in all the arts to prevent unwinding, and are disclosed in the hair waving art in the patent to Gaire, No. 1,610,855, December 14, 1926, in relation to croquignole waving, and in the Nessler patent, No. 1,105,595, of July 28, 1914, in respect to spindle waving. We see neither novelty nor invention in the Bishinger patent.

[11–13] It is clear from what we have said that we are concerned with the question of infringement only as it may relate to the method claims of the first Mayer reissue patent. We have seen that a patent for a new and useful process is not invalidated because of a lack of novelty in the mechanical means disclosed for practicing it. *Nestle-Le Mur Co.* v. *Eugene*, supra. Such process patent will cover all means of practicing the process, whether disclosed or not. *Corning* v. *Burden*, 15 How. 252, 14 L. Ed. 683. It must follow that if appellants manufactured or sold appliances organized into a unitary device for practicing the patented method, that such manufacture and sale constituted contributory infringement. *Lyman Mfg. Co.* v. *Bassick Mfg. Co.* (C. C. A.) 18 F.(2d) 29. This rule was also fully discussed in the Nestle-Le Mur case. That there was infringement of the method claims of the Joseph Mayer reissue patent is not seriously disputed. The district judge so found, and we are unable to say upon this record that there was error in the finding, unless the claim of immunity based upon asserted intervening rights of appellant Naivette, Inc., is of avail to appellant Herold Brothers.

[14] The defense last mentioned necessitates recital of further facts. Naivette, Inc., is the successor of the Naivette Permanent Wave Manufacturing Company. Both are claimed to be the creatures of Bonat & Bros., who owned all of the stock of each. Bonat & Bros. claim to have sold alleged infringing appliances prior to the date of the reissue application through a sales company called Duart, and also through the Naivette Company before its incorporation. Whether if intervening rights arose in favor of Bonat or of Duart they passed to Naivette, Inc., without express transfer we need not decide, for while the record may lack somewhat in clearness upon the subject, it seems reasonably adequate to show that Naivette, Inc., itself sold appliances designed to practice the patented method both before and after the date of the reissue application. Certainly it advertised an organized machine which illustrated the process, and the record is as clear that it sold such machines prior to the reissue application as that it infringed thereafter. The defense of intervening rights is raised only in the Herold Brothers' appeal, because there only is the first Mayer reissue patent in issue. Herold Brothers is a dealer, and claims immunity because it purchased appliances from Naivette. If intervening rights arose in favor of Naivette, and if such rights are equivalent to a perpetual license to Naivette, we assume the defense is open to Herold Brothers, for the right to sell must imply a right by the customer to buy and resell.

In *Ashland Fire Brick Company* v. *General Refractories Company*, 27 F.(2d) 744, this court concluded that intervening rights may arise as against a reissue patent even if such reissue is applied for within two years from the grant of the original patent. The facts of the instant case are sufficiently analogous to those of the Brick case to warrant assuming that some rights and consequent immunity arose in favor of Naivette. The difficulty that presents itself is to determine the extent of Naivette's intervening rights, if any, and the degree of immunity that results. In *Keller* v. *Adams-Campbell Company*, 264 U. S. 314, 44 S. Ct. 356, 357, 68 L. Ed. 705, the Supreme Court phrased it thus:

> The sole question was whether one who makes and sells articles not covered by the claims of an original patent, but embraced by the enlarged claims of a subsequent valid reissue, applied for within 7 months [within 2 years] after the original was granted, has intervening rights such that he is not only immune from liability for what he has made and sold, but enjoys an irrevocable and permanent license to continue to make and sell without restriction.

The question thus put in the Keller case was not therein answered, because not necessary to decision. In effect the court invited the presentation of it in a proper case. Nor is complete answer found in decisions of the several circuit courts of appeals. In the Ashland Fire Brick case, this court went no further than to hold that the defendant therein, who had made two alleged infringing fire brick machines between the date of the original patent and the reissue application, had acquired a right to continue to use the two machines as if it held a license therefor under the reissue patent, although the defendant therein contended in the court below (D. C.) 15 F.(2d) 215, that it had not only acquired the right to continue to use the two machines, but to make and use such other like machines as it chose. That

in the absence of equitable considerations requiring a broader remedy, the implied license to make and sell growing out of intervening rights terminates with the filing of a reissue application, seems to be the effect of the decision in the eighth circuit in *Bull Dog Floor Clip Company* v. *Munson Manufacturing Co.*, 19 F.(2d) 43. In *Baldwin* v. *Abercrombie & Fitch Company* (D. C.) 227 F. 455, 461, the district judge concluded that,

> By the reissuance of the patent, the patentee loses all in the way of an accounting under the original patent, but the dominant purpose of the reissue statute was to save to the inventor the future remaining after reissue.

Affirmed *Id.* (C. C. A.) 228 F. 895; *Id.*, 245 U. S. 198, 38 S. Ct. 104, 62 L. Ed. 240. We are aware that there are holdings to the effect that one who acquires an intervening right under such circumstances as are here disclosed acquires thereby not only immunity for devices already manufactured, but an irrevocable license to continue in the business of manufacturing them. *Autopiano Company* v. *American Player Action Co.*, 222 F. 276 (C. C. A. 2). That case, however, involved a second reissue application and it could not be assumed that the first reissue was, like the original patent, based on inadvertence.

[15] The record does not disclose that either Naivette or Herold Brothers were manufacturers, or that they had made any substantial investment in machinery for the production of the appliances organized into a unitary machine for the practice of the protected process, and since we assume that decision here does not preclude the sale of noninfringing devices not so organized, we conclude that equity does not require us to give effect to Naivette's intervening rights as though it held a license for any period beyond the date of the reissue application. This being so, the defense is not available to Herold Brothers, since the record does not disclose any machines sold by it which were made by or for Naivette prior to such application.

The decree in case 5,945 is reversed, and the cause remanded with instructions to dismiss the bill. The decree in case 5,946 is affirmed in so far as it holds claims 9 and 10 of the first Mayer reissue patent valid and infringed, and is in all other respects reversed, and the cause is remanded for further proceedings consistent herewith. In view of our conclusions, no costs are allowed either party in case 5,946.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,125,476, G. Claude, System of illuminating by luminescent tubes. D. C., N. D. Calif. (San Francisco), Doc. E 2916, *Claude Neon Electrical Products, Inc.*, v. *Wonderlite Neon Products, Ltd.* Dismissed for want of prosecution Nov. 7, 1932.

1,173,079, E. F. Alexanderson, Selective tuning system; 1,195,632, W. C. White, Circuit connections of electron discharge apparatus; 1,251,877, A. W. Hull, Method of and means for obtaining constant direct current potentials; 1,573,374, P. A. Chamberlain, Radio condenser; 1,728,879, Rice & Kellogg, Amplifying system, filed Nov. 7, 1932, D. C., S. D. Calif. (Los Angeles). Doc. E Y–27–M. *Radio Corp. of America et al.* v. *M. Sexton.*

1,180,159, 1. Langmair, Incandescent electric lamp; 1,687,510, M. Pipkin, Electric lamp bulb, filed Nov. 7, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y–31–J, *General Electric Co.* v. *T. Anraku (Tokyo Lamp Co.).*

1,195,632. (See 1,173,079.)

1,219,801, H. Williams, Sectional furniture, C. C. A., 6th Cir., Doc. 6052, *American Show Case & Mfg. Co. et al.* v. *Grand Rapids Store Equipment Corp.* Patent held not infringed Nov. 9, 1932.

1,231,764, F. Lowenstein, Telephone relay; 1,403,475, H. D. Arnold, Vacuum tube circuit, filed Nov. 7, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y–30–M, *Radio Corp. of America et al.* v. *E. Burns (Melrose Distributing Co.).*

1,233,107, R. M. Myers, Road building machine; 1,470,157, J. L. Fike, Stone spreader; 1,581,784, M. M. Butler, Device for spreading asphaltic concrete; 1,605,094, same, Rock spreading machine, D. C., N. D. Ohio, E. Div., Doc. E 3733, *The Burch Corp.* v. *Galion Iron Works & Mfg. Co.* Dismissed without prejudice Nov. 4, 1932.

1,251,877. (See 1,173,079.)

1,318,670, H. Hull, Selective signaling apparatus, C. C. A., 2d Cir., Doc. 12046, *Appliance Investment Co.* v. *Western Electric Co., Inc.* Decree affirmed (notice Nov. 7, 1932.).

1,402,589, H. A. Farrand, Rule; 1,799,044, 1,799,094, same, Means for controlling resilient rules; 1,828,401, same, Resilient rule, filed Nov. 11, 1932, D. C., S. D. N. Y., Doc. E 72/215, *H. A. Farrand, Inc.*, v. *New York Merchandise Co., Inc.*

1,403,475. (See 1,231,764.)

1,405,523, M. C. Latour, Audion or lamp relay or amplifying apparatus, filed Nov. 10, 1932, D. C., S. D. N. Y., Doc. E 72/203, *Latour Corp.* v. *Bloomingdale Bros., Inc.*

1,466,656, Barr & Jackson, Electric toaster, D. C., W. D. Mich., S. Div., Doc. E 2589, *H. C. Levine* v. *Consumers Power Co. et al.* Dismissed Nov. 9, 1932.

1,470,157. (See 1,233,107.)

1,476,509, E. H. Hart, Moulding, C. C. A., 6th Cir., Doc. 5969, *J. B. Zimmers et al.* v. *Allied Metal Products Corp.* Patent held valid and infringed Nov. 11, 1932.

1,512,888, L. Haft, Lighting set, filed Nov. 11, 1932, D. C., S. D. N. Y., Doc. E 72/204, *Noma Electric Corp.* v. *New York Merchandise Co., Inc.*

1,567,863, Sargent & De Reamer, House wiring structure; 1,567,864, H. R. Sargent, Wall attachment means for electrical devices, filed Nov. 4, 1932, C. C. A., 2d Cir., Doc. 12399, *General Electric Co.* v. *U. S. Electric Mfg. Corp.*

1,567,864. (See 1,567,863.) 1,573,374. (See 1,173,079.)

1,581,784. (See 1,233,107.) 1,605,094. (See 1,233,107.)

1,614,906, E. Von Lepel, Current converter for ignition systems, filed Nov. 9, 1932, D. C., E. D. N. Y., Doc. E 6655, *Egbert Von Lepel* v. *Times Square Stores Corp.*

1,653,501, W. L. Fry, Seat back slip cover, D. C., S. D. N. Y., Doc. E 52/202, *Wil-Fry Corp.* v. *Ebling-Murray, Inc.* Dismissed (notice Nov. 11, 1932).

1,653,542, J. N. Borroughs, Process for laundering towels, D. C., N. D. Calif. (Sacramento), Doc. 929–L, *J. N. Borroughs* v. *Willard Warner et al.* Dismissed Nov. 10, 1932.

1,670,082, D. M. Solenberger, Piston ring, C. C. A., 2d Cir., Doc. 11262, *The Simplex Piston Ring Co. of America, Inc.* v. *Herton-Gallo Creamer Co.* Decree affirmed (notice Nov. 7, 1932).

1,673,727, L. V. Aronson, Cigar lighter, D. C., S. D. N. Y., Doc. E 56/292, *Art Metal Works, Inc.* v. *Diel Watch Case Co., Inc.* Consent decree for plaintiff (notice Nov. 11, 1932).

1,684,900. (See Re. 17,151.) 1,687,510. (See 1,180,159.)

1,728,879. (See 1,173,079.) 1,743,439. (See Re. 17,834.)

1,755,114, L. A. Haseltine, Unicontrol signaling system; 1,755,115, same, Variable condenser, filed Nov. 10, 1932, D. C., S. D. N. Y., Doc. E 72/202, *Haseltine Corp.* v. *Bloomingdale Bros., Inc.*

1,755,115. (See 1,755,114.) 1,799,044. (See 1,402,589.)

1,799,094. (See 1,402,589.) 1,828,401. (See 1,402,589.)

1,834,141. (See Re. 17,131.)

1,880,620. (See Re. 17,131.)

1,885,047. O. A. Berman, Uniform dress, filed Nov. 12, 1932, D. C., E. D. N. Y., Doc. E 6657, *Morris & Co., Inc.* v. *Abraham & Straus, Inc.*

1,886,250. Des. 86,217, G. W. Bungay, Juice extractor, filed Nov. 9, 1932, D. C., E. D. N. Y., Doc. E 6654, *Bungay-Wolf Corp.* v. *Abraham & Straus, Inc.*

Re. 17,131, O. S. Caesar, Heating apparatus for automotive vehicles; 1,684,900, C. B. Waters, Automobile circulation and heating system; 1,834,141, V. J. Butterfield, Fitting for automotive vehicle heaters; 1,880,620, C. H. Will, Automobile heater and deflector therefor, filed Nov. 11, 1932, D. C., N. D. Ohio, W. Div., Doc. E 1310, *Tropic-Aire, Inc.* v. *Lucas Mfg. Co. et al.* Doc. E 1311, *Tropic-Aire, Inc.* v. *Lucas Mfg. Co. et al.*

Re. 17,334 (of 1,743,439), C. De Witt, Steel pole, D. C., N. D. Calif. (San Francisco), Doc. E 2574, *Taper Tube Pole Co.* v. *City of Berkeley, Calif. et al.* Dismissed for want of prosecution Nov. 7, 1932.

Des. 65,818, L. S. Loy, Tea basket, D. C. Calif. (San Francisco), Doc. E 2625, *C. K. Chan et al.* v. *Hong Guey et al.* Dismissed for want of prosecution Nov. 7, 1932.

Des. 81,678, J. Tuteur, Electric vacuum cleaner, appeal filed Nov. 9, 1932, C. C. A., 2d Cir., Doc. 12406, *Electric Vacuum Cleaner Co.* v. *Landers, Frary & Clark.*

Des. 86,217. (See 1,886,250.)

T. M. 280,417, Syracuse Washing Machine Corp., Washing machines, driers, ironers, etc., D. C., M. D. Pa., Doc. 927, *Syracuse Washing Machine Corp.* v. *J. F. Woellers (Easy Electric Washer Co.).* Decree restraining use of trade name (notice Nov. 9, 1932.)

Adjudicated Patents

(C. C. A. Pa.) Lowenstein patent, No. 1,258,423, for variable electrical apparatus, claims 1, 2, 3, 4, 9, and 10 *Held* not infringed. *Ballstocky* v. *Scovill Mfg. Co.*, 61 F.(2d) 494.

(C. C. A. N. J.) Johnston patent, No. 1,388,484, for method and apparatus for butt-welding thin-gage tubing, claims 4, 5, 10, 14, 17, and 19 *Held* valid and infringed. *Steel & Tubes* v. *General Tube Co.*, 61 F.(2d) 475.

(C. C. A. N. J.) Johnston patent, No. 1,435,306, for butt-welding thin-walled tubing, claims 3, 5, 6, and 9 *Held* valid and infringed. *Id.*

(C. C. A. Pa.) Aram patent, No. 1,558,215, for stoker construction, *Held* invalid. *Westinghouse Electric & Mfg. Co.* v. *American Engineering Co.*, 61 F.(2d) 512.

(D. C. Del.) Mason patent, No. 1,663,505, for hard grainless fiber products and process of making same, claims 5, 6, 26, 14, 16, 20, 22, 28 *Held* not infringed. *Masonite Corporation* v. *Celotex Co.*, 1 F. Supp. 494.

(C. C. A. Ohio.) Decker patent, No. 1,683,531, for hair-waving outfit, claims 1 and 5 *Held* invalid. *Nelvette, Inc.*, v. *Bishinger*, 61 F.(2d) 433.

(C. C. A. Ohio.) Bishinger patent, No. 1,718,025, for hair-curling appliance, *Held* invalid. *Id.*

(C. C. A. Ohio.) Mayer reissue patent, No. 17,393, for hair-waving appliance and method, claims 9 and 10 *Held* valid and infringed, claims 5, 6, and 11 *Held* invalid. *Id.*

(C. C. A. Pa.) Aram reissue patent, No. 17,416, for stoker construction, *Held* invalid. *Westinghouse Electric & Mfg. Co.* v. *American Engineering Co.*, 61 F.(2d) 512.

(C. C. A. Ohio.) Mayer reissue patent, No. 17,585, for permanent hair waving appliance, *Held* invalid. *Nelvette, Inc.*, v. *Bishinger*, 61 F.(2d) 433.

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, Dec. 20, 1932.*

Anderson Mfg. Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Nicholas Becharas, of 134 West Vernor Highway, Detroit, Mich., to effect the cancellation of the trade-mark registration of the Anderson Mfg. Co., of Flint, Mich., No. 111,547, dated July 25, 1916, and the notice of such proceeding sent by registered mail to the said Anderson Mfg. Co. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Anderson Mfg. Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, JANUARY 10, 1933

[VOL. 426. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 321,701. THE VALLEY CAMP COAL COMPANY, Cleveland, Ohio. Filed Dec. 2, 1931.



No claim is made for the exclusive use of the word "Coke" other than as a part of the mark shown in the drawing. The lining which appears on the drawing represents the color red.

For Coke.
Claims use since May 1, 1931.

Ser. No. 329,882. ANNANDALE GRAPHITE CORPORATION, Annandale, N. J. Filed Aug. 27, 1932.

LUBRICITE

For Raw and Partly Prepared Graphites.
Claims use since Oct. 1, 1928.

Ser. No. 332,437. W. E. MARSHALL & CO., INC., New York, N. Y. Filed Nov. 22, 1932.

Durogreen

For Lawn and Grass Seed.
Claims use since Oct. 15, 1932.

Ser. No. 332,596. R. NEUMANN & COMPANY, Hoboken, N. J. Filed Nov. 29, 1932.

PACAPIG

For Tanned Leather.
Claims use since Nov. 2, 1932.

Ser. No. 332,625. R. NEUMANN & COMPANY, Hoboken, N. J. Filed Nov. 30, 1932.

MANDRUCCA

For Leather.
Claims use since May, 1932.

CLASS 2

Receptacles

Ser. No. 330,305. DWIGHT D. MCBRIDE, doing business as The Dwight McBride Co., Golden City, Mo. Filed Sept. 13, 1932.



For Lunch and Game Baskets Made of Metal with an Ice Chamber for Keeping the Contents Cool.
Claims use since Sept. 1, 1932.

Ser. No. 332,144. FULTON BAG & COTTON MILLS, Atlanta, Ga. Filed Nov. 15, 1932.



For Cotton Flour Bags.
Claims use since February, 1932.

Ser. No. 332,182. THE COLUMBUS DENTAL MANUFACTURING CO., Columbus, Ohio. Filed Nov. 16, 1932.

Pack-O-Back

For Display Cards for Holding Artificial Teeth.
Claims use since Oct. 20, 1932.

Ser. No. 332,338. ESKIMO PIE CORPORATION, New York, N. Y. Filed Nov. 21, 1932.

King Cole

For Paper or Pasteboard Confection Receptacles Sold to the Trade Empty.
Claims use since June 15, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 307,242. O'CONNELL PRODUCTS COMPANY, Chicago, Ill. Filed Oct. 27, 1930.

SPEE-DEE

For a General Cleansing Preparation for the Hands, Fabrics, Porcelain, Painted Surfaces and the Like.
Claims use since June 24, 1930.

Ser. No. 330,628. IOWA SOAP COMPANY, Burlington, Iowa. Filed Sept. 24, 1932.

ECONOMY WHITE

No claim is made herein to the name "White" apart from the mark shown in the drawing.
For Laundry Soap.
Claims use since Aug. 17, 1931.

Ser. No. 331,593. RELIANCE WAX PRODUCTS CORPORATION, LTD., Los Angeles, Calif. Filed Oct. 26, 1932.



For Shoe Polish and Shoe Burnishing Ink.
Claims use since Mar. 18, 1932.

Ser. No. 331,661. FRANKSIN LABORATORIES, San Francisco, Calif. Filed Oct. 27, 1932.

SCRAM
The
QUICKEST • SLICKEST
CLEANSER

The descriptive words "The Quickest-Slickest Cleanser" are hereby disclaimed apart from the mark as shown on the drawing.
For Cleansing, Scouring, and Polishing Compound for Aluminum and Kitchen and Bathroom Use.
Claims use since Sept. 1, 1932.

Ser. No. 331,798. JOHN F. RENTSCHLER, doing business as Trux-O Chemical Co., Kansas City, Mo. Filed Nov. 1, 1932.

TRUX-O KLENZER

The word "Klenzer" is disclaimed apart from the other features of the mark shown in the drawing.
For Washing and Cleaning Compound for General Household and Laundry Use.
Claims use since Sept. 1, 1932.

Ser. No. 332,251. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed Nov. 18, 1932.

Antiso

For Soap.
Claims use since Nov. 8, 1932.

Ser. No. 332,494. MONARCH PRODUCTS CO. INC., Shrewsbury, N. J. Filed Nov. 26, 1932.

MONARCH

For Valve Grinding Compounds.
Claims use since September, 1922.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 332,495. MONARCH PRODUCTS CO. INC., Shrewsbury, N. J. Filed Nov. 26, 1932.



For Valve Grinding Compounds.
Claims use since September, 1922.

Ser. No. 332,575. CALITE MANUFACTURING CO. LTD., Los Angeles, Calif. Filed Nov. 29, 1932.

HOLIDAY

For Soaps.
Claims use since Apr. 7, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 324,968. NIK-O-KLEEN CO., doing business as Broemmel's Laboratories, San Francisco, Calif. Filed Mar. 9, 1932.

NIK-O-KLEEN

No claim is made to the word "Kleen" apart from the mark as shown.
For Preparation in Liquid or Paste Form for Removing Tobacco and Nicotine Stains from the Skin.
Claims use since Aug. 1, 1931.

Ser. No. 325,030. ESTHER ALTOSS, Bellingham, Wash. Filed Mar. 11, 1932.

HY-EST

For Beauty Products of a Creamy, Paste-Like, Jelly-Like, or Fluid Character for Application to the Skin.
Claims use since Feb. 1, 1932.

Ser. No. 326,774. LESTER AUSTERN, doing business as Athenia Manufacturing Company, New York, N. Y. Filed May 5, 1932.



The representation of the girl's head appearing on the drawing is fanciful. The words "Non-Greasy Rolling Cream" are specifically disclaimed.
For Toilet Preparations in the Form of Facial Massage Creams and Face Lotions.
Claims use since Mar. 1, 1932.

Ser. No. 328,622. PEGGY SAGE, INC., New York, N. Y. Filed July 7, 1932.



In the drawing the signature shown being the signature of Peggy Sage, the president of the applicant company.
For Nail Powder Polish, Nail Polish in Paste Form, Liquid Nail Polish, Liquid Nail Polish Remover, Nail White, Liquid Cuticle Remover, Cuticle Oil, Cuticle Cream, Hand Cream, Hand Whitener, Hand Lotion, Hand Smoother and Softener, and Powder for the Skin and Hands, Nicotine Stain Remover and Nail White Pencils.
Claims use since 1917.

Ser. No. 328,989. ALBERTA HOLT, doing business as Holt Chemical Company, Memphis, Tenn. Filed July 22, 1932.

PREMO
HOLTS
SALVE

The words "Holts Salve" are disclaimed as a part of the trade-mark.
For Salve, a Preparation Indicated in the Treatment of Athletic Feet, Sunburn, Ulcers, Eczema, and Piles.
Claims use since June 1, 1932.

Ser. No. 329,058. PARSAN CHEMICAL COMPANY, New York, N. Y. Filed July 25, 1932.

EXYTOL

For Medicines for Epileptic Fits.
Claims use since June 15, 1932.

Ser. No. 329,293. ROCCO SANTOLINE, Basking Ridge, N. J. Filed Aug. 2, 1932.



Quinolene

The portrait appearing in the drawing is fanciful.
For Hair Tonics and Shampoo.
Claims use since Aug. 1, 1930.

Ser. No. 329,669. FRANK HATTON, Miami, Fla. Filed Aug. 19, 1932.



For Preparation for a Prophylactic Treatment for the Prevention of Venereal Diseases.
Claims use since June 30, 1931.

Ser. No. 330,160. DAVIS & LAWRENCE CO., New York, N. Y. Filed Sept. 7, 1932.



The drawing is lined to indicate the colors blue and black. No claim is made to the representation of the label colored blue. The word "Plasma" is disclaimed apart from the mark as shown in the drawing.
For an Antiseptic Dressing for Inflammatory Conditions.
Claims use since 1919.

Ser. No. 330,255. GABAIL LIMITED, London, England. Filed Sept. 12, 1932.

GABAIL

For Medicines for Human Use in the Treatment of Whooping Cough, Nervous Diseases, Neurasthenia, and Insomnia.
Claims use since Feb. 10, 1926.

Ser. No. 330,268. GEORGE JUSTIN LIPTON, doing business as Macdonald Medicine Company of Canada, Detroit, Mich. Filed Sept. 12, 1932.

WAH-DOO-SAH
Kee-Kee-Kee

For Laxative.
Claims use since June 8, 1932.

Ser. No. 330,500. WILLIAMS AND SMALS, Ashley, Ohio. Filed Sept. 19, 1932.

DOUBLE CHIN



For Hog Preparation for the Treatment of Worms, Rickets, and Cholera.
Claims use since Sept. 1, 1924.

Ser. No. 330,551. RARE CHEMICALS, INC., Nepera Park, N. Y. Filed Sept. 21, 1932.

AZAMINE



For Antiseptic and Germicidal Preparation.
Claims use since Sept. 1, 1927.

Ser. No. 330,649. WILLIAM ANGUS CANADY, Raleigh, N. C. Filed Sept. 26, 1932.

Neuresco

For Liniment for the External Treatment of Neuritis, Rheumatism, Lumbago, Sciatica, Neuralgia Pains.
Claims use since 1928.

Ser. No. 330,864. PARK & TILFORD, New York, N. Y. Filed Oct. 1, 1932.

No 19

For Perfumeries, Lotions for Hands and Face to be Used as an Aid for Softening and Whitening the Skin, Toilet Waters, Face Powders, Rouge, Face Creams, and Astringent.
Claims use since Sept. 28, 1932.

Ser. No. 331,051. JOHNSON & JOHNSON, New Brunswick, N. J. Filed Oct. 7, 1932.



The drawing is lined for the color red.
For Papoid in Powder, Tablets, or Other Forms.
Claims use since July, 1902.

Ser. No. 331,517. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Oct. 24, 1932. Under Section 5b of the act of 1905 as amended in 1920.

FLEISCHMANN'S

For Amylolytic or Starch-Liquefying Preparation Suitable for Use as a Desizing Agent in the Textile Industry, as an Ingredient of Pastes and Finishing Compositions or Fillers for Paper or Leather, and for Like Purpose.
Claims use since October, 1928.

Ser. No. 331,607. WILLIAM KALENSCHER, doing business as Zing Manufacturing Co., Inc., Miami, Fla. Filed Oct. 26, 1932.

HAN-COATER

The word "Han-Coater" is hereby disclaimed apart from the other features of the mark as shown on the drawing.
For Skin Protecting Compound.
Claims use since June 15, 1919.

Ser. No. 331,735. HA-MALL MEDICAL CO., Carter, Okla. Filed Oct. 31, 1932.

HA-MALL

For Liver and Blood Tonic, a Healing Oil, an Oil for the Treatment of Rheumatism, and for a Medicine for the Digestion, Kidney, and Bladder Trouble and for Gland Trouble, Which is Composed of Dry Herbs.
Claims use since May 16, 1932.

Ser. No. 331,771. CHARM LABORATORIES, INC., New York, N. Y. Filed Nov. 1, 1932.

charm TEA

The word "Tea" is disclaimed apart from the trade-mark as shown on the drawing.
For Herbaceous Laxative.
Claims use since July 20, 1932.

Ser. No. 331,853. CRAZY WATER HOTEL COMPANY, Mineral Wells, Tex. Filed Nov. 3, 1932.

CRAZY

For Medicinal Preparation for Treatment of Constipation, Indigestion, and for Neutralization of Gastric Hyperacidity.
Claims use since Jan. 1, 1900.

Ser. No. 331,913. BARIUM REDUCTION CORPORATION, Charleston, W. Va. Filed Nov. 5, 1932.

BARI-CIDE

For Vermin Exterminator Preparations, Insecticides, and the Like.
Claims use since Sept. 28, 1932.

Ser. No. 331,985. MAE C. BOWMAN, doing business as Southeastern Chemical Co., Alexandria, Va. Filed Nov. 8, 1932.

CABO

For Insecticides.
Claims use since February, 1932.

Ser. No. 332,011. HARRY J. MILLER, doing business as Ridgely Chem. Co., Washington, D. C. Filed Nov. 9, 1932.

NOSINE

For Special Preparation Compounded for Relieving Nasal Irritations and Congestions Preceding as Well as Accompanying Common Colds.
Claims use since Nov. 2, 1932.

Ser. No. 332,065. ARTHUR C. HANSON, doing business as Slimmerz Company, Minneapolis, Minn. Filed Nov. 11, 1932.

SLIMMERZ

For Preparation for Reducing Weight.
Claims use since June 1, 1930.

Ser. No. 332,248. JOHN CAMPBELL & Co., New York, N. Y. Filed Nov. 18, 1932.

CAMACYL

For Dyes and Dyestuffs.
Claims use since Nov. 15, 1932.

Ser. No. 332,265. FRANK C. REILLY, New York, N. Y. Filed Nov. 18, 1932.

DREZDEN

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, after Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since June 1, 1932.

Ser. No. 332,378. H. A. METZ & CO., INC., New York, N. Y. Filed Nov. 22, 1932.

SATINOL

For Preparation for Finishing Textile Fabrics.
Claims use since May 15, 1902.

Ser. No. 332,407. EMBREY & HUDSON, doing business as Kephaldol Laboratories and Kephaldol Laboratory, Nashville, Tenn. Filed Nov. 23, 1932.

KEPHALDOL

For Medicine for Treatment of Pains, Colds, and Fever.
Claims use since Nov. 8, 1932.

Ser. No. 332,456. KAUFMANN DEPARTMENT STORES, INC., Pittsburgh, Pa. Filed Nov. 25, 1932.

Adoria

For Dental Cream.
Claims use since Sept. 19, 1932.

CLASS 10

Fertilizers

Ser. No. 332,586. LOOK TEONG KEE, Honolulu, Hawaii. Filed Nov. 29, 1932.

LET-K-FERTILICIDE

For Especially Prepared Fertilizing Compound for Agricultural and Domestic Useage.
Claims use since Sept. 29, 1932.

CLASS 12

Construction Materials

Ser. No. 332,160. QUIGLEY COMPANY, INC., New York, N. Y. Filed Nov. 15, 1932.

CHROMIX

For Plastic Neutral Base for Monolithic Construction Composed of Chrome Ore and a Suitable Plasticising Material.
Claims use since Sept. 19, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 304,398. HENRY J. BUCKING, San Francisco, Calif. Filed Aug. 9, 1930.

✓DOUBLE CHECK✓

For Apparatus in the Nature of a Vent or Part Thereof to be Used on Containers of Explosive or Other Inflammables, Such as Oil and Gas Receptacles, Conduits, and Containers to Prevent Igniting Agencies from Reaching Such Inflammable Contents.
Claims use since June, 1929.

Ser. No. 327,456. STANDARDVERKEN AKTIEBOLAG, Strandvagen, Sweden. Filed May 25, 1932.



For Hinges, Metal Brackets, Screws, Nails, Rivets, and Threaded Bolts.
Claims use since Oct. 22, 1929.

Ser. No. 332,263. NATIONAL MACHINE PRODUCTS COMPANY, Detroit, Mich. Filed Nov. 18, 1932.

BRACKETITE

For Combination Lock Washers and Screw Products—Namely, Nuts, Bolts, Cap Screws, and Screws.
Claims use since Oct. 2, 1931.

Ser. No. 332,470. SAMUEL SKINER, doing business as Guardian Valve Company, New York, N. Y. Filed Nov. 25, 1932.

GUARDIAN

For Valves for Relieving Boilers, Tanks, Pumps, and Other Water Containing Vessels of Excess Pressure.
Claims use since April, 1931.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 331,791. THE INTERNATIONAL NICKEL COMPANY, INC., New York, N. Y. Filed Nov. 1, 1932.

NI-TENSYL

No claim is made for the word "Tensyl" apart from the mark shown.
For Nickel-Containing Iron Castings.
Claims use since Sept. 9, 1932.

Ser. No. 332,615. CONTINENTAL STEEL CORPORATION, Kokomo and Indianapolis, Ind., and Canton, Ohio. Filed Nov. 30, 1932.



For Wire.
Claims use since Oct. 26, 1932.

CLASS 15

Oils and Greases

Ser. No. 329,817. MAJOR PETROLEUM COMPANY, Wilmington, Del., and Philadelphia, Pa. Filed Aug. 23, 1932.



The representation of a pump globe is disclaimed.
For Gasoline, Lubricating Oil, Kerosene, Fuel Oil, Lubricating Grease, Cylinder Oil, and Vehicle Grease.
Claims use since Jan. 30, 1931.

Ser. No. 331,323. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif. Filed Oct. 17, 1932.

FLIGHT

For Lubricating Oils.
Claims use since Feb. 11, 1932.

Ser. No. 331,470. LEWIS COAL & OIL CO. INC., Port Washington, N. Y. Filed Oct. 22, 1932.

'liqui-fuel'

No claim being made to the exclusive use of the word "Fuel" apart from the mark as shown in the drawing.
For Motor Fuel and Lubricating Oil and Fuel Oil.
Claims use since Sept. 1, 1932.

Ser. No. 332,089. EVEREADY OIL CO., INC., Philadelphia, Pa. Filed Nov. 12, 1932.

EVEREADY OIL CO.
Kerolite

In use the border and word "Kerolite" are printed in orange and applicant's name in green.
For Kerosene.
Claims use since Sept. 26, 1932.

Ser. No. 332,499. L. SONNEBORN SONS, INC., New York, N. Y. Filed Nov. 26, 1932.

FREEZENE

For Lubricating Oil.
Claims use since Nov. 4, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 321,964. THE PERRY ROBINSON CORPORATION, New York, N. Y. Filed Dec. 9, 1931.

PERISEAL
SPAR



VEHICLE

No claim is made to the words "Spar Vehicle" apart from the association shown in the drawing.
For Chemical Composition Used as a Vehicle for Paints, and/or in Conjunction with Other Vehicles, Such as Varnishes, Enamels, and the Like; Also Used as a Wall Primer.
Claims use since Oct. 1, 1931.

Ser. No. 331,888. COLUMBIA CHEMICAL COMPANY, Portland, Oreg. Filed Nov. 4, 1932.

Zymite

For Dry, Paste, and Ready Mixed Paints and Paint Enamels.
Claims use since Sept. 30, 1931.

Ser. No. 331,952. GAY-DAY CORPORATION, Chicago, Ill. Filed Nov. 7, 1932.

GAY-DAY

For Paint Enamel and Paint and Varnish Remover.
Claims use since Oct. 3, 1932.

Ser. No. 332,402. CRECO COMPANY, INC., Long Island City, N. Y. Filed Nov. 23, 1932.

CRECO

For Floor, Furniture, and Automobile Waxes.
Claims use since May, 1919.

CLASS 17

Tobacco Products

Ser. No. 332,045. PETER F. MURPHY CO., Philadelphia, Pa. Filed Nov. 10, 1932.

RED
STAR

For Smoking Tobacco and Chewing Tobacco.
Claims use since Oct. 28, 1932.

Ser. No. 332,386. STEPHANO BROTHERS, Philadelphia, Pa. Filed Nov. 22, 1932.



MARVELS

The drawing is stippled for shading purposes only, no claim being made to the exclusive use of the words "Mild Cigarettes Blended by" apart from the mark as shown in the drawing.
For Cigars, Cigarettes, and Tobacco.
Claims use since Nov. 14, 1932.

Ser. No. 332,443. BROWN & WILLIAMSON TOBACCO CORPORATION, Louisville, Ky. Filed Nov. 25, 1932.

DIAL

For Cigars, Cigarettes, Smoking Tobacco, Chewing Tobacco, and Snuff.
Claims use since 1884.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 332,068. GUARANTEE LAMP CO., Brooklyn, N. Y. Filed Nov. 11, 1932.



Applicant disclaims the exclusive right to the use of the words "Service," "Incandescent," and "Lamps" and a representation of an incandescent lamp separate and apart from the trade-mark as shown in the drawing.
For Incandescent Lamps or Bulbs.
Claims use since Jan. 1, 1929.

Ser. No. 332,333. CRESCENT BRAID, INC., Providence, R. I. Filed Nov. 21, 1932.

WIRY JOE

For Automotive Electric Conductor Cables.
Claims use since June 1, 1932.

Ser. No. 332,638. UNITED STATES ELECTRIC MFG. CORP., New York, N. Y. Filed Nov. 30, 1932.

DU-ET

For Combination Pocket Lighter and Flashlight.
Claims use since Oct. 1, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 332,062. CHARLES R. FARGO, Beverly Hills, Calif. Filed Nov. 11, 1932.

CROSS-O-GRAMS

The lining on the drawing indicates shading only.
For Table Games.
Claims use since Oct. 1, 1932.

Ser. No. 332,518. THE CLEVELAND CONTAINER CO., Cleveland, Ohio. Filed Nov. 28, 1932.

ZOO-A-LOG

For Construction Building Sets.
Claims use since Nov. 15, 1932.

Ser. No. 332,728. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill. Filed Dec. 8, 1932.

The Dredger

For Coin-Operated Amusement Machines.
Claims use since Nov. 16, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 321,102. GATES-PFEIFFER ENGINEERING COMPANY, New York, N. Y. Filed Nov. 18, 1931.

The Gates-Pfeiffer
Emulsifier

No claim is made to the word "Emulsifier" apart from the mark as shown.
For Apparatus Used in Treatment of Textile Materials, More Particularly Apparatus for Treating Raw Silk to Render It More Pliant for Manufacture by Forcing an Emulsion of Oil and Soap Back and Forth Therethrough.
Claims use since Nov. 10, 1930.

Ser. No. 325,160. ADVANX TY-RE-PAIR COMPANY LIMITED, Sydney, Australia. Filed Mar. 16, 1932.



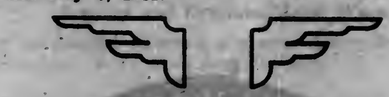
No claim is made to the outline map of Australia or to the words "Australia" and "Organised Tyre Service."
For Machinery for Vulcanizing and Retreading Tyres.
Claims use since Oct. 30, 1926.

Ser. No. 327,565. THE PIERCE GOVERNOR COMPANY, Anderson, Ind. Filed May 28, 1932.

Electro Vac

For Speed Operable Fuel Control Device for Internal Combustion Engines.
Claims use since Dec. 7, 1931.

Ser. No. 328,611. A. H. KASISHKE INC., Tulsa, Okla. Filed July 7, 1932.



STEEL DERRICK
A. H. KASISHKE INC.

No claim is made to the words "Steel Derrick A. H. Kasishke Inc." except in association with the mark as shown.
For Well-Drilling Rigs and Derricks Therefor.
Claims use since Feb. 6, 1932.

Ser. No. 330,756. PRYBRANDS, INC., Long Island City, N. Y. Filed Sept. 28, 1932.

NAT

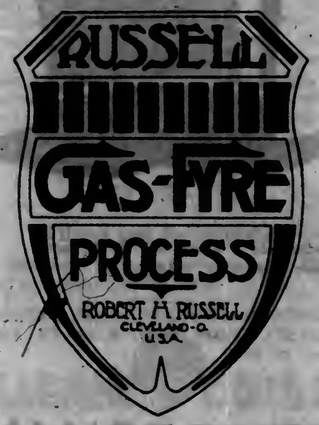
For Razors and Razor Blades.
Claims use since Aug. 24, 1932.

Ser. No. 331,650. JOSEPH T. RYERSON & SON, INC., Chicago, Ill. Filed Oct. 26, 1932.

RYERTEX

For Machinery Bearings and Bearing Collars.
Claims use since July 21, 1932.

Ser. No. 331,872. ROBERT H. RUSSELL, Cleveland, Ohio. Filed Nov. 3, 1932.



No claim is made to the words "Gas-Fyre", "Process", and "Cleveland, O., U. S. A." apart from the mark as shown.
For Gear Pumps, Plunger Pumps, Steam Turbines, Reciprocating Engines, Emulsifying Machines, Air and Gas Compressors, Hot Oil Pumps, Vacuum Pumps, and Blowing Engines.
Claims use since Oct. 14, 1931.

Ser. No. 332,272. L. C. SMITH & CORONA TYPEWRITERS, INC., New York, N. Y. Filed Nov. 18, 1932.

Secretarial

For Typewriting Machines.
Claims use since September, 1928.

Ser. No. 332,358. TWENTY GRAND BLADE COMPANY, INC., Spencer, Ind. Filed Nov. 21, 1932.

TWENTY GRAND

For Razor Blades.
Claims use since Oct. 1, 1932.

Ser. No. 332,373. JOSEPH LEVINE, New York, N. Y. Filed Nov. 22, 1932.

L. R.
BLACK DIAMOND

For Formed Razor Sharpeners Made of Formed Glass.
Claims use since Nov. 10, 1932.

Ser. No. 332,388. UNION SPECIAL MACHINE COMPANY, Chicago, Ill. Filed Nov. 22, 1932.

155

For Sewing Machine Needles.
Claims use since Jan. 1, 1919.

CLASS 24

Laundry Appliances and Machines

Ser. No. 332,818. W. T. GRANT COMPANY, New York, N. Y. Filed Dec. 6, 1932.

Wearite
LITTLE PAL

For Washboards.
Claims use since Oct. 1, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 325,893. CAMILLE CONTAL, Paris, France. Filed Apr. 7, 1932.

LE MULTISCOPE

For Motion Picture Projection Machines.
Claims use since Oct. 2, 1931.

Ser. No. 327,225. ERNST LOMBERG G. M. B. H., Berlin, Germany. Filed May 18, 1932.



For Sensitized Photographic Films and Plates.
Claims use since July 7, 1896.

Ser. No. 331,249. DELTA MANUFACTURING COMPANY, doing business as Delta Specialty Company, Milwaukee, Wis. Filed Oct. 14, 1932.

AUTO-SET

No claim is made herein broadly to the word "Set" apart from the mark disclosed in the accompanying drawing.
For Saw Gages, Particularly Miter Gages.
Claims use since Oct. 11, 1932.

Ser. No. 331,250. DELTA MANUFACTURING COMPANY, doing business as Delta Specialty Company, Milwaukee, Wis. Filed Oct. 14, 1932.

MICRO-SET

No claim is made herein broadly to the word "Set" apart from the mark disclosed in the accompanying drawing.
For Saw Gages, Particularly Rip Gages.
Claims use since Oct. 11, 1932.

Ser. No. 331,928. MAJESTIC PICTURES CORPORATION, New York, N. Y. Filed Nov. 5, 1932.



The words "A" and "Picture" appearing in the drawing are disclaimed.
For Moving Picture Films.
Claims use since Aug. 24, 1932.

Ser. No. 332,188. CONTINENTAL OPTICAL COMPANY, Indianapolis, Ind. Filed Nov. 16, 1932.



For Ophthalmic Frames and Mountings.
Claims use since July 1, 1932.

Ser. No. 332,271. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Nov. 18, 1932.

CRAFTSMAN

For Levels, Miter Boxes, Squares, Tape Lines, and Rules.
Claims use since Oct. 28, 1927.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 330,566. KOKICHI MIKIMOTO, Tokyo, Japan, and New York, N. Y. Filed Sept. 21, 1932.



No claim is made herein to the letter "M" apart from the mark shown in the drawing.
For Cultured Pearls.
Claims use since 1908.

Ser. No. 331,369. GEORG JENSENS SOLVSMEDIE A/S, Copenhagen, Denmark. Filed Oct. 19, 1932.



For Bracelets, Brooches, and Other Jewelry for Personal Wear, Not Including Watches, Trays, Teapots, Coffeepots, Dishes, Plates, Vases, Jars, Pitchers, Sugarbasins, Creamjugs, Waterjugs, Bowls, Cups, Center Ornaments for Tables, Spoons, Knives, Forks, Cigarette-Cases, Cigar-Cases, Signets or Seals, Jugs and Mugs, Tableware, Toiletware and Ornamental Ware All Made of or Plated with Silver, Gold, Platinum, and Other Precious Metals.
Claims use since Sept. 1, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 331,114. LARKIN REFRIGERATING CORPORATION, Atlanta, Ga. Filed Oct. 10, 1932.



No claim is made to the word "Coils" or the expression "100% Vertical Surface" or to the representation of the goods apart from the mark as shown.
For Refrigerating Coils.
Claims use since Sept. 16, 1932.

Ser. No. 332,292. THE CARBORUNDUM COMPANY, Niagara Falls, N. Y. Filed Nov. 19, 1932.

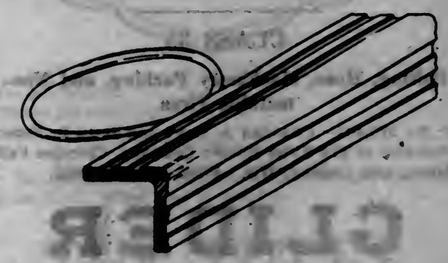
ALOXITE

For Filter Plates, Filter Tubes, Diffuser Plates, Diffuser Tubes, Porous Diaphragms, Laboratory Ware for Filtering Purposes and Porous Mediums.
Claims use since Apr. 15, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 320,649. UNITED STATES BEDDING COMPANY, St. Paul, Minn. Filed Oct. 30, 1931.



The representation of the spring and spring frame shown in the drawing is disclaimed per se. The mark comprises a plurality of grooves extending longitudinally of the exposed sides of the angle iron frame members.
For Bed Springs.
Claims use since June 1, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 327,707. W. S. ROCKWELL COMPANY, New York, N. Y. Filed June 3, 1932.



For Industrial Furnaces of All Descriptions Heated by Gas, Oil, or Coal and Parts Thereof and for Ventilating Apparatus and Parts Thereof.
Claims use since 1909.

Ser. No. 331,600. UNIVERSAL APPLIANCE COMPANY, Boston, Mass. Filed Oct. 26, 1932.

COLONIAL

For Oil Burners and Equipment for Ranges.
Claims use since May 21, 1932.

Ser. No. 332,190. LACY PRODUCTS CORPORATION, Chicago, Ill. Filed Nov. 16, 1932.

HAT FOODSTER

For Food Warmer.
Claims use since Oct. 1, 1932.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 326,461. CHARLES A. DANA and JOHN B. PIERCE, receivers of The Fiske Rubber Company, Chicopee Falls, Mass., and Cudahy, Wis. Filed Apr. 25, 1932.

GLIDER

For Vehicle Tires and Inner Tubes Made Wholly or Partly of Rubber.
Claims use since Apr. 7, 1932.

Ser. No. 332,667. THERMOID RUBBER COMPANY, Trenton, N. J. Filed Dec. 1, 1932.

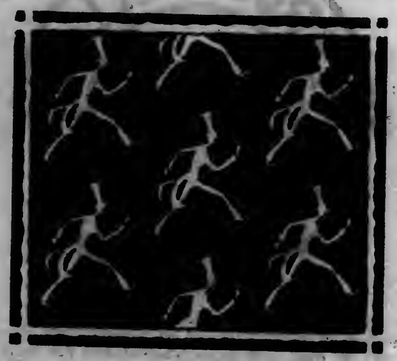
SERVBESTOS

For Brake Linings.
Claims use since Sept. 8, 1931.

CLASS 37

Paper and Stationery

Ser. No. 320,990. SCOTT PAPER COMPANY, Chester, Pa. Filed Nov. 10, 1931.



For Paper Towels in Roll Form.
Claims use since July 28, 1931.

Ser. No. 325,847. SANDUSKY CRAYON COMPANY, INC., Sandusky, Ohio. Filed Mar. 21, 1932.

CRAYARTO

For Crayons.
Claims use since Jan. 1, 1920.

Ser. No. 332,175. BROWN COMPANY, Portland, Me., and Berlin, N. H. Filed Nov. 16, 1932.

ALPHA

B Co

For Bond, Ledger, Printing, Writing, and Envelope Papers.
Claims use since Feb. 6, 1931.

Ser. No. 332,322. HURLBUT PAPER COMPANY, South Lee, Mass. Filed Nov. 18, 1932.

FERNSIDE

For Writing and Printing Paper.
Claims use since December, 1920.

Ser. No. 332,325. HURLBUT PAPER COMPANY, South Lee, Mass. Filed Nov. 18, 1932.

OVERTONE

For Writing and Printing Paper.
Claims use since September, 1931.

Ser. No. 332,680. THE BILTMORE PAPER CO., INC., New York, N. Y. Filed Dec. 2, 1932.

PLANET

For Toilet Paper.
Claims use since Nov. 30, 1932.

Ser. No. 332,692. J. HERSHKOWITZ, INC., New York, N. Y. Filed Dec. 2, 1932.

P-M-C

For Tailors' Marking Crayons.
Claims use since Nov. 22, 1932.

Ser. No. 332,731. THE POSTAGE METER COMPANY, Stamford, Conn. Filed Dec. 3, 1932.

POMECO

For Correspondence and Mailing Envelopes.
Claims use since June 1, 1932.

CLASS 38

Prints and Publications

Ser. No. 327,281. THE KANSAS COOPERATIVE WHEAT MARKETING ASSOCIATION, Wichita, Kans. Filed May 20, 1932.

The Wheat Growers Journal

For Periodical Publication.
Claims use since Sept. 24, 1920.

Ser. No. 332,168. ETHEL TRAPHAGEN (LEIGH), doing business as Traphagen School of Fashion, New York, N. Y. Filed Nov. 15, 1932.

GOONA GOONA

For Artistic Drawings for Textile Designs.
Claims use since Nov. 3, 1932.

Ser. No. 332,350. PIERRE PINCKNEY ALLSTON TRAPIER, Washington, D. C. Filed Nov. 21, 1932.

Trapier COLORPOEME

For Picture Post Cards and Art Prints.
Claims use since Nov. 4, 1932.

Ser. No. 332,710. CHRISTMAS CLUB, New York, N. Y. Filed Dec. 3, 1932.

MONEY MAGIC

For Publication Issued Periodically.
Claims use since Nov. 15, 1932.

Ser. No. 332,819. NATIONAL SHERIFFS' & POLICE ASS'N, INC., Denver, Colo. Filed Dec. 6, 1932.



For Periodical.
Claims use since Nov. 29, 1932.

Ser. No. 332,885. CENTRAL PRESS ASSOCIATION, INC., New York, N. Y. Filed Dec. 7, 1932.

THE TUTTS

For Newspaper Cartoon.
Claims use since Jan. 7, 1932.

CLASS 39

Clothing

Ser. No. 330,271. P. W. MINOR & SON, INC., Batavia, N. Y. Filed Sept. 12, 1932.

PODIATREAD

For Shoes.
Claims use since July 20, 1932.

Ser. No. 330,589. WINGET KICKERNICK COMPANY, Minneapolis, Minn. Filed Sept. 22, 1932.

Kicker-"teens"

For Ladies' Bloomers, Ladies' One-Piece Combination Garments, Underwear Comprising Brassière Waist and Bloomers, and Waist and Bloomers, Children's Bloomers, Children's Combination Garments, Underwear Comprising Waist and Bloomers and sold as Children's Combinations, and Ladies' Pajamas.
Claims use since Aug. 2, 1932.

Ser. No. 331,313. MOORHEAD KNITTING CO., INC., Harrisburg, Pa. Filed Oct. 17, 1932.

NU-PLY

Applicant makes no exclusive claim to the word "Ply" except as shown in the drawing.
For Socks.
Claims use since Sept. 1, 1932.

Ser. No. 332,050. SOKOL-COLLIER CO., Boston, Mass. Filed Nov. 10, 1932.



The drawing is lined for shading purposes only.
For Overalls, Work-Pants and Jackets.
Claims use since Oct. 15, 1932.

Ser. No. 332,113. CLUETT, PEABODY & CO., INC., Troy, N. Y. Filed Nov. 14, 1932.

SOIDARA

For Collars, Negligee and Dress Shirts; Undershirts, Underdrawers, Union Suits of Knitted and Woven Fabrics, for Men, Women, and Children.
Claims use since Nov. 7, 1932.

Ser. No. 332,120. THE KAYNEE COMPANY, Cleveland, Ohio. Filed Nov. 14, 1932.

The Stylocrat

For Boys' Shirts.
Claims use since Oct. 18, 1932.

Ser. No. 332,199. THE PIQUA HOSIERY COMPANY, INC., Piqua, Ohio. Filed Nov. 16, 1932.

THE BADMINTON

For Sweaters.
Claims use since Oct. 24, 1932.

Ser. No. 332,315. THE STAR UNION OVERALL CO., INC., South Norwalk, Conn. Filed Nov. 19, 1932.

Sleepy Night

For Men's, Boys', and Children's Broadcloth and Flannel Pajamas and Men's Flannel Night Shirts.
Claims use since June 1, 1932.

Ser. No. 332,349. PHOENIX HOSIERY COMPANY, Milwaukee, Wis. Filed Nov. 21, 1932.

PHOENIX KOOLIES

For Hosiery.
Claims use since Oct. 20, 1932.

Ser. No. 332,359. WAYNE KNITTING MILLS, Fort Wayne, Ind. Filed Nov. 21, 1932.

belle-sharmeer

For Hosiery.
Claims use since Sept. 8, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 324,345. HALL BROTHERS, Hallville Mill, Norwich, Conn. Filed Feb. 20, 1932.



No claim is made to the exclusive use of the words "Hallmark Fabric" and "Hallville Mills" apart from the mark as shown on the drawing.
For Fabrics Made of All Wool or in a Combination of Wool and Cotton and Sold in the Piece for Use in the Manufacture of Men's Wear—Namely, Overcoatings, Top Coatings, Suitings, Trouserings, and Cap Cloths; and in Women's Apparel—Namely, Cloakings, Suitings, and Dress Goods.
Claims use since Dec. 11, 1931.

Ser. No. 327,601. NASHUA MANUFACTURING COMPANY, Nashua, N. H. Filed June 2, 1932.

FINESSE

For Cotton Piece Goods.
Claims use since May 16, 1932.

Ser. No. 329,067. S. H. KRESS & CO., New York, N. Y. Filed July 26, 1932.

Kressent

For Hair Nets, Sport Nets, Linen Towels and Toweling, Sheets, Tablecloths, Textile Blankets, Textile Bath Towels, Mattress Ticking, Counterpanes, Water Wave Nets, Handkerchiefs, Cretonne, Turkish Towels, Pillow Cases, Napkins, Seamless Textile Rugs, Face Cloths, and Bedspreads.
Claims use since 1922.

Ser. No. 329,615. I. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filed Aug. 18, 1932.

Bembergette

For Knitted, Netted, and Textile Materials in the Piece, Composed Wholly or in Part of Filaments of Artificial Origin—Namely, Filaments of Artificial Silk.
Claims use since Dec. 12, 1930.

Ser. No. 331,567. STEVENS MANUFACTURING CORPORATION, Fall River, Mass. Filed Oct. 25, 1932.



No claim is made in this application to the exclusive right to the use of the word "Spread" or the word "Style" or the word "Woven" apart from the mark shown.
For Bedspreads.
Claims use since July 18, 1932.

Ser. No. 331,790. LONSDALE MANUFACTURING CO., Pawtucket, R. I. Filed Nov. 1, 1932.

COTE-DE-CHEVAL

For Textile Fabrics in the Piece, of Cotton, Wool, Silk, Rayon, and/or Combinations Thereof.
Claims use since Apr. 1, 1908.

Ser. No. 332,201. WILLIAM SKINNER & SONS, Holyoke, Mass., and New York, N. Y. Filed Nov. 16, 1932.

TROUBLEFREE

For Silk Crepes in the Piece.
Claims use since June 1, 1932.

CLASS 43

Thread and Yarn

Ser. No. 332,129. STEINBERGER BROS. INC., New York, N. Y. Filed Nov. 14, 1932.

POMPA-RAY

For Yarns of Cotton, Silk, Rayon, Wool and Angora, and Mixtures Thereof.
Claims use since 1930.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 331,861. HINDES LIMITED, Birmingham, England. Filed Nov. 8, 1932.

MASAGLOW

For Massage Devices or Appliances for Massaging and Cleansing the Skin.
Claims use since June 24, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 332,228. SHEDD PRODUCTS COMPANY, Detroit, Mich. Filed Nov. 17, 1932.

Verona Hills

For Nonalcoholic, Maltless Carbonated Beverages and Syrups and Extracts for Making the Same.
Claims use since July 21, 1932.

Ser. No. 332,637. TROPICAL JUICE CORPORATION, Miami and Titusville, Fla. Filed Nov. 30, 1932.

GIRAFFE

For Nonalcoholic, Maltless Fruit Juices Sold as Soft Drinks.
Claims use since Oct. 6, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 311,720. FRED G. CARY, Lodi, Calif. Filed Mar. 4, 1931.

LAKESHORE

For Fresh Grapes.
Claims use since Aug. 1, 1922.

Ser. No. 320,489. BATTLE CREEK BISCUIT COMPANY, Battle Creek, Mich. Filed Oct. 27, 1931.

VITA-BRAN LOGS

No. claim is made to the word "Bran" apart from the mark as shown.
For Chocolate Covered Biscuits.
Claims use since Oct. 1, 1930.

Ser. No. 321,905. A. J. CAPONE COMPANY, New York, N. Y. Filed Dec. 8, 1931.

CORA



The face shown in the portrait is fanciful.
For Canned Tomato Paste and Canned Tomatoes.
Claims use since September, 1928.

Ser. No. 322,289. THE NEW YORKER HOTEL CORPORATION, New York, N. Y. Filed Dec. 19, 1931.



Applicant hereby disclaims the exclusive right to the use of the word "Bonbonettes", except as the same is used in connection with the other features of the mark shown on the drawing.
For Candies and Chocolates.
Claims use since Nov. 16, 1931.

Ser. No. 326,876. WARD BAKING COMPANY, New York, N. Y. Filed May 7, 1932.



The drawing being lined to indicate a series of orange triangles and a blue connecting band having orange stripes adjacent its edges. No claim is made to the exclusive right to the use of the words "Greater Economy", "Bigger Value", and "Many Varieties" apart from the mark as shown.
For Cake.
Claims use since Apr. 13, 1932.

Ser. No. 329,603. LA CROSSE REFINING COMPANY, La Crosse, Wis. Filed Aug. 17, 1932.

WORTINA

For Malt Syrup.
Claims use since Aug. 5, 1932.

Ser. No. 331,434. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J. Filed Oct. 21, 1932.



For Candy, Popcorn, Coffee, Tea, Fruit Preserves, Cocoa, Cooked and Uncooked Breakfast Cereals, Bread, Salted Nuts, Pastry.
Claims use since February, 1927.

Ser. No. 331,532. BAHAMA ISLES' FOODS CORPORATION, Dover, Del., and Miami, Fla. Filed Oct. 25, 1932.



For Canned and Bottled Combinations of Sea Foods and Vegetables—Namely, Conch Chowder and/or Broth.
Claims use since Sept. 17, 1932.

Ser. No. 332,103. STANDARD RICE COMPANY, INC., Houston, Tex., and Memphis, Tenn. Filed Nov. 12, 1932.



For the purpose of this registration the word "Rice" is hereby disclaimed apart from the mark as shown.
For Rice.
Claims use since Sept. 10, 1932.

Ser. No. 332,244. THE BACHRACH-FELD COMPANY, INC., doing business as Maltwort Concentrated Malt Co., Cincinnati, Ohio. Filed Nov. 18, 1932.

MALWORT

For Concentrated Liquid Malt Syrup Used for Food Purposes.
Claims use since Oct. 19, 1932.

Ser. No. 332,540. ITALIAN FOOD PRODUCTS COMPANY, INC., Long Beach, Calif. Filed Nov. 28, 1932.

Seaview

For Canned Fish.
Claims use since Apr. 26, 1926.

Ser. No. 332,544. HAROLD OSBORNE, doing business as Harold Osborne Company, Hynes, Calif. Filed Nov. 28, 1932.

OZ

For Fresh Fruits and Fresh Vegetables.
Claims use since June 10, 1930.

Ser. No. 332,578. LOUISE DUFFY, Los Angeles, Calif. Filed Nov. 29, 1932.

FRANÇOIS

For Salad Dressings and Table Syrups.
Claims use since May 16, 1930.

Ser. No. 332,622. MAURY-COLE COMPANY, Memphis, Tenn. Filed Nov. 30, 1932.

HAPIDO

For Prepared Biscuit Flour.
Claims use since Oct. 24, 1932.

CLASS 48

Malt Beverages and Liquors

Ser. No. 332,782. GUY E. RIEGEL, Spokane, Wash. Filed Dec. 5, 1932.

Coberger

For Malt Beverages Containing Less Than One-Half (½) of one (1) Per Cent Alcohol by Volume.
Claims use since Nov. 22, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 332,025. BLOCH BROS., Glasgow, Scotland. Filed Nov. 10, 1932.

HIGH CARD

For Whiskey.
Claims use since 1925.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JANUARY 10, 1933

300,144. GOLF BALLS. SEIBERLING LATEX PRODUCTS COMPANY, Barberton, Ohio.
Filed July 15, 1932. Serial No. 328,860. PUBLISHED NOVEMBER 1, 1932. Class 22.

300,145. FILTERING MEDIA COMPOSED OF FRESHLY MINED AND/OR RECLAIMED ANTHRACITE IN ANY SIZE. ANTHRACITE EQUIPMENT CORPORATION, New York, N. Y.
Filed July 21, 1932. Serial No. 328,932. PUBLISHED NOVEMBER 1, 1932. Class 31.

300,146. MALT BEVERAGES HAVING NOT MORE THAN THE LEGAL ALCOHOLIC CONTENT. ESSLINGER'S INC., Philadelphia, Pa.
Filed September 17, 1932. Serial No. 330,421. PUBLISHED NOVEMBER 1, 1932. Class 48.

300,147. TOY OF THE BANDALORE TYPE. ILLINOIS LUMBER AND TILE CO., St. Louis, Mo.
Filed August 17, 1932. Serial No. 329,601. PUBLISHED NOVEMBER 1, 1932. Class 22.

300,148. PAPER, METAL, AND FIBER WASTE AND GARBAGE RECEPTACLES. WEBSTER J. OLIVER, New York, N. Y.
Filed August 23, 1932. Serial No. 329,772. PUBLISHED NOVEMBER 1, 1932. Class 2.

300,149. OUTDOOR GAME OF SKILL, PARTICULARLY FOR JUVENILE USE PLAYED WITH PEGS AND RINGS AFTER THE MANNER OF THE HORSE-SHOE-GAME. CONSTANTY MAJEWICK, doing business as Peg-O-Loop Mfg. Co., Dearborn, Mich.
Filed September 10, 1932. Serial No. 330,280. PUBLISHED NOVEMBER 1, 1932. Class 22.

300 150. GRAPE JUICE, GINGER ALE. VOLUNTEER STORES, INC., Chattanooga, Tenn.
Filed September 12, 1932. Serial No. 330,279. PUBLISHED NOVEMBER 1, 1932. Class 45.

300,151. SHREDDED FOIL FOR CHRISTMAS-TREE AND OTHER DECORATIONS. PAPER NOVELTY MANUFACTURING COMPANY, New York, N. Y.
Filed September 15, 1932. Serial No. 330,379. PUBLISHED NOVEMBER 1, 1932. Class 22.

300,152. POTABLE SPIRITS, WHISKEY, AND LIQUORS. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada.
Filed September 19, 1932. Serial No. 330,456. PUBLISHED NOVEMBER 1, 1932. Class 49.

300,153. POTABLE SPIRITS, WHISKEY, AND LIQUORS. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada.
Filed September 19, 1932. Serial No. 330,457. PUBLISHED NOVEMBER 1, 1932. Class 49.

300,154. COMPOSITION ROOFING AND SHINGLES. THE BARBER ASPHALT COMPANY, Philadelphia, Pa.
Filed July 30, 1932. Serial No. 329,217. PUBLISHED SEPTEMBER 13, 1932. Class 12.

300,155. POTABLE SPIRITS, WHISKEY, AND LIQUORS. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada.
Filed September 19, 1932. Serial No. 330,462. PUBLISHED NOVEMBER 1, 1932. Class 49.

300,156. BOND AND SAFETY PAPER. GILBERT PAPER COMPANY, Menasha, Wis.
Filed February 23, 1932. Serial No. 324,376. PUBLISHED APRIL 12, 1932. Class 37.

300,157. MOTION PICTURES. GUY D. HASELTON, Hollywood, Calif.
Filed June 21, 1932. Serial No. 328,170. PUBLISHED NOVEMBER 8, 1932. Class 26.

300,158. POTABLE SPIRITS, WHISKEY, AND LIQUORS. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada.
Filed September 19, 1932. Serial No. 330,467. PUBLISHED NOVEMBER 1, 1932. Class 49.

300,159. POTABLE SPIRITS, WHISKEY, AND LIQUORS. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada.
Filed September 19, 1932. Serial No. 330,468. PUBLISHED NOVEMBER 1, 1932. Class 49.

300,160. ASTRINGENTS, ASTRINGENT CERATES, BLEACH AND BEAUTY CREAMS, ETC. WILSON PRODUCTS CO., New York, N. Y.
Filed August 10, 1932. Serial No. 329,462. PUBLISHED OCTOBER 18, 1932. Class 6.

300,161. PERFUME, TOILET WATER, FACE POWDER, TALCUM POWDER, BATH SALTS, BRILLIANTINE, BANDOLINE, ROUGE, LIP STICKS, DUSTING POWDER, SACHET, COLD CREAMS, LOTION FOR THE SKIN AND HAIR, POWDER AND ROUGE COMPACTS, AND VEGETAL. HOUBIGANT, INC., New York, N. Y.
Filed August 10, 1932. Serial No. 329,446. PUBLISHED OCTOBER 18, 1932. Class 6.

300,162. LIVE SURGICAL MAGGOTS FOR USE IN THE TREATMENT OF CHRONIC OSTEOMYELITIS, INFECTED WOUNDS, AND COMPOUND FRACTURES. PETROLAGAR LABORATORIES, INC., Chicago, Ill.
Filed August 5, 1932. Serial No. 329,354. PUBLISHED OCTOBER 18, 1932. Class 6.

300,163. AGRICULTURAL INSECTICIDES. ANDREW WILSON, INC., Springfield, N. J.
Filed August 4, 1932. Serial No. 329,241. PUBLISHED OCTOBER 18, 1932. Class 6.

300,164. PREPARATION FOR STIMULATING THE GROWTH OF HAIR. ROSA-LEE JONES, New York, N. Y.
Filed July 26, 1932. Serial No. 329,167. PUBLISHED OCTOBER 18, 1932. Class 6.

300,165. MEDICINAL PREPARATION FOR THE RELIEF OF DISTRESS AND PAIN DUE TO SIMPLE HEADACHES, NEURALGIA, RHEUMATISM, HEAD COLDS, AND AFTER TOOTH EXTRACTIONS. P. O. BUGGE, Bisbee, N. Dak.
Filed July 28, 1932. Serial No. 329,131. PUBLISHED OCTOBER 18, 1932. Class 6.

300,166. EAU DE COLOGNE, PERFUMERY, HAIR TONICS, SHAMPOO, POMADE, BRILLIANTINE, COLD CREAM, VANISHING CREAM, ROUGE, FACE POWDER, BABY POWDER, AFTER-SHAVING LOTION, TOOTH PASTE, MOUTH WASH, PREPARATION FOR THE TREATMENT OF THE SCALP, AND ETHEREAL OILS. FRED. MÜLHENS, INC., New York, N. Y.
Filed July 27, 1932. Serial No. 329,117. PUBLISHED OCTOBER 18, 1932. Class 6.

300,167. SHAMPOO. THE PHOENIX OIL COMPANY, Cleveland, Ohio.
Filed July 26, 1932. Serial No. 329,094. PUBLISHED OCTOBER 18, 1932. Class 6.

300,168. SHAMPOO. THE PHOENIX OIL COMPANY, Cleveland, Ohio.
Filed July 26, 1932. Serial No. 329,093. PUBLISHED OCTOBER 18, 1932. Class 6.

300,169. AUTOMOBILES. PARAMOUNT TAXICAB CORPORATION, New York, N. Y.
Filed July 25, 1932. Serial No. 329,057. PUBLISHED NOVEMBER 1, 1932. Class 19.

300,170. LYE. CHAMPION CHEMICAL WORKS, INC., Chicago, Ill.
Filed July 16, 1932. Serial No. 328,864. PUBLISHED OCTOBER 18, 1932. Class 6.

300,171. HYDROUS AND ANHYDROUS ADEPS LANÆ OR LANOLIN FOR TOILET PREPARATIONS AND ADEPS LANÆ OR LANOLIN CREAMS, POMADES, FACE POWDERS, AND HAIR-WASHES. WOLLWÄSCHEREI UND KÄMMEREI IN DÖHREN BEI HANNOVER, Döhren near Hanover, Germany.
Filed July 15, 1932. Serial No. 328,826. PUBLISHED OCTOBER 18, 1932. Class 6.

300,172. HEMIC SOLUTION OF LIVER AND IRON. CHAPPEL BROS. INC., Rockford, Ill.
Filed July 11, 1932. Serial No. 328,684. PUBLISHED OCTOBER 18, 1932. Class 6.

300,173. INSECTICIDES. NOURSE OIL COMPANY, Kansas City, Kans.
Filed June 23, 1932. Serial No. 328,249. PUBLISHED OCTOBER 18, 1932. Class 6.

300,174. LUBRICATING OILS AND LUBRICATING GREASES. THE PEROLIN COMPANY OF AMERICA, Chicago, Ill.
Filed April 30, 1932. Serial No. 326,781. PUBLISHED NOVEMBER 1, 1932. Class 15.

300,175. MEDICINES—NAMELY, FOR THE TREATMENT OF COLDS, RHEUMATISM, ITCH, GONORRHŒA, HEADACHE, MALARIA, CONSTIPATION, HAY FEVER, EARACHE, INDIGESTION, KIDNEYS, COUGHS, SORE THROAT, BURNS AND BRUISES, TONIC FOR GENERAL AILMENT, EAR DROPS FOR EARACHE, EYE WATER, AND ANTISEPTIC POWDER FOR DOUCHES. W. HILL HORNE, doing business as Hill Horne Drug Company, Greenville, N. C.
Filed May 3, 1932. Serial No. 326,718. PUBLISHED OCTOBER 18, 1932. Class 6.

300,176. PAPER CANS AND COVERS THEREFOR. OSWEGO FALLS CORPORATION, Fulton, N. Y.
Filed March 12, 1932. Serial No. 325,078. PUBLISHED NOVEMBER 1, 1932. Class 2.

300,177. PISTON RINGS. WESTERN AUTO SUPPLY AGENCY OF LOS ANGELES, Los Angeles, Calif.
Filed April 6, 1932. Serial No. 325,862. PUBLISHED NOVEMBER 1, 1932. Class 35.

300,178. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, MADE FROM ESSENTIAL OILS. JOHN MORGAN COBLE, Jr., doing business as Red Cee Bottling Company, Burlington, N. C.
Filed May 18, 1932. Serial No. 327,214. PUBLISHED NOVEMBER 1, 1932. Class 45.

300,179. CARBONATED NON-ALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. DEMERY & SONS CO., St. Paul, Minn.
Filed July 12, 1932. Serial No. 328,727. PUBLISHED NOVEMBER 1, 1932. Class 45.

300,180. AN EFFERVESCENT CITRATE PREPARATION FOR TREATING SOUR OR ACID STOMACH. SAM TESORO, doing business as Chicago Spice & Flavor Co. and Tesoro Brand Products and Chicago Spice & Flavoring Ext. Co., Chicago, Ill.
Filed August 1, 1932. Serial No. 329,267. PUBLISHED OCTOBER 25, 1932. Class 6.

300,181. ANTISEPTIC, ANTI-TOXIC, AND DEODORANT. GODSMART & PYLES, Hollywood, Calif.
Filed July 30, 1932. Serial No. 329,232. PUBLISHED OCTOBER 25, 1932. Class 6.

300,182. POWDERED CHEMICALS USED AS FIRE EXTINGUISHERS. FIREX CHEMICAL CO., Baltimore, Md.
Filed July 30, 1932. Serial No. 329,228. PUBLISHED OCTOBER 25, 1932. Class 6.

300,183. BLOOD FOOD OR BLOOD TONIC. OTIS CLAPP & SON, INC., Boston, Mass.
Filed July 29, 1932. Serial No. 329,178. PUBLISHED OCTOBER 25, 1932. Class 6.

300,184. ASTHMA PREPARATION. PIM CHEMICAL COMPANY, West Palm Beach, Fla.
Filed July 25, 1932. Serial No. 329,060. PUBLISHED OCTOBER 25, 1932. Class 6.

300,185. STOMACH TABLETS. THOMAS H. PETERSON, doing business as The Mac-O Company, Cody, Wyo.
Filed June 28, 1932. Serial No. 328,370. PUBLISHED OCTOBER 25, 1932. Class 6.

300,186. AN ANTISEPTIC SKIN PERFECTOR AND FOR A HAIR TONIC. ECK-O-LIN MFG. CO., Minneapolis, Minn.
Filed June 13, 1932. Serial No. 327,987. PUBLISHED OCTOBER 25, 1932. Class 6.

300,187. MEDICINAL PREPARATION FOR USE IN THE TREATMENT OF PERNICIOUS ANÆMIA. NORDMARK-WERKE G. M. B. H., Hamburg, Germany.
Filed May 31, 1932. Serial No. 327,598. PUBLISHED OCTOBER 18, 1932. Class 6.

300,188. A MEDICINAL DIETETIC FOOD PREPARATION. NORDMARK-WERKE G. M. B. H., Hamburg, Germany.
Filed May 31, 1932. Serial No. 327,597. PUBLISHED OCTOBER 25, 1932. Class 6.

300,189. SALTPETRE, COD LIVER OIL, AMMONIA, ETC. TAMPA DRUG COMPANY, Tampa, Fla.
Filed May 17, 1932. Serial No. 327,204. PUBLISHED OCTOBER 25, 1932. Class 6.

300,190. MEDICINAL COMPOUND RECOMMENDED FOR ACIDITY, RHEUMATISM, AND NEURITIS. JOHN F. GARDNER, doing business as Gardner's Remedies Incorporated, Seattle, Wash.
Filed April 26, 1932. Serial No. 326,528. PUBLISHED OCTOBER 18, 1932. Class 6.

300,191. FACE CREAM. BURTON S. BOSS, New York, N. Y.
Filed April 11, 1932. Serial No. 326,068. PUBLISHED OCTOBER 25, 1932. Class 6.

300,192. DISINFECTANT AND INSECTICIDE. J. WARREN BULLEN, doing business as The Bullen Chemical Company, Folcroft, Pa.
Filed March 28, 1932. Serial No. 325,561. PUBLISHED OCTOBER 18, 1932. Class 6.

300,193. TOILET LOTIONS—NAMELY, ASTRINGENTS, YOUTH TONES, SKIN VELVETS, AND MUSCLE OILS. TERMINAL BARBER SHOPS, INC., New York, N. Y.
Filed March 25, 1932. Serial No. 325,490. PUBLISHED OCTOBER 25, 1932. Class 6.

300,194. COSMETICS—NAMELY, POWDERS, ROUGES, LIP STICKS, AND MASCARA. TERMINAL BARBER SHOPS, INC., New York, N. Y.
Filed March 25, 1932. Serial No. 325,489. PUBLISHED OCTOBER 25, 1932. Class 6.

300,195. FOOT OINTMENT FOR TREATMENT OF RINGWORM, EPIDERMOPHYTOSIS, AND LIKE INFECTIONS CAUSED BY FUNGI AND PARASITES. HARRY HARUTUNIAN, doing business as Middlesex Laboratories, Watertown, Mass.
Filed August 15, 1932. Serial No. 329,555. PUBLISHED OCTOBER 18, 1932. Class 6.

300,196. TEETHING RINGS OR INFANT PACIFIERS. HAROLD C. DOERSCHER, doing business as Tic Toc Toy Company, Buffalo, N. Y.
Filed June 6, 1930. Serial No. 302,213. PUBLISHED OCTOBER 18, 1932. Class 44.

300,197. CIGARETTES. STEPHANO BROTHERS, Philadelphia, Pa.
Filed September 22, 1932. Serial No. 330,583. PUBLISHED NOVEMBER 1, 1932. Class 17.

300,198. BARN DOOR CATCHES, CHAIN BOLTS, THUMB AND SASH FASTENERS, ETC. THE CHAMPION HARDWARE COMPANY, Geneva, Ohio.
Filed September 19, 1932. Serial No. 330,443. PUBLISHED NOVEMBER 1, 1932. Class 25.

300,199. CLEANSING TISSUES (ROLLS). PEOPLES DRUG STORES, INC., doing business as Barnard Company, Washington, D. C.
Filed September 12, 1932. Serial No. 330,274. PUBLISHED NOVEMBER 1, 1932. Class 37.

300,200. TOILET PAPER. CAPITAL PAPER COMPANY, Indianapolis, Ind.
Filed September 10, 1932. Serial No. 330,225. PUBLISHED NOVEMBER 1, 1932. Class 37.

300,201. NEWSPAPER. JOSEPH D. WILLIAMS, Bellflower, Calif.
Filed September 8, 1932. Serial No. 330,187. PUBLISHED NOVEMBER 1, 1932. Class 38.

300,202. PAPER BAGS. SANI-FIL, INC., Newton Center, Mass.
Filed September 24, 1932. Serial No. 330,638. PUBLISHED NOVEMBER 1, 1932. Class 2.

300,203. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES, SOLD AS SOFT DRINKS AND SIRUPS AND EXTRACTS FOR MAKING THE SAME. WORTH A. BROWN, Capitola, Calif.
Filed September 14, 1932. Serial No. 330,332. PUBLISHED NOVEMBER 1, 1932. Class 45.

300,204. ROLLER SKATES. ADVANCE MANUFACTURING COMPANY, Milwaukee, Wis.
Filed September 24, 1932. Serial No. 330,612. PUBLISHED NOVEMBER 1, 1932. Class 22.

300,205. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed September 21, 1932. Serial No. 330,561. PUBLISHED NOVEMBER 1, 1932. Class 22.

300,206. POTABLE SPIRITS, WHISKEY, AND LIQUORS. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada.
Filed September 19, 1932. Serial No. 330,471. PUBLISHED NOVEMBER 1, 1932. Class 49.

300,207. OPTICAL PRODUCTS. LOUIS H. SCADRON, New York, N. Y.
Filed May 24, 1932. Serial No. 327,416. PUBLISHED JULY 26, 1932. Class 26.

300,208. TITLE FOR NEWSPAPER FEATURE ARTICLES PUBLISHED FROM TIME TO TIME. WILLIAM TOMKINS, Point Loma, Calif.
Filed September 10, 1932. Serial No. 330,235. PUBLISHED NOVEMBER 1, 1932. Class 38.

300,209. CHEMICAL SUBSTANCES FOR USE AS THREAD AND FIBRE MOISTENING, PROTECTING, PENETRATING, SMOOTHING, AND FINISHING PREPARATIONS. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany.
Filed August 12, 1932. Serial No. 329,493. PUBLISHED OCTOBER 18, 1932. Class 6.

300,210. A PREPARATION FOR REMOVING WRINKLES. MARTHA WIORA, Almond, Wis.
Filed August 5, 1932. Serial No. 329,365. PUBLISHED OCTOBER 25, 1932. Class 6.

300,211. PROPHYLACTIC COMPOUND TO BE USED BY WOMEN AS AN ANTISEPTIC. ALEXANDER T. FERRIS, doing business as Sans Souci Products Co., Los Angeles, Calif.
Filed August 4, 1932. Serial No. 329,331. PUBLISHED OCTOBER 25, 1932. Class 6.

300,212. AN ESPECIALLY PREPARED MEDICINAL PREPARATION RECOMMENDED FOR RELIEF OF SUMMER COMPLAINTS, CRAMPS, DIARRHOEA, CHOLERA MORBUS, COLIC, INDIGESTION, DYSPEPSIA, AND CONSTIPATION. ISAAC N. BOYD, York, Pa.
Filed August 8, 1932. Serial No. 329,299. PUBLISHED OCTOBER 25, 1932. Class 6.

300,213. HEATER PLUGS, WALL PLATES, CANOPY SWITCHES, LAMP SOCKETS, ATTACHMENT PLUGS, PULLEY SWITCHES, CUBE TAPS, CURRENT TAPS, SURFACE TUMBLER SWITCHES, FLUSH RECEPTACLES, AND PENDANT SWITCHES. METEOR ELECTRIC CORPORATION, New York and Brooklyn, N. Y.
Filed January 23, 1932. Serial No. 323,348. PUBLISHED NOVEMBER 1, 1932. Class 21.

300,214. ELECTRICALLY DRIVEN FANS. ALMON E. JONES, Philadelphia, Pa.
Filed September 12, 1931. Serial No. 319,095. PUBLISHED NOVEMBER 1, 1932. Class 21.

300,215. WHEELS FOR AUTOMOTIVE VEHICLES. MOTOR WHEEL CORPORATION, Lansing, Mich.
Filed September 10, 1931. Serial No. 318,918. PUBLISHED NOVEMBER 1, 1932. Class 19.

300,216. MALT CEREAL BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT OF ALCOHOL BY VOLUME. THE KOCH BEVERAGE & ICE COMPANY, Wapakoneta, Ohio.
Filed September 4, 1931. Serial No. 318,741. PUBLISHED NOVEMBER 1, 1932. Class 48.

300,217. SEPARATING MEDIA FOR DENTAL AND OTHER USES. UNITED LABORATORIES, Omaha, Nebr.
Filed February 23, 1932. Serial No. 324,410. PUBLISHED OCTOBER 18, 1932. Class 44.

300,218. METAL POLISH. S. C. JOHNSON & SON, Racine, Wis.
Filed February 8, 1932. Serial No. 323,948. PUBLISHED OCTOBER 18, 1932. Class 4.

300,219. COATED FABRICS, COATED APPLIQUÉ MATERIALS, AND COATED BACKED FABRICS IN THE FORM OF VARIOUS SHAPED STRIPS, LENGTHS, OR PIECES OF MATERIAL. MAX GOLDBERG, doing business as Dormont Company, New York, N. Y.
Filed November 28, 1931. Serial No. 321,560. PUBLISHED NOVEMBER 1, 1932. Class 50.

300,220. HIGHEST ANAYLSIS ACCURATELY SIZED EXTRUDED NITROGEN AND DIAMMONIUM PHOSPHATE FERTILIZER. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed August 22, 1931. Serial No. 318,332. PUBLISHED NOVEMBER 1, 1932. Class 10.

300,221. FERTILIZER IN THE FORM OF UNIFORM DIAMETER IRREGULAR LENGTH EXTRUDES. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed August 22, 1931. Serial No. 318,331. PUBLISHED NOVEMBER 1, 1932. Class 10.

300,222. COMPOSITION FOR CLEANING WALLS, WOOD-WORK, AND THE LIKE. WHITING LABORATORIES, INC., Whiting, Ind.
Filed August 10, 1931. Serial No. 317,916. PUBLISHED DECEMBER 15, 1931. Class 4.

300,223. COTTON GOODS IN THE PIECE. WM. SIMPSON, SONS & CO., Philadelphia, Pa.
Filed August 3, 1931. Serial No. 317,618. PUBLISHED NOVEMBER 1, 1932. Class 42.

300,224. CIGAR AND CIGARETTE HOLDERS AND PIPES, SMOKE FILTERING DEVICES IN THE FORM OF FITTINGS FOR CIGAR AND CIGARETTE HOLDERS AND PIPES, AND CHEMICALLY TREATED SMOKE FILTERS FOR DENICOTINIZING PURPOSES. NIKOSTOP IPARI ÉS KERESKEDELMI RÉSZVÉNY TARSASÁG, Budapest, Hungary.
Filed June 17, 1931. Serial No. 315,973. PUBLISHED NOVEMBER 1, 1932. Class 8.

300,225. BEEF, IRON, WINE, COCOANUT OIL SHAMPOO, ETC. URE DRUGGIST, INC., Cleveland, Ohio.
Filed June 10, 1931. Serial No. 315,654. PUBLISHED OCTOBER 18, 1932. Class 6.

300,226. ELECTRICALLY OPERATED CHIMES IN THE NATURE OF DOOR OR CALL CHIMES. GENERAL KONTROLAR COMPANY, INC., Dayton, Ohio.
Filed June 1, 1931. Serial No. 315,257. PUBLISHED NOVEMBER 1, 1932. Class 21.

300,227. MEDICINAL PREPARATION FOR THE TREATMENT OF DISORDERS DUE TO AMENORRHEA, DYSMENORRHEA AND MENORRHAGIA. S. PFEIFFER MFG. CO., St. Louis, Mo.
Filed April 27, 1931. Serial No. 313,866. PUBLISHED JULY 7, 1931. Class 6.

300,228. MONTHLY MAGAZINE. ATLAS PUBLISHING COMPANY, INC., New York, N. Y.
Filed March 31, 1931. Serial No. 312,747. PUBLISHED NOVEMBER 1, 1932. Class 38.

300,229. ICE CREAM. THE WESTERN PURE MILK PRODUCTS COMPANY, Salina, Kans., assignor to The Jo-Mar Dairies Company, a Corporation of Kansas.
Filed September 18, 1930. Serial No. 305,385. PUBLISHED JANUARY 12, 1932. Class 46.

300,230. BEAUTY CREAM. TULON, INC., New York, N. Y.
Filed August 11, 1932. Serial No. 329,484. PUBLISHED OCTOBER 18, 1932. Class 6.

300,231. SOLUBLE IRON WITH COPPER AND CHLOROPHYL FOR USE IN SECONDARY ANEMIA. THE BATTLE CREEK FOOD COMPANY, Battle Creek, Mich.
Filed August 15, 1932. Serial No. 329,547. PUBLISHED OCTOBER 18, 1932. Class 6.

300,232. GUN GREASES AND LUBRICATING OILS. FRANK A. HOPPE, INCORPORATED, Philadelphia, Pa.
Filed September 3, 1932. Serial No. 330,091. PUBLISHED NOVEMBER 1, 1932. Class 15.

300,233. THREAD AND YARN. COTONIFICIO VALLE DI SUSA, Turin, Italy.
Filed May 12, 1932. Serial No. 327,006. PUBLISHED OCTOBER 18, 1932. Class 48.

300,234. VELVETS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed May 25, 1932. Serial No. 327,453. PUBLISHED OCTOBER 18, 1932. Class 42.

300,235. VELVETS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed May 25, 1932. Serial No. 327,454. PUBLISHED OCTOBER 18, 1932. Class 42.

300,236. WOOLEN PIECE GOODS. THE FORSTMANN WOOLEN CO., Passaic, N. J.
Filed July 9, 1932. Serial No. 328,665. PUBLISHED OCTOBER 18, 1932. Class 42.

300,237. COTTON PIECE GOODS. RIEGEL TEXTILE CORPORATION, New York, N. Y.
Filed July 27, 1932. Serial No. 329,122. PUBLISHED OCTOBER 11, 1932. Class 42.

300,238. COTTON THREAD. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn.
Filed August 3, 1932. Serial No. 329,318. PUBLISHED OCTOBER 4, 1932. Class 43.

300,239. COTTON THREAD. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn.
Filed August 3, 1932. Serial No. 329,319. PUBLISHED OCTOBER 4, 1932. Class 43.

300,240. COTTON PIECE GOODS. JOSEPH BANCROFT & SONS CO., Rockford, Wilmington, Del.
Filed August 6, 1932. Serial No. 329,366. PUBLISHED OCTOBER 18, 1932. Class 42.

300,241. PIECE GOODS—NAMELY, SILK, COTTON, AND RAYON FABRIC. RELIANCE PIECE DYE WORKS, Paterson, N. J.
Filed August 4, 1932. Serial No. 329,338. PUBLISHED OCTOBER 18, 1932. Class 42.

300,242. TEXTILE FABRICS IN THE PIECE, OF COTTON, RAYON, SILK, WOOL, AND/OR FOR COMBINATIONS THEREOF. LORRAINE MANUFACTURING CO., Pawtucket, R. I.
Filed August 17, 1932. Serial No. 329,605. PUBLISHED NOVEMBER 1, 1932. Class 42.

300,243. YARNS OF WOOL, WORSTED, OR HAIR. WILLIAM HOLLINS AND COMPANY, LIMITED, Nottingham, England.
Filed August 18, 1932. Serial No. 329,636. PUBLISHED OCTOBER 18, 1932. Class 43.

300,244. THREADS, YARNS, AND NOVELTY YARNS COMPOSED OF WORSTED, WOOL, COTTON, SILK, RAYON, OR A COMBINATION OF SUCH TEXTURES. THE NATIONAL SILK CO., INC., South Coventry, Conn.
Filed August 18, 1932. Serial No. 329,646. PUBLISHED OCTOBER 11, 1932. Class 43.

300,245. THREADS, YARNS, AND NOVELTY YARNS COMPOSED OF WORSTED, WOOL, COTTON, SILK, RAYON, OR A COMBINATION OF SUCH TEXTURES. THE NATIONAL SILK CO., INC., South Coventry, Conn.
Filed August 18, 1932. Serial No. 329,647. PUBLISHED OCTOBER 11, 1932. Class 43.

300,246. THREADS, YARNS, AND NOVELTY YARNS COMPOSED OF WORSTED, WOOL, COTTON, SILK, RAYON, OR A COMBINATION OF SUCH TEXTURES. THE NATIONAL SILK CO., INC., South Coventry, Conn.
Filed August 18, 1932. Serial No. 329,648. PUBLISHED OCTOBER 11, 1932. Class 43.

300,247. THREADS, YARNS, AND NOVELTY YARNS COMPOSED OF WORSTED, WOOL, COTTON, SILK, RAYON, OR A COMBINATION OF SUCH TEXTURES. THE NATIONAL SILK CO., INC., South Coventry, Conn.
Filed August 18, 1932. Serial No. 329,650. PUBLISHED OCTOBER 11, 1932. Class 43.

300,248. SILK PIECE GOODS IN THE PIECE. LOUIS ROESSEL & CO., INC., Hazleton, Pa., and New York, N. Y.
Filed August 19, 1932. Serial No. 329,690. PUBLISHED OCTOBER 11, 1932. Class 42.

300,249. THREAD. NORTH AMERICAN THREAD CO., INC., New York, N. Y.
Filed August 22, 1932. Serial No. 329,751. PUBLISHED OCTOBER 4, 1932. Class 43.

300,250. CURTAINS OF RAYON, SILK, COTTON, CELANESE, AND TUBIZE; DRAPERIES OF RAYON, SILK, COTTON, CELANESE, AND TUBIZE; AND FABRICS OF RAYON, SILK, COTTON, CELANESE, AND TUBIZE. PORTAGE DRAPERIES CO., INC., New York, N. Y.
Filed August 27, 1932. Serial No. 329,902. PUBLISHED OCTOBER 25, 1932. Class 42.

300,251. LACES AND EMBROIDERIES. ZEKARIA BROTHERS, New York, N. Y.
Filed August 27, 1932. Serial No. 329,912. PUBLISHED OCTOBER 11, 1932. Class 42.

300,252. YARNS OF WOOL, COTTON, SILK, RAYON, OR COMBINATIONS THEREOF. HANES HOSIERY MILLS CO., Winston-Salem, N. C.
Filed September 3, 1932. Serial No. 330,086. PUBLISHED OCTOBER 18, 1932. Class 43.

300,253. YARNS MADE OF WOOL, COTTON, SILK, RAYON, AND MIXTURES THEREOF. TEXTILES, INCORPORATED, Gastonia, N. C.
Filed September 13, 1932. Serial No. 330,317. PUBLISHED OCTOBER 18, 1932. Class 43.

300,254. THREADS, YARNS, AND NOVELTY YARNS COMPOSED OF WORSTED, WOOL, COTTON, SILK, RAYON OR A COMBINATION OF SUCH TEXTURES. THE NATIONAL SILK COMPANY, INC., South Coventry, Conn.
Filed September 15, 1932. Serial No. 330,377. PUBLISHED OCTOBER 25, 1932. Class 43.

300,255. GOODS IN THE PIECE OF WOOL, COTTON, RAYON, SILK, AND ANY COMBINATIONS THEREOF. WOLLNER & SMITH, New York, N. Y.
Filed September 21, 1932. Serial No. 330,560. PUBLISHED OCTOBER 25, 1932. Class 42.

300,256. VELVETS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed September 22, 1932. Serial No. 330,606. PUBLISHED NOVEMBER 1, 1932. Class 42.

300,257. ABSORBENT COTTON. THE KENDALL COMPANY, Walpole, Mass.
Filed March 17, 1932. Serial No. 325,229. PUBLISHED OCTOBER 18, 1932. Class 44.

300,258. LIQUID FLOOR WAXES AND FLOOR POLISHES FOR ALL KINDS OF FLOORS. CONTINENTAL CAR-NA-VAR CORPORATION, Brasil, Ind.
Filed April 27, 1932. Serial No. 326,622. PUBLISHED NOVEMBER 1, 1932. Class 16.

300,259. BRAKE DRESSING, CHROMIUM CLEANER, AUTO TOP DRESSING, ETC. STRAUSS STORES CORPORATION, doing business as Admiral Products Company, Brooklyn, N. Y.
Filed June 18, 1932. Serial No. 328,108. PUBLISHED OCTOBER 18, 1932. Class 4.

300,260. CLEANING COMPOUND FOR CONCRETE FLOORS, ETC. DETERGENT PRODUCTS CORPORATION, Atlanta, Ga.
Filed July 1, 1932. Serial No. 328,479. PUBLISHED OCTOBER 18, 1932. Class 4.

300,261. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed September 7, 1932. Serial No. 330,156. PUBLISHED OCTOBER 18, 1932. Class 42.

300,262. SILK GOODS IN THE PIECE. LOUIS ROESSEL & CO., INC., Hazleton, Pa., and New York, N. Y.
Filed September 3, 1932. Serial No. 330,102. PUBLISHED OCTOBER 25, 1932. Class 42.

300,263. CLOTH TOWELS. ADTOWL CORPORATION, New York, N. Y.
Filed September 3, 1932. Serial No. 330,078. PUBLISHED OCTOBER 25, 1932. Class 42.

300,264. PILE FABRICS, INCLUDING CORDUROYS AND PLUSHES. CROMPTON-RICHMOND CO., INC., Crompton, R. I.
Filed September 2, 1932. Serial No. 330,061. PUBLISHED NOVEMBER 1, 1932. Class 42.

300,265. COMPOSITION SHEET MATERIAL—NAMELY, FIBROUS SHEETS AND SHEETS COMPOSED OF CORK AND FIBERS. BEHR-MANNING CORPORATION, Troy, N. Y.
Filed September 2, 1932. Serial No. 330,060. PUBLISHED NOVEMBER 1, 1932. Class 50.

300,266. COMPOSITION SHEET MATERIAL—NAMELY, FIBROUS SHEETS AND SHEETS COMPOSED OF CORK AND FIBERS. BEHR-MANNING CORPORATION, Troy, N. Y.
Filed September 2, 1932. Serial No. 330,059. PUBLISHED NOVEMBER 1, 1932. Class 50.

300,267. COMPOSITION SHEET MATERIAL—NAMELY, FIBROUS SHEETS. BEHR-MANNING CORPORATION, Troy, N. Y.
Filed September 2, 1932. Serial No. 330,058. PUBLISHED NOVEMBER 1, 1932. Class 50.

300,268. STRIPS, SHEETS, RODS, AND SIMILAR MEMBERS OF NON-FERROUS METALS AND ALLOYS THEREOF—NAMELY, BRASS, COPPER, NICKEL, SILVER, ALUMINUM, BRONZE, AND ZINC. EASTERN BRASS & COPPER CO. INC., New York, N. Y.
Filed August 30, 1932. Serial No. 329,983. PUBLISHED NOVEMBER 1, 1932. Class 14.

300,269. COAL. MAJESTIC COAL MINING COMPANY, Kansas City, Mo.
Filed June 9, 1932. Serial No. 327,852. PUBLISHED NOVEMBER 1, 1932. Class 1.

300,270. PIECE GOODS COMPRISING OR CONTAINING ARTIFICIAL SILK. I. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y.
Filed May 5, 1932. Serial No. 326,777. PUBLISHED SEPEMBER 27, 1932. Class 42.

300,271. NEWSPAPER COLUMN. PORTLAND MAINE PUBLISHING COMPANY, Portland, Me.
Filed July 18, 1932. Serial No. 328,874. PUBLISHED NOVEMBER 1, 1932. Class 38.

300,272. MACHINE USED BY THE INDIVIDUAL SMOKER TO FORM CIGARETTES. MARDEN MFG. CO., Minneapolis, Minn.
Filed July 18, 1932. Serial No. 328,872. PUBLISHED NOVEMBER 1, 1932. Class 8.

300,273. HANDKERCHIEFS. GRAEMIGER BROS. INC., New York, N. Y.
Filed August 6, 1932. Serial No. 329,375. PUBLISHED OCTOBER 18, 1932. Class 42.

300,274. SILK PIECE GOODS. WILLIAM HOLLINS AND COMPANY, LIMITED, Nottingham, England.
Filed August 16, 1932. Serial No. 329,638. PUBLISHED OCTOBER 18, 1932. Class 42.

300,275. AUTOMOBILE TIRES, TUBES, AND PORTABLE TIRE PATCH OUTFITS. L. L. CORYELL & SON, Lincoln, Nebr.
Filed August 22, 1932. Serial No. 329,740. PUBLISHED NOVEMBER 1, 1932. Class 85.

300,276. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed August 25, 1932. Serial No. 329,827. PUBLISHED OCTOBER 18, 1932. Class 42.

300,277. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed August 25, 1932. Serial No. 329,828. PUBLISHED OCTOBER 18, 1932. Class 42.

300,278. MEN'S DRESS-SUIT CASES. THE KENNEDY COMPANY, doing business as Kennedy's, Boston, Mass.
Filed August 26, 1932. Serial No. 329,858. PUBLISHED NOVEMBER 1, 1932. Class 3.

300,279. SILK AND RAYON PIECE GOODS. SUSSBERG & FEINBERG, INC., New York, N. Y.
Filed August 27, 1932. Serial No. 329,908. PUBLISHED OCTOBER 25, 1932. Class 42.

300,280. LOOSE LEAF NOTE BOOKS AND BLANK BOOKS. S. E. & M. VERNON INC., New York, N. Y.
Filed August 29, 1932. Serial No. 329,949. PUBLISHED NOVEMBER 1, 1932. Class 37.

300,281. RUG AND FABRIC CLEANER. THE PHOENIX OIL COMPANY, Cleveland, Ohio.
Filed July 26, 1932. Serial No. 329,092. PUBLISHED OCTOBER 25, 1932. Class 4.

300,282. MALT SYRUP. BIRK BROS. MALT PRODUCTS, INC., Chicago, Ill.
Filed July 26, 1932. Serial No. 329,077. PUBLISHED OCTOBER 18, 1932. Class 46.

300,283. SPECIALLY PREPARED WHOLE WHEAT FOR COOKING PURPOSES AND BREAD MADE THEREFROM. THE HANLEY MILLING COMPANY, doing business as Wheat Division of The Wheat Krinkler Corp., Mansfield, Ohio.
Filed July 20, 1932. Serial No. 328,920. PUBLISHED OCTOBER 18, 1932. Class 46.

300,284. CLEANING COMPOUND IN POWDERED FORM, PARTICULARLY FOR LAUNDRY USE AND ALL KINDS OF DOMESTIC CLEANING. DETERGENT PRODUCTS CORPORATION, Atlanta, Ga.
Filed July 1, 1932. Serial No. 328,480. PUBLISHED OCTOBER 25, 1932. Class 4.

300,285. OINTMENT USED IN THE TREATMENT OF CHARLEY HORSE, STRAINED LIGAMENTS, SORE MUSCLES, INFLAMMATION, AND FATIGUE. F. and W. Co., San Francisco, Calif.
Filed May 2, 1932. Serial No. 326,676. PUBLISHED OCTOBER 18, 1932. Class 6.

300 286. POTABLE SPIRITS, WHISKEY, AND LIQUORS. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada.
Filed September 19, 1932. Serial No. 330,469. PUBLISHED NOVEMBER 1, 1932. Class 49.

300,287. MEDICINAL PREPARATION USED AS AN ANTISYPHILITIC. MERCK & CO., INC., Rahway, N. J.
Filed August 26, 1932. Serial No. 329,863. PUBLISHED OCTOBER 25, 1932. Class 6.

300,288. DEPILATING COMPOUND. HERCULES POWDER COMPANY, Wilmington, Del.
Filed August 24, 1932. Serial No. 329,796. PUBLISHED OCTOBER 25, 1932. Class 6.

300,289. SKIN LOTION. EDNA M. MCKAY, Akron, Ohio.
Filed August 20, 1932. Serial No. 329,718. PUBLISHED OCTOBER 25, 1932. Class 6.

300,290. GENERAL TONICS, COD LIVER OIL, LAXATIVE MEDICINES, MEDICINES INDICATED FOR DISEASES OF THE RESPIRATORY ORGANS, RHEUMATISM, AND THE NERVOUS SYSTEM; APOTHERAPIC MEDICINES AND SERUMS. FERNANDO A. RUBIÓ Barcelona, Spain.
Filed August 18, 1932. Serial No. 329,655. PUBLISHED OCTOBER 25, 1932. Class 6.

300,291. ANTISEPTIC FOR REMOVING ADHESIVE TAPE AND PLASTER FROM OPEN WOUNDS AND SORES. HOOD-HALL CHEMICAL CO., INC., Montgomery, Ala.
Filed August 16, 1932. Serial No. 329,582. PUBLISHED OCTOBER 11, 1932. Class 6.

300,292. MEDICINAL PREPARATION USED IN THE TREATMENT OF DISEASES OF POULTRY. ECONOMY MILLS, Lubbock, Tex.
Filed August 16, 1932. Serial No. 329,575. PUBLISHED OCTOBER 18, 1932. Class 6.

300,293. BACTERIOPHAGES. ALLEN-SANDLIN LABORATORIES, Louisville, Ky.
Filed August 16, 1932. Serial No. 329,571. PUBLISHED OCTOBER 18, 1932. Class 6.

300,294. MEDICINE USED IN THE TREATMENT OF PERIODIC OPHTHALMIA. EDWARD M. WILLIAMS, Norway, Iowa.
Filed August 15, 1932. Serial No. 329,566. PUBLISHED OCTOBER 25, 1932. Class 6.

300,295. MEDICINAL TABLETS FOR THE TREATMENT OF HEADACHES, NEURALGIA, COLDS, GRIPPE, SORE THROAT, TOOTHACHE, EARACHE, RHEUMATISM, LUMBAGO, SCIATICA, AND THE LIKE. THE PEPSODENT CO., Chicago, Ill.
Filed August 15, 1932. Serial No. 329,562. PUBLISHED OCTOBER 18, 1932. Class 6.

300,296. MOISTENING PREPARATIONS, THREAD AND FIBRE PROTECTING PREPARATIONS, THREAD AND FIBRE PENETRATING PREPARATIONS, SMOOTHING PREPARATIONS, AND FINISHING PREPARATIONS FOR USE IN THE TREATMENT OF TEXTILE FABRICS AND LEATHER IN THE COURSE OF THEIR MANUFACTURE. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany.
Filed August 12, 1932. Serial No. 329,497. PUBLISHED OCTOBER 18, 1932. Class 6.

300,297. MOISTENING PREPARATIONS, THREAD AND FIBRE PROTECTING PREPARATIONS, THREAD AND FIBRE PENETRATING PREPARATIONS, SMOOTHING PREPARATIONS, AND FINISHING PREPARATIONS FOR USE IN THE TREATMENT OF TEXTILE FABRICS AND LEATHER IN THE COURSE OF THEIR MANUFACTURE. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany.
Filed August 12, 1932. Serial No. 329,496. PUBLISHED OCTOBER 18, 1932. Class 6.

300,298. MOISTENING PREPARATIONS, THREAD AND FIBRE PROTECTING PREPARATIONS, THREAD AND FIBRE PENETRATING PREPARATIONS, SMOOTHING PREPARATIONS, AND FINISHING PREPARATIONS FOR USE IN THE TREATMENT OF TEXTILE FABRICS AND LEATHER IN THE COURSE OF THEIR MANUFACTURE. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany.
Filed August 12, 1932. Serial No. 329,498. PUBLISHED OCTOBER 18, 1932. Class 6.

300,299. CHEMICAL SUBSTANCES FOR USE AS THREAD AND FIBER MOISTENING, PROTECTING, PENETRATING, SMOOTHING, AND FINISHING PREPARATIONS. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany.
Filed August 12, 1932. Serial No. 329,494. PUBLISHED OCTOBER 18, 1932. Class 6.

300,300. PROPHYLACTIC RUBBER ARTICLES FOR PREVENTION OF CONTAGIOUS DISEASES. KNIGHTS CO., Cambridge, Mass.
Filed September 14, 1932. Serial No. 330,347. PUBLISHED OCTOBER 25, 1932. Class 44.

300,301. SOAP PASTE FOR CLEANING PURPOSES. HOPKINS CHEMICAL CO., Washington, D. C., and Newark, N. J.
Filed September 14, 1932. Serial No. 330,346. PUBLISHED OCTOBER 25, 1932. Class 4.

300,302. PREPARATION FOR THE TREATMENT OF INTESTINAL DISORDERS. THOMAS J. MCBRIDE, doing business as The Entromul Company, Los Angeles, Calif.
Filed September 13, 1932. Serial No. 330,306. PUBLISHED OCTOBER 25, 1932. Class 6.

300,303. SANITARY NAPKINS, AND CATAMENIAL BANDAGES OF COTTON AND/OR CELLULOSE AND SANITARY BELTS. THE DEANE PLASTER CO., Yonkers, N. Y.
Filed September 13, 1932. Serial No. 330,293. PUBLISHED OCTOBER 25, 1932. Class 44.

300,304. CLEANING COMPOUND FOR DOMESTIC USE. HYO PRODUCTS COMPANY, Binghamton, N. Y.
Filed September 8, 1932. Serial No. 330,179. PUBLISHED OCTOBER 25, 1932. Class 4.

300,305. PAINT ENAMEL. EVER-NU ENAMEL CO., INC., Chicago, Ill.
Filed September 1, 1932. Serial No. 330,041. PUBLISHED NOVEMBER 1, 1932. Class 16.

300,306. FLEA SOAP. POTTER-WRIGHTINGTON, INC., Charlestown, Mass.
Filed August 31, 1932. Serial No. 330,020. PUBLISHED OCTOBER 25, 1932. Class 4.

300,307. DENTAL ALLOYS. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa.
Filed August 26, 1932. Serial No. 329,914. PUBLISHED OCTOBER 25, 1932. Class 44.

300,308. DRY CLEANER. MAJOR PETROLEUM COMPANY, Wilmington, Del., and Philadelphia, Pa.
Filed August 23, 1932. Serial No. 329,818. PUBLISHED OCTOBER 25, 1932. Class 4.

300,309. SHOE CLEANER. PYROLE PRODUCTS CORPORATION, Portsmouth, Ohio.
Filed August 17, 1932. Serial No. 329,607. PUBLISHED OCTOBER 18, 1932. Class 4.

300,310. INSECTICIDAL SOAPS. ABBOTT LABORATORIES, North Chicago, Ill.
Filed August 17, 1932. Serial No. 329,589. PUBLISHED OCTOBER 25, 1932. Class 4.

300,311. FORCEPS FOR CASTRATION OF ANIMALS. FRANCESCO VEGLIA, Turin, Italy.
Filed August 10, 1932. Serial No. 329,461. PUBLISHED OCTOBER 18, 1932. Class 44.

300,312. SOAPS, METAL POLISH, ETC. GRACE-LEE PRODUCTS, INC., Minneapolis, Minn.
Filed August 8, 1932. Serial No. 329,401. PUBLISHED OCTOBER 18, 1932. Class 4.

300,313. WHEAT FLOUR. BLISH MILLING COMPANY, Seymour, Ind.
Filed August 5, 1932. Serial No. 329,343. PUBLISHED OCTOBER 25, 1932. Class 46.

300,314. SHOE POLISH AND CLEANER. DEAUVILLE-PALATINE CORPORATION, New York, N. Y.
Filed August 4, 1932. Serial No. 329,325. PUBLISHED OCTOBER 18, 1932. Class 4.

300,315. RUBBER NURSING BOTTLE NIPPLES. THE PYRAMID RUBBER COMPANY, Ravenna, Ohio.
Filed July 30, 1932. Serial No. 329,242. PUBLISHED OCTOBER 25, 1932. Class 44.

300,316. SWEET BISCUITS. ALL NATIONS BAKERS, INC., New York, N. Y.
Filed August 22, 1932. Serial No. 329,734. PUBLISHED NOVEMBER 15, 1932. Class 46.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]
THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

300,317. (CLASS 38. PRINTS AND PUBLICATIONS.) BESSIE H. STINE, South Orange, N. J. Filed Nov. 17, 1931. Serial No. 321,223.

REDI-MATCHED

For Color Charts.
Claims use since Nov. 12, 1931.

300,318. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) P. BALLANTINE AND SONS, Newark, N. J. Filed Nov. 11, 1931. Serial No. 321,063.

FUDGICE

For Frosting or Icing for Bakery Products.
Claims use since Oct. 29, 1931.

300,319. (CLASS 12. CONSTRUCTION MATERIALS.) PACIFIC STATES FENCE CO., Los Angeles, Calif. Filed Nov. 11, 1931. Serial No. 321,034.

BELLEAU WOOD

For Wooden Fence Paling.
Claims use since Oct. 29, 1931.

300,320. (CLASS 38. PRINTS AND PUBLICATIONS.) DYER-ENZINGER COMPANY, INC., doing business as Radio Feature Syndicate, Milwaukee, Wis. Filed Nov. 6, 1931. Serial No. 320,860.

RADIO FEATURE SYNDICATE

For Printed News Service for Daily Newspapers and Magazines.
Claims use since Sept. 21, 1931.

300,321. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) EARL FRUIT COMPANY, San Francisco, Calif. Filed Oct. 5, 1931. Serial No. 319,721.

FOLSOM

For Fresh Deciduous Fruits.
Claims use since Sept. 1, 1931.

300,322. (CLASS 42. KNITTED, NETTED, AND TEX TILE FABRICS.) KOPS BROS. INC., New York, N. Y Filed Oct. 3, 1931. Serial No. 319,698.

Supple-spun

For Fabrics Composed of Knitted Elastic Cotton Yarns.
Claims use since Sept. 29, 1931.

300 323. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE ALASKA FREEZER CO., INC., Winchendon, Mass. Filed Sept. 28, 1931. Serial No. 319,466.

Kwik Heat

For Oil Burners.
Claims use since Sept. 13, 1931.

300,324. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) MODISH SPECIALTIES, INC., New York, N. Y., assignor to Charles K. Thau, doing business as Laura Hair Novelty Co., New York, N. Y. Filed Sept. 16, 1931. Serial No. 319,117.

MODISH

For Hair Nets and Water Wave Nets of Silk and Like Materials.
Claims use since Oct. 10, 1930.

300,325. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) BENNETT MILLS, INCORPORATED, Philadelphia, Pa. Filed Feb. 18, 1932. Serial No. 324,280.

SHIRVAN

For Pile Fabrics.
Claims use since November, 1931.

300,326. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) CANADA FOUNDRIES & FORGINGS, LIMITED, Brockville, Ontario, Canada. Filed Feb. 17, 1932. Serial No. 324,276.

HEALTHMAKER

For Furnaces for Burning Gas, Oil, Coal, Coke, and Wood, and Humidifiers.
Claims use since Mar. 31, 1930.

300,327. (CLSS 16. PAINTS AND PAINTERS' MATERIALS.) ROBERT W. LEE, doing business as Lee Manufacturing Co., Brooklyn, N. Y. Filed June 29, 1931. Serial No. 316,437.

LEE'S

For Automobile and Furniture Polish.
Claims use since July 1, 1925.

300,328. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Sept. 4, 1930. Serial No. 305,322.

OUR Special

For Coffee.
Claims use since July 31, 1930.

300,329. (CLASS 11. INKS AND INKING MATERIALS.) INDIANA CHEMICAL & MFG. CO., Indianapolis, Ind. Filed Oct. 29, 1932. Serial No. 331,687.

SAFESET

For Anti-Offset, Ink Softener, and Safe Dryer.
Claims use since Aug. 1, 1927.

300,330. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Oct. 20, 1932. Serial No. 331,416.

KWIK-KUT

For Lawn Mowers.
Claims use since June 1, 1931.

300,331. (CLASS 3. BAGGAGE, ANIMAL EQUIPMENTS, PORTFOLIOS, AND POCKETBOOKS.) DEAUVILLE BAGS, INC., New York, N. Y. Filed Oct. 13, 1932. Serial No. 331,221.

DEAUVILLE BAGS

For Ladies' Handbags.
Claims use since Apr. 30, 1931.

300,332. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) KING FEATURES SYNDICATE, INC., New York, N. Y. Filed Oct. 20, 1932. Serial No. 331,405.

Anne Adams

For Dress Patterns.
Claims use since Dec. 30, 1929.

300,333. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) B. HELLER & COMPANY, Chicago, Ill. Filed Oct. 7, 1932. Serial No. 331,048.

$1000.00 GUARANTEED

For Cleaning and Polishing Preparations—Namely, Detergent Waste Pipe Opener, Enamel Cleaner, Automobile Body Polish, Window Cleaner, Silver Cleaner and Polish, Toilet Bowl Cleaner, Metal Polish, Furniture Cleaner With Incidental Polishing Properties, and Detergent Fabric Cleaner.
Claims use since Aug. 18, 1910, on waste pipe opener; since July, 1915, on enamel cleaner; since Nov. 15, 1915,

on automobile body polish; since Mar. 15, 1921, on window cleaner; since August, 1921, on silver polish; since January, 1922, on toilet bowl cleaner; since September, 1922, on metal polish; since April, 1923, on furniture polish, and since Jan. 5, 1929, on fabric cleaner.

300,334. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) STAR EXPANSION BOLT COMPANY, New York, N. Y. Filed Sept. 30, 1932. Serial No. 330,836.

TAMPIN

For Expansion Shields.
Claims use since Apr. 14, 1926.

300,335. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) COMBIER & CO. INC., New York, N. Y. Filed Sept. 27, 1932. Serial No. 330,694.

DOUBLE (2) WEAR

For Piece Goods of Silk and Mixtures Thereof.
Claims use since May, 1912.

300,336. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NELLIE N. B. BUNKLEY, Washington, D. C. Filed Aug. 11, 1932. Serial No. 329,488.

Mme. N. B. Bunkley's Hair Grower

For Hair Grower.
Claims use since Aug. 8, 1930.

300,337. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) WARNER BROS. PICTURES, INC., New York, N. Y. Filed Apr. 4, 1932. Serial No. 325,809.

WARNER BROS. PICTURES, INC.

For Motion Pictures and Motion Picture Films Which Have Records or Sound, Words and/or Music Thereon and Motion Picture Films Adapted for Synchronization with Sound, Words, and/or Music Records.
Claims use since 1928.

300,338. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) HARDWICK & MAGEE COMPANY, Philadelphia, Pa. Filed Feb. 23, 1932. Serial No. 324,879.

OAKMONT
WILTON RUG

For Textile Rugs.
Claims use since Dec. 1, 1931.

300,339. (CLASS 12. CONSTRUCTION MATERIALS.) CREO-DIPT COMPANY INC., North Tonawanda, N. Y. Filed Jan. 27, 1932. Serial No. 323,482.

WILLIAMSBURG

For Shingles of Wood and Asphalt and Composition of Asphalt and Other Fireproof Material.
Claims use since May 1, 1931.

300,340. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) G. B. RAFFETTO, INCORPORATED, New York, N. Y. Filed Jan. 22, 1932. Serial No. 323,809.

PICKLE-MIX

For Canned and Bottled Fruits and Vegetables.
Claims use since July 9, 1931.

300,341. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FORSTMANN WOOLEN COMPANY, Passaic, N. J. Filed Jan. 21, 1932. Serial No. 323,285.

Nubia

For Woolen Piece Goods.
Claims use since Dec. 1, 1931.

300,342. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FORSTMANN WOOLEN COMPANY, Passaic, N. J. Filed Jan. 21, 1932. Serial No. 323,233.

Lanta

For Woolen Piece Goods.
Claims use since Dec. 1, 1931.

300,343. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PERKINS PRODUCTS CO., Chicago, Ill. Filed Jan. 15, 1932. Serial No. 323,058.

Bet-R-Set

For Gelatine Dessert.
Claims use since Nov. 21, 1931.

300,344. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) INTERNATIONAL FIRE EQUIPMENT CORPORATION, West New Brighton, N. Y. Filed Dec. 21, 1931. Serial No. 322,410.

Shur-Stream

For Portable Hand Fire Extinguishers.
Claims use since Nov. 1, 1931.

300,345. (CLASS 17. TOBACCO PRODUCTS.) MODEL STOGIE CO., Wheeling, W. Va. Filed Dec. 22, 1931. Serial No. 322,369.

MODEL
WHEELING

For Stogies.
Claims use since June 1, 1930.

300,346. (CLASS 31. FILTERS AND REFRIGERATORS.) THE CAPPEL FURNITURE COMPANY, Dayton, Ohio. Filed Dec. 18, 1931. Serial No. 322,249.

BERING

For Electric Refrigerators.
Claims use since Dec. 4, 1931.

300,347. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) COLUMBIA STEEL EQUIPMENT COMPANY, Philadelphia, Pa. Filed Dec. 11, 1931. Serial No. 322,014.

COLUMBIA

For Manually Operated Machines for Wrapping Merchandise.
Claims use since Oct. 16, 1931.

300,348. (CLASS 45. BEVERAGES, NONALCOHOLIC.) BROWN C. BEATTON, Marlin, Tex. Filed Nov. 27, 1931. Serial No. 321,524.

MARLIN WELLS

Concentrated MINERAL WATER

For Mineral Water in Natural and Concentrated Form.
Claims use since Nov. 12, 1931.

TRADE-MARK REGISTRATIONS RENEWED

39,586. WATCHCASES. Registered December 30, 1902. ILLINOIS WATCH CASE CO., Elgin, Ill., a Corporation of Illinois. Renewed December 30, 1932.

40,281. A CEMENT PREPARATION FOR COATING METALS, &c. Registered May 5, 1903. TOCH BROTHERS. Renewed May 5, 1933, to Toch Brothers, Inc., New York, N. Y., a Corporation of New York, assignee.

40,452. FRESH AND CURED MEATS. Registered May 26, 1903. DUNLEVY AND BROTHER, Pittsburgh, Pa. Renewed May 26, 1933, to Dunlevy-Franklin Company, East Liberty Station, Pittsburgh, Pa., a Corporation of Pennsylvania, assignee by mesne assignments.

89,261. RUBBER OR CUSHION TIRES FOR VEHICLES. Registered December 3, 1912. HOOD RUBBER CO., Boston, Mass. Renewed December 3, 1932, to Hood Tire Corporation, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

89,463. A PLASTIC COMPOUND MADE OF ACETYL CELLULOSE. Registered December 17, 1912. HAIGASUN BARSAM MANISSADJIAN. Renewed December 17, 1932, to Society of Chemical Industry in Basle, of Basle, Switzerland, a Corporation of Switzerland, assignee.

89,486. DRILLING, REAMING, AND TAPPING MACHINES, SLOTTING-MACHINES, AND CHAMFERING-MACHINES. Registered December 17, 1912. THE NATIONAL AUTOMATIC TOOL COMPANY, Dayton, Ohio, and Richmond, Ind. Renewed December 17, 1932, to The National Automatic Tool Company, Richmond, Ind., a Corporation of Indiana, assignee.

89,870. RUBBER BOOTS AND SHOES AND RUBBER-SOLED SHOES. Registered January 14, 1913. NATIONAL INDIA RUBBER COMPANY, Bristol, R. I. Renewed January 14, 1933, to United States Rubber Company, New York, N. Y., a Corporation of New Jersey, assignee.

90,000. CERTAIN NAMED MEASURING INSTRUMENTS. Registered January 28, 1913. HENRY DISSTON & SONS, INCORPORATED, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed January 28, 1933.

90,023. PAINT, LINSEED-OIL, TURPENTINE, AND VARNISH. Registered January 28, 1913. INDEPENDENT PRODUCTS COMPANY. Renewed January 28, 1933, to Independent Superba Products Corporation, New York, N. Y., a Corporation of New York, assignee.

90,049. CANNED PEAS. Registered January 28, 1913. PAXTON AND GALLAGHER CO., Omaha, Nebr., a Corporation of Nebraska. Renewed January 28, 1933.

90,101. CERTAIN NAMED TOOLS. Registered February 4, 1913. HENRY DISSTON & SONS, INCORPORATED, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed February 4, 1933.

90,121. CRIMPING-MACHINES. Registered February 4, 1913. LOCKETT CRIMPING MACHINE CO., Boston, Mass. Renewed February 4, 1933, to United Shoe Machinery Corporation, Paterson, N. J., and Boston, Mass., a Corporation of New Jersey, assignee.

90,160. ALCOHOLIC BITTERS. Registered February 11, 1913. W. H. CHAPLIN & CO., LIMITED, London, England, a Corporation of Great Britain. Renewed February 11, 1933.

90,236. LUBRICATING OIL AND GREASES. Registered February 18, 1913. INDEPENDENT PRODUCTS COMPANY. Renewed February 18, 1933, to Independent Superba Products Corporation, New York, N. Y., a Corporation of New York, assignee.

90,939. BLENDED COFFEE. Registered April 1, 1913. CHARLES B. WAGSTAFF. Renewed April 1, 1933, to E. S. Gehlert & Co., Detroit, Mich., a Corporation of Michigan, assignee by mesne assignments.

90,982. CHOCOLATE AND COCOA. Registered April 8, 1913. J. S. FRY AND SONS, LIMITED, Bristol, England, a Corporation of Great Britain. Renewed April 8, 1933.

91,348. LEMONS. Registered April 29, 1913. C. D. HUBBARD FRUIT COMPANY, Carpenteria, Calif., a Corporation of California. Renewed April 29, 1933.

91,399. PLAYING-CARDS. Registered April 29, 1913. THE UNITED STATES PLAYING CARD CO. Renewed April 29, 1933, to The United States Playing Card Company, Cincinnati, Ohio, a Corporation of Ohio, assignee.

91,438. TOILET-PAPER. Registered May 6, 1913. ALBANY PERFORATED WRAPPING PAPER COMPANY. Renewed May 6, 1933, to A. P. W. Paper Company, Inc., Albany, N. Y., a Corporation of New York, by change of name.

91,516. COFFEES AND TEAS. Registered May 6, 1913. ROYAL VALLEY COFFEE CO. Renewed May 6, 1933, to R. S. Gehlert & Co., Detroit, Mich., a Corporation of Michigan, assignee by mesne assignments.

91,646. A TOILET PREPARATION INTENDED TO BE ADDED TO THE BATH. Registered May 20, 1913. CITRO CHEMICAL CO. Renewed May 20, 1933, to Citro Chemical Company of America, Maywood, N. J., a Corporation of New Jersey.

91,733. A LOCAL ANESTHETIC FOR INTERNAL AND EXTERNAL USE. Registered May 20, 1913, JULIUS C. WISE, Kansas City, Mo. Renewed May 20, 1933.

91,741. TOILET-PAPER. Registered May 27, 1913. ALBANY PERFORATED WRAPPING PAPER COMPANY. Renewed May 27, 1933, to A. P. W. Paper Company, Inc., Albany, N. Y., a Corporation of New York, by change of name.

91,743. TOILET-PAPER. Registered May 27, 1913. ALBANY PERFORATED WRAPPING PAPER COMPANY. Renewed May 27, 1933, to A. P. W. Paper Company, Inc., Albany, N. Y., a Corporation of New York, by change of name.

91,744. TOILET-PAPER. Registered May 27, 1913. ALBANY PERFORATED WRAPPING PAPER COMPANY. Renewed May 27, 1933, to A. P. W. Paper Company, Inc., Albany, N. Y., a Corporation of New York, by change of name.

91,745. TOILET-PAPER. Registered May 27, 1913. ALBANY PERFORATED WRAPPING PAPER COMPANY. Renewed May 27, 1933, to A. P. W. Paper Company. Inc., Albany, N. Y., a Corporation of New York, by change of name.

91,768. OVERCOATS, COATS, VESTS, AND TROUSERS. Registered May 27, 1913. J. S. HALL'S SONS, Knoxville, Tenn., a Corporation of Tennessee. Renewed May 27, 1933.

91,799. A CATHARTIC IN PILL FORM. Registered May 27, 1913. THE SYDNEY ROSS CO., New York, N. Y. Renewed May 27, 1933, to The Sydney Ross Co., Newark, N. J., a Corporation of New Jersey.

91,881. COFFEE. Registered June 3, 1913. THE J. HENRY KOENIG CO., Cincinnati, Ohio, a Corporation of Ohio. Renewed June 3, 1933.

91,885. BAR-STEEL AND STEEL CASTINGS. Registered June 3, 1913. MAC-IT-PARTS COMPANY, Lancaster, Pa., a Corporation of Pennsylvania. Renewed June 3, 1933.

91,886. SCREENS. Registered June 3, 1913. MAC-IT-PARTS COMPANY, Lancaster, Pa., a Corporation of Pennsylvania. Renewed June 3, 1933.

LABELS

REGISTERED JANUARY 10, 1933

41,623.—*Title:* 'LITE-FLAKE' MINUTE BISCUIT FLOUR. For Biscuit Flour. THE ABILENE FLOUR MILLS CO., Abilene, Kans. Published October 18, 1932.

41,624.—*Title:* SIMPLE SIMON. For Mince Meat. ATMORE & SON, INC., Philadelphia, Pa. Published November 22, 1932.

41,625.—*Title:* HEY! HEY! SKWEEZIT AND BITE. For Flavors. BAKER ICE MACHINE CO. INC., Omaha, Nebr. Published February 2, 1932.

41,626.—*Title:* BEECH-NUT BEANS. For Kosher Beans. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published July 8, 1932.

41,627.—*Title:* BEECH-NUT ASSORTED DROPS. For Assorted Drops. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published November 4, 1932.

41,628.—*Title:* BEECH-NUT GRAHAMS. For Graham Crackers. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published November 30, 1932.

41,629.—*Title:* PLAZA HOTEL BARS. For Butter. BREAKSTONE BROS., INC., New York, N. Y. Published September 5, 1932.

41,630.—*Title:* 8 BELLS COFFEE. For Coffee. WILL BROOKS, Los Angeles, Calif. Published November 25, 1932.

41,631.—*Title:* BUNNY. For Fresh Lettuce. J. T. BUNN, doing business as Crown Packing Company, Los Angeles, Calif. Published July 1, 1930.

41,632.—*Title:* CAMPBELL'S DUAL SHAVE. For Shaving Cream. CAMPBELL PRODUCTS CO., Chicago, Ill. Published October 10, 1932.

41,633.—*Title:* CARROCCIO'S PREPARED SAUCE FOR SPAGHETTI, ETC. For Prepared Sauce for Spaghetti, Etc. T. A. CARROCCIO & SONS, New York, N. Y. Published October 11, 1932.

41,634.—*Title:* SUNVIRO. For Reconstructive Tonic. CONADWEL LABORATORIES, INC., New York, N. Y. Published September 19, 1932.

41,635.—*Title:* SUPER WHOLE MILK BREAD. For Bread. DAIRY CORPORATION OF AMERICA, Wilmington, Del., Milwaukee, Wis., and Chicago, Ill. Published September 30, 1932.

41,636.—*Title:* TINKR-MENDR. For Liquid Solder Cement. JULIA C. DEMILLE, doing business as Demille Products Company, Baltimore, Md. Published July 22, 1932.

41,637.—*Title:* FRESH-PAK. For Carbon Paper. THE EGRY REGISTER COMPANY, Dayton, Ohio. Published October 26, 1932.

41,638.—*Title:* ESMOND ALL WOOL BLANKET. For Textile Blankets. THE ESMOND MILLS, Esmond, Smithfield, R. I. Published December 5, 1932.

41,639.—*Title:* LINCOLN LOGS. For Cigars. C. N. FOREMAN, doing business as C. N. Foreman and Co., Red Lion, Pa. Published September 15, 1932.

41,640.—*Title:* BRAHMA. For Fresh Vegetables. JOHN B. HARDWICKE, doing business as John B. Hardwicke Company, Corpus Christi, Tex. Filed September 8, 1932.

41,641.—*Title:* SEASONS GREETINGS—HILLS BROS. COFFEE—ADFORM 9. For Coffee. HILLS BROS., San Francisco, Calif. Published November 15, 1932.

41,642.—*Title:* ATTRACTIVE FOOTWEAR. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 7, 1932.

41,643.—*Title:* KEMP'S CHOCOLATES FROM THE FAMOUS GOLDEN GLOW SHOPS. For Chocolates. E. F. KEMP, INC., Somerville, Boston, and Worcester, Mass. Published August 31, 1932.

41,644.—*Title:* MONARCH OF CUBA. For Cigars. MORRIS KRAUS, New York, N. Y. Published November 5, 1932.

41,645.—*Title:* LIBERTY GRADE A BREAD. For Bread. LIBERTY BAKING COMPANY, Pittsburgh, Pa. Published September 1, 1931.

41,646.—*Title:* TERMINI-IMERESE BRAND MACARONI. For Macaroni. MEGS MACARONI COMPANY, Harrisburg, Pa. Published November 7, 1932.

41,647.—*Title:* LA MAMMA BRAND MACARONI. For Macaroni. MEGS MACARONI COMPANY, Harrisburg, Pa. Published November 7, 1932.

41,648.—*Title:* SALUTO BRAND MACARONI. For Macaroni. MEGS MACARONI COMPANY, Harrisburg, Pa. Published November 7, 1932.

41,649.—*Title:* MICKY MALTO. For Powdered Composition, Including Malt, Milk, and Egg, Forming a Base for Beverages. MICKY MALTO PRODUCTS CO., San Francisco, Calif. Published November 26, 1932.

41,650.—*Title:* XLENT WAX PAPER. For Wax Paper. MINERVA WAX PAPER CO., Minerva, Ohio. Published September 1, 1932.

41,651.—*Title:* BIG VALUE 2½ POUND ROLLED OATS. For Rolled Oats. NORTHERN ILLINOIS CEREAL COMPANY, Lockport, Ill. Published November 18, 1932.

41,652.—*Title:* ROCKS. For Sweetmeats. ROY B. PALMER, Baltimore, Md. Published November 18, 1932.

41,653.—*Title:* PHILLIPS WHOLE WHEAT FLOUR. For Whole Wheat Flour. PHILLIPS MILLING COMPANY INCORPORATED, San Francisco, Calif. Published October 1, 1932.

41,654.—*Title:* ATHA-FOOT. For Preparation for Athlete's Foot, Trycophytosis. ARTHUR LEO RANDALL, Los Angeles, Calif. Published June 9, 1932.

41,655.—*Title:* E-Z-CLEAN-PAD. For Cleaning Pads. E. H. SCHULDT, INC., Newark, N. J. Published October 3, 1932.

41,656.—*Title:* CHASE AND SANBORN'S SPECIAL HOTEL. For Coffee. STANDARD BRANDS INCORPORATED, New York, N. Y. Published November 4, 1932.

41,657.—*Title:* CHASE AND SANBORN'S SPECIAL RESTAURANT. For Coffee. STANDARD BRANDS INCORPORATED, New York, N. Y. Published November 10, 1932.

41,658.—*Title:* UNION SOLVENT SOAP. For Solvent Soap. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published October 1, 1932.

41,659.—*Title:* EASY TASK BRAND NO. 1 BROOMS. For Brooms. WESCO FOODS COMPANY, Cincinnati, Ohio. Published November 15, 1932.

41,660.—*Title:* AVALON BRAND FANCY PARLOR BROOM. For Brooms. WESCO FOODS COMPANY, Cinnati, Ohio. Published November 15, 1932.

41,661.—*Title:* TRUMP BRAND SPECIAL BROOM. For Brooms. WESCO FOODS COMPANY, Cincinnati, Ohio. Published November 1, 1932.

41,662.—*Title:* WORCESTER IVORY SALT. For Salt. WORCESTER SALT COMPANY, New York, N. Y. Published January 19, 1931.

41,663.—*Title:* SPARKLING LOUISIANA TABLE SALT. For Salt. WORCESTER SALT COMPANY, New York, N. Y. Published November 17, 1931.

PRINTS

REGISTERED JANUARY 10, 1933

14,013.—*Title:* THE HOURS. For Cleansing Cream, Velva Cream, Spotpruf Lotion, Illusion Powder, Skin Tonic, Etc. ELIZABETH ARDEN OF N. Y., LTD., doing business as Elizabeth Arden, New York, N. Y. Published October 29, 1932.

14,014.—*Title:* CROTZER'S BROMO-MINT, EFFERVESCENT, THE KEEPER OF GOOD HEALTH. For Preparation for Simple Headaches, Heartburn, Gas, Sour or Sick Stomach, Etc. BROMO-MINT COMPANY, INC., Selinsgrove, Pa. Published November 7, 1932.

14,015.—*Title:* CAMPANA LUCKY COIN. For Lucky Coins. CAMPANA CORPORATION, Batavia, Ill. Published November 1, 1932.

14,016.—*Title:* CHILTON PEN. For Fountain Pens. THE CHILTON PEN COMPANY, INC., New York, N. Y. Published December 9, 1932.

14,017.—*Title:* AUNT "MONEY BAGS," SHE CAME, SHE SAW . . . SHE WAS CONQUERED. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published December 5, 1932.

14,018.—*Title:* ANESTEX NEOTUBES. For Local Anesthetic. DAVID CURTIS, doing business as Anestex Laboratories (De-Ce Products Co. of N. Y.), New York, N. Y. Published November 15, 1932.

14,019.—*Title:* AN EXTRA GIFT—ADFORM 9 A. For Coffee. HILLS BROS., San Francisco, Calif. Published November 15, 1932.

14,020.—*Title:* HOLLYWOOD K. O. BURNING PERFUME STICKS. For Burning Perfume Sticks. K. O. LABORATORIES, LTD., Pasadena and Hollywood, Calif. Published November 9, 1932.

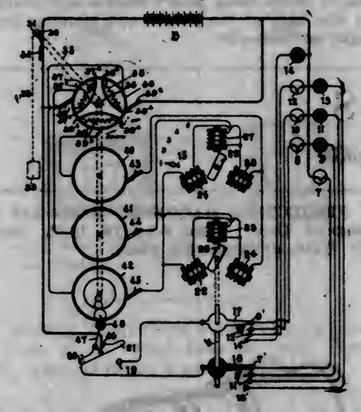
14,021.—*Title:* WHEN ONE-TENTH OF A SECOND MEANS WORLD'S RECORDS. For Watches. J. R. WOOD & SONS, INC., Brooklyn, N. Y. Published July 1, 1932.

14,022.—*Title:* WORCESTER SALT TOOTH PASTE. For Tooth Paste. WORCESTER SALT COMPANY, New York, N. Y. Published July 14, 1932.

REISSUES

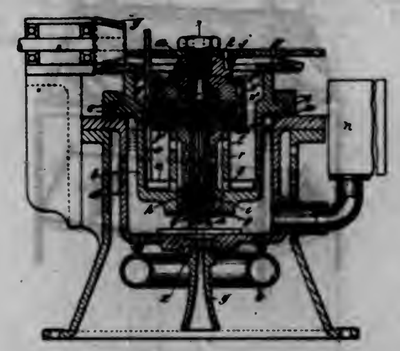
JANUARY 10, 1933

18,709. ELEVATOR-SIGNALING SYSTEM. EMIL P. BUTUSOV, Hollywood, Ill., assignor of one-half to Daniel Lewy, Chicago, Ill. Original No. 1,581,883, dated Apr. 20, 1926, Serial No. 331,114, filed Oct. 16, 1919. Application for reissue filed Oct. 13, 1932. Serial No. 637,654. 12 Claims. (Cl. 177—336.)



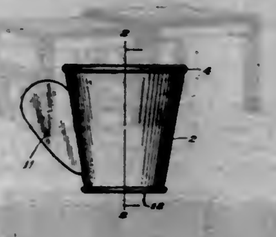
1. An elevator signaling system for an elevator system including a hatchway and a car operating between a plurality of floors, a signal at each floor, a circuit for each signal extending to substantially the mid-point of said hatchway, means mounted at substantially the mid-point of said hatchway for selecting any one of said circuits, electromagnetic means for operating said selecting means, and means mechanically operated by and in accordance with the movement of said car in said hatchway for operating said electromagnetic means to select the signal corresponding to the position of said car in said hatchway.

18,710. EXTRUSION OF METAL PIPES AND THE LIKE. PERCY DUNSHEATH, Sidcup, England, assignor to W. T. Henley's Telegraph Works Company Limited, London, England. Original No. 1,817,301, dated Aug. 4, 1931, Serial No. 463,879, filed June 26, 1930, and in Great Britain July 1, 1929. Application for reissue filed Oct. 11, 1932. Serial No. 637,297. 9 Claims. (Cl. 207—2.)



1. Means for the continuous extrusion of metal pipes and the like, comprising two, relatively rotatable concentric members the inner one of which forms a point holder or core and the outer one of which forms a casing, one of said members being formed with a screw thread and the other with longitudinal ribs and/or grooves, means being provided for supplying molten lead or lead alloy to said screw thread by which it is extruded after solidification in the form of a tube or cable sheath, in which the screw thread on one member and the ribs and/or grooves on the other member die away toward the outlet end, the former dying away before the latter, in order to produce a smooth exterior and interior surface on the mass of metal without the formation of fissures and folds in the metal.

18,711. CONTAINER. JOSEPH LEVY, Brooklyn, N. Y., assignor, by mesne assignments, to Beach & Arthur, Inc., Indianapolis, Ind. Original No. 1,384,725, dated July 12, 1921, Serial No. 316,285, filed Aug. 9, 1919. Application for reissue filed Dec. 17, 1931. Serial No. 581,765. 4 Claims. (Cl. 65—13.)



1. A container, comprising a side member having at one end at about the middle of its width an integral neck terminating in an enlargement, said side member having its ends seamed together, the neck being doubled up and lying in the seam and with the enlargement projecting at right angles and having the portions on each side of the neck in engagement with the said member, and a bottom member seamed to the side member.

18,712. SUCTION CLEANER AGITATOR. BENJAMIN F. BLAKE, deceased, Marion, Ohio, by The Hoover Company, assignee, North Canton, Ohio, a Corporation of Ohio. Original No. 1,743,954, dated Jan. 14, 1930, Serial No. 341,449, filed Feb. 20, 1929. Application for reissue filed Dec. 28, 1931. Serial No. 583,413. 18 Claims. (Cl. 15—18.)



1. A suction cleaner agitator comprising a cylinder having spaced slots, a triangularly shaped block within the cylinder provided with seats, elastic holders mounted in the seats and having longitudinally disposed edges coacting with the inner walls of the cylinder, and beater elements mounted in the holders and projecting through the slots.

PLANT PATENTS

GRANTED JANUARY 10, 1933

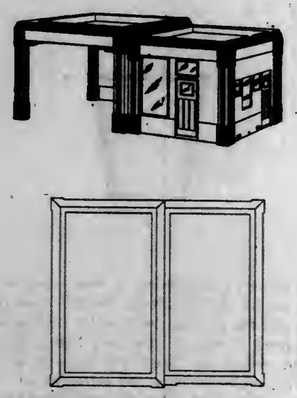
52. ROSE. JOHN A. MASON, Burlingame, Calif. Filed Oct. 10, 1931. Serial No. 568,043. 1 Claim. (Cl. 47—1.)

A rose substantially as shown and described and characterized by a flower supported on a relatively heavy stem having relatively soft thorns and foliage of a deep green color tending toward black, which flower has a plurality of rows of petals which open after the manner of a wild rose, that portion of the inner row of petals adjacent the stamens being yellow in color and which color merges outwardly into a light carmine color, and the outside of the outer row of petals being yellow merged into orange color adjacent the base of the petals and merging outwardly into a light carmine color.

DESIGNS

JANUARY 10, 1933

88,947. BUILDING. RALPH N. ALDRICH, San Francisco, Calif., assignor to Standard Stations, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 15, 1932. Serial No. 42,875. Term of patent 14 years.



The ornamental design for a building, as shown and described.

88,948. TEXTILE FABRIC OR SIMILAR ARTICLE. FERNAND BRIDIER, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,390. Term of patent 3½ years.



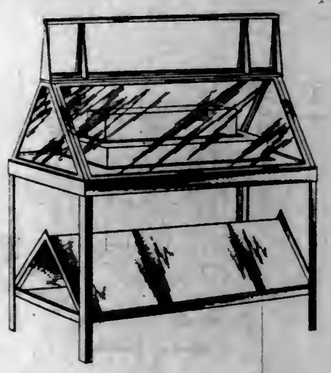
The ornamental design for a textile fabric or similar article as shown.

88,949. PROJECTING MACHINE. HARRY LEE COWAN, Los Angeles, Calif. Filed Sept. 19, 1932. Serial No. 44,992. Term of patent 3½ years.



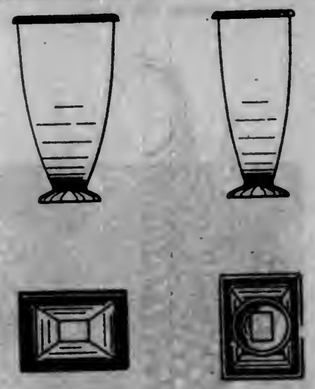
The ornamental design for a projecting machine substantially as shown.

88,950. MERCHANDISE DISPLAY RACK. HARLOW M. DAVIS, Buffalo, N. Y. Filed Oct. 11, 1932. Serial No. 45,312. Term of patent 7 years.



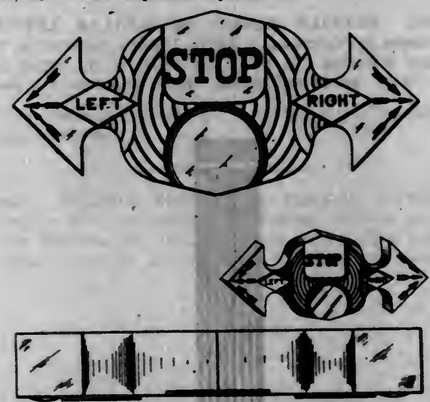
The ornamental design for a merchandise display rack as shown.

88,951. EDIBLE RECEPTACLE. ARTHUR W. DAVISON, Jamestown, N. Y. Filed Oct. 24, 1932. Serial No. 45,532. Term of patent 14 years.



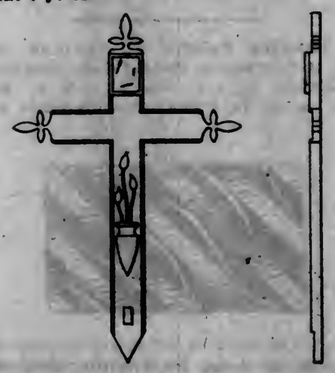
The ornamental design for an edible receptacle substantially as shown.

88,952. SIGNAL LIGHT FOR VEHICLES. ROBERT FEIN, New York, N. Y. Filed June 20, 1932. Serial No. 44,139. Term of patent 7 years.



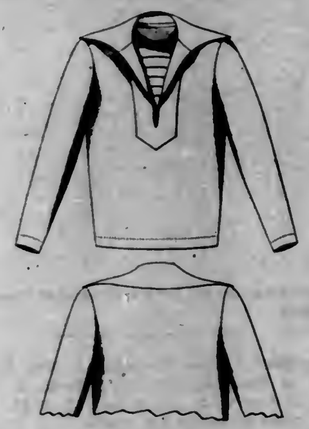
The ornamental design for a signal light for vehicles, as shown.

88,953. GRAVE MARKER. JOHN A. FUMAROL, Omaha, Nebr. Filed Oct. 21, 1932. Serial No. 45,440. Term of patent 7 years.



The ornamental design for a grave marker as shown.

88,954. SWEATER. VALLEJO GANTNER, San Francisco, Calif., assignor to Gantner & Mattern Company, San Francisco, Calif., a Corporation of California. Filed Oct. 29, 1932. Serial No. 45,635. Term of patent 7 years.



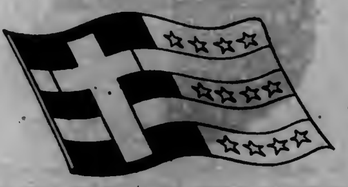
The ornamental design for a sweater substantially as shown and described.

88,955. KNITTED FABRIC. GUSTAV GASTRICH, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Aug. 15, 1932. Serial No. 44,607. Term of patent 14 years.



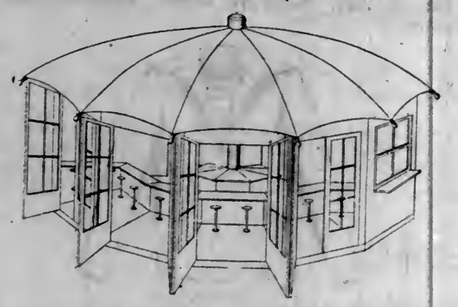
The ornamental design for a knitted fabric as shown and described.

88,956. FLAG. CHARLES A. GRABING, Bellwood, Ill. Filed Sept. 29, 1932. Serial No. 45,165. Term of patent 14 years.



The ornamental design for a flag, as shown.

88,957. REFRESHMENT STAND. HARRY F. GERHARDT, Chicago, Ill. Filed May 21, 1932. Serial No. 43,867. Term of patent 14 years.



The ornamental design for a refreshment stand as shown and described.

88,958. APRON. HUGO GOLDBERGER, New York, N. Y., assignor to Noveltex, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 17, 1932. Serial No. 46,013. Term of patent 3½ years.



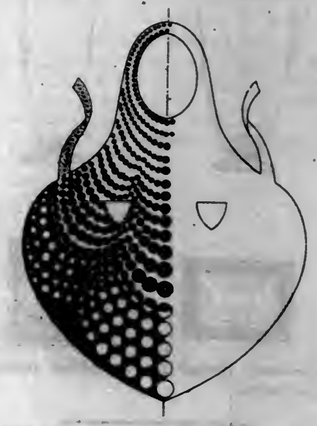
The ornamental design for an apron substantially as shown and described.

88,959. APRON. HUGO GOLDBERGER, New York, N. Y., assignor to Noveltex, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 17, 1932. Serial No. 46,014. Term of patent 3½ years.



The ornamental design for an apron substantially as shown and described.

88,960. APRON. HUGO GOLDBERGER, New York, N. Y., assignor to Noveltex, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 17, 1932. Serial No. 46,015. Term of patent 3½ years.



The ornamental design for an apron substantially as shown and described.

88,961. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,363. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,962. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,364. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,963. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,360. Term of patent 3½ years.



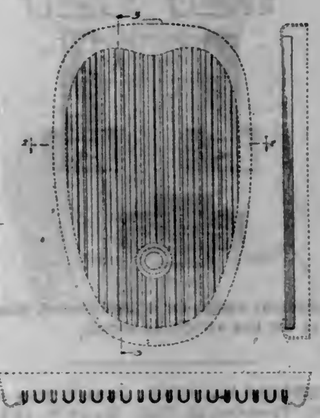
The ornamental design for a textile fabric or similar article as shown.

88,964. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,365. Term of patent 3½ years.



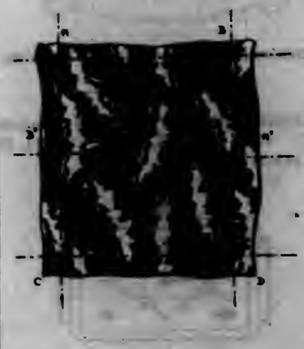
The ornamental design for a textile fabric or similar article as shown and described.

88,965. AUTOMOBILE RADIATOR SHELL WITH LOUVER-TYPE GRILLE. LEE B. GREEN, Lakewood, Ohio, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 21, 1932. Serial No. 43,243. Term of patent 7 years.



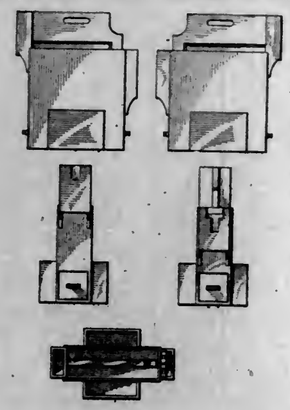
The ornamental design for an automobile radiator shell with louver-type grille, as shown and described.

88,966. TEXTILE FABRIC OR SIMILAR ARTICLE. ANTON GRULICH, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,368. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,967. COMBINATION MAGAZINE AND BOOK RACK OR THE LIKE ARTICLE. JOHN W. H. HAMILTON, New York, N. Y. Filed Oct. 27, 1932. Serial No. 45,594. Term of patent 7 years.



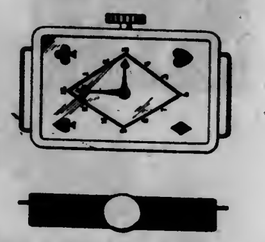
The ornamental design for a combination magazine and book rack or the like article, as shown.

88,968. VENDING MACHINE. JOHN L. HOWARD, Columbus, Ohio. Filed Oct. 28, 1932. Serial No. 45,613. Term of patent 3½ years.



The ornamental design for a vending machine, as shown.

88,969. BRIDGE WATCH. ANTHONY LOMBARDO, Brooklyn, N. Y. Filed Oct. 17, 1932. Serial No. 45,387. Term of patent 3½ years.



The ornamental design for a bridge watch, as shown.

88,970. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Dec. 8, 1932. Serial No. 46,323. Term of patent 3½ years.



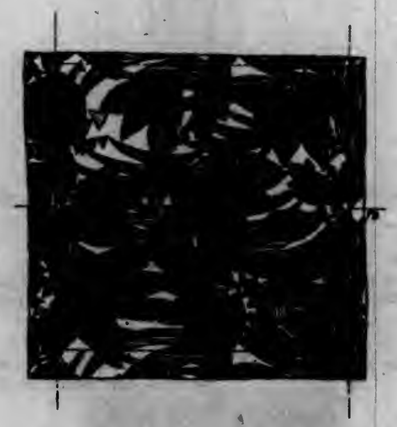
The ornamental design for a textile fabric or the like, as shown and described.

88,971. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Dec. 8, 1932. Serial No. 46,324. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,972. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Dec. 8, 1932. Serial No. 46,326. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,973. TEXTILE FABRIC OR SIMILAR ARTICLE. JULIA LUKAS, New York, N. Y., assignor to William Wilhelm Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,340. Term of patent 3½ years.



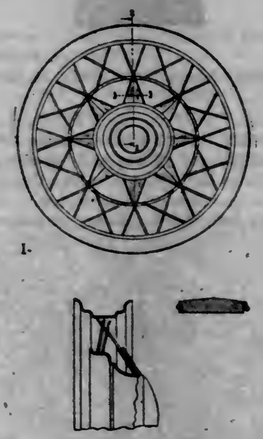
The ornamental design for a textile fabric or similar article as shown and described.

88,974. MOVABLE SIGNAL FOR AUTOMOTIVE VEHICLES. GEORGE W. MACKENZIE, Beaver, Pa. Filed Sept. 23, 1932. Serial No. 45,019. Term of patent 14 years.



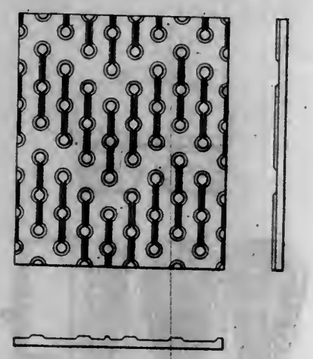
The ornamental design for a movable signal for automotive vehicles, as shown and described.

88,975. VEHICLE WHEEL OF THE WIRE SPOKE TYPE. CONSTANTY MAJEWICZ, Dearborn, Mich. Filed Sept. 10, 1932. Serial No. 44,804. Term of patent 3½ years.



The ornamental design for a vehicle wheel of the wire spoke type, as shown.

88,976. TREAD PLATE. BENJAMIN C. MCFADDEN, New Kensington, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1932. Serial No. 45,367. Term of patent 7 years.



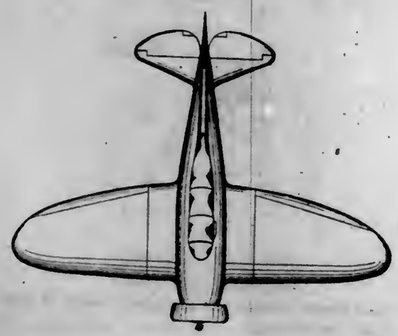
The ornamental design for a tread plate, as shown.

88,977. BOTTLE. WILLARD D. MILLER, El Paso, Tex. Filed Nov. 8, 1932. Serial No. 45,841. Term of patent 7 years.

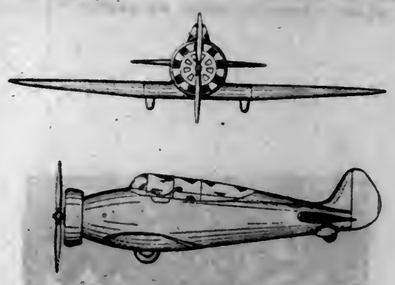


The ornamental design for a bottle, as shown.

88,978. PURSUIT AIRPLANE. CHARLES N. MONTEITH, JOHN KYLSTRA, and ROBERT J. MINSHALL, Seattle, Wash., assignors to Boeing Airplane Company, Seattle, Wash., a Corporation of Washington. Filed Oct. 7, 1932. Serial No. 45,253. Term of patent 3½ years.

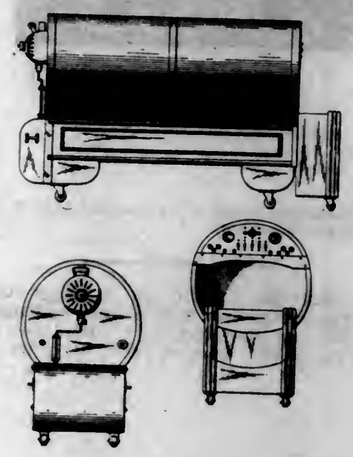


88,978—Continued.



The ornamental design for a pursuit airplane, as shown.

88,979. ELECTRICAL TREATMENT CABINET. WILLIAM H. MORTRUDE, Jr., Seattle, Wash. Filed June 20, 1932. Serial No. 44,137. Term of patent 14 years.



The ornamental design for an electrical treatment cabinet, as shown and described.

88,980. LIGHTING FIXTURE HEAD. CARL MOSER, New York, N. Y., assignor to Lightolier Co., New York, N. Y., a Corporation of New York. Filed Feb. 5, 1932. Serial No. 42,744. Term of patent 7 years.



The ornamental design for a lighting fixture head as shown.

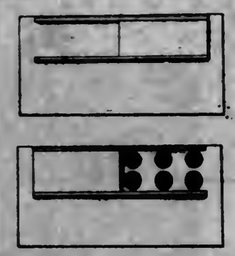
CARNEGIE LIBRARY OF ATLANTA

88,981. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN OVERMEYER, New York, N. Y., assignor to William Willhelm Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,399. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,982. ACOUSTIC PANEL FOR VEHICLES. EDWARD B. PATTERSON, Merchantville, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 30, 1932. Serial No. 42,678. Term of patent 7 years.



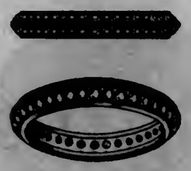
The ornamental design for an acoustic panel for vehicles, as shown and described.

88,983. BRIDGE STAND. BERNARD J. PAULSON, Wauwatosa, Wis., assignor to O-Riginal Products Incorporated, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 19, 1932. Serial No. 45,417. Term of patent 3½ years.



The ornamental design for a bridge stand, as shown.

88,984. WEDDING RING. VICTOR E. PETERSON, Brooklyn, N. Y., assignor to J. R. Wood & Sons, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Aug. 23, 1932. Serial No. 44,675. Term of patent 14 years.



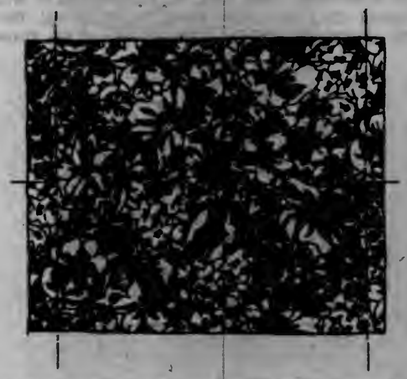
The ornamental design for a wedding ring, as shown.

88,985. COMBINED LIGHTING AND AIR CIRCULATING FIXTURE. PHILLIP RAFF, Chicago, Ill. Filed Nov. 4, 1932. Serial No. 45,764. Term of patent 7 years.



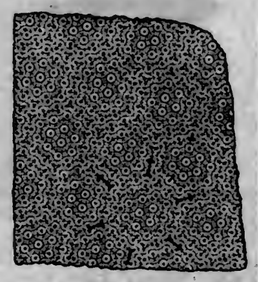
The ornamental design for a combined lighting and air circulating fixture, as shown.

88,986. TEXTILE FABRIC OR THE LIKE. WILLARD D. ROBERSON, New York, N. Y. Filed Dec. 2, 1932. Serial No. 46,278. Term of patent 3½ years.



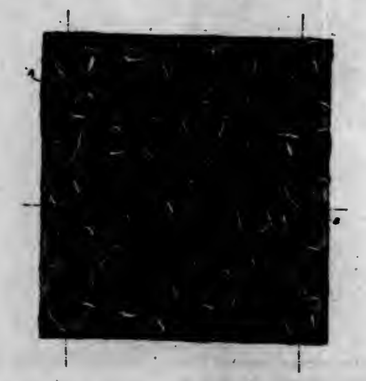
The ornamental design for a textile fabric or the like, as shown and described.

88,987. LEATHER OR SIMILAR ARTICLE OF MANUFACTURE. KARL DAVIS ROBINSON, New York, N. Y., assignor to Barrett & Company, a Corporation of New Jersey. Filed May 3, 1932. Serial No. 43,700. Term of patent 14 years.



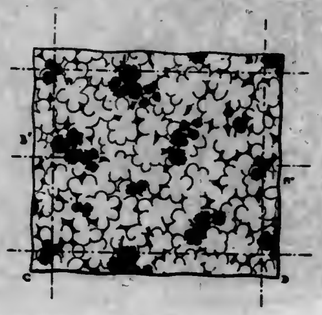
The ornamental design for leather or similar article of manufacture substantially as shown and described.

88,988. TEXTILE FABRIC OR THE LIKE. JACK SCHWEIZER, Rye, N. Y. Filed Nov. 8, 1932. Serial No. 45,811. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

88,989. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,371. Term of patent 3½ years.



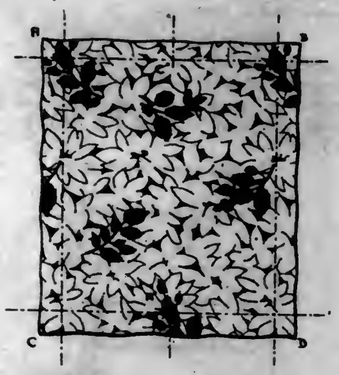
The ornamental design for a textile fabric or similar article as shown and described.

88,990. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,378. Term of patent 3½ years.



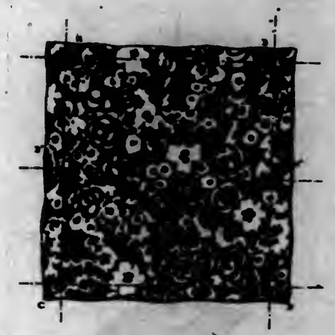
The ornamental design for a textile fabric or similar article as shown and described.

88,991. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,379. Term of patent 3½ years.



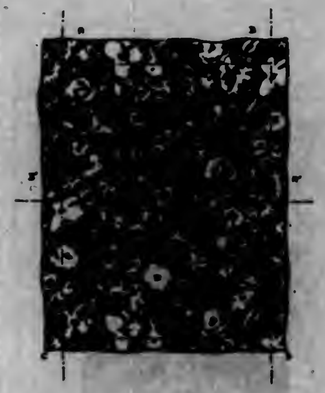
The ornamental design for a textile fabric, or similar article as shown and described.

88,992. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,383. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,993. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,384. Term of patent 3½ years.



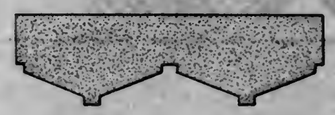
The ornamental design for a textile fabric or similar article as shown and described.

88,994. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,385. Term of patent 3½ years.



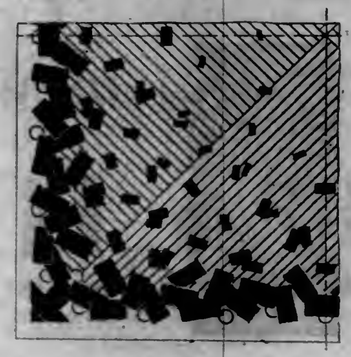
The ornamental design for a textile fabric or similar article as shown and described.

88,995. COMPOSITION ROOFING OR SIDING STRIP. ROBERT J. TOBIN, Hollis, N. Y. Filed June 25, 1931. Serial No. 40,323. Term of patent 14 years.



The ornamental design for a composition roofing or siding strip substantially as shown.

88,996. TEXTILE FABRIC. JEAN VAN DER DOES, New York, N. Y., assignor to Joseph Berlinger Company, New York, N. Y., a Corporation of New York. Filed Dec. 8, 1932. Serial No. 46,290. Term of patent 3½ years.



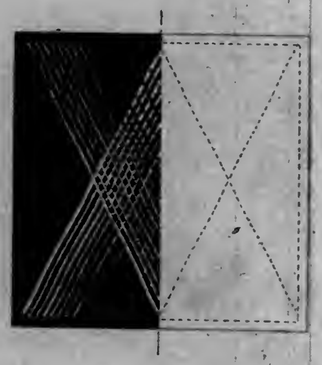
The ornamental design for a textile fabric, substantially as shown and described.

88,997. PLATFORM SCALE CASING. MATHIAS J. WEBER, Chicago, Ill., assignor, by mesne assignments, to The Health-O-Meter Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 17, 1932. Serial No. 45,384. Term of patent 14 years.



The ornamental design for a platform scale casing as shown and described.

88,998. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,232. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

88,999. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,343. Term of patent 3½ years.



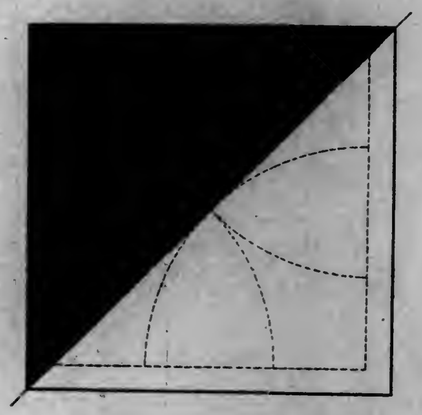
The ornamental design for a textile fabric or similar article as shown and described.

89,000. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,346. Term of patent 3½ years.



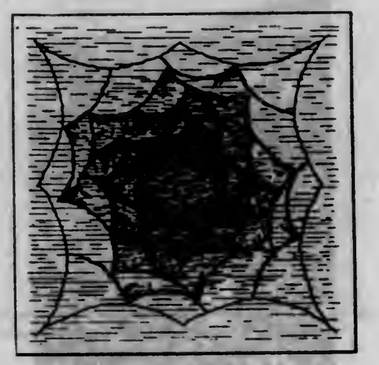
The ornamental design for a textile fabric or similar article as shown and described.

89,001. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,349. Term of patent 3½ years.



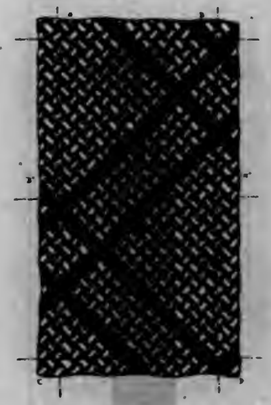
The ornamental design for a textile fabric or similar article as shown and described.

89,002. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,350. Term of patent 3½ years.



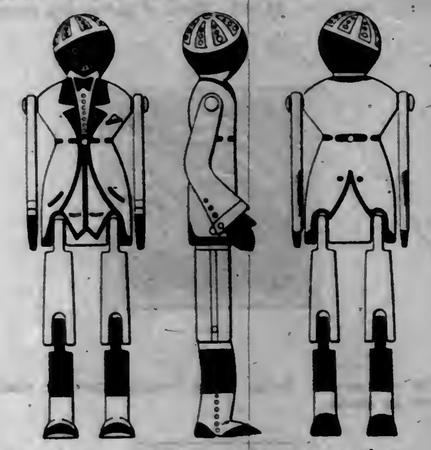
The ornamental design for a textile fabric or similar article as shown.

89,003. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,357. Term of patent 3½ years.



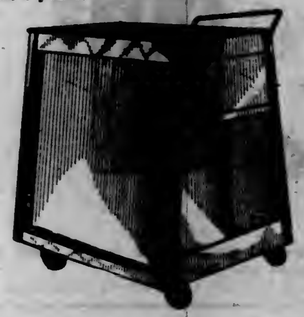
The ornamental design for a textile fabric or similar article as shown and described.

89,004. FIGURE TOY. HARRY JOHN WILLIAMS, Zephyrhills, Fla. Filed Oct. 19, 1932. Serial No. 45,418. Term of patent 3½ years.



The ornamental design for a figure toy as shown.

89,005. SERVICE LUBRICATING CART. JAMES E. BALES, Aurora, Ill., assignor, by mesne assignments, to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed May 27, 1932. Serial No. 43,918. Term of patent 7 years.



The ornamental design for a service lubricating cart substantially as shown and described.

89,006. TEXTILE FABRIC OR SIMILAR ARTICLE. FERNAND BRIDIER, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,283. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

89,007. TEXTILE FABRIC OR SIMILAR ARTICLE. FERNAND BARDIER, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,389. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

89,008. TEXTILE FABRIC OR SIMILAR ARTICLE. MARCEL LIBERT, Paris, France. Filed Dec. 9, 1932. Serial No. 46,386. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,009. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Dec. 8, 1932. Serial No. 46,325. Term of patent 3½ years.



The ornamental design for textile fabric or the like, as shown and described.

89,010. TEXTILE FABRIC OR THE LIKE. GEORGES MENDOZ, Bronxville, N. Y., assignor to Combier & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 5, 1932. Serial No. 45,226. Term of patent 3½ years.



The ornamental design for a textile fabric or the like substantially as shown and described.

89,011. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN OVERMEYER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,398. Term of patent 3½ years.



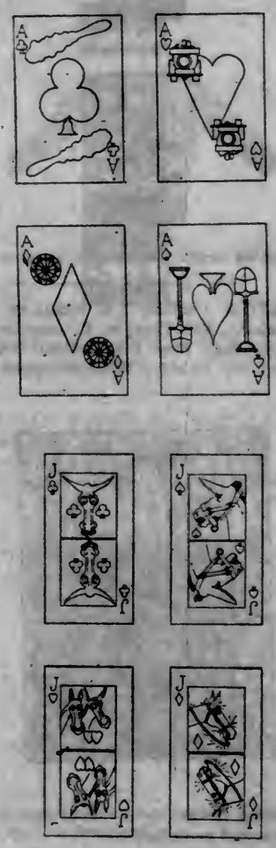
The ornamental design for a textile fabric or similar article as shown and described.

89,012. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN OVERMEYER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,400. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,013. DECK OF PLAYING CARDS OR THE LIKE. MALKAN A. PEARLMAN, Chicago, Ill. Filed Oct. 26, 1932. Serial No. 45,592. Term of patent 3½ years.

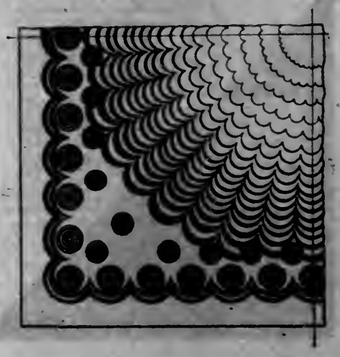


89,013—Continued.



The ornamental design for a deck of playing cards or the like, substantially as shown and described.

89,014. TEXTILE FABRIC. SOPHIA SOLOMON, Brooklyn, N. Y., assignor to Joseph Berlinger Company, New York, N. Y., a Corporation of New York. Filed Dec. 8, 1932. Serial No. 46,288. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

89,015. TEXTILE FABRIC. SOPHIA SOLOMON, Brooklyn, N. Y., assignor to Joseph Berlinger Company, New York, N. Y., a Corporation of New York. Filed Dec. 8, 1932. Serial No. 46,289. Term of patent 3½ years.



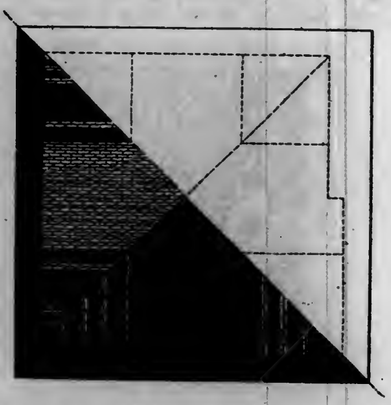
The ornamental design for a textile fabric, substantially as shown and described.

89,016. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,352. Term of patent 3½ years.



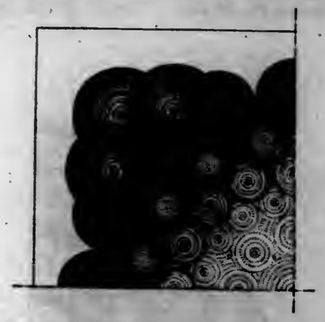
The ornamental design for a textile fabric or similar article as shown and described.

89,017. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,353. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,018. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,358. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,019. KNIT SWEATER. ROBERT J. LEVY, New York, N. Y. Filed Nov. 10, 1932. Serial No. 45,866. Term of patent 3½ years.



The ornamental design for a knit sweater, as shown.

89,020. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN OVERMEYER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,397. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,021. SHOE SOLE. OSCAR BROCKMAN, Louisville, Ky. Filed Oct. 25, 1932. Serial No. 45,574. Term of patent 14 years.



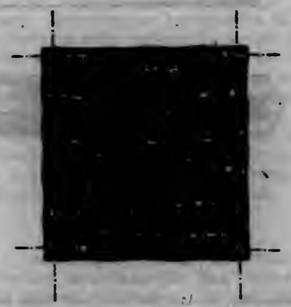
The ornamental design for a shoe sole.

89,022. TEXTILE FABRIC OR SIMILAR ARTICLE. MICHEL BRODSKY, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,392. Term of patent 3½ years.



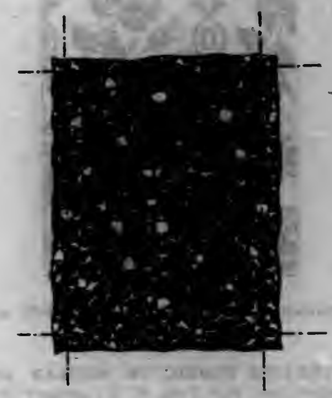
The ornamental design for a textile fabric or similar article as shown and described.

89,023. TEXTILE FABRIC OR SIMILAR ARTICLE. MARCEL CHRISTEN, Woodside, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,259. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,024. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,350. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,025. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN OVERMEYER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,398. Term of patent 3½ years.



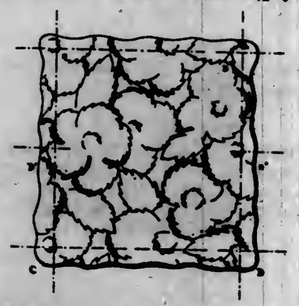
The ornamental design for a textile fabric or similar article as shown and described.

89,026. TEXTILE FABRIC. EMILY M. REIST, New York, N. Y., assignor to Marshall Field & Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 24, 1932. Serial No. 45,531. Term of patent 3½ years.



The ornamental design for a textile fabric as shown.

89,027. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,382. Term of patent 3½ years.



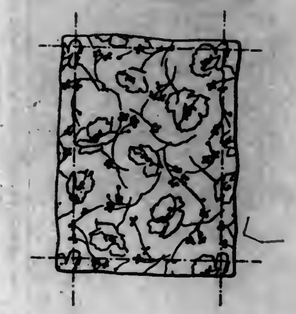
The ornamental design for a textile fabric or similar article as shown and described.

89,028. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,342. Term of patent 3½ years.



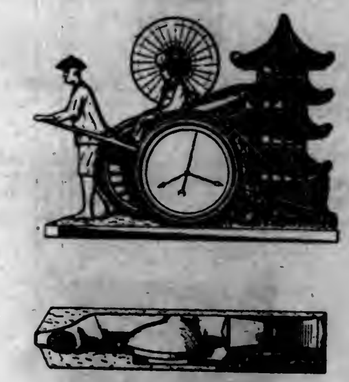
The ornamental design for a textile fabric or similar article as shown and described.

89,029. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,356. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,030. CLOCK CASE OR SIMILAR ARTICLE. PAUL BUHRLE, Bronx, N. Y., assignor to United Metal Goods Mfg. Co., Inc., Brooklyn, N. Y. Filed Nov. 21, 1932. Serial No. 46,095. Term of patent 7 years.

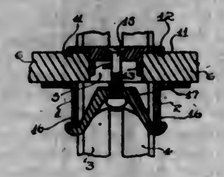


The ornamental design for a clock case or similar article, as shown and described.

PATENTS

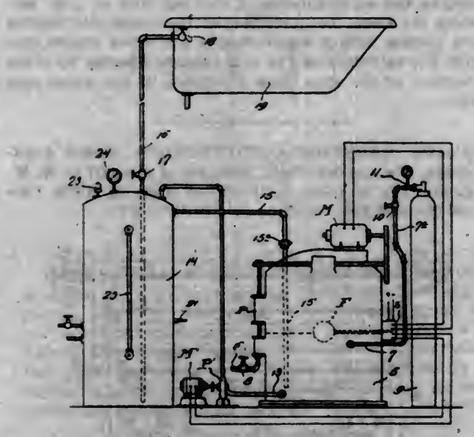
GRANTED JANUARY 10, 1933

1,893,481. TABLE, BENCH, SHELF, OR SIMILAR STRUCTURES. WALTER A. ADAMS, Rochester, N. Y. Original application filed June 19, 1925, Serial No. 38,361, now Patent No. 1,855,273. Divided and this application filed Nov. 7, 1929. Serial No. 405,501. 17 Claims. (Cl. 20—92.)



1. In combination with a support, a plurality of parallel boards, finishing and holding means for the ends of the boards formed of abutting sections extending transversely of the boards and means for securing the finishing means to the support to hold the boards to the support.

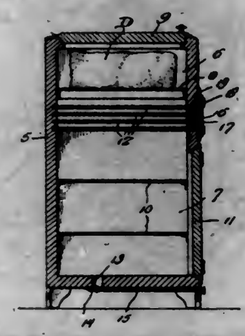
1,893,482. BATH APPARATUS. JOSEPH S. BELT, Amarillo, Tex. Filed Dec. 8, 1930. Serial No. 500,950. 2 Claims. (Cl. 261—20.)



2. In a bath apparatus, the combination of a carbonator having a carbonated water tank and a motor-operated pump for supplying said tank with water to be carbonated, a storage tank connected to said carbonator to receive carbonated water from the latter, a further motor-operated pump for forcing the carbonated water from the carbonator to the storage tank, a float-operated switch for simultaneously throwing both of said pumps into or out of operation, and a gas by-pass connection between the top of the storage tank and the carbonator tank.

1,893,483. REFRIGERATING APPARATUS AND METHOD. JOSEPH S. BELT, Amarillo, Tex. Filed Jan. 5, 1931. Serial No. 506,806. 10 Claims. (Cl. 62—91.5.)

1. In a refrigerating apparatus, an insulating receptacle and heat ingulating means of adjustable effective thickness dividing said receptacle into an upper chamber for reception of solid carbon dioxide and a lower chamber



for reception of material or articles to be refrigerated, said insulating means being of material slightly pervious to the gas evolved by sublimation of the solid carbon dioxide.

1,893,484. HEAT EXCHANGER. JOSEPH S. BELT, Amarillo, Tex. Filed July 26, 1932. Serial No. 624,836. 5 Claims. (Cl. 257—235.)

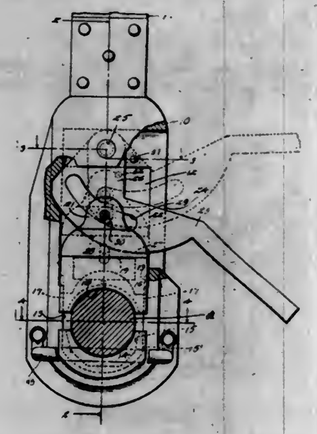


1. A heat exchanger including a casing composed of a body and removable end closure plates, said body having a spiral vane on the inner surface thereof, said casing having an inlet at one end and an outlet at the other end for a cooling or heating medium, and a coil removably arranged axially of the casing wholly within the confines of said vane and having inlet and outlet ends passing through said end closure plates to facilitate flow of a fluid to be cooled or heated therethrough countercurrent to the flow of the cooling or heating medium through the casing.

1,893,485. QUICK DETACHABLE PITMAN. LEE J. BLACK, Beaumont, Tex. Filed Mar. 29, 1930. Serial No. 440,058. 5 Claims. (Cl. 287—94.)

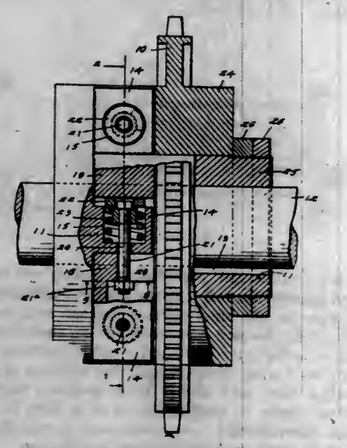
1. In a pitman, a yoke having a vertical approximately rectangular opening, upper and lower bearing boxes disposed within the opening in said yoke, the upper bearing box being slidable vertically within the yoke, and having spaced ears, a lever having a head pivoted to the yoke, the lower margin of said head being disposed between said ears, the lever being pivoted to the yoke on a line intersecting the middle of the upper bearing box and said ears having a lower convexly curved face whose center of curvature is disposed laterally of the pivotal center of the lever and toward the free end of the lever whereby the handle of the lever under the action of gravity will cause the

lever to swing in a direction to carry the handle of the lever inward toward the pitman, the upper end of the bearing box between said ears having a curved face against



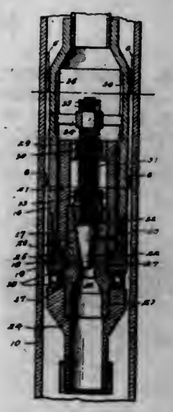
which the curved under face of the lever engages, the curvature of this under face being the same radius as the curvature of the under face of the lever.

1,893,486. SHOCK ABSORBER FOR ROTATABLE ELEMENTS. LEE J. BLACK, Beaumont, Tex. Filed July 8, 1930. Serial No. 466,528. 4 Claims. (Cl. 64—100.)



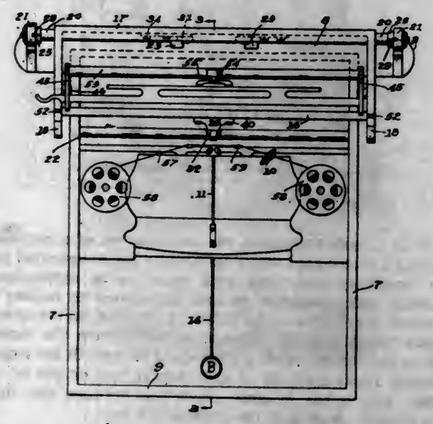
1. Rotatable driving and driven elements and a shaft upon which one of the said elements is fixedly mounted and the other of said elements loosely mounted, one of said elements having pairs of spaced apart lugs, the other element having lugs extending into the spaces between said pairs of lugs, but less in width than said spaces, and having pockets confronting one lug of each corresponding pair of lugs, compression springs disposed in said pockets, a cap engaging over the outer end of each compression spring and urged against the confronting face of the corresponding lug of the other element, and a bolt extending loosely through each cap and spring and through the rear wall of the pocket and through the adjacent lug of the other element, the bolt acting to limit the outward movement of the cap under the action of the spring, said spring yieldingly resisting movement of the lugs of the two elements toward eac other in one direction and into contact.

1,893,487. BOTTOM HOLE CHOKE FOR OIL WELLS. LEE J. BLACK, Beaumont, Tex. Filed Dec. 1, 1931. Serial No. 578,353. 4 Claims. (Cl. 166—2.)



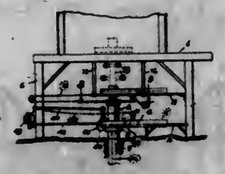
1. In a bottom hole choke, a pipe string comprising an upper pipe section and a lower pipe section, the lower pipe section having means whereby it may be anchored to the wall of a well casing, an anti-friction bearing disposed between the lower end of the upper pipe section and the upper end of the lower section, a sleeve engaged with the lower pipe section and extending up into the lower end of the upper section and formed to provide a tapered valve seat, a nut operatively carried upon said sleeve and within the upper section, the nut being held from rotation, a valve coacting with the seat and having a screw-threaded stem engaging the screw-threads of the nut, and an arm carried by the stem, the inner face of the upper pipe section being formed with a longitudinally extending groove into which the extremity of the arm extends whereby to cause a rotation of the stem upon a rotation of the upper pipe section.

1,893,488. CARRIAGE CONSTRUCTION. JESSE ALEXANDER, Los Angeles, Calif., assignor of one-half to W. W. Payne, Los Angeles, Calif. Filed Aug. 19, 1929. Serial No. 386,820. 5 Claims. (Cl. 197—60.)



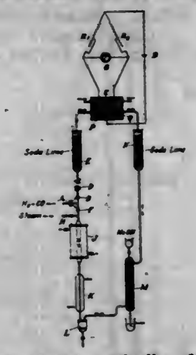
1. In a typewriter, a main frame, a supporting bracket, a guide rail, a socket seated in the supporting bracket and normally spring projected for engaging the guide rail, the said socket being retractable against the tension of its spring for disengaging the guide rail to permit removal thereof from the main frame, and a carriage traveling on the guide rail.

1,893,489. CONTROLLING APPARATUS FOR DRILLED WELLS. FRANK V. BARYCE, Los Angeles, Calif. Filed Sept. 28, 1931. Serial No. 564,551. 8 Claims. (Cl. 166—15.)



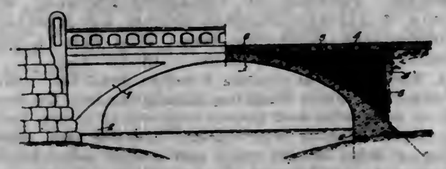
1. In the apparatus for controlling drilled wells, adapted to be connected with the well casing, a male flanged plate connected to said well casing, a female flanged plate adapted to be slideably associated with said male flanged plate, a casing upwardly extending from said female flanged plate, a passage associated with said casing, a pressure controlling valve connected to said passage, a tapered valve seat substantially associated with said casing and internally positioned within said casing at the discharge end thereof, a hinged valve plate positioned within said casing adapted to be associated with said valve seat, and means connected to said valve plate to control the manipulation of said valve plate manually and automatically.

1,893,490. GAS ANALYSIS. JOHN S. BENKLEY, Charleston, W. Va., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 23, 1928. Serial No. 272,118. 5 Claims. (Cl. 23—232.)



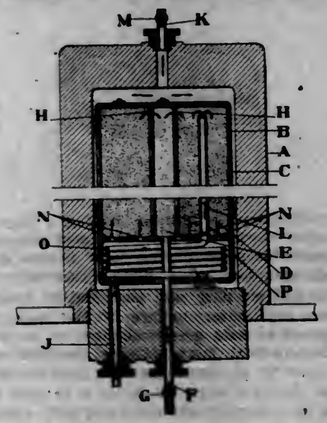
1. The method of automatically determining carbon monoxide in a gaseous stream containing hydrogen and carbon monoxide, which comprises comparing the thermal conductivity of one portion of said gaseous stream with that of a contemporaneously taken portion after replacing the carbon monoxide in the latter with hydrogen by subjecting it to catalysis with steam and removing the excess steam and carbon dioxide formed.

1,893,491. CONCRETE ARCH BRIDGE. KARL P. BILLNER, New York, N. Y., assignor to The Aerocrete Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Aug. 4, 1930. Serial No. 472,895. 5 Claims. (Cl. 72—8.)



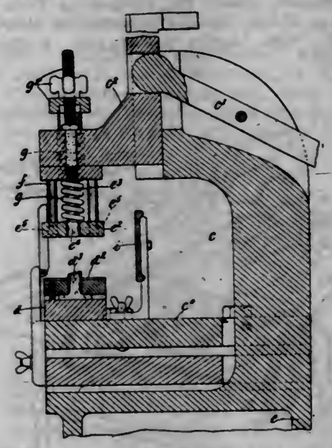
1. An improved concrete arch bridge comprising a solid concrete arch, a wearing surface of solid concrete above the arch and an interposed monolithic filling of porous concrete.

1,893,492. PROCESS AND APPARATUS FOR CATALYTIC GASEOUS REACTIONS. JOHN L. BRILL, Charleston, W. Va., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 31, 1928. Serial No. 329,553. 9 Claims. (Cl. 23—289.)



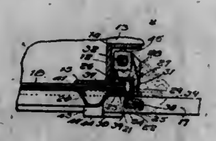
1. The method of initiating a catalytic exothermic gaseous reaction to be conducted under pressure and at a relatively high temperature, which comprises passing the compressed gases at a temperature lower than that at which the catalyst for the main reaction will function into contact with a priming catalyst, the priming catalyst being adapted to catalyze an exothermic reaction of the gases at the lower temperature, and directing the thus heated gases upon the catalyst for the main reaction.

1,893,493. PRESS TOOL FOR FIXING ATTACHÉ CASE LOCKS AND SIMILAR FASTENINGS. CHARLES WILLIAM CHENEY, Birmingham, England. Filed Oct. 24, 1930, Serial No. 490,896, and in Great Britain Oct. 26, 1929. 6 Claims. (Cl. 1—4.)



1. An apparatus for affixing a lock member having prongs, to cases, comprising the combination with a bed tool adapted to receive the lock member with its prongs upwardly directed, of a rigid vertical projection on the bed tool to accurately engage a staple hole in the lock member, a tool cooperating with said bed tool and provided with means cooperating with said rigid projection to pierce the case and with a clinching tool, means for supporting the bed tool, and means for moving said cooperating tool towards and away from the bed tool.

1,893,494. CAR CONSTRUCTION. FRANK DITCHFIELD, Cleveland, Ohio, assignor to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 21, 1930. Serial No. 437,643. 12 Claims. (Cl. 189—46.)

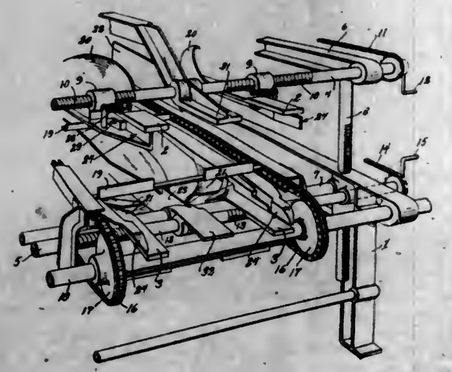


1. In combination: a member having a door opening in a wall thereof with the rear door post projecting outwardly beyond the plane of the outer surface of the adjacent wall and forming a corner therewith; a door horizontally slidable past said post and in front of and spaced from said outer surface of the wall; movable means disposed in said corner adapted to be positioned to cover the vertical joint between the door and post when the door is in closed position and to lie behind and clear of the door when the latter is in open position; and devices for automatically actuating said means to operative position during movement of the door in a horizontal direction parallel to said wall to closed position.

1,893,495. PROCESS FOR MAKING COATING MATERIALS FOR DEOXIDATION OF RUST. RUDOLF EBERHARD, Munich, Germany. Filed May 5, 1927, Serial No. 189,164, and in Germany Mar. 29, 1926. 4 Claims. (Cl. 134—1.)

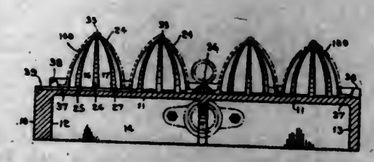
1. The process of deoxidizing rust and preventing further formation of the same which comprises coating a rusty surface with a solution of a tungsten compound in a mixture of uric acid and formaldehyde.

1,893,496. SEALER GUIDE ADJUSTING MEANS. JOHN L. FERGUSON, Joliet, Ill., assignor to J. L. Ferguson Company, Joliet, Ill., a Corporation of Illinois. Filed May 23, 1930. Serial No. 454,860. 6 Claims. (Cl. 93—2.)



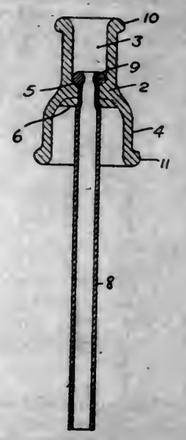
1. A device of the character described comprising a container guide for freshly glued and closed containers, and supplemental means on said guide for changing the relative position of the freshly glued and closed parts of said containers.

1,893,497. APPARATUS AND METHOD OF DRYING PULP ARTICLES. FRED D. GRAY, Herkimer, N. Y., assignor to Holed-Tite Packing Corporation, a Corporation of New York. Filed Mar. 15, 1929. Serial No. 347,302. 11 Claims. (Cl. 34—17.)



8. A drying tray for drying pulp articles comprising a metallic base having a plurality of spaced forms integral therewith, one of said forms comprising upstanding spaced portions defining the limits of the form elongated openings extending between and separating the upstanding spaced portions of the form, said base being apertured between the upstanding portions of said form.

1,893,498. BOTTLE WASHING DEVICE. CARL HERZOG, Irvington, N. J. Filed June 12, 1931. Serial No. 543,781. 2 Claims. (Cl. 141—7.)

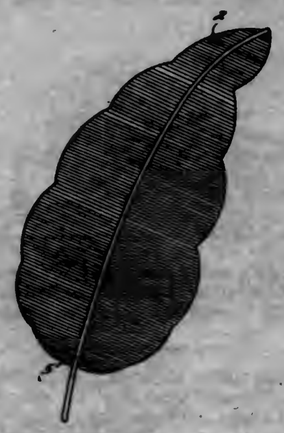


1. A bottle washer comprising a socket for attachment to a source of water supply, a water deflector integral with said socket, integral means in said deflector to space the mouth of a bottle therefrom, and a tubular flexible stem fastened in said socket, passing through and extending below said deflector and adapted to be inserted into a bottle and to deliver water near the bottom of a bottle to be washed.

1,893,499. PROCESS OF TREATING METALS. WILLIAM R. JEAVONS, Cleveland Heights, and MAHLON J. RENTSCHLER, Willoughby, Ohio. Filed Nov. 14, 1930. Serial No. 495,779. 3 Claims. (Cl. 75—17.)

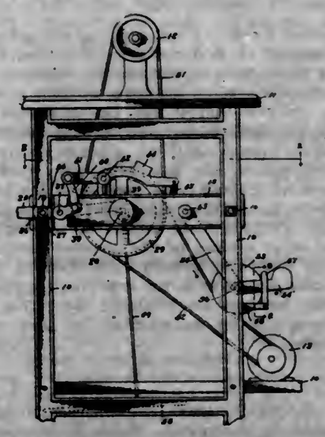
1. The method of treating a molten metal for removal of impurities which comprises introducing into the same, one or more integrated masses composed of barium peroxide bound together with barium hydrate, said masses being of lower density than said molten metal and of considerable size whereby to sink far enough below the surface to aid materially in diffusion of the nascent oxygen and barium oxide through said metal by the action of evolved gases.

1,893,500. ARTIFICIAL LEAF. CHARLES W. JOHAM, Los Angeles, Calif. Filed Dec. 22, 1931. Serial No. 582,556. 3 Claims. (Cl. 41—13.)



2. The method of making an artificial leaf which consists of pleating a sheet of material, cutting a leaf-shaped piece from the corrugated sheet, and affixing a stem to the leaf face; the cutting being transverse to the pleats of the leaf.

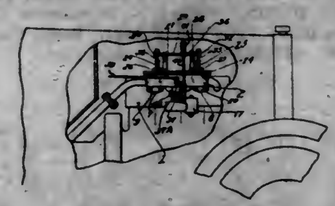
1,893,501. POWER TRANSMISSION MECHANISM. NATHAN KRAWITZ, Philadelphia, Pa. Filed May 12, 1930. Serial No. 451,586. 6 Claims. (Cl. 74—21.)



1. The combination with a frame embodying a pair of spaced uprights, a prime mover associated with the frame, a power consuming device associated with the frame, a bar fulcrumed upon one of said uprights, and extending into sliding engagement with the other of said uprights, manual means to clamp the bar relative to said last mentioned upright and in elected position, a band for said power consuming device, a belt from said prime mover and interacting pulleys carried by said bar for the band and belt respectively.

1,893,502. INTAKE MANIFOLD FOR MOTORS. ARTHUR E. KUSHN, Portland, Oreg. Filed July 22, 1930. Serial No. 469,686. 2 Claims. (Cl. 123—52.)

1. In a device of the class described, in combination with a carburetor, a manifold secured thereto, a valve reciprocably disposed therein, said valve being in tight working relationship with the walls of the manifold, a pair of valve stems extending upwardly through the upper portion of the manifold, a pair of supporting legs having journal bearings disposed within their free ends disposed upon the manifold, a shaft rockably journaled within the supporting legs, walking beams secured to the ends of the shaft, links secured to the walking beams and to the



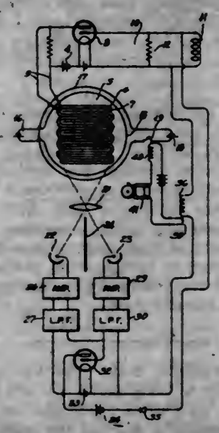
valve stems, an operating lever secured to the shaft, a bell crank journaled to the manifold and having one of its arms in direct alignment with the operating lever, links associated with the same arm and with the operating lever and carburetor valve, and means secured to the other arm of the bell crank for synchronically operating the valve disposed within the manifold and the valve disposed within the carburetor.

1,893,503. CURLING IRON. FRANÇOIS R. MARCEL, Brooklyn, N. Y. Filed Sept. 3, 1931. Serial No. 560,978. 8 Claims. (Cl. 132—37.)



1. A curling iron including a spoon member and a rod member pivotally connected with each other to co-operate in pressing a lock of hair between them, handles for said spoon and rod members by which they may be pivotally operated, said rod member being adapted to be revolved on its own axis in relation to the spoon member by revolving the handle which is associated with said rod member.

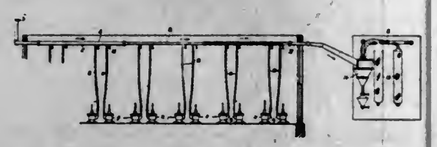
1,893,504. ARC SCREEN PROTECTION SYSTEM. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor to Communication Patents, Inc., New York, N. Y., a Corporation of Delaware. Filed June 2, 1931. Serial No. 541,572. 12 Claims. (Cl. 178—6.)



1. In a moving arc television system, a plurality of electrodes, means for supplying a potential thereto, a field winding for producing a field in which said electrodes

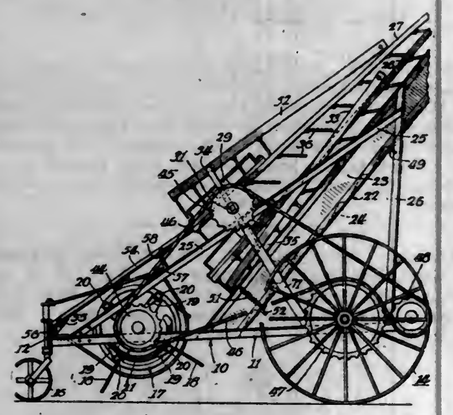
are disposed, means for detecting light from said electrodes, and means in combination with said detecting means for eliminating said electrode potential when the speed of said arc is below a predetermined value.

1,893,505. APPARATUS FOR COLLECTING AND CONVEYING DUSTS. PHILIP P. NUNGESSER, Cleveland Heights, Ohio. Filed Feb. 6, 1931. Serial No. 513,941. 3 Claims. (Cl. 83—57.)



2. An apparatus for producing and collecting bronze powders, comprising parallel air and discharge conduits having branch connections inclined in respect thereto and ejectors within said branch connections, in combination with a series of substantially closed stamping vessels having tubular exhaust connections with said ejectors.

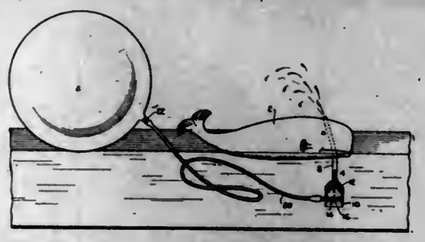
1,893,506. LOADER. THEODORE H. OPPENHEIM, Coldwater, Ohio, assignor to The New Idea Spreader Co., a Corporation of Ohio. Filed Mar. 9, 1931. Serial No. 521,190. 12 Claims. (Cl. 56—351.)



1. In a loader, an elevator, frame members for supporting said elevator, said elevator comprising a deck and reciprocating elevator bars, an operating shaft having a plurality of cranks thereon for operating said bars, bearings for the end portions of said shaft, bearing means for an intermediate portion of said shaft, a supporting bar having its lower end rigidly connected to said frame members rearwardly of said elevator and having its free upper end connected to said bearing means for supporting the same and for preventing springing of said shaft in operating said elevator bars.

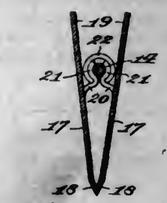
1,893,507. HYDRAULIC TOY. LEO RANNEY, New York, N. Y. Filed July 5, 1929, Serial No. 376,242. Renewed Nov. 28, 1932. 12 Claims. (Cl. 46—40.)

1. A toy comprising a floating toy member, means to actuate the same including a relatively upright conduit the lower end of which is immersed in the body on water on which the toy floats, an enlarged mouth at the lower end thereof, an inflatable elastic air bladder also adapted to float on the body of water, and a flexible tube leading from the bladder to the enlarged mouth of the conduit



in order to feed a continuous supply of air bubbles thereto during the deflation of the bladder and thereby pump water upwardly through the conduit for actuating the toy.

1,893,508. GARMENT HANGER. SOLOMON ROSENBERG, Los Angeles, Calif. Filed Mar. 17, 1930. Serial No. 436,398. 1 Claim. (Cl. 24—255.)



In a garment hanger, a rod, a spring clip arranged for sliding movement on said rod and comprising a pair of cooperating jaws, pairs of horizontally idsposed channel-shaped bearings formed on the upper portions of said jaws adjacent to the ends thereof, said bearings being adapted to cooperate and form substantially tubular members that are adapted to engage said rod, a substantially tubular spring fitting snugly over and surrounding each pair of said bearings for clamping the same upon the interposed rod and resisting opening movement of the jaws the greater portion of the inner surface of each spring contacting the outer surface of the enclosed tubular member and lugs projecting toward each other at each end of each tubular spring, said lugs overlying the ends of the corresponding bearings for retaining the spring in position thereupon and for maintaining the jaws in proper assembled relation.

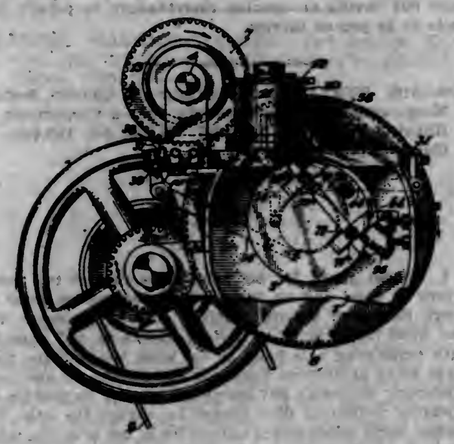
1,893,509. SLOTTING MACHINE. EDWIN B. STIMPSON, Brooklyn, N. Y., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 17, 1929. Serial No. 414,637. 15 Claims. (Cl. 10—11.)

8. A slotting machine comprising a member to be rotated having a pair of seats to receive a pair of similarly toothed segmental cutters side by side, one seat being slightly advanced rotatively with respect to the other seat to locate the teeth of the cutters in saggered relationship; and a pair of similarly toothed segmental cutters mounted in said seats.

15. A slotting machine comprising a rotary cutter head, a main seat formed on said cutter head to support a cutter saw holder, a cutter saw holder having a seat adapted to cooperate with the main seat on the cutter head, said cutter saw holder being provided with partition means to separate cutter saws mounted thereon, cutter saws mounted in parallel planes on said cutter saw holder and separated predetermined distances by said partition means, saw seats on said cutter saw holder for said cutter saws,

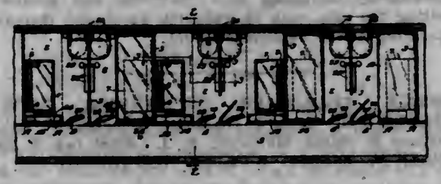
CARNEGIE LIBRARY OF ATLANTA

means to lock said cutter saws in accurate position on said cutter saw holder, and means for detachably clamping said cutter saw holder against said main seat on said cutter head, said cutter saw holder being so con-



structed and arranged that said cutter saws may be accurately mounted on said cutter saw holder prior to mounting said cutter saw holder on said rotary cutter head.

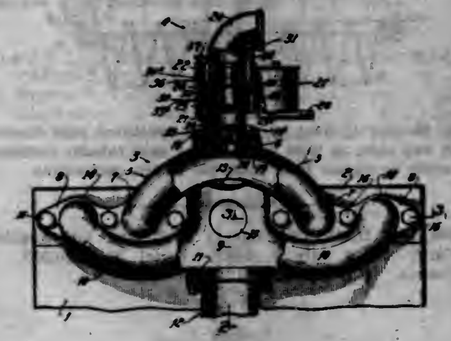
1,893,510. SLEEPING CAR. JOSEPH B. STRAUSS, Chicago, Ill. Filed Jan. 8, 1930. Serial No. 419,287. 6 Claims. (Cl. 105—315.)



1. A sleeping car comprising a series of enclosed compartments having an outer wall having a window therein, an opposed wall at a distance therefrom and a floor, a bed in each compartment hinged at one end to said opposed wall, a seat entirely separate from and independent of said bed, in each compartment, the bed and seat when in their operative positions being in the same vertical alignment and means for moving either of them to its inoperative position when the other is being used.

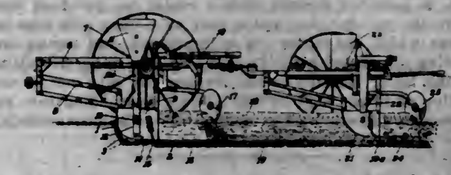
1,893,511. CARBURETOR. HERBERT H. TRAIL, Vancouver, British Columbia, Canada, assignor to Motor Devices, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed July 1, 1929. Serial No. 375,166. 2 Claims. (Cl. 261—34.)

1. In a fuel and air mixing device, a body having a perpendicularly disposed air passageway therein, a Venturi tube in said passageway having an annular chamber about a portion of the same and having a downwardly and inwardly directed passage connecting said chamber and passageway, a throttle valve in said air passageway below said Venturi tube, a fuel reservoir connected to said chamber means providing a fuel passageway opening at its bottom into said air passageway in the vicinity of said throttle valve, said fuel passageway communicating at its top end with said annular chamber and also opening to at-



mosphere and means between said chamber and the fuel reservoir for changing the fuel level therein by displacement of a portion of said fuel.

1,893,512. METHOD OF AND MEANS FOR DISTRIBUTING FERTILIZER IN CONJUNCTION WITH SEED PLANTING. ROSCOE C. ZUCKERMAN, Stockton, Calif. Filed Mar. 12, 1929. Serial No. 346,431. 13 Claims. (Cl. 111—78.)



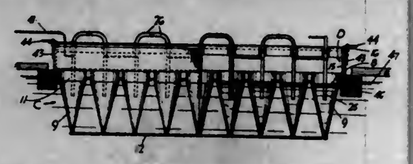
1. A method of preparing a seed-planting bed including forming a relatively wide furrow, depositing fertilizer in the bottom of the furrow, over the full width thereof, and covering the deposited fertilizer for the full width of the furrow with a relatively shallow layer of dirt.

13. An apparatus for preparing a seed bed including in combination: a means for digging a furrow, means for depositing fertilizer into the furrow, means for then mixing the fertilizer with the bottom dirt of the furrow, means for then covering the mixture with a shallow layer of dirt, means to then deposit seed in the furrow, and means to cover the seed.

1,893,513. METHOD AND MEANS FOR MAKING A COATED FROZEN CONFECTION. ABRAHAM BALIAN, Los Angeles, Calif. Filed Apr. 11, 1932. Serial No. 604,464. 4 Claims. (Cl. 107—19.)

1. In combination, a mold member comprising a plurality of liquid containers for containing confections being congealed, supporting means removably mountable on said mold member, a plurality of elongated tubular elements carried by said supporting means and projecting into said containers when said supporting means is mounted upon said mold member, there being conductors within said tubular members which are electrically connected with their lower ends and which above their lower ends are insulated therefrom, the aforementioned supporting means sustaining

said tubular elements in an insulated manner, and means to supply an electric current to said tubular elements at points spaced a substantial distance above their lower



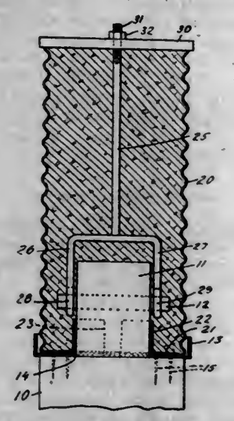
ends thereby to heat by electrical resistance said conductors and thus to heat by radiation said tubular members in order to release from them the frozen confections.

1,893,514. HAIRPIN. LESLIE F. BURCH, Los Angeles, Calif. Filed July 5, 1932. Serial No. 620,959. 5 Claims. (Cl. 132—52.)



1. A hair pin formed with a center leg provided with wave-like undulations, and a pair of similar side legs between which the center leg is interposed, and means connecting the center leg with said side legs to permit tilting of the latter relative to the former, the said means consisting of loops, each having a branch extending into the center leg and a branch extending into an adjacent side leg.

1,893,515. COMPOSITE PILE. HAROLD P. BURRELL, Nutley, N. J., assignor to MacArthur Concrete Pile Corporation, New York, N. Y., a Corporation of New York. Filed May 14, 1931. Serial No. 537,290. 5 Claims. (Cl. 61—53.)



1. In combination, a pile section having a body, a tenon of smaller diameter than that of the body and a shoulder formed between the body and the tenon, studs projecting laterally from the tenon, a metallic shell of larger internal dimension than that of the tenon resting upon the shoulder and extending upwardly from said pile section, and means for connecting the upper end of the shell with said studs to hold the lower end of the shell on said shoulder, said means including a member disposed upon the top of the shell but having an opening therethrough to permit concrete to be poured therein.

1,893,516. DUST GUARD. FRANKLIN V. CHANEY, Boston, Mass., assignor to Dust Guards, Inc., a Corporation of Illinois. Filed Apr. 14, 1927. Serial No. 183,640. 2 Claims. (Cl. 286—6.)

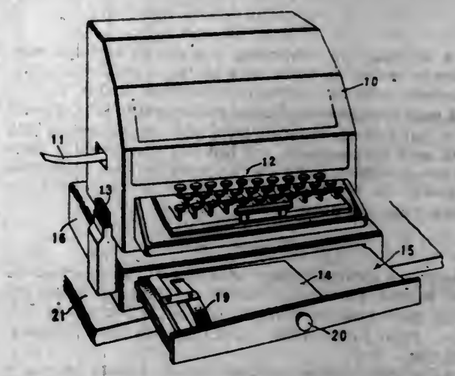


1. A dust guard for car axles consisting of two outer layers of wood and an intermediate coextensive layer of tough fibreboard secured together only by fasteners, the two wood layers being of uniform thickness and provided with registering axle holes of the same size and the fibre layer being of uniform thickness and having an axle hole concentric therewith but somewhat smaller to provide an inwardly projecting fibre tongue to engage the axle, the tongue being mushroomed outwardly in use over the inner surfaces of the holes in the wood layers and offering a non-abrasive bearing to the axle, the wood layers stiffening and strengthening the guard and the fibre layer acting to prevent separation of the dust guard parts in case of fracture.

1,893,517. SEPARATION OF MINERALS BY FLOTATION. ANTOINE MARC GAUDIN, Butte, Mont. Filed Aug. 19, 1930. Serial No. 476,455. 5 Claims. (Cl. 209—167.)

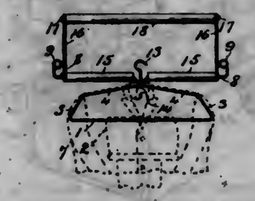
1. The flotation process which comprises collectively floating chalcocite and sphalerite, refloating with an agent substantially inhibiting both chalcocite and sphalerite, treating the pulp with an oxidizing agent and thereafter separating chalcocite from the pulp.

1,893,518. TELEGRAPH TYPEWRITER PASTING PLATFORM. JOHN J. GILLIGAN, Brooklyn, N. Y., and HARRY R. STARR, Metuchen, N. J. Filed Jan. 6, 1392. Serial No. 584,976. 9 Claims. (Cl. 178—1.)



6. The combination with a tape printing telegraph typewriter machine having a keyboard and adapted for both the transmission and reception of messages, of a message blank supporting means on which the tape may be pasted, said means being slidable in and out beneath the keyboard of said machine and means for automatically clamping said slidable means in extended position in response to the outward movement thereof, said clamping means being released in response to an inward thrust for moving said slidable means inwardly beneath the machine keyboard whereby said machine and the supporting means may be quickly conditioned for message transmission or reception.

1,893,519. GARMENT HANGER. BEN GROZOW, Kansas City, Mo. Filed Oct. 3, 1931. Serial No. 566,629. 2 Claims. (Cl. 223—61.)



1. A garment hanger comprising a lower horizontal garment supporting portion, two end portions extending respectively upwardly from the ends of said horizontal portion, two transverse garment supporting portions extending respectively from the upper ends of said end portions to a place of juncture, two upper portions extending in opposite directions from said place of juncture parallel with said lower portion, and a U shaped member having its arms respectively pivoted to said upper portions so as to be swung to and from a position in which its transverse part will be adapted to bear against a garment supported by said transverse portions.

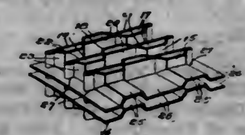
1,893,520. METHOD AND MEANS FOR FORMING TOOTH CROWNS. FERNANDO O. JAQUES, Providence, R. I. Filed Sept. 26, 1930. Serial No. 484,575. 5 Claims. (Cl. 29—160.6.)



1. The method of making crowns for teeth which comprises, forming a metal cup, shaping said cup to impart thereto the external configuration of a tooth crown, marking the outer surface of said crown by means of a gum line template to indicate the gum line of the teeth, and trimming away the open end of said crown to form a contoured edge corresponding with the gum line of the tooth to be crowned.

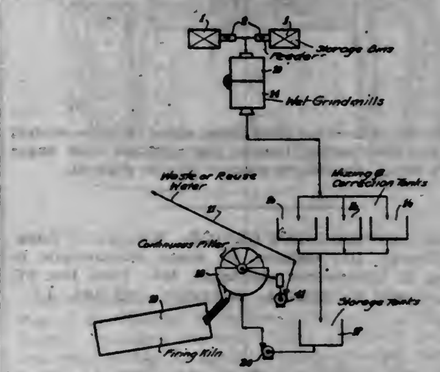
4. Means for indicating the position of the gum line of a tooth upon the outer surface of a tooth crown comprising a sleeve having one end thereof shaped to correspond substantially with the gum line of a tooth.

1,893,521. TUBE FOR HEAT EXCHANGE DEVICES. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Nov. 20, 1929. Serial No. 408,497. 2 Claims. (Cl. 257—130.)



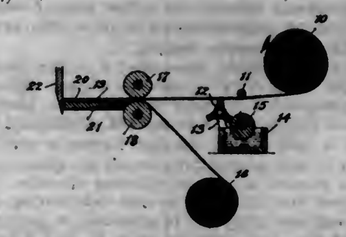
1. A radiator comprised of a plurality of tubes, each tube having a plurality of fluid passages, one tube being arranged in spaced relation to an adjacent tube, the fluid passages of one tube being arranged relatively to the fluid passages of an adjacent tube to thereby provide means for directing air into contact with tubes defining said space and agitating said air during passage through said space and transversely arranged fins having air agitating means connected with said tubes.

1,893,522. APPARATUS AND PROCESS FOR MAKING CEMENT. CHAUNCEY B. OLIVER, Oak Park, Ill., and VICTOR E. VALLET, Detroit, Mich., assignors, by mesne assignments, to Oliver United Filters Inc., San Francisco, Calif., a Corporation of Nevada. Filed Aug. 27, 1927. Serial No. 215,794. 4 Claims. (Cl. 106—25.)



1. The process of making cement which comprises grinding the cement making materials in the presence of water, adding additional water, and separating the coarse and fine particles, regrinding the coarse particles and again separating and regrinding the coarse particles, settling the finely ground slurry and water to remove part of the moisture therein, continuously filtering the settled slurry to quickly reduce the moisture content and convert it into a solid filter cake and burning the solid filter cake.

1,893,523. CIGAR WRAPPER AND PROCESS OF MAKING THE SAME. HARRY RADINSKY, New York, N. Y., assignor to International Banding Machine Company, New York, N. Y., a Corporation of New York. Filed Nov. 27, 1931. Serial No. 577,663. 5 Claims. (Cl. 93—1.)

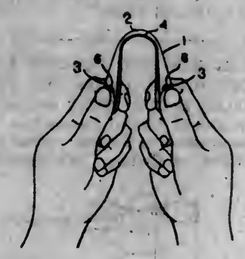


1. In a show case including a frame work and a multiple glass wall inclosing within itself a dead air space, means for removing moisture from such dead air space including a removable container mounted in communication therewith and an air pervious container filled with hygroscopic material, such last mentioned container being mounted within the former and the two adapted to be removed.

1,893,524. TONGUE SCRAPER AND CLEANER. CATHERINE E. SHANLEY, Allston, Mass. Filed May 13, 1932. Serial No. 611,044. 4 Claims. (Cl. 128—304.)

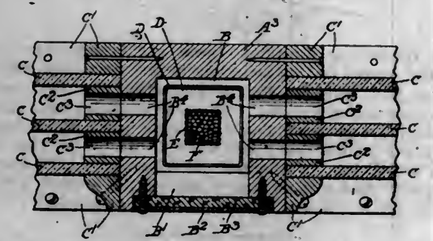
3. A tongue scraper comprising a thin strip of flexible resilient material which by its resiliency normally assumes a straight shape, but which can be readily bent

and twisted into a U-shape of variable widths and configurations, one edge of said strip being concavely curved in the direction of its length and constituting a tongue scrap-



ing edge, the ends of the strip being wider than the central tongue scraping portion thereof and provided with finger holds by which the tongue scraper may be grasped.

1,893,525. ANTIFOGGING DEVICE. WILLIAM T. SHERER, Chicago, Ill., assignor, by mesne assignments, to Reuben E. Ottenheimer, Baltimore, Md. Filed Dec. 27, 1927. Serial No. 242,644. 24 Claims. (Cl. 183—4.)

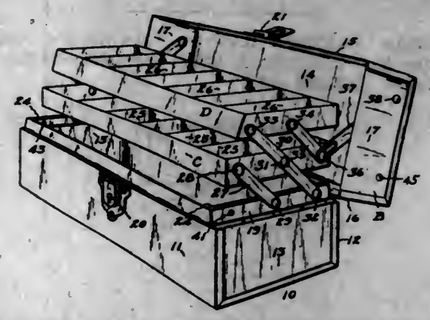


16. In a refrigerating case, an observation window comprised of at least three spaced panes, means for mounting the panes in spaced relation in substantially air tight relation to said case, and means substantially sealed off from atmospheric pressure on either side of said frame and establishing communication between adjacent spaces to equalize the pressures therein.

19. In a refrigerating show-case, a casing enclosing a refrigerated chamber, a window to display the contents of said refrigerated chamber comprising a plurality of transparent panels and an interposed substantially sealed air space, a dehydrating chamber having a port leading therefrom to said substantially sealed air space, dehydrating means located in said dehydrating chamber, the port leading from said air space to said dehydrating chamber being of sufficient capacity to maintain a circulation of air to and fro, from said air space to said dehydrating chamber.

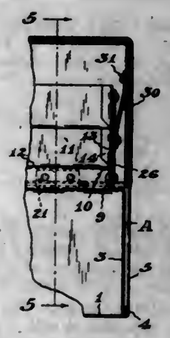
1,893,526. CANTILEVER KIT. HARRY P. SHRIVER, Van Wert, Ohio, assignor to Kennedy Manufacturing Company, Van Wert, Ohio, a Corporation of Indiana. Filed Feb. 13, 1929. Serial No. 339,523. 2 Claims. (Cl. 206—16.)

1. The combination in a sheet metal kit, of a box portion having its end and side walls continuously offset at their upper ends to provide a continuous shoulder around the perimeter of said box portion, a sheet-metal cover hinged to said box portion and being arranged in closed position to overlap the offset portions of said walls in spaced relation and to abut against said continuous shoulder, an extendable tray normally supported above the bottom of said box portion on said offset wall portions, and connecting links for said tray and box portion respectively secured at their ends to said offset end wall portions and the ends of said tray in such a manner that



they lie in the spaces between said offset end wall portions and the end walls of said cover whereby they are protected from interference with articles carried by said box portion.

1,893,527. CARRYING CASE. HARRY P. SHRIVER, Van Wert, Ohio, assignor to Kennedy Manufacturing Company, Van Wert, Ohio, a Corporation of Indiana. Filed Feb. 5, 1930. Serial No. 425,928. 3 Claims. (Cl. 206—16.)



2. In a sheet metal carrying case, in combination, a substantially rectangular box having side and end walls of substantially the same height, inwardly offset flanges formed at the upper edges of said walls, said flanges for said end walls having inwardly extending horizontal flanges, a pair of trays normally supported on said horizontal flanges, linkage connecting said trays with said offset end wall flanges, covers hinged to said side walls overlapping each other at the center of said case throughout their entire extent, and linkage connecting each of said trays with one of said covers, whereby the trays and linkage mechanism are protected and whereby said trays may be moved to outwardly extending position and vice versa.

1,893,528. MANIPULATING HOLDER FOR NEEDLES OR THE LIKE. EMIL W. WINKLER, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Feb. 14, 1930. Serial No. 428,276. 12 Claims. (Cl. 81—3.)

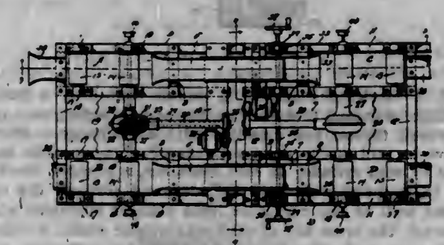
1. A device of the character described, comprising a relatively fixed member; needle holding means movably joined therewith, said means including two coactively

mounted needle gripping elements one of which is provided with a needle butt mounting aperture; means normally maintaining the other element in position to engage



and retain a needle butt in said aperture; and means urging the needle butt out of the aperture when said retaining element is disengaged from said needle butt.

1,893,529. AUTOMOBILE BRAKE TESTING DEVICE. CHARLES E. YORGASON, Ogden City, Utah. Filed Dec. 10, 1929. Serial No. 412,997. 1 Claim. (Cl. 73—51.)

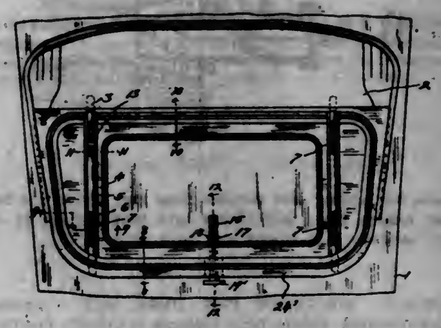


A brake testing stand comprising spaced parallel base members, each member including telescopic channel-like sections, transverse members connecting the corresponding sections of the respective members, brackets rising from said sections, a pair of tracks supported by said brackets, each track including telescopic sections simultaneously adjustable with the base members, rack teeth formed on the upper edges of corresponding sections of the base members, a transverse shaft journaled on the stand, pinions fixed on said shaft and meshing with the teeth to simultaneously vary the length of the base members and track incident to the rotation of the shaft, opposite sets of rollers for supporting the wheels of an automobile mounted at each end of the base, power driven gearing for driving corresponding rollers of said sets and permitting a slowing down of either of said driven rollers independently of the other roller at the same end of the stand under increased resistance, and means for indicating the speed of each driven roller.

1,893,530. PRODUCTION OF DIBENZANTHRONE DERIVATIVES AND THE LIKE. IAN BLOHM ANDERSON, ROBERT FRASER THOMSON, and JOHN THOMAS, Grangemouth, Scotland, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Filed July 6, 1929, Serial No. 376,488, and in Great Britain July 10, 1928. 2 Claims. (Cl. 260—61.)

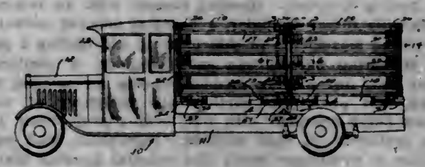
1. A process for the production of phenoxy derivatives of dibenzanthrone which consists in heating together phenoxy-Bz1: Bz1'-dibenzanthronyl, xylene, caustic potash, and alcohol.

1,893,531. ADJUSTABLE SEAT ASSEMBLY. ALBERT P. BALL, Detroit, Mich., assignor to Briggs Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed May 26, 1930. Serial No. 455,820. 1 Claim. (Cl. 155—14.)



In combination, a sheet of metal constituting a portion of the flooring of an automobile and having an upwardly extending channel shaped embossed portion, a seat base having a channel shaped embossed portion extending longitudinally of and straddling the embossed portion aforesaid, a wear plate between said embossed portion, a clamp plate on the embossed portion of the seat base, and a connection between said clamp plate, seat base, wear plate and sheet of metal including stationary means rigid with the sheet of metal.

1,893,532. TRUCK BODY CONSTRUCTION. ALBERT P. BALL, Detroit, Mich., assignor to Briggs Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 6, 1930. Serial No. 486,825. 6 Claims. (Cl. 296—10.)

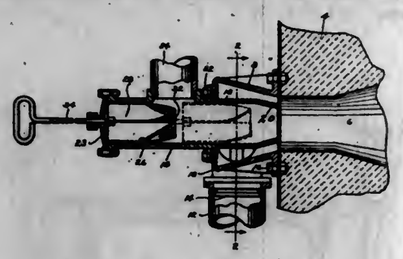


1. A truck body having a storage compartment provided with a side wall formed of a plurality of sections, and detachable means independently hingedly connecting spaced vertical side edges of each of said sections to stanchions carried by the body permitting said sections to selectively swing independently of each other about each of said vertical side edges.

1,893,533. GAS BURNER. HUGH B. BARBER, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Nov. 3, 1930. Serial No. 492,957. 8 Claims. (Cl. 158—109.)

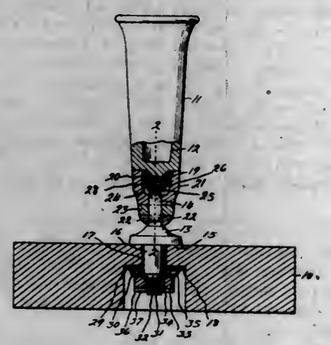
7. The combination with a gas supply chamber and a mixing throat whereinto said chamber discharges, of an air supply tube projecting into said chamber and discharging into said throat and having an inlet intermedi-

ate its ends, a longitudinally vaned member slidably mounted within said tube and being formed to impart rotary motion to fluid flowing between the vanes, and



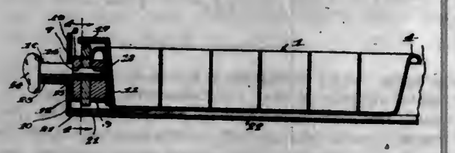
means for moving said member from that end of the tube most remote from said throat into that portion of the tube between said throat and said inlet.

1,893,534. FOUNTAIN PEN DESK SET. ANDREAS BIENENSTEIN, Toledo, Ohio, assignor to Conklin Pen Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 10, 1930. Serial No. 427,886. 4 Claims. (Cl. 120—108.)



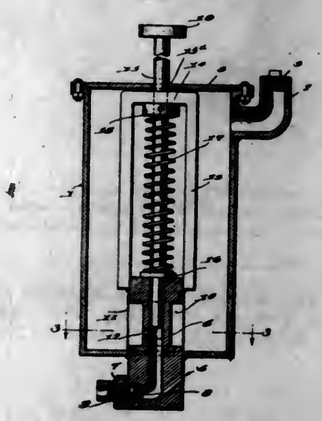
1. In a fountain pen desk set of the class described, a base having a circular opening therein with an internal downwardly facing shoulder, a pedestal member mounted for turning movements in said opening and having a portion projecting beyond the said shoulder, a combined tension and nut locking member having an opening receiving said projecting portion, the periphery of said opening being provided with nut locking projections, the outer periphery of said member cooperating with said shoulder to yieldingly retain the pedestal member seated in said opening, and a nut on the end of said projecting portion in holding engagement with said member and locked in position by said projections.

1,893,535. ICE CUBE PAN LIFTER. MICHAEL KERIN BUCHANAN, Ocean View, Va. Filed Sept. 28, 1929. Serial No. 395,927. 20 Claims. (Cl. 62—108.5.)



1. In an ice cube pan for mechanical refrigerators, means when operated for causing breaking of the frozen connection between the pan and its support, said means including means for breaking the frozen connection between the cubes and the pan.

1,893,536. LUBRICATOR. JAMES CLARENCE BURFORD, Winston-Salem, N. C. Filed Sept. 15, 1930. Serial No. 482,052. 2 Claims. (Cl. 184—27.)



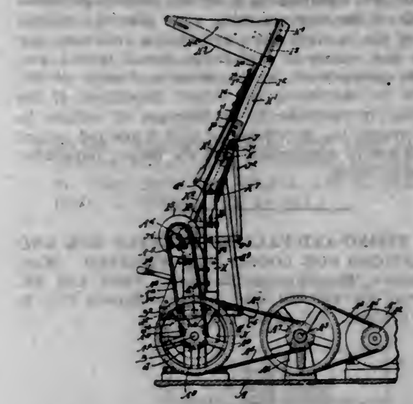
1. A lubricator comprising an oil container, a pump cylinder mounted in said container and extending through one wall thereof and provided with a discharge, a check valve in said discharge, a yoke-shaped plunger guide carried by said cylinder in said container, a plunger mounted to reciprocate in said cylinder and through the opposed wall of the container, said plunger operating also through the cross bar of said yoke-shaped guide, a coiled spring on said plunger in said guide for returning the plunger after depression, a collar on said plunger for engaging said spring to limit the return movement of the plunger, said pump cylinder being in communication with the interior of the container, and a strainer arranged to strain the oil before its admission to the pump cylinder.

1,893,537. FASTENING DEVICE FOR SHEET METAL STRUCTURES. GEORGE R. CRUZE, Danville, Pa. Filed Feb. 3, 1932. Serial No. 590,721. 7 Claims. (Cl. 24—73.)



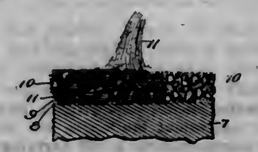
6. A fastener of the character described comprising opposed independent angular members adapted to engage within registering apertures of the parts to be held in position, the free ends of said angular members being appreciably upturned and binding against the surface of the adjacent parts, said members having notched shank portions; and a spiral spring having screw engagement with said shank portions and holding the members in their respective positions, substantially as set forth.

1,893,538. BEAD STRINGER. LOTHAR A. EDERER, Chicago, Ill., assignor to R. J. Ederer Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 24, 1930. Serial No. 438,396. 19 Claims. (Cl. 223—52.)



1. In a threading machine, a member receiving part, a plurality of means for holding and releasing said member receiving part, a positive feed adapted to convey members positively in faced position to the member receiving part.

1,893,539. METHOD OF CASTING ABRASIVE-FACED ARTICLES. RALPH S. EDMONDSON, Elizabeth, and MATHEW HOLMES, Hillside, N. J., assignors to American Abrasive Metals Company, a Corporation of New York. Filed Dec. 11, 1930. Serial No. 501,665. 10 Claims. (Cl. 22—202.)



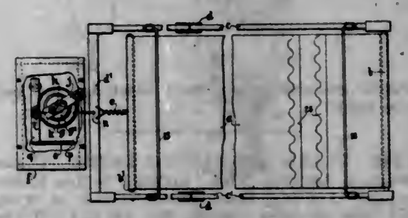
1. The method of forming a metal casting having a wear-resistant surface, which method comprises providing a mold, applying to a mold surface thereof, which is to give form to the wear-resistant surface of the casting, a layer composed of particles of holding material to form a holding bed for the wear-resistant materials, distributing grains of a wear-resistant material over said bed, applying to said bed and grains a viscous or adhesive liquid compound, drying said compound, and introducing molten metal into the mold.

1,893,540. METHOD OF CASTING ABRASIVE-FACED ARTICLES. RALPH S. EDMONDSON, Elizabeth, and MATHEW HOLMES, Hillside, N. J., assignors to American Abrasive Metals Company, a Corporation of New York. Filed Mar. 5, 1931, Serial No. 520,465, and in Great Britain Jan. 26, 1931. 6 Claims. (Cl. 22—202.)



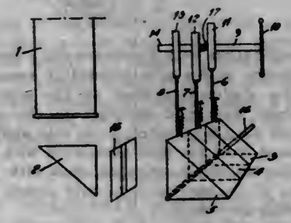
1. A method of forming a metal casting having a wear-resistant surface, which method comprises providing a mold, applying to a mold surface thereof, which is to give form to the wear-resistant surface of the casting, a layer composed of particles of holding material to form a holding bed for the wear-resistant material distributing grains of a wear-resistant material over said bed, applying to said bed and grains a solution of silicate of soda, drying said solution, and introducing molten metal into the mold.

1,893,541. APPARATUS FOR PLAYING RACE GAMES. FREDERICK ALEXANDER ALLEN EVANS, London, England. Filed June 16, 1930, Serial No. 461,374, and in Great Britain June 24, 1929. 4 Claims. (Cl. 273—86.)



1. Racing game comprising a track, means for vibrating the track, and an overhead rail on the track, in combination with playing pieces which can be displaced on the track under the influence of the vibrations, a mast on the upper side of each piece, a tooth-like projection on the base of each piece, so arranged in relation to the position of the mast that the mast, projection, and overhead rail coact mutually to cause the men or pieces to turn, a portion of each piece passing under the overhead rail during the turning movement.

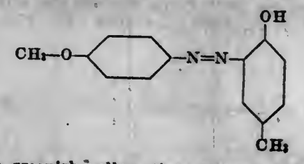
1,893,542. BOMB SIGHT. PER ERIK FAGERHOLM, Stockholm, Sweden, assignor to Fagerholm Calculators, Limited, London, England. Filed Mar. 21, 1927, Serial No. 177,120, and in Sweden Mar. 27, 1926. 4 Claims. (Cl. 88—1.)



1. In a bomb sighting device for aircraft, the combination of a vertical telescope rotatable about its axis, means for determining the speed of the aircraft in relation to the ground comprising a movably mounted speed reflector cooperating with the said telescope, adjusting means for operating the said speed reflector so as to enable by its movement an object to be retained in the field of view of the telescope during the flight of the aircraft, a movably mounted throwing angle reflector for determining the throwing angle, and coupling means adapted to couple the said throwing angle reflector to the aforesaid adjusting means in such a way that the movement of the said adjusting means during the determination of the speed of the aircraft will cause the throwing angle reflector to be moved into the position for determining the throwing angle.

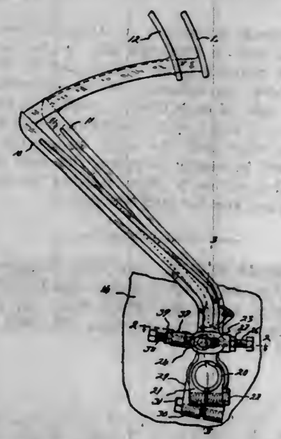
1,893,543. PROCESS FOR THE DYEING OF COLLOIDS OF THE CELLULOSE SERIES OF THE GROUP OF CELLULOSE ESTERS OR ETHERS FAST GREENISH YELLOW TINTS. FRIEDRICH FELIX, Basel, Switzerland, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Dec. 4, 1929, Serial No. 411,693, and in Switzerland Dec. 8, 1928. 1 Claim. (Cl. 8—5.)

The process of dyeing the colloids of the cellulose series of the group of the cellulose esters and ethers which comprises treating them with the dyestuff of the formula



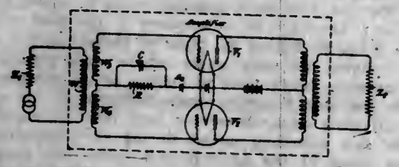
to produce greenish yellow tints which are fast particularly to light.

1,893,544. BRAKE AND CLUTCH LEVER. CLAUDE E. FURGASON, Lansing, Mich., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed Dec. 9, 1929. Serial No. 412,881. 7 Claims. (Cl. 74—81.)



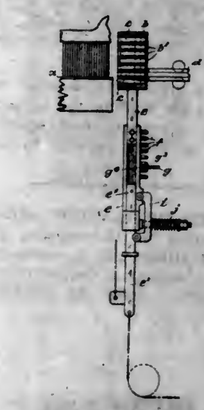
1. The combination with independently operable clutch and brake levers, of an arm adjustably associated with each lever, an abutment carried by the arm associated with said brake lever and arranged in the path of the arm associated with said clutch lever, said abutment being normally spaced from the arm associated with said clutch lever and adapted to be engaged therewith during the latter portion of the movement of said clutch lever in its clutch releasing movement.

1,893,545. ALTERNATING CURRENT AMPLIFIER. DANFORTH K. GANNETT, Jackson Heights, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 3, 1927. Serial No. 223,758. 4 Claims. (Cl. 179—171.)



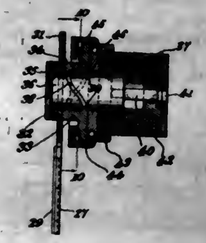
1. An amplifier of alternating currents including two vacuum tubes each having a cathode, an anode and a control electrode or grid, connected in push-pull relation, an input circuit therefor, an output circuit connected thereto, a single path for supplying alternating current to said input circuit, means included directly in said input circuit for maintaining a direct current potential on the grids of the vacuum tubes such that the output impedance of the vacuum tubes will have a relatively low value when the volume in said input circuit is low, and a grid leak arrangement in the common branch of the grid circuits for increasing the output impedance of the vacuum tubes in response to an increase of volume in said input circuit, the impedance of said connected output circuit being low in comparison with the output impedance of the vacuum tubes.

1,893,546. RISING-AND-FALLING SHUTTLE BOX AND LIKE MOTIONS FOR LOOMS FOR WEAVING. WALTER GLEDHILL, Huddersfield, England. Filed Aug. 26, 1931, Serial No. 559,529, and in Great Britain Oct. 9, 1930. 5 Claims. (Cl. 139—182.)



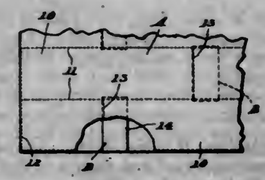
1. In a weaving loom employing a rising-and-falling shuttle box or equivalent motion, a box having a series of superposed compartments, a rod carrying said box and adapted to be moved vertically under indication of a pattern-controlled mechanism, a series of vertically-spaced rollers on said rod, said rollers being rotatable about horizontal axes, and a vertically-fixed positioning bar member having a tapered engaging surface adapted to enter between adjacent pairs of rollers after the box-shifting mechanism has ceased to operate and by such entry to correct any irregularity in the vertical positioning of the box.

1,893,547. VEHICLE SIGNAL. JOHN SISSON GRAHAM, Berkeley, Calif. Filed Mar. 6, 1931. Serial No. 520,681. 3 Claims. (Cl. 175—341.)



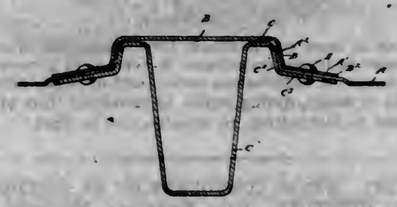
1. An actuating mechanism for signals comprising a casing, an electro magnetic coil housed in the casing, a core mounted in the coil and adapted to slide in one direction by the action of said coil, means for preventing the rotation of said core when sliding, a bearing washer mounted on said casing to hold the coil in position and to provide a support for the core, a carrier ring mounted over said core and rotated thereby, a member attached to the carrier ring to rotate therewith and to provide means for restoring the parts to initial position when said coil is released, and a securing ring mounted between said carrier ring and the bearing washer.

1,893,548. SLEEPING BAG AND THE LIKE. HENRY FRANCIS HARDY, Ottawa, Ontario, Canada. Filed Apr. 21, 1930, Serial No. 445,918, and in Canada Apr. 17, 1930. 3 Claims. (Cl. 5—334.)



2. A new article of manufacture comprising upper and lower walls secured together at spaced intervals along parallel lines to define a plurality of elongated compartments, a substantially rectangular fabric section within each of said compartments extending from side to side thereof and each secured along two opposite sides thereof to both of said walls and along one side to one of said walls to define therewith pockets opening in the direction of elongation of said compartments.

1,893,549. CAR ROOF. DAVID W. HAWKSWORTH, Birmingham, and STANLEY J. STONE, Detroit, Mich., assignors to Hutchins Car Roofing Company, Detroit, Mich., a Corporation of Delaware. Filed June 1, 1931. Serial No. 541,505. 3 Claims. (Cl. 108—5.4.)



1. A car roof comprising roofing sheets having upturned side flanges, carlines of channel cross section having at their upper ends return bent portions terminating in outwardly extending flanges and caps embracing the channel and return bent portions of said carline and having outwardly extending flanges parallel to the flange of said carline, said sheets, carline and cap being riveted to each other.

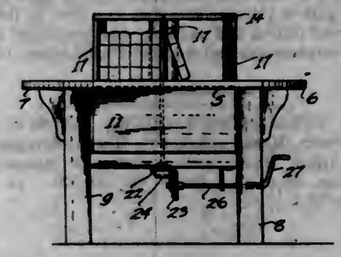
1,893,550. ELECTRICITY METER SERVICE INSTALLATION. FREDERICK HOLMES, La Fayette, Ind., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind., a Corporation of Illinois. Original application filed May 14, 1930, Serial No. 452,323. Divided and this application filed May 18, 1931. Serial No. 538,852. 18 Claims. (Cl. 247—2.)

18. In an electricity meter service installation, the combination of a meter base, a housing separate from the base through which conductors may be passed to meter connections, a conduit for meter wiring loosely engaged through a wall of the housing whereby the latter may be moved



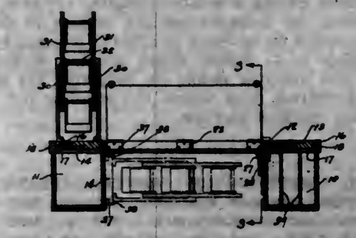
with respect to the base without disengagement from the conduit, and releasable means restraining the housing against said movement.

1,893,551. COMBINED TABLE AND BOOKCASE. ALEXANDRA KASK, San Mateo, Calif. Filed Apr. 8, 1931. Serial No. 528,662. 1 Claim. (Cl. 45—70.)



In a table of the character described, a top having an opening therein, a book rack vertically movable thru said opening and means for imparting relative movement to said rack with respect to said table top, said means comprising a vertically positioned threaded shaft, a threaded member secured to said book rack and gears for rotating said threaded shaft for the purpose specified.

1,893,552. WORKTABLE FOR INVALIDS. CATHERINE C. KING, Bronxville, N. Y. Filed Nov. 21, 1929. Serial No. 408,788. 7 Claims. (Cl. 45—46.)

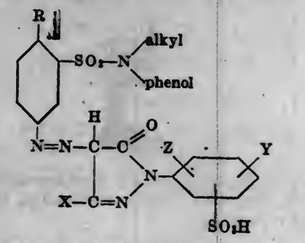


2. An invalid work table or the like comprising a table top, means adjacent to the ends of the table top for supporting the same horizontally in spaced relation above a

bed or the like, an upwardly projecting rotatable receptacle-carrying device removably mounted transversely of the table top adjacent one end thereof, and means associated with said first named means for storing said receptacle-carrying device in nested relationship below said table top.

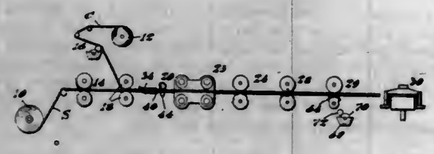
1,893,553. MANUFACTURE OF MONOAZO-DYESTUFFS. OSCAR KNECHT and THEODOR WIRTH, Basel, Switzerland, assignors to the Firm Chemical Works formerly Sandoz, Basel, Switzerland. Filed May 10, 1929, Serial No. 362,148, and in Germany May 26, 1928. 6 Claims. (Cl. 260—87.)

4. As new products, the monoazo dyestuffs, containing at least one halogen atom and corresponding to the following general formula:



wherein R stands for hydrogen, alkyl or halogen, and X for CH_3 or COOH, and wherein one or both of Y, Z stand for hydrogen or halogen, said dyestuffs constituting in the form of their sodium salts yellow powders, dissolving in water with a yellow coloration and in concentrated sulphuric acid with a brownish coloration, dyeing wool greenish-yellow to yellow tints of excellent fastness to light, perspiration and fulling and yielding upon reduction 1-aminobenzene-3-sulphamides and 4-amino-1-sulphophenyl-5-pyrazolones.

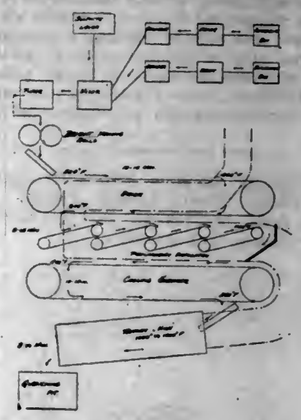
1,893,554. BOX-MAKING MACHINE. CUTLER D. KNOWLTON, Beverly, Mass., assignor to Hoague-Sprague Corporation, Lynn, Mass., a Corporation of Massachusetts. Filed Aug. 20, 1928. Serial No. 300,821. 14 Claims. (Cl. 93—36.)



1. In a box-making machine, means for advancing box-material having surfaces to be adhesively joined, one of said surfaces having a moisture-resisting covering, means for treating the moisture-resisting surface to facilitate adhesion, means for applying an adhesive coacting to one of the surfaces to be joined, means situated between said treating and applying means for preparing the material for box-formation, and means for pressing the treated and coated surfaces together.

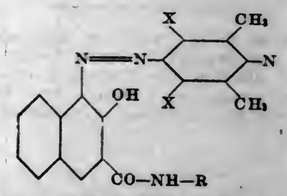
1,893,555. METHOD OF MANUFACTURING BRIQUETTES. GUSTAV KOMAREK, Chicago, Ill., GEORGE MACPHAIL and CHARLES CORTELL, Bay City, Mich. Filed July 16, 1926. Serial No. 122,868. 17 Claims. (Cl. 202—22.)

1. The method of manufacturing fuel briquettes, which comprises mixing comminuted coking fuel with comminuted solid carbonizable non-coking fuel, pressing same together to form briquettes, then subjecting the briquette to a preliminary distillation of some of the volatile content followed by a cooling period and then a second separate destructive distillation under agitation.



1,893,556. AZO DYESTUFFS AND MATERIAL DYED WITH THEM. HERBERT KRACKER and ERWIN THOMA, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 3, 1926, Serial No. 317,113, and in Germany Nov. 12, 1927. 12 Claims. (Cl. 260—95.)

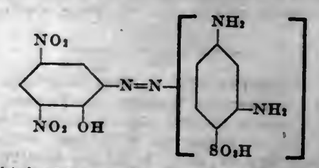
1. As new compounds, azo dyestuffs of the following formula:



wherein at least one X stands for halogen, the other X's represent hydrogen or halogen, R represents a residue of the benzene or naphthalene series, said dyestuffs being insoluble in water, dyeing yellow to bluish-red tints of good fastness to kier-boiling, to chlorine and to light.

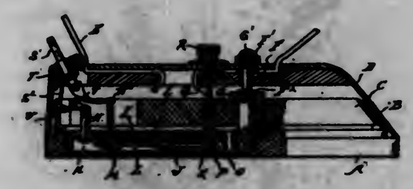
1,893,557. METAL COMPOUNDS OF AN O-HYDROXY-AZO DYESTUFF. HANS KRZIKALLA, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 20, 1928, Serial No. 320,752, and in Germany Nov. 29, 1927. 2 Claims. (Cl. 260—12.)

1. As new articles of manufacture the complex compounds of a metal selected from the group consisting of chromium and copper, of the o-hydroxyazo dyestuff of the formula:



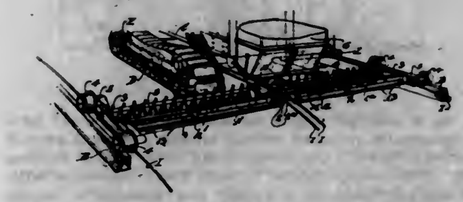
which is obtained by coupling diazotized picramic acid with 1.3-phenylenediamine-4-sulfonic acid, said complex compounds dyeing leather and wool very fast brown to violet brown shades.

1,893,558. THERMOSTATIC CONTROL FOR ELECTRIC HEATERS. FRANK KUHN, Detroit, Mich., assignor to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 26, 1927, Serial No. 222,056. Renewed July 7, 1930. 3 Claims. (Cl. 219—25.)



1. An electric laundry iron comprising a heat distributing base having a recess therein extending centrally and longitudinally thereof, a heating unit and a pressor plate therefor arranged above said base and clamped thereto, said unit and pressor plate being apertured in registration with said recess, supporting brackets electrically connected to opposite ends of said heating unit, plug-engaging terminal contacts mechanically supported on said brackets, one being electrically connected to and the other being insulated from the respective brackets, a thermostatic switch located in said recess, terminals for said thermostatic switch projecting through the registering apertures in said unit and pressor plate, electric connections between one of said thermostatic terminals and said insulated terminal contact and electric connections between the other thermostatic terminal and the bracket supporting said insulated terminal.

1,893,559. SUBGRADE PLANER. ERICH H. LICHTENBERG and WILLIAM A. NELSON, Milwaukee, Wis., assignors to Koehring Company, Milwaukee, Wis., a Corporation. Filed Mar. 2, 1927. Serial No. 172,015. 31 Claims. (Cl. 94—45.)



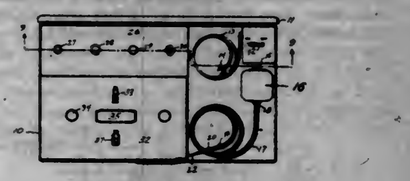
1. In a subgrade finishing device, a frame mounted to travel over the road bed and comprising a pair of frame sections disposed in end to end relation and having their adjacent ends spaced from each other so as to leave a free clearance space therebetween, means rigidly connecting the said adjacent ends and spanning the said space, and means intermediate the outer ends of the frame sections for laying and guiding reinforcing rods along the subgrade.

1,893,560. CARBURETOR FOR INTERNAL COMBUSTION ENGINES. CHARLES PETER NEWBERRY, Tweespruit, Orange Free State, Union of South Africa. Filed Oct. 22, 1927, Serial No. 228,044, and in the Union of South Africa Sept. 15, 1927. 1 Claim. (Cl. 261—64.)

A carburetor comprising a casing having a Venturi tube therein, the contracted part of which constitutes a valve seat, a streamline valve adapted to slide coaxially in said tube, said valve having a greater diameter than the minor internal diameter of the tube, a hollow stem on said valve depending into the fuel reservoir of the carburetor, a partition member in the casing constituting a top closure for the float chamber, said member having a bore for slidably receiving said stem, an annular seating face on said valve immediately below its maximum diameter, said valve being provided with an annular fuel orifice disposed above the seating face thereof, a fuel nozzle in the lower portion of said valve, air inlet ports formed in the casing and opening above the member, a tapered needle valve passable through the reservoir and stem, said member having a chamber therein, and means in the chamber for relatively adjusting the stem and needle valve.



1,893,561. PROCESS AND APPARATUS FOR POLISHING FINGER NAILS. EDWARD M. O'DONNELL, Galva, Iowa. Filed Oct. 23, 1931. Serial No. 570,653. 4 Claims. (Cl. 132—74.)

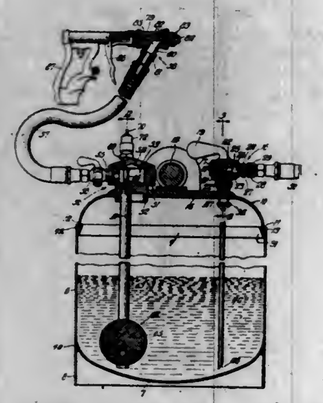


1. In a finger nail polishing device, an electric motor, a flexible shaft driven by the motor, and attachable means for polishing finger nails comprising a plurality of discs, including successive cleaning and polishing means on their peripheries, said successive means comprising first, a substantially disc-shaped rubber element, then a disc-shaped chamois skin element, then an additional disc-shaped chamois skin element, and finally a disc-shaped several-ply chamois skin element for attaining a high polish.

1,893,562. AIR PAINTING SYSTEM AND THE LIKE. JENS A. PAASCHE, Wilmette, Ill. Filed Aug. 6, 1929. Serial No. 383,911. 3 Claims. (Cl. 91—45.)

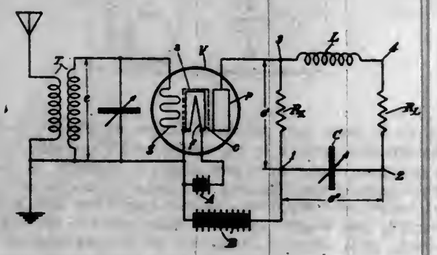
1. A spraying outfit for the purpose specified comprising in combination a tank having a removable cover, said tank being for the accommodation of liquid material to be sprayed, an inlet air valve fitting in conjunction with said cover, a connection for the delivery of compressed air to said fitting, a connection from said fitting through the cover for the delivery of compressed air into the upper portion of the tank, another connection from said fitting through the cover for the delivery of compressed air into the lower portion of the tank for agitating purposes, a valve in said fitting, for the control of air delivery into either the upper or lower portions of the tank as selected, another fitting in the tank cover including an atomising chamber, a passage from the upper portion of the tank

into said atomizing chamber for the delivery of compressed air and vapor into said atomizing chamber, another passage from the lower portion of the tank for the delivery of liquid into said chamber, independent needle



valves for controlling both of said passages, a delivery connection reaching from said atomizing chamber, and a spray hose in conjunction with said connection, substantially as described.

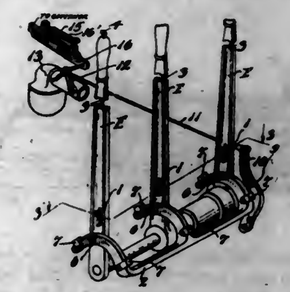
1,893,563. SELECTIVE AMPLIFIER. ALGER S. RIGGS, New York, N. Y., assignor to Willis L. Pratt, New York, N. Y., Frank W. McDonell, Rye, N. Y., and Frederick R. Rich, New York, N. Y. Filed June 8, 1929. Serial No. 369,383. 4 Claims. (Cl. 179—171.)



1. A selective amplifier of electrical variations consisting of an electron-discharge device, a suitable source of input signal potential, power supply sources for cathode and anode circuits, and an anode output net-work consisting of a non-inductive resister shunted by a condenser and an inductance forming a series circuit resonant to the frequency of the input signal potential, said non-inductive resister having a value approximating that of the tuned circuit resistance at signal frequency.

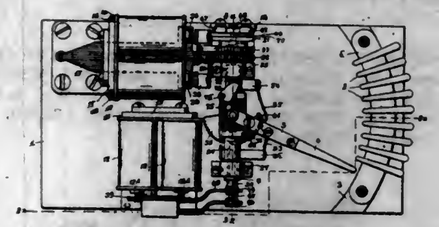
1,893,564. ACCELERATOR ATTACHMENT FOR EXCAVATING MACHINES. JOHN F. ROBB, Cleveland Heights, Ohio, assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Sept. 5, 1929. Serial No. 390,568. 6 Claims. (Cl. 214—135.)

1. In a control mechanism for cranes, excavating machines and the like having a hoisting mechanism, a turn table mechanism and a traction mechanism, levers for controlling the cycles of operation of the mechanism, a supplemental control lever for controlling the speed of op-



eration of the machine, and shiftable means to cause actuation of the second lever incident to actuation of any one of the first levers.

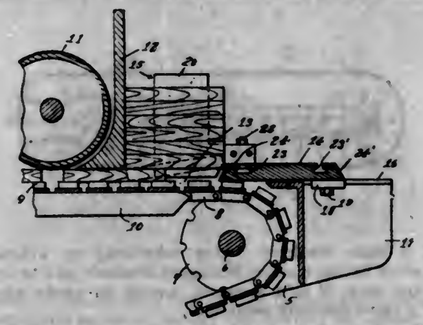
1,893,565. SELECTOR SWITCH FOR AUTOMATIC TELEPHONE SYSTEMS. WILLIAM K. SCHNEPF, Rochester, N. Y. Filed May 4, 1931. Serial No. 534,899. 5 Claims. (Cl. 179—27.52.)



1. In a selector switch for automatic telephones having spherically arranged contact members grouped around a common center, the combination of a hollow rocking shaft, pivot means carried by said shaft concentric with said contact members, a switch arm mounted to swing on said pivot means carried by said rocking shaft at right angles to the axis of rotation of said shaft, a sliding shaft mounted within the hollow portion of said shaft, and means associated with said switch arm and operated by said sliding shaft to cause said switch arm to swing on said pivot means on said shaft in the common center around which said contact members are grouped.

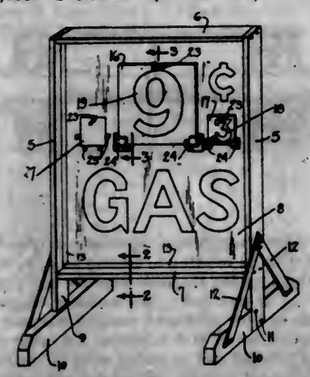
1,893,566. HOPPER FEED FOR ENDLESS BED MACHINES. PETER A. SOLEM, Rockford, Ill., and DENNIS J. MCLAUGHLIN, Ilion, N. Y.; said McLaughlin assignor to said Solem. Filed Mar. 20, 1930. Serial No. 437,351. 6 Claims. (Cl. 51—215.)

1. In an endless bed machine comprising a frame, and an endless feed bed operating thereon having an exposed portion constituting an in-feed table surface, a pair of vertically disposed stack supporting members arranged in parallel laterally spaced relation over the in-feed table surface of said bed and permitting the stacking of work pieces therebetween to be fed by the bed into the machine, a front abutment for the stack of pieces preventing forward movement of all but the lowermost piece whereby the endless bed is arranged to pull out only the lowermost piece from the stack, and a rear abutment providing an inclined bearing surface for engagement with the rear end of the next to the lowermost piece whereby to support the stack against tilting to the rear during the withdrawal of the lowermost piece and also insure the



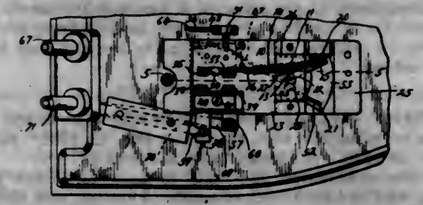
dropping down of the next to the lowermost piece front end first onto the bed after withdrawal of the lowermost piece, the said piece being urged forwardly by the riding downwardly of its rear end on the aforesaid inclined surface.

1,893,567. SIGN WITH CHANGEABLE PANEL. ALBERT SOLOMITA, Brooklyn, N. Y. Filed Jan. 30, 1932. Serial No. 589,793. 2 Claims. (Cl. 40—63.)



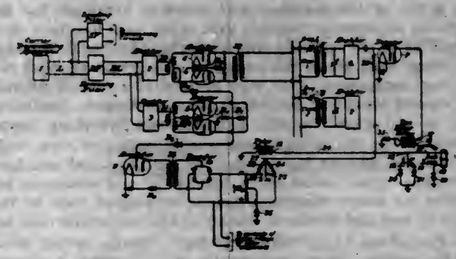
1. A sign comprising a frame, a main panel in the frame, auxiliary panels positioned against opposite sides of said main panel, a stud passing through said main panel and auxiliary panels for holding the latter in position, and support pieces engaging the lower edges of the auxiliary panels for sustaining the same in position against the main panel.

1,893,568. SWITCH FOR ELECTRIC HEATERS. LAURENCE H. THOMAS, Detroit, Mich., assignor to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 28, 1927. Serial No. 171,668. 6 Claims. (Cl. 200—138.)



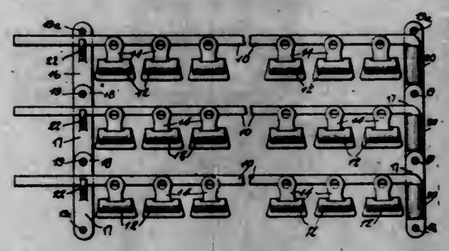
1. In a switch mechanism, the combination of a contact lever and an actuating lever fulcrumed at offset points, a contact with which said contact lever engages, resilient means connecting said levers and normally holding said contact lever in engagement with said contact when the actuating lever is in one extreme position, the fulcrums of said levers being offset in such relationship that the movement of said actuating lever from said extreme position moves the line of action of said resilient means first across the fulcrum of said actuating lever and then across the fulcrum of the contact lever, and the thermostatically operated means for moving said actuating lever to the point where said line of action crosses the fulcrum thereof.

1,893,569. REDUCTION OF INTERFERENCE IN CARRIER SYSTEMS. VAUGHN P. THORP, River Edge, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 18, 1932. Serial No. 618,057. 5 Claims. (Cl. 178—69.)



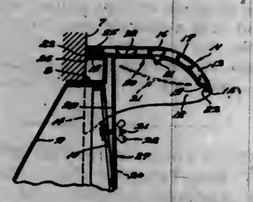
1. In a high frequency receiving circuit, the combination with an amplifier upon which high frequency signaling currents and interference currents may be impressed, the said amplifier being adjusted to limit the amplitude of the current wave transmitted therethrough, of a detector effectively connected to said amplifier, a signal receiving device connected to the output of said detector, another detector upon which the said signaling and interference currents may be impressed, the said other detector being connected to said amplifier to control the limits of the latter, and means also controlled by said other detector, to regulate the action of said first mentioned detector whenever the said amplifier is functioning to limit the current therethrough.

1,893,570. NECKTIE HOLDER. SHERIDAN C. WAITE, Springville, N. Y. Filed Jan. 21, 1930. Serial No. 422,419. 1 Claim. (Cl. 211—89.)



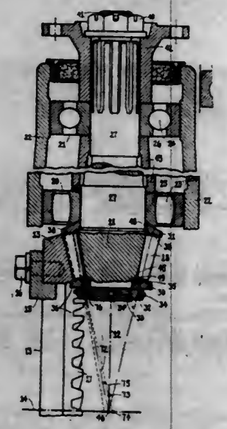
A necktie holder comprising a plurality of horizontal rods having each a downwardly extending end portion forming a hinge pintle, supporting bracket members for the rods, one of said members being composed of separate brackets and having hinge sockets respectively projecting different distances and arranged in step relation, and the other member composed of brackets having arms projecting different distances corresponding to the positions of the first named bracket, and adapted to support the free ends of the rods at different heights and different distances outwardly from a main support.

1,893,571. SCREEN FILTER FOR HOT-AIR REGISTERS. FRANK A. WALLOCH, Seattle, Wash. Filed June 24, 1930. Serial No. 463,445. 9 Claims. (Cl. 98—108.)



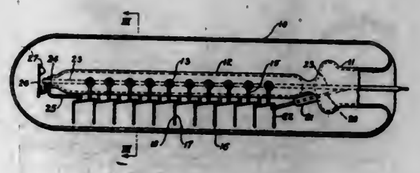
1. In a filter for a hot-air register, the combination with the grille of the register, and brackets arranged for detachable securement through said grille, said brackets each providing a horizontally disposed arm engageable against the room wall above the register, of a frame adapted for seating engagement over said horizontal arm and providing spaced apart end members having an arcuate configuration in end elevation, said end members providing downturned wings contactually engageable with the room wall at opposite sides of the register, each of said end members providing rigid spaced-apart horizontal rod elements arranged for telescoping engagement to aligned rods of the other of said end members, the outer and innermost rods being conformed to provide recessions therein having slots communicating from underneath sides thereto, a screen member insertable along the underneath surface of said rods, and spring clips for detachably securing said screen, said spring clips being mounted transversely of the frame in juxtaposition of said screen and having upturned end extremities engageable through the slots to said rod recessions.

1,893,572. GEARING. ERNEST WILDHABER, Brooklyn, N. Y. Filed Feb. 14, 1931. Serial No. 515,771. 13 Claims. (Cl. 74—41.)



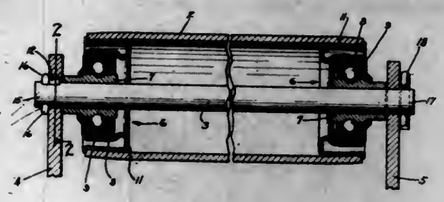
1. Spiral bevel gearing, comprising a gear and a mating pinion having spiral teeth, a thrust ring secured to said pinion for controlling the axial position of said pinion, said thrust ring containing a surface of revolution suited to bear against tooth ends of said gear, the profile of said surface in an axial section being curved and inclined to a plane perpendicular to the axis of the pinion.

1,893,573. LIGHT SENSITIVE TUBE. VLADIMIR K. ZWORYKIN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 5, 1930. Serial No. 433,298. 8 Claims. (Cl. 250—27.5.)



1. A light sensitive device comprising an evacuated container having a series of aligned elements and an anode therein, each of said elements, having an anode surface and a photo-sensitive surface.

1,893,574. CONVEYER. MARTIN J. ANDERSON, Ellwood City, Pa., assignor to Mathews Conveyer Company, Ellwood City, Pa., a Corporation of Pennsylvania. Filed Dec. 14, 1929. Serial No. 414,044. 4 Claims. (Cl. 308—20.)



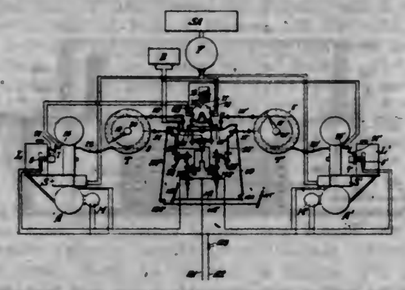
4. A conveyer comprising oppositely disposed supports each formed with an opening to receive an axle, at least one of said openings having its inner wall formed with a notch, an axle having at one end a key member adapted to seat in said notch and an abutment member adapted to engage the outer face of one of said supports, the other end of said axle being cylindrical and provided with means cooperating with said abutment member to prevent axial movement of said axle, and a load-carrying cylindrical member mounted for rotation about the axis of said axle while said axle is locked against rotation.

1,893,575. MANUFACTURE OF BENZANTHRONE. GEORGE BACHARACH, New York, N. Y., and EUGENE McCAULIFF, Jr., Yonkers, N. Y., assignors of thirty per cent to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed May 2, 1930. Serial No. 449,354. 3 Claims. (Cl. 260—61.)

1. The process of manufacturing benzanthrone, which consists of:—(1) heating sulphuric acid, glycerine and anthraquinone, in the presence of acetic anhydride to 150 degrees C., (2) adding water to the cold product, (3) filtering the mixture and recovering the benzanthrone from the residue.

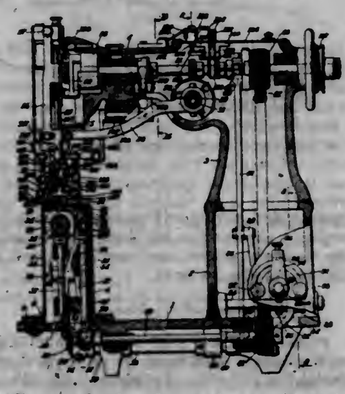
1,893,576. CHANGE OVER DEVICE. LAWRENCE E. BROCIUS, Summerville, Pa. Filed Dec. 22, 1931. Serial No. 582,558. 11 Claims. (Cl. 88—16.2.)

1. The combination of a pair of projectors, each provided with record drive mechanism, a dowser, and electrically operated control mechaism therefor, a timer for each projector comprising a rotatable control element operatively connected in timed relation with the record drive mechanism thereof, a pointer and scale for indicating the positions of said element, means for disconnecting said control element from its driving means to enable it to be set in accordance with a measured portion of the record to be driven by its connected record drive mechanism, a motor



start and change over part carried by said control element, mechanism operated thereby for starting the record drive mechanism of the other projector, and switch mechanism operated by said motor start and change over part for controlling simultaneously the dowser control mechanisms of both projectors to effect a change over.

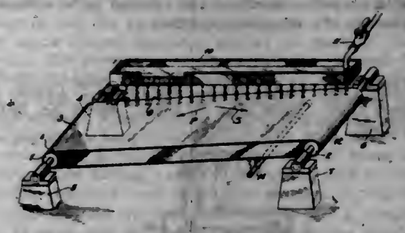
1,893,577. SEWING MACHINE FOR JOINING FABRICS. FREDERIC M. CARD, Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed May 28, 1930. Serial No. 456,380. 7 Claims. (Cl. 112—209.)



1. Feeding mechanism for sewing machines including a feed-dog carrier, a feed rock-shaft, operative connections with said rock-shaft for transmitting work-advancing and return movements to said feed-dog carrier, a crank-arm carried by the feed rock-shaft, an actuating element, a shiftable member connecting said element and the crank-arm, and means for shifting said member endwise of said crank-arm for adjustably determining the extent of work-advancing movement of the feed-dog carrier comprising, a rock-arm operatively connected with the member, a feed-adjusting shaft, intermeshing gears coaxial with said feed-adjusting shaft and rock-arm, and means for actuating the feed-adjusting shaft.

1,893,578. PROCESS OF SEPARATING MINERALS. DANIEL J. CAREY, Eaton Park, Fla. Filed Apr. 6, 1932. Serial No. 603,495. 5 Claims. (Cl. 209—2.)

1. The process of effecting separation of the particles of a material from a mixture with the differently shaped particles of another material, said materials when wet being of substantially the same specific gravity, which process comprises contacting the mixture with a body of water and effecting a relative movement between the mixture and the body of water so as to establish a differential, due to the said relative movement and the aforesaid difference in shape of the particles of the two materials, between



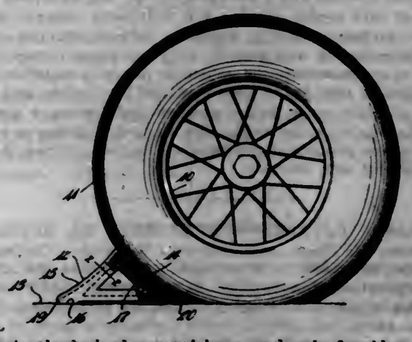
the movement of the particles of the one material and the movement of the particles of the other material, to effect the desired separation.

1,893,579. FOUNTAIN PEN. RUSSELL S. CARTER, Hewlett, N. Y. Filed Dec. 5, 1928. Serial No. 323,860. 3 Claims. (Cl. 120—47.)



1. In a fountain pen, a hollow body carrying the pen point and provided with an annular shoulder adjacent the pen point, an ink sack within the hollow body opening to the pen point, cap attaching means on the body portion, spaced from said annular shoulder and between said annular shoulder and the opposite end of the body, the body being of uniform cross-section exteriorly for a considerable part of its length, and a cap for the pen point arranged to co-act with said attaching means when covering the pen point, and to pass over the said portion of said body of uniform cross-section with a substantially air-tight connection therewith to affect the ink sack, the cap being provided with an internal annular shoulder arranged to abut against the first mentioned annular shoulder when the cap is held on the body by said cap attaching means, the end of the body opposite the pen point being open, and said cap being provided with a hole to open the interior of the cap to the atmosphere when the cap is on the end of the body opposite the pen point, said hole in the cap being located between said internal annular shoulder and the open end of the cap.

1,893,580. WHEEL CHOCK. RUSSELL S. COLLEY, Kent, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Sept. 11, 1931. Serial No. 562,290. 5 Claims. (Cl. 188—32.)



1. A wheel chock comprising a vulcanized rubber body having a base for engaging the ground and an adjacent

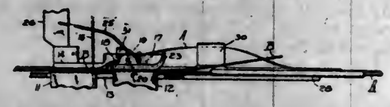
concave surface for engaging the wheel and a rigid supporting frame located therein and secured thereto by vulcanization, the rubber body being extended beyond the frame to provide a resilient toe adapted to be clamped by the wheel to the supporting surface.

1,893,581. OIL CLARIFIER. BENJAMIN F. COUAT, Long Beach, Calif. Filed Mar. 9, 1932. Serial No. 597,734. 9 Claims. (Cl. 210—164.)



1. An oil clarifier for internal combustion engines comprising a drive shaft, clutch means in said drive shaft, a housing, a pipe extending into said housing, gear means extending from said shaft to said pipe whereby said pipe is rotated, and oil intake pipe extending to the top of said first named pipe, an oil outlet pipe extending from the bottom of said housing, an annular filter pack in said housing, said first named pipe having ports therein through which the oil is expelled, and a plurality of superimposed filter trays on said first named pipe.

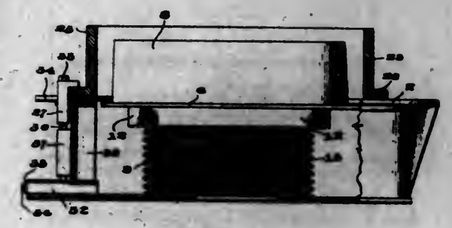
1,893,582. ATTACHMENT FOR SEWING MACHINES. HARRY A. FINN, College Point, N. Y., assignor to I. B. Kleinert Rubber Company, New York, N. Y. Filed May 7, 1929. Serial No. 361,105. 3 Claims. (Cl. 112—134.)



1. In a sewing machine of the character embodying a main feed dog and a differential feed dog, the combination of a presser foot comprising a rectangular flat plate having a needle opening and a forwardly projecting extension outside of said needle opening and a tapered channel in its under surface projecting along its forward side just back of the extension and directly over the space between the dogs to accommodate the gather in material raised by the differential feed dog, a shoe mounted for upright and pivotal adjustment on said extension and having a projection in line with the needle opening, and a spring to yieldably exert downward pressure on the shoe forwardly of the pivotal axis thereof.

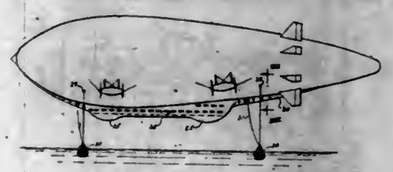
1,893,583. PATTERN FOR SHEAVES OR PULLEYS. EMORY H. FRICK and CLARENCE N. ECKEL, Cincinnati, Ohio, assignors to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Oct. 3, 1931. Serial No. 566,714. 15 Claims. (Cl. 22—158.)

1. In a pattern for making sheave or pulley molds, a supporting structure, a pattern plate removably mounted on said supporting structure, a rim pattern, adjustable means supporting said rim pattern for adjusting the active width of the rim pattern with respect to said pattern plate, flask clamps carried by said supporting structure, and



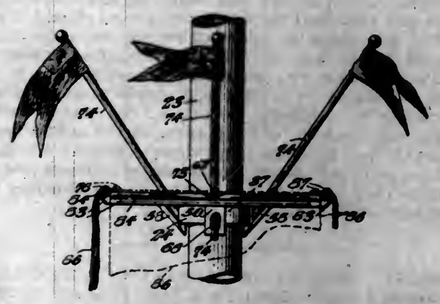
means for locking said adjustable means, said flask clamps being adjustable vertically and horizontally with respect to said supporting structure to permit their adjustment to cooperate with different sized flasks.

1,893,584. AIRSHIP MOORING METHOD AND APPARATUS. CARL B. FRITSCHE, Detroit, Mich., assignor to Aircraft Development Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 18, 1930, Serial No. 421,645. Renewed May 26, 1932. 16 Claims. (Cl. 244—3.)



13. A rigid airship having self-contained means for raising or lowering a cage or the like equipped for absorption of water by capillary action, and remote control on said ship for evacuating the water.

1,893,585. FLAG HOLDER AND SUPPORT THEREFOR. WILLIAM F. HOGAN, Wildwood, N. J. Filed Mar. 16, 1931. Serial No. 523,005. 5 Claims. (Cl. 248—37.)

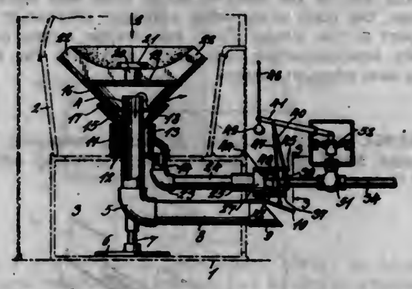


3. A device of the kind described comprising in combination a pole-engaging member, a flag staff supporting element slidably supported in said member, and drapery supporting means removably secured to said flag staff supporting element.

1,893,586. PROCESS FOR INCREASING THE ETHYLENE CONTENT OF ETHYLENE CONTAINING GASEOUS MIXTURES. GEORGE FREDERICK HORSLEY, Norton upon Tees, England, assignor to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Mar. 17, 1932, Serial No. 599,601, and in Great Britain Mar. 12, 1931. 6 Claims. (Cl. 260—170.)

1. A process for treating an ethylene-containing gaseous mixture to enrich the ethylene content thereof, which comprises passing said gaseous mixture at a temperature from 150° C. to 300° C. over a catalyst comprising essentially a cadmium salt of a phosphoric acid, whereby at least part of the higher olefines is converted into condensible hydrocarbons.

1,893,587. GAS BURNER. GASTON BROWN KILLAM, Denver, Colo., assignor to Killam Gas Burner Company, Denver, Colo., a Corporation of Colorado. Filed May 28, 1930. Serial No. 456,511. 8 Claims. (Cl. 158—108.)



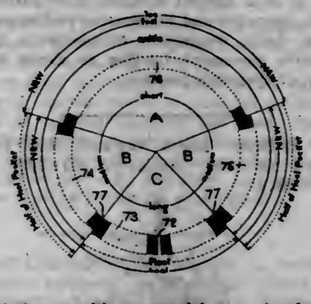
6. A gas burner comprising a central tubular member having one end open and the other provided with a movable closure, a wall surrounding the tubular member adjacent its open end and spaced therefrom, the end of the wall farthest from the open end being attached to the tubular member whereby an annular chamber is formed, a gas pipe in communication with the annular chamber, a deflector having a substantially frusto-conical surface surrounding the tubular member at a point above the wall and spaced from the top of the latter whereby an annular opening is formed for the escape of gas, and a closure for the upper end of the deflector, the wall of the deflector having a passage through which secondary air may pass to the interior of the escaping gas.

1,893,588. STOCKING AND STOCKING WEB. PATRICK P. LA MONTAGNE, Kankakee, Ill., assignor to La Montagne Machine Company, Kankakee, Ill., a Corporation of Illinois. Filed June 19, 1929. Serial No. 372,017. 10 Claims. (Cl. 66—184.)



1. A stocking web comprising a leg section in which the yarn runs in knitted courses continuously round and round, a holding section having a gap at the back of the web in which the yarn runs continuously round and round in knitted courses in the body of the web and floats across the gap, an upper ankle section having a gap at the back of the web in which the yarn runs in knitted courses to and fro at the front between the gap edges, a lower ankle section having a gap at the back of the web in which the yarn runs in knitted courses to and fro at the front between the gap edges and having a reinforcing yarn at each side of the gap running to and fro in the knitted courses, a heel pocket at the back of the web having a gap at the back in which the yarn runs to and fro in narrowing and widening knitted courses and floats across the gap, a foot section having a gap at the back of the web in which the yarn runs in knitted courses to and fro at the front between the gap edges and having a reinforcing yarn at each side of the gap running to and fro in the knitted courses, and a toe pocket at the front of the web in which the yarn runs to and fro in narrowing and widening knitted courses.

1,893,589. KNITTING MACHINE. PATRICK P. LA MONTAGNE, Kankakee, Ill., assignor to La Montagne Machine Company, Kankakee, Ill., a Corporation of Illinois. Filed Feb. 18, 1930. Serial No. 429,425. 38 Claims. (Cl. 66—41.)



1. A knitting machine comprising a circular series of needles including a group of long butt needles, two groups of medium butt needles one at each side of the long butt needles and a group of short butt needles diametrically opposite the group of long butt needles, and means for operating the needles to produce web sections including a section of round and round knitting formed on both the short and medium butt needles, a section of to and fro knitting formed on the short and medium butt needles, a section of to and fro knitting formed on the medium butt needles, a section of to and fro knitting formed on the short and medium butt needles, a section of to and fro knitting formed on the short butt needles, and means for preventing the long butt needles from taking yarn during the knitting of the said sections.

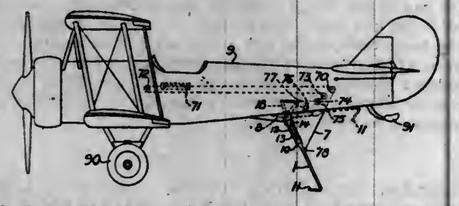
1,893,590. METHOD OF INSULATING WIRE. EDWARD A. MAU, Arlington, N. J., and ORRIN F. HUTCHINSON, New Haven, Conn., assignors to Rockbestos Products Corporation, New Haven, Conn. Original application filed Nov. 29, 1922, Serial No. 604,022. Patent No. 1,685,369, dated Sept. 25, 1928. Divided and this application filed Dec. 6, 1927. Serial No. 238,178. 11 Claims. (Cl. 173—264.)



11. The method of making an insulated electrical conductor which comprises applying an adhesive to the conductor, disposing substantially parallel to the conductor and in close proximity thereto a thin flat sliver whose fibres are generally longitudinally disposed, embedding the fibres at one face of the sliver in the adhesive on

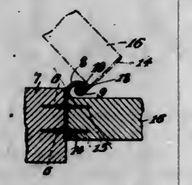
the conductor and folding the sliver about the conductor so that the latter is completely encircled and coated with interentangled fibres, compacting the fibres, and impregnating the fibrous covering.

1,893,591. ARRESTING HOOK FOR AIRPLANES. ROBERT J. MINSHALL, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash., a Corporation of Washington. Filed Mar. 7, 1932. Serial No. 597,284. 25 Claims. (Cl. 244—2.)



1. An arresting hook for airplanes comprising a member having a hooked end and supported for swinging upon the fuselage between operative and inoperative positions, an arm supported from the fuselage and swingable independently of said hooked member, into positions corresponding to operative and inoperative positions of the latter, and a clutch connection therebetween operable to resist relative movement tending to throw the hooked member out of operative position.

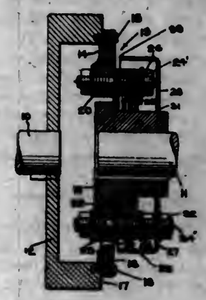
1,893,592. HINGE. LOUIS NEWMAN, New York, N. Y. Filed Jan. 29, 1931. Serial No. 512,027. 4 Claims. (Cl. 16—128.)



1. A hinge comprising two hinge plates one adapted to be secured to a fixed part and the other to a swinging member, each of said plates having a semi-tubular edge portion extending substantially the entire length of the plate and having an inner open side, the tubular portion of one hinge plate fitting within the other for free swinging movement through the open side of the tubular portion on the latter hinge plate, said latter hinge plate having means engaged by the tubular portion of the movable hinge plate to sustain the latter and the swinging member in connected relation with the fixed hinge plate, and the edge of said latter hinge plate at the open side of its tubular portion engaging the inner concave face of the tubular portion of the movable hinge plate adjacent the edge of the latter to limit movement of said hinge plate and the swinging member to open position, and said hinge plates being further provided with coacting cam surfaces whereby the movable plate is shifted vertically and the swinging member lifted in the opening movement thereof, said cam surfaces under the gravity weight of said swinging member operating to automatically return the latter to closed position.

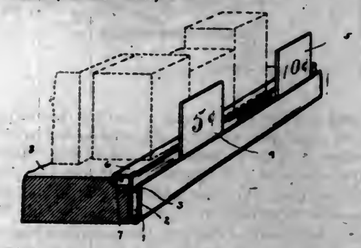
1,893,593. FLEXIBLE COUPLING. JOSEPH S. OECHSLE, Philadelphia, Pa., assignor, by mesne assignments, to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed June 21, 1929. Serial No. 372,604. 6 Claims. (Cl. 64—27.)

1. In a flexible coupling, in combination, a driving coupling member in the form of a flat plate having a central substantially triangularly shaped opening, a driven coupling member in the form of a sleeve having a substantially triangularly shaped flange adapted to be disposed within said opening, a plurality of studs projecting



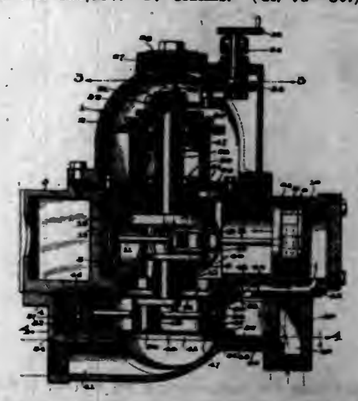
axially and in the same direction from said plate and flange, the plate studs being arranged alternately with respect to the flange studs, and flexible means respectively interconnecting each plate stud with the flange stud next adjacent thereto.

1,893,594. CARD HOLDER. ALBERT R. OESTREICH, Coleraine, Minn. Filed Apr. 16, 1931. Serial No. 530,523. 2 Claims. (Cl. 40—11.)



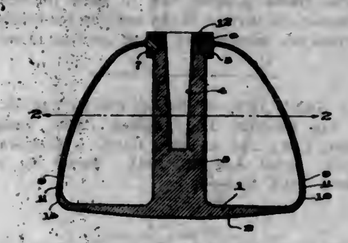
1. A sheet metal strip for attachment to a shelf comprising an upright arcuately shaped body portion cut vertically into a plurality of resilient members and the opposite edge of said strip bent at an angle to the major portion to provide suitable means for attachment to the shelf.

1,893,595. METER. WALTER F. PERKINS, Montclair, and LEON TRAGER, Newark, N. J., assignors to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Apr. 4, 1930. Serial No. 441,597. 17 Claims. (Cl. 73—30.)



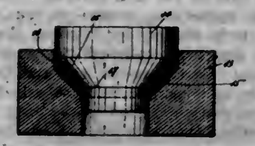
1. In a meter, a rotary crank shaft having cranks thereon, a crank pin, means adjustably connecting said crank pin to said cranks, a plurality of cylinders disposed radially about the axis of the crank shaft and in such manner that the axes of no two cylinders are in line, pistons in said cylinders, a master connecting rod connecting one of said pistons to said crank pin, connecting rods connecting the others of said pistons to said master connecting rod, and means carried by said crank shaft for moving said crank pin to vary the relative positions of the axes of the crank pin and crank shaft.

1,893,596. BUTT FOR BACKFILL TAMPERS. WALTER F. PERKINS, Upper Montclair, N. J., assignor to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Oct. 3, 1931. Serial No. 566,825. 4 Claims. (Cl. 94—49.)



1. As a new article of manufacture, a butt for backfill tampers comprising a hammer face having an annular upturned edge, a piston rod receiving stem formed integral with said hammer face, and a hood mounted upon said stem and having its lower edge engaging and welded to the upturned edge of the hammer face.

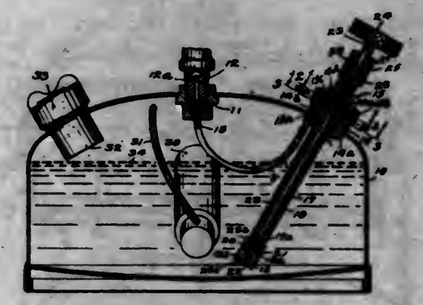
1,893,597. METHOD OF MAKING ROD PACKING. WALTER K. QUEEN, Needham Heights, Mass. Filed Nov. 23, 1931. Serial No. 576,728. 2 Claims. (Cl. 288—1.)



1. The method of making a slitted frusto-conical packing-ring which consists in disposing a single, homogeneous, relatively-thick strip of woven fabric in cylindrical form with the ends thereof abutting and then dicing the same into a coherent slitted frusto-conical annulus.

1,893,598. VAPORIZING TUBE WITH GAS CONNECTION. SOPHUS RASMUSSEN, Albert Lea, Minn., assignor to American Gas Machine Company, Albert Lea, Minn., a Corporation of Delaware. Filed Nov. 22, 1929. Serial No. 409,064. 9 Claims. (Cl. 158—81.)

1. In a device for burning a liquid vaporising fuel, the combination of a fuel container, a first member mounted in the walls of the chamber and having an open topped chamber at its upper end, a second member releasably applied to said first member and having an open bottomed chamber overlying said first mentioned chamber, a sealing member interposed between portions of said first and second members, and closing said two chambers, said sealing member having an opening therethrough permitting communication between said two chambers, means for supplying fuel to said second mentioned chamber



from said fuel container and a conduit having communication with said first mentioned chamber for supplying fuel to a burner.

1,893,599. PROTECTIVE COATING. ALMERIC WALTER SEYMOUR, Los Angeles, Calif. Filed May 23, 1930. Serial No. 455,153. 4 Claims. (Cl. 154—2.)

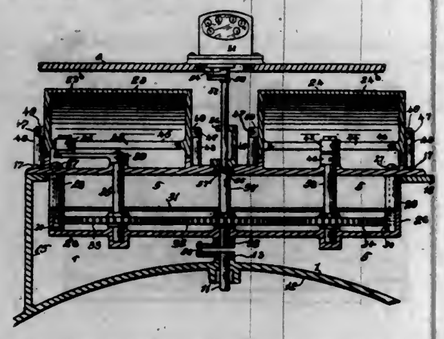
1. The method of coating materials which comprises; first applying to the surface of a material, a bituminous under-coating of colloidal nature; and then applying a bituminous outer-coating of non-colloidal nature, over the under-coating; the material of the outer-coating being wholly bituminous normally non-fluid, and having been made fluid by heating before its application.

1,893,600. COLLAR LOCATOR. DANIEL L. SHULL, Bakersfield, Calif., assignor, by direct and mesne assignments, to Shell Perforating Company, a Corporation of Nevada. Filed July 16, 1927. Serial No. 206,280. 14 Claims. (Cl. 33—205.)



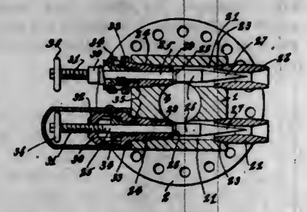
1. In a locator of the class described adapted to be moved through a casing, the combination of a body, a head movably carried by said body, locator arms extendable to a diameter greater than the casing bore, means whereby said locator arms are swingably supported by said head, said locator arms being swingable between retracted and extended position, lock means for retaining said locator arms in retracted position, and means operative for releasing said locator arms from said lock means.

1,893,601. GAS METER. HENRY H. SPRAGUE, Bridgeport, Conn., assignor to The Sprague Meter Company, Bridgeport, Conn. Filed June 30, 1931. Serial No. 547,856. 3 Claims. (Cl. 73—1.)



1. In a gas meter of the character described having a body and gas distributing and gas exhaust chambers, means separating said chambers and including valve seats, valves for the seats, and a rotatable shaft projecting into said exhaust chamber from the meter body, a shaft section operatively connected with the body shaft, a gear mounted on the shaft section, auxiliary gears meshing with said first mentioned gear, a crank shaft carried by each of said auxiliary gears, each crank shaft operatively connected with a valve and independently oscillating the valves on their respective seats, and supporting means for locating the gears shaft section and valve operating crank shafts in the exhaust chamber of the meter.

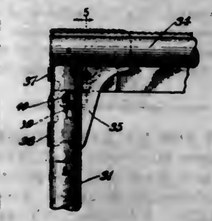
1,893,602. PRODUCTION CONTROL ASSEMBLY. OSCAR KEZER STEPHENS, San Gabriel, Calif. Filed May 31, 1930. Serial No. 457,936. 9 Claims. (Cl. 166—15.)



1. In a production control assembly, the combination of a housing in the form of an upright body having a passage extending upwardly therethrough for the oil or gas, said body having a transverse chamber therein at each side of the said passage and communicating with the passage, a flow-nipple mounted in the end of each of said chambers, a needle-valve corresponding to each flow-nipple and mounted in its corresponding chamber, each needle-valve having a stem passing out through the said body on the side opposite its corresponding flow-nipple, and means mounted on the body for regulating the position of the needle-valves.

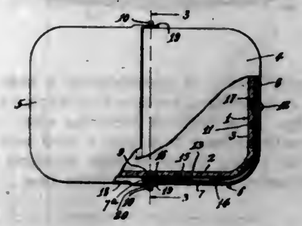
1,893,603. CONNECTION FOR COLLAPSIBLE ARTICLES OF FURNITURE. EDWIN VANDERMINDEN, Granville, N. Y., assignor to The Telescope Cot Bed Company, Granville, N. Y., a Corporation of New York. Filed Oct. 17, 1929. Serial No. 400,205. 2 Claims. (Cl. 287—99.)

1. In an article of folding furniture of the class described, a horizontal frame member, a connecting bracket secured to said member and comprising one side with a cut-out portion, registering slots in the adjacent sides inclined slightly from parallelism with and towards the end of the cut-out side nearer the frame member, said slots substantially within the projected area of said cut-out portion, a supporting bar, pivots at its upper end pivotally and slidably engaging the slots of said bracket, said bar adapted when positioned at right angles to the frame member to be wedged against the cut-out side of the bracket by the



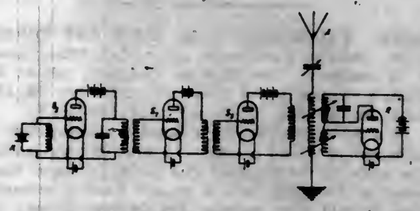
action of the inclined slots and the pivots when pushed towards the frame member and to have its end swing through the cut-out portion of the one side for folding when the bar pivots are brought to a lower position in said slots.

1,893,604. SANITARY COVERED RECEPTACLE. WALTER J. VAN ROSSEM, Los Angeles, Calif., assignor to Surgident, Ltd., Los Angeles, Calif., a Corporation of California. Filed Aug. 29, 1931. Serial No. 560,123. 13 Claims. (Cl. 215—63.)



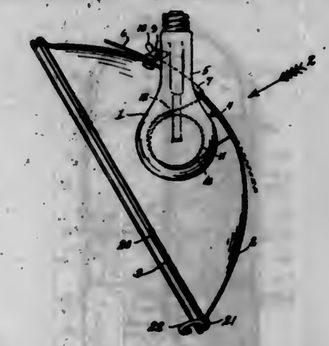
1. In a covered receptacle, the combination of a receptacle body of substantially rectangular form having an upper opening with a wall extending around the said opening, a cover having a body section capable of being placed over the edge of the wall at one side of the receptacle so as to cover a part of the said opening toward one end of the receptacle, cooperating means on two opposite walls and the said body section for latching the body section against being moved laterally off the receptacle, and cooperating means on a transverse wall and the body section for latching the same against being raised off the wall, and a movable cover section carried by the body section of said cover, for covering the remainder af the opening.

1,893,605. TRANSMITTER ARRANGEMENT. GEORG VON ARCO, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Aug. 13, 1927, Serial No. 212,681, and in Germany Oct. 30, 1926. 3 Claims. (Cl. 250—17.)



1. A transmitter comprising an antenna, a crystal controlled oscillatory circuit coupled to said antenna, and, a normally inoperative self-excited tube oscillator arrangement also coupled to said antenna, the couplings being adjusted so that upon operation of said crystal controlled oscillatory circuit, said self-excited tube oscillator arrangement is brought into operation at a frequency controlled by said crystal controlled oscillatory circuit.

1,893,606. LIGHTING DEVICE. WESLEY WILSON, Chicago, Ill., assignor to Wilson Lighting, Inc., Chicago, Ill., a Corporation of Illinois. Filed Aug. 21, 1929. Serial No. 387,447. 9 Claims. (Cl. 240—138.)



1. The combination with an electric lamp having a contact base, a bulb portion, a neck portion connecting said bulb and base, and a light source in the bulb portion, of a concave reflector in which the bulb portion is located having an elongated slot through which the neck portion of the bulb extends, the side edges of which slot are spaced apart such a distance that they both lie close to the neck portion and the end edges of which are spaced apart such a distance as to permit a substantial movement of the reflector with respect to the neck portion, and means for supporting said reflector for swinging movement on said bulb comprising a pair of opposed spring loop members embracing the bulb portion, said loop members lying on opposite sides of the plane through the center line of the slot and the light source.

1,893,607. METHOD OF MAKING BUILDING MATERIAL. ANTHONY M. ZOTTOLI, Quincy, Mass. Filed Mar. 19, 1930. Serial No. 437,186. 3 Claims. (Cl. 18—48.8.)

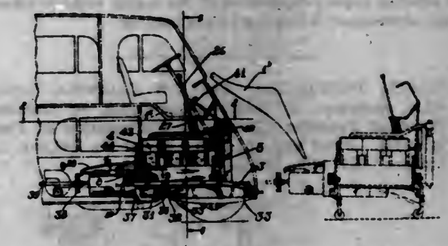


1. The method of making a building material of the character specified which consists in molding a layer of plastic material of a character capable of reaction with an acidic solution to form a gas, applying an acidic solution to the upper surface of the plastic layer and sealing the upper surface until the gas forming reaction is completed whereby undercut cavities are formed in the upper surface of the plastic layer.

1,893,608. CASEIN SOLUTION AND METHOD OF MAKING THE SAME. FRANCIS CLARKE ATWOOD, Newton, Mass. Filed Aug. 8, 1929. Serial No. 383,430. 5 Claims. (Cl. 134—12.)

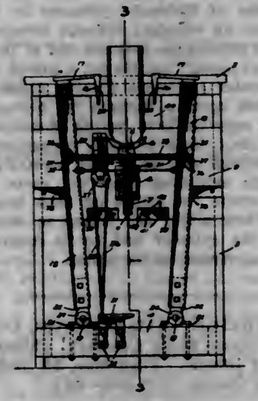
1. The method of making a casein solution, which consists in subjecting casein to treatment with a swelling agent such as sodium fluoride in the presence of water, maintaining the materials at an elevated temperature until the casein particles are swollen to many times their original size to form a thick gel, and dissolving the gel in a mild alkali producing a thick viscous casein solution having pH values within the limits of 4.6 and 7.0 and characterized particularly by its stability and uniform viscosity over long periods of time.

1,893,609. DEMOUNTABLE MOTOR CONSTRUCTION FOR AUTOMOBILES. DWIGHT E. AUSTIN, Los Angeles, Calif. Filed Jan. 14, 1930. Serial No. 420,644. 6 Claims. (Cl. 180—64.)



1. In a structure of the class described, a vehicle frame having spaced apart tracks, and brackets positioned above the tracks, a motor having supporting means at its opposite sides adapted to ride upon said tracks, and means in connection with the frame and said supporting means for raising the supporting means above the tracks when the motor is in position, said supporting means, when raised, positively engaging the brackets for positively locking the supporting means and said motor to said brackets and with respect to said frame.

1,893,610. BAG CLOSING MACHINE. DANIEL BELCHER, Minneapolis, Minn., assignor to Bemis Bro. Bag Co., Minneapolis, Minn., a Corporation of Missouri. Filed Feb. 9, 1931. Serial No. 514,540. 7 Claims. (Cl. 93—2.)

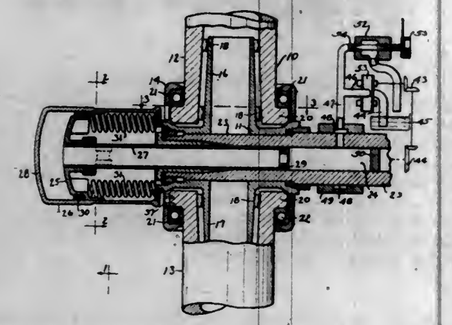


1. In an apparatus adapted for use in the operation of manually closing the open tops of filled bags whose bodies are substantially cylindrical in cross-section, a member mounted for vertical adjustment and upon which the bag to be closed is supported, oppositely movable shaping elements having faces adapted to engage opposite walls of the bag body to shape the upper portion thereof, whereby the operation of manually folding the walls of the bag, mouth to close the latter is facilitated, said faces being inclined outwardly from their upper inner corners to cause the maximum pressure to be exerted against the bag body at an elevation substantially coincident with the level of the material in the bag, and whereby the lower portion of the bag body may retain its rounded or cylindrical shape.

1,893,611. WRINKLED FINISH COATING. THEODORE F. BRADLEY, Westfield, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Feb. 20, 1931. Serial No. 517,316. 10 Claims. (Cl. 91—68.)

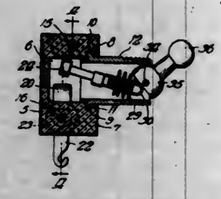
1. The process of producing a wrinkled finish coating which comprises applying to an article, a coating composition containing a substantial proportion of a highly volatile solvent and as the essential base-forming ingredient, a resinous ester of polyhydric alcohol, a polybasic acid and fatty acids of a drying oil, and then drying the coating to produce rapid evaporation of the highly volatile solvent with consequent wrinkling of the coating.

1,893,612. PROPELLER. FRANK W. CALDWELL, Dayton, Ohio, assignor, by mesne assignments, to Hamilton Standard Propeller Company, a Corporation of Pennsylvania. Filed May 25, 1929. Serial No. 366,051. 16 Claims. (Cl. 170—163.)



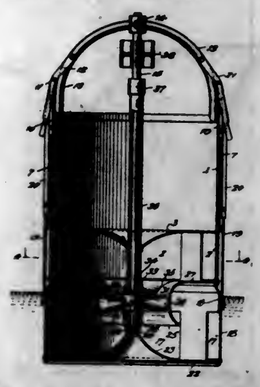
1. An aeronautical controllable pitch propeller, comprising a hub, blades mounted thereon rotatable on their longitudinal axes but otherwise immovable relation to the hub, a drive shaft carrying the hub and having an axial bore, a source of hydraulic pressure in communication with the bore, an enlarged cylinder mounted on the hub and extended beyond the forward end of the engine shaft, and positioned beyond the blades, a piston in the cylinder having a tubular extension slidably fitted in the engine shaft bore and opening through the piston, the walls of the cylinder near its base having diametrically disposed longitudinal slots, links pivotally connected to the piston extending through said slots and pivotally connected to arms laterally extending from the roots of the blades whereby to rotate the blades on their longitudinal axes to increase their pitch, and means to control hydraulic pressure in the cylinder and so to control increase of pitch due to movement of the piston.

1,893,613. SWITCH. ALVA J. CARTER, Chicago, Ill., assignor to Carter Radio Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 25, 1929. Serial No. 349,632. 4 Claims. (Cl. 200—68.)



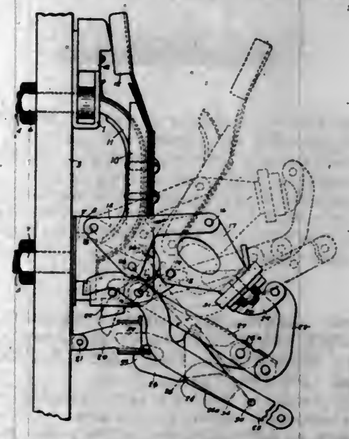
1. In a device of the character described, a pair of stationary contacts, a bridging contact movable into and out of position connecting said stationary contacts, and operating means for moving said bridging contact, and a support for said contacts comprising an insulating block cut away from one side edge intermediate its ends to form a recess in which said contacts lie, grooves on opposite sides of one end portion of said block, said stationary contacts being seated in said grooves, and flat insulating sheets closing the sides of said recess and holding said contacts in position.

1,893,614. LOW-HEAD ROTARY PUMP. ROYDEN O. COUCH, Grant, Fla. Filed Dec. 27, 1930. Serial No. 505,051. 4 Claims. (Cl. 103—89.)



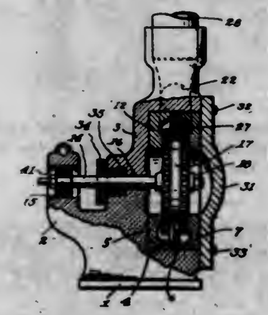
1. In an hydraulic turbine pump having a draft and discharge conduit in which is a turbine rotor, the improvement which comprises, providing an external vertical housing having a transverse diaphragm the opening in which communicates with said conduit, the walls of said housing having guides extended above said diaphragm and having a plurality of angularly disposed inlet and outlet openings above and below said diaphragm, and independently movabel gates for each of said openings in said housing and slidable in said guides which form supports therefor, whereby the points at which the water enters and leaves said housing may be determined.

1,893,615. NONCLOSABLE CIRCUIT BREAKER. THOMAS B. EASTBURN, Bywood, Upper Darby, Pa., assignor to I-T-E Circuit Breaker Company, Philadelphia, Pa., a Corporation of New Jersey. Filed June 26, 1931. Serial No. 547,061. 16 Claims. (Cl. 200—89.)



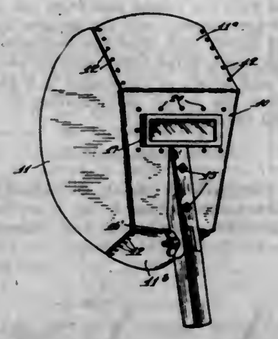
1. A non-closable circuit breaker comprising a movable contact system, an operating system, means disengageably connecting said systems, and spring means connecting said systems and so arranged that it is effective upon movement of said contact system toward open circuit position to bias said operating system for movement effecting connection between said systems by said disengageable connecting means.

1,893,616. PUMPING APPARATUS. GALE L. FERGUSON, Cleveland, Ohio, assignor, by mesne assignments, to Westco Pump Corporation, Davenport, Iowa, a Corporation of Delaware. Filed June 9, 1930. Serial No. 459,958. 5 Claims. (Cl. 103—96.)



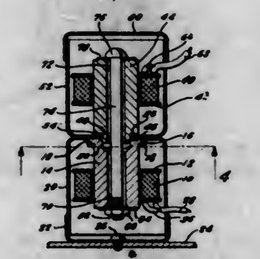
1. In a pumping apparatus, the combination of a casing having inlet and outlet ports a recess in said casing, rings mounted in said recess, said rings forming a double impeller channel, a pair of impellers rotatably mounted in said channel, a spacing ring between said impellers, said rings comprising two allochiral rings each having an arc-shaped channel formed therein, and a central ring having a projecting portion which forms a continuation of the arcs of said allochiral rings.

1,893,617. PORTABLE GUARD. OSCAR S. FLOOD, Chicago, Ill., assignor to Sellstrom Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1929. Serial No. 345,560. 6 Claims. (Cl. 2—11.)



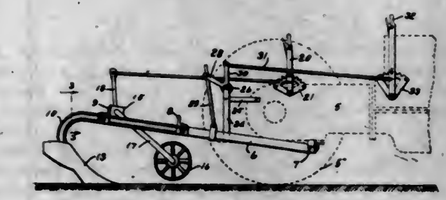
1. A lens holder for welder's guards and the like, including a frame, a welding lens removably secured in said frame, said frame having a pocket with an open end, a cover glass for said pocket removable exteriorly therefrom through said open end, a second frame slidable in said pocket through said open end, and spring means on said latter frame for engaging and for urging said glass in a snug relation with said first frame.

1,893,618. COUPLING DEVICE. HENRY C. FORBES, Dayton, Ohio, assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed June 5, 1931. Serial No. 542,291. 11 Claims. (Cl. 250—16.)



1. A coupling unit comprising in combination, a pair of coils having no inductive coupling, and a conducting member electrostatically associated with each of said coils whereby the coils have a capacity coupling.

1,893,619. EARTH WORKING IMPLEMENT. GERALD GERALDSON, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed June 29, 1931. Serial No. 547,608. 2 Claims. (Cl. 97—47.)



1. An implement for breaking and disintegrating land preparatory to cultivation by tillage implements, comprising a frame, means for pivotally connecting the frame to a tractor, a standard on the tractor including a bell-crank, a link connecting the bell-crank with said frame, a lever on the tractor, a link connecting the bell-crank and lever whereby the bell-crank may be actuated to vertically adjust the frame, an arm pivotally mounted on the frame and having a gage-wheel at its lower end, a second lever on the tractor, and a link connecting the arm and second lever whereby the link may be actuated to vertically adjust said arm.

1,893,620. ACTUATING MECHANISM FOR AN ELECTRIC SAFETY RAZOR. ARTHUR A. GROTHE, Oak Park, Ill., assignor to William J. Cameron, Chicago, Ill. Filed Nov. 18, 1929. Serial No. 407,832. 2 Claims. (Cl. 172—126.)

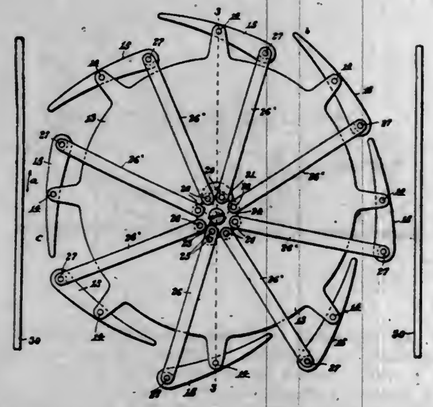
1. Actuating mechanism for an electro-safety razor comprising a hollow handle, an electromagnet core mounted therein having a bore and provided with an energizing winding, a longitudinally reciprocatory armature movable

in said bore, a spring plate anchored at one end on the end of said core with its free end extending across said bore in position to receive impact from and be vibrated by



said armature during reciprocation of the latter, and a tool post having connection with said plate and vibrated during operation of the mechanism.

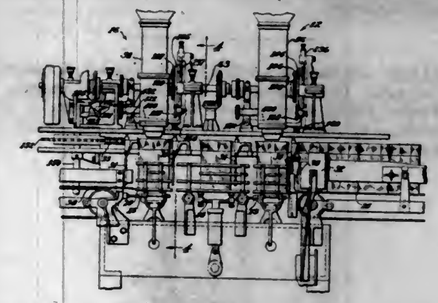
1,893,621. MECHANICAL MOVEMENT. CHRISTIAN S. HANSEN, Medford, Mass., assignor of one-half to Otto W. H. Wendler, Melrose, Mass. Filed Mar. 14, 1931. Serial No. 522,640. 16 Claims. (Cl. 170—151.)



1. The combination of a rotatable member having a tubular hub; a support for said hub; a shaft extending through said hub; blades pivoted at their centers to the periphery of said member; a crank on one end of said shaft having a lateral cylindrical pin at the outer end thereof; a disk loosely mounted on said pin; and links extending from said disk and pivotally connected to the front ends of said blades, one of said links being fixedly secured to said disk.

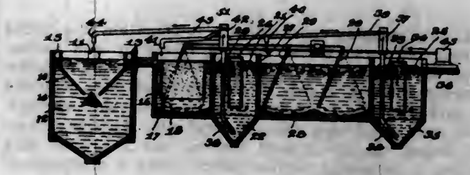
1,893,622. WEIGHING MACHINE. STANLEY R. HOWARD, Milton, Mass., assignor to Pneumatic Scale Corporation Limited, Quincy, Mass., a Corporation of Massachusetts. Filed Dec. 16, 1930. Serial No. 502,683. 12 Claims. (Cl. 149—59.)

1. In a weighing machine, in combination, a scale beam, load applying means, and a controlling device cooperating with the beam to form its sole support during a sufficient part of the weighing operation to prevent motion being imparted to the beam by extraneous vibration until the time when the load being applied to the



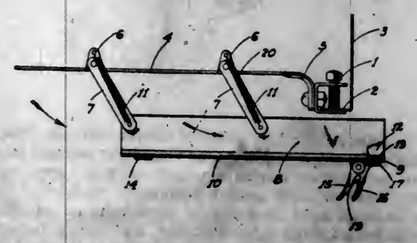
beam substantially reaches that required to balance the beam to thereby reduce to a minimum the transmission of vibration to the beam at such time.

1,893,623. SEWAGE PURIFICATION. KARL IMHOFF, Essen, Germany. Filed Aug. 30, 1930, Serial No. 479,046, and in Germany Jan. 20, 1930. 2 Claims. (Cl. 210—8.)



1. A sewage treatment plant comprising two stages, the first stage including a digestion tank, an aerator and a settling tank and the second stage including a sludge tank and a settling tank, agitators mounted in the aerator and sludge tanks, means for operating the agitators, a source of air supply under pressure connected to said agitators for supplying air to the liquor passing through said tanks, return pipes leading from the settling tanks of both stages with the return pipe from the settling tank of the first stage opening into the aerator and digestion tanks and the return pipe from the second stage opening into the sludge and aerator tanks, and air actuated means connected to said source of air supply and to said return pipes for lifting the sludge accumulating in the settling tanks into said return pipes.

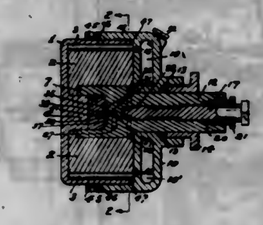
1,893,624. CONTAINER AND SUPPORTING UNIT. WEBB JAY, Port Washington, N. Y. Filed Nov. 13, 1931. Serial No. 574,776. 10 Claims. (Cl. 206—19.5.)



1. A container and supporting unit comprising a container, a cover plate for the container, a frame in which

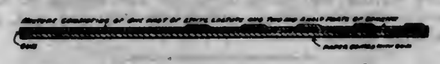
said container is slidably mounted, means supporting the frame from the plate for vertical movement relative thereto, and means for normally holding the frame up to maintain the cover in engagement with the receptacle.

1,893,625. SHOCK ABSORBER. CHARLES H. LAND, Grosse Pointe, Mich., assignor to Mechanical Development Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 15, 1930. Serial No. 495,866. 18 Claims. (Cl. 188—89.)



1. In a recoil compensator and shock absorber, adapted for connection with elements respectively movable in relation to each other; a casing; a hydraulic line; a wing piston located in the casing; a shaft carrying said piston journaled in the casing having a valve chamber connected with said hydraulic line, with seats spaced apart to receive a valve; a valve formed of sheet metal housed in said valve chamber, adapted to diaphragm in either direction under predetermined hydrostatic pressure toward the valve seats of the valve chamber, to progressively restrict fluid flow through the hydraulic line to absorb excess vibration.

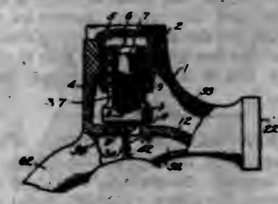
1,893,626. METHOD OF TRANSFERRING DESIGNS AND TRANSFER COMPOSITION. WINTHROP STANLEY LAWRENCE, Brooklyn, N. Y., assignor to Kaumagraph Company, New York, N. Y., a Corporation of New York. Filed June 20, 1928. Serial No. 287,041. 4 Claims. (Cl. 41—33.)



1. The method of transferring a design consisting of a film of soluble material intermixed with coloring matter and located on a base, which consists in immersing the said base in a transfer liquid comprising a plurality of liquids in which said film has varying solubilities, the more active solvent having the higher boiling point, and the said transfer being immersed in said transfer liquid for a sufficiently short period of time to prevent the film from being dissolved or running, and then applying the transfer design directly to the surface to be marked after permitting the liquid having the lower boiling point to evaporate until the transfer can be utilized without any substantial running.

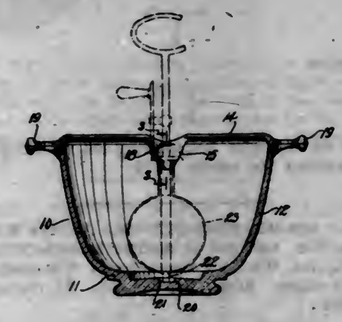
1,893,627. VALVES AND THEIR OPERATION. EDGAR EARLE LITTLEFIELD, Los Angeles, Calif. Filed Jan. 22, 1925. Serial No. 4,102. 3 Claims. (Cl. 137—139.)

1. A valve mechanism including, in combination, a valve body having a chamber open to line pressure when communication through the valve is interrupted and having a seat therein arranged to support a fluid operated valve; a fluid operated valve supported by said seat in the closed position of the former; an auxiliary valve controlling the fluid operated valve, the latter supporting the former in its closed position and electrically controlled means in the path of the fluid without said chamber for controlling the auxiliary valve, said means including a



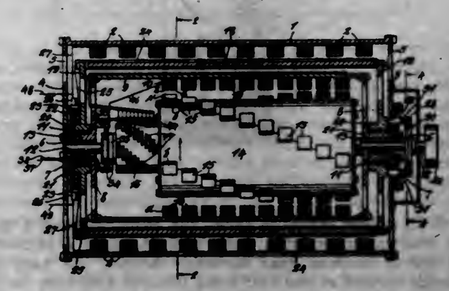
member coacting with the auxiliary valve by lost motion action; controlling means for said electrically controlled means.

1,893,628. MIXING BOWL. JOHN E. MARSDEN, Philadelphia, Pa. Filed Feb. 21, 1930. Serial No. 430,165. 6 Claims. (Cl. 65—15.)



1. A one-piece mixing bowl having circular side wall providing a horizontal rim, said bowl having an integral inturned flange at the rim to retain the bowl contents in centrifugal mixing action, said flange being relatively narrow to provide a large mouth for the bowl, and an outward extending spout for the bowl below the level of the flange, said spout having an inwardly extending rim portion to retain the contents of the bowl in centrifugal mixing action.

1,893,629. ELECTRIC MOTOR. WILLIAM E. MASTERSON and HENRY PRICE, Borger, Tex., assignors of one-third to Harry R. Rogers, Denver, Colo. Filed June 1, 1931. Serial No. 541,412. 3 Claims. (Cl. 172—239.)

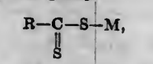


1. A motor generator comprising, in combination, an elongated stationary cylindrical generator field frame, a stationary elongated cylindrical motor field frame located within the generator field frame, tubular cylindrical com-

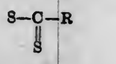
nectors between the frames and concentrically located with respect to the frames, a cylindrical generator armature surrounding the motor field and mounted for rotation about the tubular connectors, a motor armature located in the motor field frame, and provided with a shaft whose ends extend through the tubular connectors which form bearing supports for the shaft, and mechanical means for interconnecting the two armatures so that they will rotate simultaneously and in opposite directions whenever one is rotated.

1,893,630. TREATMENT OF RUBBER. WILLIAM EARL MESSER, Naugatuck, Conn., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Mar. 18, 1930. Serial No. 436,882. 13 Claims. (Cl. 18—53.)

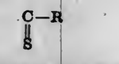
1. A process of treating rubber which comprises combining therewith a vulcanizing agent, a metallic oxide, a material comprising the group.



M representing zinc, dinitro aryl, aryl methylene, the group

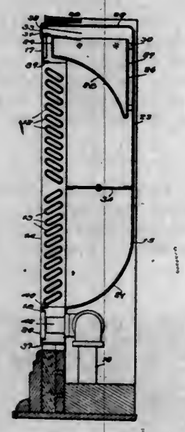


or the group



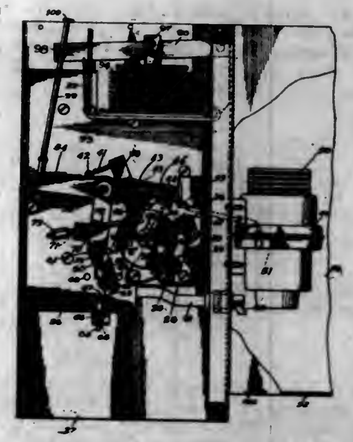
and R in all instances representing the radical pipecolyl, and vulcanizing the rubber stock.

1,893,631. AIR HEATING DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 26, 1929. Serial No. 388,495. 16 Claims. (Cl. 257—138.)



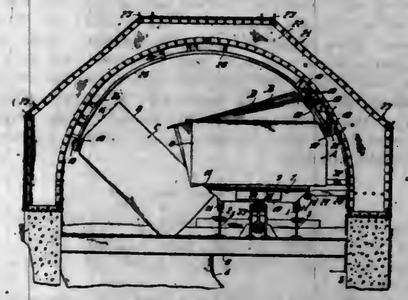
5. In a heat exchange device the combination of a pair of heat exchange units, each unit including a plurality of spaced inclined heat exchange devices, the heat exchange devices of one unit being inclined relatively to the heat exchange devices of the other unit, and means providing a humidifier arranged adjacent one of said heat exchange units, said humidifier having a wall providing means for directing air toward one of said heat exchange units.

1,893,632. DISPENSING APPARATUS. JOHN W. MOORE, Detroit, Mich., assignor to The Autofont Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 8, 1930, Serial No. 434,249. Renewed June 9, 1932. 11 Claims. (Cl. 221—112.)



1. In a dispensing machine of the class described, the combination of a measuring chamber having an inlet adapted for connection with a supply source of beverage under pressure and having a discharge outlet, valve mechanism for controlling said inlet and outlet, a setting lever for controlling the setting of said valve mechanism, said valve mechanism in one position of said lever being set to close said inlet and open said outlet and in another position of said lever being set to open said inlet and close said outlet, a main operating lever, a connecting train operated by rotation of said main operating lever to cause movement of said valve mechanism setting lever to set said valve mechanism to close said discharge outlet and open the supply inlet for a charge of beverage into said measuring chamber, and a pressure bellows controlled by the pressure within said measuring chamber to move said valve setting controlling lever for the setting of said valve mechanism to close said supply inlet and open the discharge outlet.

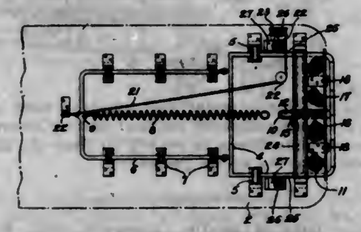
1,893,633. CAR DUMPING APPARATUS. RAYMOND S. PETERSON and ARTHUR L. LEE, Chicago, Ill. Filed Dec. 5, 1929. Serial No. 411,859. 2 Claims. (Cl. 214—62.)



1. In combination with a plurality of cars each comprising a truck with wheels, and a body hinged to the truck along one of its side edges, a dumping apparatus comprising a hopper, a continuous trackway extending adjacent the hopper along which the wheels of the trucks travel,

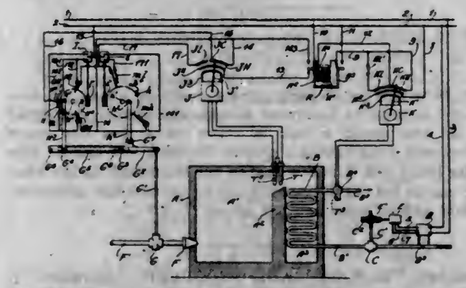
means for propelling the trucks along the track, a curved overhead track, means on each car body for engaging the overhead track to tilt the body of the moving car about its hinged connection and dump the contents thereof into the hopper, and an auxiliary rail adapted to be engaged by the upper surfaces of certain wheels of the truck to hold these wheels in normal upright position and prevent the truck from tilting during the dumping operation.

1,893,634. SAFETY DEVICE FOR VEHICLES. SOLOMON PFEFFER, Montreal, Quebec, Canada, assignor of one-half to Roch Despatis, Montreal, Quebec, Canada. Filed May 25, 1931. Serial No. 539,855. 3 Claims. (Cl. 293—25.)



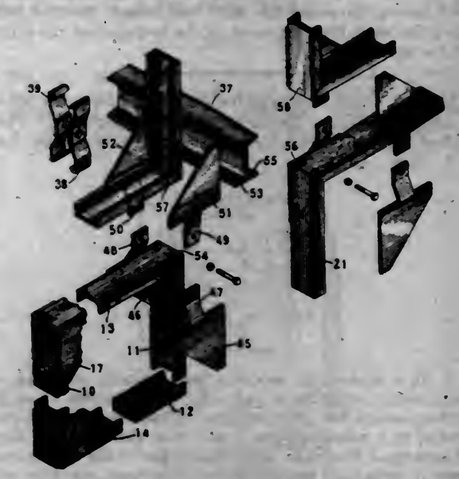
1. A fender for vehicles and the like, comprising a rectangular frame horisontally and slidably mounted beneath said vehicle, means covering said frame, a slidable guide-member pivotally connected to said rectangular frame, tension means to normally press said rectangular frame forward of said vehicle into its operative position, and means to secure said frame into the inoperative position beneath said vehicle.

1,893,635. HEATER CONTROL SYSTEM. FOSTER MALIC POOLE, Kansas City, Mo., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 18, 1929. Serial No. 393,392. 11 Claims. (Cl. 236—70.)



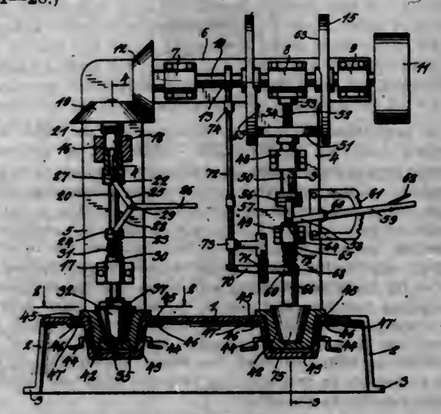
1. In a control system, a meter comprising a member deflecting in response to changes in the value of a source of energy and control devices selectively actuated by said member according to its deflection, a second meter comprising a member deflecting in response to changes in value of a second source of energy and control devices selectively actuated by the last mentioned member according to its deflection, regulating mechanism controlling one of said sources of energy, means through which said mechanism is normally controlled by the selective actuation of the control devices of the first mentioned meter, and means through which the first mentioned meter is prevented from controlling said mechanism and the latter is subjected to a control action whenever one of the control devices of said second meter is actuated, and means through which the actuation of another control device of said second meter restores the control of said mechanism to the first mentioned meter.

1,893,636. METALLIC HOUSE FRAMING. HERBERT RIDGWAY, Brooklyn, N. Y. Filed Apr. 11, 1931. Serial No. 529,366. 7 Claims. (Cl. 189—1.)



1. A steel frame building construction composed of a plurality of frame units, each unit being made up of channel irons with the flanges substantially parallel with the surfaces of the walls and gusset plates having connected extension arms securing the corners of adjacent units together.

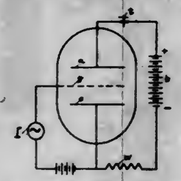
1,893,637. FRICTION TAPER VALVE CUTTER AND FINISHER. HARRY R. ROGERS, Denver, Colo. Filed May 19, 1931. Serial No. 538,465. 2 Claims. (Cl. 51—28.)



1. A machine for grinding and polishing, comprising, in combination, a frame, a drive shaft carried by the frame and mounted for rotation, two friction gear disks mounted on the drive shaft in spaced relation, the adjacent surfaces of the disks being each composed of two substantially circular portions each lying in a separate plane which is perpendicular to the axis of the drive shaft, whereby each disk has a raised surface and a depressed surface, the raised surface of one disk lying opposite the depressed surface of the other disk, the raised surfaces being the driving surfaces, a driven shaft carried by the frame and mounted for rotation about an axis substantially perpendicular to the axis of the drive shaft, the driven shaft being located between the spaced disks, a friction gear wheel carried by the end of the driven shaft the size of the gear wheel being such that it will contact with the nearest surface of the friction disks whereby when the drive shaft rotates the friction gear

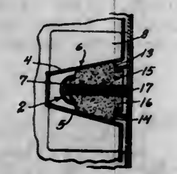
wheel will be engaged alternately on opposite sides and rotated alternately in opposite directions, a tool carried by the other end of the second shaft, a spring urging the tool outwardly along the shaft and means operated from the drive shaft for reciprocating the tool against the action of the spring.

1,893,638. GAS DISCHARGE RELAY. JOHANNES MICHAEL SCHMIDBER, Berlin-Lichterfelde, Germany. Filed Nov. 6, 1930, Serial No. 493,824, and in Germany Nov. 7, 1929. 16 Claims. (Cl. 250—27.)



1. In a system for relaying weak electric currents, an ionic tube, including a pair of cold electrodes close together, means for impressing a voltage across said electrodes, of a value such as to maintain the tube in a state of ante-glow discharge and control means for introducing current variations in said discharge current, whereby said discharge current is an amplification of variable control currents applied to said control means.

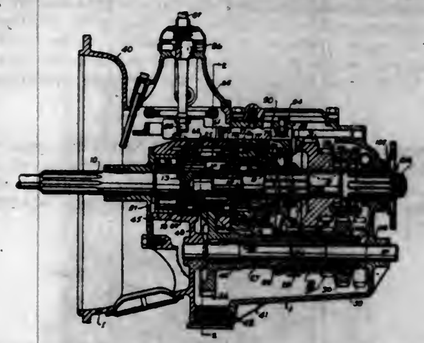
1,893,639. DOVETAIL. WILLIS STUTSON, Chicago, Ill. Filed Aug. 17, 1931. Serial No. 557,519. 1 Claim. (Cl. 16—86.)



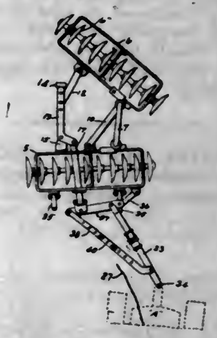
A projecting dovetail construction for use with a recessed receiving construction, comprising a projecting metal pocket having upper and lower openings therein, a cushioning wear-resisting construction comprising upper and lower wear-resisting devices, each having a portion retained in said pocket, and a wear-resisting portion extending through said opening for engaging the receiving device, cushioning means between said wear-resisting devices for yieldingly holding said wear-resisting portions in engaging position, and means outside the space between the wear-resisting devices for securing the dovetail construction to a support whereby the entire body of the cushioning means between the wear-resisting devices acts as a cushion in transmitting pressure from one wear-resisting device to the other.

1,893,640. TRANSMISSION GEARING. CHARLES E. F. AHLM, Cleveland, Ohio, assignor, by mesne assignments, to Automotive Research Corporation, Warren, Ohio, a Corporation of Delaware. Filed Mar. 21, 1929. Serial No. 348,678. 5 Claims. (Cl. 74—57.)

1. In a gearing, a casing, a pair of aligned shafts, two hollow sleeve-like gear elements internally and externally geared together and to one of the shafts, said gear elements being positioned, one in eccentric relation to the shafts and the other in concentric relation thereto, means to selectively connect the two shafts directly together and to connect one of the shafts to the concentric geared sleeve, one of said sleeves having external gear teeth formed thereon, a countershaft with a gear thereon meshing with said external teeth, said countershaft having a driving connection to one of said first named shafts and being drivingly connected to the other through the sleeve having said external teeth, and means to lubricate the internal and external gears comprising a recess in the casing leading from a point adjacent said external teeth of such sleeve to a point adjacent one end of this sleeve, there being cooperating means to convey oil from the discharge end of the recess to within the sleeve.

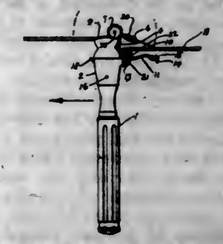


1,893,641. DISK HARROW. JOSEPH E. BODA, Rockford, Ill., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Oct. 9, 1931. Serial No. 567,863. 12 Claims. (Cl. 55—83.)



1. In a harrow including front and rear gangs, an arm fixedly secured to the front gang and pivotally connected to the rear gang, a pair of links connecting the gangs one of said links having a stop at its outer end and an arm at its inner end, a reciprocating bar connected to the arm, and means for actuating said bar to control the movement of said pair of links and the gangs.

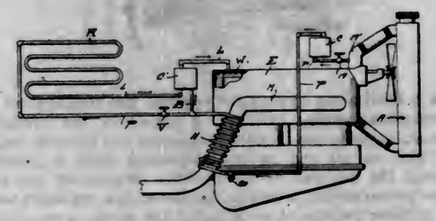
1,893,642. RAZOR BLADE STROPPER. ANTHONY D. BOULANGER and FRANK P. HUBRICH, Ridgefield Park, N. J., assignors of one-third to Frank D. Boulanger (2nd), Ridgefield Park, N. J. Filed July 19, 1928. Serial No. 293,984. 2 Claims. (Cl. 30—12.)



1. A stropping device comprising a base, a blade carrier mounted to rock with respect to said base, a blade

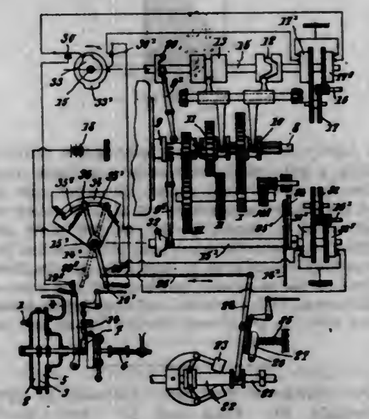
holder pivotally mounted on said carrier and means transmitting the rocking motion of said carrier to said holder to swing the latter about its pivotal axis, said carrier comprising, as strop engaging members, a transverse non-rotatable circular rod and a plate parallel thereto and spaced therefrom, said plate having transverse edges at a higher level than the under surfaces of said rod.

1,893,643. HEATING SYSTEM. ROBERT E. CARNES, Greenville, S. C. Filed Nov. 6, 1929. Serial No. 405,146. 4 Claims. (Cl. 237—12.3.)



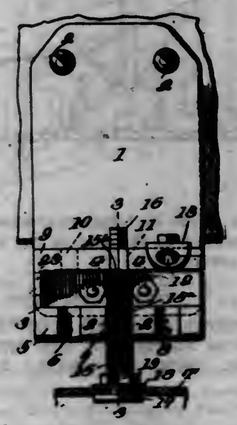
1. In a steam heating apparatus for a vehicle driven by an internal combustion engine having an exhaust element and a source of water, a heating circuit including a vehicle-heating radiator, an inlet pipe connected with the radiator and with the source of water, a steam generating element connected in the inlet pipe and receiving heat from the exhaust element, an outlet pipe connected with the radiator and connected with the source of water, a check valve connected with the inlet pipe upon the inlet side of the steam generating element and opening toward the steam generating element for supplying water into the same, and a check valve connected in the outlet pipe upon the outlet side of the radiator, the last-named check valve opening toward the source of water to permit of the discharge of water from the outlet pipe, the arrangement of the two check valves being such that the condensation of steam in the radiator produces a suction therein which draws water into the steam generating element from the source of water.

1,893,644. PROGRESSIVE CLUTCH CONTROL FOR AUTOMATIC GEAR SHIFTING SYSTEMS. GASTON FLEISCHEL, Bleneau, France. Filed Mar. 4, 1931, Serial No. 520,090, and in Italy Mar. 28, 1930. 24 Claims. (Cl. 74—97.)



1. In a vehicle, a motor including a driving shaft,—a driven shaft,—a clutch for coupling said shafts in driving and driven relation,—and a clutch control assembly including a rotatable shaft, a fly-wheel mounted in flexibly driven relation to said shaft, and means operative by differences in speed between said last named shaft and said fly-wheel to displace said clutch.

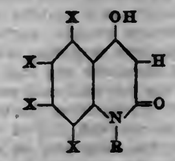
1,893,645. HOLDER SUPPORT FOR HAND ASSEMBLING VALVE STEMS AND PNEUMATIC TUBES. ELMORE M. GODFREY, Jr., Knoxville, Tenn. Filed Dec. 2, 1931. Serial No. 578,563. 7 Claims. (Cl. 81—13.)



1. A holder support for hand assembling valve stems and pneumatic tubes comprising a supporting bracket, means carried thereby for loosely engaging and supporting the valve stem in a horizontal position and for preventing the valve stem from turning when a valve stem nut is turned to clamp the tube, said supporting means having a stop for positioning the valve stem so that the clamping valve stem base is spaced from the supporting means for rendering accessible the clamping nut for a turn of the same.

1,893,646. AZO DYESTUFFS AND COMPLEX METAL COMPOUNDS THEREOF. KARL HOLZACH, Ludwigshafen-on-the-Rhine, and GUIDO VON ROSENBERG, Mannheim, Germany, assignors to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed June 29, 1929, Serial No. 374,939, and in Germany July 30, 1928. 4 Claims. (Cl. 260—12.)

1. As new articles of manufacture complex metal compounds of the dyestuffs derived from coupling an o-hydroxy diazo compound and a 4-hydroxyquinolone of the general formula:

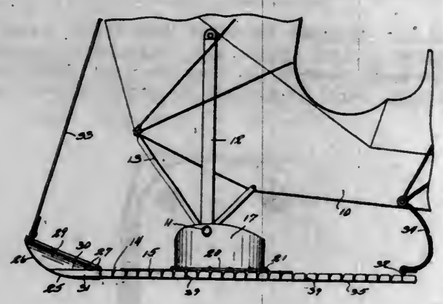


in which R stands for an alkyl radicle or a radicle of the benzene series and X for hydrogen or a sulphonic acid group, the reacting components being so chosen that the product contains at least one sulphonic acid group.

1,893,647. AIRPLANE LANDING SKI. WILLIAM F. KAMMER, Wenatchee, Wash. Filed Mar. 10, 1932. Serial No. 598,066. 11 Claims. (Cl. 244—2.)

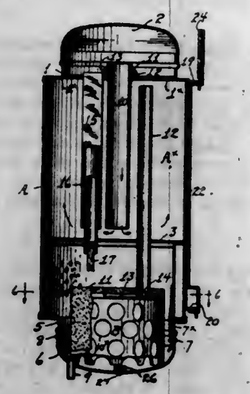
8. An airplane ski having a runner and an axle mounted on the runner, the forward end of the runner con-

stituting a tip extending upward in a curve and then extending downward and rearward to a point in front of the axle mounting, the downwardly and rearwardly ex-



tending portion of the tip being transversely rounded and extending downward to the face of the runner whereby a closed tip is provided.

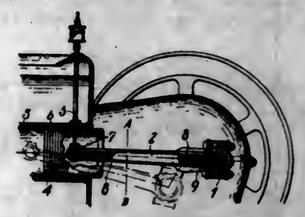
1,893,648. DEODORIZING AND DISINFECTING APPARATUS. LOUIS KOOPERSTEIN, New York, N. Y. Filed Jan. 3, 1930. Serial No. 418,181. 2 Claims. (Cl. 299—22.)



1. In a deodorizing and disinfecting apparatus, a canister provided with an interior wall forming the base of a liquid receiving chamber, said canister having a top wall and having a perforated annular section below said interior wall, a filling tube projecting within the chamber and having an inlet above the top wall, a wick tube having an inlet above the top wall and an outlet below the interior wall, a wick box adjacent the wick tube and having an inlet above the top wall and an outlet near the interior wall, whereby the wick may be led from the wick tube downwardly through the wick box to the upper surface of the interior wall, an air tube having an inlet below the interior wall and an outlet within and near the top of the chamber, and, a liquid receptacle below the wick tube outlet and so positioned that the air tube inlet is within the receptacle and liquid received by the receptacle may close the air tube inlet.

2. Deodorizing and disinfecting apparatus comprising in combination with a canister, of drip mechanism within the canister, a rounded-wall closure at the lower end of the canister, and an absorbent body carried by said closure at its exterior as and for the purpose set forth.

1,893,649. OIL FEEDING APPARATUS FOR INTERNAL COMBUSTION ENGINES. MINORU KUMAGAI, Osaka, Japan. Filed Nov. 1, 1929. Serial No. 404,093. 1 Claim. (Cl. 184—65.)



In a lubricating system for engines, the combination of a horizontal engine cylinder, a piston in the cylinder, a crank, a piston pin, a solid connecting rod between crank and pin, an oil cup in communication with a passage through the top wall of the cylinder situated at one end of the piston stroke, a hole in the piston that registers with the cylinder passage at such end of the stroke, a hole leading through the connecting rod above the piston pin and alining with said piston hole at said end of the stroke, and an upwardly open longitudinal channel in the upper side of the connecting rod terminating short of said hole in the connecting rod and leading to a hole passing inward to the crank, said channel being situated to pass below the passage in the cylinder wall during the stroke of the piston and to receive lubricant passing downward through such passage and convey it to the hole leading to the crank.

1,893,650. HEAT EXCHANGE UNIT. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Sept. 17, 1928. Serial No. 306,476. 6 Claims. (Cl. 257—259.)



1. In apparatus of the class described, a radiator unit comprising a pair of diametrically positioned tanks, an inlet tube for one of said tanks, an outlet tube for the other of said tanks, a plurality of arcuate tubes connecting said tanks, a generally disc shaped plate mounted interiorly of the radiator unit, said plate having its outer peripheral portion concave on one side and its inner portion convex on the same side, and a motor and a fan mounted on said plate with their axis of rotation in substantial alignment with the transverse central line of said radiator unit.

1,893,651. WINDOW SCREEN. LEONARD A. RAY, Center Rutland, Vt. Filed Aug. 25, 1931. Serial No. 559,281. 3 Claims. (Cl. 156—39.)

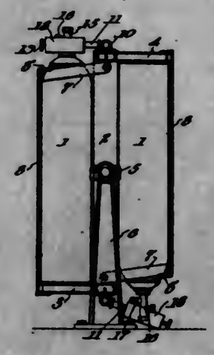
1. In a window screen apparatus having a roller mounted at the lower end of a window frame, a screen attached to said roller to wind thereon or unwind therefrom, means for

connecting the screen to a window sash whereby as the sash is raised the screen will be unwound, pulleys secured on the ends of the roller, guide pulleys above said pulleys and arranged at the sides of the window frame, and cables attached to the first mentioned pulleys and wound there-



on reversely to the screen and passing upwardly therefrom to and over the guide pulleys and attached to the sash whereby as the sash is lowered the screen will be wound; slidably mounted plates carrying the upper guide pulleys, and springs acting on said plates to hold them normally raised whereby to maintain the cables under tension.

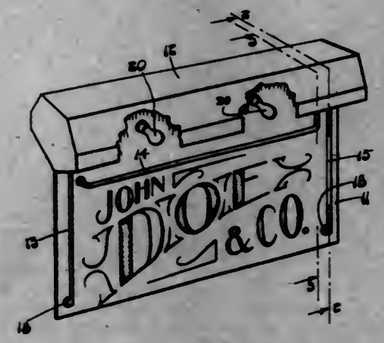
1,893,652. MEANS FOR CLEANING GAS CYLINDERS. GUSTAVE T. REICH, Anaheim, Calif. Filed Jan. 7, 1927. Serial No. 159,688. 6 Claims. (Cl. 141—1.)



1. An apparatus for washing and cleaning gas cylinders of the type having at one end thereof a normal gas outlet and an emergency outlet, said apparatus comprising a carrier, a pipe mounted thereon, means for detachably securing a cylinder to said carrier, and means for detachably connecting said pipe to one outlet of said cylinder, said carrier being pivoted for movement about a horizontal axis, whereby it may be inverted to allow said cylinder to drain.

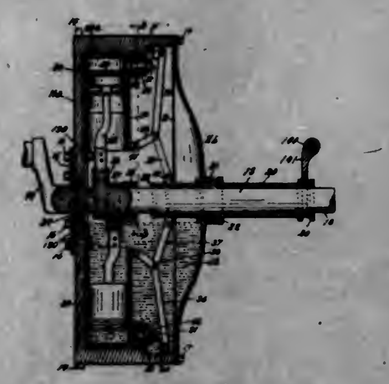
1,893,653. SIGN. GUSTAVE M. REININGER, Bellevue, Ky. Filed Sept. 6, 1932. Serial No. 631,773. 3 Claims. (Cl. 40—130.)

1. A sign comprising a sign board, a source of illumination of the board, a hood at the top to house certain features of the device therein, said source consisting of a U-shaped neon tube supported at its base by occupying an opening through the board, the tube branches occupying substantial parallelism with the opposite faces of the board and terminating beneath the hood, and means beneath the



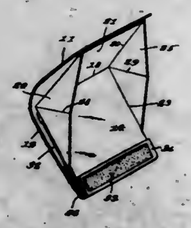
hood for connection of the tube terminals to a source of current, whereby illumination of the tube may be accomplished.

1,893,654. HYDRAULIC VARIABLE SPEED CONTROL. CHARLES H. ROBERTS, Phoenix, Ariz., assignor of one-half to Della Mae Morris, Los Angeles, Calif. Filed Jan. 15, 1930. Serial No. 420,997. 2 Claims. (Cl. 192—60.)



1. Hydraulic variable speed control including a drive shaft, a driven shaft, a rotary fluid-tight housing in which the driven shaft extends and is mounted coaxially, a chamber in said housing integral radially disposed cylinders detachably secured in and to said housing with chambers in their outer ends communicating with the chamber in said housing, pistons in said cylinders, eccentrics on the driven shaft, eccentric straps, piston rods connecting said straps and pistons, rotary valves for controlling the communication between the chamber of the housing and the chambers in the outer ends of the cylinders, a sleeve slidable on said driven shaft and having its inner end extending into the housing, external means for moving said sleeve, a crank on each valve and toggle bars pivotally mounted on said cylinders and connecting said cranks with said sleeve which open the valves when the sleeve is moved in one direction and close the same when it is moved in the opposite direction.

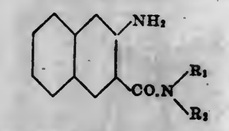
1,893,655. COMBINED MATCH HOLDER AND WINDSHIELD. LOUIS RUBINSTEIN, New York, N. Y. Filed Sept. 22, 1930. Serial No. 483,719. 4 Claims. (Cl. 206—29.)



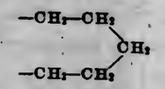
1. The combination with a match holder having front and rear walls, of a shield adapted to be collapsed over said front wall, said shield comprising a top portion connected to said front wall, a side wall connected to said top portion and a flap affixed between said front and rear walls and connected to said side wall, there being a fold line arranged medially of said side wall to permit folding of said wall over said front wall.

1,893,656. AMIDES OF 2.3-AMINO-NAPHTHOIC ACID AND A PROCESS OF PREPARING THEM. LUDWIG SANDER, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 1, 1929. Serial No. 375,333, and in Germany July 14, 1928. 12 Claims. (Cl. 260—124.)

7. As new products, the amides of the 2.3-amino-naphthoic acid of the following general formula:



wherein R_1 stands for hydrogen or alkyl, R_2 for hydrogen, aryl or aralkyl, or R_1 and R_2 for the residue



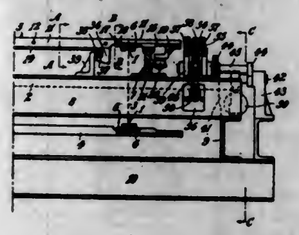
being yellow compounds soluble in organic solvents and in diluted mineral acids, insoluble in aqueous alkalies.

1,893,657. DEVICE FOR SIMULTANEOUSLY OPENING A PLURALITY OF VALVES. CARL SCHÄFER, Solingen-Weyer, Germany. Filed Dec. 16, 1931, Serial No. 581,357, and in Germany Dec. 18, 1930. 1 Claim. (Cl. 137—153.)



A device for simultaneously opening a plurality of valves comprising in combination with the valves, a plurality of diaphragms corresponding to the number of valves, a common compartment formed by said diaphragms, a spring-loaded diaphragm for regulating the pressure in said compartment, a ram on said diaphragm, and means in said compartment for closing said compartment adapted to be opened by said ram in the event of unforeseen yielding of said valve diaphragms enclosing said space.

1,893,658. APPARATUS FOR CUTTING FLAT GLASS. FRANK EDWIN SLOCOMBE, Kirk Sandall, England, assignor to Pilkington Brothers Limited, Liverpool, England. Filed June 7, 1932, Serial No. 615,847, and in Great Britain June 12, 1931. 19 Claims. (Cl. 49—48.)



1. In apparatus for cutting flat glass, the combination with a conveyor for the glass and a fence moving with the conveyor, of means whereby the fence may be moved into and out of operative position during the movement of the conveyor.

19. In apparatus for cutting flat glass, the combination with a slat conveyor for the glass of at least one cross fence carried by a conveyor slat in which it is adapted to slide in and out of operative position, means whereby the fence may be moved into operative position at the starting end of the conveyor, automatic means for restoring it to inoperative position just before it reaches the cutter, a fixed guide parallel with the conveyor at one side thereof, blocks adapted to be moved along said guide by the conveyor, side fence members carried by said blocks, a cam adapted to be moved by hand into a position in which it operates to raise the side fence members into operative position and a fixed cam adapted to lower them into inoperative position.

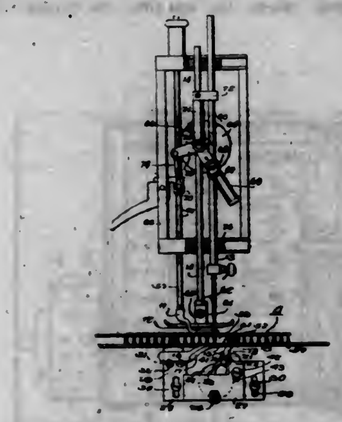
1,893,659. METAL AWNING. SAMUEL STACK, New York, N. Y. Filed May 14, 1932. Serial No. 611,871. 5 Claims. (Cl. 156—43.)



1. An improved rolling awning cover comprising a plurality of thin narrow slats arranged in overlapping relation, the under edges of the slats having openings therein, flexible strips passing beneath the slats and through said openings, and fastening means for binding the slats to the strips independent of the connection made through said openings.

1,893,660. TUFTING MECHANISM. HENRY J. SCHOMER, Oshkosh, Wis., assignor to Waite Carpet Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed Feb. 17, 1930. Serial No. 428,872. 19 Claims. (Cl. 112—79.)

1. In tufting mechanism of the class described, the combination of a reciprocating needle, a looper in coacting relation with the needle and provided with a cutting edge presented to the line of movement of loops formed around the looper, feeding means associated with the needle and adapted to feed the fabric forwardly to



carry loops onto the looper and along the cutting edge, and a reciprocating loop feeder adapted to force the loops along the looper after the recession of the needle.

1,893,661. PROPELLER AND CONTROL MEANS THEREFOR. THEODORE L. SMITH, Detroit, Mich., assignor to Caille Motor Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 14, 1930. Serial No. 428,261. 7 Claims. (Cl. 170—163.)



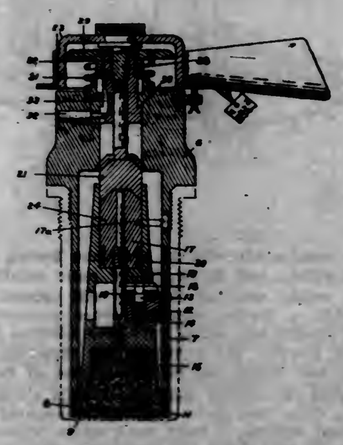
1. The combination with an out-board motor comprising a tubular post having a motor at its upper end and an under-water unit at its lower end, a propeller shaft journaled on said under-water unit, an adjustable pitch propeller on said shaft, a shaft connected to the motor at its upper end and geared to the propeller shaft at its lower end, and a steering handle, of an enclosure on said under-water unit in which said propeller shaft is journaled, a longitudinally shiftable link disposed alongside said post and connected with said handle at its upper end and entering said enclosure at its lower end, and an actuating connection disposed within said enclosure and connecting the lower end of said link with the propeller for adjusting the pitch of the propeller blades from said steering handle.

1,893,662. GEAR PUMP FOR OUTBOARD MOTORS AND THE LIKE. THEODORE L. SMITH, Detroit, Mich., assignor to Caille Motor Company, Detroit, Mich., a Corporation of Michigan. Filed July 8, 1931. Serial No. 548,554. 4 Claims. (Cl. 115—17.)



1. In an outboard motor, a hollow under water unit having a pointed closed end, the opposite end of said unit being open, a shaft journaled concentrically in said unit and projecting from the open end thereof, a propeller mounted on said shaft and having a hub closing the open end of said unit, a pump casing disposed in said unit adjacent its closed end and concentric with said shaft, means for securing said casing in position, a channel extending obliquely through said casing and having a circumferential channel at its upper end communicating with an outlet opening, an inlet opening extending through said under water unit and communicating with said oblique channel, and gears disposed transversely of said oblique channel for pumping water therethrough.

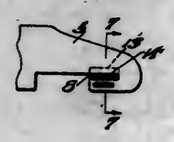
1,893,663. FUSE FOR BOMBS. DAVID L. WOODBERRY, Baltimore, Md., assignor to Secretary of War of the United States of America. Filed Sept. 20, 1926. Serial No. 136,659. 4 Claims. (Cl. 102—39.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A fuse including a body, a tiltable carrier in the body, a booster charge in the base portion thereof, a bolt movable transversely of the carrier, a primer detonator

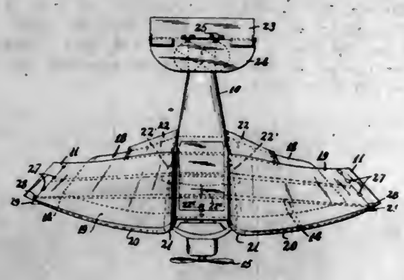
in the bolt, a striker having a cam face movably mounted in an open end of the carrier and engageable with the bolt to hold it in unarmed position, a spring for moving the striker to release the bolt, a release member having a cam seat movable axially of the body for holding the striker in place, means removable during flight for holding the release member and an axially movable impact plate for limiting outward movement of the release member and for moving said member inwardly on impact.

1,893,664. ANVIL BLADE FOR WIRE STITCHING MACHINES. RUDOLF E. ZERUNEITH, Camden, N. J. Filed Apr. 23, 1931. Serial No. 532,383. 1 Claim. (Cl. 1—13.1.)



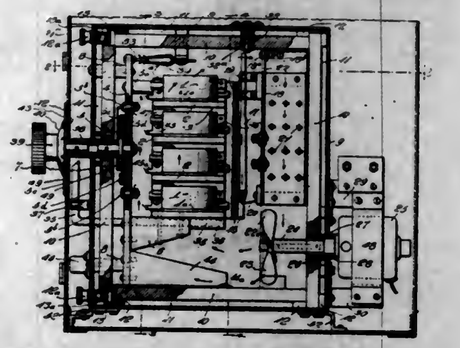
An anvil blade for a wire stitching machine comprising a body portion adapted to be secured to a machine, a front slotted stitch supporting portion adapted to engage the flaps of a container to be stitched, said stitch supporting portion being tapered and bevelled to facilitate insertion thereof between said flaps with said container in the closed condition, and a stitch deflecting recess therein.

1,893,665. AEROPLANE. GUSTAVE W. ELMWALL, New York, N. Y. Filed July 16, 1930, Serial No. 468,230. Renewed Apr. 22, 1932. 11 Claims. (Cl. 244—29.)



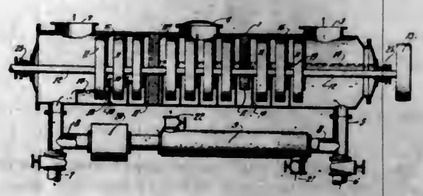
1. In combination with an aeroplane having ailerons, opposed pulleys and tackle, pilots' seats constituting a leveling weight attached between said opposed pulleys and tackle, a flexible member system connecting said opposed pulleys and tackle with said ailerons for automatically leveling the aeroplane by operation of said ailerons, and means for manual control of said leveling weights for manual operation of said ailerons, comprising a drum fixed upon a rotatively mounted member for manual control, a right hand string wound in one direction on said drum and connected with one end of the pilots' seats, and a left hand string wound in the other direction upon said drum and connected with the other end on said pilots' seats.

1,893,666. TEMPERATURE CONTROL SYSTEM FOR ELECTROMECHANICAL OSCILLATORS. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed May 20, 1930. Serial No. 454,169. 10 Claims. (Cl. 171—327.)



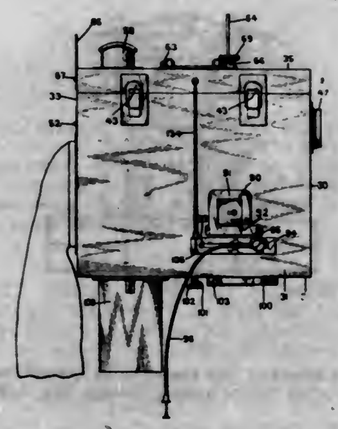
1. A frequency control apparatus comprising a multiplicity of electromechanical oscillators, means for supporting said oscillators comprising a metallic casting of high heat conductivity having a vertical web and a multiplicity of integrally related supporting shelves extending horizontally from sides of the web in opposed relation to each other and in vertically spaced planes, electromechanical oscillator carriers resting upon said shelves and removably secured thereon, means for circulating air of a constant temperature about the supporting means and carriers, and a selector switch connected with said electromechanical oscillators for rendering effective any one of the multiplicity of oscillators.

1,893,667. APPARATUS FOR TREATING HYDROCARBON AND OTHER GASES AND OILS. HOMER T. DARLINGTON, West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America, a Corporation of Delaware. Filed Apr. 25, 1927. Serial No. 186,459. 6 Claims. (Cl. 196—140.)



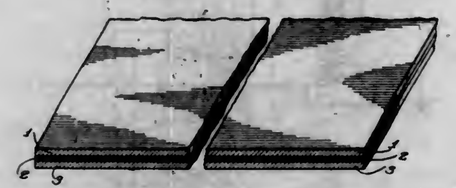
1. In a dephlegmator, a chamber provided with an inlet for condensible vapors and gases, and an outlet for incondensible gases, an inlet and an outlet for liquid, discs in the chamber between said inlets and outlets provided with surfaces forming passages extending in angular relation to the line of flow of the gases and adapted to permit the gases to pass and be relieved of mist, said passages being configured to afford an extended surface exposure for the interchange of heat, and means for rotating the discs.

1,893,668. CAMERA. OCTAVIANO DIAZ, Antofagasta, Chile. Filed Nov. 28, 1927, Serial No. 236,329, and in Chili Nov. 29, 1926. 18 Claims. (Cl. 95—18.)



1. In a camera, in combination, a plurality of groups of lenses, shutter means therefor, and means to selectively move a lens group into operative position in the camera.

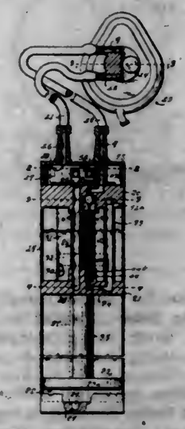
1,893,669. SHEET FOR SANITARY AND SURGICAL PURPOSES AND METHOD OF MAKING THE SAME. LEVI L. GILBERT, Muskegon, Mich. Filed June 19, 1929. Serial No. 372,109. 1 Claim. (Cl. 154—40.)



The method of making a sterilized composite paper sheet for sanitary and surgical purposes, which method comprises the placing of a thin layer of asphalt between a pair of paper sheets, then forcing said sheets and asphalt together in intimate relation in the presence of a temperature high enough to melt the asphalt and sustained to produce sterilization of the composite sheet.

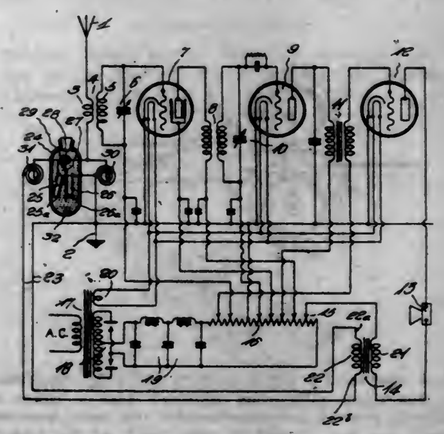
1,893,670. RESUSCITATOR AND THE LIKE. MONROE H. GOODNER, Glendale, Calif., assignor to C. N. Erickson, Glendale, Calif. Filed Oct. 20, 1928. Serial No. 313,973. 13 Claims. (Cl. 128—29.)

1. In apparatus of the class described, a mask, an inspiratory cylinder connected with said mask, an expiratory cylinder connected with said mask; each cylinder including a reciprocating piston each having an operating stroke and a retrograde stroke respectively, means controlled by the pressure in said mask for alternately operating said pistons, means for conveying gas under pressure to said inspiratory cylinder, and an auxiliary valve



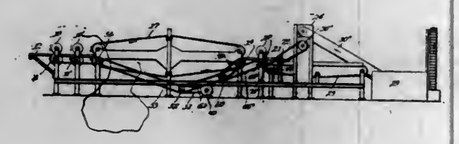
operable at the end of the maximum operating stroke of the piston of said inspiratory cylinder to connect said means for conveying gas with said mask.

1,893,671. VOLUME CONTROL SYSTEM. ERNEST R. HENTSCHEL, Washington, D. C.; John Olson, administrator of said Ernest R. Hentschel, deceased, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 9, 1930. Serial No. 474,208. 9 Claims. (Cl. 250—20.)



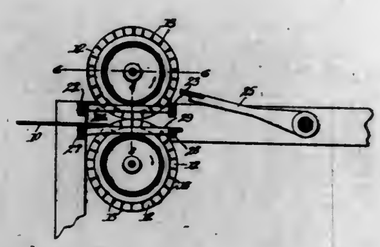
1. In a signal receiving system, a radio frequency energy pick-up circuit, a receiving circuit connected with said aforesaid circuit, a sound reproducer operated by said receiving circuit, an electroscopic device having terminals thereof connected in series in said radio frequency energy pick-up circuit, and a control circuit disposed in series with said sound reproducer and connected with said electroscopic device for impressing charges upon said electroscopic device for varying the effective capacity thereof and modifying the characteristics of said radio frequency energy pick-up circuit.

1,893,672. MACHINE FOR PRODUCING CANDY CONFECTION. LEE G. JAMES, HARRY E. JAMES and ENOCH R. JAMES, Atlantic City, N. J. Original application filed Dec. 2, 1929, Serial No. 411,086. Divided and this application filed Feb. 8, 1930. Serial No. 427,012. 12 Claims. (Cl. 107—4.)



12. In a machine for the manufacture of candy, a plurality of feeding rollers adapted to feed and reduce a relatively bulky batch into a thinned and elongated body, means for receiving the thinned and elongated body from the feeding rollers and for maintaining the same in thinned and elongated condition until it receives a set, said last-mentioned means comprising opposed walls forming a receiving channel therebetween, travelling belts overlying said walls for causing movement of the thinned elongated mass therebetween and through said channel from one end to the other, and a cutting instrumentality disposed at one end of said channel for receiving the set mass therefrom and dividing the same into individual pieces.

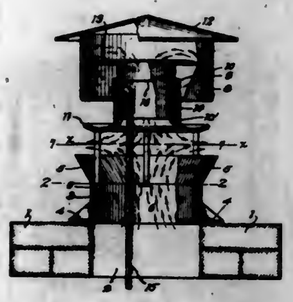
1,893,673. MACHINE FOR MANUFACTURING CONFECTIONS. LEE G. JAMES, HARRY E. JAMES and ENOCH R. JAMES, Atlantic City, N. J., assignors to James', Inc., Atlantic City, N. J., a Corporation of New Jersey. Filed July 22, 1931. Serial No. 552,474. 13 Claims. (Cl. 107—23.)



2. A machine for the manufacture of taffy comprising two superposed rolls, each provided with a series of peripheral pockets, a circumferential slot being provided in each roll and through opposite walls of the pockets thereof, a relatively stationary rod or bar extending through each of said slots, and means for rotating the rolls, for the purpose described.

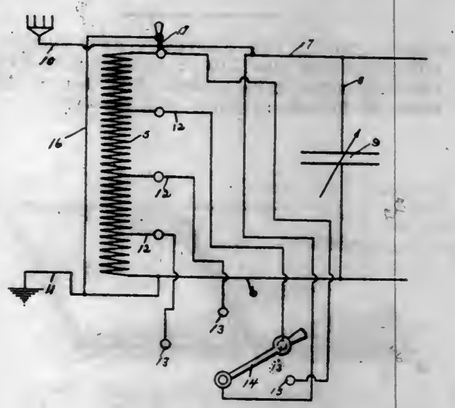
1,893,674. OIL BURNER. JAMES C. LYLE and RICHMOND W. MESSMORE, Daytona Beach, Fla. Filed Dec. 18, 1926. Serial No. 155,684. 7 Claims. (Cl. 158—663.)

1. An oil burner for furnaces and the like having a tubular air intake, and above the same a generator having an annular oil receptacle, and forming with said intake the upper and lower lips of an annular combustion aperture which extends around the burner, and means for causing the vaporized oil to pass outward against the



wall of the generator and thence down against the rising air, the mixture thence passing through said combustion aperture.

1,893,675. RADIO SYSTEM. GEORGE A. MAHONE, Baltimore, Md. Filed Feb. 16, 1926. Serial No. 88,517. 10 Claims. (Cl. 250—40.)

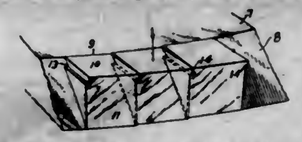


1. A radio inductance comprising a plurality of stationary sections in axial alignment end to end and connected at adjacent ends in series in mutually inductive relation and means for connecting certain of said sections in parallel in opposition to other of said sections.

1,893,676. TELEVISION SCANNING DISK. HARRY B. MARIS, Riverdale, Md. Filed Jan. 21, 1932. Serial No. 587,914. 2 Claims. (Cl. 178—6.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. In a device of the class described, a rotatable member having a peripheral face inclined with respect to the axis of rotation, a plurality of totally reflecting prisms disposed on said face, the reflecting face and the transmitting faces of each of said prisms being optically plane,

each of said prisms except two having a rabbet formed in one edge and an offset adapted to coact with the rabbet in an adjacent prism, the said rabbets and offsets having such angular relation to the faces of the prisms that each prism is tilted through a small angle with respect to adjacent prisms, the rabbets and offsets

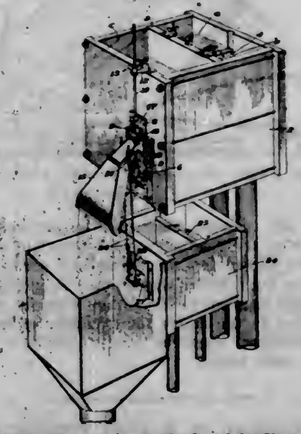


of the said excepted two prisms having such angular relations as to cause the said two prisms to have a reverse tilt substantially equal in magnitude to the sum of the angular tilts of all the other prisms, and means to cause a suitable beam of light to pass through said prisms seriatim as the said member is rotated.

1,893,677. PURIFICATION OF NITROCELLULOSE. FREDRICH OLSEN, Dover, N. J. Filed Mar. 1, 1929. Serial No. 343,833. 6 Claims. (Cl. 260—148.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. The process of preparing nitrocellulose comprising nitrating cellulose, removing the spent acid, drowning the nitrated cellulose in water, subjecting the cellulose nitrate to a short boil, washing the cellulose nitrate with a solution containing an organic amine in an amount slightly in excess of the unstable elements to be displaced, then gelatinizing the nitrated cellulose.

1,893,678. PAPER MAKING PROCESS AND MACHINE. ERNEST POIRIER, Waterville, Me., assignor of twenty-five one-hundredths to John W. Stoble, Waterville, Me. Filed Sept. 16, 1931. Serial No. 563,038. 25 Claims. (Cl. 92—46.)



1. That improvement in methods of feeding paper stock to a paper making wire which consists in causing variations in the shape of a stream of the stock flowing to the wire to effect such adjustments of the rate of delivery of stock to the wire as to maintain an approximately constant rate of delivery of solid constituents of the stock notwithstanding variations in its consistency.

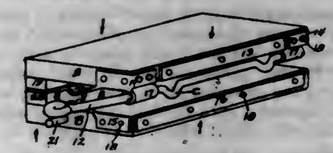
1,893,679. HAND AND ROTARY SANDER. JOHN P. QUINN, Sioux City, Iowa. Filed May 25, 1929. Serial No. 365,998. 12 Claims. (Cl. 51—187.)

1. In a sander, a pair of members each forming part of a peripheral surface to support a sanding sheet, said members being connected in such a manner as to be movable relative to each other, and being provided with opposed jaw portions adapted to engage between them the inturned ends of a sanding sheet, and means connecting said mem-



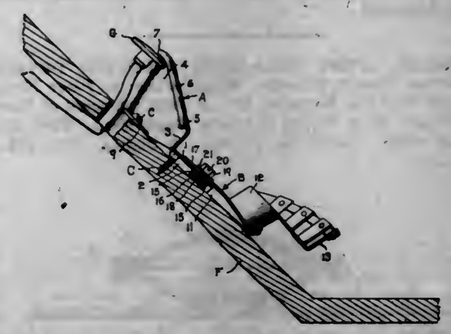
bers to move them so as to securely retain the said inturned ends between the said jaws, and at the same time while being so held, enlarge the said peripheral surface, to take up the slack in the sanding sheet.

1,893,680. SANDING BLOCK. JOHN P. QUINN, Sioux City, Iowa. Filed Mar. 25, 1930. Serial No. 438,712. 3 Claims. (Cl. 51—187.)



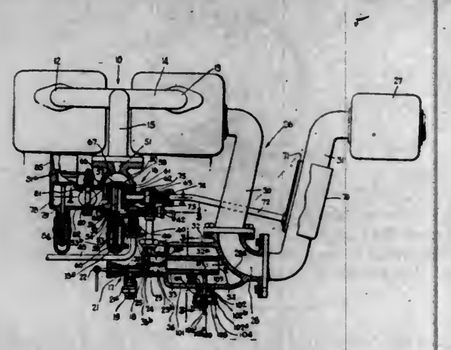
2. In a device of the character described, a pair of members together forming a complete peripheral surface to support a sheet, said members being connected substantially centrally of their peripheral surface by a spring element for combined rocking and expanding movement relative to each other, coacting jaws formed on adjacent portions of said members, and a cam acting between adjacent portions of said members, opposite said jaws, to move the members apart, said cam pivotally connected with one of the said members and in contact with the other, and means to actuate the said cam.

1,893,681. FOOT REST. HENRY H. RABBES, Washington, D. C. Filed Feb. 6, 1931. Serial No. 514,046. 4 Claims. (Cl. 74—81.)



1. In a foot rest for an accelerator pedal, the combination of a plate having a shank for attachment to the foot board of an automobile adjacent the pedal and provided with a bolt hole therein, an upstanding shoulder and an inclined shoulder projected forwardly at an angle of 45° from the first shoulder, and having an ear for attachment to the foot board; a second plate having a shank slidably mounted on the shank of the first plate and provided with a slot, a heel socket for a woman's shoe and a heel socket for a man's shoe; and a bolt passed through said bolt hole and said slot, and having a nut thereon, for clamping the two shanks together.

1,893,682. INTERNAL COMBUSTION ENGINE. CHARLES A. ROSSER, Bronx, N. Y. Filed May 24, 1929. Serial No. 365,704. 26 Claims. (Cl. 123—133.)



1. In combination with a motor having a fuel intake opening, a mixing chamber communicating therewith, means for feeding gasified hydrocarbon to said chamber, means for feeding preheated air to said chamber and means for feeding unheated air to said chamber, and separate valves assocated with each of said means adapted to open automatically upon reduction of pressure of said intake opening.

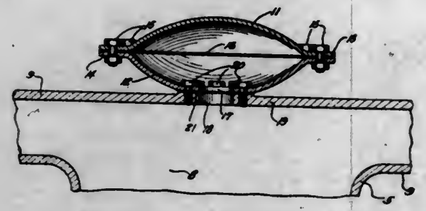
1,893,683. CORE OR MOLD BINDER, COATING OR PASTE. CHARLES MARSHALL SAEGER, Jr., Bowmanstown, Pa. Filed Feb. 17, 1930. Serial No. 429,224. 13 Claims. (Cl. 22—188.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A core binder, coating, or paste containing rubber and meta-toluylene-diamine.

1,893,684. CORE OR MOLD BINDER, COATING OR PASTE. CHARLES MARSHALL SAEGER, Jr., Bowmanstown, Pa. Filed Feb. 17, 1930. Serial No. 429,226. 13 Claims. (Cl. 22—188.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

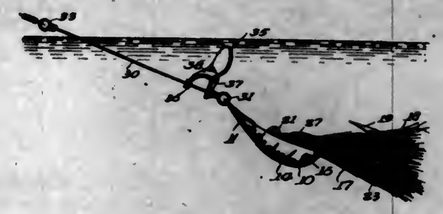
1. A core binder, coating, or paste containing rubber and benzidine.

1,893,685. PUMP PULSATION REDUCING DEVICE. PETER PIRSCH, Kenosha, Wis., assignor to Peter Pirsch and Sons Co., Kenosha, Wis., a Firm composed of Peter Pirsch, W. R. Pirsch and Celia Pirsch Even. Filed July 28, 1930. Serial No. 471,354. 3 Claims. (Cl. 103—223.)



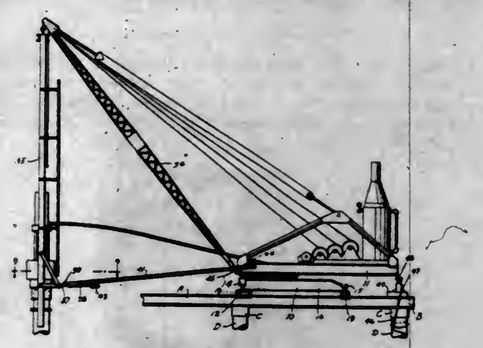
1. The combination, with a pump, of an entirely flexible, hollow, air containing metallic body connected thereto and having an opening in communication with the pump chamber to absorb pump pulsations, the interior of said body being unobstructed.

1,893,686. ARTIFICIAL FISH LURE. CHARLES P. SCHILPP, Cleveland Heights, Ohio. Filed Aug. 28, 1931. Serial No. 559,828. 7 Claims. (Cl. 43—42.)



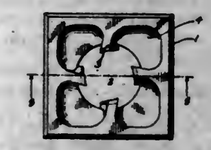
1. An artificial lure comprising a body, a hook rigidly secured to said body and extending rearwardly therefrom, a member composed of flexible fibers extending rearwardly from the body and along the hook, a longitudinally extending strip of metal having an opening in the rear end thereof and extending over the shank of the hook for spreading groups of the fibers so they will project laterally at the sides of the hook, and a screw for removably securing the strip to the body, the shank of the hook extending through the opening in the strip to hold the strip against lateral displacement.

1,893,687. PILE DRIVING MACHINE. LESTON WATSON, Fort Worth, Tex. Filed June 4, 1931. Serial No. 542,057. 5 Claims. (Cl. 61—74.)



1. In a pile driving machine, longitudinal flanged supports having their adjacent ends overlapping, a base frame, rollers supporting the frame and arranged to engage either or both of the overlapping supports so as to ride from one support to the other support, hold-down devices carried by the frame for engaging either or both of the overlapping supports, and a platform rotatably mounted on said frame.

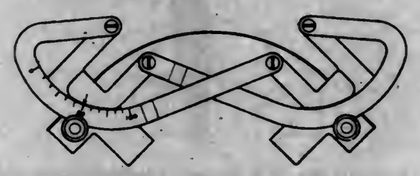
1,893,688. METHOD OF MAKING THREAD CUTTING DIES. FRANK O. WELLS, Greenfield, Mass. Filed Oct. 23, 1929. Serial No. 401,708. 3 Claims. (Cl. 76—101.)



1. The method of making a one-piece thread cutting die which is characterized by forging a die blank from a block of metal of a thickness equal to the finished die

and to produce as the immediate result of the forging operation a die blank having a plurality of lands temporarily connected by a thin web of metal, removing the said web between the ends of the lands while the blank is still soft, twisting the lands into spiral form, and forming threads on the lands.

1,893,689. ADJUSTABLE CURVE RULER. WILLIAM S. WESTON, Dallas, Tex. Filed Jan. 13, 1930. Serial No. 420,474. 7 Claims. (Cl. 33—177.)



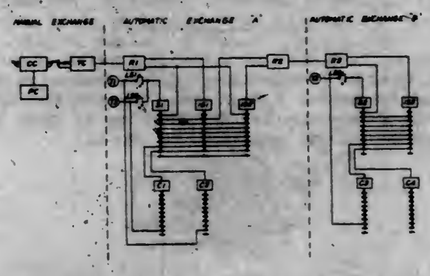
4. An instrument of the class described comprising end frames, a flexible arc member immovably secured to said end frames, and link connections of constant length between the frames respectively connecting and holding a point outside and adjacent each end of the arc member at a constant distance from a point inside and adjacent the opposite end thereof, said points at each end being in fixed relation to each other and the adjacent end of the arc member.

1,893,690. ADJUSTABLE CURVED RULER. WILLIAM S. WESTON, Dallas, Tex. Filed July 28, 1930. Serial No. 471,124. 13 Claims. (Cl. 33—177.)



6. An adjustable curve ruler including a flexible ruling edge member and means for controlling the flexing thereof, all formed in one piece from a single blank of material substantially as described.

1,893,691. MULTIOFFICE TELEPHONE SYSTEM. JOHN WICKS, Oak Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 29, 1931. Serial No. 540,992. 22 Claims. (Cl. 179—27.)



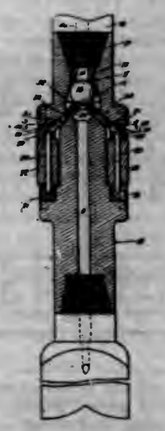
1. The method of extending a connection to a called station and of supervising the connection thereto which comprises the transmission and receiving of alternating current impulses of the same frequency but of different predetermined duration and translating said impulses into corresponding switching movements and supervisory functions.

1,893,692. COIN AND SLUG SEGREGATING APPARATUS. ARTHUR M. WILLIAMS, Dearborn, Mich. Filed June 24, 1930. Serial No. 463,502. 8 Claims. (Cl. 194—103.)



1. A device of the character described comprising a compartment opening to the exterior of the device, a compartment opening into a coin operated machine, a pivotally mounted chute adapted to receive coins and to discharge said coins into one of said compartments, and a magnet for counter-balancing said chute against the weight of a coin therein.

1,893,693. ROTARY UNDERREAMER. MILLIO FRANK ALOI, Huntington Park, Calif., assignor to John Grant, Los Angeles, Calif. Filed Jan. 24, 1931. Serial No. 510,998. 2 Claims. (Cl. 255—76.)

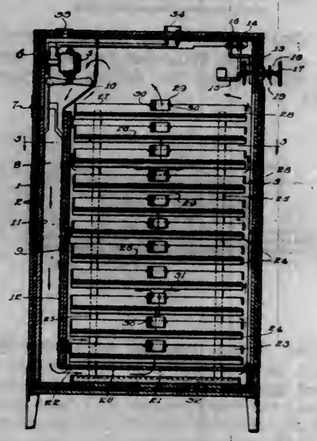


2. In an expansive reamer, a body having a fluid circulation passage therein, cutters mounted in the exterior parts of the body and constrained to lateral movement with reference thereto, push rods engaging the cutters and extending diagonally upwardly and inwardly into the body, and a vertically movable member in the body, engaging the upper inner ends of the rods, and movable downwardly under action of fluid pressure in the fluid passage.

1,893,694. INCUBATOR. JOHN C. BOHMKER, Kankakee, Ill. Filed May 11, 1931. Serial No. 536,413. 3 Claims. (Cl. 119—37.)

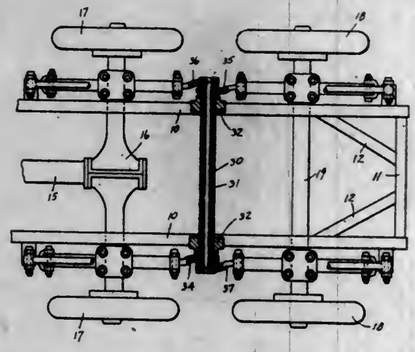
1. An incubator comprising a cabinet, a plurality of egg supporting trays in said cabinet, and spaced apart, one above the other, each of said trays being provided

with an open work bottom, and a central air conduit in position to hold eggs away from the center of the tray and to provide a central passageway for air through-



out the trays, each of said conduits being spaced away from the bottom of its respective tray and supported by means extending therefrom to the side walls of the tray.

1,893,695. EQUALIZING CHASSIS. JESSE W. CHENOWETH, Lebanon, Ind., assignor of one-half to Earl M. Hicks, Lebanon, Ind. Filed Mar. 14, 1930. Serial No. 435,770. 6 Claims. (Cl. 280—104.)



1. An equalizing chassis construction including a tandem arranged pair of paired wheels, an axle for each pair of wheels, a spring supporting each axle near each wheel, means supporting each spring at the remote end, and a pair of coaxial means connecting the inner ends of diagonal opposite springs for equalization purposes.

1,893,696. PROCESS OF MANUFACTURING PORTLAND CEMENT. JAMES H. COLTON, Berkeley, Calif., assignor to Pacific Portland Cement Company, Consolidated, a Corporation of California. Original application filed Feb. 4, 1926, Serial No. 86,097, now Patent No. 1,791,800. Divided and this application filed May 20, 1929. Serial No. 364,707. 5 Claims. (Cl. 222—3.)

1. A process of the class described comprising burning a cement mix containing alumina, lime and silica to a clinker, and recalcining the product.

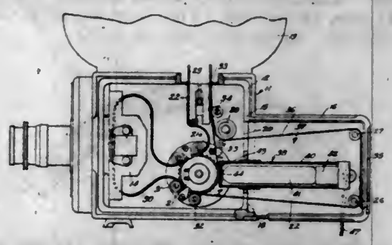
5. As an article of manufacture, a Portland cement capable of setting to give high early compressive strength, produced by burning a raw Portland cement mix including alumina, lime and silica to a clinker, grinding the clinker, and recalcining the same to again clinker the material.

1,893,697. METATARSAL ARCH SUPPORT. JACK J. CORAN, St. Louis, Mo. Filed July 20, 1931. Serial No. 551,833. 4 Claims. (Cl. 36—71.)



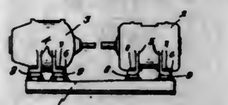
1. A metatarsal arch support comprising a mounting frame set into the insole of a shoe and extending longitudinally thereof, a slide rod extending lengthwise of said frame and a pad having a projection mounted loosely on said slide rod.

1,893,698. METHOD AND APPARATUS FOR PLACING SOUND RECORDS IN COLOR PHOTOGRAPHY. WILLIAM T. CRESPINEL, Los Angeles, Calif., assignor to Multicolor, Ltd., Los Angeles, Calif., a Corporation of California. Filed July 28, 1930. Serial No. 471,370. 11 Claims. (Cl. 88—16.2.)



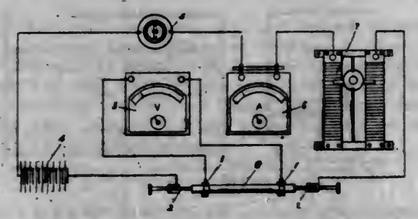
1. A method of recording sound in conjunction with obtaining exposed negative color films, including: conducting a pair of color films in contact through a prescribed path; impressing color images from a scene on said films of sufficiently reduced width to leave an unexposed strip on the edge of each film; separating the films; recording sound accompanying said scene on the unexposed edge of one of said films while said films are separated; developing said films so as to leave a sound strip on the edge of one of said films and a transparent strip on the edge of the other of said films; and forming superposed positives from said films with said strips in registry.

1,893,699. METHOD OF MOUNTING UNITS. SAMUEL G. DUNNING, Cleveland Heights, Ohio, assignor to The Reliance Electric & Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 26, 1930. Serial No. 477,823. 4 Claims. (Cl. 29—84.)



1. The method of making a supporting bed for a machine comprising providing a suitable metallic base, placing a desired machine on said base with metallic blocks under its legs, providing bolts extending through said legs, in threaded engagement with said blocks and abutting said base, rotating said bolts to space said blocks from said base sufficiently to properly position said machine, and fill welding said blocks to said base.

1,893,700. METHOD OF DETERMINING THE CONTENTS OF A FOREIGN SUBSTANCE. BROR DAVID ENLUND, Degerfors, Sweden, assignor to Henning Enlund, Binghamton, N. Y. Filed Mar. 5, 1929. Serial No. 344,361. 3 Claims. (Cl. 175—183.)



1. The method of determining the percentage of a foreign substance in iron and steel, comprising the steps of measuring, in the absence of any chemical reaction within the material, the electric resistance of a test piece of the material to be tested and comparing such measurement with a prepared chart of known factors.

1,893,701. TOY GUN. MAX GARRELL, Chicago, Ill. Filed May 25, 1931. Serial No. 539,829. 17 Claims. (Cl. 46—46.)



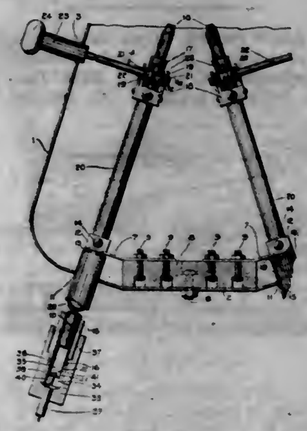
1. A pneumatic gun of the character described, comprising in combination a housing, a carrier having an aperture therein and secured to and spaced from one end of said housing, a cylinder slidably mounted within the housing, a piston arranged for reciprocating movements in the cylinder, material engaging means carried by the cylinder, a fracturable material strip extending between the housing and the carrier in the path of the material engaging means, said material engaging means being movable into engagement with the material strip to feed the same when the cylinder is moved in one direction upon the movement of the piston and free of said material strip in the other direction of cylinder travel upon the reverse movement of the piston.

1,893,702. GARMENT HANGER SUPPORT. EDWARD R. GLENN, Philadelphia, Pa. Filed Feb. 27, 1929. Serial No. 343,009. 2 Claims. (Cl. 248—30.)



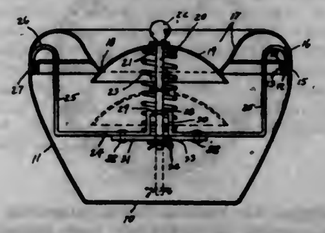
1. In a device of the character stated, a hinged, sectional, rigid collar adapted to be secured to a vertical support, means on the inner surface of said collar for preventing rotation thereof with respect to said support, means for diametrically adjusting said collar, a lug carried by said collar and having an aperture therein, and an arm detachably engaging said aperture, there being a groove in said lug adapted to engage said arm normally to prevent the rotation thereof with respect to said collar.

1,893,703. THERAPEUTIC ARC LAMP. OLE HISNER, Cleveland, Ohio. Filed Dec. 26, 1929. Serial No. 416,425. 3 Claims. (Cl. 176—65.)



1. In a therapeutic arc lamp, a pair of elongated metallic tubes forming holders, each for an elongated electrode telescoped therein and projected by their ends convergingly therefrom, an insulating plate disposed intermediate said tubes, and a pair of inherently resilient sheet metal strips each rigidly secured by an end to and extending from said plate, means for fixedly mounting each of said tubes in relative converging relation on a free end of each of said strips, the strips being adapted to bend generally in the direction of the axis of the tubes respectively, a hood having an open end enclosing said plate, said strips and the converging ends of said electrodes supported by said plate, said hood apertured to permit rearward projection of diverging ends of said tubes, insulating means surrounding the outwardly projected ends of said tubes exteriorly of the hood, said outwardly projected ends adapted for manual engagement for effecting momentary deflection of at least one of said tubes whereby an arc may be struck between the converging ends of said electrodes from without the hood.

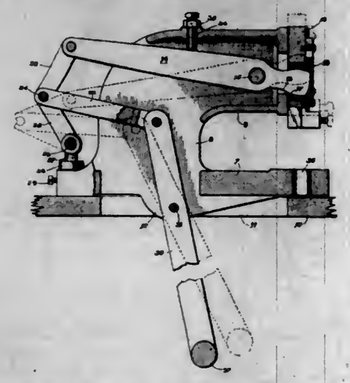
1,893,704. ASH RECEIVER. SAMUEL W. HYATT, Connersville, Ind., assignor, by mesne assignments, to The Corcoran-Brown Lamp Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 24, 1930. Serial No. 422,982. 3 Claims. (Cl. 131—51.)



1. An ash receiver including a bowl having a top supporting seat adjacent its upper edge, a top seatable upon said bowl seat and including an inwardly directed de-

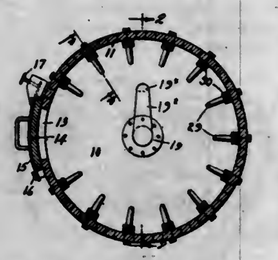
pressed portion with a central aperture, a dished closure having a greater projected outline than the aperture outline and normally extending partially through the aperture for closing the same, a closure supporting construction solely supported by the top and including a centrally positioned closure supporting portion and a plurality of upwardly directed arms each terminating in a downwardly directed end, said top having a flange providing an inturned groove forming portion for receiving and seating the ends, and means connected to the closure supporting construction and closure for operating the closure.

1,893,705. FOOT PRESS. JOHN JENSEN, Rockford, Ill., assignor to Whitney Metal Tool Company, Rockford, Ill., a Corporation of Illinois. Filed June 29, 1931. Serial No. 547,586. 1 Claim. (Cl. 164—19.)



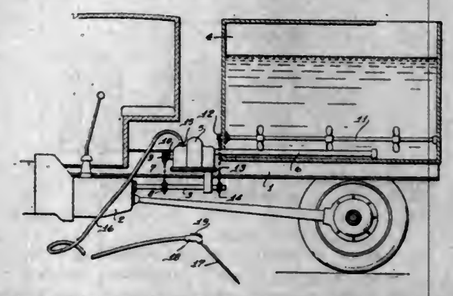
A tool of the character set forth, comprising, in combination, a frame having a horizontally disposed arm, a tool slide mounted for up and down movement at the forward end of said arm, a lever operatively engaging said slide and disposed approximately at right angles to the path of movement thereof, said lever having a fulcrum adjacent the end engaging said slide, a toggle linkage having one end connected to the remaining end of said lever and the other end adjustably supported in said frame, a substantially vertical lever fulcrumed on said frame and having a link connection with the intermediate pivot of said toggle linkage to actuate said first mentioned lever, and an adjustable stop positioned to be engaged by said first mentioned lever to limit the downward movement of said tool slide.

1,893,706. METHOD AND APPARATUS FOR TANNING LEATHER. CHARLES KANNEL, Endicott, N. Y. Filed Apr. 17, 1930. Serial No. 444,940. 6 Claims. (Cl. 149—11.)



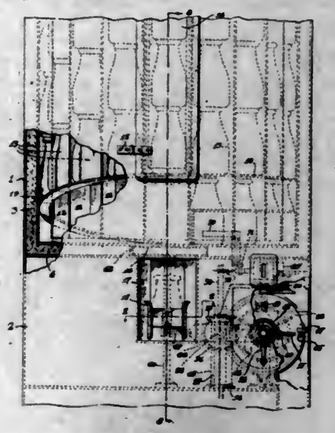
5. Apparatus for tanning hides comprising a drum, means for rotatably mounting said drum including a hollow axle, evacuating means for withdrawing gases from said drum connected to the outer end of said hollow axle, and an upwardly extending hollow arm connected to the inner end of said axle, through which said gases are withdrawn, means for rotating said drum and means inside of said drum for lifting the hides therein, said last named means comprising a plurality of inwardly projecting pin members more than six inches long mounted on shelves, said shelves being directly attached to said drum.

1,893,707. TREE FERTILIZER. GEORGE C. KARSHNER, Detroit, Mich. Filed June 27, 1932. Serial No. 619,412. 1 Claim. (Cl. 47—48.)



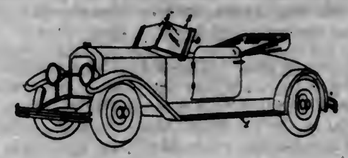
A machine for fertilizing trees comprising a reservoir adapted to receive water and fertilizer, a pump having inlet and outlet ports, a pipe connected to the inlet port and extending into said reservoir, an agitator rotatably mounted in said reservoir, adjacent said intake pipe, a drive shaft adapted to be connected to a power source for rotating the same, driving connections between said shaft and said pump and agitator whereby said pump and agitator are driven synchronously by said shaft, a hose connected to the outlet of said pump, and a nozzle mounted on said hose and having an elongated slender portion adapted for insertion in the ground to reach a depth adjacent the roots of a tree.

1,893,708. DISPENSING APPARATUS. IRVIN H. KAUFFMAN, Detroit, and ARTHUR M. WILLIAMS, Dearborn, Mich. Filed June 28, 1928. Serial No. 288,917. 1 Claim. (Cl. 312—36.)



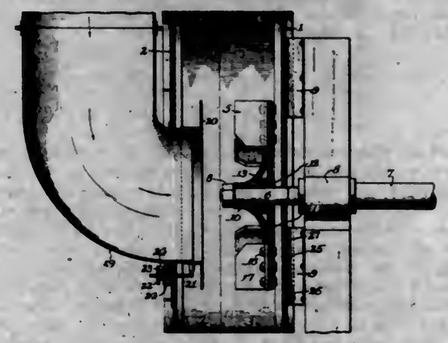
A dispensing apparatus comprising a cylindrical body having a floor, a cylindrical drum rotatably mounted therein, fins extending from said drum towards the wall of said body, a trap door in said floor at the edge thereof, and a spiral track along the inner wall of said body, extending from a point directly above said trap door to said floor, and a deflecting member projecting inwardly from said body at the lower end of said track and positioned to guide articles from said track to said trap door.

1,893,709. WINDSHIELD. RAYMOND G. F. LOEWY, New York, N. Y. Filed Mar. 11, 1931. Serial No. 521,745. 10 Claims. (Cl. 296—84.)



4. A windshield comprising a pair of spaced supports pivoted to swing from upright to prostrate position, a pair of transparent plates, each mounted on one support to swing with and move transversely of its support, the plates extending toward each other and having their adjacent edges pivoted together with the axis of the pivot lying in an upright plane.

1,893,710. FLUID IMPELLER. HENRY G. LYKKEN, Minneapolis, Minn. Filed June 12, 1929. Serial No. 370,174. 9 Claims. (Cl. 302—37.)



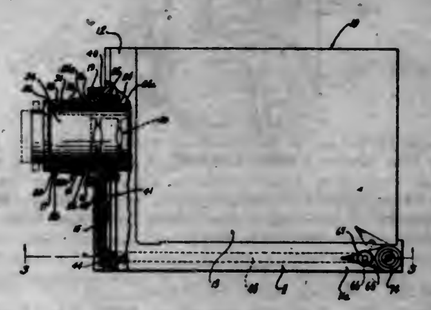
1. A fluid impelling device comprising a housing having a receiving space for the material to be impelled, means for delivering a material laden fluid body to said receiving space, means located outside of said receiving space for creating a vorticose movement of said material laden fluid body as it enters said space, and means for varying the volume of said receiving space so as to control the extent of vorticose movement.

1,893,711. METHOD OF MAKING VALVE CASINGS. SETH G. MALBY, Tenafly, N. J., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 27, 1931. Serial. No. 533,127. 9 Claims. (Cl. 29—157.1.)



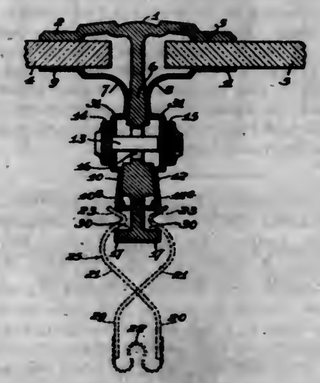
1. A method of producing a tubular member, which comprises extruding a slug to form a flanged tubular member, the flange consisting of unextruded material, enlarging the bore through a portion of said member, and then extruding the flange so as to reduce the diameter of the bore therethrough.

1,893,712. CAMERA FOCUSING MECHANISM. GEORGE A. MITCHELL, West Hollywood, Calif., assignor to Mitchell Camera Corporation, West Hollywood, Calif., a Corporation of Delaware. Filed June 9, 1931. Serial No. 543,108. 16 Claims. (Cl. 95—45.)



1. In combination with an optical instrument having a body and a lens carrier mounted therein movably for focusing, lens focusing means, and indicator means connected to the focusing means and embodying a calibrated rotatable spiral, and a longitudinally moving indicator member engaging the spiral to be moved thereby.

1,893,713. PLATE GLASS HOLDING BAR. DANIEL J. MURNANE, Burbank, Calif., assignor to Non Pressure Glazing Company, Burbank, Calif., a Corporation of California. Filed July 16, 1930. Serial No. 468,295. 7 Claims. (Cl. 189—78.)



1. A plate-glass holder comprising an outer clamp having lateral flanges for engaging the outer faces of adjacent plates of glass and having a central wedge-shaped segment provided with slots for receiving retaining members and adapted to extend inwardly between the edges of such plates, a pair of angular inner clamps each having a laterally-extending leg for engaging the inner face of one of such plates and an inwardly-extending leg resting upon a face of said segment, and retaining members extending through said inwardly-extending legs and through said slots for clamping said inwardly-extending legs upon said segment.

1,893,714. ARTIFICIAL BODY MEMBER. ARTHUR H. OWEN, Moberly, Mo. Filed July 17, 1931. Serial No. 551,512. 4 Claims. (Cl. 3—12.)

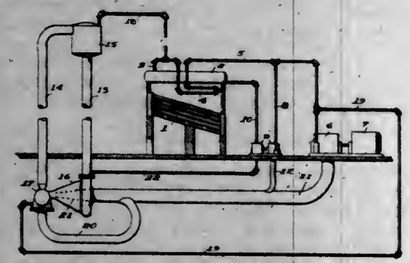
1. An artificial hand comprising a base portion having integral finger elements, a flexible palm portion shaped to

receive the stub palm of a user, said palm portion being connected to the base portion to form an extension there-



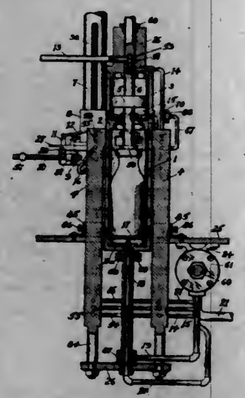
of, an adjustable tension member, said member being connected at one end to said base portion and at its opposite end to said palm portion.

1,893,715. STEAM RECUPERATOR. JOHN M. ROBB, Peoria, Ill. Filed Feb. 10, 1927. Serial No. 167,123. 3 Claims. (Cl. 16—92.)



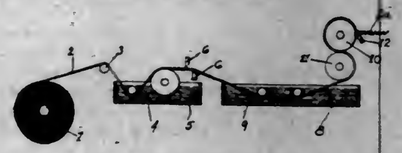
1. In a steam recuperator the combination of a pair of columns, a separator to which both columns are connected, a boiler, means for utilizing the pressure developed by the boiler, a steam line from the boiler to the separator, a Venturi tube between the columns, a circulating pump in the recuperator, and an exhaust steam conduit from the means for utilizing pressure developed by the boiler and terminating in a discharge nozzle associated with the Venturi tube.

1,893,716. FILLING, VACUUMIZING, STERILIZING, AND SEALING MACHINE. DAVID B. RONZONE, Brooklyn, N. Y., assignor to Vacuum Packing Corporation, Salem, N. J., a Corporation of Delaware. Filed Jan. 13, 1930. Serial No. 420,305. 15 Claims. (Cl. 226—68.)



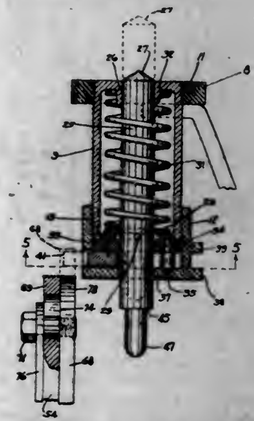
1. A machine of the character described having in combination, a fixed container support, means for forming an airtight casing enclosing said support and a container to be filled, means for creating a vacuum in said casing, means for sterilizing said container while enclosed by said casing, and means for filling and sealing said container while enclosing it by said casing and maintaining said vacuum, and actuating elements for causing successive operation of said means.

1,893,717. CREPING WEBS OF PAPER AND THE LIKE. WILLIAM WALLACE ROWE, Cincinnati, Ohio, assignor to The Paper Service Company, Lockland, Ohio, a Corporation of Ohio. Filed Dec. 31, 1930. Serial No. 505,881. 9 Claims. (Cl. 92—69.)



1. A creping process comprising coating a web with a thermo-plastic adhesive substance, moistening said web, binding it to a creping roll by means of said adhesive substance and creping it by removing it from said roll with a creping knife.

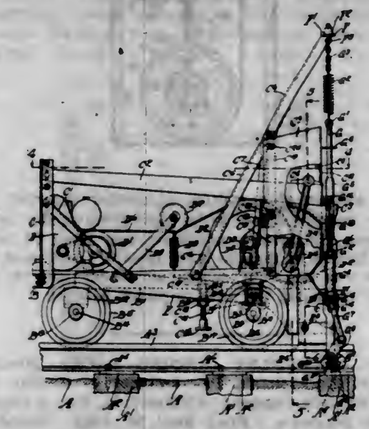
1,893,718. ANTISKID DEVICE. HENRY M. STETTNER, St. Paul, Minn. Filed June 6, 1931. Serial No. 542,578. 5 Claims. (Cl. 301—47.)



1. In an anti-skid device, a support adapted to be secured to a wheel, a cylinder secured to said support and having a wall at one end provided with an aperture, a head demountably secured to the opposite end of said cylinder, a plate mounted in said head and adapted to be seated against the end of the cylinder, means for spacing said plate from the end wall of said head to provide a chamber between said plate and said end wall, a stud mounted in said cylinder and having one end portion projecting through the aperture provided in the end wall of the cylinder and having its opposite end projecting through alined apertures in said plate and the end wall of said head, a spring actuated dog pivotally mounted in said chamber and having an end portion adapted to lockingly engage said stud to secure the latter in operative position, and means for moving said dog out of locking engagement with said stud to permit the latter to return to inoperative position.

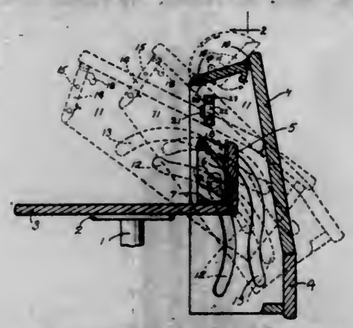
1,893,719. SPIKE PULLER. HENRY H. TALBOTS, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 9, 1930. Serial No. 466,737. 16 Claims. (Cl. 254—18.)

1. In a movable spike pulling machine, a vehicle truck frame, axles and wheels supporting said frame, a spike pulling assembly positioned upon said frame, a support therefor movable with respect to the running gear of said frame, cushioning elements adapted normally to hold said support in one position and adapted to yield under pressure to permit movement of said support into another position, a road surface contacting member carried by said support adapted when the support yields under pressure to contact the road surface, said spike pulling assembly including a lever and means for moving the same up and down, a nail engaging tongs adapted to be moved into engaging contact with a nail and to be moved into contact with said lever, whereby said tongs is raised, a



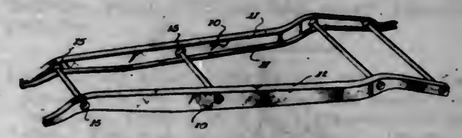
spring support for said tongs adapted normally to hold the tongs in a raised position, the tongs including a main member carrying a part adapted to engage said lever and carrying a second part movable with relation thereto, a spring adapted to hold the parts in one position, and a handle whereby the parts may be moved against the opposition of the spring into another position, one of said parts carrying a fixed spike engaging member and a movable spike engaging member, a link connecting said movable spike engaging member to the other of said parts, whereby relative movement of the two main parts is effective to move the spike engaging jaws toward and from each other.

1,893,720. COMBINED TYPEWRITER STAND AND DESK. MILFORD T. VANDERVOORT, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed May 14, 1931. Serial No. 537,264. 2 Claims. (Cl. 45—68.1.)



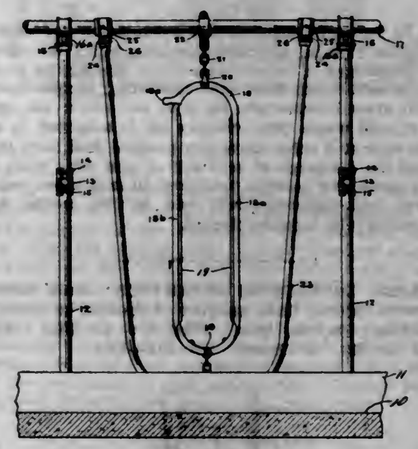
1. In a structure of the character described, a stand having a pair of laterally projecting spaced rollers on opposite sides thereof, a desk top forming a cover for said stand and having oppositely disposed depending sides each provided with a pair of grooved trackways in which said rollers are adapted to travel, each pair of trackways being so formed that said top is movably tiltable on said rollers upwardly and rearwardly.

1,893,721. AUTOMOBILE FRAME. NILS ERIK WAHLMO, Kenosha, Wis., assignor to The Nash Motors Company, Kenosha, Wis., a Corporation of Maryland. Filed Aug. 31, 1928. Serial No. 303,155. 6 Claims. (Cl. 280—106.)



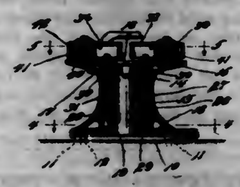
1. An automobile frame including pressed steel flanged side frame members and tubular cross members, said side frame members being initially formed with open ended inwardly extending nipples pressed directly from said frame members having their side walls flared outwardly toward and adjacent the upper and lower flanges thereof and having the open end of said nipples welded directly to the adjacent ends of the tubular cross members.

1,893,722. STANCHION ANCHOR STRUCTURE. PAUL G. A. WEISS, Lester Prairie, Minn. Filed Feb. 16, 1931. Serial No. 515,916. 9 Claims. (Cl. 119—147.)



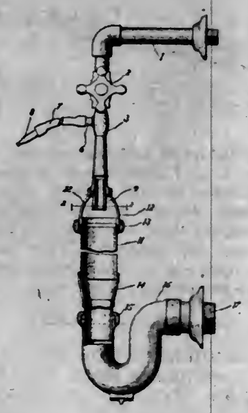
1. A stanchion structure having in combination, a top rail, a stanchion comprising relatively movable side portions adapted to embrace the neck of an animal supported from said top rail, and a member having ends secured to said top rail extending downward at each side of said stanchion and beneath the same, and an articulated means connecting the lower end of said stanchion with said member.

1,893,723. WINCH. WALTER CROMWELL WOOD, Providence, R. I. Filed Apr. 9, 1931. Serial No. 528,759. 16 Claims. (Cl. 254—164.)



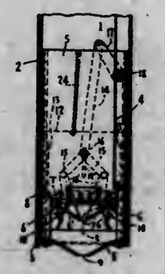
1. A winch comprising relatively stationary and rotary members, means for relatively moving said members, and securing means mounted on one end of the relatively stationary member and through a portion of which the axis of rotation of said members passes.

1,893,724. ASPIRATOR. ROY H. ZINKIL, Chicago, and LOUIS B. STINE, Niles Center, Ill., assignors to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed July 14, 1930. Serial No. 467,709. 2 Claims. (Cl. 103—262.)



1. In an aspirator, a suction tube, means for creating a suction therein, a waste tube into which the suction tube discharges, a connecting member joining the suction tube to said waste tube, said connecting member having spaced arms intermediate its ends and above the upper end of said waste tube whereby air is admitted to said waste tube at a point above any possible fluid level therein and the discharge of said end of said tube being disposed above any possible fluid level in said waste tube to prevent back-siphonage into said suction means when said waste tube becomes clogged.

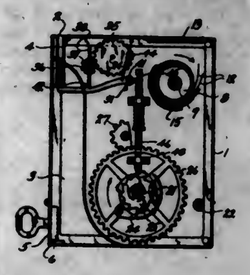
1,893,725. DISPENSING APPARATUS. ADAM BOOMERSHINE, Dayton, Ohio, assignor of one-half to Grant W. Nicholas, Dayton, Ohio. Filed Jan. 23, 1931. Serial No. 510,694. 9 Claims. (Cl. 312—51.)



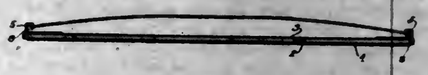
1. In a dispensing apparatus for stacked paper articles such as towels, folded and stacked such that a fold of the lowermost article will depend from the stack, of devices for ejecting said depending flap through a discharge opening consisting of means upon the initial movement of said devices for positively grasping said depending flap and means for thereafter bodily moving said grasping means with the flap in a direction only toward the discharge opening so as to project the flap therethrough.

1,893,726. TOY SAVINGS BANK. OSCAR H. BRASIER, Tacoma, Wash. Filed Nov. 12, 1929. Serial No. 406,579. 5 Claims. (Cl. 194—28.)

1. The combination with a housing having a coin delivery chute, of a spring motor mechanism within the housing having a main drive shaft with mechanism operatively connected thereto and adapted to be driven thereby, a yieldably supported lever normally engaging the mechanism to retain it inactive; said lever being disposed in position to be engaged and initially moved by a coin delivery into the chute to thereby release the motor for operation, a cam on the drive shaft having a gradual rise and an abrupt drop, a member separate from the lever and arranged to be moved outwardly by the cam to give the lever a secondary movement to release the coin therefrom then to move inwardly over said drop to release the lever for return movement and yieldable means for returning the lever to initial position.

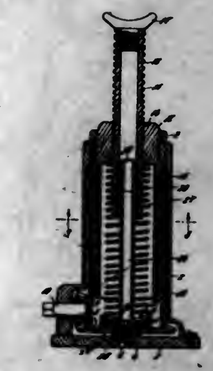


1,893,727. PAMPHLET BINDING BACK. HUGH G. BUCHAN, Philadelphia, Pa., assignor to Buchan Telephone Records Company, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 18, 1931. Serial No. 575,721. 2 Claims. (Cl. 129—38.)



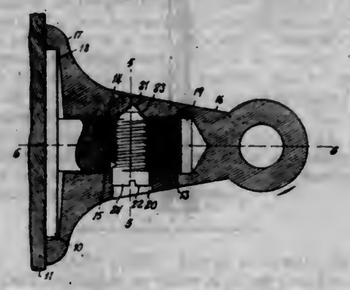
2. In a pamphlet holding binder, a back member, channel shaped keepers, one upon each end of said back member, said keepers having depending lips with spaced notches, and a flexible wire rod engaging a pair of alined notches, said flexible wire rod having enlarged ends adapted for engaging said keepers and preventing removal thereof by upward flexure.

1,893,728. JACK. FRED J. BULLIS, Chicago, Ill., assignor to Auto Specialties Manufacturing Company, San Francisco, Calif., a Corporation of California. Filed June 12, 1926. Serial No. 115,603. 19 Claims. (Cl. 254—102.)



1. A device of the class described comprising a housing, a cylindrical threaded member rotatably mounted therein, means for rotating the same, an outer screw having its threads engaging the threads of said cylindrical member, an inner screw threaded in the outer screw, means for holding the inner screw against turning about its axis without interfering with the rectilinear movement thereof, said means including a telescopic key having connection with the inner screw, cooperating means mounted on the frame and tending to prevent rotary movement of the key in one direction, and yieldable means for holding the co-operating means in operative position.

1,893,729. FIXTURE SUPPORT. REGINALD L. CALL, Meriden, Conn., assignor to The Charles Parker Company, Meriden, Conn., a Corporation. Filed Sept. 10, 1932. Serial No. 632,487. 2 Claims. (Cl. 248—20.)



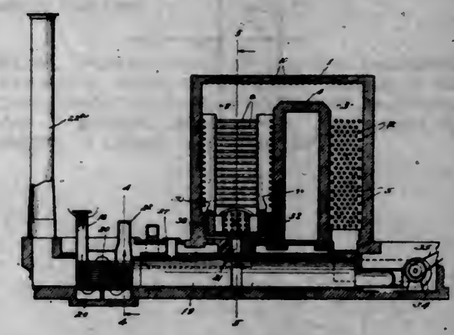
1. In a fixture support, comprising a plate and a stud, the stud formed with a transverse opening counterbored and threaded, a fixture formed with a longitudinal opening from its inner end for the reception of said stud, said fixture formed on one side with a clearance opening and on the other side with a conical notch, the apex of which is at one side of the longitudinal center of the stud opening, and a screw having a truncated conical end adapted to pass through the opening in the fixture, engage with the threads in the stud, and enter the conical recess, whereby the fixture is forced onto the stud and firmly engaged therewith.

1,893,730. LAMP. MABEL R. CHARLES, San Diego, Calif. Filed Jan. 15, 1931. Serial No. 508,959. 8 Claims. (Cl. 176—16.)



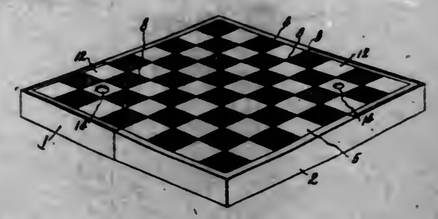
1. In a lamp structure, a hollow body member, fitting means at one end of said body member for connecting the same to a source of electrical energy, a hollow head member, a solid neck member joining said head member to said body member, conductors cast in said neck member and communicating between said head member and said body member, an illuminating element connected with said fitting means and joined to said conductors, and an illuminating means within said head member joining said conductors.

1,893,731. OIL HEATING FURNACE. WALTER M. CROSS, Kansas City, Mo., assignor to Gasoline Products Company, Inc., Jersey City, N. J., a Corporation of Delaware. Filed Apr. 19, 1926. Serial No. 103,181. 11 Claims. (Cl. 122—356.)



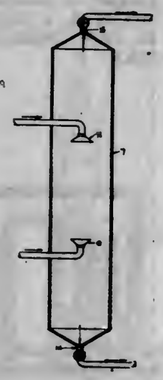
1. A heater comprising radiant heat and convection heat chambers, a bank of preheating tubes disposed in the cooler portion of the convection heat chamber, connection from this bank of tubes to a coil disposed about the side walls of the radiant heat chamber, a bank of superheating tubes disposed in the hotter portion of said convection heat chamber and a group of exposed tubes positioned on the roof of the radiant and convection heat chambers connecting the superheater with the coil in said radiant heat chamber, and means for recycling a portion of the flue gases in said radiant heat chamber between the wall tubes and the source of radiant heat.

1,893,732. GAME BOARD. CHARLES L. CUTLER, Springfield, Mass. Filed Mar. 25, 1931. Serial No. 525,148. 3 Claims. (Cl. 273—136.)



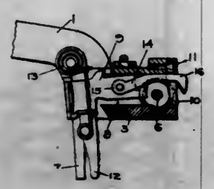
3. A game board comprising two box-like members closed on all sides and hinged together along one edge, at least one flat face of the board being provided with a playing field, a storage compartment formed in at least one of said members, an opening in one face of the board communicating with said compartment and a separable closure frictionally engaged within said opening and flush with the face of the board, said closure being provided with a small aperture to facilitate the opening thereof.

1,893,733. SEPARATION OF OLEFINES FROM PARAFFINE HYDROCARBONS. RICHARD M. DUNKLEY, Berkeley, Calif., assignor to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Oct. 14, 1929. Serial No. 399,589. 7 Claims. (Cl. 260—170.)



1. A process for the separation of olefines from a mixture containing olefine and paraffin hydrocarbons comprising extracting the mixture with liquid anhydrous ammonia under such conditions that the ammonia forms a liquid layer separate from the hydrocarbon mixture, thereafter removing the ammonia layer and recovering from it the extracted olefines.

1,893,734. THREAD CUTTING TEMPLE FOR LOOMS. FREDERIC H. DOUGLAS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Apr. 12, 1932. Serial No. 604,767. 9 Claims. (Cl. 139—303.)



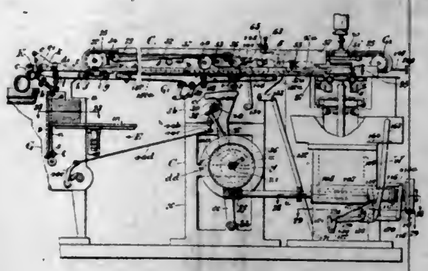
1. A thread cutting temple for looms, comprising a temple head having a guideway for a movable cutter blade, a resilient U-shaped ledger blade secured to the temple head by a combined fulcrum and securing screw passing between the legs of the ledger blade at the bend therein, and a movable cutter blade mounted in said guideway and cooperating with both legs of the ledger blade, said ledger blade being adjustable about said screw transversely of the plane of movement of the said movable cutter blade.

1,893,735. MILK FILTERING APPARATUS. GEORGE C. EVERS, Spokane, Wash. Filed June 24, 1929, Serial No. 373,451. Renewed Feb. 20, 1932. 2 Claims. (Cl. 23—258.)



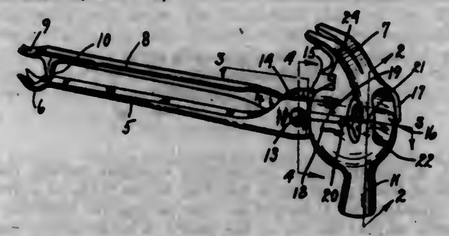
1. A milk testing apparatus comprising a tubular body having an enlarged lower chamber, a plunger, a screened lower cap member, a filter pad for said member, and a transverse rod adapted to retain said pad in place.

1,893,736. CONVEYING SYSTEM. THEODORE A. FEDERWITZ and WALTER T. BAILEY, Philadelphia, Pa., assignors to Stokes & Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed July 1, 1925, Serial No. 40,769. Divided and this application filed Sept. 25, 1926. Serial No. 137,668. 84 Claims. (Cl. 271—79.)



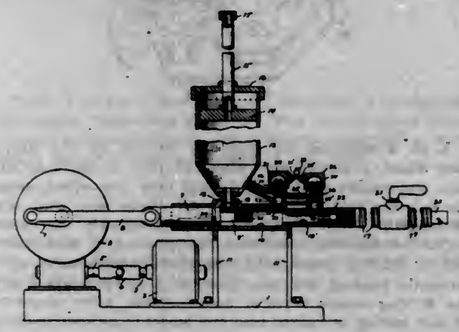
1. In a system for applying wrappers to boxes including a wrapping machine, means for delivering wrapper sheets thereto in succession comprising a chain, wrapper-gripping mechanism carried by and movable with said chain, means operated in timed relation to said wrapping machine for opening and closing said gripping mechanism, a machine for delivering wrapper sheets to said gripping mechanism, and means controlled by said wrapping machine controlling operation of said wrapper-delivering machine.

1,893,737. COMBINATION TOOL. ELBE FILAN, Hay, Wash. Filed Jan. 26, 1931. Serial No. 511,264. 1 Claim. (Cl. 7—8.)



In a combination tool having two pivotally connected parts adapted to cooperatively form a hammer head, the combination of a jaw extended outwardly and downwardly from one of the parts, a jaw extended outwardly and upwardly from the other part disposed in cooperative relation with the first named jaw, another jaw on the opposite side of the first named part, a corresponding jaw on the opposite side of the second named part, the last two named jaws being of heavier construction than the first named jaws, and the first named jaws extending further from the center of the hammer head to counterbalance the weight of the last named jaws.

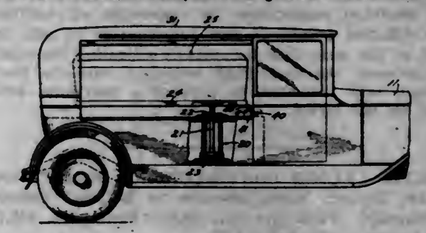
1,893,738. GREASE GUN. LOUIS GOODMAN, San Francisco, Calif., assignor to State Holding Co., Inc., a Corporation of California. Filed Dec. 6, 1926. Serial No. 152,959. 4 Claims. (Cl. 221—47.1.)



1. A lubricant pump provided with large and small diameter aligned cylinders in axial extension, means for supplying lubricant to the large cylinder for ejection from the remote end of the small cylinder, a reciprocable pressure plunger fitting in the large cylinder provided with a smaller plunger extending from the end thereof arranged to fit and operate in the aligned small cylinder, and means for reciprocating the plungers, the stroke of the plungers being such as to cause withdrawal of the small plunger from its cylinder at each backward stroke of the large plunger and a pressure relief by-pass valve on the large cylinder leading to the lubricant supply.

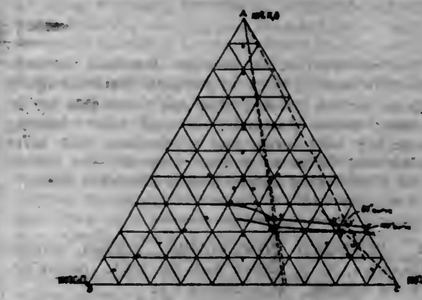
1,893,739. SIDE-LOADING HEARSE WITH FIXED TURNTABLE. FORD W. HARRIS, Los Angeles, Calif., assignor to Big Rock Ranch Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 26, 1929. Serial No. 335,161. 4 Claims. (Cl. 296—16.)

1. In a hearse, the combination of: an enclosed body having a length somewhat greater than, and a width somewhat less than, the length of an adult casket to be transported; a door in the side of said body; and a turntable turning about a fixed axis within said body and adapted to support said casket within said body and to turn it about said axis, said axis being adjacent one of the ends of said casket, into a position such that the



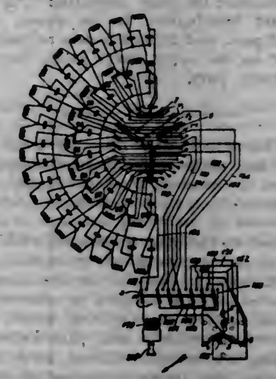
casket may be removed through the opening normally closed by said door.

1,893,740. PURIFICATION OF CALCIUM CHLORATE. SHELDON B. HEATH, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 6, 1930. Serial No. 433,768. 6 Claims. (Cl. 23—85.)



1. The method of separating calcium chlorate from a solution thereof containing calcium chloride which comprises crystallising the former at a temperature above 60° C. as anhydrous $Ca(ClO_3)_2$ from such solution which is saturated with respect thereto but unsaturated with respect to calcium chloride dihydrate.

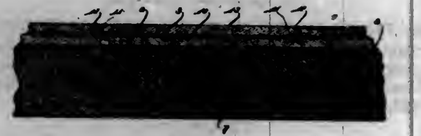
1,893,741. ARRANGEMENT FOR DIRECTIONAL TRANSMISSION AND RECEPTION WITH A PLURALITY OF OSCILLATORS. HEINRICH HECHT, Kiel, and HEINRICH STENZEL, Berlin, Germany, assignors to Electroacustic Gesellschaft mit beschränkter Haftung, Kiel, Germany, a Firm. Filed Jan. 9, 1929, Serial No. 331,286, and in Germany Jan. 14, 1928. 22 Claims. (Cl. 177—386.)



2. An arrangement for determining the directional maximum effect in communication of wave energy, com-

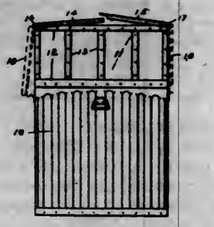
prising one indicator, a plurality of oscillators (three or more) distributed in a polygon over a plane in parallel to the direction of the wave propagation, a compensator, and electrical connections for connecting all oscillators over different points of said compensator to said indicator at the same time for suitably adjusting the relative lag between the individual oscillator currents flowing through said indicator, to produce a maximum energy effect in the latter.

1,893,742. FLOOR CONSTRUCTION. PAUL G. HEIDMAN, Detroit, Mich., assignor to National Heliofloor Company. Filed Apr. 17, 1929. Serial No. 355,729. 4 Claims. (Cl. 94—3.)



1. A floor construction of the class described, comprising: a concrete base; a layer of yieldable material affixed to the upper surface of said base and penetrable by affixing means; forms positioned on said layer; affixing means engaging said forms and penetrating said layer for securing said forms in position thereon; and plastic material of a hardening nature poured into said forms.

1,893,743. COVERED CONTAINER. JOSEPH HIRSHMAN, Brooklyn, N. Y. Filed Jan. 22, 1931. Serial No. 510,444. 4 Claims. (Cl. 220—1.)

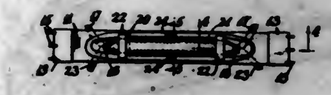


1. In a container; the body consisting of a corrugated, cylindrical part terminating in an upper, square and non-corrugated part, and formed from a rectangular sheet; covers secured on the upper part; and a bottom secured in the cylindrical part.

1,893,744. TREATING BRINES. COULTER W. JONES, Shreveport, La., assignor to Jones Chemical Company, McDade, La., a Corporation of Louisiana. Filed Mar. 20, 1931. Serial No. 524,213. 4 Claims. (Cl. 23—217.)

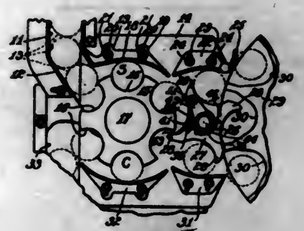
1. In a method of extracting bromine or iodine from a natural brine or the like containing such halogen in combined form and accompanied by organic impurities, wherein the halogen is liberated in the elemental state and then removed from the solution by adsorption upon an adsorbent medium therefor, the step which consists in contacting such brine with a body of absorbent material before liberating the halogen therein, such material being selected from the group consisting of charcoal, absorbent carbon, siliceous earth, precipitated silica, aluminum hydrate and metallic oxide gels.

1,893,745. CATAMENIAL BANDAGE. JACOB JOSIAS, Brooklyn, N. Y. Filed Feb. 26, 1931. Serial No. 518,318. 3 Claims. (Cl. 128—290.)



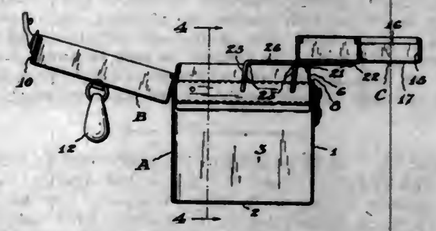
1. A napkin holder, comprising a napkin holder, comprising liquid-proof sheet material in the form of a strip of substantially U-shaped in cross section for receiving a napkin so that the top of the napkin is substantially flush with the top of the strip, means for holding supplementary napkin of smaller width than said napkin above the top of the said strip, and adjustable means on the longitudinal edges of said strip for aiding in pressing the material of the supplementary napkin against the body.

1,893,746. PROPELLER FOR BOTTLE FILLING MACHINES. JAMES KANTOR, Chicago, Ill., assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 16, 1930. Serial No. 468,352. 14 Claims. (Cl. 198—22.)



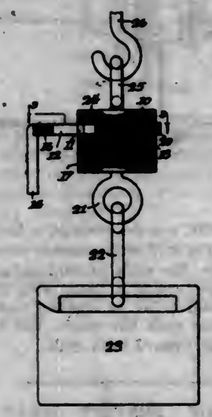
1. In a machine for handling bottles, or the like, a star wheel, a second star wheel adapted to move articles into cooperative relation with said first star wheel, means for rotating said star wheels in directions such that adjacent portions of said wheels move in opposite directions, and a lost-motion connecting between one of said wheels and its driving means, said connection comprising a spring normally holding said one wheel in a given relation with the driving means therefor and operable, after distortion of said spring, to return said one wheel to normal position.

1,893,747. TOTE BOX. HOWARD L. KENNEDY, Van Wert, Ohio, assignor to Kennedy Manufacturing Company, Van Wert, Ohio, a Corporation of Indiana. Filed Jan. 30, 1930. Serial No. 424,562. 8 Claims. (Cl. 206—16.)



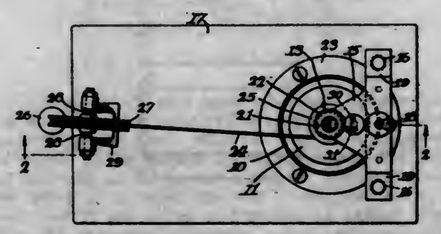
1. In a carrying case, a box having side walls and end walls, supporting ledges secured to said end walls, a movable tray normally seated on said ledges above the bottom of said box and being extendible to a horizontal position over one of said side walls to uncover said box, and a pair of spaced longitudinal rods hinged to said tray and having depending portions at their ends hinged to said end walls well below the horizontal plane of the upper edges of said side walls, portions of said depending portions of one of said rods, when said tray is in extended position, being engageable with the bottom of said tray to rigidly support the said tray in its extended position.

1,893,748. THERMOELECTRIC DEVICE. PAUL E. KLOPSTEG, Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 11, 1928. Serial No. 311,765. 9 Claims. (Cl. 136—4.)



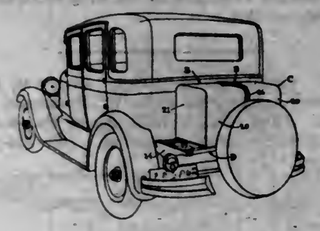
1. In a device of the character described, a thermo-electric couple comprising a circular loop of one metal having the end portions thereof connected by a dissimilar metal, and a magnetic core surrounded by said loop.

1,893,749. VISCOSITY APPARATUS. PAUL E. KLOPSTEG, Chicago, Ill., assignor to Central Scientific Company, a Corporation of Illinois. Filed Sept. 27, 1929. Serial No. 395,729. 8 Claims. (Cl. 265—11.)



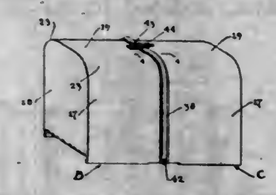
4. In apparatus of the class described, a base, a cylindrical fluid reservoir rigidly secured to the base and having an axial bearing on the inner face of its base, a rotatable cylinder concentrically arranged within the reservoir and mounted upon said bearing, a drum rigidly connected to the cylinder and positioned along the axis of the cylinder, a projection on the drum, means for applying different known rotational forces through the drum to rotate the cylinder, and a spring releasable stop engaging the projection on the drum for holding the cylinder stationary preparatory to operating the apparatus.

1,893,750. AUTOMOBILE TRUNK. JOHN W. MALMQUIST, Aberdeen, S. Dak. Filed May 18, 1929. Serial No. 364,066. 9 Claims. (Cl. 224—29.)



1. A combined trunk and luggage carrier constructed to be mounted transversely of an automobile on a support at the rear of the automobile body and convertible from closed trunk-like form into an elongated open top carrier by being expanded endwise at both ends laterally of the automobile and over the rear fenders thereof, said combined structure including an intermediate section carried by said support, and end sections hingedly carried by said intermediate section, said intermediate section comprising front and rear sides and a bottom and being open at its top and ends, the end sections each comprising front and rear sides and two contiguous walls, said end sections being foldable upon said intermediate section, one wall of each end section, in the folded positions of said sections, closing its respective end of the intermediate section and the other wall of each end section cooperating with the corresponding wall of the other end section to close the top of said intermediate section, said end sections, in unfolded positions, providing extensions in opposed endwise continuation of the intermediate section.

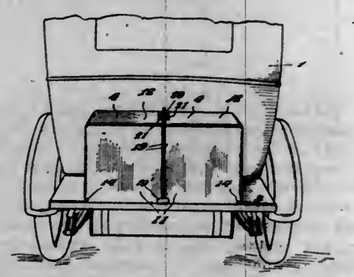
1,893,751. COMBINED TRUNK AND LUGGAGE CARRIER FOR AUTOMOBILES. JOHN W. MALMQUIST, Aberdeen, S. Dak. Filed Oct. 13, 1930. Serial No. 488,386. 20 Claims. (Cl. 224—29.)



1. A convertible structure of the character described adapted to be closed in compact trunk-like form and expanded in the form of an open top carrier, said structure comprising a body section and wing sections foldable on the body section to envelope the same and unfoldable therefrom to provide extensions therefor, the body section consisting of a bottom and two sides, each wing section consisting of two sides and two walls, one wall thereof forming an end and the other a top portion of the structure, in the folded position of the section, the first wall forming a bottom portion of the structure and the second wall an end, in the unfolded position of the section, the sides and said second wall of the wing section merging and forming curved corner portions adapted to engage and squeeze inwardly the sides of the body section at their upper edges, in the final folding stage of the wing section, guide rails, one for each side of each wing section, said rails being se-

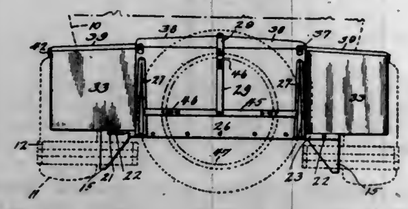
cured to the outer faces of the sides of the body section, each side of each wing section having a shoe secured to the inner face thereof and cooperating with its respective guide rail, said rails and shoes serving to prevent the outward flaring of the sides of the wing sections from the sides of the body section when and as the wing sections are folded on the body section.

1,893,752. LUGGAGE CARRIER. JAMES M. DEEN, Harlan, Iowa, assignor to John W. Malmquist, Aberdeen, S. Dak. Filed Nov. 1, 1929, Serial No. 404,155. Renewed Sept. 21, 1932. 5 Claims. (Cl. 224—29.)



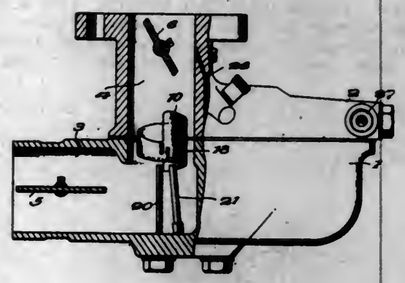
1. A luggage carrier comprising a receptacle having an intermediate section open at its top and ends, and end sections pivoted to said intermediate section for swinging from retracted to extended positions, said end sections when extended being open at their tops and inner ends and constituting continuations of said intermediate section and when retracted being disposed about the intermediate section in closing relation thereto, the walls of said end sections being provided with abutment flanges contacting when the end sections are retracted to limit movement thereof towards each other and form a tight joint between the same.

1,893,753. EXTENSIBLE AUTOMOBILE TRUNK. ROY M. SHELTON, Sioux City, Iowa, assignor to John W. Malmquist, Aberdeen, S. Dak. Filed Aug. 5, 1929. Serial No. 383,720. 12 Claims. (Cl. 224—29.)



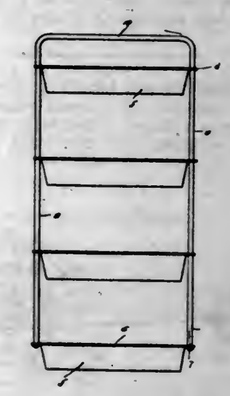
1. In an extension trunk, a fixed trunk member including forward and rear side walls and a bottom wall, said fixed trunk member being adapted to be secured to a vehicle in a position therebehind with its ends open and directed laterally, a pair of platform members rigidly secured to the fixed trunk member and extending laterally from the bottom of the fixed trunk member, and a pair of movable trunk members hinged to the fixed trunk member near the lower end corners of the side walls, each of said movable trunk members being adapted to move from an upstanding position forming an end wall in the open end of the fixed trunk member, to a position extended away from said open end in a direction laterally of the vehicle, forming, together with the fixed trunk member, a receptacle of greater length in a direction laterally of the vehicle, than the length of the fixed trunk member.

1,893,754. CARBURETOR. WILLIAM M. THOMAS, Albuquerque, N. Mex. Filed Apr. 18, 1931. Serial No. 531,177. 8 Claims. (Cl. 261—53.)



1. In a carburetor, a main passage, a hollow open ended cylinder suspended in said main passage substantially axially parallel thereto, the ends of said cylinder each being in the form of one turn of a helix with the ends thereof joined, said cylinder being of smaller inside diameter at a point between the ends but nearer one end thereof and tapering outwardly toward both ends.

1,893,755. HANDY SERVICE TRAY ASSEMBLY. CHARLES MELVIN WENTWORTH, St. Louis, Mo. Filed June 21, 1932. Serial No. 618,555. 2 Claims. (Cl. 211—133.)



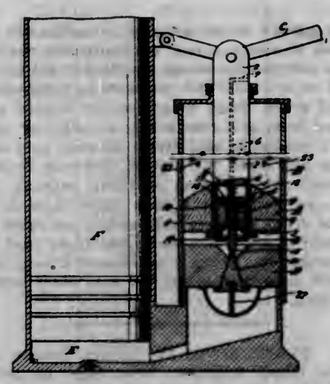
1. A device of the class described including a plurality of pans having at their upper edges outwardly directed annular flanges formed each with two pair of openings, one pair on each side thereof, a plurality of rectangular side sections, a pair of said sections between each pair of said flanges and having on their longitudinal edges hollow beads registering with said openings, and a handle section having depending end portions and provided with longitudinal edge hollow beads, the ends of which register with the openings of the flange of the uppermost pan and rods extending through said beads and said openings and having their ends headed below the lowermost flange.

1,893,756. RADIO TUBE. FREDERICK D. WIENEKE, Baltimore, Md. Filed Apr. 8, 1931. Serial No. 528,647. 2 Claims. (Cl. 250—27.5.)



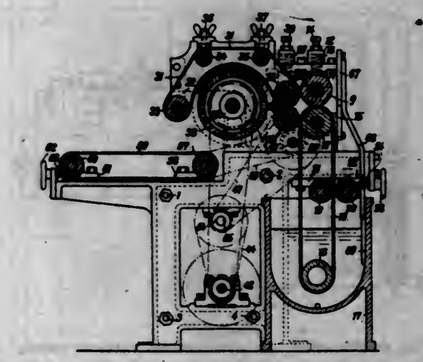
1. In a radio tube comprising a hollow base and partitions mounted within the base for dividing the same into separate connector compartments, said partitions being each of angular construction with their corner portions in adjacent relation.

1,893,757. RELEASE VALVE. CHARLES M. BANKS, Philadelphia, Pa. Filed Sept. 10, 1931. Serial No. 562,028. 1 Claim. (Cl. 188—9.)



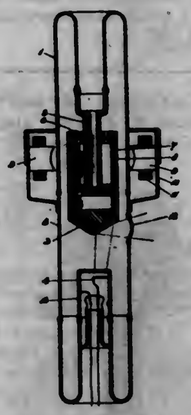
In a device of the kind described, embodying a hydraulic jack and connected pump cylinder and piston operatively mounted therein, there being an inlet valve mounted at the bottom of the cylinder in alignment with the piston, and the said piston having a central, threaded opening into which is threaded the end of the piston rod, the lower end of the piston rod having an axially aligned internally threaded cylindrical recess, and the piston rod having an axially extended air escape passage leading from the said recess and emerging from the rod outwardly of the pump cylinder, an exteriorly threaded tubular valve shell mounted in the said cylindrical recess of the piston rod, the said shell having a central bore therethrough and having a valve seat formed at its upper end, a release valve seated on the said valve seat, the said valve having a stem loosely passed down through the central bore of the said shell and adapted to impinge upon the said inlet valve when the said piston is pressed down to its limit, and resilient means for holding the said valve to its seat for opening the said inlet valve upon the full downward movement of the piston.

1,893,758. MACHINE FOR STEEPING PELTS. MAX BLOCH, Frankfort-on-the-Main, Germany. Filed Mar. 8, 1930, Serial No. 434,430, and in Germany Mar. 22, 1929. 7 Claims. (Cl. 8—21.)



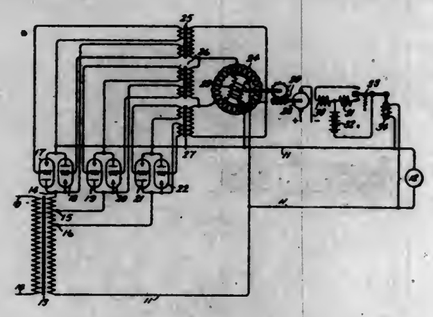
1. A machine for steeping pelts including a pair of pelt feeding rollers, a steeping liquid tank below said rollers, a liquid supplying belt extending into said tank and passing over one of said rollers, and brushing means located at the discharge side of said pelt feeding rollers.

1,893,759. X-RAY TUBE. ALBERT BOUWERS, Eindhoven, Netherlands, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands, a Limited Liability Company of the Netherlands. Filed Apr. 25, 1927, Serial No. 186,522, and in the Netherlands Jan. 18, 1927. 10 Claims. (Cl. 250—35.)



1. An X-ray tube having a cylindrically shaped outer envelope having mounted therein a cathode adapted to be heated to incandescence and a rotatable anticathode body, an electromagnetic stator for rotating said anticathode body mounted outside the tube, said anticathode body comprising an annular part located within the magnetic field of the said stator, said annular part comprising an outer copper portion surrounding and fixed to a ferromagnetic cylinder.

1,893,760. VOLTAGE REGULATING SYSTEM. ARAM BOYAJIAN, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Apr. 17, 1931. Serial No. 530,880. 29 Claims. (Cl. 171—119.)

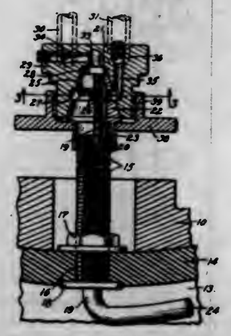


1. In combination, an alternating current supply circuit, a transformer winding provided with a plurality of electrically spaced terminals, an alternating current load circuit connected to said supply circuit through said winding, and means including a pair of electric valves reversely connected in parallel interposed in the connections to certain of said terminals for determining the potential of said load circuit.

1,893,761. MANUFACTURE OF CHROMIUM OXIDE AND CHROMIUM HYDROXIDE. RUDOLPH CASPARI, Uerdingen-Niederrhein, Germany, assignor, by mesne assignments, to General Aniline Works, Inc. New York, N. Y., a Corporation of Delaware. Filed Apr. 25, 1927, Serial No. 186,596, and in Germany May 7, 1926. 19 Claims. (Cl. 134—58.)

5. The process for the manufacture of chromium oxide, consisting in the washing, drying and ignition of the chromium hydroxide, produced by heating aqueous solutions of alkali salts of chromic acid with organic compounds exerting a reducing action at temperatures between about 110° C. and about 183° C.

1,893,762. VULCANIZING APPARATUS. BARTHOLD DE MATTIA, Passaic, N. J. Filed Aug. 2, 1929. Serial No. 383,122. 4 Claims. (Cl. 18—2.)



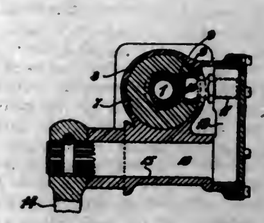
4. A double-flow conduit for the circulation of an inflating fluid through an inflatable former, said conduit comprising a stem portion having means for permanently attaching it to the inflatable former, a cap portion adapted to be detachably connected to the stem portion, and quick detachable means for holding the cap portion in fluid-tight engagement with the stem portion, said stem portion being made up of two concentric tubes integrally joined at their outer ends and spaced apart inwardly of said ends to provide a passage extending through the inner tube and a second passage between the tubes, and said stem portion being provided at its outer end with a tapered plug formed with a radial port in communication with the outer fluid passage, and said cap portion being formed with a tapered socket adapted to fit over the tapered plug of the stem portion and having an annular groove adapted to align with the radial port of the plug, said cap portion having one fluid passage adapted to communicate with the inner fluid passage of the stem portion and to connect the same with a supply pipe, and a second fluid passage adapted to communicate through the aforesaid radial port and annular groove with the outer fluid passage of the stem portion and to connect the same with an exhaust pipe.

1,893,763. WINDOW CONSTRUCTION. JOSEPH V. DESMARAIS, New Bedford, Mass. Filed May 21, 1932. Serial No. 612,803. 7 Claims. (Cl. 20—12.)



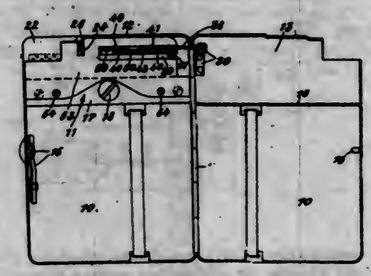
1. In a window construction, in combination, a frame having side members, a rear bead adjacent the rear edge of each of said side members, a strip secured to the inner surface of each of said side members in front of said rear beads, said strips being supported for limited movement toward and from said rear beads, an outer or upper window sash arranged in said frame between said strips and slidable up and down in front of said rear beads, an inner or lower window sash arranged between said side members and having the side rails thereof abutting against the front edges of said strips, an inner or front bead in front of said inner sash, said front bead including a part arranged to yieldingly press against said inner sash and thereby press said strips and said outer sash toward said rear bead.

1,893,764. STEERING GEAR. JOHN GEORGE DOUGLAS, Leagrave, Luton, England. Filed Sept. 16, 1931, Serial No. 563,142, and in Great Britain Feb. 6, 1931. 6 Claims. (Cl. 74—79.)



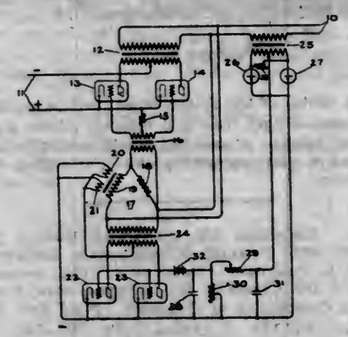
1. In a steering gear a worm shaft, a cylindrical nut threaded on said worm shaft, a housing accommodating the nut, and acting as a bearing for the periphery of said nut, a rocker arm, a radial recess in said nut and a lateral projection on said rocker arm engaged in said radial recess, the nut being rotatable as it is fed along the worm shaft in conformity with the arcuate path of travel of the rocker arm.

1,893,765. COMBINED CIGARETTE CASE AND LIGHTER. ROBERT FEURER, Geneva, Switzerland, assignor to "La Nationale S. A.", Geneva, Switzerland, a Corporation of Switzerland. Filed June 21, 1932, Serial No. 618,573, and in Switzerland May 15, 1931. 13 Claims. (Cl. 206—41.4.)



1. A combined cigarette case and lighter in which the cigarette case comprises two parts movable in relation to each other for opening and closing the case, means cooperating with the cigarette case and the lighter, said means comprising a connecting rod driven during the movement of the parts of the cigarette case, a lever and a guide therefor driven by the said connecting rod, the said lever being so secured to the said guide that it can turn, engage with, and move a rack for cocking the latter and getting it ready for action.

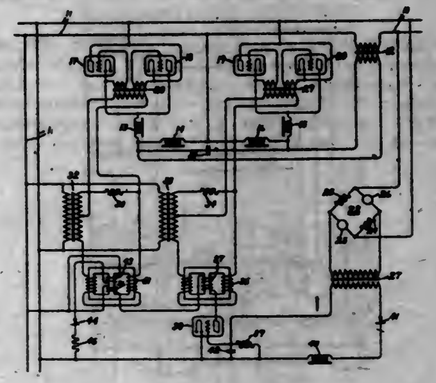
1,893,766. ELECTRIC TRANSLATION CIRCUITS. ALAN S. FITZ GERALD, Wynnewood, Pa., assignor to General Electric Company, a Corporation of New York. Filed Apr. 17, 1931. Serial No. 530,883. 6 Claims. (Cl. 175—363.)



1. In a system of distribution, an alternating current supply circuit, a load circuit, an electric valve for transmitting energy from said supply circuit to said load circuit, and means responsive to a predetermined overload on one of said circuits for maintaining said valve non-conducting for a predetermined interval and thereafter gradually increasing the conductivity of said valve.

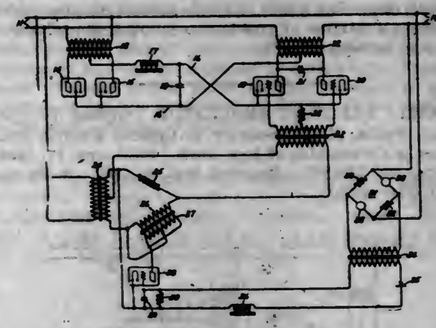
3. In combination, an alternating current supply circuit, a load circuit, an electric valve for transmitting energy from said supply circuit to said load circuit, a second electric valve for controlling the conductivity of said first valve, said second valve being provided with a control grid, a capacitor associated with said control grid and adapted to be charged in accordance with the current transmitted by said first valve, and a discharge circuit for said capacitor including a resistor for effecting a predetermined time delay between variations of said valve current and the controlling effect of said second valve.

1,893,767. ELECTRIC REGULATOR. ALAN S. FITZ GERALD, Wynnewood, Pa., and FRANCIS L. GAINES, Berkeley, Calif., assignors to General Electric Company, a Corporation of New York. Filed Apr. 17, 1931. Serial No. 530,888. 13 Claims. (Cl. 171—119.)



1. In a regulating system, the combination of a regulated circuit, means including a pair of electric valves for controlling an electrical condition of said circuit, and means responsive to an electrical condition of said circuit for regulating the conductivities of said pair of valves in an opposite sense.

1,893,768. ELECTRIC REGULATOR. ALAN S. FITZ GERALD, Wynnewood, Pa., assignor to General Electric Company, a Corporation of New York. Filed Apr. 17, 1931. Serial No. 530,895. 15 Claims. (Cl. 171—119.)

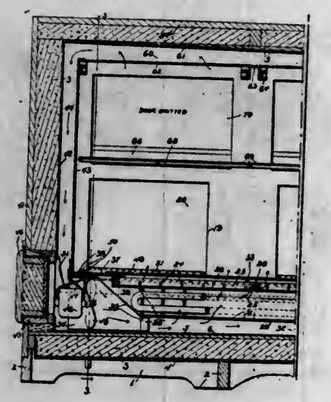


1. The combination of an alternating current circuit, a booster transformer connected in said circuit, electric valve means for energizing said booster transformer from said circuit, and means responsive to an electrical condition of said circuit for controlling the phase relation of the potential applied to said booster transformer by said valve means.

1,893,769. REFRIGERATOR. GEORGE E. FRIEDRICH, San Antonio, Tex., assignor to Edward Friedrich, San Antonio, Tex. Filed Apr. 8, 1932. Serial No. 604,092. 28 Claims. (Cl. 62—89.5.)

1. In a refrigerator, a cabinet having a food compartment extending substantially the full length, depth, and height of the cabinet, said cabinet having a recessed bottom and a recessed top, air ducts extending from end to end of said cabinet and located in the recesses of the top and bottom, a down-air duct located at one end of

the cabinet and connecting the top and bottom ducts, a fan housing in the bottom of the cabinet with which said down-air duct and said bottom duct communicate, a fan in said fan housing, said top and bottom ducts having

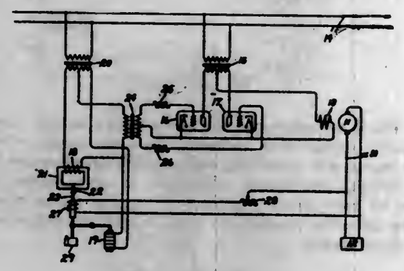


their opposing faces perforated, a food shelf supported in said cabinet adjacent the recessed bottom and over the lower air duct, and cooling means located between said shelf and the lower air duct.

1,893,770. DISINFECTING MEDIUM AND THE PROCESS OF MANUFACTURING THE SAME. ERNST AUGUST GARBE, Berlin-Lichterfelde, Germany. Filed July 2, 1927, Serial No. 203,268, and in Germany July 7, 1926. 3 Claims. (Cl. 167—84.)

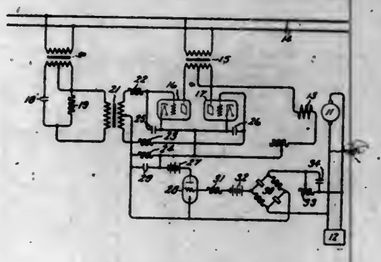
2. A disinfecting medium in the form of a clear, homogeneous dispersion which is stable against dilution which comprises a mixture of cresol soap solution, glacial acetic acid, and tobacco extract.

1,893,771. ELECTRIC REGULATOR. GEORGE W. GARMAN, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 17, 1931, Serial No. 530,885. Renewed Sept. 3, 1932. 6 Claims. (Cl. 171—119.)



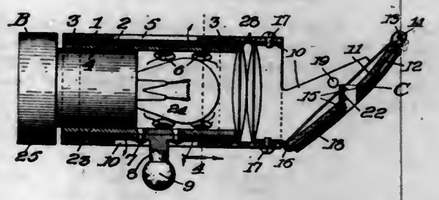
1. In combination, an electric translating circuit including an electric valve provided with a control grid, a source of electrical variations, an impedance phase shifting circuit including a plurality of variable impedance elements, connections for impressing upon said control grid a potential derived from said phase shifting circuit to control the current flowing through said valve, and means responsive to said electrical variations for jointly controlling two of said impedance elements in an opposite sense.

1,893,772. ELECTRICAL REGULATOR. GEORGE W. GARMAN, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 17, 1931, Serial No. 530,891. Renewed Sept. 3, 1932. 5 Claims. (Cl. 171—119.)



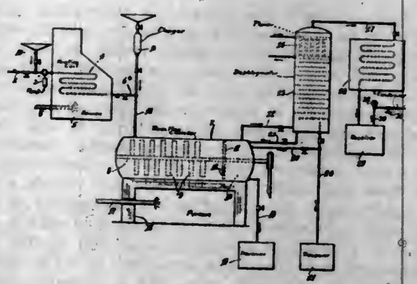
1. In combination, a dynamo-electric machine provided with a field winding, an alternating current circuit, means for energizing said winding from said circuit including an electric valve provided with a control grid, an impedance phase shifting circuit, connections for exciting said control grid from said phase shifting circuit, and a potential responsive bridge for varying the excitation of said control grid.

1,893,773. SURGICAL HEAD LAMP. PALMER GOOD, River Forest, Ill. Filed Jan. 22, 1930. Serial No. 422,647. 2 Claims. (Cl. 128—23.)



1. In a device of the character set forth, a casing member, a source of light therein, a reflector mirror supported in angular relation to said light, said mirror being apertured, and a glare-preventing shield extending through said aperture.

1,893,774. PROCESS OF MANUFACTURING LUBRICATING OIL. RALPH A. HALLORAN, Berkeley, and MARVIN L. CHAPPELL, Los Angeles, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Nov. 8, 1926. Serial No. 147,158. 3 Claims. (Cl. 196—78.)



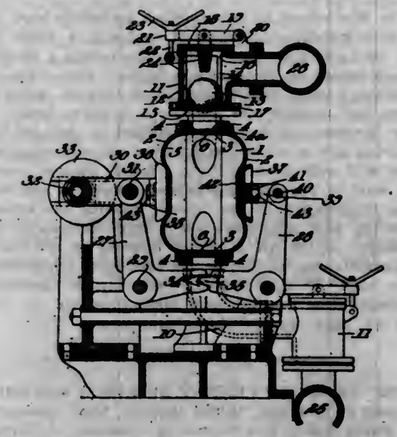
1. A process of manufacturing lubricating oil, which comprises treating unsaturated oil derived from a sulphur dioxide extract of hydrocarbon oil with aluminum chloride at a temperature suitable for polymerizing the oil, and separating the polymerized oil from the residual aluminum chloride.

1,893,775. STEERING LEVER CONTROL. JAMES G. HEASLET, Shaker Heights, Ohio, assignor to The Cleveland Tractor Company, Cleveland, Ohio. Filed July 23, 1931. Serial No. 552,685. 1 Claim. (Cl. 74—89.)



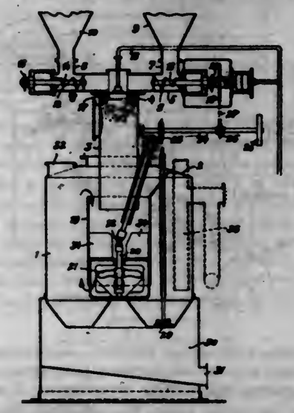
A steering lever control mechanism, comprising a pivoted rock shaft, a notched quadrant mounted adjacent the base of said shaft, a movable pawl slidably affixed on the lower portion of said shaft adapted to engage the said notched quadrant, an operating rod swivelled to said pawl, the opposite end of the rod passing through a hand grip surrounding the upper section of the shaft, and a rotatable knob having depending lugs formed at 180° angles on the bottom side thereof fastened to the rod and adapted to selectively engage corresponding slots formed on the upper edge of the hand grip to insure positive engagement and disengagement of the pawl and quadrant notches.

1,893,776. PUMP. MONROE R. HULL, Anaconda, Mont. Filed Oct. 27, 1931. Serial No. 571,388. 11 Claims. (Cl. 103—148.)



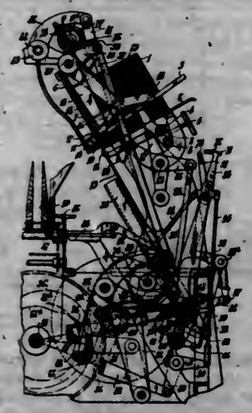
1. In a pump of the type described, the combination of a flexible member defining a displacement chamber, a lining therefor, a connecting piece, a hole in said liner and in said flexible member, a bolt having a shank extending through said holes and the connecting piece to clamp the flexible member and the liner between the head of the bolt and the connecting piece and a bead formed integrally with the liner and surrounding the hole therein to prevent leakage from said displacement chamber.

1,893,777. PRODUCTION OF GASES FROM CARBIDES AND WATER. PETER KRUSEN, Dusseldorf, Germany, assignor to Autogenwerk Sirius Gesellschaft mit beschränkter Haftung, Dusseldorf-Eller, Germany, a Corporation. Filed Jan. 9, 1930, Serial No. 419,624, and in Germany May 15, 1929. 4 Claims. (Cl. 48—54.)



1. Apparatus for generating gas from carbide powder comprising a generator to contain water, a container for powdered carbide connected with the upper part of the generator, a device for feeding carbide from the container in small quantities to the point of introduction thereof into the generator, a device for supplying water jets to the powder during introduction into the generator, a tubular element open at both ends and supported in said generator in position to surround the downwardly directed stream of water, and a water impeller mounted in said generator to cause a downward circulation of the carbide through said tubular element.

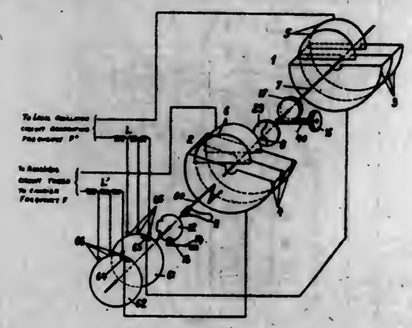
1,893,778. PAPER FEEDING. RUDOLF KLEMM, Leipsig-Plagwitz, Germany, assignor to Gebruder Brehmer, Leipsig-Plagwitz, Germany, a German Firm. Filed Oct. 6, 1930, Serial No. 486,756, and in Germany May 3, 1930. 18 Claims. (Cl. 271—29.)



1. Automatic sheet-handling apparatus, comprising means for positioning a sheet-pile with the front sheet

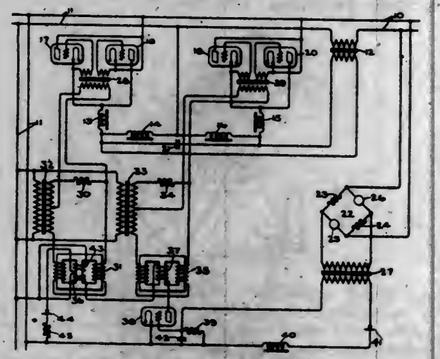
in an operative working plane, a pivotal member abutting said front sheet, pivotal suction nozzles, sheet-tensioning segmental members associated with said nozzles, a sheet-separating member, means for moving said member perpendicularly to the front sheet, means for swinging the front sheet away from the pile, and means for retaining the entire following sheet in the working plane.

1,893,779. SUPERHETERODYNE RECEIVING SYSTEM. LUCIEN LEVY, Paris, France. Filed Oct. 3, 1927, Serial No. 223,761, and in France Oct. 18, 1926. 5 Claims. (Cl. 250—20.)



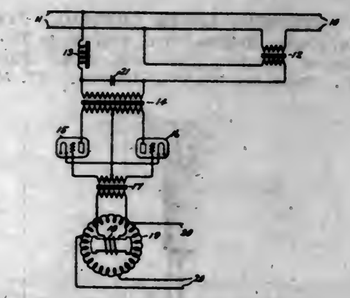
1. In a superheterodyne receiver comprising a receiving circuit and a local oscillations generating circuit, the difference between the proper frequencies of which must always keep the same value, the combination of variable inductances in each of said circuits, means for varying said inductances so that they always remain equal to each other, straight line frequency condensers in each of said circuits, means for simultaneously moving the rotors of said condensers, and means for varying the angular relation between the stator and the rotor of one of said condensers when varying the common value of the inductances, to always keep a constant difference between the frequencies of the receiving circuit and of the local oscillations generating circuit.

1,893,780. ELECTRIC REGULATOR. HAROLD T. LYMAN, Jr., Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 17, 1931. Serial No. 530,886. 5 Claims. (Cl. 171—119.)



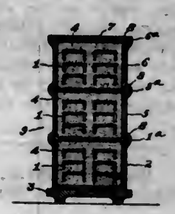
1. In combination, an alternating current supply circuit, a load circuit, an impedance bridge including a pair of electric valves, means for controlling the potential of said load circuit in accordance with the unbalance of said bridge, and means for regulating the conductivity of said valves.

1,893,781. ELECTRIC REGULATOR. HAROLD T. LYMAN, Jr., Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 17, 1931. Serial No. 530,892. 4 Claims. (Cl. 171—119.)



1. The combination of an alternating current supply circuit, a booster transformer provided with primary and secondary windings, a load circuit connected to said supply circuit through said secondary winding, an impedance device, a filter circuit, said primary winding being connected to said supply circuit through said impedance device and said filter circuit, electric valve means shunting said impedance device for controlling the impedance thereof, and means for controlling the conductivity of said valves.

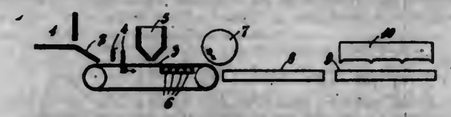
1,893,782. PRODUCTION OF COATED MALLEABLE IRON CASTINGS. LESLIE H. MARSHALL, Columbus, Ohio, assignor to The Technimet Company, Columbus, Ohio, a Corporation of Ohio. Filed Jan. 2, 1930. Serial No. 417,978. 6 Claims. (Cl. 148—21.8.)



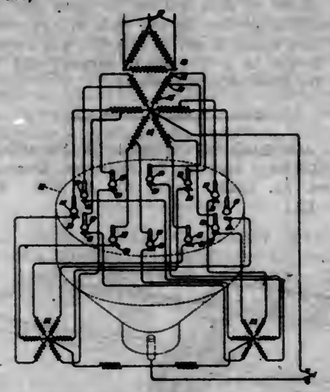
1. The process of forming coated malleable iron castings which includes the steps of enclosing a white iron casting in a chamber with material including a metal of the group consisting of chromium, silicon, zinc, aluminum and antimony and a halogen compound adapted, when said material and casting are heated, to evolve, before the casting becomes substantially oxidized, a non-oxidizing and etching gas or vapor heavier than air and capable of reacting with said metal to form a halide thereof vaporizable at least in part at temperatures below the maximum treating temperature of the process, heating the material and casting and meanwhile permitting the escape from the chamber of the air displaced upward by the heavier vapor formed; and continuing the heating at temperatures between 1200° F. and 1800° F. for a time adapted to malleableize the casting and simultaneously to form thereon an alloy coating of the said metal.

1,893,783. ASBESTOS CEMENT BUILDING MATERIAL. WILLIAM J. MOELLER, Mount Healthy, Ohio, assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed June 25, 1928. Serial No. 288,085. 7 Claims. (Cl. 154—45.9.)

1. As an article of manufacture an integral sheet formed from a plurality of laminations, each lamination containing a mixture of fibre and cement materials; one of the laminations containing weather resisting particles of material of a color contrasting in color to the lamination and forming an exposible surface having areas formed by said particles and adjacent areas formed by the body of the top lamination.



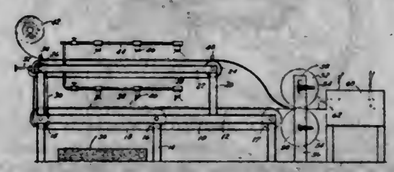
1,893,784. VOLTAGE REGULATING SYSTEM. DAVID C. PRINCE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 26, 1930. Serial No. 484,692. 29 Claims. (Cl. 175—363.)



1. The combination of an alternating current supply circuit, a direct current load circuit, a vapor electric device interconnecting said circuits and provided with a plurality of anodes and control electrodes each associated with a different one of said anodes, said anodes being arranged in groups, means associated with said circuit to impress a voltage on each of said groups, said control electrodes being arranged in groups corresponding to said anode groups, and means for impressing a voltage on said control electrodes and for shifting independently the voltage phase of each control electrode group with respect to the voltage impressed on the corresponding anode group to control the voltage of said load circuit.

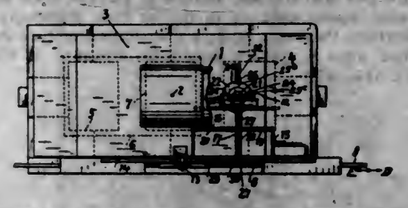
28. In combination, a supply circuit, a load circuit, one of said circuits being an alternating current circuit provided with a plurality of electrically spaced terminals, a plurality of electric valves interconnecting said circuits through said several terminals, and means for selectively controlling the conductivities of said valves to vary the voltage ratio of said circuits.

1,893,785. METHOD AND APPARATUS FOR DECORATING AND FORMING ARTICLES. THOMAS S. RENSH, Cleveland, Ohio. Filed Nov. 2, 1931. Serial No. 572,717. 39 Claims. (Cl. 41—33.)



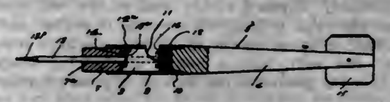
1. The combination with a strip of sheet metal of a die-formable primer thereon, a thin die-formable film of prehardened material carrying a printed or lithographed design applied to the primer, said film being comprised of a synthetic resin material.

1,893,786. REVERSING GEAR FOR FURNACES. OTTO REINER, Rheinhausen, Germany. Filed Dec. 28, 1929, Serial No. 417,229, and in Germany Jan. 10, 1929. Renewed Nov. 3, 1932. 4 Claims. (Cl. 277—5.)



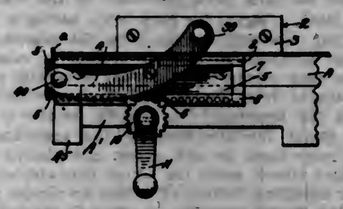
1. Cowl reversing gear for the flow of gas and waste gas in furnaces comprising a plurality of flues, an adjustable cowl associated with said flues, a reversing device for said cowl, a gas supply pipe, a valve in said pipe, and means temporarily closing said valve during the period of reversal of said coil, said means including alternately tensioned elements interposed between the reversing device and valve, and means to alternately lock and release the valve during reversal of the cowl to permit a snap action of the valve under the influence of the tensioning elements.

1,893,787. TORPEDO DART. OTTO F. SCHROEDER, Santa Ana, Calif. Filed May 7, 1932. Serial No. 609,908. 1 Claim. (Cl. 102—26.)



A detonating-dart comprising a longitudinally tapered body divided transversely adjacent one end to provide a relatively elongated section and a relatively short section, a sleeve telescopically receiving one end of each of said body sections and serving to secure said body sections in longitudinal alinement with the confronting ends of said sections in relatively spaced relation, said sleeve forming between said ends of the body sections a chamber, and being also provided with a lateral opening whereby access to said chamber may be had adjacent the inner end of the longer body section, said short body section having an axial opening therethrough, a plunger slidable through the opening in said last-named body section, and provided at its outer end with a penetrating point, and at its inner end with a disc-like head, a percussion cap arranged in said chamber adjacent the inner end of the longest body section, and a spring clip secured to the inner end of the shorter body section and peripherally engaging the head of said plunger for normally retaining the latter in projected position.

1,893,788. PAPER HANGER'S TABLE OR BOARD. HERMANN J. SCHUBERT, Hackensack, N. J. Filed Sept. 24, 1930. Serial No. 484,125. 5 Claims. (Cl. 164—78.)

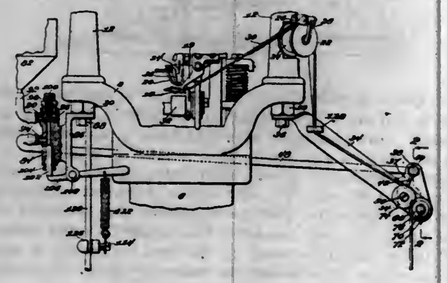


3. In a device of the character described, the combination with a working board surface of an adjustable

CARNEGIE LIBRARY OF ATLANTA

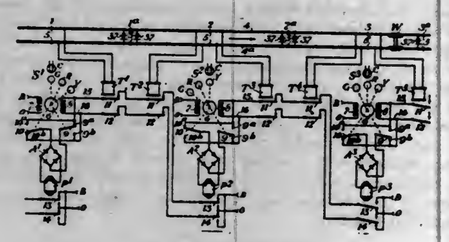
guide member parallel to one edge of said surface, and means for supporting it near said edge, consisting essentially of links pivoted to the end of the guide and slides arranged to reciprocate on the board, to which slides the other ends of the links are pivoted.

1,893,789. WELT TEMPERING DEVICE FOR SHOE SEWING MACHINES. JOSEPH E. THAYER, West Bridgewater, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 4, 1929. Serial No. 368,294. 4 Claims. (Cl. 112—48.)



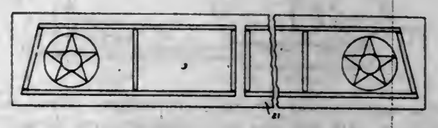
1. A welt shoe sewing machine having, in combination, stitch-forming mechanism, work-feeding devices, a pair of welt-guiding rolls spaced apart by a distance greater than the thickness of the welt, and with the plane of their axes obliquely disposed to the lead of the welt entering between the rolls, a flange on one roll to engage one edge of the welt, a flange on the other roll to engage the other edge of the welt, and a nozzle discharging tempering liquid into the groove of the welt as it passes through the rolls.

1,893,790. RAILWAY SIGNALING SYSTEM. HARRY C. VANTASSEL, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 21, 1931. Serial No. 558,481. 3 Claims. (Cl. 246—41.)



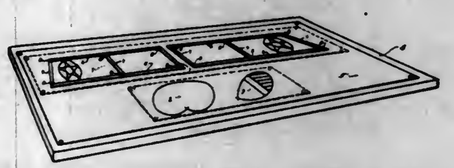
1. In combination, a railway track divided into blocks, a track circuit including a track relay for each block, a line circuit for each block controlled by the track relay for such block, a signal for each block having a controlling winding receiving current from the associated line circuit and arranged to indicate proceed or caution according as such current is of normal or reverse polarity, a pole-changing relay for each block also receiving current from the associated line circuit, means controlled by each signal for disconnecting the associated pole-changing relay from its line circuit and placing the relay on short circuit when the signal indicates stop, and means for supplying current of normal or reverse polarity to each line circuit according as the pole-changing relay for the block next in advance is energized or deenergized.

1,893,791. MINIATURE STRUCTURE. GEORGE D. WANNER, Dayton, Ohio. Filed Jan. 28, 1929. Serial No. 335,622. 7 Claims. (Cl. 35—12.)



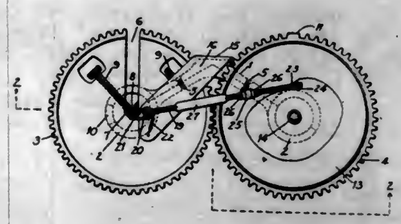
1. The method of constructing a miniature airplane having a wing frame, a cover therefor and a fuselage which comprises placing upon the wing cover material an outline of the wing frame structure, shaping structural parts individually to conform to the respective parts of said outline, attaching said structural parts one to the other and to said cover material in register with the respective parts of said outline to form the wing, securing attaching devices to the ends of two such wings to connect said wings in spaced relation, and securing said attaching devices to a fuselage to support said wings on the respective sides of said fuselage.

1,893,792. METHOD OF CONSTRUCTING MINIATURE STRUCTURES. GEORGE D. WANNER, Dayton, Ohio. Filed Dec. 31, 1929. Serial No. 417,653. 6 Claims. (Cl. 35—12.)



1. The method of constructing a miniature airplane which comprises superimposing on a structural outline of a wing structure a sheet of transparent cover material through which said outline will be visible, shaping frame parts individually to conform to the respective parts of said outline, attaching said frame parts to said transparent cover material in register with the corresponding parts of said outline to form the wing, trimming said transparent material to conform to the exterior contour of said outline, securing an attaching device to the ends of two such wings to connect said wings in spaced relation and securing said attaching device to the fuselage to support said wings on the respective sides of said fuselage.

1,893,793. PERIMETER DELINEATOR. NORMAN S. BORTNER, Baltimore, Md. Filed Dec. 2, 1931. Serial No. 578,540. 5 Claims. (Cl. 33—23.)



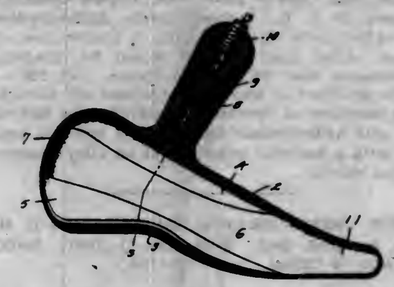
1. In a wire cross-section perimeter delineator, a sun-gear, means to hold a wire axially therein, a planet-gear adapted to rotate planet-like around said sun-gear and having thereon a chart, means to hold said gears together, a pivoted lever on said means, one end of which is adapted to rest against the side of said wire and the other end of which is adapted to delineate on said chart the perimeter of the wire cross-section upon a complete revolution of said planet-gear around said sun-gear.

1,893,794. HAIR WAVING DEVICE. RAMON BOVÉ, Bayside, N. Y. Filed Sept. 2, 1931. Serial No. 560,710. 33 Claims. (Cl. 132—32.)



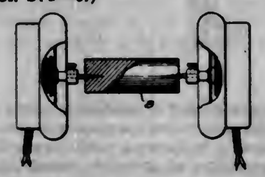
1. A hair-waving device comprising hinged sections adapted to clamp a strand of hair between them for waving, one of the sections constituting a frame having teeth forming a pair of transversely spaced apart combs and a guiding strip paralleling and positioned between the combs, a toothed member slidable longitudinally on the guiding strip for a limited distance and to one end of which the other hinged section is pivotally mounted, said other hinged section comprising a pair of wire members adapted when in clamping position to be disposed between the toothed member and the combs, the frame provided at the free ends of the wire members with means forming a keeper for securing the free ends of the wire members in place.

1,893,795. INFLATABLE CLEANING AND DYEING LAST FOR SHOES. ROY MCKINLEY CHAPMAN, Erwin, Tenn. Filed Nov. 24, 1931. Serial No. 577,098. 2 Claims. (Cl. 12—129.)



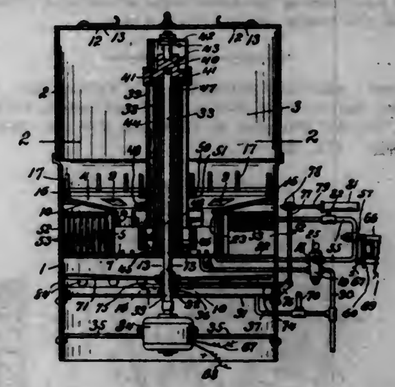
1. A shoe last comprising a hollow body of rubber material shaped to conform to the interior of a shoe, the top and bottom of the body having areas of hard rubber and areas surrounding and tapering off from the hard rubber areas of heavy slightly stretchable rubber, the said slightly stretchable areas of rubber being joined by rubber of a relatively thin character, and means for introducing air under pressure into the last to expand the same.

1,893,796. ACOUSTIC DEVICE. ROY E. COLEMAN, Meriden, Conn. Filed Aug. 21, 1929. Serial No. 387,558. 5 Claims. (Cl. 274—6.)



1. In a transmission system, a pair of vibrators and an element comprising a substance of great internal surface between said vibrators, said element being substantially free of said vibrators so as to avoid substantial damping of the latter.

1,893,797. WASHING MACHINE. CHARLES W. FOSTER, Kansas City, Mo. Filed Nov. 10, 1930. Serial No. 494,651. 7 Claims. (Cl. 141—9.)



1. In a washing machine, a washing chamber, air conducting means communicating with said chamber, a radiator in said conducting means, a hot water supply source, means for discharging hot water from said source selectively into said chamber or into said radiator, and means for forcing air through said air conducting means into contact with said radiator and from said radiator into said chamber.

1,893,798. METALLURGY OF COMPLEX ORES. MORRIS G. FOWLER, CHARLES R. KUSELL and OLIVER C. RALSTON, Clarkdale, Ariz., assignors to United Verde Copper Company, Clarkdale, Ariz., a Corporation of Delaware. Filed Jan. 14, 1929. Serial No. 332,557. 21 Claims. (Cl. 75—28.)

1. The method of recovering zinc from ore containing copper and zinc minerals which comprises smelting the ore to form a molten bath of slag and matte, blowing the resulting bath until the matte has reached the stage of white metal, and subjecting the resulting bath to the action of a reducing agent to form and vaporize metallic zinc.

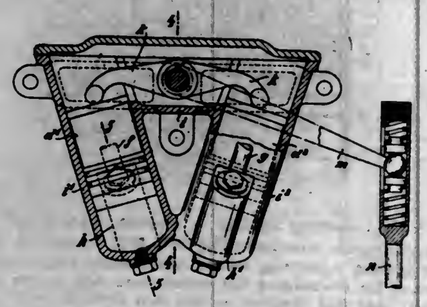
1,893,799. LABORATORY SUPPORT. ERTLE L. HARRINGTON, Saskatoon, Saskatchewan, Canada, assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 21, 1930. Serial No. 497,257. 3 Claims. (Cl. 248—41.)



1. A supporting base for laboratory apparatus comprising two arms meeting at an acute angle and a bridge bearing a socket for a standard joining the two arms at

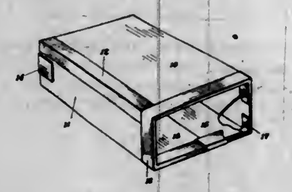
points intermediate their ends and positioned throughout its length above the upper boundary of the arms, whereby a plurality of said bases may be nested with the portions of the legs forming the acute angle of one base extending beneath the bridge of an adjacent base.

1,893,800. SHOCK ABSORBER FOR VEHICLES. HUGO HÖME, Essen—Ruhr, Germany. Filed Jan. 9, 1931, Serial No. 507,610, and in Germany Nov. 17, 1930. 3 Claims. (Cl. 267—11.)



1. In a liquid shock absorber for vehicles: a casing comprising two liquid cylinders on each of the sides of the vehicle; a piston for each of said cylinders; a double-armed lever mounted in said casing; a lever mounted on the axis of said double-armed lever acting to selectively operate said pistons upon movement in opposite directions; means for mounting said casings and levers between the axle of the vehicle and the chassis; and means for connecting hydraulically oppositely acting cylinders on opposite sides of the vehicle.

1,893,801. STORAGE FILE. SAMUEL C. HUFFMAN, Lincoln, Nebr. Filed Jan. 16, 1932. Serial No. 587,113. 5 Claims. (Cl. 229—9.)

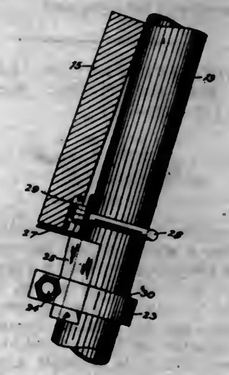


1. A collapsible file including an integral shell having an open front and rigid top and bottom and side walls and a collapsible rear end wall, means for maintaining the parts of said shell in rigid rectangular relation, a collapsible liner adapted to seat snugly within said shell, and a flexible strip secured to said shell at the front edges thereof and projecting forwardly therefrom, said strip being adapted to be folded inwardly and to be secured to the inner surface of said liner.

1,893,802. METHOD OF PRODUCING PARA-CYMENE. IRVIN W. HUMPHREY, Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed May 4, 1928. Serial No. 275,268. 12 Claims. (Cl. 260—168.)

1. The method of producing para-cymene which includes heating pine oil in the presence of a neutral dehydration catalyst thereby effecting dehydration of the tertiary alcohols and continuing the treatment thereby effecting the conversion of a part of the product into para-cymene.

1,893,803. BAFFLE SUPPORT. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed June 8, 1929. Serial No. 369,473. 5 Claims. (Cl. 110—98.)

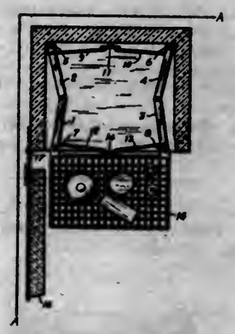


1. In a boiler, a row of water tubes having a baffle disposed adjacent thereto, a clamp surrounding one of said tubes, a wedge between said clamp and tube, and a bearing member resting on said wedge and adapted to support said baffle thereon.

1,893,804. HEAT TREATING HYDROCARBONS AT AN ELEVATED TEMPERATURE. ALWIN MITTASCH, Mannheim, RUDOLF WIETZEL, Ludwigshafen-on-the-Rhine, and CONRAD PFAUNDLER, Oppau, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 11, 1927, Serial No. 174,694, and in Germany Mar. 13, 1926. 5 Claims. (Cl. 260—170.)

1. In processes in which hydrocarbons are subjected to a heat treatment at elevated temperatures, the step of confining said hydrocarbons while at said elevated temperatures, with a material consisting of an alloy composed of iron and silicon.

1,893,805. REFRIGERATOR CABINET. LEE B. MORRISON, Portland, Oreg. Filed May 11, 1931. Serial No. 536,464. 4 Claims. (Cl. 312—184.)



1. A cabinet, a drawer of substantially the same width as the chamber in said cabinet normally housed therein, and a device extensibly supporting said drawer in said cabinet comprising, two pairs of pivotally joined links extremities of which pairs are pivotally attached to inner corners of said cabinet and said drawer respectively and means for constraining the links attached to said drawer and the links attached to said inner cabinet corners to equi-angular motion respectively.

1,893,806. GRINDING APPARATUS. FRED G. MUSHENO, Schuylkill Haven, Pa., assignor to Allegheny Steel Company, a Corporation of Pennsylvania. Filed Mar. 11, 1931. Serial No. 521,649. 18 Claims. (Cl. 51—164.2.)



1. An internal grinder for objects, such as tubes, cylinders and the like, comprising a mandrel of smaller diameter than the bore in said objects, said mandrel having at least one flat side and curved edges, said curved edges having pockets therein normal to the longitudinal axis of said mandrel, abrasive elements in said pockets, and means in said pockets urging said elements outwardly therefrom and into engagement with the surface to be ground.

1,893,807. GRIP STRAP. HERMAN H. RUBIN, New York, N. Y. Filed Jan. 15, 1931. Serial No. 508,871. 7 Claims. (Cl. 105—354.)

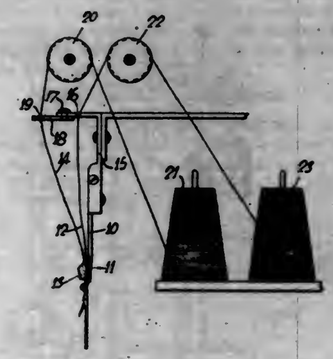


1. A grip strap comprising a body portion having a core of resilient material, a layer of padding enclosing said core, and an outer covering enclosing said core and said padding.

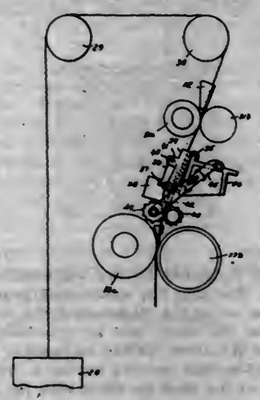
2. A grip strap comprising a strip of resilient material forming a core, a strip of padding enclosing said core, a strip of flexible material covering said core and padding strips, and a clamp secured to end portions of said strips to form a bracket engaging loop and a hand hold loop.

1,893,808. YARN CARRIER FOR KNITTING MACHINES. BENJAMIN SPECTOR, New York, N. Y., assignor to Gropper Sport Apparel Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 22, 1930. Serial No. 477,018. 5 Claims. (Cl. 66—126.)

1. In a yarn carrier adapted for use in the production of plated knit fabric, the combination of an outwardly extending arm providing a yarn guide for one yarn, and an arm having its inner end pivotally connected with the outer end of the aforesaid arm and at its outer end providing a yarn guide for another yarn, the free end of said pivoted arm being adapted to swing freely to a position at the rear of said first mentioned yarn guide each time the direction of movement of the yarn carrier is reversed, said free end being formed with an eyelet for said other yarn.

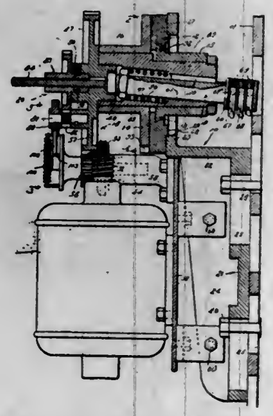


1,893,809. MANUFACTURE OF YARN. MALCOLM B. STONE, Milton, and WILLIAM P. WILLIAMSON, Ludlow, Mass., assignors to Ludlow Manufacturing Associates, trustees, Boston, Mass. Filed June 20, 1931. Serial No. 545,725. 13 Claims. (Cl. 118—38.)



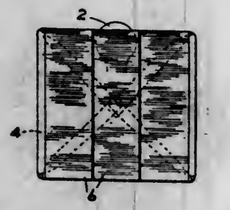
1. A method of making yarn from bast and similar long fibres which comprises subjecting sliver to a drawing operation, treating the drawn sliver of said drawing operation without twisting it to increase its ability to undergo a lengthwise pull without being broken, subjecting the treated sliver to a single final drawing operation reducing it to yarn size, an extended length of the sliver being supported and subjected to dragging control without the use of gills, during said single drawing operation, and twisting the product of said single drawing operation and winding it into a yarn package.

1,893,810. PORTABLE MACHINE FOR BORING TAPERED ELLIPTICAL HOLES. BERTRAM C. TRAVIS, Los Angeles, Calif., assignor of one-half to Pacific Copper and Brass Works, Incorporated, Los Angeles, Calif., a Corporation of California. Filed Apr. 6, 1927. Serial No. 181,374. 3 Claims. (Cl. 77—2.)



1. A machine of the character described including a guide member, slides carried by the member to slide in directions at right angles to each other, a spindle rotatably carried in one of the slides, a tool carrier carried in the spindle for movement longitudinally of the spindle on an axis at an angle to the axis of the spindle and projecting from an end of the spindle, and an eccentric on the spindle and carried in the other slide.

1,893,811. PACKAGE FOR CANDY BARS. JOHN H. WARE, Jr., Oxford, Pa. Filed May 20, 1930. Serial No. 453,894. 2 Claims. (Cl. 206—46.)

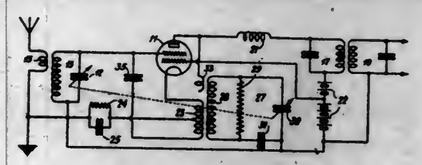


1. A package for candy having a generally rectangular glassine sheet overlying the candy and provided with a tab arranged on one of the diagonals of the sheet and within the border of the sheet, said tab provided by partially cutting it from the sheet leaving an opening in the sheet, a generally rectangular backing having a cover strip, the corner portion of the sheet provided with the tab tucked in between the backing and candy to project the tab and substantially cover the hole, and the other three corner portions of the sheet secured between the backing and cover strip.

1,893,812. PRODUCTION OF CATALYTIC MATERIAL. JACOB ALBERT WEIL, Manchester, England, assignor to Imperial Chemical Industries Limited, London, England. Filed May 21, 1930, Serial No. 454,513, and in Great Britain June 1, 1929. 8 Claims. (Cl. 23—234.)

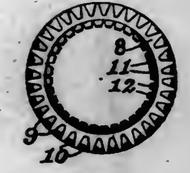
1. A process for the preparation of a catalytic material, which consists in mixing together a vanadium compound, a silicious diluent and a silica hydrogel substantially in unreacted form.

1,893,813. OSCILLATOR. VERNON E. WHITMAN, New York, N. Y., assignor to Haseltine Corporation. Filed Apr. 9, 1932. Serial No. 604,172. 14 Claims. (Cl. 250—20.)



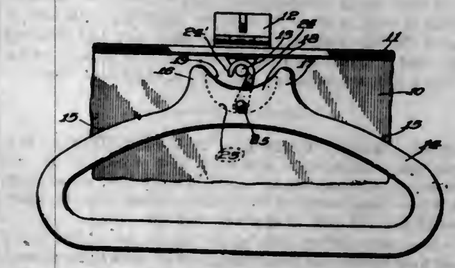
1. In an oscillator-modulator arrangement, a vacuum tube having grid, anode, and cathode, an input circuit connected between said grid and said cathode, an output circuit connected between said anode and said cathode, a tuned circuit included in said input circuit and tunable to the frequency of a current to be modulated, an oscillation circuit coupled to said output circuit and tunable to the frequency of a modulating current, means for impressing voltages of said oscillation frequency upon the input circuit of said tube, means for producing substantially constant amplitude of oscillation voltage as said oscillation circuit is tuned throughout a range of frequencies, and means for neutralizing the grid-to-cathode capacity of said tube relative to the oscillation-frequency input thereof, whereby the presence of the tuned input circuit will not affect the oscillation-frequency voltage impressed upon the input of said tube.

1,893,814. OIL SEAL AND SPRING. EDGAR WIDIN, Roselle Park, N. J. Filed May 2, 1931. Serial No. 534,649. 1 Claim. (Cl. 267—1.)



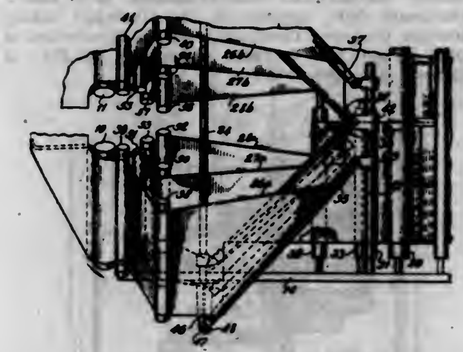
As a new article of manufacture, a spring device of the class described, comprising a circular body substantially tubular in cross-section and provided with short notches on its outer edge and with short slits on its inner edge, said body being solid throughout its length between the inner ends of all of said short notches and short slits, and said tubular body adapted to exert both lateral and vertical pressure.

1,893,815. GARMENT HANGER. CHARLES T. WILT, Jr., ELMER ELLSWORTH WILT, COLIN D. WILT, and ROBERT L. WILT, Chicago, Ill., assignors to Wilt Trunk Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 27, 1930. Serial No. 491,374. 4 Claims. (Cl. 223—61.)



1. A garment hanger comprising garment carrying arms, a neck portion between said arms, the neck portion having a concave upper edge, a hook pivotally mounted in the concave neck portion, and means on the hanger for normally retaining the hook in upright position relative to the hanger, said means comprising a member yieldingly mounted on the hanger and bearing on the hook.

1,893,816. FORMING MECHANISM FOR WEB PRESSES. HENRY A. WISE WOOD New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 12, 1930. Serial No. 495,065. 17 Claims. (Cl. 270—5.)

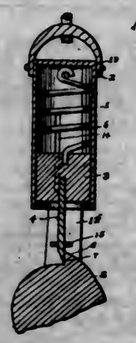


1. In a web press, a pair of nipping rolls, and a pair of formers converging toward said rolls whereby web portions may run without bending from the formers to said rolls.

1,893,817. ELECTRODE CLEANING PROCESS. HERBERT S. WOODWARD, Morenci, Aris., assignor to Phelps Dodge Corporation, Morenci, Ariz., a Corporation of New York. Filed Oct. 27, 1931. Serial No. 571,466. 7 Claims. (Cl. 148—8.)

2. The process which comprises treating an electrode having lead peroxide scale thereon with a soluble sulphide.

1,893,818. AUTOMATIC PARACHUTE PACK RELEASER. MARK W. COLLET, Philadelphia, Pa. Filed Jan. 2, 1931. Serial No. 506,143. 14 Claims. (Cl. 244—21.)

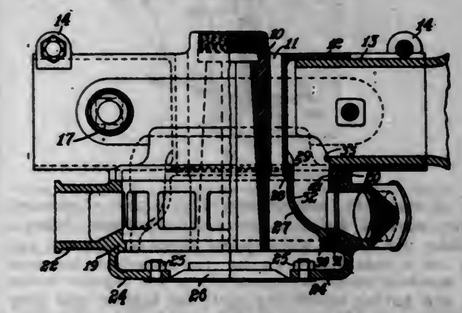


1. A parachute releasing device, automatically set in action by being allowed to fall freely, comprising a weight, an elastic element put into stress by said weight and sufficiently resilient to move said weight when the entire device is falling freely, and means for releasing said parachute set in motion through the movement of the weight caused by the resiliency of the said elastic element.

1,893,819. PROCESS FOR PRODUCING GLUCONIC ACID BY FUNGI. JAMES N. CURRIE, JASPER H. KANE, and ALEXANDER FINLAY, Brooklyn, N. Y., assignors to Charles Pfizer & Company, Brooklyn, N. Y., a Corporation of New Jersey. Filed Feb. 9, 1931. Serial No. 514,694. 16 Claims. (Cl. 260—120.)

1. Process of producing gluconic acid comprising forming a solution of glucose and nutrient substances, supplying a gluconic acid generating mold, and maintaining aeration and agitation such as to disperse the growing mold and oxygen through the solution.

1,893,820. EXHAUST GAS HUB. THOMAS A. DICKS, Pittsburgh, Pa., assignor to Pittsburgh Screw and Bolt Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 1, 1930. Serial No. 440,742. 9 Claims. (Cl. 170—172.)

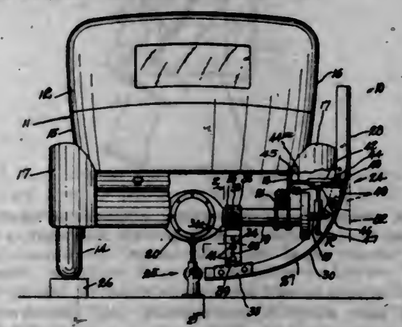


1. In an exhaust gas hub for aeronautical type engines, a body portion having blade receiving sockets and a gas collecting ring member, means for interlocking said gas collecting ring member and sockets, a member for directing said gas into said sockets and for keeping said gas from contacting with said body portion, and air passages for keeping said hub relatively cool.

1,893,821. METHOD OF IMPROVING THE RESISTANCE OF ALLOY ARTICLES TO CORROSION. COLIN G. FINK, New York, N. Y., assignor to Allegheny Steel Company, Brackenridge, Pa., a Corporation of Pennsylvania. Original application filed Nov. 4, 1927, Serial No. 231,156. Divided and this application filed June 26, 1930. Serial No. 464,112. 5 Claims. (Cl. 148—8.)

2. A method of improving the resistance of ferro-alloy articles to corrosion, comprising immersing said articles in a bath containing about 7% sulphuric acid and about 60% chromic acid.

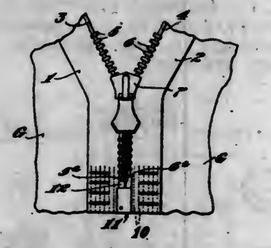
1,893,822. AUTOMOBILE TURN FRAME. ANTHONY GUERRIERO, Brooklyn, N. Y. Filed Dec. 23, 1930. Serial No. 504,239. 10 Claims. (Cl. 214—1.)



1. A device for a vehicle having a spring supporting means, means removably connected to the vehicle for turn-

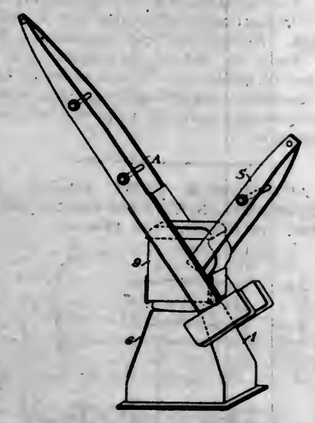
ing the vehicle on a side and with said side supported above the ground, and detachable means for releasably locking the spring means under tension to prevent vibration of the vehicle due to said spring means in the turn position of the vehicle.

1,893,823. SEPARABLE FASTENER. ROBERT C. LAGAT, New Britain, Conn., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Sept. 12, 1931. Serial No. 562,464. 17 Claims. (Cl. 24—205.)



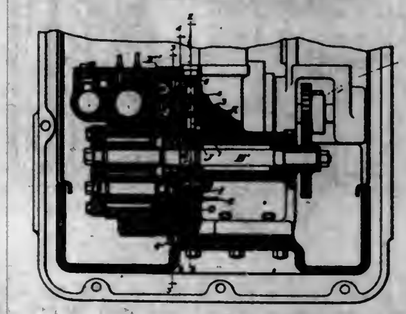
1. A separable fastener comprising a pair of stringers having opposed series of interlocking fastener elements, a slider for moving the opposed series of elements into and out of engagement, an end stop comprising independent members attached respectively to the opposite stringers and having interfitting parts for holding said members in assembled relation, and means adjacent to said end stop for stiffening the stringer transversely, and an uninterrupted series of stitches extending longitudinally of said stiffened portion.

1,893,824. AUTOMATIC CROSSING GATE. WILLIAM C. MCWHIRTER, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 12, 1932. Serial No. 610,831. 2 Claims. (Cl. 39—7.)



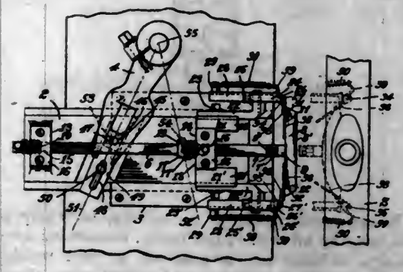
1. A crossing gate comprising a rotatable shaft, a crossing arm operatively connected with said shaft, a first gear wheel keyed to said shaft, a second gear wheel rotatably mounted on said shaft, a counterweight secured to said second gear wheel for biasing said second gear wheel to one position, said counterweight being provided with a recess, means including an electric motor for rotating one or the other of said gear wheels depending upon which gear wheel offers the least resistance to its rotation, a circuit controller comprising a relatively flexible contact finger biased into engagement with a relatively rigid contact finger, a roller secured to said flexible contact finger and cooperating with the recess in said counterweight in such manner that the roller will enter said recess and permit the contact formed by said two contact fingers to become closed when and only when said gear wheel occupies the position to which it is biased by said counterweight, and a circuit for said motor including said contact.

1,893,825. HYDRAULIC TRANSFORMER. HANS ERNST, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 6, 1929. Serial No. 412,231. 4 Claims. (Cl. 103—174.)



1. An hydraulic pump device combining a series of radially arranged pistons; a reduced valve portion formed intermediate the ends of each piston; casing means providing cylinders for the pistons, and also providing concentric annular channels, one for supply fluid and one for exhaust fluid, a series of ports connecting the said channels with portions of the respective cylinders, said casing also providing a series of tangential conduits connecting the end portion of each cylinder with an intermediate portion of a related cylinder; and means for cyclically actuating said pistons to cause fluid to be discharged from the cylinders and to position the pistons of related cylinders so that the valve portion thereof establishes communication between said cylinders and said exhaust channel and said cylinders and said supply channel in a predetermined sequence.

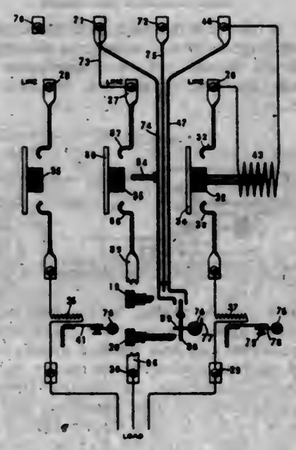
1,893,826. LABELING MACHINE. CHARLES R. FREDSELL, New York, N. Y., assignor to McDonald Engineering Corporation, Brooklyn, N. Y., a Corporation of New York. Filed July 10, 1931. Serial No. 549,863. 11 Claims. (Cl. 91—47.)



1. In a labeling machine, means for applying adhesive to an article having curved and irregular faces to which a label is to be attached, including a flexible pad fixed

at its center portion from top to bottom to a yielding carrier with the remaining portions free to be flexed into curved or angular shapes, said yielding carrier mounted on a slide movable to and from the article, and means carried by the slide to press the said free portions against the article.

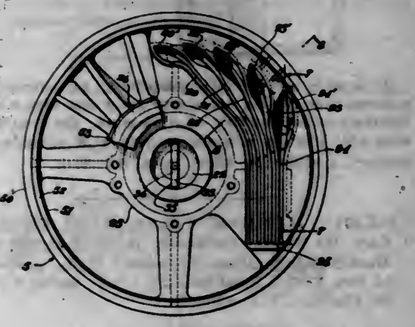
1,893,827. ELECTRIC SWITCH. BENJAMIN E. GETCHELL, Plainville, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Jan. 15, 1930. Serial No. 420,929. 12 Claims. (Cl. 175—294.)



1. A three pole switch having three line terminals, three load terminals, a switch member interposed between each line terminal and its corresponding terminal, a heater member interposed in circuit with each one of two poles of the switch, a magnet coil having one terminal connected to one of the line terminals, a spring contact arm connected to the other magnet terminal, a spring contact arm connected to another of said line terminals, a contact mounted between said contact arms, a rocker member having one end interposed between said contact arms for moving the same, a spring-pressed latch member adapted to hold said rocker member in position, thermostatic members actuated by said heater members and adapted to release said latch member, two push buttons, one of said buttons being located in position to move said contact arms into electrical connection for closing the magnet coil circuit and the other push button being arranged to move said rocker member for opening the magnet coil circuit and for re-setting the latch member, said rocker member, when released, being adapted to electrically disconnect said spring contact arms, an armature actuated by said electromagnet for moving all of the movable switch members to closed circuit position, and means actuated by the movement of said switch members to closed circuit position for holding said switch contact arms in electrical connection, one of said spring contact arms being biased to disrupt the electrical connection automatically when said switch members move to open circuit position.

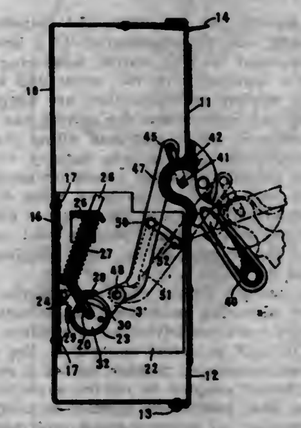
1,893,828. MACHINE FOR SEPARATING AND COUNTING COINS. CHARLES G. GRAEME, Buffalo, N. Y., assignor to John H. Wells. Filed Dec. 1, 1928. Serial No. 328,115. 13 Claims. (Cl. 133—3.)

13. In a machine of the class described, the combination with a coin separator, of an actuator, a guide having a plurality of runways to support the coins separated with their edges in the path of movement of said actuator, and coin counters at the ends of said runways, said actuator being common to all of said runways and engaging the



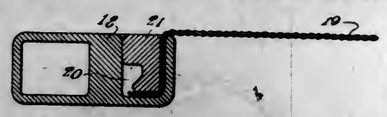
outer edges of said coins and rolling them along said runways to engage and actuate said counters, said runways extending alongside of the path of movement of said actuators for a distance less than a semi-circle.

1,893,829. INCLOSED SWITCH. HERMAN J. HAMMERLY, Wallingford, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Mar. 2, 1931. Serial No. 519,328. 8 Claims. (Cl. 200—50.)



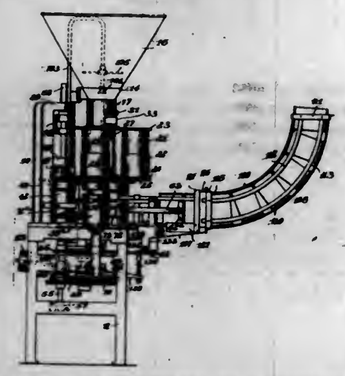
1. An inclosed switch construction embodying a box having a cover portion hinged across the front of the box, a switch carrier frame mounted in the box including quick-make and break mechanism and a side plate having a slot with a straight portion and an arcuate portion, a handle hinged to the cover and means of connection between said handle and the quick-make and break mechanism including a link having a projection slidable in the straight portion of the slotted side plate to actuate the switch and swinging in the arcuate portion to form a safety interlock.

1,893,830. WIRE FABRIC. ROBERT P. TURNER, York, Pa., assignor to New York Wire Cloth Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 18, 1930. Serial No. 503,174. 6 Claims. (Cl. 91—68.)



1. A wire screen cloth comprising wire strands having a strength-providing aluminum alloy core and a corrosion-resistant outer surface of aluminum, the coating of the separate strands adhering where said strands cross to produce a stiffening effect upon the cloth.

1,893,831. MACHINE FOR FILLING CONTAINERS. CARL M. WEBER, Rochester, N. Y., assignor to Weber Machine Corporation, Rochester, N. Y., a Corporation of New York. Filed Dec. 28, 1928. Serial No. 328,942. 23 Claims. (Cl. 226—71.)

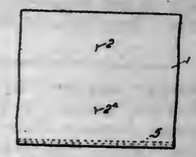


1. In a machine for measuring and transferring materials to containers, the combination of a holder for the material provided with an outlet, measuring receptacles movable into registry with the outlet and subsequently to a filling station at which they are adapted to discharge their contents, means for moving the receptacles to and from said outlet and said filling station, guide and overflow tubes movable into registry with said receptacles at the filling station, means for moving the containers and said guide and overflow tubes to the filling station in position to receive the contents discharged by the receptacles and a single plunger head operating to successively engage each of the filled containers to pack the material thereinto.

23. In a machine of the character described including a container advancing mechanism, an actuating mechanism for said container advancing mechanism and releasing means for said actuating mechanism, the combination of a circular positioning member having a pocket in the perimeter thereof adapted to receive a container, means for rotating said positioning member to receive and position a container at predetermined intervals, a control member carried by said positioning member and located thereon so as to be operated by a container on the receipt thereof in said pocket, said control member operating said releasing means of said actuating means on the movement of said positioning member with the control member held inoperative on the nonreceipt of a container.

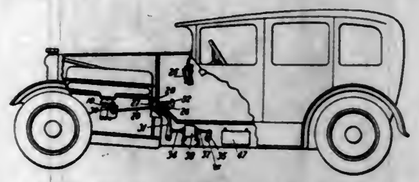
1,893,832. METHOD OF MANUFACTURING BAGS. RALPH A. WELLMAN, Cleveland, Ohio. Filed Oct. 9, 1930. Serial No. 487,510. 8 Claims. (Cl. 93—35.)

1. A process of manufacturing bags, comprising providing a web of bag material with a plurality of slits arranged transversely of the web and extending in a transverse direction with respect thereto, forming a tube from the web by folding the same along lines intersecting the slits, and cutting blanks from the tube by cuts



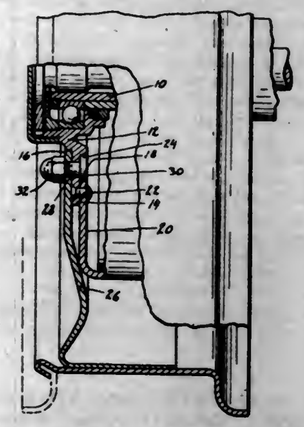
from opposite sides thereof, said cuts joining the slits, one of said cuts being concave with respect to the other to provide a flap in the opposite side of the tube.

1,893,833. VEHICLE BRAKE MECHANISM. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 8, 1928. Serial No. 298,148. 12 Claims. (Cl. 192—3.)



1. A motor vehicle having, in combination, electrically operated brake apparatus, a power plant having fuel admission apparatus and fuel ignition apparatus, electrically operated control mechanism to render the fuel admission apparatus ineffective, an electric circuit including said brake apparatus, ignition apparatus and said control mechanism, a switch in said circuit having one position at which the brake apparatus may be operated without affecting the ignition apparatus or said control mechanism and having a second position at which operation of the brake apparatus automatically cuts out the ignition apparatus and operates the control mechanism to render the fuel admission apparatus ineffective.

1,893,834. VEHICLE WHEEL. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed Nov. 2, 1929, Serial No. 404,235. Divided and this application filed Feb. 18, 1931. Serial No. 516,688. 4 Claims. (Cl. 301—6.)



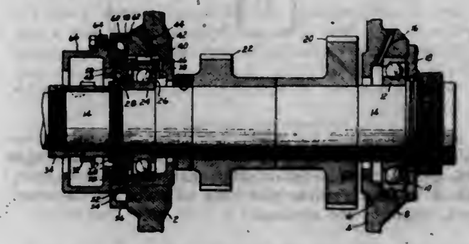
4. A wheel and brake drum assembly comprising a wheel hub having a radially extending flange, a brake drum secured to the inner face of said flange, said flange being provided with a countersink in the inner face of

the flange adjacent the edge of the drum, and a wheel secured to the outer face of said flange by means of a bolt having a polygonal head, said bolthead resting in the countersink with an edge adjacent the edge of the drum.

1,893,835. ANTIFREEZING SOLUTION. PHILIP ATTKISS, Brooklyn, N. Y. Filed July 18, 1930. Serial No. 468,981. 2 Claims. (Cl. 252—5.)

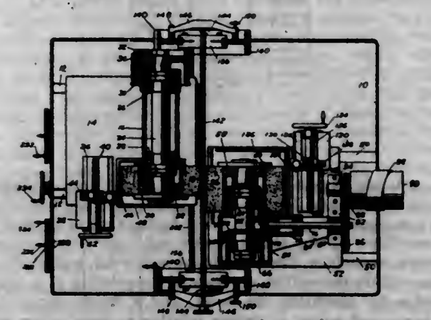
1. A solution, to be used as an anti-freeze composed of ingredients mixed in the following proportions: 100 lbs. calcium chloride, 1 gal. glycerine, ¼ lb. calcium hydroxide, enough water to make 17 gallons of solution.

1,893,836. BEARING MOUNTING. JOHN H. BANINGER, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Feb. 16, 1931. Serial No. 515,926. 8 Claims. (Cl. 308—189.)



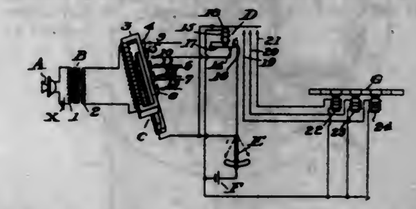
1. In a bearing mounting, a casing having side walls, a spindle, opposed angular contact antifriction bearings between the spindle and the side walls, a housing for the outer race ring of one of the bearings, the housing being slidably seated in one of the side walls and having a threaded portion, a nut carried on said threaded portion and arranged to engage the side wall to put an initial thrust load on the bearings, the nut comprising a body portion and a resilient wall carrying an axially directed rim, the rim having an end face overhanging the body of the nut, the amount of overhang being selected to require a predetermined force to bring the end face of the rim flush with the body portion, the amount of overhang also being greater than the amount of spindle expansion whereby the nut maintains a thrust load on the bearings throughout the expansion; substantially as described.

1,893,837. GRINDING MACHINE. WILLIAM H. CHAPMAN, Montclair, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 12, 1926. Serial No. 87,940. 22 Claims. (Cl. 51—103.)



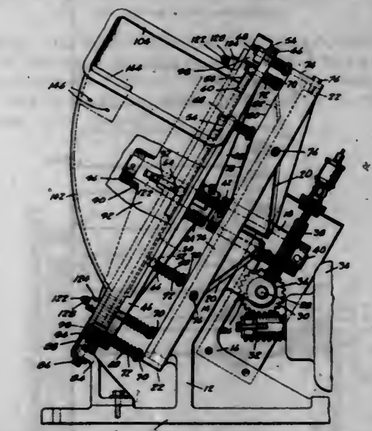
1. In a centerless grinding machine, a fast wheel, a slow wheel, the axis of rotation of one of said wheels being tiltable with respect to the other, a supporting head for said tiltable wheel, said head having, on its underside, curved ways whose centers of curvature lie in a line intersecting the work contacting portion of the other wheel, a support arranged beneath the head and having corresponding ways for the ways on the head, means for tilting said head and comprising a turnbuckle connecting the head to the support and bracing the head in adjusted position, and means for clamping said head in adjusted position; substantially as described.

1,893,838. APPARATUS FOR PRODUCING MUSICAL TONES AND SOUNDS. EMORY DAUGHERTY HECOX, Columbus, Ohio. Filed July 25, 1930. Serial No. 470,663. 17 Claims. (Cl. 84—1.)



2. In an instrument of the type set forth, means for receiving sound waves, a selector means for utilizing said sound waves so received as a means of causing other sound waves to be sounded, the latter waves to provide harmonious chord accompaniment for the former sound waves.

1,893,839. ARTICLE FEEDING MACHINE. PHILIP H. HUTCHINSON, Montclair, and JOSEPH KLOPAK, Newark, N. J., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 5, 1929. Serial No. 397,720. 24 Claims. (Cl. 221—127.)

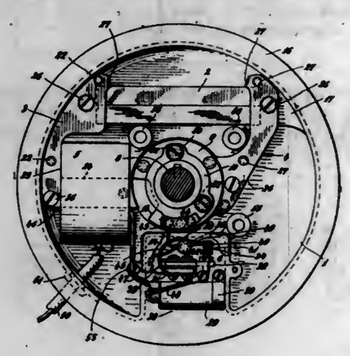


1. In apparatus of the character described, in combination, a hopper, a wheel inclined to the vertical and having a flat face closing an open side of the hopper, buckets carried on the flat face of the wheel and projecting into the hopper, and means for rotating the wheel to cause the buckets to pick up articles and carry them beyond the hopper; substantially as described.

1,893,840. MAGNETO. JOHN F. MARTIN, Springfield, Mass., assignor to United American Bosch Corporation, Springfield, Mass., a Corporation of New York. Filed Feb. 26, 1931. Serial No. 518,484. 14 Claims. (Cl. 171—209.)

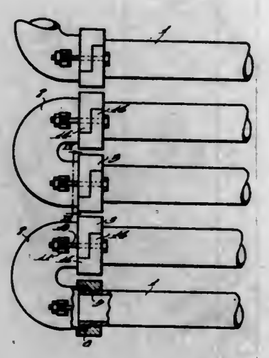
1. A magneto comprising generating coils, a source of magnetic flux for said coils, a pole-piece associated with

each pole of said source and having opposed polar faces, said coils being mounted on one of said polepieces between the polar face thereof and said source, a rotor shaped to vary the permeability of the magnetic path



through said coils, the rotor being disposed between said polar faces, and a shunting element to form a path of changing reluctance through which magnetic flux is diverted from said coils.
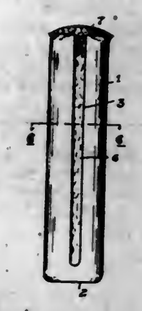
1,893,841. RETURN BEND FOR PIPE COILS. MALCOLM MERRITT, Fort Wayne, Ind., assignor to The Western Gas Construction Company, a Corporation of Indiana. Filed Jan. 4, 1930. Serial No. 418,614. 3 Claims. (Cl. 285—20.)



1. Apparatus comprising a pipe having a groove near the end thereof, a collar having a projection for engaging the groove, a recess in the collar, a member surrounding the pipe and extending into said recess and means for drawing the color and member toward each other, said collar comprising overlapping segments and said means serving to hold the overlapping segments in assembled relation.

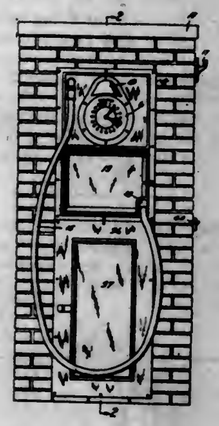
1,893,842. FROZEN FOOD PACKET AND PROCESS OF MANUFACTURING THE SAME. CHARLES J. NEEP, Castle Shannon, Pa. Filed Nov. 24, 1931. Serial No. 576,964. 6 Claims. (Cl. 99—11.)

1. As a new article of manufacture, a frozen food product comprising an elongated cylindraceous container formed of baked edible material and having its lower end closed and its upper end open, a column of frozen product, such as ice cream, fitted in said container, the walls of the container being provided with slotted openings extending longitudinally from the open end and the container resiliently holding the column, the sides of the column being provided with longitudinally disposed grooves which register with



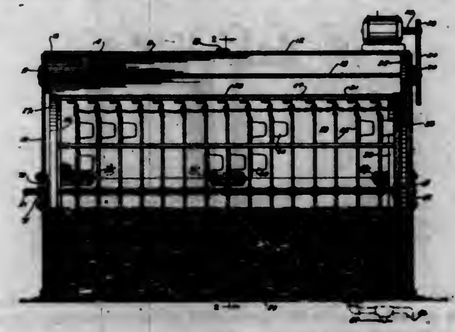
the slotted openings but which are wider than said openings so that the side edges of the openings overlap the edges of the grooves, and strips of edible material, such as fruit, inserted in said grooves and held in place by the overlapping edges of the openings.

1,893,843. LIQUID DISPENSING APPARATUS. WALTER E. MILESTONE, Lakewood, Ohio. Filed June 10, 1930. Serial No. 460,255. 4 Claims. (Cl. 221—95.)



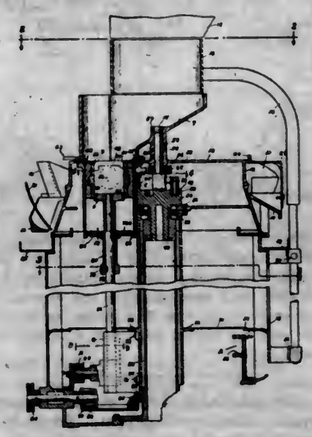
1. A liquid dispensing apparatus for use in an encasing structure, the same being in the nature of a self-contained unit and comprising an open front casing that is adapted to be contained within the structure with its front exposed through a surface thereof, liquid metering and delivery means within the casing, an assembly consisting of a pump, a motor for operating the same, and a frame supporting the pump and motor in proper relation to each other, said assembly being mounted within the casing and bodily removable therefrom as a unit, separable communicative connections between the pump and meter, and a closure for the open front of the casing.

1,893,844. CLEANING APPARATUS. ANTON J. RAUS, Cleveland, Ohio. Filed Nov. 20, 1931. Serial No. 576,323. 10 Claims. (Cl. 68—18.)



1. In a cleaning apparatus, in combination, a tank for liquid, and a rotary carrier in said tank, and a series of axially spaced annular frames extending across said carrier and around the axis thereof, each frame being provided with a plurality of article holders on the side thereof.

1,893,845. COMBINATION DIVIDER AND BALLER. SIGMUND SCHIFF, Cincinnati, Ohio. Filed Oct. 15, 1931, Serial No. 568,921, and in Great Britain Dec. 13, 1930. 34 Claims. (Cl. 107—4.)

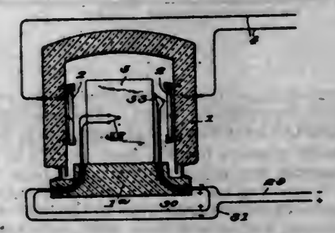


4. In a device of the class described the combination of a hopper, a revolving plunger casing, a plunger reciprocally contained in the casing, and means for effecting relative movement of the hopper and the plunger casing whereby to bring the plunger into and from registration with the hopper, for moving the plunger away from the hopper when in registration therewith whereby a plastic contained in the hopper is caused to enter the space vacated by the plunger, for effecting relative movement of the hopper and plunger casing whereby to reduce the passage between the hopper and the space created in the plunger casing by the movement of the plunger, for moving the plunger toward the plastic in the last referred to space whereby to return some of the plastic to the hopper and for effecting further relative movement of the hopper and plunger casing whereby to sever communication between the space in the casing and the hopper, and means for reducing the pressure within the space in the casing intermediate the plunger and the plastic whereby the plastic will completely fill the space in the plunger casing before the plunger will return any of the plastic to the hopper.

1,893,846. RUBBER VULCANIZATION PROCESS. WINFIELD SCOTT, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed May 16, 1928. Serial No. 278,350. 14 Claims. (Cl. 18—53.)

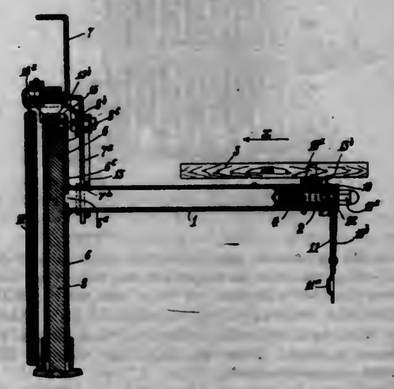
1. The method of manufacturing a vulcanized rubber product which comprises heating rubber and sulfur in the presence of an accelerating agent, said agent comprising a mixture of a benzo-thiazole-disulfid accelerator and an accelerator containing a substituted amino grouping.

1,893,847. METHOD OF AND MEANS FOR CONTROLLING TEMPERATURE. GEORGE L. SIMPSON, Coraopolis, Pa., assignor to Pittsburgh Research Corporation, Pittsburgh, Pa. Filed June 1, 1931. Serial No. 541,451. 14 Claims. (Cl. 13—24.)



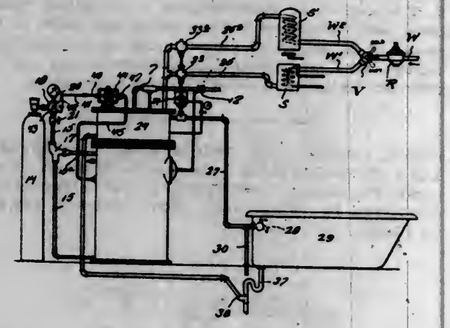
1. In the heat treatment of a furnace charge the method of heating which comprises applying heat to the furnace to progressively raise its temperature, and so regulating the heat input that the temperature difference between two separate points of the charge approaches but does not exceed a predetermined amount.

1,893,848. JACKING DEVICE FOR ROAD VEHICLES. JOHN FERGUSON STEVENSON and GEORGE BOWMAN, Belfast, Northern Ireland. Filed Sept. 18, 1930, Serial No. 482,841, and in Great Britain Feb. 7, 1930. 8 Claims. (Cl. 254—93.)



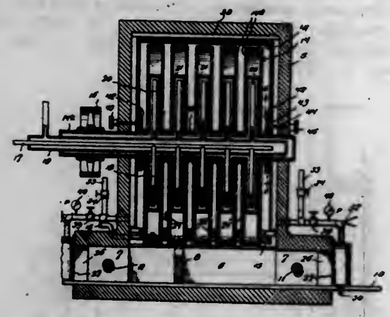
1. Jacking apparatus for vehicles, the combination of a jack, comprising a plunger element, a pressure fluid reservoir for said jack, a resilient connection adapted to permit vertical movement of said reservoir bodily on a readily accessible part of the vehicle, a second resilient connection adapted to permit vertical movement of the jack for said reservoir bodily and arranged in proximity thereto on a part of the vehicle adapted for effective application of lifting force, and means for forcing pressure fluid from said reservoir to said jack so as to raise the vehicle.

1,893,849. BATH APPARATUS. EDWARD G. SULLIVAN, Amarillo, Tex., assignor to Joseph S. Belt, Amarillo, Tex. Filed Jan. 5, 1931, Serial No. 506,810. Renewed Nov. 7, 1932. 9 Claims. (Cl. 261—89.)



1. In a bath apparatus, a substantially gas-tight storage tank, means for supplying water to and maintaining it at a predetermined level within said tank, means for supplying gas under pressure into the lower portion of said tank for carbonating the water therein, and means for automatically increasing the pressure of gas supplied to said tank in accordance with the rise of temperature of carbonated water within said tank when said temperature rises beyond a predetermined point, said tank having a valve-controlled discharge pipe having an inlet end extending into said tank below the level of the water therein.

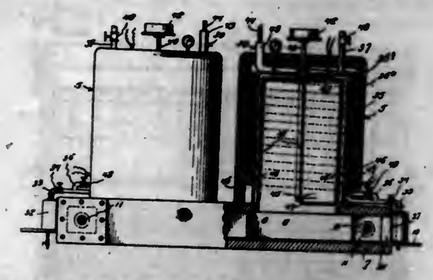
1,893,850. APPARATUS FOR PRODUCING SOLID CARBON DIOXIDE. EDWARD G. SULLIVAN, Amarillo, Tex., assignor to Joseph S. Belt, Amarillo, Tex. Filed Feb. 17, 1931. Serial No. 516,489. 11 Claims. (Cl. 62—121.)



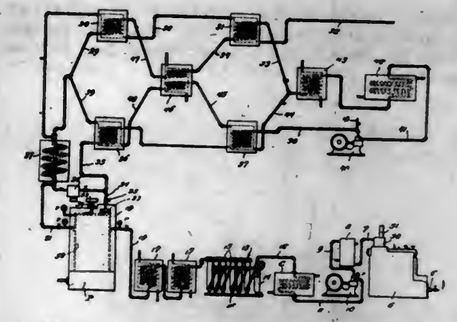
1. In an apparatus for producing solid carbon dioxide, a converting chamber having a bottom collecting chamber, a press chamber arranged at each side of the collecting chamber and communicating through the side thereof directly with said collecting chamber, and means to feed the snow laterally from the collecting chamber into the respective press chambers.

1,893,851. APPARATUS FOR PRODUCING SOLID CARBON DIOXIDE. EDWARD G. SULLIVAN, Amarillo, Tex., assignor to Joseph S. Belt, Amarillo, Tex. Filed Feb. 17, 1931. Serial No. 516,490. 3 Claims. (Cl. 62—121.)

1. In an apparatus for producing solid carbon dioxide, a converting chamber having a bottom snow collecting chamber, a countercurrent heat exchange element coiled about the converting chamber and including an inner conduit terminating in an expansion nozzle arranged to discharge flue gases into the converting chamber, said heat exchange element further including an outer conduit connected to the collecting chamber for the escape of nitrogen and unsolidified carbon dioxide gas therethrough from said collecting and converting chambers and means to control the escape of gas from the collecting and converting chambers through said outer conduit.

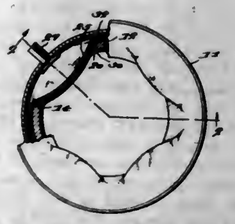


1,893,852. PROCESS OF AND APPARATUS FOR PRODUCING SOLID CARBON DIOXIDE. EDWARD G. SULLIVAN, Amarillo, Tex., assignor to Joseph S. Belt, Amarillo, Tex. Filed Feb. 17, 1931. Serial No. 516,491. 8 Claims. (Cl. 62—121.)



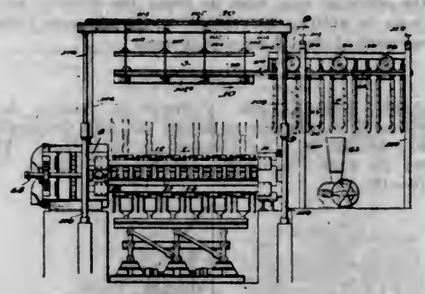
1. The process of making carbon dioxide snow which includes discharging moderately compressed and cooled dried flue gases containing carbon dioxide gas into a converting chamber, and precipitating the carbon dioxide in the form of snow from the flue gases by subjecting the latter to the cooling action of a jet of expanding highly cooled nitrogen.

1,893,853. ARTIFICIAL LIMB. AMOS E. TULLIS, Minneapolis, Minn. Filed Dec. 15, 1931. Serial No. 581,208. 5 Claims. (Cl. 3—8.)



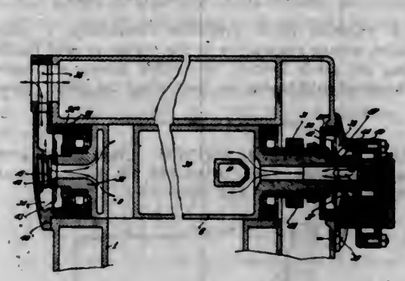
1. An artificial limb comprising a substantially rigid socket member having openings in the side walls thereof, a shell embracing said socket, a liner formed of flexible material suspended within the socket, an elastic tube located between the outer wall of the socket and the shell, valve means through which air may be forced for inflating the tube so that the portion of the tube within the openings will be inflated and provide cushioning means for the amputated member.

1,893,854. CAKE STRIPPER. WILSON A. WILHELM, Vernon, Tex. Filed Aug. 11, 1930. Serial No. 474,604. 29 Claims. (Cl. 100—52.)



1. The combination of a pair of suspended elements supporting an adhering cake therebetween, and means insertible between said elements and both sides of the cake to strip the cake from said elements.

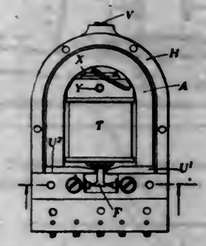
1,893,855. COOLING MEANS FOR ROTARY VALVES. ALFRED BARR, Charlottenburg, Berlin, Germany. Original application filed Sept. 18, 1928, Serial No. 306,640, now Patent No. 1,841,344, dated Jan. 12, 1932. Divided and this application filed Feb. 9, 1931. Serial No. 514,683. 5 Claims. (Cl. 123—177.)



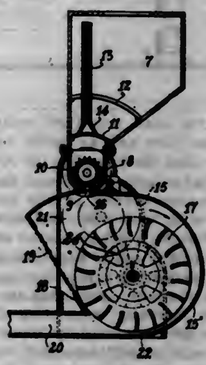
1. Improved packing for the rotary valves of internal combustion engines of the type specified, hollow spindles for supporting said rotary valve, abutment surfaces on said spindles, collars for engaging with said abutment surfaces, elastic annular diaphragms connected by their inner peripheries to said collars, means for clamping the external periphery of said diaphragms against an abutment formed on the covers of the valve housing, springs for maintaining said collars in cooperation with said abutment surfaces on the hollow spindles, and means for conducting cooling fluid through one hollow spindle to the interior of said valve and through the other hollow spindle from the interior of said valve in order that continuous cooling of said valve may be effected.

1,893,856. RELAY. DENIS MCDONNELL BROUGHTON, London, England. Filed Nov. 9, 1929, Serial No. 406,048, and in Great Britain Nov. 9, 1928. 3 Claims. (Cl. 200—93.)

1. A polarised relay comprising a permanent magnet having two arms, a pair of pole pieces secured one to each of said arms, a hollow coil located between said arms, a pair of stationary contacts located adjacent said pole pieces, a pivotally mounted armature extending through said coil and between said pole pieces and said contacts and a magnetic shunt pivotally mounted relatively to said arms, said magnetic shunt being rotatable in a plane parallel to the plane of said magnet, whereby when said shunt is oscillated about its centre it serves simultaneously to increase and decrease the direction and magnitude of the operative field strength through said armature.



1,893,857. PULVERIZED FUEL FEEDER. CHARLES M. BUCK, Brooklyn, N. Y. Filed Dec. 18, 1930. Serial No. 503,169. 9 Claims. (Cl. 302—37.)

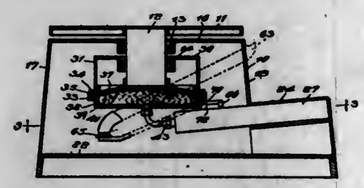


1. In a pulverized coal feeder, a substantially volute-like fan casing terminating in an inlet opening at its larger end, a fan in said casing including a ring of fan blades mouted for rotation in a path extended from the large end of the volute to the small end thereof, a discharge passage extended from the smaller end of the volute casing, said inlet opening and said discharge passage being located relatively close to each other toward the same side of the fan, a relatively narrow casing part interposed between the inlet opening and the discharge passage and positioned closely adjacent to the path of movement of the fan blades, and means for feeding powdered coal into the casing at a point adjacent its inlet end.

1,893,858. SCALE. HARRY CARLSON, Chicago, Ill. Filed Oct. 31, 1929. Serial No. 403,782. 6 Claims. (Cl. 265—47.)

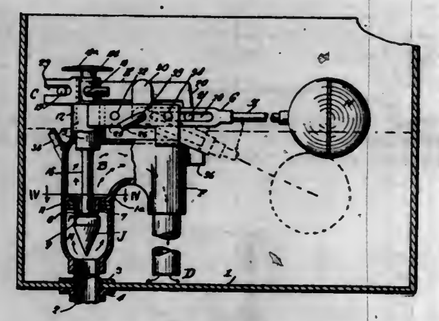
1. A scale comprising a frame, a platform, a piston operatively connected to said platform and having a concave surface, a cylinder associated with said piston, a diaphragm

extending transversely in said cylinder and formed with a convex surface engageable by said concave surface, said cylinder being adapted to hold a quantity of liquid between



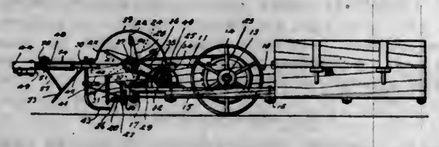
said diaphragm and an end wall thereof, and indicating means operatively connected to said cylinder and operable by said liquid.

1,893,859. COMPENSATING VALVE. CARL E. GLEASON and MELVIN A. MARTIN, Watsonville, Calif. Filed Oct. 9, 1930. Serial No. 487,572. 4 Claims. (Cl. 137—104.)



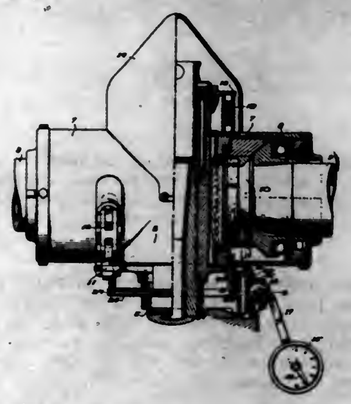
1. A device of the kind described, comprising a valve structure having an inlet and an outlet for fluid, a valve stem arranged for axial movement in the structure, a valve seat carried by the structure adjacent the lower end of said stem, valve means carried by the lower end of the stem cooperative with said seat and arranged to open against the fluid pressure, a primary lever loosely fulcrumed in bearing means at the upper end of the structure, the body of said lever extending across the upper end of said valve stem, means pivotally connecting the lever with the valve stem, means pivotally connecting the free end of said primary lever with a secondary lever, a float extending from the free end of said secondary lever, means arranged to pivot the fixed end of the secondary lever at different distances from the axis of said valve stem, rest means arranged to limit the downward movement of said float, and guide means carried by and extending upwardly from the pivotal end of said secondary lever and arranged to engage and aline the primary lever.

1,893,860. COW PEA HARVESTER. JOHN F. HAAG, Weatherford, Okla. Filed Mar. 12, 1931. Serial No. 522,056. 11 Claims. (Cl. 56—124.)



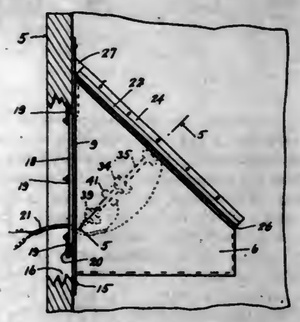
1. A harvester of the character described, comprising a body, traction wheels upon which the body is mounted for tilting movement, the body having a bottom constituting an operator's platform and side walls, a knife bar mounted at the forward end of the body, means driven by the traction wheels for reciprocating the knife bar, a beater mounted immediately above the knife bar at the forward end of the body, and draft means pivotally connected to the forward end of the body, the tilting axis of the body being so disposed that the body is balanced whereby the operator may raise or lower the forward end of the body by shifting his weight on the platform forward or rearward of the tilting axis thereof.

1,893,861. PROPELLER. CLINTON H. HAVILL, South Orange, N. J., assignor to Bendix Research Corporation, East Orange, N. J., a Corporation of Indiana. Filed May 29, 1931. Serial No. 541,035. 15 Claims. (Cl. 170—162.)



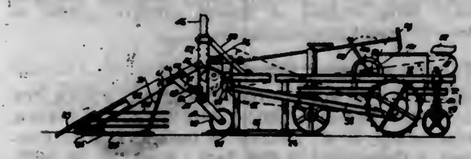
1. A variable pitch propeller comprising a plurality of blades, means responsive to the thrust of said blades for varying the pitch thereof, and other means responsive to the thrust of said blades for indicating the pitch thereof.

1,893,862. BIN ALARM SWITCH. CHARLES H. JOHANSSON, Texas City, Tex. Filed Jan. 14, 1931. Serial No. 508,746. 4 Claims. (Cl. 200—85.)



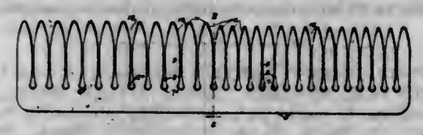
1. A bin alarm switch structure of the type described comprising a dustproof casing adapted to be disposed within a bin and be secured to one of the side walls thereof, a downwardly sloping upper frame forming the top of the casing, a flexible dustproof medium covering said frame, a plate in contact with the under side of the flexible medium and movably supported relative to the frame, a plunger depending from said plate means on the lower end of the plunger for actuating an electrical circuit closer disposed within the casing, a support depending from said frame spring means carried by the support for maintaining said plate in normally raised position relative to the frame thereby carrying the plunger normally out of position for actuating said circuit closer, said plate and said plunger being adapted to be depressed by material in the bin so as to actuate said circuit closer when the level of the contents of the bin is above said plate, said frame being arranged at a slant so as to receive the outward as well as the downward pressure of material in the bin, and so as to permit the material to slide gravitationally therefrom when reduced below the level thereof, whereby to insure the absence of material thereon when the material is below such level insuring positive opening of the circuit closer.

1,893,863. AGRICULTURAL IMPLEMENT. ADOLF KERNS, Gonzales, Calif. Filed Sept. 24, 1930. Serial No. 484,206. 6 Claims. (Cl. 55—60.)



1. An implement of the kind described, comprising in combination, a frame, wheel-support for the front end of the frame, wheel-support for the rear end of the frame, scuffle blades disposed underneath the frame at oblique angles thereto, means connecting said blades with said frame; a tractor, vertically-adjustable pusher means linking the tractor to the forward part of said frame, means to raise and lower the front of said frame independently of the level of the tractor, means to raise and lower the rear of said frame independently of the level of the tractor, and dual simultaneously-operable independent means to alter the levels of both the front end and the rear end of said frame independently of the level of the tractor.

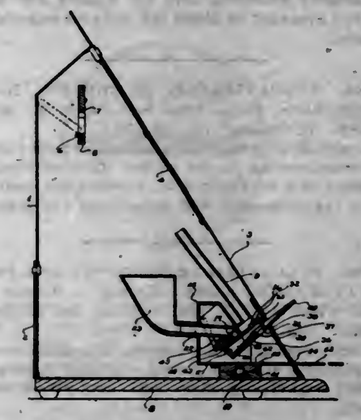
1,893,864. COMB. PHILIP KOCHER, Baltimore, Md. Filed Feb. 26, 1932. Serial No. 595,281. 4 Claims. (Cl. 132—18.)



1. A comb comprising a series of teeth having adjacent complemental parallel intermediate surfaces, outwardly diverging complemental outer end surfaces merging with said parallel intermediate surfaces, and inwardly diverging complemental inner end surfaces merging with said intermediate surfaces and with curved surfaces which extend from the base of each tooth to its next adjacent tooth.

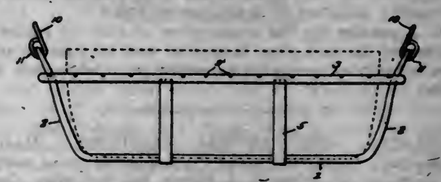
1,893,865. CATAPULT FOR GAME APPARATUS. DAVID D. LEVITT, Rochester, N. Y. Filed June 16, 1931. Serial No. 544,818. 1 Claim. (Cl. 124—13.)

In a catapult for use in game apparatus, the combination with a base, an inclined barrel mounted thereon, a relatively angular loading chamber communicating therewith and having an opening therein in alinement with the barrel, and a lateral longitudinal slot, of a substantially horizontal magazine communicating with the loading chamber and provided with a collecting hopper, a transfer device reciprocatable in the chamber for carrying a projectile from the magazine into alinement with the barrel adjacent to the opening said, transfer device being provided with a projection extending through the said slot, a spring actuated hammer having a firing pin adapted to project through the opening and make violent contact with the projectile, a trigger for cocking and then releasing the hammer, a relatively transverse trigger shaft, an exterior arm at one side of the barrel and loading chamber engaging the projection on the transfer device, a spring acting on said arm to normally retract the transfer device into position to receive a projectile from the



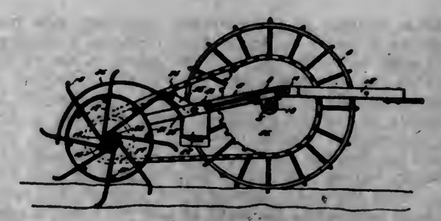
magazine, and an arm on the trigger shaft engaging the actuating arm to operate it against the tension of its spring for a loading movement of the transfer device when the trigger is operated.

1,893,866. CRADLE FOR LIFEBOATS. WILLIAM MACHADO, Reno, Nev. Filed Dec. 8, 1931. Serial No. 579,743. 1 Claim. (Cl. 9—22.)



A device of the class described comprising a longitudinally extending member having its ends curved upwardly, outwardly bowed side members having their ends connected to the upper portions of the last-mentioned member, substantially yoke-shaped transversely extending members having their central parts connected to the intermediate portions of the first-mentioned member, and their ends connected to the side members, said side members having grooves in their outer faces, and ropes or the like located in said grooves, U-shaped members connected with the upper end of the first-mentioned member, said first-mentioned member being arcuate shaped in cross section with its concaved face uppermost to receive the keel of the boat.

1,893,867. QUACK GRASS DIGGER. ARTHUR F. MILLER, Bartlett, Ill. Filed Dec. 23, 1931. Serial No. 582,839. 2 Claims. (Cl. 97—10.)



1. In a quack grass digger, in combination, an axle, wheels supporting the axle, a frame pivotally mounted on

the axle at one end of the frame, a revoluble combined digger and elevating device supported on the free end of the frame, a receptacle mounted transversely of the frame between the ends of the latter, and a concavo-convex guard member extending over the digging and elevating device and arranged to direct the elevated material to the receptacle.

1,893,868. VULCANIZATION OF RUBBER. HAROLD A. MORTON, Akron, Ohio. Filed Sept. 30, 1929. Serial No. 396,386. 12 Claims. (Cl. 18—53.)

1. A method of producing a rubber article which comprises incorporating in the rubber stock or compound a monovalent salt of acetic acid, forming the desired article from the compound, and vulcanizing the same.

1,893,869. VULCANIZABLE COMPOUND AND PROCESS FOR PREPARING SAME. HAROLD A. MORTON, Akron, Ohio. Filed Jan. 7, 1931. Serial No. 507,298. 12 Claims. (Cl. 18—53.)

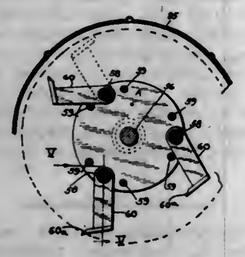
1. A rubber composition including an organic accelerator of vulcanization and an alkaline metal salt of an aliphatic monobasic acid having more than two carbon atoms in the chain.

1,893,870. PROCESS FOR THE PURIFICATION AND PRESERVATION OF ETHER. SAMUEL PALKIN, Washington, D. C., and HOWARD R. WATKINS, Somerset, Md. Filed May 21, 1928. Serial No. 279,626. 7 Claims. (Cl. 260—151.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A method for the purification of contaminated ether comprising the subjection of said ether to the action of pyrogallol dissolved in a solution of alkali.

4. A process for the preservation of ether by means of packaging the said ether in contact with an aqueous alkaline solution of pyrogallol associated with absorptive material.

1,893,871. AGRICULTURAL MACHINE. MANUEL ROMERA, Castroville, Calif., assignor, by mesne assignments, of two-thirds to A. Pavan, San Francisco, Calif. Filed June 14, 1930. Serial No. 461,175. 1 Claim. (Cl. 97—216.)



In a machine of the character described, side frame members, a rotary cutting element including a transverse axle shaft journalled on the frame members, spaced disks fixed to the axle shaft, hollow pivot shafts between the disks outwardly of and parallel with the axle shaft, a plurality of radially extending cutter members mounted for independent pivotal movement on the hollow pivot shafts for shearing and chopping plant growths said cutter members having relatively wide pivot bearing ends bushings lining the cutter member pivot bearings, and lateral oil ways perforating the walls of said pivot shafts adapted to lubricate the contacting pivotal surfaces of said bushings.

1,893,872. METAL COMPLEX COMPOUND. HANS SCHMIDT, Wuppertal, Vohwinkel, and HEINRICH JUNG, Wuppertal, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed June 4, 1931, Serial No. 542,190, and in Germany June 3, 1930. 28 Claims. (Cl. 260—11.)

1. As new products complex compounds of a metal other than iron, antimony alkali- and alkali-earth metals, but having an atomic number higher than 21, with an aliphatic polyhydroxy carboxylic acid of at least 5 carbon atoms and containing at least three hydroxy groups bound to three adjoining carbon atoms, said complex compounds having been neutralised with a base of the group consisting of alkali metal bases and aliphatic amines, being whitish or colored powders, soluble in water with about neutral reaction.

1,893,873. RESINOUS CONDENSATION PRODUCTS AND PROCESS OF MAKING THEM. ROY H. KIENLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 29, 1927. Serial No. 164,662. 41 Claims. (Cl. 260—8.)

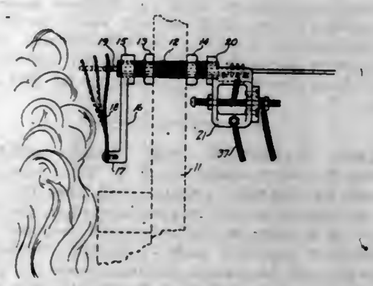
1. A resinous composition constituted by the reaction product of a polyhydric alcohol, a polybasic aromatic acid and air drying fatty acid.

2. A resinous composition constituted by the reaction product of a polyhydric alcohol, a polybasic aromatic acid and mixed fatty acids derived from China wood oil.

1,893,874. RESINOUS COMPOSITIONS AND METHOD OF MAKING. LESTER V. ADAMS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 25, 1926. Serial No. 118,604. 34 Claims. (Cl. 260—8.)

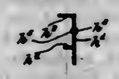
1. A composition comprising a resinous polyhydric alcohol-polybasic acid condensation product which is capable of being rendered infusible by heating and a fatty acid glyceride, said ingredients being indistinguishably united, and said composition being soluble in one or more liquids in which said condensation product is insoluble.

1,893,875. SAFETY CONTROL MECHANISM FOR LIQUID FUEL BURNERS. LOYD I. ALDRICH, Peoria, Ill., assignor, by mesne assignments, to Preferred Oil Burners, Inc., Peoria, Ill., a Corporation of Illinois. Filed Apr. 16, 1923, Serial No. 632,541. Renewed June 3, 1932. 8 Claims. (Cl. 200—138.)



5. In a device of the class described, in combination, a thermal metal strip, contact points, a contact member adapted to oscillate between said points, and means including a shiftable rod and connecting mechanism whereby the initial movement of said shiftable rod in either direction controlled by the said thermal strip will result in an immediate movement of the contact member without further disturbance thereof due to the continued movement of said shiftable member.

1,893,876. STAIRWAY CONSTRUCTION. PHILIP G. ANDERSON, New Rochelle, N. Y. Filed Nov. 3, 1931. Serial No. 572,746. 4 Claims. (Cl. 20—10.)



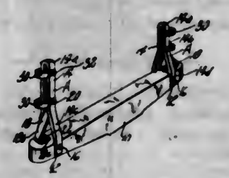
1. In stairway construction the combination of a string piece having a recess formed therein, a stair element having its end received in said recess, a wedge interposed between one shoulder of said recess and the stair element to force the stair element against the other shoulder of said recess, a flanged metallic locking piece, means to engage one of the flanges with the string piece, and means to engage the other of the flanges with the stair element.

1,893,877. PENCIL SHARPENER. WILLIAM APPEL, Little Rock, Ark. Filed May 11, 1931. Serial No. 536,454. 6 Claims. (Cl. 120—90.)



1. In a pencil sharpener, a cutting element comprising a blade holder adapted to loosely hold and support in its normal plane of repose a normally flat flexible blade, and means cooperating with said blade holder for pressing a portion of said blade out of its normal plane of repose, for imparting a concave contour to its cutting margin, and rigidly hold in normal plane of repose, other portions thereof.

1,893,878. BOLSTER AND STAKE CONSTRUCTION. WILLIAM A. BALDWIN, Panora, Iowa. Filed Oct. 1, 1930. Serial No. 485,689. 2 Claims. (Cl. 280—143.)

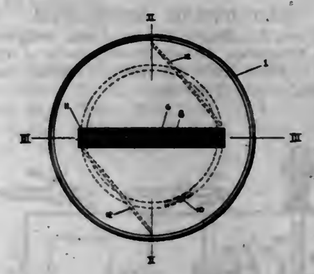


1. In a bolster and stake construction, a bolster member having adjacent each end thereof a pair of vertical grooves in each side of the bolster member, a stake member for each end of said bolster member, each stake member being formed of channel shaped metal bent U-shaped, the flanges only of the lower ends of said stake members being embedded in said grooves and means for holding said stakes in such position with their flanges so embedded in said grooves of said bolster member.

1,893,879. METALLIC CATALYST. OWEN G. BENNETT and JOSEPH C. W. FRAZER, Baltimore, Md.; said Bennett assignor to Catalyst Research Corporation, Baltimore, Md., a Corporation of Maryland. Filed Jan. 28, 1931. Serial No. 511,925. 8 Claims. (Cl. 23—233.)

1. A process of preparing highly active metallic catalysts comprising preparing an amalgam of catalytic metal with mercury, and evaporating the mercury from said amalgam under high vacuum and out of contact with metal-reactive gases, the metal remaining in a form which presents a very great highly active free metal surface.

1,893,880. POWDER DISPENSER. GEORGES BOURQUIN, Paris, France, assignor to Lentheric, Societe Anonyme, Paris, France. Filed Sept. 9, 1930, Serial No. 480,653, and in France Sept. 20, 1929. 15 Claims. (Cl. 132—82.)



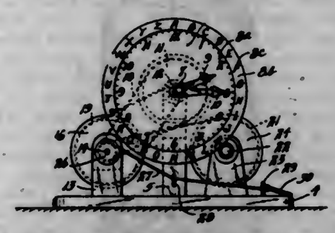
1. In a powder dispenser, a receptacle, an apertured partition theresbove, and an axially supported rotary conveyor extending into said receptacle and protruding through said aperture so that a puff above said partition may contact with the protruding portion of said conveyor.

1,893,881. GASKET. STEPHEN W. BRANER, Chicago, Ill., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 1, 1930. Serial No. 499,288. 8 Claims. (Cl. 288—1.)



1. A gasket having an opening therein and comprising top and bottom metal layers and an intermediate filler layer, one of said metal layers having an inner flange about said opening, said flange being tapered inwardly to its free edge and its free edge abutting the other layer, and said other layer having a flange overlapping said inner flange and snugly contacting therewith.

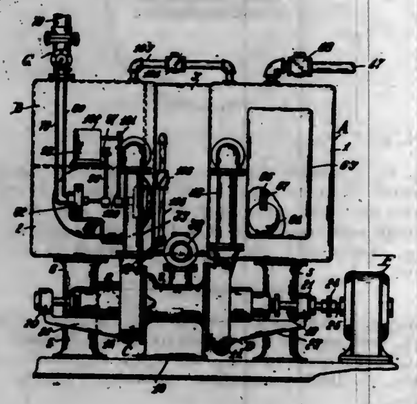
1,893,882. TOY CLOCK. ARTHUR R. BURKE, Rochester, Minn., assignor of one-half to Oscar Langlo, Rochester, Minn. Filed Apr. 24, 1930. Serial No. 446,912. 6 Claims. (Cl. 58—106.)



1. A toy clock comprising a suitable standard, a sleeve journaled therein, a shaft journaled in said sleeve and projecting at both ends beyond said sleeve, a clock dial secured to the forward edge of said standard and through which the forward ends of said shaft and sleeve extend, hands secured to the forward ends of said shaft and sleeve for movement over said clock dial, a shaft suitably journaled adjacent said standard, means including a resilient member urging said second mentioned shaft to rotate in one direction, means for driving said first mentioned shaft from said second mentioned shaft, means for driving said sleeve from said second mentioned shaft

at a different speed than said first mentioned shaft is driven therefrom, and means for rotating said second mentioned shaft against the tension of said resilient element.

1,893,883. EXHAUSTING MECHANISM. DAVID N. CROSTHWAIT, Jr., Marshalltown, Iowa, assignor to C. A. Dunham Company, Marshalltown, Iowa, a Corporation of Iowa. Filed May 15, 1931. Serial No. 537,633. 22 Claims. (Cl. 230—92.)



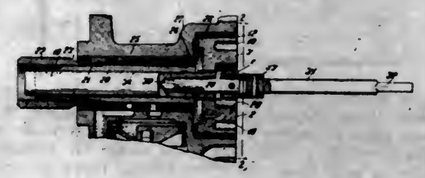
1. In combination with a pump, a jet exhauster and a separating tank from which liquid is drawn to supply the actuating stream circulated by the pump through the jet exhauster and back to the tank, together with fluids drawn in by the exhauster, a reserve tank filled with liquid by the pump and adapted to automatically replenish the liquid supply in the separating tank when the liquid level therein falls to a predetermined minimum.

1,893,884. MILK AND CREAM DISPENSER. THOMAS E. DAVIS, Arlington, Mass. Filed Dec. 2, 1931. Serial No. 578,506. 1 Claim. (Cl. 225—26.)



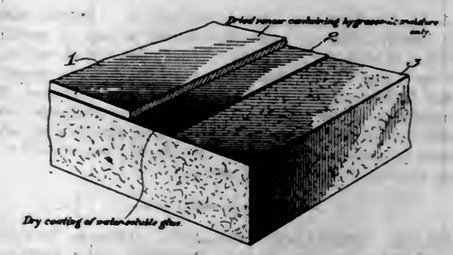
A dispensing apparatus including a tank adapted to store a body of lacteal fluid, and a tell-tale dispensing attachment cooperating with the tank, said attachment comprising, in combination, a valve casing having an internal valve seat extending through the lower end of the casing, and a shank constituting a fixed conduit communicating with the lower portion of the tank and with the valve seat, a flexible conduit including a section fixed to and extending through the tank wall, and a swinging section jointed to the fixed section within the tank, and having a float adapted to maintain its free end in close proximity to and below the surface of a body of fluid in the tank, the fixed section of the jointed conduit communicating with the valve seat, and a plug valve movable in the valve seat, and having an exposed face in the open end of said seat, an inner duct arranged to communicate with the fixed conduit and extending to the center of said exposed face, and an outer duct in the periphery of the valve arranged to communicate with the fixed section of the flexible conduit, the plug valve being movable to simultaneously connect the inner duct with the fixed conduit, and the outer duct with the fixed section of the flexible conduit, the arrangement being such that when the tank contains fluid and the valve ducts are connected with the conduits, two independent simultaneously visible streams are discharged from the exposed end of the valve, so that the quality of fluid passing through the two conduits may be determined by an inspection of said streams.

1,893,885. BUSHING AND CYLINDER REAMER. JAMES M. DOLLY, Chicago, Ill. Filed Feb. 24, 1930. Serial No. 430,756. 10 Claims. (Cl. 51—184.2.)



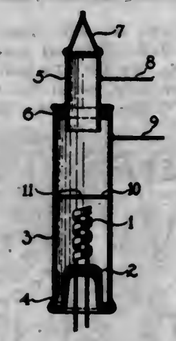
1. A cylinder reamer comprising a multipart cylindrical head, spring means confined between the parts of the head to separate the same, a retaining member having spaced parallel end portions adapted to be removably engaged with the outermost members of the head to retain the head parts in assembled relation after these parts have been pressed together against the expansive action of the spring means, and an abrasive covering surrounding the head.

1,893,886. VENEERED BOARD AND METHOD OF MAKING SAME. ARMIN ELMENDORF, Chicago, Ill. Filed Oct. 22, 1931. Serial No. 570,513. 4 Claims. (Cl. 144—309.)



1. The method of making a veneered board, which consists in producing a dry coating of water-soluble glue on the face of a board faced with fibrous material, laying on the glue coating thin wood veneer containing only hygroscopic moisture, and applying pressure and heat to bring the veneer into intimate contact with the glue and cause hygroscopic moisture in the work to vaporize, soften the glue and unite the veneer to the board.

1,893,887. ELECTRON TUBE. EUGENE A. GIARD, Shorewood, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 19, 1931. Serial No. 582,015. 8 Claims. (Cl. 250—27.5.)



1. A gaseous electron discharge tube including a cathode, an anode and a control grid forming part of the envelope of said tube and being divided into two compartments connected by a relatively small aperture, said cathode and anode being arranged respectively in the two compartments.

1,893,888. BAG. GEORGE I. GOLDWYN, Chicago, Ill. Filed Mar. 31, 1930. Serial No. 440,200. 3 Claims. (Cl. 150—1.)



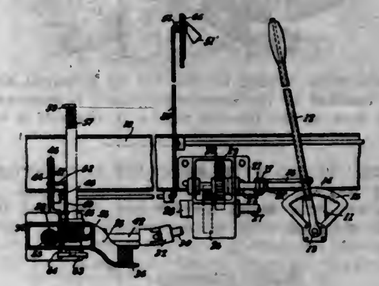
1. A bag having side walls, a marginal part of each of which is folded to provide a plurality of thicknesses turned back upon the outside of associated side walls, and means securing said side walls together as well as securing said marginal parts thereto and to each other, said means including parts that pass about the folds of said margins and provide a bound edge for the bag.

1,893,889. BUTTER SPREADER. ANNIBALE A. GUERINI, Bronx, N. Y. Filed Sept. 9, 1931. Serial No. 561,856. 3 Claims. (Cl. 65—12.)



1. A butter spreader consisting of a casing having an open bottom, a plunger operable in the casing toward and away from the open bottom, and adapted to act upon butter contained within the casing below the plunger, and a pair of handles pivoted to one another, one fixed to the casing and the other to the plunger, and operable to move the plunger in the direction of the open bottom to maintain the butter therein in engagement with the article to be buttered.

1,893,890. JACKING APPARATUS. JOHN GUTMANN, Jr., St. Albans, N. Y., assignor, by mesne assignments, to Motor Jack Corp., New York, N. Y., a Corporation of New York. Filed June 7, 1929. Serial No. 369,112. 3 Claims. (Cl. 254—86.)

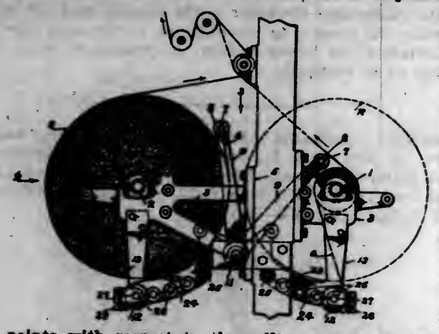


1. In jacking apparatus for motor vehicles the combination with a chassis, of a casing secured to said chassis, a shift gear mounted in said casing, a peripherally toothed fly-wheel connected to the vehicle motor, a driving gear mounted in said casing, manual means to shift said shift gear to engage with said fly-wheel teeth and said driving gear; a casing secured to an axle of the vehicle, a pair of opposed bevel gears provided with clutch elements rotatably mounted in said latter casing, a connecting gear adapted to mesh with said bevel gears, shafting provided with universal joints, connecting said driving gear with said connecting gear, a collar keyed within said latter casing adapted to move between said bevel gears, said collar being provided with clutch elements to engage and positively drive the corresponding elements of said bevel gears, a pivoted forked shift lever engaging said collar, a bell-crank lever pivotally connected to said chassis, one arm of which being connected to one end of said shift lever, a control lever adapted to be actuated by the operator of the vehicle, said control lever being connected to the other arm of said bell-crank lever, a worm driven by said bevel gears, a worm wheel meshing with said worm, said worm wheel being provided with an internal screw thread, a threaded jack stem engaging with said screw thread, said jack stem being provided with a lug at its top and a bearing plate at its bottom, means to prevent said jack stem from turning, a second bell-crank lever, one arm of which is connected to said shift lever, and the other arm of which is so disposed as to be tripped by said lug when said jack stem is moved to its lowermost position, thereby disconnecting said clutch collar from the engaging bevel gear, and a rod slidably mounted in said latter casing and so disposed with relation to said bearing plate that when said jack stem is moved to its uppermost position, said rod is caused to contact with said bell-crank lever thereby disconnecting said clutch collar from the other of said bevel gears.

1,893,891. PAPER ROLL CONTROL. JOHN J. HALLIWELL, Tuckahoe, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 21, 1926. Serial No. 130,590. 21 Claims. (Cl. 242—75.)

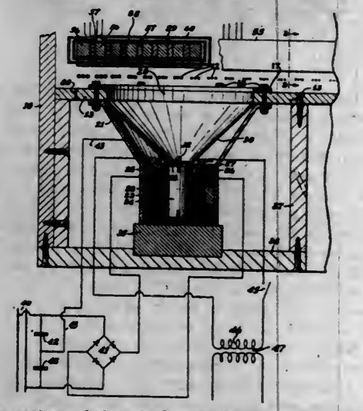
1. In a web controlling mechanism, the combination of means for supporting a web roll while unwinding, fric-

tion means engaging the roll surface, and means for adjustably supporting the friction means at a plurality



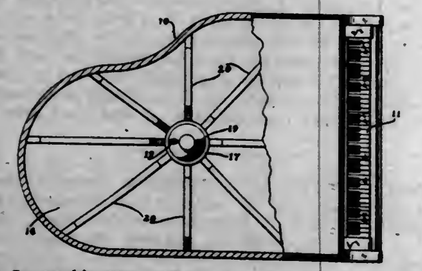
of points with respect to the roll so arranged that as one or another of the supporting points is employed the contact area of the friction means on the roll is varied.

1,893,892. PIANO WITH REACTION LOUD SPEAKER. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed June 13, 1929, Serial No. 370,484. Renewed Oct. 6, 1932. 7 Claims. (Cl. 84—192.)



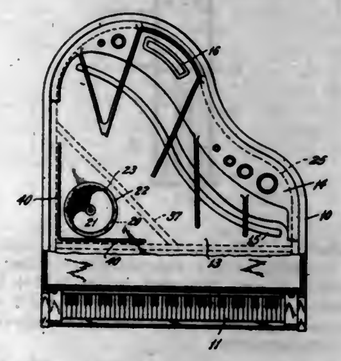
1. In a system of electrical amplification of sound waves, a piano, a sounding board connected therewith, a magnetic sound reproducing means having an armature and a chassis, said chassis being rigidly secured to said sounding board whereby the reaction from said armature on said chassis is directly transmitted to said board for reenforcing the sound waves produced by said armature.

1,893,893. PIANO WITH LOUD SPEAKER ON SECONDARY SOUND BOARD. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed June 19, 1929, Serial No. 372,078. Renewed Oct. 6, 1932. 8 Claims. (Cl. 84—192.)



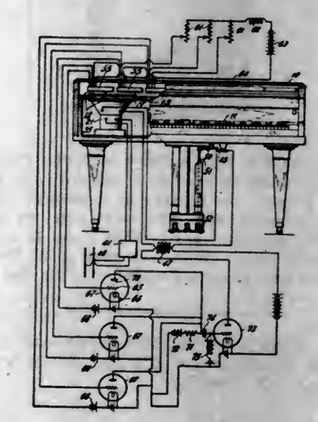
1. In combination with a piano having strings and a sounding board, a second sounding board, a loud speaker phonetically associated with said second sounding board, and means whereby the vibrations produced by said speaker are transmitted to said second sounding board and amplified thereby.

1,893,894. SOUNDING BOARD. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Original application filed June 6, 1929, Serial No. 370,484. Divided and this application field July 21, 1930, Serial No. 469,518. Renewed June 8, 1932. 7 Claims. (Cl. 84—192.)



4. In a piano, a sounding board adapted to propagate compressional waves, a frame supporting said sounding board, a portion of said sounding board being mounted in overhanging relationship with respect to said frame whereby said portion is substantially free to vibrate.

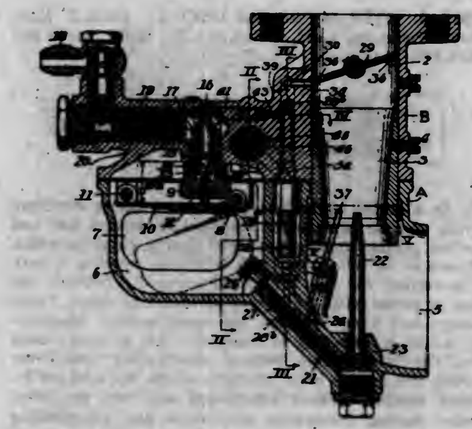
1,893,895. MUSICAL INSTRUMENT. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Original application filed June 13, 1929, Serial No. 370,484. Divided and this application filed Aug. 28, 1930, Serial No. 477,325. Renewed Oct. 7, 1932. 12 Claims. (Cl. 84—189.)



1. In a piano having a plurality of strings, arranged in groups, means for amplifying the vibrations of each of said groups, and means for separately controlling the amount of amplification of each group.

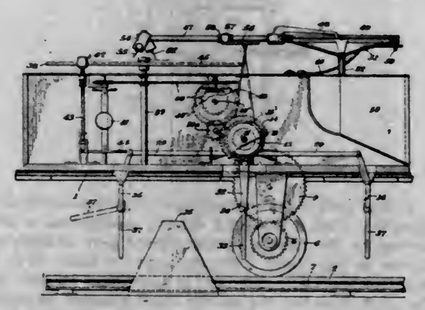
1,893,896. CARBURETOR. VICTOR R. HEFTLER, Detroit, Mich., assignor to Societe du Carburateur Zenith, Lyon, France, a Corporation of France. Filed Sept. 3, 1926. Serial No. 133,365. 9 Claims. (Cl. 261—41.)

1. In a carburetor, a carbureting chamber, a main supply of fuel thereto, a plurality of fuel wells, a nozzle delivering fuel from each of said wells to said carbureting chamber, there being supplemental openings from each of said wells for the delivery of fuel to said carbureting



chamber above said nozzles, and quill assemblies of different fuel feeding characteristics for transferring fuel from the respective wells to the supplemental opening.

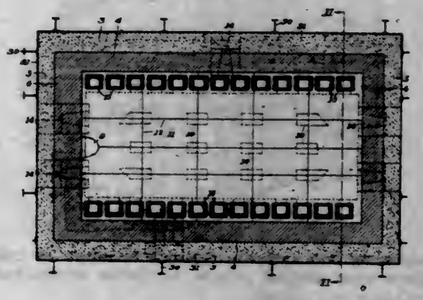
1,893,897. TOY VEHICLE. CHARLES W. HUMMER, Brooklyn, N. Y. Filed Mar. 2, 1932. Serial No. 596,188. 10 Claims. (Cl. 46—47.)



1. A toy of the character described, comprising a record table and a tone arm, said tone arm having a cross arm, a needle mounting device at each end thereof; and means for rocking the tone arm for tilting one end or the other of the cross arm toward the table and for returning the tone arm to normal position with both ends equi-distant from said table.

10. A toy of the character described comprising a record table and a tone arm, a member adapted to rotate when the toy is in motion, interconnecting means between said member and record table whereby said record table will be rotated by rotation of said member, a needle holder on said tone arm, an actuating device for said needle holder and means connected with said device for lowering said needle holder adjacent a record and for raising it therefrom.

1,893,898. FURNACE. HENRY C. JURS, Alliance, Ohio. Filed Dec. 22, 1930. Serial No. 503,900. 9 Claims. (Cl. 25—144.)



1. In a furnace of the muffle type, a series of walls defining a firing chamber, a flat type roof forming the top of said chamber, a floating flue structure intermediate said roof and walls, and muffles carrying said flue structure.

1,893,899. LADY'S WATCH. MARCEL D. KRAMER, New York, N. Y. Filed Mar. 27, 1931. Serial No. 525,703. 4 Claims. (Cl. 58—88.)

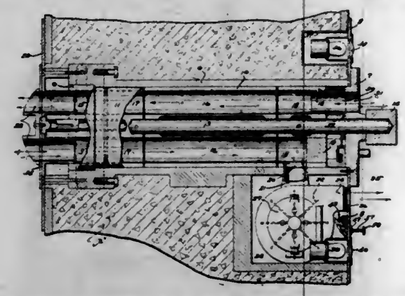


4. As a new article of manufacture a timepiece comprising a base, adapted to be imposed vertically upon the wearer's person, and a watch case projecting forwardly from said base, said watch case forming a right-angled triangle with the base as its hypotenuse, the upper wall of said triangle containing the dial and lying at a forwardly downward angle, the time indications on said dial being oriented to dispose the numeral 12 in the lowermost position thereon, and the lower wall carrying the stem and crown, said base having rearward means for engagement with a garment.

1,893,900. TEMPORARY CUT-OUT SWITCH FOR VAULT VENTILATORS. OLIVER B. MCCLINTOCK, Minneapolis, Minn., assignor to O. B. McClintock Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Oct. 4, 1930. Serial No. 486,395. 1 Claim. (Cl. 98—33.)

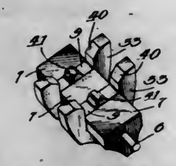
A vault ventilator comprising a member adapted to extend through a vault wall and having an air conduit therethrough, manually operable valve means carried by said member for opening and closing said conduit, means cooperating with said valve means and conduit for normally maintaining forced circulation of air through said conduit when said valve means is moved to open position, and means independent of said valve means carried by said member and manually operable in one direction

to interrupt circulation of air through said conduit when said valve means is open, whereby to permit conversation in either direction through said conduit, said independent



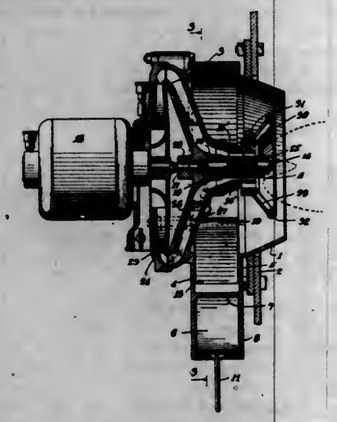
means being automatically operable to return to normal position upon manual release to restore circulation of air through said conduit.

1,893,901. SEALING TOOL. JOHN M. MCGREGOR and ARVID ERICSSON, Chicago, Ill., assignors to Signode Steel Strapping Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 13, 1931. Serial No. 522,326. 11 Claims. (Cl. 81—9.1.)



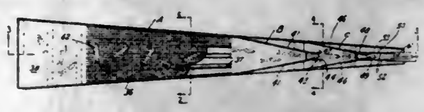
1. In a sealing tool of the class described, a pair of individually pivoted confronting jaws, means for forcibly actuating said jaws toward each other, pressure blocks mounted between said jaws, said jaws comprising portions adapted to engage the edges of straps to be sealed together, fold them over and force the folded straps upon said pressure blocks, and a projection on said pressure blocks positioned in a manner to press into and cut the straps to interlock the straps together.

1,893,902. METHOD OF LIQUID FUEL COMBUSTION. HARRY MEACHEM, Teaneck, N. J., assignor to Todd Dry Dock, Engineering & Repair Corporation, Brooklyn, N. Y. Filed Feb. 25, 1931. Serial No. 518,138. 2 Claims. (Cl. 158—117.5.)



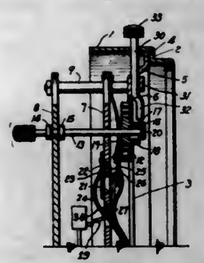
1. The method of liquid fuel combustion which consists in creating a hollow whirling film of fuel and adding thereto a hollow, contactingly enclosing concentric column of air, whirling under impelling force in the same direction of rotation as the fuel, enabling the fuel and air to travel together in an extended rotary path, to become finely blended, and burning the blended fuel and air.

1,893,903. FISH HANDLING DEVICE. FRED J. MULLINS, Piedmont, Calif. Filed Jan. 31, 1930. Serial No. 424,877. 4 Claims. (Cl. 17—2.)



1. In a device of the lass described, a shaker structure having one portion thereof arranged to receive fish and another portion thereof arranged near a point to which fish are to be presented, said structure forming a path of movement for fish inclined downwardly towards the point of presentation and being divided into upper, intermediate and lower sections, the upper section constituting means for tending to cause the fish to move head first, the intermediate section constituting means for causing the fish to move along in single file and for reducing overlap between superposed fish, and the third section having converging side walls and constituting means for receiving fish in single file from the intermediate section and for further reducing the overlap between successive ones of the fish.

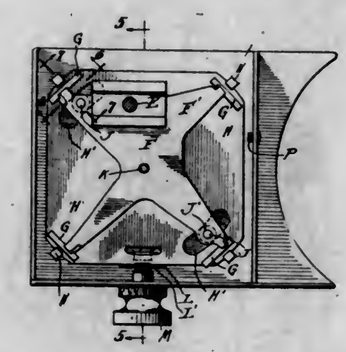
1,893,904. TIME SWITCH. JOHN B. PETRUS, Kansas City, Mo., assignor of one-fourth to John S. Stone, Kansas City, Mo. Filed Jan. 13, 1930. Serial No. 420,415. 3 Claims. (Cl. 200—38.)



1. A time switch for controlling a circuit comprising, in combination with a case and driving mechanism, a shaft supported by the case, a spring-pressed gear slidable and rotatable on the shaft and constantly in mesh with the driving mechanism, a lug, an arcuate boss on one face of the gear, a radial lug on the shaft adapted to engage the boss to restrain the gear against the influence of the spring, the boss having a notch provided with stop walls to receive the lug for permitting the gear to slide forwardly on the shaft, a pair of contacts supported respectively by the clock case and the gear, one of said contacts being responsive to sliding movements of the gear for controlling the circuit, and a crank mounted on the case for moving the gear against the influence of the spring.

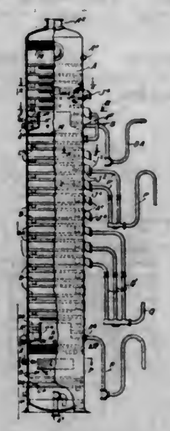
1,893,905. SLICING MACHINE. GEORGE G. PORTER, New York, N. Y., assignor to Globe Slicing Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 16, 1928. Serial No. 319,988. 3 Claims. (Cl. 146—102.)

1. A slicing machine combining a regulating tray to regulate the thickness of the slices, a stationary supporting member having a plurality of cam faces, means comprising a pin to guide the regulating tray, an intermediate member connecting the regulating tray and the supporting member, the intermediate member having a plurality of bent ears forming cam faces in interlocking engagement with the cam faces of the supporting member,



and means to rotate the intermediate member so that the cam faces of the intermediate member will vary the distance between the supporting member and the regulating tray.

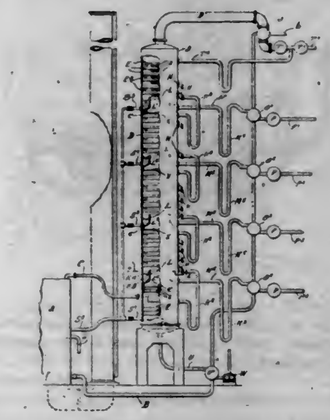
1,893,906. FRACTIONATING TOWER. JOHN PRIMROSE, Richmond, and HARRY R. SWANSON, West New Brighton, N. Y., assignors to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed May 5, 1926. Serial No. 106,866. 43 Claims. (Cl. 196—139.)



31. Apparatus for the fractional distillation of hydrocarbon oils and the like comprising a shell, means in the shell for passing oil vapors counter-current to and in contact with reflux oil and means in the shell for passing a portion of the reflux oil countercurrent to and in contact with a stripping medium and out of contact with the oil vapors for removing low boiling constituents from said portion.

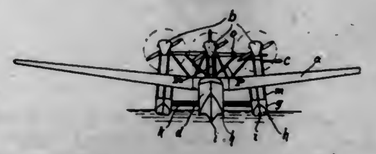
1,893,907. FRACTIONATING METHOD. JOHN PRIMROSE, Richmond, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 8, 1927. Serial No. 181,973. 16 Claims. (Cl. 196—94.)

8. In the art of fractionally distilling hydrocarbon oils, the method which comprises passing vapors of the oil counter-current to and in contact with reflux oil in a fractionating zone, dividing the flow of liquid oil intermediate the lightest and heaviest fractions into portions, passing one portion counter-current to steam in contact therewith in the fractionating zone to remove low boil-



ing components, thereby yielding an intermediate fraction of higher flash point and continuing the other portion of the liquid oil counter-current to the vapors in an earlier stage of the fractionating system.

1,893,908. FLYING BOAT. ADOLF ROHRBACH, Berlin, Germany, assignor to Rohrbach Patents Corporation, a Corporation of Delaware. Filed Sept. 19, 1927, Serial No. 220,341, and in Germany Sept. 22, 1926. Renewed May 18, 1932. 18 Claims. (Cl. 244—2.)

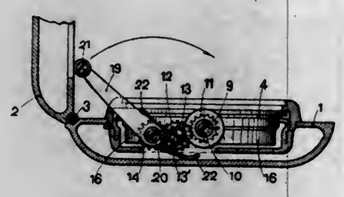


1. A seaplane having in combination long monoplane wings which taper in the ratio of about 4:1 from the roots towards their tips, a boat shaped hull located substantially underneath the wings and having compartments to accommodate the crew and the cargo, the wings and the hull forming the seaplane cell, driving means for the seaplane comprising driven air screws, said driving means being disposed above the cell and essentially centrally thereof and braced against said cell, the air screws being located in the shelter of said cell, said hull carrying the vertical and horisontal tail planes, and lateral floats close to the hull in the region of the center of gravity of the craft, said floats being designed to give the craft an adequate metacentric height when afloat and together with the hull constituting means of hydrodynamical buoyancy when the craft is traveling at speed.

1,893,909. KEYLESS WATCH. THEODOR SCHILD, Grenchen, Switzerland. Filed Dec. 24, 1930, Serial No. 504,587, and in Switzerland Jan. 11, 1930. 5 Claims. (Cl. 58—80.)

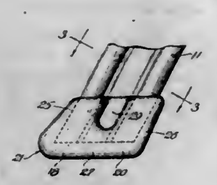
1. A watch comprising a case body, a watch movement in said case body, a lid hinged to said case body, a main winding spindle for the spring of said watch movement, an auxiliary winding spindle, gearing between said aux-

iliary winding spindle and said main winding spindle, and a lever arm carried by said auxiliary spindle, the free end of said lever arms bearing against the interior surface



of said lid so as to be given an arcuate movement when said lid is closed down upon said case body, whereby said spindles are rotated.

1,893,910. FOOT FOR SUPPORTING LEGS AND THE LIKE. JOSEPH SILVERMAN, Chicago, Ill. Filed May 29, 1931. Serial No. 540,875. 6 Claims. (Cl. 45—137.)



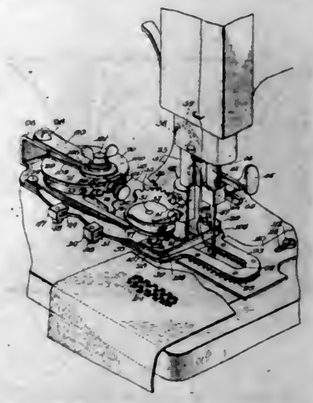
1. The combination with a supporting leg having enlarged edges of a foot therefor comprising a resilient body having a pocket for receiving the lower end of the leg, said pocket having spaced enlargements for receiving the enlarged edges of the leg, said foot having a thickened lower edge and said leg extending down into and between the sides of the thickened lower edge of the foot whereby stability of the foot against bending is obtained.

1,893,911. UREA-FORMALDEHYDE CONDENSATION PRODUCT AND METHOD OF PRODUCING SAME. LEONARD SMIDTH, New York, N. Y. Filed Dec. 24, 1927. Serial No. 242,520. 10 Claims. (Cl. 260—3.)

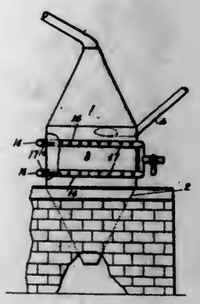
1. The process of forming a transparent urea formaldehyde condensation product which consists in reacting urea with formaldehyde to an advanced stage without causing gelatinization and adding more urea in a proportion of less than one mole for every two moles of free formaldehyde, so that the proportion in the final product is from 1.1 to approximately 1.3 moles of urea to 2 moles of formaldehyde.

1,893,912. BUTTONHOLE WORKING ATTACHMENT FOR SEWING MACHINES. FRANKLIN SPAULDING, Chicago, Ill. Filed Dec. 9, 1931. Serial No. 579,924. 9 Claims. (Cl. 112—77.)

1. In a buttonhole working attachment for sewing machines, a cloth feeder plate, means for advancing the plate, and means for imparting a lateral oscillatory movement to the plate on each side of the center of the buttonhole, the last recited means embodying mechanism for causing the needle to make a plurality of stitches between successive lateral movements.



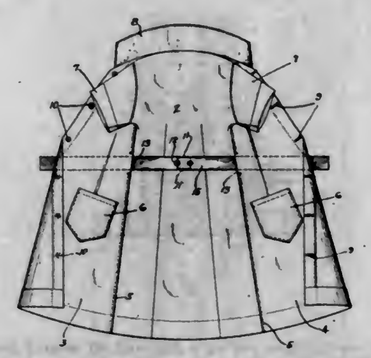
1,893,913. PROCESS AND APPARATUS FOR THE ROASTING OR CALCINATION OF PULVERULENT MATTERS. EUGÈNE CAMILLE SAINT-JACQUES, Paris, France. Filed Apr. 2, 1932, Serial No. 602,858, and in France Feb. 26, 1931. 6 Claims. (Cl. 23—277.)



1. The process of treating pulverulent materials in a vertical reaction chamber, which consists in forming in said chamber a gyrating flame of a combustion gas containing in suspension the solid material in a finely divided state, and instituting in said chamber a positive upward suction pull on the gyrating flame in line with the axis of gyration.

4. A device for heat treating pulverulent materials comprising a vertical main reaction chamber formed of two superposed cones arranged in apposition, means for admitting a combustible gas and finely divided pulverulent material suspended therein into the chamber at the junction of the cones, a supplementary reaction chamber arranged above the main reaction chamber, a suction pipe connecting said supplementary chamber with the apex of the upper cone, an oxidizing fluid supply pipe connected with the supplementary chamber, and a suction and discharge fan connected to said supplementary chamber and pipes.

1,893,914. GARMENT. GEORGE ADOLPH STEINER, Salt Lake City, Utah, assignor to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Filed Jan. 22, 1932. Serial No. 588,133. 1 Claim. (Cl. 2—93.)



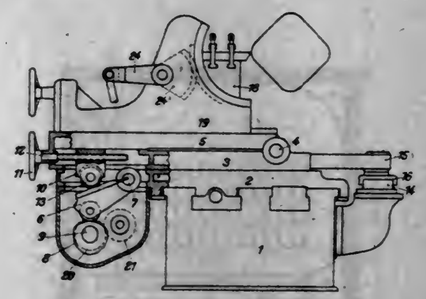
A washable garment of the type described, having front and rear panels of washable material, seams formed by lines of stitching connecting the panels, and each having an opening therein, and a belt also of washable material having loose ends and fastened substantially at the middle thereof to the back panel, the loose ends of said belt being adapted to be selectively passed through the openings in said seams and connected together at the front of the wearer, concealed beneath the front of the garment, or to be drawn out of said openings and secured together at the front of the garment on the outside thereof, for the purpose specified.

1,893,915. ALTERNATING CURRENT RECTIFIER. WILLIAM H. VIDOR, Maplewood, N. J. Filed Feb. 8, 1929. Serial No. 338,371. 2 Claims. (Cl. 250—27.5.)



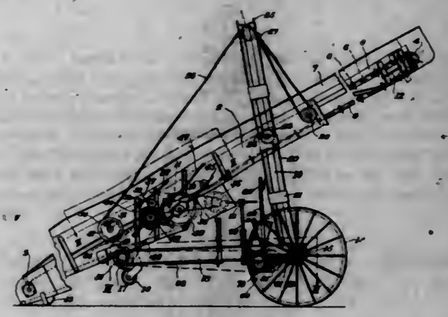
1. A rectifier for converting alternating current into direct current comprising, a hermetically sealed bulb containing a fluid at low pressure, an insulating base secured to said bulb, terminal contact prongs projecting from said base, a metallic cathode filament contained within said bulb and having terminals connected to a pair of said contact prongs, said cathode filament having a suitable metallic oxide coating adapted to increase the electronic emission from said filament, a hollow metallic anode positioned within said bulb in surrounding relation to said filament, a metallic supporting and conducting member connecting said anode to another of said contact prongs, an insulating member overlying the outer end of said hollow metallic anode, and spring tensioned hooks carried by said insulating member supporting said cathode filament therefrom, said cathode filament passing over said hooks and being tensioned thereby so that said cathode filament is held taut at all times.

1,893,916. COPYING MECHANISM. OSKAR WALDRICH, Siegen, Germany. Filed July 1, 1931, Serial No. 548,070, and in Germany July 30, 1930. 3 Claims. (Cl. 82—19.)



1. A copying mechanism for turning a tapered polygonal work-piece, comprising a bed, a cutting tool mounted thereon, means for supporting a work-piece adjacent to said tool and for rotation on its longitudinal axis, means for reciprocating said tool transversely of the axis of the work-piece, means for moving said tool axially of the work-piece, and means actuated by said axial movement of the tool for automatically changing the starting points of its reciprocating strokes, and means governed by said last-mentioned means for automatically changing the lengths of said strokes.

1,893,917. PORTABLE LOADER. HENRY B. WALKER, Marion, Ohio, assignor to The Fairfield Engineering Company, Marion, Ohio, a Corporation of Ohio. Filed June 22, 1931. Serial No. 545,871. 10 Claims. (Cl. 198—233.)

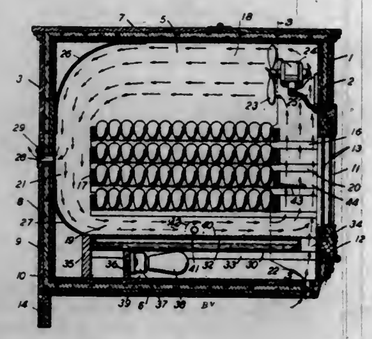


5. A portable loader comprising a boom, a conveyor on the boom, a motor mounted on the boom, a frame pivotally connected with the boom, a pair of traction wheels mounted on the frame, and driving connections between the motor, the conveyor and the traction wheels including power transmission members so positioned relative to the pivot point that they are effective regardless of pivotal movement between the frame and the boom, and also including means on the frame for disconnecting either traction wheel at will.

1,893,918. INCUBATOR. LELAND A. WILSON, Merriam, Kans. Filed June 5, 1930. Serial No. 459,325. 15 Claims. (Cl. 119—37.)

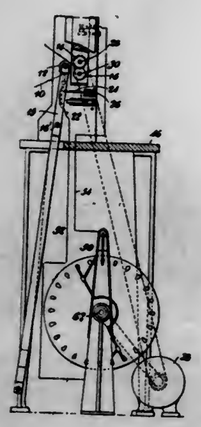
1. In an incubator, a casing including a bottom wall having an air inlet adjacent one edge thereof, side walls, a front wall, and a back wall having an air outlet port, means for inducing flow of current of air through the inlet into the casing, an egg tray, means on the side walls for sup-

porting the tray in spaced relation with said front and back walls, a water containing pan, and means for supporting said pan in the casing below the egg tray and in



spaced relation therewith to form an air passage and with one edge spaced laterally from the air inlet for passage of air from said inlet into the casing.

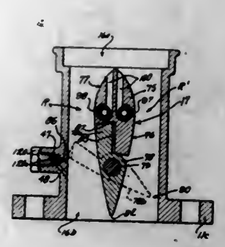
1,893,919. FUR PLUCKING. WILLIAM K. WILSON, Norwalk, Conn. Filed Feb. 24, 1930. Serial No. 430,649. 9 Claims. (Cl. 149—27.)



1. A method of plucking furs comprising continuously moving a pelt having fur and interposed hair thereon into a zone of a static electric charge to cause the hair and fur to assume an outstanding position and gripping and pulling the hair while it is maintained in outstanding position.

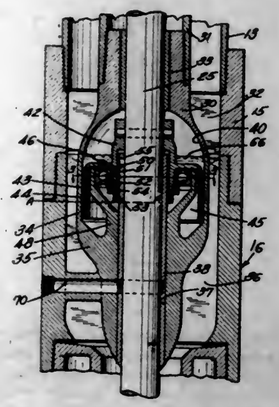
6. A plucking machine comprising an insulated guide, a pair of insulated plucking rolls mounted adjacent the guide, an electrostatic machine having negative and positive terminals connected respectively with the guide and rolls, means to rotate the rolls in opposite directions with an approaching movement on the side of the rolls adjacent the guide.

1,893,920. CARBURETOR. EDWARD A. WINFIELD, La Canada, Calif. Filed Jan. 3, 1930. Serial No. 418,208. 20 Claims. (Cl. 261—44.)



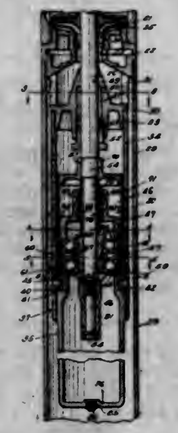
1. In a carburetor having a fuel and air mixing passage, a butterfly throttle valve within said passage and mounted on an axis extending across the passage, a stationary partition extending longitudinally within said passage and substantially in alinement with the axis of the throttle valve, said valve in moving from closed to open position causing a greater flow of air to occur past one side of said partition than past the other side, and means for delivering fuel to said passage at opposite sides of the partition.

1,893,921. LUBRICATION FOR SUBMERGED BEARINGS. JOHN A. WINTROATH, Los Angeles, Calif., assignor to Wintroath Pumps, Ltd., Alhambra, Calif., a Corporation of California. Filed Mar. 21, 1928. Serial No. 263,254. 21 Claims. (Cl. 308—168.)



1. In a bearing structure, the combination of: a cap; a stationary cylinder wall; means for retaining said cap and said cylinder wall together to define a chamber containing a lubricating medium; a shaft extending into said chamber through said cap, said shaft being rotatable within said cap, said chamber being provided with an opening through which external fluid is admissible thereto; a bearing in said chamber for journalling said shaft; and means for preventing any external fluid from reaching said bearing.

1,893,922. SUBMERSIBLE BEARING STRUCTURE. JOHN A. WINTROATH, Los Angeles, Calif., assignor to Wintroath Pumps, Ltd., Alhambra, Calif., a Corporation of California. Filed June 18, 1928. Serial No. 286,112. 21 Claims. (Cl. 308—134.)



1. In a well pump submersible bearing structure, the combination of: walls forming a separating chamber, walls forming a bearing chamber separate from said separating chamber, a tubular casing surrounding said chambers and connected to the separating chamber walls above said bearing chamber, said separating chamber being communicable with an external fluid and with a lubricating medium in said bearing chamber; a bearing in said bearing chamber; a shaft journalled by said bearing and extending through said separating chamber; and means in said separating chamber preventing a rise of said external fluid to a point of access to said bearing.

1,893,923. MANUFACTURE OF SHOE STIFFENER MATERIAL. FRANK O. WOODRUFF, Newton, Mass., assignor to Harry H. Beckwith, Brookline, Mass. Filed Aug. 12, 1931. Serial No. 556,614. 8 Claims. (Cl. 92—3.)

1. Shoe stiffener material comprising a partially glutinized, prefabricated sheet of water-laid, interfelted animal fibers, said sheet being characterized by its translucency, density, resiliency, and ability to be rendered limp and mouldable by soaking in water and to be set in moulded shape.

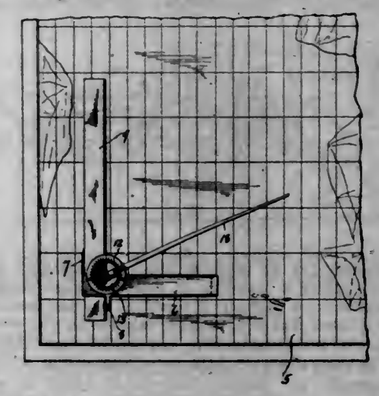
1,893,924. MANUFACTURE OF SHOE STIFFENER MATERIAL. FRANK O. WOODRUFF, Newton, Mass., assignor to Harry H. Beckwith, Brookline, Mass. Filed Aug. 12, 1931. Serial No. 556,615. 10 Claims. (Cl. 91—68.)

1. Fire-resistant shoe stiffener material comprising a fibrous foundation associated with nitrocellulose as a stiffening agent and impregnated with a mixture of both sodium silicate and a crystallized alkaline salt, said material being rendered limp and mouldable by treatment with a nitrocellulose solvent.

8. A process which comprises impregnating a fibrous foundation containing nitrocellulose with a concentrated solution of both sodium silicate and tri-sodium phosphate, and drying the impregnated foundation.

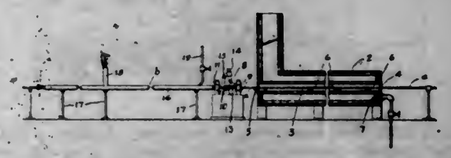
1,893,925. NAUTICAL PRECISION INSTRUMENT. FRED ALESSI, Woodridge, N. J. Filed Oct. 19, 1929. Serial No. 400,948. 4 Claims. (Cl. 33—97.)

1. A nautical instrument comprising a blade slidably disposed on a rule, a protractor fixed to said blade, one half of said protractor extending over the edge of said blade, a second protractor concentrically movably cooperating



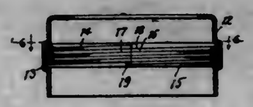
with said fixed protractor, and a pointer fulcrumed at the common center of said protractors and radially extending therefrom.

1,893,926. PRODUCTION OF SCALE-FREE WELDED TUBING. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1928. Serial No. 325,094. 12 Claims. (Cl. 113—112.)



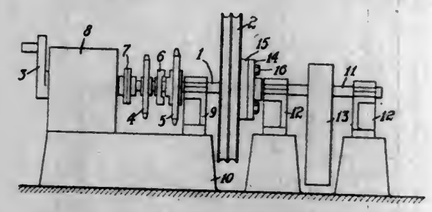
1. The method of producing welded tubing free of scale on the inside which comprises heating the material in a furnace above a bright red heat, moving the material lengthwise and progressively welding the seam, and simultaneously introducing reducing gas into the interior of the heated tubing so as to deoxidize the entire inner surface, and continuing to introduce said gas so that said surface is protected until it cools down below the oxidizing point.

1,893,927. FITTING FOR THREADED MEMBERS. HENRY W. AVERY, Cleveland, Ohio. Filed Feb. 12, 1930. Serial No. 427,934. 1 Claim. (Cl. 137—91.)



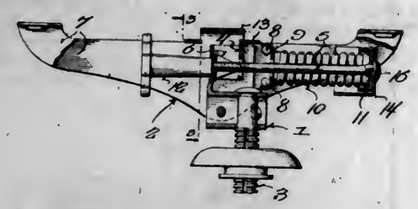
In a device of the character described, the combination of a metallic sleeve having an annular recess therein, a thread engaging element in said recess comprising a length of longitudinally ridged strip stock bent to substantially circular form, said element having the ends thereof disposed in abutting laterally offset relation whereby a ridge of said length of stock forms a helical thread, and lugs carried by said sleeve and projecting into said recess, said lugs being arranged so that each lug cooperates with an end face of one end of said length and a side edge of said length adjacent the other end thereof whereby said length is held against rotation relative to said sleeve and said abutting ends are retained in laterally offset relation.

1,893,928. COUNTERBALANCE FOR DRIVE SHAFTS. OSCAR BIELER, Pittsburgh, Pa. Filed Aug. 20, 1929. Serial No. 387,138. 1 Claim. (Cl. 74—71.)



Mechanism for oil well drilling and pumping operations comprising a plurality of axially aligned shafts independently journaled for a rotation, a drive connection on one of said shafts, a counter balance on the other of said shafts and means for detachably connecting the counterbalance shaft to said drive connection.

1,893,929. CHAIR IRON. HARRY W. BOLENS, Port Washington, Wis. Filed June 20, 1930. Serial No. 462,670. 8 Claims. (Cl. 155—77.)



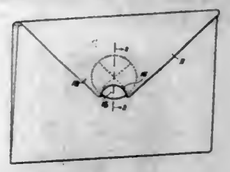
8. A chair iron comprising a stationary member, a seat spider member pivotally mounted thereon, a spring resisting tilting action of said seat spider member upon the stationary member, an adjusting bolt carried by one of said members for regulating the tension of the spring, spring retaining means carried by said bolt, and a stop carried by the other of said members to limit the movement of the retaining means within the expansive limits of the spring.

1,893,930. ANNEALING BOX. HARRY O. BREAKER, Buffalo, N. Y., assignor to Industrial Furnace Corporation, Buffalo, N. Y. Filed July 23, 1931. Serial No. 552,718. 10 Claims. (Cl. 263—49.)



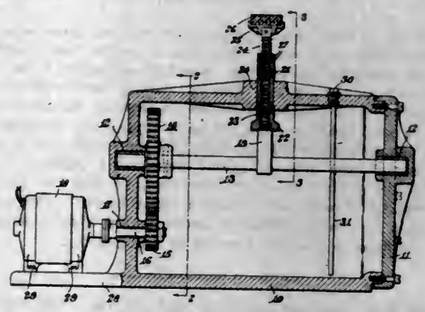
3. An annealing box comprising a plurality of walls, having corrugations therein, and members secured in spacing relation between adjacent wall edges, and dividing the inner and outer opposite angles defined by adjacent intersecting wall planes, said members extending outwardly from the corner portions of the box and confined substantially within the projected outline of the outer wall contour.

1,893,931. HAND BAG AND THE LIKE. LOUIS BROMFELD, Bronx, N. Y. Filed Jan. 7, 1932. Serial No. 585,217. 5 Claims. (Cl. 150—42.)



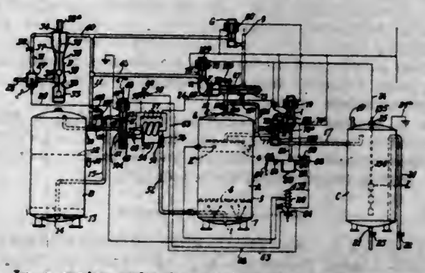
1. A handbag, comprising material in the form of a handbag and having a flap cover with a substantially pointed area and composed of layers, a disc disposed between said layers and formed with different colored sectors selectively viewable through a cutout in the outer layer of said flap cover, and a tubular member attached axially on said disc and extending through the inner layer of said flap cover.

1,893,932. DEVICE FOR ROCKING THE BODIES OF MOTOR VEHICLES. GEORGE DEVER DEWEY, East Milton, Mass. Filed June 23, 1931. Serial No. 546,366. 6 Claims. (Cl. 259—91.)



1. A device for rocking the bodies of motor cars consisting of a portable support having a vertical bearing therein, a body-supporting member reciprocable in said bearing, a screw threaded to the upper end of said member, a resilient disk secured to the upper end of said screw, locking nuts on said screw, an eccentric for reciprocating said member, a revolvable shaft on which said eccentric is mounted, and an electric motor on said support for rotating said shaft.

1,893,933. WATER SOFTENING APPARATUS. ANDREW J. DOTTERWEICH, Pittsburgh, Pa., assignor to Automatic Water Softener Company, Pittsburgh, Pa., a Corporation of Delaware. Filed June 7, 1929. Serial No. 369,149. 7 Claims. (Cl. 210—24.)



3. In a water softening system the combination of a softener tank, having an inlet and an outlet connection at the bottom and top thereof and having another outlet

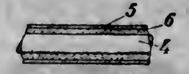
connection intermediate said inlet and first named outlet connections, means for conducting regenerating material through the inlet connection to said tank, and for withdrawing the same through the intermediate outlet connection, and means for conducting raw water through the first named outlet connection to prevent the flow of regenerating material to the upper portion of said softening tank.

1,893,934. ADJUSTABLE BOTTOM HOLE FLOW BEAN. ERIC S. DURWARD, Dallas, Tex., assignor to Shell Petroleum Corporation, a Corporation of Virginia. Filed Feb. 3, 1930. Serial No. 425,467. 1 Claim. (Cl. 166—2.)



An adjustable bottom hole flow bean including a tubing adapted to be inserted in a well, a fitting secured to the end of the tubing, said fitting having an axial passage therethrough and forming a valve seat, a sleeve about said fitting and in slidable contact therewith, said sleeve engaging external threads on the tubing above the fitting, a tube secured to the sleeve and extending below said sleeve, a valve head carried by a spider secured to the sleeve, and bow-springs mounted on said sleeve for engaging the wall of the well to prevent circumferential movement of the sleeve whereby the relative position of the valve seat and valve head may be adjusted from the top of the well by rotating the tubing, said fitting being of sufficient external diameter to limit the downward movement of the valve head and sleeve.

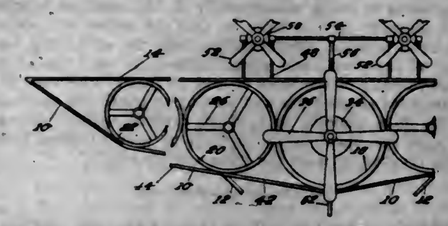
1,893,935. HIGHLY EMISSIVE CATHODE. OTTO EMERSLEBEN, Berlin, Germany. Filed June 22, 1931, Serial No. 545,998, and in Germany June 25, 1930. 6 Claims. (Cl. 250—275.)



1. A method for manufacturing highly emissive cathodes which consists in coating the surface of the cathode body with a compound of sulphur with a highly emissive metal and that thereon a highly emissive substance is deposited in form of metal vapour.

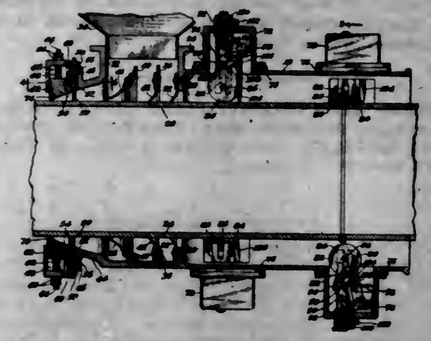
1,893,936. POWER MEANS FOR AIRCRAFT. ANDREAS ERIKSSON, Chicago, Ill. Filed June 12, 1931. Serial No. 543,803. 5 Claims. (Cl. 244—18.)

5. A power means for aircraft, including a central motor, a central wind terminal associated therewith, a plurality of sets of auxiliary propeller blades, a wind tunnel associated with each auxiliary propeller blade set, and means for driving the auxiliary blades from the central



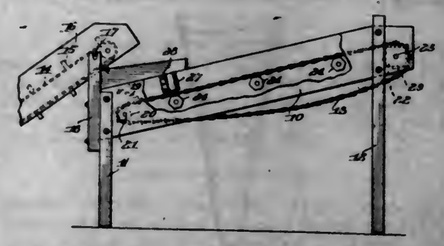
motor, said means comprising rotatable frictionally contacting and driven forward edges of juxtaposed wind tunnels.

1,893,937. METHOD AND APPARATUS FOR COATING PIPES. JOHN B. W. GARDINER, New York, N. Y. Filed June 5, 1931. Serial No. 542,226. 21 Claims. (Cl. 91—30.)



1. In combination, a sleeve adapted to be opened along its axis and adapted to surround a portion of a pipe so that when said sleeve is around a substantially horizontal pipe, it will cooperate with the pipe to form a receptacle for a viscous liquid, an opening in the side of said sleeve through which a viscous liquid may be readily introduced, means for substantially closing one end of the sleeve around the pipe, substantially rigid means largely closing the other end of such sleeve, comprising a member surrounding the pipe, but leaving a substantially clear circular space around the pipe, and means for supporting the sleeve on the pipe, whereby said sleeve will be maintained with such member substantially concentric with the pipe.

1,893,938. GRADING MACHINE. WILLIAM E. GHENT, Atlanta, N. Y., assignor to Boggs Manufacturing Corporation, Atlanta, N. Y., a Corporation of New York. Filed Apr. 21, 1931. Serial No. 531,689. 3 Claims. (Cl. 209—84.)



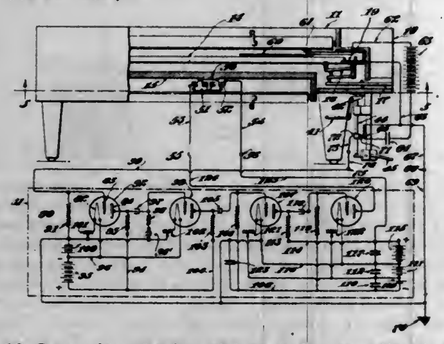
1. A machine for grading articles comprising a frame, an endless belt thereon for grading the articles comprising a series of transversely extending links, rolls carried by the

frame for supporting the belt one of which comprises a driving roll for the belt having a plurality of angularly disposed faces forming corners on the roll each face corresponding in width substantially to the combined lengths of a plurality of the links so that the latter will swing one upon another substantially about the advancing corners of said roll, and strips secured to and extending longitudinally of the faces of said driving roll between the extremities of the faces and serving to guard the openings of the links whereby to hold the articles against passage through the openings to the roll to prevent them from being crushed between the links and the roll.

1,893,939. PROCESS OF MANUFACTURING METALLIC COATED PRODUCTS. MORRIS GROSSMAN, New York, N. Y. Filed July 8, 1929. Serial No. 376,855. 2 Claims. (Cl. 154—40.)

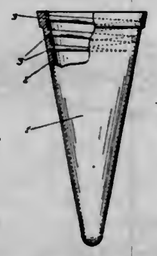
1. A process of manufacturing a product having a fabric base, consisting in applying while it is still warm an adhesive solution composed of india rubber and mineral oil which have previously been boiled together at a temperature of approximately 302 degrees F. for about one half hour, allowing the solution to cool on the fabric and applying thereto a layer of aluminum foil of approximately .005 in thickness.

1,893,940. REGENERATIVE PIANO. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed July 24, 1926, Serial No. 124,576. Renewed Apr. 6, 1932. 24 Claims. (Cl. 84—189.)



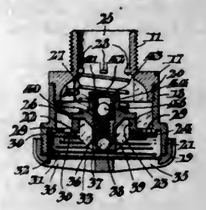
16. In a piano having strings and a sounding board acoustically coupled, means for increasing the effective coupling comprising electrical means for picking up energy from said strings, amplifying said energy and applying the amplified energy to said sounding board.

1,893,941. ICE CREAM CONE. SELDEN G. HOPKINS, Washington, D. C., assignor to MacElhone Methods, Inc., Binghamton, N. Y., a Corporation of New York. Filed June 20, 1932. Serial No. 618,276. 3 Claims. (Cl. 99—11.)



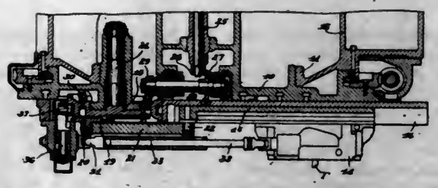
1. An edible holder for frozen confections characterized by a screw thread on its inner surface.

1,893,942. SAFETY VALVE FOR GASOLINE TANKS AND THE LIKE. JAMES A. JENSEN, Philadelphia, Pa., assignor to Quaker City Iron Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 28, 1929. Serial No. 395,777. 10 Claims. (Cl. 271—1.)



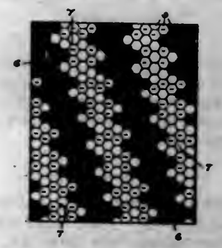
1. In a safety valve for use in connection with tanks for gasoline and the like, the combination of a hollow casing comprising continuously interconnected hollow sections, a normally closed high pressure relief member in a medial section thereof and capable of yielding to extreme pressures induced by evaporation incident to abrupt rises in temperature, and an independently-operative normally-closed low pressure spring-influenced ball relief housed within an axial bore in the member aforesaid and functional ordinarily in maintaining a comparatively light predetermined pressure sufficient to hold evaporation in check, but capable of yielding to slight increases due to surging of the liquid in the tank or to climatic changes in excess of such predetermined pressure.

1,893,943. TOOL MECHANISM FOR GEAR CUTTING MACHINES. MAGNUS H. JOHANSON, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Oct. 29, 1931. Serial No. 571,835. 3 Claims. (Cl. 90—9.)



1. In a gear cutting machine, a reciprocable tool slide, a movable tool support mounted on said slide and operable to move the tool to and from cutting position, respectively, at opposite ends of the movement of said slide, means for reciprocating said slide, and means for actuating said support comprising a reciprocable member having a stroke of invariable length, and separate means connected to the tool support and selectively connectable to said reciprocable member adapted to impart, respectively, when connected to the reciprocable member, different amounts of movement to said tool support.

1,893,944. METHOD FOR FORMING DESIGNS. FRANK R. JOHNSON, Seattle, Wash. Filed June 19, 1929. Serial No. 372,021. 3 Claims. (Cl. 35—12.)



1. A method for forming designs consisting in arranging a number of hexagonal units of two constrasting colors

in a series of basic forms in accordance with the table of basic forms herein enumerated, and in reversing horizontal courses of said units at equal, regular and symmetrical intervals.

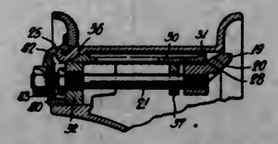
1,893,945. PRODUCTION OF POTASSIUM NITRATE. OSCAR KASELITZ, Berlin, Germany. Filed June 17, 1929, Serial No. 371,718, and in Germany Feb. 11, 1929. 5 Claims. (Cl. 23—102.)

1. The method of producing potassium nitrate comprising acting on potassium chloride with a solution of nitric acid separating the potassium nitrate formed, treating the acid solution remaining over after separation of potassium nitrate wtih nitrous gases and air in order to freshly form nitric acid and removing chlorine in the form of nitrosylchloride substantially free from other chlorine compounds and from elementary chlorine, decomposing the nitrosyl chloride and adding the nitrogen oxide resulting in this decomposition to the nitrous gases.

1,893,946. PRODUCTION OF CALCIUM NITRATE. OSCAR KASELITZ, Berlin, Germany. Filed Jan. 9, 1932, Serial No. 585,803, and in Germany Feb. 24, 1931. 8 Claims. (Cl. 23—102.)

1. The method of producing solid calcium nitrate directly from basic calcium compounds comprising mixing such a basic calcium compound with calcium nitrate and treating said mixture with nitrous gases at an elevated temperature.

1,893,947. VEHICLE WHEEL. CHARLES G. KELLER, Hyde Park, N. Y. Filed May 14, 1931. Serial No. 537,362. 11 Claims. (Cl. 301—13.)



1. A fellyless wheel body adapted to support a pair of axially spaced rims, with each acting as a part of means for holding the other against axial movement, and each having an internal beveled surface, said body including a plurality of spokes, each of which presents an inclined rim seat adjacent to the inboard side near the outer periphery thereof and a shoulder, the seats being in position to support one of said pair of rims with the beveled surface of said rim in engagement with said seats, a plurality of detachable members one carried by each of said spokes and each having a rim seat at the outboard side, said last mentioned rim seat being substantially parallel to said first mentioned rim seat of the corresponding spoke and axially spaced therefrom, said seats on said members being adapted to support a single rim similar to one of said pair of rims, means for clamping said members in predetermined positions and against said shoulders, and means engaging said single rim for forcing said single rim axially into clamped position on said seats of said detachable members.

1,893,948. DOOR-KEY ATTACHMENT. WILHELM KLOTZ, Dusseldorf, Germany. Filed Nov. 11, 1930, Serial No. 494,910, and in Germany Jan. 1, 1930. 1 Claim. (Cl. 40—2.)



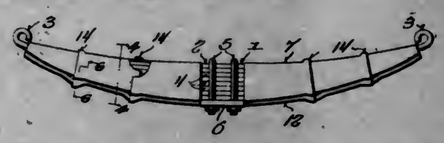
Door-key attachment consisting of a hollow rubber ball having a stuffing of spongy rubber, sorbo or scrap rubber or similar elastic material, and an eyelet attached thereto.

1,893,949. COUCH BED. KURT KOLLER, Koenigsberg, Germany. Filed Nov. 24, 1931, Serial No. 576,999, and in Germany Dec. 2, 1929. 2 Claims. (Cl. 5—14.)



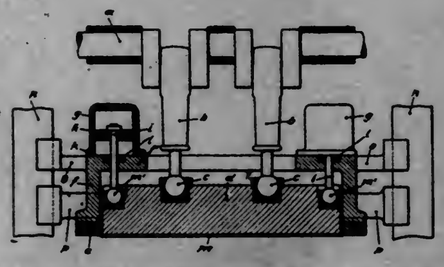
1. In a piece of furniture as described, in combination a main frame, a mattress frame located in the main frame on which feather beds or other bed clothing is placed, the upper edges of the mattress frame having some distance from the inner sides of the main frame, and being some distance below the upper edges of the main frame, these distances providing ventilating spaces between the two frames, bars attached to outer sides of the mattress frame and extending upwardly and outwardly toward the upper edges of the main frame and adapted to keep the bedding lying on the mattress out of the said ventilating spaces.

1,893,950. SPRING COVER. HERBERT G. KUECHLE, Milwaukee, Wis., assignor, by mesne assignments, to I-X-L Metal Spring Cover Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 4, 1929. Serial No. 411,441. 11 Claims. (Cl. 267—37.)



8. A spring cover adapted to snugly fit the top, sides and bottom of a spring and formed from a single blank of sheet metal having its side and bottom portions cut transversely, the top portion of said cover being folded back upon itself adjacent said cuts, causing the side and bottom portions of the cover adjacent said cutout portions to overlap each other, and means for securing the longitudinal edges of said cover together along the bottom of the spring.

1,893,951. SHEET METAL PRESS. OTTO KÜHNER, Goppingen, Germany. Filed Sept. 3, 1930, Serial No. 479,433, and in Germany Sept. 4, 1929. 3 Claims. (Cl. 113—38.)

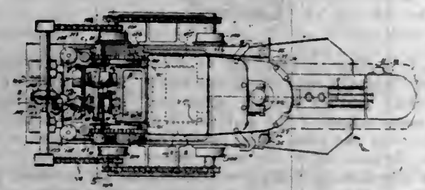


1. A sheet-metal press comprising a drawing slide, adapted to perform its operation in a single stage, means for reciprocating said drawing slide, a blank holder surrounding said drawing slide, a cylinder on said blank holder, a piston in said cylinder, and a piston rod connecting said piston to said drawing slide.

1,893,952. MINING MACHINE. FRANK A. LINDGREN, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 14, 1927, Serial No. 175,070. Renewed Sept. 13, 1930. 47 Claims. (Cl. 262—30.)

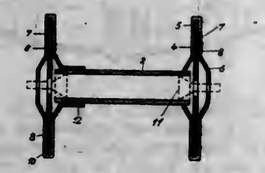
1. A mining machine having a frame including a motor section enclosing an electric motor, said motor having

a horizontally disposed armature with its commutator disposed to the rear of said motor section, so that the rear portion of the latter is of less lateral dimensions than the main body portion thereof, and a feed operating



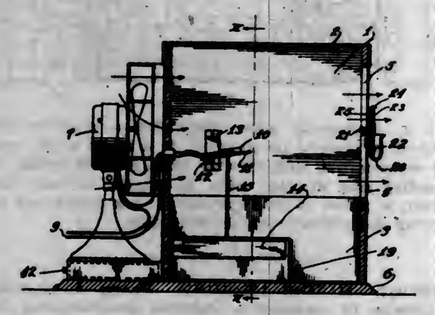
device on a transversely disposed horizontal axis closely adjacent one side of said reduced motor portion and rearwardly of said main body portion and having operative connections with the rear end of said motor.

1,893,953. ELECTRON VALVE WITH CENTERED HEATER. SIEGMUND LOEWE and EDGAR RÖMHILD, Berlin, Germany. Filed Aug. 25, 1928, Serial No. 301,965, and in Germany Aug. 31, 1927. 7 Claims. (Cl. 250—27.5.)



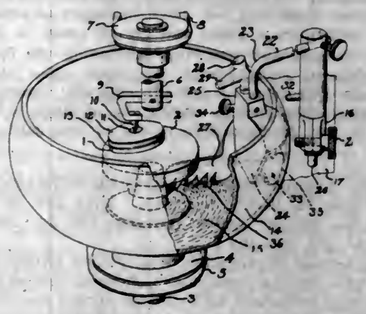
1. In an electron discharge device an indirectly heated cathode consisting of a heater element, a cylindrical metallic cathode tube surrounding said heater element, a metallic body mounted on each end of the heater element, a metallic body mounted on each end of the cathode tube and two insulating bodies, each arranged between one of said first mentioned metallic bodies and one of said second mentioned metallic bodies.

1,893,954. HUMIDIFIER. ANTHONY J. LORENZ and FRANK E. HARTMAN, Chicago, Ill., assignors, by direct and mesne assignments, to Biological Engineering Laboratories, Chicago, Ill., a Corporation of Illinois. Filed Feb. 24, 1931. Serial No. 517,714. 6 Claims. (Cl. 261—30.)



1. A portable humidifier comprising a fan, a water reservoir, capillary material panels extending from said reservoir, a housing for said panels and heating means interposed between the fan and the capillary material panels to supply heat to the air streams created by the fan and thereby increase the moisture absorbing capacity of said air before said air reaches said capillary panels.

1,893,955. SURFACING MACHINE. ALBERT E. MAYNARD, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Apr. 27, 1931. Serial No. 533,195. 17 Claims. (Cl. 51—263.)



1. An attachment for use in abrading comprising a support, a shield member on the support, a projection on the shield having a toothed edge thereon and a scoop member on said shield on the side opposite the projection, said scoop member having an open mouth portion adjacent one end thereof and a spout adjacent its opposite end.

1,893,956. STORE FRONT COUPLING. FRANK L. MICHAELS, Covington, Ky. Filed Mar. 11, 1931. Serial No. 521,677. 5 Claims. (Cl. 189—78.)

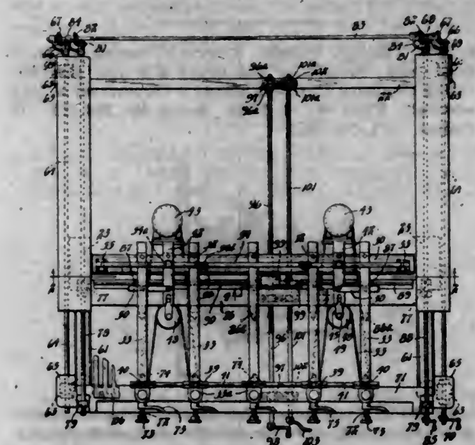


1. A store-front coupling comprising a pair of coupling jaw members adapted to engage one face of adjacent glass panes provided with telescopically engaging sections adapted to interengage said jaw members with a closed hinge joint, independent clamping jaw members adapted to engage opposite faces of said glass panes respectively and to frictionally engage one of said first mentioned coupling jaws, and means to draw said coupling jaw members and said friction jaw members together at intervals on opposite sides of the coupling joint.

1,893,957. CARVING MACHINE STRUCTURE. GUSTAVE A. PARTEN, Minneapolis, Minn. Filed Mar. 26, 1928. Serial No. 264,650. 12 Claims. (Cl. 90—13.2.)

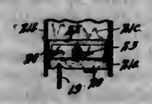
1. A carving machine having in combination, a frame, a member extending transversely of said frame oscillatable about its longitudinal axis and freely movable forwardly and rearwardly of said frame, a plurality of arms pivotally mounted on said member about axes extending at right angles thereto, motors carried by said member, a conduit extending longitudinally of said member about the same for carrying conductors for said motors, brackets secured

to said member adjacent its ends and upstanding therefrom, to which said conduit is secured, intermediate hangers connecting said member and said conduit, said conduit



being of bowed form so as to be a greater distance from said member at its center than at its ends and forming a truss for said member.

1,893,958. CARVING MACHINE STRUCTURE. GUSTAVE A. PARTEN, Minneapolis, Minn. Filed Aug. 11, 1928. Serial No. 298,902. 15 Claims. (Cl. 90—13.2.)



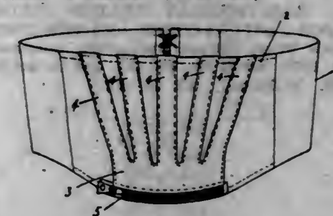
1. A carving machine having in combination, an arm having a recess in its forward end with portions above and below the same, said recess being open at its rear side, the upper portion being bored to receive a cap, means securing said cap to said arm, a bearing secured in said cap, a spindle journaled in said bearing extending through said recess, and journaled in the portion below the same, a pulley secured to said spindle, a belt for said pulley extending through the open rear side of said recess, the bore receiving said cap being of larger diameter than said pulley, whereby said pulley and spindle may be removed therethrough when said cap is removed.

1,893,959. DRIVING MECHANISM. HARRY R. PATTERSON, Toledo, Ohio, assignor, by mesne assignments, to The Electric Auto-Lite Company, Toledo, Ohio, a Corporation of Ohio. Filed July 22, 1918. Serial No. 246,182. 24 Claims. (Cl. 74—7.)



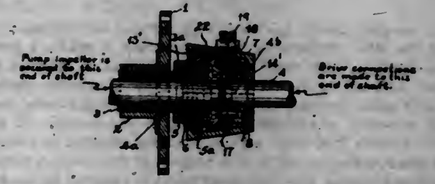
1. In a starting mechanism for internal combustion engines, the combination of a gear operatively connected to the engine; a drive shaft, a portion of which is threaded; a cylindrical block on said shaft having an internal thread adapted to mesh with the threaded portion of the shaft; an externally threaded sleeve having a sliding engagement with said block; a pinion having threaded engagement with said sleeve and adapted to have axial movement into engagement with said engine gear; and resilient means arranged to oppose axial movement of the block on the motor shaft.

1,893,960. ABDOMINAL SUPPORTING BELT. ISAAC M. PEASE, Cincinnati, Ohio. Filed Dec. 5, 1931. Serial No. 579,188. 2 Claims. (Cl. 2—41.)



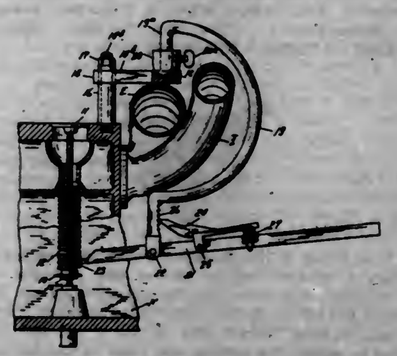
1. In combination with a belt of the type specified, having a front section constructed of elastic webbing, a reenforcing member for said front section, said member comprising a plate and a plurality of fingers pivotally secured to said plate, and a pocket on said front section to receive said plate and fingers, said pocket having individual extensions for the fingers and being provided with a closure whereby said reenforcing member may be readily inserted or removed.

1,893,961. AUXILIARY PACKING GLAND. CHARLES A. ROBBINS, Pittsburgh, Pa. Filed Aug. 6, 1931. Serial No. 555,499. 3 Claims. (Cl. 286—38.)



1. For combination with a main packing gland upon a shaft, an auxiliary packing gland comprising two segments each including an end wall portion which in assembly bears edgewise upon the lateral face of said main packing gland, and means for drawing said segments together and securing said wall portions edgewise and peripherally upon said main packing gland.

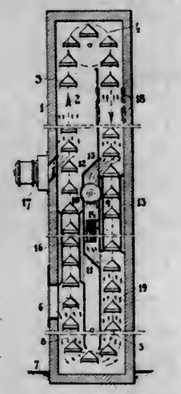
1,893,962. VALVE SPRING LIFTER. WILLIAM J. ROWAN, Akron, Ohio. Filed Sept. 13, 1930. Serial No. 481,655. 11 Claims. (Cl. 29—86.3.)



1. A tool for use in removing engine valves comprising a supporting bar adapted to be mounted on top of the en-

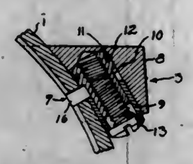
gine block, a rod adapted to be mounted on said bar so as to be suspended thereon to rotate and to swing, a lever pivoted on the lower end of said rod, said lever having a valve spring engaging member at one end and the other end providing an operating handle, a latch on said lever, a series of teeth arranged vertically of said rod, and yielding means whereby said latch is adapted to hold a valve spring compressed.

1,893,963. ELECTRICALLY HEATED DRYING FURNACE FOR CASTING CORES AND THE LIKE. EMIL FRIEDRICH RUSS, Cologne-Marienburg, Germany. Filed Oct. 23, 1930, Serial No. 490,725, and in Germany Oct. 19, 1929. 4 Claims. (Cl. 34—12)



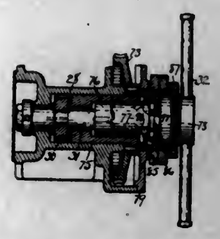
1. An electrically heated drying furnace for casting cores and the like, comprising in combination a shaft, a partition dividing said shaft into two sections, a vertical elevator adapted to circulate in said shaft, a service opening in said shaft for charging on and removing the cores from said elevator, a narrowed portion in the section of said shaft remote from said service opening adapted to prevent the upward flow of air in this section of the shaft, a branch channel bridging said narrowed portion adapted to conduct the air out of and back into the shaft around said narrowed portion, heating elements in said branch channel adapted to heat the air passing through said channel, and a ventilating blower in said branch channel adapted to suck the air from said shaft into said branch channel and to return this air into said shaft after being heated by said heating elements.

1,893,964. CONNECTING MEANS FOR OPHTHALMIC MOUNTINGS AND THE LIKE. ELMER L. SCHUMACHER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed May 9, 1930. Serial No. 450,982. 2 Claims. (Cl. 88—53.)



1. In a device of the character described, a split holding member, a tubular lug on one of the portions of the split member, a housing on the opposite portion having a portion cut out to fit over the holding member to conceal the split portion therein and having a cut out portion adapted to receive the tubular lug, a second tubular member within the cut out portion of the housing having a shouldered portion secured to said housing and having a threaded bore, the threaded tubular member being adapted to extend within the tubular lug and screw means for securing the split ends together within the housing.

1,893,965. DRILL PRESS. CURTIS F. SHERMAN, Hartford, Conn., assignor to The Henry & Wright Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Oct. 2, 1929. Serial No. 396,719. 10 Claims. (Cl. 77—33.)

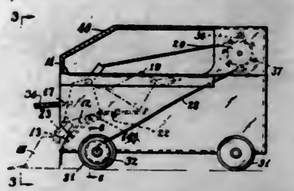


1. In drilling machines, wherein the rotatable spindle is shiftable axially between inactive and work-performing positions, a rotatable feeding member operatively connected with the spindle for shifting the latter, power-operated mechanism including a worm and its gear, a manually-operable element, and means for operably connecting said mechanism and element to the feeding member to provide feed movements of the latter individually by the mechanism or element or concurrently by both, said means comprising a pair of clutch members each carried by and movable longitudinally of the feeding member, one of the clutch members being keyed to the feeding member, said clutch members having their clutching faces arranged for over-running action in one direction of rotation of the feeding member when the clutch members are in clutching engagement, means operatively connecting said element with the keyed clutch member in a manner to permit limited relative rotation therebetween to thereby shift such clutch member into and out of clutching engagement, and separate means operable at will for locking the element and keyed clutch member against relative rotation when the latter is out of clutching engagement, the other clutch member being permanently operatively connected to the power-operated mechanism.

1,893,966. RUBBER PRODUCT AND METHOD FOR MAKING THE SAME. FRANK L. SHEW, Ashtabula, Ohio. Filed Sept. 16, 1929. Serial No. 393,127. 4 Claims. (Cl. 18—50.)

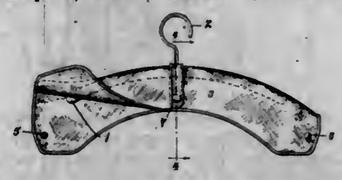
1. A white rubber product consisting of vulcanized rubber composition comprising white pigment, and having a surface bleach.

1,893,967. DUSTLESS STREET CLEANING TRUCK. LOUIS SIMON, New York, N. Y. Filed June 30, 1932. Serial No. 620,058. 3 Claims. (Cl. 214—67.)



1. A street cleaning machine, comprising a container body opened at the top, a partial cover on the rear end extending at an inclination from the bottom to the top, telescopic leaves on said partial cover adapted to be extended, a container carriage for being hoisted along on said partial cover and telescopic leaves, means on said container carriage for gripping and causing the extension of said telescopic leaves, and means for lifting said container carriage over said partial cover said means for gripping comprising a rod attached upon and extending from the front of said container and adapted to engage a hook element on the last of said telescopic leaves.

1,893,968. GARMENT COVER. ROSE M. SPENCE, Buffalo, N. Y. Filed May 25, 1928, Serial No. 280,575. Renewed Apr. 9, 1932. 5 Claims. (Cl. 223—61.)



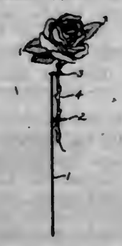
4. As an article of manufacture a garment cover comprising a piece of material fashioned to be placed over the supporting bar of a garment hanger so as to hang over the sides of said bar, said cover having an opening for the hook of the hanger and being provided with a strap connected to said piece of material at opposite sides of said opening one of the strap connections being detachable whereby the strap may be looped around the bar of the hanger to effect the securement of the cover to said bar or may be disengaged from said bar to permit the removal of the cover.

1,893,969. METHOD OF SEPARATING CUPROUS AND AMMONIUM CHLORIDES. WESLEY C. STOESSER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 23, 1930. Serial No. 455,149. 6 Claims. (Cl. 23—100.)

1. The process of separating cuprous chloride and ammonium chloride from an aqueous solution containing the same which comprises removing the water by vaporization therefrom under non-oxidizing conditions and subliming ammonium chloride from the dry residue.

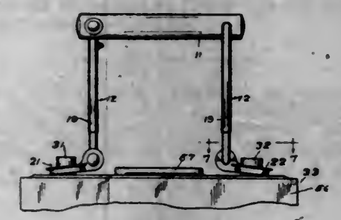
5. The process of recovering cuprous chloride and ammonium chloride from the aqueous solution resulting from the reaction between a chlorinated aromatic hydrocarbon and ammonia which comprises distilling such solution under substantially non-oxidizing conditions to remove ammonia, phenol, arylamine and water therefrom, subliming ammonium chloride from the dry residue by heating the same at a temperature between 340° and 450° C., collecting the sublimed product and drawing off molten cuprous chloride from the still.

1,893,970. FLOWER SUPPORT. YEINOSUKE TAKAHASHI, Montara, Calif. Filed Oct. 29, 1930. Serial No. 491,883. 4 Claims. (Cl. 47—55.)



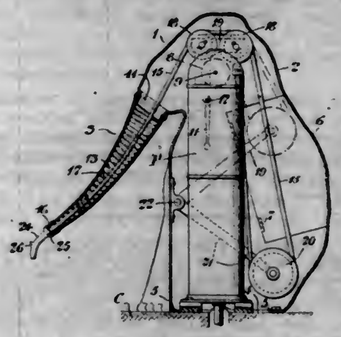
1. A flower support comprising a malleable wire bent to form a plurality of grips, each grip comprising a substantially V-shaped fold whose apex projects transversely from the axis of the support.

1,893,971. STORAGE BATTERY LIFTER. HAROLD C. TERRELL, Cincinnati, Ohio, assignor to The Ohio Parts Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 6, 1930. Serial No. 500,551. 11 Claims. (Cl. 294—92.)



1. In a storage battery lifter, the combination of a gripping part and an electrically insulated handle therefor, said gripping part having an aperture receiving the terminal post of the storage battery, said gripping part arranged to tilt by gravity upon lifting movement applied to said handle, and opposite ends of opposite walls of said aperture arranged to cramp opposite sides af said terminal post upon such tilting movement applied to said gripping part.

1,893,972. GASOLINE PUMP. ROGER B. WHITMAN, New Hyde Park, N. Y. Filed Mar. 5, 1931. Serial No. 520,288. 8 Claims. (Cl. 221—95.)

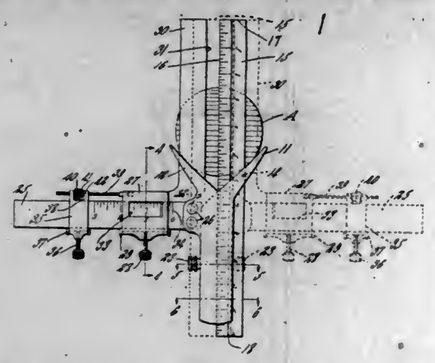


1. A gasoline pump comprising a measuring pump and a casing surrounding and enclosing said measuring pump, the top portion of the casing extending above the top of the measuring pump and provided with a downwardly and forwardly projecting opening; a hollow, conically shaped, flexible member secured to the casing over said opening and provided with an opening at its lower end; a hose from the measuring pump adapted to extend through the flexible member and said open end and provided with a nozzle; and means for preventing the nozzle from being drawn through said end opening into the flexible member.

1,893,973. MECHANIC'S TOOL. FELIX YAVICOLI, Buffalo, N. Y. Filed July 1, 1932. Serial No. 620,470. 10 Claims. (Cl. 33—108.)

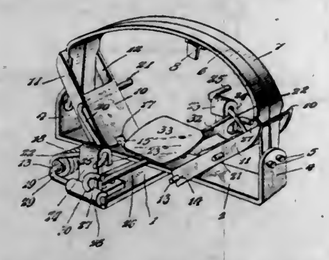
8. A mechanic's tool comprising a handle having diverging jaws, a member having an edge bisecting the angle

subtended by said jaws, and a second member mounted on said handle for adjustment in a direction transversely



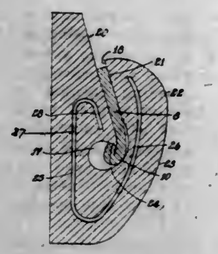
to said bisecting edge and having an edge parallel to said bisecting edge.

1,893,974. TRAP. ERLE T. ZOOK, Casper, Wyo. Filed Sept. 1, 1931. Serial No. 560,618. 15 Claims. (Cl. 43—88.)



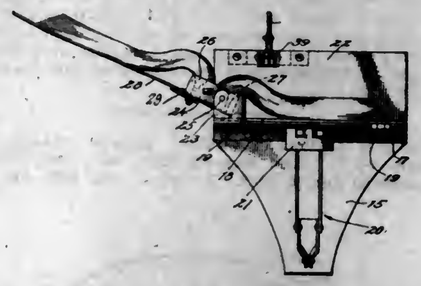
1. In a trap, coacting jaws, means to releasably hold the paws opened, and springs having portions engaged by the jaws when opened to initially impart movement to the jaws towards a closed position when the jaws are released and other portions serving to complete closing of the jaws.

1,893,975. SPRING FOR REENFORCING CLAMPING DEVICES. WALTER C. JACKSON, Rahway, N. J., assignor to Tingley Reliance Rubber Corporation, Rahway, N. J., a Corporation of New Jersey. Original application filed Aug. 5, 1930, Serial No. 473,225. Divided and this application filed Mar. 15, 1932. Serial No. 598,955. 2 Claims. (Cl. 267—1.)



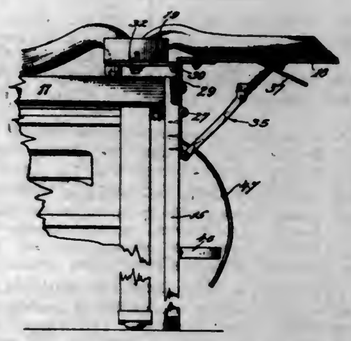
2. A reenforcing device formed of spring steel having one portion ending in a bent over, hooked end, and bent outwardly to present another portion on the same side as is the hooked end, such latter portion ending well beyond the said hooked end.

1,893,976. BOOKHOLDER. HARRISON ANDERSON, Los Angeles, Calif. Filed June 15, 1929. Serial No. 371,274. 3 Claims. (Cl. 45—85.)



1. A bookholder comprising a wall bracket, a book holding frame including a lower leaf hingedly supported on the bracket to occupy lowered and elevated position, a back leaf pivoted on the lower leaf to occupy open and closed positions, an upper leaf hingedly supported on the back leaf to occupy open and closed positions, lugs on the back leaf, for defining the open position of the upper leaf, and lugs on the back leaf, for defining the open position of the upper leaf, and lugs on the lower leaf defining the open position of the back leaf.

1,893,977. BOOKHOLDER. HARRISON ANDERSON, Los Angeles, Calif. Filed June 15, 1929. Serial No. 371,275. 4 Claims. (Cl. 45—85.)

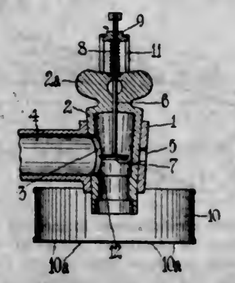


1. A bookholder, comprising a book holding frame having a bottom leaf and a back leaf hingedly connected to occupy open and closed positions, means for so mounting the frame on a desk that when said leaves are in open position the bottom leaf can project to one side of the desk while the back leaf reposes on the desk and co-acts with the bottom leaf to support an opened book in a position for reading by an occupant of the desk, and when in closed position said leaves can be moved to occupy vertical positions at one side of the desk, and foldable means for supporting the bottom leaf horizontally when in open position.

1,893,978. MEANS FOR REGULATING THE FLOW OF LIQUID FROM CONTAINERS. ALFRED WALTER ALEXANDER BARNARD and HENRY ADIN, Foxton, New Zealand, assignors of one-half to Roy William Priest and Fergus Cumming, Broadway Palmerston North, New Zealand. Filed Apr. 30, 1930, Serial No. 448,643, and in New Zealand May 23, 1929. 2 Claims. (Cl. 137—139.)

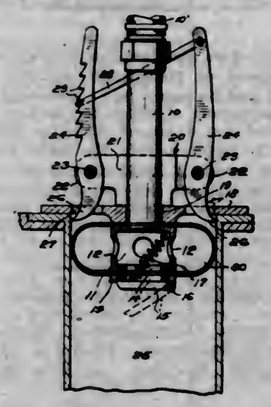
1. In liquid flow regulators, a liquid discharge cock including a body, a hollow plug rotatable in the body and open at its lower end and having a radial port, a

valve arranged within the plug, a stem carrying the valve and slidable through the top of the plug, a spring about the stem and above the plug, for supporting a nut adjustably engaged on the stem and acting to adjust the



tension of the spring, and a vessel with one or more liquid outlets of predetermined area therein directly suspended from the nut and positioned beneath the lower open end of the plug.

1,893,979. CLEANING DEVICE FOR WASTE OR DRAIN PIPES. JOHN P. BARRERE, Nyack, N. Y. Filed Feb. 12, 1932. Serial No. 592,615. 4 Claims. (Cl. 15—104.05.)



1. A device for cleaning waste or drain pipes, comprising a tubular body portion for the passage of water under pressure, an expansible hollow plug connected with the tubular body portion and in communication therewith and adapted to be expanded by the water pressure, means to permit of the discharge of the water from the tubular body portion into the waste or drain pipe, and locking means carried by the tubular body portion for engagement with the waste or drain pipe.

1,893,980. PRESSED IN SPUT. LEON M. BELL, Portsmouth, Ohio. Filed Aug. 18, 1931. Serial No. 557,930. 2 Claims. (Cl. 285—49.)



1. The combination with a metallic shipping drum having a sput opening, of a sput fitted in the opening, said sput having an annular rib formed at the upper end thereof, said annular rib having an inclined upper surface, enlargements formed on the inclined upper surface, said enlargements having vertical side surfaces and horizontal upper surfaces, the side and upper surfaces of the enlargements defining sharp corners at their meeting edges, the drum adapted to be pressed around the enlargements and the sharp corners biting into the drum locking the sput within the opening.

1,893,981. GUY GUARD. THEODORE BIRKENMAIER, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 16, 1931. Serial No. 522,827. 7 Claims. (Cl. 189—31.5.)

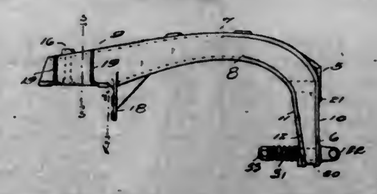


6. A guy strand guard comprising a body portion, means formed on one end of said body portion for bolting said guard to a guy clamp, another means formed elsewhere on said body portion for bolting said body portion to a clamp, said bolting means being adapted to substantially cover the top of said guy clamp when bolted thereto, and gripping means formed on said body portion for directly engaging said guy strand.

1,893,982. ESTER RESIN PRODUCT AND PROCESS OF MAKING SAME. THEODORE F. BRADLEY, Westfield, N. J., assignor to Ellis-Foster Company, Montclair, N. J., a Corporation of New Jersey. Filed Aug. 18, 1927. Serial No. 213,978. 2 Claims. (Cl. 260—98.)

1. As a new composition of matter rosin glyceride of light color, having a softening point as measured by the "ball and ring" method of between 100° C. and 130° C. and an acid number of less than 20.

1,893,983. DRAFT APPLIANCE. ROY E. CHOATE, Cedar Rapids, Iowa. Filed Apr. 7, 1931. Serial No. 528,410. 2 Claims. (Cl. 280—33.44.)



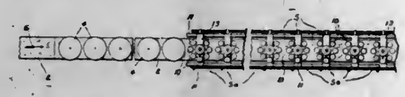
2. A one piece, integral casting to be used as an arched draft appliance comprising a tongue having an attaching frame at its butt end, and a forward depending hitch bar, the inner or rear face of which is sloped downwardly and forwardly, and the upper portion of said inner face being curved into the under face of the tongue in sym-

metrical outline, said casting and its several above named parts being of hollow, rectangular construction in cross section.

1,893,984. ALLOY. MICHAEL G. CORSON, Jackson Heights, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Oct. 20, 1926. Serial No. 143,017. 4 Claims. (Cl. 75—1.)

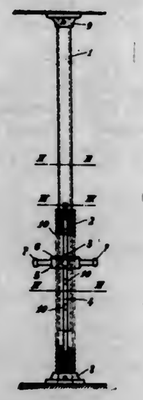
4. An alloy containing about .3 to 2% beryllium, from .1 to 40% nickel and the balance principally copper.

1,893,985. POLISHING GLASS. JAMES W. CRUIKSHANK, Pittsburgh, Pa., assignor, by mesne assignments, to Pilkington Brothers Limited, Lancashire, England, a British Company. Filed Oct. 21, 1926. Serial No. 143,205. 4 Claims. (Cl. 51—278.)



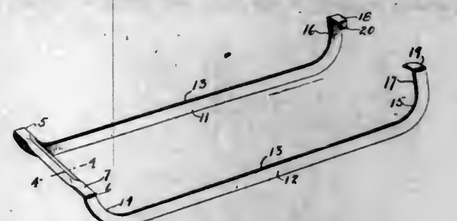
4. The method of polishing glass which consists in moving the glass in one direction in operative engagement successively with a plurality of polishers, reversing the movement of the glass to cause it to travel in the opposite direction and selectively permitting a portion of the polishers to be moved back with the glass by frictional engagement therewith, while holding others of said polishers against such movement.

1,893,986. ADJUSTABLE BRACE. JACQUES DREYFUSS, Lausanne, Switzerland, assignor to the Firm Adria S. A. Galerie du Commerce, Lausanne, Switzerland. Filed Jan. 31, 1930, Serial No. 424,990, and in Switzerland Oct. 30, 1929. 1 Claim. (Cl. 254—98.)



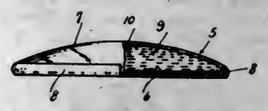
In an adjustable brace, the combination of a base plate, an externally threaded outer tube fixed to said base plate and provided with limited slots arranged opposite each other, a nut fitted to the threads of the outer tube and having a shouldered portion on its top face, handles attached to said nut as manoeuvring means of the same, an inner tube telescoped into the outer tube and provided with a number of transverse holes registering with said slots, a transverse bar passing through one of the holes and having its ends extending into said shouldered portion on the top face of said nut, a conically threaded and slotted portion at the upper extremity of the outer tube and a second nut fitted to these conical threads and a handle hinged to said nut as means for clamping the extremity of the outer tube upon the inner tube.

1,893,987. STRAIGHTENER FOR SHOE SOLES. GEORGE B. DUSINBERRE, Wellsboro, Pa. Filed Feb. 24, 1932. Serial No. 594,874. 5 Claims. (Cl. 12—129.1.)



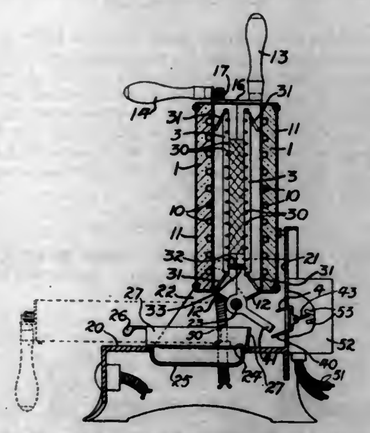
1. A shoe sole straightener formed of a substantially wide flat ribbon of resilient material having a mid-portion, two side portions bent out of the plane of the mid-portion and curved into positions with their edges substantially parallel with the plane of the mid-portion, and attaching means on the end of each side portion.

1,893,988. LEVEL. JAMES O. FRENCH, Los Angeles, Calif. Filed Aug. 25, 1930. Serial No. 477,705. 1 Claim. (Cl. 33—212.)



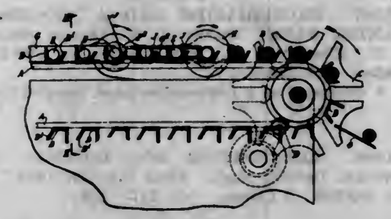
A level of the class described comprising a shallow hollow wafer formed of transparent material having its lower face flat and its upper face convexed, a cup-shaped member on the bottom of which the bottom part of the wafer rests and the flange of which is bent over the periphery of the wafer to hold the wafer in said member, said wafer having a liquid therein but partly filling the same to form a bubble and the central part of the convex face of the wafer having a pair of grooves therein intersecting each other and arranged at right angles to each other.

1,893,989. ELECTRIC BROILER. ROBERT E. GALER, Seattle, Wash., assignor, by direct and mesne assignments, to Minute Electric Broiler, Seattle, Wash., a Corporation of Washington. Filed Jan. 22, 1929. Serial No. 334,198. 10 Claims. (Cl. 219—19.)



1. A steak broiler comprising two opposed heating elements, each carrying its half of steak supporting means, and a common pivot for both said heating elements, upon which they may be turned together or separately, and a base carrying said common pivot of said heating elements.

1,893,990. WRAPPING MACHINE. FREDERICK GROVER, Leeds, England, assignor to The Forgrove Machinery Company Limited, Leeds, England. Filed Aug. 7, 1931, Serial No. 555,829, and in Great Britain Nov. 7, 1930. 8 Claims. (Cl. 93—5.)



1. A wrapping machine, comprising, in combination, two cylindrical formers concentrically arranged and spaced apart, wrapper grippers on said cylindrical formers, means for rotating said formers for winding a wrapper held by said grippers around said formers, a pocket for supporting between said formers and concentric therewith a cylindrical object to be wrapped in said wrapper, said pocket having an inclined wall whereby the cylindrical object tends to move upwardly free from the pocket when the wrapper is carried around the cylindrical object, means for moving said formers outwardly to withdraw them from the wrapper after the latter has been wound; two oppositely rotatable twist grippers spaced apart from said cylindrical formers for twisting the ends of said wrapper; means for feeding said pocket from a position in which the cylindrical object and its wrapper are between the formers to a position in which they are between the two twist grippers, and means for maintaining the wrapper around the cylindrical object while it is fed from the formers to the twist grippers.

1,893,991. AZO DYESTUFFS ON THE FIBER AND NEW COMPOSITIONS OF MATTER. JOSEF HALLER, Wiesdorf-on-the-Rhine, and CARL TAUBE, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 1, 1929, Serial No. 343,843, and in Germany Mar. 24, 1928. 9 Claims. (Cl. 8—6.)

1. The process which comprises printing fibers with a printing paste containing about equimolecular quantities of a condensation product of the general formula:

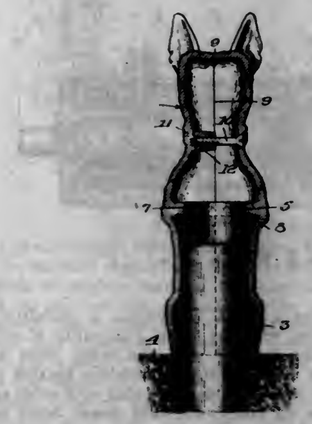
$$R{-}N{=}N{-}N\begin{matrix}R_1\\R_2\end{matrix}$$

wherein R stands for an aromatic residue containing no sulfonic acid and no carboxylic acid groups, and R_1 and R_2 stand for substituents of the group consisting of the alkyl, cyclohexyl and aralkyl groups, or R_1 and R_2 jointly stand for a pentamethylene chain, and of a coupling component free from a sulfonic acid and carboxylic acid group for producing azo dyestuffs, drying the fibers, steaming the same, treating them in a bath containing a weak, organic acid, washing and drying the same.

1,893,992. PRODUCTION OF METALS AND ALLOYS BY REDUCTION. WALTER BIRKETT HAMILTON, Birkdale, and THOMAS ALLEN EVANS, Whitefield, England, assignors to Electro Metallurgical Company, New York, N. Y. Filed Jan. 18, 1930, Serial No. 421,723, and in Great Britain Feb. 5, 1929. 4 Claims. (Cl. 75—22.5.)

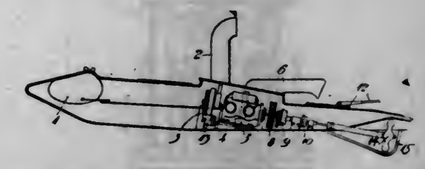
1. Process of reducing refractory compounds of metals which comprises forming a mixture containing said compounds together with a reducing agent and subdivided electrically conductive material, subjecting the mixture to the action of a high frequency alternating electrical field of sufficient intensity to raise said mixture to the temperature required to initiate and maintain the reaction between the compounds and the reducing agent, and maintaining the heating after the reaction is complete for sufficient time to allow the slag to separate and cool below the temperature of the molten metal.

1,893,993. PIPE-CLOSURE DEVICE. JACOB H. HIRSCH, Chicago, Ill., assignor to Automatic Burner Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 17, 1930. Serial No. 496,297. 4 Claims. (Cl. 137—76.)



4. In combination with the upwardly extending threaded portion of a filler-tube for a tank positioned in the ground, a closure device for said end portion consisting of a hollow body, comprising longitudinally divided sections and open at its lower end whereby it may be applied over said end of the filler-tube, said sections having an inwardly extending rib reinforcing the same and also provided with screw threads applied to the threaded end of the filler-tube, said device having a portion depending below said rib and substantially to the ground, and fastening means securing the sections of the device together and located above said rib.

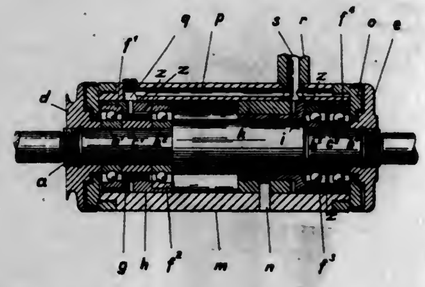
1,893,994. MOTOR PROPELLED SURFING OR AQUAPLANE. CHARLES OCEAN JOHNSON, Brittatorp, Sweden. Filed Mar. 23, 1932. Serial No. 600,745. 1 Claim. (Cl. 115—34.)



A motor propelled surfing apparatus or aquaplane comprising a wholly water-tight hull, having a flat upper surface at its stern to form a surf-board portion of sufficient area to permit a bather to stand erect or lie thereon, and a channel beneath said surf-board portion, a motor in said water-tight hull, a propeller driven by said motor in said channel beneath the surf-board, a spring released clutch mechanism in the hull connecting the motor and propeller and also a carburetor choke, a control pedal on the outside of the hull on its upper surface, and to one side of the surf-board for actuating the clutch against the tension of the spring of the clutch, and accessible to the bather's foot or arm when standing or reclining, respectively, whereby the driving mechanism is automatically

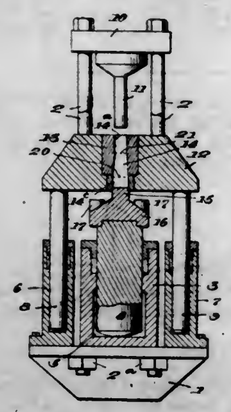
released and simultaneously the speed of the motor is decreased when the control pedal is released from pressure by the bather, and a steady-rest handle extending transversely across the front portion of said surf-board portion.

1,893,995. BEARING FOR ACCURATELY RUNNING SHAFTS USING BALL BEARINGS. KARL JUNG, Berlin, Germany. Filed May 20, 1930, Serial No. 454,079, and in Germany Mar. 7, 1930. 7 Claims. (Cl. 308—187.)



1. A bearing for a shaft, comprising a plurality of inner races rotating with the shaft, a plurality of outer races corresponding radially with the inner races and stationary relative to the shaft, anti-friction bearing elements between the races, means for moving each outer race axially relative to its inner race, said means being controlled by a pressure medium, and means for feeding the pressure medium.

1,893,996. HYDRAULIC SALT PRESS. GEORGE KERSHNER, Hutchinson, Kans, assignor to Carey Salt Company, Hutchinson, Kans., a Corporation of Kansas. Filed May 29, 1931. Serial No. 541,050. 9 Claims. (Cl. 25—91.)

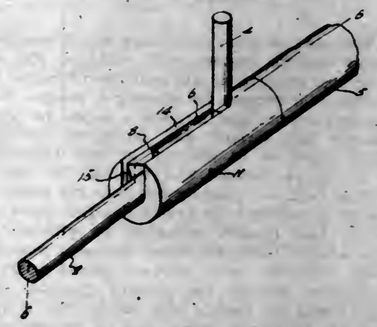


1. A hydraulic press for forming salt blocks having relatively movable members combining to bound a forming space subject to reduction in capacity to compress a contained substance, and represented respectively by a lateral restraining wall and terminally opposed elements, one of which elements normally lies in said space and the other is adapted to progress into said space bounded laterally by the wall member, means for causing the second element to enter said space and thereafter for causing both said elements to approach each other so as to exert live pressure on the substance under compression in both directions to define a predetermined limit of compression, and means becoming operative at the limit of compression to withdraw said elements only and to withdraw the compressed substance therewith.

1,893,997. BACTERIACIDE AND A PROCESS FOR MAKING SAME. IRVING S. BARKSDALE, Greenville, S. C. Filed Nov. 19, 1929. Serial No. 408,422. 6 Claims. (Cl. 260—11.)

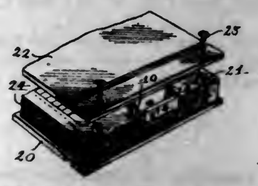
6. A compound of a triphenylmethane dye and bismuth.

1,893,998. REENFORCING ROD HOLDER. DOLPH LOZELLE, Detroit, Mich. Filed Jan. 29, 1932. Serial No. 589,733. 7 Claims. (Cl. 287—103.)



1. A rod holder comprising a member having a bore therein and further having a substantially spiral slot communicating with the bore, said bore and slot for the reception of the rod, and a sleeve rotatably mounted on the member having a slot therein communicating with the bore and the first named slot and accommodating the rod.

1,893,999. INDEX HOLDER. JOSEPH H. MASSÉ, Montreal, Quebec, Canada. Filed June 16, 1931. Serial No. 544,904. 4 Claims. (Cl. 129—1.)



2. An index holder comprising an elongated card plate, index card engaging channels formed at the margins of the said plate, a right angularly extending connecting plate projecting from the card plate, and an elongated sleeve formed at the inner end of the connecting plate.

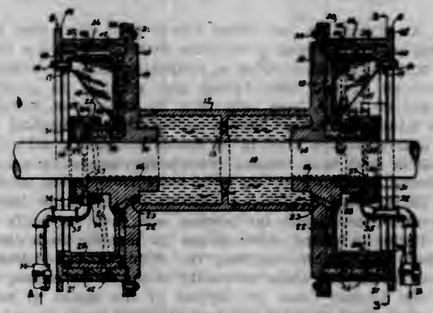
1,894,000. PISTON RING. ALLEN W. MORTON, Baltimore, Md., assignor to The American Hammered Piston Ring Company, Baltimore, Md., a Corporation of Maryland. Filed June 8, 1932. Serial No. 615,218. 4 Claims. (Cl. 74—109.)

1. A piston ring comprising a one-piece split annulus having centrally located intermediate its sides a single row composed of two end-to-end series of elongated slots having parallel sides and outwardly flaring end walls and severally aperturing the annulus from its inner face outwardly toward its periphery, the series being separated from each other at points that are respectively about 90° from the split in the annulus, by solid portions of the annulus that are intact and imperforate from their inner faces entirely to their peripheral faces, and the slots, constituting each series having their outermost mutually adjacent ends communicably connected by short peripheral grooves; whereby each series of slots constitutes within itself a substantially continuous oil-circulation aperturing



of the annulus, while the series are severally separated from out of communication wtih each other and thereby severally localize the oil-circulation aperturing that they respectively provide.

1,894,001. COOLING MEANS FOR DRAW WORKS FOR WELL DRILLING MACHINERY. GORDON F. MYERS, Beaumont, Tex., assignor to Beaumont Iron Works Company, Beaumont, Tex., a Corporation of Texas. Filed Dec. 18, 1929. Serial No. 413,905. 8 Claims. (Cl. 188—264.)



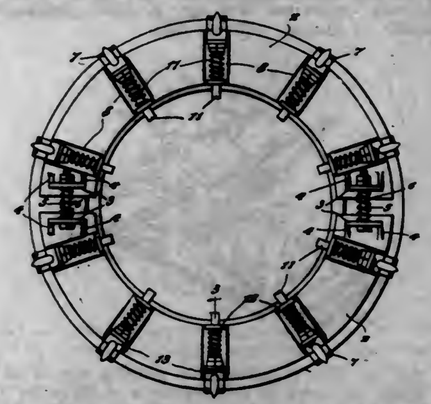
1. A winding mechanism of the character described, including a solid shaft, a drum mounted thereon having a medially disposed hollow core, oppositely disposed hubs, flanges on each end of the core and brake rims carried by the flanges, the hub, flanges and brake rims having cooling fluid passages communicating with the hollow interior of the core, and means swivelly connected to the hubs whereby cooling fluid may be introduced into one of said hubs and discharged from the other hub after passing through said core and passages.

1,894,002. ELECTRIC SWITCH. JOHANN G. PETERSON, West Hartford, Conn. Filed Apr. 11, 1931. Serial No. 529,510. 33 Claims. (Cl. 200—11.)



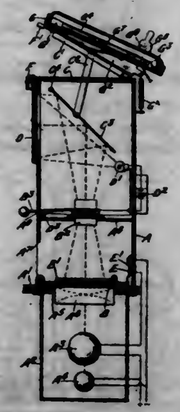
1. In a switch, stationary and movable contact members, and actuating means for said movable contact having a series of aligned stationary cams and a resiliently mounted cam successively engageable therewith.

1,894,003. ANTISKID ATTACHMENT FOR WHEELS. FRANK R. FRANCIS and CHARLES A. FRANCIS, Minneapolis, Minn. Filed July 13, 1931. Serial No. 550,522. 5 Claims. (Cl. 152—14.)



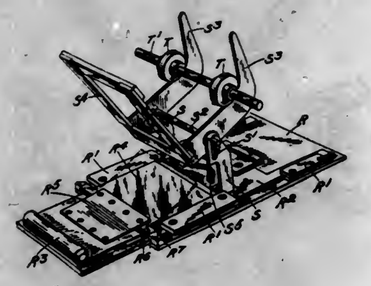
1. An anti-skid device comprising a band of a diameter to be disposed against a tire at one side thereof and consisting of arcuate sections, fasteners adjustably connecting the ends of said sections, traction yokes each having one end thereof secured to the adjacent section and its other end extended transversely across the tread of a tire and against the other side thereof strips connecting the last mentioned ends of certain of said yokes to form arcuate clamping members independent of and spaced circumferentially from each other, and yieldably supported traction devices carried by the band sections and adapted to project outwardly therefrom.

1,894,004. PHOTOGRAPHIC PRINTING APPARATUS. WILLIAM HORACE THOMAS RAMPLING ROSE, Chester, England. Filed Apr. 20, 1931, Serial No. 531,544, and in Great Britain May 12, 1930. 18 Claims. (Cl. 88—24.)



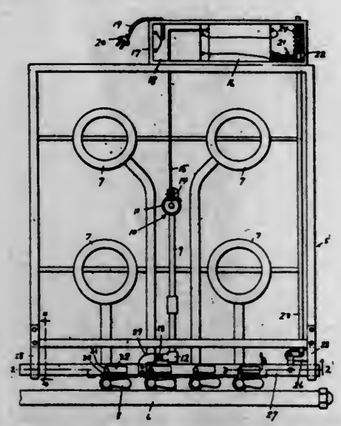
1. A photgraphic printing apparatus including in combination a film holder, a lens, a printing lamp, a sheet of material of a nature such that the appearance thereof gives an indication of the relative values of light projected respectively on to the two faces thereof, means whereby the light projected from the printing lamp through a film in the holder and lens can be directed on to one face of the said material, a standard source of light the light from which can be directed on to the other face of the said material, and an adjusting device whereby the intensity of the light projected through the film and lens from the printing lamp can be varied.

1,894,005. PHOTOGRAPHIC PRINTING APPARATUS. WILLIAM HORACE THOMAS RAMPLING ROSE, Chester, England. Original application filed Apr. 20, 1931, Serial No. 531,544, and in Great Britain May 12, 1930. Divided and this application filed Apr. 5, 1932. Serial No. 603,389. 7 Claims. (Cl. 88—24.)



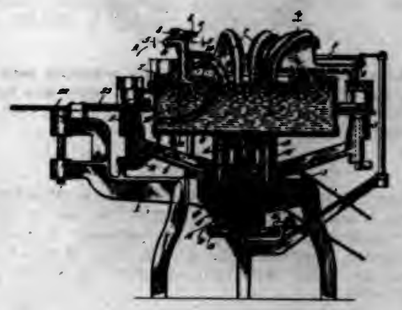
1. For use with a photographic printing apparatus, a film holder including in combination a carriage for the film, a support along which the carriage can slide, means for clamping the front edge of the film on the carriage, upwardly projecting lugs disposed at the rear of the carriage, a clamping frame for the film so pivoted to the lugs with its pivotal axis offset from the plane of the frame that the final clamping movement of the frame is a swinging movement which tends to draw the film away from the clamped edge and thus flatten the film before clamping, means actuated by the carriage as it travels for imparting movement to the clamping frame, and means whereby the initial movement of the carriage towards the printing position automatically operates the said means for clamping one edge of the film.

1,894,006. ELECTROMECHANICAL PILOT LIGHT CONTROL. DOMENICK ROSSI and NICOLA COLICCHIO, Albany, N. Y. Filed Sept. 8, 1930. Serial No. 480,500. 1 Claim. (Cl. 200—164.)



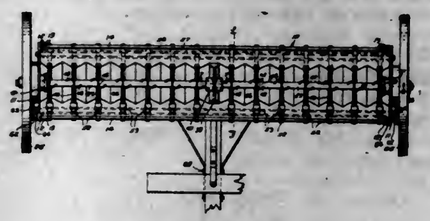
Means for closing a switch by the operation of a turn handle comprising a supporting structure, a rod slidably supported by said structure and having a part thereon for closing the switch when the rod is moved in such direction, spring means for holding the rod in a position with the switch opened, a bar slidably supported by the structure and arranged at right angles to the rod, a bell crank pivotally supported by the structure and having one end connected with the rod and its other end connected with the bar for communicating movement of the bar to the rod, a projection on the handle, a cam lever fixed to the bar engaged by the projection when the handle is moved in one direction for imparting movement to the bar to move the rod to a switch closing position, said projection riding over the cam and tilting the same on opposite movement of the handle, and means for normally holding the cam lever in a position where it will be engaged by the projection.

1,894,007. LIQUID FILLING MACHINE. JOHN SCHMIDT, Hoopeston, Ill., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Filed Sept. 24, 1926. Serial No. 137,521. 24 Claims. (Cl. 226—104.)



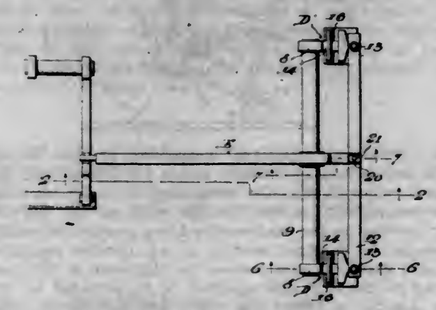
2. An apparatus for filling liquid into open end unsealed cans comprising a rotatable turret including a supply tank for liquid, a series of measuring devices pivotally positioned around said turret and adapted to receive charges of liquid from said tank by immersion therein, each measuring device having a discharge nozzle and an air lock extension that is in constant contact with the liquid in said tank, means for placing empty cans into receiving position adjacent each measuring device, means for tilting said measuring devices to discharge liquid into said cans, means for moving said cans vertically as the discharge begins, other means for moving them along a fixed plane while starting the filling and additional means for moving them vertically as the filling ceases, an air line leading from the surface of the liquid in each can when filled to check the flow of liquid from the measuring device when closed by the liquid in the can, the tops of the cans remaining open to the atmosphere while being filled.

1,894,008. FERTILIZER DISTRIBUTOR. BURRELL WASHINGTON SEGARS, Oswego, S. C. Filed Apr. 13, 1931. Serial No. 529,867. 8 Claims. (Cl. 275—2.)



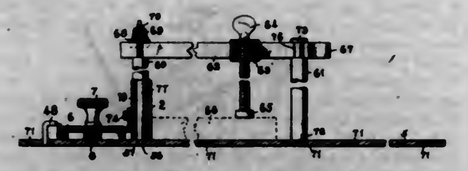
1. A fertilizer distributor comprising, a relatively long hopper having forward and rear sides provided with substantially equidistantly spaced openings, an idler shaft arranged exteriorly of and extending longitudinally upon one side of the hopper, drive shaft means arranged exteriorly of and extending longitudinally upon the opposite side of the hopper, bearing means for the idler shaft and drive shaft means and attached to the hopper, a set of sprocket wheels mounted upon the idler shaft, a set of sprocket wheels mounted upon the drive shaft means, sprocket chains engaging corresponding sprocket wheels in said sets, the upper runs of the sprocket chain being arranged near the bottom of the hopper and operating through the openings in said sides, axle sections connected with the ends of the hopper and disposed therein and extending longitudinally throughout substantially the entire length of the hopper and having their inner ends connected so that one axle section can turn with relation to the other axle section, agitators mounted upon the axle sections and arranged above the upper runs of the sprocket chains and corresponding in number and arrangement with relation thereto, ground-engaging wheels secured to the outer ends of the axles, and means driven by one wheel to drive the driving shaft means.

1,894,009. WEIGHING SCALE. MORTON HULL STARR, Beloit, Wis. Filed Sept. 29, 1931. Serial No. 565,853. 9 Claims. (Cl. 265—71.)



1. In a weighing scale, the combination with a pair of fulcrum standards, of a lever frame including spaced side arms respectively fulcrumed intermediate their inner and outer ends on the standards, a fulcrum bar supported on the outer ends of the side arms, and a load-carrying lever arm having a pivotal supporting connection intermediate its ends on the frame on the side of the fulcrum of said frame opposite the fulcrum bar and having its outer end overhanging the bar for engagement therewith.

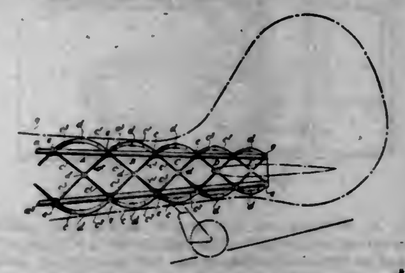
1,894,010. WORK-HOLDING MEANS FOR GAUGES. HERBERT E. TAUTZ, Milwaukee, Wis., assignor to Delta Manufacturing Company, Milwaukee, Wis. Filed July 27, 1932. Serial No. 625,186. 25 Claims. (Cl. 149—169.)



1. A work-holding clamp adapted to cooperate with a miter gauge, said miter gauge comprising a body member and a bar pivoted thereto, the clamp comprising means secured to said body member substantially in line with the pivot of the bar and having a member adapted to clamp a workpiece against said bar.

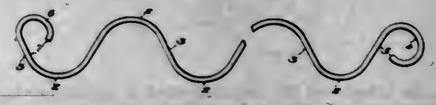
11. Work-holding means for cooperation with a miter gauge, said miter gauge comprising a body member and a bar pivoted thereto, the work-holding means comprising rods, the bar having a number of threaded apertures therein, each rod being threaded at one end to fit said apertures, for thus securing one end of each rod to the bar, a rigid element secured to the other ends of the rods, and a screw supported by said rigid element.

1,894,011. CONSTRUCTION OF FUSELAGE OR OTHER BODIES OF AIRCRAFT. BARNES NEVILLE WALLIS, Weybridge, England, assignor to Vickers (Aviation) Limited, Weybridge, England. Filed Aug. 15, 1932, Serial No. 628,910, and in Great Britain Aug. 27, 1931. 10 Claims. (Cl. 24—30.)



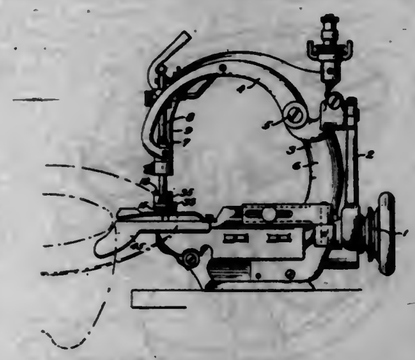
1. An aircraft body structure comprising in combination an outside covering, a structure for supporting and shaping the covering constituted by longitudinal members, opposed bracing members having their exterior borders constituting geodetic lines in the external contour of the structure, said bracing members being of greater radial depth than width, and means for attaching the opposed bracing members to each other where they intersect.

1,894,012. CORRUGATED SHEET PILING. JULIUS R. WEMLINGER, Brooklyn, N. Y. Filed Feb. 5, 1931. Serial No. 513,708. 2 Claims. (Cl. 61—60.)



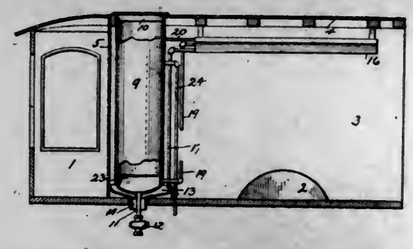
1. A corrugated metal plate, adapted for use in sheet piling, having one of its edges curled around in one directionn and its other edge curled around in the other direction but with a smaller radius than the first mentioned edge, whereby adjacent plates can be interlocked by lateral entry and are capable of relative deflection.

1,894,013. ADJUSTABLE CUTTER FOR SEWING MACHINES. ANNA M. WENZEL, Brooklyn, N. Y. Filed Aug. 26, 1929. Serial No. 388,362. 8 Claims. (Cl. 112—122.)



1 In a sewing machine the combination of a presser foot; a cutter support mounted thereon; a slide adjustably mounted on said support; and a cutter mounted in said slide.

1,894,014. REFRIGERATING AUTOMOBILE TRUCK. NICKOLAS FRANK WOLF, Evansville, Ind. Filed July 13, 1931. Serial No. 550,604. 4 Claims. (Cl. 62—13.)



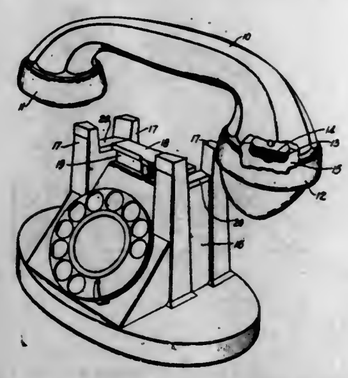
1. In a refrigerating automobile truck, the combination with a refrigerating chamber, of an upright refrigerant tank which rises from the lower part of said truck, a refrigerating coil located in said chamber, said coil being in circuit with the tank, an independent compartment in said truck completely sealed from the refrigerating chamber and accessible from the exterior of the truck, and an internal combustion engine operated pump located in said compartment and in circuit with the coil and accessible independently of said refrigerating chamber.

1,894,015. SEPTIC INDICATOR. WILBURN F. BERNSTEIN, Los Angeles, Calif. Filed Dec. 15, 1931. Serial No. 581,149. 6 Claims. (Cl. 116—114.)



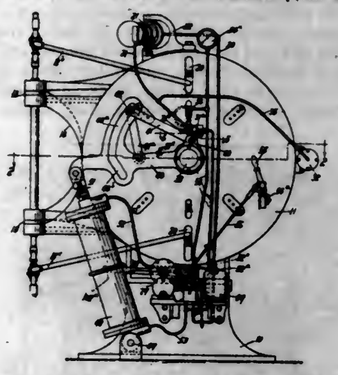
1. In a device of the class described, a card constructed of absorbent material and provided with embossed indicating means, and heat sensitive means associated with said embossed indicating means, whereby, when said card is subjected to certain temperature, said heat sensitive means will coact with said embossed indicating means to indicate said temperatures.

1,894,016. TELEPHONE DESK SET. NELSON BLOUNT, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1930. Serial No. 448,507. 2 Claims. (Cl. 179—147.)



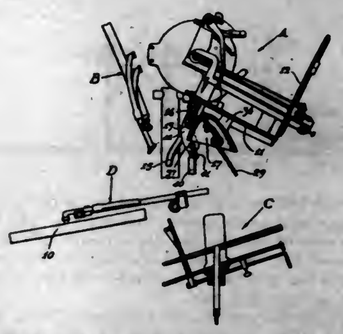
1. A telephone desk stand comprising a pedestal, a cradle for supporting a hand telephone including a carbon granule transmitter, and U-shaped resilient cushioning members between the tines of said cradle, the stems of said members being fitted in recesses in said tines.

1,894,017. VULCANIZER. HENRY C. BOSTWICK, Akron, Ohio, assignor to The Akron Standard Mold Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 19, 1929. Serial No. 393,694. 30 Claims. (Cl. 18—17.)



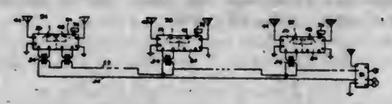
1. Vulcanizing apparatus comprising a fixed section and a section hinged thereon, means for locking said sections together, said means comprising bayonet joint members respectively carried by the sections, the bayonet joint member on the fixed section being secured on a shaft journaled in the fixed section, a cam member journaled on said shaft, an arm secured to the shaft, a link connected to the arm and adapted to be actuated by the cam member to rotate the shaft, and cooperating cams respectively on the cam member and the fixed section for drawing the sections together when the bayonet joint members are engaged, valve controlled means for inflating an article in the vulcanizer, a lever for actuating the inflation valve when the bayonet joint members are actuated, and means for actuating the cam member comprising a pivoted cylinder, a double acting piston therein and a connecting rod between the piston and the cam member, said lever being connected to said pivoted cylinder.

1,894,018. HEATING APPLIANCE FOR PRINTING PRESSES. HENRY A. BRANDTJEN, St. Paul, Minn., assignor to Brandtjen and Kluge, Inc., St. Paul, Minn., a Corporation of Minnesota. Filed Dec. 11, 1930. Serial No. 501,530. 11 Claims. (Cl. 101—416.)



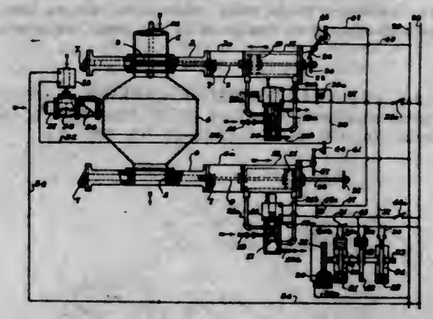
11. A heating appliance for a stock magazine having a table and an attaching member therebeneath, said appliance comprising two heads, also a heating element and a shield, both supported jointly by said heads, each head having a portion for engagement with said attaching member, said heads being removable jointly from said member.

1,894,019. AIRCRAFT SIGNALING. JOHN P. BUCKLEY, Washington, D. C. Filed Aug. 6, 1929. Serial No. 383,854. 14 Claims. (Cl. 250—2.)



5. A system of aircraft navigation comprising a multiplicity of geographically spaced radio beacon stations, each of said beacon stations including a transmitter and receiver, a remote control station, line wires interconnecting said remote control station with each of said beacon stations, aircraft transmitting and receiving apparatus, said receiving apparatus being maintained in a condition continuously responsive to signals from any one of said beacon transmitters, the transmitting means on the aircraft being operative to transmit signaling energy and being operative under control of signaling energy incident upon the receiving apparatus on the aircraft for the transmission of predetermined signals to the receiver at one of said beacon stations for registering at said remote control station the location of the aircraft in said respective zones.

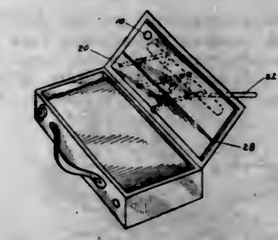
1,894,020. VALVE GEAR FOR COAL WASHERS AND CONCENTRATORS AND METHOD OF OPERATING THE SAME. THOMAS M. CHANCE, Merion, Pa. Filed Mar. 3, 1930. Serial No. 432,895. 12 Claims. (Cl. 209—155.)



1. In separating solids of unlike physical properties in which the heavier of said solids fall from a fluid separating body containing liquid into a chamber alternately communicating with said medium through an intake slide valve and with an exterior discharge through a discharge slide valve, said valves being reciprocated by energy externally applied, the improved apparatus comprising in combination means for causing the closing movement of said intake valve to effect the application of energy to produce an opening movement of said discharge valve after said intake valve has closed a predetermined distance; means for applying energy to close said discharge valve; means for causing the closing movement of said discharge valve to effect the application of energy to produce an opening movement of said intake valve after said discharge valve has closed a predetermined distance; and means for applying energy to close said intake valve, whereby the opening of either slide valve is dependent upon the closing of the other, and whereby one slide valve must be closed a predetermined distance before the other can be opened.

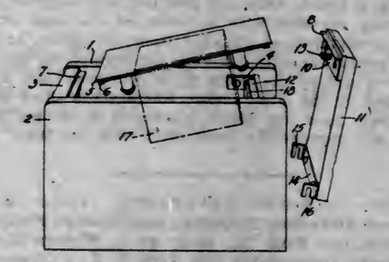
1,894,021. FILM RECORD. ULYSSES G. CORNELL, Lincoln, Nebr. Filed Oct. 25, 1927. Serial No. 228,648. 2 Claims. (Cl. 95—1.1.)

1. In a device of the character described, a box camera having a slot in its back wall and extending lengthwise thereof, a linkage secured for movement parallel to the back wall of said box camera and on the inner side thereof, means for actuating said linkage through the slot in the back wall of said camera box, and a lever



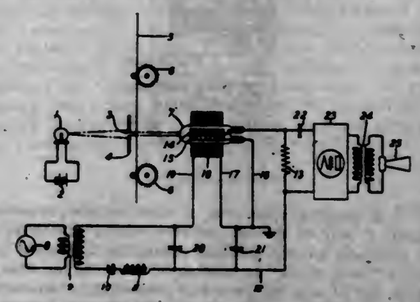
secured to said linkage, the extremity of said lever being adapted to bear against the sensitized surface of the roll film and to reproduce the movement of said means for actuating said linkage.

1,894,022. CONTAINER. VICTOR I. CRUSER, East Orange N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1929. Serial No. 385,885. 7 Claims. (Cl. 217—56.)



1. A container comprising fixed sides and one fixed end, a removable end and a removable top, separable cooperating engaging means on said ends, top and sides, a member fixed between the two sides and a single locking means attached to the removable end and cooperating with said member for bringing said cooperating means into engagement and locking them in position.

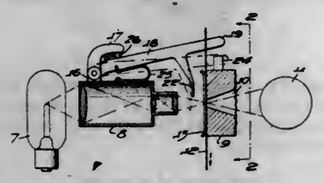
1,894,023. CIRCUITS FOR PHOTO-ELECTRIC CELLS. WILFRID L. DAWSON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 30, 1931. Serial No. 583,999. 3 Claims. (Cl. 250—41.5.)



1. In combination, a light sensitive device, a rectifier energized by alternating current, a circuit for supplying polarizing potential from said rectifier to said device,

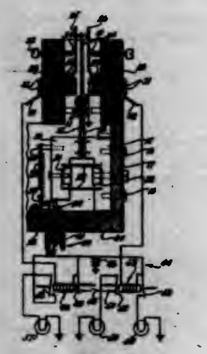
and a filter section in said circuit including an inductive element, the magnetic field of said element being arranged to modulate the current flowing in said device.

1,894,024. PHOTOGRAPHIC SOUND REPRODUCING APPARATUS. LEE DE FOREST, New York, N. Y., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 23, 1930. Serial No. 490,761. 3 Claims. (Cl. 179—100.3.)



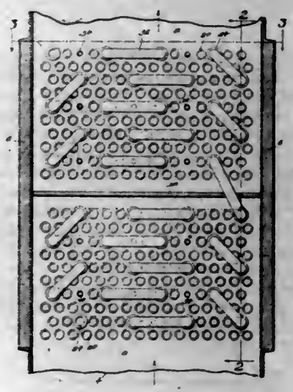
1. The combination with an exciter lamp, an optical system, a film guiding means against and through which the beam of light from the lamp is projected, and a film carrying a sound track and provided with a splice, said film being provided with a notch on one edge of the film a predetermined distance from the splice, and resilient means normally engaging the edge of the film and to be engaged by the notch to be depressed, and means controlled by the latter means whereby the effect of the light beam upon the splice is affected to gradually decrease and increase the beam effect from the lamp.

1,894,025. GAUGING APPARATUS. LAWRENCE IMMANUEL DENNISON, Brookfield, and CHARLES FREDERICK DREYER, Oak Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 15, 1927. Serial No. 240,222. 7 Claims. (Cl. 33—172.)



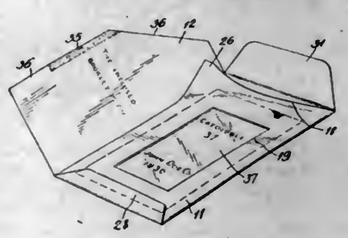
6. In a gauging apparatus, a fixed member, a movable member, a pair of springs interconnecting said members, said members having portions extending into close proximity to each other, springs each attached at one end only to one of said portions and projecting in substantial parallelism therefrom, the free length of said last named springs being a multiple of the distance between them, and an arm carried by and connected with the free end portions of said last named springs.

1,894,026. HEAT EXCHANGE APPARATUS. GARDNER C. DERBY, Sharon, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed Sept. 26, 1929. Serial No. 395,299. 20 Claims. (Cl. 257—242.)



1. Heat exchange apparatus for extracting heat from waste gases comprising a flue, air tubes and water tubes in the flue adapted to be swept transversely by the hot gases, the water tubes being interspersed among the air tubes and exposed to flue gases of the same temperature.

1,894,027. ADVERTISING CARRIER. ABRAHAM DEUTSCHMEISTER, New York, N. Y. Filed June 5, 1930. Serial No. 459,404. 11 Claims. (Cl. 229—6.)

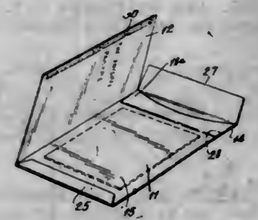


1. A carrier comprising an envelope having a rear section and a front section, said envelope being closed on three sides thereof and open at one end thereof only, a closure flap for the open end of said envelope foldable over said front section, and a cover section extending from a side of said envelope foldable over said front section, and means for attaching said cover section to said front section, said cover section having a portion thereon overlying said flap for retaining the same in folded position, and having a portion thereof cut away to expose a portion of said flap and front section, said cover being unattached to said flap to permit said flap to be opened for inspecting the contents of said envelope.

1,894,028. ADVERTISING CARRIER. ABRAHAM DEUTSCHMEISTER, New York, N. Y. Filed June 5, 1930. Serial No. 459,405. 5 Claims. (Cl. 229—68.)

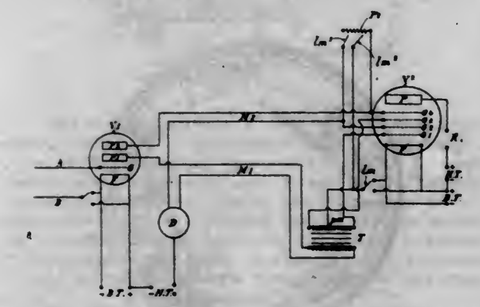
1. As an article of manufacture, a carrier made from a single piece of sheet material and comprising a rear

section, a front section extending from one side edge of said rear section and integrally formed therewith, and foldable over said rear section, and attached by means of adhesive at the outer edge thereof to the opposite side of said rear section, a flap extending from one end of said rear section foldable over said front section and attached thereto by adhesive, a flap extending from the



opposite end of said rear section foldable over said front section, a cover section extending from the opposite side edge of said rear section foldable over said front section and folded flaps and an adhesive strip on the said cover section adapted to overlie said folded flaps and front section for attaching said front section to said second flap.

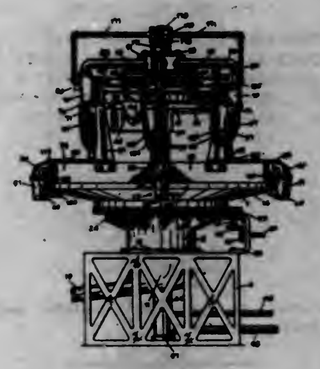
1,894,029. DEVICE FOR THE TRANSFORMATION OF ELECTRIC CURRENTS. JEAN DIEUX, Paris, France. Filed Dec. 31, 1928, Serial No. 329,588, and in France Jan. 7, 1928. 10 Claims. (Cl. 179—171.)



1. In a device for the transformation of vibrated electric currents, a circuit carrying a vibrated primitive current to be transformed, a multiple anode valve, the grid and the filament of this valve being connected to the terminals of the circuit carrying the primitive current to be transformed, a multiple grid valve, distinct transmission conducting means separately connecting each anode of said multiple anode valve with a corresponding grid of said multiple grid valve, a distributor connected with said anodes to differentiate the anode currents and to thus cause the primitive current to be analyzed.

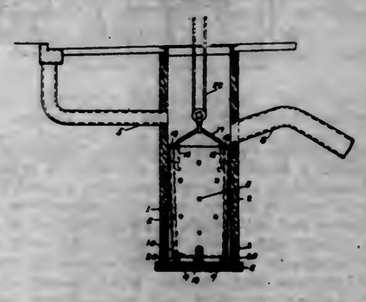
1,894,030. GLASS FEEDING MACHINE. JOHN F. DOWLING, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 11, 1928, Serial No. 299,004. Renewed July 21, 1930. 10 Claims. (Cl. 49—62.)

1. In a glass machine, a plurality of cups, means for shifting the cups horizontally, a suction means for producing a vacuous condition within the cups, a plurality of cam members, one for operating the shifting means and another for controlling the suction means, a clapper for



partially closing the cups, and a pneumatic means for operating the clapper, one of the cam members operating to control the said pneumatic means.

1,894,031. MANHOLE CATCH BASIN SUMP. ELDON J. EDWORDS, Detroit, Mich., assignor of one-half to Andrew C. Baird, Leonard B. Porter, and S. L. Westerman, Detroit, Mich. Filed June 3, 1931. Serial No. 541,861. 4 Claims. (Cl. 182—2.)

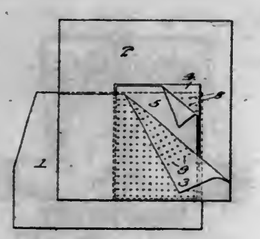


1. A catch basin sump adapted for inserting within a drainage catch basin for receiving and removing dirt and silt therefrom and used in combination therewith, comprising a receptacle suitable for inserting within a drainage catch basin and practically filling the same below the drainage water level, a lifting bail movably mounted on the receptacle walls, movable stirring sections also mounted on the receptacle side walls near the bottom thereof, and means mounted thereon for operatively connecting said stirring sections with the said lifting bail for causing both members to move simultaneously.

1,894,032. METHOD OF AND MEANS FOR PERMANENTLY WAVING HAIR. RALPH L. EVANS, New York, N. Y., assignor to Zotos Corporation, New York, N. Y., a Corporation of New York. Original application filed Jan. 21, 1932, Serial No. 587,890. Divided and this application filed Sept. 21, 1932. Serial No. 634,182. 6 Claims. (Cl. 132—36.2.)

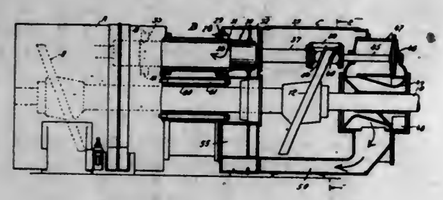
1. Imparting a permanent wave to hair by subjecting the hair to heat generated by the reaction of an exother-

mic material with a moistening medium, the natural development of the heat being accelerated without raising



its temperature, by combining a suitable medium with the exothermic material.

1,894,033. ENGINE. RAYMOND HILL FARWELL, Groton, Conn., assignor to Michell-Crankless Engines Corporation, New York, N. Y., a Corporation of New York. Filed July 31, 1930. Serial No. 471,985. 5 Claims. (Cl. 123—58.)



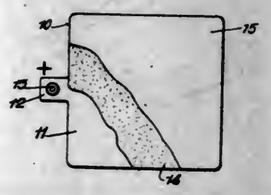
1. An internal combustion engine comprising an engine casing, a shaft therein, a plurality of cylinders arranged parallel to and circumferentially around the shaft pistons in said cylinders, operative connections between said pistons and said shaft, a pump disposed at one end of the casing and driven by the engine, and conduits formed integrally in said casing connecting the pump to the cylinders said conduits being located circumferentially around the shaft and each conduit being disposed between two cylinders.

1,894,034. SCREW HEAD. JOSEPH F. FIEG, La Grange, Ill., assignor to United Screw and Bolt Corporation, Chicago, Ill., a Corporation of Ohio. Filed July 6, 1931. Serial No. 548,748. 4 Claims. (Cl. 85—45.)



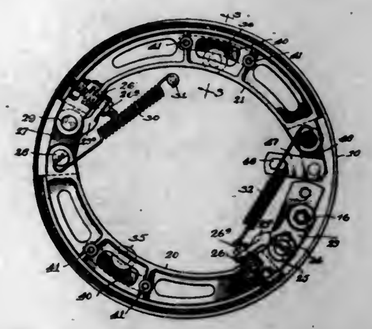
3. A screw comprising a threaded shank and a head thereon, said head having recesses therein of substantial and uniform depth and having a pair of tapered teeth between said recesses extending inwardly from diametrically opposite sides of the head toward the center thereof, each side wall of one tooth being parallel to a side wall of the opposed tooth and being spaced laterally therefrom a distance sufficient to permit the insertion of a screw driver therebetween.

1,894,035. ELECTRIC CURRENT RECTIFYING DEVICE. EDWIN R. GILL, Sr., Yonkers, N. Y. Filed Jan. 24, 1931. Serial No. 510,989. 9 Claims. (Cl. 175—366.)



1. An electric current rectifying device comprising a plate of alloy of copper and arsenic, and an electric current obstructive layer of copper oxide, arsenic oxide, and silver oxide formed thereon.

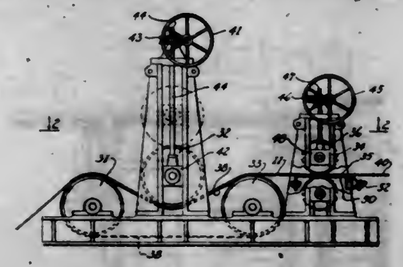
1,894,036. BRAKE. EARL G. GUNN, Racine, Wis., assignor to The Nash Motors Company, Kenosha, Wis., a Corporation of Maryland. Filed Sept. 6, 1928. Serial No. 304,244. 6 Claims. (Cl. 188—78.)



1. In a wheel brake having a drum and a series of brake shoes mounted for servo action relative thereto, means connecting adjacent brake shoes including a double hinged link and yielding means between said link and the shoe further removed from the anchored end of the series normally holding said link and shoe at a predetermined angle, but permitting the last named shoe to automatically reposition itself against the tension of said yielding means when under braking torque in substantially concentric relation to said drum.

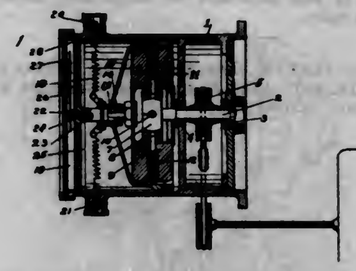
1,894,037. SHINGLE MACHINE. NORMAN P. HARSHBERGER, Chicago, Ill. Filed Jan. 16, 1929. Serial No. 332,913. 5 Claims. (Cl. 164—28.)

1. In a shingle making machine, a cutting roller having knives provided with cutting edges, means for stripping cut shingles from said roller, said means comprising elongated members running across a portion of the periphery of the roller, and means for tensioning said



elongated members, the cutting edges of the knives projecting beyond the periphery of the roller a greater distance than the elongated members.

1,894,038. GYROSCOPIC STEERING INDICATOR OR CONTROLLER. JAMES BLACKLOCK HENDERSON, Lee, England. Filed July 26, 1919, Serial No. 313,530, and in Great Britain Aug. 6, 1918. 17 Claims. (Cl. 33—204.)



1. The combination with a craft provided with a propelling engine, of a gyroscopic indicator comprising a rotor having a spinning axis and an axis at an angle thereto about which said rotor is mounted to oscillate, means for continuously driving said rotor from the engine of the craft, an indicating member, and an operating connection between said rotor and member responsive to oscillation of the former in consequence of movement of said craft about an axis perpendicular to said other axes.

4. The combination with a craft provided with a propelling engine of a gyroscopic steering indicator comprising a rotor mounted for oscillation about an axis normally fixed in relation to the craft to lie substantially in the plane of travel thereof, driving connections between the engine and the rotor continuously operable while the engine is propelling the craft, an indicating member, and means actuated by relative displacement between the rotor and the craft for displacing the member in accordance with changes in the movement of the craft about an axis substantially perpendicular to the first-mentioned axis.

11. In a turn indicator for aircraft, a frame, a support, pivots connecting said frame and said support for permitting movement of said frame about an axis, at an angle to the vertical, a rotor mounted in said frame for rotation about another axis that is fixed with respect to said support, and a spring connected to said frame adjacent one of said pivots for opposing movement of said frame in either of opposite directions about said axis.

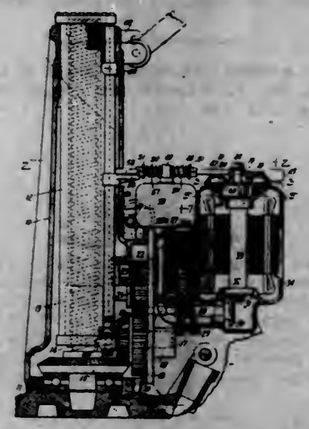
14. In a flying indicator adapted to be mounted on an aircraft which banks on turning, a part adapted to be fixed on the aircraft, a gyroscope having a rotor directly mounted on said part for precession on said craft at an angle to the vertical, means for opposing said precession and an index for indicating the apparent movements of the gyroscope with respect to said fixed part.

1,894,039. APPARATUS FOR THE STRAIGHT DRILLING OF WELLS. FRANK F. HILL, Los Angeles, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a Corporation of California. Filed Mar. 6, 1929. Serial No. 344,654. 15 Claims. (Cl. 255—19.)



12. In combination in earth drilling mechanism, a main drill stem, means to rotate the same, a drill bit to be driven from the inner end of the stem, and a speed step-up transmission interposed between the inner end of the main stem and the bit.

1,894,040. LIFTING MECHANISM. ION VON KERT HOTZ, Dayton, Ohio, assignor to The Joyce-Cridland Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 20, 1930. Serial No. 476,468. 18 Claims. (Cl. 254—103.)



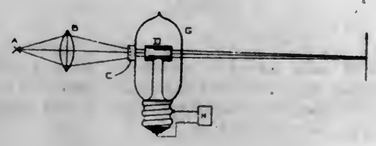
1. In a lifting mechanism comprising a standard, a lifting element mounted on said standard, operating mechanism for said lifting element, a reversible electric motor to drive said operating mechanism, and a switch to control the operation of said motor, an actuating device for said switch having a neutral position and two operative positions and having manually operable means for mov-

ing the same from said neutral position to either operative position, yieldable means to retain said actuating device in the position to which it has been moved, and means controlled in accordance with the movement of said lifting element to automatically restore said switch actuating device to said neutral position when said lifting element reaches the limit of its movement in either direction, said restoring means comprising a part adapted to yield until the resistance offered by said retaining means has been overcome and to then move said actuating device quickly to its neutral position.

1,894,041. FUMIGANT GAS PRODUCING COMPOSITION. HARRY W. HOUGHTON, Glen Echo, Md., assignor to Safety Fumigant Company, Boston, Mass., a Corporation of Massachusetts. Filed July 3, 1928. Serial No. 290,283. 5 Claims. (Cl. 167—35.)

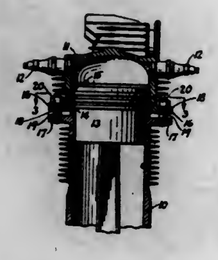
1. A fumigant gas producing composition containing a cyanide salt, bleaching powder and calcium chloride in proportions for generating cyanogen chloride and hydrocyanic acid packed in a dry state and adapted to react upon exposure to air and moisture.

1,894,042. GASEOUS LIGHT VALVE. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to Jenkins Laboratories, Washington, D. C., a Corporation of the District of Columbia. Filed June 22, 1927. Serial No. 200,752. 13 Claims. (Cl. 88—61.)



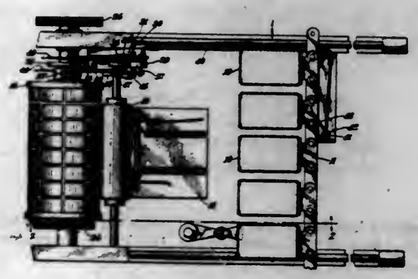
13. Apparatus for modulating light comprising a source of light, a tube containing a gas or vapor in the path of the light from said source, and means for applying a varying potential difference to said gas or vapor to cause a varying glow thereof for controlling the passage of light therethrough.

1,894,043. PISTON CYLINDER. FRANK S. JONES, Philadelphia, Pa. Filed Jan. 3, 1931. Serial No. 506,335. 2 Claims. (Cl. 123—173.)



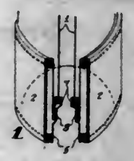
1. In combination with a cylinder barrel having its outer extremity formed with a frusto-conical male taper, a cylinder head comprising an imperforate band having a frusto-conical bore of substantially the same taper as that of the end of the cylinder, and means to bind said head upon said barrel.

1,894,044. FEEDING MECHANISM. MONTGOMERY O. JONES and WESLEY P. SHOMAKER, Richmond, Va. Filed Oct. 11, 1930. Serial No. 487,932. 14 Claims. (Cl. 101—247.)



1. In combination, a printing cylinder, an impression cylinder, means including a plurality of magazines to feed envelopes or the like between said cylinders, and means actuated by said magazines for momentarily moving said cylinders apart.

1,894,045. SLEEVE. AARON KAMEN and HERMAN KAMEN, Brooklyn, N. Y. Filed July 11, 1931. Serial No. 550,054. 2 Claims. (Cl. 2—123.)

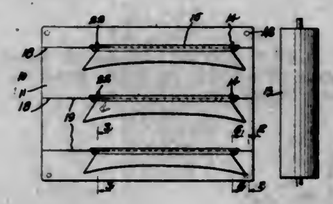


1. In combination with a sleeve, a reversible cuff comprising one face ply stitched at its upper edge to the sleeve; a backing strip also stitched at its upper edge to the sleeve; a fine row of stitching connecting the intermediate portion of the backing strip to the face ply above the middle of the face ply, and constituting a hinge about which the cuff is reversed; an opposite face ply of the same width as the first face ply and stitched at one edge to the lower edge of the first face ply and at its opposite edge to the free edge of said backing strip, whereby the backing strip provides a narrow backing therefor; said opposite face ply when the cuff is reversed presenting a plain, unbroken surface; and means whereby the cut may be fastened substantially midway between its edges in either reversed position, the overall length of the sleeve being changed by reversing the cuff without varying the cuff width.

1,894,046. ADJUSTABLE NECKBAND AND COLLAR SIZING AND IRONING BOARD. PAUL KRAEMER, Jr., Jersey City, N. J. Filed Sept. 15, 1930. Serial No. 481,863. 19 Claims. (Cl. 68—10.)

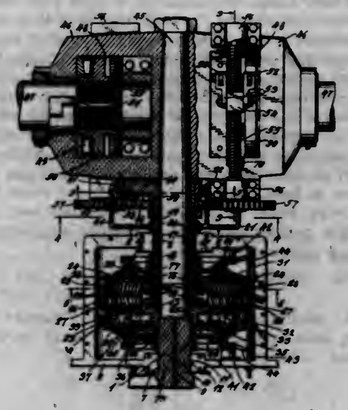
1. A device, including an ironing board, a covering therefor, means movable along the board for holding an article thereon, said means extending through the covering,

said covering having an opening extending along the path of movement of said means, said covering having



portions forming a seam alined with said opening and extending beyond the same, said portions extending along said opening and reenforcing the covering thereat.

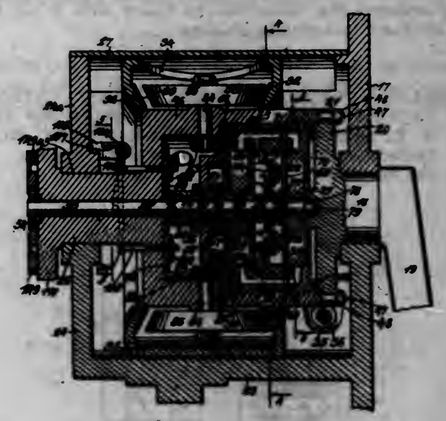
1,894,047. HYDRAULIC PROPELLER. DANIEL G. LILLEY, Denver, Colo., assignor of one-half to A. J. O'Brien, Denver, Colo. Filed Jan. 13, 1930, Serial No. 420,402. Renewed Mar. 18, 1932. 24 Claims. (Cl. 170—163.)



1. In a device of the class specified, in combination, a shaft, a pump secured to the shaft and rotatable therewith, a hydraulic motor also secured to the shaft and rotatable therewith, conduits connecting the pump with the motor and means for operating the pump and the motor in either of two directions while the shaft is rotating in the same direction.

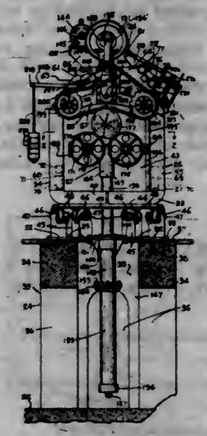
1,894,048. VARIABLE PITCH PROPELLER. DANIEL G. LILLEY, Denver, Colo., assignor of one-half to A. J. O'Brien, Denver, Colo. Filed Mar. 18, 1932. Serial No. 599,609. 30 Claims. (Cl. 170—163.)

1. In a device of the class specified, in combination, a drive shaft mounted for rotation about its own axis and provided with an axial opening, an independent shaft in the axial opening, a member carried by the drive shaft and rotatable therewith, but capable of being moved with respect thereto, means drivably connecting the member to the independent shaft, so that member will be moved with respect to the drive shaft whenever the independent shaft is moved relative thereto, means for moving the independent shaft relative to the drive shaft by power derived from the rotation of the latter, and means operated by the relative movement between the independent shaft



and drive shaft for automatically limiting the extent of movement of the independent shaft and body relative to the drive shaft as the latter is rotating about its axis.

1,894,049. POLE PUNCTURING MACHINE. EDWIN G. MONSON and HARRY E. CULLEN, Minneapolis, Minn., assignors to MacGillis & Gibbs Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 7, 1931. Serial No. 507,125. 20 Claims. (Cl. 144—2.)



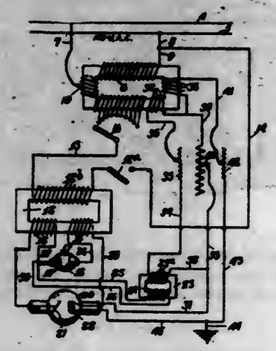
1. A pole puncturing machine comprising a frame work, means for supporting a pole within said frame work, a ram reciprocable in said frame work toward and from said pole, means for reciprocating said ram, separate pole turning devices applicable to the pole at different localities thereon, equalizing means interposed between said pole turning devices, and means for operating said equalizing means.

1,894,050. COATING COMPOSITION. FRANCIS B. MORTON, Parlin, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed June 27, 1928. Serial No. 288,808. 9 Claims. (Cl. 134—79.)

5. A coating composition which comprises a cellulose compound, an oil from the group consisting of neat's-foot.

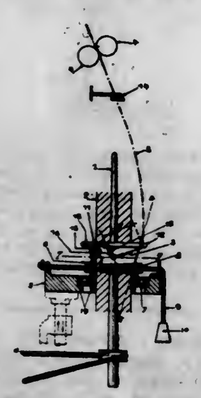
cod liver, sperm, lard, olive, egg, and a mixture of cocoanut and paraffin oils, and an organic acid, said ingredients being in proportions such that when applied to leather and dried the composition will form a non-tacky, strongly adherent film which can be ironed with a hot iron and glazed in a glazing machine.

1,894,051. CONTROL SYSTEMS FOR HOT CATHODE VACUUM TUBES. ARTHUR MUTSCHELLER, New York, N. Y., assignor to Wappler Electric Company, Inc., a Corporation of New York. Filed Apr. 10, 1926. Serial No. 101,012. 2 Claims. (Cl. 250—34.)



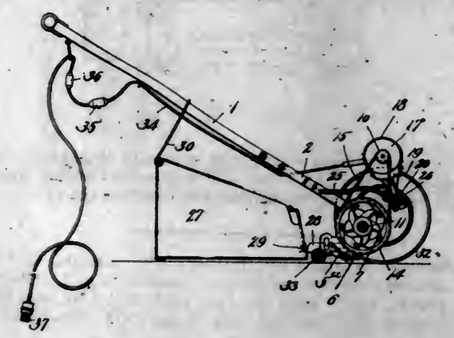
1. In a control system for X-ray tubes, the combination with a plurality of thermionic discharge devices provided with cathodes to be heated, one of said discharge devices being an X-ray tube, of a main transformer for supplying energy to the electrodes of said devices, an auto-transformer connected to a suitable source of electrical energy provided with a plurality of windings for energizing said main transformer and for supplying heating current to the cathode of one of said devices, a heating transformer for supplying heating currents to the cathode of the other of said devices, a ground connection for one of said cathodes and means for varying the currents for heating the cathode of the X-ray tube to a greater extent than the currents for heating the cathode of any other discharge device.

1,894,052. TEXTILE APPARATUS. ALBERT NAUTOURON, Grasse, France. Filed Feb. 8, 1930, Serial No. 426,890, and in France Feb. 7, 1929. 9 Claims. (Cl. 118—55.)



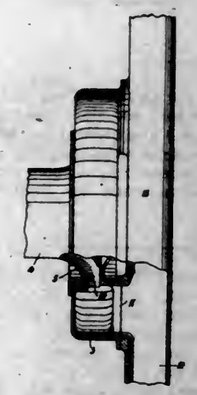
1. In a textile machine, a rotatable spindle, a shell rotatably mounted outside said spindle, said shell having a pair of orifices formed therein spaced from one another in the direction of the length of said spindle, and means for rotating said spindle, said shell having an elongated slot formed therein extending from one of said orifices to one of the peripheral edges of the shell, whereby a thread may be moved along said slot into said last named orifice.

1,894,053. LAWN MOWER. GEORGE H. NOBBS, Watertown, Mass. Filed Jan. 26, 1927. Serial No. 163,779. 5 Claims. (Cl. 56—26.)



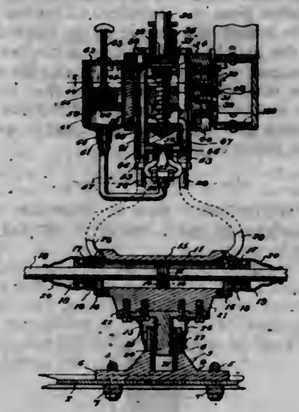
1. In a manually propelled lawn mower, the combination with the frame including as a rigid part thereof a round transverse tie-rod; a knife reel rotatably mounted on said frame; a driven wheel connected with said knife reel; supporting wheels for said frame, one opposite each end of said tie-rod and each freely rotatable independently of said knife reel, of a cantilever bracket arm attachment having means by which it is fixedly clamped upon said tie-rod; an electric motor mounted upon and supported by said cantilever bracket arm attachment with its armature shaft parallel with the axis of said reel and so that said motor is bodily adjustable toward and from the latter, a driving wheel on said armature shaft and an endless flexible power-transmitting member connecting said driving and driven wheels.

1,894,054. SUPERCHARGER CASING. WARREN NOBLE, Detroit, Mich. Filed Sept. 21, 1928. Serial No. 307,518. 5 Claims. (Cl. 123—52.)



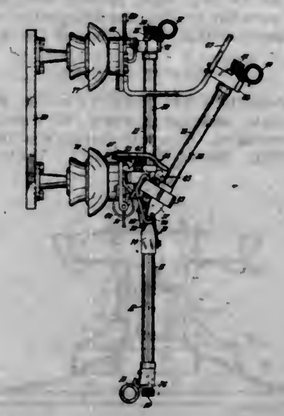
1. In combination, a ring inlet manifold and means for equalizing the pressure at various points in said manifold, said means comprising a plurality of inlets adapted to inlet a fluid in opposed direction at different points around said manifold.

1,894,055. STEERING GEAR. DAVID N. PERKINS, Norwood, Ohio. Filed July 11, 1929. Serial No. 377,482. 2 Claims. (Cl. 60—54.5.)



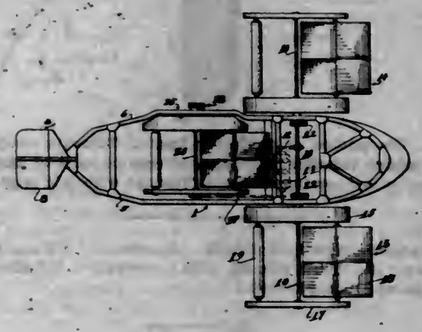
1. In a vehicle steering gear, a cylinder, tubular bolts fitted through the ends of the cylinder and spaced inwardly from the wall thereof, one of said bolts having its bore opening into the cylinder at the lower end thereof and the other bolt having its bore opening into the cylinder at the top thereof, a piston within the cylinder slidably fitted upon said bolts, a steering rod journaled in the ends of the cylinder and extending tarough and having threaded engagement with the piston whereby rotation of the steering rod will effect travel of the piston longitudinally of the cylinder, means for supplying pressure fluid to the cylinder through said tubular bolts, and means whereby the pressure fluid will be caused to shift the steering wheels of the vehicle when said piston is moved.

1,894,056. AUTOMATIC FUSE-CHANGER. RALPH R. PITTMAN and CARROLL H. WALSH, Pine Bluff, Ark. Filed Apr. 2, 1932. Serial No. 602,666. 12 Claims. (Cl. 200—126.)



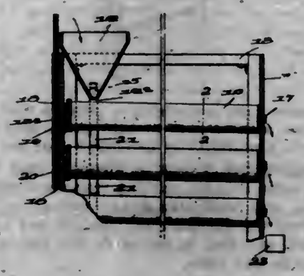
1. A repeating fuse adapted for installation in a circuit, comprising in combination insulating means supporting a fixed fuse-containing tube of insulating material and a plurality of movable fuse-containing tubes of insulating material, means for latching said movable tubes in a normal position out of the circuit, springs biasing said movable tubes to an operating position in the circuit, and unlatching means for said movable tubes including a fusible element under tension and means biased thereby, whereby the rupturing of the fuse in the said circuit effects the sequential actuation of the said movable tubes from said normal position to said operating position.

1,894,057. AERONAUTIC EQUIPMENT. WILLIAM RAHN, New York, N. Y., assignor to Rahn Aircraft Corporation, a Corporation of Delaware. Filed July 17, 1929. Serial No. 378,841. 8 Claims. (Cl. 244—25.)



6. An aeroplane comprising, in combination, a fuselage, and wing mechanism having a frame rotatably supported by said fuselage and a wing element rotatably supported on said frame, said wing element being provided on one of its sides at one end with a concave portion and on the other side of its other end with another concave portion.

1,894,058. METHOD AND APPARATUS FOR SEPARATING SEEDS AND THE LIKE. WILLIAM A. RICE, Jerseyville, Ill. Filed Nov. 26, 1930. Serial No. 498,494. 9 Claims. (Cl. 209—1.)



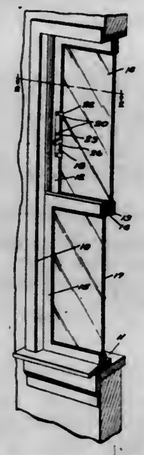
9. A method of separating mixed seeds, each variety of which possesses surface characteristics differing from those of the others, said method including the depositing of mixed seeds with an area defined by upwardly extending surfaces, the character of which being such that the seeds will not adhere thereto and the bottom of said area being devoid of agitation obstructions; and separating certain of the seeds from the mixture by causing them to carom upwardly between said surfaces of said area by moving the latter at a sufficiently high rate of speed while effecting a sliding movement of the other seeds over said surfaces; and separately collecting the separated seeds.

1,894,059. PROCESS FOR PRODUCING ELECTRON EMITTERS AND THE PRODUCT. FREDERICK RUFFLEY, Jersey City, N. J., assignor to De Forest Radio Company, Jersey City, N. J., a Corporation of Delaware. Filed Apr. 8, 1927. Serial No. 181,944. 10 Claims. (Cl. 250—27.5.)



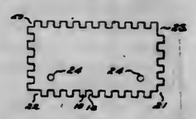
1. The method of producing treated filaments comprising mixing together magnesia and organic salts of barium in water and coating a suitable filament with said mixture.

1,894,060. WINDOW LOCK. JOSEPH M. RURKA, Chicago, Ill. Filed Feb. 20, 1931. Serial No. 517,230. 3 Claims. (Cl. 292—63.)



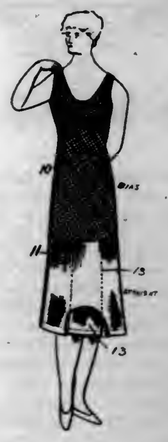
1. A window lock comprising a plate, a rod in spaced rigid position with respect to said plate, said rod being provided with a plurality of notches, a bolt set upon said rod for longitudinal movement thereon, said bolt being adapted to make angular shifting movement with respect to said plate, and tensioning means cooperating with said bolt for selectively engaging said rod at any one of said notches when said bolt is swung to the angular position with respect to said plate.

1,894,061. TOY CONSTRUCTION BLOCK. REGINALD E. SANDERS, Neenah, Wis. Filed Apr. 8, 1931. Serial No. 528,470. 1 Claim. (Cl. 46—35.)



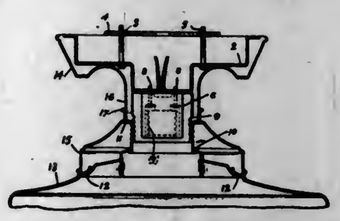
In a set of rectangular toy construction blocks, each block having at least one edge thereof an exact multiple in length of the corresponding edge of the smallest of said blocks and said blocks being of substantially the same thickness, each block having all edges cut to form a series of uniform, substantially cubical mortises and tenons of equal size on each edge, the mortises and tenons on one edge being offset from the mortises and tenons on the opposite edge to render each corner of the block different in shape, and the mortises and tenons on the several edges being so arranged with respect to one another that a plurality of the blocks may be joined together by means of the mortises and tenons to form closed box-like structures with flush edges with but one arrangement of mortises and tenons on all blocks of the same size.

1,894,062. GARMENT. MAX C. SCHRANK, Bridgeton, N. J. Filed Apr. 25, 1932. Serial No. 607,441. 1 Claim. (Cl. 2—73.)



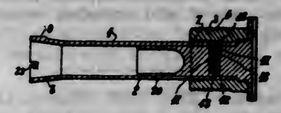
An article of apparel comprising an upper body covering part and a skirt part, the upper part being of material set on the bias and the skirt part being of material set straight the skirt having a vertically extending shadow-proof member of strip form situated at the central portion of the front and the skirt at the back being divided vertically to provide adjacent normally overlapping free portions that open and close to accommodate the posture of the wearer.

1,894,063. LIGHTING FIXTURE. CARL A. SCHROEDER, Vermilion, Ohio, assignor to The F. W. Wakefield Brass Company, Vermilion, Ohio, a Corporation of Ohio. Filed Sept. 18, 1931. Serial No. 563,547. 7 Claims. (Cl. 240—78.)



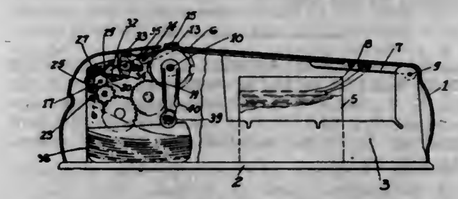
1. In a lighting fixture, an anchor member, a canopy for covering the same and having a depending cylindrical portion, a lamp socket carried by said anchor member, a screw-threaded barrel about said socket, a collar engageable on said barrel and having an out-turned flange at its upper end and laterally projecting shade supporting portions at its lower end, and a shade cover movable on the cylindrical portion of the canopy.

1,894,064. TAP. ROBERT XAVIER SCHUBENEL, Pantin, France. Filed Oct. 16, 1930, Serial No. 489,105, and in France Aug. 27, 1930. 7 Claims. (Cl. 221—27.)



1. In a tap device, the combination with a receptacle and a mounting piece secured to said receptacle, of a hollow tube adapted to be pulled in and out of said mounting piece, a hollow plug member closed at one end and mounted to rotate within said tube, said plug including an opening adapted to be brought by rotation of said plug into and out of register with a corresponding opening formed in said tube, a tenon member mounted in a recess in said plug and adapted to project into a groove formed in said tube, and means associated with said tenon and groove for permitting a predetermined angular displacement of said plug relative to said tube or for directly connecting said plug and tube together.

1,894,065. MANIFOLDING MACHINE. JOHN Q. SHERMAN and ALBERT W. METZNER, Dayton, Ohio, assignors, by direct and mesne assignments, to The Standard Register Company. Filed Sept. 22, 1926. Serial No. 137,149. 16 Claims. (Cl. 164—17.)



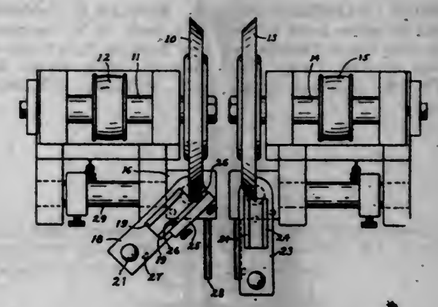
1. A device for severing a paper web by disruption thereof across a line of cleavage in manifolding machines, comprising means to hold the web under longitudinal tension, and interspaced bars between which the paper web is directed, and means for imparting a revolution to said bars to engage and apply a blow to the paper transverse its length.

1,894,066. RUBBER GLOVE. EMERSON J. SMITH, Ravenna, Ohio. Filed Feb. 18, 1931. Serial No. 516,625. 2 Claims. (Cl. 2—168.)



1. A rubber glove having at least one of the finger portions elliptical in cross section with the major axis of the ellipse extending transversely of the finger and the minor axis extending from the front to the back of the finger.

1,894,067. GRINDING METHOD AND MEANS. THEODORE B. SMITH, Great Neck, N. Y., assignor to John Hassall, Inc., Brooklyn, N. Y., a Corporation of New York. Filed June 13, 1929. Serial No. 370,532. 5 Claims. (Cl. 51—278.)



1. The method of grinding a tapered notch in a right angular surface, including moving the surface through 90° in a plane at right angles to that of a revoluble grinding tool having a frusto-conical peripheral face to cut one half of the tapered notch, and then moving it through the adjacent 90° against a second similar grinding tool in reverse position to cut the other half of the tapered notch.

1,894,068. SNARE DRUM. WALTER E. SODERBERG, Duluth, Minn., assignor to Henry H. Slingerland, Chicago, Ill. Filed June 16, 1932. Serial No. 618,908. 6 Claims. (Cl. 84—415.)



1. The combination with a drum of the character described, of snare supporting brackets upon opposite sides of the drum each comprising a vertically adjustable roller supported by each bracket over which the snare is positioned, and a second vertically adjustable roller spaced beneath the first mentioned roller on each bracket for regulating the tension of the snares, both pairs of snare supporting rollers being spaced outboard of the circumferential edge of the drum.

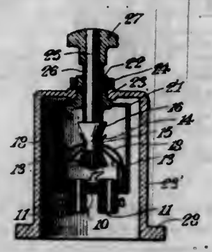
1,894,069. METHOD AND APPARATUS FOR PRODUCING GLASS ARTICLES. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 17, 1929. Serial No. 355,701. 17 Claims. (Cl. 49—5.)



1. The combination of a container for molten glass having a bottom opening exposing an under surface of the glass, a receptacle open at its upper end to receive a charge of glass, the opening in the receptacle being of less diameter than said exposed surface of glass, means for periodically bringing the open end of said receptacle into

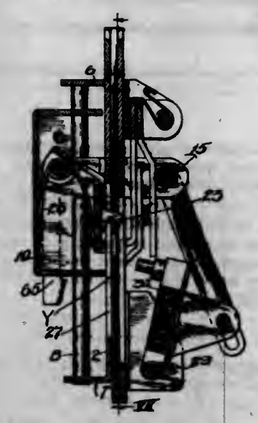
sealing contact with said exposed surface of glass without closing said bottom outlet opening, means for causing glass to enter and fill said receptacle, and means for severing the glass.

1,849,070. ELECTRIC SWITCH. RUDOLPH R. TEICHNER and STIRLING ROSS YANCEY, New York, N. Y., assignors to Sure Guard Corporation, New York, N. Y., a Corporation of New York. Filed May 18, 1928, Serial No. 278,688. Renewed June 2, 1932. 8 Claims. (Cl. 200—16.)



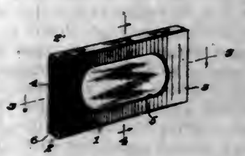
1. A switch comprising leaf contacts and a plug slidable between the contacts, said plug being smallest in its middle conducting portion and flaring toward the ends, with one end portion having a flaring part of insulating material.

1,894,071. FARE BOX. ERNEST H. THOMPSON, Winnetka, Ill., assignor to Johnson Fare Box Company, Chicago, Ill., a Corporation of New York. Filed Sept. 15, 1930. Serial No. 481,913. 8 Claims. (Cl. 235—32.)



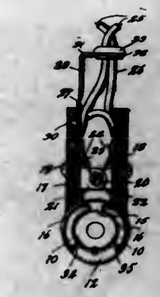
1. In a fare box having a chute, means normally within said chute for arresting and positioning a deposited token, an impeller member adjacent to said chute, spaced apart arms on said impeller member and impeller fingers at the upper ends of said arms, means to move said impeller member toward said chute, the distance between said arms being greater than the diameter of certain tokens but less than the diameter of other tokens whereby when said impeller member is moved it will project its impeller fingers into the chute above a deposit token and the ends of its arms past a token when of a smaller diameter but against the token when of a larger diameter, means for shifting said impeller member bodily downwardly and withdrawing said arresting means from said chute whereby the token may be ejected from the chute, independent registering devices for the tokens of smaller diameter and the tokens of larger diameter, actuating mechanism controlled by said impeller member for cooperating with said registering devices, the cooperation of said impeller member with a token of small diameter or a token of larger diameter determining the selective cooperation of said actuating mechanism with said registering devices.

1,894,072. RAZOR BLADE CLIP. SAMUEL JAMES TODD, West Grove, Pa. Filed Nov. 10, 1931. Serial No. 574,213. 1 Claim. (Cl. 206—16.)



A razor blade clip comprising a sheet of resilient material having an intermediate portion with angularly disposed portions along the opposite edges thereof, said angularly disposed portions extending in opposite directions from the intermediate portion and side portions extending from the angularly disposed portions along the opposite sides of the intermediate portion, one of the side portions having a central opening and the other side portion being provided with an interiorly located bevel along its free edge.

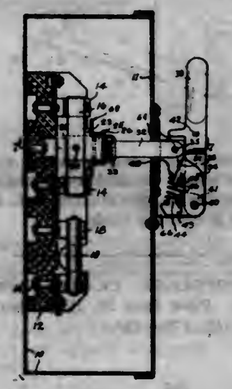
1,894,073. COMBINED SPINDLE AND CROQUIGNOLE HAIR WAVING HEATER. ERNEST G. UNGER, Brooklyn, N. Y., assignor to Halliwell-Shelton Electric Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 31, 1929. Serial No. 403,899. 14 Claims. (Cl. 219—24.)



8. An electric heater for use in waving hair, comprising a pair of spring pressed hingedly connected jaws and constituting a heater for use as a croquignole waver, and a filler fashioned to fit between the edges of the jaws on the side thereof remote from their hinge connection and clamped in position thereby to form a hollow heater for use as a spindle waver.

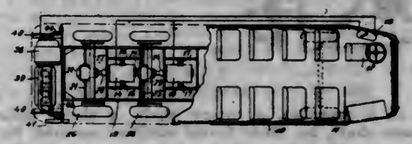
1,894,074. SAFETY SWITCH. ALFRED G. VON NORMANN, Seattle, Wash., assignor to Trumbull Electric Manufacturing Company, Pacific Division, Seattle, Wash., a Corporation of Washington. Filed June 12, 1931. Serial No. 543,792. 8 Claims. (Cl. 200—76.)

1. In a safety switch a housing, a switch panel within said housing having spring terminal clips thereon, a switch bar guided for movement toward and away from said panel and having blades arranged to fit within and be frictionally held by said terminal clips, a link connected with said switch bar and extending outwardly through a wall of said housing, an operating lever pivoted externally of said housing for swinging movement toward and away from the housing, said operating lever being substantially parallel to the housing when the switch is closed, a short bell crank arm on the pivoted end of said operating lever extending inwardly toward said housing, a secondary lever having one end pivoted coaxial with said operating lever and the other end pivotally connected with the outer end of said link, said



secondary lever and said bell crank arm respectively having oppositely disposed spring receiving protections thereon, and a compression spring on said projections between said bell crank arm and said secondary lever arranged to be compressed by opening movement of said operating lever whereby said switch blades will be snapped into open position when the pull on said link overcomes the friction on said blades.

1,894,075. MOTOR VEHICLE. OLIVER F. WARNUS, Albany, N. Y., assignor, by mesne assignments, to The Cincinnati Car Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 21, 1927. Serial No. 234,640. 18 Claims. (Cl. 180—54.)



1. A motor vehicle comprising a frame, a set of steerable wheels supporting the front end of the frame, a four-wheel truck supporting the rear end of the frame, a power plant supported by the rear end of the frame and extending rearwardly of the rear truck wheels, driving connections between the truck wheels and the power plant, and equalising mechanism for absorbing torque between the front and rear wheels of the truck.

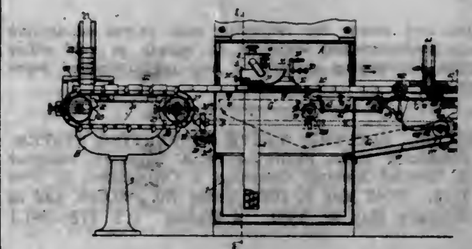
1,894,076. SALT SHAKER. LOUIS WEIDLICH, Stratford, and GEORGE E. RUSSELL, Bridgeport, Conn., assignors to The Weidlich Bros. Manufacturing Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 14, 1929. Serial No. 407,128. 2 Claims. (Cl. 65—45.)

1. A salt shaker having an unobstructed ball top and comprising a receptacle having an inner annular seat in its discharge end and an outer threaded periphery, a ball rotatably mounted upon said seat to close the receptacle, an attached threaded annular cap encircling the ball and seat and including a series of upwardly and inwardly extended resilient curved spaced-apart fingers to engage and limit the movement of the ball when disengaged from its seat, said fingers normally being in spaced relation to the ball and terminating below the upper surface of



said ball whereby said surface at all times presents an upwardly projecting unobstructed portion for manually rotating it upon its seat.

1,894,077. CHOCOLATE AND THE LIKE COATING MACHINE. ALFRED WINKLER and MAX DÜNNEBIER, Neuwied, Germany. Filed May 7, 1930, Serial No. 450,437, and in Germany Apr. 29, 1927. 16 Claims. (Cl. 107—1.)

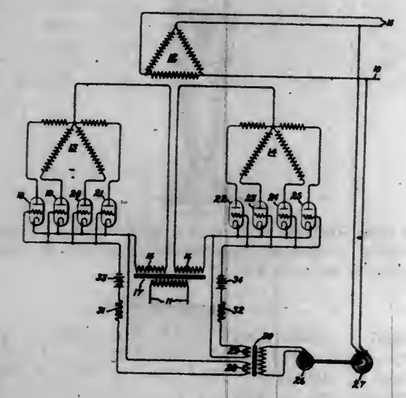


16. In a coating machine, means for supplying fluent material, a pair of supporting means arranged beneath said supplying means at different heights, means for feeding articles to the upper of said supporting means, said feeding means being removable to permit replacement by means to supply articles to the lower of said supporting means, the upper of said supporting means being such as to permit fluent material to pass therethrough when no objects are supported thereon so as to coat objects on the lower supporting means, means in the upper supporting means for inverting articles, means to stop the operation of said inverting means, scrapers below said upper supporting means adapted to scrape the inverted articles, said scrapers being removable to permit movement of objects on said lower supporting means, a shaking table arranged to receive articles from said upper supporting means, a conveyor arranged to receive articles from the lower of said supporting means, said shaking table being removable to permit movement of articles on said conveyor, and a cooling arrangement including a conveyor arranged to receive articles from said first conveyor, a table extending above said conveyor and arranged to receive articles from said shaking table, a second conveyor parallel to said first conveyor, and means to transfer articles from said second table to said second conveyor.

1,894,078. ELECTRIC VALVE CONVERTING APPARATUS. FRIEDRICH BARZ, Berlin-Friedenau, Germany, assignor to General Electric Company, a Corporation of New York. Filed July 18, 1931, Serial No. 551,814, and in Germany Aug. 21, 1930. 7 Claims. (Cl. 172—281.)

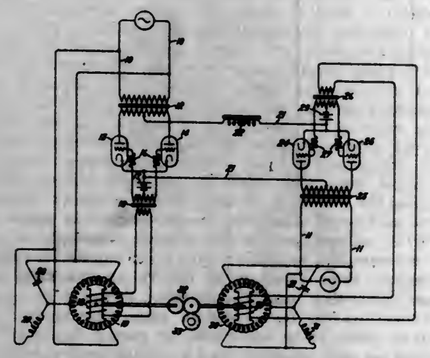
1. Apparatus for transmitting energy between alternating current circuits of different frequencies compris-

ing a plurality of inductive windings having unequal numbers of turns and arranged to be energized from one of said circuits, a plurality of electric valves for interconnecting said windings and the other of said cir-



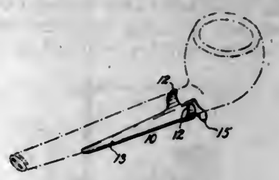
cuits, and means for rendering said valves conductive in a predetermined sequence to supply to said other circuit alternating current of any predetermined wave form.

1,894,079. ELECTRIC VALVE CONVERTING SYSTEM. FRIEDRICH BARZ, Berlin-Lankwitz, Germany, assignor to General Electric Company, a Corporation of New York. Filed May 5, 1932, Serial No. 609,540, and in Germany May 22, 1931. 4 Claims. (Cl. 172—281.)



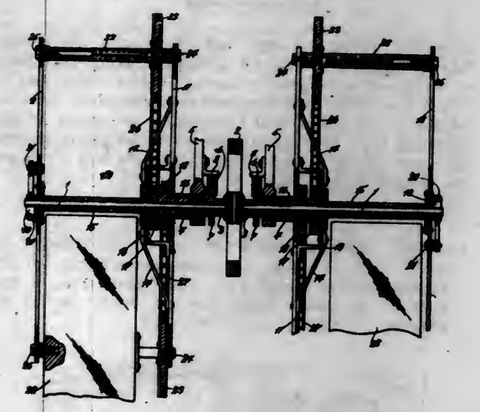
4. An electric valve converting system comprising a first alternating current circuit, a direct current circuit, a rectifier interconnecting said circuits and including a group of electric valves each provided with a control grid, a second alternating current circuit, an inverter interconnecting said direct current circuit and said second alternating current circuit and including a second group of electric valves each provided with a control grid, a rotary phase shifting transformer for exciting the grids of each group of valves from its associated alternating current circuit, and means for simultaneously varying the setting of said phase shifting transformers in an opposite sense.

1,894,080. PIPE STAND AND CLEANER. OTTO E. BILLGREN, Jersey City, N. J. Filed Mar. 5, 1931. Serial No. 520,310. 3 Claims. (Cl. 131—12.)



1. A pipe stand and cleaner having a central portion with upturned wings for embracing the stem of a pipe, an end portion having downturned feet, and an end portion providing a cleaning blade.

1,894,081. PROPELLER. CHARLES E. BROOKS, St. Louis County, Mo. Filed June 20, 1930. Serial No. 462,492. 3 Claims. (Cl. 170—150.)

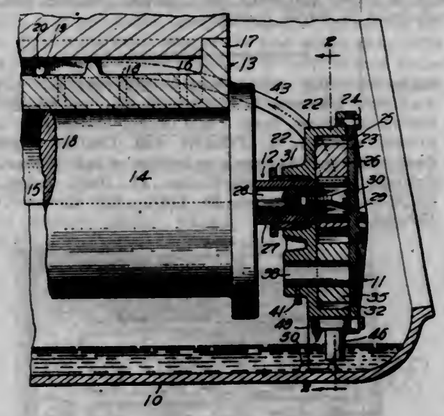


1. In a propeller, a rotary shaft, a sleeve mounted on said shaft, an inner frame member mounted for rotation on said sleeve, a hub mounted on said shaft and rigidly attached to said inner frame member, an outer frame member mounted on said shaft, a hub mounted on said shaft and rigidly attached to said inner and outer frame members, means for rigidly securing said outer frame member to said shaft, propeller vanes rotatively supported between said inner and outer frame members, sprocket wheels rigid with said sleeve, sprocket wheels rigid with said vanes respectively, and sprocket chains connecting said first sprocket wheels with said sprocket wheels that are rigid with said vanes for rotating said vanes automatically and as an incident to rotation of said shaft.

1,894,082. SELF-LUBRICATING BEARING. JOSEPH M. BRYAN and BRINAY SMARTT, Indianapolis, Ind.; said Smartt assignor to said Bryan. Filed Feb. 9, 1931. Serial No. 514,641. 1 Claim. (Cl. 308—84.)

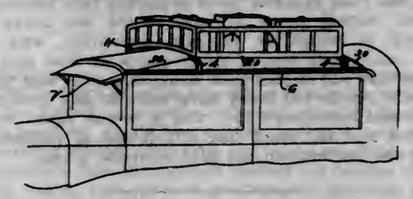
In a lubricating apparatus for a bearing, the combination comprising a main shaft and a stub shaft secured thereto, said stub shaft being radially slotted at its extremity and internally threaded and tapered, a sleeve secured upon said stub shaft, a pump mounted upon said sleeve and removably secured thereto by a screw with a

tapered head which engages the threaded and tapered portions of said stub shaft and expands the slotted portions thereof against said sleeve, said pump having a



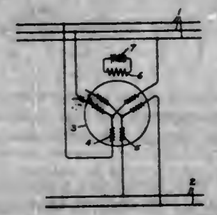
housing and a cover-plate therefor, said cover-plate abutting against the end of said stub shaft to prevent loosening of said screw.

1,894,083. TOP RACK FOR AUTOMOBILES. JONATHAN O. CHANEY, North Hollywood, Calif. Filed Sept. 8, 1930. Serial No. 480,458. 5 Claims. (Cl. 224—29.)



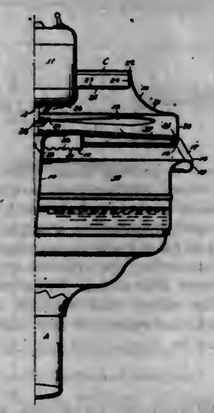
1. A top rack for automobiles including a frame structure having individually applicable bow sections, vertical gripping members slidable laterally on said sections for adjustment according to width of the top, and means attached to the frame for positively drawing said members inward against the side eaves of the top.

1,894,084. SYSTEM OF DISTRIBUTION. DELMAR D. CHASE, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 1, 1931. Serial No. 526,992. 3 Claims. (Cl. 172—238.)



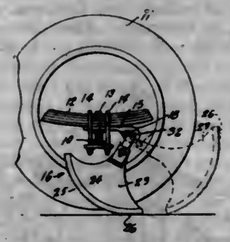
1. In a system of distribution, a polyphase supply circuit, a single phase load circuit, an alternating current dynamo-electric machine having two separately insulated windings on the same stator core for interconnecting said circuits, one of said windings being connected to said supply circuit and the other being connected to said load circuit, the inductive relation between said windings being such that the mutual inductance thereof shall be substantially less than the self-inductance of the winding connected to said polyphase circuit whereby a substantial portion of the single phase load shall be imposed upon the polyphase system as a polyphase load.

1,894,085. AIR CONDITIONING AND CIRCULATING DEVICE. ARTHUR W. CONLEY, Shaker Heights, Ohio. Filed Aug. 3, 1931. Serial No. 554,651. 4 Claims. (Cl. 261—91.)



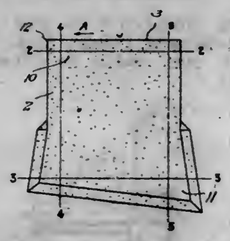
1. In a device of the character described, a receptacle, a fan housing having an open bottom and an upper wall provided with a plurality of louvers, an electric motor supported by said upper wall centrally thereof and having the armature shaft extending vertically downward, a substantially horizontally disposed fan carried by said shaft, a generally flat, horizontally disposed humidifying element comprising inner and outer rings and wicking wound back and forth therebetween supported under said fan, and means for maintaining said element moist.

1,894,086. AUTOMATIC JACK. LOUIS M. CORTIGIANO, Waterbury, Conn., assignor of one-half to Paul D. Hippolitus, Bridgeport, Conn. Filed May 27, 1931. Serial No. 540,250. 6 Claims. (Cl. 254—94.)



3. In a jack for motor vehicles, in combination, a bracket adapted to be secured to an axle of the vehicle, said bracket including a head having a transversely extending opening therein and a lateral slot entering the opening, a ground engaging element having a ground engaging surface, said element including a pin adapted to be passed through the lateral slot and into the transverse opening in the head and having bearing therein, said opening being offset upwardly relative to the slot whereby to form a lock for the pin, said ground engaging element adapted to rock on its surface to elevate and maintain elevated a wheel of the vehicle when the pin of the element is in the opening of the bracket and the vehicle is moved in the direction of the element and said slot inclining downwardly whereby the pin will fall out of the opening and slot on the vehicle moving in a direction away from the element after lowering of the wheel.

1,894,087. STONE CUTTING IMPLEMENT. HARRY J. COWIE, Niagara Falls, Ontario, Canada, assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Apr. 10, 1929. Serial No. 354,123. 6 Claims. (Cl. 125—22.)

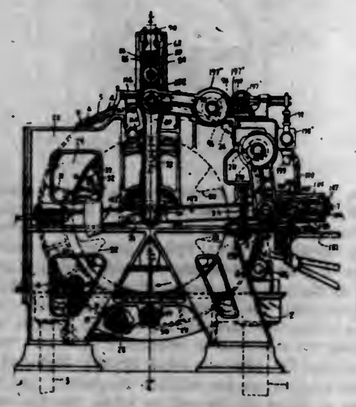


5. The process of cutting stone, which comprises rotating a circular stone cutting saw having insert teeth of bonded abrasive material, which teeth have their cross sections in planes tangential to the periphery of the saw tapering from a thicker front or leading edge to a thinner rear or following edge, the direction of rotation being such that the teeth first engage the stone at their thicker front or leading edges, and causing a relative bodily feeding movement between the saw and the stone so as to cause the saw to engage and cut into the stone.

1,894,088. METHOD OF MAKING PHENOLIC CONDENSATION PRODUCTS. HARRY M. DENT, Buffalo, N. Y., assignor to General Plastics, Inc., a Corporation of New York. Filed Feb. 15, 1929. Serial No. 340,344. 8 Claims. (Cl. 260—4.)

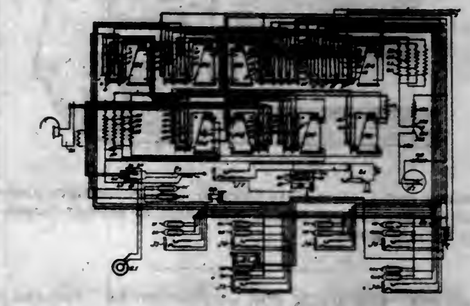
1. The process of producing condensation products from phenolic bodies comprising higher homologues of phenol, which comprises the steps of causing a reaction to take place in the presence of an alkali between a phenol and formaldehyde present in solution in excess of equal molecular proportions, stopping such reaction by neutralising the alkali before all the formaldehyde has combined, adding ammonia and drying.

1,894,089. MOLDING MACHINE FOR PULP. WILLIAM J. DE REAMER, Crown Point, Ind., assignor to Mapes Consolidated Manufacturing Company, Griffith, Ind., a Corporation of Delaware. Filed Nov. 16, 1931. Serial No. 575,297. 32 Claims. (Cl. 92—56.)



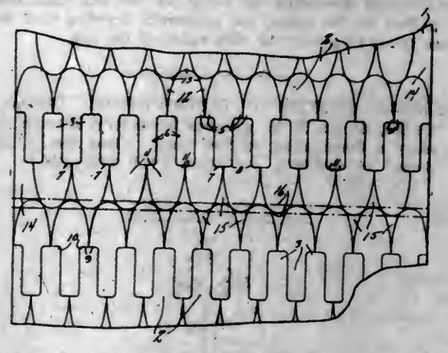
1. In a molding machine, a continuously rotating molding member having a series of circumferentially extending forming molds, a single mating mold member to cooperate with said forming molds, and means for bringing said mating mold member successively in cooperative relation with each forming mold, said means including mechanism to move the mating mold member to and from the forming molds and positive means to cause the mating mold to travel therewith for a limited distance and restore same to initial position.

1,894,090. TOLL TELEPHONE SWITCHING APPARATUS. HERBERT M. FRIENDLY and ARCHIBALD E. BURNS, Portland, Oreg.; said Burns assignor to said Friendly, Milton S. Friendly and Central Republic Bank and Trust Company, executors of said Herbert M. Friendly, deceased. Filed June 11, 1915, Serial No. 531,310. Renewed Jan. 23, 1922. 208 Claims. (Cl. 179—27.)



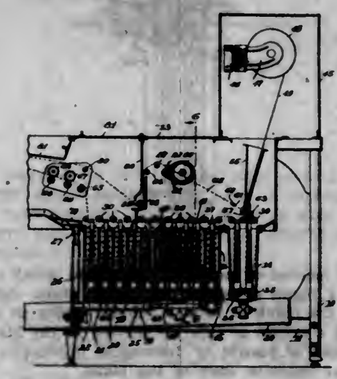
1. The combination of a subscriber's line in connection with an automatic exchange, a trunk to a toll board, a toll line from said toll board extending to a remote toll board, central means at said remote toll board the agency of which is to gain connection with the said subscriber's line, a signal device on first said toll board that will display upon manipulations of said means on said remote toll board being made to gain connection with said subscriber's line, and a second signal device on first said toll board that will display in conformance with the response on the said subscriber's line.

1,894,091. GLOVE AND THE PRODUCTION THEREOF. HERMAN GILLIAN, Coshocton, Ohio. Filed June 17, 1930. Serial No. 461,786. 1 Claim. (Cl. 2—169.)



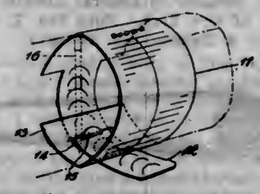
A glove hand back comprising a plurality of similar interfitting elements, each element extending from wrist to finger tip as a full finger back, said element having a finger back section extending from the finger tip to lateral abrupt shoulders, which shoulders each approximate one-quarter the general width of the finger back section adjacent the shoulders, there to leave from the shoulders a hand back section of half the width of the finger back section, said half width portion of the hand back extending to a wrist terminus, said elements arranged side by side in a series with the wrist termini lying in a line parallel to their tips along a lineal extent of said series, said wrist termini of the first series interfitting with the wrist termini of a second reversely disposed similar series with the wrist termini of one abutting the shoulders of the other in pairs, said first series being scalloped at the line of the finger tips on the other side of the first series away from the second series and then sinuously interfitting said finger tips of the first series with the finger tips of a third similar series disposed in the direction of the second series.

1,894,092. PRINT TREATING APPARATUS. JOHN S. GREENE and PAUL LANDROCK, Rochester, N. Y., assignors to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed July 28, 1932. Serial No. 625,408. 11 Claims. (Cl. 95—90.5.)



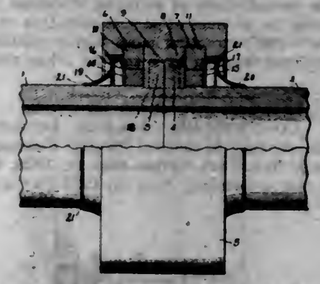
1. Photographic print treating apparatus comprising means for holding a plurality of print treating baths, mechanism for holding a comparatively long strip of photographic material, an endless member having a path of travel passing through said baths, and means attachable to and detachable from said endless member for holding the advance end of said strip of photographic material to thread it through said baths.

1,894,093. SCORE AND TALLY DEVICE. JAMES J. GRIFFIN, West Orange, N. J. Filed Apr. 17, 1931. Serial No. 530,782. 1 Claim. (Cl. 281—43.)



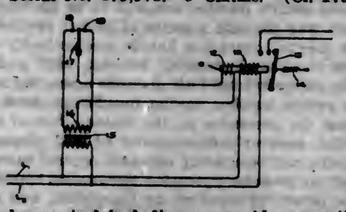
A device of the class described comprising an elongated, strip-like body, one end of said body comprising a comparatively long section, the other end of said body being reduced to form a tongue member of less length than said section, the free end portion of said section having longitudinally spaced transverse slits through which said tongue member is adapted to pass, the central portion of the tongue member being cut transversely at relatively close and regularly spaced intervals longitudinally with respect thereto to form a plurality of curved arcuate retaining clips, said transverse slits being spaced apart a distance which is a multiple of the space between consecutive clips so that one clip will engage one side wall of one slit and another clip the side wall of another slit to form a double catch for securing said body in the form of a ring or loop of different sizes.

1,894,094. FLANGE COUPLING. HAROLD N. HACKETT, Ballston Lake, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 28, 1931. Serial No. 571,600. 5 Claims. (Cl. 285—129.)



1. The combination with two conduits having abutting flanges for conveying a hot fluid, of a holding ring provided with annular grooves defining an intermediate portion slidably engaging the peripheries of the flanges, and shear means seated in the grooves and engaging the outer faces of the flanges to lock the flanges together whereby the engaging surface of the flanges are forced against each other to define a seal when the conduits are heated.

1,894,095. RELAY CONTROL DEVICE. CHESTER I. HALL, Philadelphia, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 18, 1930. Serial No. 475,973. 9 Claims. (Cl. 175—375.)



1. A relay control including a movable magnetic member biased to one position, electromagnetic operating means therefor having a winding normally energized from an alternating current source for setting up a normal alternating magnetic flux sufficient only to maintain said member in another position when operated thereto, and means for providing additional flux substantially in phase with said normal magnetic flux to operate said member to said other position and substantially in opposite phase with said normal magnetic flux to effect the return of the member to said one position in accordance with its bias, and means for selectively controlling said additional flux providing means.

8. A thermostatic relay including a switch member biased to open position, an electromagnet continuously energized from an alternating current source of energy sufficiently only to maintain said switch member in a closed position, a transformer connected to be energized from said source of energy, a second transformer connected to affect the energization of said electromagnet and thermostatic means for connecting said second transformer to said first transformer to be energized thereby to increase the energization of said electromagnet to close said switch member or for connecting said second transformer to said first transformer to decrease the energization of said electromagnet to open said switch member.

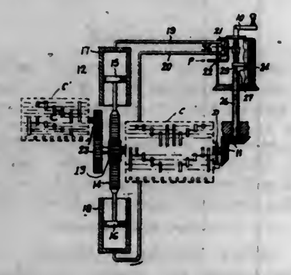
1,894,096. SOAP PRODUCT AND METHOD OF MAKING SAME. JOSEPH HIDY JAMES, Pittsburgh, Pa., assignor to Clarence P. Byrnes, trustee, Sewickley, Pa. Original application filed Feb. 3, 1922, Serial No. 533,986. Divided and this application filed May 7, 1929. Serial No. 361,251. 3 Claims. (Cl. 87—16.)

1. As a new article of manufacture, a soap formed by saponification of a fraction of a liquid product of the partial oxidation of hydrocarbons.

1,894,097. METHOD OF MAKING SOLVENTS. JOSEPH HIDY JAMES, Pittsburgh, Pa., assignor to Clarence P. Byrnes, trustee, Sewickley, Pa. Filed Oct. 31, 1924. Serial No. 747,106. 4 Claims. (Cl. 260—116.)

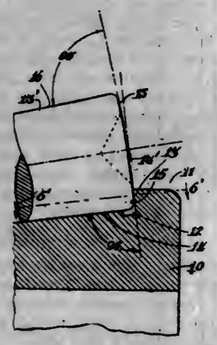
1. In the manufacture of solvents, the steps consisting in fractioning the product of partial oxidation of aliphatic hydrocarbons and extracting more highly oxidized bodies from a resulting fraction by a solvent other than water.

1,894,098. CONTROLLER. LEOPOLD JANISCH, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 11, 1928, Serial No. 284,372, and in Germany June 23, 1927. 6 Claims. (Cl. 200—17.)



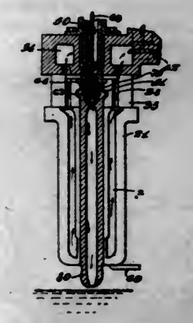
1. In combination, an electric circuit controller having a movable switch member adapted to be operated step by step each way through a series of circuit controlling positions, a manual operating handle mechanically connected to drive the switch member between said positions, an opposing piston balanced air pressure operating mechanism for the switch member having insufficient force upon unbalancing the pressures on the pistons thereof to operate the switch member independently of said manual operating handle, and separately operable control valves for the balanced air pressure operating mechanism biased to maintain the pressures balanced on the piston, and means for operating the valves selectively upon movement of the manual operating handle in opposite directions to exhaust the air pressure from a corresponding piston and thereby allow the opposing piston to assist in driving the switch member between said position.

1,894,099. TAPERED ROLLER BEARING. EDWARD A. JOHNSTON, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Feb. 1, 1928. Serial No. 250,976. 4 Claims. (Cl. 308—214.)



1. In a tapered roller bearing the combination of a tapered inner race member having a race-way surface and a fixed thrust flange provided with a thrust surface disposed at an angle of ninety degrees with respect to the race-way surface on the race member, and a tapered roller cooperating with said race piece and having a thrust surface at its larger end disposed at a ninety degree angle with respect to the tapered surface of the roller.

1,894,100. METHOD OF AND APPARATUS FOR MAKING GLASS TUBES. AUGUST KADOW, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 30, 1929. Serial No. 403,587. 33 Claims. (Cl. 49—5.)



1. The method of making a glass tube which comprises forming a blank of molten or plastic glass, chilling the walls of the blank to form a tubular casing or skin, and removing the core or interior portion of the blank while still molten or plastic by differential pneumatic pressure applied at opposite ends of the blank.

16. In a machine for forming glass tubes, the combination of a mold open at one end to receive a charge of glass, means for bringing said mold into operative relation to a supply body of molten glass, means for exhausting the air from the mold and thereby introducing a blank of glass by suction into the mold, and means for supplying air under pressure to the mold while said receiving end remains open and thereby expelling a portion of the glass and giving the blank a hollow tubular formation extending to the said open end of the mold while the blank is still integrally united with the supply body.

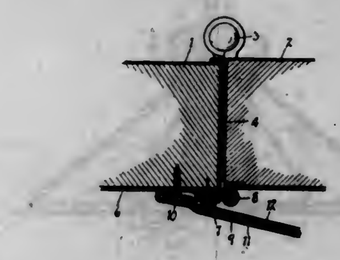
1,894,101. MACHINE CENTER. THOMAS KERR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 2, 1931. Serial No. 506,170. 6 Claims. (Cl. 82—33.)



1. A machine center comprising a relatively soft metal shank having a conical end portion and a hollow, hard, conical work-engaging member mounted on and secured to said shank, said member having on its inner surface a plurality of ribs adapted to engage the conical end portion of said shank and provide bearing surfaces for said conical member.

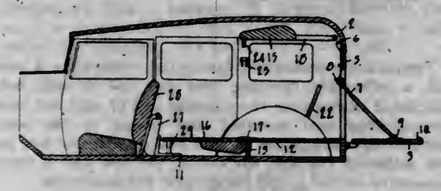
1,894,102. GUARD FOR AUTOMOBILE DOORS. S H HUNTER KUENZEL, Kalamazoo, Mich., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Filed Feb. 21, 1931. Serial No. 517,483. 2 Claims. (Cl. 20—16.)

1. The combination in a motor vehicle body provided with a door opening, of a door hinged at the edge of the opening to swing inwardly in closing, a lining finishing strip at the rear edge of the door opening, a guard strip mounted on the inside of the body at the rear edge of the door opening to overlap said finishing strip and projecting substantially beyond the same relative to the door,



and a covering for said guard folded around its edges, the outer edge of said covering being in overlapping relation to said finishing strip, said finishing strip supporting the guard strip in inwardly inclined position relative to the opening.

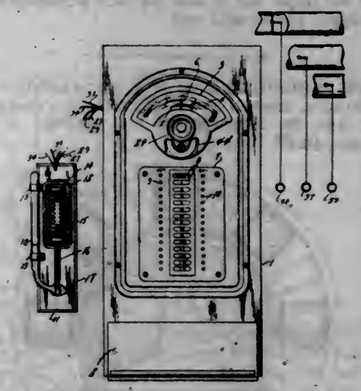
1,894,103. CONVERTIBLE VEHICLE BODY. S H HUNTER KUENZEL, Kalamazoo, Mich., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Filed May 18, 1931. Serial No. 538,045. 6 Claims. (Cl. 296—24.)



1. A passenger vehicle body having an opening in the rear thereof and a closure therefor adapted as a tail gate, a transom member above said tail gate hinged at its upper edge, a raised floor deck in the rear portion of the body, a panel-like rear seat bottom member hinged to the forward edge of said deck to rest thereon or to be swung forwardly to an inverted horisontal position to constitute a continuation for said deck, means for supporting said rear seat member in such horisontal position in spaced relation to the floor of the vehicle, a rear seat back member provided with upwardly projecting supporting arms pivoted adjacent the top of the vehicle body so that said back member may be swung to operative relation to the seat bottom when it is adjusted as a seat or swung upwardly to a position adjacent the top of the body, and means for securing said rear seat bottom in a vertical position.

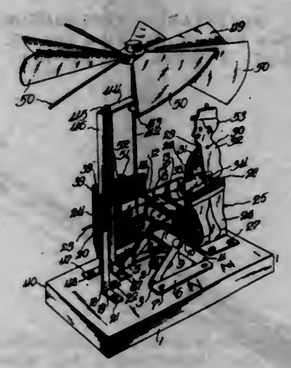
1,894,104. HUMIDITY FACTOR TELETHERMOMETER. CARL H. KUHLMAN, Toledo, Ohio. Filed Mar. 3, 1928. Serial No. 258,896. 12 Claims. (Cl. 73—24.)

1. The combination with an indicating instrument of two remote temperature responsive devices, one of which is affected by humidity for departing from the other, control means at said instrument for obtaining disclosure of



temperature condition of said devices, connections between the devices and instrument, and humidity factor interpreting indicating means for said disclosure.

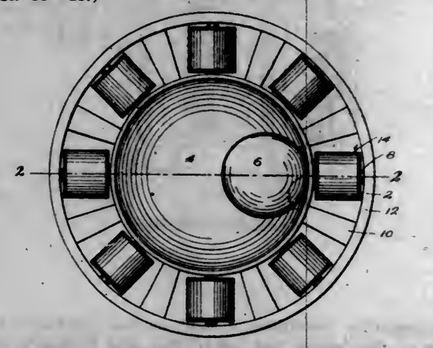
1,894,105. TOY. LOUIS EUGENE KUPFER, Chicago, Ill. Filed Feb. 24, 1932. Serial No. 594,799. 2 Claims. (Cl. 46—14.)



1. In a device of the class described comprising a perforated base, a saw-buck carried by said base, a log adapted to rest upon said saw-buck, a figure arranged at one end of said base and having a slot formed therein, a plate pivotally mounted in said slot, the head of said figure formed on one end of said plate and the other end being perforated, one arm of said figure being pivotally connected to the perforated end of said plate, a saw, the hand of said arm adapted to grasp the handle of said saw, said saw adapted to rest in operative position upon said log, a V shaped guide having the ends thereof bent in opposite directions and attached to said saw, an upright having a perforated end, one end of said guide adapted to extend beyond one end of said saw and slidably carried by said upright, a supporting plate car-

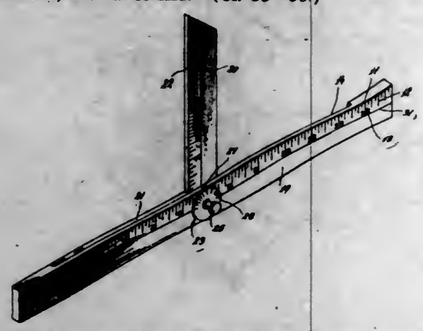
ried by said base and adapted to support the bight portion of said guide, a rod rotatably carried by said base and having an eccentric formed intermediate the ends thereof and slidably arranged in said guide, a second upright having a supporting arm adapted to rotatably support the upper end of said rod, and a propeller carried by the upper end of said rod.

1,894,106. CRUSHING AND MIXING MACHINE. OTTO J. LEHRACK, Mission Township, Johnson County, Kans. Filed Apr. 29, 1929. Serial No. 358,862. 3 Claims. (Cl. 83—45.)



1. A machine of the character described consisting of a receptacle having a bottom portion and an endless wall extending upwardly from said bottom portion, a crushing member free to travel upon the bottom portion and against the wall of said receptacle, and means for setting up a rotary magnetic field around said wall of the receptacle for actuating said crushing member.

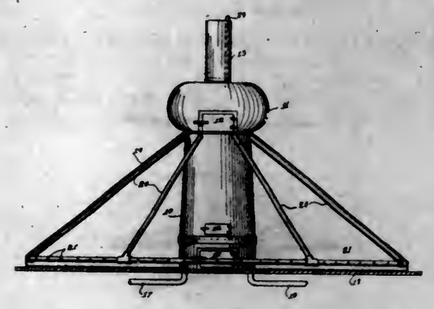
1,894,107. ADJUSTABLE PROTRACTOR. WILLIBALD LÜCK, New York, N. Y. Filed Dec. 27, 1930. Serial No. 505,047. 2 Claims. (Cl. 33—93.)



1. In a device of the class described, a linear graduated rule having a longitudinal recess therein, a pair of intersecting protractor arms joined at right angles to each other, a stud secured to said protractor arms at the axial intersection thereof, said stud passing through said rule and being rotatable therein, said stud having a shank thereon, an annular dial mounted on said shank, said dial having radial graduations thereon, and means on said rule cooperating with said dial for visibly indicating the adjusted angle of either of said arms.

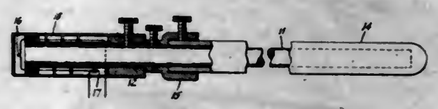
1,894,108. BROODER STOVE. RICHARD LYONS, Lambertville, N. J. Filed Dec. 10, 1929. Serial No. 413,010. 2 Claims. (Cl. 119—32.)

1. A brooder stove comprising the combination of a fire pot provided with heat radiating means, with an outer mantle allowing the circulation of air about the fire pot, a hood, a base, an air duct within said base open to the atmosphere, and connected with said outer mantle, a plurality of inclined pipe conduits, also connected with



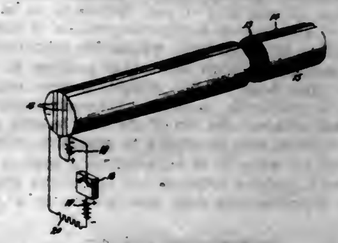
said outer mantle, a lower interchange pipe having a plurality of openings connecting said pipe conduits for supplying fresh, preheated air to said hood, and an exhaust duct also embedded in said base and leading to an exhaust conduit, for exhausting the foul air.

1,894,109. TEMPERATURE MEASUREMENT. FREDERICK S. MARCELLUS, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 19, 1930. Serial No. 496,742. 1 Claim. (Cl. 73—32.)



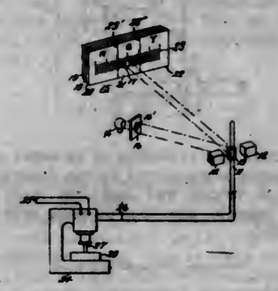
Temperature measuring apparatus comprising a quartz rod, a refractory covering over one end of said rod, a ventilated casing over the opposite end of said rod, means for securing said covering and casing to the rod, a thermocouple supported in said casing with its hot junction adjacent the end surface of the rod and a current responsive device connected to said thermocouple.

1,894,110. TEMPERATURE MEASUREMENT. FREDERICK S. MARCELLUS, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 28, 1930. Serial No. 498,772. 2 Claims. (Cl. 73—32.)



1. A temperature responsive device comprising a pair of spaced electrodes forming therebetween an ionisation air gap and a control electrode located between and spaced from the electrodes of said pair, all of said electrodes being insulated from each other.

1,894,111. LIGHT BEAM INSTRUMENT. FREDERICK S. MARCELLUS, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 23, 1932. Serial No. 634,526. 8 Claims. (Cl. 116—129.)



1. An indicating instrument comprising a movable element carrying a mirror, a source of light and a translucent screen so arranged that a beam of light from said source is reflected by said mirror against said screen, said screen comprising an opal glass plate with a scale marked thereon cooperating with said light beam, and a plurality of color filters having different colors placed against the surface of said glass plate toward said beam of light, thereby producing a spot of light on said screen which varies in color as the deflection of the movable element deflects the light spot from one portion of the screen to another.

1,894,112. EXTENSION OUTLET. RODERICK S. MCNEIL, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed May 4, 1931. Serial No. 534,935. 3 Claims. (Cl. 173—332.)

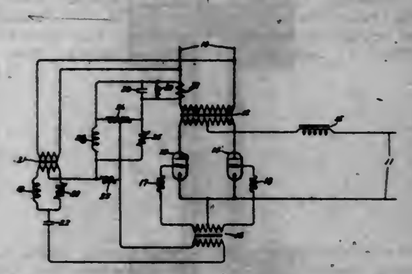


1. An extension outlet comprising an insulating shell having internal shoulders at its base, contact blades with one end engaging the internal shoulders of said shell and the other end having shoulders at either side, and an insulating socket member provided with a tongue having longitudinal recesses to receive said contact blades and seats for the shoulders of said contact blades whereby the contact blades are clamped in position between the shell and socket member.

1,894,113. MANGANESE RESINATE. PHILIP S. MILLER, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 20, 1929. Serial No. 372,537. 2 Claims. (Cl. 134—26.)

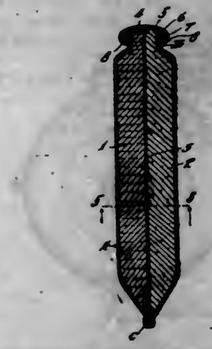
1. A composition of manganese and rosin containing at least about 4.5% to 5% by weight of combined manganese, reacted at 300 to 315° C. and being soluble in mineral oil.

1,894,114. ELECTRIC POWER CONVERTING APPARATUS. ALBERT H. MITTAG, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 26, 1931. Serial No. 518,487. 6 Claims. (Cl. 175—363.)



2. In combination, an alternating current supply circuit, a load circuit, electric valve means for transmitting energy therebetween, means for normally rendering said valve means conductive, and means responsive to the current flowing betwen said circuits for gradually reducing the conductivity of said valve means only after said current has reached a predetermined value.

1,894,115. PLURAL CHAMBERED COLLAPSIBLE TUBE. MICHAEL F. MURPHY, Newark, N. J. Filed Apr. 11, 1931. Serial No. 529,445. 4 Claims. (Cl. 221—60.)

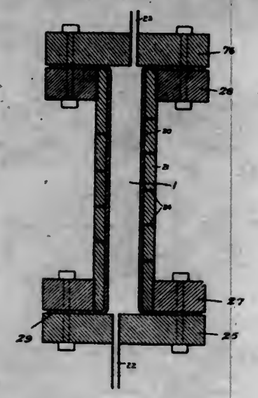


1. A collapsible tube comprising a bellow body having collapsible walls and a longitudinal partition dividing the interior of the body into two chambers, said body having an outlet opening at one end thereof for each chamber and said partition being laterally extensible to compensate for deformation of the walls of said body as the latter are collapsed.

1,894,116. APPARATUS FOR CARRYING OUT THE DESTRUCTIVE HYDROGENATION OF CARBONACEOUS MATERIAL. MATHIAS PIER, Heidelberg, Germany, assignor, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed Aug. 11, 1928, Serial No. 299,124, and in Germany Aug. 30, 1927. 1 Claim. (Cl. 196—52.)

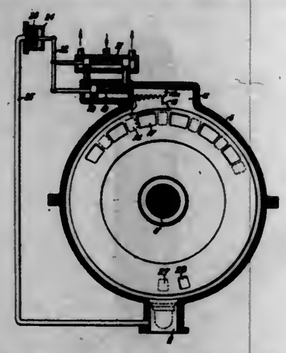
An apparatus for destructively hydrogenating distillable carbonaceous materials containing sulfur, with hydrogen, comprising a vessel composed of two readily separable concentric shells, the inner having relatively thin, hydrogen permeable walls of a chromium alloy steel resistant

to attack by sulfur and hydrogen, the outer having relatively thicker walls which possess a high resistance to pressure and which are also composed of a chromium alloy



steel resistant to hydrogen and sulfur attack, said outer wall having openings therein to permit escape of the hydrogen diffusing through the thin inner shell.

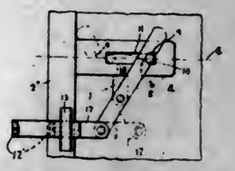
1,894,117. ELASTIC FLUID TURBINE. EDWARD V. POLLARD, Lynn, and ARTHUR D. SOMES, East Lynn, Mass., assignors to General Electric Company, a Corporation of New York. Filed Oct. 15, 1931. Serial No. 569,001. 1 Claim. (Cl. 253—59.)



The combination with an elastic fluid turbine having a conduit connected to an intermediate stage through which elastic fluid may be extracted from or supplied to the turbine, of a grid valve provided at an intermediate stage for regulating the flow of fluid through the turbine, and a by-pass between the intermediate stage and a lower pressure stage through which elastic fluid can be passed to the lower stage, said grid valve comprising a stationary and a movable member provided with corresponding openings, one opening in each member forming a part of the by-pass and being so arranged with respect to the other openings that they begin to register when the opening area formed by the other openings has reached a maximum value.

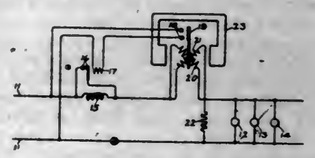
1,894,118. GRAVE VAULT. JAMES W. POWELL and JACOB R. BURKHARDT, Springfield, Ohio, assignors to The Springfield Metallic Casket Company, Springfield, Ohio, a Corporation of Ohio. Filed July 27, 1931. Serial No. 553,242. 5 Claims. (Cl. 27—35.)

4. In a grave vault consisting of two separable members, a latch mounted to slide horizontally carried by one member to latch the other member thereto, a spring for projecting said latch to latching position, a movable element to retract said latch against the tension of its spring and automatically hold the same in retracted position, and a horizontally movable operating device connected



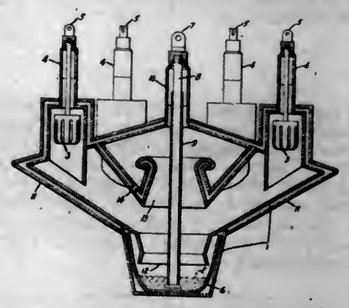
with said element and extending to an outer side of said vault and adapted when moved in one direction to cause said element to retract and lock said latch and when moved in the opposite direction to cause said element to release said latch.

1,894,119. CURRENT LIMITER. WILLIAM H. PRATT, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Oct. 30, 1931. Serial No. 572,207. 6 Claims. (Cl. 171—97.)



1. In combination with a circuit carrying an electric current, means for reducing the magnitude of the current in said circuit and means responsive to the impedance of said circuit for controlling said current reducing means, said controlling means comprising a pair of relatively movable members, one of said members carrying a potential coil and a current coil, said controlling means being arranged to place said current reducing means in operation with the impedance of said circuit falls below a predetermined value and to terminate the operation of said current reducing means when the impedance rises above a predetermined value.

1,894,120. VAPOR ELECTRIC DEVICE. DAVID C. PRINCE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 16, 1927. Serial No. 168,811. 7 Claims. (Cl. 250—27.5.)



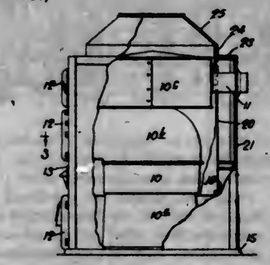
1. A vapor electric device including an evacuated vessel, a vaporizable cathode located within said vessel, a condensing chamber above said cathode within said evacuated vessel, an anode chamber within said evacuated vessel, a contracting and expanding nozzle interposed between said cathode and said chamber to raise the vapor pressure in said condensing chamber and to lower the vapor pressure in said anode chamber, and means for circulating a cooling medium in contact with the surfaces of said condensing chamber, said nozzle, and said evacuated vessel.

1,894,121. CLOTHES PEG. WALTER PRÖNNECKE, Quedlinburg, Germany, assignor to Reinhard Jahn, Bad Suderode, Osthars, Germany. Filed Mar. 16, 1932, Serial No. 599,194, and in Germany Nov. 19, 1931. 1 Claim. (Cl. 24—138.)



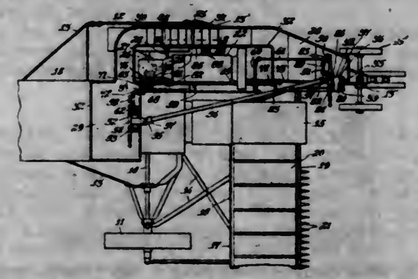
A clothes-peg consisting of a wooden bar of square cross section, said bar being formed to provide a body and two arms divided by a cleft, one of the two arms of the peg extending over the entire width of the peg and having a curved projection projecting into the peg cleft, whereas the other peg arm is subdivided by a saw's cut extending to the bottom of the peg cleft into two arms which have each an inwardly projecting curved face, the portion of which projecting farthest into the peg cleft is still situated in this cleft.

1,894,122. WARM AIR HEATER. DAVID RAIT RICHARDSON, New York, N. Y., and ANDREW RUSSELL LYND, Dover, N. J., assignors to Richardson & Boynton Company, New York, N. Y., a Corporation of New York. Filed June 6, 1928. Serial No. 283,207. 10 Claims. (Cl. 126—99.)



1. In a device of the class described, a bottom plate formed to receive the base of a heating unit, a bottom rail surrounding said plate and formed to receive a casing surrounding said unit, and means comprising portions extending inwardly from said rail and adapted to support a second casing spaced interiorly therefrom and exteriorly of the heating unit.

1,894,123. HARVESTER THRESHER. BIRD L. ROGERS, Farnsworth, Tex. Filed Oct. 17, 1928. Serial No. 312,981. 9 Claims. (Cl. 56—122.)



1. A harvester thresher having an element to be controlled, two spaced operator stations on the harvester thresher, each station including means for effecting control of said element, and a runway connecting said stations.

1,894,124. SINGLE-PHASE MOTOR. EDWARD J. SCHAEFER, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed Nov. 11, 1931. Serial No. 574,870. 5 Claims. (Cl. 172—278.)



1. A single phase motor having relatively rotatable primary and secondary members, the primary member having windings disposed at an angle to each other, one of said windings having two sections substantially equal in effective turns, means for connecting said primary windings in primary and secondary circuits, one circuit including one of said sections and the angularly displaced primary winding, and the other circuit including the other of said sections, means for short-circuiting one of said circuits, and means for supplying single-phase energy to the other circuit during the starting period of the motor, at which time the said two winding sections serve as the primary and secondary of a transformer connected between the said circuits, and means for supplying single-phase energy to both of said sections in parallel after the motor has been started.

1,894,125. POUNDER WASHER. FRIEDRICH SCHMIDT, Berlin-Lichtenrade, Germany, assignor of one-half to Emil Max Kappler, Berlin-Wilmersdorf, Germany. Filed Jan. 15, 1931, Serial No. 509,017, and in Germany May 9, 1930. 2 Claims. (Cl. 68—5.)



1. A pounder washer, comprising in combination a pounder, an air bellows, an intermediate chamber between said pounder and said bellows having open communication with said bellows and an aperture communicating with the interior of said pounder, a check valve at the lower end of said chamber adapted to control the aperture in said chamber, the lower edge of said pounder being provided with an air passage way having the discharge apertures, and an air feed pipe extending from said chamber to said lower edge adapted to supply air from said chamber to said lower edge.

1,894,126. PRODUCTION OF CARBON BLACK. OTTO SCHMIDT, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 26, 1928, Serial No. 328,614, and in Germany Jan. 21, 1928. 17 Claims. (Cl. 134—60.)

1. A process for the production of carbon black from a gas containing carbon monoxide, which comprises treating

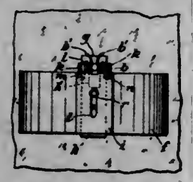
the said initial material under pressure and at a low to moderately elevated temperature in the presence of a catalyst, which is solid under the conditions of working and which contains at least one constituent comprising a metal from the iron group in admixture with at least one activating addition.

1,894,127. REFRIGERATING APPARATUS. WARREN H. F. SCHMIEDING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 30, 1929. Serial No. 351,445. 6 Claims. (Cl. 62—108.5.)



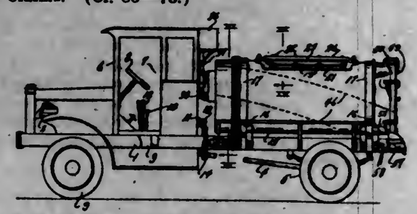
6. A freezing receptacle for refrigerators comprising a bottom wall, a plurality of walls projecting from the upper and lower sides of the bottom wall to form molds on the upper and lower sides thereof.

1,894,128. HOLDING CLIP CONSISTING OF A SPRING FOR CIGARETTES OR CIGARS. KURT SCHULT, Berlin-Steglitz, Germany. Filed May 1, 1931. Serial No. 534,253. 5 Claims. (Cl. 131—51.)



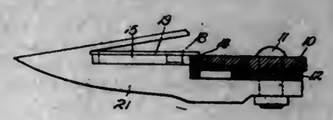
1. A holding clip for cigars or cigarettes, comprising in combination a lyre-shaped spring, an insert piece in said spring having a cavity in the top edge and a sleeve in which said spring with insert piece are slidably arranged.

1,894,129. CONCRETE DELIVERY. HARRY J. SHAW, Toledo, Ohio. Filed May 14, 1928. Serial No. 277,406. 8 Claims. (Cl. 83—73.)



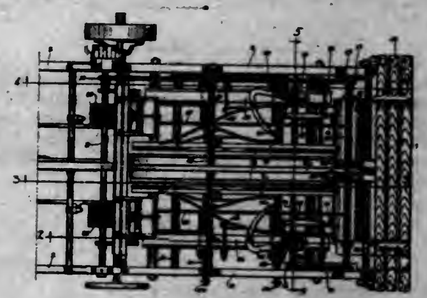
1. A self-dumping truck comprising a chassis, a shell mounted on the chassis, a head for the shell, said head having marginal mounting and locking means extending axially over the shell from said opening for spacing the head from the shell, a drive for rotating the shell to effect flow of material from the shell at the opening between the spaced head and the shell, and directing means from the shell for the discharging material.

1,894,130. CUTTING APPARATUS FOR MOWERS. JOHN C. SLONNEGER, Milwaukee, Wis., assignor to International Harvester Company, a Corporation of New Jersey. Filed Dec. 15, 1930. Serial No. 502,368. 3 Claims. (Cl. 56—298.)



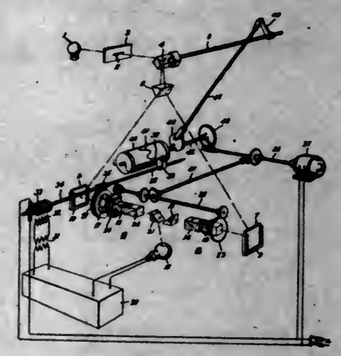
1. A cutting apparatus for mowers, said apparatus comprising a cutter bar, a ledger plate support connected to the bar, said support embodying forward extensions, ledger plates having the same profile as the extensions removably secured to said extensions, and guard fingers removably secured to said bar in cooperative relationship with the extension supported ledger plates.

1,894,131. PAPER BOX MACHINE. EDWIN G. STAUDE, Minneapolis, Minn. Filed Mar. 11, 1929, Serial No. 346,129. Renewed Nov. 17, 1932. 21 Claims. (Cl. 93—49.)



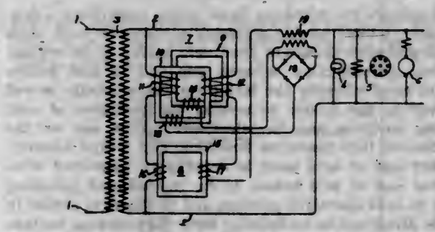
1. A device of the class described comprising a feed mechanism, means for selectively moving the flaps of a carton blank laterally out of alignment with the face of the blank while being fed, means for receiving and folding one of the flaps so moved, additional means engageable to fold a rearmost flap after being so moved, and during feeding movement, and means for synchronizing the movements of the feed mechanism and rear flap folding means.

1,894,132. COLOR ANALYZER. CHARLES W. STONE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 10, 1931. Serial No. 556,156. 6 Claims. (Cl. 234—5.5.)



1. A color analyzer comprising a light source, means for dispersing a beam therefrom to produce a spectrum, means for successively directing each of a plurality of color bands of the spectrum on a standard and on a sample, a photo-electric device arranged to receive light alternately from the standard and the sample, and recording means responsive to the output of said device.

1,894,133. ELECTRICAL REGULATOR. LOUIS W. THOMPSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 29, 1930. Serial No. 448,898. 7 Claims. (Cl. 171—119.)



1. In a regulating system, in combination, an alternating current circuit, a transformer connected to said circuit so as to produce a voltage boost therein, a second transformer connected to said circuit so as to produce a voltage buck therein, means connecting the primary windings of said transformers in series, said second mentioned transformer having a higher normal reactance than said first mentioned transformer, and means responsive to an electrical condition of said circuit for varying the reactance of said second mentioned transformer.

1,894,134. PARALLEL CONDUCTOR SYSTEM. LEWI TONKS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 17, 1931. Serial No. 545,059. 5 Claims. (Cl. 250—36.)



1. In a system for electrical measurement or control, the combination of a pair of conductors, means for supplying electromotive force to said conductors, a conducting bridge between said conductors arranged for movement along the length thereof and dividing said system into opposite portions whereby the current in said bridge is dependent upon the characteristics of said opposite portions, and a connection between the two conductors in one of said portions to prevent the characteristics of the conductors of said one portion from affecting the current in said bridge.

1,894,135. MAKING DOUGH AND BREAD. GABRIEL TÖRÖK and GEORG BECZE, Budapest, Hungary. Filed Dec. 15, 1930. Serial No. 502,616, and in Hungary Dec. 27, 1928. 16 Claims. (Cl. 99.)

6. As a new product, a yeast preparation containing per yeast cell at least one bacterium capable of causing decomposition and separated from its nutrient medium.

1,894,136. FERTILIZER MANUFACTURE. CHAPLIN TYLER and FRANK W. PARKER, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 23, 1931. Serial No. 532,273. 14 Claims. (Cl. 71—9.)

1. A superphosphate nitrifying agent comprising a liquid containing dissolved free ammonia and urea.

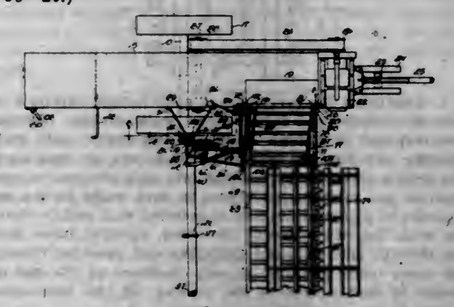
7. A process for the production of fertilizer which comprises incorporating with a superphosphate a liquid containing dissolved free ammonia and urea.

1,894,137. TRANSFER DEVICE. PAUL O. UNGER, Syracuse, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed Oct. 9, 1929. Serial No. 398,447. 8 Claims. (Cl. 129—1.)



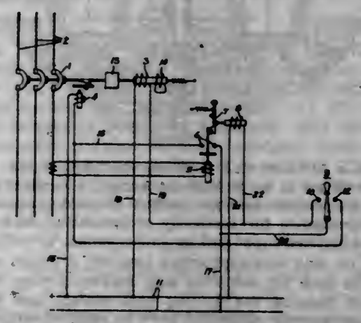
6. A transfer device for paper sheets comprising a bottom bar, a substantially flat resilient top bar arranged flatwise face to face with the bottom bar, means located at a point intermediate the ends of the bars for securing the bars together including a spring normally maintaining the bars in contact at said securing means, but permitting separation of the bars under the resiliency of the spring, means secured to one of said bars at a point near one end for holding said bars in alignment, and means for removably securing the opposite ends of the bars together.

1,894,138. HARVESTER THRESHER. ALBERT B. WELTY, Kenilworth, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed June 22, 1931. Serial No. 545,908. 24 Claims. (Cl. 56—20.)



1. In a harvester thresher, a longitudinally disposed thresher part, a vertically disposed standard carried by the thresher part, a harvester support hingedly connected to the lower part of said standard for up and down movement, a harvester part connected to said support, and a counter-balance connected between the upper part of the standard and said harvester part.

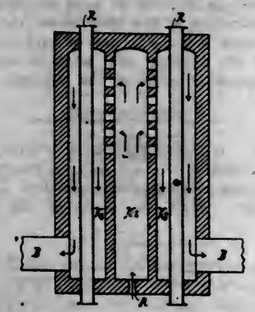
1,894,139. CONTROL OF ELECTRIC SWITCHES. ROLF WIDERÖE, Karlshorst, Germany, assignor to General Electric Company, a Corporation of New York. Filed Aug. 8, 1930, Serial No. 473,952, and in Germany Aug. 16, 1929. 5 Claims. (Cl. 175—294.)



1. In combination with a latched closed circuit interrupter, operating means for closing said interrupter, means

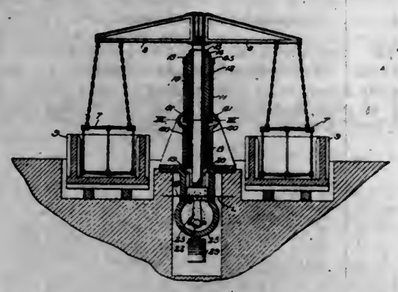
for releasing the latch of said interrupter to effect the opening thereof including a lockout relay, control means for simultaneously resetting said lockout relay and effecting the actuation of said operating means and means for effecting the movement of the contacts of the lockout relay from the releasing position prior to the closing of the contacts of the circuit interrupter.

1,894,140. APPARATUS FOR ENDOTHERMIC CATALYTIC REACTIONS. GUSTAV WIETZEL, Ludwigshafen-on-the-Rhine, and GEORG SCHILLER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 9, 1929, Serial No. 412,752, and in Germany Dec. 11, 1928. 3 Claims. (Cl. 23—288.)



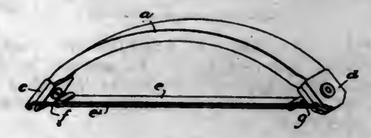
1. Apparatus for carrying out endothermic catalytic reactions comprising a furnace, two walls of heat resistant material and of a high heat emitting power, said walls dividing said furnace into three chambers, an opening in the middle chamber for leading into said chamber a combustible gas mixture, apertures in said walls at the end opposite to said opening and connecting said middle chamber with the two adjacent chambers, catalyst tubes passing through said adjacent chambers and passages through the outer walls of said adjacent chambers at the end opposite to said apertures for leading off the combustion gases.

1,894,141. ROTARY PICKLING MACHINE. FRANK J. WOOD, Mount Lebanon, Pa., assignor to Mesta Machine Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 7, 1931. Serial No. 573,542. 20 Claims. (Cl. 266—23.)



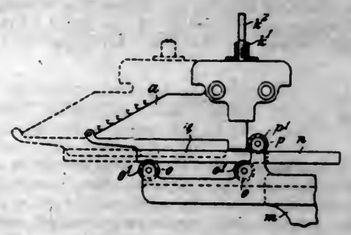
3. In a pickling and washing machine of the type in which articles to be pickled are soused, a vertical plunger, a load-supporting member carried by said plunger, actuating mechanism for vertically reciprocating said plunger to souse articles supported by said member, a vertical rack carried by said load-supporting member, a pinion meshing with said rack for elevating said load-supporting member, reduction gearing for driving said pinion, and a prime mover operatively connected both to said actuating mechanism and to said gearing and constituting common actuating means therefor.

1,894,142. POLISHING APPLIANCE FOR FINGER NAILS. PAUL WÜRZBURGER, Wiesbaden, Germany. Filed May 28, 1930, Serial No. 456,596, and in Germany Nov. 2, 1929. 1 Claim. (Cl. 132—78.)



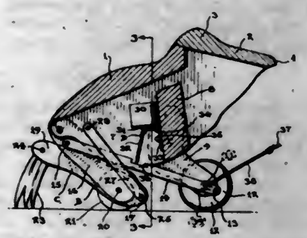
An appliance for polishing finger nails, comprising a flexible holder, a band having polishing surfaces on both sides and being shorter in length than said holder in its normal condition, a connection between one end of said holder and said band whereby the latter may be pivotally moved relatively to the holder to reverse the positions of said polishing surfaces and to selectively adjust one or the other thereof into operative positions, and means whereby the other end of said band is detachably connected with the other end of said holder to fix the selected polishing surface in said operative position and to flex said holder in opposite directions in accordance with the polishing surface being used, said holder in both of its flexed positions developing a tension in said band between its points of connection with said holder and compensating for any stretch in said band, the latter spanning the space between opposite ends of said flexed holder and being out of contact therewith.

1,894,143. TYPOGRAPHICAL COMPOSING AND LINE-CASTING MACHINE. CHRISTIAN AUGUSTUS ALBRECHT, Berlin, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y. Filed Jan. 9, 1932, Serial No. 585,669, and in Germany Aug. 31, 1931. 5 Claims. (Cl. 199—18.)



1. Matrix composing and line casting machine in which the keyboard can be moved out of its operative position for the purpose of making it more accessible, characterised by the fact that the keyboard is mounted on the machine frame so as to be movable in fore and aft direction towards and away from the operator.

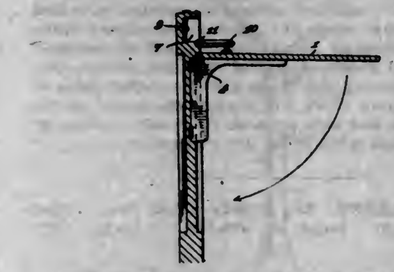
1,894,144. FIGURE TOY. FROHMAN ANDERSON, Detroit, Mich., assignor to All Fair Incorporated, Churchville, N. Y., a Corporation of New York. Filed Mar. 11, 1932. Serial No. 598,276. 20 Claims. (Cl. 46—95.)



1. A figure toy including a body, wheeled supporting means on which the body is mounted for up and down

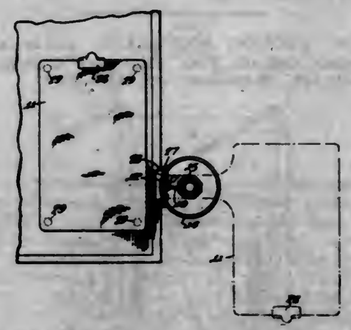
movement, upper and lower pivotally connected leg sections pivoted to the body in the rear of said wheeled supporting means, wheels for the support of said upper and lower leg sections, a crank connection between the wheeled supporting means and the pivotally connected leg sections to cause said up and down movement of the body when the toy is moved over a supporting surface, and connecting means between said pivotally connected leg sections and the body whereby to give relative movement to the said pivotally connected leg sections as the body moves up and down.

1,894,145. DOOR DESK. EDWARD J. ANDLER, Margate City, N. J. Filed Sept. 9, 1930. Serial No. 480,794. 1 Claim. (Cl. 45—51.)



The combination of a horizontally swinging door having superposed recesses in one side thereof, panels swingingly connected to the door and forming closures for the recesses and adapted to lie flush with the adjacent surface of said door when the panels are in closed position, the panels being movable upon horizontal axes, brackets pivotally supported in one of the recesses for horizontal swinging movement to support one of the panels when open as a writing desk and movable into the recess on the closing of the panel to be concealed thereby, and a latch carried by the other panel and having a knob serving as a rest for said other panel to hold it in position as a rack when both panels are swung to open position, both panels when in open position being solely supported by said brackets.

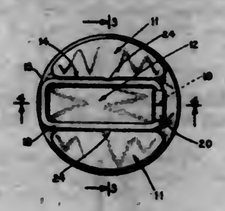
1,894,146. SCORE CARD HOLDER OR WRITING TABLET. JOHN S. BAKER, New Orleans, La. Filed Apr. 30, 1931. Serial No. 534,096. 5 Claims. (Cl. 45—82.)



1. The combination of a tablet or platform, a pintle at a right angle to the plane of the tablet, a bracket provided with a socket in which said pintle is mounted and having a V-shaped radial groove at its upper end, and a projection on the pintle and movable with the pintle, said projection resting in said groove when the tablet is in its operating position.

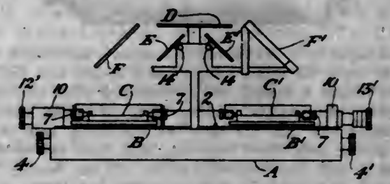
4. A device of the character described, comprising a tray having an opening in its bottom, a tubular member mounted in said opening, said tubular member having its upper end open and projecting above the bottom of said tray and its lower end closed and depending from the tray, a plate projecting laterally from said tray in a plane at a right angle to the axis of said tubular member and supporting means on which said tray is rotatable on an axis coaxial with said tubular member.

1,894,147. FLASH LIGHT BOTTOM CAP. GEORGE H. BARBER, New Rochelle, N. Y., assignor to Bond Electric Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Dec. 20, 1928. Serial No. 327,217. 3 Claims. (Cl. 240—10.66.)



1. A flashlight bottom cap having a bottom surface formed with a rectilinear single wide groove with substantially straight sides extending diametrically through the bottom surface of the end of the cap without obstructions, and a hanger substantially as wide as the groove pivoted within the groove and lying below the bottom surface.

1,894,148. TOPOGRAPHICAL STEREOSCOPE. ARCHIBALD BARR, Anniesland, Glasgow, Scotland, assignor to Barr and Stroud, Limited, Glasgow, Scotland. Filed June 2, 1930, Serial No. 458,956, and in Great Britain June 14, 1929. 4 Claims. (Cl. 33—1.)



1. A topographical stereoscope comprising a base plate, two tables on the base plate each rotatable in its own plane, two grid plates, one for each table, means for connecting the grid plates to the base plate, means for moving said grid plates longitudinally equally and simultaneously and longitudinally relative to one another, and reflector elements for viewing stereoscopically photographs on the tables.

1,894,149. PROCESS FOR CONSERVING GRANULAR MATERIALS. FRIEDRICH BARTLING, Hugling, Germany. Filed July 14, 1930, Serial No. 467,981, and in Germany July 19, 1929. 10 Claims. (Cl. 23—243.)

1. The process of preserving non-stable solid material which comprises treating the said non-stable solid material with ammonium chloride in the form of a vapor in such a manner that the said ammonium chloride is deposited on the said non-stable solid material in the form of a coating.

1,894,150. THERMOSTAT SWITCH. JOHN B. BEERS, Bloomfield, N. J. Filed July 25, 1932. Serial No. 624,570. 3 Claims. (Cl. 200—138.)

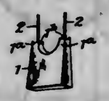
1. In a thermostat switch, a base of insulating material, a tubular casing of thin glass closed at one end

and having an open end secured to the base, two switch members secured to the base and extending into said casing, one of said members being relatively short and the other member being relatively long, the latter member



comprising a U-shaped bi-metallic strip extending close to the casing outward from the base and thence inward toward the base, its free end adapted to engage said shorter member.

1,894,151. SPRUE WIRE. JOHN P. BELL, Baltimore, Md. Filed Aug. 9, 1932. Serial No. 628,102. 6 Claims. (Cl. 22—1.)



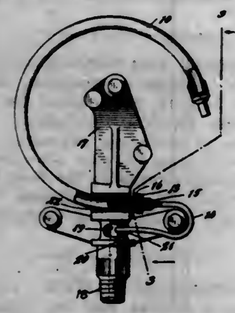
1. A dental sprue, comprising a base tapering in thickness towards one end; and a thin flexible sprue wire mounted in the smaller end of said base.

1,894,152. COLLAPSIBLE TUBE DISPENSING MEANS. CHARLES BOLZ, Pleasant Grove, N. J. Original application filed Mar. 27, 1931, Serial No. 525,807. Divided and this application filed June 3, 1932. Serial No. 615,201. 1 Claim. (Cl. 221—60.)



A collapsible tube having its open end folded upon itself to close the same, and the said folded and flattened portion having a central ear extension, a cross sectionally U-shaped compressible sealing strip arranged over the said folded end and the said ear extension, said sealing strip having indentures entering said tube and said ear extension, and the central portion of the sealing strip and said ear designed to be engaged by a winding key.

1,894,153. PRESSURE GAUGE. ADAIAN P. BRIETZKE, Toledo, Ohio, assignor to Moto Meter Gauge & Equipment Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Dec. 16, 1930. Serial No. 502,779. 8 Claims. (Cl. 73—109.)

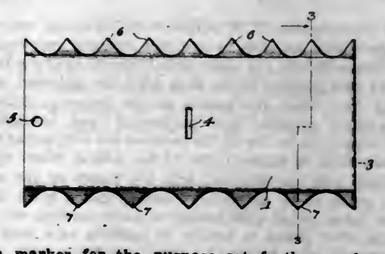


8. A device of the character described, comprising in combination, a support having a passage therein and an opening through the wall of the support communicating with said passage, a recess in said support adjacent said passage, a heat treated assembly comprising a Bourdon tube and a capillary, said capillary being connected to said opening by welding and an end portion of said Bourdon tube being disposed in said recess, the capillary being of sufficient length to permit welding to the support without the welding process annealing the Bourdon tube.

1,894,154. PROCESS OF CLEANING WOOL AND OTHER ALLIED FIBERS. RUSSELL L. BROWN, Lowell, Mass., assignor, by mesne assignments, to Fitger California Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 15, 1932. Serial No. 633,378. 5 Claims. (Cl. 19—66.)

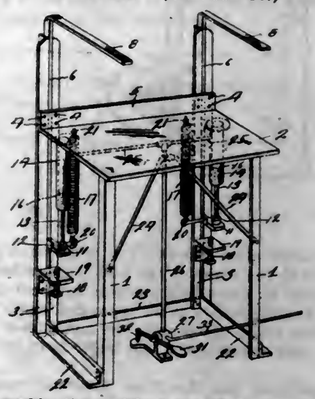
1. The herein described process of cleaning unwashed fleece and pulled wools and other allied animal fibers, containing extraneous foreign matters and substantially all the natural grease as derived from the animal, consisting in subjecting such wools and other allied fibers to a low temperature which will congeal the grease on the wools or fibers, and then cleaning the wools or fibers by mechanical means while at the low temperature.

1,894,155. MARKER. ROY BUATON, Salem, Oreg. Filed Oct. 18, 1930. Serial No. 489,688. 1 Claim. (Cl. 33—44.)



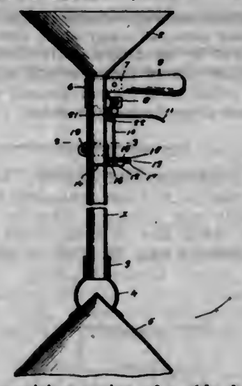
In a marker for the purpose set forth, an elongated, flat, thin, one-piece body part provided at one end with a right angularly disposed flange and intermediate its ends with an opening, said opening disposed centrally of said body part, said body part further having each side edge thereof provided with a laterally extending set of equally spaced, integral tapered projections providing marking points.

1,894,156. PACKING BOX PRESS. JAMES AUGUSTUS BYINGTON, Orlando, Fla. Filed Mar. 4, 1930. Serial No. 433,148. 2 Claims. (Cl. 100—57.)



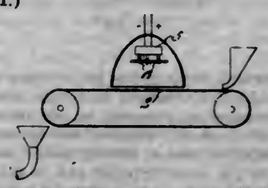
2. The combination with a packing case lid holder comprising clamping arms movable towards and away from a table, of separate air controlled expansible means for moving said arms towards the table, means for moving said arms away from the table, means for simultaneously supplying air to the extensible air controlled means from a single source of power for moving the arms under equal pressure against the action of the means for moving the arms away from the table and means for simultaneously releasing air from the separate extensible air controlled means after a lid clamping operation for allowing the arms to move away from the table.

1,894,157. SIDE DRESSING MACHINE. CHARLES D. CAMPBELL, Springdale, Ark. Filed June 27, 1931. Serial No. 547,428. 3 Claims. (Cl. 221—119.)



1. A control comprising a pipe of a side dressing machine for conveying fertilizer between a hopper and a deflector and provided with a slot, a collar secured to the pipe a plate on said collar and extending at right-angles thereto and to the pipe, guide means on the plate, a valve element slidable in the pipe by way of the slot and having an offset portion slidably received by the guide means, and a control lever pivoted to the pipe and connected to the valve element.

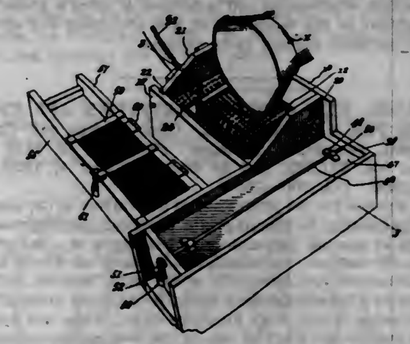
1,894,158. TREATMENT OF ALIMENTARY PRODUCTS. NEWCOMB K. CHANEY, Lakewood, Ohio, assignor to National Carbon Co., Inc., a Corporation of New York. Filed Mar. 13, 1928. Serial No. 261,388. 2 Claims. (Cl. 99—11.)



1. In the process of imparting antirachitic properties to protein-containing ozone-sensitive food stuffs while avoiding the development therein of objectionable flavor and taste by irradiating the same with ultra-violet rays, the step which consists in subjecting said food stuffs to irradiation from an arc for a sufficient period to fully effect antirachitic activation thereof, said arc being formed between carbon electrodes having an addition material therein whereby the energy emitted will have a high portion of wave lengths between 200 and 300 millimicrons and a negligible proportion of wave lengths shorter than 200 millimicrons.

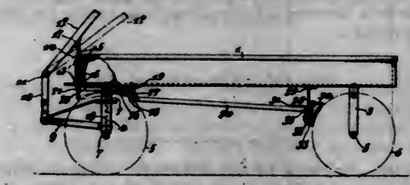
1,894,159. APPARATUS FOR THE RECOVERY OF GOLD. ALLAN J. CLARK and WARREN H. TODD, Lead, S. Dak. Filed Jan. 2, 1932. Serial No. 584,500. 4 Claims. (Cl. 209—42.)

1. In apparatus for the recovery of gold, a pulp box, a mill discharge to the pulp box, a perforated guard screen permanently mounted in said box, a removable end wall for said box, an amalgamated tray movable through the end wall and situated below said guard screen, a chip



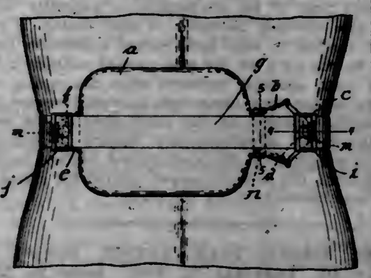
screen removably mounted above the tray and beneath the discharge, a supply of water to said tray, and launders connecting with said tray.

1,894,160. BRAKE MECHANISM CONTROLLED BY STEERING MEANS. HARRY O. CLARK, Philadelphia, Pa. Filed Sept. 15, 1931. Serial No. 562,946. 6 Claims. (Cl. 188—20.)



1. In a brake mechanism, the combination with a wagon having a steering mechanism including a steering beam, said wagon having a body and provided with supporting front steering and rear wheels, of a brake beam having brake shoes for co-operation with the peripheries of the rear wheels, and a brake bar or each having its rear end connected to the brake beam, a guide on the forward end of the wagon body, upper and lower plungers mounted in the guide, the former being operatively connected to the steering beam, and means operatively connecting the latter and the forward end of the brake bar or reach, whereby upon depressing the steering beam and moving the upper plunger in contact with the lower plunger the brake bar or reach operates to move the brake beam and apply the brake shoes.

1,894,161. HOT WATER BOTTLE ATTACHMENT. JOHN B. CRAPO, Wakefield, N. H. Filed Oct. 14, 1931. Serial No. 568,739. 1 Claim. (Cl. 128—258.)



A device of the kind described comprising a flexible elongated heat-transfer receptacle with extensions at the ends thereof, a flexible belt extending lengthwise over the body

of said receptacle, and securing devices engaging the receptacle extensions detachably and the belt adjustably, for holding the receptacle in adjusted extension with respect to the belt, whereby the belt is adapted to press a greater or less extent of the receptacle at will uniformly and evenly upon the body surface to be treated.

1,894,162. NEW CHOLINE DERIVATIVE AND PROCESS FOR MAKING SAME. OTTO DALMER and CLAUS DIEHL, Darmstadt, Germany. Filed Apr. 18, 1931, Serial No. 531,252, and in Germany May 8, 1930. 4 Claims. (Cl. 260—106.)

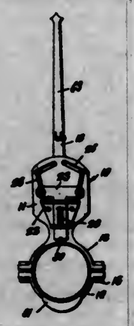
1. Process for the production of derivatives of the choline type consisting in bringing into chemical combination by means of heating equi-molecular quantities of a saturated aliphatic halogen compound, the halogen of which is of the character and reactivity of the alkyl halides, with a saturated aliphatic tertiary base, the nitrogen atom of the latter being bound to an aliphatic chain, while one hydrogen atom of one alkyl of one of the two mentioned starting materials is substituted by the "carbaminoyloxy" radical

$$(NH_2C{=}O).$$
$$\quad\quad C-$$

3. As a new and useful product of therapeutic value the methochloride of carbamic acid-β-dimenthyl-aminoethyl-ester (trimethyl-, [(amino-formyl-)-β-oxy-ethyl]-ammonium-chloride) consisting of snow white crystalline powder which melts at 200° C., being easily soluble in water, therein showing a neutral reaction, having the following formula:—

$$NH_2{-}CO{-}OCH_2{-}CH_2{-}N(CH_3)(CH_3)Cl$$

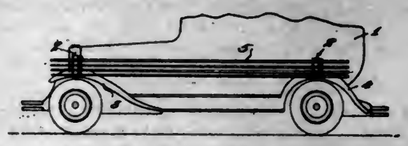
1,894,163. SIGNAL LIGHT SWITCH. CHARLES FRANCIS DAL PORTO, Vallejo, Calif. Filed May 7, 1930. Serial No. 450,534. 1 Claim. (Cl. 200—59.)



In a circuit closer, a casing adapted for connection with a steering post of an automobile, a manually operated switch arm movably mounted in said casing, a contact member carried by said arm, spaced stationary contacts located in the path of the arm carried contact, a spring resisted plate slidingly mounted upon the casing, centering arms having their inner ends pivotally secured to said plate, means engaged by the outer ends of the arms to move the latter simultaneously inward to engage the switch arm and move the arm carried contact to neutral position when the plate is moved against the action of its spring, and means to move the plate.

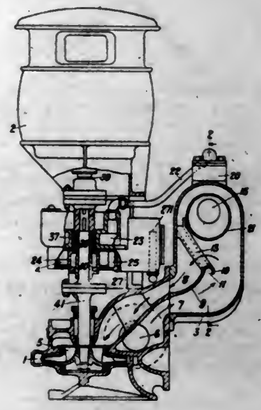
1,894,164. FISHING POLE CARRIER. ELVIN F. DOHT, Quincy, Ill. Filed Apr. 27, 1931. Serial No. 533,278. 1 Claim. (Cl. 224—29.)

A carrier for poles comprising vertically disposed channel shaped supporting members detachably secured to the fenders at one side of a vehicle and each having aligned notches in the side walls thereof to receive poles, shafts journalled to the side walls of the members adjacent the notches, hook shaped elements formed integrally with the shafts to engage over and force the poles against



the walls of the notches, tension means for each shaft including coiled portions mounted on the respective shafts and connected by an intermediate portion engaging the respective hook shaped elements and said coiled portions having the other ends thereof secured to the supporting members, and a handle on each shaft.

1,894,165. CENTRIFUGAL PUMP. JOHN WHITEHEAD WILSON DRYSDALE, Yoker, Glasgow, Scotland, assignor to Drysdale and Company, Limited, Yoker, Glasgow, Scotland. Filed Mar. 4, 1932, Serial No. 596,870, and in Great Britain Mar. 30, 1931. 4 Claims. (Cl. 103—113.)

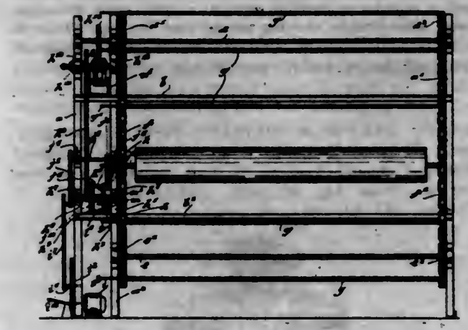


1. A centrifugal pump of the self-priming type comprising a water-impeller arranged to rotate about a vertical axis, an air-separating chamber, an air-exhauster for extracting the air from said chamber and mounted above the said water-impeller, and a driving motor mounted above and coupled to the water-impeller and to the exhauster, a passage in the form of a loop interposed between the main suction inlet and the eye of the water-impeller, said passage comprising ascending and descending branches, an inclined partition separating the two branches and forming at its top a weir which overhangs the ascending branch.

1,894,166. SUPPORT FOR ROLLED GOODS. HENRY ELLIOTT, Hillhead, Glasgow, Scotland. Filed May 31, 1930, Serial No. 458,392, and in Great Britain June 4, 1929. 10 Claims. (Cl. 211—121.)

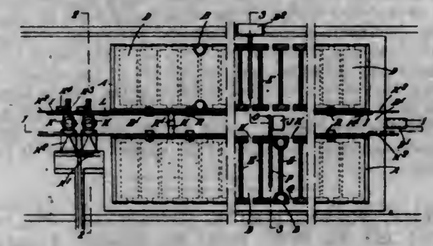
1. A machine for the purpose set forth comprising two endless parallel chains, an upper and a lower pair of sprocket wheels, each of said endless chains passing over an upper sprocket wheel and under the lower corresponding sprocket wheel, a series of horizontally extending transverse shafts supported at the two ends thereof by the two chains, gearing to drive the chains with shafts carried thereby, means to rotate the shafts in their bearings,

means to secure an inner coil of a roll to the shafts and a loaded pawl or finger for each shaft, which pawl or finger when held in an inoperative position permits its



shaft to be rotated to unwind the roll thereon and when released instantaneously operates to prevent further unwinding of the roll.

1,894,167. KILN FOR THE HEAT TREATMENT OF MATERIALS. HENRY CHARLES ERITH, Sutton, and RAYMOND CHARLES ERITH, London County, England. Filed July 7, 1931, Serial No. 549,236, and in Great Britain Mar. 26, 1931. 5 Claims. (Cl. 25—2.)



1. A continuous kiln having in combination a multiplicity of kiln chambers disposed contiguous to one another on opposite sides of a central corridor, a portable press, transporting means located above the floor level of the corridor for raising, lowering and transporting the press to any desired point in the corridor, an endless band conveyor extending longitudinally through the central corridor, grinding means situated at the front of the conveyor, said endless band conveyor being adapted to receive raw materials from the grinding mills and to feed the same into the press at any point in the central corridor.

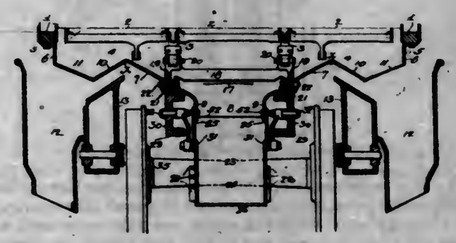
1,894,168. PROCESS OF MODIFYING THE CHARACTERISTICS OF PIGMENTS, AND PRODUCT. HENRY A. GARDNER, Washington, D. C. Filed Jan. 22, 1931. Serial No. 510,585. 6 Claims. (Cl. 134—58.)

1. Process which comprises coating the surfaces of particles of a pigment with a film-coating of beta-eleostearin.

1,894,169. PROCESS FOR SOFT COATING METALS TO BE SUBMITTED TO COLD DEFORMATIONS. FRANCESCO GIANNI, Milan, Italy, assignor of one-half to Alessandro Salvi, Milan, Italy. Filed July 14, 1931. Serial No. 550,818, and in Italy Feb. 14, 1931. 4 Claims. (Cl. 205—21.)

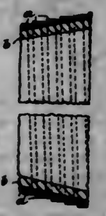
1. A process for mechanically working pieces of iron to change their form, comprising covering with a thin film of mercury the surface of the starting pieces to be worked into a different form, chemically depositing on said film of mercury a thin continuous and tenacious layer of lead, mechanically working the coated starting pieces into its changed finished form, and then heating moderately said pieces so as to volatilize the mercury and by a pickle operation eliminate totally the external continuous layer of lead covering the finished pieces.

1,894,170. ASH PAN FOR LOCOMOTIVES. HARRY GLAENZER, Philadelphia, Pa. Filed Dec. 14, 1931. Serial No. 581,029. 12 Claims. (Cl. 110—166.)



1. The combination in a locomotive fire box, of an ash pan located under the fire box, said ash pan having a central hopper and side inclined surfaces, and having side openings at the outer edges of said inclined surfaces whereby the ashes from the outer end sections of the side grates will be directed through the openings.

1,894,171. VENEERING. JOSHUA GREEN, Dalston, London, England, assignor, by direct and mesne assignments, to Malenite Industries Limited, London, England. Filed Nov. 8, 1928, Serial No. 317,959, and in Great Britain Nov. 8, 1927. 19 Claims. (Cl. 144—309.)

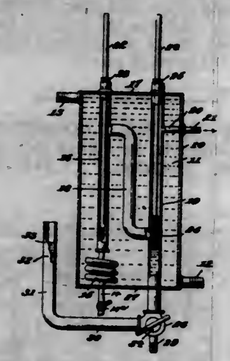


1. A method of producing veneered structures having an imitation inlaid effect, which comprises building upon a face of a foundation layer a composite veneer surface formed of two separate layers of wood, cutting one of said layers to form a series of strips, inserting the other layer between the alternate strips of said cut layer, securing said layers together, subjecting the whole structure to pressure so as to press the strips into and deform the intermediate layer and then cutting away one series of said strips and the intervening portions of the intermediate layer.

1,894,172. APPARATUS FOR DETERMINING THE MOISTURE CONTENT OF GASES. ROBERT G. GUTHRIE and OSCAR J. WILSON, Chicago, Ill., assignors to Peoples Gas By-Products Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 12, 1930. Serial No. 495,274. 5 Claims. (Cl. 73—24.)

1. In a moisture determining apparatus for gases, a conduit for the gas, dry and wet bulb thermometers extending into said conduit, said conduit having a depending branch for containing a water supply for the wet thermometer, conduit means extending from said portion to the exterior and including an upwardly bent end constituting

a gage, a branch for supplying water, and a shut off valve for selectively closing communication between said portion, said supply branch and said gage.



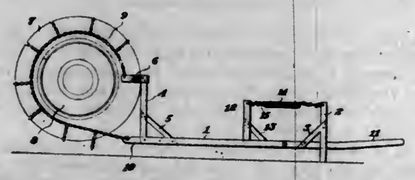
4. In a moisture determining apparatus for gases, the combination of a pair of vertically disposed tubes, means to admit gas into the lower end of one tube, a conduit to pass gas from the upper end of said first tube to the lower end of said other tube, a gas inlet at the lower end of said first tube, a gas outlet at the end of said second tube, dry and wet bulb thermometers each located in one of said tubes, and a casing providing a water jacket around said tubes.

1,894,173. REAR MOTOR VEHICLE SIGNAL. JOHN R. HAINES, Vincentown, N. J., assignor to Arrow Safety Device Company, Inc., Mount Holly, N. J., a Corporation of New Jersey. Filed May 3, 1930. Serial No. 449,621. 4 Claims. (Cl. 177—329.)



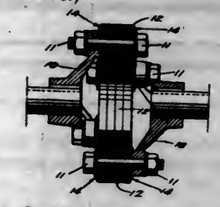
1. A signal casing of compartmental form comprising a shell, and a partitioning member disposed within the shell, the partitioning member being formed from sheet metal slit on parallel lines and from opposite ends, those portions on opposite sides of the slits being bent into parallelism and those portions between the slits being likewise bent into parallelism to occupy planes at right angles to the plane of the first said portions to define a center compartment, those portions of the blank extending beyond the second said portions being bent to engage the top and bottom walls of the shell and to define with the latter a series of compartments in surrounding relation to the center compartment.

1,894,174. AUTOMOBILE BRAKE TESTER. JOHN H. HARTH, Mendota, Ill. Filed June 20, 1931. Serial No. 545,804. 1 Claim. (Cl. 265—1.)



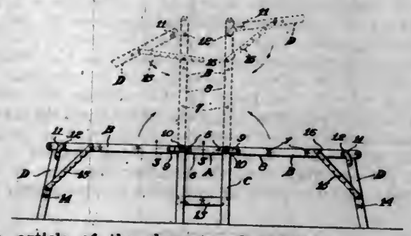
A brake tester comprising a bar, an extension on one end of said bar and disposed angularly thereto, a flexible element secured to said end of the bar and to the end of the extension and encircling the tire of an elevated wheel having the brake thereof applied, a lever pivoted to said bar, a supporting leg on the other end of the bar and extending angularly thereto, an arm on the lever and extending angularly thereto, and a weight scale attached to said arm and to the leg to indicate the resistance of the brake against the turning of the wheel during manual pivoting of the lever relative to the bar.

1,894,175. FLEXIBLE COUPLING DISK. JAMES RUSSELL HEMEON, Trenton, N. J., assignor to Thermoid Rubber Company, Trenton, N. J., a Corporation of New Jersey. Filed Aug. 26, 1931. Serial No. 559,551. 5 Claims. (Cl. 64—96.)



1. A disk for flexible couplings comprising a flexible body of compressible material having a bolt hole for the passage of a bolt employed in connecting the disk with the coupling, the disk having in at least one face thereof about said bolt hole a socket for the reception of a washer adapted to surround said bolt and including a body portion and a rib projecting from said body portion, said socket including areas of minor depth for the reception of the body portion of the washer and areas of major depth for the reception of said rib, the areas of major depth exceeding in depth the areas of minor depth by a distance less than the depth of the rib of the washer to be employed therewith those portions of the disk in alignment with the sockets having a compression factor exceeding the compression factor of the body of the disk proportionately to the depth of the aligned portion of the socket.

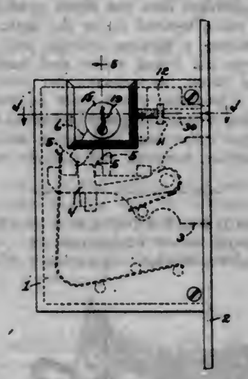
1,894,176. FOLDABLE RACK. JACOB HIRSCH, Erie, Pa. Filed Jan. 23, 1932. Serial No. 588,462. 1 Claim. (Cl. 211—178.)



An article of the character described comprising an intermediate section, outer sections detachably and adjustably connected with the intermediate section to permit the swinging of said outer sections vertically or horizontally, props supporting the intermediate section, adjustable props supporting the outer sections when horizontally disposed and functioning as clothes racks when the outer sections are vertically disposed, and rack keepers carried by the last mentioned props and adjustably engageable with the outer section.

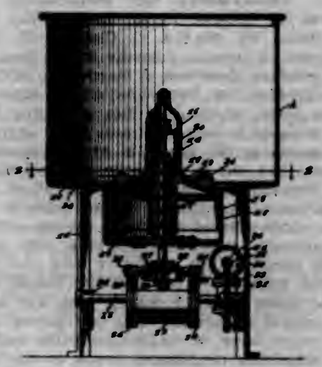
1,894,177. SAFETY LOCK. CHARLES H. JOHNSTON, Steubenville, Ohio. Filed July 11, 1928. Serial No. 291,765. 1 Claim. (Cl. 70—46.)

The combination in a lock, of a lock case having substantially rectangular openings in the opposed sides thereof, one wall of each opening having ratchet teeth, with the teeth on the wall of one opening being reversely disposed with regard to the teeth of the other opening, a cylinder lock for operating the bolt of said lock, said cylinder including a tumbler case received by one of said openings for lateral sliding movement therein, ratchet teeth formed on the opposed sides of said case, a ratchet block positioned in the other of said openings for lateral sliding movement, and having reversely disposed ratchet teeth formed on the opposed edges thereof, the teeth on one edge of said block and the corresponding side of said



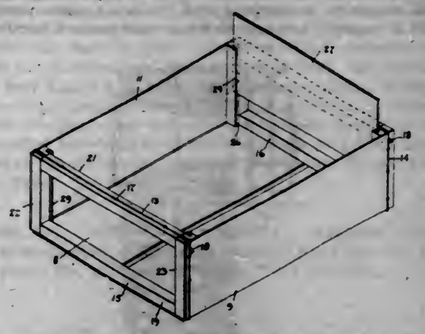
tumbler case being adapted to engage the teeth of said openings, a second ratchet block slidable within the lock case and having one side formed with spaced series of oppositely disposed ratchet teeth, adapted to engage the teeth on the opposite side of the first mentioned block and the adjacent side of the tumbler case, a notched lug projecting within the case, and a bolt having threaded connection with the second mentioned block, and journaled in said lug, and operable to move the second mentioned block into effective engagement with the first mentioned block and the teeth of said tumbler case.

1,894,178. WASHING MACHINE. SARA M. KITTS, Lima, Ohio. Filed Sept. 8, 1931. Serial No. 561,744. 1 Claim. (Cl. 259—144.)



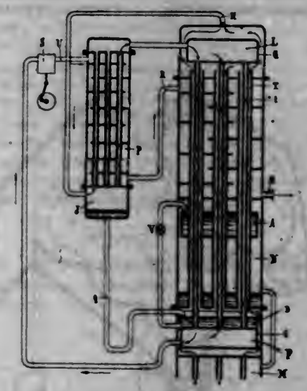
In a washing machine, an agitator having a central vertical hollow column, a post stationarily mounted and aligned with said column and having an external female spiral, a shaft journaled in said post and connected with the column of said agitator, a male spiral connected with the shaft and telescopically fitted with the female spiral, eccentrically operated means having connection with the shaft to impart movement thereto, means forming a swiveled union between the last named means and said shaft, and an enclosure for said spirals secured to the post and fitted in the vertical column of the agitator.

1,894,179. CRATE. JOHN P. KUBBS, Cleveland, Ohio. Filed June 22, 1932. Serial No. 618,712. 6 Claims. (Cl. 217—12.)



1. A crate comprising a bottom, side walls, cleats forming open end frames and having vertical grooves therein, wires for binding the foregoing elements into box form and end panels adapted to be slid into said grooves after said crate has been bound into shape by said wires.

1,894,180. SEPARATION OF GASEOUS MIXTURES BY LIQUEFACTION. HENRI LANTZ, Paris, France, assignor to l'Air Liquide, Societe Anonyme pour l'Etude & l'Exploitation des Procedes Georges Claude, Paris, France. Filed Dec. 4, 1929, Serial No. 411,648, and in France Dec. 18, 1928. 8 Claims. (Cl. 183—115.)

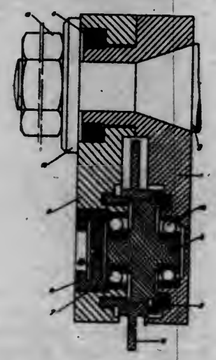


1. A method of separating the constituents of gaseous mixtures by partial liquefaction under pressure and expansion of the compressed stripped gas, which comprises preliminarily cooling and partially liquefying the incoming mixture by circulating it in indirect contact with both the compressed and the expanded gases at the same time, and finally cooling the incoming mixture by circulating it in indirect contact with the expanded stripped gas alone.

1,894,181. TOOL AND APPARATUS FOR LEVELING CYLINDRICAL SURFACES FROM GRINDING DISKS. ALFRED LEBERT, Dusseldorf, Germany. Filed Oct. 1, 1931, Serial No. 566,384, and in Germany Oct. 1, 1930. 4 Claims. (Cl. 125—37.)

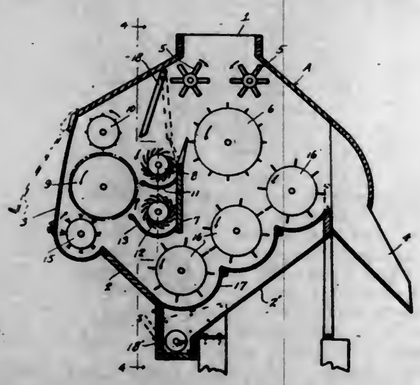
1. Apparatus of the class described, comprising a machine shaft, a pair of members one having an opening for the reception of said machine shaft and also having an annular flange extending from its inner side and around the said shaft and the other having an opening to receive said flange and means to clamp said members securely together, a second shaft arranged eccentrically of the ma-

chine shaft and mounted for rotation in bearings with which said members are provided, said second shaft having an enlarged portion tapered in one direction between said members, a swaying disk having a nave provided with a tapered bore and fitted on said tapered portion of



said second shaft, said swaying disk being arranged between and carried by said members, means to secure the swaying disk on the enlarged and tapered portion of said second shaft and means to secure and adjust the bearings in the members.

1,894,182. COTTON CLEANING DEVICE FOR COTTON GINS. JOHN J. LESIKAR, Temple, Tex. Filed July 6, 1931. Serial No. 549,056. 1 Claim. (Cl. 19—37.)



A cotton cleaning apparatus comprising a casing having an inlet at its top at substantially the middle thereof and a door covered opening at one side of the casing and a chute opening at the opposite side, a transverse partition in the casing spaced from the bottom and top portions thereof and in substantial alinement with that wall of the inlet opening closest to the door covered opening, a door section pivoted to the upper edge of the partition, a door section pivoted at its upper edge to the top part of the casing, said door section when in closed position closing the space above the partition, a pair of feeding rollers for receiving the cotton passing through the inlet, a main picker roller located under the feeding rollers for receiving the cotton from the feeding rollers, and located slightly to one side of said partition and rotated in a direction to throw the cotton received from the feeding rollers over the lower door section, upper and lower spiral picker rollers rotating in opposite directions and receiving the material from the main picker roller and located adjacent the door side of the partition, a trough for each of the spiral rollers and attached to the partition, an end of the casing having a discharge opening therein through which the material from the lower spiral roller passes, a saw roller located between the door and the spiral rollers and against which the spiral rollers move the cotton, a stripper roller located above the saw for throwing burrs and other foreign matter from the cotton on the saw back upon the upper spiral roller, a brush roller located below the saw, a diagonal row of cleaning drums in the casing, the lower one of which is located in the space below the partition, and the upper one of which delivers into the chute opening, the center one of which being located under the main picker roller, said casing having a sloping bottom part for receiving the cotton from the brush roller and leading it to the lower cleaning drum, and means for moving the door sections from a position where their adjacent edges contact to a position where the lower section is tilted towards the main picker roller and the upper section is moved to a tilted position towards the stripper roller.

1,894,183. HOLD FAST SHOE LACE FASTENER. JOHN HENRY LINDNER, South Pittsburgh, Pa. Filed Sept. 19, 1932. Serial No. 633,902. 2 Claims. (Cl. 24—122.)



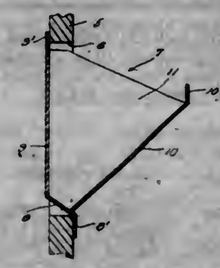
2. A fastener comprising a substantially rectangular shaped frame constructed from a single length of material, said material being extended at right angles to one side of the frame and then bent to form tension arms, said material of the arms being bent to form spaced coiled portions on each of said arms, said coiled portions adapted to receive and grip one side of the frame.

1,894,184. TREATMENT OF DOLOMITIC STONE. CHAUNCEY C. LOOMIS, Lenox, Mass. Filed Nov. 10, 1930. Serial No. 494,814. 1 Claim. (Cl. 23—201.)

The process of treating dolomite in the form of large lumps to produce therefrom a magnesium oxide-calcium carbonate product free from objectionably large amounts of calcium oxide, which comprises subjecting the large lumps of dolomite to heat treatment in an ordinary lime kiln but operating the lime kiln at a somewhat lower temperature than one is ordinarily operated thereby effecting a decomposition of substantially all of the magnesium carbonate constituent of the dolomite to form magnesium oxide without effecting a decomposition of the calcium carbonate constituent except a very small percent which occurs in the form of a very thin layer on the exterior surfaces of the dolomite lumps, removing the treated lumbs from the heating zone, and separating the inner core of magnesium oxide and calcium carbonate from the outer layer of magnesium oxide and calcium oxide by subjecting the treated lumps to the action of a water spray to thereby slake and wash off the calcium oxide containing layer, said calcium oxide containing layer being of such physical and chemical nature as to readily permit its removal by means of water.

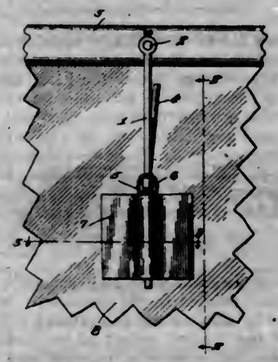
1,894,185. FILING RACK. FRED M. MARTIN, Beatrice, Nebr. Filed Apr. 23, 1930, Serial No. 446,635. Renewed May 9, 1932. 2 Claims. (Cl. 211—88.)

2. A device of the character described comprising in combination a receptacle comprising a bottom wall, front and rear walls rising therefrom, and side walls connecting said front and rear walls, said front and rear walls having their upper ends projecting beyond the corresponding ends of said side walls to provide stop flanges, said rear wall rising from said bottom wall at substan-



tially right angles to the bottom wall, and said front wall rising from said bottom wall at substantially an obtuse angle to said bottom wall, and said bottom wall rearwardly of said rear wall provided with a depending stop flange extending in a plane substantially parallel to the plane of said front wall.

1,894,186. WINDSHIELD WIPER. CLARENCE O. McCORD, Cresco, Iowa. Filed May 18, 1931. Serial No. 538,294. 1 Claim. (Cl. 15—255.)



In combination with an arm having a wiper attached thereto, a windshield cleaner attachment comprising a cylinder adapted to slip over the lower portion of the wiper and circumscribe the same, and a plate applied to the cylinder and having angularly disposed side portions with edges adapted to bear against the exterior surface of the windshield and flexible elements attached to the cylinder for tying the same to the arm.

1,894,187. ELECTRICAL SWIVEL CONNECTION. MILDRED McGREGOR, Fernwood, Idaho, assignor of one-half to Harold Kabellek, Fernwood, Idaho. Filed Apr. 18, 1931. Serial No. 531,168. 3 Claims. (Cl. 173—324.)



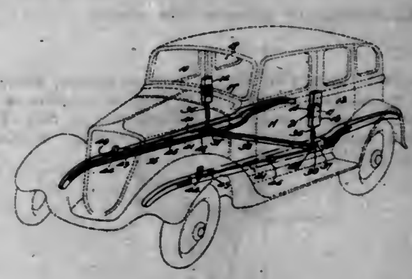
1. In a device as described, the combination with a housing having a bearing ring therein, of a rotatable swivel-head and means for retaining it within the housing; a non-conducting bearing ring, bearing balls between the two rings, and a pair of terminal arms on said ring, an open center conducting cup-disk rigid with one of the arms and the other arm having an end terminating adjacent the open center of the cup-disk; a non-rotatable connector-head and a conducting pin rigid with said head and journaled in said arm-end, a pair of retaining-conductor-blades on the connector-head one of which is electrically connected with the pin, a contact point electrically connected with the other blade and frictionally engaging said disk-cup, and means for connecting electrical conductors to said terminal arms.

1,894,188. TONSORIAL DEVICE. ALFONSO FLORES MIRAFUENTES, Guadalupe, Mexico. Filed May 17, 1930. Serial No. 453,334. 8 Claims. (Cl. 30—12.)



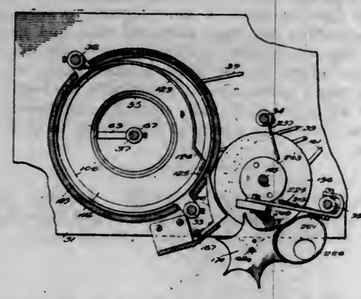
1. In a tonsorial device, a comb member having a plane surfaced face provided with threaded recesses therein and having one plane edge and comb teeth projecting from the other edge thereof, a handle member having a smooth face engaging said plane surfaced face and having slots therethrough, said smooth face being provided with a toothed edge, a double edged razor blade secured to said handle member, one cutting edge of said razor blade crossing the line of teeth on the toothed edge of the handle member and the other cutting edge projecting beyond the opposite edge of the handle member and crossing the line of teeth projecting from the comb member, and fastening screws passing through the slots of the handle member and engaging the comb member, the screws being movable in said slots whereby the toothed edge of the handle member may be extended beyond the plane edge of the comb member and whereby one of the cutting edges may be adjusted with respect to the comb teeth.

1,894,189. AUTOMOBILE LOCKING MEANS. GUSTAV M. MORTENSON, Kane, Pa. Filed Feb. 29, 1932. Serial No. 595,888. 2 Claims. (Cl. 292—6.)



1. In a closed automobile, vertical latch-operating rods, horizontal latch-operating rods, and a single angle metal bar extending transversely between the chassis frame side bars of the automobile and having integral trunnions mounted in openings in said side bars, said angle metal bar having both vertical and horizontal flanges formed with openings, said vertical rods being provided with integral eyes having pivotal engagement with the openings of said horizontal flange, said horizontal rods having integral eyes in pivotal engagement with the openings of said vertical flange.

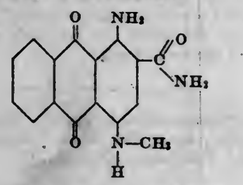
1,894,190. COIN ASSORTING AND COUNTING MACHINE. HERBERT B. MYERS, Little Rock, Ark. Filed Dec. 5, 1930. Serial No. 500,370. 11 Claims. (Cl. 133—3.)



1. Coin handling apparatus comprising a flat rotatable disc, means for rotating said disc, means for delivering coins to said disc, a stationary support, a retaining ring secured thereto and disposed over said disc in concentric relation thereto, said disc being formed with an annular groove receiving the bottom of said ring, said ring having a coin discharge port provided in its bottom portion, means on said ring for directing coins through said port, and means for adjusting the position of said ring axially of said disc.

1,894,191. DYESTUFF OF THE ANTHRAQUINONE SERIES. PAUL NAWIASKY and ARTUR KRAUSE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1932, Serial No. 606,067, and in Germany Dec. 16, 1929. 1 Claim. (Cl. 260—60.)

1. The dyestuff suitable for dyeing cellulose esters and ethers corresponding to the formula:



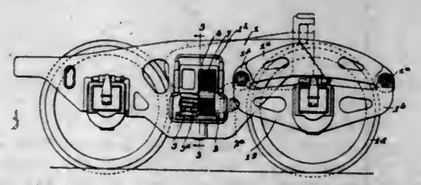
dyeing acetate silk greenish blue shades.

1,894,192. LANDING NET. WILLIAM OLSON, Brooklyn, N. Y., assignor to Olson Bros. Saw Manufacturing Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed June 2, 1931. Serial No. 541,642. 9 Claims. (Cl. 43—12.)



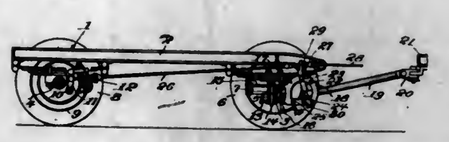
1. In a landing net, a handle having an enlarged head at its inner end, a net frame, a slidable connection therebetween to permit of relative movement thereof respectively to retracted or extended relations and integral portions of the net frame operable to frictionally grip the head at the inner end of the handle when the frame and handle are in extended relation.

1,894,193. SPRING ARRANGEMENT FOR CAR TRUCKS. CLAUDE L. ORR, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Sept. 25, 1930. Serial No. 484,428. 4 Claims. (Cl. 105—197.)



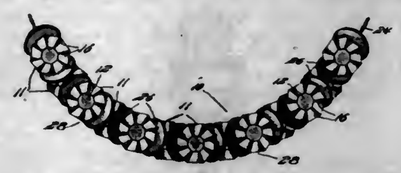
1. A car truck including a side frame member, a helical spring and an elliptical spring supported by said member and arranged side by side, and a transverse bolster resting on said springs, said elliptical spring being positioned in alignment with said bolster and at one side of the longitudinal vertical center of the bolster, and the helical spring being arranged at the opposite side of said center.

1,894,194. COMBINED STEERING HITCH AND AUTOMATIC BRAKE. ELMER OVERMON, Sperry, Okla. Filed Jan. 18, 1932. Serial No. 587,384. 2 Claims. (Cl. 280—33.44.)



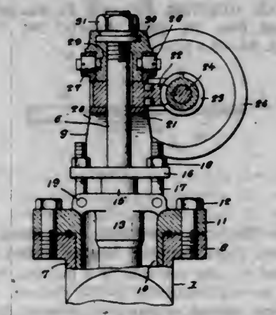
1. A combined steering hitch and automatic brake comprising a bracket pivoted to the front axle of a trailer, an arm carried by said bracket and pivoted to the steering mechanism of the trailer, spaced plates carried by said bracket, a draft tongue received between said plates and connected to a towing vehicle, a lever pivoted between said plates and pivoted to the tongue in a plane below the pivot between the plates and the lever, spaced stops carried by the plates to limit the pivotal movement of the lever, a brake mechanism of the trailer slidably connected to the upper end of the lever, and an element adjustable on the brake mechanism to engage the lever for causing operation of the brake mechanism during the pivotal movement of the lever in one direction.

1,894,195. ORNAMENTAL BEAD CHAIN. HAROLD L. PULVER, North Attleboro, Mass. Filed Apr. 26, 1932. Serial No. 607,568. 6 Claims. (Cl. 63—28.)



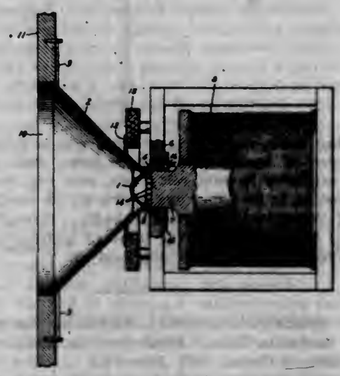
1. A bead chain comprising beads having flat tops and bottoms and flat polygonal facet portions extending upwards from the median line thereof and similar complementary polygonal facet portions extending downwardly from the median line thereof and string holes extending diametrically thereof below the median line thereof, arranged in a line so that alternate beads will face upwardly and downwardly respectively, disc shaped members having a substantially central hole herein abutting opposed flat facet portions of alternate beads and being alternately obliquely inclined relative to said beads and string means extending through said disc holes and bead holes to string them together.

1,894,196. PLUG VALVE. ISAAC N. REED and FRANCIS T. REED, Shreveport, La. Filed Apr. 29, 1931. Serial No. 533,765. 1 Claim. (Cl. 251—97.)



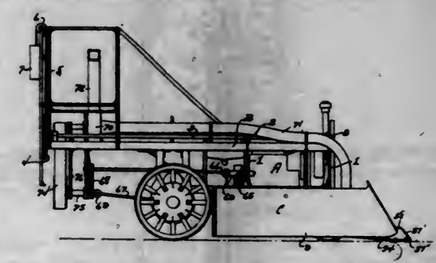
A valve comprising an open body having ports, a tapered seat in the body, a tapered valve member in the body engaging the seat for controlling the ports, a stem on the valve member and extending exteriorly of the body, a bonnet closing the body and receiving the stem, adjustable packing means between the bonnet and the stem, means carried by the bonnet to rotate the valve member in either direction, an adjusting member having a cam shaped groove slidably mounted in the bonnet and splined to the stem, pins on the bonnet and fitting in the groove to impart a sliding movement to the valve member during the rotation thereof, and means rotatably secured to the adjusting member and threaded to the stem whereby the valve member may be adjusted relative to the seat.

1,894,197. SOUND REPRODUCING APPARATUS. CHESTER W. RICE, Schenectady, N. Y., and EDWARD W. KELLOGG, Moorestown, N. J., assignors to General Electric Company, a Corporation of New York. Filed Aug. 21, 1931. Serial No. 558,598. 8 Claims. (Cl. 179—115.5.)



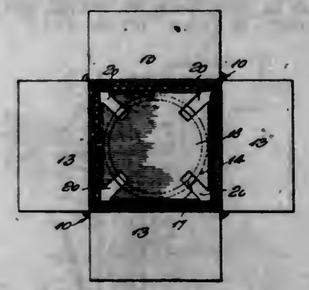
1. In an apparatus for sound reproduction, a diaphragm having the form of a truncated cone which is so rigid in comparison with its size and weight that when a driving force is applied thereto at its top all parts thereof will have substantially equal movement, means for suspending said diaphragm having so low a restoring force that its natural rate of vibration as a whole will be below the lowest important voice frequency, means for actuating said diaphragm comprising a pair of concentric pole pieces separated by an annular air gap, an actuating coil secured to the top of said diaphragm and located in said air gap, and means in addition to the suspending means for preventing lateral movement of said coil in said air gap.

1,894,198. COTTON PICKING MACHINE. JOHN D. RUST and MACK D. RUST, Newllano, La. Filed June 30, 1930. Serial No. 464,921. 14 Claims. (Cl. 56—14.)



1. In a cotton picking machine, a frame having a picking side and a stripping side, a vertically arranged endless spindle carrying member passing over said sides, means for moving said member, a plurality of rows of spindles rotatably carried by said member, rollers on the inner ends of said spindles, a plurality of horizontally arranged resilient rails on the picking side with which the spindle rollers will engage to cause rotary movement of the spindles, resilient rails on the stripping side arranged to impart rotary movement to the spindles in an opposite direction from that in which the spindles are rotated on the picking side, means for applying pressure to the cotton on the spindles as they are being rotated on the stripping side to loosen the cotton and means for stripping the cotton from the spindles after the loosening operation.

1,894,199. FROZEN CONFECTION PACKAGE. LOUIS K. SALSBURG, Wilkes-Barre, Pa. Filed Apr. 22, 1932. Serial No. 606,981. 1 Claim. (Cl. 62—91.5.)



A frozen-confection package comprising a carton closed at its top, bottom and sides, a confection container within said carton and spaced downwardly from the top thereof, the top of said container having an upstanding peripheral rib, an insulating partition resting removably upon said rib and by the latter supported above the major part of said container top to provide a pocket, said partition having gas conducting openings from its upper to its lower side, part of each opening extending inwardly from said rib and the remainder outwardly from said rib to place

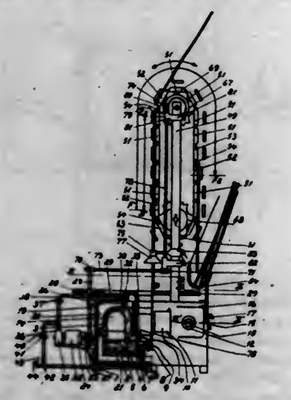
said pocket in circulatory communication with said carton, and a gas-forming refrigerant resting on said partition, said refrigerant and partition being freely removable when the carton is opened.

1,894,200. OSCILLATORY COMBINED WINDSHIELD HEATER AND WIPER DEVICE. EDWARD E. SAUCIER, Lowell, Mass., assignor of one-half to Donat Gervais, Lowell, Mass. Filed Mar. 20, 1931. Serial No. 524,178. 2 Claims. (Cl. 15—255.)



1. A combined windshield heater and wiper comprising, a pair of wiper elements, an electrical heater interposed between said elements and having spaced shoulders, a pair of spaced, resilient inner clamps of V-form having integral parts engaging with said shoulders for resiliently clamping the heater thereto, and a pair of outer V-clamps being secured centrally to said inner clamps and having their side portions opposing in spaced relation the side portions of the inner clamps, said elements arranged between said opposed side portions, and the side portions of the outer clamps having integral parts coacting with the side portions of the inner clamps for resiliently clamping said elements between the opposed side portions of said clamps.

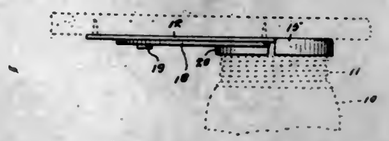
1,894,201. MACHINE FOR DRAWING GLASS TUBES OR RODS. ROBERT SALOMON, Neuilly sur Seine, France. Filed July 14, 1928, Serial No. 292,742, and in France July 20, 1927. 20 Claims. (Cl. 49—17.1.)



6. A machine for drawing glass tubes or rods comprising a crucible adapted to contain molten glass, an upwardly directed mandrel terminating above the bottom of said crucible to constitute the point from which the glass is drawn upwardly in the direction of said mandrel, an annular wall coaxially surrounding said mandrel a short distance therefrom, a cover for said crucible provided with a supply opening and a burner carried by said cover, at least one of the aforementioned elements being arranged for rotation relative to the other elements about the axis of said mandrel.

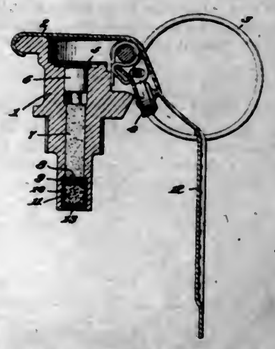
17. A method of drawing glass tubes and rods from a molten bath which consists in causing the glass to assume a state of symmetry about a vertical axis, and drawing the skin forming on the free surface of said bath radially towards and upwardly along the said vertical axis.

1,894,202. JAR OPENER. FRANK P. SMITH, Cordelia, Calif. Filed Feb. 28, 1931. Serial No. 519,126. 1 Claim. (Cl. 81—3.1.)



A device of the class described, comprising an eccentrically pivoted plate member having segmental means thereon adapted to grip one side of a jar top, and another plate member having segmental means thereon complementary to the first named means and pivoted for eccentric movement with respect thereto, the pivot points for the plates being oppositely located with reference to a center from which the curves represented by the complementary segmental means are struck.

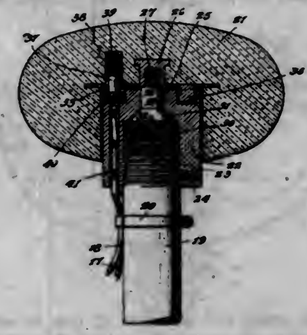
1,894,203. FIRING DEVICE. ALVA F. SPRING, Cleveland Heights, Ohio, assignor to The Lake Erie Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 28, 1932. Serial No. 635,257. 8 Claims. (Cl. 102—26.)



1. A firing head, comprising a firing pin, a primer, a fuse, a layer of igniting powder, a relay cup, and a charge of explosive in said relay cup, said cup provided with an opening in its upper end, and a match comprising a mass of compressed powder projecting through said opening and contacting with the layer of igniting powder and the charge of explosive within said cup.

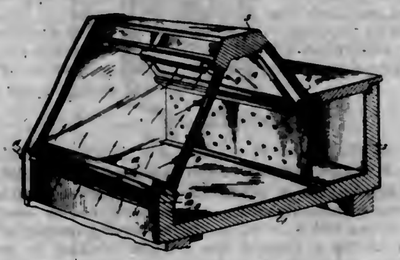
1,894,204. DIRECTION SIGNAL SWITCH. GEORGE H. STEELE, Nashville, Tenn. Filed Sept. 19, 1930. Serial No. 483,088. 1 Claim. (Cl. 200—11.)

For use with the gear shift lever of an automobile, a switch, said switch comprising a body part of insulation adapted to be fixed on the lever, and a top part mounted to rotate on the body part, the body part having spaced recesses in its upper end, stationary contacts in the ends of one recess, cushions in the ends of another recess, a plate embedded in the top part and electrically and mechanically connected with the body part, a lug depending



from the plate into the recess containing the cushions and normally held by the cushions midway the ends of said recess, and a contact carried by the plate to engage either of the first-mentioned contacts and normally disposed between and out of contact therewith.

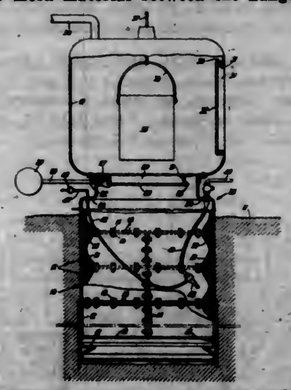
1,894,205. MEANS FOR PREVENTING FROSTING OR CONDENSATION OF MOISTURE ON GLASS OR OTHER SURFACES. FREDERICK J. STOLLSTEIMER, Trenton, N. J., assignor to C. V. Hill & Co., Inc., Trenton, N. J., a Corporation of New Jersey. Filed Apr. 23, 1931. Serial No. 532,308. 8 Claims. (Cl. 20—40.5.)



1. The combination with a transparent panel disposed in an upright position and having its opposite faces respectively exposed to varying inside and outside atmospheric temperatures, of means arranged adjacent to the lower edge of the outer surface of said panel or heating air and directing a stream of the heated air against the outer face of the panel for travel upward over said face of the panel, and means arranged adjacent to the upper edge of the outer surface of the panel for exerting an upward suction pull on said air stream.

1,894,206. CAISSON WORK. LYMAN R. TALBOT, Port Washington, N. Y., assignor to Cement Gun Company, a Corporation of Delaware. Filed Oct. 11, 1930. Serial No. 488,095. 2 Claims. (Cl. 61—81.)

2. The method of sinking a caisson under internal air pressure which includes assembling in successive interior-pressure-sustaining rings at the bottom of the caisson ring sections having at their edges inwardly extending fastening flanges, securing together the flanges brought together in assembling ring sections into a ring engaging the lower edge of a previously formed ring, and quickly sealing the joints of newly formed portions at the bottom of the caisson by applying sheets of mesh material over said flanges at the interior of the caisson depressing the mesh material between the flanges at oppo-

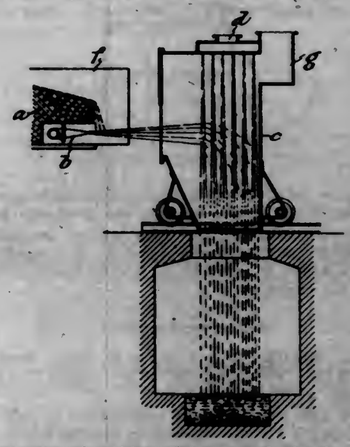


site edges of the ring sections, and blowing hydrated cementitious material into place to embed said mesh material.

1,894,207. DETERGENT COMPOSITION. MAURICE CRAIG TAYLOR, Niagara Falls, N. Y., assignor to The Mathieson Alkali Works, Inc., New York, N. Y., a Corporation of Virginia. Filed Oct. 24, 1929. Serial No 402,309. 6 Claims. (Cl. 87—5.)

1. A detergent salt mixture forming in water a solution containing a water soluble detergent and a bactericide, the detergent being at least equal in amount to the amount of the bactericide, said mixture comprising a water soluble detergent alkali metal salt of an acid forming an insoluble calcium salt and a minor proportion, with respect to the alkali metal salt, of a stable calcium hypochloride.

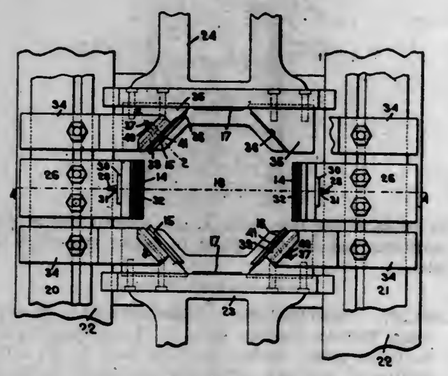
1,894,208. METHOD OF PRODUCING ALUMINA. CONWAY VON GIESEWALD, Frankfort-on-the-Main, HANS SIEGENS, Horrem near Cologne, and MARTIN MARSCHNER, Frankfort-on-the-Main, Germany, assignors to Metallgesellschaft Aktiengesellschaft, Frankfort-on-the-Main, Prussia, Germany, a Corporation of Germany. Original application filed June 15, 1928, Serial No. 285,730, which is in turn a division of application Serial No. 195,123, filed May 28, 1927, and in Germany May 8, 1926. Divided and this application filed Nov. 15, 1929. Serial No. 407,540. 9 Claims. (Cl. 83—91.)



1. A process of making disintegrated alumina for use in electrolysis which comprises atomizing liquid alumina

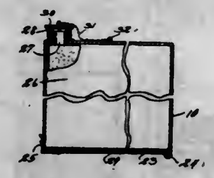
by means of a stream of air, quickly quenching the atomized product by means of water, and conducting the generated steam away from the liquid alumina.

1,894,209. BOX-FOLDING MACHINE. OSKAR W. WIKSTROM, Newton, Mass., assignor to Percy E. Ginn, Newton, Mass.; Everett W. Ginn administrator of said Percy E. Ginn, deceased. Filed July 27, 1929. Serial No. 381,491. 12 Claims. (Cl. 93—51.)



1. In a box-folding machine, the combination with two pairs of opposed slides arranged at right angles to each other, of a primary folder and secondary folders carried by each slide of one pair and an end folder carried by each slide of the other pair, said folders being in planes substantially at right angles to the plane of the slides and forming between them a well or throat, the adjacent sides of which form angles other than 90° and a plunger movable into and out of the well and co-operating with the folders to fold a box blank, the upper edge of the primary folders standing at a higher level than those of the secondary folders, whereby when the plunger is operated the sides of the box will be folded successively.

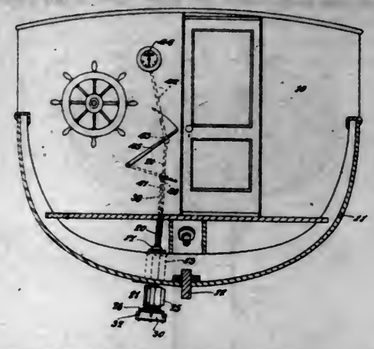
1,894,210. REFILLABLE VANITY CASE. WILLIAM F. WINNING, Braddock, Pa. Filed Feb. 6, 1932. Serial No. 591,388. 6 Claims. (Cl. 132—83.)



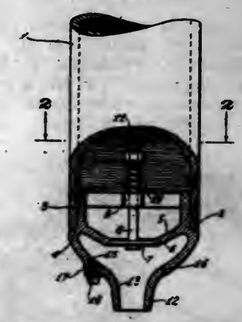
1. A case as described comprising a receptacle, a discharge means, a closure cap for the discharge means, a loose powder receiving cartridge within the receptacle, and a nozzle carried by the cartridge and engaging said discharge means whereby to permit discharge of the contents of the cartridge.

1,894,211. BILGE LOG. EMMETT K. ZINK, West Somerville, Mass. Filed Dec. 26, 1928. Serial No. 328,595. 7 Claims. (Cl. 73—122.)

1. In a ship comprising in combination a hull, a bilge log including a rotator comprising pivoted blades, means for suspending the rotator from the bottom of said hull, a register device mounted on said ship remote from said rotator, driving means operatively connecting said rotator to said register device, and selective control means for regulating the speed of said driving means to compensate for the speed and direction of tide to which said rotator is subjected during the travel of said ship in a body of water.

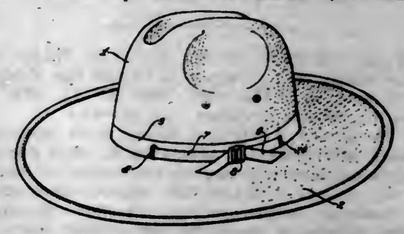


1,894,212. CASING SHOE ATTACHMENT. CHARLES F. DOUGHERTY, Tulsa, Okla., assignor to John J. Larkin, St. Louis, Mo. Filed Sept. 2, 1927. Serial No. 217,075. 7 Claims. (Cl. 166—1.)



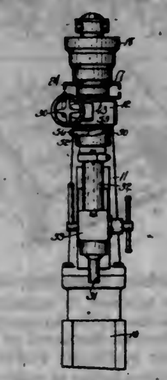
1. A device designed for attachment to the end of a well casing shoe to extend therebeyond when attached to provide a guide therefor, comprising, a hollow head having at one end a coupling, the projecting portion of said head having a tapered rim portion adapted to provide a casing guide, an elongated wide-mouthed nozzle beyond said rim portion at the tip of said head adapted to project a strong concentrated stream down into the hole, a plurality of auxiliary jet outlets adjacent said nozzles, and removable closures for said outlets.

1,894,213. HAT. FRANK OSTOLAZA, St. Louis County, Mo., assignor to Mexican American Hat Company, St. Louis, Mo., a Corporation of Missouri. Filed July 23, 1931. Serial No. 552,570. 2 Claims. (Cl. 2—183.)



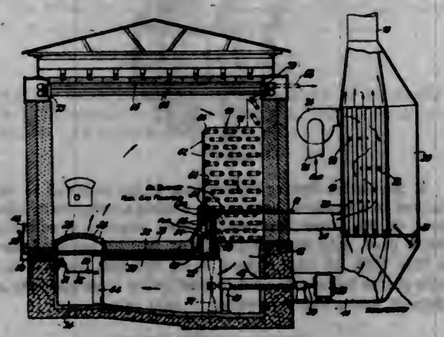
1. A hat having a crown, and a sweat-band secured to the inside of the crown, said sweat band having a forehead-engaging portion separated from the forward part of the crown continuously from side to side of the hat, the crown extending forwardly beyond said forehead-engaging portion of the sweat band so as to provide an elongated ventilating space of substantial width between the crown and the sweat-band along the forehead of the wearer.

1,894,214. DRILL PRESS. FREDERICK C. ALLEN, Hartford, Conn., assignor to The Henry & Wright Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Oct. 2, 1929. Serial No. 396,692. 20 Claims. (Cl. 74—58.)



1. A drill press including a rotatably mounted spindle, mechanism for changing the rate of speed of rotation of said spindle, a handle for operating said mechanism to effect said change, a lock, a lock controlling member mounted in said handle to operate said lock and means actuated by the rotative force of the spindle to be moved into the path of movement of said lock controlling member to prevent operation of said operating mechanism until the spindle is at rest.

1,894,215. PIPE STILL FURNACE. DAVID G. BRANDT, Westfield, N. J., assignor, by mesne assignments, to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1925. Serial No. 73,292. 31 Claims. (Cl. 196—116.)



6. In an oil-heating furnace, the combination of a heating chamber and firebox in communication with each other at their upper ends whereby hot gases from the firebox must pass through said chamber on their way out of the furnace, a bank of oil-heating tubes in said heating chamber over which said gases circulate, a relatively thin wall between said bank and firebox, said wall being adapted to conduct heat to those tubes of said bank which are adjacent said wall without a substantial drop in temperature, and means for re-introducing into the firebox controllable amounts of combustion gases which have passed through said heating chamber whereby the heat of the firebox may be tempered.

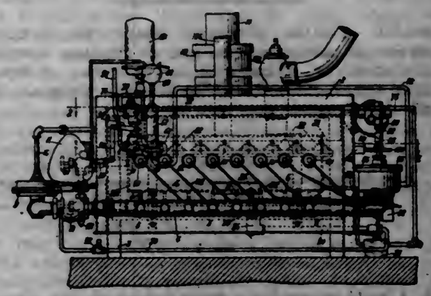
21. An oil still furnace comprising side walls and a roof, a bridge wall extending upwardly, terminating short of the roof and dividing the oil still furnace into a heating chamber and a heat absorption chamber, means for producing combustion in the heating chamber, a first tube group comprising a plurality of fluid-conveying tubes in the heat absorption chamber, a second tube group comprising a plurality of rows of exposed fluid-conveying tubes under the entire roof and arranged above the top of the bridge wall and spaced from said top of the bridge wall, said tubes of the second tube group having a relatively long path of fluid flow and being so spaced relative to each other as to prevent reflection of radiant heat rays from the roof into the heat absorption chamber and so connected as to have flow of fluid from any row to the next higher row and means to conduct fluid from the first tube group to the second tube group, the arrangement being such that the uppermost tubes of the second group are in a zone of relatively still gas.

1,894,216. INTERMEDIATE SUPPORT FOR VENETIAN BLIND TILT RAILS. FRED J. BURNS, Saginaw, Mich., assignor to Columbia Mills, Inc., New York, N. Y., a Corporation of New York. Filed May 6, 1931. Serial No. 535,341. 2 Claims. (Cl. 156—17.)



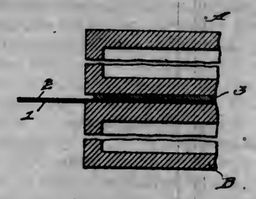
1. A one-piece bracket for connecting the inner ends of Venetian blind tilt rail sections, and comprising a plate, opposed sections punched in the plate intermediate its width, said sections being bent upwardly and lying in spaced apart relation, the upper ends being bent horizontally to overlap the upper face of the tilt rail, the edge sections of the plate being horizontally disposed and forming wings adapted to be secured to the bottom face of said tilt rail.

1,894,217. STEAM GENERATING SYSTEM. HARRY R. CROWTHER and SYLVANUS W. HAWKINS, Cuyahoga Falls, Ohio, assignors of one-third to Martin H. Behncke, Akron, Ohio. Filed Sept. 10, 1931. Serial No. 562,102. 17 Claims. (Cl. 122—451.)



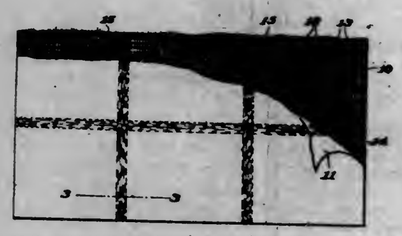
1. A system for steam generation comprising a plurality of steam generating tubes, a heater for said tubes, a source of water under pressure, and a distributor between the source and the tubes and operating independently of the water pressure adapted to deliver jets of water from the source to the several tubes at spaced intervals.

1,894,218. METHOD OF GLUING THIN WOOD VENEER TO A BACKING AND FLATTENING THE VENEER. ARMIN ELMENDORF, Chicago, Ill., assignor to The Flexwood Company, a Corporation of Delaware. Filed July 10, 1931, Serial No. 549,951. Renewed Oct. 5, 1932. 7 Claims. (Cl. 144—309.)



1. The method of gluing to a flexible backing thin, dry wood veneer containing no free moisture, which consists in providing the backing with a dry coating of water-soluble glue, laying the veneer on the glue coating, and applying pressure and heat to bring the veneer into intimate contact with the glue and cause hydroscopic moisture in the work to vaporize, soften the glue and unite the veneer to the backing.

1,894,219. REENFORCED PAPER. GEORGE E. GIBBS, Attleboro, Mass., assignor to American Reenforced Paper Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Apr. 3, 1931. Serial No. 527,375. 4 Claims. (Cl. 154—52.)



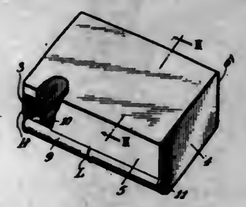
1. As an article of manufacture, a multiply reenforced fabric, comprising two sheets of paper secured together with waterproof adhesive, reenforcing material secured between the sheets of paper by the adhesive, and means for further strengthening the multiply fabric at predetermined points consisting of ribbon-like strips of reenforcing material secured to the reenforced fabric structure at spaced intervals.

1,894,220. TABLE. GOODING N. KELLY, Chicago, Ill., assignor, by mesne assignments, to Freeman Furniture Factories, Inc., Chicago, Ill., a Corporation of Illinois. Filed Dec. 7, 1931. Serial No. 579,383. 2 Claims. (Cl. 45—118.)



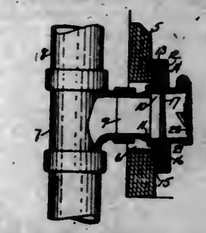
2. A table comprising a frame having an end apron, a top body section mounted on the frame, said apron having a recess therein, a pair of slides operating longitudinally of the table and projecting through said recess beyond the apron, a top end section mounted on the projecting portions of the slides in the plane of the top body section and registering with the opposing edge of said top body section to complete the table top, a one-piece additional leaf as long as the width of the table, said slides being movable through said recess to extend the top end section outward from the top body section and permit insertion of the additional leaf between the top body section and said end section to lie in the plane of the top body section and the end section, and means on said slides and movable therewith to support said additional leaf in storage between said slides and to move said additional leaf endwise through said recess in the apron.

1,894,221. CIGARETTE PACKAGE. CHARLES H. MACKIE, Brooklyn, N. Y., assignor of one-half to Augustus L. Merolle, Brooklyn, N. Y. Filed Aug. 8, 1930. Serial No. 473,906. 4 Claims. (Cl. 206—41.)



1. A cigarette package comprising confining top bottom side and end walls adapted to contain a supply of cigarettes, one of said walls having an opening therethrough of a size to permit lateral discharge of a cigarette therethrough, a trap door positioned within said opening concaved on its inner side adapted to receive a cigarette therein, means by which said trap door is pivotally mounted to swing for disposing said cigarette exteriorly of the package, and operating means for said trap door including a finger flap pivotally mounted upon a wall of the package remote from the door and a flexible thread operatively connecting said flap with said door so that pivotal movement of said flap will draw upon the thread and swing the door in one direction.

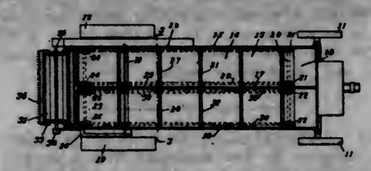
1,894,222. VALVE OUTLET FIXTURE. WILBUR V. PAINE, East Hartford, Conn., assignor to The Spencer Turbine Co., Hartford, Conn., a Corporation of Connecticut. Filed Jan. 11, 1932. Serial No. 585,915. 4 Claims. (Cl. 137—69.)



4. An outlet fixture including a union adapted to be attached to a conduit, said union having a spherically shaped seat on its outer surface, a valve support comprising a valve case, said support including two plates each having a hole with an edge shaped to fit the seat on said union, said plates being attached to said union from opposite ends thereof, and a valve mounted in said case.

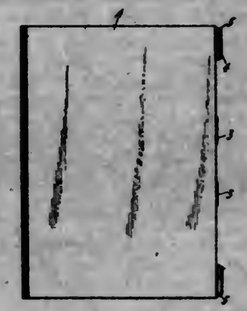
1,894,223. SPREADER. WILLIAM F. PAPE, Chicago, Ill. Filed Apr. 26, 1930. Serial No. 447,491. 6 Claims. (Cl. 275—5.)

1. The combination with a manure spreader, of a material carrying box mounted thereon, a high division wall mounted in the longitudinal center of said box, for dividing said box into two longitudinally extending compartments and dividing the manure into two separate piles, a drive shaft mounted on said spreader at the rear end thereof, driving sprockets mounted on said shaft and located in



each of said compartments, and endless conveyors mounted in each compartment and driven by said sprockets for conveying the material rearwardly in said box.

1,894,224. BOOK. DONALD H. PARSONS, Noroton, Conn., assignor to McCall Company, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1931. Serial No. 578,926. 4 Claims. (Cl. 281—16.)



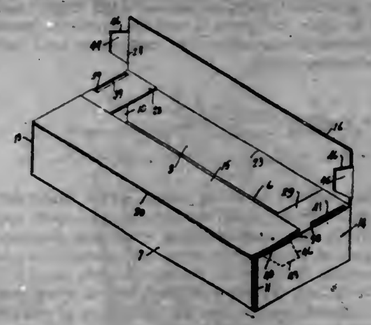
1. A multiple book consisting of a plurality of individual multileaved books, and constructed to present any one of said individual books as the front section of the multiple book with said individual books lying flat on one another: said individual multileaved books being separately bound and separately hinged at their bound edges to a common hinge element; said hinge element, when said books lie flat on one another, lying entirely between the planes of the top and bottom faces of the multiple book; and said hinge element providing for rotation of individual books thereabout from a flat position as the front section of the multiple book to a flat position as the back section thereof and vice versa to present any one of said individual books as the front or back section of said multiple book.

1,894,225. ELECTRIC SWITCH. JOHANN G. PETERSON, West Hartford, Conn. Filed Dec. 31, 1928. Serial No. 329,570. 48 Claims. (Cl. 200—11.)



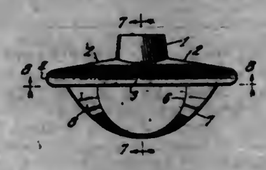
1. An electric switch having swinging contact carrying and actuating members, and snap actuating means for the former operative by the latter including snap actuating means and co-operating snap actuating means operative irrespective of the rate of movement of said actuating member and having an additional spring.

1,894,226. FOLDING BOX. LOUIS ROSS, Brooklyn, N. Y., assignor to Beatrice R. Somach, New York, N. Y. Filed Jan. 26, 1932. Serial No. 588,893. 2 Claims. (Cl. 229—36.)



1. A foldable box made of a single sheet of material, said box comprising a base, side walls, interlocking sections forming end walls, a flap at each end of the box covering the end walls, a horizontally slotted flange on each of the flaps, lid sections extending from the side walls, and a flap at each end of the lid sections, having an inclined edge for lockingly engaging the flange slots.

1,894,227. LAMP SHADE. DIRK G. SAAP, Chicago, Ill., assignor to Goodrich Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 30, 1931. Serial No. 583,842. 4 Claims. (Cl. 240—103.)



1. A shade for an electric lamp having an aperture in the center for the reception of the lamp base and oppositely disposed angular reflecting surfaces having parallel edges on each side of the longitudinal center line, continued at each end between said parallel edges on a reentrant angle and of diminishing width on each side of the lamp.

1,894,228. METHOD OF FILLING SHOES. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 26, 1929. Serial No. 388,320. 21 Claims. (Cl. 12—142.)

1. That method of filling shoes with shoe bottom filler containing body material susceptible to burning and binder material of such high melting point as to require for softening it a temperature high enough to burn the body material, which comprises conditioning the filler for spreading by applying to the filler heat sufficiently high to soften the binder and of sufficiently short duration to prevent injury to the body material, and immediately spreading the filler while in softened condition in a shoe bottom cavity.

6. That method of filling shoes, which comprises providing a spreadable shoe-bottom filler of compacted consistency containing an ingredient capable of loosening the filler to a freely spreadable condition by becoming partially gaseous under heat treatment, subjecting said filler to heat sufficient to loosen the filler structure for easy spreading, and spreading the filler in the shoe-bottom cavity while so loosened.

11. That method of filling shoes, which comprises providing a shoe-bottom filler in the form of a condensed piece

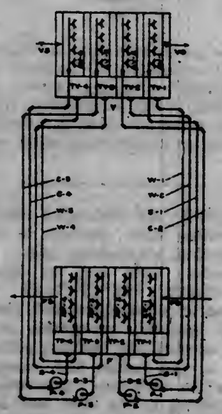
adapted to fill a single shoe-bottom cavity and containing means held under special restraint by the condensed condition of the piece responsive to high heat for giving the filler a highly loosened spreadable condition, applying to said condensed piece a sudden high heat treatment adapted to give the piece a sudden excessive loosening, and immediately spreading and collapsing said piece in the shoe-bottom cavity.



13. That method of filling shoes, which comprises providing shoe-bottom filler containing dispersed material responsive to heat, and breaking down said dispersion by heat treatment, causing the dispersed particles to coalesce and spreading the filler in the shoe-bottom cavity.

18. The herein described method, which comprises providing a cohesive and compacted filler piece of compressed, spreadable filler material adapted when spread in a shoe-bottom cavity to fill the cavity, said piece containing at least adjacent one side thereof low melting filler material and adjacent the other side high-heat responsive filler material which when melted by high heat thereafter forms on setting a stiffener for the entire laid filler, placing said piece in a shoe-bottom cavity with the low melting side down and then passing over the opposite top surface of the piece of spreading tool raised to a high heat, in such direct contact with and progressive movement on the piece as to melt said stiffening material and unite its particles with each other and with the adjacent portions of the piece and spread the same to constitute when set a coherent stiffener for the laid filler uninfluenced in use by normal shoe wearing temperatures.

1,894,229. HEATING AND VENTILATING DEVICE. ERWIN L. WEBER, Seattle, Wash., assignor to Elsa M. Obst, St. Paul, Minn. Filed Mar. 8, 1928. Serial No. 260,142. 1 Claim. (Cl. 261—29.)



An improved method of heating and ventilating an enclosure which comprises passing the incoming air thru a battery of stages in each of which it is subjected to a liquid spray, passing the outgoing air thru a similar battery of similar stages, conducting liquid from the spray of the last stage of one battery to the spray of the first stage of the other battery, from the spray of the next to the last stage of one battery to the spray of the second stage of the other battery, from the spray of the third from the last stage of one battery to the spray of the third stage of the other battery, and from the spray of the first stage of one battery to the spray of the last stage of the other battery.

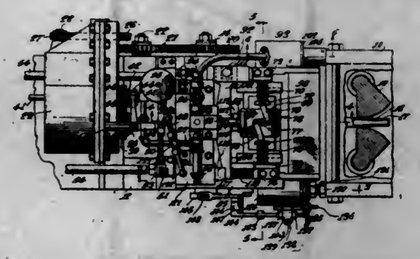
1,894,230. AGE RESISTOR. ALBERT M. CLIFFORD, Stow, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 14, 1931. Serial No. 562,826. 6 Claims. (Cl. 18—50.)

1. A method of preserving rubber which comprises subjecting it to vulcanization in the presence of a hydroxy derivative of a material selected from a group comprising fluorene and biphenylene oxide.

1,894,231. ANTIOXIDANT. ALBERT M. CLIFFORD, Stow, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 14, 1931. Serial No. 562,828. 5 Claims. (Cl. 18—50.)

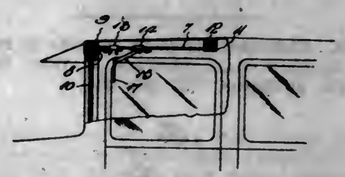
1. A method of preserving rubber which comprises subjecting it to vulcanization in the presence of a primary amino derivative of phenanthrene.

1,894,232. APPARATUS FOR REDUCING METAL STOCK. GEORGE B. COE, Waterbury, Conn., assignor, by mesne assignments, to Tube Reducing Corporation, Wilmington, Del., a Corporation of Delaware. Filed Nov. 15, 1930. Serial No. 495,829. 18 Claims. (Cl. 80—14.)



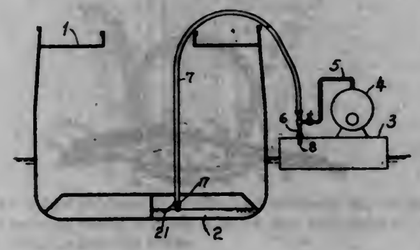
18. Apparatus for reducing stock progressively in relatively short increments, comprising in combination, gripping jaws, a reciprocable feed frame carrying said jaws, means on said frame for actuating said jaws in one direction and coil springs attached at one end to a part on said frame and at the other end to a fixed part for actuating said jaws in the opposite direction.

1,894,233. AUTOMOBILE ATTACHMENT. ARTHUR H. ELLIS, Rochester, Minn., assignor of one-half to Rochester Appliance Company, Rochester, Minn., a Corporation of Minnesota. Filed May 12, 1931. Serial No. 536,907. 5 Claims. (Cl. 296—97.)



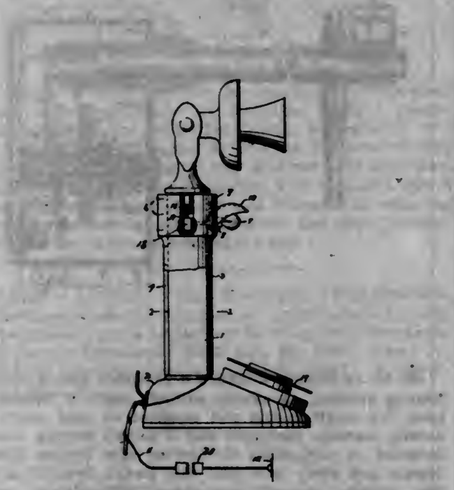
2. An automobile attachment comprising a horizontal bar adapted for mounting immediately under the ceiling of an automobile body, a flat sleeve slidable along said bar and having a projecting integral lug at one end of one of its side walls, an elongated tongue integral with the other end of said side wall, said tongue being folded inwardly, extending longitudinally of said one side wall and being in overlapped relation with said lug, a portion of said tongue being bowed away from said side wall, a panel having a hinge shaft received between said bowed tongue portion and said one side wall, and a threaded fastener securing the free end of said tongue to said lug for drawing the former toward the latter.

1,894,234. OIL PUMPING APPARATUS. GUNNAR C. ENGSTRAND, New York, N. Y., assignor to Sludge Pumping, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 20, 1932. Serial No. 638,747. 4 Claims. (Cl. 103—5.)



1. The method of pumping viscous material characterized by admitting steam at high velocity in the direction of flow at the discharge end of an open transmission line to create a high vacuum to thereby suck an air stream through the transmission line and admitting air at high velocity at the intake end of the transmission line to thereby blow the material into fragments which are suspended in the air stream during the transfer through the transmission line.

1,894,235. TELEPHONE ATTACHMENT. ROBERT F. FARMER, Houston, Tex. Filed Apr. 14, 1931. Serial No. 529,921. 1 Claim. (Cl. 240—2.17.)



An attachment for a telephone comprising a sleeve shaped to fit around the telephone stand and being of a length to enclose the stand substantially from end to end open at one side, an inside lengthwise groove in the sleeve, an electric light socket and an electric switch carried by said sleeve, an electric light globe in said socket, current conductors within said groove and forming a circuit into which said socket and switch are connected, means normally holding the switch open when the receiver is on the hanger of the telephone and means arranged to close the switch when said receiver is lifted.

1,894,236. BASKET. OLIVER MATTHEW JAMES, Dayton, Tenn., assignor to Dayton Veneer & Lumber Mills, Dayton, Tenn., a Corporation of Tennessee. Filed Dec. 28, 1931. Serial No. 583,537. 9 Claims. (Cl. 217—122.)



2. A basket, including two webs of stave members, the members of one web being paired with the members of the other web in radiated superposed relation, said webs of stave embers bent to form the bottom and sides of the basket and extending continuously across said bottom, and hoops applied to the side-forming portions of the stave members, the bend of each stave member being reinforced by the stave member with which it is paired.

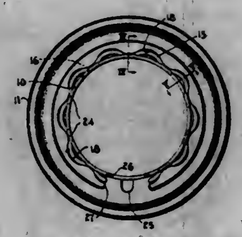
1,894,237. BREAKER STRIP. GERALD D. MALLORY, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 31, 1930. Serial No. 458,785. 10 Claims. (Cl. 154—14.)



1. A method of forming breaker strips for pneumatic tires which comprises forming a plurality of relatively short transverse incisions in a strip of breaker strip fabric having the cords thereof running longitudinally, said incisions being arranged in a pattern in such manner that all of the cords are cut into a relatively short length without excessive weakening of the fabric, subsequently cutting the fabric upon a bias and then applying the bias cut pieces one upon the other to form a multi-ply breaker strip band.

10. A breaker strip for pneumatic tire carcasses comprising an inner and outer ply of cord fabric, the plies being formed of bias cut material in which the cords are cut into relatively short lengths.

1,894,238. HUB ASSEMBLY FOR WHEEL TIRES. ALVIN J. MUSSELMAN, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 16, 1930. Serial No. 444,736. 6 Claims. (Cl. 152—21.)

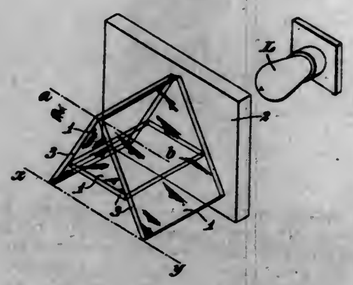


1. A tire-supporting construction comprising a tire carrying member, tire-retaining annular members mounted thereon, and a sinuous ring removably positioned between the tire carrying member and one of the annular members for positively preventing movement of the annular member from the hub.

1,894,239. PRODUCTION OF MOLYBDENUM AND TUNGSTEN CARBONYLS. MAX NAUMANN and LEO SCHLECHT, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 17, 1931, Serial No. 509,529, and in Germany Jan. 20, 1930. 4 Claims. (Cl. 27—203.)

1. In the production of metal carbonyl from a material containing at least one of the metals molybdenum and tungsten, the step which comprises reducing said material in the presence of a substance comprising copper, and then acting thereon with carbon monoxide.

1,894,240. SIGN AND THE LIKE. JOHN WINDRUSH NEWMAN, London, England. Filed Feb. 25, 1931, Serial No. 518,244, and in Great Britain Mar. 1, 1930. 4 Claims. (Cl. 40—141.)



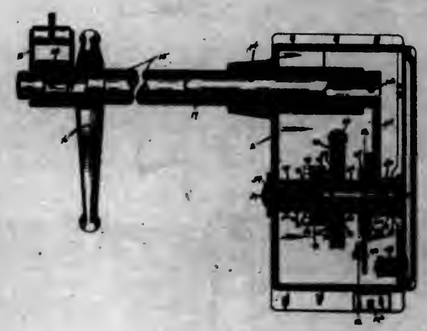
1. A sign comprising an opaque base having openings extending therethrough from the back to the front thereof, and transparent sheet-like members arranged edgewise in said openings and projecting in front of the base in the form of characters and adapted to transmit light from a source behind the base to their front edges.

1,894,241. LEAF FLIPPER. REGINALD M. RAYNOLDS, New York, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed Sept. 11, 1929. Serial No. 391,925. 5 Claims. (Cl. 129—4.)



8. In a device of the class described, a plate having a plurality of spaced apertures adjacent one edge of the plate and having a plurality of spaced notches in such edge in opposed relation to the apertures, and a plurality of spaced vertically extending stops adjacent such edge of the plate.

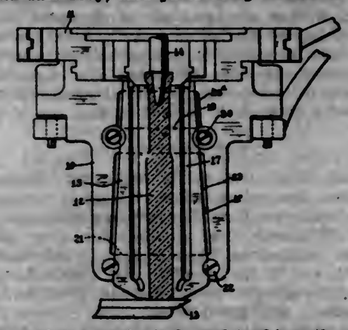
1,894,242. IRONER. LUTHER RINGER, Union Springs, N. Y., assignor to Easy Washing Machine Corporation, Syracuse, N. Y., a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,484. 17 Claims. (Cl. 68—9.)



13. In an ironing machine, a rotatable roll, a movable ironing element, an axially movable shaft, a driving element for rotating said roll mounted on said shaft and axially movable therewith and a second driving element mounted on said shaft for moving said ironing element toward and away from said roll, means for driving said first driving element comprising motor-driven means mounted on said shaft, means for driving said second driving element through said motor-driven means, and means for stopping the rotation of said first driving element comprising means for moving said shaft axially to disconnect the first named driving element from the motor-driven means.

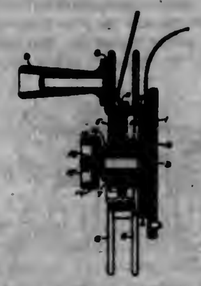
1,894,243. MOLD. HAROLD A. ROHRICH and LEONARD D. SOUBIER, Alton, Ill., assignors to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Jan. 30, 1931. Serial No. 512,332. 11 Claims. (Cl. 49—5.)

1. A mold structure comprising the combination of a metal body, a metal lining or bushing formed with a mold cavity therein, and means for removably securing the bushing within said body, said parts being formed to provide



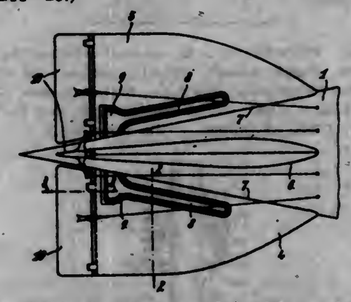
an air space between the body and bushing, the walls of said bushing being tapered and of less thickness at one end thereof than the other.

1,894,244. ANTENNA REEL. WILBUR J. RUBLE, Washington, D. C. Filed Dec. 9, 1927. Serial No. 238,927. 10 Claims. (Cl. 173—367.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



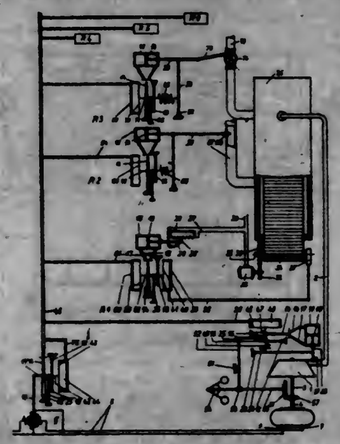
1. In an antenna reel, the combination of a mounting board, a ring secured to the mounting board, a spindle mounted upon the mounting board, an antenna reel revolvably mounted on said spindle, an independent ring mounted upon the antenna reel adjacent said first mentioned ring, an electrical connection with said first named ring, an antenna connected to said independent ring, and means for producing friction between the rings to effect a retardation of the rotation of the reel.

1,894,245. AIRSHIP. MAX SCHIRMER, Friedrichshafen, Bodensee, Germany, assignor to Luftschiffbau Zeppelin Gesellschaft mit beschrankter Haftung, Friedrichshafen, Bodensee, Germany. Filed Dec. 22, 1930, Serial No. 503,985, and in Germany Dec. 23, 1929. 3 Claims. (Cl. 244—29.)



1. An airship fin being provided with a substantially longitudinally extending slit, the main portion of said slit having substantially parallel edges, the rear portion being of considerably greater width than the main portion.

1,894,246. DEVICE FOR REGULATING POWER GENERATING PLANTS, ESPECIALLY ELECTRICITY WORKS. THEODOR STEIN, Berlin-Grunewald, and GUIDO WÜNSCH, Steglitz, near Berlin, Germany, assignors to Askania-Werke Aktiengesellschaft, vormals Centralwerkstatt Dessau und Carl Bamberg Friedenau, Berlin-Friedenau, Germany, a Corporation of Germany, and Allegemeine Elektricitats-Gesellschaft, Berlin, Germany, a Corporation of Germany. Filed May 25, 1928, Serial No. 280,578, and in Germany May 28, 1927. 10 Claims. (Cl. 290—2.)

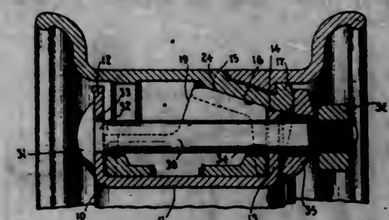


8. In combination, an electrical generator; means for regulating the supply of driving energy to said generator in response to the load carried by said generator; and means for regulating the production of driving energy for said generator in response to the load carried by said generator.

1,894,247. THERAPEUTIC COMPOUND AND PROCESS OF PRODUCING IT. GEORGE B. WALDEN, Southport, Ind., assignor to Eli Lilly and Company, Indianapolis, Ind., a Corporation of Indiana. Filed Jan. 9, 1932. Serial No. 585,799. 10 Claims. (Cl. 167—74.)

1. A product effective by oral administration in the treatment of certain anemias, which comprises a dehydrated mixture of effective stomach-tissue material and tissue-material of the class comprising liver and kidney, and which when administered orally is more effective in the treatment of pernicious anemia than the sum of the effects of the ingredients of the mixture.

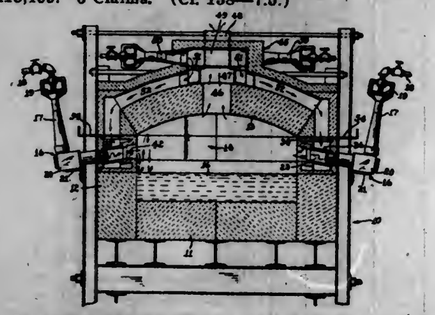
1,894,248. VEHICLE WHEEL. WILL T. WHITE, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 31, 1930. Serial No. 457,864. 2 Claims. (Cl. 301—18.)



1. In combination, a wheel having a channel felloe, a rim having an inclined seat, a channel shaped device extending transversely of the channel felloe, the device having walls parallel to the axis of the wheel, the base of the channel shaped device engaging the base of the channel felloe, a bolt extending through the sides of the

channel felloe and loosely through the channel of the device to provide for free relative rotation between the device and the bolt, the edges of the walls opposite the base of the channel shaped device being inclined to form a seat to receive the inclined seat of the rim.

1,894,249. HEATING APPARATUS FOR GLASS FURNACES. PERCY Q. WILLIAMS, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 11, 1929. Serial No. 413,409. 6 Claims. (Cl. 158—7.5.)

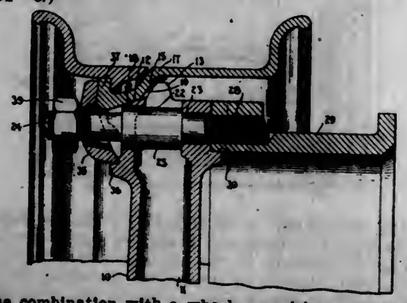


1. In combination, a furnace wall including a burner block extending therethrough, said block being of hollow construction and having one open end, a closure plate for the open end of said burner block, said plate and block having a pair of aligned openings therein, a wall surrounding the opening in the burner block and extending into the latter, a tube positioned to form with said wall a passageway connecting said openings, and means for directing a fuel mixture lengthwise through said openings and passageway.

1,894,250. METHOD OF TREATING AMPHIBOLIC MATERIAL FOR TRANSPORTATION. GRANT V. WILSON, Chicago, Ill., assignor to Norristown Magnesia & Asbestos Company, Norristown, Pa., a Corporation of Pennsylvania. Filed Sept. 13, 1930. Serial No. 481,814. 7 Claims. (Cl. 23—239.)

1. The method of treating naturally loosely flocculent amphibolic material for transportation; which consists in reducing the natural moisture content of such material, as mined, and considerably reducing the bulk of such material, while retaining its initial commercial quality, by confining and compressing the desiccated material to solid but frangible form; from which it may be subsequently released and restored to its initial composition and flocculent form.

1,894,251. VEHICLE WHEEL. ALVA W. WOODWARD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 31, 1930. Serial No. 457,859. 1 Claim. (Cl. 301—6.)

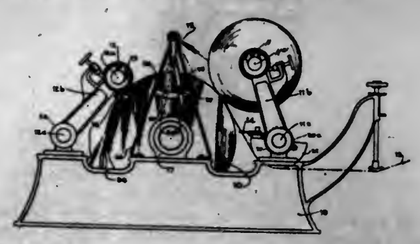


The combination with a wheel comprising a spoke having a hollow outer end, a bolt projecting laterally through such end of the spoke, said bolt having an enlarged intermediate portion forming a shoulder, the shoulder abutting the inner wall of the inner side of the spoke to prevent lateral movement thereof in one direction, the enlarged portion being supported by and extending through an enlarged hole in the outer side wall of the spoke, the inner end of the bolt projecting beyond the inner wall of the spoke, and a brake drum secured to such end of the bolt.

1,894,252. TREATING THIOCYANATES. CHRISTIAN J. HANSEN, Essen-on-the-Ruhr, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa., a Corporation of Delaware. Original application filed Aug. 9, 1928, Serial No. 298,617, and in Germany Apr. 14, 1928. Divided and this application filed Nov. 29, 1929. Serial No. 410,651. 6 Claims. (Cl. 23—119.)

1. The method of decomposing thiocyanates and of producing ammonium compounds therefrom comprising heating an aqueous solution of such thiocyanates in the presence of a bisulfite, a polythionate and a thiosulfate.

1,894,253. MECHANISM FOR WINDING PAPER INTO ROLLS. PHILIP NAPOLEON MCCARTHY, Gatineau Mills, Quebec, and PAUL MASSON, Wrightville, Quebec, Canada, assignors, by mesne assignments, to Pope Appliance Corporation, Portland, Me., a Corporation of Maine. Filed Aug. 30, 1929, Serial No. 389,404, and in Canada June 28, 1929. 7 Claims. (Cl. 242—65.)



3. In a paper winding mechanism, the combination of a rotary drum, two winding reels, a forward and a back reel, supported to be rotated by said drum and adapted to have paper webs wound thereon alternately, means for delivering a web of paper into the bite of the forward one of said winding reels and said drum, means for initiating the severance of the web at a point ahead of said bite to separate the wound web from the unwound web when a winding reel becomes filled, fluid blast means adapted to act on the forward end of the unwound web and operable to detach the same from the filled reel and cause said end to be carried to the empty winding reel, and a second fluid means in position to direct the forward end of the unwound web from the drum onto the rear winding reel.

1,894,254. POPPET VALVE. ALBERT EDWARD RICHARDS, Wawota, Saskatchewan, Canada, assignor of one-third to Ethel Thompson, Wawota, Saskatchewan, Canada. Filed Feb. 5, 1930, Serial No. 426,168, and in Canada Feb. 7, 1929. 2 Claims. (Cl. 251—144.)

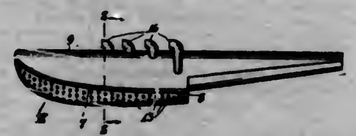


1. A poppet valve having a stem with diametrically opposite openings therein; a compressed valve spring coiled on said stem; a conical keeper for said valve spring flanged interiorly at the top to engage said stem and flanged exteriorly at the bottom to hold said valve spring; and a semi-circular spring pin having inturned ends seating in the said openings of said stem and locking on the latter by the action of said compressed valve spring on said keeper.

1,894,255. PRODUCTION OF LIQUID HYDROCARBONS FROM OLEFINES. FRITZ WINKLER and HANS HAEUBER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 4, 1928, Serial No. 275,255, and in Germany May 27, 1927. 5 Claims. (Cl. 196—10.)

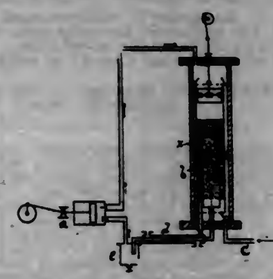
1. In the production of liquid hydrocarbons at an elevated temperature from gases comprising olefines, the step of acting on the said olefines with a catalyst consisting of a metal resistant to heat superficially coated with a metal selected from the group consisting of tin, zinc, aluminium, and chronium at temperatures of between about 300° and 800° centigrade.

1,894,256. BOAT HULL AND METHOD OF REDUCING THE WATER FRICTION THEREUPON. CARL DE GANAHL, Greenlawn, and NATHANIEL O. ROBINSON, Brooklyn, N. Y., assignors to Fleetwings, Inc., a Corporation of Delaware. Filed May 15, 1931. Serial No. 537,608. 7 Claims. (Cl. 114—67.)



1. In a boat hull, seaplane hull or float the combination of a main bottom and a false bottom located below the main bottom and spaced therefrom, said false bottom being provided with perforations so located and arranged that whenever a suction is developed between the false bottom and the water this suction draws air through the said perforations, thus breaking the suction, inwardly turned conical portions on said false bottom projecting from one edge of the perforations to a point inwardly of but spaced above an opposite edge so as to leave an opening between said second edge and said conical portion, the base of the conical portion facing the direction of travel of the boat, and means whereby a supply of air may reach the space between the false bottom and the main bottom.

1,894,257. PRODUCTION OF LIQUID HYDROCARBONS. MATHIAS PIER, Heidelberg, and EUGEN ANTHES, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 23, 1928, Serial No. 280,067, and in Germany May 28, 1927. 10 Claims. (Cl. 196—53.)



2. In a process for thermally converting hydrocarbon materials in a reaction zone having a stationary catalytic body therein, the steps of effecting the conversion in the presence of gases or vapors by operating in a cycle in which the gases or vapors are continuously withdrawn from and returned to the reaction zone and imparting to the gases and vapors while in the reaction zone, an additional movement comprising a continuous oscillatory flow of said gases or vapors repeatedly through said catalytic body.

8. Apparatus for effecting the thermal conversion of carbonaceous materials comprising a reaction vessel, a stationary catalytic body in said reaction vessel, means for admitting a gas into said reaction vessel, means for withdrawing said gas from said vessel and means in said vessel for imparting a continuous oscillatory movement of said gas through said catalytic body.

CARNEGIE LIBRARY OF ATLANTA

Patents Nos. 1,894,258 to 1,894,935

THE OFFICIAL GAZETTE

OF THE

United States Patent Office

Vol. 426—No. 3 TUESDAY, JANUARY 17, 1933 Price—$16 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscriptions, $16.00 per annum, including annual index, $18.25; single numbers, 35 cents each.

PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
Issue of January 17, 1933	455
Rules—Amendment—(Order No. 3,230)	455
Interference Notice	455
Notice of Cancellation	455
Applications Under Examination	456
Decisions of the U. S. Courts—	
In re Cross	457
In re Gage	457
Patent Suits	459
Adjudicated Patents	459
Adverse Decisions in Interference	459
Disclaimers	459
Trade-Marks Canceled	460
Trade-Marks Published (171 Applications)	461
Trade-Mark Registrations Granted	464
Trade-Mark Registrations Renewed	468
Labels	468
Prints	468
Reissues	469
Designs	469
Patents Granted	469

Issue of January 17, 1933.

Trade-Marks	109—No.	300,349 to No.	300,457, inclusive.
T. M. Renewals	5		
Labels	19—No.	41,864 to No.	41,882, inclusive.
Prints	9—No.	14,083 to No.	14,091, inclusive.
Reissues	5—No.	18,713 to No.	18,717, inclusive.
Designs	44—No.	89,031 to No.	89,074, inclusive.
Patents	678—No.	1,894,258 to No.	1,894,935, inclusive.
Total	860		

RULES

AMENDMENT

(Order No. 3,230)

U. S. Patent Office, *Washington, Dec. 30, 1932.*

Acting under the provisions of section 483 of the Revised Statutes (U. S. C. Title 35, sec. 6), and with the approval of the Secretary of Commerce, the Rules of Practice in the United States Patent Office are amended as follows:

By inserting after the word "States" in line 2, of paragraph (b) of rule 17, the following:

, who has had three years experience in patent work under the personal direction and supervision of a duly registered patent attorney, or who has served for three years in the examining corps of the Patent Office,

So that the second, third, and fourth paragraphs of rule 17 will read as follows:

A register of attorneys will be kept in this Office, on which will be entered the names of all persons entitled to represent applicants before the Patent Office in the presentation and prosecution of applications for patent. The names of persons in the following classes will, upon their written request, be entered upon this register:

(a) Any attorney at law who is in good standing in any court of record in the United States or any of the States or Territories thereof and who shall furnish a certificate of the clerk of such United States, State, or Territorial court, duly authenticated under the seal of the court, that he is an attorney in good standing, and who shall file proof that he is possessed of the legal and technical qualifications enumerated in paragraph (b).

(b) Any person not an attorney at law who is a citizen or resident of the United States, who has had three years experience in patent work under the personal direction and supervision of a duly registered patent attorney, or who has served for three years in the examining corps of the Patent Office, and who shall file proof to the satisfaction of the Commissioner that he is of good moral character and of good repute and possessed of the necessary legal and technical qualifications to enable him to render applicants for patents valuable service and is otherwise competent to advise and assist them in the presentation and prosecution of their applications before the Patent Office.

THOMAS E. ROBERTSON,
Commissioner.

Interference Notice

U. S. Patent Office, *Washington, Dec. 30, 1932.*

Leader Food Products Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of the New England Importation Company, 208 State Street, Boston, Mass., for registration of a trade-mark and trade-mark registered July 3, 1928, No. 243,907, to the Leader Food Products Co., 167 West Division St., Chicago, Illinois, and a notice of such declaration sent by registered mail to said Leader Food Products Co., at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Leader Food Products Co., their assigns or legal representatives, shall enter an appearance therein within 20 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notice of Cancellation

U. S. Patent Office, *Washington, Dec. 30, 1932.*

Anderson Mfg. Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Nicholas Becharas, of 134 West Vernor Highway, Detroit, Mich., to effect the cancellation of the trade-mark registration of the Anderson Mfg. Co., of Flint, Mich., No. 111,547, dated July 25, 1916, and the notice of such proceeding sent by registered mail to the said Anderson Mfg. Co. at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Anderson Mfg. Co., its assigns or legal representatives, shall enter an appearance therein within 20 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business December 30, 1932 (December 31, holiday)

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 89,160; Trade-Mark Division, 1,014. Oldest new case, Aug. 1, 1932; oldest amended, Aug. 1, 1932.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Nov. 7	Nov. 17	317
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Sept. 1	Sept. 2	884
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Oct. 5	Oct. 1	699
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Nov. 2	Dec. 1	232
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Oct. 3	Oct. 8	317
4806C	6. LEWERS, A. M., Carbon Chemistry	Aug. 1	Aug. 1	1,033
5725	7. JARBOE, C. G., Optics; Photography	Sept. 1	Sept. 1	1,117
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Sept. 19	Sept. 20	664
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Oct. 3	Nov. 1	588
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Aug. 22	Sept. 8	617
5067B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus	Sept. 2	Sept. 6	580
7701	12. HENRY, C. O., Machine Elements	Nov. 1	Nov. 15	260
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling	Sept. 2	Sept. 2	876
8097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes	Oct. 1	Oct. 4	597
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Aug. 17	Aug. 17	1,536
5612	16. SPENCER, C. J., Telegraphy; Telephony	Oct. 1	Oct. 1	641
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting	Aug. 1	Aug. 1	1,284
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Oct. 10	Oct. 10	455
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Aug. 1	Aug. 1	1,506
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Oct. 15	Oct. 22	331
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Sept. 10	Sept. 10	846
5734	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion	Oct. 18	Nov. 2	356
7802	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Aug. 4	Aug. 6	749
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Nov. 2	Nov. 1	505
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors	Aug. 8	Aug. 8	1,330
5808	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Aug. 11	Aug. 11	670
5706	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Oct. 1	Oct. 1	767
4626	28. BENSON, A. R., Internal-Combustion Engines	Aug. 1	Aug. 1	1,202
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Aug. 2	Aug. 2	580
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats	Sept. 1	Oct. 1	601
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Aug. 6	Aug. 6	1,344
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Oct. 1	Oct. 3	694
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings	Aug. 3	Aug. 1	1,896
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders	Aug. 15	Aug. 15	801
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Nov. 17	Dec. 1	263
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Aug. 1	Aug. 1	1,448
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Sept. 1	Sept. 2	824
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells	Nov. 7	Dec. 1	151
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Aug. 1	Aug. 1	1,192
7890	40. OBERLIN, J. J., Receptacles	Aug. 18	Aug. 18	2,020
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices	Nov. 1	Nov. 2	408
5882	42. CUTTING, H. O., Electric Signaling	Aug. 2	Aug. 1	1,274
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members	Aug. 1	Aug. 1	1,502
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Aug. 3	Aug. 3	1,572
7007	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Oct. 7	Oct. 7	721
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Oct. 3	Oct. 21	410
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Aug. 1	Aug. 1	1,770
5731	48. ROEPKE, O. B., Electricity, General Applications	Sept. 3	Sept. 3	603
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification	Aug. 1	Aug. 1	1,280
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 1	Aug. 1	1,879
5628	51. BACKUS, C. D., Radiant Energy	Sept. 9	Sept. 9	967
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings	Nov. 1	Nov. 1	500
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens	Oct. 31	Nov. 2	349
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light-Sensitive Circuits	Aug. 10	Aug. 10	1,005
6857	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery / Designs	Oct. 5 / Dec. 1	Oct. 6 / Dec. 17	330 / 248
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Aug. 6	Aug. 8	1,140
3623	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks	Sept. 1	Sept. 1	623
5005	58. DOWELL, E. F., Abrading; Typewriting	Aug. 3	Aug. 3	1,063
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Aug. 1	Aug. 1	1,272
5806	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants	Aug. 2	Aug. 1	1,245
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus	Aug. 3	Aug. 6	1,141
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles	Sept. 1	Sept. 1	1,205
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates	Aug. 1	Aug. 1	1,260
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Oct. 8	Oct. 6	380
5634	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission	Aug. 1	Aug. 1	1,422
2099B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND, {Trade-Marks / Labels and Prints	Dec. 1 / Dec. 6	Dec. 15 / Dec. 20	895 / 119

CARNEGIE LIBRARY OF ATLANTA

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE CROSS

No. 1,911. Decided December 19, 1932

1. PATENTABILITY—ANTICIPATION—FOREIGN PATENTS.

"We know of no rule relating to foreign patents when used as references which requires that every element and feature of the claims in the patent application shall be clearly shown in such foreign patent. The rule is to the effect that a foreign patent may be a valid reference only for all that it clearly discloses. If, however, the foreign patent does clearly disclose a certain feature of the claimed invention, it may be used in connection with other references to negative patentability of the claims."

2. SAME—STEAM-GENERATING SYSTEM.

Claims for a steam-generating system *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Gifford, Scull & Burgess, Mr. Charles S. Grindle, Mr. George F. Scull, and *Mr. William F. Wilder* for Cross.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

From a decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner, who refused to allow claims 11 and 12 of appellant's application, appellant has appealed to this court.

There were but two claims in the application and claim 12 is illustrative and follows:

12. A steam generating system having in combination a furnace, a heating coil located therein, means for forcing water through said coil at a pressure sufficient to prevent vaporization in said coil, a separating chamber, means for delivering water from said coil into said chamber so as to vaporize a part only of said water, a feed water heater including a heating coil, and means for removing the unvaporized water collected in said chamber and forcing it through said feed water heating coil.

The references relied upon are: German patent 285,461; and Nelson, 440,410.

Appellant's application relates to a steam boiler of the flash type. The water is taken from the feed heater and forced by means of a pump through a heating coil located in the furnace. The water is heated to a high temperature at high pressure, the pressure being such that very little evaporation occurs within the coil. The highly heated water then passes through a reduction valve into a large boiler or drum where most of the water flashes into steam. After the steam is taken off, the residue left in the drum is drawn off and passes through a coil where it imparts heat to the incoming feed water. The cooled residue is then discharged as waste.

The German patent operates in the same manner as appellant's structure, except that in the German patent the unevaporated water in the drum is recirculated through the heating coil, while in appellant's device it is discarded as unfit for use.

In Nelson the waste liquids or condensed steam are collected in pipes and used to heat the water as it feeds into the boiler.

In affirming the decision of the Examiner the Board said:

This claim is regarded as devoid of patentability in view of the same references as cited against claim 11, the patent to Nelson clearly disclosing a feed water heater including a heating coil and means for removing the unvaporized water collected in the system and forcing it through said feed water heating coil. We are of the opinion that no invention was involved in utilizing the heat of the unvaporized water in the separating tank [of] the German patent by heating fresh feed water in the manner disclosed by Nelson instead of returning said water to the lower end of the steam generating coils.

The decision of the Examiner is affirmed.

Appellant's main contention in his brief is indicated by the following quotation therefrom:

The principal reference relied upon by the Patent Office is the German Patent 285,461, and here we call attention to the well-settled rule that *a foreign patent must clearly disclose the claimed subject matter before it will be held to be an anticipation.* [Italics quoted.]

[1] We know of no rule relating to foreign patents when used as references which requires that every element and feature of the claims in the patent application shall be clearly shown in such foreign patent. The rule to which appellant obviously refers and which has been frequently laid down by this and other courts is to the effect that a foreign patent may be a valid reference only for all that it clearly discloses. *In re Dann*, 18 C. C. P. A. (Patents) 1031, 47 F.(2d) 356, 400 O. G. 7. In the Dann case, where the feature relied upon in the foreign patent was only indefinitely shown in the drawings and not referred to in the specifications, it was held that the feature was not clearly disclosed in the foreign patent and the patent was not, therefore, a proper reference.

If, however, the foreign patent does clearly disclose a certain feature of the claimed invention, it may be used in connection with other references to negative patentability of the claims. *In re Holst*, 18 C. C. P. A. (Patents) 743, 44 F.(2d) 878, 403 O. G. 4. This is the situation, as we see it, which confronts us here. There is no question in the case at bar but that the foreign reference does clearly disclose the particular feature in applicant's claimed invention to which the Board referred.

[2] We agree with the conclusion of the Board and the reasons therefor, and its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE GAGE

No. 3925. Decided December 19, 1932

1. CLAIMS COPIED FROM A PATENT—CONSTRUCTION.

The doctrine of broad interpretation as applied to claims copied from a patent may not be stretched so as to give a meaning to words other than the meaning which they have in the particular relation used and with reference to the art under consideration.

2. PATENTABILITY—RECTIFICATION OF ALTERNATING CURRENTS.

A claim for means for effecting rectification of alternating currents *Held* unpatentable to applicant because not readable upon the disclosure of his application.

APPEAL from the Patent Office. Affirmed.

Mr. Harry G. Grover, *Mr. James G. Norton*, and *Mr. Phil L. Rodier* for Gage.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

In this appeal from a decision of the Board of Appeals of the United States Patent Office there is involved a single claim, numbered 21, which reads as follows:

21. Means for effecting the rectification of alternating currents including a transformer having primary and secondary windings, a rectifier in circuit with the secondary, a capacity shunted across the rectifier, a capacity in series with the first capacity and the rectifier and a filter circuit shunted across said second capacity.

This claim originated in a patent to Willard et al., No. 1,682,000, issued August 28, 1928, being claim 2 thereof. It was copied by appellant, after the patent had been issued, and inserted into his application, Serial No. 629,292, filed April 2, 1928, which was still pending when the patent to Willard et al. was granted.

The rejection by the tribunals of the Patent Office was based solely upon the ground that appellant had no right to make the claims, because the disclosures of his original application failed to support it in a single particular—that of a certain feature designated in the claim "a capacity in series with the first capacity and the rectifier."

For this element, which in the patent to Willard et al. is conceded to be a condenser, appellant relies upon a feature shown in his specifications to be a storage battery.

The experts in the Patent Office declare, in effect, that under no proper interpretation of "capacity," in the light of the functions to be performed by that feature in the patent, may a storage battery be substituted for the Willard condenser.

Funk & Wagnalls New Standard Dictionary defines electrical "capacity" as the "ability to absorb and retain * * * electricity."

The brief of the Solicitor for the Patent Office asserts that the plates of Willard's condenser do "store or absorb and retain electricity until such times as it is desired to utilize it," but that a storage battery as disclosed by appellant does not; that the condenser stores the same electricity which is passed into it, while in the storage battery the changing current produces chemical changes or chemical energy which energy is later drawn upon to produce other (than the original) electricity.

The Examiner said:

Claim 21 is not allowable to applicant for the reason that his storage device 3 is not the equivalent of a capacity for all purposes and for the further reason that the filter network shown in Fig. 1 must be broken-up in order that the claim may be read on that figure. The examiner is of the opinion that the storage battery 3 is an integral part of applicant's filter network and can not be arbitrarily set aside for some other function.

The Board said:

Believing, as we do, that if a capacity, such as the applicant's storage battery may be said to be, is substituted for the second capacity in the circuit arrangement of Willard et al., that arrangement would not operate in the manner the patentees recite, we feel the applicant here should not be permitted a claim which must have a meaning so inconsistent with what the patentees sought to convey by it.

There is nothing in the record in this case which would seem to justify us in running counter to the holdings of the Patent Office tribunals in this highly technical electrical field. No proofs are presented in support of the contention that the functions of a condenser and of a storage battery, in the art to which the respective parties seek to apply to them, would be the same.

At the request of the court, appellant's counsel has supplied some definitions of the term "capacity" taken from technical dictionaries and, with these, has furnished a copy of a recent opinion of the United States Court of Appeals of the Third Circuit in *Balistocky et al.* v. *Scovill Mfg. Co.*, decided September 22, 1932, wherein the term is discussed.

We fail to find in these anything which, in our opinion, would justify a reversal of the decision of the Board of Appeals.

Appellant invokes the application of the broad interpretation doctrine, the claim having been copied in order to try to bring about an interference, and cites *Stern et al.* v. *Schroeder et al*, 17 C. C. P. A. (Patents) 690, 36 F.(2d) 515, 393 O. G. 3. As to this, it should be said that the doctrine of broad interpretation may not be stretched so as to give a meaning to words other than the meaning which they have in the particular relation used and with reference to the art under consideration. "Capacity," as here involved, has a technical meaning which is measured by its function in the relation in which it is proposed to apply it.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,173,079, R. F. Alexanderson, Selective tuning system; 1,195,632, W. C. White, Circuit connections of electron discharge apparatus; 1,251,877, A. W. Hull, Method of and means for obtaining constant direct current potentials; 1,573,374, P. A. Chamberlain, Radio condenser; 1,728,879, Rice & Kellogg, Amplifying system, filed Dec. 12, 1932, D. C., E. D. N. Y., Doc. E 6719, *Radio Corp. of America* v. *Atlantic Radio Corp.* Doc. E 6721, *Radio Corp. of America* v. *Vim Electric Co., Inc.*

1,195,632. (See 1,173,079.)

1,227,481, W. L. Morris, Lubricating mechanism; 1,632,724, E. J. Bloom, Terminal construction for central lubricating installations; 1,632,767, same, Chassis lubrication; 1,632,771, J. Bijur, Lubricating installation; 1,632,772, 1,732,828, 1,734,026, 1,734,027, same, Flow control fitting; 1,732,212, same, Chassis lubricating installation C. C. A., 3d Cir., Doc. 4981, *Auto Research Corp. et al.* v. *Alemite Corp.* Decree affirmed Dec. 8, 1932.

1,227,777, R. M. Gilson; Signal, 1,241,512, C. O. Harrington, Adjusting incandescent lamp, D. C., S. D. N. Y., Doc. E 54/237, *Union Switch & Signal Co.* v. *Handlan-Buck Mfg. Co.* Consent order of discontinuance (notice Dec. 13, 1932).

1,231,764, F. Lowenstein, Telephone relay; 1,618,017, same, Wireless telegraph apparatus; 1,403,475, H. D. Arnold, Vacuum tube circuit, filed Dec. 12, 1932, D. C., E. D. N. Y., Doc. E 6718, *Radio Corp. of America* v. *Atlantic Radio Corp.* Doc. E 6720, *Radio Corp. of America* v. *Vim Electric Co., Inc.*

1,241,512. (See 1,227,777.) 1,251,877. (See 1,173,079.)

1,261,832, 1,812,704, F. X. Maloney, Cigar banding machine, D. C., S. D. N. Y., Doc. E 70/298, *International Banding Machine Co.* v. *American Cigar Co. et al.* Consent order of discontinuance (notice Dec. 7, 1932).

1,277,600, 1,625,414, G. Kammerer, Tool for cutting and removing pipe from wells; 1,625,391, Reilly & Stone, same, filed Dec. 9, 1932, D. C., S. D. Calif., C. Div., Doc. Y-71-C, *Kammerer Corp. et al.* v. *Drill Pipe & Casing Cutter Co. et al.*

1,307,733, A. V. Gullborg, Lubricating apparatus; 1,307,734, same, Lubricating means; 1,475,980, O. Zerk, Lubricating apparatus, filed Oct. 6, 1932, D. C., S. D. Ind. (Indianapolis), Doc. 1420, *Alemite Corp.* v. *C. B. Coombs.*

1,307,734. (See 1,307,733.)

1,341,729, I. A. Weaver, Tire changing mechanism; 1,341,730, Weaver & Sternaman, Tire removing appliance; 1,650,674, G. E. Weaver, Tire changer, D. C. Minn., 4th Div., Doc. E 1217, *Weaver Mfg. Co.* v. *Marquette Mfg. Co.* Consent decree Dec. 6, 1932.

1,341,730. (See 1,341,729.)

1,365,043, Mann & Williams, Process of making reactive acid liquor from hydrocarbon gases containing olefins; 1,486,646, Ellis & Cohen, Alcohol, etc., and process of making same; 1,486,647, same, Production of acid extract and alcohol from hydrocarbon gases; 1,744,207, Born & Isham, Process of producing alkyl sulphates and alcohol therefrom, D. C. Del., Doc. E 873, *S. B. Hunt et al.* v. *Petroleum Chemical Corp.* Dismissed upon stipulation Dec. 6, 1932.

1,394,197. (See 1,588,094.) 1,403,475. (See 1,231,764.)

1,413,365, Towsley & Otis, Locomotive terminal; 1,686,103, L. G. Plant, same; 1,592,618, S. Otis, Direct steaming system for locomotives, filed Nov. 12, 1932, D. C. Utah (St. Lake City), Doc. 12,818, *Railway Engineering Equipment Co.* v. *Oregon Short Line Rrd. Co.*

1,475,980. (See 1,307,733.) 1,486,646. (See 1,365,043.)

1,486,647. (See 1,365,043.)

1,540,369, 1,614,972, A. W. Scotcher, Carton; 1,776,844, 1,793,026, 1,794,124, 1,794,125, L. Sugerman, Twin-section egg-carton, D. C., S. D. Ind. (Indianapolis), Doc. 1416, *L. Benoit* v. *International Printing Co.* Patents held infringed Dec. 5, 1932.

1,573,341, E. B. Hiatt, Device for packing fruit; 1,593,302, same, Basket liner, filed Sept. 17, 1932, D. C., S. D. Ind. (Indianapolis). Doc. 1413, *Carpenter-Hiatt Sales Co.* v. *Fruit & Produce Packing, Inc.*

1,573,374. (See 1,173,079.) 1,575,631. (See 1,728,859.)

1,588,094, W. L. Chambers, Fruit pickers bag; 1,394,197, W. F. Keeline, same, D. C., S. D. Calif. (Los Angeles), Doc. E P-76-J, *W. H. Hoegee Co., Inc., et al.* v. *E. D. Burt (Riverside Tent & Awning Co.)*. Claim 1 of each of said patents held invalid July 20, 1932. (To correct error in notice in 413 O. G., 1107. Original notice, "Claim 7 of each of said patents held invalid".)

1,592,618. (See 1,413,365.) 1,593,302. (See 1,573,341.)

1,614,972. (See 1,540,369.) 1,618,017. (See 1,231,764.)

1,625,391. (See 1,277,600.) 1,625,414. (See 1,277,600.)

1,632,724. (See 1,227,481.) 1,632,767. (See 1,227,481.)

1,632,771. (See 1,227,481.) 1,632,772. (See 1,227,481.)

1,638,739, Re. 17,567, H. J. Gaisman, Safety razor; 1,815,745, R. E. Thompson, Safety razor, D. C., S. D. N. Y., Doc. E 61/310, *Gillette Safety Razor Co.* v. *D. Jacoby et al.* (*Mills Razor Blade Co. et al.*). Decree for plaintiff, dismissed without prejudice as to Clark Blade & Razor Co. (notice Dec. 8, 1932).

1,650,674. (See 1,341,729.) 1,686,103. (See 1,413,365.)

1,710,073, 1,714,191, same, Electrical condenser, filed Dec. 5, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y-65-M, *Ruben Condenser Co. et al.* v. *Universal Music Co.*

1,714,191. (See 1,710,073.)

1,728,859, W. Frame, Garter; 1,575,631, Larimore & Frame, same, D. C., N. D. Ohio, E. Div., Doc. E 3818, *Comfee Roll Garter Corp.* v. *Vaughn, Inc.* Dismissed without prejudice Dec. 7, 1932.

1,728,879. (See 1,173,079.) 1,732,212. (See 1,227,481.)

1,732,828. (See 1,227,481.) 1,734,026. (See 1,227,481.)

1,734,027. (See 1,227,481.) 1,744,207. (See 1,588,094.)

1,755,114, L. A. Hazeltine, Unicontrol signaling system; 1,755,115, same, Variable condenser, filed Dec. 12, 1932, D. C., E. D. N. Y., Doc. E 6723, *Hazeltine Corp.* v. *Abraham & Straus, Inc.* Doc. E 6727, *Hazeltine Corp.* v. *Michaels Bros., Inc.* Doc. E 6728, *Hazeltine Corp.* v. *Doyle-Otty Radio, Inc.* Same, filed Dec. 10, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y-75-M, *Hazeltine Corp.* v. *Trans-Continental Radio, Inc., et al.* Same, filed Dec. 13, 1932, D. C., S. D. N. Y., Doc. E 72/144, *Hazeltine Corp.* v. *Emerson Radio & Phonograph Corp.*

1,755,115. (See 1,755,114.)

1,763,350, 1,793,962, C. H. Trube, Electric coupling system, D. C., S. D. N. Y., Doc. E 72/365, *Hazeltine Corp.* v. *John Wanamaker N. Y., Inc.* Consent order of discontinuance (notice Dec. 13, 1932). Same, filed Dec. 13, 1932, D. C., S. D. N. Y., Doc. E 72/146, *Hazeltine Corp.* v. *Emerson Radio & Phonograph Corp.*

1,774,312, 1,774,313, H. P. Brauntigam, Refrigerating apparatus; 1,860,325, B. B. Geyer, same, filed Dec. 6, 1932, D. C., S. D. N. Y., Doc. E 73/81, *Frigidaire Corp.* v. *U. S. Stamping Co.*

1,774,313. (See 1,774,312.) 1,776,844. (See 1,540,369.)

1,793,026. (See 1,540,369.) 1,794,124. (See 1,540,369.)

1,794,125. (See 1,540,369.) 1,793,962. (See 1,763,350.)

1,812,704. (See 1,261,832.) 1,815,745. (See 1,638,739 and Re. 17,567.)

1,845,306, 1,857,055, W. A. MacDonald, Coupling system, filed Dec. 12, 1932, D. C., E. D. N. Y., Doc. E 6724, *Hazeltine Corp* v. *Abraham & Straus, Inc.*

1,857,055. (See 1,845,306.) 1,860,325. (See 1,774,312.)

Re. 17,567, H. J. Gaisman, Safety razor; 1,815,745, R. E. Thompson, same, D. C., S. D. N. Y., Doc. E 61/226, *Gillette Safety Razor Co* v. *Regal Lock & Hardware Co., Inc.* Dismissed without prejudice (notice Dec. 7, 1932).

Re. 17,567. (See 1,638,739.)

Adjudicated Patents

(C. C. A. Mich.) Hart patent, No. 1,476,509, for molding, *Held* valid and infringed. *Zimmers* v. *Allied Metal Products Corporation*, 61 F.(2d) 534.

(D. C. Del.) Buchsbaum patent, No. 1,728,924, for hosiery, *Held* not infringed. *Gotham Silk Hosiery Co.* v. *Artcraft Silk Hosiery Mills*, L. F. Supp. 643.

(D. C. Del.) Tilles patent, No. 1,824,636, for hosiery, *Held* valid and infringed. *Id.*

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,680,675, A. S. Gale, Magnetic system to control the stop and leveling of elevator, decided December 2, 1932, claims 20, 21, 23, 25, 26, 28, 30, 54, and 57.

Pat. 1,862,748, C. B. Harbison, Return bend, decided December 19, 1932, claims 1, 2, 4, and 5.

Disclaimers

1,536,844.—*Ward Harrison* and *John H. Waterbury*, Cleveland, Ohio. LIGHTING UNIT. Patent dated May 5, 1925. Disclaimer filed December 22, 1932, by the assignee, *The Miller Company*.

Hereby enters this disclaimer to that part of claims 2, 3, and 4 which it does not choose to claim or hold by virtue of the patent or said assignment, to wit:

The combinations of elements set forth in claims 2, 3, and 4, respectively, of said Letters Patent No. 1,536,844, except when the globe recited in said combinations is a diffusing globe.

1,853,178.—*Walter van Braam Roberts*, Princeton, N. J. RADIORECEIVER. Patent dated April 12, 1932. Disclaimer filed December 21, 1932, by the assignee, *Radio Corporation of America*.

Hereby enters this disclaimer to the said claims of said Letters Patent which are in the following words, to wit:

"1. A tuned radio frequency amplifier having an input circuit and having an output circuit whose reactance is condensive, said output circuit delivering power to a tuned circuit, and means for feeding back power to the input circuit so as to eliminate the damping effect on said input circuit of the capacity reactance of said output circuit.

"2. In combination, an output circuit of an electron discharge device whose reactance is negative, the output circuit feeding power to a tuned secondary circuit, a feed back coil and current limiting condenser connected in series between the anode and cathode of the electron discharge device, said feed back coil being magnetically coupled to the input circuit of the device.

"3. In an amplifier, a thermionic tube, a tunable input circuit therefor, an output circuit therefor including a coil whose inductance is so great that the output current of the tube tends to flow mostly through the natural capacity of the coil and other capacities shunting said coil, causing a damping effect on the input circuit of said tube, and means including a path between the output and input circuits for counteracting said damping effect.

"4. In an amplifier, a thermionic tube, a tunable input circuit therefor, an output circuit therefor comprising a coil whose inductance is so great that the output current of the tube tends to flow through the natural capacity of the coil causing a damping effect on the input circuit of said tube, and means for counteracting said damping effect, said means comprising an inductance and a condenser in series, said last mentioned inductance being magnetically coupled to the input circuit of said tube.

"5. The method of operating a space discharge tube amplifier having an output circuit with a negative reactance which consists in feeding back energy from the output circuit to the tube input circuit through a path other than the inter-electrode coupling of the tube, to counteract the effect of said negative reactance on the input circuit.

"6. The method of operating a multi-electrode amplifier tube having an output circuit which exercises a damping effect upon the tube input circuit, the method consisting in establishing a path between the output and input circuits other than through the tube electrodes, and feeding energy from the output to the input circuit along the said path so as to counteract said damping effect.

"7. The method of operating an amplifier circuit which includes a multi-electrode space discharge tube having an output circuit including a reactance naturally resonant to a frequency below the broadcast range and which exercises a damping effect on the tube input circuit, the method consisting in regeneratively coupling the output circuit to the input circuit, and feeding back energy from the output to the input circuit to counteract said damping effect.

"8. A tuned radio frequency amplifier having an input circuit and an output circuit, the latter having a negative reactance, and exercising a damping effect on the input circuit, and a path between the output and input circuit for feeding back energy to the latter to eliminate said damping effect, said path including an adjustable reactance.

"9. In an amplifier, a space discharge device, an input circuit therefor, an output circuit therefor including a reactance which exercises a damping effect on the said input circuit, and a path including a pair of reactances between the output and input circuits for counteracting said damping effect, one of said reactances being variable."

"11. In an amplifier, a space discharge tube including a tunable input circuit and an output circuit, a coil in said output circuit naturally resonant to a frequency outside a predetermined frequency range, and causing a degenerative effect on said input circuit, and a path between the output and input circuits for counteracting said effect."

Trade-Marks Canceled

97,016. Certain named foods. Percival H. Troutman, Canon City, Colo. Registered May 12, 1914. Canceled December 19, 1932.

147,786. Certain named toilet preparations. The Klinker Manufacturing Co., Cleveland, Ohio. Registered November 1, 1921. Canceled December 19, 1932.

162,145. Water-purifying machinery and parts thereof. United States Ozone Co., Scottdale, Pa. Registered December 5, 1922. Canceled December 19, 1932.

175,518. Coffee. Haas, Baruch & Co., Los Angeles, Calif. Registered November 6, 1923. Canceled December 1, 1932.

260,964. Fresh onions. Dingfelder and Balish, New York, N. Y. Registered September 3, 1929. Canceled December 15, 1932.

275,233. Cigars. Harry Blum, New York, N. Y. Registered September 16, 1930. Canceled December 19, 1932.

277,055. Work gloves. Keller Glove Manufacturing Co. Inc., Plumsteadville, Pa. Registered November 4, 1930. Canceled December 19, 1932.

294,178. Certain named metal working machine tools. Superior Machine Tool Company, Kokomo, Ind. Registered May 17, 1932. Canceled December 15, 1932.

297,444. Medicinal inhalant. Fred Rime, doing business as Par Laboratories, Los Angeles, Calif. Registered September 13, 1932. Canceled December 19, 1932.

TRADE-MARKS

OFFICIAL GAZETTE, JANUARY 17, 1933

[VOL. 426. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 329,896. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, doing business as The Quaker Maid Co., Inc., New York, N. Y. Filed Aug. 27, 1932.

FLIGHT

For Bird Gravel.
Claims use since Aug. 15, 1931.

Ser. No. 331,287. LEON, INC., Los Angeles, Calif., and Peabody, Mass. Filed Oct. 15, 1932.



No claim is made to the words "Brand" and "Sheep-Skins" apart from the mark shown.
For Sheep Skins.
Claims use since Sept. 1, 1932.

Ser. No. 331,733. J. GREENBAUM TANNING COMPANY, Chicago, Ill.; Boston, Mass.; and Milwaukee, Wis. Filed Oct. 31, 1932.



For Leather.
Claims use since Jan. 1, 1932.

Ser. No. 332,767. FERGUSON PRINTING INK CORPORATION, New York, N. Y. Filed Dec. 5, 1932.

MACOFANE

For Cellulose Acetate Sheeting.
Claims use since Nov. 28, 1932.

CLASS 2

Receptacles

Ser. No. 327,450. REYNOLDS SPRING CO., Jackson, Mich. Filed May 25, 1932.

BONNY WARE

No claim is made to the word "Ware" apart from the mark as shown.

For Receptacles of Synthetic Resin, Non-Precious Metal, and Composition Other than Glassware—Namely, Vases, Tumblers, Trays, Dishes, Pin Dishes, Powder Boxes, Candy Boxes, Cosmetic Boxes, Coasters, Jewelry Boxes, Hair Receivers, Refuse Boxes, Toothbrush Holders, Soap Dishes, Dressing Table Trays, Condiment Dispensers, and Utility Boxes for Receiving Small Objects of Various Descriptions.

Claims use since Mar. 22, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 330,518. METAL TEXTILE CORPORATION, West Orange, N. J. Filed Sept. 20, 1932.

MYSTIC MIRACLE

For Metallic Abrasive Pot Cleaners.

Claims use since August, 1931.

Ser. No. 330,519. METAL TEXTILE CORPORATION, West Orange, N. J. Filed Sept. 20, 1932.

MYSTIC MOP

No exclusive right to the word "Mop" is claimed apart from the mark as shown.

For Dish Mops.

Claims use since January, 1930.

Ser. No. 330,580. NATIONAL MILLING & CHEMICAL COMPANY, Philadelphia, Pa. Filed Sept. 22, 1932.

NAMICO

For Soap Compound, Soap for Laundry Use, Soap for Textile Trade, and an Abrasive and Scouring Detergent.

Claims use since Sept. 1, 1932.

Ser. No. 332,611. FRANK A. BOWLES, doing business as Bowles Bros. Co., Los Angeles, Calif. Filed Nov. 30, 1932.

FLUFFY SUDS

For Soaps.

Claims use since July 11, 1932.

CLASS 5

Adhesives

Ser. No. 333,015. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 12, 1932.

ALLSTATE

For White Paste.

Claims use since Nov. 22, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 326,725. HARRY VOYAGES, New York, N. Y. Filed May 3, 1932.

PHENIX
Extraordinary
HAIR TONIC

The portraits forming part of the trade-mark are fanciful. The words "Extraordinary Hair Tonic" are disclaimed apart from the mark as shown on the drawing.

For Hair Tonic.

Claims use since Oct. 15, 1931.

Ser. No. 327,858. INDEPENDENT DRUGGISTS' ALLIANCE DISTRIBUTING CO., Chicago, Ill. Filed May 28, 1932.



The words "Tooth Paste" and "Tooth Paste Cleans" are disclaimed apart from the mark as shown in the drawing. The representation of the carton per se is disclaimed.

For Tooth Paste.

Claims use since Jan. 2, 1932.

Ser. No. 329,710. HALL & RUCKEL, INC., Brooklyn, N. Y. Filed Aug. 20, 1932.

X

For Deodorants and Depilatories.

Claims use since 1838 for depilatories; Aug. 15, 1932, for deodorants.

Ser. No. 331,046. FRANK GUBA, doing business as St. Ann's Laboratory, Waterbury, Conn. Filed Oct. 7, 1932.

St. Ann's



The trade-mark represents a fanciful portrait of St. Ann.

For Antiseptic Healing Ointment, Cough Sirup, Cold Tablets; Liniment for Muscular Cramps, Strains and Sprains of Muscles and Tendons, Neuralgia, and Stiff Neck; Laxative Herb Tea, General Tonic, Slight Laxative.

Claims use since July 24, 1932.

Ser. No. 331,437. PARK & TILFORD, New York, N. Y. Filed Oct. 21, 1932.

No 3

For Perfumeries, Lotions, Toilet Waters, Face Powders, Rouge, Face Creams, and Astringents.

Claims use since July 16, 1931.

Ser. No. 331,438. PARK & TILFORD, New York, N. Y. Filed Oct. 21, 1932.

No 12

For Perfumeries, Lotions, Toilet Waters, Face Powders, Rouge, Face Creams, and Astringents.

Claims use since July 17, 1931.

Ser. No. 331,595. RUSTVOID PRODUCTS, INC., Long Island City, N. Y. Filed Oct. 26, 1932.

WHITE RUSTVOID

The words "Stops Rust" are disclaimed except in the association shown.

For Liquid Preparation Containing a Mixture of Oils, Chemicals, and Metal Salts, to be Applied to Metal Surfaces to Prevent Rust and Corrosion.

Claims use since Mar. 26, 1931.

Ser. No. 331,878. TRI-VEE COMPANY, Baltimore, Md. Filed Nov. 3, 1932.

Vegelized IRON

The word "Iron" has been disclaimed apart from the mark shown on the drawing.

For Vegetised Iron—Namely, a Tonic Tablet for General Run Down Condition of the System, to Improve the Appetite, and Increase the Strength.

Claims use since Apr. 27, 1931.

Ser. No. 331,992. PROFESSIONAL PRODUCTS CORPORATION, New Brunswick, N. J. Filed Nov. 8, 1932.

Kalms

For Tablets for Pains, Dysmenorrhea, Headaches, and the Like.
Claims use since Oct. 1, 1932.

Ser. No. 332,087. DAY CHEMICAL COMPANY, Newark, N. J. Filed Nov. 12, 1932.

Surgilube

For Surgical Lubricating Jelly.
Claims use since Feb. 1, 1932.

Ser. No. 332,096. MIDWEST HARDWARE COMPANY, Chicago, Ill. Filed Nov. 12, 1932.

BLACK REAPER

For Moth-Proofing Materials.
Claims use since Sept. 30, 1932.

Ser. No. 332,101. SALVATORE A. REINA, doing business as Salva-Gene Chemical Laboratory, San Francisco, Calif. Filed Nov. 12, 1932.

SALVA-GENE

For Internal Medicine—Namely, an Intravaginal Bacteriostatic and Prophylactic Agent.
Claims use since Oct. 25, 1932.

Ser. No. 332,128. SOLUOL CORPORATION, Providence, R. I. Filed Nov. 14, 1932.

SOLUGEL

For Sizing and Treatment Material for Natural and Synthetic Textile Fibers.
Claims use since Sept. 1, 1932.

Ser. No. 332,157. ROBERT MCNEIL, Philadelphia, Pa. Filed Nov. 15, 1932.

Rosebud

For Prophylactic Astringent and Anodyne, and Preparations for Treatment of Inflammatory Affections of the Mucuous Membranes and Tissues of the Vaginal Tract.
Claims use since Oct. 25, 1932.

Ser. No. 332,170. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y. Filed Nov. 15, 1932.

NEOFOSFAN

For Tonic and Reconstructive.
Claims use since May, 1931.

Ser. No. 332,223. THE BUCKEYE SODA COMPANY, Painesville Township, Ohio. Filed Nov. 17, 1932.

Nevite

For Washing Soda.
Claims use since Nov. 4, 1932.

Ser. No. 332,255. HYNSON, WESTCOTT & DUNNING, INCORPORATED, Baltimore, Md. Filed Nov. 18, 1932.

H. W. & D.

For Antiseptics, Bactericides, Bacteriostats, Disinfectants, and Germicides for General Pharmaceutical Use and for Use in Oral Hygiene, and Antiseptic, Bactericidal and Bacteriostatic Disinfectant and Germicidal Preparations Containing a Local Anesthetic;—Local Anesthetics, Benzyl Benzoate Preparations, Ant-Acids, Bile Salts and Preparations Made From or Containing Same, Ovarian Preparations, Thyroid Preparations, Hand Lotions, Tooth Powder and Tooth Paste, Antimony Compounds, Antispasmodics, Indicator Dyes, Antisyphilitics, Blood Anticoagulants, and Blood Coagulants.
Claims use since December, 1928.

Ser. No. 332,274. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y. Filed Nov. 18, 1932.

DERMOTONE

For Veterinary Medicine for Use in the Treatment of Mushy Ankles, Inflamed, Bowed, or Weak Tendons; Bruises, Cuts, Chafings, Bucked Shins, Swellings, and the Like.
Claims use since 1914.

Ser. No. 332,275. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y. Filed Nov 18, 1932.

DERMOS

For Veterinary Medicine for the Treatment of Chafings, Abrasions, Galls, and Raw Wounds.
Claims use since 1914.

Ser. No. 332,276. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y. Filed Nov. 18, 1932.

EMBRO-LIN

For General Medicinal Preparation for the Treatment of Stiffness, Soreness, Swollen Joints, Neuralgia Pains, Sore Throat, Colds, and the Like for Man or Beast.
Claims use since 1914.

Ser. No. 332,277. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y. Filed Nov. 18, 1932.

Ethol

For Veterinary Medicine for the Treatment of Colic, Constipation, Shipping Fever, Heat Prostration, Paralysis and Nervous Conditions.
Claims use since 1914.

Ser. No. 332,278. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y. Filed Nov. 18, 1932.

FEVERINE

For Veterinary Medicinal Preparation for the Treatment of Distemper, Coughs, Colds, Chills, Epizootic, Pink Eye, Menningitis.
Claims use since 1914.

Ser. No. 332,279. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y. Filed Nov. 18, 1932.

NERVOSAN

For Veterinary Nerve Tonic.
Claims use since 1914.

Ser. No. 332,280. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y. Filed Nov. 18, 1932.

"SHRINKS"

For Medicinal Preparation for Swollen Tendons, Capped Hock, Big Knee, Caked Bag in Cows or Horses.
Claims use since 1914.

Ser. No. 332,282. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y. Filed Nov. 18, 1932.

VESICOL

For Veterinary Medicinal Preparation for Humane Blisters.
Claims use since 1914.

Ser. No. 332,283. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y. Filed Nov. 18, 1932.

SUL 4 DIP

No claim being made to the word "Dip" apart from the mark shown in the drawing.
For Medicinal Preparation for the Treatment of Skin Diseases for Man or Beast.
Claims use since 1914.

Ser. No. 332,284. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y. Filed Nov. 18, 1932.

Vitafos

For Veterinary Tonic for the Treatment of Rachitis, Dentition, Weak Joints, and Run-Down Conditions.
Claims use since 1914.

Ser. No. 332,309. NATURAL CRYSTALS CORPORATION, Excelsior Springs, Mo. Filed Nov. 19, 1932.

EXCELSIOR SPRINGS Natural CRYSTALS



The words "Excelsior Springs Natural Crystals" are disclaimed apart from the mark as shown in the drawing.
For Dehydrated Medicinal Salts.
Claims use since July 2, 1932.

Ser. No. 332,327. JACOB TESMAN, doing business as Tesman Drug Co., Philadelphia, Pa. Filed Nov. 18, 1932.



For Liniment in Paste Form to Relieve Pain Due to Bronchitis, Neuritis, Pleurisy, Rheumatism, Lumbago, Sprains, and Bruises.
Claims use since Jan. 1, 1932.

Ser. No. 332,734. GEORGE RUCK, Philadelphia, Pa. Filed Dec. 3, 1932.

CAUSALIN

For Antipyreticum and Analgesic and Specific.
Claims use since Nov. 28, 1932.

CLASS 7

Cordage

Ser. No. 331,918. BRITISH ROPES LIMITED, London, England. Filed Nov. 5, 1932.



For Rope of Jute and Hemp.
Claims use since Apr. 2, 1932.

Ser. No. 331,919. BRITISH ROPES LIMITED, London, England. Filed Nov. 5, 1932.



For Rope of Jute and Hemp.
Claims use since Apr. 2, 1932.

Ser. No. 331,920. BRITISH ROPES LIMITED, London, England. Filed Nov. 5, 1932.



For Rope of Jute and Hemp.
Claims use since June 10, 1932.

Ser. No. 331,921. BRITISH ROPES LIMITED, London, England. Filed Nov. 5, 1932.



For Rope of Jute and Hemp.
Claims use since June 10, 1932.

Ser. No. 332,362. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and Brooklyn, N. Y. Filed Nov. 22, 1932.

BEAVER

For Twine Manufactured from Vegetable Fiber.
Claims use since Jan. 26, 1911.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

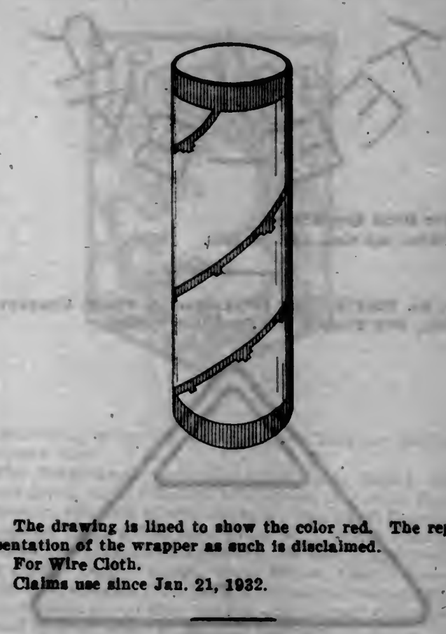
Ser. No. 330,384. NEW JERSEY PORCELAIN CO., Trenton, N. J. Filed Sept. 15, 1932.

"SLIP-ON"

Monarch

No claim is made to the exclusive use of the term "Slip-On" apart from the mark as shown on the drawing.
For Bathroom-Fixtures—Namely, Soap Dishes, Tumbler Holders, Toothbrush Holders, Towel Bars, and Paper Holders.
Claims use since Sept. 1, 1931.

Ser. No. 330,944. REYNOLDS WIRE CO., Dixon, Ill. Filed Oct. 4, 1932.



The drawing is lined to show the color red. The representation of the wrapper as such is disclaimed.
For Wire Cloth.
Claims use since Jan. 21, 1932.

Ser. No. 331,621. SAMUEL L. MARKOWITZ, INC., New York, N. Y. Filed Oct. 27, 1932.

5-8 1-2 LB. NET WIRE 16
GOLD-RITE
CLINCH NAILS

Registration rights in all of the wording and other notations appearing on the drawing are hereby disclaimed.
For Nails.
Claims use since July 1, 1932.

Ser. No. 332,553. SECURITY PRODUCTS COMPANY, St. Louis, Mo. Filed Nov. 28, 1932.

NOVERFLO

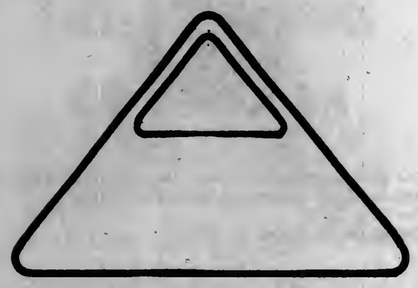
For Flush Valves.
Claims use since Sept. 25, 1932.

Ser. No. 332,657. MECHANICAL IMPROVEMENTS CORPORATION, Camden, N. J. Filed Dec. 1, 1932.

KEE-BAR

For Metal Key Holders.
Claims use since Apr. 16, 1931.

Ser. No. 332,719. THE INTERNATIONAL NICKEL COMPANY, INC., New York, N. Y. Filed Dec. 3, 1932.



For Sinks, Particularly Those Made of Nickel or of Alloys of Nickel and/or Copper.
Claims use since Apr. 29, 1919.

CLASS 15

Oils and Greases

Ser. No. 332,218. BILTRITE MOTOR EQUIPMENT CO. INC., New York, N. Y. Filed Nov. 17, 1932.

PENN-BILT

For Lubricating Oils and Greases for Motor Vehicles, Hydraulic Brake Oils, Crank Case Oils, Shock-Absorber Oils, and Penetrating Oils.
Claims use since Aug. 1, 1932.

Ser. No. 332,346. GEORGE MEYER, doing business as The Puissant Co., St. Louis, Mo. Filed Nov. 21, 1932.

PUISSANT

For Lubricating Compound.
Claims use since Oct. 1, 1932.

Ser. No. 332,455. INDUSTRIAL OIL CORPORATION, Warren, Pa. Filed Nov. 25, 1932.

PENN-HILLS.

For Motor Lubricating Oils.
Claims use since Nov. 7, 1932.

Ser. No. 332,457. KENTUCKY CONSUMERS OIL COMPANY, INC., Louisville, Ky. Filed Nov. 25, 1932.

Valv-Lax

No claim is made to exclusive right in the word "Valv", apart from its use in the mark and as shown in the drawing.
For Overhead Valve and Cylinder Lubricant.
Claims use since Nov. 1, 1931.

Ser. No. 332,460. THE LUBRI-GRAPH CORPORATION, Cleveland and Wickliffe, Ohio. Filed Nov. 25, 1932.

LUBRI-GEAR

For Lubricating Oils and Lubricating Greases.
Claims use since Nov. 14, 1932.

Ser. No. 332,466. PETROLEUM HEAT AND POWER COMPANY, New York, N. Y. Filed Nov. 25, 1932.

PETROFUEL

Applicant disclaims the word "Fuel" apart from the mark as shown in the drawing.
For Heating Furnace Oils.
Claims use since Nov. 10, 1932.

Ser. No. 332,592. MAY OIL BURNER CORPORATION, Baltimore, Md. Filed Nov. 29, 1932.

ECON-O-MAY

For Heating Furnace Fuel Oils.
Claims use since Oct. 5, 1932.

Ser. No. 332,593. MAY OIL BURNER CORPORATION, Baltimore, Md. Filed Nov. 29, 1932.

QUIET MAY

For Heating Furnace Fuel Oils.
Claims use since Oct. 5, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 321,815. NORTH AMERICAN PAINT & CHEMICAL CO. LTD., Los Angeles, Calif. Filed Dec. 5, 1931.



For Ready-Mixed Cold Water and Paste Paints, Dry Paint Colors, Paint Thinners, White Lead, Zinc Oxide Paint Pigments, Prepared Shellac Ready for Use, Paint Enamels, Lacquers, Lacquer Thinners, Floor Wax, Putty, Varnish, Linseed Oil, Turpentine, Calcimine, Oil and Japan Colors, Oil Stains, Cement Stains, Wood Fillers.
Claims use since Mar. 8, 1928.

Ser. No. 332,219. BILTRITE MOTOR EQUIPMENT CO. INC., New York, N. Y. Filed Nov. 17, 1932.

BILTRITE

For Ready-Mixed Paint, Paint Enamels, Lacquers, Varnishes, Stains, and Japans; Paint and Lacquer Thinners, Paint Finishes, Enamel Finishes, Touch-Up Paints, Wood Polishing Oils, Aluminum Bronze, Prepared Shellac, Motor Vehicle Engine Enamels, and Tire Paint.
Claims use since July 2, 1928.

Ser. No. 332,241. THE TRUSCON LABORATORIES, Detroit, Mich. Filed Nov. 17, 1932.

ALCHEMIK

For Paste and Liquid Paints, Paint Enamels, Varnishes, Stains, Paint, Vehicle and Similar Oils, Japans, Primers, Lacquers, and Surfacers.
Claims use since Nov. 1, 1932.

Ser. No. 332,524. LEON FINCH LTD., Los Angeles, Calif. Filed Nov. 28, 1932.



The lining shown on the drawing is used for shading purposes only.
For Ready-Mixed Cold Water and Paste Paints, Dry Paint Colors, Paint Thinners, White Lead, Zinc Oxide Paint Pigments, Prepared Shellac Ready for Use, Paint Enamels, Lacquers, Lacquer Thinners, Floor Wax, Putty, Varnish, Linseed Oil, Turpentine, Kalsomine, Oil and Japan Colors, Oil Stains, Cement Stains, Wood Fillers, Clear Primers, Pigmented Primers, Clear Sealers, Pigmented Sealers, Pigmented Surfacers; Paint, Varnish and Lacquer Removers; Baked Enamel Remover, Sanding Lacquers.
Claims use since August, 1931.

CLASS 17

Tobacco Products

Ser. No. 332,874. BONUS TOBACCO COMPANY, Cincinnati, Ohio. Filed Dec. 8, 1932.

BONUS

For Chewing Tobacco.
Claims use since Nov. 1, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 329,180. EDWARD G. BUDD MANUFACTURING COMPANY, Philadelphia, Pa. Filed July 28, 1932.

SHOTWELD

For Air, Land, and Water Vehicles and Structural Parts Thereof and/or Structural Subassemblies of Such Vehicles.
Claims use since June 20, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 331,522. WHITALL TATUM COMPANY, Millville, N. J. Filed Oct. 24, 1932.



For Electrical Insulators.
Claims use since October, 1924.

Ser. No. 331,946. JAMES H. BOYD MANUFACTURING CO., Chicago, Ill. Filed Nov. 7, 1932.

BOYEMACO

For Electric Floor Lamps.
Claims use since Aug. 25, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 332,423. STEPHEN SLESINGER, New York, N. Y. Filed Nov. 23, 1932.

GAME OF THE MONTH

No claim is made to the word "Game" apart from the mark as shown.
For Games—That is, Card Games, Board Games, Educational Card Games, Puzzles, and Parlor Board Games.
Claims use since Apr. 14, 1929.

Ser. No. 332,424. STEPHEN SLESINGER, New York, N. Y. Filed Nov. 23, 1932.

TOY OF THE MONTH

No claim is made to the word "Toy" apart from the mark as shown.
For Toys—That is, Figure Toys, Dolls, Doll Houses, Mechanical Toys and Construction Toys, and Roller Toys.
Claims use since Apr. 14, 1929.

Ser. No. 332,436. E. D. CLEM, doing business as Standard Amusement Company, Beaumont, Tex. Filed Nov. 22, 1932.

THE SILVER KING TWINS

For Coin-Controlled Amusement Device.
Claims use since June 1, 1932.

Ser. No. 332,996. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed Dec. 12, 1932.

TAKIT

For Artificial Bait Such as Spinners.
Claims use since Nov. 25, 1932.

Ser. No. 333,009. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass. Filed Dec. 12, 1932.

BARON MUNCHAUSEN

For Board Game Played with Movable Pieces.
Claims use since Dec. 1, 1932.

CLASS 23

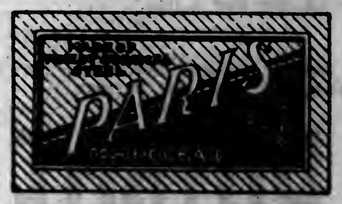
Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 331,415. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Oct. 20, 1932.

ACME

For Lawn Mowers.
Claims use since May, 1909.

Ser. No. 331,857. ROSS GOLDBERG, Brooklyn, N. Y. Filed Nov. 3, 1932.



No claim is made to the words in the drawing apart from the mark shown on the drawing. The drawing is lined for green.
For Safety Razor Blades.
Claims use since Aug. 4, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 327,961. PITTSBURGH EQUITABLE METER COMPANY, Pittsburgh, Pa. Filed June 11, 1932.

EMCO

For Cast Iron, Tin, and Steel Gas Meters, Large Capacity Positive Gas Meters, Orifice Meters, Demand Meters, Domestic and Curb Box Meters, Combined Record Gauges, Well Testing and Pressure Gauges, Meter Provers, and Test Meters.
Claims use since 1911.

Ser. No. 331,795. FREDERICK LOESER & CO., INC., Brooklyn, N. Y. Filed Nov. 1, 1932.

METER-COOK

The word "Meter" in the mark is disclaimed apart from the mark as shown in the drawing.
For Meters Applied to Gas Ranges.
Claims use since Sept. 12, 1932.

Ser. No. 332,712. FLEISCHER STUDIOS, INCORPORATED, New York, N. Y. Filed Dec. 8, 1932.



For Motion Picture Cartoons.
Claims use since Aug. 9, 1930.

CLASS 27

Horological Instruments

Ser. No. 326,581. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio. Filed Apr. 28, 1932.

Auto-Lite ALARM

The word "Alarm" is disclaimed apart from the mark shown in the drawing for purposes of registration only.
For Time Indicating and Registering Apparatus—Namely, Clocks, Watches, Chronometers, Mechanisms Responsive to Electric Currents Especially Adapted for Driving the Same, and Parts Thereof.
Claims use since Mar. 4, 1932.

Ser. No. 326,583. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio. Filed Apr. 28, 1932.

Unico

For Time Indicating and Registering Apparatus—Namely, Clocks, Watches, Chronometers, Mechanisms Responsive to Electric Currents Especially Adapted for Driving the Same, and Parts Thereof.
Claims use since Mar. 24, 1932.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 331,612. WINDOWITCH COMPANY, Cleveland, Ohio. Filed Nov. 1, 1932.

Windo Witch

For Rubbing and Squeegeeing and Polishing Devices in the Form of Hand Implements, and Pole or Handle Supported Structures with or without Reservoirs for Cleansing Fluid, Particularly Useful for Window Cleaning Operations.
Claims use since Sept. 19, 1932.

CLASS 32

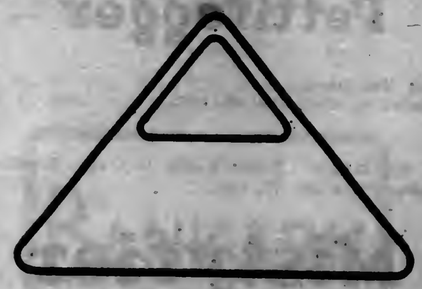
Furniture and Upholstery

Ser. No. 331,040. CONANT BALL COMPANY, Boston, Mass. Filed Oct. 7, 1932.



The words "Famous Reproductions of Old New England Furniture" are disclaimed apart from the mark as shown in the drawing.
For Household Furniture—Namely, Tables, Chairs, Beds, Dressers, Highboys, Chiffoniers, Chifforobes, Dressing Tables, Vanities, Benches, Clothing Cabinets, Kitchen Cabinets, Chinaware Cabinets, Linen Cabinets, Costumers, Trunk Racks in the Nature of Furniture, Stools, Servers, Buffets, Book Racks, Mirror Frames, Secretaries, Bookcases, Magazine Stands, Hanging Wall Racks, Sewing Stands, Dressing Screens, Partitioning Screens, Folding Tray Stands, Davenports, Sofas, Wardrobes, Telephone Stands, Tabourettes, Desks, Settees, Picture Frames, and Pedestals.
Claims use since Mar. 1, 1932.

Ser. No. 332,720. THE INTERNATIONAL NICKEL COMPANY, INC., New York, N. Y. Filed Dec. 8, 1932.



For Table Tops, Particularly Those Made of Nickel or of Alloys of Nickel and/or Copper.
Claims use since Apr. 29, 1919.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 318,170. REAL-OIL-HEAT BURNER COMPANY, Winona, Minn. Filed Aug. 19, 1931.

SUNAIRE

For Oil Burners, Humidifiers and Heat Savers, Consisting of Heating Drums Through Which the Products of Combustion of Heating Plants Are Run Prior to Passage to Smoke Pipes.
Claims use since Apr. 2, 1931.

Ser. No. 330,595. MIRIAM FRANKEL, Brooklyn, N. Y. Filed Sept. 23, 1932.

DOROTHY

For Lampshades Made of Silk, Parchment, and the Like.
Claims use since July 26, 1932.

Ser. No. 330,639. THE SILEX COMPANY, Hartford, Conn. Filed Sept. 24, 1932.

SILEX

For Stoves, Gas and Spirit.
Claims use since July 12, 1913, on spirit stoves, and since Oct. 1, 1930, on gas stoves.

Ser. No. 331,315. PARKS-CRAMER COMPANY, Fitchburg, Mass. Filed Oct. 17, 1932.

Pettifogger

For Humidifiers.
Claims use since Jan. 25, 1932.

Ser. No. 331,316. PARKS-CRAMER COMPANY, Fitchburg, Mass. Filed Oct. 17, 1932.

Mistyfier

For Humidifiers.
Claims use since Jan. 25, 1932.

Ser. No. 332,632. ROBERT H. RUSSELL, Cleveland, Ohio. Filed Nov. 30, 1932.

RUSSELL
GAS-FYRE
PROCESS
ROBERT H. RUSSELL
CLEVELAND-O.
U.S.A.

No claim is made to the words "Gas-Fyre," "Process," and "Cleveland, O., U. S. A.," apart from the mark shown.
For Industrial Liquid Fuel Burners, Liquid Fuel Atomizers, Furnace Retorts, and Furnace Air Registers.
Claims use since Oct. 14, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-Metallic Tires

Ser. No. 329,243. THE SIMPLEX PISTON RING COMPANY OF AMERICA, INC., Cleveland, Ohio. Filed July 30, 1932.

APACHE

For Brake Linings.
Claims use since May 6, 1932.

Ser. No. 331,272. UNION OIL COMPANY, Parsons, Kans., and North Kansas City, Mo. Filed Oct. 14, 1932.

CO-OP

For Vehicle Tires and Inner Tubes Made of Rubber and Rubber and Fabric.
Claims use since Jan. 1, 1932.

CLASS 36

Musical Instruments and Supplies

Ser. No. 331,832. C. MEISEL, INC., New York, N. Y. Filed Nov. 2, 1932.

UNITY

For Violins, Violas, Violoncellos, Double Basses, Mandolins, Guitars, Banjos, Tenor Banjos, Ukeleles, Zithers, Accordions, Blow Accordions, Concertinas, Harmonicas, and Band Instruments Consisting of Brass and Wood-Wind Instruments and Tympani; Strings, Bows, Rosin, Trimmings, Chin Rests, Bridges, Pegs, Tail Pieces, and String Adjusters for Bowed and Fretted Stringed Instruments.
Claims use since Oct. 1, 1897.

CLASS 37

Paper and Stationery

Ser. No. 330,951. GEORGE B. GRAFF CO., Cambridge, Mass. Filed Oct. 5, 1932.

CELLUGRAF

For Indicator Tabs or File Signals.
Claims use since Apr. 20, 1932.

Ser. No. 332,324. HURLBUT PAPER COMPANY, South Lee, Mass. Filed Nov. 18, 1932.

SCOTCH TWEED

For Writing and Printing Paper.
Claims use since September, 1931.

Ser. No. 332,384. WILLIAM DANA SEIBERT, New York, N. Y. Filed Nov. 22, 1932.

EXPANDIT

For Binder for Magazines.
Claims use since Apr. 1, 1932.

CLASS 38

Prints and Publications

Ser. No. 331,178. FERRY-HANLY ADVERTISING COMPANY, Kansas City, Mo. Filed Oct. 12, 1932.



The words "Charity Chek" appearing on the drawing are disclaimed apart from the mark as shown.
For Printed Advertising Matter in the Nature of Trading Stamps.
Claims use since Oct. 6, 1932.

Ser. No. 332,140. BLUE RIBBON BOOKS, INC., New York, N. Y. Filed Nov. 15, 1932.

"POP-UP"

For Printed Books Published in a Series.
Claims use since Oct. 8, 1932.

Ser. No. 332,917. GREEN-HALL, INC., Chicago, Ill. Filed Dec. 9, 1932.

APARTMENT and HOTEL LEDGER

For Periodically Issued Magazines.
Claims use since January, 1932.

Ser. No. 332,934. THE WASHINGTON TIMES COMPANY, Washington, D. C. Filed Dec. 9, 1932.

FEDERAL MERRY-GO-ROUND

For Column of a Newspaper.
Claims use since Dec. 1, 1932.

CLASS 39

Clothing

Ser. No. 327,904. CHIPPEWA SHOE MANUFACTURING COMPANY, doing business as Kushion-Aire Shoe Company, Chippewa Falls, Wis. Filed June 11, 1932.

KUSHION AIRE

No claim is made to the word "Kushion" except in the association shown.
For Shoes Made of Leather, Fabric, or Combinations of These Materials and Rubber.
Claims use since Mar. 21, 1932.

Ser. No. 328,080. WALDVOGEL-ABRAMS COMPANY, Boston, Mass. Filed June 17, 1932.

PAKT-NAP

No claim is made to the exclusive right to use the word "Nap" apart from the mark shown.
For Men's and Young Men's Overcoats.
Claims use since Feb. 15, 1932.

Ser. No. 329,616. ADAM HAT STORES, INC., New York, N. Y. Filed Aug. 18, 1932.

BANKARU

For Men's Hats.
Claims use since January, 1932.

Ser. No. 329,685. MODERN MERCHANDISING BUREAU, INC., New York, N. Y. Filed Aug. 19, 1932.

Screen Star ★ Styles

Applicant disclaims the right to the exclusive use of the word "Styles" individually except in the precise relation and association in which it appears in the drawing.

For Women's, Misses', and Children's Hats and Caps; Scarfs of Silk, Wool, Rayon, Linen and Cotton; Underwear of Knitted, Netted, and Textile Fabrics; Bloomers, Chemises, Brassières, Negligees, Petticoats, Slips, Panties, Vests and Shirts for Underwear, Nightgowns, Pajamas, Wraps, Skirts for Under and Outer Wear, Knickers, Riding Habits, Beach Overalls and Beach Pajamas, Coats, Blouses, Shirtwaists, Gowns, Frocks, Dresses, and Suits.

Claims use since June 30, 1932.

Ser. No. 330,549. NELSON KNITTING COMPANY, Rockford, Ill. Filed Sept. 21, 1932. Under 10-Year proviso.

Nelson

For Hosiery.

Claims use since 1880.

Ser. No. 330,632. MODEL BRASSIERE CO. INC., Brooklyn, N. Y. Filed Sept. 24, 1932.

BANDOLINK

For Brassières.

Claims use since Sept. 2, 1932.

Ser. No. 331,231. SIMON WEINER, New York, N. Y. Filed Oct. 13, 1932.



No claim is made to the words "Styles in London" apart from the mark as shown.

For Men's, Women's, and Children's Shoes, Slippers, and Sandals Made of Leather, Imitation Leather, Rubber, Fabric, and Combinations of Said Materials; and Men's, Women's, and Children's Rubbers.

Claims use since Apr. 15, 1932.

Ser. No. 331,493. THE CORSETRY INCORPORATED, South Norwalk, Conn. Filed Oct. 24, 1932.

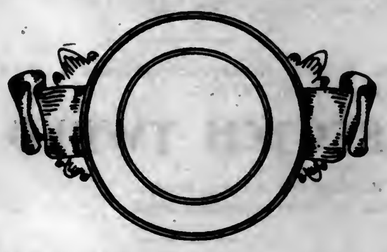
FORM Saver

The words "Form Saver" are hereby disclaimed apart from the mark as shown.

For Foundation Garments, Corsets, Brassières, Girdles, and Combinations of the Same.

Claims use since Sept. 29, 1932.

Ser. No. 331,507. MARION SHOE COMPANY, Marion, Ind. Filed Oct. 24, 1932.



For Footwear, Comprising Shoes Made of Leather, Fabric, or Combinations Thereof.

Claims use since Oct. 30, 1930.

Ser. No. 331,540. OSCAR BROCKMAN, doing business as Oscar Brockman Company, Louisville, Ky. Filed Oct. 25, 1932.

ALL-AMERICAN

For Shoe Soles.

Claims use since July, 1932.

Ser. No. 331,542. BURLINGTON COUNTY SHOE COMPANY, Mount Holly, N. J. Filed Oct. 25, 1932.



Applicant disclaims all the wording appearing on the drawing except in connection with the mark shown.

For Infants', Children's, and Misses' Shoes Made of Leather.

Claims use since Aug. 2, 1932.

Ser. No. 331,556. INTERNATIONAL SHOE CO., St. Louis, Mo. Filed Oct. 25, 1932.



No claim is made to the words "Style" and "Comfort" apart from the trade-mark shown.

For Boots and Shoes of Leather, Fabric, and/or Combinations Thereof.

Claims use since Oct. 11, 1932.

Ser. No. 331,867. LAROMAN, GRAY COMPANY, Croydon, Pa., and New York, N. Y. Filed Nov. 3, 1932.

BLUE MOON

For Gloves Made of Leather, Fabric, Rubber, and/or Combinations Thereof; and Underwear Made of Knitted, Netted, and Textile Fabrics.

Claims use since Aug. 12, 1932.

Ser. No. 331,881. DAVID WIENER, New York, N. Y. Filed Nov. 3, 1932.

RITE-MAID
TRADE MARK
FROCKS
"MADE RIGHT FOR THE RIGHT MAID"

Applicant disclaims the right to the exclusive use of the words "Trade-Mark," "Frocks," and "Made Right for the Right Maid."

For Ladies' Dresses and Coats.

Claims use since Oct. 27, 1932.

Ser. No. 332,066. THE JUVENILE SHOE CORPORATION OF AMERICA, Aurora and St. Louis, Mo. Filed Nov. 11, 1932.

ROUGHIES

For Shoes and Slippers of Leather or Kid.

Claims use since Aug. 1, 1932.

Ser. No. 332,337. ELLANAY FROCKS, INC., Los Angeles, Calif. Filed Nov. 21, 1932.

ELLANAY

For Women's Frocks.

Claims use since November, 1930.

Ser. No. 332,496. NATIONAL SILK HOSIERY MILLS, INC., Indianapolis, Ind. Filed Nov. 26, 1932.



For Hosiery.

Claims use since Nov. 14, 1932.

Ser. No. 332,497. SEYMOUR TROY & CO., INC., New York, N. Y. Filed Nov. 26, 1932.

Vam Petites

For Leather and Fabric Shoes.

Claims use since Sept. 5, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 327,951. UNIVERSAL BUTTON FASTENING & BUTTON COMPANY, Detroit, Mich. Filed June 13, 1932.

ALCOL

For Buttons of Non-Precious Material.

Claims use since Apr. 20, 1932.

Ser. No. 332,214. AMERICAN HARD RUBBER COMPANY, Hempstead and New York, N. Y. Filed Nov. 17, 1932.

Okay

For Hard Rubber Combs for Dressing and Cleaning the Hair.

Claims use since June 17, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 321,198. CANNON MILLS, INC., New York, N. Y. Filed Nov. 17, 1931.

CAVALIER

For Textile Sheets, Sheetings, and Pillow Cases.

Claims use since Sept. 29, 1931.

Ser. No. 328,892. WALTER J. MUNRO, New York, N. Y. Filed July 19, 1932.

MUN-ROBE

The letters "Robe" are disclaimed apart from the mark as shown on the drawing.
For Blankets, Carriage Sets, Carriage Robes Made of Wool, Silk, Rayon, and/or Cotton.
Claims use since May 15, 1932.

Ser. No. 329,888. HOWARD L. CURRY & CO. INC., New York, N. Y. Filed Aug. 27, 1932.

Storm King CHINCHILLA

The word "Chinchilla" is disclaimed apart from the mark as shown.
For Goods: Woolen Cloth in the Piece.
Claims use since July 1, 1925.

Ser. No. 330,987. MARTHA W. AHLES, Chicago, Ill. Filed Oct. 6, 1932.

BAA-VEE

For Hair Net to be Used on a Hat.
Claims use since Aug. 1, 1932.

Ser. No. 332,082. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Nov. 12, 1932.

Crystelle

For Pile Fabrics in the Piece.
Claims use since Nov. 2, 1932.

Ser. No. 332,202. L. & E. STERN, INC., New York, N. Y. Filed Nov. 16, 1932.

San Tone

For Silk and Rayon Fabrics in the Piece.
Claims use since Nov. 11, 1932.

Ser. No. 332,217. WILLIAM L. BARRELL COMPANY, INC., New York, N. Y. Filed Nov. 17, 1932.

GABERTEX

For Cotton Piece Goods.
Claims use since Oct. 20, 1932.

Ser. No. 332,247. FRED BUTTERFIELD & CO., INC., New York, N. Y. Filed Nov. 18, 1932.

DOVELIN

For Fabrics in the Piece of Wool, Cotton, Silk, Rayon and/or Combinations Thereof.
Claims use since June 8, 1932.

CLASS 43

Thread and Yarn

Ser. No. 330,810. ERNEST B. DANE AND ALBERT J. MESSERVE, doing business as The Shepherd Worsted Mills, Newton, Mass. Filed Sept. 30, 1932.



For Fingering Yarns for Knitting and Crocheting.
Claims use since Sept. 14, 1932.

Ser. No. 332,134. PATONS & BALDWINS, LIMITED, Halifax, England. Filed Nov. 14, 1932.



For Yarns of Wool, Worsted, or Hair.
Claims use since July, 1930.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 330,368. THE A. C. GILBERT COMPANY, New Haven, Conn. Filed Sept. 15, 1932.

GILBERT

Applicant is the owner of registration No. 137,287, registered Nov. 23, 1920.
For Electric Vibrators for Therapeutical Use and Electric Hairdryers.
Claims use since July 1, 1913.

Ser. No. 331,916. BERKELEY COMPANY, Chicago, Ill. Filed Nov. 5, 1932.

Bon-Ton

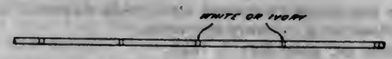
For Sanitary Napkins.
Claims use since Jan. 3, 1931.

Ser. No. 332,674. JULIUS ADLER, INC., New York, N. Y. Filed Dec. 2, 1932.



The trade-mark consists in spaced red or orange bands or markings along the substantial length of the wire. The representation of the wire shown in the drawing is disclaimed.
For Dental Wire.
Claims use since July 25, 1932.

Ser. No. 332,675. JULIUS ADLER, INC., New York, N. Y. Filed Dec. 2, 1932.



The trade-mark consists in spaced white or ivory bands or markings along the substantial length of the wire. The representation of the wire and the legend words "White or Ivory" together with the lead lines shown in the drawing are disclaimed.
For Dental Wire.
Claims use since July 25, 1932.

Ser. No. 332,676. JULIUS ADLER, INC., New York, N. Y. Filed Dec. 2, 1932.



The trade-mark consists in spaced green bands or markings along the substantial length of the wire. The representation of the wire shown in the drawing is disclaimed.
For Dental Wire.
Claims use since July 25, 1932

CLASS 46

Foods and Ingredients of Foods

Ser. No. 316,224. SHOREHAM COFFEE COMPANY, Washington, D. C. Filed June 24, 1931.

SHOREHAM CLUB

For Coffee.
Claims use since Mar. 25, 1931.

Ser. No. 318,152. THE KUNER PICKLE COMPANY, Brighton, Colo. Filed Aug. 19, 1931.

"Packed in the shadow of the Rockies"

Kuner's

Applicant is the owner of registration No. 290,569 under the ten-year proviso.
For Peas, Green Lima Beans, Sugar Corn, Sauerkraut, Sauerkraut Juice, Pumpkin, Cherries, Hominy, Tomatoes, Beet Salad, Whole Beets, Sliced Beets, Green Stringless Beans, Wax Beans, Sweet Relish, Sliced Sweet Pickles, Sour Pickles, Dill Pickles, Tomato Juice, Tomato Ketchup, Carrots, Carrots and Peas, and Golden Bantam Corn, All Packed in Cans.
Claims use since July 18, 1931.

Ser. No. 319,824. C. A. MARSH, INC., Orlando, Fla. Filed Oct. 7, 1931.



The drawing is lined for blue. No claim is made to the geographical name "Minneola" except as used as a trademark by the applicant.
For Fresh Citrus Fruits.
Claims use since Oct. 1, 1931.

Ser. No. 319,998. EDWIN E. KOONTZ, Kansas City, Mo. Filed Oct. 12, 1931.



The applicant disclaims the exclusive right to the cone shown in the drawing except in the association and arrangement shown.
For Chocolate Covered Cone Filled with Ice Cream and Topped with Nuts.
Claims use since Sept. 10, 1931.

Ser. No. 321,219. ROYAL BAKING POWDER COMPANY, New York, N. Y. Filed Nov. 17, 1931.



The lining on the drawing indicates the colors brown and red which are particularly claimed.
For Pudding and Pie Filling.
Claims use since Jan. 26, 1931.

Ser. No. 321,651. L. M. MCLAREN, Yuma, Ariz. Filed Dec. 1, 1931.

BigMc's YUMA PAK

The geographically descriptive notation "Yuma Pak" is disclaimed apart from the mark as shown on the drawing.
For Fresh Vegetables.
Claims use since Sept. 24, 1931.

Ser. No. 324,694. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Filed Mar. 2, 1932.

CHANDU

For Chewing Gum.
Claims use since Feb. 12, 1932.

Ser. No. 325,286. S. T. EDWARDS & CO., INC., Chicago, Ill. Filed Mar. 19, 1932.

STECO

For Dried Skim Milk (for Human Consumption).
Claims use since Apr. 15, 1931.

Ser. No. 330,992. COMMERCIAL PACKING CORPORATION, New York, N. Y. Filed Oct. 6, 1932.

Jel-ish-ous

For Food Product Consisting of a Combination of Fruits and Jelly.
Claims use since Sept. 1, 1932.

Ser. No. 331,183. I. & P. HOME PRODUCTS COMPANY, INC., Port Chester, N. Y. Filed Oct. 12, 1932.



For Percolated Compound Made from Oakwood, Herbs, Etc., Used for a Culinary Flavoring.
Claims use since May 1, 1932.

Ser. No. 331,288. MEXICAN IMPORTING COMPANY, New York, N. Y. Filed Oct. 15, 1932.



The representation of the man on the specimen furnished herein is fanciful and is not the portrait of a living or deceased individual.
For Chile Sauce and Ketchup.
Claims use since April, 1931.

Ser. No. 331,409. NORTH PACIFIC NUT GROWERS' CO-OPERATIVE, Lebanon, Oreg. Filed Oct. 20, 1932.

NORPAC

For Canned Nuts.
Claims use since December, 1931.

CARNEGIE LIBRARY OF ATLANTA
CARNEGIE LIBRARY OF ATLANTA

Ser. No. 331,563. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed Oct. 25, 1932.

POPSIE

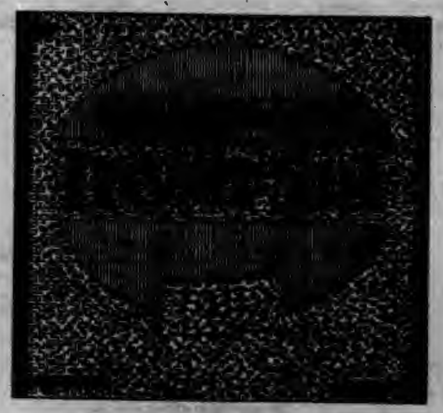
For Frozen Confections.
Claims use since Oct. 11, 1932.

Ser. No. 331,645. LA CROSSE REFINING COMPANY, La Crosse, Wis. Filed Oct. 28, 1932.

Ayishire Pale

No claim is made to the exclusive use of the word "Pale" apart from the mark as shown in the drawing.
For Malt Syrup.
Claims use since Oct. 14, 1932.

Ser. No. 331,655. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Oct. 28, 1932.



The drawing is lined for buff and red which colors are particularly claimed. Applicant is the owner of registration #294,032, registered May 17, 1932.
For An Invertase Preparation Suitable for Use in the Conversion of Sucrose in the Preparation of Foods and Ingredients of Foods.
Claims use since Oct. 22, 1932.

Ser. No. 331,714. PAULY AND RAMSEY, Tulsa, Okla. Filed Oct. 29, 1932.



The color lining on the drawing is used for shading purposes only.
For Cereal Breakfast Foods.
Claims use since Oct. 6, 1932.

Ser. No. 331,753. RED & WHITE CORPORATION, Buffalo, N. Y. Filed Oct. 31, 1932.

FLAV-R-JELL

No claim is made to the word "Jell" for registration purposes apart from the mark shown in the drawing.
For Gelatine Dessert.
Claims use since Aug. 24, 1932.

Ser. No. 331,910. SOUHEGAN APPLE PACKING ASSOCIATION, Wilton, N. H. Filed Nov. 4, 1932.



For Fresh Apples.
Claims use since Sept. 19, 1932.

Ser. No. 331,938. JOSEPH TETLEY & CO., INC., New York, N. Y. Filed Nov. 5, 1932.

TETLEY

BUDGET

TEA

No claim is made to the word "Tea" apart from the mark as shown in the drawing.
For Tea.
Claims use since July 15, 1932.

Ser. No. 332,213. AMERICAN MAIZE-PRODUCTS COMPANY, New York, N. Y. Filed Nov. 17, 1932.

BORDEX

For Corn Syrup.
Claims use since June 27, 1932.

Ser. No. 332,444. COMMONWEALTH FLOUR MILLS, INC., St. Louis, Mo. Filed Nov. 25, 1932.

TOL+PLUS

For Wheat Flour.
Claims use since Nov. 1, 1932.

Ser. No. 332,634. THE SHELLABARGER MILL & ELEVATOR COMPANY, Salina, Kans. Filed Nov. 30, 1932.

DIA-SURED

For Wheat Flour.
Claims use since July 18, 1932.

CLASS 47

Wines

Ser. No. 331,703. GEO. G. SANDEMAN SONS & CO. LIMITED, London, England. Filed Oct. 29, 1932.

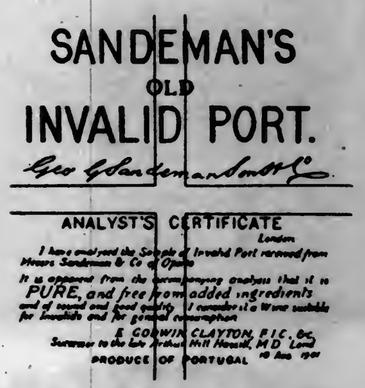


"BROWN BANG" SHERRY.

No claim is made to the word "Sherry" apart from the association shown on the drawing.
For Sherry Wine.
Claims use since July 17, 1920.

Ser. No. 331,707. GEO. G. SANDEMAN SONS & CO. LIMITED, London, England. Filed Oct. 29, 1932.

SANDEMAN'S
OLD
INVALID PORT.



All words appearing on the drawing, excepting the name "Geo. G. Sandeman Sons & Co.", are hereby disclaimed except in the association shown on the drawing. The name "Geo. G. Sandeman Sons & Co." is in the handwriting of Albert Geo. Sandeman.
For Port Wine.
Claims use since July 12, 1927.

CLASS 48

Malt Beverages and Liquors

Ser. No. 332,886. K B BEVERAGE COMPANY, Bay City, Mich. Filed Dec. 8, 1932.

White Rose

For Malt Beverages Containing Less Than One-Half of One Per Cent of Alcohol by Volume.
Claims use since Oct. 18, 1931.

Ser. No. 332,887. K B BEVERAGE COMPANY, Bay City, Mich. Filed Dec. 8, 1932.

Big Master

For Malt Beverages Containing Less Than One-Half of One Per Cent of Alcohol by Volume.
Claims use since Oct. 18, 1931.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 330,454. THE DISTILLERS AGENCY LIMITED, Edinburgh, Scotland. Filed Sept. 19, 1932.



No claim is made to the words "Rare Old Scots Whisky" and "Distillers Edinburgh."
For Scotch Whisky.
Claims use since April, 1896.

Ser. No. 331,552. JOHN HARVEY & SONS, LIMITED, Bristol, England. Filed Oct. 25, 1932.

HARVEY'S "GOLF BLEND"



No claim is made to any of the wording appearing on the drawing with the exception of the words "Harvey's Golf" and "The 19th Hole."
For Scotch Whisky.
Claims use since 1910.

Ser. No. 331,782. THE GLENFYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland. Filed Nov. 1, 1932.



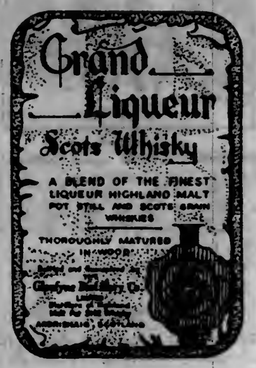
No claim is made to the words "Fine Old Scotch Whisky" except in the association shown on the drawing.
For Whisky.
Claims use since June 26, 1907.

Ser. No. 331,784. THE GLENFYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland. Filed Nov. 1, 1932.



No claim is made to any of the words appearing on the drawing with the exception of "Glen Sannox" and the name of the applicant company, and no claim is made to the exclusive use of the device of a seal.
For Whisky.
Claims use since Dec. 10, 1926.

Ser. No. 331,785. THE GLENFYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland. Filed Nov. 1, 1932.



No claim is made to any of the words appearing on the drawing with the exception of the name of the applicant company, and no exclusive right is claimed to the representation of a seal which is shown on the drawing lined for shading purposes only.

For Whisky.

Claims use since Dec. 10, 1926.

Ser. No. 331,786. THE GLENFYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland. Filed Nov. 1, 1932.



No claim is made to any of the words appearing on the drawing with the exception of the words "Sandy Tamson" and the name of the applicant company, and no exclusive rights are claimed to the representation of a seal per se. The lines shown on the drawing are for shading purposes only.

For Whisky.

Claims use since Dec. 10, 1926.

Ser. No. 331,788. THE GLENFYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland. Filed Nov. 1, 1932.



No claim is made to the exclusive use of the words "Old Highland Whisky", "Sole Proprietor", "Paisley", and "Glasgow".

For Whisky.

Claims use since Aug. 1, 1881.

Ser. No. 332,473. WHITE HORSE DISTILLERS, LIMITED, Glasgow, Scotland. Filed Nov. 25, 1932.



For Whisky.

Claims use since Mar. 20, 1890.

Ser. No. 332,474. WHITE HORSE DISTILLERS, LIMITED, Glasgow, Scotland. Filed Nov. 25, 1932.

WHITE HORSE

For Whisky.

Claims use since Mar. 20, 1890.

Ser. No. 332,875. ROBERT L. CRIGLER, Covington, Ky. Filed Dec. 8, 1932.

OLD JORDAN

For Whiskey.

Claims use since 1832.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 330,361. BLOOMINGDALE BROS., INC., New York, N. Y. Filed Sept. 15, 1932.



For Artificial Ornamental Trees.

Claims use since Aug. 24, 1932.

Ser. No. 331,089. ASHTON B. COLLINS, Birmingham, Ala. Filed Oct. 7, 1932.



For Mats, Electrotypes, Stereotypes, and Photo Engravings.

Claims use since Mar. 14, 1926.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JANUARY 17, 1933

300,349. SURGICAL SUPPLIES AND APPLIANCES. THE KENDALL COMPANY, Chicago, Ill., and Boston, Mass.
Filed March 14, 1932. Serial No. 325,099. PUBLISHED NOVEMBER 1, 1932. Class 44.

300,350. HEATING AND LIGHTING APPARATUS, PARTS OF AND ACCESSORIES THEREFOR—NAMELY, HYDROCARBON LAMPS, BURNERS, LANTERNS, HEATERS, AND PARTS OF AND ACCESSORIES THEREFOR, MICA LAMP CHIMNEYS, INCANDESCENT MANTLES, WICKS, AND METAL, PAPER, FABRIC, PARCHMENT, AND METAL-FRAME GLASS LAMP SHADES. THE MANTLE LAMP COMPANY OF AMERICA, Chicago, Ill.
Filed July 5, 1932. Serial No. 328,560. PUBLISHED NOVEMBER 1, 1932. Class 34.

300,351. FLUID MIXING HEADS AND THROATS FOR AERATION, PURIFICATION, AND TREATMENT BY MIXING WATER AND AIR, TWO GASES OF DIFFERENT DENSITIES, OR A FLUID AND A GAS WHEREBY IT IS PARTICULARLY ADAPTABLE FOR USE IN WATER WORKS, SEWAGE DISPOSAL PLANTS AND INDUSTRIAL FIELDS. VOGT BROTHERS MFG. CO., Louisville, Ky.
Filed May 19, 1932. Serial No. 327,240. PUBLISHED NOVEMBER 8, 1932. Class 13.

300,352. ELECTRIC METER AND TONE INDICATOR FOR INDICATING PEAK RESONANCE OF RADIO SIGNALS AND INDICATOR OF HIGH FREQUENCY CURRENTS AND VOLTAGES. DUOVAC RADIO TUBE CORP., Brooklyn, N. Y.
Filed May 13, 1932. Serial No. 327,051. PUBLISHED NOVEMBER 8, 1932. Class 26.

300,353. FRESH CITRUS FRUITS, FRESH DECIDUOUS FRUITS, FRESH VEGETABLES. J. T. MELTON, doing business as Melton Farms Inc., Fort Lauderdale, Fla.
Filed April 22, 1932. Serial No. 326,392. PUBLISHED NOVEMBER 1, 1932. Class 46.

300,354. DENTIFRICE. IRVING SCHUMAN, doing business as Vitadent Laboratories, Jersey City, N. J.
Filed April 20, 1932. Serial No. 326,304. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,355. LIVER FOOD PREPARATIONS AND TONIC FOOD PREPARATIONS, MALT AND FODDER. NORDMARK-WERKE G. M. B. H., Hamburg, Germany.
Filed March 17, 1932. Serial No. 325,237. PUBLISHED NOVEMBER 1, 1932. Class 46.

300,356. HAIR TONIC. ELIZABETH J. TATE, Washington, D. C.
Filed September 26, 1932. Serial No. 330,671. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,357. SHAMPOO PREPARATIONS. JOHN H. BRECK, INC., Springfield, Mass.
Filed September 16, 1932. Serial No. 330,392. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,358. COMPOSITION SHEET MATERIAL—NAMELY, FIBROUS SHEETS AND SHEETS COMPOSED OF CORK AND FIBRES. BEHR-MANNING CORPORATION, Troy, N. Y.
Filed September 12, 1932. Serial No. 330,242. PUBLISHED NOVEMBER 8, 1932. Class 50.

300,359. SHAMPOO. EMILY A. HORTON, doing business as The Swedish Laboratories, Cambridge, Mass.
Filed September 2, 1932. Serial No. 330,064. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,360. COSMETIC PREPARATIONS. CONTOURS LABORATORIES, INC., New York, N. Y.
Filed August 27, 1932. Serial No. 329,887. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,361. PLASTIC SOLDER. ANGIER & EARLE, INC., Boston, Mass.
Filed August 24, 1932. Serial No. 329,781. PUBLISHED NOVEMBER 8, 1932. Class 14.

300,362. STOP-LEAK COMPOUND. GEORGE M. FERGUSON, doing business as Ferguson Manufacturing Company, Portland, Oreg.
Filed August 17, 1932. Serial No. 329,664. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,363. CIGARETTES. JEAN JOSEPHS, doing business as Jay Tobacco Company, Philadelphia, Pa.
Filed September 26, 1932. Serial No. 330,658. PUBLISHED NOVEMBER 8, 1932. Class 17.

300,364. RAZOR HONES. WISCONSIN ABRASIVE CO., Milwaukee, Wis.
Filed September 19, 1932. Serial No. 330,502. PUBLISHED NOVEMBER 1, 1932. Class 4.

300,365. RAZOR HONES. WISCONSIN ABRASIVE CO., Milwaukee, Wis.
Filed September 19, 1932. Serial No. 330,501. PUBLISHED NOVEMBER 1, 1932. Class 4.

300,366. ASBESTOS-CEMENT PRODUCT MADE IN CORRUGATED SHEET FORM ESPECIALLY ADAPTED FOR ROOFINGS, SIDINGS, AND PARTITIONS. KEASBEY & MATTISON COMPANY, Ambler, Pa.
Filed August 9, 1932. Serial No. 329,424. PUBLISHED NOVEMBER 1, 1932. Class 12.

300,367. PREPARATION FOR HOLDING ARTIFICIAL TEETH IN PLACE. JULIUS H. TUVIN, doing business as The Dentay Company, New York, N. Y.
Filed July 29, 1932. Serial No. 329,206. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,368. HAIR WAVING PADS. ZOTOS CORPORATION, New York, N. Y.
Filed June 18, 1932. Serial No. 328,112. PUBLISHED NOVEMBER 1, 1932. Class 44.

300,369. SENSITIZED GELATINE COATED PAPER SHEETS FOR USE IN PHOTOGRAPHIC AND COLOTYPE PRINTING. PINCHOT-NEUMANN HOLDING CORP., New York, N. Y.
Filed August 24, 1929. Serial No. 288,980. PUBLISHED NOVEMBER 1, 1932. Class 26.

300,370. METAL STAMPING DIES, BUTTON COVERING MACHINES, EYELET SETTING MACHINES, ETC. AMERICAN BRASS & STEEL PRODUCTS CO., New York, N. Y.
Filed September 4, 1929. Serial No. 289,306. PUBLISHED NOVEMBER 8, 1932. Class 23.

300,371. PLUMBING, STEAM-FITTING, GAS FITTING AND AIR AND GAS VALVES, AND REGULATOR VALVES. THE SAFETY CAR HEATING & LIGHTING COMPANY, New Haven, Conn., and New York, N. Y.
Filed November 4, 1929. Serial No. 292,012. PUBLISHED NOVEMBER 1, 1932. Class 13.

300,372. GLOBES, SHADES, AND REFLECTORS MADE OF GLASS, FOR LIGHTING FIXTURES. THE SAFETY CAR HEATING & LIGHTING COMPANY, New Haven, Conn., and New York, N. Y.
Filed November 4, 1929. Serial No. 292,013. PUBLISHED NOVEMBER 8, 1932. Class 33.

300,373. SWITCH STANDS USED FOR OPERATING RAILROAD TRACK SWITCHES AND USUALLY COMPRISING A COMPLETE UNIT OF HOUSING AND MECHANICAL LEVERAGE FOR OPERATING THE SWITCH. RAMAPO AJAX CORPORATION, New York, N. Y.
Filed August 21, 1930. Serial No. 304,888. PUBLISHED NOVEMBER 1, 1932. Class 23.

300,374. FRESH ORANGES, FRESH MELONS, FRESH VEGETABLES. A. ARENA & CO., LTD., Los Angeles, Calif.
Filed August 26, 1930. Serial No. 305,025. PUBLISHED OCTOBER 25, 1932. Class 46.

300,375. FRESH VEGETABLES, FRESH CITRUS FRUITS, FRESH PEACHES, AND FRESH MELONS—NAMELY, CANTALOUPES AND HONEYDEWS. CORN & WARE, Calipatria, Calif.
Filed February 21, 1931. Serial No. 311,322. PUBLISHED NOVEMBER 1, 1932. Class 46.

300,376. LAUNDRY BLUE POWDER. JESSE C. STEWART CO., Pittsburgh, Pa.
Filed April 15, 1931. Serial No. 313,396. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,377. MAILING ENVELOPES. SAMUEL CUPPLES ENVELOPE COMPANY, St. Louis, Mo.
Filed April 25, 1931. Serial No. 313,771. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,378. WALL BOARD. JOHN DEAN, San Francisco, Calif.
Filed October 27, 1931. Serial No. 320,493. PUBLISHED NOVEMBER 1, 1932. Class 12.

300,379. CIGARETTE PAPERS AND CIGARETTE BOOKLETS. LARUS & BROTHER COMPANY, INCORPORATED, Richmond, Va.
Filed November 10, 1931. Serial No. 320,981. PUBLISHED NOVEMBER 8, 1932. Class 8.

300,380. PACKING PADS AND WRAPPERS AND INSULATING MAT OR SHEET FOR PACKING PADS. COTTONWOOD PRODUCTS, INC., Reading, Mass.
Filed December 2, 1931. Serial No. 321,679. PUBLISHED NOVEMBER 8, 1932. Class 50.

300,381. BREAD SLICING MACHINES. GELLMAN MANUFACTURING CO., Rock Island, Ill.
Filed January 4, 1932. Serial No. 322,691. PUBLISHED NOVEMBER 1, 1932. Class 23.

300,382. CIGARETTES, CIGARS, AND SMOKING TOBACCO. EXCELSIOR TOBACCO CO. INC., St. Louis, Mo.
Filed January 29, 1932. Serial No. 323,575. PUBLISHED NOVEMBER 8, 1932. Class 17.

300,383. WALL BATHROOM FIXTURES—NAMELY, SOAP DISHES, SOAP NICHES, DRINKING GLASS HOLDERS, DRINKING GLASS NICHES, TOOTH BRUSH HOLDERS, TOWEL RODS, TOILET PAPER NICHES AND TOILET PAPER SUPPORTS. WALFIX SPECIALTIES, INC., New York, N. Y.
Filed February 1, 1932. Serial No. 323,734. PUBLISHED NOVEMBER 1, 1932. Class 13.

300,384. MALT SYRUP. UNION MALT PRODUCTS COMPANY, Detroit, Mich.
Filed February 16, 1932. Serial No. 324,236. PUBLISHED NOVEMBER 1, 1932. Class 46.

300,385. TONIC FOR GROWING HAIR. JAMES J. AMICK, doing business as James J. Amick & Son, Detroit, Mich.
Filed February 18, 1932. Serial No. 324,278. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,386. AUTOMATIC GAS BURNING UNITS, A UNIT COMPRISING A BURNER AND DRAFT AND FUEL CONTROLLING DEVICES THEREFOR APPLIED TO WARM AIR FURNACES AND BOILERS, BOTH STEAM AND HOT WATER. LENNOX FURNACE COMPANY, Marshalltown, Iowa.
Filed March 30, 1931. Serial No. 312,713. PUBLISHED NOVEMBER 8, 1932. Class 34.

300,387. OPHTHALMIC LENSES. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y.
Filed September 13, 1932. Serial No. 330,288. PUBLISHED NOVEMBER 1, 1932. Class 26.

300,388. OPHTHALMIC LENSES. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y.
Filed September 13, 1932. Serial No. 330,287. PUBLISHED NOVEMBER 1, 1932. Class 26.

300,389. RAZORS, SAFETY RAZORS, SAFETY RAZOR BLADES, POCKETKNIVES, SCISSORS, TABLE KNIVES AND FORKS OF BASE METAL, AND HAIR CLIPPERS. S. H. KRESS & CO., New York, N. Y.
Filed September 12, 1932. Serial No. 330,265. PUBLISHED NOVEMBER 1, 1932. Class 23.

300,390. FORMED RAZOR SHARPENERS, INCLUDING SHARPENERS MADE OF FORMED GLASS. ZIG-ZAG SHARPENER CO., Tulsa, Okla.
Filed September 6, 1932. Serial No. 330,137. PUBLISHED NOVEMBER 1, 1932. Class 23.

300,391. SHELLED PEANUTS. DE LEON PEANUT COMPANY, De Leon, Tex.
Filed September 1, 1932. Serial No. 330,039. PUBLISHED NOVEMBER 1, 1932. Class 46.

300,392. SINKS, ESPECIALLY THOSE MADE OF NICKEL AND/OR COPPER AND/OR ALLOYS THEREOF. THE INTERNATIONAL NICKEL COMPANY, INC., New York, N. Y.
Filed August 31, 1932. Serial No. 330,016. PUBLISHED NOVEMBER 1, 1932. Class 13.

300,393. CUT MACARONI FOR USE IN SOUPS. THE KANSAS CITY MACARONI & IMPORTING COMPANY, doing business as The American Beauty Macaroni Company, Kansas City, Mo.
Filed August 29, 1932. Serial No. 329,951. PUBLISHED NOVEMBER 1, 1932. Class 46.

300,394. COMBINATION OF MACARONI AND BEANS. THE KANSAS CITY MACARONI & IMPORTING COMPANY, doing business as The American Beauty Macaroni Company, Kansas City, Mo.
Filed August 29, 1932. Serial No. 329,950. PUBLISHED NOVEMBER 1, 1932. Class 46.

300,395. HANDLES FOR HOES, HAY FORKS, MANURE FORKS, HEADER FORKS, SPADING FORKS, RAKES, DRAIN CLEANERS, SHOVELS, SPADES, SCOOPS, POTATO HOOKS; D CHISHOLM PATTERN HANDLES, D MAYNARD SHOVEL HANDLES, D DITCHING SPADE HANDLES, AND D TILLING SPADE HANDLES. THE BRYANT MANUFACTURING COMPANY, Wapakoneta, Ohio.
Filed August 29, 1932. Serial No. 329,935. PUBLISHED NOVEMBER 1, 1932. Class 23.

300,396. MECHANICAL CLUTCHES, CLUTCH PLATES, AND PARTS THEREOF. THE BORG & BECK COMPANY, Chicago, Ill.
Filed August 29, 1932. Serial No. 329,931. PUBLISHED NOVEMBER 1, 1932. Class 23.

300,397. INDUSTRIAL FURNITURE—NAMELY, WORK TABLES AND WORK BENCHES. WALTER A. ADAMS, doing business as Adams Machine Company, Rochester, N. Y.
Filed August 22, 1932. Serial No. 329,782. PUBLISHED NOVEMBER 1, 1932. Class 23.

300,398. ICE CREAM. ALPINE ICE CREAM CO. INC., Corona, N. Y.
Filed August 19, 1932. Serial No. 329,666. PUBLISHED NOVEMBER 1, 1932. Class 46.

300,399. INTERNAL COMBUSTION ENGINES, PUMPS, PUMPING PLANTS, WINDMILLS, AND FEED GRINDERS. FAIRBANKS, MORSE & CO., Chicago, Ill.
Filed August 18, 1932. Serial No. 329,631. PUBLISHED NOVEMBER 8, 1932. Class 23.

300,400. RAZOR BLADES. FRED KASSEKERT, Greenwich, Conn.
Filed August 16, 1932. Serial No. 329,583. PUBLISHED NOVEMBER 8, 1932. Class 23.

300,401. CONTROLS COMPRISING A PYRO-RECORDING COMPOSITION DISPOSED ON CARDBOARD AND REACTING AT CRITICAL TEMPERATURE TO PRODUCE A CHANGE IN COLOR AND THEREBY PROVIDE A VISUAL RECORD. STERILOMETER LABORATORIES, Los Angeles, Calif.
Filed August 15, 1932. Serial No. 329,565. PUBLISHED NOVEMBER 8, 1932. Class 26.

300,402. ELECTRICAL CONDENSER TESTING INSTRUMENTS. UNITED AMERICAN BOSCH CORPORATION, Springfield, Mass.
Filed August 13, 1932. Serial No. 329,542. PUBLISHED NOVEMBER 8, 1932. Class 26.

300,403. ORANGES, LEMONS, GRAPE FRUIT, TANGERINES, AND LIMES. THE CITRA PACKING CO., Citra, Fla.
Filed August 9, 1932. Serial No. 329,420. PUBLISHED NOVEMBER 1, 1932. Class 46.

300,404. EDIBLE WHITE OIL. CARMEL OIL CO., New York, N. Y.
Filed July 25, 1932. Serial No. 329,040. PUBLISHED NOVEMBER 1, 1932. Class 46.

300,405. REGISTERS FOR AIR CONDITIONING, HEATING, AND VENTILATING. HART & COOLEY MFG. COMPANY, New Britain, Conn.
Filed July 7, 1932. Serial No. 328,609. PUBLISHED NOVEMBER 8, 1932. Class 34.

300,406. PAPER EXCELSIOR. PIONEER PAPER STOCK COMPANY, Chicago, Ill.
Filed September 30, 1932. Serial No. 330,881. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,407. WRITING PENS OF ALL KINDS. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY, Camden, N. J.
Filed September 28, 1932. Serial No. 330,743. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,408. LITERARY MAGAZINE. ANTHONY J. BUTTITTA, doing business as Contempo, Ltd., Durham, N. C.
Filed July 23, 1932. Serial No. 329,071. PUBLISHED NOVEMBER 8, 1932. Class 38.

300,409. PERIODICAL PUBLICATION. WILSON-HALL PRINTING COMPANY, Rockford, Ill.
Filed September 28, 1932. Serial No. 330,771. PUBLISHED NOVEMBER 8, 1932. Class 38.

300,410. WAXED PAPER BAGS AND TRANSPARENT CONTAINERS USED FOR BAKERY PRODUCTS SUCH AS DOUGHNUTS, ETC. NEWARK PARAFFINE & PARCHMENT PAPER CO., Newark, N. J.
Filed June 23, 1932. Serial No. 328,247. PUBLISHED NOVEMBER 8, 1932. Class 2.

300,411. PERIODICAL MAGAZINE PUBLISHED MONTHLY. RESERVE OFFICERS' ASSOCIATION OF THE UNITED STATES, Washington, D. C.
Filed September 27, 1932. Serial No. 330,711. PUBLISHED NOVEMBER 8, 1932. Class 38.

300,412. PREPARATIONS FOR SKIN IRRITATION. PETER MURDOCK, doing business as Murdock Pharmacal Co., New York, N. Y.
Filed September 14, 1932. Serial No. 330,349. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,413. PERCOLATORS. THE ENTERPRISE ALUMINUM COMPANY, Massillon, Ohio.
Filed September 14, 1932. Serial No. 330,342. PUBLISHED NOVEMBER 1, 1932. Class 13.

300,414. TINNED BRONZE WIRE INSECT SCREENING. PACIFIC WIRE PRODUCTS COMPANY, Los Angeles, Calif.
Filed September 14, 1932. Serial No. 330,350. PUBLISHED NOVEMBER 1, 1932. Class 13.

300,415. METERED DISPENSING PUMPS. UNIVERSAL LUBRICATING SYSTEMS, INC., Pittsburgh, Pa.
Filed May 12, 1932. Serial No. 327,034. PUBLISHED NOVEMBER 1, 1932. Class 26.

300,416. AUTOMATIC THERMO-ELECTRIC GAS MIXING CONTROL APPARATUS. CUTLER-HAMMER, INC., Milwaukee, Wis.
Filed May 23, 1932. Serial No. 327,344. PUBLISHED NOVEMBER 1, 1932. Class 26.

300,417. PHOTOGRAPHIC CAMERAS AND PARTS THEREOF. UTILITY MANUFACTURING COMPANY, INC., New York, N. Y.
Filed July 12, 1932. Serial No. 328,747. PUBLISHED NOVEMBER 1, 1932. Class 26.

300,418. GINGER ALE. LOFT, INC., Long Island City, N. Y.
Filed September 29, 1932. Serial No. 330,792. PUBLISHED NOVEMBER 8, 1932. Class 45.

300,419. CARBON BLACK. WILCKES, MARTIN, WILCKES COMPANY, New York, N. Y.
Filed September 28, 1932. Serial No. 330,770. PUBLISHED NOVEMBER 8, 1932. Class 16.

300,420. RUBBER CEMENT. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed September 28, 1932. Serial No. 330,768. PUBLISHED NOVEMBER 8, 1932. Class 5.

300,421. WRITING PENS OF ALL KINDS. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY, Camden, N. J.
Filed September 27, 1932. Serial No. 330,700. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,422. WRITING PENS OF ALL KINDS. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY, Camden, N. J.
Filed September 27, 1932. Serial No. 330,699. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,423. WRITING PENS OF ALL KINDS. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY, Camden, N. J.
Filed September 27, 1932. Serial No. 330,698. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,424. RAZOR BLADES. COOPER PRODUCTS CORPORATION, New York, N. Y., assignor to Earl Safety Razor Corporation, New York, N. Y., a Corporation of New York.
Filed September 17, 1932. Serial No. 330,419. PUBLISHED NOVEMBER 1, 1932. Class 23.

300,425. MARINE GLUE. ALFRED JEFFERY & CO., doing business as Jeffery's Patent Marine Glue Works, London, England.
Filed September 15, 1932. Serial No. 330,870. PUBLISHED NOVEMBER 8, 1932. Class 5.

300,426. SILK GOODS IN THE PIECE. LOUIS ROESSEL & CO., INC., Hazleton, Pa., and New York, N. Y.
Filed September 8, 1932. Serial No. 330,101. PUBLISHED OCTOBER 11, 1932. Class 42.

300,427. PACKETS OF ABSORBENT TISSUE. TACHETTE MANUFACTURING CORPORATION, Long Island City, N. Y.
Filed September 1, 1932. Serial No. 330,055. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,428. PACKETS OF ABSORBENT TISSUE. TACHETTE MANUFACTURING CORPORATION, Long Island City, N. Y.
Filed September 1, 1932. Serial No. 330,054. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,429. MECHANICAL PACKINGS, BELTING, HOSE; MACHINERY PACKING OF ALL KINDS, IN PARTICULAR, FLAX, JUTE, ASBESTOS, DUCK, AND RUBBER; LEAD, COPPER, AND METAL SHREDDED PACKINGS AND LININGS AND ANY COMBINATION THEREOF; PLASTIC PACKINGS, FURNACE DOOR PACKINGS, SHEET PACKINGS, RING PACKINGS, SEMI-METALLIC PACKINGS, AND PUMP VALVES AND NON-METALLIC TIRES. ARMOR PRODUCTS INC., New York, N. Y.
Filed August 26, 1932. Serial No. 329,846. PUBLISHED NOVEMBER 8, 1932. Class 35.

300,430. ADHESIVE CEMENT. THE STARK METAL PRODUCTS COMPANY, Massillon, Ohio.
Filed August 24, 1932. Serial No. 329,809. PUBLISHED NOVEMBER 8, 1932. Class 5.

300,431. CORRESPONDENCE AND MAILING ENVELOPES. BUFFALO ENVELOPE COMPANY, INC., Buffalo, N. Y.
Filed August 10, 1932. Serial No. 329,441. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,432. BOWLING PINS, PARTICULARLY THE TYPE KNOWN AS CANDLE PINS. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill.
Filed August 8, 1932. Serial No. 329,396. PUBLISHED NOVEMBER 8, 1932. Class 22.

300,433. WOODEN CRATES AND BOXES. GENERAL BOX COMPANY, Chicago, Ill.
Filed May 31, 1932. Serial No. 327,586. PUBLISHED NOVEMBER 8, 1932. Class 2.

300,434. A FINISH IN THE NATURE OF A PAINT OR VARNISH USED FOR PRIMING, FILLING, AND/OR FINISHING SURFACES OF WOOD, CONCRETE, LINOLEUM, TILE, LEATHER, AND THE LIKE. EVERETT D. WOLBERT, doing business as Inwood Products Corporation, San Francisco, Calif.
Filed May 28, 1932. Serial No. 327,588. PUBLISHED NOVEMBER 8, 1932. Class 16.

300,435. MALT BEVERAGE CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. PREMIER MALT PRODUCTS CO., Peoria Heights, Ill.
Filed September 15, 1932. Serial No. 330,381. PUBLISHED NOVEMBER 8, 1932. Class 48.

300,436. WRITING PENS OF ALL KINDS. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY, Camden, N. J.
Filed September 27, 1932. Serial No. 330,697. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,437. DEVICES AND APPLIANCES FOR MOISTENING AND/OR SERVING ADHESIVE OR GUMMED TAPE, ETC. NASHUA PACKAGE SEALING CO. INC., Nashua, N. H.
Filed September 26, 1932. Serial No. 330,663. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,438. DEVICES AND APPLIANCES FOR MOISTENING AND/OR SERVING ADHESIVE OR GUMMED TAPE, ETC. NASHUA PACKAGE SEALING CO. INC., Nashua, N. H.
Filed September 26, 1932. Serial No. 330,662. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,439. DEVICES AND APPLIANCES FOR MOISTENING AND/OR SERVING ADHESIVE OR GUMMED TAPE, ETC. NASHUA PACKAGE SEALING CO. INC., Nashua, N. H.
Filed September 26, 1932. Serial No. 330,661. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,440. SAFES. GUNITE FOUNDRIES CORPORATION, Rockford, Ill.
Filed September 26, 1932. Serial No. 330,656. PUBLISHED NOVEMBER 8, 1932. Class 25.

300,441. FISHING REELS. THE HORTON MANUFACTURING COMPANY, Bristol, Conn.
Filed September 23, 1932. Serial No. 330,598. PUBLISHED NOVEMBER 8, 1932. Class 22.

300,442. FABRIC CUPS FOR USE IN OIL WELLS. DARLING VALVE & MANUFACTURING COMPANY, Williamsport, Pa.
Filed September 22, 1932. Serial No. 330,571. PUBLISHED NOVEMBER 8, 1932. Class 35.

300,443. SEAMLESS BRASS AND COPPER TUBING. PHELPS DODGE COPPER PRODUCTS CORPORATION, Dover, Del., and New York, N. Y.
Filed September 15, 1932. Serial No. 330,565. PUBLISHED NOVEMBER 8, 1932. Class 18.

300,444. TABLE BOARD GAME PLAYED WITH PIECES. FANESS INDUSTRIES, Chicago, Ill.
Filed September 20, 1932. Serial No. 330,510. PUBLISHED NOVEMBER 8, 1932. Class 22.

300,445. DYNAMITE. HERCULES POWDER COMPANY, Wilmington, Del.
Filed September 17, 1932. Serial No. 330,424. PUBLISHED NOVEMBER 8, 1932. Class 9.

300,446. SANITARY PAPER SHEETS FOR USE IN COVERING PHYSICIANS' EXAMINATION TABLES. LESTER VAN WAGNER, doing business as Van Wagner & Co., Richmond Hill, N. Y.
Filed September 14, 1932. Serial No. 330,353. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,447. OIL WELL SUPPLIES—NAMELY, FISHING TOOLS. ELLSWORTH GRAY, doing business as Saxet Tool Company, Houston, Tex.
Filed September 12, 1932. Serial No. 330,257. PUBLISHED NOVEMBER 8, 1932. Class 23.

300,448. BOND, LEDGER, LINEN, AND MANUSCRIPT COVER PAPERS. WORTHY PAPER COMPANY ASSOCIATION, North Agawam, Mass.
Filed September 3, 1932. Serial No. 330,173. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,449. PERIODICAL. STANDARD RATE & DATA SERVICE, Chicago, Ill.
Filed September 7, 1932. Serial No. 330,168. PUBLISHED NOVEMBER 8, 1932. Class 38.

300,450. COLUMN OF HUMOR IN NEWSPAPER PUBLICATIONS. CURTIS-MARTIN NEWSPAPERS, INC., Philadelphia, Pa.
Filed September 7, 1932. Serial No. 330,159. PUBLISHED NOVEMBER 8, 1932. Class 38.

300,451. SILHOUETTE PROBLEM GAME, A GAME PLAYED WITH BLOCKS OF GEOMETRIC DESIGN. AMERICAN RECORD CORPORATION, New York, N. Y.
Filed September 7, 1932. Serial No. 330,151. PUBLISHED NOVEMBER 8, 1932. Class 22.

300,452. COVERED AND BOUND BLANK BOOKS, NOTE BOOKS, INDEX BOOKS, ETC. WILSON-JONES COMPANY, Chicago, Ill.
Filed September 6, 1932. Serial No. 330,136. PUBLISHED NOVEMBER 8, 1932. Class 37.

300,453. SUCTION CLEANING MACHINES FOR CARPETS, FLOORS, ETC. THE BRITISH VACUUM CLEANER & ENGINEERING CO. LTD., London, England.
Filed August 31, 1932. Serial No. 330,007. PUBLISHED NOVEMBER 8, 1932. Class 23.

300,454. PLANE IRONS, CHISELS, SHOEMAKERS' KNIVES, AND TONGS. E. A. BERGS FABRIKS AKTIEBOLAG, Eskilstuna, Sweden.
Filed July 16, 1932. Serial No. 328,885. PUBLISHED NOVEMBER 1, 1932. Class 23.

300,455. UNIFORMS FOR NURSES, MAIDS, AND WAITRESSES; APRONS AND HOUSE GARMENTS OF THE WRAP AROUND STYLE. MORRIS & COMPANY, INCORPORATED, Baltimore, Md.
Filed August 25, 1932. Serial No. 329,833. PUBLISHED NOVEMBER 1, 1932. Class 39.

300,456. GARDEN AND FIELD SEEDS, BULBS, AND PLANTS. ASSOCIATED SEED GROWERS, INCORPORATED, New Haven, Conn.
Filed June 22, 1932. Serial No. 328,211. PUBLISHED NOVEMBER 15, 1932. Class 1.

300,457. FEATURED PUBLISHED ARTICLES PUBLISHED IN A SERIES. EDWARD J. HERBERT, Mount Vernon, N. Y.
Filed December 2, 1930. Serial No. 306,508. PUBLISHED NOVEMBER 8, 1932. Class 38.

TRADE-MARK REGISTRATIONS RENEWED

89,651. WHISKY. Registered January 20, 1903. TANQUERAY, GORDON & Co. LIMITED, London, England, a Corporation of Great Britain. Renewed January 20, 1933.

89,906. LAGER BEER AND BOTTLED BEER. Registered March 10, 1903. TERRE HAUTE BREWING Co. Renewed March 10, 1933, to Wabash Realty & Loan Co., Terre Haute, Ind., a Corporation of Indiana, assignee.

89,517. ORANGES, GRAPE-FRUIT, TANGERINES, LEMONS, AND LIMES. Registered December 17, 1912. TERRA CEIA CITRUS GROWERS ASSOCIATION, Terra Ceia, Fla., a Corporation of Florida. Renewed December 17, 1932.

89,772. A SALVE. Registered January 7, 1913. REDDING & Co., INCORPORATED, Melrose, Mass., a Corporation of Maine. Renewed January 7, 1933.

89,837. CERTAIN NAMED METAL FORGINGS AND CASTINGS. Registered January 14, 1913. FRIED. KRUPP AKTIENGESELLSCHAFT GRUSONWERK. Renewed January 14, 1933, to Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany, a Corporation of Germany, successor.

LABELS

REGISTERED JANUARY 17, 1933

41,664.—*Title:* B/DOCTOR'S PRESCRIPTION POWDER. For Preparation for the Relief of Athlete's Foot, Prickly Heat, Etc. BO-KAY PERFUME Co., New York, N. Y. Published September 20, 1932.

41,665.—*Title:* BURNETT'S SKIN SALVE. For Skin Salve. JOHN BURNETT, doing business as Burnett Laboratories, Chicago, Ill. Published November 10, 1932.

41,666.—*Title:* BIG BOY. For Bread. CARL CARLSON, doing business as Marysville Home Bakery, Marysville, Wash. Published May 24, 1930.

41,667.—*Title:* DA-KO. For Washing and Cleaning Compound. CHLORINE CHEMICAL CORP., New York, N. Y. Published December 19, 1932.

41,668.—*Title:* CHOICE ROASTED COFFEE. For Coffee. THE DAYTON SPICE MILLS Co., Dayton, Ohio. Published December 5, 1931.

41,669.—*Title:* ECLIPSE. For Food Products. ECLIPSE FOOD PRODUCTS Co., Scarsdale, N. Y., and New York, N. Y. Published September 5, 1932.

41,670.—*Title:* FILENE'S. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published October 10, 1932.

41,671.—*Title:* FENMODE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published November 5, 1932.

41,672.—*Title:* MODEL MODE FOOTWEAR. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published November 15, 1932.

41,673.—*Title:* SHOES FOR ALL THE FAMILY. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published November 7, 1932.

41,674.—*Title:* MEAD'S VIOSTEROL IN HALIBUT LIVER OIL. For Viosterol—Namely, Activated Ergosterol, in Halibut Liver Oil. MEAD JOHNSON & COMPANY, Evansville, Ind. Published November 10, 1932.

41,675.—*Title:* PEERCRAFT FINISHES. For Flat White Paint. PEERLESS PAINT & VARNISH CORP., Brooklyn, N. Y. Published November 16, 1932.

41,676.—*Title:* FIXED. For Flavors. M. C. ROSENFELD LABORATORIES, Boston, Mass. Published August 1, 1932.

41,677.—*Title:* CHECKER BUTTER CARTON. For Butter Cartons. LOUIS SCHWARTZBERG, Chicago, Ill. Published September 1, 1932.

41,678.—*Title:* DOMINO BUTTER CARTON. For Butter Cartons. LOUIS SCHWARTZBERG, Chicago, Ill. Published September 1, 1932.

41,679.—*Title:* UNION TOP-TONE. For Substance For Renovating and Water Proofing Black Auto Tops and Imitation Leathers. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published November 15, 1932.

41,680.—*Title:* UNION SOLVENT SPIRIT. For Household Spot Remover. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published October 1, 1932.

41,681.—*Title:* UNION LUSTRE WAX. For Lustre Wax for Floors, Furniture, Linoleum, Tile. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published December 1, 1932.

41,682.—*Title:* WORCESTER IODIZED SALT. For Salt. WORCESTER SALT COMPANY, New York, N. Y. Published January 19, 1931.

PRINTS

REGISTERED JANUARY 17, 1933

14,023.—*Title:* BEECH-NUT ASSORTED DROPS. For Assorted Drops. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published November 4, 1932.

14,024.—*Title:* BEECH-NUT BRAND CHEWING GUM. For Chewing Gum. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published November 19, 1932.

14,025.—*Title:* CLEARTONE COLORS 1933. For Straw Braids and Body Hats. R. H. COMBY BROOKLYN COMPANY, INC., Brooklyn, N. Y. Published December 6, 1932.

14,026.—*Title:* 85% OF THIS HEAVY TOLL IS EXACTED FROM LITTLE CHILDREN. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published December 10, 1932.

14,027.—*Title:* OUR NEW-DAY CIGAR STAND. For Cigars, Cigarettes, Tobaccos, Knives, Pipes, Flashlights, Smoker's Articles, Etc. F. A. DAVIS & SONS, Baltimore, Md. Published March 16, 1932.

14,028.—*Title:* DORMAN MODERN ENGINEERING ASSEMBLY CHART. For Automotive Parts. JACK DORMAN, Cincinnati, Ohio. Published November 28, 1932.

14,029.—*Title:* FERM-A-SURED. For Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published July 16, 1932.

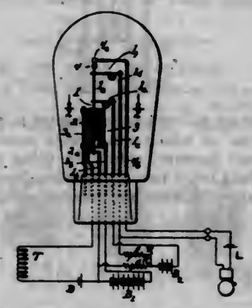
14,030.—*Title:* HILLS BROS. COFFEE THRILLS YOUR TASTE—(ADFORM 124). For Coffee. HILLS BROS., San Francisco, Calif. Published February 1, 1932.

14,031.—*Title:* HILLS BROS. COFFEE ENDS YOUR SEARCH FOR FINE COFFEE—(ADFORM 128). For Coffee. HILLS BROS., San Francisco, Calif. Published November 4, 1932.

REISSUES

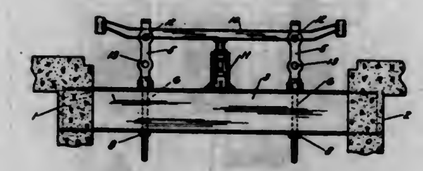
JANUARY 17, 1933

18,713. ELECTRICAL DISCHARGE DEVICE. SAMUEL RUBEN, New Rochelle, N. Y., assignor to Ruben Patents Company, New York, N. Y., a Corporation of Delaware. Original No. 1,815,483, dated July 21, 1931, Serial No. 238,218, filed Dec. 6, 1927. Application for reissue filed Sept. 1, 1932. Serial No. 631,412. 8 Claims. (Cl. 250—27.5.)



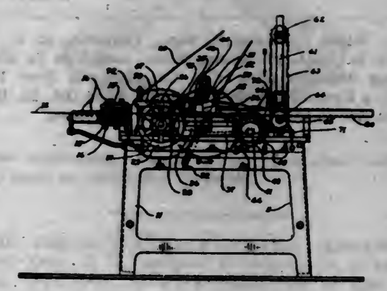
1. An electrical discharge device comprising an envelope containing a thermionic cathode and an anode and contacts for an external circuit, one of said contacts being controlled by the extensible movement of said cathode.

18,714. AXLE STRAIGHTENING MECHANISM. HENRY WOCHNER, Rock Island, Ill., assignor to Bear Manufacturing Company, Rock Island, Ill. Original No. 1,819,311, dated Aug. 18, 1931, Serial No. 360,662, filed May 6, 1929. Application for reissue filed Mar. 28, 1932. Serial No. 601,661. 9 Claims. (Cl. 153—38.)



7. In combination with a fixed beam, a frame supported on said beam and laterally adjustable thereof, an auxiliary frame adapted for engagement with the axle structure of an automobile, means for actuating said auxiliary frame to clamp an axle rigidly upon said first-named frame, a cradle engageable with the end of an axle held by said frames, provided with bearing points on both sides of such axle, a power jack mounted on said beam, and engaging one of said bearing points, and a bar secured to said cradle, projecting oppositely to said jack, and capable of being reversed in position.

18,715. MACHINE FOR STRAIGHTENING AND SHEARING LONG STOCK. FRANK COLE HUTCHINSON, deceased, Rutherford, N. J., by The F. B. Shuster Company, New Haven, Conn., assignee. Original No. 1,703,885, dated Mar. 5, 1929, Serial No. 166,165, filed Feb. 5, 1927. Application for reissue filed Mar. 4, 1931. Serial No. 520,126. 33 Claims. (Cl. 140—145.)



1. In a long stock fabricating machine, the combination with stock-feeding mechanism, of fabricating mechanism reciprocable in line with the direction of long-stock feed and including a fabricating tool simultaneously additionally reciprocable to and from the moving stock; a continuously rotating heavy fly-wheel having a rate coordinated with the rate of the stock-feeding mechanism; a uniformly-acting, positive-locking clutch operated by said fly-wheel and intermittently connectible to said fabricating mechanism; and a master-control causing said intermittent connection of the fly-wheel-driven clutch and fabricating mechanism and adjustable in desired coordination with the stock-feed.
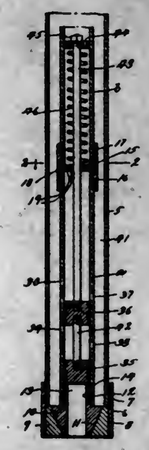
18,716. PLASTER-CHANNEL INSTALLATION FOR SCREEN GUIDES. HARRY DIXSON, Pella, Iowa, assignor to Rolscreen Company, Pella, Iowa. Original No. 1,736,432, dated Nov. 19, 1929, Serial No. 247,172, filed Jan. 16, 1928. Application for reissue filed Jan. 20, 1931. Serial No. 509,982. 10 Claims. (Cl. 156—89.)



8. In combination with a screen guide for roll screens, a plaster channel installation for said guide comprising a channel member, a guide receiving flange mounted within said channel member, said guide having a portion to receive said flange.

18,717. DEVICE FOR PUMPING OIL FROM A WELL. PHILLIP G. SHERRY, Oklahoma City, Okla., assignor, by direct and mesne assignments, to P. F. O'Brien, Shreveport, La. Original No. 1,835,437, dated Dec. 8, 1931, Serial No. 426,889, filed Feb. 8, 1930. Application for reissue filed Aug. 3, 1932. Serial No. 627,884. 7 Claims. (Cl. 103—234.)

1. In a device for forcing free rising fluid from a well, inner and outer spaced tubular members, means of communication between the tubular members, a member threaded in the lower end of the inner tubular member and having a bore therethrough providing an intake passage for said inner tubular member and through which the free rising fluid rises and a normally open spring controlled spaced apart pair of sealing members adapted



to be downwardly moved under pressure in the inner tubular member one of which constitutes means for controlling said intake passage, said fluid being pressure lifted interiorly of said inner tubular member through the means of communication between the tubular members.

DESIGNS

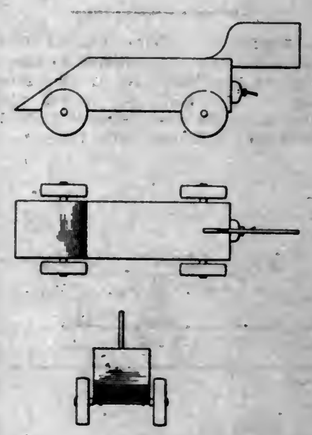
JANUARY 17, 1933

89,031. RING. GEORGE E. BALL, Cranston, R. I., and PERCY B. BALL, Attleboro, Mass., assignors to Chesebrough Manufacturing Co., Consolidated, New York, N. Y., a Corporation of New York. Filed Oct. 25, 1932. Serial No. 45,580. Term of patent 3½ years.



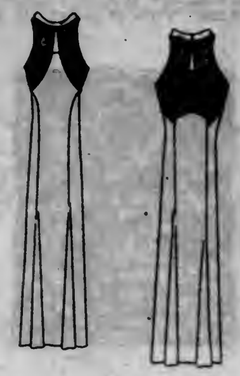
The ornamental design for a ring, as shown.

89,032. TOY. RENE BECOTTE, Lawrence, Mass. Filed Nov. 2, 1932. Serial No. 45,710. Term of patent 3½ years.



The ornamental design for a toy as shown.

89,033. DRESS. JEAN BROILLET, New York, N. Y. Filed Nov. 26, 1932. Serial No. 46,187. Term of patent 3½ years.



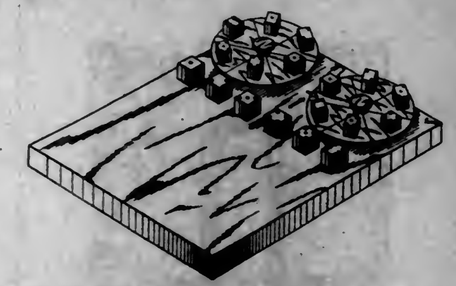
The ornamental design for a dress substantially as shown.

89,034. DECK OF PLAYING CARDS. WILLIAM L. BRUNING, New York, N. Y., assignor to Brown & Bigelow, St. Paul, Minn., a Corporation of Minnesota. Filed Oct. 21, 1932. Serial No. 45,437. Term of patent 3½ years.



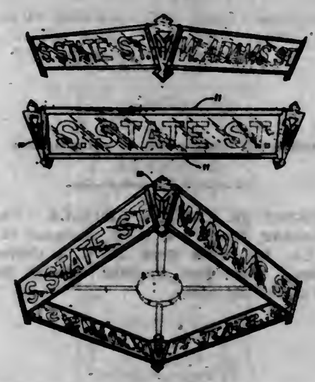
The ornamental design for a deck of playing cards as shown and described.

89,035. AMUSEMENT DEVICE. ROY CHALK, New York, N. Y., assignor of one-half to Maurice Chalk, New York, N. Y. Filed Oct. 21, 1932. Serial No. 45,444. Term of patent 7 years.



The ornamental design for an amusement device substantially as shown and described.

89,036. STREET SIGN FRAME FOR LAMP POSTS. LEO M. CHAPMAN, Chicago, Ill. Filed Aug. 12, 1932. Serial No. 44,584. Term of patent 14 years.



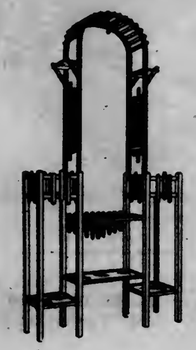
The ornamental design for a street sign frame for lamp posts as shown and described.

89,037. DRESS OR SIMILAR ARTICLE. MINNA FIELDS, New York, N. Y., assignor to Feigenbaum & Adelson, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 9, 1932. Serial No. 46,402. Term of patent 3½ years.



The ornamental design for a dress or similar article, as shown.

89,038. COMBINATION STAND. THEODOR GASS, Brooklyn, N. Y. Filed Nov. 7, 1932. Serial No. 45,802. Term of patent 3½ years.



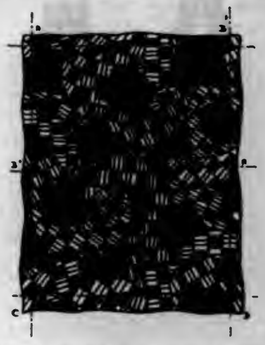
The ornamental design for a combination stand, as shown.

89,039. DRESS OR SIMILAR ARTICLE. FRANCIS ROBERTA GREENE, New York, N. Y., assignor to C. H. D. Robins Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 9, 1932. Serial No. 46,401. Term of patent 3½ years.



The ornamental design for a dress or similar article, as shown and described.

89,040. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,226. Term of patent 3½ years.



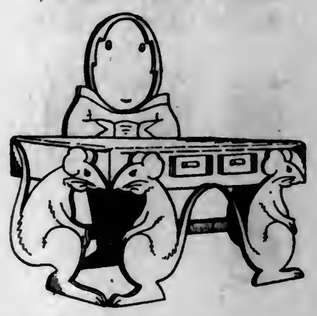
The ornamental design for a textile fabric or similar article as shown and described.

89,041. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,510. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,042. CHILD'S DRESSING TABLE OR SIMILAR ARTICLE. MICHAEL HALLWARD, Pasadena, Calif., assignor, by mesne assignments, to Wonderland Furniture, Ltd., a Corporation. Filed May 7, 1932. Serial No. 43,738. Term of patent 7 years.



The ornamental design for a child's dressing table or similar article, as shown.

89,043. CHILD'S CHEST OF DRAWERS. MICHAEL HALLWARD, Pasadena, Calif., assignor, by mesne assignments, to Wonderland Furniture, Ltd., a Corporation. Filed May 7, 1932. Serial No. 43,739. Term of patent 7 years.



The ornamental design for a child's chest of drawers, as shown.

89,044. CHILD'S BED OR SIMILAR ARTICLE. MICHAEL HALLWARD, Pasadena, Calif., assignor, by mesne assignments, to Wonderland Furniture, Ltd., a Corporation. Filed May 7, 1932. Serial No. 43,740. Term of patent 7 years.



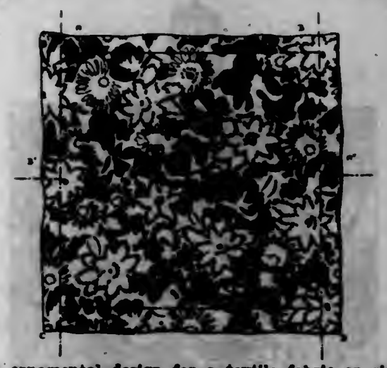
The ornamental design for a child's bed or similar article, as shown.

89,045. RADIATOR ORNAMENT. GLEN A. JOHNSON, Connersville, Ind., assignor to Stant Manufacturing Co., Connersville, Ind., a Corporation of Indiana. Filed Nov. 22, 1932. Serial No. 46,118. Term of patent 7 years.



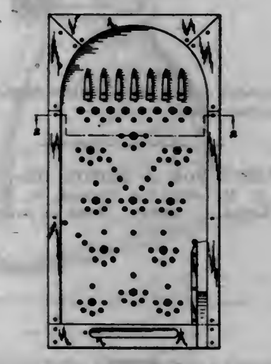
The ornamental design for a radiator ornament as shown.

89,046. TEXTILE FABRIC OR SIMILAR ARTICLE. ALEXANDER KOHUT, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,497. Term of patent 3½ years.



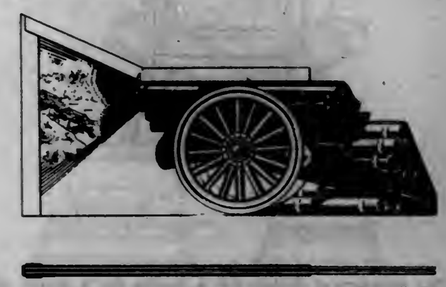
The ornamental design for a textile fabric or similar article as shown and described.

89,047. GAME BOARD. CARL LESSIG and CLARENCE J. CARLEY, Dalton, Nebr. Filed Sept. 6, 1932. Serial No. 44,758. Term of patent 3½ years.



The ornamental design for a game board as shown.

89,048. TOY GUN. ALBERT T. LINNEY, Lexington, Ky. Filed Nov. 21, 1932. Serial No. 46,102. Term of patent 14 years.



The ornamental design for a toy gun, as shown.

89,049. TEXTILE FABRIC OR THE LIKE. JULIA LUKAS, New York, N. Y. Filed Dec. 13, 1932. Serial No. 46,446. Term of patent 3½ years.



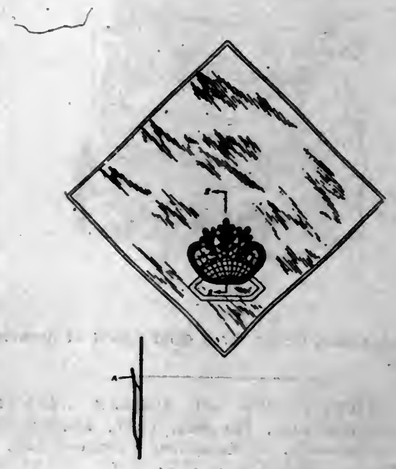
The ornamental design for a textile fabric or the like, as shown and described.

89,050. CASING FOR A MOTOR OIL DISPENSER. JAMES J. R. MCLOUGHLIN, Poland, N. Y. Filed May 4, 1932. Serial No. 43,710. Term of patent 3½ years.



The ornamental design for a casing for a motor oil dispenser, as shown and described.

89,051. HANDKERCHIEF OR SIMILAR ARTICLE. EMIL METZNER, Weehawken, N. J., assignor to Heather Handkerchief Works, Jersey City, N. J., a Corporation of New York. Filed Oct. 1, 1932. Serial No. 45,191. Term of patent 14 years.



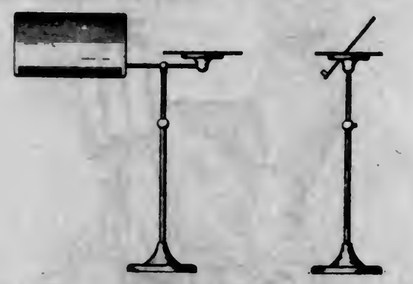
The ornamental design for a handkerchief or similar article, substantially as shown and described.

89,052. SHOE. CHARLES MILLER, New York, N. Y. Filed Nov. 11, 1932. Serial No. 45,887. Term of patent 3½ years.



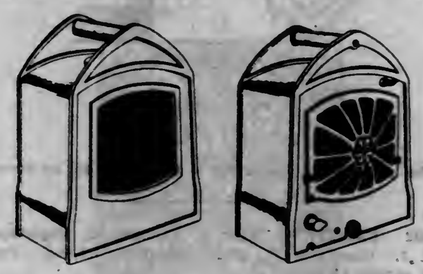
The ornamental design for a shoe, as shown.

89,053. FLOOR READING STAND. OSSIAN K. MITCHELL and LEONARD O. MITCHELL, Oak Park, Ill. Filed Dec. 26, 1931. Serial No. 42,223. Term of patent 14 years.



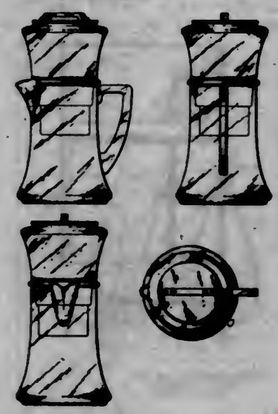
The ornamental design for a floor reading stand as shown.

89,054. AIR CONDITIONING DEVICE. FRED M. OPITZ, Milwaukee, Wis., assignor to Hexcel Radiator Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 26, 1932. Serial No. 45,583. Term of patent 7 years.



The ornamental design for an air conditioning device, as shown.

89,055. DRIP COFFEE MAKER. CHARLES E. PAGE, Los Angeles, Calif. Filed Nov. 4, 1932. Serial No. 45,766. Term of patent 3½ years.



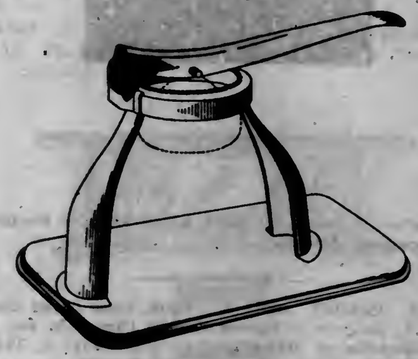
The ornamental design for a drip coffee maker, as shown and described.

89,056. LAMP BULB. CHARLES PECKERMAN, New York, N. Y. Filed Jan. 29, 1932. Serial No. 42,675. Term of patent 7 years.



The ornamental design for a lamp bulb substantially as shown.

89,057. FRUIT SQUEEZER. WALTER H. PLEISS, Ludington, Mich. Filed Oct. 24, 1932. Serial No. 45,530. Term of patent 3½ years.



The ornamental design for a fruit squeezer, as shown.

89,058. COMBINATION CIGARETTE DISPENSER AND LIGHTER. EDGAR M. RAUH, Philadelphia, Pa. Filed Oct. 1, 1931. Serial No. 41,286. Term of patent 3½ years.



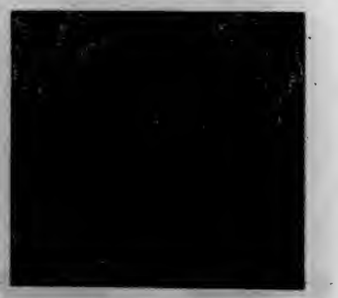
The ornamental design for a combination cigarette dispenser and lighter as shown.

89,059. TEXTILE FABRIC OR THE LIKE. JACK SCHWEIZER, Rye, N. Y., assignor to The Schwarzenbach Huber Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 8, 1932. Serial No. 45,809. Term of patent 3½ years.



The ornamental design for a textile fabric or the like, as shown and described.

89,060. CARPET. JOHN S. TRAVIS, Long Island City, N. Y., assignor to Bigelow Sanford Carpet Co. Inc., a Corporation of Massachusetts. Filed Nov. 1, 1932. Serial No. 45,691. Term of patent 7 years.



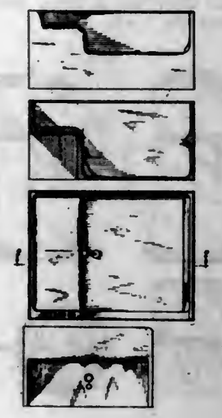
The ornamental design for a carpet substantially as shown and described.

89,061. DISPLAY STAND. WILLIAM R. TUTTLE, Rochester, N. Y. Filed May 28, 1932. Serial No. 43,928. Term of patent 3½ years.



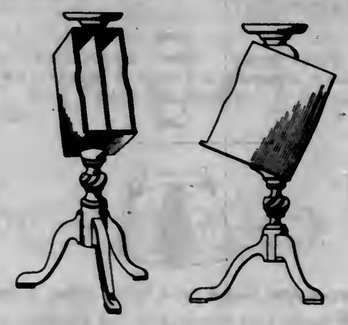
The ornamental design for a display stand, as shown.

89,062. BATHTUB. ISAAC S. VANDERBILT, Maplewood, N. J. Filed Oct. 27, 1932. Serial No. 45,596. Term of patent 14 years.



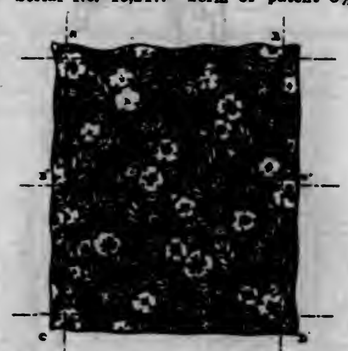
The ornamental design for a bath tub as shown.

89,063. COMBINATION TELEPHONE STAND AND TELEPHONE BOOKHOLDER. RICHARD VON EDDORF, Oneida, N. Y. Filed July 30, 1932. Serial No. 44,501. Term of patent 3½ years.



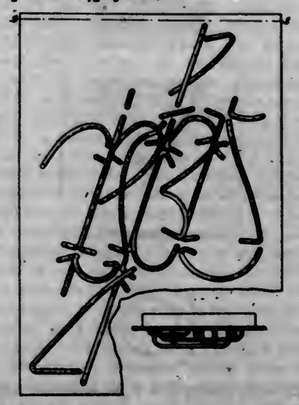
The ornamental design for a combination telephone stand and telephone book holder as shown.

89,064. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,247. Term of patent 3½ years.



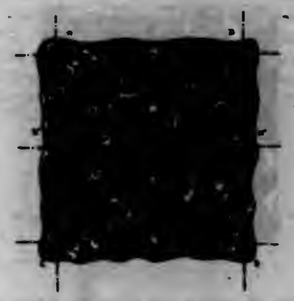
The ornamental design for a textile fabric or similar article as shown and described.

89,065. ELECTRIC SIGN. ANTONIO ZICKB, San Francisco, Calif. Filed Apr. 26, 1932. Serial No. 43,614. Term of patent 3½ years.



The ornamental design for an electric sign substantially as shown.

89,066. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,511. Term of patent 3½ years.



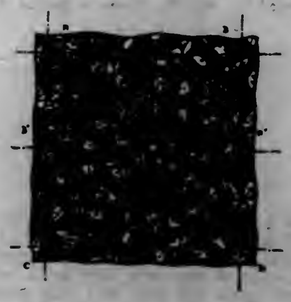
The ornamental design for a textile fabric or similar article as shown and described.

89,067. CASKET BIER. VACLAV J. HAJNY, Brookfield, Ill. Filed Aug. 21, 1930. Serial No. 36,724. Term of patent 3½ years.



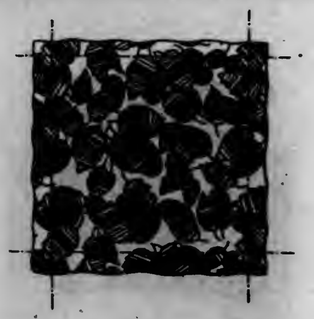
The ornamental design for a casket bier, as shown.

89,068. TEXTILE FABRIC OR SIMILAR ARTICLE. ALEXANDER KOHUT, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,500. Term of patent 3½ years.



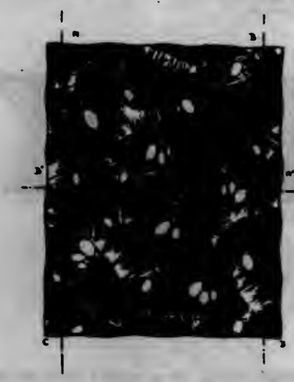
The ornamental design for a textile fabric or similar article as shown and described.

89,069. TEXTILE FABRIC OR SIMILAR ARTICLE. ALEXANDER KOHUT, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,498. Term of patent 3½ years.



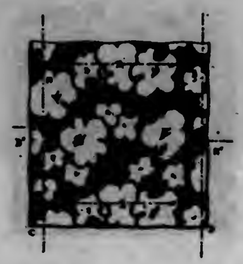
The ornamental design for a textile fabric or similar article as shown and described.

89,070. TEXTILE FABRIC OR SIMILAR ARTICLE. ALEXANDER KOHUT, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,495. Term of patent 3½ years.



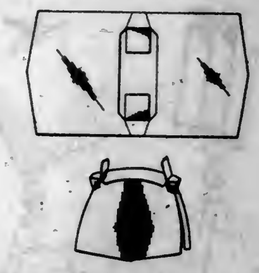
The ornamental design for a textile fabric or similar article as shown and described.

89,071. TEXTILE FABRIC OR SIMILAR ARTICLE. ROGER MEGROZ, Bronxville, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,505. Term of patent 3½ years.



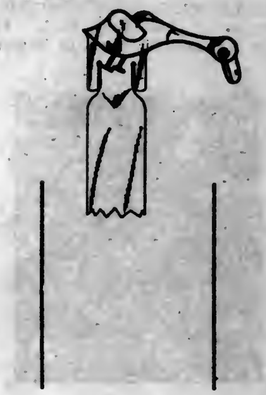
The ornamental design for a textile fabric or similar article as shown and described.

89,072. BOTTLE COLLAR. LEROY P. NEHER, St. Louis, Mo., assignor to Neher-Whitehead & Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 15, 1932. Serial No. 44,614. Term of patent 14 years.



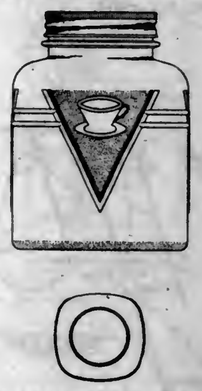
The ornamental design for a bottle collar, substantially as shown.

89,073. BOOKMARK. ROBERT NELSON ROYLE, Ossining, N. Y. Filed Oct. 5, 1932. Serial No. 45,222. Term of patent 7 years.



The ornamental design for a bookmark, as shown.

89,074. JAR. FRANK J. STAYTON, Birmingham, Ala., assignor to Batterton Coffee Co. Inc., a Corporation of Alabama. Filed Oct. 31, 1932. Serial No. 45,663. Term of patent 3½ years.

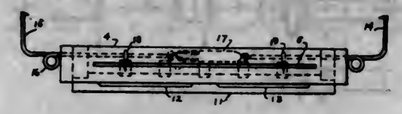


The ornamental design for a jar substantially as shown and described.

PATENTS

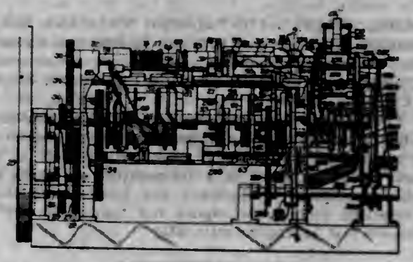
GRANTED JANUARY 17, 1933

1,894,258. BUTCHER'S TOOL RACK FOR MEAT BLOCKS. JOSEPH G. EASTLACK, Pasadena, Calif. Filed Apr. 1, 1932. Serial No. 602,588. 3 Claims. (Cl. 248—20.)



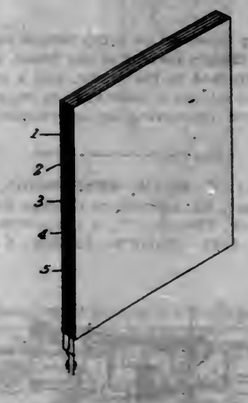
1. In a butcher's tool rack, means for holding said rack to a butcher's meat block, said means comprising a pair of penetrating hooks for engaging opposite sides of a butcher's meat block, each of said hooks being offset angularly from a horizontal rod integral, therewith, and said rods being joined by a spring capable of holding said hooks in hooked position relative to said block.

1,894,259. MACHINE FOR MAKING WINDOWED RECEPTACLES. ROBERT H. FLUEGGE, Elmhurst, Ill., assignor to W. C. Ritchie and Company, Chicago, Ill., a Corporation of Illinois. Filed June 13, 1932. Serial No. 616,802. 4 Claims. (Cl. 93—40.)



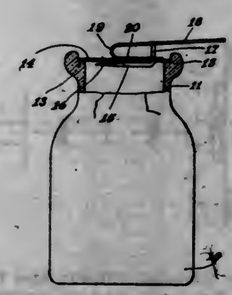
1. In a machine for making windowed convolutely-wound container-bodies, the combination of a mandrel, means to revolve said mandrel intermittently about its axis, means at a first station on said mandrel to clamp the forward ends of successively-advanced adhesive-coated body-blanks to said mandrel, whereby said blanks will be convolutely wound around the mandrel in succession during subsequent rotations of the latter, means to feed said blanks in succession to said mandrel and clamping means, means to initiate such clamping action while the mandrel is stationary and to terminate the clamping operation when each blank has been wound, means to force the outer end portion of each such blank into adhering relation to the wound remainder of the blank at a second station on, and during the rotation of, the mandrel, means to remove a portion of each convolutely-wound body at said second station on said mandrel while the latter is stationary to provide a window in the body wall, means to feel labels in succession to such wound bodies at a third station on said mandrel, means to wrap each label around its corresponding body at such third station on, and during rotation of, the mandrel each such label having a window covered with a transparent material which when wound on said body registers with said body window, and a feeder to slide said wound bodies progressively from said first station to said second and third stations and finally to discharge the labelled containers from the mandrel.

1,894,260. INTEGRAL UNILATERAL CONDUCTOR OF ELECTRIC CURRENTS. WILLIAM T. ANDERSON, Jr., and LESTER F. BIRD, Newark, N. J., assignors to Hanovia Chemical and Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed July 26, 1930. Serial No. 470,949. 3 Claims. (Cl. 175—366.)



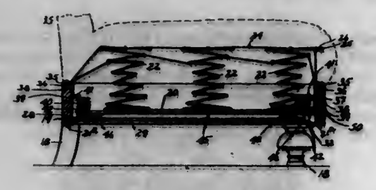
2. In combination, copper having cuprous oxide formed thereon, said combination constituting in and of itself a unidirectional current carrying device, and means for making intimate contact with the cuprous oxide to establish an electric circuit through said combination, said means comprising a layer of copper reduced from the oxide and combined with nickel to form a layer of nickel bronze on the cuprous oxide.

1,894,261. BOTTLE CAP REMOVER. ALFRED ANSCHUTZ, Brooklyn, N. Y. Filed Apr. 6, 1931. Serial No. 527,868. 1 Claim. (Cl. 65—47.)



A device of the class described comprising a flat member bent into a U-shape, one of the arms of said U being extended to provide a handle, the other arm of said U having a hole therein, a rod rigid with said first-named arm extending through said hole, said rod being bent from a point near the outer side of said second-named arm at right-angles to said rod to provide a prong extending parallel to said arms, said prong being pointed and extending beyond said U.

1,894,262. UPHOLSTERY CONSTRUCTION. ALBERT M. HANK, Jersey City, N. J., assignor to Sylvia Bank, Jersey City, N. J. Filed July 20, 1929. Serial No. 379,686. 7 Claims. (Cl. 155—179.)



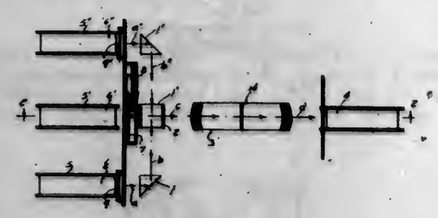
1. Upholstery construction comprising a frame, webbing secured at the margin thereof to the frame, a pair of tension springs attached to the frame, and a rod spaced inwardly from the margin of said webbing supported by said springs, said rod supporting an intermediate portion of said web.

1,894,263. BRAKE BEAM SUSPENSION. EDWIN G. HUSAN, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 9, 1931. Serial No. 521,353. 6 Claims. (Cl. 188—218.)



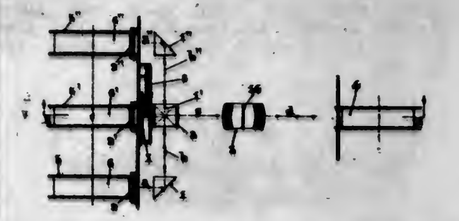
1. In combination, a brake beam including a fulcrum arm, a connecting rod above said beam, and a support member having one end hooked over said rod and slidably engaging the same, the other end of said member supporting the inner end of said arm to prevent said beam form tilting.

1,894,264. APPARATUS FOR PRINTING SYNTHETIC FILMS. HENRI CHRÉTIEN, Saint-Cloud, France. Filed Sept. 7, 1929, Serial No. 390,878, and in France Oct. 6, 1928. 1 Claim. (Cl. 88—24.)



A machine for obtaining synthetic films from a plurality of original films, said machine comprising in combination a mask placed behind each of the original films each of said masks covering on each film the part not to be reproduced, a stationary prism placed behind each of said masks, a prism adapted to be intermittently rotated into positions to receive light transmitted through said original films, through said masks and through said stationary prisms and to transmit said light in one direction and an objective adapted to receive the light transmitted by said rotatable prism and to transmit said light unto different unexposed portions of a film.

1,894,265. APPARATUS FOR PRINTING SYNTHETIC ANAMORPHOSED FILMS. HENRI CHRÉTIEN, Saint-Cloud, France. Original application filed Sept. 7, 1929, Serial No. 390,878, and in France Oct. 6, 1928. Divided and this application filed Jan. 6, 1932. Serial No. 585,133. 2 Claims. (Cl. 88—24.)

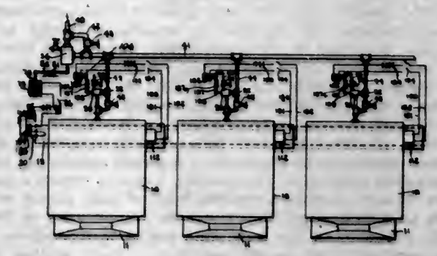


1. A machine for obtaining synthetic anamorphosed films from a plurality of original films said machine comprising in combination a mask placed behind each of the original films each of said masks covering on each film the part not to be reproduced, a stationary prism placed behind each of said masks, a prism adapted to be intermittently rotated in positions to receive light transmitted through said original films through said masks and through said stationary prism and to transmit said light in one direction and an optical system comprising a spherical objective and cylindrical lenses the generating lines of which are placed in a parallel relation said optical system being adapted to receive the light transmitted by said rotatable prism and to transmit the same onto different unexposed portions of a film.

1,894,266. DIARYL CONTAINING WAX-LIKE SOLID. CHARLES B. DURGIN and RUSSELL L. JENKINS, Anniston, Ala., assignors to Swann Research, Inc., a Corporation of Alabama. Filed Sept. 27, 1929. Serial No. 393,084. 9 Claims. (Cl. 260—168.)

1. The process for producing a diphenyl containing wax-like solid, comprising vaporising benzol, contacting said vapor with a fluid mass inert with respect to said vapors, and maintained at a temperature at which substantial quantities of diphenyl are formed, condensing the resulting condensible vapors and heating to 900° C. to remove low boiling constituents.

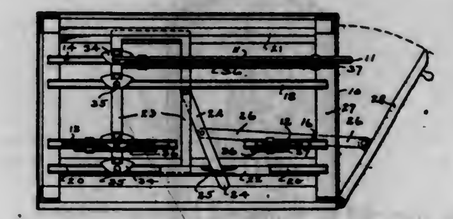
1,894,267. ASH HANDLING APPARATUS. ROBERT A. FORSEMAN, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 2, 1928. Serial No. 251,891. 20 Claims. (Cl. 110—171.)



1. The combination with a furnace having a progressive feed stoker and an ash disposal mechanism arranged at the discharge end thereof, of an inclined trough-like structure extending beneath the ash disposal mechanism and having an air-tight connection with the furnace, the trough-like structure being adapted to discharge ash beyond the confines of the furnace, said trough-like structure having its discharge end turned upwardly to provide a basin, fluid jet means for conveying ash downwardly through the trough-like structure and for maintaining a body of liquid in the basin portion of the structure, and a plate member having an air-tight connection with the furnace and extending transversely of the trough-like structure and downwardly into the basing to a point beneath the liquid level therein for maintaining a liquid seal between the interior of the furnace and the discharge end of the trough.

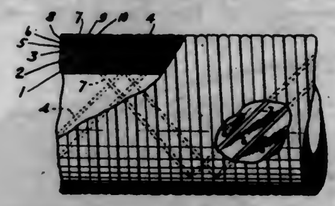
CARNEGIE LIBRARY OF ATLANTA

1,894,268. OVEN RACK SHIFTING DEVICE. MILO G. FORSYTH, Indianapolis, and ROY LASITER, Greenwood, Ind. Filed July 9, 1931. Serial No. 549,662. 7 Claims. (Cl. 126—340.)



1. In an oven, the combination with a slidable rack and a door, of a slide, connecting linkage between the door and the slide, and a plate rockably carried on the slide in the path of said rack, said plate being adapted to rock into engagement with the rack upon travel thereover, the oven being of such length that the rack may be positioned to such a rearward extent that when the slide and plate are in their most rearward position the rack is out of engagement with the plate.

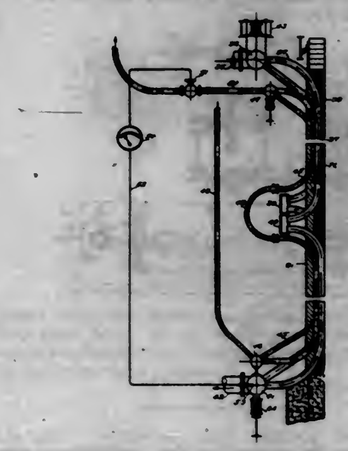
1,894,269. HOSE. HOWARD W. GOODALL, Aldan, Pa. Filed Apr. 8, 1931. Serial No. 528,505. 3 Claims. (Cl. 137—90.)



3. A hose comprising a body of rubberlike material having embedded therein a plurality of separated helically wound layers of flat imperforate all metal ribbon consisting of parallel wires bonded together arranged lengthwise of the ribbon, one of the layers being wound in one direction and another of the layers being wound in the opposite direction.

1,894,270. FURNACE. CHARLES B. GRADY, West Orange, N. J., assignor to Metropolitan Engineering Company, a Corporation of New York. Filed Mar. 10, 1927. Serial No. 174,815. 25 Claims. (Cl. 122—235.)

1. In an apparatus of the class described, the combination of a plurality of heat absorbing, fluid carrying elements exposed to radiant heat, means for causing a flow of fluid through the elements, means for flowing a second fluid shielded from said radiant heat in heat exchange relation to the first fluid within said elements, and means for controlling the rate of flow of the second fluid to vary the quantity of heat transferred to it from the first fluid.

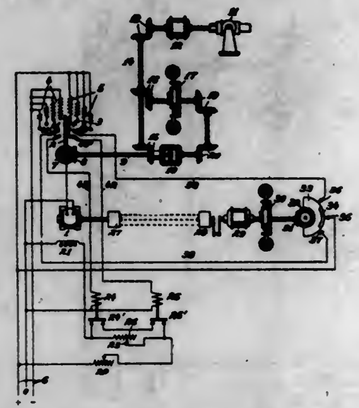


1,894,271. ELECTROLYTIC TREATMENT OF SOLUTIONS CONTAINING A HIGH PERCENTAGE OF CHLORINE IONS. GÜNTHER HÄNSEL, Berlin-Charlottenburg, and ERWIN MICHAEL, Berlin-Siemensstadt, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany, a Corporation of Germany. Filed Dec. 26, 1928, Serial No. 328,240, and in Germany Dec. 28, 1927. 7 Claims. (Cl. 204—4.)



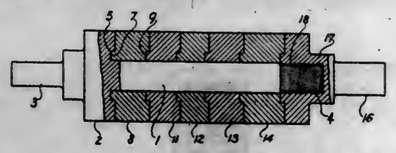
1. An anode for the electrolytic treatment of solutions containing a high percentage of chlorine ions, comprising a solid body of lead, and walls of solid insulating material surrounding said lead body and spaced therefrom and provided with openings of such size as to permit the free passage of the electrolyte, said insulating walls being relatively close to the adjacent surfaces of the lead body, so as to hold compactly against such surfaces, the lead peroxide deposited during electrolysis.

1,894,272. SHIP STABILIZER. HERMANN HORT, Berlin-neu-Westend, Germany, assignor to Gesellschaft fur Elektrische Apparate, Marienfelde near Berlin, Germany, a Corporation of Germany. Filed Feb. 17, 1931, Serial No. 516,351, and in Germany Feb. 24, 1930. 9 Claims. (Cl. 114—122.)



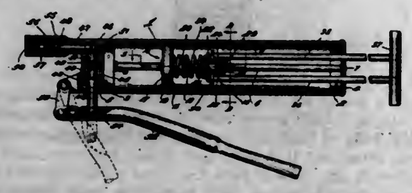
1. Apparatus for controlling ship stabilizing masses, comprising driving means for said stabilizing masses, a regulating member for said driving means, a member the movements of which correspond to the extent of the rolling motion of the ship, for adjusting said regulating member, and a damping device adjustable according to the rolling motion of the ship for effecting an additional adjustment of said regulating member.

1,894,273. ELECTRIC MACHINE ROTOR. EMIL HUNZIKER, Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Dec. 2, 1931, Serial No. 578,475, and in Germany Aug. 4, 1930. 6 Claims. (Cl. 171—252.)



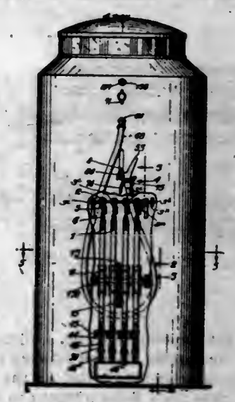
1. A rotor for electric machines comprising a shaft having a flange adjacent one end thereof and being screw-threaded at the other end thereof, a plurality of discs arranged on said shaft, and a flanged end member engaging the threaded end of said shaft to clamp said discs against the flange on said shaft.

1,894,274. LUBRICATING APPARATUS. RAYNALDO P. JACQUES, Woonsocket, R. I. Filed Aug. 22, 1930. Serial No. 476,989. 16 Claims. (Cl. 221—47.3.)



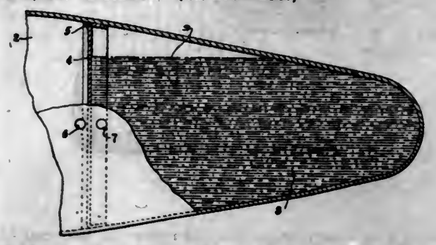
1. A lubricating apparatus comprising a lubricant chamber, a piston movably supported in said chamber, a guide member for guiding said piston in its movement within the chamber, means for locking said piston against movement in one direction relative to said guide member, and manually actuated means extending without said chamber for positively moving said piston in one direction without releasing said locking means and for effecting the release of said locking means to permit movement of the piston in the opposite direction.

1,894,275. LIQUID PUMP. PAUL KRAUSE, Babylon, N. Y., assignor, by direct and mesne assignments, of one-third to William E. Sprague, and one-third to Harry Taylor, Babylon, N. Y.; Lucy A. Sprague administratrix of said William E. Sprague, deceased. Filed Nov. 10, 1928. Serial No. 318,520. 11 Claims. (Cl. 221—95.)



1. In a liquid pump, a shaft, a motor for operating the shaft, a pumping rack, a pinion on the shaft for moving said rack, a toothed member yieldably mounted on the pumping rack, a switch normally maintained in closed position by the toothed member, a motor circuit of which said switch and motor form a part, a stop member movable into the path of and arranged to actuate the toothed member for breaking the motor circuit at a predetermined time and means for moving said stop member into the path of the toothed member a predetermined distance.

1,894,276. AIRPLANE PROPELLER. GLEN T. LAMPTON, Pittsburgh, Pa. Filed June 8, 1931. Serial No. 542,734. 3 Claims. (Cl. 170—159.)



1. In an aircraft propeller, a blade having a chamber therein, a sealed container in said chamber, and a fluid partly filling the container for damping the vibration of the blade, said container being of such shape as to allow liquid to cover substantially the entire inner surface of the blade tip.

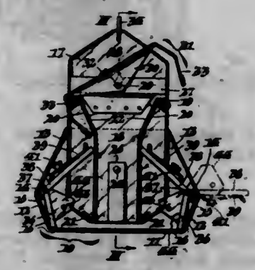
1,894,277. BLEACHING COMPOSITION AND PROCESS. EDWARD H. MANAHAN, Mountain Lake, N. J., and ARTHUR C. JOHANN, Richmond Hill, N. Y. Filed July 28, 1928. Serial No. 296,090. 3 Claims. (Cl. 8—2.)

1. A bleaching composition for furs, comprising an alkaline aqueous solution of about 1½% of hydrogen peroxide, and about two ounces of a persulphate and about two ounces of sodium pyrophosphate for each gallon of the solution.

3. The process of bleaching furs which comprises treating them with an aqueous alkaline solution of hydrogen peroxide, a persulphate and sodium pyrophosphate while keeping the temperature below about 90° F.

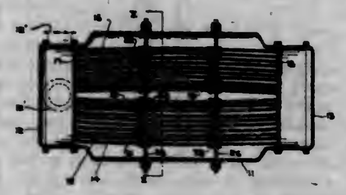
CARNEGIE LIBRARY OF ATLANTA

1,894,278. ADJUSTABLE FEEDER. PERRY S. MARTIN, Harrisonburg, Va. Filed May 4, 1929. Serial No. 360,441. 21 Claims. (Cl. 119—53.)



1 A feeder comprising a trough having side walls, end walls and a bottom wall, a hopper consisting of side walls and end walls, said hopper being adjustably carried by the trough, and a cover supported by pivot studs engaging notches, in offset members above and carried by the hopper end walls, for swinging movement.

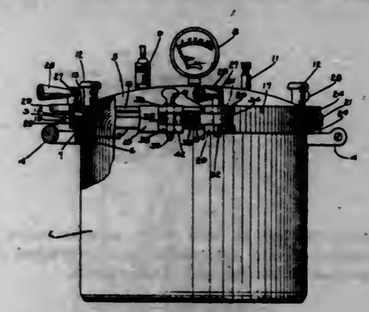
1,894,279. CONDENSER. FRANK A. MEYER, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1930. Serial No. 438,408. 17 Claims. (Cl. 257—43.)



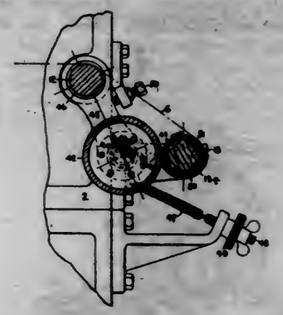
1. A heat exchanger embodying a casing having a steam inlet connection, tubes disposed within said casing, said tubes being bendable transversely so as to provide for expansion and contraction, fixed tube supports located on said casing at the ends of said tubes, transversely movable tube supports within said casing located at points intermediate the ends of said tubes and means for restraining said tube supports from movement in a direction toward and away from the inlet connection and for affording freedom of movement in another direction.

1,894,280. PRESSURE COOKER. CARL NELSON, Eau Claire, Wis., assignor to National Pressure Cooker Company, Eau Claire, Wis., a Corporation of Wisconsin. Filed Jan. 9, 1931. Serial No. 507,641. 6 Claims. (Cl. 220—61.)

1. A pressure cooker comprising a body having a seat therein, a cover for said body having a portion adapted to engage said seat, outwardly projecting means on said body and said cover, a clamping ring adapted to engage the projecting means on said body and said cover to secure the latter to the body, means for contracting said ring to force the cover into leak-proof engagement with said seat, and means for preventing said ring from expanding sufficiently to permit the cover to become detached from the cooker to thereby prevent the cover from being blown off the cooker, should said contracting means accidentally be actuated to release the cover while the cooker is under pressure.



1,894,281. METHOD AND MEANS FOR MAKING TIGHT ROLLS. PHILIP D. PARSONS, Swarthmore, Pa., assignor to Scott Paper Company, a Corporation of Pennsylvania. Filed May 15, 1930. Serial No. 452,793. 8 Claims. (Cl. 242—65.)

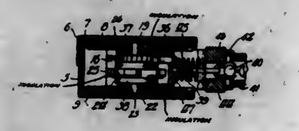


1. In a roll winding machine, means for winding a paper web upon a mandrel into roll form, combined with said mandrel, means to rotate the mandrel, paper tightening means comprising a pressure cylinder having an axis parallel to the mandrel and yieldingly pressed into frictional contact with the paper roll being formed on the mandrel, means for guiding the paper web to that portion of the mandrel and paper roll being formed thereon which is rotating away from the pressure cylinder, and means for initially holding the pressure cylinder a slight distance away from the mandrel and the core thereon when present to permit the paper web to be wound upon the mandrel and core for a few turns before the web contacts with the pressure cylinder.

1,894,282. SWITCH MOVEMENT. RUDOLF POPP, Valparaiso, Ind., assignor to McGill Manufacturing Company, a Corporation of Indiana. Filed June 3, 1929. Serial No. 368,006. 3 Claims. (Cl. 200—64.)

1. A switch comprising a frame including spaced supporting members, stationary contacts on said frame, a bridging contact unit carried by said frame, said unit having a spindle journalled in said members, a lever rockably mounted on the exterior of said frame and connecting means for causing the unit to rotate step

by step upon rocking said lever comprising ratchet teeth on said unit, a substantially U-shaped guide member, link means connecting the base of said guide member to

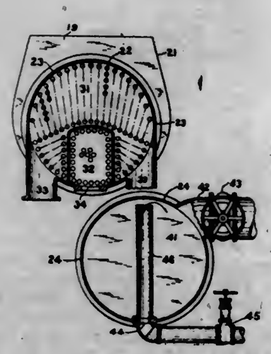


said lever, the legs of said guide member being guided by a portion of said unit and a pawl positioned by said guide member to engage said ratchet teeth.

1,894,283. PROCESS AND APPARATUS FOR THE PRODUCTION OF DIPHENYL. THOMAS J. SCOTT, Foley, Ala., assignor to Swann Research, Inc., a Corporation of Alabama. Filed June 2, 1928. Serial No. 282,403. 14 Claims. (Cl. 260—168.)

11. Process of making diphenyl which comprises contacting benzol vapor with an inert liquid mass maintained at a temperature sufficient to decompose the benzol.

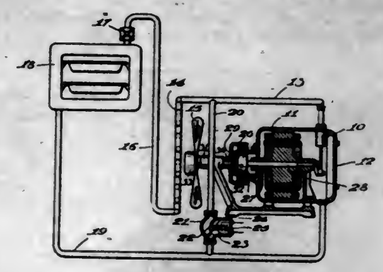
1,894,284. CONDENSING SYSTEM. JOHN H. SMITH, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 19, 1930. Serial No. 483,087. 2 Claims. (Cl. 257—47.)



1. The method of operating a surface condenser which is subjected alternately to full load and light load conditions which includes, during light load conditions, restricting the supply of circulating cooling water to a portion of the tube nest in order to produce condensate of high temperature and, in addition, maintaining, during all of such times, a static supply of water in the remaining portion of the tube nest to protect the latter.

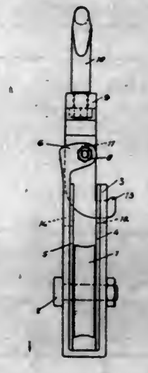
1,894,285. REFRIGERATING APPARATUS. WILLIAM F. SWEZEY, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 26, 1929. Serial No. 395,220. 10 Claims. (Cl. 62—4.)

1. In a refrigerating apparatus, a compressor, a driving motor therefor, a sealed casing enclosing the motor and compressor, an evaporator and a condenser, a rotating element outside the casing, a fan driven by said element for cooling the condenser, means for unloading the



compressor at predetermined times, said means being controlled by said rotating element.

1,894,286. GUIDE BLOCK, PULLEY BLOCK AND THE LIKE. MARTIEN VAN DER SCHANS, Krimpen-on-the-Ijssel, and GERRIT HILGERS, Rotterdam, Netherlands, assignors to the Firm of Wed. C. Stinis, Krimpen-on-the-Lek, South-Holland, Netherlands, a Dutch Firm. Filed Jan. 13, 1931, Serial No. 508,474, and in the Netherlands Sept. 16, 1930. 5 Claims. (Cl. 254—193.)



1. A snatch block including the combination, with a pair of corresponding block members having a pulley rotatably mounted between the same, of a latch member having a suspension means associated therewith and pivoted in one of said block members in a position rendering the same swingable about an axis transverse to the axis of said pulley, there being a slot in the other block member engageable by said latch member to provide a closure for said snatch block, whereby to retain a rope in association with said pulley, and means for effecting locking engagement of said latch member with said other block member.

1,894,287. WHEEL DEMOUNTING MEANS. ANDREW S. VAN HALTEREN, East Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Feb. 26, 1931. Serial No. 518,306. 1 Claim. (Cl. 301—9.)

A demountable wheel assembly including a fixed rear support for the wheel, the support provided in the hub zone with threaded apertures, the wheel provided with an equal number of unthreaded apertures in alignment with the threaded apertures of the support, a corresponding number of headed mounting bolts with threaded shanks extending freely through the wheel apertures into threaded engagement with the apertures of the support,



the wheel also provided with an additional aperture closed at the rear by the support, and a nut imbedded in the last mentioned aperture fixed against axial and angular movement and threaded to fit the mounting bolts.

1,894,288. ROLLING PROCESS. HANS WEIGEL, Ecking, Germany. Filed Feb. 24, 1930, Serial No. 431,049, and in Germany Feb. 23, 1929. 1 Claim. (Cl. 80—63.)

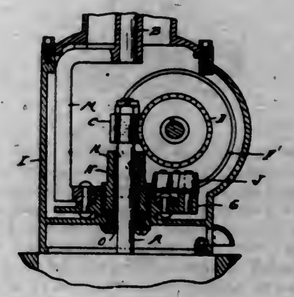
In the process of rolling steel wire to be wire-drawn in which the steel wire is successively subjected to rolling operations, the method of forming a sorbitic structure in steel wire for refining it during the rolling process, which consists in quenching the steel wire while heated immediately after one rolling operation during the rolling process, and subjecting the heated quenched steel wire to another rolling operation immediately after the quenching, for refining the steel wire to produce a sorbitic structure therein, thereby adapting it to subsequent cold wire drawing.

1,894,289. ART OF PURIFYING PHOSPHORIC ACID. BENJAMIN F. WOOD, Ridley Park, Pa., assignor to American Chemical Paint Company, Ambler, Pa., a Corporation of Delaware. Filed Feb. 4, 1930. Serial No. 425,820. 1 Claim. (Cl. 23—165.)

The method of removing suspended organic matter from a non-oxidizing solution of phosphoric acid, comprising admixing with the said acid sodium thiosulphate to liberate sulphur in a finely divided state, permitting the said sulphur to precipitate together with the said suspended matter and separating the resultant sludge f om the purified acid.

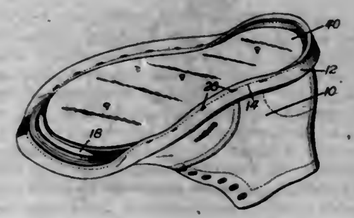
1,894,290. MECHANICAL MOVEMENT. WILLIAM E. BOCK, Toledo, Ohio, assignor to The Bock Laundry Machine Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 15, 1930. Serial No. 482,081. 9 Claims. (Cl. 74—14.)

1. A mechanical movement comprising a pin gear wheel and a co-operating cam gear wheel arranged to rotate about transverse axes offset to be in different planes, said cam gear wheel having portions for alternately engaging the



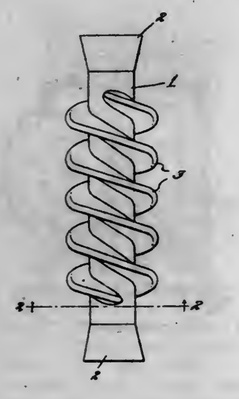
pins on opposite sides of the axial plane of said pin gear wheel to respectively rotate the same in opposite directions with positive and negative accelerations.

1,894,291. SHOE AND METHOD OF MAKING THE SAME. ALBERT W. BRADBURY, Cliftondale, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 24, 1929. Serial No. 416,228. 2 Claims. (Cl. 12—142.)



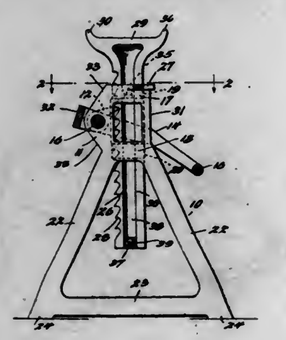
1. That improvement in the methods of making shoes which consists in providing a welted upper comprising an upper to which a welt has been attached, assembling the welted upper and an unlipped, unchanneled insole upon a last, exerting a force applied in the crease between the welt and the upper to work the welted upper over the sides of the insole, fastening the side portions of the welted upper to the side portions of the insole by fastening means clenched in the interior of the insole without penetrating the inner face thereof, thus leaving the toe portion and the heel-seat portion of the upper unlasted, and subsequently lasting the toe and heel-seat portions and completing the manufacture of the shoe.

1,894,292. STRAIN INSULATOR. WALTER CRAMER, Charlottenburg, Germany, assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Mar. 12, 1926, Serial No. 94,232, and in Germany Mar. 28, 1925. 1 Claim. (Cl. 178—318.)



An insulator comprising an elongated body of dielectric material of cylindrical form with outwardly flaring end portions, the intermediate portion of the body having a helical rib thereon terminating short of said flaring ends and merging into the body adjacent said ends.

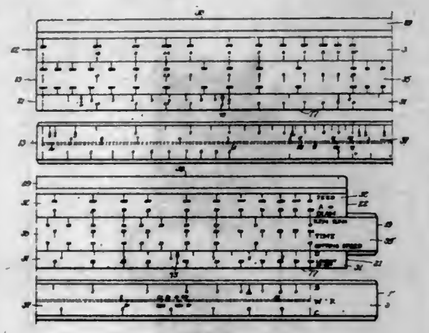
1,894,293. TRESTLE. EARL F. GREEN, York, Pa., assignor to The Manley Manufacturing Company, York, Pa., a Corporation of Delaware. Filed Sept. 19, 1929. Serial No. 393,742. 8 Claims. (Cl. 248—2.)



1. A trestle consisting of a base, a rack vertically slidable in the base and having ratchet teeth, a pawl pivoted to the base to engage said teeth, and transporting handle means so connected to the pawl and pivoted to the base as to free the pawl from the teeth on upward movement of the handle and to transport the trestle upon still further movement of the handle, said handle being on one side of said rack and said pawl being on the other side, and means on the base for preventing the handle from engaging the rack in any position.

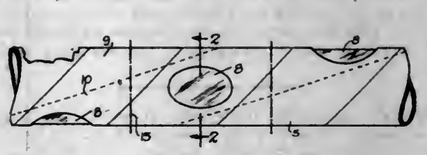
1,894,294. SLIDE RULE. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed June 9, 1928. Serial No. 284,130. 13 Claims. (Cl. 235—70.)

1. In a slide rule having relatively movable scale surfaces, scales formed and arranged in the scale surfaces and including a two-cycle logarithmic scale representing Time, a two-cycle logarithmic scale means representing R. P. M. and Cutting speed, said two-cycle scale means being relatively inverted with respect to the scale representing Time, said Time, R. P. M., and Cutting speed



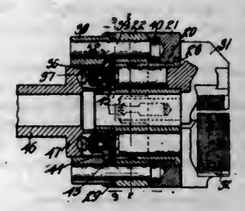
scales being formed in relatively stationary scale surfaces, and two-cycle logarithmic scales representing Feed, Diameter, and Length of cut formed in scale surfaces relatively movable with respect to the surfaces containing the Time, R. P. M., and Cutting speed scales.

1,894,295. CONTAINER CONSTRUCTION. NICHOLAS SCANDORE, Brooklyn, N. Y. Filed Feb. 21, 1931. Serial No. 517,469. 5 Claims. (Cl. 93—39.)



1. The method of making containers which consists in spirally winding material to form a tubular body portion, cutting spaced sight openings therein, closing said sight openings with a transparent material, and then cutting the body into sections each having a sight opening.

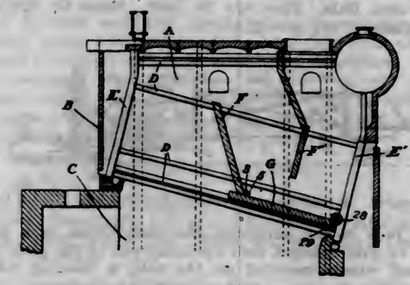
1,894,296. DIE HEAD. HARRY T. SHEARER and CHARLES A. REIMSCHISSEL, Waynesboro, Pa., assignors to Landis Machine Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Aug. 21, 1929. Serial No. 387,499. 7 Claims. (Cl. 10—100.)



1. A die head comprising a body member, trunnions mounted in the body member, chaser holders mounted on the trunnions, tangential chasers in the holders, a plurality of rings surrounding the said body member, one of said rings being connected to the said chaser holders, means in said rings for opening and adjusting the die head, the

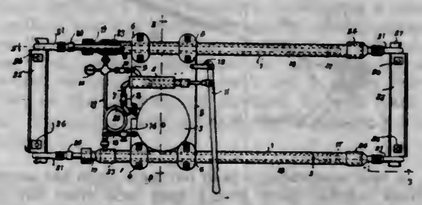
said rings being positioned laterally of said body member by a flange on the body member, and a ring plate attached to the said body member, a ring carrying locking pins connected to the said plurality of rings and rotatable about the body member with said plurality of rings, said ring being positioned on a shank slidably connected to said body member, the said ring being limited in its axial movement relative to said shank in both open and locked position substantially as set forth.

1,894,297. BOILER CLEANER. NORMAN L. SNOW, New Canaan, Conn., and WILLIS P. THOMAS, Detroit, Mich., assignors to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 2, 1927. Serial No. 165,480. 11 Claims. (Cl. 110—165.)



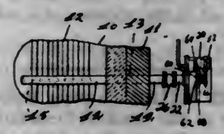
10. In combination, a boiler furnace, a blower element, a suction device cooperating with said blower element to remove soot from a portion of the boiler furnace, said blower element being arranged to move deposits on the surface of the said portion of the boiler furnace toward the suction member, and a common means for controlling the operation of said blower element and said suction device.

1,894,298. HYDRAULIC BELT STRETCHER. WILEY F. SUTTON, Gladewater, and JULIUS P. HENSLER, Corsicana, Tex. Filed Feb. 24, 1928, Serial No. 256,635. Renewed May 31, 1932. 1 Claim. (Cl. 60—52.)



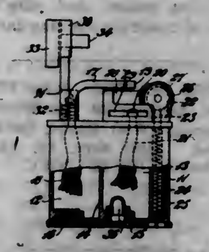
An apparatus for the purpose set forth comprising a plate having longitudinal depressions near its side edges, cylinders seated in said depressions, caps secured on the plate over the cylinders whereby the cylinders will be supported and maintained in parallel relation by and at opposite sides of the plate, pistons in the cylinders, a rod extending from each piston through one end of the respective cylinder, work-engaging means connecting the outer ends of said rods, work-engaging means connecting the ends of the cylinders remote from the outer ends of the rods, a tank on the plate, a pump on the plate connected with the tank, a transverse pipe connected with the outlet of the pump and having its ends connected with the respective cylinders, said pipe having a coil formed therein between its ends, and a valve connection between the transverse pipe and the tank.

1,894,299. BOILER CLEANER. GEORGE C. VENNUM, Wilmington, Del., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed July 29, 1921, Serial No. 488,454. Divided and this application filed Apr. 10, 1929. Serial No. 354,076. 12 Claims. (Cl. 122—392.)



1. In a boiler cleaner, the combination with a boiler wall and a blower pipe extending transversely through said wall, said blower pipe being provided with a nozzle for discharging a cleaning fluid adjacent a surface to be cleaned, of a blower head mounting the blower pipe, means for turning said blower pipe about its longitudinal axis to direct the nozzle toward different portions of the boiler to be cleaned, and means affording a yielding connection between said blower pipe and said blower head, said last mentioned means including a flexible connecting member.

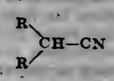
1,894,300. POCKET LIGHTER. GUY STRACHAN BARKER, London, England. Filed Nov. 5, 1930, Serial No. 493,667, and in Great Britain Dec. 13, 1929. 1 Claim. (Cl. 67—7.1.)



A lighter comprising a container having a plurality of fuel compartments, a wick burner in the top of the container in communication with one compartment, a jet burner rising from the container in communication with another compartment and extending toward the wick burner and terminating in a nozzle adjacent the wick burner to be heated by a flame therefrom and directed at an angle to the path of said flame, a wick extending from the fuel compartment into said jet burner and terminating short of the nozzle whereby to define a pressure chamber upon which the flame from the wick burner plays, and a sparking device mounted on top of the container adjacent the wick burner.

1,894,301. PROCESS OF PRODUCING TERTIARY NITRILES. MAX BOCKMÜHL and GUSTAV EHRHART, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 4, 1931, Serial No. 579,101, and in Germany Dec. 10, 1930. 5 Claims. (Cl. 260—108.)

1. In the process of preparing tertiary nitriles by transforming a secondary nitrile of the general formula



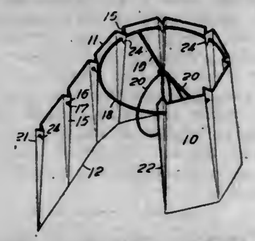
wherein R stands for alkyl or alkenyl, into the corresponding alkali metal compound and causing an alkylat-

ing agent to act upon the alkali metal compound of the secondary nitrile, the step which comprises preparing the alkali metal compound of the secondary nitrile by causing an organic alkali metal compound of the general formula

R—X

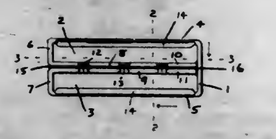
wherein R stands for alkyl or aryl and X stands for an alkali metal, to act in the presence of a solvent upon the secondary nitrile.

1,894,302. LAMP SHADE. ALFRED BURKE, New York, N. Y., assignor to The Parchlite Corporation, New York, N. Y., a Corporation of New York. Filed July 30, 1932. Serial No. 626,275. 5 Claims. (Cl. 240—108.)



5. A lamp shade comprising a supporting ring, a paper covering having inwardly extending folds at intervals around its periphery, oppositely disposed holes in the walls of the folds near their tops through which holes the supporting ring passes, and slits connecting said holes to permit of inserting the ring into the holes.

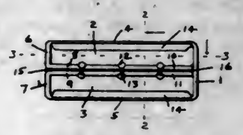
1,894,303. SLIDE BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Sept. 26, 1931. Serial No. 565,322. 2 Claims. (Cl. 24—200.)



1. A slide buckle structure comprising a piece of wire of uniform diameter throughout its length and bent to form a substantially rectangular frame having side, upper, lower and intermediate bar-structures, the upper and lower bar-structures being flattened in the plane of the frame and the intermediate bar-structure being provided with spaced nubs, each nub being pressed out from said uniform diameter to extend beyond the bar-structure of which a full diameter is maintained between, and at the rear of, said nubs, said nubs extending out of said plane in opposite directions and cooperating with the inner edges of the flattened bar-structures to grip a strap threaded into the slide buckle.

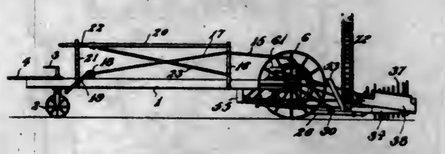
1,894,304. SLIDE BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Sept. 26, 1931. Serial No. 565,323. 2 Claims. (Cl. 24—200.)

1. A slide buckle comprising a piece of wire of uniform diameter throughout its length and bent to form a substantially rectangular frame having side, upper, lower and intermediate bar-structures, the upper and lower bar-structures being flattened in the plane of the frame and the intermediate bar-structure being provided with spaced nubs, each nub being pressed out from said uniform diameter to extend beyond the bar-structure of which a full diameter is maintained between, and at the rear of, said nubs, said nubs extending in opposite directions along



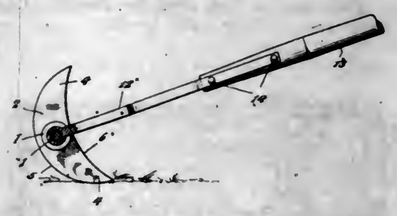
said plane and cooperating with the inner edges of the flattened bar-structures to grip a strap threaded into the slide buckle.

1,894,305. COTTON HARVESTER. CHARLES DUMLER, Canton, Okla. Filed Apr. 10, 1931. Serial No. 529,183. 7 Claims. (Cl. 56—33.)



1. In a cotton harvester, the combination of a push bar, an axle engaged with the front end of the push bar, ground wheels mounted on the axle, a steering wheel supporting the rear end of the push bar, supporting arms fitted to the axle and extending downwardly and forwardly therefrom, a frame carried by the front ends of said arms, cotton picking mechanism mounted on said frame, means whereby the supporting arms may be adjusted vertically relative to the axle, rocking posts mounted over the axle, connections between said posts and the supporting arms, and means for rocking said posts.

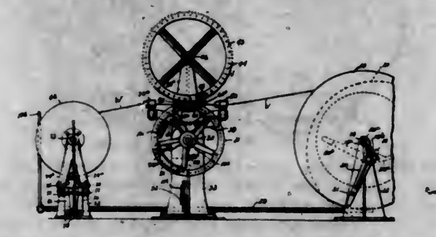
1,894,306. RAKE. ROY W. EIFERT, Bushnell, Ill. Filed June 8, 1931. Serial No. 542,952. 2 Claims. (Cl. 55—10.)



1. A rake comprising a head having a cross bar angular in cross section, teeth fitting upon said cross bar and consisting of fixed concavo-convex plates each formed intermediate its ends with an angular opening to receive the cross bar, said plates having their end portions projecting in opposite directions from the cross bar and each having its convex edge presented to the ground to form a rocking surface, arms extending rearwardly from said head, and a handle having its front end portion secured to said arms.

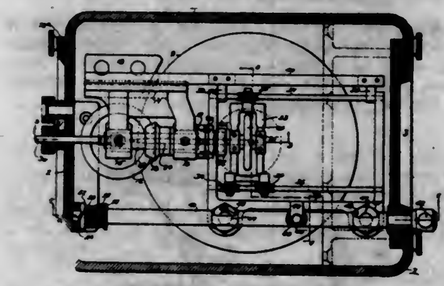
1,894,307. MEASURING AND CONTROL APPARATUS. EMIL EK, Portland, Me., assignor to Adde and Company, Portland, Me., a Corporation of Maine. Filed May 20, 1926. Serial No. 110,431. 22 Claims. (Cl. 33—132.)

9. Apparatus of the character described comprising, in combination, a device for supplying wire and a device for withdrawing it therefrom and braking means for each device; control means between said devices having a rotatable member arranged to be rotated by the wire traveling over its periphery; a rod having operative connection with said braking means; a spring for moving said rod to apply said braking means; mechanism actu-



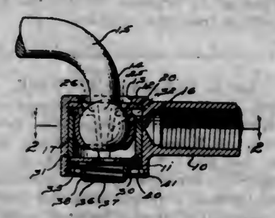
ated by said rotatable member for compressing said spring; means holding it in compression; and other means actuated by said rotatable member in accordance with the length of wire withdrawn for releasing said compressed spring; the last said means being adapted to be set to effect said release when a predetermined length of wire has been drawn from the supply.

1,894,308. SPEEDOMETER. FREDERICK A. FLEISCHMANN, Drexel Hill, and ALPHA L. MARSH, Philadelphia, Pa. Filed Oct. 4, 1930. Serial No. 486,480. 8 Claims. (Cl. 74—26.)



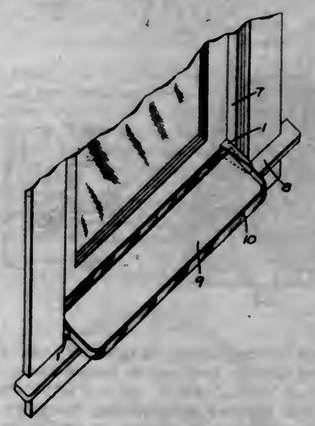
1. The combination in a speedometer, of a driven speedometer disk; a speedometer wheel arranged to bear against the disk; a shaft on which the wheel is mounted; a carriage; bearings on the carriage for said speedometer wheel shaft; a pick up frame; longitudinal rails on the frame; two pairs of wheels on one end of the carriage arranged to travel on one rail; and a single pair of wheels on the opposite end arranged to bear upon the other rail so that said carriage has a three point suspension.

1,894,309. JOINT. WILLIAM A. FLUMERFELT, Columbus, Ohio, assignor to Columbus Auto Parts Company, a Corporation of Ohio. Filed Dec. 7, 1931. Serial No. 579,469. 1 Claim. (Cl. 287—90.)



A ball and socket joint comprising a housing, a ball member in the housing, a ball seat having a semi-spherical shell portion for receiving a part of the ball, flanges on opposite edges of the seat and directed in the same plane and at an angle to one wall of the housing, a wedging member between the seat and housing wall, and having legs wedgingly engaging the flanges on the seat, the semi-spherical shell portion of the seat being disposed between such legs, and means for normally urging the wedging member into wedging relation with the flanges on the seat.

1,894,310. WINDOW GARDEN SHELF. CHARLES H. GUNTH, East McKeesport, and CAROLINE G. EASTLEY, Pittsburgh, Pa. Filed Jan. 22, 1932. Serial No. 588,104. 5 Claims. (Cl. 248—18.)



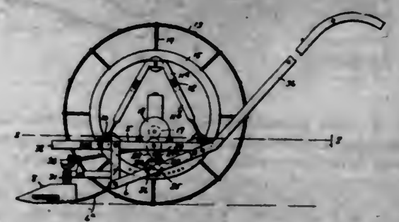
1. A bracket for supporting a window tray formed of sheet metal to provide a channel for receiving the tray and having a wing adapted to be inserted between the window sill and a vertical weather strip.

1,894,311. LOAD CARRYING VEHICLE. HARRY GRAY, Galveston, Tex. Filed June 14, 1932. Serial No. 617,150. 14 Claims. (Cl. 280—102.)



1. A vehicle comprising a frame, front and rear trucks on which the frame is mounted, crossed steering rods connecting said trucks and means for mounting the frame for limited longitudinal movement relative to one of said trucks.

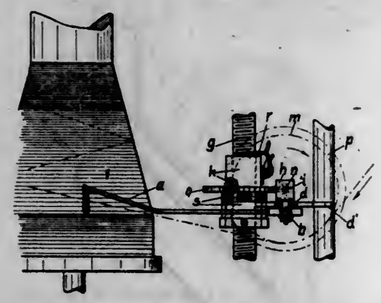
1,894,312. POWER MOWER. SLINGSBY D. HARMAN, Woodhull, Ill. Filed Mar. 7, 1932. Serial No. 597,355. 3 Claims. (Cl. 56—257.)



1. A mower machine comprising in combination a frame, a plurality of rollers supported on the frame in substantially triangular relation, a sickle bar mounted on said

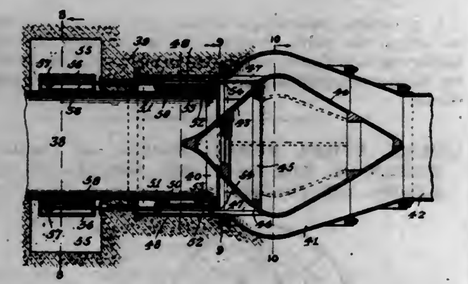
frame adjacent the forward end thereof, a wheel having an annular part engaged on its inner side by said rollers, a prime mover mounted on said frame, a drive connection between said prime mover and the annular part of said wheel for driving the latter and additional driving means connecting the prime mover with the sickle bar for reciprocating it.

1,894,313. THREAD GUIDE ADVANCING DEVICE FOR BOBBIN WINDING MACHINES. AUGUST HOFFMANN, Leipzig, Germany. Filed May 2, 1931, Serial No. 534,669, and in Germany May 3, 1930. 4 Claims. (Cl. 242—31.)



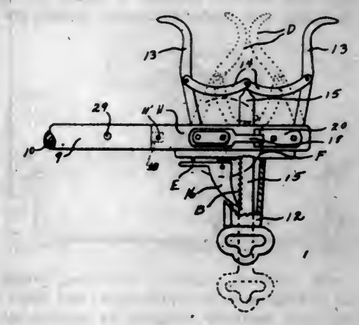
1. A cop winding device including a screw threaded reciprocating member arranged to reciprocate in spaced parallel relation to the axis of the cop to be wound, a carrier on said member reciprocating therewith, means on said carrier engaging the thread on said member, a worm wheel on said carrier, a drive shaft pivoted to swing at right angles to said member and reciprocating therewith, a worm on said drive shaft movable by the swinging movement of said drive shaft into and out of engagement with the worm wheel, thread controlled means for effecting swinging movement of the drive shaft, and thread actuated means for driving said drive shaft.

1,894,314. VALVE. CLEVES HARRISON HOWELL, Albuquerque, N. Mex., and HOWARD PHELPS BUNGER, Wheat Ridge, Colo. Filed July 20, 1931. Serial No. 552,012. 6 Claims. (Cl. 137—139.)



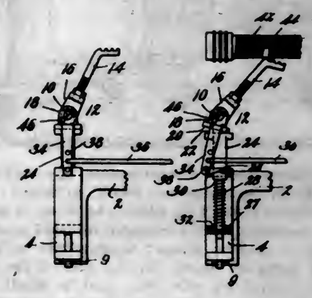
5. A valve mechanism for hydraulic and like conduits comprising a conduit having an open mouth, a plug member spaced from the conduit in advance of the mouth, means for supporting the plug member including spaced tie members located across the space between the plug and conduit mouth and extending longitudinally along the conduit behind its open mouth, and a tubular valve movable on the conduit across the space between the mouth and plug, said valve having bearings on the said tie members and being guided thereby.

1,894,315. MAIL POUCH CATCHING AND DELIVERING MEANS. ISAAC J. LANE, Topeka, Kans. Filed Oct. 27, 1930. Serial No. 491,344. 5 Claims. (Cl. 258—11.)



1. In a mail pouch catching and delivering means, a bifurcated head having a sleeve laterally extending therefrom, a toothed rack slidably mounted within the sleeve, a spring tensioned pawl pivoted on the sleeve to engage the teeth, a pair of jaws pivotally attached to the head, and a toggle jointed element pivotally connected to the jaws and to the rack, by which means the jaws are opened and locked in a closed position, substantially as shown.

1,894,316. FILLING-FEELER MECHANISM FOR LOOMS. HECTOR LE DOUX, Hyde Park, Mass., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Filed Aug. 7, 1930. Serial No. 473,620. 4 Claims. (Cl. 139—286.)

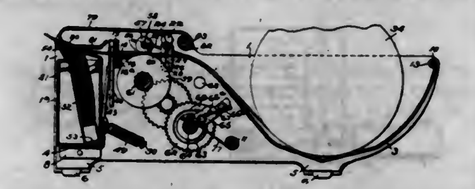


1. A filling-feeler mechanism for looms, having in combination, a feeler-carrier, a side slipping feeler-member pivotally mounted on the carrier, and resilient means exerting a force on the feeler-member in balanced relation and without tendency to produce pivotal movement of the feeler-member when in normal angular relation, and exerting a force on the feeler-member, when the latter slips sidewise, tending to produce pivotal movement opposite to that resulting from side slipping.

1,894,317. TAPE SERVING MACHINE. LOUIS LINK, New York, N. Y., assignor, by mesne assigments, to Nashua Gummed & Coated Paper Co., Nashua, N. H., a Corporation of Massachusetts. Filed Mar. 15, 1929. Serial No. 347,404. 7 Claims. (Cl. 91—14.5.)

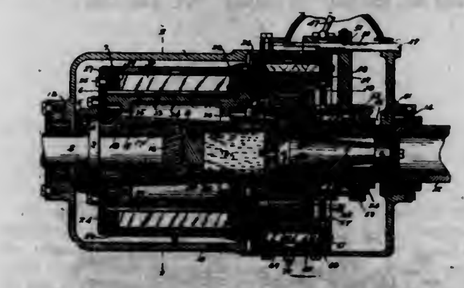
1. In a machine for serving and moistening strip material, in combination, a frame including spaced side members, strip advancing means between said side members including a feed floor having its fore portion below the upper edges of said members, a reservoir having a brush moistener projecting therefrom into the path of the strip,

strip severing means between said brush and the strip advancing means, and a plate pivotally supported upon the frame between said side members, said plate cooperating with said side members to provide a covering closure
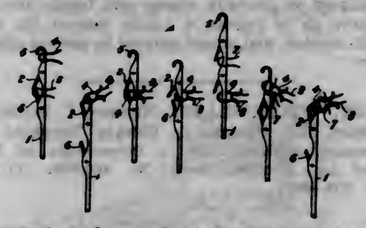


for said moistening and severing means and otherwise exposed parts of the advancing means, and having a forward portion adapted to effect yielding moistening engagement of the strip and said brush moistener.

1,894,318. AUTOMATIC VARIABLE SPEED TRANSMISSION. JOHN C. MESSICK, Venice, Calif., assignor of one-third to Frank H. Tull, Culver, Calif. Filed June 19, 1931. Serial No. 545,399. 7 Claims. (Cl. 192—58.)



1. In a transmission mechanism, a driving shaft, a sleeve on said shaft, a helical drive connection between said shaft and the sleeve, a piston head on the sleeve, and a fluid chamber in which the head works and which is splined to the sleeve for rotation therewith and for relative reciprocation.

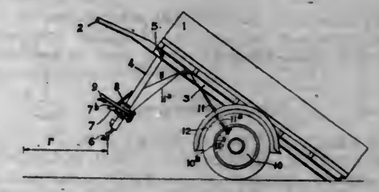
1,894,319. METHOD OF PRODUCING KNITTED FABRICS. ROBERT KIRKLAND MILLS, Sherwood, Nottingham, England. Original application filed Jan. 8, 1930, Serial No. 419,228, and in Great Britain Mar. 28, 1929. Divided and this application filed July 1, 1932. Serial No. 620,490. 6 Claims. (Cl. 66—198.)



1. The method of producing knitted fabric wherein the loop of new thread is drawn by a knitting instrument such as a needle through an old stitch loop and said old stitch loop is subsequently drawn through said new loop.

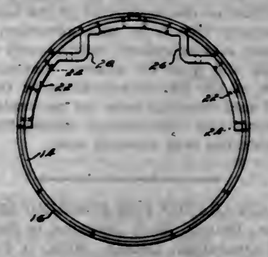
1,894,320. SINGLE AXLE TIPPING TRAILER. KARL MUCHENBERGER-WITTLINGER, Riehen near Basel, Switzerland. Filed Dec. 28, 1931, Serial No. 583 450, and in Switzerland Jan. 8, 1931. 2 Claims. (Cl. 298—5.)

1. In a single axle tipping trailer, a frame, a forwardly projecting beam pivoted on the front end of the trailer frame, a draft member thereon, movable relatively thereto, a forwardly projecting coupling bar rigidly connected to the trailer frame, a releasable coupling device on said beam to connect the same to the coupling bar when being in its lying position ready for traction, means for releasing said coupling device, an automatically operating brake for



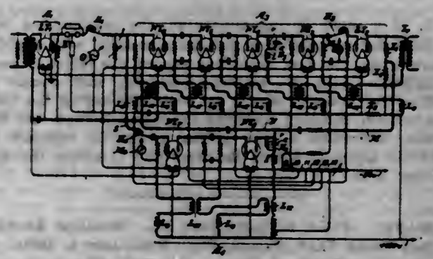
the trailer wheels, a flexible traction member between said brake and said draft member, for operating the brake on release of the traction effort, guide means on the trailer frame for said flexible traction member, said beam being so arranged as to be obliquely erected for tilting the trailer upon a backward push thereon after release of said coupling device.

1,894,321. METHOD OF MAKING A BRAKE BAND. EMIL A. NELSON, Detroit, Mich. Filed Apr. 23, 1930. Serial No. 446,770. 3 Claims. (Cl. 29—152.1.)



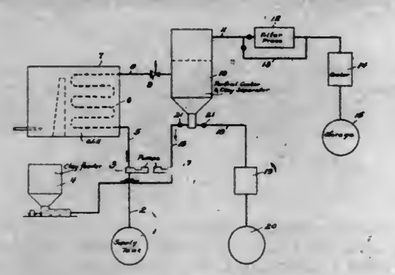
1. In the manufacture of a brake band, the method of forming the same which consists in securing a substantially semicylindrical rigid reinforcement to the inner periphery of a resilient cylindrical member, and severing the member and reinforcement mid-way between the ends of the reinforcement immediately before said band is installed so as to obviate distortion thereof.

1,894,322. MEANS FOR ELIMINATING DISTORTION IN REPEATERS. HARRY NYQUIST, Millburn, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 17, 1929. Serial No. 393,241. 24 Claims. (Cl. 179—171.)



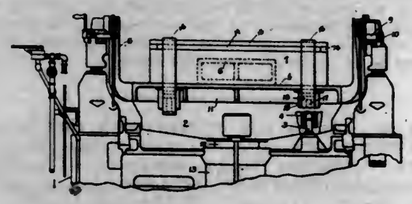
1. In an amplifier circuit in which an effective bridged capacity C exists, means to compensate first order of frequency effects of said capacity comprising a series combination of inductance L and resistance R shunted across said circuit, the resistance R being of appreciable magnitude as compared with the inductance L.

1,894,323. METHOD OF PURIFYING OILS. RUDOLPH C. OSTERSTROM, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Feb. 15, 1930. Serial No. 428,796. 7 Claims. (Cl. 196—147.)



1. The continuous method of purifying and decolorizing oils with adsorbents which comprise: heating in a treating zone a confined flow stream composed of an oil to be decolorized and an adsorbent to a temperature above the vaporization point of the oil while applying pressure to the stream to prevent the evolution of oil vapor, continuously removing the oils from said heated treating zone to a separating zone whereby said oils are maintained at a viscosity permitting of the separation of the oils into a fraction substantially free from said adsorbent and a fraction containing said adsorbent, continuously removing the adsorbent-free oils from the system, continuously returning a portion of the adsorbent-containing fraction to the inlet side of said treating zone for recirculation through said latter zone, and continuously adding fresh adsorbent to the oils entering said treating zone.

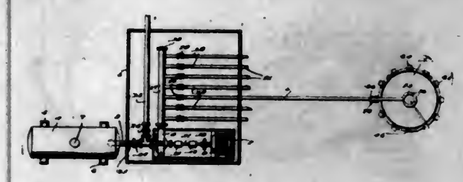
1,894,324. APPARATUS FOR FORMING MOLDS. JOHN E. RADIGAN, Detroit, Mich., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 7, 1930. Serial No. 442,331. 7 Claims. (Cl. 22—45.)



1. In a mold jolting apparatus, the combination with a table for supporting a pattern and flask with molding material in the flask extending beyond the latter, a board engageable with the molding material, and means for jolting the table, of means for yieldably urging the board against the molding material extending beyond the flask during operation of the jolting means to compact the molding material within the flask and to clamp the flask to the table.

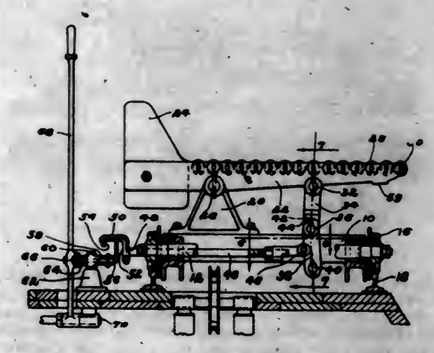
1,894,325. FIRE EXTINGUISHER. WILLIAM RICHTER, and PETER FRAY, Tampa, Fla. Filed July 1, 1930. Serial No. 465,199. 1 Claim. (Cl. 169—13.)

In a fire extinguishing apparatus for oil tanks and like structures comprising a source of liquid supply, a main associated with said supply, pump means for forcing said liquid through said main, said main having a circular branch conduit adapted to encircle the tank in which it is wished to extinguish a fire and a conduit disposed above and over said tank, each of said conduits having nozzles to permit discharge of fluid, said liquid main being inclined downwardly from said branch conduits toward said



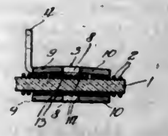
pump, a drain plug mounted in the low end of said main, and a valve in said main disposed between the outlet of said pump and said drain plug.

1,894,326. UNLOADING APPARATUS. JOHN SATTERQUIST, Olympia, Wash., assignor of one-half to Mill Engineering and Supply Company, Seattle, Wash., a Corporation of Washington. Filed Apr. 13, 1931. Serial No. 529,709. 11 Claims. (Cl. 143—105.)



1. An unloading apparatus consisting of a frame disposed for longitudinal movement; a transverse log support member pivotally supported from said frame; horizontally disposed log supporting rollers on the upper surface of said member to maintain the latter and transversely thereof; a toggle link pivotally secured to said support member to maintain the latter in a horizontal position; a trip link pivotally supported from said frame and adapted to pivotally engage said toggle link in such a manner as to provide a toggle support for said log support member, and means adapted to operate said toggle support.

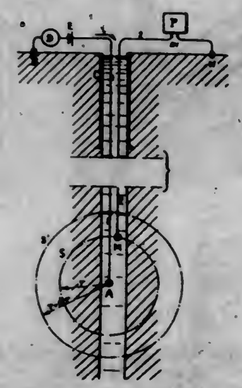
1,894,327. FIXED CLAMP. NEWTON C. SCHELLENGER, Elkhart, Ind., assignor to Chicago Telephone Supply Company, Elkhart, Ind., a Corporation of Indiana. Filed Apr. 2, 1930. Serial No. 440,984. 11 Claims. (Cl. 201—63.)



6. In combination, a bar of insulation, a conductor supported upon the surface thereof, a C-shaped clamp embracing the bar and conductor and being deformed into gripping engagement therewith, said clamp having an

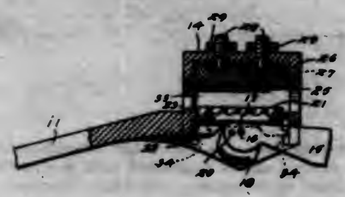
arched central portion, the edges of the arched portion defining fixed contact with the conductor, and circumferentially disposed slots on each side of the central portion, said slots having projections along their edges biting into the body of the bar.

1,894,328. ELECTRICAL DEVICE FOR THE DETERMINATION OF SPECIFIC RESISTIVITY. CONRAD SCHLUMBERGER, Paris, France. Filed July 2, 1932. Serial No. 620,698. 1 Claim. (Cl. 175—182.)



An electrical device for determining the nature of the geological formations traversed by a drill hole, comprising two electrodes placed at a known and small distance from one another in the water filling the uncased part of the said drill hole; means for varying the depth of these two electrodes in the drill hole; means for measuring the current flowing in the circuit constituted when one of these two electrodes is connected by an insulated wire to a source of current whose other pole is earthed; means for measuring the difference of potential thus created between the second electrode in the drill hole and a third electrode in contact with the surface of the soil; said means being connected by insulated wires to said two electrodes, whereby an approximate value for the resistivity of the earth at the depth of the two electrodes inside the drill hole can be deduced.

1,894,329. CABLE ARMOR CUTTER. ANDREW P. TALLMADGE, Washington, D. C. Filed Feb. 8, 1932. Serial No. 591,697. 7 Claims. (Cl. 81—9.5.)

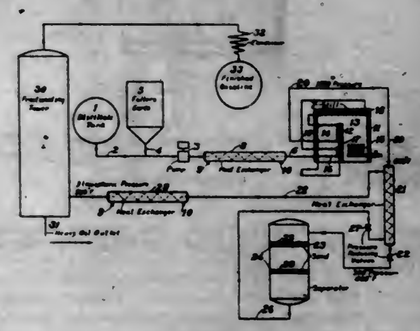


1. In a device of the class described, elements for receiving and clamping a length of cable armor therebetween, one of these elements having an opening therein, a cutting element for slotting the armor longitudinally, the cutting element being movable through the opening, and unitary means for throwing the cutting element and the element having said opening into operative position successively by a single stroke of said means.

1,894,330. MANUFACTURE OF 1-AMINO-2-ALKOXYNAPHTHALENES. RICHARD TOBLER, Rieben, near Basel, and WALTER KERN, Sissach, Switzerland, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Jan. 25, 1932, Serial No. 588,812, and in Switzerland Feb. 9, 1931. 8 Claims. (Cl. 260—130.5.)

1. A process for the manufacture of 1-amino-2-alkoxynaphthalenes, consisting in causing 1-halogen-2-alkoxynaphthalenes to react at raised temperature with agents yielding ammonia.

1,894,331. LIQUID PHASE POLYMERIZATION OF HYDROCARBON OILS. CORNELIUS B. WATSON, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Mar. 18, 1930. Serial No. 436,607. 6 Claims. (Cl. 196—147.)

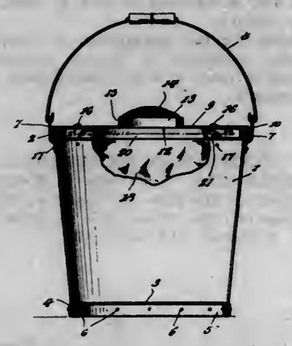


1. The method of removing gum-forming and color-imparting bodies from cracked hydrocarbon oils containing unsaturated compounds, which comprises producing a mixture of such oils with a comminuted solid adsorbent, then passing said mixture through a heating zone wherein the oils of the mixture are subjected to temperatures in excess of their normal vaporization temperatures but insufficient to effect any material cracking thereof, maintaining the oils in the mixture while passing through said zone under the conditions of temperature specified in substantially the liquid phase by the employment of superatmospheric pressures of the order of 1000 pounds on said oils sufficient to inhibit vapor evolution, then passing said mixture under partially reduced temperature and pressures of the order of 300 to 500 pounds and temperatures but with the oils thereof still in the liquid phase through a separating zone, removing from the mixture during its passage through said separating zone the adsorbent content thereof, substantially removing the pressure from the adsorbent freed oils to vaporise the latter without reheating the same, and subjecting said vaporized oils to fractionation to remove high boiling polymerized bodies from the treated vapors.

1,894,332. SANITARY MILK PAIL. JENNIE M. WESTERBERG, Boring, Oreg. Filed Oct. 14, 1930. Serial No. 488,629. 1 Claim. (Cl. 31—51.)

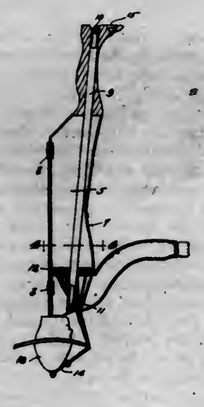
A milk pail comprising a receptacle having a bottom and open at its top, a reinforcing strip covering the upper edge of the receptacle, a cover for the receptacle having spaced inner and outer rims adapted to bear against said reinforcing strip, an annular collar of substantially the same height as the inner and outer rims secured to the lower face of the cover and inclined outwardly and downwardly, there being an opening formed in the cover at the center of the collar and of less diameter than the collar, a neck projecting upwardly from the collar at said opening, a concavo-convex screen fitted to the neck with its convex face presented upwardly, a sheet of fabric having its marginal edge portion fitting around the collar, said sheet of fabric being considerably larger than the concavo-convex screen

and having its intermediate portion immediately below the screen bowed downwardly, and a flexible securing element disposed in the angle formed at the junction of the collar



and lower face of the cover and bearing against the fabric strip for detachably securing said fabric strip in position on the collar.

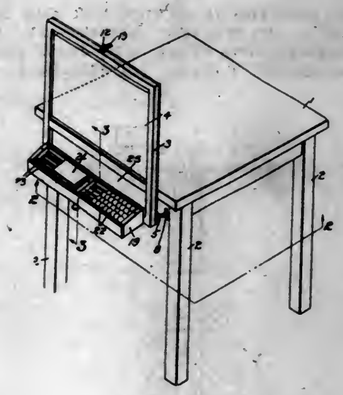
1,894,333. TOY PROJECTILE. LEE BARTON WILLIAMS, Pittsburgh, Pa. Filed Sept. 29, 1931. Serial No. 565,857. 2 Claims. (Cl. 46—52.)



1. A projectile toy comprising a hollow body portion including hingedly connected sections, means for urging the sections to their open positions, a latch at one end of the body portion for normally holding the sections of the body portion closed, a tube within the body portion and extending to one end of the body portion, said latch member extending into the tube, a weight within the tube and adapted to gravitate to one end of the tube releasing the latch, and a parachute held within the body portion, and adapted to unfold to support the body portion when the body portion opens and floats to the earth.

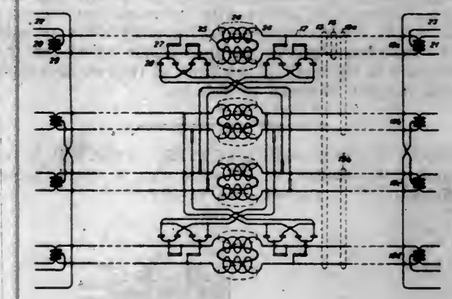
1,894,334. COMBINATION BLACKBOARD AND DESK OR THE LIKE. WILLIAM J. XAVIER, Clifton Dale, Mass. Filed Sept. 21, 1931. Serial No. 563,925. 4 Claims. (Cl. 45—75.)

1. A device of the class described comprising, in combination, an article of furniture having legs and a top supported upon said legs, a blackboard, hinge means securing said blackboard to said article of furniture in swinging relation thereto so that the blackboard may be concealed beneath the top or exposed in an upright position by a complete swinging movement only from one position to the



other and suitable interengaging fasteners provided partly on the article of furniture and partly on the blackboard for holding said blackboard in the exposed or concealed position with relation to the said top.

1,894,335. PHANTOM TELEPHONE CIRCUIT. MANVEL K. ZINN, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 16, 1931. Serial No. 544,869. 14 Claims. (Cl. 178—45.)

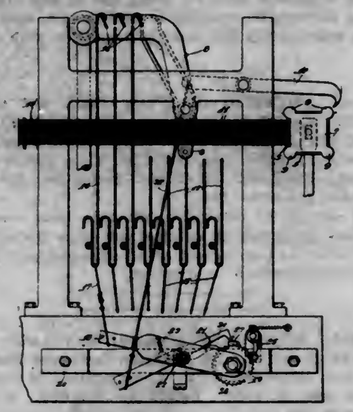


1. In combination, two loaded side circuits and a phantom circuit, and means associated with the loading coils to neutralize their leakage inductance reactance in the phantom circuit.

1,894,336. LOOM. MUIR ANDERSON, Chicago Heights, Ill. Filed May 13, 1929. Serial No. 362,628. 1 Claim. (Cl. 139—59.)

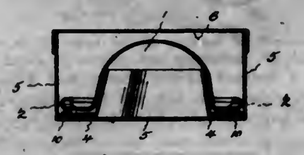
In a loom of the class described wherein a drive advances a cylinder for a fabric pattern in timed relation with the movement of a shuttle, the combination with said cylinder and fabric pattern, of an advancing pawl for advancing

said cylinder in timed relation with the movement of said shuttle, a ratchet, a cam on said ratchet, a tripper arm associated with said ratchet and connected to said cylin-



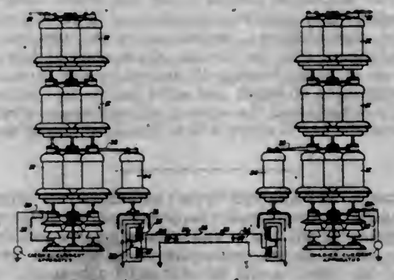
der advancing pawl, and means for rotating said ratchet to cause said cam to lift said tripper arm whereby to disengage said cylinder advancing pawl from said cylinder.

1,894,337. MERCHANDISE PACKAGE. CHAMPE S. ANDREWS, Chattanooga, Tenn. Filed Feb. 12, 1930. Serial No. 427,683. 4 Claims. (Cl. 206—8.)



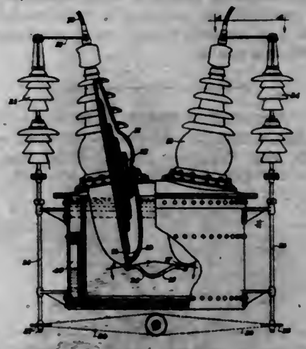
1. Packing means for merchandise comprising a container, a removable support within said container, said support being composed of a sheet detachably held within said container, a collapsible and separable band detachably secured to said sheet by means comprising a flanged lower edge of said band engaging the under side of portions of said sheet adjacent to an opening in said sheet into which said band is inserted.

1,894,338. CONNECTION FOR HIGH VOLTAGE LINES. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Jan. 21, 1928. Serial No. 248,471. 9 Claims. (Cl. 171—97.)



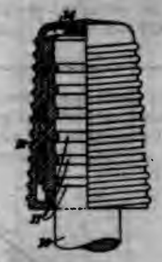
1. Means for withdrawing energy from a high voltage alternating current transmission line comprising a condenser having one terminal connected with said line, a resistance in series with said condenser, a transformer having its primary winding in series with said condenser, current receiving means in circuit with the secondary of said transformer, and a condenser in parallel with the primary winding of said transformer.

1,894,339. ELECTRIC SWITCH. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed June 1, 1928, Serial No. 282,215. Renewed Feb. 10, 1931. 12 Claims. (Cl. 200—150.)



1. The combination with a housing, of a pair of bushing insulators extending through the wall of said housing, conductor rods extending through said insulators, laterally extending contact arms connected with said respective conductor rods within said housing and arranged to contact with each other to form electrical connection between said conductor rods, and means for simultaneously rotating said conductor rods to move said contact arms together from opposite directions.

1,894,340. INSULATOR PIN. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Aug. 10, 1928. Serial No. 298,828. 4 Claims. (Cl. 173—321.)



1. An insulator pin, comprising a spindle, a soft metal tip enclosing the end of said spindle, and a reinforcing member embedded in said tip, said reinforcing member having contact with said spindle to brace said reinforcing member against said spindle.

1,894,341. MATERIAL FOR AND METHOD OF PROTECTING CONDUITS. EDWARD P. BECKER, Grand Tower, Ill. Filed May 19, 1930. Serial No. 453,709. 1 Claim. (Cl. 144—309.)

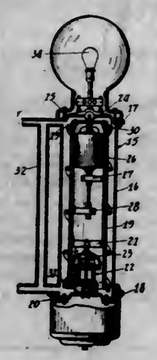
The combination with a conduit, of a covering comprising a strip of wood veneer of substantially uniform width throughout and whose grain extends laterally of the length of the strip, and the ends of the strip terminating in

diagonal lines, whereby a pair of said strips may be wound spirally about and in contact with said conduit, with the diagonal ends of the adjoining strips in abutment and with out overlapping and in a line parallel to the axis of the



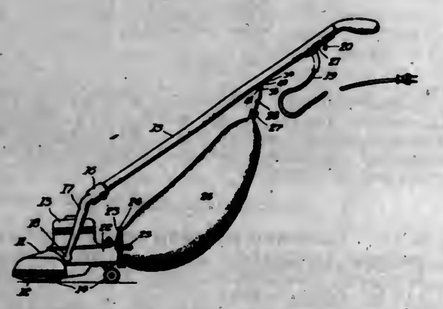
conduit, and fastening means at longitudinally spaced intervals for securing the covering to said conduit thereat, said conduit and covering being free of securement except at said fastening means.

1,894,342. ROTATING NEON ILLUMINATED UNIT FOR BARBER POLES. MORRIS W. BERGER and FRANK H. VIVIAN, San Francisco, Calif. Filed Mar. 8, 1932. Serial No. 597,484. 8 Claims. (Cl. 40—126.)



1. In a device of the class described, a spider provided with a boss having a hole centrally therethrough for the accommodation of a tube, said tube having a light socket on its upper end and a transformer carried pendently from its lower end, said transformer having wiping contacts adapted to convey the electrical energy to a multiple of gas-charged tubes spirally wound about said cylindrical member.

1,894,343. SUCTION CLEANER. EUGENE BUTZER, Basel, Switzerland, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Aug. 15, 1931. Serial No. 557,322. 5 Claims. (Cl. 15—257.)



1. In a suction cleaner, the combination of a body having an outlet, a dust bag connected to said outlet, a hollow handle pivotally engaging said body and having an opening therein, and means for supporting the upper end of said leg comprising a spring within and secured at one end with respect to said hollow handle and a flexible member connected with the other end of said spring and passing through the opening in said handle, said member having means at its free end for connection with said bag.

1,894,344. METHOD OF FLOTATION OF OXIDES. LUDWIG J. CHRISTMANN, Jersey City, and STUART A. FALCONER, Elizabeth, N. J., assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Feb. 20, 1930. Serial No. 430,134. 4 Claims. (Cl. 209—166.)

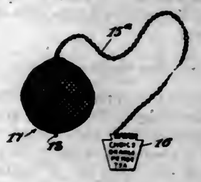
1. A method of recovering minerals from ores which comprises subjecting an oxidized ore to a froth flotation operation in the presence of an alkaline salt of a thioketo mercaptothiodiazole as a promoter.

1,894,345. METHOD OF MAKING TEA BAGS. SIMON COOPER, Brooklyn, N. Y., assignor to Cooper Tea Packet Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 6, 1931. Serial No. 528,029. 9 Claims. (Cl. 226—53.)



1. The method of making a tea bag which comprises circumferentially gathering two pieces of sheet material to produce a reduced circumference, and stitching the pieces together along said reduced circumference, whereby the resultant bag is adapted to be distended into spherical form.

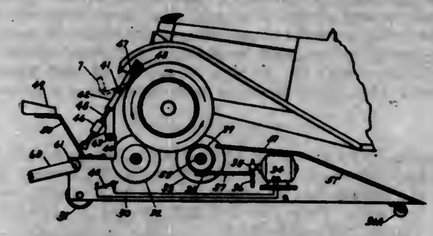
1,894,346. METHOD OF MAKING TEA BAGS. SIMON COOPER, Brooklyn, N. Y., assignor to Cooper Tea Packet Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 6, 1932. Serial No. 603,651. 4 Claims. (Cl. 226—53.)



1. The method of making a tea bag which comprises circumferentially gathering two pieces of fabric to produce reduced circumferences, superimposing the two reduced circumferences with the threads of one piece of fabric at an angle of approximately 45 degrees to the threads of the other piece of fabric, and stitching the two pieces of fabric together along the reduced circumferences, whereby the resultant bag is adapted to be distended into spherical form.

1,894,347. APPARATUS FOR RETREADING TIRES. CHARLES H. DACON and VIRGIL STULTS, St. Louis, Mo., assignors to St. Louis Tire Retreading Machine Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 10, 1932. Serial No. 597,988. 14 Claims. (Cl. 164—36.)

10. In a tire retreading device, a frame, a pair of grooved rollers carried by said frame, means for operating at least one of said rolls, a third roller carried by said frame, means for moving at least one of said rollers with



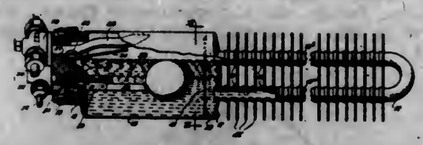
respect to the other two, and an adjustable tool support carried by said frame.

1,894,348. HEATING DEVICE. ALBERT A. EPSTEIN, New York, N. Y. Filed Apr. 10, 1931. Serial No. 529,140. 2 Claims. (Cl. 158—97.)



1. As a new article of manufacture, a heating device comprising a collapsible container having an outlet and a combustible paste in the container of a consistency to form a wick to be pressed through said outlet.

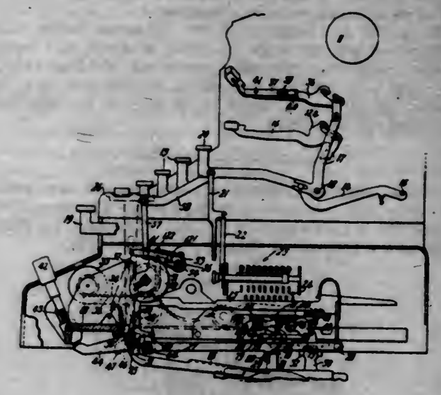
1,894,349. VAPORIZER. FREDERICK R. ERBACH, Detroit, Mich., assignor, by mesne assignments, to The Guardian Trust Company, Cleveland, Ohio, as trustee. Filed Apr. 26, 1928. Serial No. 272,918. 7 Claims. (Cl. 62—126.)



2. A refrigerant evaporating unit comprising a refrigerant receiving vessel, means for maintaining a constant quantity of liquid in said vessel, a plurality of horizontally disposed conduits communicating at one end with said vessel both above and below the liquid level therein, and means for supplying liquid from the receptacle to the remote ends of the conduits.

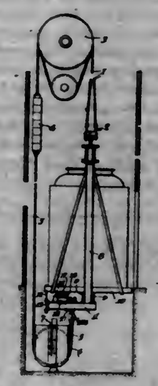
1,894,350. COMBINED TYPEWRITING AND COMPUTING MACHINE. EWELL E. FOWLER, East Point, Ga., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 25, 1926. Serial No. 97,206. 4 Claims. (Cl. 235—60.)

2. A machine for printing and adding the amount on a series of checks, each check being for the same amount as the others, including an amount printing type, a lever and connections to control the operation of said printing type, means operable for indexing an amount which may be the same amount as is printed by the type, a register controlled by the indexing means, a general operator for advancing the register in accordance with the indexing



means and restoring the indexing means in a predetermined cycle, and means for preventing the restoration of said indexing means during an indefinite number of cycle operations, whereby the same amount may be run into the register and concomitantly printed at each cycling of the general operator.

1,894,351. DEVICE FOR EQUALIZING STRAINS UPON A GROUP OF CABLES CONNECTED TO A STRESS-RECEIVING ELEMENT. WILLIAM P. FROST, Jackson Heights, N. Y., assignor to Evans Elevator Equaliser Company, Bedford, Ind., a Corporation of Indiana. Filed Dec. 26, 1931. Serial No. 583,342. 8 Claims. (Cl. 187—1.)



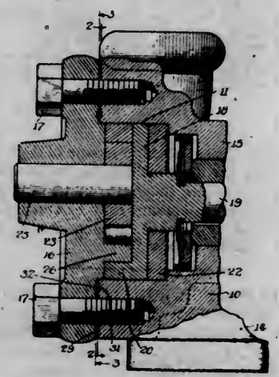
1. In a device for equalizing the strain upon the members of a group of cables connected to a stress-receiving body and subject to joint stress, a plurality of levers severally pivotally connected to said body and having corresponding free ends severally connected to said cables, a plurality of pulleys severally pivoted to said levers, a plurality of other pulleys mounted on said body, and an equalizing cable anchored at its ends to said body and engaging said first-mentioned pulleys and second-mentioned pulleys in alternation.

1,894,352. METHOD OF TREATING COMPLEX LIQUID PARTIAL OXIDATION PRODUCTS AND ARTICLES PRODUCED THEREBY. JOSEPH HIDY JAMES, Pittsburgh, Pa., assignor to Clarence P. Byrnes, Sewickley, Pa., trustee. Filed July 13, 1920, Serial No. 520,715. Renewed Dec. 7, 1921. 31 Claims. (Cl. 260—2.)

1. As a new article of manufacture, a resinified portion of the product of partial oxidation containing aldehyde bodies of different molecular weights.

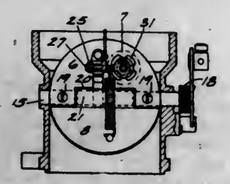
15. In the treatment of partial oxidation products of hydrocarbon oils, the steps consisting of distilling a liquid partial combustion mixture containing aldehyde fatty acids into a plurality of portions of different boiling point ranges, saponifying the acids in the heavier portions and liberating the said acids.

1,894,353. ROTARY ENGINE. HERBERT E. KEMPTON, Chicago, Ill., assignor to Tuthill Pump Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 14, 1929. Serial No. 392,636. 4 Claims. (Cl. 103—126.)



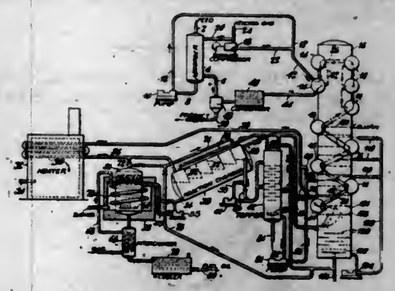
1. A pump comprising, in combination, a casing having a chamber open at one end and having spaced inlet and discharge passages opening to said chamber, a removable cover plate closing said chamber, rotary fluid transmission means in said chamber, and a thin metallic gasket interposed between said casing and said cover plate, said casing and said cover plate being formed respectively with opposed shallow annular grooves opening along opposite sides of said gasket, said gasket being formed with an aperture establishing communication between said grooves, said casing being formed with a duct connecting the groove therein to said inlet passage.

1,894,354. CARBURETOR. FRED A. KOMMER and OTTO HENNING, St. Louis, Mo., assignors to Carter Carburetor Corporation, St. Louis, Mo., a Corporation of Delaware. Filed May 7, 1931. Serial No. 535,704. 18 Claims. (Cl. 261—52.)



1. In a carburetor, means forming an air inlet passageway, a transverse shaft mounted in the walls of said passageway, a semi-circular choke valve rigidly attached to said shaft, a semi-circular warm up valve pivotally mounted on said shaft, spring means for normally holding said warm up valve in line with said choke valve, a latch carried by said choke valve, said latch being adapted to contact with the walls of said air passage when the choke is in closed position, said latch being constructed and arranged to prevent the opening by suction of said warm up valve when the choke valve is in fully closed position.

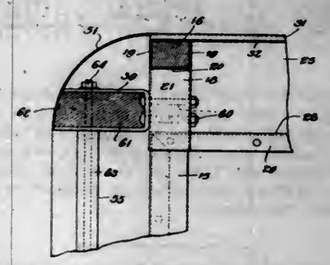
1,894,355. METHOD AND APPARATUS FOR TREATING OILS. WILBUR G. LAIRD, New York, N. Y., assignor to Heat Treating Company, New York, N. Y., a Corporation of Delaware. Filed July 30, 1926. Serial No. 125,892. 13 Claims. (Cl. 196—49.)



5. The method of cracking oils under pressure, which comprises, passing oil under pressure through a cracking still and into a reaction chamber to complete the cracking operation and to effect the separation of the vapors from residuum, withdrawing the residuum from said chamber, stripping said residuum of lighter volatiles by vaporization, and mingling said volatiles while in vapor state with the oil and vapor leaving said cracking still and prior to being passed into said reaction chamber.

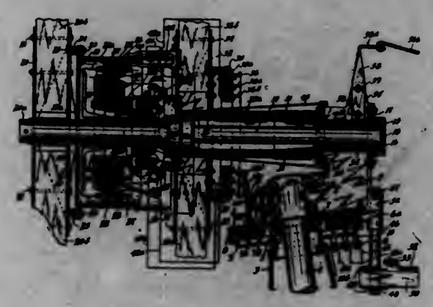
10. In an apparatus for treating liquids, a fractionating column, means for advancing liquid to be treated downward through the column in indirect heat interchange with vapor passing upward through said column to produce a condensate therein and means for passing said condensate into said advancing liquid at an intermediate point in said column.

1,894,356. VEHICLE BODY CONSTRUCTION. GEORGE K. LEWIS, Chicago, Ill., assignor to Met-L-Wood Corporation, Chicago, Ill., a Corporation of Illinois. Filed Feb. 20, 1929. Serial No. 341,370. 1 Claim. (Cl. 296—28.)



In a vehicle body construction having side walls and a roof; of formed metallic corner members; corner posts arranged within said corner members; channel means secured to said side members and extending into supporting relation with said corner posts; a filler block disposed within said channel member; and tie rods extending through said channel member, filler block and corner post.

1,894,357. WIND ELECTRIC PLANT. GEORGE MANIKOWSKE, Minneapolis, Minn., and GEORGE FENDIG and WALLACE MANIKOWSKE, Mooreton, N. Dak., assignors, by direct and mesne assignments, to Ethel Purdon Manikowske, Minneapolis, Minn. Filed Oct. 21, 1925, Serial No. 64,062. Renewed Oct. 9, 1931. 12 Claims. (Cl. 290—44.)



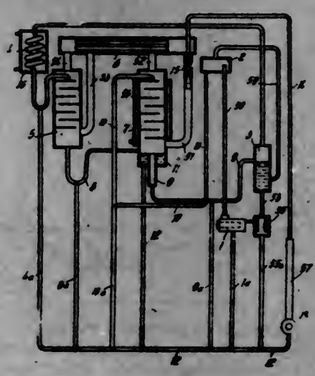
12. In a wind electric plant, a support or standard, a substantially vertical shaft journaled therein, a bracket secured to the upper portion of said shaft and carrying a substantially horizontal bearing, a shaft journaled in said bearing, a thrust bearing also carried by said bracket and engaged by said shaft, a propeller mounted adjacent the outer end of said shaft, and fixed thereto, an electric rotor mounted on said shaft between its ends, a hollow shaft journaled on said bracket said bracket having a thrust bearing engaged by said hollow shaft, a propeller fixed to said hollow shaft and a second electric element also fixed to said hollow shaft and disposed in juxtaposition to said rotor element fixed to said first mentioned shaft.

1,894,358. DRILL AND HOLE CLEANER. SAMUEL E. MORTIMER, Lorain, Ohio, assignor of one-fourth to William V. Clampet, Dayton, Ohio, one-fourth to Carl E. Hennies, Cleveland, Ohio, and one-fourth to Joseph F. Glidden, Lakewood, Ohio. Filed Oct. 4, 1929. Serial No. 397,244. 5 Claims. (Cl. 255—42.)



1. A combined hole drilling and cleaning device comprising an open ended cylinder, a plunger having longitudinal reciprocating movement in said cylinder and through its upper end and provided with an enlargement within the cylinder for limiting its upward movement, a drill point movable axially in the lower opening of the cylinder and having an unobstructed axial opening therethrough, an enlargement on the upper end of said drill point movable axially within the cylinder for preventing disengagement of the cylinder and drill point, ball valves carried by said plunger enlargement to prevent back suction through said axial opening when the plunger moves upwardly but closing as the plunger descends, and a coil spring within the cylinder normally holding the plunger above and separate from the drill member.

1,894,359. ABSORPTION REFRIGERATING APPARATUS. KURT NESSELMANN and HANS BRÄUER, Berlin-Siemensstadt, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin, Siemensstadt, Germany, a Corporation of Germany. Filed Mar. 3, 1932, Serial No. 596,515, and in Germany Mar. 6, 1931. 15 Claims. (Cl. 62—119.5.)



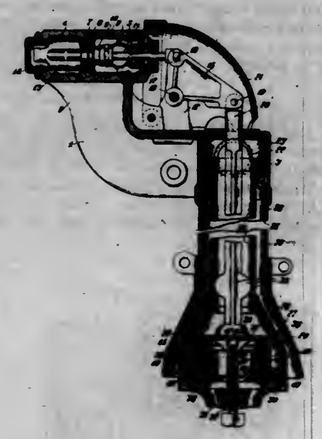
1. In combination with an absorption refrigerating apparatus of the continuous type comprising a generator, a condenser, an evaporator and an absorber, an absorption solution circulating system containing said generator and absorber, an inert gas circulating system comprising said evaporator and absorber, a driving means for the circulation of said inert gas, a vapor agent for operating said driving means and a vessel exteriorly of said absorption solution circulating system and capable of being heated for generating said vapor agent, said agent being different from the agents coacting in the absorption apparatus.

2. The method of moving an inert gas to be circulated through the evaporator and absorber of continuous-operation absorption refrigerating apparatus which comprises generating the vapor from an agent different from the agents utilized for the operation of the absorption apparatus, employing said vapor to cause said gas circulation, condensing said vapor after it has caused the gas circulation and returning the condensate to the point where the vapor is generated.

1,894,360. VAPOR REGULATOR. EDWARD A. RUSSELL, Chicago, and PAUL B. PARKS, Oak Park, Ill., assignors to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York. Filed Oct. 9, 1931. Serial No. 567,890. 5 Claims. (Cl. 236—40.)

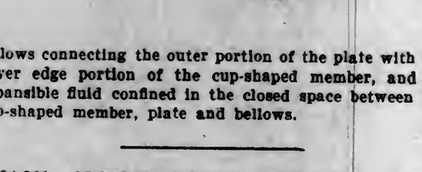
1. In a vapor regulator for railway car steam heating systems, a valve for controlling the steam flow to the heating system, a substantially closed housing having a fluid inlet in its upper portion and a restricted outlet in its lower portion, means for delivering fluids returned from the heating system into the housing, an operating rod projecting from the housing for moving the valve, a supporting post adjustably mounted in the lower portion of the housing and in substantial alignment with the rod, and a

thermostatic member within the housing and comprising an inverted cup-shaped member the top of which supports the rod, a bottom plate movable within the cup-shaped member and resting on the post, an annular corrugated



bellows connecting the outer portion of the plate with the lower edge portion of the cup-shaped member, and an expansible fluid confined in the closed space between the cup-shaped member, plate and bellows.

1,894,361. SUCTION CLEANER AGITATOR. CHARLES L. SHANK, North Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Nov. 22, 1929. Serial No. 408,959. 10 Claims. (Cl. 15—13.)

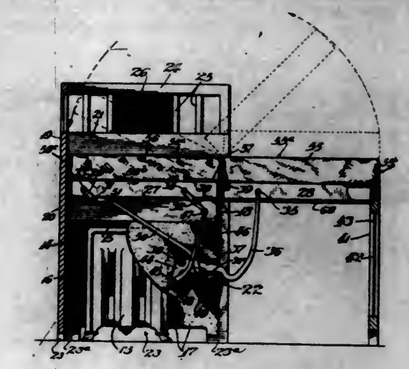


4. In a rotary agitator for suction cleaners, a beater comprising a rigid wire coil, and means supporting said coil at a fixed distance from the axis of rotation.

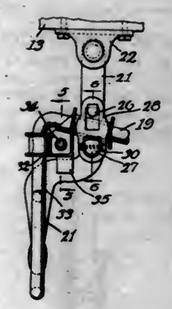
7. A suction cleaner rotary agitator including a body, rigid surface-contacting-beating means positioned on said body, and surface-contacting pile-flexing means on said body, characterized by the fact that said last-mentioned means is provided with a smooth surface-contacting side whose slope is such that the pile of the surface covering undergoing cleaning is deflected parallel to the axis of rotation of said agitator to a greater extent than it is deflected perpendicular to that axis.

1,894,362. COMBINATION FURNITURE. ANNA D. STINE, Chicago, Ill. Filed Feb. 12, 1931. Serial No. 515,319. 5 Claims. (Cl. 5—17.)

1. In an article of furniture of the character described, a main body frame closed at its back and opposite ends, a convertible couch and bed structure mounted in said body frame, comprising a vertically movable inner bed section and a cooperating extensible bed section, an insulating lining for said main frame constituting a hood under said convertible couch and bed structure for the accommodation of the radiator and constituting a shield proper therefor, and a supplemental member carried on the underside of said extensible bed section constructed of heat insulating material and being arranged in cooperative relation to said hood to deflect the heat laterally from the radiator and to insulate the couch and bed structure from the heating effect of the radiator.



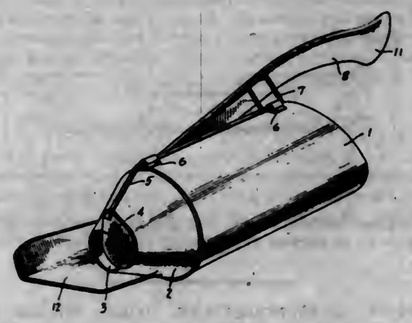
1,894,363. CAR COUPLER CONTROLLER. JACK WILSON, Chicago, Ill., assignor to Universal Draft Gear Attachment Co., Chicago, Ill., a Corporation of Illinois. Filed June 26, 1931. Serial No. 546,957. 3 Claims. (Cl. 213—17.)



1. In a coupler controller, in combination, a depending lever adapted for pivotal attachment to a car body, a rotative bearing box carried by the lever, a rod adapted for attachment to an element of a coupler and projecting through the box and having a crank arm at its outer end, and being secured to the lever against longitudinal movement relative thereto.

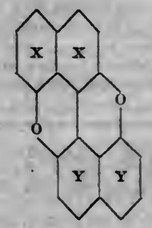
1,894,364. HAND FERTILIZER DISTRIBUTOR. CLAUDE WOOLSEY, Washington, D. C., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Sept. 30, 1930. Serial No. 485,574. 2 Claims. (Cl. 275—11.)

1. A distributor for flowable material, comprising a substantially cylindrical hopper having a tapered bottom portion, a discharge opening therein, a valve operable to close the opening, an operating lever for the valve extending along the hopper, a handle for the hopper secured to one longitudinal side thereof and extending generally longitudinally alongside of the hopper, the valve lever extending to a point in proximity to the handle, whereby the lever may be manipulated by an operator grasping the handle without releasing the handle.

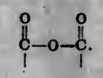


1,894,365. BINAPHTHYLENEDIOXIDE COMPOUND. BERNHARD BOLLWEG, Leverkusen-on-the-Rhine, and LUDWIG ZEH, Wiesdorf-on-the-Rhine, and ERWIN KRAMER, Cologne-Deutz, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 24, 1929. Serial No. 380,754, and in Germany July 28, 1928. 9 Claims. (Cl. 260—54.)

8. As new products binaphthylene dioxides of the general formula:



the naphthalene nuclei X and Y being equally and in symmetric positions substituted either of them at least once by a substituent of the group consisting of alkyl, alkoxy, acylamino, the carboxylic acid group, a carboxylic acid ester group, a carboxylic acid arylamide group and the group



1,894,366. PRESSURE GAUGE AUTOMATICALLY CORRECTING THE TEMPERATURE. SERVAN GEORGES CANTACUZENE, Paris, France. Filed Mar. 3, 1932, Serial No. 596,586, and in Rumania Mar. 26, 1931. 2 Claims. (Cl. 73—31.)

1. In a mercury pressure gauge for the measurement of the weight of a liquid contained in a tank, the combination of a tube having a small cross section and a great length filled with a gas and one end of which opens in the said tank at the level where the pressure of the liquid is to be measured, a vessel of large horizontal cross section relatively to its height, containing mercury and in the top of which opens the other end of the said tube having a small cross section, a glass tube constituting the manometric column, extending from the bottom of the said vessel and connected to the upper part of the said tank, a graduated scale on this manometric tube, a rider adapted to be moved on the said tube and the said graduated scale, a thermometer fixedly mounted on one side of the said manometric tube, a reading rider movable on this thermometer, a side arm on this rider, a roller on this arm, a cam on the manometric tube and arranged for acting on the said roller said manometric tube adapted to be moved to compensate for temperature variations as indicated by the thermometer and a spring for maintaining the contact between the said cam and the said roller.



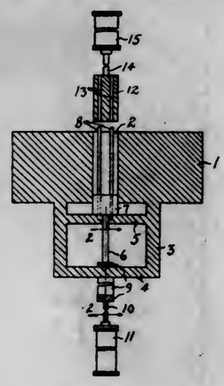
1,894,367. AUTOMATIC CONTROL DEVICE. LEWIS LAMONT CORCORAN, Sellersville, Pa., assignor to United States Gauge Company, New York, N. Y., a Corporation of Pennsylvania. Filed Oct. 25, 1928. Serial No. 314,979. 15 Claims. (Cl. 137—68.)



1. A device for automatically maintaining a volume of fluid within fluid chambers comprising a closed housing connected to the tank; a magnet mounted for movement in a vertical plane within said housing; a float pivotally connected externally of said housing; magnets supported by said float for movement in a vertical plane therewith for actuating through a wall of said housing said first magnet upon movement of said float; and control means operated by said first magnet.

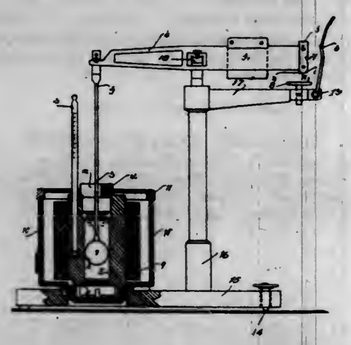
CARNEGIE LIBRARY OF ATLANTA

1,894,368. METHOD OF MOLDING CERAMIC MATERIALS. HENRY L. CROWLEY, West Orange, N. J., assignor to Henry L. Crowley & Company, Inc., West Orange, N. J., a Corporation of New Jersey. Filed Apr. 9, 1931. Serial No. 528,732. 9 Claims. (Cl. 25—156.)



7. The method of preparing a moldable powder which comprises mixing a metal or its oxide in the form of powder with a binder and a liquid carrier in a vacuum and drying the mixture.

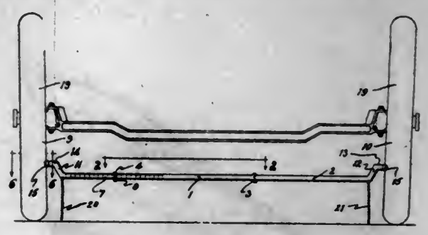
1,894,369. VISCOMETER. GEORG DUFFING, Hamburg, Germany. Filed Jan. 4, 1930, Serial No. 418,603, and in Germany Feb. 7, 1928. 2 Claims. (Cl. 265—11.)



1. An apparatus for determining the viscosity of liquids, comprising a massive testing cylinder adapted to contain the liquid, a ball adapted to be immersed in said liquid, a rod connected to said ball, a balance-arm from one end of which said rod is suspended and being notched at its other end, a counterweight adjacent the notched end of the balance arm and adapted to balance said ball, rod and arm, said weight being fixed to the arm of the balance so that the system is in equilibrium in anr, a cup in which said cylinder is disposed, a cover for said cup having an aperture therein concentric with said cylinder, a lid received in said aperture and having a radially directed slot through which said rod passes, said cup, cover and lid providing an enclosed air space around said cylinder in order to insure against loss of heat therefrom.

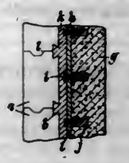
1,894,370. WHEEL ALIGNING GAUGE. FRED M. ERICKSON, Pasadena, Calif. Filed June 20, 1928. Serial No. 286,778. 3 Claims. (Cl. 33—208.)

1. A wheel alining gauge for automobiles comprising a pair of bars slidable one on the other, attaching members swivelly carried on the outer ends of said bars respectively and arcuately formed and provided with notches at their ends for engagement with the tires or rims of a pair



of opposed vehicle wheels, and means for tensioning said bars so as to support the same on the opposed wheels for use.

1,894,371. ACIDPROOF TANK. HAROLD WILLIAM FENDER, Wednesbury, England, assignor to Prodorite, S. A., Geneva, Switzerland. Filed Aug. 1, 1928, Serial No. 296,841, and in Great Britain Aug. 22, 1927. 5 Claims. (Cl. 72—14.)



2. An acid-proof tank construction, comprising an outer container, an inner lining of inert bricks suitably spaced from said container and provided with projections of height less than the width of the aforesaid spacing, and a filler between said container and said inner lining, said filler consisting of inert material which is substantially solid when cold but may be poured when hot and contains a mineral powder.

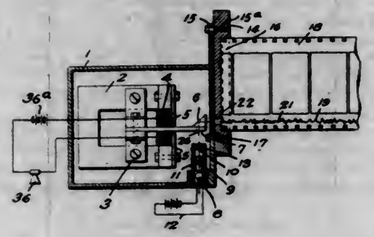
1,894,372. PRESSURE INDICATING VALVE. PAUL C. FLECK and HARRY M. FLECK, Cleveland, Ohio. Filed Mar. 25, 1931. Serial No. 525,158. 1 Claim. (Cl. 152—11.5.)



A combined gage and valve device cooperable with a duct communicable with a container of gas under pressure, comprising: a sleeve secured in said duct, having a portion affixed in air tight relation with respect to said duct and having a portion spaced with respect to said duct,

said spaced portion having an aperture communicating with said duct, the outer end of said sleeve being open, a piston mounted in said sleeve and subject to pressure exerted by said gas, movable to opposite sides of said aperture, in one position uncovering said aperture at the outer side of the piston, and in another position passing outwardly beyond and closing communication between said aperture and the outer end of the sleeve, and indicating mechanism in said sleeve having means resisting movement of said piston, yieldable different extents dependent upon fluctuations in pressure, and having means operable to visually indicate said fluctuations.

1,894,373. SOUND RECORDING SYSTEM. SAMUEL KAHN, New York, N. Y., assignor of one-third to Monroe Friedman and two-thirds to Anthony William Deller, New York, N. Y. Filed Feb. 25, 1929. Serial No. 342,338. 3 Claims. (Cl. 179—100.3.)



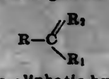
1. In apparatus for recording motion pictures and sound on a photographic film that improvement which comprises in combination a microphone, a source of electrical energy for actuating said microphone, an electro-magnetic coil connected to said microphone and source of energy whereby modulations of sound impinging upon said microphone are converted into electro-magnetic variations in said coil, an armature located closely adjacent to said coil so as to be vibrated by the said electro-magnetic variations, said armature being fixed at one end and adapted to be acted upon magnetically at an intermediate portion thereof by the aforesaid electro-magnetic coil while the other end is free to vibrate, a light aperture provided in said armature adjacent to the free end thereof; light reflecting prism mounted over the light aperture of said armature and capable of vibrating therewith, said prism being covered practically completely with an opaque substance and having a small aperture for light on one face and a pin hole on a face at right angles thereto for the emission of a sharp, concentrated, intense beam of light reflected from the inclined face of the prism; a source of light positioned to direct a beam of light on said light-reflecting prism through said small light aperture, and a sound aperture incorporated in the film supporter of the recording apparatus in alignment with a beam of light normally reflected by said light-reflecting means whereby the light reflected by the vibrating light reflecting means on the armature is effective for making a sound record on the photographic film.

1,894,374. VARNISH. CARL C. KESLER, Cedar Rapids, Iowa, assignor to Pine Institute of America Incorporated, Jacksonville, Fla., a Corporation of Delaware. Original application filed July 30, 1925, Serial No. 47,123. Divided and this application filed Sept. 6, 1929. Serial No. 390,862. 2 Claims. (Cl. 134—26.)

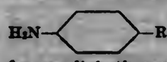
1. The method herein described of preparing a material for use in varnish making which consists in removing from rosin its abietic-acid component and recovering the remaining resene component.

1,894,375. BASIC PRODUCT AND PROCESS OF MAKING IT. ROBERT KNOLL, Hornau in Taunus, Germany, assignor, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed July 30, 1929, Serial No. 382,290, and in Germany Aug. 13, 1928. 8 Claims. (Cl. 260—124.)

1. The process which consists in causing a derivative of a higher fatty acid of the general formula:



wherein R stands for an aliphatic hydrocarbon residue containing at least 10 carbon atoms, R_1 stands for a radical of the group consisting of OH, OCH_3, OC_2H_5, $OCH_2C_6H_5$, Cl, NH_2 and R_2 stands for O or NH, to act upon an aromatic polyamino compound of the following general formula:



wherein R_2 stands for an aliphatic residue with a tertiary amino group or for an amino group which has at least one aliphatic residue containing a tertiary nitrogen.

1,894,376. LOUD SPEAKER AND LIKE HORN. FREDERICK WILLIAM LANCHESTER, Moseley, Birmingham, England. Filed Aug. 9, 1929, Serial No. 384,705, and in Great Britain Aug. 25, 1928. 3 Claims. (Cl. 181—27.)



1. A sound-emitting horn having an elongated emission aperture, the larger dimension of which is vertical and at least four times the smaller dimension the latter being more than three inches corresponding to the wave length of a note of about 4,000 cycles per second but not more than about six inches corresponding to the wave length of a note of about 2,000 cycles per second.

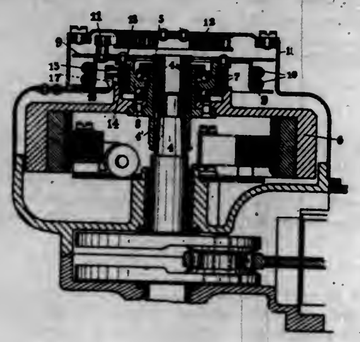
1,894,377. METHOD OF PREPARING A FOOD PRODUCT. SAMUEL S. LERNER, Chicago, Ill. Filed Feb. 17, 1930. Serial No. 429,218. 3 Claims. (Cl. 99—11.)

2. The process of making a food product which consists in mixing together and heat sterilizing, skimmed milk, sweet milk, butter and cream in the proportions of about five gallons of skimmed milk, one-eighth gallon of sweet milk, one quarter gallon of cream, four pounds of butter, cooling the same to a culture growing temperature, then mixing therewith a kefir fungi treated milk culture, and then maintaining a culture growing temperature of about 100° F. for about ten hours.

1,894,378. STARTING DEVICE FOR OUTBOARD MOTORS. ALFRED LESAGE, Schweinfurt, Germany. Filed Mar. 3, 1932, Serial No. 596,423, and in Germany Mar. 5, 1931. 2 Claims. (Cl. 74—14.)

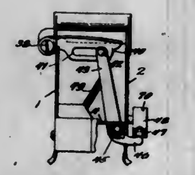
1. In a starting device for internal combustion motors, the combination with the crank shaft of the motor, of a flywheel fixed on the said shaft, a cord drum rotatably mounted with its hub coaxial with the flywheel, a cord

attached to said drum, a reversing spring attached to the cord drum, a coupling ring, interengaged screw threads provided between the hub of the drum and the said



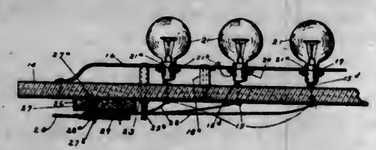
coupling ring, a clutch adapted to connect and disconnect the said coupling ring with the flywheel, and a friction brake acting on the coupling ring.

1,894,379. GUMMED TAPE SERVING MACHINE. LOUIS LINK, New York, N. Y., assignor, by mesne assignments, to Nashua Gummed & Coated Paper Co., Nashua, N. H., a Corporation of Massachusetts. Filed Oct. 15, 1927. Serial No. 226,366. 21 Claims. (Cl. 164—42.)



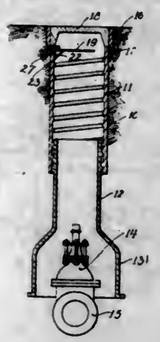
1. A gummed tape serving machine comprising, a tape shear device having a fixed blade and a movable blade pivoted adjacent one end of the fixed blade, and operating means for swinging the pivoted blade to cutting position, the point of engagement between the operating means and pivoted blade being progressively farther from the pivot of the blade as the blade moves to full cutting position, thereby increasing the leverage as the cutting point approaches the free end of the moving blade, to insure a clean cutting action throughout the operative length of said blade.

1,894,380. PANEL UNIT SIGN. JOHN E. LONG, Multnomah, Oreg. Filed Mar. 31, 1930. Serial No. 440,462. 18 Claims. (Cl. 40—130.)



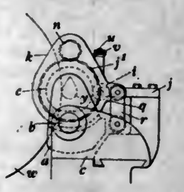
1. In an electric sign of the character described, including a display board, such board comprising a plurality of uniform separately removable panels, each electrically separated from the others and consisting of an electrically non-conductive base, a plurality of terminals arranged thereon, an electrically conductive face plate carried by such base, such face plate being provided with apertures arranged in registry with such terminals, means adjacent such apertures to constitute light-receiving sockets and an electric circuit, one portion comprising a plurality of branches, each serving as an individual electrical connection for one of such terminals and another portion serving as a common return connection for the face plate of such panel.

1,894,381. VALVE TAG. MATHEW G. MARKLE, Oak Park, Ill. Filed Aug. 2, 1930. Serial No. 472,542. 11 Claims. (Cl. 137—13.)



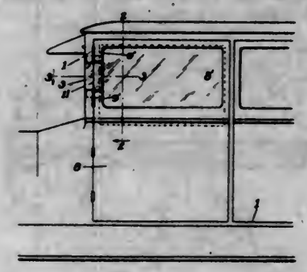
1. The combination with a valve box including a valve at one end thereof accessible from the other end, of means interposed between said latter end and said valve in the path of accessibility whereby accessibility of said valve is normally precluded, and indicia on said means suitably identifying said valve to a prospective operator of the valve.

1,894,382. CAM AND LIKE GRINDING MACHINE. LLYWELYN MAWER, Bishopston, Bristol, England, assignor of one-half to The Churchill Machine Tool Company Limited, Manchester, England, a British Company. Filed Apr. 30, 1930, Serial No. 448,782, and in Great Britain Nov. 18, 1929. 2 Claims. (Cl. 51—101.)



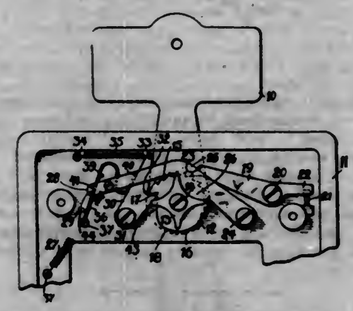
1. In cam and like grinding and milling machines, the combination of a grinding wheel, a work spindle, a machine bed, a swinging head mounted on said bed, trunnions for said swinging head, a gear driving and rotating upon the same axis as said work spindle, a frame mounted on said swinging head and housing said gear, a lug on said frame, a pinion carried by said frame and driving said driving gear, a link one end of which is pivotally connected to said lug and the other end to said machine bed, the distance between the pivots of said link being equal to the distance between the axis of said trunnions and the axis of said driving gear and constituting a parallel linkage system which together with the fact that said pinion is mounted in the same frame as said driving gear, ensures that said work spindle is rotated with uniform angular velocity.

1,894,383. AUTOMOBILE BODY CONSTRUCTION. JOHN ANTHONY SMITH, Spokane, Wash. Filed Mar. 18, 1931. Serial No. 522,395. 7 Claims. (Cl. 296—28.)



1. In automobile body construction, a pair of front corner posts having portions thereof within the line of vision of the operator cut away, a pair of doors having frame portions cut away adjacent the cut away portions of the posts, a windshield having frame portions cut way adjacent the cut away portions of the posts, and a transparent section disposed within said cut away portions of the posts and doors and coacting with the doors and windshield to provide the operator with an unobstructed view extending throughout an arc of substantially 180 degrees, the transparent portions in said posts formed with projections bearing against the windshield glass.

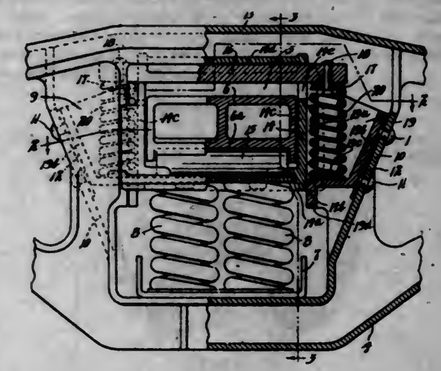
1,894,384. FLAG LOCKING MECHANISM FOR TAXIMETERS. GEORGE VLAHOV, New York, N. Y.. assignor to Ohmer Fare Register Company, Dayton, Ohio. Substitute for application Serial No. 159,628, filed Jan. 7, 1927. This application filed Dec. 7, 1931. Serial No. 579,512. 14 Claims. (Cl. 235—80.)



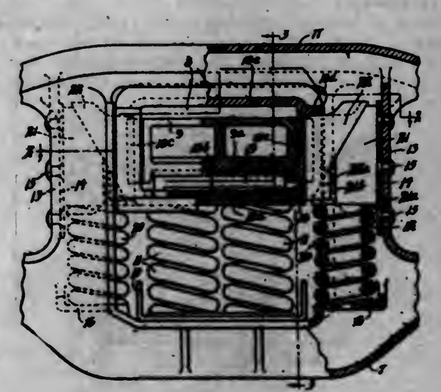
1. In a taximeter flag locking mechanism, a locking pawl operative to lock the flag when said flag is rotated into locked position, a pair of springs differing in power and acting in opposite directions on said pawl, and means for imparting additional force to the weaker one of said springs when the movement of the flag into the locked position is begun.

1,894,385. SPRING DAMPING CAR TRUCK. EDWIN W. WEBB, Chicago, Ill., assignor to Standard Car Truck Company, Chicago, Ill., a Corporation of New Jersey. Filed Feb. 13, 1932. Serial No. 592,721. 9 Claims. (Cl. 105—186.)

1. In a car truck, side frames having bolster openings, a truck bolster structure having its ends disposed within said bolster openings, springs supporting the ends of said bolster structure from said side frames, wedges interposed between the sides of said bolster structure and portions of said side frames, and resilient means reacting between said wedges and said bolster structure to urge said wedges into tighter wedging relation as said springs are increasingly compressed.



1,894,386. SPRING DAMPING TRUCK. EDWIN W. WEBB, Chicago, Ill., assignor to Standard Car Truck Company, Chicago, Ill., a Corporation of New Jersey. Filed Feb. 13, 1932. Serial No. 592,722. 6 Claims. (Cl. 105—186.)

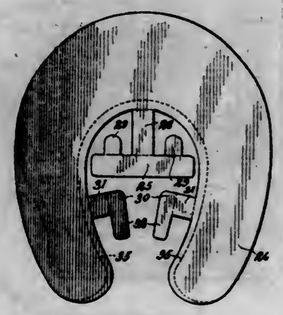


1. In a car truck, side frames having bolster openings, a bolster structure having ends disposed within said bolster openings, bolster springs supporting the ends of said bolster structure from said side frames, pairs of oppositely disposed wedges interposed between the sides of said bolster structure and portions of said side frames, each end of said bolster structure resting on one wedge of each pair and springs interposed between the other wedges of each pair and portions of said side frames, said last mentioned springs urging said wedges into tighter wedging relation as said bolster springs are increasingly compressed.

1,894,387. CHILD'S COMFORT TOILET SEAT. ANDREW L. WEIS, Fort Lauderdale, Fla. Filed Nov. 18, 1931. Serial No. 575,900. 5 Claims. (Cl. 4—239.)

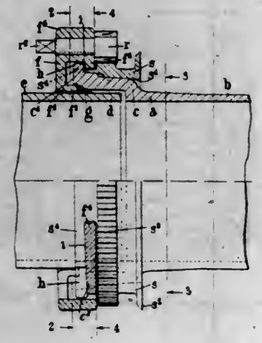
1. As an article of manufacture, an auxiliary toilet seat constructed of resilient metal pressed to shape and

having a child's opening therein the metal at the edge of the opening being depressed, and holding devices projecting from the edge of the depressed portion and at a



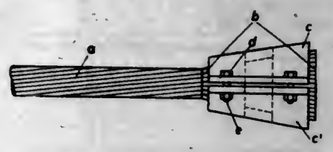
small angle to the plane thereof which holding devices are adapted to engage the edge of the opening of a larger seat and hold the auxiliary seat in position thereon.

1,894,388. JOINTING OF PIPES. PERCY HUTCHINSON WILSON, Carlton, Nottingham, England, assignor of one-half to The Stanton Ironworks Company, Limited, Nottingham, England. Filed Jan. 14, 1930, Serial No. 420,758, and in Great Britain Dec. 4, 1929. 7 Claims. (Cl. 81—8.1.)



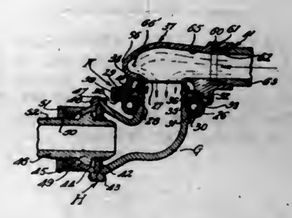
5. Mechanism for rotating a ring member forming part of a spigot and socket pipe joint for pressing home and retaining the jointing material through helical surfaces, and which ring member is so formed as so to engage a rotatable member that rotation of the latter would tend to cause rotation of said ring, said mechanism comprising a rotational element, means for rotating same, a second element temporarily applicable to an adjacent peripheral portion of the pipe and having means for preventing rotational displacement thereof on said peripheral portion and also means for so engaging said rotational element as to provide a basis for action and reaction by the rotational element between the ring and the second element to cause rotation of the rotational element to produce relative rotary movement between the ring and the second element.

1,894,389. METHOD OF FINISHING THE ENDS AND FIXING ROPES. GEORG ZAPF, Cologne, Germany, assignor to Felten & Guilleaume Carlswerk Actiengesellschaft, Cologne-Mulheim, Germany. Filed Oct. 13, 1930, Serial No. 488,465, and in Germany Nov. 25, 1929. 1 Claim. (Cl. 29—148.)



A method of finishing and securing the ends of ropes comprising spreading out the wires at the end of the rope, casting metal round the spread out wires allowing the cast end to cool slowly, rapid withdrawal of heat being avoided, removing the mold and fixing a shackle consisting of several parts around the end of the rope.

1,894,390. JOINT FOR ALL METAL ROTARY HOSE FOR OIL WELLS. CHARLES G. BANKS, Los Angeles, Calif. Filed Nov. 27, 1929. Serial No. 410,105. 8 Claims. (Cl. 285—9.)



1. A conduit joint of the character described comprising: a casing; a closure head for said casing and a movable element mounted in said casing; a fluid sealing means between said closure head and said movable element; means for supporting said fluid sealing means upon said casing, said last mentioned means including a ring arranged to bear upon said casing and adapted to freely receive said movable element; and a cup leather supported upon said ring and arranged to movably engage said movable element.

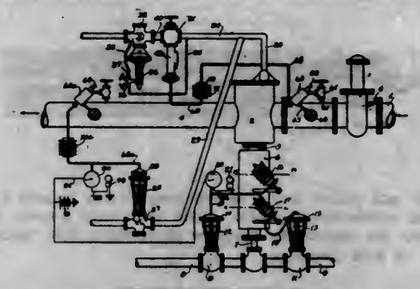
1,894,391. DESUPERHEATER. JOSEPH M. BARRETT, Cleveland, and GEORGE M. FRITZE, Orville, Ohio, assignors to The Swartwout Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 29, 1927. Serial No. 229,779. 17 Claims. (Cl. 122—479.)

1. The combination of conducting means through which superheated steam may flow, means for supplying water to said conducting means for lowering the temperature of said steam, and means for varying the supply of water according to the degree of superheat of said steam in excess of the temperature of dry saturated steam.

11. A desuperheater through which superheated steam flows including a conduit through which water is delivered, a valve in said conduit and means dependent upon the temperature of the steam for controlling said valve and adjustable means for limiting the valve movement regardless of the temperature of the steam.

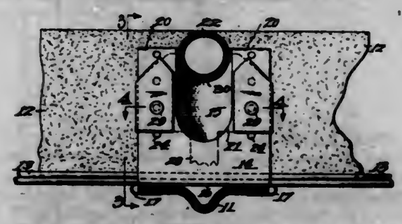
15. In a desuperheater having a mixing chamber for water and steam, a water conduit leading thereto, a valve

in said conduit, a diaphragm for actuating said valve, means for exerting a fluid pressure on one side of said diaphragm to open said valve including a vessel containing fluid disposed in the path of superheated steam and



a conduit leading from said vessel to a chamber enclosing said diaphragm, and means for exerting on the opposite side of said diaphragm a fluid pressure proportionate to the steam pressure in said desuperheater.

1,894,392. GAUGE FOR CONCRETE FLOORS. FRANK O. BERGSTRAND, Worcester, Mass. Filed Nov. 9, 1931. Serial No. 573,897. 5 Claims. (Cl. 72—122.)



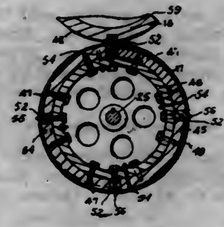
5. As an article of manufacture, a floor gauge comprising a stationary part having a vertical member of soft sheet metal perforated at fixed levels, a movable part having provision for supporting a floor leveling strip, and means for securing the movable part to the vertical member at any one of said perforations, said stationary part having integral ears projecting from opposite sides and adapted to be bent down around the edges of a supporting member to hold the stationary part in fixed position.

1,894,393. TURBINE PUMP. GEORGE E. BIGELOW, Huntington Park, Calif. Filed May 31, 1927. Serial No. 195,258. 21 Claims. (Cl. 103—5.)



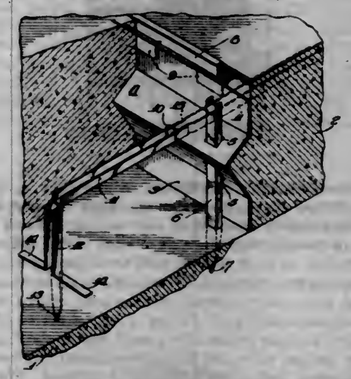
1. In a fluid-operated deep-well pump, the combination of: a well casing set in a well; a pump housing removable from said well casing; packing means for sealing said well casing and said pump housing in fluid-tight relationship; a pump secured to said pump housing; a fluid-operated motor operatively connected to said pump; a pump tubing extending through said casing, said pump tubing communicating with the exhaust of said motor and the discharge of said pump; and means for forcing said fluid operating said motor between said pump tubing and said well casing.

1,894,394. SHINGLE MACHINE. DAVIS BROWN, Los Angeles, Calif. Filed Dec. 19, 1930. Serial No. 503,357. 9 Claims. (Cl. 25—21.)



1. In a machine for forming products from plastic material, means for producing a column of plastic material, a pair of forming rolls arranged to receive the column of plastic material, one of said rolls having molds of irregular contour on the outer surface thereof, means for positively actuating said rolls, a scraper for cleaning one of said rolls, and means for retracting said scraper at predetermined periods.

1,894,395. DOWEL BAR DEVICE. WILLIAM C. BURRELL, Kankakee, Ill., assignor of one-half to Robert R. Robertson, Chicago Heights, Ill. Filed Apr. 4, 1930. Serial No. 441,475. 6 Claims. (Cl. 94—51.)



1. A dowel bar device comprising a dowel bar section, a dowel bar supporting pin integrally supported on one end thereof, and stops formed on said pin.

1,894,396. CUTTER PACKAGE. GEORGE H. GARDNER, Chicago, Ill., assignor to The Menasha Products Company, Chicago, Ill., a Corporation of Wisconsin. Filed Oct. 21, 1929. Serial No. 401,309. 2 Claims. (Cl. 206—58.)

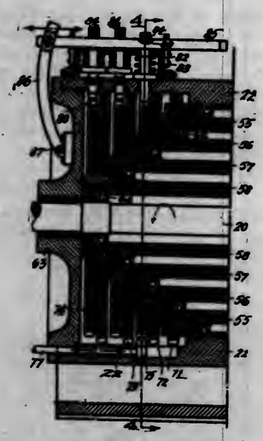
1. A foldable box blank made from a single piece of material foldable to provide a closed box having front and rear walls, a top, a bottom, and a second or supplemental front-wall overlying said first mentioned front wall, said top, bottom, and first mentioned front wall having interlocking end pieces, said second mentioned

front wall having end pieces with tuck in flaps thereon arranged so that when the blank is assembled into box-like form the end pieces of said second mentioned front wall overlie and cover the interlocking end pieces of the other portions with the flaps tucked in against the rear



wall to lock said parts in position, said first and second front walls providing a passageway, a roll of material within said box having its free end in said passageway for withdrawal therefrom, and a serrated blade attached to the free edge of said second mentioned front wall.

1,894,397. VARIABLE SPEED TRANSMISSION MECHANISM. ERNST GESSNER, Worcester, Mass. Filed Nov. 2, 1931. Serial No. 572,520. 7 Claims. (Cl. 74—34.)



1. A transmission mechanism comprising a driving shaft, a driven shaft, a carrier mounted on said driving shaft, radial shafts mounted in said carrier, a bevel pinion mounted to rotate about the axis of each radial shaft, bevel gears mounted at each side of said bevel pinion and selectively engageable therewith by relative axial movement of said bevel gears and carrier, driving connections between said bevel gears and said driven shaft, a series of additional bevel pinions mounted on each radial shaft and rotatable in unison with said first-named bevel pinions, bevel gears engaging said additional bevel pinions, concentric sleeves supporting said last-named bevel gears, and selective means to hold one of said sleeves from rotation in one direction but permitting free rotation in the other direction, the remaining sleeves and supported bevel gears being left free to rotate in either direction.

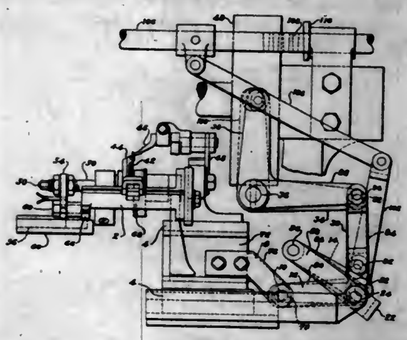
1,894,398. ROCK DRILL. LOUIS W. GREVE, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Filed May 24, 1928. Serial No. 280,189. 3 Claims. (Cl. 121—9.)

1. In a pneumatic tool a cylinder having a hammer piston reciprocable therein, a feed cylinder having a feed piston reciprocable therein, a head block disposed between said cylinders, a bushing fitted in said feed cylinder, there being an annular groove in said bushing, there being a passage communicating said groove with the interior of said feed cylinder, there being a fluid pressure inlet and a fluid pressure outlet, in said head block, there being a passage-way in said head block communicating said inlet



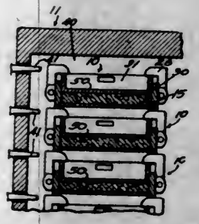
with said groove and a second passage-way in said head block communicating said outlet with said groove, and means for restricting the flow of pressure fluid through one of said passages.

1,894,399. SEWING MACHINE. GEORGE HAZELTON, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 27, 1930, Serial No. 431,705, and in Great Britain Mar. 7, 1929. 12 Claims. (Cl. 112—.47.)



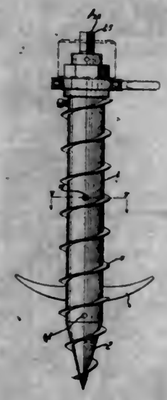
1. A machine for sewing suitcases, bags and the like having, in combination, stitch-forming devices including a needle and an awl, a work support having work supporting surfaces, inclined with relation to each other and arranged to engage and support two outer surfaces of the work adjacent a corner at an inclination to, and intersecting, the needle path, a horn presser to engage the inside of the work, and means for relatively moving the needle, awl, work-support, and presser to impart a continuous feeding movement to the work.

1,894,400. METHOD OF MAKING A MOLDED ARTICLE. ABRAHAM M. HERBSMAN, Huntington Park, Calif. Filed June 6, 1931. Serial No. 542,483. 13 Claims. (Cl. 18—47.5.)



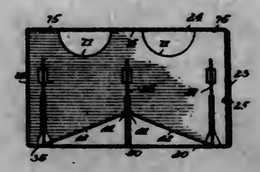
1. A method of making a molded article which consists in mixing an aggregate of refractory material with a water soluble silicate, and a material capable of uniting with said soluble silicate to form an insoluble silicate, molding said mixture to a given shape, and heating the article thus molded to form said insoluble silicate and fuse this to unite the particles of said aggregate.

1,894,401. ANCHOR POST. AUGUST A. HOLLOS, Toledo, Ohio. Filed Sept. 6, 1930. Serial No. 480,083. 1 Claim. (Cl. 189—91.)



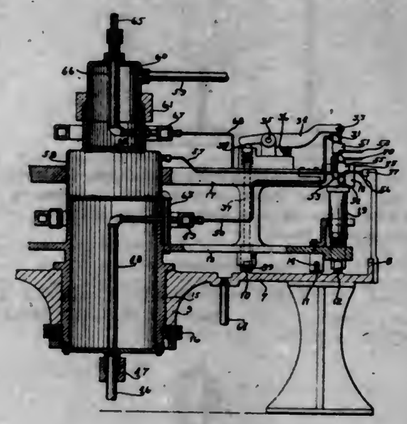
Cap locking means for an anchor post, the latter having a barrel and a rod movable longitudinally in said barrel, a bearing member for said rod secured to said barrel and provided with a non-circular portion, the outer end of said rod projecting through said bearing member and terminating outside thereof, comprising a cap adapted to fit over the projecting end of said rod and the non-circular portion of said bearing member, the end portion of said rod also projecting through said cap and having a transverse opening to receive a pad lock or the like.

1,894,402. EGG CONTAINER. HARRY A. INMAN, Newark, N. Y., assignor to Bloomer Bros. Company, Newark, N. Y., a Corporation of New York. Filed Apr. 28, 1931. Serial No. 533,496. 4 Claims. (Cl. 229—28.)



1. A container comprising a body having a bottom, collapsible partition means placeable in and removable from said body, said partition means comprising a plurality of substantially parallel members spaced from each other when said partition means is erected, and cushioning means secured to said partition means for movement as a unit therewith, said cushioning means comprising a resilient member substantially in contact with one of said parallel members at a point above said body bottom and extending in a downwardly inclined direction to said bottom at a point adjacent another of said parallel members when said partition means is erected and placed in said body, said resilient member extending downwardly substantially parallel to and partially between said parallel members when said partition means is removed from said body and collapsed.

1,894,403. MACHINE FOR FILLING CONTAINERS WITH FLUID. LOTHAR T. KONOPAK, Toledo, Ohio. Filed June 17, 1930. Serial No. 461,820. 7 Claims. (Cl. 226—68.)



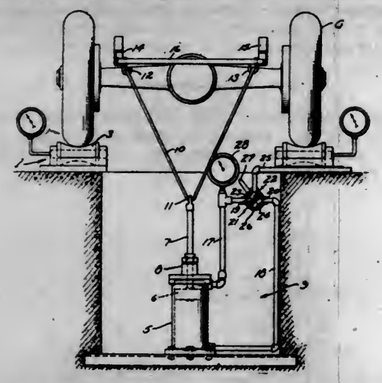
6. In a machine for filling a container with sterilized fluid, a hood, means for receiving a container cap within the hood, means for temporarily sealing the hood to the container with the cap and mouth of the container inside the hood, means for then sterilizing the interior of the hood, the cap and the interior of the container, and means for filling the container and sealing the same with the cap, while the container is thus held and while the cap and the interior of the container are completely sterilized.

1,894,404. ELECTRIC CONTROL DEVICE. CLARENCE W. KUHN, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed June 24, 1929, Serial No. 373,172. Renewed Apr. 11, 1932. 15 Claims. (Cl. 175—294.)



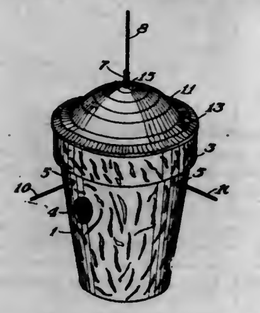
1. The combination with a manually operated switch for effecting interruption of the supply circuit of an electric translating device, of an electro-thermally responsive cut-out device operable independently of said switch to interrupt the supply circuit of the translating device under given overload conditions, and means associated with said manually operated switch for effecting resetting of said cutout device.

1,894,405. BRAKE TESTER. HAROLD W. LANGBEIN, Los Angeles, Calif. Filed June 23, 1930. Serial No. 463,194. 8 Claims. (Cl. 265—47.)



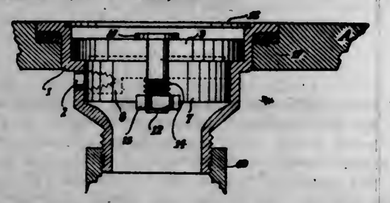
7. In a vehicle-brake testing mechanism, the combination with a brake tester, of means for imposing various loads on the vehicle, and means for measuring the extent of such imposed loads.

1,894,406. POTTERY BIRD HOUSE. JOSEPH B. LENHART, Roseville, Ohio. Filed May 19, 1931. Serial No. 538,535. 3 Claims. (Cl. 119—23.)



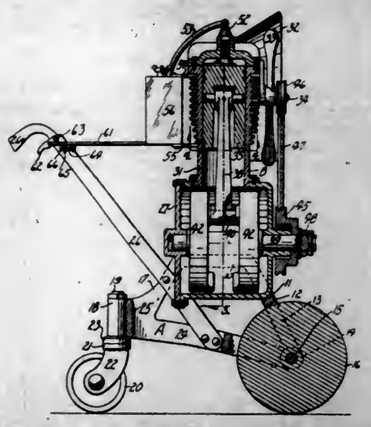
1. A bird house formed from heat treated ceramic materials, comprising a hollow open topped base section having an entrance opening formed in its side wall, the interior of said base section being such as to admit of its being nested with corresponding base sections during heat treatment, a cover section removably positioned upon the upper edge of the base section, and a metallic supporting frame connected with said base section to admit of the suspension of the assembled sections from an elevated support.

1,894,407. VALVE FITTING FOR PLUMBING FIXTURES. BERNARD LUTSKY, Brooklyn, N. Y. Filed Apr. 12, 1930, Serial No. 443,849. Renewed June 10, 1932. 2 Claims. (Cl. 4—287.)



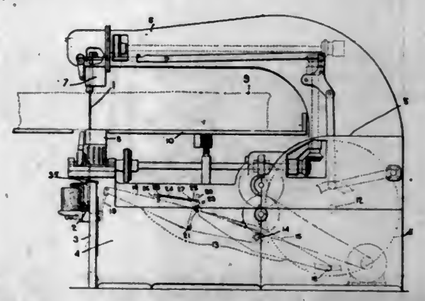
1. In combination with a casing for a valve fitting, the said casing comprising concentric walls of differential radii from the central and vertical axis, the upper wall having an outwardly turned concentric flange at the top with a concentric rest on the inner edge of the said flange to serve as a seat for a strainer, a lower wall reduced to a nipple for connection to the drain pipe of the fixture, a horizontal slot on the lower wall: a valve mechanism affixed to and telescoping with the interior of the said casing at a concentric seat between the upper and lower concentric walls of the casing, external means to open and close the valve mechanism.

1,894,408. IMPACTING MACHINE. LEON R. MACKENZIE, Des Moines, Iowa. Filed Mar. 24, 1930. Serial No. 438,603. 5 Claims. (Cl. 94—39.)



1. In an impacting machine, a frame having rotary members for affording free mobility in any direction, an internal combustion engine mounted on the frame having a fixed vertical cylinder, a vertically reciprocating piston element actuated by fuel explosions and a piston rod element associated with the piston, one of said elements being abnormally overweighted to cause the engine to deliver vertical impacts only.

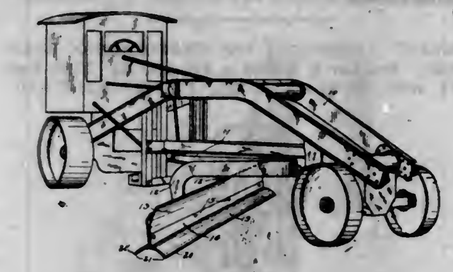
1,894,409. MATTRESS-TUFTING MACHINE. WILFRED B. MATHEWSON, North Weymouth, Mass., assignor to United Mattress Machinery Co. Inc., Boston, Mass., a Corporation of Maine. Filed Feb. 8, 1932. Serial No. 591,477. 7 Claims. (Cl. 112—3.)



1. In a mattress-tufting machine, the combination with a tufting needle, of a cam for operating said needle and connections between the cam and the needle operative to give the needle its penetrating thrust against normal resistance but which become inoperative when the needle meets abnormal resistance.

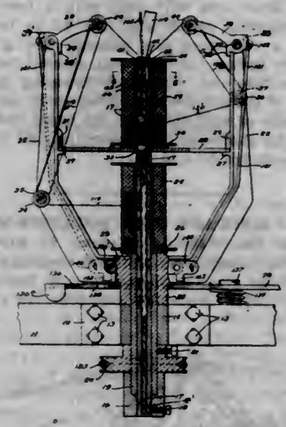
CARNEGIE LIBRARY OF ATLANTA

1,894,410. BLADE FOR ROAD MAINTAINERS. WILLIAM J. MATTICE, Primghar, Iowa. Filed Nov. 21, 1931. Serial No. 576,581. 4 Claims. (Cl. 37—143.)



1. An improved blade for scraping roads comprising a massive substantially arcuate body having a supporting tang extending upwardly from approximately the central portion thereof, sole surfaces upon opposite edge portions of the arcuate blade adapted to rest simultaneously upon the road surface to be planed, and sharp reversible cutting edges outwardly of said sole surfaces.

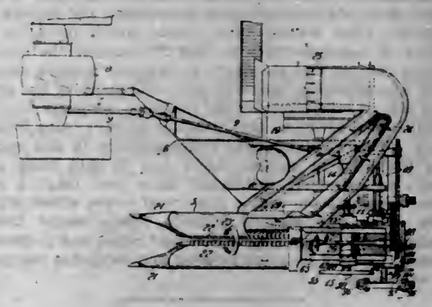
1,894,411. YARN FORMING MACHINE. WILLIAM NANFELDT, Paterson, N. J., assignor to World Bestos Corporation, Paterson, N. J., a Corporation of Delaware. Filed July 1, 1927. Serial No. 202,796. 12 Claims. (Cl. 117—34.)



1. In a yarn making machine, means to simultaneously form a strip of paper-like material around a string of core material and tightly wind a reinforcing wire thereabout; and means to hold said material against rotation while said forming and winding operations are taking place whereby said reinforcing wire may be slightly embedded in said paper-like material.

1,894,412. STALK SHREDDING IMPLEMENT. LEONARD B. NEIGHBOUR, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed June 13, 1928. Serial No. 284,904. 30 Claims. (Cl. 56—15.)

1. A device of the character described, comprising in combination a vehicle, a frame for said vehicle, a stalk shredding device supported thereby, said shredding device comprising two sets of overlapping cutting discs arranged to be moved along a row of stalks to be shredded, pivotal means for securing said shredding device to said frame, and means movably carrying the lower end of said shredding device so that the shredding device may rise and fall relative to the vehicle frame in traveling over uneven ground.

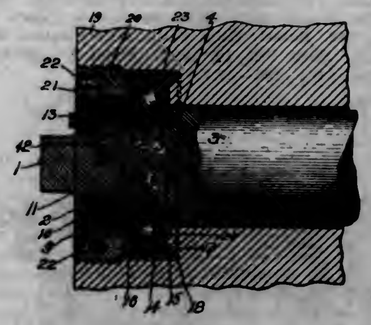


1,894,413. TOOTHBRUSH. GEORGE H. NENNING, Bellmore, and JOHN CLIFFORD JOHNSON, Glen Cove, N. Y. Filed June 23, 1931. Serial No. 546,180. 4 Claims. (Cl. 15—227.)



1. A toothbrush consisting of a cot or the like adapted to fit the user's finger, said cot being made of fragile water-proofed fibrous material, woven tape means for reinforcing the top of the cot, whereby damage to the cot from the finger nail pushing therethrough is prevented, said tape means extending down the side of said cot, and bristles mounted adjacent one end of said means.

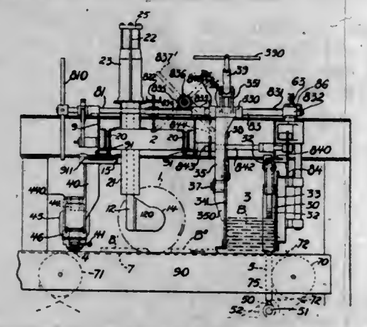
1,894,414. BEARING. GUSTEN OLSON, Medford, Mass. Filed Feb. 7, 1931. Serial No. 514,088. 1 Claim. (Cl. 308—236.)



A bearing comprising a shaft having two integral immediately adjacent cylindrical portions of different diameters providing an abrupt shoulder at the junction thereof,

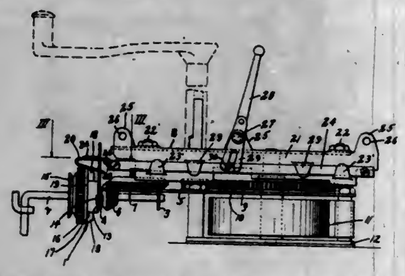
the portion of smallest diameter having its axis co-incident and parallel with the axis of said shaft and said shoulder being formed with a conical clutch face; an inner interiorly cylindrical one-piece jointless race ring slidably fitted directly upon the smaller cylindrical portion of said shaft in a position against said shoulder and having its opposite sides formed with conical clutch faces one of which is complementary to and fits against the conical clutch face of said shoulder; a clamping member adjustably and removably mounted upon said shaft at the opposite side of said race ring for clamping the latter forcibly against said shoulder, said clamping member being formed with a conical clutch face complementary to and engaging the adjacent conical clutch face of said inner race ring; an exteriorly cylindrical outer race ring; a one-piece support made with a cylindrical recess within which said outer race ring is slidably fitted; means fixedly clamping said outer ring within said recess and a circular series of rolling members between and occupying the races of said rings.

1,894,415. LUMBER RETRIMMING MACHINE. ALBERT H. ONSTAD, Tacoma, Wash., assignor to Weyerhaeuser Timber Company, Tacoma, Wash., a Corporation of Washington. Filed Jan. 18, 1932. Serial No. 587,198. 9 Claims. (Cl. 143—33.)



1. In combination, a conveyor table, means for advancing boards lengthwise and piling them upon said table, a magazine to receive said boards, and to align one end thereof, means to remove the lowermost board from the magazine and to advance it edgewise over the table, a saw disposed to trim the previously aligned end of boards thus advanced, printing mechanism disposed to engage the trimmed end of such boards, and means connecting the saw and printing mechanism for conjoint adjustment.

1,894,416. STOP DEVICE FOR TOY MOTORS. SAMUEL ORKIN, Beverly Hills, Calif., assignor to Calwis Industries, Ltd., Beverly Hills, Calif., a Corporation of California. Filed Feb. 10, 1932. Serial No. 592,029. 4 Claims. (Cl. 185—37.)



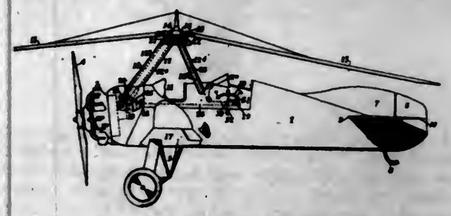
1. In a brake device for toy motors having a power take-off device, a brake operating rod, means mounting said rod for movement parallel to the axis of rotation of said power take-off device, a brake surface formed upon said power take-off device, and a brake shoe formed of a strip of resilient material secured to said brake operating rod and movable therewith into engagement with said braking surface.

1,894,417. GENERATOR FOR HYDROCARBON BURNERS. STANLEY S. PIEPGRAS, Chicago, Ill. Filed Sept. 16, 1929. Serial No. 392,859. 1 Claim. (Cl. 67—50.)



A generator for hydrocarbon burners comprising, in combination, a stationary part providing an upright fuel supply duct, a tube removably supported in vertical position on said part within a heated zone and communicating at its lower end with said duct, a non-porous inner member mounted within said tube so as to define with said tube a restricted fuel passage, and a resilient U-shaped clip having its open end entered into the lower end of the tube and frictionally engaging therewith, the lower end of the clip bearing against said stationary part of the mouth of said duct and the upper end of the clip providing an abutment for supporting said inner member in spaced relation to said duct.

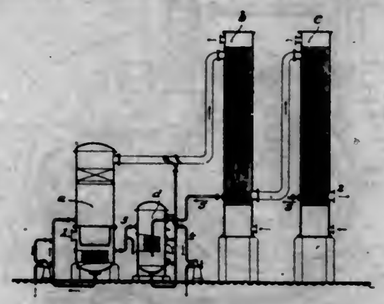
1,894,418. AIRCRAFT WITH ROTATIVE SUSTAINING BLADES OR WINGS. HAROLD F. PITCAIRN, Bryn Athyn, Pa., assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed June 27, 1931. Serial No. 547,203. 12 Claims. (Cl. 244—19.)



6. In an aircraft, a sustaining rotor, a driving device therefor, a braking device for the rotor, a control element, a tension operating member between the driving device and said element, and a tension operating member between the braking device and said element.

1,894,419. PURIFICATION OF COAL DISTILLATION GASES. ALFRED POTT, Essen-on-the-Ruhr, Germany Filed Jan. 7, 1929, Serial No. 330,971, and in Germany Jan. 14, 1928. 3 Claims. (Cl. 183—114.6.)

3. The method of removing traces of naphthalene from coal distillation gas previously purified in the usual way, comprising the compression of the gas to a pressure adapted for long distance transmission, passing the gas so compressed and with raised temperature in a first stage through solvents for naphthalene, thereby causing the incorporation of vapors of said solvents in the gas, then



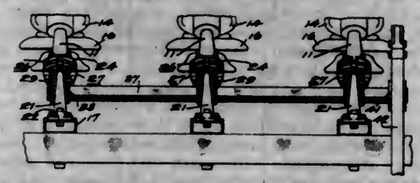
in a second stage cooling the gas and thereby causing the condensation of the vapors of the solvents which also take up from the gas the traces of naphthalene, and then separating this condensate from the gas before delivering the gas to the main.

1,894,420. MOPPING, SPREADING, AND POLISHING DEVICE. HARRY RANISH, Los Angeles, Calif. Filed Sept. 26, 1930. Serial No. 484,600. 3 Claims. (Cl. 91—39.)



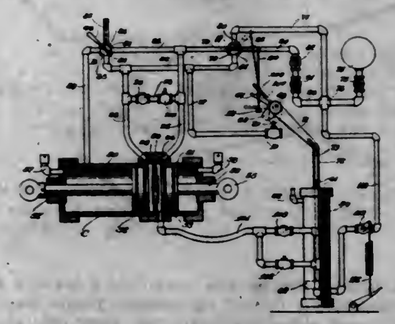
1. A device of the character set forth comprising an applicator provided with a head plate and a distributing chamber having an open bottom; spring fingers integral with said chamber; a distributor inside having a vertical movement; said distributor comprising an adjustable valve and a valve nozzle provided with an intermediate lateral outlet that is closed in one position and open in another position to supply to said chamber the substance to be distributed and spread; a brush provided with pockets and means comprising said spring fingers to fit into said pockets for securing the brush to the outside of said chamber.

1,894,421. ELECTRICAL SWITCH. JAMES C. REA, San Francisco, Calif., assignor to Pacific Electric Manufacturing Corporation, San Francisco, Calif., a Corporation of California. Filed July 12, 1929. Serial No. 377,735. 6 Claims. (Cl. 200—48.)



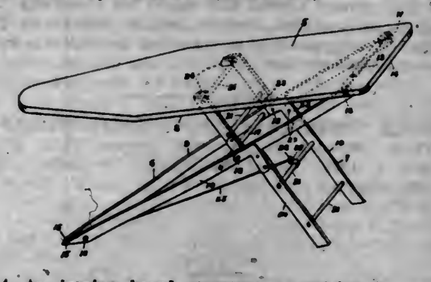
1. In a multipole electric switch, a plurality of switch arms, switch elements carried by said arms, a lever member associated with each of said arms, adjustable coupling means connecting each of said switch arms with its associated lever member, a pivot pin for each switch arm embraced by said coupling means, said pivot pins being in substantial alinement and a rigid bar interconnecting all of said lever members and extending substantially parallel to the axis of alinement of said pivot pins.

1,894,422. IRONING AND AERATING PRESS. CHARLES O. REEPS, deceased, Waukegan, Ill., by Harriette Estelle Reeps, executrix, Waukegan, Ill., assignor to National Laundry Machinery Company, Inc., Syracuse, N. Y., a Corporation of Delaware. Filed Jan. 2, 1930. Serial No. 418,118. 5 Claims. (Cl. 68—9.)



3. In an ironing machine, cooperating ironing elements one of which is movable toward and from the other, means for actuating the movable element including a single cylinder structure having two pistons operable therein, means for admitting fluid under pressure into said cylinder to cause simultaneous movement of both pistons relative to the cylinder whereby said movable element will be moved into ironing engagement with the other ironing element, means for relieving only one of said pistons from pressure, and means causing said movable member to be partially moved away from the other member upon such release of pressure.

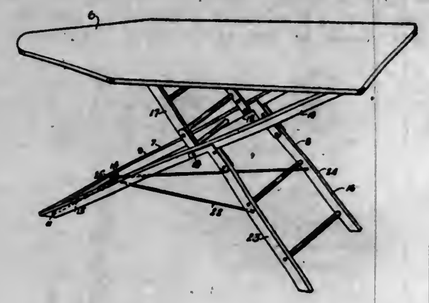
1,894,423. IRONING BOARD STRUCTURE. CHESTER A. RICH, Cincinnati, Ohio. Filed Oct. 8, 1931. Serial No. 567,649. 6 Claims. (Cl. 68—10.)



4. An ironing board structure comprising in combination a substantially horizontal elongated table, a two legged supporting frame having its lower extremities spaced apart and located substantially directly below one end of the table, with its upper extremities supporting the table, a third leg pivoted on the supporting frame and upon the table and inclined relative to the table, the lower extremity of said third leg being disposed substantially in a vertical plane passing through the major axis of the table, and a single brace connecting the said third leg and the supporting frame at a point substantially midway between the two legs thereof, said brace lying substantially in the aforesaid vertical plane passing through the major axis of the table, and means con-

sisting of but a single perforate guide member carried by the two legged supporting frame and arranged to slidably receive the brace and move it into substantial parallelism with the table upon collapsing of the device for storing.

1,894,424. IRONING STAND WITH STABILIZING MEANS. CHESTER A. RICH, Cincinnati, Ohio. Filed Feb. 12, 1932. Serial No. 592,464. 3 Claims. (Cl. 63—10.)



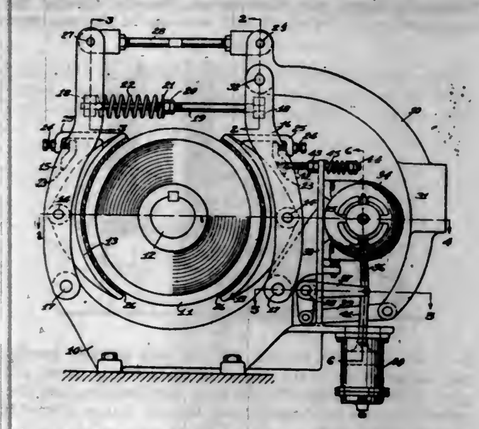
1. A foldable ironing table comprising a board, a support comprising a pair of leg members jointed together at their lower ends, and having their upper ends spaced transversely of the board and hingedly secured thereto, a spacer extending transversely between said leg members toward the lower ends thereof, a guide rod having one end secured between the lower ends of said leg members and the other end secured to said spacer, a second support comprising two leg members pivotally mounted one each upon one of said first mentioned leg members intermediate the ends thereof, said support members being adapted to be moved into crossed relationship beneath the board for holding up the latter in operative position and to be moved into overlying relationship with one another against the board in the folded position of the ironing table, and a rigid stabilizing wire having its ends attached one each to one of the leg members of said second support and its intermediate portion formed into a loop slidably embracing said guide rod, the loop being adapted to be moved upwardly of the guide rod into contact against said spacer for stabilizing the supports in operative position, and to slide down the guide rod for permitting movement of the supports from cross to folded position.

1,894,425. THERMORESPONSIVE RESTRAINING DEVICE. WILLIAM L. ROESSNER, Denver, Colo. Filed Mar. 7, 1932. Serial No. 597,154. 6 Claims. (Cl. 169—42.)



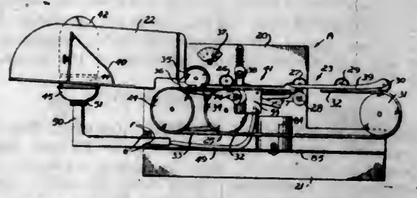
1. A restraining device for a thermo-responsive mechanism comprising a member having two substantially parallel flexible arms, the ends of the arms being spread apart and outwardly inclined, the adjacent surfaces of the inclined arms being connected by means of a spacer formed from readily fusible solder in which is embedded a metal member of higher fusing point and greater compressive strength, said last named member being hollow whereby heated air will have access to the interior thereof.

1,894,426. ELEVATOR BRAKE. WILLIAM L. RUFNOW, Columbus, Ohio. Filed Apr. 22, 1931. Serial No. 532,024. 4 Claims. (Cl. 188—174.)



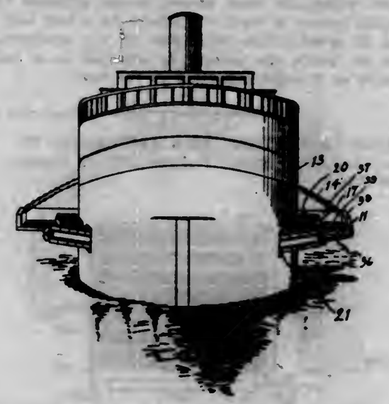
1. In elevator brake mechanism, a motor driven drum, a pair of pivotally mounted arms arranged on opposite sides of said drum, brake shoes pivotally connected with said arms, said brake shoes being provided with arcuate surfaces adapted for coaction with the perimeter of said drum, a weighted lever pivotally connected with the upper end of one of said arms, a tie rod uniting the other of said arms with an offset portion of said lever whereby said weighted lever normally serves through gravity to oscillate said arms inwardly to maintain the brake shoes carried thereby in contact with said drum, spring means between said arms normally serving to force said arms apart, said spring means being normally counter-acted by the weighted lever, a stall motor, a bell crank lever, a flexible connection between the armature shaft of said motor and said bell crank lever, and a link connection between said bell crank lever and the lower depending portion of said weighted lever, whereby when said stall motor is energised, the said weighted lever is moved to a position against gravity for effecting the release of the brake shoes.

1,894,427. ENVELOPE MOISTENER. COMMODORE D. RYAN, Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev., a Corporation of Nevada. Filed Apr. 30, 1930. Serial No. 448,567. 14 Claims. (Cl. 91—43.)



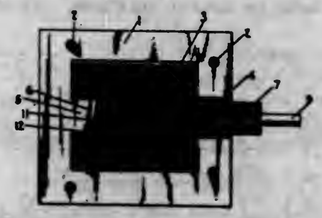
1. In a postal machine the combination of a conveyor, a stripper, a moistening device comprising a blade; a guide plate disposed across said conveyor to act upon envelopes carried by said conveyor to position the flaps of said envelopes to contact the said blade and comprising a convex portion for positioning said flap, a concave portion for receiving said blade in inoperative position, and a drain section; means to position a flap to be moistened by said moistener while being conveyed by said conveyor; means whereby said envelope will engage said blade and moisten the envelope flap while being conveyed by said conveyor; and means to control the position of the moistening section of said moistener and control the supply of water to said moistener.

1,894,428. FISHING BRIDGE. HIKOKUMA SHIRAISHI, Wilmington, and WILLIAM S. O'HIRA, Terminal Island, Calif. Filed Dec. 1, 1930, Serial No. 499,246. Renewed May 16, 1932. 13 Claims. (Cl. 114—0.5.)



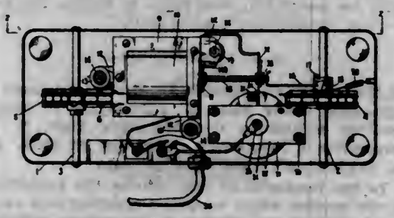
1. A fishing bridge, comprising a platform adapted to be mounted on the side of a ship and at suitable fishing distance above the sea surface, a knee rail extending upwardly from the platform and around the edges thereof, and conveyor elements leading from the platform and into the interior of the ship.

1,894,429. ELECTROMAGNET. ALDEN B. STARR, Brooklyn, N. Y., assignor to Knapp-Monarch Company, a Corporation of Missouri. Filed Feb. 12, 1930. Serial No. 427,740. 7 Claims. (Cl. 175—341.)



1. A solenoid construction comprising a frame member having a flat surface portion, and a core member having an end surface inclined from one side thereof to the other side and cooperating with said flat surface.

1,894,430. TOASTER DEVICE. ALDEN B. STARR, Brooklyn, N. Y., assignor to Knapp-Monarch Company, a Corporation of Missouri. Filed Feb. 17, 1930. Serial No. 429,088. 10 Claims. (Cl. 161—16.)



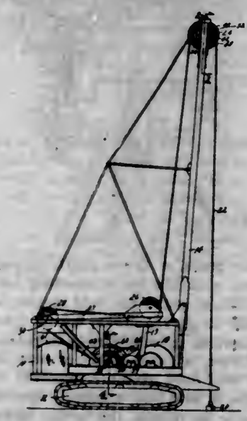
1. In combination, a conveyor, electromotive power driving means therefor, and a recurrent period control therefor comprising an oscillatory balance wheel, a movable bearing therefor, a spring connected between the bearing and balance wheel and put under tension by oscillations of the balance wheel, and means for moving the bearing about the axis of said balance wheel to adjust the tension of said spring.

1,894,431. HAIR WAVER. JAMES VAGHELATOS, Toledo, Ohio. Filed July 26, 1930. Serial No. 470,866. 8 Claims. (Cl. 219—24.)



1. A hair waving device comprising a hair encasing treated fabric wrapper, a metal sheathed heating element having a concave side to nest against a convex side of the hair encasing wrapper, and a wrapper extension from the said fabric wrapper enveloping the element and wrapper.

1,894,432. WELL DRILLING MACHINE. GEORGE R. WATSON, Waterloo, Iowa. Filed Nov. 4, 1931. Serial No. 572,888. 10 Claims. (Cl. 255—16.)



1. In a drilling machine, a drilling tool, a cable carrying the tool, a drum on which a portion of the cable is adapted to be wound, and non-metallic vibration insulating means interposed between the machine frame and that portion of the drum engaged by said cable, to permit such portion of the drum to move independently in any radial direction.

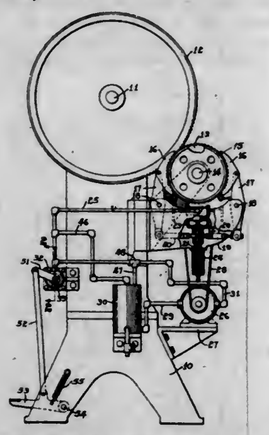
1,894,433. RESETTABLE REGISTER. RALPH G. WHITLOCK, Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev., a Corporation of Nevada. Filed Dec. 18, 1928. Serial No. 326,846. 5 Claims. (Cl. 235—144.)



1. A register containing a frame, a shaft, a plurality of indicia wheels and gears therefor carried on said shaft, a carriage mounted on said frame, a plurality of transfer pinions mounted on said carriage for meshing with said gears respectively, a latch mounted on said car-

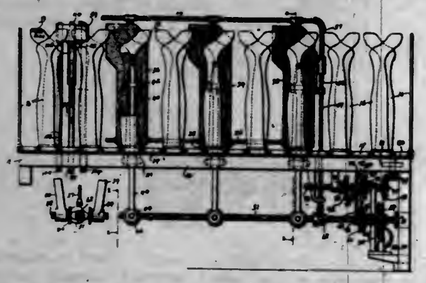
riage and constructed with locking fingers, bolts mounted on said carriage for engaging holes in said frame for locking said carriage in position with said transfer pinions in mesh with said gears, draw bars connected respectively to said bolts, a spring engaging said draw bars for normally holding said draw bars apart and said bolts in engagement with said holes, pins on said latch, cams on said draw bars respectively for engaging said latch pins and moving said locking fingers in locking engagement with said pinions before said carriage is shifted and after said pinions are withdrawn from said gears.

1,894,434. HYDRAULIC CONTROL DEVICE. LARKIN R. WILLIAMSON, Toledo, Ohio, assignor to The Toledo Machine & Tool Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 27, 1930. Serial No. 491,388. 3 Claims. (Cl. 188—170.)



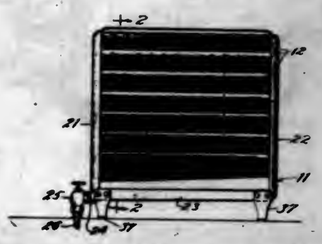
1. In a power press, a drive shaft, power press operating mechanism, a clutch for connecting the drive shaft to said mechanism, a brake for said mechanism, a spring normally operable to set the brake, means operable by fluid pressure in opposition to said spring to release the brake, a fluid pump driven by said shaft, a pipe line from the pump outlet to said fluid pressure operable means, a normally closed valve in said line, manually operable means for opening said valve to release the brake, means associated with said valve to drain fluid from the fluid pressure operable means to set the brake when said valve is closed, and a relief valve to limit the pressure in said pipe line.

1,894,435. HOSIERY PRESS. JOHN ZIMARIK, Akron, Ohio, assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Nov. 27, 1925. Serial No. 71,527. 23 Claims. (Cl. 223—17.)



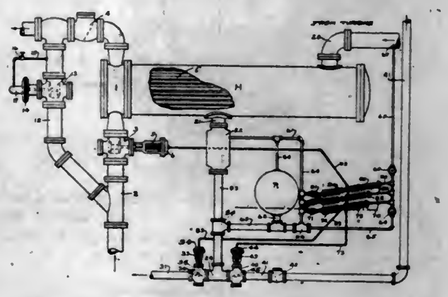
1. A pressing machine comprising in combination, a frame, a plurality of pressing jaws arranged in sets mounted in spaced relation from each other, operating means for opening and closing the jaws, a conveyor adapted to travel in relation to the sets of jaws and progressively carry work through the jaws from one set to the next by a stop and start action, a printer mounted on the machine through which the work passes, means actuated by the operating means to work the printer by a stop and start action in synchronism with that of the conveyor, and means by which the printer is adjusted to a position operative on a selected portion of the work.

1,894,436. RADIATOR. NELS ASP, Chicago, Ill. Filed Mar. 14, 1932. Serial No. 598,572. 8 Claims. (Cl. 257—139.)



5. A radiator, comprising a frame including spaced hollow uprights, cellular radiating elements extending between said uprights and having an upper substantially horizontal edge and a lower angularly disposed edge, and guide ribs extending between said edges for directing heated air.

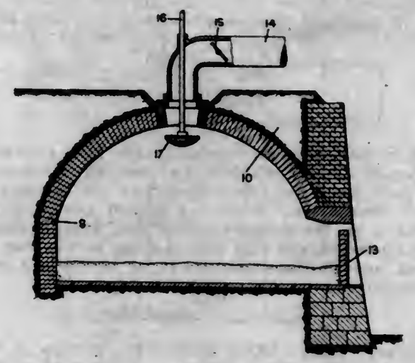
1,894,437. HEATER CONTROL. JOSEPH M. BARRETT, Fostoria, Ohio, assignor to The Swartwout Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 7, 1927. Serial No. 159,619. 32 Claims. (Cl. 122—441.)



1. The combination of a feed water line, heating coils in said line, a valve in said line, a container for heating fluid surrounding said coils, and means responsive to the temperature of the heating fluid and to the level of condensate for positioning said valve to control the flow of feed water through said heating coils.

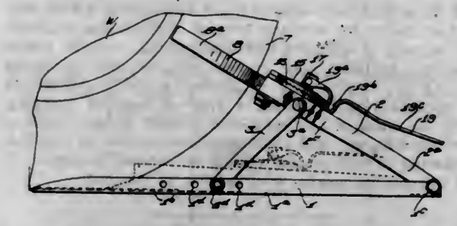
1,894,438. COKING PROCESS. GEORGE POMEROY BARTHOLOMEW, Essex Fells, N. J., assignor to American Smelting & Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 20, 1928. Serial No. 313,816. 5 Claims. (Cl. 202—6.)

5. In the treatment of coal tar for the production of coke, the process which comprises spraying said tar into a closed chamber preheated to a temperature sufficient to effect simultaneous distillation of creosote and other volatiles and initial coking of the residuum, the heat for said simultaneous distillation and initial coking actions being derived from heat stored in the walls of said preheated chamber, discontinuing the spraying of tar and continuing the heating of the residue until the vapors are driven off, then admitting limited quantities of air to said chamber and burning a portion of the residuum to com-



plete the coking operation and to aid in reheating the walls of the chamber to a temperature sufficient for the treatment of further quantities of tar, and repeating the above cycle.

1,894,439. ADJUSTABLE AND COLLAPSIBLE WHEEL CHOCK. GEORGE F. CHISHOLM, San Diego, Calif. Filed Feb. 11, 1931. Serial No. 515,036. 8 Claims. (Cl. 188—32.)



1. In a wheel chock, a base member, a bracket hinged to said base member, said bracket shiftable from a collapsed position adjacent to said base member to one of several extended positions of angular relation therewith, braces for supporting said bracket in its various positions relative to said base member, means for locking said bracket in any of its various positions, and a wheel clamping mechanism associated with said bracket.

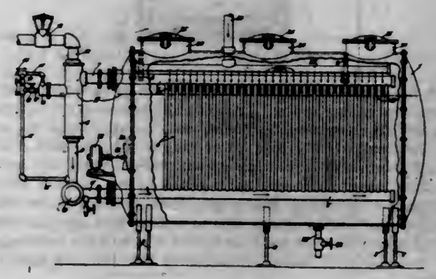
1,894,440. METHOD OF FASTENING FOOTWEAR WELTS. ABRAHAM CODISH, Brooklyn, N. Y. Filed Mar. 24, 1931. Serial No. 524,991. 6 Claims. (Cl. 12—142.)



1. The method of fastening footwear welts which comprises fastening a welt, intermediate its side edges, to an upper, with the upper surface of the welt and the outer surface of the upper confronting each other, placing the upper surface of a portion of said welt in confronting relation to the upper surface of an insole, and securing the welt to the insole and fastening the welt to a shoe outsole.

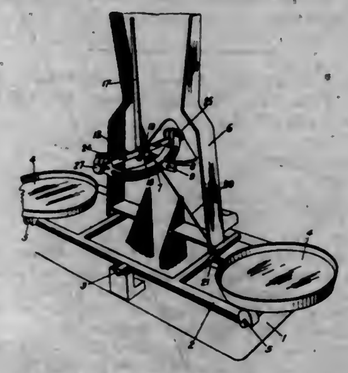
6. A shoe comprising an upper, a welt, an insole, said welt being secured to said upper with the outer surface of said upper and the upper surface of said welt confronting, a marginal portion of said welt being secured to a marginal portion of said insole with the upper surface of said welt and the upper surface of said insole confronting, said welt being secured to an outsole, and formed into a bead adjacent said upper.

1,894,441. LIQUID COOLER. RALPH COPP, St. Louis, Mo., assignor to Pevely Dairy Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 2, 1931. Serial No. 572,595. 6 Claims. (Cl. 62—141.)



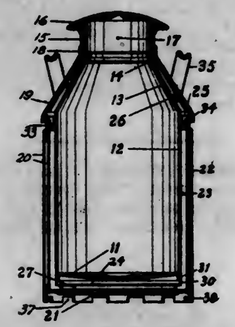
6. A cooler of the character described including a tank, a valved drain in the tank, an agitator in the tank, a refrigerating unit in said tank adapted to contain a fluid refrigerant and having a vertical exterior surface, means for causing all of the liquid to be cooled to flow upon said surface, and mechanism other than said agitator for forcing circulation of the fluid refrigerant through said refrigerating unit.

1,894,442. WEIGHING SCALE. THOMAS B. FLANAGAN, Columbus, Ohio, assignor to The Exact Weight Scale Company, Columbus, Ohio, a Corporation of Ohio. Filed Sept. 14, 1927. Serial No. 219,541. 8 Claims. (Cl. 265—59.)



1. Scale structure comprising a beam, an indicator, a resilient member cooperating with said indicator and normally tending to maintain it in predetermined position, a crank for bending said resilient member, and a thrust rod between the beam and said crank to operate said crank to bend said resilient member and move said indicator in response to movement of said beam.

1,894,443. MILK COOLING AND TEMPERATURE STABILIZING DEVICE. ADOLPH GOBEL and RUDOLPH GEDEON, Egelston Township, Muskegon County, Mich. Filed Feb. 5, 1932. Serial No. 591,042. 2 Claims. (Cl. 257—212.)



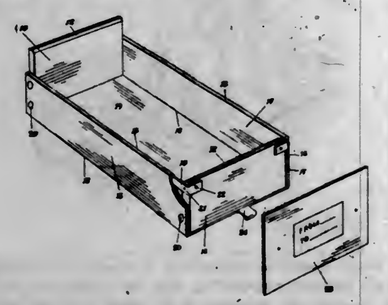
1. In a milk container the combination of various novel means forming together a cooling and temperature stabilizing device, comprising an inside-can, fastened with its neck airtight and rigidly to a protecting outer-can, said outer-can having heat-insulating means which, when the device is standing upright and surrounded by air, form a closed airspace around the inside-can, thus stabilizing the temperature of the contents of the inside-can; said airspace being equipped with floating valves which when submerged in water permit water to circulate through the said airspace.

1,894,444. HEADREST. WILLIAM JOHN HEINTZ, Utica, N. Y. Filed Oct. 16, 1930. Serial No. 489,156. 4 Claims. (Cl. 155—173.)



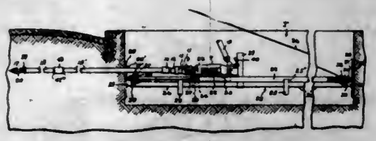
3. In a head rest for an operating chair, a hollow cushion member of elastic material for supporting the head, a retaining device having a cup-shaped chamber for receiving said hollow cushion member and held therein by friction fit and readily removable with respect to said cup for sanitary purposes and a removable cover on said head rest.

1,894,445. DRAWER. SAMUEL C. HUFFMAN, Lincoln, Nebr. Filed Jan. 16, 1932. Serial No. 587,114. 5 Claims. (Cl. 45—7.)



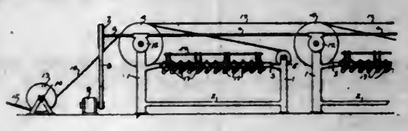
1. A drawer including a pair of spaced end walls, reinforcing straps uniting said end walls, and integral bottom and side walls of readily bendable material secured to said end walls.

1,894,446. CONDUIT DRIVING MECHANISM. VAN S. MCKENNY, Seattle, Wash., assignor to Ne Page McKenny Company, Seattle, Wash., a Corporation of Washington. Filed June 27, 1927. Serial No. 201,764. 4 Claims. (Cl. 255—1.)



2. In mechanism for driving conduit pipe, a standard pneumatic hammer, a cupped front head for said hammer, an anvil disc within said cupped head and engaging the anvil block of said hammer, a conduit pipe, a driving terminal on the rearward end of said pipe, a cushion disc intermediate of said anvil disc and said driving terminal, and tensioned cable means for feeding said pneumatic driver forward as said pipe is driven.

1,894,447. STEEL WOOL MACHINE. WILLIAM H. ROBBINS and RAYMOND F. BOEHLER, Jr., Springfield, Ohio, assignors to The Williams Company, London, Ohio, a Corporation of Ohio. Filed Mar. 24, 1928. Serial No. 264,413. 12 Claims. (Cl. 29—4.5.)



1. In a steel wool machine, a frame having a bed, supporting means for carrying loops of wire passing adjacent the surface of said bed and maintaining them in predetermined position with respect to the cutting means carried by the bed, said supporting means consisting of an arcuate support having a grooved face for engaging with the wires, a pin connected to said support passing through said bed, and yielding means carried on said bed connected to said pin to restrict the lateral movement of the supporting means with respect to the bed.

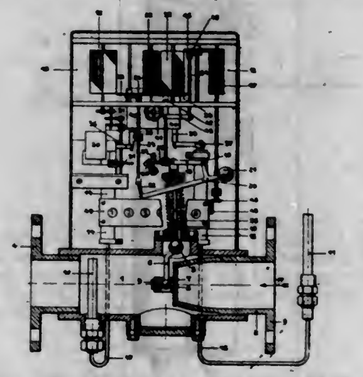
1,894,448. STEEL WOOL MACHINE. WILLIAM H. ROBBINS and RAYMOND F. BOEHLER, Jr., Springfield, Ohio, assignors to The Williams Company, London, Ohio, a Corporation of Ohio. Filed Mar. 29, 1928. Serial No. 265,774. 7 Claims. (Cl. 29—4.5.)



2. In a steel wool machine, a pair of spaced supporting sheaves, means to supply and take away wire from said sheaves, said wire being arranged to be looped completely about one of said sheaves and about a portion of the other, means to drive the sheave about which the wire is completely looped, cutting means for said wire, and means to place the tension on said wire.

1,894,449. METER FOR HEAT-QUANTITIES. HERMANN SANDVOSS, Frankfort-on-the-Main, Germany. Filed June 15, 1927, Serial No. 199,138, and in Germany June 18, 1926. 10 Claims. (Cl. 73—184.)

1. A chlorimeter for measuring or counting the heat quantities consumed in hot water heating systems at the generation or utilization of saturated and superheated steam, comprising in combination with the steam conduit, a non-loaded flap valve in said conduit adapted to shift according to the velocity of flow of the water, means actuated by the shifting of said valve for measuring the flow of water through said conduit for the ascertaining of the heat quantities consumed, thermostats one at the inflow side and the other at the outflow side of the heating



system adapted to measure the temperature of the water before entering the system and on leaving the system, and means for transmitting the movements of said thermostats to the meter to ascertain the temperature difference of the water on entering and on leaving the system, this temperature difference divided by the quantity of water flowing through the system representing the heat quantities consumed per unit of water flowing through the system.

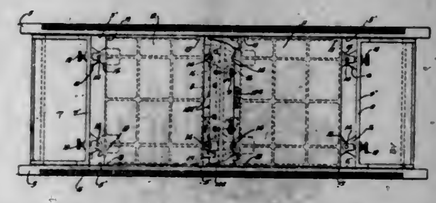
1,894,450. BOX. FRANK J. SCHLEICHER, University City, Mo. Filed June 8, 1929. Serial No. 369,441. 2 Claims. (Cl. 217—5.)



1. In a box, a lid comprising two plies of material superimposed one upon the other and the upper ply having spaced openings therethrough, an upwardly extended handle element seated upon the upper ply of said lid, and a flexible fastener engaging said upwardly extended element and extending through and across the space between said openings and being wholly covered at the under side of said upper ply by the lower ply of said lid and securing said element on said lid.

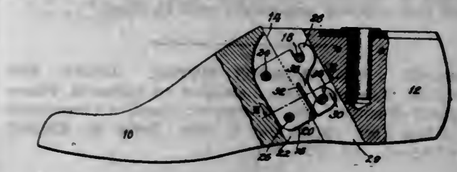
1,894,451. WORKHOLDER. HUGO F. SCHMIDT and LOUIS JUNG, Milwaukee, Wis. Original application filed Mar. 14, 1929, Serial No. 346,841. Divided and this application filed Sept. 2, 1930. Serial No. 479,378. 13 Claims. (Cl. 101—407.)

1. In a printing press of the character described, a bed, a plate incorporated in the bed below the printing plane, gripping fingers cooperable with the undersurface of the plate for gripping a sheet, and means below the plate for forcing the gripping fingers into gripping relation with the plate and comprising a shaft, cams on the shaft



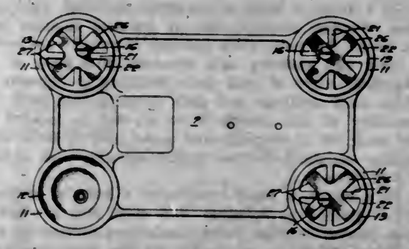
engageable with the gripping fingers, and means for turning the shaft and holding the same in either extreme position.

1,894,452. LAST. EDWIN W. SMITH, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 13, 1932. Serial No. 592,725. 5 Claims. (Cl. 12—135.)



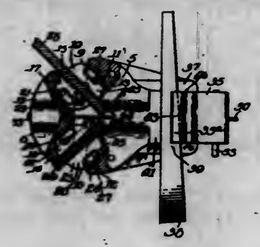
1. In a shoe last, a forepart and a heel part, separated by a cut permitting sliding movement of one relatively to the other, and bonding mechanism joining them comprising an abutment on one of said parts and a resilient hook on the other arranged to be engageable with each other when the last parts are in operative position to hold the last parts together, the arrangement being such that the hook is resiliently distorted in engaging the abutment.

1,894,453. MACHINE BASE. CHARLES ZOOK SUTTON, Piedmont, Calif., assignor to Instograph Ltd., Oakland, Calif., a Corporation of California. Filed Dec. 14, 1929. Serial No. 414,067. 5 Claims. (Cl. 248—16.)



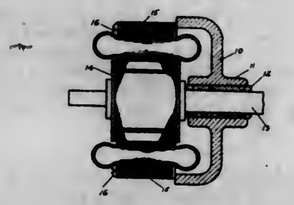
1. In combination, a stud having a threaded portion and another portion forming a shoulder with the threaded portion, a casing having a threaded portion to receive the stud, a base adapted to be secured to the casing and having a circular recess eccentric with respect to the threaded portion of said casing, a circular foot having an aperture therein for positioning in the recess in said base, and a cross member adapted to be positioned eccentrically on said stud to secure said foot in position, said stud engaging the threaded portion of the casing to secure the foot in position in the recess in said base, the shoulder portion on the stud engaging the base to secure said base to the casing upon engagement of the threaded portion of the stud with the threaded portion of the casing.

1,894,454. WELDING CLAMP. EDWARD G. TODT, Chicago, Ill. Filed Sept. 11, 1930. Serial No. 481,125. 32 Claims. (Cl. 219—17.)



2. In a clamp, a pair of gripping jaws, separable means for tying said jaws together, and means acting transversely of the axis of said tying means for bringing said jaws into gripping engagement with an object.

1,894,455. SYNCHRONOUS MOTOR. JOSEPH YOUHOUSE, Fairfield, Conn., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed May 9, 1930. Serial No. 450,997. 4 Claims. (Cl. 172—275.)

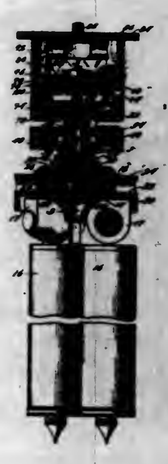


1. In a rotor, a body of magnetic material, said body having openings therethrough in parallel relation with the axis of the body, slots through the outer surface of said body and entering said openings, said body at the longitudinal edges of said slots inclining in opposite directions, said openings and slots dividing said body into a plurality of pole pieces of which one is located between each set of openings and slots, and at least three conductor members carried by and movable with each of said pole pieces.

3. In a motor, a rotor comprising a body of magnetic material divided by openings and slots into a plurality of pole pieces, at least three conductors carried by each of said pole pieces, a stator having the same number of pole pieces as the rotor, a pair of windings on said stator, and a condenser in the circuit of one of said windings whereby the currents in said windings are off-set in timed relation.

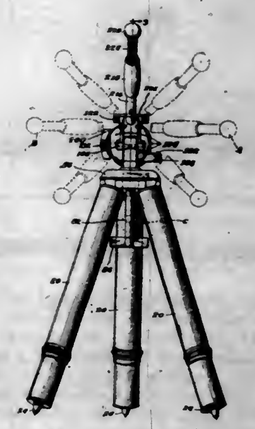
1,894,456. UNIVERSAL PANORAMIC TRIPOD HEAD. OSCAR U. ZERK, Chicago, Ill. Filed Sept. 19, 1927. Serial No. 220,494. 18 Claims. (Cl. 248—47.)

1. In a device of the class described, the combination of a tripod head plate, a tapered post rotatable with respect to said plate, means for clamping said post to said plate, a tapered pin secured near the top of said post and perpendicular thereto, a camera supporting member pivotally mounted upon said pin and having a tapered bore bearing upon a tapered portion of said pin, and means to clamp said member to said pin comprising a handle threaded in said member and having a frusto-



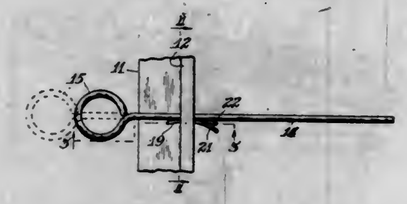
conical portion positioned to engage a portion of said pin, whereby rotation of said handle in one direction will force said member toward the larger end of said pin.

1,894,457. SUPPORTING MEANS. OSCAR U. ZERK, Chicago, Ill. Filed Oct. 22, 1928. Serial No. 314,073. 21 Claims. (Cl. 248—47.)



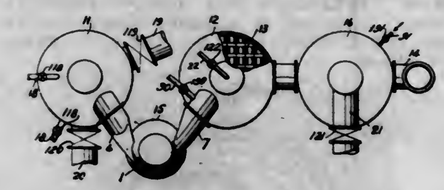
15. In a panoramic tripod head, a relatively stationary element, a member rotatably mounted thereon, and a guide bar secured to said member, said guide bar comprising a main handle adapted to be rigidly connected to said member, resilient means secured at the end of said handle and forming an extension thereof, and an auxiliary handle secured at the other end of said resilient means, and resilient means forming the sole connection between said main handle and said auxiliary handle.

1,894,458. CONTROL LOCK. HERMAN E. ALTGELT, South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company, a Corporation of Delaware. Filed Mar. 9, 1928. Serial No. 260,480. 5 Claims. (Cl. 74—39.)



1. A control mechanism comprising a frame having an aperture therein, a reciprocable rod mounted in said aperture and yielding unsecured means mounted in and extending through said aperture and located on one side of and engaging said rod for resisting the movement of said rod with respect to said frame.

1,894,459. GAS APPARATUS. EDWARD J. BRADY, Philadelphia, Pa., assignor to The United Gas Improvement Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 26, 1928. Serial No. 315,131. 8 Claims. (Cl. 48—80.)



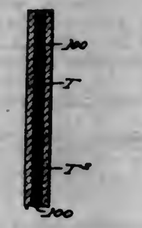
7. A gas manufacturing apparatus comprising a separate gas generator, a separate structure for removing solid particles from the gas comprising a frusto-conical chamber, a gas inlet pipe leading from said generator and connecting downwardly and tangentially with said structure, and a gas outlet pipe leading off tangentially from said structure.

1,894,460. SALTS OF KETONIC ACIDS DERIVED FROM PETROLEUM HYDROCARBONS AND METHOD OF PREPARING SAME. HERMAN A. BRUSON, Philadelphia, Pa., assignor to The Resinous Products & Chemical Co. Inc., a Corporation of Delaware. Filed Oct. 26, 1929. Serial No. 402,803. 15 Claims. (Cl. 260—108.)

1. A new composition of matter consisting of salts of the acid mixture which is obtained by hydrolyzing the product from the condensation of an anhydride of a polycarboxylic acid with a petroleum hydrocarbon essentially of aliphatic nature, and a Friedel-Crafts catalyst.

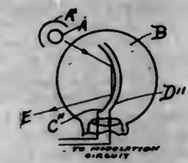
1,894,461. RUBBER THREAD AND METHOD OF MAKING THE SAME. LESTER B. CHISHOLM, Providence, R. I. Filed Feb. 24, 1932. Serial No. 594,948. 5 Claims. (Cl. 117—53.)

1. As an article of manufacture, a rubber thread comprising a compound textile core impregnated and covered with rubber, said core being formed of a straight and relatively weak thread in short discontinuous fragments



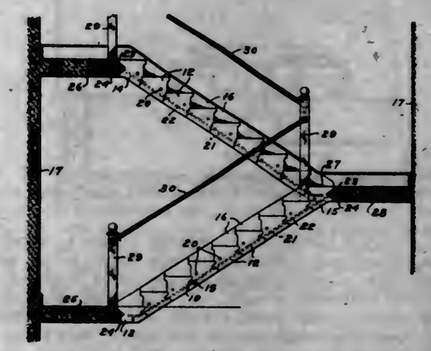
in the finished product, and a winding thread disposed in helical coils around said straight core thread.

1,894,462. LUMINOUS ENERGY CONTROL. CHESTER L. DAVIS, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 25, 1929. Serial No. 358,107. 3 Claims. (Cl. 88—61.)



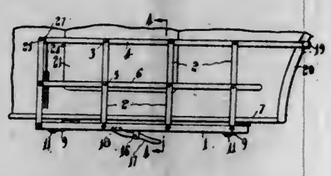
1. A modulating reflector for luminous energy comprising a pair of glow discharge electrodes disposed in an ionizing atmosphere, a modulation circuit for controlling the luminosity of the glow discharge from said electrodes, means for directing light rays upon said glow discharge electrodes and shaped surfaces on said electrodes for deflecting the rays therefrom to a predetermined focal point, the reflected energy being proportional in intensity to the ionization of the atmosphere adjacent said electrodes.

1,894,463. STAIR STRUCTURE. JULIUS FRICK, Milwaukee, Wis. Filed Jan. 21, 1932. Serial No. 587,947. 12 Claims. (Cl. 72—96.)



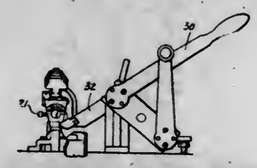
1. In a stair structure, a series of treads having abutting faces and complementary tongues and grooves adjoining said faces, and elongated connecting elements extending through said treads transversely of said tongues and grooves.

1,894,464. LUGGAGE CARRIER. ALBERT HARRIS, Toronto, Ontario, Canada. Filed Feb. 14, 1930. Serial No. 428,330. 5 Claims. (Cl. 224—29.)



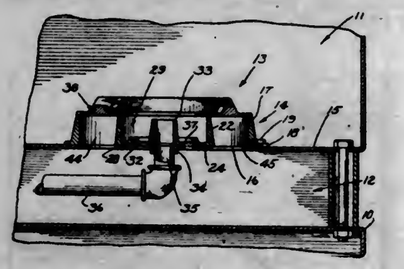
1. A collapsible luggage carrier including a supporting member; a rail; a plurality of parallel links pivotally connected with the member and the rail, the said member being formed of angle iron to receive the links and rail when the carrier is collapsed; and a lifter pivoted on the member for raising the collapsed links and rail therefrom into a position where they may be readily grasped by the hands of an operator.

1,894,465. EMBOSSING AND VENDING APPARATUS. GEORGE W. HEENE, Cleveland, Ohio. Filed Sept. 25, 1930. Serial No. 484,274. 9 Claims. (Cl. 197—6.)



1. In an apparatus of the class described a die actuating hammer, means to lift the hammer in position to deliver an impact blow to a die when released, and means associated with the hammer and in the path of the lifting means to regulate the lift of said hammer.

1,894,466. OIL BURNER. THOMAS W. HUNTER, Alhambra, Calif. Filed Sept. 10, 1929. Serial No. 391,659. 4 Claims. (Cl. 158—91.)



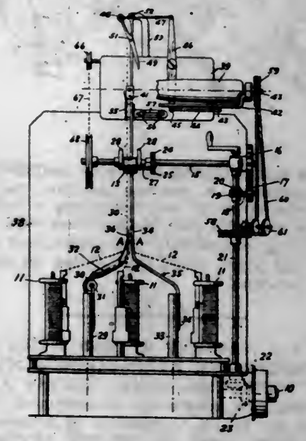
1. A burner comprising an annular frame, a plurality of segmental pans integral with said frame, a fuel well intermediate of said pans, an annular basin surrounding said well and being integral with said pans, converging walls banding said pans, arcuate air passages within said frame and positioned to the side of said pans, a baffle wall between said passages and said basin, said baffle wall terminating in a plane intersected by the walls bounding said pans, a cover for said burner, grooves in said cover, said grooves being positioned to overhang said passages and said pans whereby air may be conducted from said passages to said pans to promote combustion within said burner.

1,894,467. PRODUCTION OF FOILS AND APPARATUS THEREFOR. HEINRICH JACQUÉ, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Sept. 25, 1930, Serial No. 484,463, and in Germany Sept. 26, 1929. 6 Claims. (Cl. 18—15.)



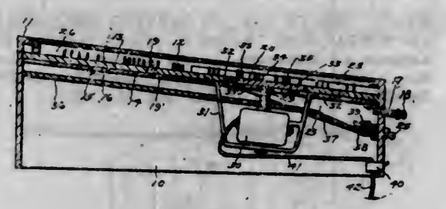
5. Apparatus for the production of foils from liquefied film-forming substances comprising a pair of endless belts, sets of pulleys for supporting said belts, said sets of pulleys being arranged so that said belts substantially converge at one end, means for moving said pulleys and belts and means for supplying said liquefied substance to said belts at the converging end thereof.

1,894,468. APPARATUS FOR MAKING CHENILLE FABRIC. RAYMOND B. KALBACH, Philadelphia, Pa. Filed Aug. 27, 1930. Serial No. 477,998. 10 Claims. (Cl. 112—2.)



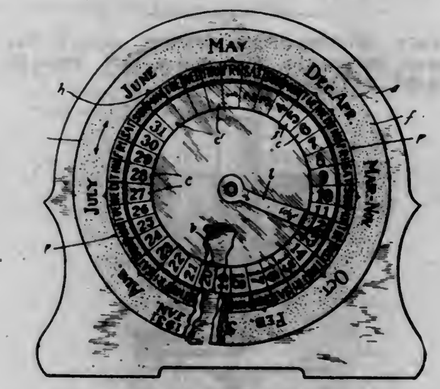
1. Apparatus for making chenille comprising a vertical supporting structure, bobbins arranged for movement in a tortuous path carried by said structure, bobbin operating means, sewing mechanism arranged in a plane above said bobbins and carried by said vertical supporting structure, means arranged between said bobbin operating means and sewing mechanism for operating said sewing mechanism, means for presenting the twisted and braided yarn to the needle of said sewing mechanism for making a continuous line of stitches substantially in parallelism with the side edges of said twisted and braided yarn and severing means arranged beyond the sewing mechanism for cutting at least one side edge of the twisted and braided material substantially in parallelism with said line of stitches.

1,894,469. GAME BOARD. SILAS H. LYNCH, Dallas, Tex. Filed Feb. 23, 1932. Serial No. 594,465. 5 Claims. (Cl. 273—121.)



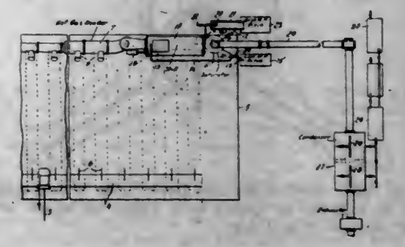
1. In a game, an inclined deck having ball-receiving openings, deflecting elements on said deck, a rotating disk mounted in said deck and having ball-receiving openings and deflecting elements mounted thereon for casting off a ball rolling thereonto from said deck, and a slide under said deck and disk normally closing the bottoms of the openings thereof and having openings for registering with the openings of said deck.

1,894,470. DATE INDICATING CALENDAR. HARRY M. MATHERS, Portland, Oreg., assignor of thirty-nine one-hundredths to Howard M. Covey, nineteen one-hundredths to Frank L. Matter and three one-hundredths to Anna Rueger, Portland, Oreg. Filed Aug. 11, 1931. Serial No. 556,356. 11 Claims. (Cl. 40—115.)



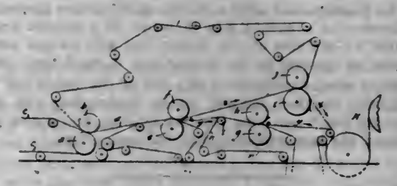
1. A date indicating calendar comprising, a primary circular disc provided on the margin of its face with consecutive groups of the names of the days of the week arranged seriatim and with the names of the months arranged seriatim and so located that the name of each month registers with the day of the week on which the first day of such month falls, a secondary circular disc provided on its face with the numerals 1 to 31, inclusive, the said numerals arranged to coincide with the consecutive names of the week days on the primary disc, the spaces between the numerals 31 and 1 being left blank, one of said discs being relatively rotatable, whereby the relative rotation of one of said discs to bring the first of said numerals into registration with the week day name on which the first day of a particular month falls will adjust the calendar for such month.

1,894,471. METHOD AND APPARATUS FOR DISTILLING TAR AND SIMULTANEOUSLY PRODUCING HIGH AND LOW MELTING POINT PITCHES. GREGORY EDWARD MCCLOSKEY, South Orange, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 11, 1929. Serial No. 413,259. 10 Claims. (Cl. 202—30.)



1. The two-stage method of distilling tar in which low melting point pitch is produced in the first stage of the process and high melting point pitch is produced in the second stage, which comprises bringing low melting point pitch from the first stage of the distilling operation into direct contact with highly heated waste-heat gases whereby the low melting point pitch is distilled and pitch of high melting point is produced, bringing tar into direct contact with the hot gases and vapors resulting from this second stage of the distilling operation to distill the tar and produce the low melting point pitch and drawing off a portion of the low melting point pitch as a separate product.

1,894,472. COMBINED LIGHT AND HEAVY WEIGHT PAPER MAKING MACHINE. MAX OBERDORFER and JOSEF E. RYBERG, St. Helens, Oreg. Filed Mar. 12, 1932. Serial No. 598,861. 2 Claims. (Cl. 92—49.)

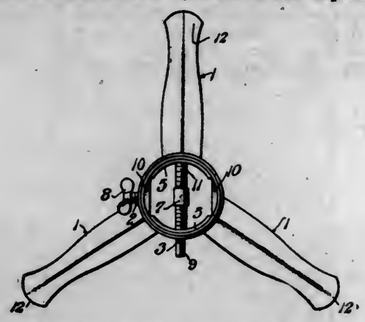


1. In a paper making machine, the combination with couch rolls, press rolls, transfer rolls and a drier section, and a top felt passing thru said couch rolls and press rolls and then returning over said transfer rolls, of second press rolls located between the first mentioned press rolls and the drier section, said transfer rolls being located to arrange the path of travel of said top felt above said second press rolls.

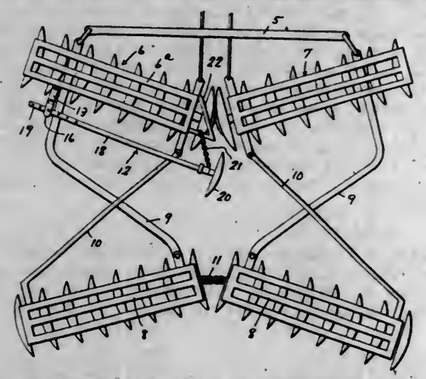
1,894,473. CHRISTMAS TREE STAND. ANTON PESHOUT, San Francisco, Calif. Filed Aug. 17, 1931. Serial No. 557,648. 4 Claims. (Cl. 248—38.)

1. A tree holder comprising a cylindrical shaped body or cup adapted to receive the butt of a tree, a set of two clamps set inside of such cup and adapted to hold a tree

rigid by means of a two-way threaded adjusting screw, a plurality of legs or supports extending outwardly and downwardly from the inner portion of said cup and having an upper circular portion fitted inside of said cup and held in position by means of a single set screw at the lower portion of said cup.

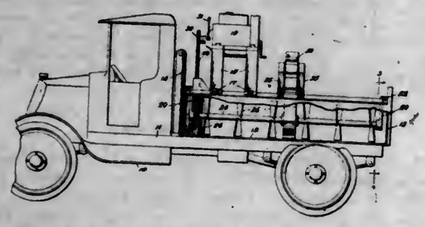


1,894,474. RIDGE CUTTER FOR DISK HARROWS. HENRY G. SCKOWSKA, Blue Mound, Ill. Filed May 26, 1932. Serial No. 613,732. 3 Claims. (Cl. 55—82.)



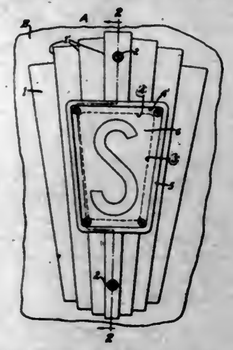
1. In combination with a double disk harrow including a disk gang and a weight box therefor, of a lateral bracket mounted on one side of the weight box and an end bracket mounted at one end of the weight box, a reach bar, adjustable pivot means connecting one end of the reach bar with the lateral bracket, flexible means suspending the other end of the reach bar from the end bracket, and a disk journalled on the last named end of the reach bar.

1,894,475. AGITATING ATTACHMENT FOR VEHICLE BODIES. SAMUEL SHAFER, JR., Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 20, 1929. Serial No. 356,765. 3 Claims. (Cl. 83—73.)



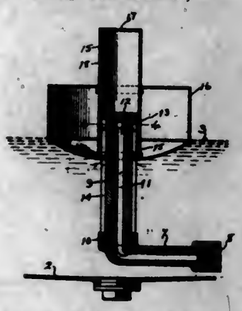
1. An agitating attachment for vehicle bodies, comprising a plurality of adjustable frame members adapted to be readily attached to and detached from the body; shafts having agitating paddles journaled in said members; a motor also carried by said members; and driving connections between said motor and shafts.

1,894,476. MEANS FOR DECORATING REFRIGERATED CONTAINERS. RALPH H. STRAIT, Ligonier, Ind., assignor to Hussmann-Ligonier Company, St. Louis, Mo., a Corporation of Delaware. Filed Apr. 3, 1931. Serial No. 527,394. 1 Claim. (Cl. 40—140.)



A device of the class described, comprising a decorative body portion provided with an opening formed therethrough, a recess surrounding said opening, an outwardly projected element surrounding said recess, a shoulder within said recess, a display-receiving panel removably secured to said shoulder and disposed in said recess, and fastening devices for securing said display-receiving panel to said body portion.

1,894,477. ENGINE OILING DEVICE. LOUIS C. VANDERLIP, Elkhart, Ind. Filed Sept. 4, 1928. Serial No. 303,694. 13 Claims. (Cl. 184—6.)



1. The combination with the lubricant container of an internal combustion engine carrying a pool of lubricant, of an upright stationary tubular lubricant suction element arranged relatively to said container and provided with an inlet orifice, a combined sleeve and float element slidably encompassing said suction element and buoyantly sustained in the lubricant pool, the lower end of said sleeve being open and immersed in the oil pool to establish communication between said oil pool and the inlet orifice of said suction element, a pump, and a suction conduit operatively connecting said pump with said suction element.

1,894,478. PROPELLER CONSTRUCTION. GARFIELD A. WOOD, Algonac, Mich. Filed Oct. 11, 1930. Serial No. 487,925. 15 Claims. (Cl. 115—34.)

1. In combination with a motor boat having a hull, a strut depending from the lower side of the hull near its rear end, a substantially horizontal bearing sleeve carried at the lower end of the strut, a propeller having a hub located at the front end of the bearing sleeve and having a shaft extending from the rear side of the hub through said bearing sleeve, said hub at its front end being recessed and having a plurality of longitudinal grooves in the sides of said recess, a driving shaft extending downwardly and to the rear from said hull at an angle to the

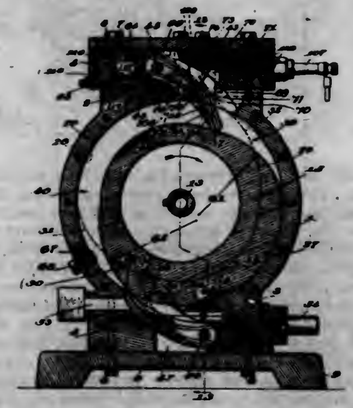


horizontal to the recess in the hub of the propeller, the rear end portion of the driving shaft extending into said recess, said rear end portion of the driving shaft having a plurality of longitudinal grooves therein located opposite the grooves in the recess of said hub, balls disposed in the grooves of the propeller shaft and said hub, and a thrust bearing disposed between the rear end of the drive shaft and the inner end of said recess.

1,894,479. SAPONIFICATION OF ESTERS OF ORGANIC ACIDS. WALTER BADER, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Original application filed Sept. 27, 1926, Serial No. 138,116, and in Great Britain July 20, 1926. Divided and this application filed July 26, 1928. Serial No. 295,611. 21 Claims. (Cl. 260—112.)

1. A process for producing a concentrated organic acid, which comprises saponifying an ester thereof in the presence of an acid saponifying agent by means of a quantity of water not substantially greater than one molecule of water for each ester group to be saponified.

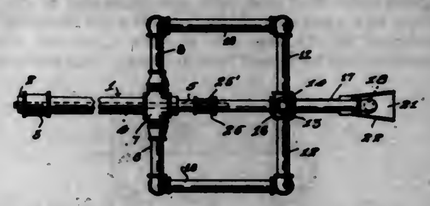
1,894,480. ROTARY ENGINE. GEORGE H. BEUOY, Cedar Vale, Kans. Filed Dec. 19, 1929. Serial No. 415,806. 9 Claims. (Cl. 123—15.)



1. In a rotary engine, a stator having a base containing a pair of extensions of separate working chambers adapted to be formed within the stator, a slot in the base running in the direction of the extension chambers, having confronting inlet depressions, channels leading from said depressions to the extension chambers, and a head in which said extension chambers are continued, having cross-over ports communicating with said inlet depressions and having a rib fitting in the slot and defining a partition between said inlet depressions.

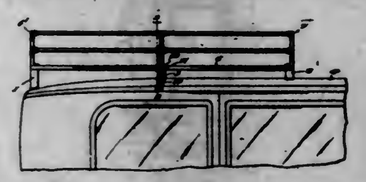
CARNEGIE LIBRARY OF ATLANTA

1,894,481. LOCOMOTIVE OIL BURNER. MONROE BRITTAIN, Chickasha, Okla. Filed Apr. 17, 1931. Serial No. 530,937. 1 Claim. (Cl. 158—56.)



An oil burner comprising a horizontally extending pipe having one end plugged and an outwardly flared burner plate having side flanges thereon connected to its other end, said plate having a downwardly extending lip partially closing the open end of the pipe, a second plug within the pipe spaced from said first plug, a steam pipe extending in spaced relation within said pipe, and through said plugs and terminating beyond said second plug, an oil pipe communicating with said first pipe adjacent said first plug, laterally extending pipes connected to the first named pipe, one on each side, between said plugs and adjacent said second plug, said lateral pipes having downward extensions which merge into horizontal pipes extending parallel to the first named pipe, upstanding pipes connecting said horizontal pipes with inwardly directed sections terminating in a coupling directly above the first named pipe, a pipe closed at its lower end depending from the coupling and having a branch extending outwardly and then downwardly terminating in a nozzle immediately above said plate, and an air pipe connected to the first named pipe intermediate the second plug and the end of the steam pipe.

1,894,482. LUGGAGE CARRIER. MELVIN D. DORSEY, Waldport, Oreg. Filed May 8, 1929. Serial No. 361,467. 1 Claim. (Cl. 224—29.)

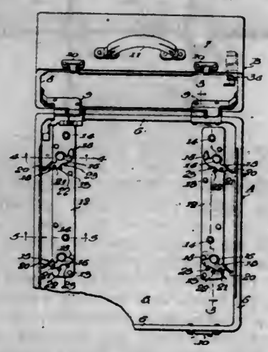


A luggage carrier adapted to be supported on the roof of a motor vehicle comprising a plurality of transversely disposed sills having their top edges in the same plane and having their lower edges conforming to the longitudinal and transverse camber of the roof for which the carrier is designed, longitudinal slats connecting the sills and in contact with the top edges thereof, a railing extending upwardly around the sides of the carrier, one of said sills having sockets near its ends opening through its under face, pins having threaded lower ends to be screwed into the roof of the vehicle and unthreaded upper portions for engagement in the sockets to prevent shifting of the carrier upon the roof of the vehicle, vertically spaced loops extending from the rail and body of the vehicle, respectively, at each pin, and fastening straps connecting said loops for holding the carrier in position on the roof of the vehicle and retaining the pins in their sockets.

1,894,483. TYPEWRITER CABINET. BERNARD J. DOWD, West Hartford, Conn., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed July 29, 1931. Serial No. 553,867. 5 Claims. (Cl. 248—16.5.)

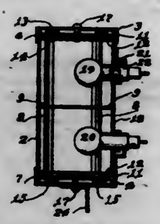
5. In a portable typewriter and the cabinet therefor including a base, typewriter frame portions, socketed foot

supporting lugs depending from the frame portions, supporting feet carried by the lugs, a mounting strip secured at each side of the base, a pair of centering pins projecting upwardly from each strip and receivable in the lug sockets at a given side of the typewriter for centering the typewriter on the base and securing it against lateral movement relative to said base, and means engageable with



the frame portions adjacent each foot for securing the typewriter upon the base, said last named means comprising holddown levers each pivoted about a vertical axis intermediate its end adjacent one of the socketed lugs and terminating at one end in an upturned fingerpiece and at its other end in a vertically and then a horizontally disposed holddown portion for overlying and engaging a frame portion.

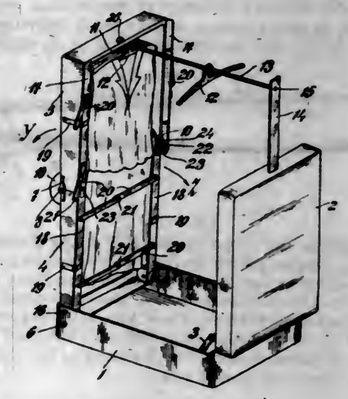
1,894,484. AUTOMOBILE SIGNAL. WILLIAM EDDY, Springfield, Ohio. Filed Jan. 29, 1931. Serial No. 512,134. 2 Claims. (Cl. 177—329.)



1. In a device of the class described, in combination, a transparent hollow cylinder, a pair of flanged caps, a set of pillars in the interior of said hollow cylinder, ceiling and floor members at the ends of said pillars, each of said ceiling and floor members comprising a pair of circular disks, the ends of said pillars bent over, said bent over portions inserted between the said pair of disks, a screw for fastening each of said flanged caps to said ceiling and floor members, a partition dividing the interior of said body member in two compartments, said partition supported by said pillars, and an electric bulb in each compartment.

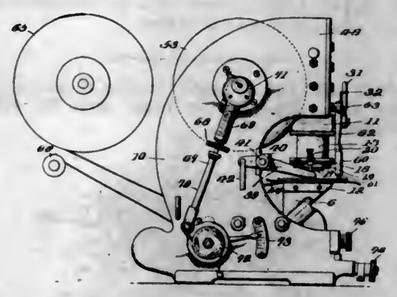
1,894,485. CLOTHES TRUNK. JACQUES FRANKL, Vienna, Austria. Filed Jan. 7, 1932, Serial No. 585,350, and in France Oct. 20, 1931. 3 Claims. (Cl. 190—41.)

1. A clothes trunk comprising in combination with a body portion a lid hinged to one side of the said portion, corner props for holding the lid in a position at right angles to the said body portion, a two-part framework pivotally attached to the side of the said body portion opposite the said lid, and a hinge comprising a hinge axle between the two parts of the said framework for the purpose of enabling the said two parts to be folded together and to lie one upon the other within the trunk when the latter is in the closed condition, and further comprising a rail for the suspension of clothes hangers attached to the end portion of the said two-part framework farthest removed from the said body portion of the trunk when in the open condi-



tion, an extension rod articulated to the said rail, an extensible support housed within the said lid, and an aperture in the said support adapted to be engaged by the end of the said extension rod when the said rod is substantially parallel to the base of the trunk.

1,894,486. CUT-OUT MACHINE. BENJAMIN W. FREEMAN, Cincinnati, Ohio. Filed Feb. 12, 1931. Serial No. 515,346. 20 Claims. (Cl. 101—287.)



8. A die unit for ornamenting machines comprising a cylindrical body member having means to attach the unit to the machine, a sleeve encircling said body member and rotatable thereabout, a supporting plate attached to said sleeve, cutting edges mounted on said plate, studs mounted in said supporting plate for sliding movement relative to said die and a gauge mask connected to said studs, spring means engaging said studs and effective to normally position said mask adjacent the cutting edges, a stripper mounted within the confines of said edges, and resilient means normally positioning said stripper in advance of said edges whereby the stripper is effective to engage a work piece prior to contact therewith of the cutting edges.

12. A die unit for ornamenting machines comprising a cylindrical body member having means to attach the unit to the machine, a sleeve encircling said body member and rotatable thereabout, a supporting plate attached to said sleeve and rotatable therewith about its axis, and cutting edges mounted on said plate.

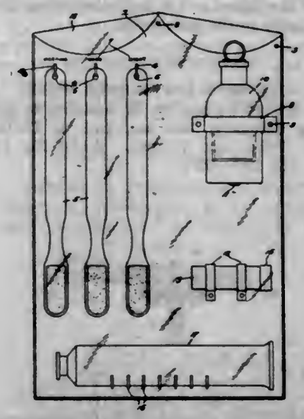
19. A die unit for ornamenting machines comprising a body member having means to attach the unit to the machine, a die block mounted in spaced relation to said member, cutting edges on said block, a passage for cut-out chips leading from said cutting edges to the space between said member and block and a chip receiving trough extending transversely of said die and positioned to receive and deflect chips from said space to a point at the side of the cutting edges of the die.

1,894,487. BOTTLE OPENER. SAMUEL GUNTHER, Carey, Ohio. Filed Mar. 15, 1932. Serial No. 599,044. 2 Claims. (Cl. 65—46.)



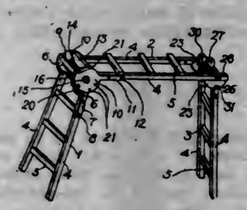
1. A bottle opener comprising a handle member having a hook at one end thereof for removing the cap or seal from a bottle, an inverted cup-shaped member adapted to cover the mouth and neck of the bottle when the hook is in use in removing the cap or seal from the bottle, said cup-shaped member having an opening in a side part thereof through which the hook part of the handle member extends and means for pivotally connecting the cup-shaped member to a part of the handle member.

1,894,488. HOLDER. CARROLL HARRIS, Luling, Tex. Filed June 11, 1932. Serial No. 616,711. 1 Claim. (Cl. 132—84.)



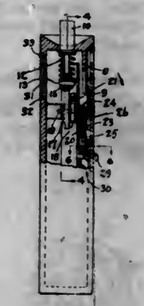
A holder particularly adapted to the administration of oral hygiene for articles consisting of toothbrushes, a tube of toothpaste, and independent vials containing dental floss and oral antiseptics comprising a flat plate having a pair of openings spaced from each other, one for receiving a supporting fastener and the other to receive a fastener to prevent swinging movement of the plate about the supporting fastener; a loop of metal disposed horizontally and anchored to the plate on one portion thereof for supporting a vial of oral antiseptic; an eye anchored to the plate below the loop to form a limit stop for said vial, a pair of spaced concentric loops anchored to the plate below the first mentioned loop to support a vial of dental floss; a series of alined arms anchored to the plate along the lower margin thereof to form a trough for supporting toothpaste tubes; a series of alined hooks anchored to the plate to one side of said loops adapted for supporting tooth brushes; and said plate embraced by a transparent moisture-proof wrapper encompassing said loops, arms, hooks and their retained articles.

1,894,489. FOLDING STOOL-LADDER. JUN HIROSE, Tokyo-Fu, and NAGAHIRO ISHIMIZU, Kanda-Ku, Tokyo, Japan, assignors to Kito Hirose, Tokyo-Fu, Japan. Filed June 6, 1929, Serial No. 368,928, and in Japan June 8, 1928. 1 Claim. (Cl. 228—24.)



A stool ladder comprising a pair of ladder elements, one provided at the upper end with a pair of discs having perforations and the other provided at the upper end with a pair of ear pieces bearing against the inner sides of said discs, said ear pieces having perforations, a pivot bolt extending through the centers of the discs and the corresponding portions of the ear pieces and coacting with said discs and ear pieces to hingedly connect the ladder elements together, a tube secured to and connecting the ear pieces and having longitudinal slots near its ends, slidable members in the tube having finger pieces extending through the slots and movable therein, said sliding members having pins extending through the openings in the ear pieces and engageable with the openings in the discs and springs active to hold said slidable members with their pins in engaged position.

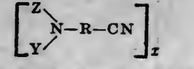
1,894,490. PNEUMATIC TIRE PRESSURE GAUGE. ARTHUR W. HOBSON, San Francisco, Calif. Filed Oct. 11, 1929. Serial No. 398,980. 4 Claims. (Cl. 73—81.)



3. A tire pressure indicator comprising a casing, a plunger slidably carried thereby and extending therefrom, said plunger being designed to be moved against a tire, spring means for moving said plunger into extended position when the indicator is removed from the tire, a rack forming a part of the plunger, a pinion rotated by said rack and having an integral finger, a rotatable disc having a pin engageable by the finger when the latter is moved in one direction so as to rotate the disc, a pointer operatively connected to said disc and being movable thereby, said casing having a dial over which the pointer moves, means for holding said disc in the maximum position into which it is moved, said last-named means being manually releasable, and spring means for returning the disc and pointer to normal when released.

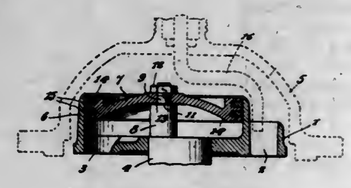
1,894,491. DERIVATIVE OF POLYMERIZED CYANOANTHRAQUINONE COMPOUNDS. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 12, 1930, Serial No. 495,281, and in Germany Nov. 18, 1929. 9 Claims. (Cl. 260—60.)

3. As new articles of manufacture derivatives of polymerized cyanoanthraquinone corresponding to the formula:—



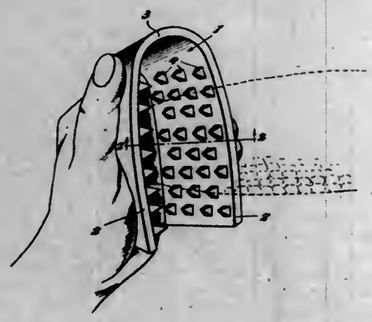
in which x is probably 3, R stands for an anthraquinone radicle, Y for hydrogen or an alkyl group and Z for an acyl group, the said derivatives being difficultly soluble in organic solvents, soluble in concentrated sulphuric acid to give olive colorations and dyeing cotton from brown vats yellow shades.

1,894,492. VALVE FOR LIQUID METERS. DONALD H. McGOGY, McMinnville, Oreg. Filed Dec. 9, 1930. Serial No. 501,120. 5 Claims. (Cl. 73—30.)



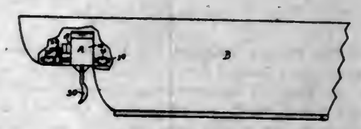
1. A circular disk valve for liquid meters adapted to be connected with a crank shaft for rotation therewith, said valve having spaced ports, a cylinder rising eccentrically from the valve with a portion of the wall of the cylinder being disposed between the ports of the valve, a piston fitted within said cylinder, and means for connecting the piston to the crank shaft.

1,894,493. CORN TIPPER AND BUTTER. ARTHUR E. OLSON, Clarks, Nebr. Filed Apr. 9, 1930. Serial No. 442,918. 1 Claim. (Cl. 130—10.)



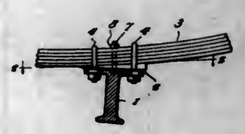
A corn tipper and butter comprising an elongated body having an end wall and side walls extending from the end wall in transverse spaced relation to each other, the body being open at its front and the side walls being inclined transversely and converging rearwardly, and teeth projecting from the inner faces of the side walls for removing kernels from the end of an ear of corn when thrust into the body through its open front and rotated, the side walls at the lower end of the body being spaced apart to provide an opening at the bottom of said body through which kernels may drop by gravity during the shelling operation.

1,894,494. MARINE PROPELLER HAVING A TRANSVERSE MOTION. GEORGE PADIS, Norfolk, Va. Filed Dec. 24, 1931. Serial No. 583,098. 2 Claims. (Cl. 115—28.)



1. A propelling device for boats comprising a V-shaped cylinder, a rock shaft extending through the lower end of the cylinder and closing the same, a piston blade on the shaft received in the cylinder, means for controlling inlet and outlet of fluid from the cylinder on opposite sides of the blade including a slide valve, a crank on the shaft, a double ended lever rockably mounted intermediate its ends, a pitman rod operatively connecting the crank to one end of the lever, and a link connecting the opposite end of the lever to the slide valve.

1,894,495. CASTER-MAINTAINING SHIM. CLYDE H. PHELPS, Mount Vernon, N. Y., assignor to Riess Manufacturing Company, Kokomo, Ind., a Corporation of Indiana. Filed Apr. 7, 1931. Serial No. 528,386. 3 Claims. (Cl. 267—52.)

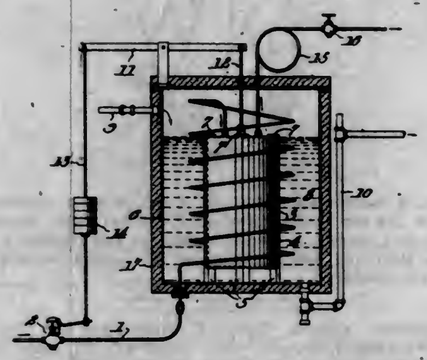


1. A device for the purpose set forth comprising a wedge-shaped shim provided with an open-ended slot in its entering end, the side portions of the shim being somewhat resilient whereby the structure may clear the center bolt and enter between the clip bolts of a spring and axle assembly and effect frictional engagement with the clip bolts to prevent withdrawal.

1,894,496. FERTILIZER AND METHOD OF MAKING SAME. ARTHUR B. PICKETT, Haines City, Fla. Filed July 13, 1929. Serial No. 378,177. 2 Claims. (Cl. 71—10.)

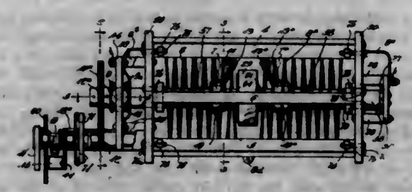
1. The process of preparing a moisture absorbing fertilizer which comprises mixing lime and manure with muck-peat, storing the same to permit bacterial action to break down the raw product, sterilizing the product, reseeding the product after sterilization with a bacterial culture, saturating the product thus formed with a salt solution containing available nitrogen, then removing the moisture.

1,894,497. GAS-DISPENSING APPARATUS. JASPER M. ROWLAND, Niagara Falls, N. Y., assignor to Hooker Electrochemical Company, New York, N. Y., a Corporation of New York. Filed Aug. 13, 1931. Serial No. 556,926. 5 Claims. (Cl. 62—1.)



1. A gas-dispensing apparatus comprising in operative combination, a closed chamber suspended so as to be capable of vertical movement in response to change in weight of its contents, a conduit discharging into said chamber, a throttle valve controlling said conduit, means for withdrawing gas from said chamber, and means responsive to downward and upward movement of said chamber so as to cause closing and opening, respectively, of said throttle valve.

1,894,498. VARIABLE INDUCTANCE SYSTEM. CORRIE F. RUDOLPH, Washington, D. C. Filed July 20, 1931. Serial No. 552,051. 8 Claims. (Cl. 171—242.)



1. In a variable inductance system, a frame, a helical inductance having the turns thereof supported by said frame, a shaft extending axially through said frame, said shaft having two portions each having screw threads cut thereon, the screw threads on one portion being pitched differently from the screw threads on the other portion, contactors engaging turns of said helical inductance and means interposed between said contactors and the portions of said shaft for driving said contactors through equal angular distances in opposite directions with respect to a common center.

1,894,499. OAR OR CANOE PADDLE. JAMES L. SWAILS, Portland, Oreg., assignor to Bellingham Chain and Forge Company, South Bellingham, Wash. Filed Jan. 16, 1932. Serial No. 587,022. 3 Claims. (Cl. 9—24.)



1. An oar having a blade provided at its tip end with a reinforcing insert which extends through the tip end only of the blade.

1,894,500. FISHING LURE. FLOYD DE C. SWEENEY, Fresno, Calif. Filed July 12, 1932. Serial No. 622,149. 2 Claims. (Cl. 43—46.)

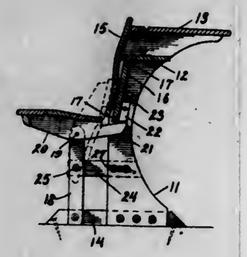


1. A fishing lure comprising a body which, in side elevation, tapers from its forward end toward its rear end, the body, in top plan, being of common width from its forward end to a place about midway between its ends, the body tapering, in top plan, from said place to its rear end, the upper edge of the body being convexed, and the lower edge of the body comprising front and rear straight portions defining an obtuse angle intermediate the ends of the body, there being a transverse shoulder in the lower part of the body, near the forward end of the body, and at the forward end of the said straight front portion, and there being a downwardly inclined surface leading from the shoulder to the forward end of the body and cooperating with the forward end of the body to form a point, the body being provided in its lower surface with a recess, located behind and closely adjacent to the shoulder, and a weight in the recess.

1,894,501. MANUFACTURE OF WOOD PULP. MAURICE C. TAYLOR and JAMES F. WHITE, Niagara Falls, N. Y., assignors to The Mathieson Alkali Works, Inc., New York, N. Y., a Corporation of Virginia. Filed Apr. 17, 1930. Serial No. 445,197. Renewed May 19, 1932. 3 Claims. (Cl. 92—9.)

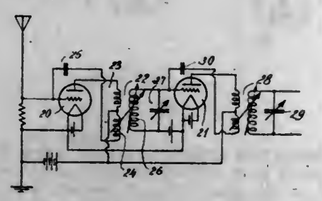
1. In the pulping of wood chips, the improvement which comprises digesting the wood chips with an aqueous solution containing a chlorite of a metal of the group comprising the alkali-metals and the alkaline-earth-metals.

1,894,502. SCHOOL DESK. PLEASANT L. B. TAYLOR, Booneville, Miss. Filed Jan. 28, 1931. Serial No. 511,911. 1 Claim. (Cl. 155—3.)



A desk comprising a base, standards mounted thereon and supporting a seat back, abutment blocks mounted upon the standards, leg members pivoted to the base, a seat pivoted to the leg members and having an extension adapted to engage the abutment blocks and bars pivotally connected with the intermediate portions of the legs, said bars adapted to be adjusted transversely across the standards when the legs are swung upon said base pivots and means for fixing the bars at adjusted position to the standards.

1,894,503. RADIO FREQUENCY AMPLIFIER. LINCOLN WALSH, Elizabeth, N. J., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Sept. 26, 1927, Serial No. 222,009, and in Canada Dec. 14, 1927. 20 Claims. (Cl. 179—171.)



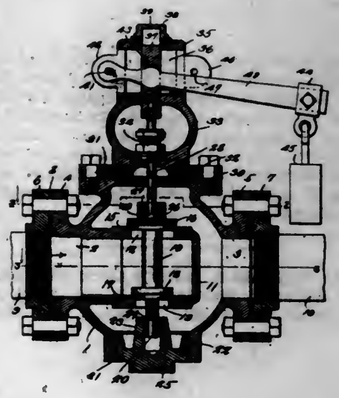
1. In a vacuum tube amplifier, a plurality of vacuum tubes, a tunable coupling means interconnecting the output side of one of said tubes with the input side of another of said tubes, said coupling means comprising a transformer having a primary winding and a secondary winding and a variable tuning condenser, and means operable to vary, simultaneously, the tuning capacity, the secondary self-inductance, the mutual inductance and the ratio of secondary to mutual inductance of said transformer whereby the degree of amplification may be increased as the frequency to which the amplifier is tuned is decreased.

1,894,504. BOTTLE CAP. FRIDOLIN J. WEMPE, St. Marys, Kans. Filed Dec. 31, 1931. Serial No. 584,193. 9 Claims. (Cl. 215—46.)



1. A bottle cap comprising a top, a skirt depending from the top having substantially diametrically opposite openings therein, a tongue having one end integral with the skirt and bendable ears on the tongue engageable in the openings.

1,894,505. VALVE. CLAUDE C. WESTERMAN and GUY L. WESTERMAN, Bremen, Ohio. Filed Apr. 15, 1929. Serial No. 355,192. 1 Claim. (Cl. 137—53.)



The combination with a casing and a valve therein, of a stem extending from and having a swivel connection with the valve, a slotted guide member removably engaging and closing the casing, said stem being extended through and guided by said member, a slide mounted in the guide member and intersecting the slot, said slide being connected to the swiveled stem, ears at opposite ends of the slot in the guide, a lever extending through the slide and slot and pivotally mounted at one end in the ears at one end of the slot, the ears at the other end of the slot being apertured for the reception of lever fastening means, and a weight for controlling the actuation of the lever and slide and holding the valve normally in one position and the lever normally below the fastener receiving apertures.

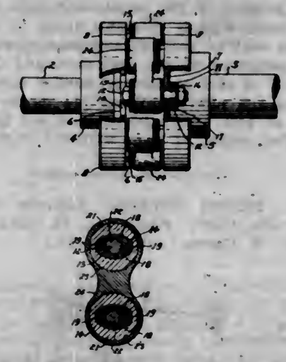
1,894,506. WRAPPING FOR PLANTS. CLARENCE ELLSWORTH WILSON, Manchester, Conn. Filed June 17, 1931. Serial No. 545,115. 1 Claim. (Cl. 206—46.)

A commercial package comprising a housing and at least a plant having live roots and a dormant top, the housing being substantially moisture-proof, moisture absorbing material embracing the roots, the roots and material being embraced by the housing, the dormant top being exposed above the housing, the housing being constricted adjacent the crown of the plant, a waxy material adherent to the dormant top and coating said top, that portion of the package intervening between the housing



and the top being provided with a waxy sealing means preventing escape of moisture from the interior of the housing where constricted.

1,894,507. FLEXIBLE COUPLING. HOWARD D. AINSWORTH, Berkeley, Calif., assignor to F. A. B. Manufacturing Company, Oakland, Calif., a Corporation of Nevada. Filed May 17, 1930. Serial No. 453,118. 9 Claims. (Cl. 64—96.)



1. In a flexible coupling for transmitting power between shafts, the combination of opposed shaft yokes, power transmitting means having a peripheral surface contour of varying curvature secured to said shaft yokes, bushings of cushioning material snugly surrounding said power transmitting means for fixed surface engagement therewith, and coupling links extending between said shaft yokes and having eyes snugly surrounding said bushings for fixed surface engagement therewith, the curvature of said link eyes being uniform and equal to the curvature of the major portion of the surface of said power transmitting means, whereby all relative movement of said shaft yokes is provided for by the flexing of said bushings.

1,894,508. METHOD OF ABSORBING AND RECOVERING VAPORS OF VOLATILE LIQUIDS. HENRI LOUIS BARTHELEMY, Milan, Italy, assignor to Ruth Aldo Company (Inc.), New York, N. Y., a Corporation of New York. Filed July 28, 1927, Serial No. 209,165, and in France Dec. 28, 1926. 9 Claims. (Cl. 252—4.)

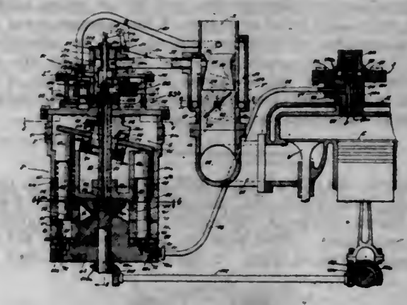
1. A process for recovering a substance in vapor form by absorption of the vapor in a constituent of foam, in which the vapor is brought into contact with a foam including a base liquid and an absorbent for the vapor dispersed by emulsification throughout said liquid.

1,894,509. TOOTHBRUSH. DAVID N. BOOTH, New York, N. Y. Filed Sept. 10, 1931. Serial No. 562,009. 6 Claims. (Cl. 15—201.)



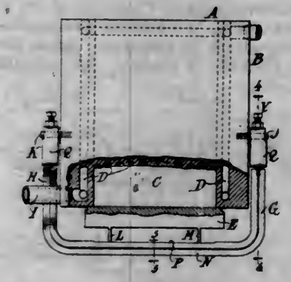
1. A tooth brush comprising a central brush member, a handle pivotally secured to said brush member, additional brush members pivotally connected on opposite ends of the said central brush member, and means connecting said handle and end brush members whereby the respective brushes cooperate to form either a convex or concave brushing surface dependent upon the position in which the handle is set with respect to the central brush member.

1,894,510. FUEL INJECTION SYSTEM. ROY F. ENSIGN, South Pasadena, Calif., assignor to Ensign Carburetor Co., Ltd., Huntington Park, Calif., a Corporation of California. Filed Oct. 10, 1928. Serial No. 311,512. 38 Claims. (Cl. 123—119.)



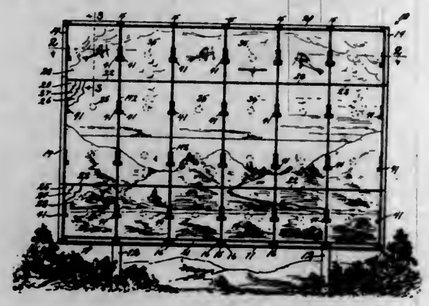
1. The method of supplying fuel to an internal combustion engine, that includes feeding air to the engine in accordance with its varying requirements, metering fuel proportionate to the amount of air being fed to the engine, and introducing such metered fuel to the engine independently of the said feed of air thereto.

1,894,511. MOLD. WILLIAM F. EPPENSTEINER, Woodbridge, N. J., assignor to United States Metals Refining Company, Carteret, N. J., a Corporation of New Jersey. Filed Aug. 8, 1930. Serial No. 473,973. 4 Claims. (Cl. 22—146.)



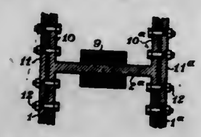
1. A mold having a movable bottom, a bail, and a pair of spring devices, one arranged at each side of the mold, and adapted to resiliently hold the bail in locking position with relation to said bottom.

1,894,512. APPARATUS FOR DISPLAYING ADVERTISING. GUSTAVUS W. ESCHENBACH, Los Angeles, Calif. Filed May 16, 1931. Serial No. 537,903. 8 Claims. (Cl. 40—132.)



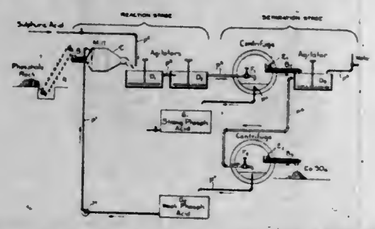
1. An apparatus for displaying advertising including a frame in the form of a billboard having compartments in the front thereof, superposed plates in sets of three each including a back light diffusing plate, an intermediate picture plate and a front transparent plate with each picture plate forming an interchangeable part of a panoramic advertising picture, each set of plates adapted to be removably fitted into any of the compartments and interchangeable with other sets so that an advertising story in a serial can be displayed in series by the substitution of one set of plates for another set of the serial, and means for detachably securing the sets of plates in the compartments of said frame.

1,894,513. RAILWAY CAR RETARDER. LARS O. GRONDAHL, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 11, 1930, Serial No. 481,163. Renewed Dec. 3, 1932. 3 Claims. (Cl. 188—62.)



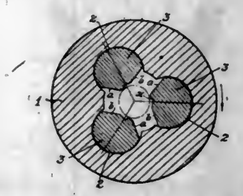
1. A railway car retarder comprising a magnetizable member extending along the inner side of the web of each track rail, a magnetizable bar connecting an intermediate point in one of said members with an intermediate point in the other, and an energizing winding on said bar.

1,894,514. PHOSPHORIC ACID MANUFACTURE. INGENUIN HECHENBLEIKNER, Charlotte, N. C., assignor, by mesne assignments, to Chemical Construction Corporation, a Corporation of Delaware. Filed Oct. 4, 1929. Serial No. 397,192. 7 Claims. (Cl. 23—165.)



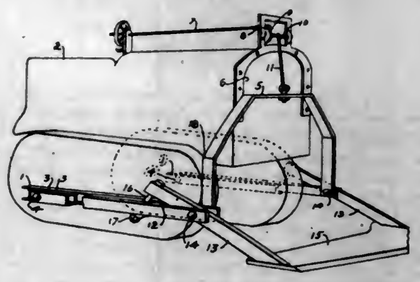
1. In the process of making phosphoric acid, the steps of reacting calcium phosphate with sulphuric acid and producing calcium sulphate crystals in phosphoric acid, and in then separating the calcium sulphate crystals from the phosphoric acid by rotating the mixture at high speed for centrifugal action, the crystals being thrown outwardly against an imperforate wall, and the liquid being withdrawn relatively nearer the center of rotation than the crystals.

1,894,515. CHUCK. MINOTT P. HUBBELL, Ashburnham, Mass. Filed Aug. 25, 1931. Serial No. 559,192. 9 Claims. (Cl. 279—61.)



1. A chuck having a body with axially inclined circular jaw recesses, jaws circular in plan projection having work-piece-engaging edge portions, said jaws being movable longitudinally in the jaw recesses for advancement and retraction and a nut control for said jaws the work-piece-engaging edge portion of at least one of the jaws being, in cross-section, a segment of an arc terminating on the side facing the advancing face of the jaw in a sharp corner representative of a line parallel to the longitudinal axis of the chuck, said jaw being slightly rotatable about its axis whereby said arc is adapted first to come into tangential contact with the periphery of the work-piece and then upon intensification of said contact by further actuation of the nut control and rotation of said jaw on its own axis, to move out of such tangential position and into a position where a line contact is made with the work-piece.

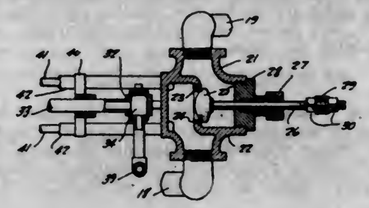
1,894,516. BRUSH CUTTER. LORANCE C. KARSTEDT, Watsonville, Calif. Filed Nov. 13, 1931. Serial No. 574,847. 2 Claims. (Cl. 97—47.)



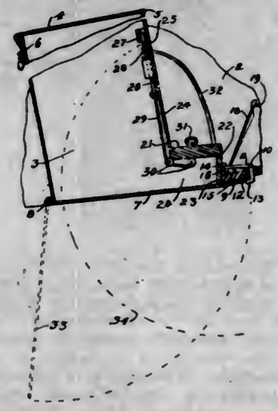
1. The combination of a tractor and a brush cutter mounted thereon forwardly thereof and disposed in a substantially horizontal plane, and means extending across the face of the tractor and thence downwardly to points adjacent the tractor tracks and rearwardly of the cutter and adapted to throw the cut material beneath the tractor.

1,894,517. WATER FEED REGULATOR. JAMES C. KUTZNER, South Pasadena, Calif., assignor to Monarch Investment Company Limited (a trust estate), Los Angeles, Calif. Filed Jan. 8, 1929. Serial No. 331,025. 3 Claims. (Cl. 122—451.1.)

1. In a water feed regulator for steam boilers, means arranged to be operated in response to a definite water level variation in the boiler, and a valve controlling the admission of water to the boiler, and actuated by said means, said valve being provided with a closure member of the door knob type, in which all the active surfaces thereof are smooth and curved.

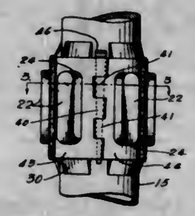


1,894,518. AEROPLANE. DOMINICK A. LUCCHESE, San Francisco, Calif. Filed May 12, 1932. Serial No. 610,862. 3 Claims. (Cl. 244—21.)



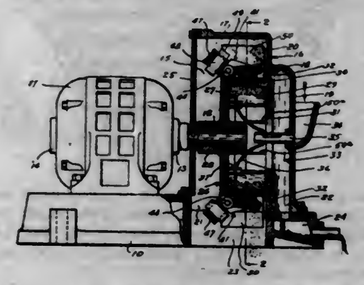
1. In combination, an aeroplane fuselage having a compartment formed therein and provided with a discharge opening in the bottom of the fuselage, a closure for the opening, a seat structure pivotally mounted at one edge of said opening and releasable means for securing the same in position, the seat structure being disposed to swing backwardly and downwardly through said compartment opening when released.

1,894,519. DRILL PIPE PROTECTOR. WILLIAM L. MCLAINE, Los Angeles, Calif., assignor of one-third to Richard A. Sperry, Los Angeles, Calif., and one-third to E. M. Smith Company, Los Angeles, Calif., a Corporation of California. Filed Apr. 28, 1930. Serial No. 447,911. 18 Claims. (Cl. 308—4.)



16. In a drill pipe protector the combination of: a plurality of wear members adapted for placement on a drill pipe; separate means adapted to engage said wear members for clamping same to said drill pipe; and holding means for holding said wear members in predetermined positions on said drill pipe.

1,894,520. APPARATUS FOR SEPARATION. FRANCISCO A. QUIMOZ, Brooklyn, N. Y. Filed May 31, 1929. Serial No. 367,406. 15 Claims. (Cl. 233—20.)



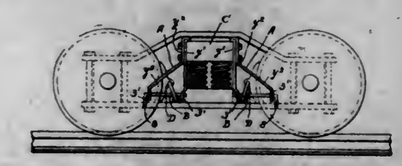
1. In apparatus of the character described, in combination, a rotatably mounted container, means for driving said container, a plurality of discharge openings spaced apart about the periphery of said container, a plurality of valves for closing said openings, each mounted upon said container exteriorly thereof in operative relation to its respective opening, and a plurality of baffles provided upon the inner peripheral surface of said container and positioned to form a pocket adjacent each discharge opening.

1,894,521. FASTENER SOCKET. DANIEL I. REITER, New York, N. Y. Filed June 29, 1932. Serial No. 619,893. 14 Claims. (Cl. 24—220.)



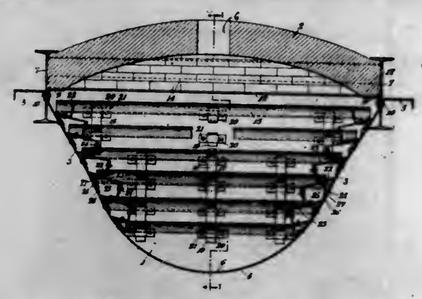
1. In a fastener socket, a one-piece sheet metal anvil member having a cap portion and an integral anvil portion forming one face thereof, and having an integral rim portion opposed to the cap portion forming the other face thereof and surrounding an opening, said rim portion being bent from the cap portion to provide an annular space between the cap portion and the rim portion for the reception of a socket member, and said rim portion having a plurality of slits therein, and a plurality of upstanding prongs integral with and bent from the material between the slits of said rim portion and arranged in outwardly spaced relation to the opening.

1,894,522. SAFETY LOOP FOR BRAKE BEAMS. MICHAEL RUSSIAN, Binghamton, N. Y. Filed Mar. 12, 1929. Serial No. 346,407. 5 Claims. (Cl. 188—210.)



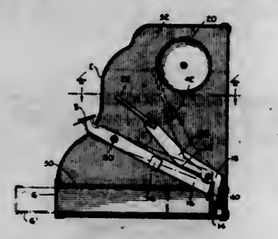
3. A loop support for brake beams and the like comprising a frame open at its bottom, means for securing the frame to a car truck, and a rod inserted in the frame to close the bottom opening, said rod being automatically locked by gravity, in its operative position.

1,894,523. CONTAINER FOR HOT COMMINUTED MATERIAL. JOHN MOORE SAMUEL, Douglas, Ariz.. Filed Nov. 7, 1931. Serial No. 573,710. 9 Claims. (Cl. 266—1.)



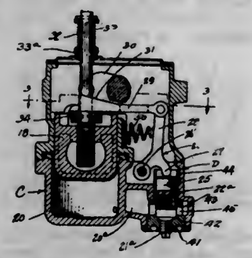
1. In a container for particles of hot solid material, means along walls of said container to catch particles of said material as they pass downwardly and maintain them in proximity to said walls, said means comprising shelves parallel to said walls.

1,894,524. TOY CASH REGISTER. ANTHONY N. SMITH, Girard, Pa., assignor to The Girard Model Works Inc., Girard, Pa., a Corporation of Pennsylvania. Filed June 4, 1929. Serial No. 368,351. 13 Claims. (Cl. 235—22.)



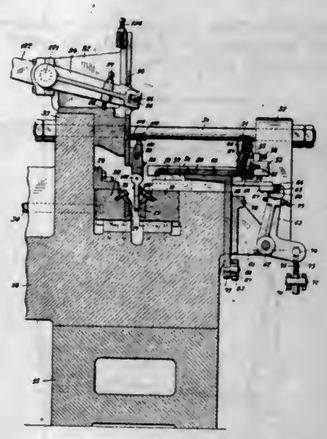
1. A toy cash register comprising a cash drawer, resilient means tending to open said drawer, a key controlled detent lever engaging the drawer in order to lock it in closed position, a signal bell, a bell striker arm, a bell striker loosely carried thereby, a stop for said arm, a lug on said arm arranged in the path of the detent lever when the key is depressed in order to move the arm against the stop and cause the striker to ring the bell by inertia when the drawer is opened.

1,894,525. BRAKE. JOHN W. TATTER, Chicago, Ill., assignor to Lewis Differential Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1929. Serial No. 405,467. 13 Claims. (Cl. 60—54.6.)



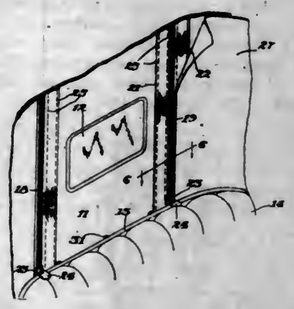
1. In a device of the character described, the combination with a brake device of means for actuating said brake device and comprising a closed liquid system of substantially constant volume and including a master cylinder, a piston adjustable in the master cylinder to vary the volume of the liquid system, means for actuating the piston for placing the liquid in the system under pressure, and means responsive to temperature changes for adjusting the piston.

1,894,526. HEADER MECHANISM. RICHARD LESTER WILCOX, Waterbury, Conn., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 20, 1927. Serial No. 200,085. 30 Claims. (Cl. 24—34.)



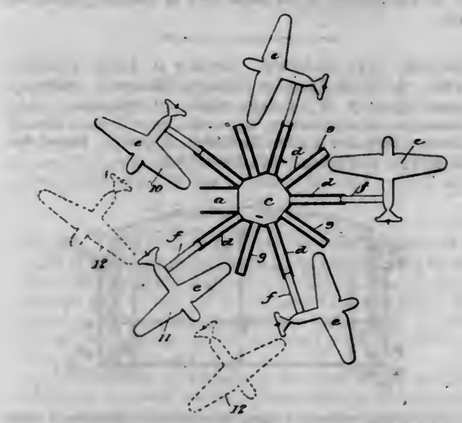
1. Mechanism of the character described, having as a part thereof means to cut stock into workpieces of predetermined lengths; means, located in a different horizontal plane than the cut-off mechanism, for upsetting the workpieces; automatic means for transferring the workpieces from the cut-off mechanism to a point adjacent the upsetting mechanism in a substantially right angular path from the cutting means to the upsetting means and the workpieces during the transfer being spaced from and substantially parallel to each other and means for lifting the work piece from the transferring mechanism and depositing the same into the upsetting mechanism.

1,894,527. VEHICLE CURTAIN. CHARLES RUSSELL YENGST, Meadville, Pa., assignor to Hookless Fastener Company, a Corporation of Pennsylvania. Filed Mar. 18, 1930. Serial No. 436,792. 3 Claims. (Cl. 296—138.)



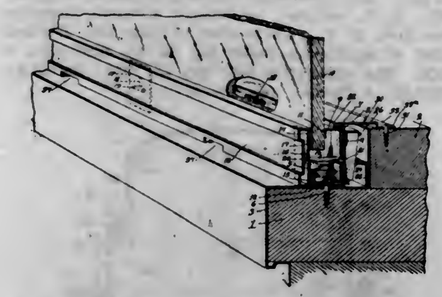
1. In a vehicle top having an opening, a curtain for closing the opening, said top having a rigid frame member extending across the top of said opening, means for attaching said curtain to said frame member, and a pair of slide fasteners along the vertical edges of said curtain for attaching the opposite sides of the curtain to said top, said fasteners extending continuously from the bottom of said curtain to retain said curtain under tension in all portions and terminating at a point spaced a substantial distance from the frame member, said curtain adapted to be folded upwardly when not in use.

1,894,528. BUILDING CONSTRUCTION. ARCHIE C. ZIMMERMAN, Los Angeles, Calif. Filed Aug. 23, 1929. Serial No. 387,886. 6 Claims. (Cl. 189—1.5.)



1. In aircraft station construction, a central concourse portion, provided with entrance means comprising a depressed, covered passage-way leading thereto and a plurality of radially arranged tunnels extending therefrom.

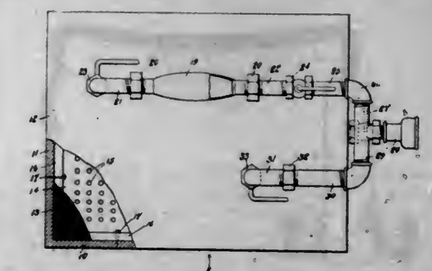
1,894,529. SASH CONSTRUCTION. PER A. H. ANDERSON, Chicago, Ill. Filed Feb. 20, 1931. Serial No. 517,214. 11 Claims. (Cl. 20—56.4.)



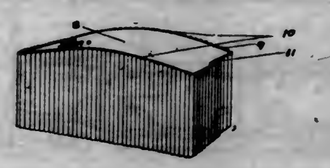
1. A sash construction comprising an inner sash member to be secured to a sill, an outer sash member, said members being arranged to clamp a plate of glass therebetween, and connecting means including a cam operable to engage the back of said inner molding for frictionally securing said members in clamping relation.

1,894,530. MARKING MACHINE. LEONARDO BERNARDO, Philadelphia, Pa. Filed Nov. 24, 1931. Serial No. 576,967. 6 Claims. (Cl. 101—114.)

5. A marking machine comprising a housing having a foraminous wall, a perforated distributor spaced away from the foraminous wall, a powder container, a conduit leading from the powder container into the housing and communicating therewith at the side of the distributor opposite the foraminous sheet, an air line communicating with the powder container in opposition to the conduit, an air by-pass communicating directly with the housing, and manual valves located in the air line.

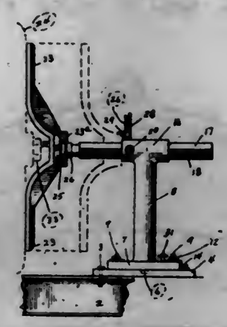


1,894,531. FRUIT BOX LINER. CARL G. BRUNTSCH, Portland, Oreg., assignor to Schmidt Lithograph Company, San Francisco, Calif., a Corporation of California. Filed Mar. 7, 1930. Serial No. 433,979. 3 Claims. (Cl. 217—3.)



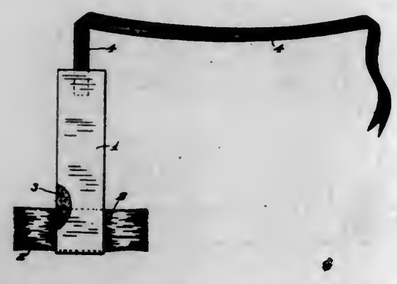
3. A lining for a rectangular fruit box, comprising a sheet of paper material adapted to lie against the inner side wall of the box and arched outwardly beyond the edge of said wall in a manner so as to substantially conform to the arch of the bulged cover of the box when packed.

1,894,532. WHEEL ALIGNING DEVICE. JOHN C. CRAGMILE, Oakland, Calif. Filed Aug. 6, 1929. Serial No. 383,850. 7 Claims. (Cl. 32—203.)



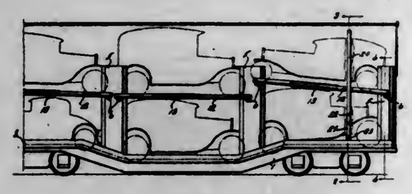
6. An apparatus for testing automobile wheels comprising a standard arranged vertically, a horizontal shaft journalled in the standard for rotatable and reciprocable movement with respect thereto, means for maintaining the shaft stationary relative to the standard, and an arm carried at one end of said shaft and arranged at right angles to the axis thereof for engagement with an automobile wheel at diametrically opposed points thereon.

1,894,533. BOOKMARK. WILLIAM T. DEMPSEY, Philadelphia, Pa. Filed Mar. 31, 1932. Serial No. 602,181. 5 Claims. (Cl. 116—19.)



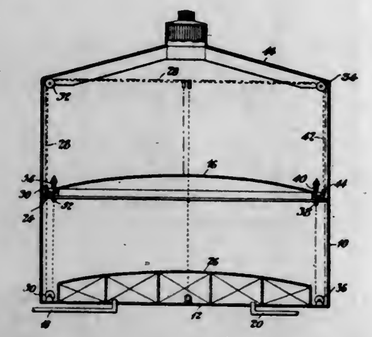
1. A detachable bookmark comprising a finder and a setaceous retainer.

1,894,534. AUTOMOBILE RAILWAY CAR. DAVID J. DOLAN, Cleveland Heights, Ohio. Filed Oct. 9, 1931. Serial No. 567,861. 8 Claims. (Cl. 105—368.)



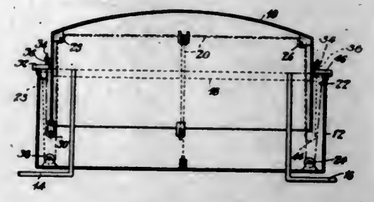
1. In a railroad car for transporting vehicles, a body mounted upon a pair of spaced trucks, said body including a pair of vehicle ways one above the other, the lower way having a portion intermediate said trucks lower than its end portions, the upper way being arranged for adjustment to various elevations.

1,894,535. GAS HOLDER. WILBUR G. LAIRD, Pleasantville, N. Y., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 24, 1930. Serial No. 504,472. 8 Claims. (Cl. 48—176.)



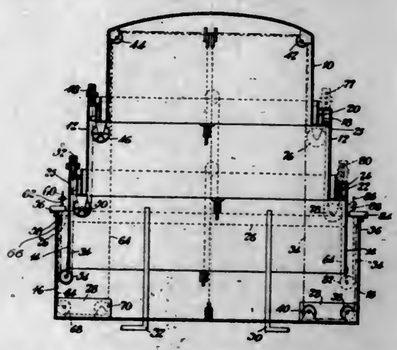
1. A waterless gas holder comprising a gas-tight shell having a bottom therein, a piston closure vertically movable within the shell, means adapted to maintain a seal between the edge of the piston and the wall of the shell, a series of pairs of guide cables arranged at intervals around the periphery of the piston, said cables passing over guides within said shell and arranged to constrain the movement of the piston to a predetermined and fixed vertical path, one cable of each pair extending from the periphery of the piston upwardly along the wall to the top of the shell, then across to the diametrically opposite side of the shell immediately under its top, then downwardly along the shell wall and through the piston to a point adjacent the bottom of the shell, and then upwardly and attached to the piston at a point adjacent where it passes therethrough, the other cable of the pair being arranged within the shell and attached to the piston in the reverse order from that of the first described cable.

1,894,536. GAS HOLDER. WILBUR G. LAIRD, Pleasantville, N. Y., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Continuation of application Serial No. 93,113, filed Mar. 8, 1926. This application filed Feb. 6, 1931. Serial No. 513,871. 11 Claims. (Cl. 48—176.)



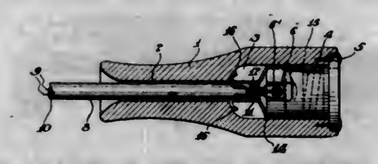
1. In a gas holder, a tank arranged to provide a body of sealing liquid, a closed bell movably mounted in the tank with its wall arranged to move adjacent the wall of the tank in the sealing liquid so as to trap gas within the bell above the sealing liquid, means to introduce gas into and remove gas from said bell and flexible cables secured to the tank and movably mounted wholly within said tank and bell for supporting and guiding said bell in its upward and downward movement in the tank.

1,894,537. GAS HOLDER. WILBUR G. LAIRD, Pleasantville, N. Y., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Continuation of application Serial No. 93,114, filed Mar. 8, 1926. This application filed May 25, 1931. Serial No. 539,740. 8 Claims. (Cl. 48—177.)



1. In a gas holder, a tank, a plurality of lifts independently movable over the tank, and a guide means for the lifts comprising, cables mounted entirely within the tank and lifts, with their ends attached to the tank at opposite sides thereof, said cables connecting all of the lifts together.

1,894,538. TERMINAL CONNECTIONS FOR LAMP GUARD SOCKETS OR THE LIKE. HENRY G. LEWIS, Philadelphia, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 13, 1927. Serial No. 205,381. 6 Claims. (Cl. 173—322.)

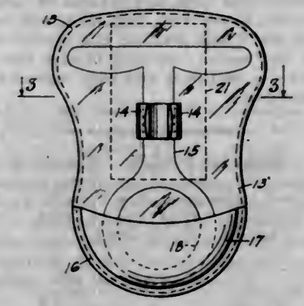


1. The combination with a holder containing a socket, a terminal carrying shell disposed in said socket and provided with terminals, and a cord having conductors connected with said terminals, of a screw clamp connected with said cord and bearing against a wall of said socket, said clamp having a yoke telescoped on said shell.

1,894,539. COMPOSITION FOR DISINFECTING AND BLEACHING AND METHOD OF MAKING THE SAME. HANS MIRAU, Radebeul, Germany, assignor to Chemische Fabrik Von Heyden, A. G., Radebeul near Dresden, Germany, a Corporation of Germany. Filed May 18, 1931, Serial No. 538,249, and in Germany June 23, 1930. 10 Claims. (Cl. 8—2.)

1. The method of preparing dry and stable mixtures containing aromatic sulfodihalogen amides for disinfecting, bleaching and the like processes, from aromatic sulfodihalogen-amides, said process consisting in adding to an aromatic sulfodihalogen amide a dry alkali metal hydroxide and embodying into the mixture of aforesaid substances a water soluble salt inert to the other ingredients and to the articles to be treated with the solution of the compositions.

1,894,540. HANDCUFF HOLSTER. AUGUST D. PEIRCE, Oakland, Calif. Filed Dec. 29, 1930. Serial No. 505,317. 8 Claims. (Cl. 224—2.)



1. A handcuff holster, in combination with a handcuff, a semi-rigid shield, a shallow sheath disposed at the lower end of the shield and adapted to receive the lower portion of the handcuff to permit swinging the upper portion thereof away from the shield, a pair of opposed arcuately formed spring clips adjacent the upper end of the shield for gripping the rigid stock of the handcuff and adapted to permit removal of the handcuff by drawing the handcuff outwardly from the shield and belt attaching means for said shield.

1,894,541. ELASTIC SUPPORTER AND CLASP. JULIAN F. PINTO, Sacramento, Calif., assignor of one-half to W. B. Jenkins, Sacramento, Calif. Filed Apr. 12, 1932. Serial No. 604,809. 7 Claims. (Cl. 24—251.)



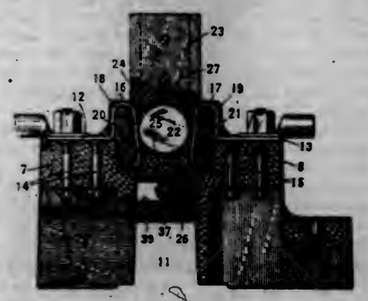
1. In an elastic supporter and clasp, a clasp comprising a base plate, a cover hinged thereto, a slide arm carried by the base plate and a hook on one end of the slide arm engageable with the cover to retain the same in closed position, and said cover having a depression therein to receive the hook with the latter lying in the same plane as the cover.

1,894,542. DIVIDING ATTACHMENT FOR MOWING MACHINES. JOHN ANDREW RIVINGTON, Carp, Ontario, Canada. Filed Aug. 5, 1932. Serial No. 627,613. 12 Claims. (Cl. 56—318.)



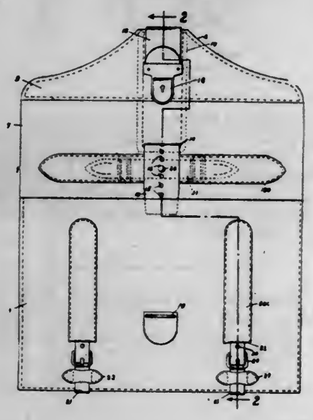
1. An attachment for mowing machines, comprising, in combination with the divider board, a pivotally mounted unitary bracket, a tucker arm and a divider arm mounted on said bracket and projecting rearwardly of the divider board, means for horizontally adjusting said arms relatively to one another, and means for vertically adjusting said arms.

1,894,543. ELECTRIC SWITCH. RAYMOND N. BOWE, Plainville, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Sept. 15, 1931. Serial No. 562,927. 6 Claims. (Cl. 200—163.)



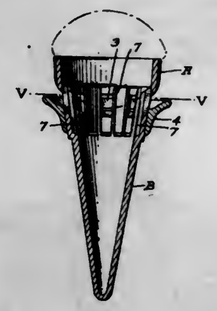
6. In an electric switch an insulating base having a passage extending therein substantially at right angles to the plane of the base, stationary contacts carried by the base on opposite sides of said passage, an insulating plunger slidable in said passage and composed of slide plates and an insulating barrier adapted to be interposed between said contacts, and a switch contact roller loosely carried by said plunger between said side plates.

1,894,544. BRIEF CASE. CHARLES SCHELL, Cincinnati, Ohio, assignor to Schell Leather Goods Company, Cincinnati, Ohio, a Firm composed of Charles Schell and Albert M. Schell. Filed Feb. 17, 1930. Serial No. 428,960. 6 Claims. (Cl. 150—1.6.)



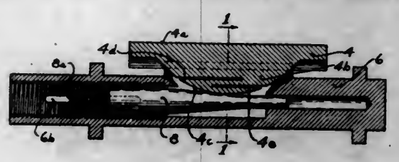
1. A brief case comprising a flap or cover, said flap having a strap attached thereto and slidable vertically thereof, one end of the strap projecting outwardly of the edge of the flap and adapted to have secured thereto a suitable lock element, the other end of the strap projecting inwardly of the case through a perforation in the flap, and means associated with said inwardly-projecting end for securing the strap in adjusted positions relative to the flap.

1,894,545. ICE CREAM CONE. JOSEPH SCHOENFELD, San Francisco, Calif. Filed Mar. 16, 1931. Serial No. 522,925. 2 Claims. (Cl. 99—10.)



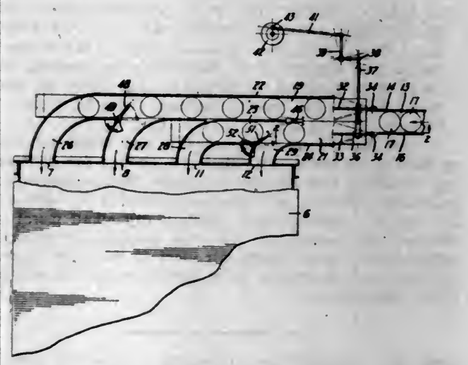
1. An edible ice cream container comprising a hollow conical member having an open ended upper section to receive and support a mass of ice cream, a conical lower section formed integrally with the upper section, the exterior diameter of the lower section being the same as the interior diameter of the upper section at the point of junction therebetween, said lower section being formed with openings through its side immediately below the lower end of the upper section, and an annular flange on the lower section circumscribing the same immediately below the openings to receive drippings and direct them through said openings.

1,894,546. VALVE. NAPOLEON B. SIMPSON, San Francisco, Calif., assignor to Simpson Motor Corporation, San Francisco, Calif., a Corporation of California. Filed Oct. 26, 1929, Serial No. 402,684. Renewed July 5, 1932. 12 Claims. (Cl. 123—81.)



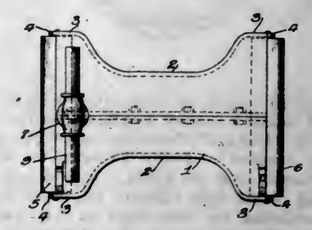
1. In combination, a valve seat, an oscillating valve, bearing means for resisting motion of the valve from said seat, and positive adjusting means between said valve and bearing for adjusting said valve toward said seat.

1,894,547. CAN FEEDER. JOHN T. TUCKER, Berkeley, Calif., assignor to Marcus Lothrop, Berkeley, Calif. Filed Aug. 8, 1931. Serial No. 556,019. 2 Claims. (Cl. 198—31.)



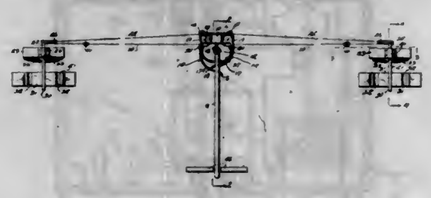
1. A can feeder comprising a pair of walls defining a channel, a plurality of abutments defining a plurality of paths, a conveyor underlying said channel and said paths for propelling article from said channel to said paths, a pair of parallel guides each pivoted at one end to the extremity of one of said walls, a link pivoted to both of said guides, and means connected to said link for moving said guides so that their free ends register alternately with said abutments.

1,894,548. LINOLEUM ROLLER. WILLIAM E. WHITNEY, Philadelphia, Pa., assignor, by mesne assignments, to Sloane-Blabon Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 4, 1928. Serial No. 323,658. 3 Claims. (Cl. 94—50.)



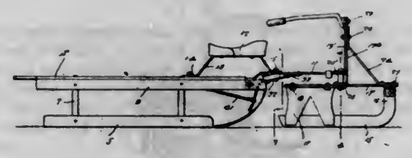
1. A device of the character described comprising a foot rest containing a plurality of sockets disposed transversely to each other and at opposite ends of the foot rest a handle adapted for engagement in either of said sockets, and rollers journalled relatively to said foot rest at the ends thereof.

1,894,549. GATE OPERATING DEVICE. BERTHA B. AKERS, Chadron, Nebr. Filed June 4, 1931. Serial No. 542,120. 1 Claim. (Cl. 39—55.)



An automatic gate opener and closer comprising a support, a gate, means for mounting the gate on the support for vertical and horizontal movement, a lever pivoted to the support, a curved cam member formed with the lever and extending beneath the gate, a spring engaging the lever to normally hold the cam depressed, a fixed cam carried by the support, remotely disposed means engaging the lever to raise the curved cam member and coactively raise the gate for opening thereof, latch means engaging the lever to hold the first cam upraised and the gate open, and remotely positioned latch operating means, said lever upon release from said latch discharging the gate onto the fixed cam, said fixed cam being so positioned as to swing the gate into closed position simultaneous with the downward movement thereof.

1,894,550. COASTING SLED. JOSEPH A. BARTLEY, Charleston, W. Va., assignor of one-half to W. M. Thomas. Filed Apr. 4, 1930, Serial No. 441,634. Renewed June 14, 1932. 2 Claims. (Cl. 280—16.)



2. A coasting sled comprising in combination a runner supported platform, a steering runner, a horizontal bar supported on said steering runner, a tongue projecting forwardly from said platform in a plane above said horizontal bar, a pivot bolt extending through said tongue and said horizontal bar, a spacer sleeve about said bolt between said tongue and horizontal bar, and a brake device pivotally supported on said tongue and swingable on an axis transverse to said tongue between adjacent ends of said platform and steering runner.

1,894,551. HEAT TREATMENT OF STEEL RAILS. JOHN BRUNNER, Chicago, Ill. Original application filed Oct. 22, 1931. Serial No. 570,496. Divided and this application filed June 11, 1932. Serial No. 616,761. 13 Claims. (Cl. 148—12.)

1. The method of heat treating steel rails to increase the surface hardness thereof and especially on the head at and near its ends, which comprises heating the rail to temperatures approximating but above the thermal critical range, quenching the head of the rail at and near its ends until the surface temperatures of the head at and near its ends approximate but are not less than 200° C., then quenching the entire rail until the surface temperatures thereof between the pre-quenched ends approximate but are not less than 250° C., reheating the rail to tempratures higher than the quenching temperatures but below the thermal critical temperatures and thereafter slowly cooling to atmospheric temperatures.

1,894,552. FASTENING DEVICE FOR AUTO LICENSE TAGS OR THE LIKE. GEORGE R. CRUZE, Danville, Pa. Filed May 12, 1932. Serial No. 610,958. 4 Claims. (Cl. 40—125.)



1. A device for holding auto license tags comprising a pair of hook members adapted to engage distal apertures in the tag adjacent the lower corners thereof, a third hook member for fitting over the upper medial portion of the tag, and a tensioning spring connecting said three hook members, as and for the purpose set forth.

1,894,553. SAFETY RAZOR. CHRISTO DIMITROFF DUDEW, Sofia, Bulgaria. Filed Jan. 25, 1930, Serial No. 424,038, and in Bulgaria Feb. 18, 1929. 2 Claims. (Cl. 30—12.)

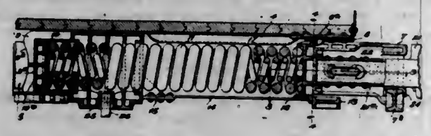


1. A safety razor equipment comprising a lower supporting plate for a razor blade having an upper surface to which the blade may be clamped, said supporting plate having downwardly extending arms, a trough having a perforated bottom and an upwardly extended side portion against the upper side portions of which the ends of said arms rest and a row of prongs extending above the trough from where said arms and trough meet and at an angle to said arms to leave an open space between said row of prongs and the side of said holding plate, a razor blade and means to clamp it to said holding plate and when so clamped to the holding plate said blade will extend into said open space but terminate short of the plane of the row of prongs to leave said space open from end to end of the holding plate and allow free movement of the lather downwardly into the trough except for the obstruction caused by said downwardly extending arms.

1,894,554. CAR CONSTRUCTION. OTHO C. DURYEA, Waterbury, Conn., assignor to O. C. Duryea Corporation, Wilmington, Del., a Corporation of Delaware. Filed Mar. 1, 1926, Serial No. 91,618. Renewed Mar. 25, 1932. 39 Claims. (Cl. 213—8.)

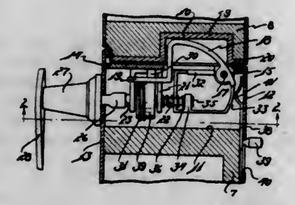
10. In a car structure comprising a bolster having an opening therethrough, a long travel center member extending substantially the length of the car structure and mounted for movement relative to said bolster, resilient

means extending through said opening and adapted to yieldingly resist relative movement of said center member, and means operatively secured to said bolster for holding



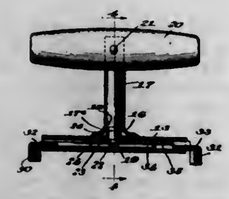
said resilient means against movement in one direction when the center member moves, relative to the bolster, from normal position.

1,894,555. LATCH MECHANISM. EDWARD C. DYAL, Lincoln Park, Mich. Filed Apr. 16, 1931. Serial No. 530,546. 3 Claims. (Cl. 292—224.)



1. A latch mechanism of the class described, comprising: a swingable latch member; a rotatable member for swinging said latch member to inoperative position; an axially movable shaft supporting and rotating said rotating member; a rotating handle for rotating said shaft; and resilient means for disengaging said shaft from said handle.

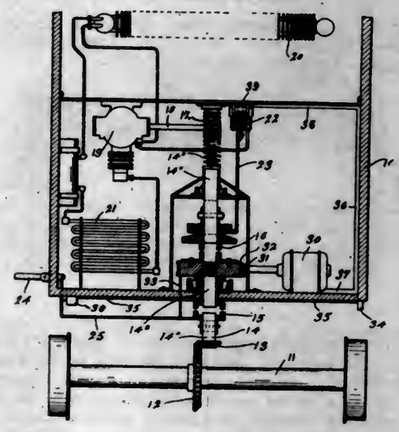
1,894,556. DEVICE FOR REMOVING SCREW TOPS. HENRY J. EDLUND, Burlington, Vt. Filed Mar. 18, 1932. Serial No. 599,805. 4 Claims. (Cl. 81—31.)



1. A top removing device comprising a base member provided with guides, a shaft rotatably mounted at one end in the base member, means for rotating said shaft, a tooth wheel secured to the inner end of the shaft, U-shaped members provided with top-gripping jaws slidably mounted in the guides, one arm of each U-shaped member having teeth meshing with the teeth of the wheel, the toothed arms being located upon opposite sides of the wheel, so that the U-shaped members will be moved towards or away from each other when the wheel is rotated.

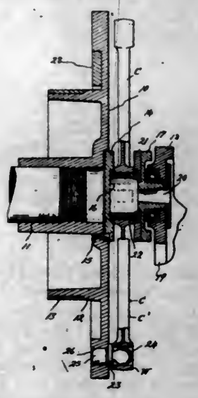
1,894,557. REFRIGERATING APPARATUS. GEORGE H. FASSETT, Ashtabula, Ohio. Filed Apr. 30, 1931. Serial No. 534,013. 4 Claims. (Cl. 62—117.)

1. In a vehicle, in combination, a refrigerating compartment, cooling mechanism therefor, an operative connection between a rotating shaft of said vehicle and said cooling mechanism, means for disengaging said connection, secondary driving means for said cooling means, means



for disengaging said secondary driving means, and connections between both of said disengaging means permitting connection of only one at a time.

1,894,558. METHOD OF BABBITTING DOUBLE CONNECTING RODS. WILLIAM J. FIEGEL, Detroit, Mich., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 28, 1930. Serial No. 456,710. 8 Claims. (Cl. 29—156.5.)

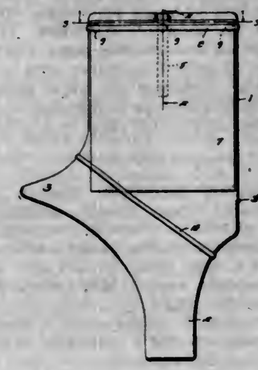


1. In the method of babbitting connecting rods, those steps which consist in forming a double connecting rod with the main bearing ends of the individual rods united, balancing the rod by rotating the same about the center of the recess formed by the main bearing ends, and simultaneously babbitting the two main bearing ends.

1,894,559. BODY FITTING WRITING BOARD. LEO H. FISHER, Huntingburg, Ind. Filed Apr. 6, 1929. Serial No. 353,141. 1 Claim. (Cl. 45—59.)

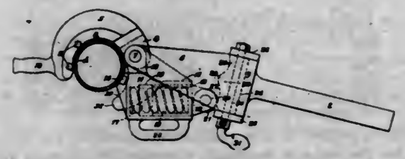
A body fitting writing board comprising a flat elongated body portion provided at its base with a reduced arm and wrist support at one side with a lateral triangular

extension, whose inner side edge is curved to conform to the abdominal front and side of the body, a rubber band provided with thickened portions stretched around the top of the board, a second band stretched diagonally



across the base of the board and a leg support pivoted to the back of the writing board, said bands serving to hold the sheets of writing paper firmly on the face of the board.

1,894,560. AUTOMATIC RELEASING TONG. EDGAR E. GREVE, Bellevue, Pa., assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Sept. 2, 1927. Serial No. 217,097. 11 Claims. (Cl. 81—53.)



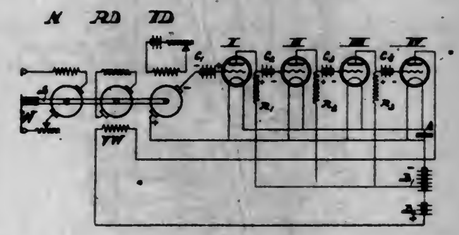
1. A self-releasing pipe tong including a handle, a jaw-member pivotally mounted on the handle, a second spring actuated jaw-member also pivotally mounted on the handle and having a spring receiving chamber, a spring and a movable member in said chamber, and a cam carried by the handle and cooperating with the movable member and spring.

1,894,561. SANDAL. GAETANO GUIFFRE, Washington, D. C. Filed Oct. 14, 1931. Serial No. 568,803. 1 Claim. (Cl. 36—11.5.)



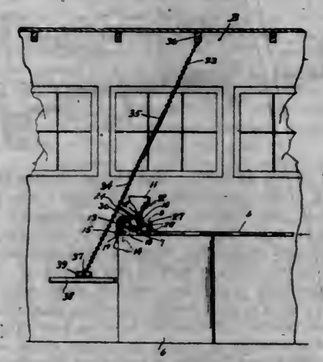
A sandal comprising a sole portion, a heel portion extending upwardly from the rear edge of the sole portion, ankle encircling strap portions formed integrally with and extending forwardly from the upper end of the heel portion, means connecting the free ends of the strap portions together, other heel portions spaced forwardly from said first heel portion and extending upwardly from the side edges of the sole portion, said other heel portions being provided at their upper ends with slits through which the strap portions pass, a toe portion extending upwardly and rearwardly from the front edge of the sole portion, a strap portion extending rearwardly and upwardly from the toe portion and provided at its upper end with slits through which one of said first named strap portions passes, and other toe portions spaced rearwardly from said first named toe portion and extending upwardly and inwardly from the side edges of the sole portion with their inner ends arranged in overlapping relation, said overlapping ends having slits through which passes the strap portion carried by said first named toe portion, the heel and toe portions being formed integrally with the sole portion.

1,894,562. INSTALLATION FOR THE REGULATION OF THE ANGULAR VELOCITY OF A SHAFT. MARINUS JACOBUS JANSEN, ROELOF VERMEULEN, and NICOLAAS ANTHONY JOHANNES VOORHOEVE, Eindhoven, Netherlands, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands, a Limited Liability Company of the Netherlands. Filed Jan. 31, 1930, Serial No. 425,052, and in the Netherlands Mar. 9, 1929. 5 Claims. (Cl. 171—312.)



1. An installation for regulating the angular velocity of a shaft, comprising a direct current generator, a second generator which acts as a brake dynamo, both generators being mechanically coupled to the said shaft, and an amplifier having an input and an output circuit, the first generator being connected to the input circuit of the said amplifier, and the field winding of the second generator being connected to the output circuit of the said amplifier.

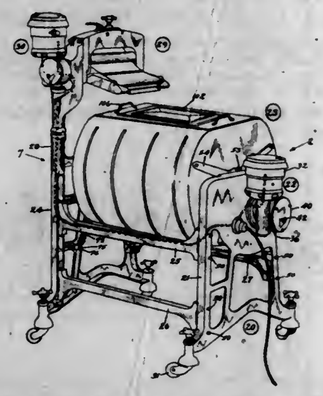
1,894,563. SANITARY AUTOMATIC POULTRY FOUNTAIN. FRANK E. JONES, Santa Ana, Calif. Filed Feb. 25, 1931. Serial No. 518,250. 3 Claims. (Cl. 119—76.)



1. A drinking fountain comprising in combination an overflow trough, a drinking bowl disposed above said trough, a supply valve connected with said drinking bowl, and including a core provided with a stem, an operating bar operatively engaged with said stem, a member provided with a clamp engaging the wall of said overflow trough,

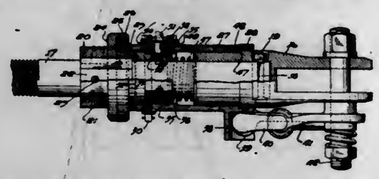
said member and said operating bar provided with co-operating means for limiting movement of said bar when the latter is actuated for moving the valve core to a valve opening or closing position, said means including a stop adjustable on said bar, and engageable with said member, and a second stop on said member remote from the first mentioned stop and to be engaged by said bar when the first mentioned stop is moved out of engagement with with said member.

1,894,564. DOMESTIC APPLIANCE. RALPH L. LEE, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 31, 1923, Serial No. 629,201. Renewed Nov. 6, 1930. 8 Claims. (Cl. 68—21.)



1. Washing apparatus comprising in combination, a tub adapted to have a to-and-fro motion; a reversible electrical driving means for operating the tub; and means for automatically reversing the direction of the current through the driving means before the latter completes its movement whereby the driving means exerts force tending to reverse the tub, thereby quickly overcoming the momentum of the tub.

1,894,565. AUTOMATIC SLACK ADJUSTER. HENRY A. LEONHAUSER, Baltimore, Md. Filed Apr. 8, 1930. Serial No. 442,610. 9 Claims. (Cl. 188—202.)



1. In a slack adjuster, brake-lever connecting means comprising heads connected to said brake levers and an intermediate rod having threaded engagement with one of said heads and rotatable engagement with the other of said heads, and means for rotating said intermediate rod in one direction upon excessive movement of the brake levers comprising a ratchet member rigid with said intermediate rod, a second ratchet member rotatable relative to said rod, resilient means for holding said ratchet members in engagement, a sleeve rotatable upon said rigid ratchet member and having a guideway therein receiving said second ratchet member and adapted to transmit rotary motion thereto, said rigid ratchet member having a non-circular portion outside said sleeve to facilitate adjustment by hand, means operable by motion of one of the brake levers for oscillating said sleeve, and means for disengaging said ratchet members.

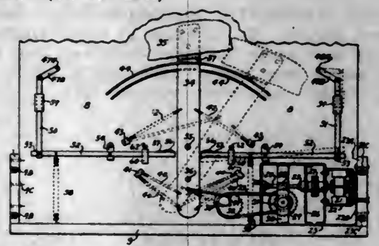
1,894,566. METHOD OF WATERPROOFING PAPER. GEORGE JAMES MANSON, Hawkesbury, Ontario, Canada, assignor, by mesne assignments, to Manson Chemical Company, Montclair, N. J., a Corporation of New Jersey. Original application filed July 8, 1926, Serial No. 121,260. Divided and this application filed Apr. 25, 1927. Serial No. 186,600. 10 Claims. (Cl. 92—21.)

1. The method of waterproofing paper which comprises encasing a water-repellant substance with a precipitate formed by double decomposition while dispensing said water-repellant substance, and introducing said dispersion mixture into stock from which paper is to be formed.

1,894,567. FIBROUS PRODUCT. GEORGE JAMES MANSON, Hawkesbury, Ontario, Canada, assignor, by mesne assignments, to Manson Chemical Company, Montclair, N. J., a Corporation of New Jersey. Original application filed July 8, 1926, Serial No. 121,261. Divided and this application filed Apr. 25, 1927. Serial No. 186,603. 9 Claims. (Cl. 92—21.)

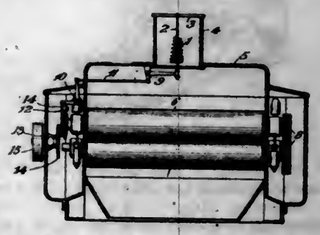
1. As a new article of manufacture, a fibrous product made from a pulp carrying a dispersion of gel-encysted water-repellent substance.

1,894,568. MOTION POSTER ADVERTISING DEVICE. ROBERT M. MEISEL and HARRY S. AIKMAN, Port Huron, Mich. Filed Sept. 21, 1931. Serial No. 564,060. 3 Claims. (Cl. 40—126.)



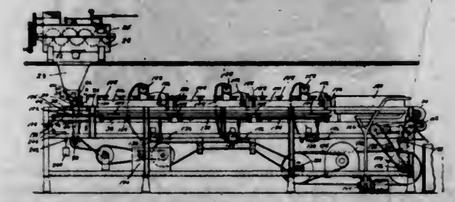
1. In a device of the character described, an enclosed case for the same, a vertically arranged front panel adapted to be secured within the said case, a similar formed rear panel within the said case, means upon the said front panel whereby the arms of a girl and a boy respectively will actuate in a manner so as to appear that the boy and girl are tossing a loaf of bread to one another, the boy upon one side of the panel and the girl upon the opposite side thereof and in face to face relation, the aforesaid means also actuating the said loaf of bread.

1,894,569. ROLLER MILL. JACQUES MEZGER, St. Gall, Switzerland, assignor to Firm Gebrüder Buhler, Uzwil, Switzerland. Filed July 15, 1931, Serial No. 551,033, and in Germany July 23, 1930. 3 Claims. (Cl. 83—12.)



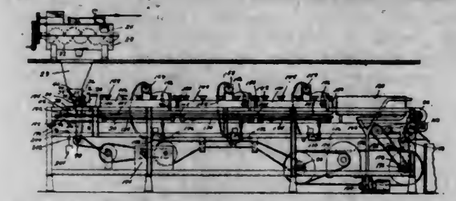
1. In a roller mill particularly for cereals, in combination, cooperative grinding rolls, feed means for conveying the stock to said cooperative rolls, a prime mover operatively associated with said rolls, speed regulating means for said prime mover, a control means included in said feed means and influenced in dependency on the flow of stock, and transmission means cooperating with said control means and said speed regulating means for said prime mover, adapting the latter to adjust the speed of the grinding rolls in accordance with the feed of stock for maintaining the specific output of ground goods from the surface of the rolls constant.

1,894,570. METHOD AND APPARATUS FOR THE CONVERSION OF STARCH TO DEXTRINE AND THE LIKE. NATHAN CARLETON PHILLIPS, Gloucester, Mass., assignor to Russia Cement Company, Gloucester, Mass., a Corporation of Massachusetts. Filed Dec. 9, 1929. Serial No. 412,614. 9 Claims. (Cl. 127—38.)



1. The method of converting starch in powder form into dextrine which consists in forming the starch containing material to be converted into a uniform thin layer, carrying the layer forward at uniform speed through a heat controlled atmosphere without agitation or disturbance of formation, subjecting each cross section of the material to the same heat at the same relative time in its treatment, and predetermining and adjusting the heat supplied to dextrinize the material to the desired amount.

1,894,571. APPARATUS FOR HEAT TREATING MATERIALS. NATHAN CARLETON PHILLIPS, Gloucester, Mass., assignor to Russia Cement Company, Gloucester, Mass., a Corporation of Massachusetts. Original application filed Dec. 9, 1929, Serial No. 412,614, and in Canada June 27, 1930. Divided and this application filed Apr. 6, 1931. Serial No. 528,064. 13 Claims. (Cl. 127—28.)



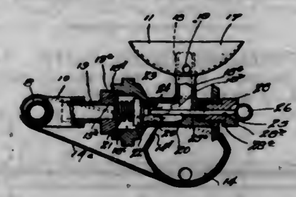
1. In a machine for the conversion of starch and the like, the combination of an imperforate travelling belt adapted to carry the material to be converted horizontally from one end to the other of the apparatus without disturbance or change of formation, means for driving the belt, a feed hopper means for forcing the material to be converted uniformly through an outlet slot onto said belt, at a speed depending on the speed of the belt, a levelling device spaced above the belt operated at a peripheral speed equal to the speed of the belt pressing on the belt beyond the outlet adapted to level the material and press it against the belt, means to control the pressure of the levelling device, a chamber through which the belt passes carrying the material, means for heating said chamber, and means for controlling said heat.

1,894,572. DEMOUNTABLE RIM FOR WIRE WHEELS. CHARLES H. RESCH, Akron, Ohio. Filed Nov. 17, 1930. Serial No. 496,246. 1 Claim. (Cl. 152—21.)

In combination with a wheel felly having a drop center and a fixed flange provided with an annular bead at one edge, a bolt disposed across the drop center of the felly, a removable side flange fitting snugly upon the felly and adapted to support a tire, said side flange having an edge bearing against the side of said bead, said side flange being tapered by gradually increasing in transverse thickness from said bearing edge toward its opposite edge and said tapered portion bridging the drop center of the felly, a lug carried at the thicker portion of the side flange and receiving said bolt and said side flange having an annular bead spaced from the inner side of said lug, and bearing against the edge of the drop center portion of the felly.



1,894,573. DRINKING FOUNTAIN. THOMAS J. SEXTON, Henryetta, Okla. Filed Oct. 27, 1930. Serial No. 491,542. 1 Claim. (Cl. 299—8.)

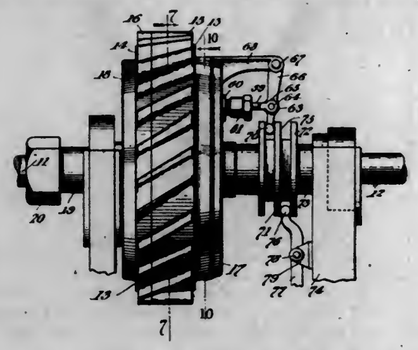


A drinking fountain comprising a jointed horizontally and longitudinally extending fluid supply pipe having a plurality of spaced and aligned fountains mounted laterally thereof, a tapering, semi-cylindrical drain trough arranged below said fountains and having a downwardly curving drain spout at one end thereof, means for suspending said trough from said fountains comprising wires looped around said trough and fountains, and bracing members extending from the ends of the trough to said supply pipe to prevent lateral movement of said trough, each of said fountains comprising a hollow valve casing having inlet and outlet openings and having a valve stem opening, said valve stem opening having an enlarged threaded portion, an enlarged chamber at the inlet end of said valve casing, said chamber having a valve seat formed therein, an upstanding hollow nipple communicating with said outlet opening of said valve casing, a valve having a stem slidable in said valve stem opening and provided with a spherical knob at one end and with a seat member at the other end thereof to engage said valve seat, a spring disposed in said chamber for normally retaining said valve in closed position, a guide member disposed in said casing intermediate said chamber and said valve stem opening to slidably support said valve stem, said enlarged threaded portion of said valve stem opening having packing for said valve stem arranged therein and a packing nut threadedly received in said threaded portion, and said nut having a semispherical recess formed at the outer end thereof to receive said spherical knob on the outer end of said valve stem when said valve is moved against the tension of said spring into open position.

1,894,574. GEARLESS TRANSMISSION. JOHN W. SHAW, San Francisco, Calif. Filed Apr. 27, 1931. Serial No. 533,217. 1 Claim. (Cl. 192—58.)

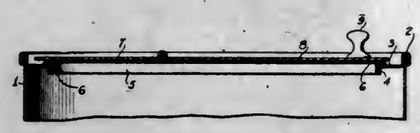
A gearless transmission comprising a driving shaft and a driven shaft, a fluid-containing casing secured to one of said shafts, a disc rotatable in said casing and secured to

the other shaft, said disc having radial slots therein, opposed pairs of vanes in each slot whereby torque may be transmitted in either direction, springs urging the vanes of each slot radially into fluid-tight contact with the inner wall of the casing, each vane having a tapered end adja-



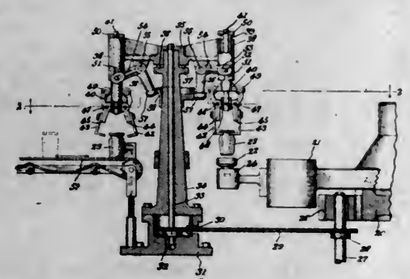
cent the said inner wall, the said tapers of the two vanes in each slot being directed oppositely to one another, and each vane having a portion of its outer face cut away to provide access of fluid thereto, the parts of the disc adjacent each slot being also cut-away to cooperate therewith.

1,894,575. CONTAINER COVER PLATE. ROGER W. SHERMAN, Needham, Mass. Filed Oct. 7, 1930. Serial No. 487,057. 1 Claim. (Cl. 220—32.)



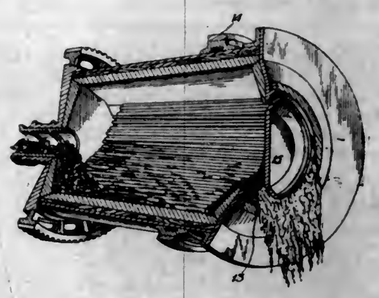
A cylindrical container having a circular opening in one end thereof, the edge of said opening being formed as a cylindrical flange concentric with the cylindrical wall of the container, a circular cover plate overlapping said opening and having an annular plate secured to a segment thereof, said annular plate being shaped to form a flange adapted to fit frictionally in the first named flange, the other segment of said cover plate being hinged to the first named segment and adapted to be swung toward and from said flanges.

1,894,576. BOTTLE CONVEYING AND COOLING MACHINE. ALBERT F. TREMBLAY, Winchester, Ind. Filed Oct. 2, 1929. Serial No. 396,842. 3 Claims. (Cl. 49—14.)



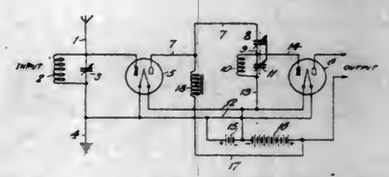
1. A take-out device for molded articles comprising a rotary support, cam means carried by and movable relatively to said support, and a grab rotating with the support and movable horizontally and vertically.

1,894,577. PRODUCTION OF FIBER. SIDNEY D. WELLS, Quincy, Ill., assignor to The Mine & Smelter Supply Company, Denver, Colo., a Corporation of Colorado. Filed Sept. 17, 1927. Serial No. 220,201. 1 Claim. (Cl. 92—20.)



In the production of fibers from vegetable material for use in making paper, the method of treating material, which has been uniformly softened but not pulped, which method consists in separating the fibers of said softened material by pounding the same between parallel pounding surfaces of a plurality of elongated pounding elements which extend in substantially constant parallel relation and which freely fall in intermingled contact with the material and impact upon particles of the material, and discharging said material at a point below the upper level of said pounding elements, the treatment being conducted under conditions in which the material treated includes fiber in proportions of at least five parts and not more than 9.5 parts to 100 parts of fluid by weight.

1,894,578. METHOD AND APPARATUS FOR AMPLIFYING RADIOFREQUENCY CURRENTS. JOHN M. AVERY, Flushing, N. Y., assignor, by mesne assignments, to Radio Corporation of America, a Corporation of Delaware. Filed July 13, 1925. Serial No. 43,103. 10 Claims. (Cl. 179—171.)

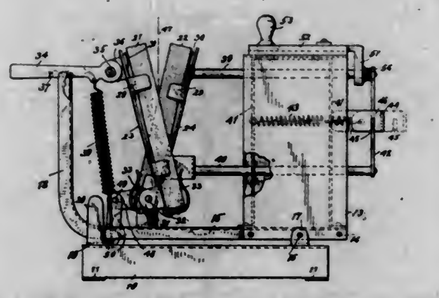


1. In a radio signaling system, a plurality of three-electrode thermionic relays, plate circuits and grid circuits associated therewith, an adjustable tuning means comprising a fixed inductance and a variable condenser cooperating with said grid circuit, an impedance associated with said plate circuit, and separated from said grid circuit, a variable condenser connected between said plate circuit and said grid circuit, and means comprising a mechanical connection between said tuning condenser and said variable condenser for causing the simultaneous actuation thereof, such that said variable condenser is reduced in value as said tuning condenser is adjusted for a higher oscillation frequency.

1,894,579. KNIFE SHARPENER. WILLIAM BLANKNER, Cleveland, Ohio. Filed Jan. 12, 1928, Serial No. 246,174. Renewed Mar. 11. 1932. 14 Claims. (Cl. 51—213.)

1. In a sharpening device of the character described, abrading elements disposed in angular relationship, means

for adjusting the angular relation of the working faces of said abrading elements, and means whereby the angles be-



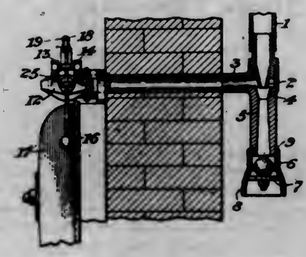
tween each of said working faces and a given plane are equalized for the different positions of said abrading elements.

1,894,580. REACTION PRODUCT OF ROSIN, AROMATIC AMINES AND FURFURAL. OSCAR A. CHERRY and FRANZ KURATH, Chicago, Ill., assignors to Economy Fuse & Manufacturing Company, Chicago, Ill., a Corporation of New York. Original application filed Mar. 30, 1928, Serial No. 266,114. Divided and this application filed Aug. 16, 1929. Serial No. 386,485. 5 Claims. (Cl. 260—2.)

1. A composition of matter formed by reacting furfural on the reaction product of rosin and an aromatic amine.

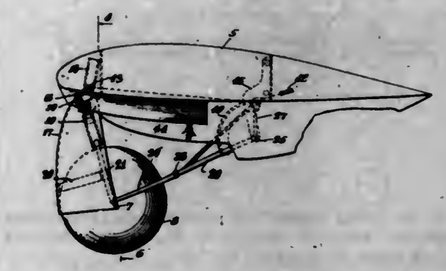
3. The process which consists in reacting rosin with a mixture of a plurality of aromatic amines and then reacting the reaction product thereof with furfural.

1,894,581. ALARM DEVICE AND OPERATING MECHANISM THEREFOR. EDWARD H. DAGGETT, Glen Ridge, N. J., assignor of one-half to Thomas H. Brown, Chatham, N. J. Filed Mar. 26, 1929, Serial No. 349,917. Renewed Dec. 6, 1930. 11 Claims. (Cl. 116—112.)



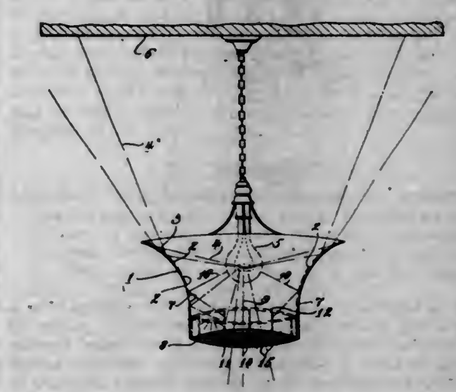
1. An alarm apparatus comprising a water pipe through which water is delivered to operate the alarm, a casing surrounding the delivery end of the pipe comprising an air inlet and an outlet, means adjacent the delivery end of the pipe whereby the water leaving the pipe will induce an air current through the casing, and a gong alarm connected for operation by the air current.

1,894,582. RETRACTABLE LANDING GEAR. GEORGE W. DE BELL, Farmingdale, N. Y., assignor to The Aviation Patent and Research Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 22, 1931. Serial No. 570,359. 11 Claims. (Cl. 244—2.)



1. A retractable landing gear for aircraft comprising a cowling therefor which is slidably movable with and relatively to said landing gear into extended and retracted positions, so as to provide a streamlined protecting shield for substantially all of the landing gear when in extended and retracted position.

1,894,583. LIGHTING UNIT. CLARENCE ERROL FERREE and GERTRUDE RAND FERREE, Baltimore, Md. Filed Sept. 17, 1930. Serial No. 482,533. 3 Claims. (Cl. 240—78.)

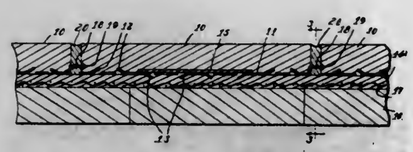


1. The combination in a lighting unit having a source of illumination, of a reflector adapted to project a portion of the light therefrom toward the ceiling and apertured beneath the source of illumination to permit the downwardly directed rays to pass, a baffle in said opening adapted to shield the eye from the inclined rays, but permitting the substantially vertical rays to pass, and a diffusing member directly overlying the baffle.

1,894,584. TILE. CLARENCE E. FORT, Rockford, Ill. Filed Apr. 24, 1929. Serial No. 357,613. 19 Claims. (Cl. 72—18.)

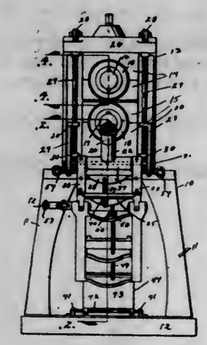
1. A tile of the character described comprising a body portion molded on a sheet metal backing, the latter hav-

ing struck-down projections extending downwardly from the plane of the bottom of the tile to serve to anchor the



tile in the laying thereof, the said projections extending in different directions relative to one another whereby to secure better anchorage of the tile.

1,894,585. DISK HOLDER FOR DISK SHARPENERS. DENNIS C. GALVIN, Des Moines, Iowa. Filed Dec. 29, 1930. Serial No. 505,308. 4 Claims. (Cl. 76—89.2.)



1. In combination, a support, a pair of coacting rolls, a disk clamp adapted to support a disk with a portion of its periphery between said rolls, a lower frame member having its inner end pivoted and slidably connected to said support, an auxiliary frame member slidably mounted to move longitudinally of the lower frame member, an upper frame member having its outer end pivotally connected to the outer end of said auxiliary frame member and its inner end making pivotal and sliding connection with said support, a bearing block slidably mounted on said upper frame member, a disk clamp rotatively mounted on said block, means for adjusting the inner end of said upper frame member vertically, and means carried by the last said means for adjusting said upper frame member laterally.

1,894,586. LIGHTING FIXTURE. GEORGE E. GLATTHAR, Cleveland Heights, Ohio, assignor to The Art Metal Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 18, 1931. Serial No. 551,702. 1 Claim. (Cl. 240—78.)

An electric lighting fixture of the suspension or pendant type, comprising a depending tube, a shade holder mounted on the lower end of said tube, a plurality of ornamental devices of generally cone shape and each having its lower end provided with a centrally disposed opening with an inwardly extending annular flange surrounding said opening, the opening in each of said devices being of such size as to

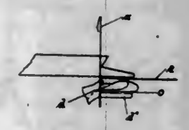


just permit said tube to extend therethrough, and a plurality of spacing and supporting tubular members adapted to be sleeved over said tube and support said ornamental devices in spaced relation along said tube, said devices being also sleeved over said tube.

1,894,587. MANUFACTURE OF FERTILIZER. HERMAN L. HARTENSTEIN, Chicago, Ill. Filed Oct. 18, 1926. Serial No. 142,192. 5 Claims. (Cl. 71—6.)

2. In the manufacture of fertilizer the method of utilizing peat in its natural wet state, which consists in mixing iron and nitride of aluminum with the peat, then adding calcium sulphate (gypsum), and then drying the mass.

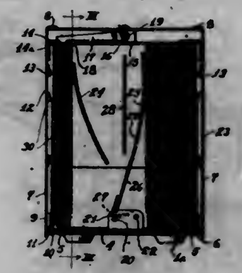
1,894,588. KNOCK-OVER BIT APPARATUS. CURT HILSCHER and ANTON LOIMANN, Chemnitz, Germany. Filed Dec. 19, 1930, Serial No. 503,404, and in Germany Aug. 16, 1930. 3 Claims. (Cl. 66—109.)



1. A knock-over bit apparatus for taking the meshes off the needles in cotton machines comprising, a group of longer knock-over bits, a group of shorter knock-over bits, the machine needles and bits being relatively movable so as to permit an edge of the fabric to pass the ends of the shorter bits in a vertical direction, and means for preventing those portions of the fabric edge which are brought down past the ends of the shorter bits from following the full downward motion of the needles.

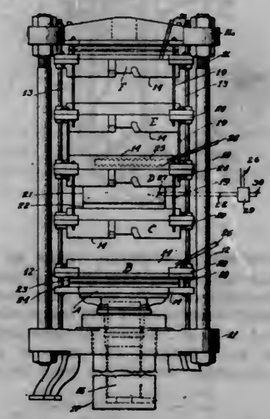
CARNEGIE LIBRARY OF ATLANTA

1,894,589. DISPENSER. PAUL H. HORWITT, Hartsdale, N. Y., assignor to The Menasha Products Company, Menasha, Wis., a Corporation of Wisconsin. Filed Feb. 20, 1931. Serial No. 517,134. 6 Claims. (Cl. 312—61.)



1. A napkin dispenser comprising, a container, removable closure members at the ends of the container, stop members attached to the walls of the container, said stop members dividing the container into two napkin containing compartments, a follower pivoted to the base in each compartment and inclining upwardly into the opposite compartment, said followers being actuated by gravity to fall downward and outwardly to thereby urge the napkins toward the closure members.

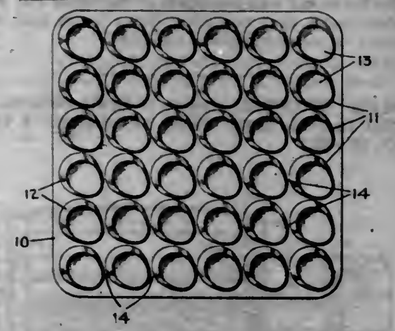
1,894,590. APPARATUS FOR MECHANICAL AND HEAT TREATMENT OF METAL ARTICLES. ROY C. INGERSOLL, Galesburg, Ill., assignor to Ingersoll Steel and Disc Co., a Corporation of Illinois. Filed Aug. 21, 1930. Serial No. 476,827. 10 Claims. (Cl. 266—5.)



10. Apparatus for simultaneously annealing and mechanically treating preformed metal articles which comprises a hydraulic press, electrically heated dies to cooperate therewith, means for automatically maintaining said dies at a constant temperature and means whereby the pressure exerted by said press is automatically increased.
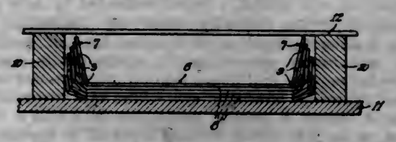
1,894,591. EGG PACKING DEVICE. REUBEN D. JUNGE, New York, N. Y., assignor, by direct and mesne assignments, to Keyes Fibre Company, Inc., Waterville, Me., a Corporation of Maine. Filed Aug. 5, 1931. Serial No. 555,154. 6 Claims. (Cl. 217—26.5.)

1. A packing for eggs, comprising a sheet having a plurality of equidistantly spaced holders formed therein, and means for forming separate rectangular compartments about each of said holders, each of said holders being substantially oval-shaped in plan view and disposed diagonally in its compartment, the holder being so formed



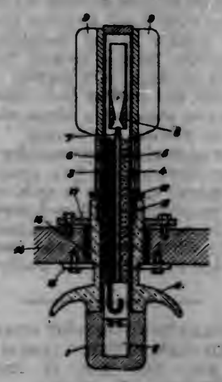
to firmly support an egg in said compartments, the major axis of the egg being at substantially less than 90° in relation to plane of said sheet.

1,894,592. INSULATING UNIT. CHARLES B. KILMER, River Forest, Ill. Filed July 18, 1931. Serial No. 551,720. 7 Claims. (Cl. 20—4.)



1. An insulating unit adapted to be inserted between spaced frame members, said unit comprising a plurality of rectangular sheets of corrugated board secured together throughout an area intermediate two opposite sides leaving free individual edge portions along said sides capable of sliding one upon the other when subjected to a deflecting stress, whereby the edge portion of the unit may be readily bent toward right angular relationship to the plane of the unit.

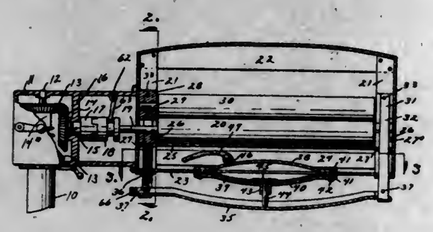
1,894,593. COOLING DEVICE FOR ANODES IN METAL VAPOR RECTIFIERS. UNO LAMM, Ludvika, Sweden, assignor to Allmanna Svenska Elektriska Aktiebolaget, Vasteras, Sweden, a Corporation of Sweden. Filed June 12, 1930, Serial No. 460,672, and in Sweden May 8, 1929. 5 Claims. (Cl. 250—27.5.)



1. A mercury vapor rectifier comprising a vapor-containing receptacle, at least one hollow anode traversing

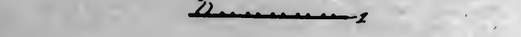
the upper wall of said receptacle, a vacuum-tight packing surrounding each of said anodes, a liquid having a high ebullition point inside said anodes adapted to be vaporized at the lower end and condensed at the upper end of said anodes, and a heat insulating lining inside said anodes adjacent to said surrounding packing.

1,894,594. WRINGER. GEORGE W. LEWIS, Grinnell, Iowa. Filed Dec. 15, 1930. Serial No. 502,395. 9 Claims. (Cl. 68—32.)



1. A wringer comprising a supporting frame having vertical guide members, a pair of lower bearing members supported therein, a roller shaft carried by said lower bearing members, a pair of upper bearing members slidably mounted in said guides, a roller supported by said upper bearing members, yieldable means for supporting said upper bearing members at their upper limit of movement with said rollers spaced apart, pneumatically operated means for moving said upper bearing members downwardly, foot controlled means for controlling said pneumatically operated means, a driving mechanism including a clutch device, a coacting clutch member mounted to operate said lower wringer roll and adapted to be moved into and out of engagement with the first clutch member, and means actuated by the upward movement of the upper roll for throwing said clutch member out of operative relation with each other, or vice versa.

1,894,595. ROLLER BEARING CAGE AND METHOD OF FORMING THE SAME. EDWARD W. MITCHEL, Detroit, Mich., assignor to F. L. McLaughlin Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 5, 1929. Serial No. 383,743. 12 Claims. (Cl. 29—148.4.)

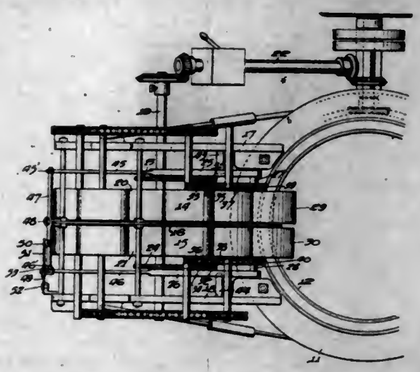


1. A container for cylindrical roller bearings, comprising a pair of annular sheet metal members integrally secured together, each member having complementally formed stamped out portions forming pockets for receiving the cylindrical roller bearings, said pockets completely surrounding the sides and ends of each roller bearing, and said members having cooperating flanges and being secured together solely by welding said flanges.

9. The method of forming containers for roller bearings, which comprises stamping out two pieces of flat metal stock, forming spaced apertures in each member, forming each strip into an annular shell, and spacing the respective apertures in each shell to form preformed pockets for receiving the roller bearings, and then inserting the roller bearings and welding the two shells together.

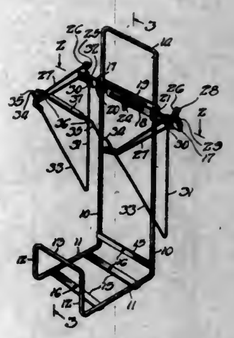
1,894,596. APPARATUS FOR AND METHOD OF MAKING KNITTED PILE FABRICS. DAVID PELTON MOORE, Avon Park, Fla. Filed Feb. 17, 1931. Serial No. 516,339. 17 Claims. (Cl. 66—9.)

1. A pile fabric knitting machine including in combination a knitting machine having a movable needle carrying member, a plural fiber feeding device operatively associated therewith, and cooperative means carried by the needle carrying member and the fiber feeding device where-



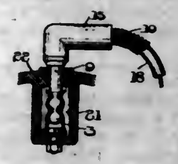
by one feeding member at a time of the plural fiber feeding device is brought into cooperative relation with the needles.

1,894,597. BAG HOLDER. KAY H. MURRAY, Chicago, Ill. Filed May 24, 1930. Serial No. 455,185. 7 Claims. (Cl. 211—51.)



1. In a bag holder, a unitary frame of wire bent to provide a bag supporting base and upright portions, a member adjustable vertically upon said upright portions and expansible transversely of said frame, and fingers pivotally secured to said member for movement in a horizontal plane and engaging the edges of bags on said frame and releasably secured on said member.

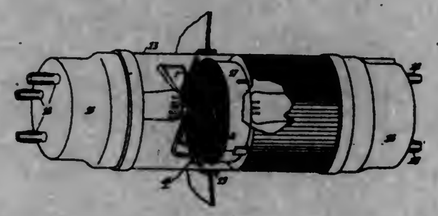
1,894,598. ELECTRIC TERMINAL. YOSHITOSHI NOTSHIKI, Kojimachi Ku, Tokyo, Japan. Filed Apr. 25, 1927, Serial No. 186,193, and in Japan Oct. 6, 1926. 1 Claim. (Cl. 173—363.)



In an electric terminal, a casing, a jack comprising corrugated leaves fixed therein, a plug rotatably mounted in said jack and having a plurality of spherical surfaces for

engagement with said jack, a tubular casing mounted on said plug, and a conductor, an end of said conductor being formed in a loop to engage with a portion of the plug within said tubular casing.

1,894,599. FOUR-ELECTRODE VALVE. HENRY JOSEPH ROUND, Westfield, Muswell Hill, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 22, 1927, Serial No. 185,822, and in Great Britain May 5, 1926. 9 Claims. (Cl. 250—27.5.)



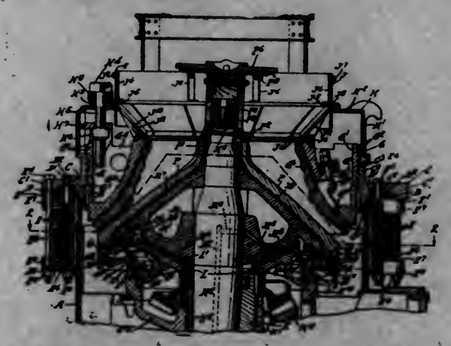
1. A thermionic valve having an envelope, a cathode, an anode, a control grid, an additional electrode extending transversely across the envelope of the valve to near the outer walls of the envelope between the anode and the control grid, and a rim integral with the outer periphery of the additional grid-like electrode.

1,894,600. CHAIN. CHARLES D. SCHMIDT, Jamaica, N. Y. Filed June 4, 1928. Serial No. 282,839. 18 Claims. (Cl. 74—32.)



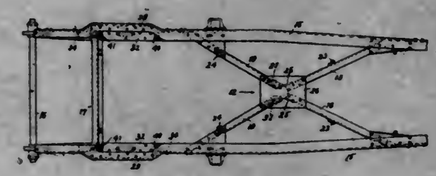
1. A chain comprising links, means connecting said links comprising helical spring bushings, helical spring rollers, transverse pins, and means of absorbing shock of impact with sprocket.

1,894,601. CRUSHING MACHINE. EDGAR B. SYMONS, Hollywood, Calif., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 20, 1929. Serial No. 341,336. 9 Claims. (Cl. 83—10.)



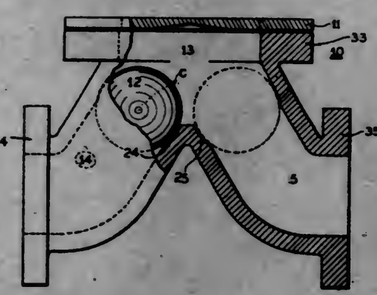
1. In a gyratory crusher, a circumferential frame member, a cone positioned within said frame member and means for gyrating it, a bowl surrounding said cone and tiltably mounted upon said frame member, the plane of the tilting connection between bowl and frame intersecting said cone beneath its top.

1,894,602. VEHICLE FRAME. STANLEY R. THOMAS, Cleveland Heights, Ohio, assignor to Peerless Motor Car Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 9, 1931. Serial No. 521,045. 7 Claims. (Cl. 280—106.)



1. In a vehicle frame, side bars of channel section having a rear axle kick-up, the web and upper flange of each side bar at the kick-up being deflected outwardly, leaving a space above the lower flange unobstructed for a distance.

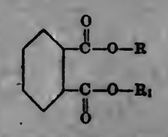
1,894,603. DOUBLE CHECK VALVE. LELAND J. TOWNE, Oklahoma City, Okla. Filed Feb. 24, 1930. Serial No. 430,592. 3 Claims. (Cl. 251—118.)



1. A valve comprising an integral body casting having an outlet chamber with two descending ports leading therefrom and terminating in the same straight-line, a seat in either port, and a ball adapted to rest in either of said seats, one of said seats being located so that its projection upwardly in parallelism with the axis of its port passes through the outlet chamber without contacting with the walls of said outlet chamber for the purpose described.

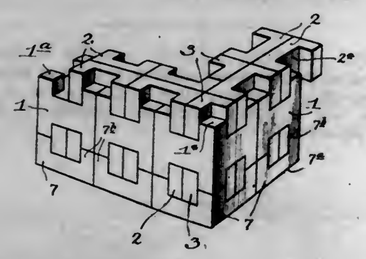
1,894,604. INSECTIFUGE. VANDERVEER VOORHEES, Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed July 20, 1931. Serial No. 552,068. 12 Claims. (Cl. 167—22.)

8. An insectifuge comprising an ester of the following general formula:



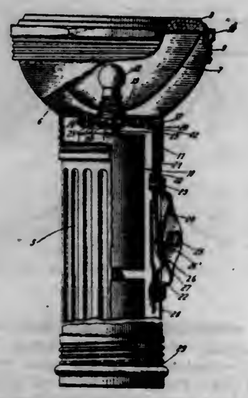
wherein R and R_1 may be the same or different polymethyleneyl radicals.

1,894,605. BUILDING BLOCK. JOHN LLOYD WRIGHT, Michigan City, Ind. Filed Apr. 9, 1932. Serial No. 604,132. 7 Claims. (Cl. 46—35.)



1. A set of building blocks comprising cubical blocks, each having one face thereof provided with grooves of a predetermined depth and width intersecting at right angles whereby a cubical projection is retained at each corner, and elongated connecting pieces having a rectangular transverse notch cut in one of the longer faces thereof and adapted to connect a row of said first mentioned blocks by an interlocking engagement with the cubical projections thereof.

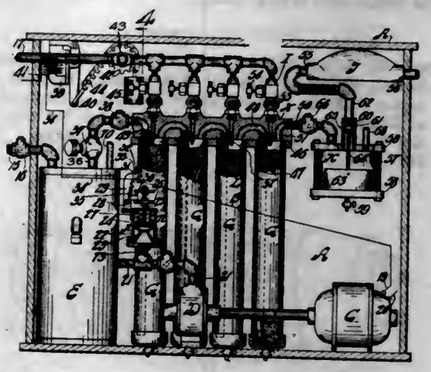
1,894,606. FLASH LIGHT. MORRIS H. BENNETT, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Mar. 6, 1931. Serial No. 520,538. 4 Claims. (Cl. 240—10.66.)
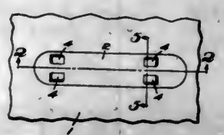


1. The combination in a flash light of a casing, a lamp, a battery, separate conductor strips connected to said lamp and battery respectively, insulating means between said individual strips and between said strips and said casing, a resilient wear plate associated with said strips, supporting means for securing said strips, said insulating means and said wear plate together to form a unitary assembly and means for supporting said assembly on the inside of said casing to permit said lamp and battery to be connected, and operating means engaging said plate and movable to connect said strips to electrically connect said lamp and battery.

1,894,607. CARBURATION APPARATUS. JOHN CARR, Cleveland, Ohio; George H. Forrier executor of John Carr, deceased. Filed Sept. 12, 1927. Serial No. 219,014. 2 Claims. (Cl. 261—26.)

1. A carburation apparatus including a container having a mixture outlet means and baffle means therein, means to feed carburation liquid and carburation gas under pressure into said container to form a gaseous mixture, and a shut off means in said outlet means operated by carburation liquid therein to close the outlet to prevent carburation liquid from finally leaving said outlet means.

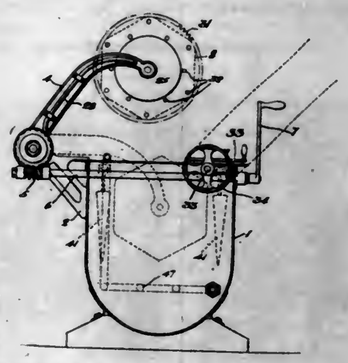


1,894,608. PAD FOR MOTOR VEHICLE FENDER WELLS. CHARLES L. HALL, Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed June 29, 1931. Serial No. 547,688. 2 Claims. (Cl. 224—29.)



1. The combination with a fender well open at the top to receive a tire, of a tire-supporting pad secured within the well to space the tire from the bottom thereof to prevent rattle and separable snap fastening means carried partly by the pad and partly by the material of the fender well for permitting quick attachment and removal of said pad.

1,894,609. PLATING BARREL. THEODORE M. HIESTER, Dayton, Ohio, assignor, by mesne assignments, to Aero Supply Manufacturing Corporation, Corry, Pa., a Corporation of Pennsylvania. Filed June 15, 1928. Serial No. 285,571. 16 Claims. (Cl. 204—11.)



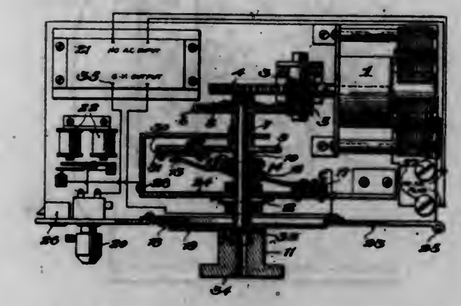
1. In a plating machine, a vat, a pair of vertically swinging arms mounted thereon, a revoluble plating drum carried by the arms, said arms being interconnected for unison oscillation, a worm gear operating mechanism for said arms to effect the lowering of the drum into said vat and its elevation therefrom, a revoluble shaft for said drum journalled in said arms for rotation in unison with said drum, insulating means for electrically isolating the shaft from said arms and an electrical conductor mounted upon one of the arms and moving therewith making electrical connection with the drum shaft independent of said arm.

1,894,610. OVERSHOE AND METHOD OF MAKING SAME. WALTER JOY, Somerville, Mass., assignor to Cambridge Rubber Co., Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 18, 1929. Serial No. 400,574. 8 Claims. (Cl. 36—7.3.)



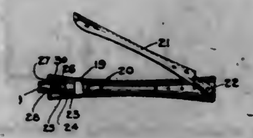
1. That improvement in methods of making rubber shoes which consists in assembling parts of a shoe including an upper providing a front slit in said upper, at some stage of the process applying a flexible cord containing rubber to the upper across the lower end of said slit with portions of said cord extending backwardly at opposite sides of said slit, and causing the rubber in said cord to unite with the rubber in the adjacent parts of the shoe to secure the cord permanently in said position in the shoe.

1,894,611. MOTOR DRIVEN ALARM AND SIGNAL DEVICE. SIGMUND LIPPSTADT, New York, N. Y., assignor to Isabel G. Lippstadt, New York, N. Y., and to Frank S. Velardi. Filed Jan. 17, 1931. Serial No. 509,468. 6 Claims. (Cl. 161—1.)



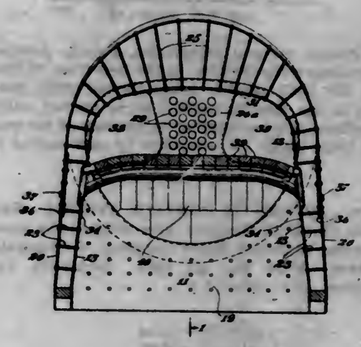
1. In a motor driven alarm and signal device, a shaft adapted to be rotated once in 12 hours, a contact disc mounted on said shaft, an insulated fin mounted on said disc, a flush mounted electrical contact in said fin electrically connected to said contact disc, and a second electric contact cooperating with and insulated from said first contact and adapted to be set to make electrical connection with said first contact at a predetermined time.

1,894,612. HAIR WAVING APPARATUS. JOSEF MAYER, Karlsbad, Czechoslovakia, assignor to The Philad Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 18, 1929. Serial No. 379,235. 7 Claims. (Cl. 132—36.)



1. Hair waving apparatus comprising a clamp consisting of two elongated arms articulated together to grip a flat strand of hair adjacent its roots, a latch connecting the other end of said arms, a supporting member extending upwardly from said clamp, a generally cylindrical spool-shaped curler rod recessed at one end, ratchet mechaniam within said recess, and provided with a pintle extending beyond the end of the rod and engageable with the supporting member to be held against rotation thereby.

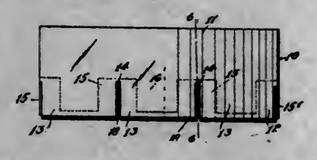
1,894,613. LOCOMOTIVE BOILER. CHESTER A. SIEGEL, Newark, N. J. Filed May 16, 1931. Serial No. 537,771. 24 Claims. (Cl. 122—68.)



1. In combination with a locomotive boiler having a crown sheet and sheets defining side water legs extending below the level of the crown sheet, a water steaming and circulating member positioned transversely of the fire box and having materially less extent longitudinally of the fire box than the transverse width thereof, said member comprising a lower portion having ends opening into said side water legs and the upper portion of said member connecting the lower portion with the space above the crown sheet, there being space for flow of gas past said member above said lower portion.

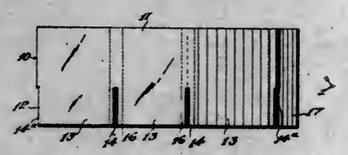
5. In combination with a locomotive fire box having a crown sheet and sheets defining side water legs extending below the level of the crown sheet, a water steaming and circulating member comprising a flat stayed upper portion opening into the space above the crown sheet transversely thereof and a lower portion having hollow arms communicating with said side water legs, said upper portion being of substantially less width than the width of the fire box and arranged to provide passages for combustion gases to either side of said member above the bottom portion thereof.

1,894,614. STRIP SHINGLE. JULES L. WETTLAUFER, Belmont, Mass., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed May 4, 1929. Serial No. 360,374. 2 Claims. (Cl. 108—7.)



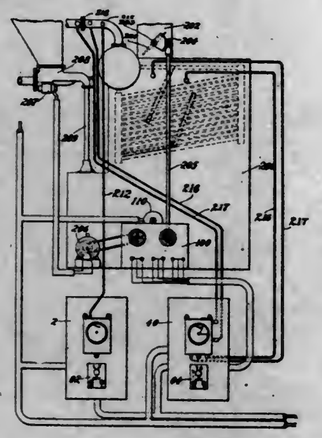
2. A roofing element comprising a body portion formed with spaced tab defining slots in the lower or weather exposed area thereof, and integral extensions spaced from each other by intervening recesses in such manner as to enable the elements to be cut from a parent sheet without waste, said extensions being retroverted to substantially completely underlie said slots.

1,894,615. STRIP SHINGLE. JULES L. WETTLAUFER, Belmont, Mass., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed May 4, 1929. Serial No. 360,375. 3 Claims. (Cl. 108—7.)



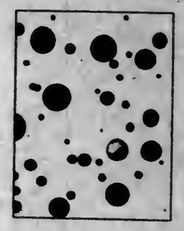
1. A roofing element comprising a body portion and spaced sealing strips secured to the underface of the body portion, the body portion being formed with tab-defining slots in the weather-exposed areas thereof, said slots cut therethrough being confined to portions of the weather-exposed areas which are underlaid by said sealing strips.

1,894,616. AUTOMATIC CONTROL SYSTEM. ERVIN G. BAILEY, Cleveland Heights, Ohio, assignor, by mesne assignments, to Bailey Meter Company, a Corporation of Delaware. Filed Nov. 13, 1924. Serial No. 749,769. 32 Claims. (Cl. 236—14.)



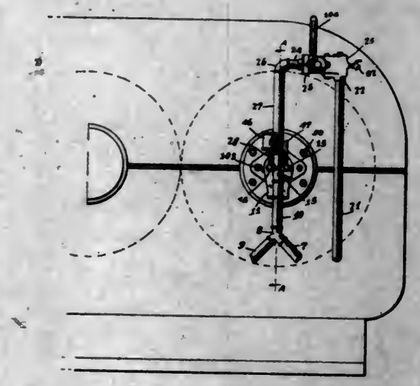
1. An automatic controlling apparatus for maintaining the desired condition of combustion in a steam generator furnace, comprising an indicator responsive to changes of steam pressure; correctors for changing the rate of supply of fuel and air to the furnace, and a controlling instrument comprising a feeler which has a periodic movement relative to the indicator and which causes the correctors to operate during portions of the period of movement of the feeler when the indicator is in abnormal position.

1,894,617. BITUMINOUS EMULSION. LEONARD GOWEN GABRIEL, London, England, assignor, by mesne assignments, to Colas Roads Inc., Boston, Mass., a Corporation of Massachusetts. Filed June 5, 1928, Serial No. 283,088, and in Great Britain May 22, 1928. 6 Claims. (Cl. 134—1.)



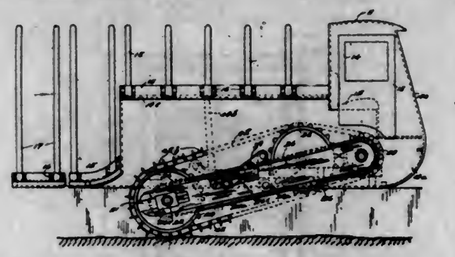
1. A process for the manufacture of an aqueous bituminous emulsion which comprises admixing a bitumen with an aqueous solution of such a small quantity of soap-like emulsifying agent as to produce an initial emulsion having relatively large particle size, bulk instability and quick breaking characteristics, and thereafter adding an inert stabilizing agent in quantities sufficient to prevent coalescence of the emulsified bitumen particles during storage, whereby to impart bulk stability to the initially formed emulsion, but in insufficient quantities to destroy the quick-breaking characteristics of the emulsion when applied to a porous surface.

1,894,618. RUBBER MILL COOLING DEVICE. JOSEPH MARION KING, Detroit, Mich. Filed Apr. 29, 1929. Serial No. 359,184. 12 Claims. (Cl. 257—95.)



1. A cooling device for roller-mills comprising a member mounted in an end-portion of a roller communicable via a passage with a fluid cooling-chamber formed in the said roller, an external supply conduit communicable with the said member and fluid cooling-chamber, an internal emitting-conduit connective with the said member and an external drain-conduit, an upright inlet-conduit positioned in the top side of the said fluid cooling-chamber and made connective with the said emitting-conduit and means to hold the said conduits in releasable fixed position.

1,894,619. VEHICLE WITH ENDLESS TRACK TENSIONING MEANS. GEORGE S. KNICKERBOCKER, Minneapolis, Minn. Filed May 16, 1931. Serial No. 537,799. 14 Claims. (Cl. 180—5.)

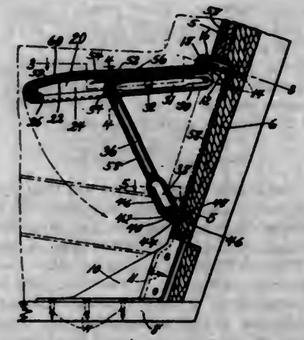


3. A vehicle having in combination, a frame adapted to carry the load, a shaft carried by said vehicle frame journaled adjacent its front end on said shaft, front and rear track sprockets mounted in said frame, an endless track for each frame running over said track sprockets, a member disposed between the upper and lower runs of said track and engageable with the inner sides thereof, and means carried by said frame and engaging said track frame for swinging said track frame and track downwardly about the axis of said shaft, and means connecting said last mentioned means to said member for causing said member to engage said track to move the same out of the line extending tangentially to the peripheries of said sprockets.

1,894,620. PROCESS OF PRODUCING A WHITE FILLER PRODUCT FROM SULPHATE PULP LIME MUD. OTTO KRESS, Appleton, Wis. Filed June 26, 1929. Serial No. 373,955. 1 Claim. (Cl. 23—49.)

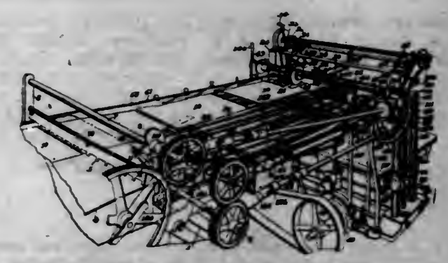
The method of treating green liquor obtained in the sulphate process of pulping wood, which consists in first treating a green liquor with a lime to form a lime mud and a white liquor; second, removing the white liquor from the lime mud; third, then oxidising the lime mud by mixing calcium hypochlorite therewith, then washing and filtering the oxidized mud and finally drying and grinding the same to a powdered form.

1,894,621. FOLDING ARMREST FOR SEATS. ARTHUR E. LEHMAN, St. Charles, Mo., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 28, 1929. Serial No. 388,946. 7 Claims. (Cl. 155—112.)



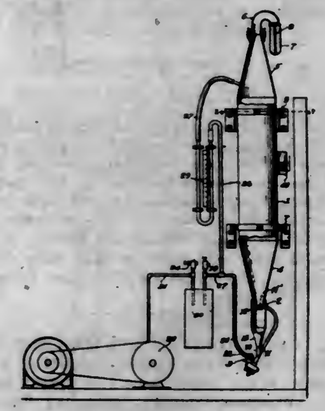
2. In a folding arm rest, a supporting member, an arm rest member hinged to said supporting member, a strut for supporting the free end of said arm rest member hinged to said supporting member and slidably connected to said arm rest member, and resilient means carried by the arm rest member and so arranged as to cooperate with the strut to retain the latter in supporting position.

1,894,622. SHEET FEEDING MACHINE. HARMON E. LINDBLADH, Brookline, Mass., assignor to The Lindbladh Corporation, Boston, Mass., a Corporation of Massachusetts. Filed May 8, 1930. Serial No. 450,651. 22 Claims. (Cl. 271—48.)



1. In a sheet feeding machine the combination of a frame, rollers mounted in said frame, a drive to transmit motion to said rollers, tape passing over said rollers, means to lift the leading edge of one sheet above the trailing edge of the preceding sheet, a sheet feeding means mounted above the paper to be fed, a support for the paper stock, a gate to control the entry of the paper into the ruling machine, means adapted to stop temporarily the feeding of sheets while permitting said gate to function and when desired to automatically reestablish the correlation between said lifting and feeding means and said gate upon the resumption of sheet feeding, and a source of power to provide movement to said parts.

1,894,623. ELUTRIATING MEANS. MARCEL A. LISSMAN, Los Angeles, Calif., assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed Mar. 7, 1929. Serial No. 344,997. 2 Claims. (Cl. 209—139.)



1. Means for elutriating divided materials comprising nozzle means, means for supplying gas under definite pressure to said nozzle means, a cyclone chamber, a pipe for conducting gas from said nozzle means to said cyclone chamber, said pipe opening tangentially into said chamber, so as to provide for cyclonic action therein, in such manner as to separate finer material from the coarser material contained therein, an elutriator chamber connected to receive a current of gas carrying divided material from said cyclone chamber and adapted to permit the coarser material to be separated by gravitative settling from the gas current, said elutriator chamber being provided at its upper portion with outlet means for discharge of gas therefrom,

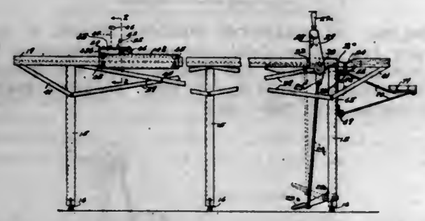
and at its lower end with an outlet for returning such coarser materials to the cyclone chamber and means for returning the coarser material from the bottom of the cyclone chamber to said nozzle means.

1,894,624. PERMANENT WAVING DEVICE. FRANÇOIS R. MARCEL, Brooklyn, N. Y. Filed Sept. 3, 1931. Serial No. 560,979. 21 Claims. (Cl. 132—36.)



1. A device for waving hair, including inner and outer tubes and means for holding them in spaced relation to provide an annular chamber between the tubes, the inner tube having the end which is disposed away from the head closed, and its opposite end in open communication with said annular space and a heating device adapted to be placed on said outer tube for the purpose of supplying heat to said device, said waving device being adapted to receive therein a lock of hair whereby it will be subjected to the heating action of said exterior heating device.

1,894,625. TABLE FOR STRETCHING FABRIC. CHARLES M. MCCARTHY, Minneapolis, Minn. Filed Dec. 11, 1930. Serial No. 501,566. 18 Claims. (Cl. 45—24.)



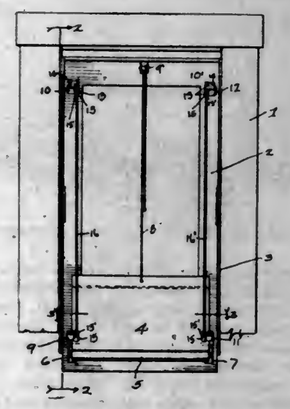
1. A fabric stretching device having in combination, a rectangular table, a member extending transversely of said table guided at the sides thereof and slidable lengthwise thereof, a clamping means for cloth on said member, and a cloth holding means carried by said table depressible on said cloth adjacent one end of said table, said last mentioned means being liftable and having an end free of connection with said table so that cloth after being folded thereover, can be slid off at one end thereof.

1,894,626. VARNISH-LIKE MATERIAL AND METHOD OF PRODUCING THE SAME. JAMES P. A. MCCOY, Milwaukee, Wis. Filed Sept. 24, 1920, Serial No. 412,542. Renewed June 26, 1930. 13 Claims. (Cl. 134—26.)

5. A varnish-like material containing a mixture including a substance which is polymerizable at temperatures under 150° C., and a substance of a greasy nature incapable of entering to a substantial degree into the drying reaction of a film of the varnish, a film of said varnish hardening mainly through polymerization of said polymerizable substance.

1,894,627. ROLLER SHADE GUIDE AND HOLDER. THOMAS E. MCNULTY, Alameda, Calif. Filed July 29, 1931. Serial No. 553,797. 2 Claims. (Cl. 156—26.)

2. A guide to support a side leg of a window shade comprised of a pair of U-shaped brackets, each bracket having one leg thereof arranged for attachment to a shade support and the other leg provided with a socket therein, said bracket being shaped apart and connected by a guide mem-



ber, having an enlarged head on each of its opposite ends that is confined in the bracket sockets, to guide the window shade thereon.

1,894,628. COMPOSITION OF MATTER. JAMES A. MORTLAND and HERBERT L. SMITH, Tampa, Fla. Filed Jan. 14, 1931. Serial No. 508,805. 1 Claim. (Cl. 106—24.)

A composition of matter consisting of finely ground Portland cement mixed with finely ground stone, the ground stone being coarser than the cement and the cement filling interstices of the stone and forming with the stone a dense composition, and a mass of shredded-dust free vegetable fibers selected from the group consisting of saw palmetto and sugar cane, the ingredients being in substantially the following proportions: Portland cement 675 pounds, ground stone 1090 pounds and vegetable fiber 235 pounds.

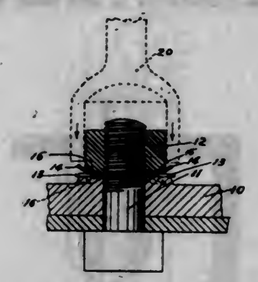
1,894,629. MANUFACTURE OF ARTICLES OF/OR CONTAINING RUBBER OR SIMILAR MATERIALS. EDWARD ARTHUR MURPHY, Erdington, Birmingham, ROBERT GILBERT JAMES, Selly Oak, Birmingham, and DOUGLAS FRANK TWISS, Wylde Green, England, assignors to American Anode Incorporated, Akron, Ohio, a Corporation of Delaware. Filed Sept. 9, 1930, Serial No. 480,812, and in Great Britain Sept. 23, 1929. 6 Claims. (Cl. 18—58.)

1. A process for the manufacture of rubber articles which comprises coating a form successively with two aqueous dispersions of rubber, one of which is acid in nature and the other coagulable by acid.

1,894,630. PROCESS OF MAKING BITUMINOUS MATERIAL. HARRY C. NEUBERGER, New York, N. Y., assignor to Neuberger Chemical Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 6, 1929. Serial No. 383,983. 4 Claims. (Cl. 106—31.)

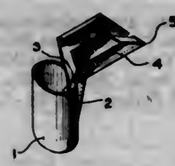
1. The process of making a resilient cold laid paving material consisting of a hard silicious mineral aggregate and a bituminous binder material which comprises, the step of mixing the mineral aggregate and bituminous binder material by agitating the mass at a temperature of approximately 100 degrees F., adding a volatile hydrocarbon to the mass prior to the mixing operation, and removing the volatile hydrocarbon from the mixed material under a vacuum in excess of twenty inches and at a temperature of approximately 100° F. prior to the completion of the mixing operation.

1,894,631. NUT LOCK. CLARENCE R. OWEN, Minneapolis, Minn. Filed July 18, 1930. Serial No. 468,776. 5 Claims. (Cl. 151—33.)



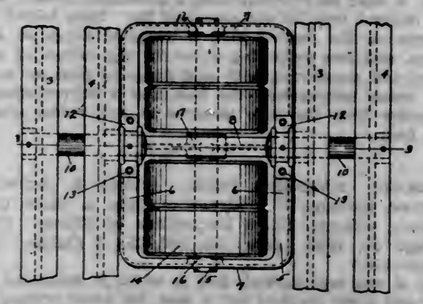
1. A nut lock comprising a metal washer adapted to be disposed about a threaded element and between a nut upon said threaded element and a member or surface in connection with which said nut and threaded element are used, said metal washer including a resilient element removably interlocking with said nut to prevent turning thereof, and said resilient element including a portion extending beyond the perimeter of said nut and adapted to be released from the nut by means of a tool fitted down over said nut, and means for fixing said metal washer against turning movement relatively to said member or surface.

1,894,632. PEN AND PEN TREATMENT. WALTER H. PEARCE, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 28, 1932. Serial No. 635,192. 9 Claims. (Cl. 120—109.)



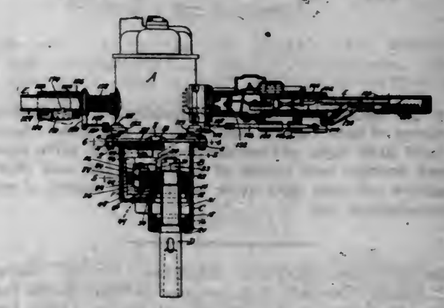
1. The method of preparing a pen for use which consists in covering the pen surface which in normal use is covered by a wet ink film with a dry adherent coating dissolving rapidly on contact with such ink.

1,894,633. VEHICLE. PHILIP T. ROBIN, Erie, Pa., assignor, by mesne assignments, to The Wellman Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 31, 1930. Serial No. 440,256. 2 Claims. (Cl. 280—81.)



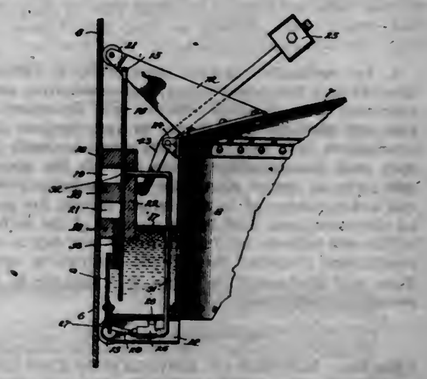
2. In a vehicle, the combination of a frame; wheel supports arranged in alinement transversely of the frame; wheels arranged each side of the center of each support; and pivotal connections between the frame and the wheel supports, said pivotal connections being separable transversely to the axis of the connections, said separation permitting the lifting of the frame from the supports and permitting the removal bodily of the supports and wheels from the vehicle.

1,894,634. PORTABLE ELECTRIC TOOL. JOHN M. ROHLFING, Plainfield, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 9, 1931. Serial No. 521,286. 6 Claims. (Cl. 77—6.)



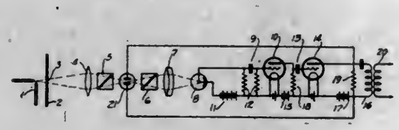
1. In an electric drill or the like, a driving motor, handles a tool holding spindle, and gearing between said motor and spindle comprising a main shaft having a pinion, a gear constantly meshing with said pinion to be driven thereby, shiftable means supporting said gear adapted to force the latter into driving connection with the spindle when shifted in one direction and to break the driving connection between the gear and spindle when shifted in the opposite direction, independent lever means associated with each of the handles and connected with the gear supporting means and adapted to be actuated to shift the latter, said lever means being relatively so arranged as to necessitate operation of each thereof to establish driving connection between said gear and spindle.

1,894,635. GAS HOLDER. JOHN R. L. SANTOS, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 29, 1928, Serial No. 302,787. Renewed Mar. 25, 1932. 7 Claims. (Cl. 48—176.)



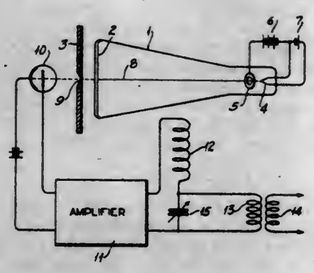
1. In a waterless gas holder, the combination of a shell; a piston vertically movable in said shell to vary the effective volume thereof; a packing surrounding and carried by said piston and contacting said shell; a lubricant reservoir; and pumping means actuated by the movement of the piston and serving to deliver lubricant from said reservoir to said packing.

1,894,636. OSCILLATION GENERATOR. GORDON BROWN SCHEIBELL, Newark, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 26, 1930. Serial No. 471,066. 6 Claims. (Cl. 250—36.)



1. An oscillation generator comprising, in combination, a source of light rays, a photosensitive cell under control of said light rays, and an electrostatic light valve interposed between said source of light rays and said photosensitive cell, said light valve being under control of said photosensitive cell.

1,894,637. OSCILLATION SYSTEM. GORDON BROWN SCHEIBELL, Newark, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 26, 1931. Serial No. 546,939. 3 Claims. (Cl. 250—36.)



1. An oscillation system comprising, a cathode ray tube having a fluorescent screen, a photosensitive device, an apertured plate disposed between said fluorescent screen and said photosensitive device in such manner that the irradiations from said fluorescent screen normally impinge upon said photosensitive device through the aperture in said plate, an output circuit for said photosensitive device and means connected to said output circuit for producing an electromagnetic field in the vicinity of the cathode ray within said cathode ray tube to deflect said ray to vary the irradiations projected through the aperture in said plate upon said photosensitive device in a manner to produce sustained oscillations.

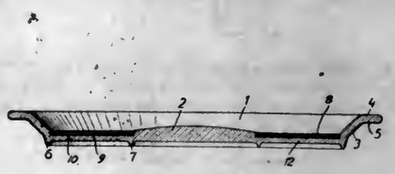
1,894,638. METHOD OF REGULATING THE COOLING EFFECT OF A REFRIGERANT. PETER SCHLUMBOHM, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed Mar. 16, 1931, Serial No. 523,107, and in Germany Mar. 18, 1930. 2 Claims. (Cl. 62—170.)

1. The method of automatically regulating the cooling effect of cooling means, which comprises separating the cooling means from the room to be cooled by a closed space containing a suitable gas, and subjecting said gas to the action of an adsorbing medium whose temperature depends upon the temperature of said room, whereby said



medium withdraws gas from said space when the room temperature falls to decrease the heat conductivity of said space, and whereby said medium at rising room temperature gives up adsorbed gas which flows into said space to increase its conductivity.

1,894,639. MIRROR. PETER SCHLUMBOHM, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed June 26, 1931, Serial No. 547,055, and in Germany Mar. 23, 1931. 7 Claims. (Cl. 88—1.)

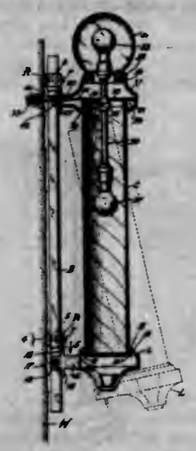


1. A hand mirror comprising a glass plate formed with an integral lens for concentrating light from behind the mirror on the desired part, a marginal flange on said plate, said lens projecting above the top surface of said plate and cooperating with said flange to form an annular recess surrounding the lens, and a mirror element separate from the plate mounted in said recess around the lens.

1,894,640. BARBER'S POLE. ARTHUR R. SCHWARZKOPF, Chicago, Ill., assignor to Theo. A. Kochs Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 24, 1932. Serial No. 600,905. 7 Claims. (Cl. 40—126.)

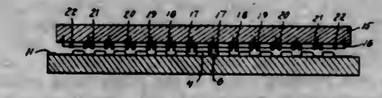
1. A wall-type barber's pole in which is comprised upper and lower brackets and a base, the lower bracket being formed to embrace the base on opposite sides and having oppositely extending vertical ears for abutting the base upon the front, means passing laterally into

the base for securing the lower bracket removably thereto, a hollow connector for securing the upper bracket to the face of the base, a light carried by the pole, and



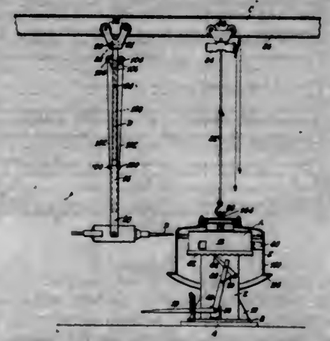
wiring connections extending from the light through the upper bracket and hollow connector to a source of current.

1,894,641. STEEL RULE DIE. LOUIS E. SHAW, East Orange, N. J., assignor to Adartcraft, Incorporated, New York, N. Y., a Corporation of Delaware. Filed Mar. 4, 1931. Serial No. 520,066. 5 Claims. (Cl. 164—29.)



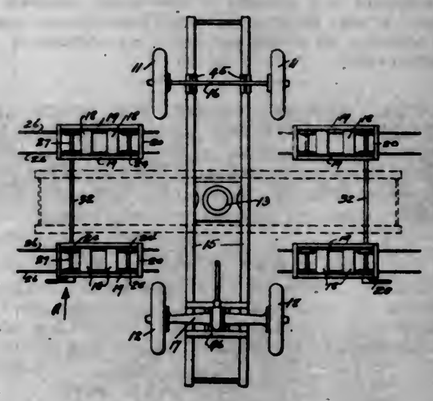
1. A cutting die for an embossed sheet having a plurality of spaced embossings comprising a supporting member on which the sheet is adapted to be positioned, a second member cooperating therewith, cutting members carried by said second member to trim the sheet, and centering devices carried by said second member and adapted to engage the embossings to properly position said sheet with respect to said cutting members.

1,894,642. MEANS FOR FORMING TANK DOMES. JOHN D. SEILER, Milton, Pa., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 22, 1928. Serial No. 307,578. 2 Claims. (Cl. 77—64.)



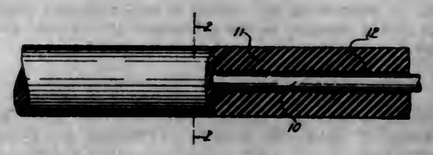
1. In the fabrication of tank domes, a support for temporarily assembled dome elements comprising a base, an upright pedestal fixedly secured to the base and having a recessed upper end portion, a head supported by said pedestal and provided with a portion extended into the recess, said head being maintained on said pedestal by gravity and being freely removable from said pedestal, anti-friction bearing elements between the pedestal and head, manually operated means for rotating the head step by step, a supporting element secured to and forming part of said head, said element projecting vertically upward from the head and being adapted to be engaged by a temporary dome cover whereby to support a tank dome in a position such that the tank dome sheet surrounds said head, and backing plates secured to the head and projecting radially therefrom to engage the dome sheet.

1,894,643. BRAKE TESTING MEANS AND METHOD FOR AUTOMOBILES. LOUIS C. STUKENBORG, Memphis, Tenn. Filed May 27, 1929. Serial No. 366,135. 7 Claims. (Cl. 73—51.)



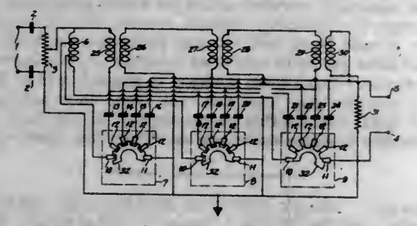
4. In a brake tester, means for raising an automobile with the wheels free, and supporting same for rotation about a vertical axis, wheel supporting units in pairs spaced transversely apart to conform to the wheel spacing of an auto, each unit comprising a frame and a pair of transverse and parallel rollers spaced apart and journalled in said frame, said unit pairs being manually movable toward and away from said vertical axis, whereby said auto may be raised and rotated with the wheels into the path of said units, and thereafter said units be moved toward said jack to position them under said wheels, and said auto be lowered into supported position on said rollers.

1,894,644. METHOD OF COATING METALLIC BODIES. EARL GROVER STURDEVANT, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 8, 1929. Serial No. 369,517. 2 Claims. (Cl. 18—59.)



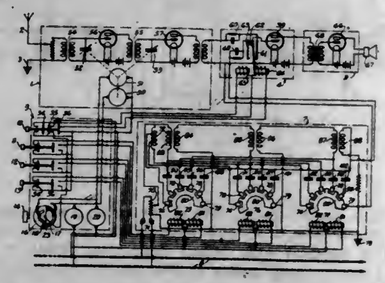
1. The method of securing the adherence of a rubber compound to a tinned metallic body which consists in mixing with the compound while in a plastic state a quantity of oleic acid, applying the compound to the metallic body, and vulcanizing the compound thereto.

1,894,645. SELECTIVE FILTER SYSTEM. ARTHUR M. TROGNER, Maplewood, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed May 26, 1931. Serial No. 540,035. 5 Claims. (Cl. 178—44.)



1. A selective filter system comprising, a plurality of circuits each having a plurality of different values of circuit constants, a plurality of switches each of which is connected to a plurality of said circuit constants in several of said circuits, and common mechanical means for actuating all of said switches in a predetermined sequential order.

1,894,646. REMOTE CONTROL FOR SPACE AND WIRED RADIO SYSTEMS. ARTHUR M. TROGNER, Maplewood, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 3, 1931. Serial No. 541,781. 5 Claims. (Cl. 179—2.5.)



2. A remote control system comprising, a tuning system connected to a space radio energy collecting system, motors for varying the values of the circuit constants of said tuning system, a rotatable contact for selectively engaging with contacts respectively connected to said motors, a selective filter system connected to wire lines carrying high frequency signaling energy, a plurality of switches in said filter system, a plurality of electromagnets for actuating said switches, a source of electrical energy, a plurality of depressible keys each of which is adapted to complete a circuit from said source of electrical energy to one of said electromagnets for actuating a selected one of said switches, a space discharge detector tube, a switch for connecting said detector tube to said space radio tuning system or to said selective filter system, electromagnetic means for actuating said switch, a depressible key for controlling said electromagnetic means and for controlling the circuit to said rotatable contact, and means operable by the depression of any one of said keys for releasing any previously depressed key.

1,894,647. METAL ORGANIC PHOSPHATE AND PROCESS OF MAKING SAME. THEODORE B. WAGNER, Brooklyn, N. Y. Filed May 21, 1928. Serial No. 279,622. 8 Claims. (Cl. 260—11.)

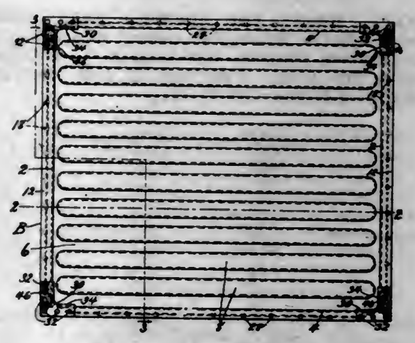
6. A corn product composed of a precipitate containing a heavy metal of the group consisting of iron, manganese, cobalt and bismuth which is derived from the steepwater of corn by the addition thereto of a soluble salt of said heavy metal.

1,894,648. PRESSURE GAUGE. JOHN WAHL, Rosedale, N. Y., assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 5, 1930. Serial No. 433,372. 10 Claims. (Cl. 73—111.)



3. A pressure gauge comprising an elongate casing having a fluid pressure inlet at one end, pressure responsive means within said casing, pressure indicating means operable by the outward movement of the pressure responsive means, said indicating means having indicia embracing a plurality of pressure ranges for the gauge, and a helical compression spring within said casing for resisting movement of the pressure responsive means when subjected to fluid pressure, the convolutions of the spring for different portions of its length being more closely spaced in one portion than in another, at least one of said portions of the spring upon being subjected to the maximum pressure of the first pressure range of the gauge being adapted to become completely compressed and provide an abutment for the adjacent portion of the spring.

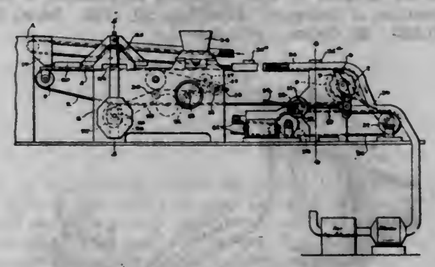
1,894,649. SKID BOX. CHARLES F. WALP, Berwick, Pa., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 28, 1929. Serial No. 395,865. 7 Claims. (Cl. 220—1.)



1. In a skid box adapted to be mounted on a support, means for restraining the box against sidewise shifting on the support, comprising sockets secured to the lower portion of the box, pins arranged in the sockets and normally projecting therefrom for cooperation with the support, and spring means in the sockets for normally urging the pins to projecting position.

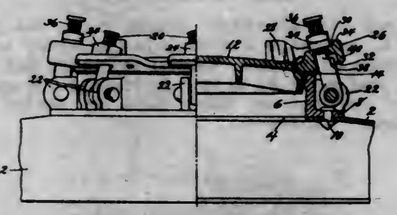
1,894,650. [WITHDRAWN.]

1,894,651. METHOD OF MOLDING CANDY CENTERS. THEODORE WERNER and CHARLES WERNER, Rochester, N. Y., assignors to John Werner & Sons, Inc., Rochester, N. Y., a Corporation of New York. Filed Aug. 13, 1931. Serial No. 556,866. 5 Claims. (Cl. 107—54.)



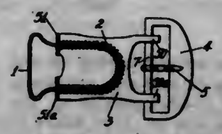
1. The method of quick setting candy centers in comminuted material consisting in conditioning the material so that it has a temperature within the range of 40° to 60° Fahrenheit, depositing hot candy in said material to form candy centers, and maintaining the comminuted material constantly at a temperature within the said range to force or hasten crystallization of the sugar of the candy centers to cause the same to set immediately and case harden or skin harden so that the candy may be removed from the comminuted material in a short period of time.

1,894,652. CAR TANK CLOSURE. VICTOR WILLOUGHBY, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed June 11, 1931. Serial No. 543,591. 13 Claims. (Cl. 220—55.)



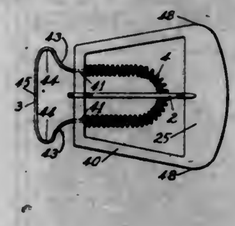
1. A tank having an opening, a cover therefor adapted to have partial rotation about the axis of said opening preparatory to removal of the cover, bolts carried by the tanks, ears carried by said cover and through which said bolts project, said bolts and ears having provision whereby said cover must be in a partially open position prior to partial rotation of the cover.

1,894,653. BELT BUCKLE. DORSEY M. WIRTH, Bucyrus, Ohio. Filed Apr. 7, 1932. Serial No. 603,798. 6 Claims. (Cl. 24—163.)



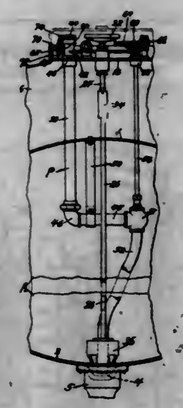
1. An automatic spring operated belt buckle comprising a loop adapted to be attached to one end of a belt, a compressible and expanding spring on said loop, a holder being mounted on said loop and engaging said spring, a rod disposed transversely of the holder thru holes of the holder and the rod projecting beyond each side thereof, a buckle body having flanges pivotally receiving the projecting ends of said rod, and a belt engaging jaw mounted between said flanges for co-operating with said body to clamp an end of the belt.

1,894,654. BELT BUCKLE. DORSEY M. WIRTH, Bucyrus, Ohio. Filed Apr. 18, 1932. Serial No. 605,918. 4 Claims. (Cl. 24—163.)



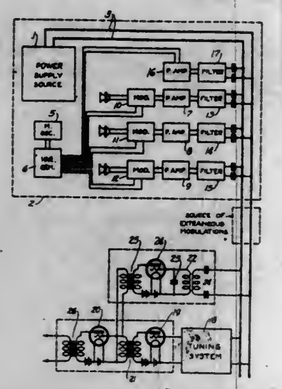
1. A belt buckle of the type described comprising a belt connector assembly, a yoke having a flanged bight carrying the belt connector slidably in said bight, a spring on the belt connector for resisting longitudinal separation of the belt connector and the yoke, a buckle body connected with the yoke, a belt hole engaging the tongue swingably carried on the flanged bight.

1,894,655. TANK CAR DOME CLOSURE. WILLIAM K. AUCHINCLOSS, New York, N. Y., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 9, 1930. Serial No. 501,037. 5 Claims. (Cl. 220—86.)



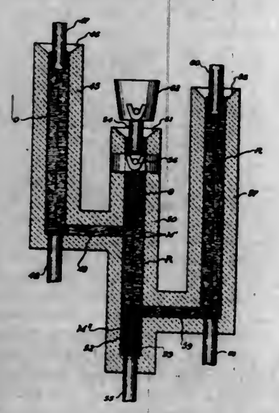
1. In a car tank, a filling and discharge pipe normally subject to pressure within the tank, a closure for the upper end of the pipe, a control valve intermediate the ends of the pipe below the normal load line of the tank operative to isolate a portion of the lading in the pipe from internal tank pressure whereby upon removal of the closure element the lading in said isolated portion may be sampled while there is pressure within the tank, and means for equalising the pressure in the tank and the pipe containing the isolated portion of tank lading to permit gauging of the lading.

1,894,656. HUM ELIMINATION SYSTEM. SALVATORE A. BARONE, Lakewood, Ohio, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 25, 1930. Serial No. 470,649. 2 Claims. (Cl. 179—2.5.)



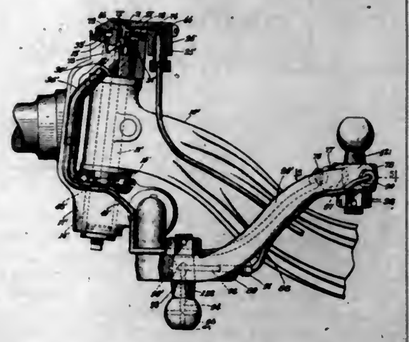
2. A hum elimination system comprising means for generating a master carrier current, means for deriving from said master carrier current a plurality of carrier currents of different frequencies, means for modulating only certain of said derived carrier currents with signal frequencies, a receiving system adapted to receive any one of said modulated carrier currents, a receiving system for receiving an unmodulated one of said carried currents wire lines connecting said source of carrier currents and said receiving systems, and means for combining the outputs of said first mentioned receiving system and said second mentioned receiving system whereby any one of said modulated carrier currents may be combined in phase opposition with said unmodulated one of said carrier currents.

1,894,657. METHOD AND APPARATUS FOR REFINING METALS. THADDEUS F. BAILY, Alliance, Ohio. Filed Aug. 12, 1929. Serial No. 385,113. 6 Claims. (Cl. 75—22.5.)



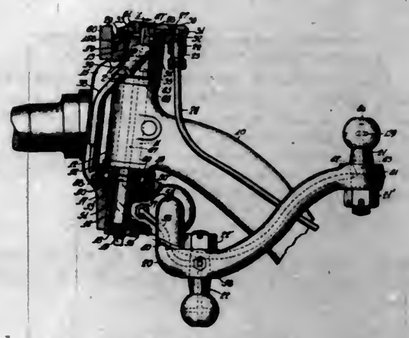
3. The process of purifying ferrous metal which consists in passing molten ferrous metal downward through a molten oxidizing slag resistor column and moving the molten oxidizing slag upward counter to the flow of the molten metal and then passing the molten metal downward through a molten reducing slag resistor column, and moving the molten reducing slag upward counter to the flow of the molten metal.

1,894,658. LUBRICATION. JOSEPH BIJUR, New York, N. Y., assignor to Auto Research Corporation, a Corporation of Delaware. Filed Aug. 22, 1925. Serial No. 51,733. 35 Claims. (Cl. 184—7.)



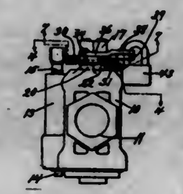
1. In a lubricating installation, in combination, a bearing, a conduit leading lubricant thereto from a turning structure at higher level, a support structure for said conduit between said first structure and said bearing, said support structure affording a dust excluding vent at said first structure to maintain the upper end of the conduit at atmospheric pressure for permitting ready gravity flow of the lubricant therethrough to supply the bearing.

1,894,659. LUBRICATION. JOSEPH BIJUR, New York, N. Y., assignor to Auto Research Corporation, a Corporation of Delaware. Original application filed Aug. 22, 1925, Serial No. 51,733. Divided and this application filed Sept. 29, 1930. Serial No. 485,056. 31 Claims. (Cl. 184—7.)



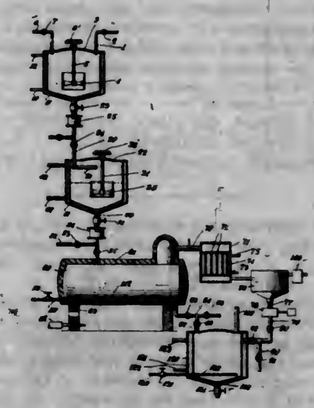
1. A steering knuckle having an arm projecting therefrom, a bearing on said arm and below the upper end of the knuckle, a conduit carried by the knuckle and extending to said bearing, inlet means including a covered collecting chamber at the upper end of said conduit and said knuckle delivering lubricant to said conduit and a vent to said collecting chamber to permit free flow of lubricant through said conduit to the bearing.

1,894,660. VALVE LOCK. ALEXANDER R. BLACK and ROBERT CLADE, Detroit, Mich., assignors to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 11, 1932. Serial No. 592,236. 18 Claims. (Cl. 70—90.)



1. A valve casing having spaced lugs, a rotatable plug in said casing having a stem provided with a wrench-faced end and a stop lug alternatively cooperative with said spaced lugs, said wrench-faced end having oppositely disposed transverse slots; in combination with a device for sealing the plug in either of two rotative positions, comprising a body member apertured to fit over said plug end, a pair of arms pivoted on said body member and movable to enter said slots respectively and simultaneously register seal receiving portions of the respective arms.

1,894,661. PROCESS FOR GENERATING USEFUL PRODUCTS FROM HYDROCARBON MIXTURES CONTAINING OLEFINES. BENJAMIN T. BROOKS, Stamford, Conn., assignor to Petroleum Chemical Corporation, a Corporation of Delaware. Filed Mar. 5, 1930. Serial No. 433,327. 11 Claims. (Cl. 196—10.)



1. Process of generating useful products from a mixture of hydrocarbons containing mono and diolefines, which comprises separating from said mixture a fraction, the olefine content of which fraction consists predominantly of butadiene and butene, treating said fraction in liquid phase with sulphuric acid of from 60 to 80%, H_2SO_4 content, separating hydrocarbons not in solution in said sulphuric acid, and recovering polymerized hydrocarbons from said separated hydrocarbons.

1,894,662. PROCESS FOR ACETYLATING OLEFINES. BENJAMIN T. BROOKS, Greenwich, Conn., assignor to Petroleum Chemical Corporation, a Corporation of Delaware. Filed May 6, 1930. Serial No. 450,265. 5 Claims. (Cl. 260—106.)

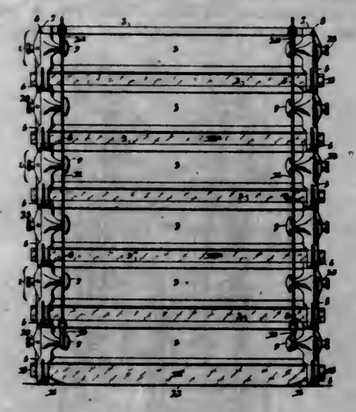
1. In the process of generating secondary butyl and amyl acetates from a mixture of hydrocarbons produced by cracking petroleum oil, the steps of separating from said mixture by distillation a fraction, the olefine content of which consists predominantly of olefines of the same number of carbon atoms to the molecule corresponding to the acetate to be produced, and thereafter esterifying the secondary olefines contained in said separated fraction by admixing the said fraction with free acetic acid and a catalyst.

1,894,663. POPPET VALVE CONTROL. CHARLES S. BURNETT, Presidio, San Francisco, Calif. Filed June 18, 1929. Serial No. 371,951. 7 Claims. (Cl. 74—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



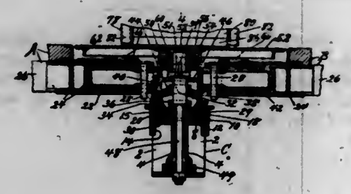
1. In a sectional cam, a fixed part and a movable part pivoted thereto and having a skirt bestriding the fixed part, and an extension on said skirt operating in certain positions to form a portion of the cam contour of the said fixed part.

1,894,664. CONTAINER FOR STACKED ARTICLES. GEORGE W. BUTTS, Wynnewood, Pa., assignor to Pennsylvania Railroad Company, a Corporation of Pennsylvania. Filed Aug. 12, 1931. Serial No. 556,550. 9 Claims. (Cl. 294—67.)



1. In combination, a bottomless container for transporting stacked articles or the like, a releasable load carrying member disposed therebeneath, and means on said container for engaging and supporting said load carrying member, said container having base and top portions so formed that when one such container is mounted above another the base portion of the upper container will nest upon the top portion of the lower container with the load of the upper container removed from said engaging and supporting means and carried direct to the lower container.

1,894,665. ARTICULATED CAR. JOHN CHRISTIANSEN, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 12, 1931. Serial No. 508,060. 22 Claims. (Cl. 105—4.)

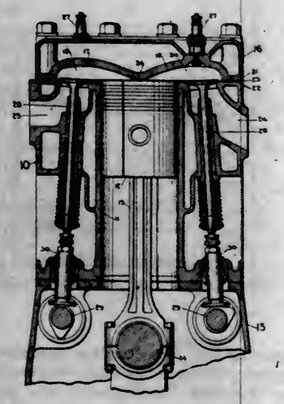


1. In a car construction, a truck center bearing, a body center bearing mounted in the truck center bearing, a filler block in said body center bearing, a second body center bearing supported by the filler block, and a foot plate mounted on and supported by the second body center bearing.

1,894,666. AMIDOPYRIN BORATE IN COMBINATION WITH ACETONE AND PREPARATION THEREOF. WALTER G. CHRISTIANSEN, Bloomfield, N. J., and ALFRED E. JURIST, Brooklyn, N. Y., assignors to E. R. Squibb & Sons, New York, N. Y., a Corporation of New York. Filed Oct. 10, 1929. Serial No. 398,810. 4 Claims. (Cl. 260—45.)

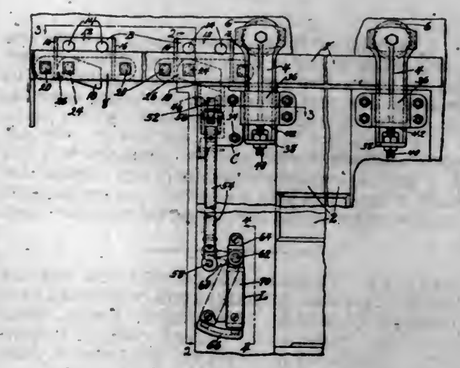
1. A compound consisting of amidopyrin, boric acid, and acetone, in the respective approximate proportions of 1, 5, and 1 molecules.

1,894,667. INTERNAL COMBUSTION ENGINE. HAROLD D. CHURCH and FERDINAND JEHLE, Cleveland, Ohio, assignors to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 4, 1930. Serial No. 425,787. 5 Claims. (Cl. 123—191.)



1. In an internal combustion engine, the combination of a cylinder, a piston in said cylinder, a plurality of combustion chambers in communication with one end of said cylinder and separated by dividing structure having a surface which lies closely adjacent the end of the piston when the piston is at the end of its compression stroke, an inlet conduit and an exhaust conduit leading into each of said chambers, valves for said inlet and exhaust conduits, and means for causing substantially simultaneous ignition of the separate fuel charges which are compressed within the respective combustion chambers by said piston.

1,894,668. BUFFER MECHANISM FOR CAR DOORS. ALLEN W. CLARKE, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 4, 1931. Serial No. 555,021. 10 Claims. (Cl. 292—254.)



1. A buffer mechanism for car doors comprising a pivoted element normally arranged in the path of movement of the door and with which the door contacts when moved in the closing direction whereby to limit closing movement of the door, plunger means carried by the door and normally arranged out of contacting relation with the pivoted element, and a lever for shifting the plunger means to release the engagement of said pivoted element and door to permit further closing movement of said door.

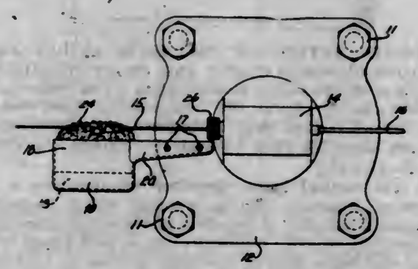
1,894,669. METHOD OF ELECTROPLATING AND COMPOSITIONS FOR USE THEREIN. FREDERICK CONLIN, New York, N. Y. Filed Mar. 23, 1928. Serial No. 264,270. 5 Claims. (Cl. 204—1.)

1. A method of electroplating with a brush having free bristles between or among which the electrolytic solution is carried, and an electrode among the bristles, comprising impregnating the spaces between the bristles with a solution containing a dissolved compound of the metal to be deposited and a substance for increasing the viscosity of the solution to counteract the flow of the solution away from the bristles and the electrode therein under pressure applied to the brush in its application, and passing current from the electrode in said brush to a conducting surface to which the solution-laden brush is applied.

1,894,670. METHOD OF ELECTROCLEANING. FREDERICK CONLIN, New York, N. Y. Original application filed Mar. 23, 1928, Serial No. 264,270. Divided and this application filed July 23, 1929. Serial No. 380,464. 3 Claims. (Cl. 204—7.)

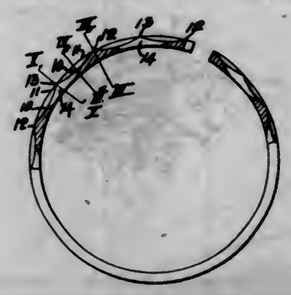
1. A method of electrocleaning by means of an applying implement in the form of a brush in which the solution is held in interstices between flexible bristles or filaments and through which current is passed from an electrode in the brush, comprising loading the brush with a viscous electrocleaning solution containe a soluble electrolyte of the electro-cleaner type which releases gas at the surface to be cleaned, and an amount of viscous constituent to render the solution resistant to expulsion from the said interstices when pressure is applied to the solution-laden brush in the act of applying the same, and passing current from the said electrode in the brush to a surface to be cleaned while said solution-laden brush is rubbed thereon.

1,894,671. METHOD OF COATING ARTICLES. THOMAS KING COX, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 8, 1929. Serial No. 369,351. 4 Claims. (Cl. 91—70.)



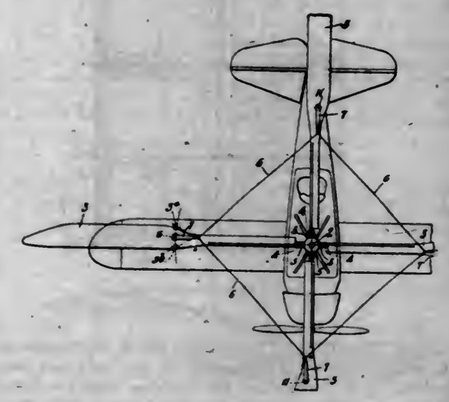
1. The method of securing the adhesion of a rubber compound to a metallic body which consists in depositing thereon a film of an acid of the organic class consisting of formic, acetic, oleic and palmitic acids, applying thereon the compound while in a plastic state, and thereafter vulcanizing the compound to the metallic body.

1,894,672. OIL RING FOR PISTONS. FRITZ DEUTSCH, Memphis, Tenn. Filed Sept. 14, 1931. Serial No. 562,700. 3 Claims. (Cl. 74—109.)



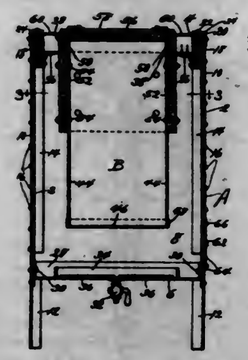
1. A piston ring having a plurality of substantially concave pockets in the outer face thereof forming parallel cylinder contacting edge portions, and a ridge portion formed between and separating each of the adjacent pockets and extending outwardly to the outer face of said ring, alternate of said ridges being provided with a slot extending through the ring and the other of said ridges being each provided on their opposite sides with a pocket extending into adjacent of said slots.

1,894,673. AIRCRAFT WITH ROTATIVE WINGS. JUAN DE LA CIERVA, London, England, assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 26, 1929, Serial No. 416,356. Renewed Dec. 16, 1931. 20 Claims. (Cl. 244—19.)



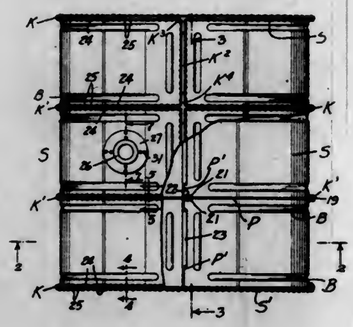
1. In combination with a rotative sustaining unit for aircraft, having a plurality of blades articulated to the axis of rotation, a non-reactive damping device for the blades.

1,894,674. PORTABLE COOLING APPARATUS. WILLIAM F. DIETRICHSON, Webster Groves, Mo., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed July 10, 1930. Serial No. 467,043. 8 Claims. (Cl. 62—91.5.)



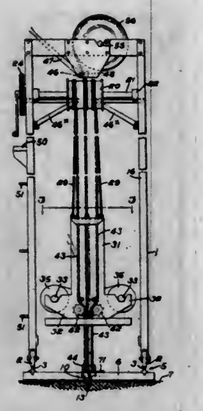
7. A portable cooling unit comprising a cabinet having a top, a closed container holding solid carbon dioxide arranged within the cabinet and depending from the top thereof, the connection of said cabinet with said top being insulated, insulation around the upper portion only of the container, the remaining portions of the container being exposed and free from connection with the cabinet whereby conduction of heat to the container is prevented, and air inlet and outlet means formed in the upper and lower portions, respectively, of the cabinet.

1,894,675. FUEL TANK. ALBERT C. DIXON, Santa Monica, Calif. Filed Apr. 4, 1931. Serial No. 527,803. 1 Claim. (Cl. 220—75.)



A tank comprising: a body composed of sections having edge flanges extending outwardly of the body and being unbroken at the corners of the sections, with the flanges of adjacent sections confronting each other; baffle plates in the body having their marginal edges disposed between the confronting flanges and being arranged in intersecting relation at the corners of the sections; U-section cap strips embracing the flanges and being integral at the corners of the sections; bars extending along the outer sides of the cap strips; fastening members extending through the bars, cap strips, flanges and baffle plates; and a film of cement coating said baffle plates, flanges and cap strips for sealing the joints between them.

1,894,676. WALL CONSTRUCTION. REVERE W. DRESSER, San Diego, Calif. Filed Oct. 16, 1931. Serial No. 569,127. 19 Claims. (Cl. 25—131.)



10. Wall forming mechanism operative to form a cementitious wall about a vertical reinforcing support sheet, having therein vertically movable means for progressively pressing a mass of cementitious material toward and into intimate association with said sheet while compacting the mass from opposite sdes thereof toward sad support sheet to form a dense wall having the support sheet included therein, in combination with means for applying to opposite faces of the wall protective sheets of covering material.

19. Method of wall construction in successive sections which comprises the erection of an end reinforcing element, the extrusion of cementitious material between opposite sheets with their ends juxtaposed to the reinforcing element and about an intermediate reinforcement of meshed wire, while limiting the width of the first section thus extruded so that the wire reinforcement projects beyond the extruded cementitious material, extruding the cementitious material of a second section between a second pair of retaining sheets and about reinforcing wire in overlapped engagement with the end of the wire reinforcement for the first section, and thus proceeding to erect successive sections, permitting the cementitious material to harden, and stripping the sheets from the face of the successively formed sections.

1,894,677. METHOD OF PREPARING EDIBLE EMULSIONS OF SOLID IN FAT AND PRODUCT THEREOF. LEWIS B. ESMOND, Boston, Mass., and WERNER W. DUECKER, Pittsburgh, Pa., assignors to Essex Gelatine Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 15, 1931. Serial No. 509,028. 4 Claims. (Cl. 99—11.)

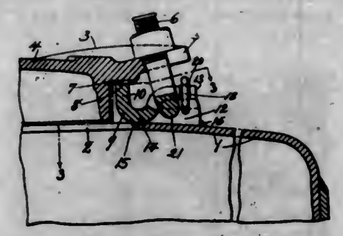
2. The method herein described of preparing a non-blooming chocolate coating material which consists in bringing a quantity of chocolate liquor to the approximate temperature of 115° F., introducing to said liquor and in solid and finely divided condition gelatine in an amount not greater than 3.5% of the whole, mixing the substances so brought together, adding to the mixture as the mixing operation proceeds a quantity of water not greater than .70% of the whole, adding fat in sufficient quantity to bring the fat content of the mixture approximately to 30%, then increasing the temperature to approximately 140° F. and maintaining such increased temperature for approximately 15 hours.

1,894,678. MANUFACTURE OF SHOES. JOSEPH FAUSSE, Melrose, Mass., assignor, by mesne assignments, to The Littleway Process Company, Boston, Mass., a Corporation of Massachusetts. Filed May 13, 1929. Serial No. 362,753. 57 Claims. (Cl. 12—145.)



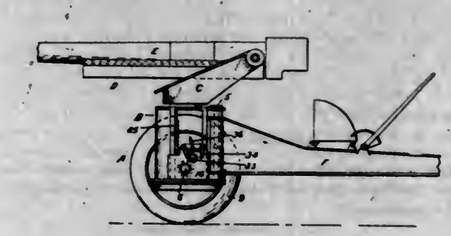
1. That improvement in methods of fastening an upper in lasted position over the marginal portion of a sole on a last which consists in applying a temporary retaining member to the overlasted upper over the marginal portion of the sole and pressing said member against the upper in a direction toward the bottom face of the last, and while holding the member thus pressed against the upper driving a plurality of fastenings in locations along the same portion of the margin of the shoe bottom where the holding pressure is applied to said member and in such relation to the member as to secure it in position to maintain the pressure thus applied substantially throughout the length of that portion of the margin of the sole along which the pressure is applied.

1,894,679. DOME RING FOR WELDED TANKS. CLYDE H. FOLMSBEE, Cranford, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed June 4, 1931. Serial No. 542,002. 9 Claims. (Cl. 220—55.)



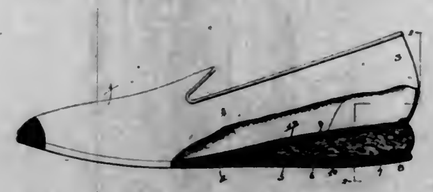
9. A dome ring comprising a metal pressing having an annular vertically arranged flange and a substantially horizontal flange projecting therefrom and provided with a plurality of bolt receiving recesses pressed therein.

1,894,680. GUN CARRIAGE. ELMER C. GOEBERT, U. S. Army, Philadelphia, Pa. Filed Jan. 11, 1932. Serial No. 585,928. 9 Claims. (Cl. 89—40.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



9. In a gun mount, an axle, a member movable vertically relative to the axle, a resilient suspension means carried by said member, and a gun pedestal carried by the suspension means.

1,894,681. SLIPPER. JAMES B. GREIDER, South Milwaukee, Wis. Filed Aug. 30, 1930. Serial No. 478,972. 1 Claim. (Cl. 36—9.)

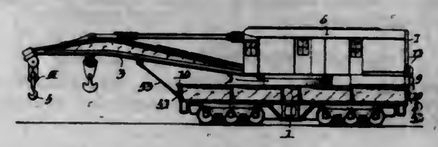


A slipper comprising a continuous inner sole, an upper having its lower edge turned under the lower face of the inner sole and secured thereto by an adhesive, a flat outer sole comprising a flat top face and an outer wear covering having its upper edge turned over the flat top face and secured thereto by an adhesive, a layer of cushioning material disposed between the covering and top face, and a wedge-shaped heel piece having a flat lower face interposed between the inner sole and the outer sole and including top and bottom pieces and a cushion interposed between said pieces, a flexible side wall uniting said pieces with its edges turned over said pieces, and an adhesive securing the inner sole, outer sole and heel piece together.

1,894,682. PROCESS OF PREVENTNG CLINKER. FRANK HAAS, Philadelphia, Pa. Filed July 23, 1929. Serial No. 380,465. 8 Claims. (Cl. 44—4.)

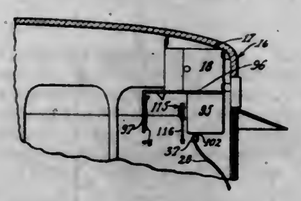
1. The process of preventing clinker from forming in a bed of coal or coke that is being burned, which comprises mixing fine particles of mineral material with the incoming combustion air, said particles being of such character and amount as will increase the melting point of the total ash.

1,894,683. LOCKING ATTACHMENT FOR CRANES. FREDERICK W. HANKINS, Philadelphia, Pa. Filed June 1, 1932. Serial No. 614,733. 6 Claims. (Cl. 212—69.)



1. In a railroad crane vehicle, the combination with a railway car and a crane structure rotatable thereon, of locking pin means for securing said crane structure in alignment with the car for travel; releasable vertical tie means for thereafter securing and holding down the crane structure to the car, and thus preventing disengagement of said locking pin means; and means for holding up said crane structure against said tie means, and thus preventing hammering between them, and also completely fixing the crane structure relative to the car.

1,894,684. AUTOMATIC ADVERTISING STATION ANNOUNCING SYSTEM AND METHOD. WALTER D. HAWK, Los Angeles, Calif. Filed June 17, 1929. Serial No. 371,382. 6 Claims. (Cl. 40—42.)

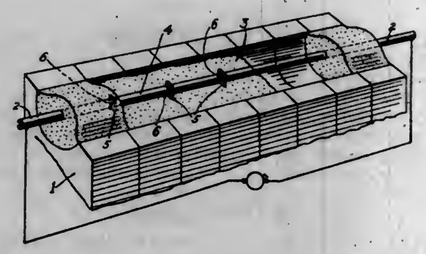


1. In an automatic station announcing system, a reduction gear train, a means to connect the reduction gear train to the running gear of a vehicle, a camera provided with a means for continuously moving a strip of film in the camera, a means operably connecting the film moving means with the reduction gear train, manually operated means to expose the film when the vehicle is stationary, and a support for holding a card in front of the camera.

1,894,685. ELECTRICAL RESISTOR AND MANUFACTURE THEREOF. ERNST HEDIGER, Niagara Falls, N. Y., assignor to The Globar Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed May 10, 1930. Serial No. 451,457. 8 Claims. (Cl. 201—76.)

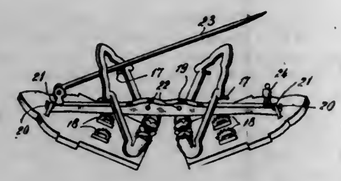
4. In the manufacture of silicon carbide resistors from particles of silicon carbide, the steps of increasing the resistance of the silicon carbide, which comprise initially

applying adhering aluminum particles to some of the silicon carbide particles, and subsequently converting the adhering aluminum to an oxide which adheres to the surface of the silicon carbide particles.



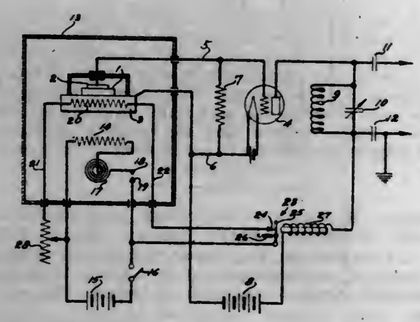
7. A raw mix for the manufacture of silicon carbide heating elements comprising silicon carbide grains and aluminum powder.

1,894,686. BROOCH. OSCAR HEYMAN, New York, N. Y. Filed Aug. 6, 1930. Serial No. 473,306. 7 Claims. (Cl. 24—85.)



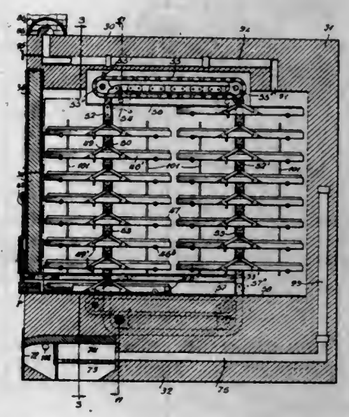
1. In a clip brooch, the combination of a body, a clamp pivotally mounted thereon and cooperating with the body to clamp the clothing of the wearer, a pin carried by the clamp coaxial with the pivotal axis, a bearing for said pin carried by the body, and coacting cam faces on the bearing and clamp whereby the pin is given an axial movement as the clamp is swung.

1,894,687. PIEZO-ELECTRIC CRYSTAL TEMPERATURE CONTROL. LAWRENCE A. HYLAND, Washington, D. C., assignor to Eclipse Aviation Corporation, East Orange, N. J., a Corporation of New Jersey. Filed Dec. 8, 1930. Serial No. 500,838. 18 Claims. (Cl. 250—36.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



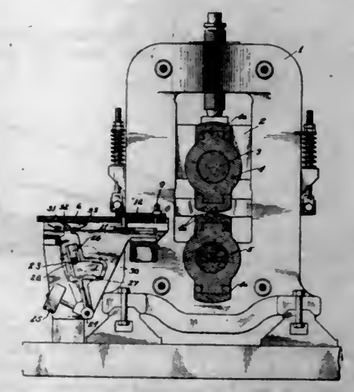
1. In a temperature regulating system for frequency control or stabilizing devices, means for mounting a frequency control or stabilizing device, and means for supplying heat to said device when the latter is not operating, in the same amount as the heat generated thereby when it is operating.

1,894,688. OVEN. JEAN BAPTISTE ICRE, New York, N. Y. Filed June 16, 1930. Serial No. 461,324. 6 Claims. (Cl. 107—57.)



1. An oven provided in its interior with an endless chain having ascending and descending runs, carriers connected with said chain pivotally and slidable laterally, and provided with rollers, an upper conveyer for transferring carriers from the ascending chain run to the descending one, a lower conveyer for transferring carriers from the descending chain run to the ascending one, a track engaged by said rollers during the transfer of a carrier from one of said chain runs to the other and arranged adjacent to the conveyer effecting such transfer, and coordinated means for operating said chain and conveyers in properly timed sequence.

1,894,689. METHOD OF AND APPARATUS FOR ROLLING METAL ARTICLES. ROY C. INGERSOLL, Galesburg, Ill., assignor to Ingersoll Steel & Disc Co., Galesburg, Ill., a Corporation of Illinois. Filed Jan. 9, 1931. Serial No. 507,576. 7 Claims. (Cl. 80—16.)



7. In an apparatus for rolling and tapering a metal disk comprising a pair of gap rolls, a rotatable and shiftable work holder, mechanism for advancing said workholder toward said rolls and simultaneously rotating the same one step, said mechanism including a pair of cooperating

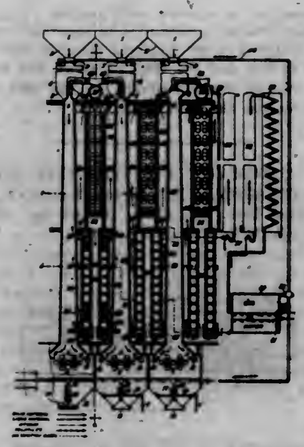
members having a driving relation that becomes ineffective where said workholder has been advanced for allowing said workholder to freely move away from said rolls.

1,894,690. COMBINED COSTUME FALSE-HEAD AND CHILD'S PLAY-HAT. HERMAN ISKIN, Jamaica, N. Y. Filed Nov. 17, 1931. Serial No. 575,544. 6 Claims. (Cl. 2—206.)



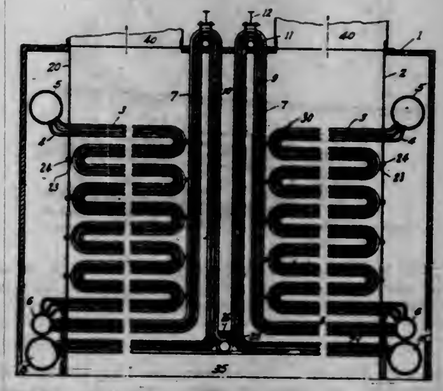
1. As a new article of manufacture, a separate, segmental piece of material shaped to fit the outlines of the front upper part of the head, elastic means for engendering variable friction between said piece and the head sufficient to hold said piece in place, and a single member suspended from said segmental first member, said single member having a portion constituting the front part of the combined regalia and head-covering group and another portion integral therewith constituting a disguise.

1,894,691. DESTRUCTIVE DISTILLATION OF CARBONACEOUS MATERIAL. LEWIS CASS KARRICK, Salt Lake City, Utah. Filed Nov. 16, 1925. Serial No. 69,300. 6 Claims. (Cl. 202—7.)



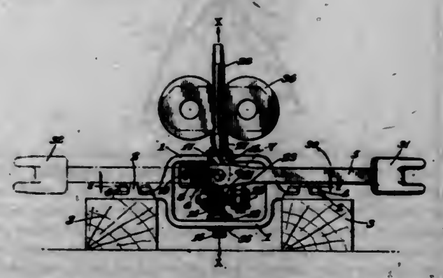
1. The process of treating dust free lumps of coal to produce a useful solid fuel which comprises, heating the coal in the absence of an appreciable amount of air by a large supply of superheated steam at a temperature sufficient to cause heat decomposition of the coal, and providing additional internal heat by supplying and burning mixed fuel gas and air within the retort.

1,894,692. TUBE SUPPORT. HOWARD J. KERR, Westfield, and CHARLES U. SAVOYE, Hackensack, N. J., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Feb. 18, 1931. Serial No. 516,559. 13 Claims. (Cl. 257—240.)



1. In a heat transfer device, a casing, a plurality of tubes formed into loops and disposed within said casing, an inlet and an auxiliary outlet header to which the inlet and outlet ends of the tubes are connected, and a second group of tubes connected to the auxiliary outlet header and extending parallel to the first named tubes for a portion of their length and at right angles thereto in a loop extending to the top of the casing, with a support for said last named tubes at the top of the casing, alternate loops of said first named tubes being supported on the right angle section of said last named tubes.

1,894,693. PARALLEL THROW SWITCH STAND. ISAIAH B. KIMMEL and JOHN V. STEWART, Johnstown, Pa. Filed Nov. 20, 1931. Serial No. 576,404. 10 Claims. (Cl. 246—411.)

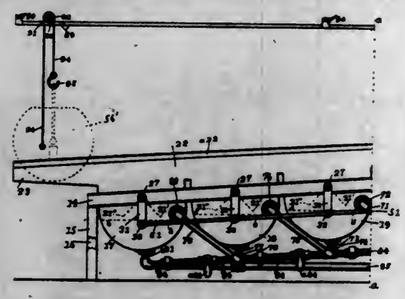


1. In a switch stand of the parallel throw type, a one piece housing, a double bearing spindle vertically supported in said housing, a double bearing throw lever adapted to rotate said spindle, and a thrust rod adapted to be actuated by the rotation of said spindle to operate switch mechanism.

1,894,694. LAUNDRY DRY-CLEANING MACHINE. ELMER KNUTSEN, Bellingham, Wash. Filed July 7, 1930. Serial No. 466,017. 7 Claims. (Cl. 68—21.)

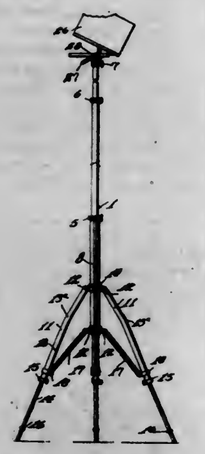
1. Apparatus of the kind described including a series of washing machine tubs disposed side by side in stepped relation, a pair of alined bearings fastened in each of said tubs, a controllable outlet from the bottom of the lowest of said tubs, a series of intervening stand pipes in stepped-down relation joining the bottom of each higher tub with

the top of the adjacent lower tub adapting said series of tubs for the free gravity flow of liquid through said tubs from the top to the bottom thereof and between said tubs



from the bottom of each higher tub into the top of the adjacent lower tub, and a liquid supply pipe leading into the top of the highest of said series of tubs.

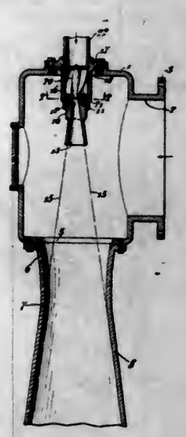
1,894,695. TRIPOD. GEORGE ALBERT LEY, Chicago, Ill. Filed Aug. 15, 1930. Serial No. 475,497. 2 Claims. (Cl. 248—43.)



1. A support for cameras and the like comprising a staff for supporting the camera, a longitudinally extending strip positioned on said staff, collars mounted on said staff for snug engagement therewith and with said strip, legs swivelly related to one of said collars, leg braces swivelly related to the other of said collars and to said legs, and set screws engageable through said collars and with said strip for securing said legs in adjusted position.

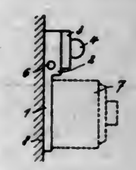
1,894,696. VAPOR CONDENSER. OTTO A. LINDEMANN, Wyncote, Pa., assignor to Schutte and Koerting Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 11, 1930. Serial No. 494 862. 1 Claim. (Cl. 261—116.)

A vapor condenser comprising, in combination, a condensing chamber, a Venturi tail pipe leading from the bottom of said chamber, a nozzle located in the said chamber and projecting downwardly therein in alignment with the said Venturi tail pipe, the said nozzle having a Venturi passageway, the angle of taper of the tail discharge portion of the passageway through said nozzle being approximately the same as that of the angle of taper of the tail discharge portion of the said Venturi tail pipe, a tapered device projecting into the upper end of the said Venturi passageway, adjustable means for supporting said tapered device to adjust the latter into position as desired



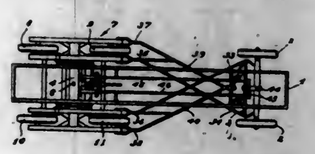
with relation to the upper end of the said Venturi passageway, and means for supplying liquid to the said passageway.

1,894,697. INDICATOR. ALEXANDER LULKI, Berlin, Germany. Filed June 12, 1929, Serial No. 370,322, and in Germany Aug. 31, 1928. 1 Claim. (Cl. 200—167.)



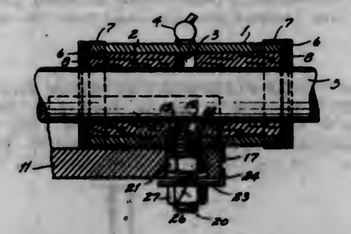
In an indicator, an electric wall switch a lamp adapted to burn when the said switch is in the "off" position, a base plate adapted to be disposed between the rear part of the said switch and the wall to which the said switch is secured, and an edge abutment on the said base plate adapted to receive the said lamp.

1,894,698. AUTOMATIC DIFFERENTIAL FOR FOUR-WHEEL ATTACHMENTS. BYRON MARKHAM, Martinez, Calif. Filed Mar. 16, 1931. Serial No. 523,077. 2 Claims. (Cl. 180—18.)



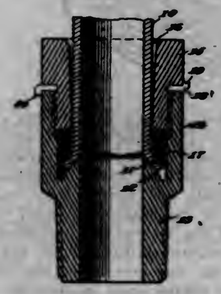
1. In combination, a tie rod, a T-shaped swingably mounted member operated by the tie rod, links connected to the arms of the T-shaped member, an attachment, two sets of drive wheels supporting the attachment, a driving shaft, separate connections between the driving shaft and each set of drive wheels and including clutches, and operating means connecting the links with the clutches, the means disposed on the side of the vehicle having the clutch in operative position, being extended.

1,894,699. BEARING AND MOUNTING THEREFOR. JOHN E. MITCHELL and ORVILLE MITCHELL, Dallas, Tex. Reiling of abandoned application Serial No. 211,318, filed Aug. 8, 1927. This application filed Jan. 12, 1931. Serial No. 508,341. 6 Claims. (Cl. 308—72.)



1. In combination with a support, a tubular bearing provided on its underside with swivel members adapted to rest on said support, and means for securing said bearing in position on the support comprising a washer having a swivel elevated above the plane of the washer centrally thereof and engaging the underside of said support.

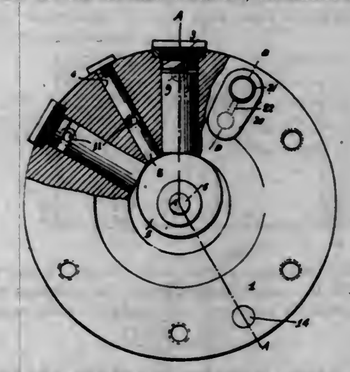
1,894,700. COUPLING AND WASHER ASSEMBLY. ARTHUR LA RUE PARKER, Cleveland, Ohio. Filed Mar. 17, 1931. Serial No. 523,374. 3 Claims. (Cl. 285—86.)



1. A flexible coupling for tubes comprising male and female members having a threaded connection and a recess within said members, one of said members having a projecting tapering portion extending into the recess and adapted to extend into the flared end of a tube and provide a seat therefor, the other coupling member having an opening to receive the tube, said opening having sufficient clearance to permit normal vibrations of the tube, a tube clamping member of flexible material located in said recess and surrounding the tube, said flexible clamping member in its free condition being shaped and dimentioned so that when the coupling members are connected, said coupling member with the opening therein will engage the flexible clamping member for forcing the clamping member against the flared end of the tube and the tube against said seat, and pressure will be exerted on the tube throughout the entire region of the flexible clamping member with a maximum pressure on the flared end of the tube and a minimum yielding pressure on the tube wall whereby vibrations of the tube in the coupling member are yieldingly restrained.

1,894,701. COMPRESSOR. RENÉ PAUL, Colombes, France. Filed Jan. 8, 1930, Serial No. 419,225, and in France Jan. 23, 1929. 10 Claims. (Cl. 230—187.)

1. In an automatic variable output compressor, the combination of a block formed with a plurality of sets of radial cylinders, the cylinders of the different sets having different cross-sectional area, pistons positioned in said cylinders for reciprocation therein, an eccentric for reciprocating said pistons in said cylinders, a plurality of receivers, means for conducting fluid from each set of cylinders to one of said receivers, an outlet adapted to

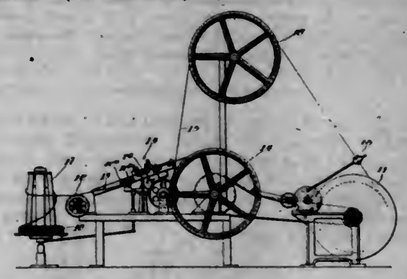


communicate with said receivers and means for limiting the fluid pressure discharged from each of said receivers into said outlet.

1,894,702. PROCESS FOR PREPARING TRANSPARENT PHENOL-FORMALDEHYDE RESINS. GERMAINE PECHIN, née LACROUX Bois-Colombes, France. Filed Dec. 4, 1930, Serial No. 500,145, and in France Dec. 4, 1929. 2 Claims. (Cl. 260—4.)

1. In a process for preparing transparent artificial resins by condensing phenols and formaldehyde the addition of a bleaching or discolouring agent consisting of a mixture of acetic acid, camphor, glycerine and hydrochloric acid.

1,894,703. WIRE STRAIGHTENING APPARATUS. ROBERT C. PIERCE, Niles, Mich., assignor to National-Standard Company, Niles, Mich., a Corporation of Michigan. Filed June 3, 1931. Serial No. 541,883. 3 Claims. (Cl. 140—136.)

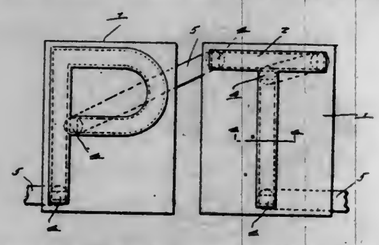


1. Wire straightening apparatus, including; a plurality of ball-bearing mounted rollers adapted to give the wire a series of alternate opposite bends first in one plane and then in a plane substantially at right angles to the first; and means for drawing wire between said rollers, said means including a haul-off drum around which the wire is wrapped, the diameter of such drum being sufficiently great and the tension exerted on the wire in pulling the same between said rollers being such that the wire will not receive a permanent set or bend by being wrapped around said drum.

1,894,704. ILLUMINATED SIGN. WILLIAM B. PIPER, Memphis, Tenn., assignor of twenty-five per cent to Ben Carlyle Welch, Memphis, Tenn. Filed Nov. 27, 1929. Serial No. 410,043. 1 Claim. (Cl. 40—130.)

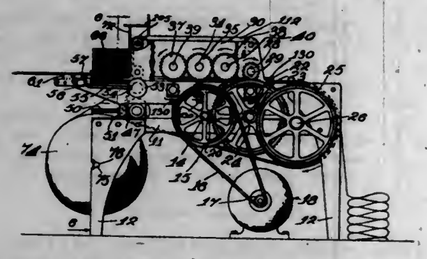
In a sign, a plurality of glass panels, characters having bodies curved transversely and having the edges thereof fused to said panels forming passages for the inser-

tion of a gas, said panels, having openings extending entirely therethrough and communicating with said passages and jumper tubes extending across the backs of



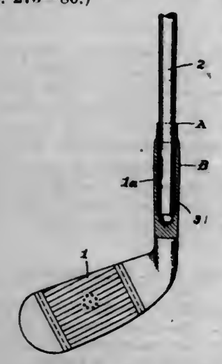
said panels, and fused at the ends thereof to the backs of the panels in communication with the openings in the panels establishing communication between said passages.

1,894,705. GRID PASTING MACHINE. HENRY J. RADLE, Evanston, Ill., assignor to Monark Battery Company, Inc., a Corporation of Delaware. Filed May 1, 1930. Serial No. 449,069. 15 Claims. (Cl. 226—39.)



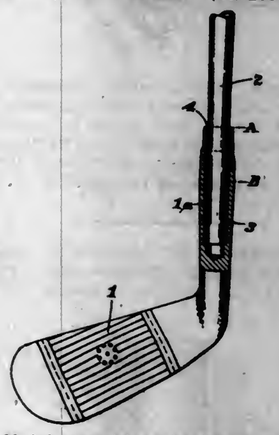
1. In a grid pasting machine, a frame, a hopper for holding paste mounted on the frame, means for advancing grids through the hopper, a plurality of driven rolls in said hopper for packing paste into said grids, said rolls being driven in opposite directions, and a roll mounted in said hopper and driven at a higher speed than the first mentioned rolls to polish the pasted grids.

1,894,706. GOLF CLUB WITH METALLIC SHAFT AND HOSEL. WILLIAM F. REACH, Springfield, Mass., assignor to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Original application filed July 6, 1928, Serial No. 290,823. Divided and this application filed Apr. 8, 1929. Serial No. 353,521. 2 Claims. (Cl. 273—80.)



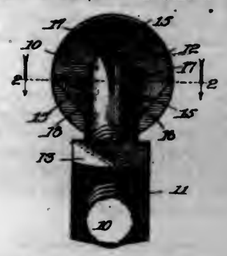
In a golf club and in combination, a head having a metallic hosel, a metal shaft, a sleeve of torsionally distortable resilient material fixed to the shaft, and fitting against the interior of the wall of the hosel, the upper end of the hosel extending along the shaft above the upper end of the sleeve and having its bore contracted at said upper end with the wall of said bore overlying the end of the sleeve, said sleeve being of rubber material vulcanized to the shaft, said vulcanized shaft and rubber sleeve being inserted into the hosel from the upper end thereof.

1,894,707. GOLF CLUB WITH METALLIC SHAFT AND HOSEL. WILLIAM F. REACH, Springfield, Mass., assignor to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Filed Jan. 13, 1931. Serial No. 508,518. 7 Claims. (Cl. 273—80.)



1. A golf club comprising a head having a metal hosel in one piece throughout, a metal shaft, a sleeve of torsional, resilient shock absorbing material capable of restoring itself to normal condition after distortion permanently affixed to said shaft and having a driving fit with the wall of the bore of the hosel, said hosel extending above the upper end of the sleeve, said extended upper end of the hosel being compressed toward the shaft and thereby reduced in internal diameter above the sleeve to retain the sleeve and its affixed shaft in place in the hosel, said compressed extended end of the hosel surrounding said shaft in spaced relation thereto without metal to metal contact with the shaft at any point.

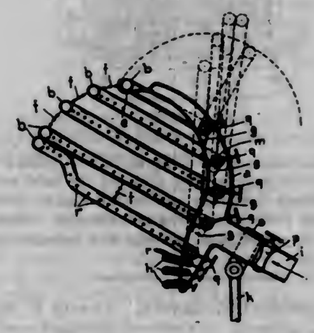
1,894,708. BOLT. ROBERT SARDESON, Minneapolis, Minn., assignor to Lewis Bolt & Nut Company, a Corporation of Minnesota. Continuation of application Serial No. 474,444, filed Aug. 11, 1930. This application filed July 7, 1932. Serial No. 621,246. 1 Claim. (Cl. 85—9.)



A screw-threaded bolt comprising a thin disc-like head adapted to be drawn into a wooden beam through which the bolt is passed, and a substantially triangular-shaped fin integral with the shank and head of said bolt and extending along the under side of said head from the shank to a point substantially at the periphery of said head, one side of said fin being disposed in a plane extending substantially radially from said shank, and the other side

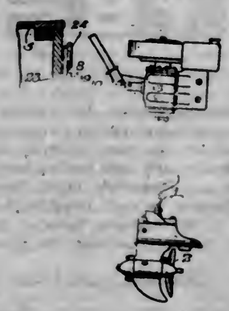
of said fin being disposed at an acute angle to said plane to provide a relatively sharp cutting edge along the outer edge of said fin whereby said fin may be forced readily into said wooden beam, said radially extending surface of said fin being adapted to engage the wooden beam to prevent the bolt from turning in the direction necessary to unscrew it from a nut threaded thereon.

1,894,709. HAIR-DRYING APPARATUS. ALFRED SALM, Brunswick, Germany, assignor to Salm & Bruns, Ludwig Stolberg Nachf, Brunswick, Germany. Filed Nov. 10, 1930, Serial No. 494,730, and in Germany Sept. 6, 1929. 7 Claims. (Cl. 34—26.)



7. A hair-drying apparatus, comprising a tubular member for supplying a drying medium, a plurality of superposed pipes in the form of incomplete rings adapted to partially encircle the head, each ring having two ends communicating with said tubular member, said rings spaced one above another along said tubular member, said rings being movable relative to one another and being formed with holes for the delivery of the drying medium towards the head.

1,894,710. OUTBOARD PROPELLING MOTOR FOR BOATS. CHARLES B. SAMUELSON, Peninsula Township, Grand Traverse County, Mich. Filed Mar. 28, 1931. Serial No. 526,051. 6 Claims. (Cl. 248—14.1.)



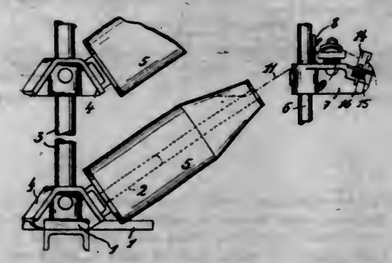
1. In a device for mounting an outboard propelling motor on a boat: a supporting member secured on the boat and having an upwardly-downwardly extending slide bearing with a shoulder adjacent its upper end; a member carried by the first-mentioned member slidably along its bearing to lower position and in its upper position movable laterally into and out of supported position on the shoulder, and carrying the motor, the second-mentioned member being held by said slide bearing against detaching lateral movement.

1,894,711. FAUCET CONNECTER. CLIFFORD A. SCHACHT, Huntington, Ind. Filed Mar. 19, 1932. Serial No. 600,009. 1 Claim. (Cl. 285—163.)



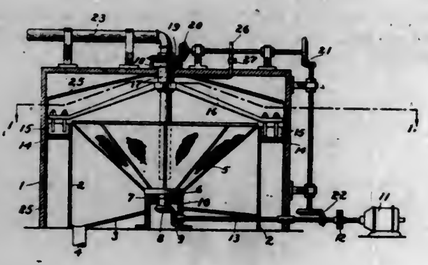
A faucet connecter comprising a casing having an outlet nipple at one end, the other end being outwardly flared and having an annular shoulder; a rubber bushing seating upon the shoulder and having a centrally disposed opening to receive the end of the faucet; the face of the bushing adjacent the opening being countersunk to facilitate entry of the faucet into the opening; a cap for locking the bushing to the shoulder, the cap having its lower edge rolled under the shoulder to compress the bushing between the cap and shoulder; an annular flange on the bushing within the casing surrounding the opening and adapted to engage the faucet; and a second annular flange surrounding the first flange and engaging the inner wall of the casing, whereby the water pressure within the casing will force the flanges against the faucet and casing walls respectively.

1,894,712. WARPING FRAME. WALTER SCHWEITER, Horgen near Zurich, Switzerland. Filed June 13, 1930. Serial No. 461,008, and in Switzerland June 26, 1929. 1 Claim. (Cl. 242—131.)



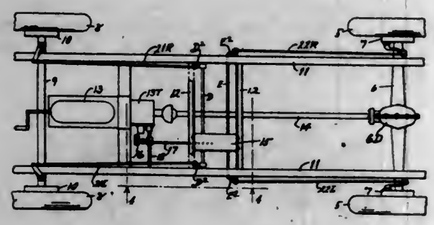
In combination with a warping frame, a plurality of stationary braking devices for the threads each comprising a pair of brake discs between which the thread is designed to pass, fixed guide eyes cooperating with each of said braking devices for introducing the thread to said braking devices, thread guides arranged behind each of said braking devices in the direction of motion of the thread, and means for displacing said thread guides in groups in the longitudinal direction of the frame to vary the angular extent of contact between the thread and brake discs to obtain an additional regulation of the tension of the thread.

1,894,713. SELF CLEANING CENTRIFUGAL SIEVE. CLARENCE C. SEARLE, Taft, Calif. Filed July 29, 1930. Serial No. 471,574. 3 Claims. (Cl. 210—68.)



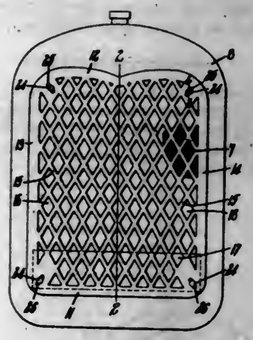
2. A device for continuously cleaning mud used in oil well drilling machinery comprising a rotatable conical-shaped sieve, a temporary reservoir enclosing the sieve for receiving material passed through the sieve, an outlet for the reservoir, a circular channel encircling the open top of the sieve, said channel having an outlet, paddles movable in the channel for directing material to the outlet, a dome-shaped casing covering the top of the sieve for temporarily trapping gases liberated from the mud and an outlet pipe leading from the top of the casing.

1,894,714. BRAKE EQUALIZER. RENO O. SHULTZ, Montevideo, Minn. Filed Dec. 26, 1931. Serial No. 583,243. 3 Claims. (Cl. 188—204.)



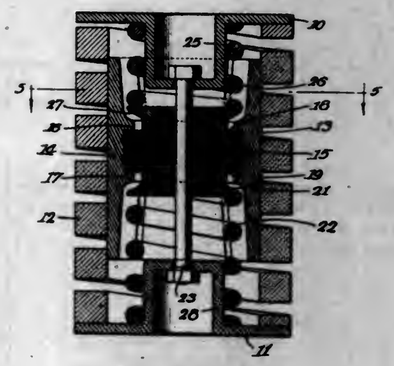
1. A brake equalizer device for a motor vehicle with four wheel brakes, brake means including a lever at each brake drum, reach rods extending from said levers, and a transverse rock shaft for each pair of said brake rods; foot pedal operated means arranged to oscillate said rock shafts and operate the brakes simultaneously; a longitudinal mechanism housing mounted near said foot pedal, three differentials in said housing and means connecting said differentials to each other and the forward differential to the foot brake to cause simultaneous oscillation of the differentials, said rock shafts arranged one forward of the other, both shafts two-part and fixed in respective opposite gears of the front and rear differentials, a pair of meshing multilated gears connecting the center differential rotatably to the rear differential, reach rod members operatively connecting the forward with the center differential and reach rod means connecting the forward differential with the brake foot pedal.

1,894,715. AUTOMOBILE SHIELD AND GRILLE. GEORGE L. SMITH, Hyde Park, Mass. Filed July 22, 1931. Serial No. 552,386. 2 Claims. (Cl. 257—132.)



1. In combination, a grille adapted to be fastened to the radiator of an automobile, and a shield for said radiator interposed between the grille and radiator and embodying a single sheet of material creased transversely thereof and folded to form a plurality of sections and fastened to said grille.

1,894,716. CUSHIONING DEVICE. DONALD F. SPROUL, Chicago, Ill., assignor to Cardwell Westinghouse Company, a Corporation of Delaware. Filed June 20, 1931. Serial No. 545,645. 3 Claims. (Cl. 267—9.)

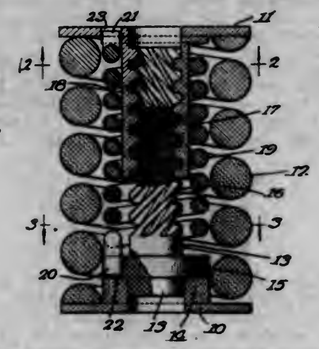


2. In a cushioning device, in combination, a pair of followers, a spring barrel reacting therebetween and having an interior friction face, friction shoes in engagement with such face and each having interior spaced segmental flanges, an expansible block interposed between the shoes and located between the flanges, a pair of metal plates applied to the opposite faces of the block, and a pair of springs reacting between the plates and the followers.

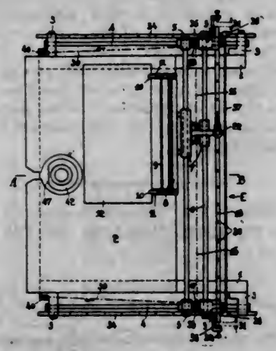
1,894,717. CUSHIONING DEVICE. DONALD F. SPROUL, Chicago, Ill., assignor to Cardwell Westinghouse Company, a Corporation of Delaware. Filed July 6, 1931. Serial No. 548,914. 1 Claim. (Cl. 267—9.)

In a cushioning device, in combination, a pair of opposed followers one thereof carrying an instanding non-rotatable socket and the other having an instanding socketed boss, a shaft pivotally engaging the boss and

having a flange seated on the end thereof, the shaft being in threaded engagement with the first-named socket, a helical spring surrounding the threaded elements and having its ends anchored, respectively, to the flange and to the opposite follower, and an expansion spring interposed between the followers.



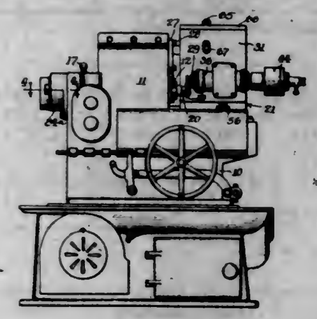
1,894,718. STAMP AND DRAWING PRESS. KARL STERN, Baden near Vienna, and JOSEF KUBIN, Mollersdorf, Austria; Said Kubin assignor to said Stern. Filed July 6, 1931, Serial No. 549,044, and in Austria July 21, 1930. 7 Claims. (Cl. 113—42.)



1. Feeding mechanism for stamp or drawing presses and the like for stamping out rows of patterns comprising a slide carrying the workpiece to be stamped, a guide for said slide, at least one second guide arranged perpendicularly to the first guide and adapted to serve as a guide for the first guide, dividing means arranged parallel to said guides and having stops adapted to secure the working positions of the slide along said guides, said stops being optionally adjustable along said dividing means, one of said dividing means which is arranged parallel to the guide of the slide being displaceable in its longitudinal direction in both directions, and means for displacing said dividing means by an optionally adjustable amount.

1,894,719. CAM MILLING ATTACHMENT FOR LATHES AND OTHER MACHINE TOOLS. ERNEST J. SVENSON, Rockford, Ill. Filed July 27, 1929. Serial No. 381,526. 28 Claims. (Cl. 90—13.4.)

1. The combination with a machine tool having a bed, a headstock at one end of said bed having a headstock spindle therein, and clutch controlled actuating means for said headstock spindle, of a cutter on said spindle and a cam milling attachment comprising a column secured on said bed rearwardly of the plane of said headstock spindle, a head mounted for vertical reciprocation on the forward side of said column, rotatable work supporting means on said head adapted to support and rotate a cam blank above said cutter, a master cam rotatably mounted on said column, a roller engaging said master cam and having an adjustable connection with said head whereby to control the vertical position thereof, a drive shaft operatively connected to said master cam to rotate

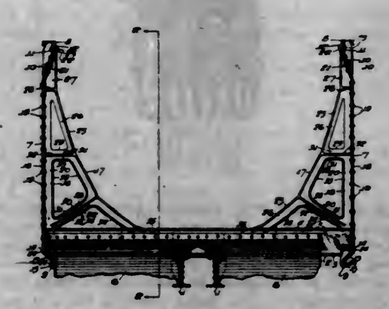


the same and journalled in said column and extending along the rear side of said headstock, said shaft being operatively connected to the far end of said headstock spindle so as to be driven thereby, a driving connection between said shaft and said work supporting means including a pair of change gears, and a movable trip device driven from said shaft and operable to disengage the clutch of said actuating means upon completion of a cam.

1,894,720. PROCESS OF ELIMINATING ARSENIC FROM ACIDS, PARTCULARLY SULPHURIC ACID. CONWAY, BARON VON GIRSEWALD and WOLFHART SIECKE, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 9, 1930, Serial No. 442,994, and in Germany Nov. 13, 1929. 9 Claims. (Cl. 23—172.)

1. A process for eliminating arsenic from acids which comprises treating acids at a temperature not substantially exceeding 50° C. with a compound containing the acid radicle of an oxyacid of sulphur having at least two directly linked sulphur atoms and separating the precipitated arsenic sulphide from the liquid.

1,894,721. RAILWAY CAR. WILLIAM E. WINE, Toledo, Ohio. Filed Aug. 11, 1931. Serial No. 556,434. 9 Claims. (Cl. 105—406.)

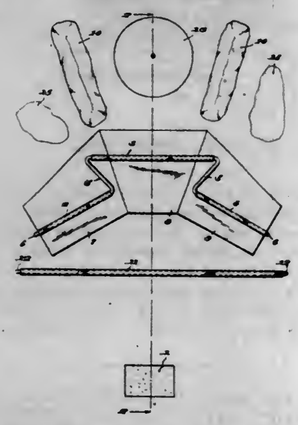


1. A railway car having side walls and strengthening means for said walls, each of said means comprising a side stake portion rigid with the adjacent side wall and a brace portion extending downwardly and inwardly from adjacent the upper end of the side stake portion,

said portions being rigidly connected by a plurality of members disposed intermediate the ends of the brace portion.

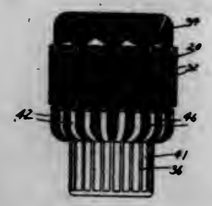
2. A railway car having side walls and strengthening means for said side walls, each of said means comprising a side stake portion rigid with the adjacent side wall, a brace portion diverging downwardly from adjacent the upper end of the side stake portion, and a plurality of members intersecting the brace portion intermediate the ends of the latter for integrally connecting said brace portion to said side stake portion.

1,894,722. GOLF GAME APPARATUS. ROBERT E. ADAMS, New York, N. Y. Filed Mar. 5, 1931. Serial No. 520,416. 6 Claims. (Cl. 273—32.)



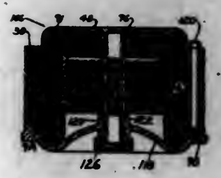
1. Golf apparatus comprising a tee, fairway and green, a substantially vertical curtain interposed between the tee and green, and an inclined surface disposed beneath said curtain and sloping in a direction away from said tee, the lower edge of said curtain being adjacent said surface but spaced therefrom a distance sufficient to permit the passage of a ball.

1,894,723. ARMATURE. VINCENT G. APPLE, Dayton, Ohio; Herbert F. Apple, Edward M. Apple, and Gourley Darroch executors of said Vincent G. Apple, deceased. Filed Feb. 5, 1930. Serial No. 426,176. 4 Claims. (Cl. 171—206.)



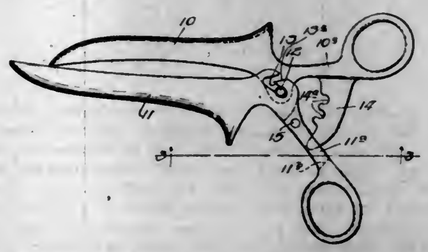
1. A dynamo electric machine armature comprising a magnetizable core, a winding comprising a plurality of turns of insulated wire on said core extending beyond and forming winding heads at the ends of said core, a commutator hub of insulation in coaxial alignment with said core axially beyond the front winding head, a plurality of metal commutator segments circumferentially spaced apart around said hub, the one end only of each segment being imbedded in said hub, the other end being extended beyond said hub toward said core and joined to said winding, and a concentrically molded ring of insulating cement extending from said core to said hub, cementing said core to said hub, the said front winding head and the said extended ends of said segments and the joints between said segments and said winding all being imbedded in said ring.

1,894,724. STATOR WITH BUILT-IN CONDENSER. VINCENT G. APPLE, Dayton, Ohio; Herbert F. Apple, Edward M. Apple and Gourley Darroch executors of said Vincent G. Apple, deceased. Filed Nov. 6, 1930. Serial No. 493,836. 3 Claims. (Cl. 172—233.)



3. An alternating current motor stator comprising a magnetizable core having an axial rotor opening, a plurality of circumferentially spaced apart winding apertures extending radially outward from said opening, a winding in said apertures extending axially beyond the ends of the core to form ring-like winding heads, a condenser at one end of the core situated in the space within one of said ring-like winding heads and connected in series with a portion of said winding, and a one piece mass of impervious insulation pressure molded to and about the structure but not otherwise fastened, said mass comprising a ring at one end of the core within which one winding head is imbedded, a shell surrounding and completely covering the outside of the core, struts extending through the core apertures within which the coil sides are imbedded, and a heavy end wall closing the end of the rotor opening, the other winding head being imbedded in said end wall and the condenser being imbedded in and supported midway within the thickness of said wall but not otherwise supported.

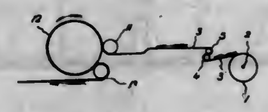
1,894,725. SPECULUM. JOSEPH B. BACON, Macomb, Ill. Filed May 26, 1932. Serial No. 613,715. 2 Claims. (Cl. 128—3.)



1. A speculum of the character described including two jaws with handles, pivotally attached together to permit relative sliding movement of said jaws and handles with respect to each other, a notched segment carried by one handle, and a pin carried by the other handle adapted to be engaged in the notches in said segment or released therefrom by said relative sliding movement.

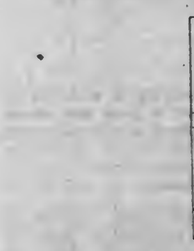
1,894,726. ROTATING PAPER BAG MACHINE. HILDING WILLIAM BECKMAN, Malmo, Sweden. Filed Apr. 13, 1931, Serial No. 529,811, and in Germany Apr. 24, 1930. 27 Claims. (Cl. 93—14.)

1. In a rotating paper cross-bottom bag, or paper canister, machine, a continuously rotating drum, a plurality of bottom folding members mounted in a spaced relation at the circumference of said drum, means for actuation of such folding members at the rotation of the drum, feeding means for advancing canister blanks to said drum, and means adapted to coact with the drum for clamping the said blanks to the drum during the different folding operations, the folding members being adapted to act in succession, and the folding member performing the first phase of the bottom folding being adapted to coact with a clamping rib for folding the canister blank along said rib.



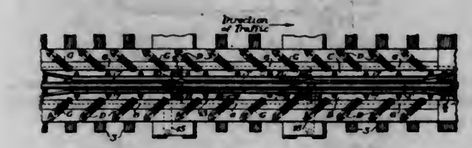
2. In a rotating paper cross-bottom bag, or paper canister, machine, a continuously rotating drum, a plurality of bottom folding members mounted in a spaced relation at the circumference of said drum, means for actuation of such folding members at the rotation of the drum, continuously running belt means adapted for coaction with the drum and passing around a rotating roller positioned so as nearly to touch the drum, clamping ribs mounted on said belts and partaking in their movement, and means for feeding in the canister blanks between said drum and roller.

1,894,727. ARTICLE FOR TRANSFERRING COLOR AND OTHER MATERIAL. LLOYD E. BENNER, Minneapolis, Minn. Filed Aug. 9, 1930. Serial No. 474,282. 10 Claims. (Cl. 132—79.)



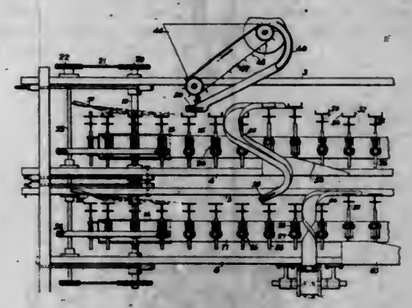
1. A transfer article comprising a stem having a head consisting of transfer material carried at one end thereof and a protective relatively non-adhesive jacket surrounding said head and slidably removable therefrom.

1,894,728. RAILWAY BRAKING APPARATUS. HERBERT L. BONE, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 24, 1931. Serial No. 524,782. 2 Claims. (Cl. 188—62.)



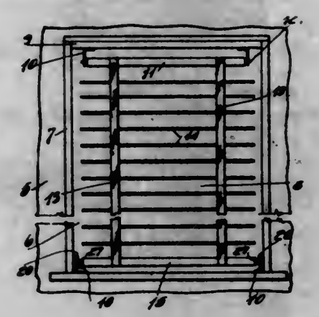
1. As a new article of manufacture, a beam section for a car retarder, said beam section being provided at one end with a vertically extending T-shaped tongue and at the other end with a vertically extending T-shaped slot adapted to receive a T-shaped tongue on the end of a similar beam section.

1,894,729. MACHINE FOR AND METHOD OF SPRAY COATING. WILLIAM H. BOZARTH, Vineland, N. J., assignor to Eastern Cap Spraying Co., Inc., a Corporation of New Jersey. Filed Jan. 11, 1929. Serial No. 331,804. 11 Claims. (Cl. 91—44.)



1. A spray coating machine comprising a plurality of article carriers, a spray jet, means for progressively moving the carriers through the path of the jet spray, means to rotate said carriers to expose all parts of the articles to the spray, and means to bodily raise said article carriers vertically with the articles supported thereby.

1,894,730. ANCHOR BRACKET. FRED J. BURNS, Saginaw, Mich., assignor to The Columbia Mills, Incorporated, Saginaw, Mich., a Corporation of New York. Filed June 20, 1932. Serial No. 618,198. 10 Claims. (Cl. 156—17.)



1. An anchor bracket comprising a vertically disposed main body member, a foot formed integral therewith, and a slider member adjustably mounted on said body member and adapted to detachably engage a blind.

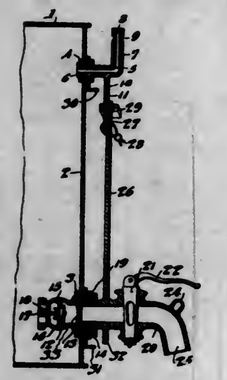
1,894,731. STENCIL PAPER. KENNETH W. CARR, Oak Park, Ill., assignor to Ditto, Inc., Chicago, Ill., a Corporation of West Virginia. Filed Sept. 29, 1926. Serial No. 138,572. 17 Claims. (Cl. 41—38.6.)

14. A stencil coating having as a base a synthetic resin of the phenol condensation type which is finally reacted and incapable of polymerization.

1,894,732. SEALING AND DISPENSING DEVICE FOR OIL DRUMS AND THE LIKE. JOHN F. CHENEY, West Palm Beach, Fla. Filed Dec. 30, 1931. Serial No. 583,985. 3 Claims. (Cl. 221—1.)

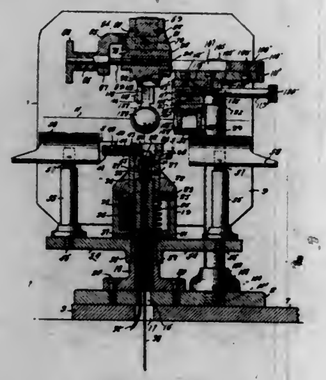
1. A sealing and dispensing device for oil drums and the like provided with screw-threaded liquid discharge

and vent openings comprising, a vent member screwed into said vent opening, a discharge valve screwed into said discharge opening, and arms on said vent member



and said valve extending laterally to lie in overlapped relation and provided with registering openings in the overlapped portions.

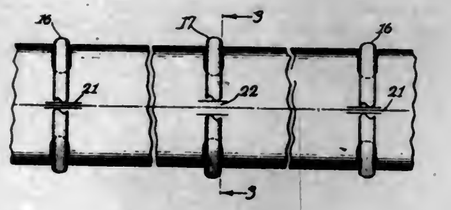
1,894,733. FOCUSING MACHINE. GEORGE H. CUSHING, Washington, D. C. Filed Jan. 10, 1930. Serial No. 419,853. 7 Claims. (Cl. 176—7.)



1. In a focusing machine a hollow supporting member mounted upon a base plate, a housing secured to said supporting member, a lamp socket slidably mounted within said housing, a hollow contact member slidably mounted within said housing and said lamp socket, a receptacle carrying a spring pressed contact point mounted in said contact member, an electric conductor extending through said contact member and secured to said contact point, and a spring in bearing with said socket and said housing, and a second spring in bearing with an end of said contact member and a base plate.

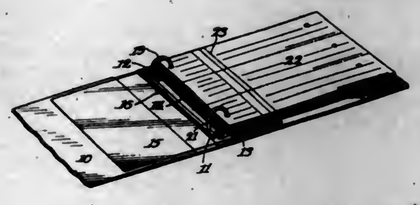
1,894,734. RING BOOKBINDER. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Filed June 27, 1930. Serial No. 464,232. 4 Claims. (Cl. 129—24.)

3. In a loose leaf binder, a pair of articulated toggle plates, a paper holding prong adjacent to each end of each plate arranged in mating pairs, an intermediate prong on each toggle plate arranged in mating relation and means, including a base plate having hooked margins engaging the outer edges of said toggle plates, for resiliently mounting the toggle plates and for causing



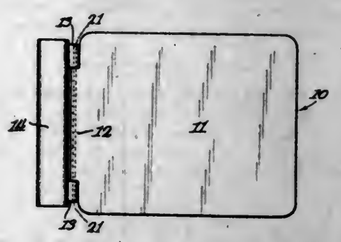
the intermediate prong to engage its mate subsequently to the engagement of the prongs adjacent to the ends of the plates during the closing operation of the binder.

1,894,735. CHECK BOOKBINDER. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Filed Apr. 29, 1931. Serial No. 533,715. 3 Claims. (Cl. 129—1.)



1. In a check book, a cover bearing a plurality of perforated posts, a stub cover, and a loose leaf binder metal attached to the stub cover by eyelets located and adapted to fit over said posts.

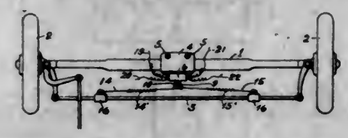
1,894,736. LOOSE LEAF BINDER BAR. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Filed Oct. 6, 1930. Serial No. 486,526. 3 Claims. (Cl. 129—12.)



1. A tubular binder bar having a relatively thin wall, and a hinge lug having a relatively thick wall welded to the wall of the binder bar.

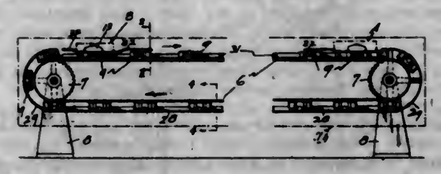
1,894,737. SIGNALING DEVICE FOR VEHICLES. ANDRES DEL VALLE Y DESVERNINE, Habana, Cuba. Filed Apr. 18, 1930, Serial No. 445,412, and in Cuba Mar. 19, 1930. 1 Claim. (Cl. 200—161.)

An electric switch comprising a casing, a support for the casing, a clamp carried by the casing adapted to detachably engage the support, said casing having a slot in one wall thereof, a shaft within the casing, a switch arm pivotally connected to the shaft and swingable in the slot, said arm having a contact leaf thereon and disposed intermediate its ends, contact stems mounted in the casing, each stem having an offset extension adapted to be fixed in one wall of the casing, and conductors connecting



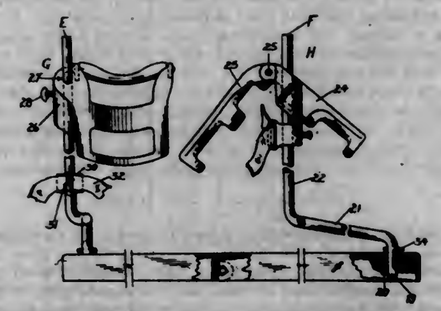
the extensions and the source of electrical energy, a spring connecting the arm and casing and serving to normally hold the arm in its inoperative position, and means movable relative to the casing for swinging the arm against opposition of the spring to move the contact leaf into a position between the contact stems, as and for the purpose set forth.

1,894,738. DRAINER APPARATUS. GEORGE D. GARDNER, San Jose, Calif., assignor to Gardner Manufacturing Company, Ltd., Sunnyvale, Calif., a Corporation of California. Filed Mar. 12, 1930. Serial No. 435,207. 16 Claims. (Cl. 226—22.)



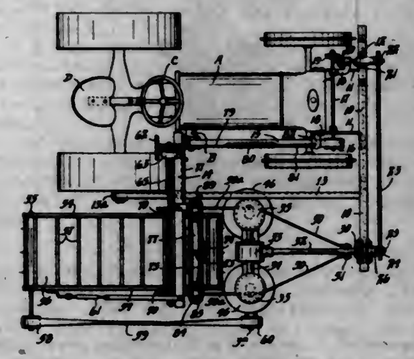
1. In a drainer apparatus a conveying mechanism; a plurality of carriers thereon; an inlet for containers to be drained being related to the mechanism; an outlet for discharge of the drained containers being related to the mechanism in advance of the inlet in respect to the conveyor movement, said conveyor mechanism being adapted to advance the carriers in inverted position on a part of the distance between the inlet and the outlet, and to advance the carriers in upright position at and from the outlet to the inlet; means on each carrier to grip the container therein in an upright position at said inlet, said gripping means being adapted to retain solid contents of the container and transmit fluid substances drained from the container as the container is carried in said inverted carrier.

1,894,739. SURGICAL OPERATING SUPPORT. LEVI L. GILBERT, Muskegon, Mich. Filed Oct. 26, 1929. Serial No. 402,569. 4 Claims. (Cl. 45—50.)



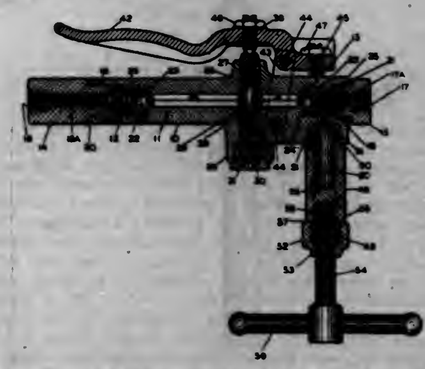
1. In combination, a table, a standard on the table, a surgical knee support comprising a rigid exposed limb-joint fitting surface, and means on a side of said support adjustably mounted on said standard for adjustable supported connection of said knee support.

1,894,740. MACHINE FOR HARVESTING BEANS AND PEAS. AUGUST GROENIG and JOSEPH W. WOODRUFF, Rupert, Idaho. Filed Feb. 11, 1931. Serial No. 515,040. 1 Claim. (Cl. 55—62.)



A machine for harvesting beans and peas, comprising the combination with a supporting frame movable over the ground, of a pair of spaced rotary cutting disks carried by said frame in position to sever the plants from their roots, means for rotating said disks toward each other, an elevator having its lower end in position to receive the severed plants from said rotary cutting disks, and means for adjusting the lower end of said elevator relative to said disks.

1,894,741. PORTABLE FAUCET. PAUL D. HARTOG, Long Island City, N. Y. Filed Oct. 11, 1930. Serial No. 488,135. 8 Claims. (Cl. 221—47.3.)

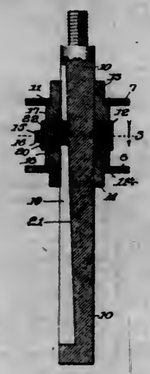


2. A portable faucet comprising a body provided with a longitudinal port within and through said body, a pair of simultaneous pressure close check valves within said port, a transverse cylinder on and integral with said body, a member operative longitudinally within said transverse cylinder having operative engagement with means for simultaneously opening the previously mentioned check valves and a lever connected to said body and operative upon the member within said cylinder.

1,894,742. SUPPORTING STRUCTURE. EVAN C. HARTER, Sturgis, Mich. Filed May 18, 1929. Serial No. 364,212. 3 Claims. (Cl. 155—94.)

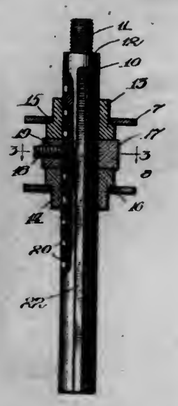
1. A chair base or the like comprising, in combination, a supporting member having a vertical bore, a smooth sur-

faced cylindrical member slidably and revolubly mounted in said bore and having a longitudinal groove downwardly increasing in depth, a collar surrounding said cylindrical member and seating upon said supporting member, and elevation adjustment controlling means carried by said collar comprising pressure producing means and a groove en-



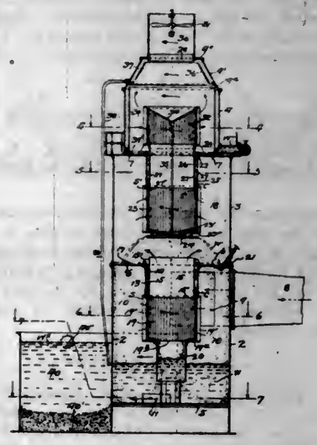
gaging element, a portion of said controlling means projecting into said groove during sliding movement of the cylindrical member to preserve rotational registration of the groove and controlling means, whereby pressure of said groove engaging element against the bottom of said groove clamps the collar upon the cylindrical member.

1,894,743. SUPPORTING STRUCTURE. EVAN C. HARTER, Sturgis, Mich. Filed Aug. 22, 1929. Serial No. 387,620. Renewed May 9, 1932. 2 Claims. (Cl. 155—94).



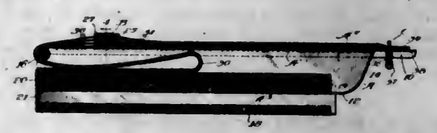
1. In a supporting structure, the combination of a base member, spaced plates on said base member, bushings extending through said plates, said bushings having portions located between and in contact with the plates preventing their displacement otherwise than through the space between the plates, a collar disposed intermediate said bushings and adapted for rotation, said collar maintaining said bushings in operative engagement with the plates, a post passing through the bushings and collar, said post having a longitudinal series of openings, an adjustable projection carried by the collar to selectively engage said openings so that the position of the post may be varied, and interengaging means between the collar and post preventing rotation of the collar relatively to the post and permitting longitudinal adjustment of the post relatively to the collar, when said projection is disengaged from said openings.

1,894,744. GAS CONDITIONER. CHARLES GILBERT HAWLEY, Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 6, 1927. Serial No. 238,038. 21 Claims. (Cl. 183—24.)



1. The described conditioning apparatus comprising a casing which contains washing and drying chambers, the former having a sump in its bottom and provided with an inlet above said sump, in combination with a whirl-promoting tuyère fixed in said washing chamber and forming in part the avenue of communication between it and said drying chamber, means communicating with the upper interior portion of said tuyère and adapted to supply liquid to the interior of the tuyère for wetting the inner surfaces of said tuyère, said drying chamber having an outlet, a moisture separator fixed in said drying chamber and forming the avenue of communication with said outlet, and means for disposing of the separated moisture in advance of said outlet.

1,894,745. PORTABLE AUTOGRAPHIC REGISTER. LOUIS JENSEN, Chicago, Ill., assignor to United Autographic Register Co., Chicago, Ill., a Corporation of Illinois. Filed May 7, 1931. Serial No. 535,757. 2 Claims. (Cl. 282—12.)

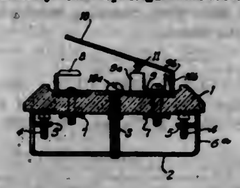


1. In an autographic register: an open-top filing-compartment having a slip-admitting opening and an upwardly extending rear wall; and a movably mounted unit forming a closure for said filing-compartment, comprising a supply-compartment partially enclosed by the rear wall of said filing-compartment, a surmounting platen equipped at its front end with a stationery gripping-bar, and a guide near the rear of said platen through which stationery may be drawn from said supply-compartment over the platen, said guide being adapted to hold carbon sheets and prevent them from advancing forwardly with said stationery.

1,894,746. THERMOSTAT FOR FIRE ALARM SYSTEMS. JOHN M. JOHNSON, Kansas City, Mo. Filed Nov. 14, 1929. Serial No. 407,110. 5 Claims. (Cl. 200—142.)

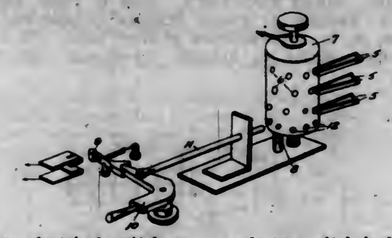
1. A closed circuit thermostat for double circuit fire alarm systems comprising an insulated base, connections thereon for interposing the thermostat into the system, spring leaf circuit interrupters uniting the connections and

held under tension by solder of predetermined melting point, and auxiliary coil springs hermetically sealed be-



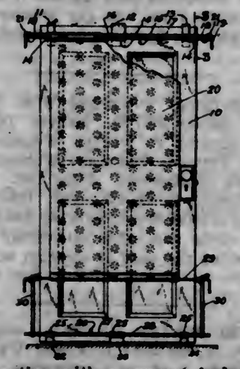
neath the circuit interrupters providing double assurance for interrupting the circuit by melting or release of the fusible metal.

1,894,747. ELECTRIC SWITCH GEAR. CHARLTON STANFORD AGATE, South Croydon, and WILLIAM ALFRED JAMES THORN, London, England, assignors to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Sept. 8, 1930, Serial No. 480,440, and in Great Britain Sept. 26, 1929. 1 Claim. (Cl. 200—5.)



In an electrical switch gear, a selector switch including a rotary cylinder having contact closing studs thereon, said cylinder adapted to be moved to position said studs in their various circuit closing positions and having a series of radially arranged openings the number and positions of which correspond with the various positions into which the cylinder may be moved in the operation of the selector switch, a main power switch, means including a slidable bolt operable by the main power switch to and from locking position, and said bolt adapted to be moved to enter one of said radial openings to lock the selector switch against movement on the main switch being moved to circuit closing position.

1,894,748. CURTAIN STRETCHER. FRANCES C. AMOS, Stratford, Conn. Filed July 1, 1932. Serial No. 620,356. 12 Claims. (Cl. 45—24.)



1. In combination with a support including a pair of spaced edges, a stay bar, means removably mounting said stay bar on said support adjacent one of its edges, said stay bar adapted to support a curtain rod, an attaching rod, means removably mounting said attaching rod on said support adjacent the opposite edge of the latter, and means for securing a curtain rod to said attaching rod in the desired spaced relation thereto whereby a curtain connected at its respective ends with curtain rods may be stretched and dried.

1,894,749. GAMMA FERRIC OXIDE HYDRATE AND METHOD OF MAKING SAME. OSKAR BAUDISCH, Maffersdorf, Czechoslovakia. Filed Sept. 18, 1929, Serial No. 393,587, and in Germany May 17, 1929. 5 Claims. (Cl. 23—200.)

1. A process for preparing gamma ferric oxide hydrate, which consists in precipitating the same from a pure ferrous chloride solution with an organic base selected from the group consisting of pyridine and aniline in the presence of oxygen.

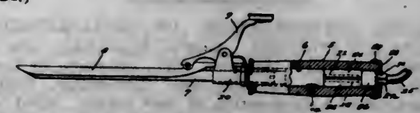
5. Chemically pure gamma ferric oxide hydrate adapted for therapeutic uses precipitated from a pure ferrous chloride solution by an organic base selected from the group consisting of pyridine and aniline, in the presence of oxygen.

1,894,750. GAMMA FERRIC OXIDE AND METHOD OF MAKING SAME. OSKAR BAUDISCH, Maffersdorf, Czechoslovakia. Filed Sept. 18, 1929, Serial No. 393,588, and in Germany May 17, 1929. 5 Claims. (Cl. 23—200.)

1. Ferromagnetic pure gamma ferric oxide adapted for the therapeutic uses prepared by dehydrating chemically pure gamma ferric oxide hydrate at a temperature of from 150 to 280° C.

2. The process of making chemically pure gamma ferric oxide, which consists in dehydrating chemically pure gamma ferric oxide hydrate by heating it to a temperature of from 150 to 280° C., until it becomes ferromagnetic.

1,894,751. CONNECTER FOR ELECTRICAL APPLIANCES. HENRY J. BAUM, Clarion, Iowa. Filed Jan. 13, 1931. Serial No. 508,543. 1 Claim. (Cl. 173—324.)

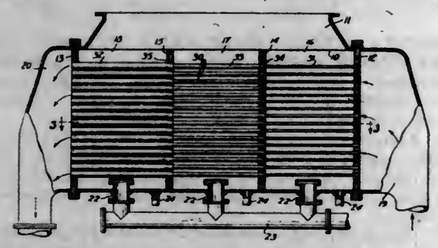


In a device of the character described, the combination with a handle having an axial bore, and a connecter mounted in said bore and having insulated terminals, a two-part insulated casing rotatably mounted in said axial bore and having a plurality of bores and spaced recesses and presenting a plurality of reduced portions, annular contact members mounted in said recesses and adapted to be electrically connected to said terminals, conducting wires seated in the smaller bore of said casing and connected to said contact members, a sleeve embracing the larger reduced portion of said casing binding the parts of said casing together to maintain the contact members in spaced and insulated relation and clamping said conductor wires in the smaller bore of said casing, and an apertured cap fitting over the smaller reduced portion of said casing and being affixed to said handle to position said casing within the axial bore of said handle.

1,894,752. METHOD OF TREATING GRAY CAST-IRON AND MALLEABLE IRON. JOHN C. BOZARD, Kokomo, and JAMES L. SUMMERS, Flora, Ind., assignors, by mesne assignments, to James L. Summers, John C. Bozard, and R. T. Wakefield, Kokomo, Ind. Filed Jan. 21, 1929. Serial No. 334,136. 11 Claims. (Cl. 148—15.)

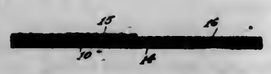
1. The process of hardening gray and malleable cast iron which comprises heating the iron in a fused salt mixture composed principally of about 16 parts by weight common salt, and 1 part of a cyanide.

1,894,753. CONDENSER. ERNEST L. CAHOON, Westfield, N. J., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 27, 1930. Serial No. 484,732. 16 Claims. (Cl. 257—43.)



1. A condenser comprising a shell, tube sheets, inlet and outlet water boxes, tubes within the shell extending between the tube sheets and connecting the water boxes, said tubes being of smaller diameter at the inlet water box end than at the outlet water box end.

1,894,754. WATERPROOF CONSTRUCTION MATERIAL. MAX E. CAMPBELL, Los Angeles, Calif., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 22, 1929. Serial No. 349,063. 2 Claims. (Cl. 108—7.)

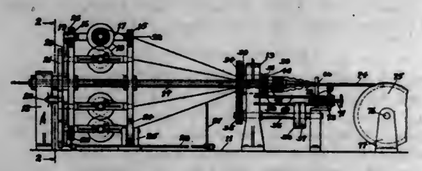


1. A waterproof construction comprising a plurality of overlapping sheets of water resistant felted fibrous base having upon at least a portion of a surface of each sheet a finely divided substance capable of reacting with saponified material and upon which bituminous emulsion has been spread during the laying of said sheets.

1,894,755. PRESERVATION OF METALLURGICAL FURNACE BOTTOMS. ARTHUR TREGONING CAPE and KIEL B. BOWMAN, Massillon, Ohio, assignors, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed Dec. 30, 1930. Serial No. 505,582. 6 Claims. (Cl. 75—87.)
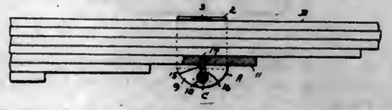
1. The method of preserving metallurgical furnace bottoms which are normally subject to disintegration by the expansion of slag which seeps therein and expands on solidification and subsequent cooling, consisting in incorporating a borate with the slag before the latter solidifies.

1,894,756. WIRE ROPE AND STRAND PREFORMING DEVICE. DAVID W. CLARK, Montreal, Quebec, Canada, assignor to John A. Roebling's Sons Company, Trenton, N. J., a Corporation of New Jersey. Filed Feb. 6, 1928. Serial No. 252,233, and in Canada Oct. 6, 1927. 3 Claims. (Cl. 117—20.)



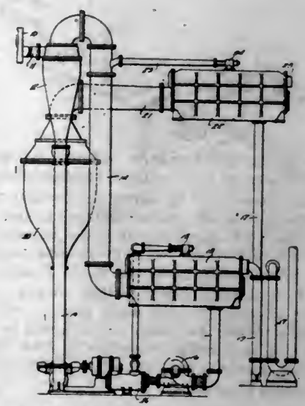
1. A wire rope machine including a fly and a head secured to a spindle rotatably mounted, a die, a support rotating with the head, a central disc secured to the support, outer discs on opposite sides of the central disc slidably secured to the support, intermediate discs slidably secured to the support between the outer discs and the central disc and adjustable in the circumferential direction thereof, and wire crimping means on the periphery of each of the discs.

1,894,757. VEHICLE SPRING CLIP. GEORGE W. CRABTREE, Cleveland Heights, Ohio. Filed Oct. 10, 1930. Serial No. 487,655. 4 Claims. (Cl. 267—53.)



1. A clip for laminated vehicle springs formed from flat stock, having angularly-related side walls and a connecting wall, said connecting wall being of the same width as said side walls at the angular corners therein and of reduced width medially thereof to provide a free flexing portion adapted to permit the clip to be readily buckled to slip over a vehicle spring.

1,894,758. HEAT RECOVERY. DION K. DEAN, Rahway, N. J., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 1, 1928. Serial No. 316,499. 10 Claims. (Cl. 261—21.)



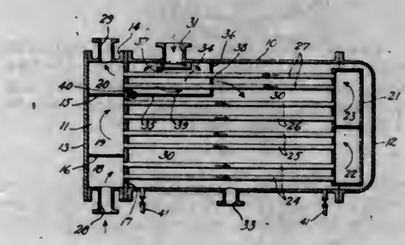
1. The process of recovering heat from hot pulp liquor discharged from a digester which comprises successively lowering the pressure and the temperature of the hot pulp liquor and flashing steam therefrom at different temperatures, and producing flow of and progressively increasing the temperature and the pressure of water in direct contact with the flashed steam of different temperatures.

1,894,759. FLOODING PROCESS FOR RECOVERING OIL FROM SAND BEDS. MELVIN DE GROOTE, St. Louis, and ARTHUR F. WIRTEL, Webster Groves, Mo., assignors to Tretolite Company, Webster Groves, Mo., a Corporation of Missouri. Filed Dec. 14, 1931. Serial No. 581,055. 5 Claims. (Cl. 166—21.)

1. A flooding process for recovering fixed oil from subterranean oil sands and other oil-bearing strata, which consists in washing the sand or stratum with an aqueous treating solution containing salts of oleic acid sulphates.

1,894,760. FEED WATER HEATER. GERALD D. DODD, Plainfield, N. J., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed June 14, 1929. Serial No. 370,788. 2 Claims. (Cl. 257—240.)

1. A feed water heater comprising a shell, a feed water inlet, a feed water outlet, means comprising a plurality of parallel tubes forming a path of flow of water from the inlet to the outlet, the heater having a steam space around the tubes, means comprising a baffle within said shell transverse to said tubes and a baffle parallel to said tubes, said baffles forming a chamber in said steam space in heat transfer relation with said path of flow



at an advanced point of flow, an inlet for steam to said chamber, an aperture for admitting steam from the chamber into the remainder of the steam space, means to drain condensate from said chamber into said remainder of the steam space and means to drain condensate from said remainder of the steam space.

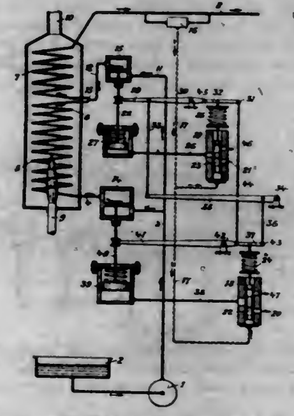
1,894,761. FIRE EXTINGUISHER CONTAINER. LODIAS J. DUOAS, Chicago, Ill., assignor to Du-Gas Fire Extinguisher Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 13, 1928. Serial No. 325,675. 5 Claims. (Cl. 169—31.)



1. In a container for a dry fire extinguishing powder, a receptacle having a sloping bottom converging into a discharge opening for the powder and a conduit for introducing a gas under pressure into the interior of said receptacle, said conduit terminating slightly above said discharge opening and closely adjacent the sloping bottom in a curved end, said curved end being so arranged with respect to the sloping bottom as to deliver said gas in a stream substantially tangential to the sloping bottom and in a plane substantially parallel to the plane of the discharge opening.

1,894,762. WATER TUBE STEAM GENERATOR. HANS C. EGLOFF, Bern, Switzerland, assignor to Firm Sulzer Frères Société Anonyme, Winterthur, Switzerland. Filed Nov. 12, 1931, Serial No. 574,634, and in Switzerland Nov. 12, 1930. 5 Claims. (Cl. 122—451.1.)

1. In apparatus for regulating the working medium fed to a once-through type of boiler, means for introducing working medium into the boiler at spaced inlet points, one of which entrains the regular supply of working medium and the other of which entrains an additional or auxiliary quantity, means for supplying said additional quantity without varying the main feed-line pressure drop, and



a temperature-responsive device for regulating both the quantity of the auxiliary supply and the regular supply by the temperature of the output steam.

1,894,763. PURIFICATION OF GASES CONTAINING ACETYLENE. OTTO EISENHUT, Heidelberg, and HEINRICH SCHILLING, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 3, 1930, Serial No. 418,401, and in Germany Jan. 16, 1929. 4 Claims. (Cl. 23—3.)

1. A process for the purification of gases containing acetylene obtained by the treatment in the electric arc of carbonaceous substances, and for rendering the said gases suitable for further conversion, which comprises passing the said gases over active porous masses.

1,894,764. PRODUCTION OF CARBON BLACK. OTTO GROSSKINSKY, Ludwigshafen-on-the-Rhine, and MAX TREPPENHAUER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 13, 1930, Serial No. 495,537, and in Germany Nov. 23, 1929. 14 Claims. (Cl. 134—60.)

1. In the production of carbon black by catalytic thermal decomposition at a temperature between 100° and 600° C. of a carbon compound in the gaseous phase, the step of confining the reacting materials by walls the inner surfaces of which consist of a heat resisting metallic material, which effects no appreciable decomposition of the initial materials to carbon black under the working conditions.

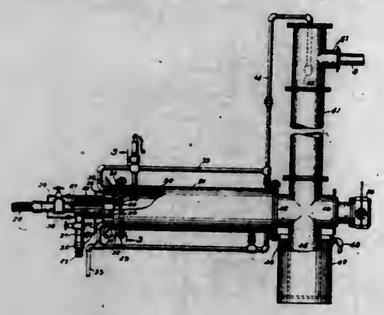
1,894,765. PRODUCTION OF ACETYLENE. HANS HAEUBER and EDUARD LINCKH, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 16, 1930, Serial No. 502,857, and in Germany Dec. 21, 1929. 7 Claims. (Cl. 260—170.)

1. In the production of acetylene by incomplete combustion of a gas comprising a gaseous hydrocarbon with a gas comprising free oxygen, the step which comprises effecting the said combustion in the presence of free elementary silicon.

1,894,766. INERT GAS PRODUCTION. ARTHUR DUDLEY HARRISON, Brooklyn, N. Y. Filed Aug. 29, 1931. Serial No. 560,070. 19 Claims. (Cl. 23—262.)

16. In apparatus of the character disclosed, the combination of a water jacketed combustion chamber, a water

jacketed burner discharging into said combustion chamber, a cooling tower connected with the combustion chamber and provided with a spray head and an outlet for the

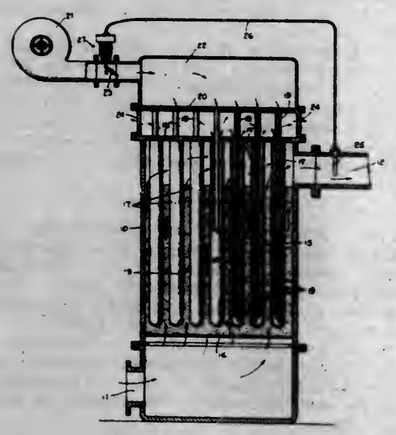


gases of combustion and interconnected water supply connections to the water jacketed burner, and combustion chamber and spray head of the cooling tower aforesaid.

1,894,767. METHOD OF APPLYING AQUA-AMMONIA TO FERTILIZER MIXTURES. EDWARD W. HARVEY, New Brunswick, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 1, 1928. Serial No. 323,210. 4 Claims. (Cl. 71—9.)

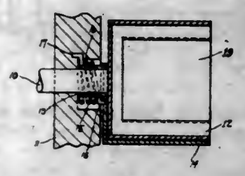
3. The process of reacting mono-calcium acid phosphate with ammonia which comprises applying to a solid material containing said mono-calcium acid phosphate an ammoniacal liquid in the form of a spray substantially uniformly distributed to the several particles of said solid material and supplying said liquid in amount sufficient to react with said mono-calcium acid phosphate to form citrate soluble calcium phosphate.

1,894,768. CATALYTIC APPARATUS. INGENUIN HECHENBLEIKNER, Charlotte, N. C., assignor, by mesne assignments, to Chemical Construction Corporation, a Corporation of Delaware. Filed Apr. 3, 1929. Serial No. 352,094. 10 Claims. (Cl. 23—288.)



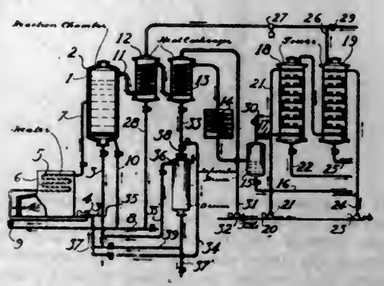
1. A converter system comprising a chamber having entrant and exit openings for the reaction gases, a catalytic mass in said chamber, and a cooling apparatus for controlling the temperatures of the reaction gases developed in said chamber, said cooling apparatus comprising a plurality of ducts disposed in the catalytic mass, and means for causing a cooling fluid independent of the reaction gases to flow through said ducts in the same direction as the direction of movement of the reaction gases through the contact mass whereby an intense cooling of the contact mass is effected in the initial stages of reaction and a diminished and more moderate cooling in the last stages of reaction.

1,894,769. REVOLVING FIRE PREVENTING SHUTTER FOR CINEMATOGRAPHIC PROJECTION APPARATUS. KURT HOFFMANN, Dresden, Germany. Filed Aug. 30, 1930, Serial No. 479,044, and in Germany Dec. 23, 1929. 2 Claims. (Cl. 88—19.3.)



1. In a cinematographic projecting apparatus, a support, a drum formed with a light opening and having a shaft projecting from one end and journaled through said support, the support being formed with a chamber about said shaft, a sleeve fitting loosely about said shaft within the chamber, a fire shutter extending longitudinally of said drum and having an arm at one end carried by said sleeve, and a coiled spring of selected strength wound about said sleeve within the chamber and having one end secured to the support and its other end anchored to said arm, said spring yieldably holding the shutter in a normal position to close the opening of the drum and permitting movement of the shutter into and out of position to close the opening.

1,894,770. IMPROVED METHOD FOR DESTRUCTIVE HYDROGENATION OF CARBONACEOUS MATERIALS. JAMES M. JENNINGS, Baton Rouge, La., assignor to Standard-I. G. Company. Filed Dec. 21, 1926. Serial No. 327,498. 10 Claims. (Cl. 196—53.)

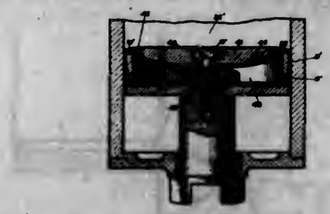


1. An improved process for the destructive hydrogenation of heavy asphalt-containing materials, comprising maintaining a body of such material at decomposition temperature in the presence of hydrogen under high pressure and in contact with a solid catalyst resistant to sulfur poisoning suspended in the material and holding the ratio of "asphalt" to "catalyst" below about 1.5.

1,894,771. PISTON. ROMUALD KARASINSKI, Cleveland, Ohio, assignor to The Guardian Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 16, 1927. Serial No. 184,224. 6 Claims. (Cl. 74—109.)

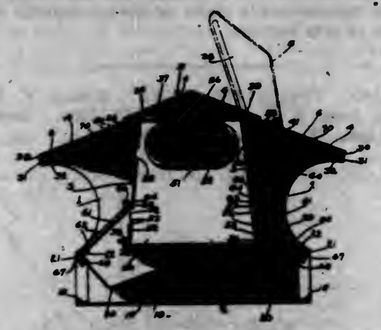
1. In a piston, packing means therefor including a thin circumferentially extensible sheet metal cylinder wall engaging ring, a piston body, and means to secure said ring

on a head portion thereof, and expanding means therefor including an inherently resilient disk of sheet metal, and means for securing said disk by an intermediate portion



to said piston head effecting deformation of said ring to communicate outwardly directed pressure against annular longitudinally intermediate portions only of said ring.

1,894,772. CHICKEN FEEDER. MAURICE H. KEATING, Minneapolis, Minn., assignor to H. D. Hudson Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Jan. 13, 1930. Serial No. 420,509. 8 Claims. (Cl. 119—52.)

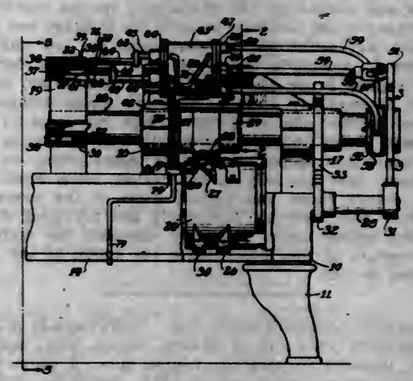


1. A device of the class described comprising upright end elements, a trough the ends of which are formed by the end elements, and two metal elements connecting the end elements and defining with them a feed storage receptacle which delivers into said trough, each metal element being bent outwardly to provide a roof-forming portion overlying and extending outwardly beyond the trough in a manner to substantially prevent entry of rain into the trough, but spaced above the trough to permit lateral entry thereto to feeding position.

1,894,773. AUTOMATIC CHUCK OPERATING DEVICE. FRANK KREJCI, Chicago, Ill. Filed Aug. 31, 1931. Serial No. 560,311. 11 Claims. (Cl. 29—38.)

1. In combination with an automatic chucking machine head and indexing means whereby said chuck head is intermittently rotated; of a pinion on each of said chuck screws; a plurality of guide members on said chuck head, each mounted adjacent its respective pinion; rack bars slidably mounted in each of said guide members; a pair of adjacent compressed air cylinders; a slidable piston and piston rod in each of said cylinders; a rack bar connected to the other end of one of said piston rods; a yieldable element on the end of the other of said piston rods; a manually controlled compressed air circuit connecting manually operable means for selectively controlling said air circuit to the respective ends of said cylinders in series; the compressed air being adapted to project one piston and piston rod and retract the other piston and piston rod to successively and intermittently rotate one of said pinions in each direction to successively open and close the chuck controlled by said pinion when the chuck has been moved to a predetermined point.

9. The combination with an automatic chucking machine having a slidable and rotatable turret shaft, a multiple chuck head, a plurality of screw operated chucks in said head, and a feed cam drum, of a pinion on each of said chuck screws; slidably mounted rack bars normally in mesh with said pinion; cylinders on the machine frame having pistons and piston rods; a rack bar connected to the upper of said piston rods and adapted to mesh with said pinion; a hinged member pivotally secured to the lower piston rod; a yieldably mounted cap on said hinged



member adapted to strike the end of the other of said slidably mounted rack bars and move the same longitudinally, said hinged member being adapted to be moved on its pivot by rotation of said chuck head, and a compressed air system connecting opposite ends of said cylinders, and a compressed air source, and a manual operable valve in said air system adapted to permit alternate reciprocation of said pistons and connected parts to cause rotation of each pinion and chuck screw.

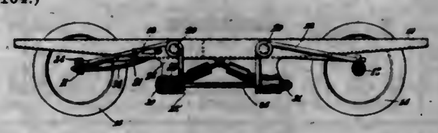
1,894,774. TRANSFER. WINTHROP STANLEY LAWRENCE, New York, N. Y., assignor to Kaumagraph Company, New York, N. Y., a Corporation of New York. Filed July 28, 1930. Serial No. 471,422. 8 Claims. (Cl. 134—36.)

1. A heat transfer comprising a paper base having a fusible marking thereon, said marking comprising a major portion of asphalt intermixed with colloidal non-fusible material.

1,894,775. THERMAL COMPOSITION OF MATTER. HERBERT S. LEVENSON, Brooklyn, N. Y. Filed Apr. 12, 1929. Serial No. 354,703. 8 Claims. (Cl. 23—5.)

1. A thermal agent free of added solvent liquid, comprising at least two sodium salts, each having the property of giving up latent heat slowly during crystallization and a small quantity of a substance selected from a group consisting of atlas oil and glycerine.

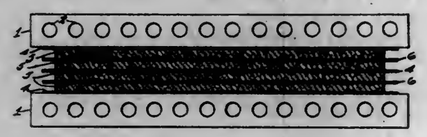
1,894,776. SPRING SUSPENSION FOR AUTOMOBILE CHASSIS. MING T. LIANG, Tientsin, China. Filed July 25, 1928. Serial No. 295,240. 2 Claims. (Cl. 280—104.)



1. In a vehicle provided with a chassis frame and front and rear axles, spring suspension devices for the axles arranged on each side of the chassis frame, each suspension device comprising a pair of bell-crank levers each having a longitudinally extending arm and a substantially vertical arm, said levers being pivotally con-

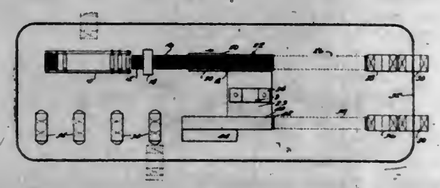
nected at the angle of intersection of their arms to the chassis frame adjacent to and on opposite sides of the transverse center thereof, and said levers having their longitudinally extending arms respectively connected to the front and rear axles and having their substantially vertical arms provided with housings, sliding abutments in the housings on the vertical lever arms, a longitudinally movable rod extending between and into the housings and connecting the abutments, springs operatively arranged in the housings between the housings and abutments and acting on the abutments, the rod and the levers to yieldingly oppose relative movement between the chassis frame and axles toward each other, and a pair of angularly arranged auxiliary spring devices disposed between and cooperating with each pair of suspension levers and comprising cylinders, pistons in said cylinders and springs in said cylinders acting on the pistons, said auxiliary spring devices being jointed to the chassis frame and vertical arms of the levers for pivotal and telescopic movements and providing double acting spring means yieldingly opposing the aforesaid movements of the levers under the action of the first-named springs.

1,894,777. PRODUCTION OF VEGETABLE FIBER SHEETS. WILLIAM H. MASON, Laurel, Miss., assignor to Masonite Corporation, Laurel, Miss., a Corporation of Delaware. Filed Apr. 3, 1929. Serial No. 352,175. 13 Claims. (Cl. 92—61.)



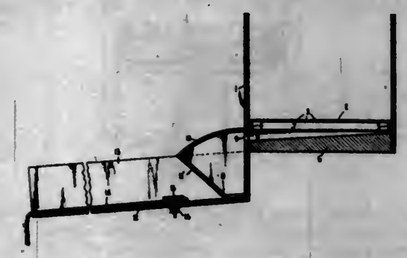
7. The process of simultaneously pressing a plurality of sheets of wet pulpy material which comprises placing said sheets in superimposed relation between the opposing heated platens of a press with an imperforate metallic surface plate in contact with one side of each sheet and a wire mesh screen in contact with the other side of such sheet, and subjecting said sheets to pressure and heat applied thereto at the ends of the stack thereof by said platens, and effecting thereby the expression of water and the escape of steam at the sides of the stack through the individual channels formed by said screens, and the pressure effecting such consolidation of the sheets that the heat is readily transmitted from the platens through the outer sheets to the inner ones.

1,894,778. MULTIPLE FIBER BOARD PRODUCTION. WILLIAM H. MASON, Laurel, Miss., assignor to Masonite Corporation, Laurel, Miss., a Corporation of Delaware. Filed Jan. 23, 1931. Serial No. 510,601. 16 Claims. (Cl. 92—39.)



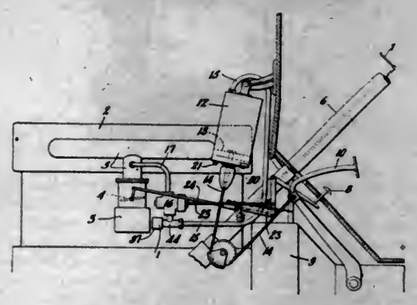
1. The method of producing fiber boards in multiple which comprises superposing wet lap sections of vegetable fiber in sandwich formation with a face forming member therebetween, transferring same to a press, and pressing.

1,894,779. ORE CONCENTRATOR. HENRY C. MITCHELL, Naturita, Colo., assignor of one-half to Paul Stark Seeley. Filed Oct. 8, 1931. Serial No. 567,566. 14 Claims. (Cl. 209—44.)



1. The combination with a grizzly, of a riffle box below said grizzly, there being a plurality of lateral discharge outlets from said riffle at the ends of the riffles in said riffle box, a launder adjacent each discharge, a hood for each outlet which directs the flow backwards towards said outlet and spreads it in a lamina which extends the width of said launder and a lining of fibrous material on the bottom of said launders.

1,894,780. PNEUMATIC VALVE. ROBERT V. MORSE, New York, N. Y. Filed Nov. 16, 1931. Serial No. 575,398. 5 Claims. (Cl. 192—.01.)



1. In automotive apparatus, the combination of a free-wheeling mechanism of the vacuum operated type, an accelerator pedal, a main control valve for said vacuum mechanism operable by said accelerator pedal, and an auxiliary valve of the quick acting type connected into said vacuum mechanism whereby an abrupt change of vacuum pressure may be produced, however gradual the movements of the main control valve may be.

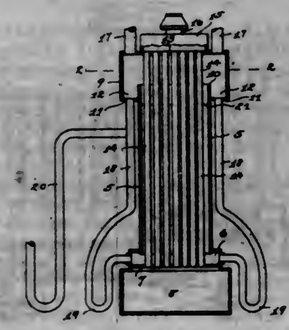
1,894,781. PRODUCTION OF COMPOSITIONS RESEMBLING CELLULOID. EDUARD MUENCH and FRITZ NICOLAI, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 6, 1928, Serial No. 304,384, and in Germany Oct. 12, 1927. 10 Claims. (Cl. 106—37.)

2. A composition of matter comprising a cellulose ester and triamyl phosphate.

1,894,782. STEAM BOILER. GEORGE J. MULLER, Baltimore, Md. Filed Feb. 1, 1930. Serial No. 425,218. 1 Claim. (Cl. 122—114.)

In a steam boiler the combination with a boiler-shell open at its upper end and closed at its lower end, of a drum encircling said upper open end of the shell and

extending from a point below said open end to a point above said end, a large number of relatively small closely spaced fire tubes extending through the shell and also extending through the open end and through the drum,—said drum forming with said shell an annular channel



about the upper open end of the shell and means for returning water of circulation from the annular channel back to the boiler-shell adjacent the bottom, comprising tubes having loops extending below the bottom of the boiler.

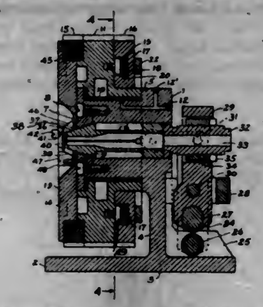
1,894,783. FENCE POST. NED A. OCHILTREE, Peoria, Ill., assignor to William H. Sommer, Peoria, Ill. Filed Jan. 23, 1931. Serial No. 510,620. 2 Claims. (Cl. 256—57.)



1. A metallic fence post T-shaped in cross section, the head portion thereof being adapted to engage and support a fence wire, the web portion thereof being of substantially uniform dimension throughout the length thereof and apertured to receive securing wires, the centers of said apertures being on the neutral axis of said post with respect to forces that may be applied to said post transversely to said head portion.

1,894,784. DEVICE FOR CUTTING OFF TUBING. BERNARD J. O'CONNOR, and JOHN J. HANNON, Cleveland, Ohio, assignors to Steel and Tubes, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 2, 1930. Serial No. 472,519. 9 Claims. (Cl. 81—190.)

1. In a machine for cutting off an article, the combination of a cutting tool, means to revolve the cutting tool about the article, an annular member revolvable about the cutting tool to feed the cutting tool longitudinally into the article, means for gripping the article, and means revolvable at the same peripherial speed as said annular

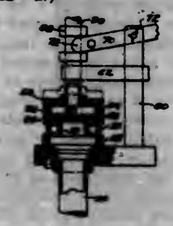


member for effecting the operation of said gripping means whereby the feeding of the cutting tool and the actuation of the gripping means are synchronized.

1,894,785. PROCESS FOR REACTIVATION OF CATALYST USED FOR THE HYDROGENATION OF HYDROCARBON OILS. EDWARD B. PECK, Elizabeth, N. J., assignor to Standard-I. G. Company. Filed Nov. 18, 1929. Serial No. 407,019. 8 Claims. (Cl. 23—238.)

1. An improved process for reactivating sulphactive catalyst used for destructive hydrogenation of hydrocarbon oil, which comprises separating the bulk of the oil from the catalyst and subjecting the catalyst for a prolonged period to the action of a gas comprising free hydrogen substantially free of hydrocarbons.

1,894,786. WASHING MACHINE FOR BEARINGS. THOMAS C. PEW, Ann Arbor, Mich., assignor to Hoover Steel Ball Company, Ann Arbor, Mich., a Corporation of Michigan. Filed Feb. 2, 1931. Serial No. 512,795. 4 Claims. (Cl. 141—1.)



4. In a machine for washing bearings having two annular races separated by friction reducing balls or rollers, means to clampingly engage one of the races and thereby support the bearing in place with that race fixed, the other race being left free to rotate, and means to discharge streams of washing fluid into and against said bearings at such angles as to cause the freely rotatable race to rotate.

1,894,787. TINNER'S SNIPS. FREDERIC H. RAUH, South Orange, N. J., assignor to J. Wiss & Sons Co., Newark, N. J., a Corporation of New Jersey. Filed Mar. 2, 1931. Serial No. 519,513. 1 Claim. (Cl. 30—17.)

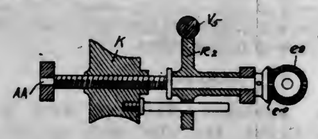
In tinner's snips, the combination of a pair of complementary members, each embodying a backwardly curved blade, with a cutting edge lying in a uniform plane, a shank, and an extended handle lying at all times free of the cooperating handle through its entire length, a pivot, positively connecting the shanks in close contact against spreading, locked in one shank and passing freely through the other shank and having a tapered shoulder on its unlocked portion seated in a beveled socket in the shank,

the shanks being provided with mitered shoulders beveled transversely of their planes and constituting cooperating stop-elements, each shank being provided with a transverse groove in its inner face adjacent and parallel to the



mitered shoulder, and being wholly uncovered when the snips are opened, whereby surplus yieldable matter may be squeezed laterally from above the groove and up along the bevel on the closing of the snips.

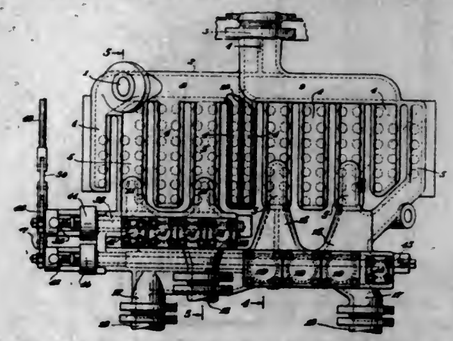
1,894,788. AIMING APPARATUS FOR ANTIAIRCRAFT FIRE. RENÉ RIBEROLLES, Paris, France. Filed June 1, 1931, Serial No. 541,317, and in France June 7, 1930. 10 Claims. (Cl. 89—41.)



1. In a gun for firing a projectile at a moving aerial objective situated at a distance D from the gun and being displaced at a constant velocity V in a straight line, a fixed gun mounting, a frame mounted on this mounting, means enabling displacement of the frame on the mounting in the direction of azimuths, a barrel mounted on this frame, means enabling displacement of the barrel on the frame in the direction of sites, an aiming apparatus mounted on this frame, a telescope movable in all directions mounted on this aiming apparatus and directed towards the objective, mechanical movement transmission means interposed between the telescope and the site displacement mechanism of the barrel, correction means mounted in the aiming apparatus and modifying the effect of these transmission means according to the characteristics of the displacement of the objective, these correction means being constituted by movable members effecting in the aiming apparatus the reproduction on the scale $\frac{1}{VD}$ of the triangle formed by the gun, the position of the objective on the departure of the projectile, the position of the objective on the arrival of the projectile, which enables the values of the site and azimuth of the position which the objective will occupy on the arrival of the projectile to be imparted to the site and azimuth of the gun.

1,894,789. THROTTLE. CHARLES RINGEL, North Hawthorne, N. J., and WILLIAM K. CARTER, Brooklyn, N. Y., assignors to American Throttle Company, Inc., New York, N. Y. Filed June 6, 1931. Serial No. 542,574. 3 Claims. (Cl. 122—462.)

1. In a high pressure, low pressure locomotive, the combination of a stem superheater header having a compartment to which superheated high pressure steam is delivered and a second compartment to which superheated low pressure steam from a source independent of the high pressure steam is delivered, a conduit to conduct the high pressure steam to a high pressure engine, a second conduit to conduct the low pressure steam to a low pressure engine, a plurality of throttles governing each of the conduits, the throttles governing the high pressure steam being in an alined group transverse to the axis of the loco-

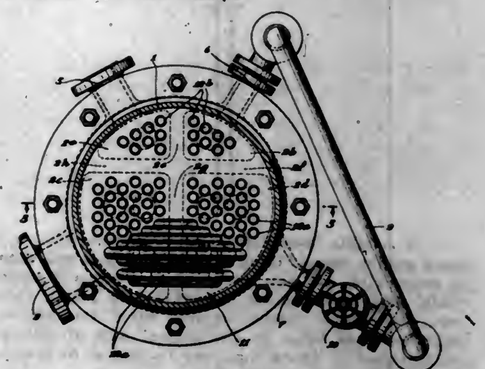


motive, the throttles governing the low pressure steam being in a second alined group transverse to the axis of the locomotive, one group being forward and to one side of the other, two parallel cam shafts extending inward from one side of the header to operate the throttles and means to actuate such shafts in unison.

1,894,790. 2,6-DIAMINO-ANTHRAQUINONE SULPHIDES AND PROCESS OF PREPARING THE SAME. WILLIAM L. RINTELMAN, Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Apr. 20, 1931. Serial No. 531,633. 6 Claims. (Cl. 260—59.)

3. As a new product of manufacture, a water-insoluble oxidation product of 1,5-dimercapto-2,6-diamino-anthraquinone.

1,894,791. DESUPERHEATER. DAGOBERT W. RUDORFF, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Aug. 1, 1931. Serial No. 554,452. 5 Claims. (Cl. 122—459.)



1. In the art of steam treatment the process of changing high-pressure superheated steam to low-pressure desuperheated steam comprising the steps of first abstracting a large part of the superheat, then allowing the steam to expand to the lower pressure whereby it again becomes more highly superheated, and then finally reducing the superheat to the desired point.

3. Desuperheating apparatus including a stage in which high-pressure superheated steam is desuperheated by water in heat-exchanging relation but out of contact with the steam, a low pressure stage in which low-pressure superheated steam is desuperheated by water in heat-exchanging relation but out of contact with the steam, a pressure reducing valve, and connections to the high-pressure stage inlet, from the high pressure stage outlet to the valve from the valve to the low pressure stage, and from the low pressure stage.

1,894,792. MANUFACTURE OF VALUABLE PRODUCTS FROM GASEOUS UNSATURATED HYDROCARBONS. LEO SCHLECHT and HANS ROETGER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 3, 1929, Serial No. 397,151, and in Germany Oct. 18, 1928. 10 Claims. (Cl. 260—88.)

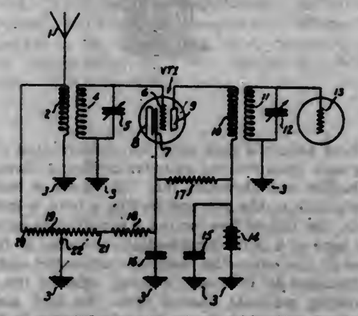
1. In the production of valuable products from gaseous unsaturated hydrocarbons, by passing, while heating, an unsaturated aliphatic hydrocarbon together with a volatile compound, containing an active hydrogen atom, of a metalloid having an atomic weight from 14 to 16, over a catalyst comprising a compound of a metal of the second sub-group to the sixth group of the periodic system having a more metallic character than arsenic, the step which comprises heating the still reactive products in the presence of hydrogen and of a hydrogenation catalyst.

1,894,793. BRACKET FOR FUNERAL DRAPES. HENRY J. SCHOMER, Oshkosh, Wis., assignor to Waite Carpet Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed June 3, 1931. Serial No. 541,782. 10 Claims. (Cl. 27—27.)



1. In devices of the class described, the combination with a truck adapted to support a casket, of a group of four bracket heads secured to the respective corners of the truck and adapted to have the base of the casket rested thereon, a pair of bracket arms extending forwardly from the two forward bracket heads, a front curtain rod carried by said bracket heads, extension rods slidably mounted respectively within the two forward bracket heads and the two rear bracket heads and extending outwardly from the ends of the truck, end curtain rods carried by the extension rods, and draperies depending from the front and end curtain rods in position to conceal the front and the ends of the truck.

1,894,794. DOUBLE ACTION VOLUME CONTROL. ALEXANDER SENAUKE, New York, N. Y., assignor to King Manufacturing Corporation, Buffalo, N. Y., a Corporation of New York. Filed July 3, 1929. Serial No. 375,669. 7 Claims. (Cl. 179—171.)



1. In an amplifier system in combination, a thermionic vacuum tube, a source of anode potential, a path through which the anode current flows, a second path through which current flows from the source of anode potential, a resistance in said second path, and a resistance common to both said current paths, means for applying the voltage drop across said two resistances as a bias potential to the grid of said vacuum tube, an input circuit associated with said vacuum tube, a third resistance in shunt with said input circuit, and means for simultaneously varying said last named resistance and said common resistance.

1,894,795. HAIR WAVING DEVICE. ROBERT B. SEWARD, Guilford, Conn., assignor to Zotos Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1932. Serial No. 644,957. 4 Claims. (Cl. 132—33.)



1. A hair waving device comprising a perforated tube on which the hair tress is to be wound, a tube of absorbent material surrounding the tress wound tube, and a charge of exothermic material insertable into the perforated tube.

1,894,796. HAIR WAVING DEVICE. ROBERT B. SEWARD, Guilford, Conn., assignor to Zotos Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1932. Serial No. 644 959. 20 Claims. (Cl. 132—36.2.)



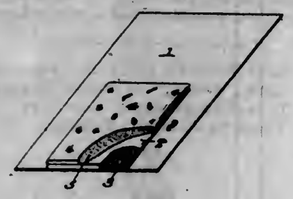
1. A hair waving device comprising a soluble capsule containing an exothermic material and a puncturable capsule containing a liquid reagent for the exothermic material.

1,894,797. HAIR WAVING DEVICE. ROBERT B. SEWARD, Guilford, Conn., assignor to Zotos Corporation, New York., N. Y., a Corporation of New York. Filed Nov. 30, 1932. Serial No. 644,960. 10 Claims. (Cl. 132—33.)



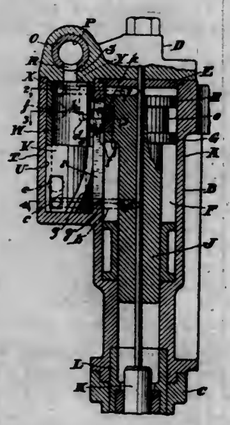
1. A hair waving device comprising a perforated tube on which the hair tress is to be wound, a soluble capsule containing exothermic material and a puncturable capsule containing a liquid reagent for the exothermic material, both inserted into the perforated tube.

1,894,798. HAIR WAVING DEVICE. ROBERT B. SEWARD, Guilford, Conn., assignor to Zotos Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1932. Serial No. 644,962. 8 Claims. (Cl. 132—36.2.)



1. A hair waving pad comprising an outer layer of non-absorbent material, an inner layer containing an exothermic material and an intermediate layer in the form of a puncturable envelope of impervious material containing a liquid reagent for the exothermic material.

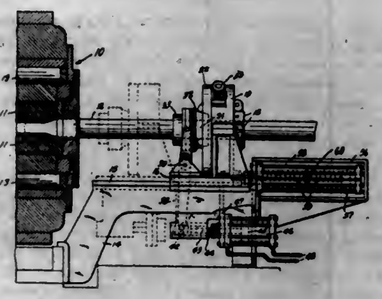
1,894,799. DISTRIBUTING VALVE. WILLIAM A. SMITH, Jr., Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. Y., a Corporation of New Jersey. Filed Nov. 20, 1930. Serial No. 496,891. 7 Claims. (Cl. 121—30.)



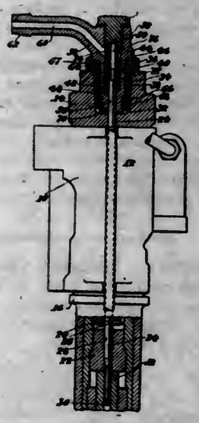
1. In a fluid actuated rock drill, the combination of a cylinder having a piston chamber and a hammer piston reciprocable and capable of free rotation in the piston chamber, a valve chest on the side of the cylinder and having a valve chamber, inlet passages leading from the valve chamber to the piston chamber, a valve in the valve chamber to control the inlet passages, and means in slidable engagement with the valve and the piston for translating the linear movement of the piston into a rotary movement of the valve.

1,894,800. FEED MECHANISM FOR SWAGING MACHINES. ERIC L. STOWE, Torrington, Conn., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Filed Mar. 27, 1930. Serial No. 439,286. 12 Claims. (Cl. 78—98.)

2. A feed mechanism for a swaging machine for tubes and the like having a swaging means rotatable about the axis of the tube, comprising a support for the tube movable toward and from said swaging means, rotatable means on the support for gripping the tube, and means operating through friction to resist turning movement of said means and adapted to slip against said friction to permit turning movement.



1,894,801. WATER CONNECTION. EDWARD F. TERRY, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. Y., a Corporation of New Jersey. Filed Sept. 30, 1931. Serial No. 566,024. 1 Claim. (Cl. 121—10.)



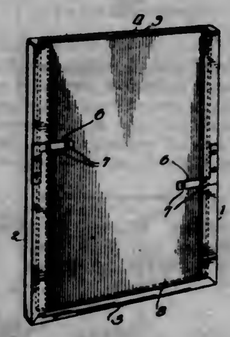
In a fluid actuated rock drill, the combination of a cylinder, a back head for the cylinder having a threaded recess, a hollow nut threaded into the recess, a connection freely rotatable in the nut and having a bore, a lateral extension on the connection having a supply passage opening into the bore at a point intermediate the ends of the bore, shoulders on the connection seating against the ends of the nut, a shoulder in the bore, a water tube in the connection, packing material seated upon the last mentioned shoulder and encircling the water tube, a plug in the bore to compress the packing material, and a passage in the plug to convey water from the supply passage to the tube.

1,894,802. BEET HARVESTER. WILLIAM E. URSCHEL, Valparaiso, Ind. Filed Dec. 5, 1929. Serial No. 411,722. 15 Claims. (Cl. 55—108.)



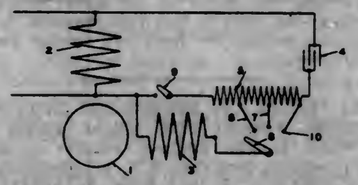
1. The combination with a cutting means, of a conveyor for a root crop, and means moving transversely to the direction of said conveyor and gripping the crop for adjusting the position thereof normal to its movement in said conveyor and relatively to said cutting means.

1,894,803. FRAME FOR DISPLAYING ADVERTISING CARDS. FRED D. WAHLSTROM, Chicago, Ill. Filed Oct. 5, 1931. Serial No. 566,943. 3 Claims. (Cl. 40—156.)



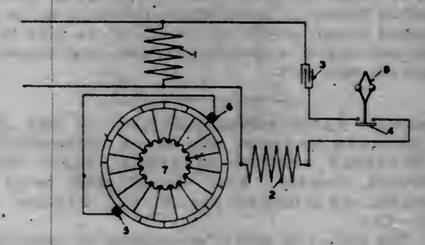
1. An advertising device comprising a frame having spaced side members and upper and lower end members, said spaced side members being provided with channels inwardly of said frame, said upper end member having a cut away rear portion aligned with said channels, a frame supporting plate secured to each said spaced side member rearwardly of said channels, and an advertising card slidably receivable in said channels through said cut away rear portion and concealing said frame supporting plates.

1,894,804. ALTERNATING CURRENT MOTOR. HANS WEICHSEL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Mar. 1, 1930. Serial No. 432,357. 6 Claims. (Cl. 172—238.)



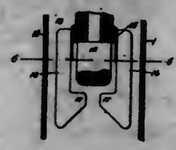
1. In an alternating current motor, an induced member, an inducing member provided with a main inducing winding and with an auxiliary winding displaced therefrom, a phase displacing circuit comprising a capacity and a current transformer and means independent of the auxiliary winding for impressing on said phase displacing circuit an E. M. F. derived from the line, said current transformer having its secondary in circuit with the auxiliary inducing winding for starting the motor and being so dimensioned that the current in said secondary circuit exceeds the current in the phase displacing circuit.

1,894,805. SINGLE PHASE MOTOR. HANS WEICHSEL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Apr. 29, 1931. Serial No. 533,637. 2 Claims. (Cl. 172—277.)



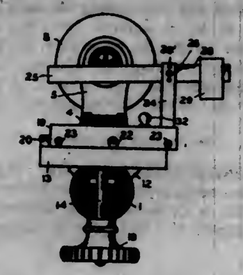
2. In a single phase motor, an induced member provided with a commuted winding, an inducing member provided with a main inducing winding and with an auxiliary inducing winding displaced therefrom, a phase displacing circuit comprising said auxiliary winding and a condenser, means including a speed controlled switch for connecting said phase displacing circuit to the line in parallel with the main inducing winding, means for closing the commuted winding along an axis displaced from the axis of the main inducing winding, and means for short-circuiting the induced member along a plurality of axes, said last named means and the means for closing the switch in the phase displacing circuit being adjusted to operate approximately simultaneously.

1,894,806. ARC DISCHARGE DEVICE. FRANK P. WHITAKER, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Mar. 12, 1932, Serial No. 598,517, and in Great Britain Mar. 11, 1931. 4 Claims. (Cl. 250—27.5.)



1. In an arc discharge device comprising an evacuated container and a cathode and anode mounted therein, an anode screen structure mounted in said container adjacent the active surfaces of said anode and comprising a plurality of relatively closely spaced arc sub-dividing elements extending in a direction laterally of the anode and a plurality of arc sub-dividing elements extending in a direction downwardly of the anode, said screen structure providing relatively long and narrow passages throughout substantially all the space surrounding the active surfaces of the anode.

1,894,807. POLISHER. HENRY E. WIEDMANN, San Francisco, Calif. Filed Dec. 6, 1930. Serial No. 500,507. 4 Claims. (Cl. 51—59.)



1. In combination with a lathe, a sliding base having a standard thereon; a counterbalanced polishing bar on said standard pivoted parallel to the axis of the work in the lathe and capable of resilient movement longitudinally in respect to said work.

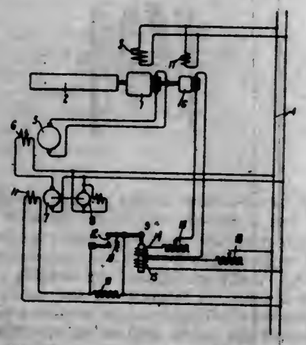
1,894,808. RAPID DETERMINATION OF THE PERCENTAGES OF LIGHT AND BLACK CONSTITUENTS OF FINELY GRAINED MIXTURES. MARTIN WITTE, Breslau, Germany. Filed Apr. 17, 1930, Serial No. 445,232, and in Germany Apr. 23, 1929. 2 Claims. (Cl. 88—14.)

1. The method of quickly ascertaining the percentages by weight of the light and dark constituents of finely grained mixtures which consists in preparing a number of mixtures containing different percentages of light and dark constituents, measuring the brightness of the different mixtures, recording the degrees of brightness together with the respective percentages on a chart, measuring the brightness of a similar mixture of unknown contents, and reading off its percentage from the said chart.

1,894,809. TESTING OF COAL DUST-MINERAL DUST MIXTURES. MARTIN WITTE, Breslau, Germany. Filed June 7, 1930, Serial No. 459,844, and in Germany June 14, 1929. 1 Claim. (Cl. 88—14.)

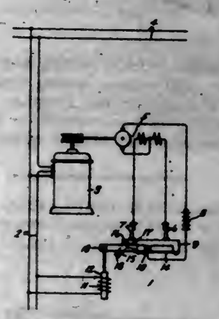
The method of testing liability to explosion of mixtures of coal dust and mineral dust from underground mine galleries consisting in taking samples of these mixtures, measuring their brightness, and comparing this brightness with that of a mixture of the same materials which is just on the safe side of the danger-limit.

1,894,810. SPEED RESPONSIVE SYSTEM. FRED H. WINTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 2, 1931. Serial No. 506,015. 8 Claims. (Cl. 171—229.)



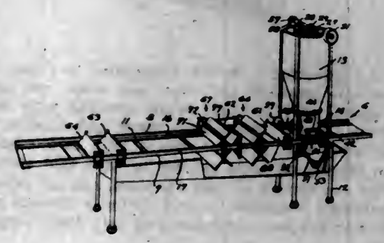
5. In combination, a separately excited variable speed generator, a source of current supply subjected to voltage fluctuations for providing the separate excitation for said generator, a device connected to be responsive to the voltage of said generator, and means for compensating said device for voltage changes of said generator which are due to the voltage fluctuations of said source whereby said device responds only to voltage changes of said generator which are produced by speed changes of said generator.

1,894,811. ELECTRICAL RELAY. FRED H. WINTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 17, 1931. Serial No. 551,537. 11 Claims. (Cl. 171—119.)



1. In combination, a relay having a circuit controlling position, and means associated with said relay for causing it to assume said circuit controlling position on relatively large changes in input from a normal input value in one direction and on relatively small changes in input from said normal value in the other direction.

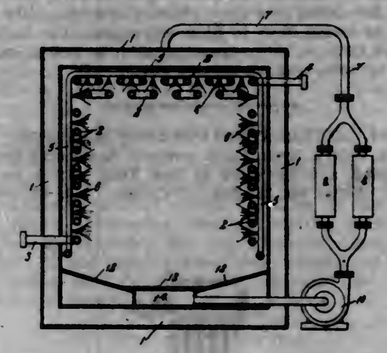
1,894,812. BATTERY PLATE FILLING MACHINE. WILLIAM O. WUEST, Van Nuys, Calif. Filed Apr. 29, 1931. Serial No. 533,726. 3 Claims. (Cl. 226—39.)



1. A battery plate filling machine comprising a hopper, means for forcing paste from the bottom of the hopper, means providing a track beneath the hopper along which battery plates may pass, said track forming a closure beneath the hopper so that discharged paste will not continue to be forced through the plates positioned therebeneath and spring pressed shoes at the sides of the hopper and extending the length of the hopper outlet adapted to engage the plates as they pass benneath the hopper to hold them against the track and prevent leakage of paste laterally.

1,894,813. MEANS AND METHOD FOR CHILLING AND FREEZING FOODSTUFFS. MIKAIL TROFIM ZAROTSCHENZEFF, London, England, assignor to American "Z" Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 17, 1931, Serial No. 516,441, and in Great Britain July 15, 1930. 5 Claims. (Cl. 62—104.)

4. A method for refrigerating edible products, which consists in subjecting the edible products in a chamber to the action of chilled air and also of a dense fog comprising a medium of low temperature and withdrawing from



the air and dense fog in the chamber of heat absorbed from the edible products as they are being frozen.

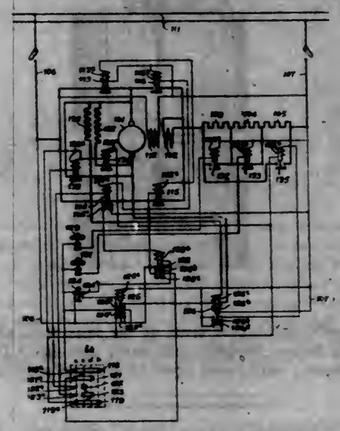
1,894,814. REGISTERING GOLF TARGET. MERLE H. BAKER, Des Moines, Iowa. Filed Jan. 19, 1931. Serial No. 509,778. 2 Claims. (Cl. 265—22.)



1. In a device of the class described, two spaced apart rotatably mounted shafts, a flat target wing member designed to be struck by golf balls in flight rigidly secured to each of said shafts; said two wing members designed to normally rest in a common plane and of such dimensions as to have their outer marginal ends terminating adjacent to each other, stop means engaging said two wing members for preventing the swinging movement thereof forwardly of their said normal positions when returning to said normal position after being moved from said normal positions by golf balls in flight, and coil springs engaging and yieldingly urging said wings into engagement with said stops and against movement by golf balls in flight.

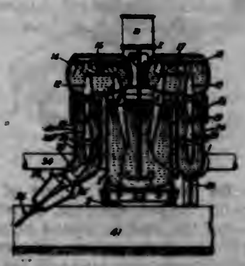
1,894,815. CONTROL SYSTEM. FLORENCE C. BIGGERT, Jr., Crafton, and JOHN A. SMITMANS, Pittsburgh, Pa., assignors to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 16, 1930. Serial No. 461,828. 6 Claims. (Cl. 172—239.)

3. The combination with a rotatable element, an electric motor having an armature operably coupled to said element, and a source of current for actuating said motor, of a control system for controlling the operation of said motor, comprising a starting switch for connecting said motor to said source of current, means actuated in accordance with the movement of said element for reversing the current through said motor at a predetermined point in the path of travel of the element, a resistor element, means for connecting said resistor element across



said armature when the counter electromotive force in the armature fails after the current therethrough is reversed, and means for disconnecting the motor from the source of current when the rotatable element is returned to its starting position after the current therein is reversed.

1,894,816. ELECTRICAL SWITCH GEAR. DAVID REGINOLD DAVIES, Didsbury, England, assignor to General Electric Company, a Corporation of New York. Filed June 15, 1931, Serial No. 544,436, and in Great Britain July 25, 1930. 8 Claims. (Cl. 175—298.)

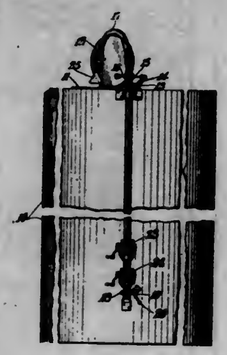


1. Electrical switchgear comprising a circuit breaker having relatively movable contacts mounted for bodily rotative movement about its vertical axis, a disconnecting contact connected to each terminal of and carried by said circuit breaker and stationary disconnecting contacts coacting with the aforesaid disconnecting contacts in accordance with rotative movement of said circuit breaker.

1,894,817. SAMPLING AND GAUGING DEVICE. HARRY E. FORD, Jersey City, N. J. Filed Sept. 17, 1929. Serial No. 393,273. 13 Claims. (Cl. 73—82.)

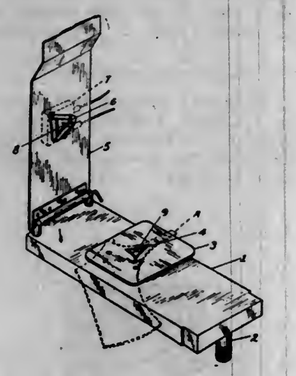
1. In combination, an upright tank having an opening in its top wall and a cover for said opening hinged to said

top wall, a davit having its upper end projecting above the top of the tank, said davit being rotatable to locate said



end over said opening or clear of the tank wall and interconnecting means between said cover and davit for opening and closing said cover upon rotation of said davit.

1,894,818. PROCESS FOR ORNAMENTING SHOES. BENJAMIN W. FREEMAN, Cincinnati, Ohio. Filed Mar. 16, 1929. Serial No. 347,736. 9 Claims. (Cl. 101—32.)



1. A process for ornamenting a part of a shoe upper having ornamental cut-out openings therein which consists in positioning the part by means of positioning the edges of the openings of the pattern, and supporting such edges, then pressing indenting elements against the outer surface of the uppers to provide imitation stitch markings in the upper closely bordering and outlining the edges of the openings of the pattern.

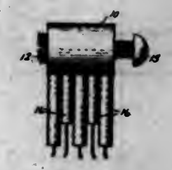
1,894,819. WEAR RESISTING FERROUS ALLOY. ALFRED W. GREGG and RAYMOND H. FRANK, Columbus, Ohio, assignors to The Bonney-Floyd Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 24, 1931. Serial No. 525,031. 6 Claims. (Cl. 75—1.)

1. An alloy of approximately the following composition; chromium 15.00% to 20.00%; tungsten 10.00%; molybdenum 1.00%; vanadium 1.00%; nickel 2.00%; carbon 2.50% to 4.50%, the balance being iron except for impurities such as phosphorus and sulphur, which are incidental to the manufacture thereof.

1,894,820. WEAR RESISTING FERROUS ALLOY. ALFRED W. GREGG and RAYMOND H. FRANK, Columbus, Ohio, assignors to The Bonney-Floyd Company, Columbus, Ohio, a Corporation of Ohio. Filed Aug. 4, 1932. Serial No. 627,536. 4 Claims. (Cl. 75—1.)

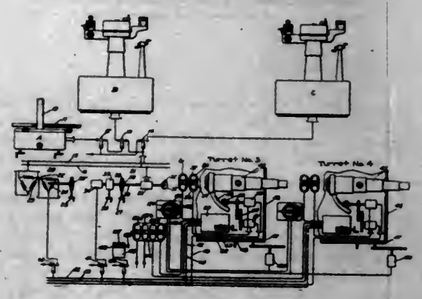
1. A low fusing wear and abrasion resistant alloy consisting of nickel 21% to 31%, chromium 11% to 19%, tungsten 12% to 20%, vanadium .5% to 2.00%, carbon 2.00% to 3.5%, and the balance iron.

1,894,821. ALTERNATING CURRENT RECTIFIER. EDGAR A. HARTY, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 8, 1929. Serial No. 384,449. 5 Claims. (Cl. 175—366.)



2. An alternating current rectifier including an insulation casing provided with a slot at one of its sides and threaded at its opposite ends, a plurality of rectifying elements mounted within said casing, conductive terminal members interposed between said rectifying elements and provided with leads extending through said slot, and means arranged to cooperate with said threaded ends for adjusting the pressure between said rectifying elements and said terminal members.

1,894,822. SYSTEM OF GUN FIRE CONTROL. EDWARD M. HEWLETT and WALDO W. WILLARD, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Aug. 2, 1923. Serial No. 655,358. 58 Claims. (Cl. 89—41.)



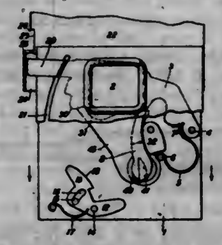
1. A system of gun fire control comprising a plurality of directors, a plurality of guns, and means for operating said guns as a single group under the control of one of said directors for concentrated fire or in a plurality of groups under the control of a plurality of said directors for divided fire.

7. A system of gun fire control comprising a director, a gun, an indicating member adjacent said gun, an electrical system for the transmission of angular motion connecting said indicating member to said director, and electrical means interposed in said system actuated by movement of said gun for controlling said indicating member jointly with said director so as to cause said indicating member to show the angular relation of said gun and said director.

36. In a gun fire control system, the combination with a gun and a sight, of a device for showing the relative train of the gun and sight comprising coarse and fine rotatable indicators, a plurality of repeater motors each connected to an indicator at a one-to-one ratio, and means for actuating said motors including a plurality of transmitters, some of which are connected to the said sight at a one-to-one and at a multiple speed ratio and the others of which are connected to said gun at a one-to-one and at a multiple speed ratio.

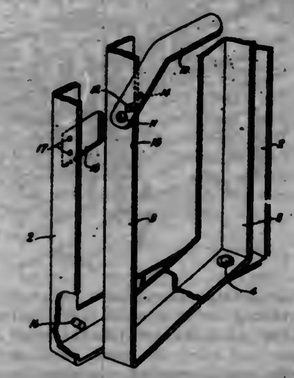
58. A system of gun fire control comprising in combination with a gun, a sighting device remote therefrom, gun directing means adjacent said gun operated by said sighting device, means remote from said sighting device and said gun for operating said gun directing means independently of said sighting device and said gun and means for adjusting said sighting device independently of said gun directing means.

1,894,823. COIN RECEPTACLE. FREDERICK A. HOYT, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 11, 1930. Serial No. 481,162. 11 Claims. (Cl. 232—15.)



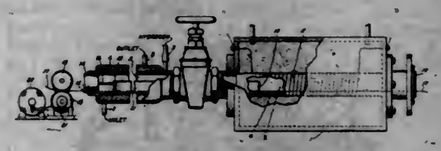
1. A coin receptacle comprising a box, a cover therefor having a coin receiving opening therein, a shutter for said opening, a locking lever for locking said shutter in closed position and means on said shutter to compel said locking lever to follow said shutter for substantially its entire length of travel from its open to its closed position.

1,894,824. SWITCHBOARD DOORLATCH. HARRY H. IDE, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 23, 1930. Serial No. 490,576. 7 Claims. (Cl. 292—241.)



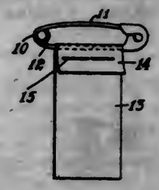
1. In a combination latching arrangement for a door hinged to a supporting frame, a latching member on said door, together with means on said supporting frame cooperative with said latching member to raise said door consequent to its being locked in its closed position on said supporting frame.

1,894,825. ANNEALING PROCESS. FLOYD C. KELLEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 1, 1930. Serial No. 449,021. 3 Claims. (Cl. 266—3.)



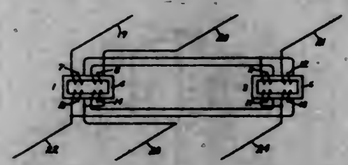
1. In combination, an annealing furnace comprising a heating chamber and a cooling chamber, a closed receptacle mounted in said cooling chamber and spaced from the outer end thereof, said receptacle extending a relatively short distance into the heating chamber, said receptacle having closure members provided with openings through which a metal strip may be drawn, and means whereby a reducing gas may be supplied to said furnace.

1,894,826. SAFETY TICKET. FRANK MAGIDSON, Pittsburgh, Pa., assignor to Pittsburgh Tag Company, a Corporation of Pennsylvania. Filed Jan. 13, 1932. Serial No. 586,267. 5 Claims. (Cl. 40—26.)



1. A fastener of safety pin construction having a strip of tag forming material looped around the stationary leg thereof and a member for securing said strip to said pin, said member having the ends thereof embedded in the strip.

1,894,827. POLYPHASE SYSTEM. MONTVILLE B. MALLETT, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Apr. 29, 1931. Serial No. 533,751. 11 Claims. (Cl. 172—238.)

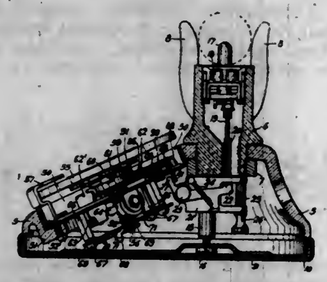


1. The method of producing balanced three phase voltages which consists of producing two alternating fluxes which are 120 degrees out of phase, generating therewith two of said three phase voltages, also generating therewith a similar pair of voltages and combining said last mentioned voltages to produce the third of said three phase voltages.

6. In combination, a three phase three conductor ungrounded neutral circuit, and two single phase transformers connected thereto to give substantially balanced three phase operation, said transformers being equivalent wye connected to said circuit.
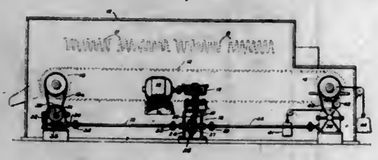
CARNEGIE LIBRARY OF ATLANTA

1,894,828. SUBSTATION TELEPHONE SET. HERBERT F. OBERGFELL, River Forest, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 27, 1931. Serial No. 533,052. 18 Claims. (Cl. 179—99.)



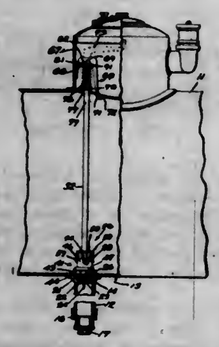
1. In a substation telephone set, a switching member, a calling device, means for operating said calling device and locking it under control of said switching member, means for operating said switching member to release said calling device to permit it to restore to normal, and means for preventing said switching member from interferring with the restoring motion of said calling device until it reaches its normal position.

1,894,829. FURNACE CONVEYER DRIVE. ALBERT N. OTIS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 27, 1932. Serial No. 595,645. 4 Claims. (Cl. 263—8.)



1. In combination, a furnace provided with an endless conveyer, a plurality of rotatable supports for said conveyer, driving means for said supports, and means for equalizing the driving effort between said supports comprising a differential mechanism connected between said driving means and said supports.

1,894,830. TANK CAR VALVE LOCKING DEVICE. WALTER E. PETERSON, Inglewood, Calif. Filed Mar. 27, 1929. Serial No. 350,202. 19 Claims. (Cl. 137—21.)



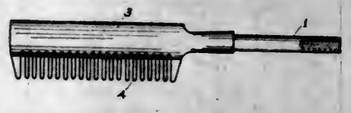
1. A tank valve mechanism comprising a valve seat encircling a port in a wall of a tank, a valve associated therewith and having prongs extending therefrom, a cage having inclined slots therein for the slidable reception of said prongs, means for adjusting said cage to vary the position of its slots in respect to said seat, and means for turning said valve.

1,894,831. ROLLED EDGE CONSTRUCTION. MAURICE C. PHENIX, Los Angeles, Calif. Filed Mar. 11, 1931. Serial No. 521,647. 3 Claims. (Cl. 155—184.)



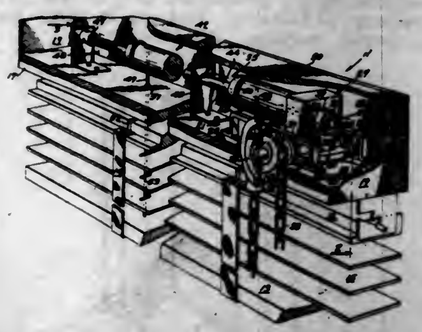
1. In an upholstered furniture construction, the combination of a spring frame provided with springs, a textile fabric provided with a stuffed rolled edge disposed along and slightly in advance of the front edge of such spring frame, and a plurality of independent staples, each staple having a hook at one end to engage the front edge of the spring frame and passing through the rolled edge with its other end being bent downwardly and unattached to the spring frame.

1,894,832. COMB. JOHN CARTER ROBINSON, Pittsburgh, Pa. Filed Jan. 8, 1932. Serial No. 585,406. 5 Claims. (Cl. 132—14.)



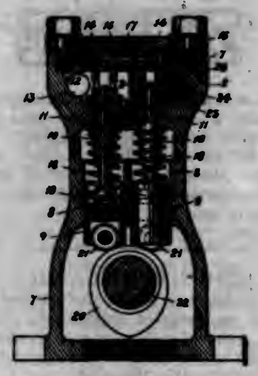
1. A comb consisting of a heel and line of teeth, the two opposite sides of the line of teeth being concave from base to tip and of a curvature corresponding to that of a human head, and the heel being of convex curvature.

1,894,833. LIFTING AND LOCKING DEVICE FOR VENETIAN BLINDS. WILLIAM H. RUBY and JESSE E. COOPER, Los Angeles, Calif., assignors to Western Venetian Blind Co., Los Angeles, Calif, a Corporation of Delaware. Filed May 16, 1932. Serial No. 611,539. 14 Claims. (Cl. 156—17.)



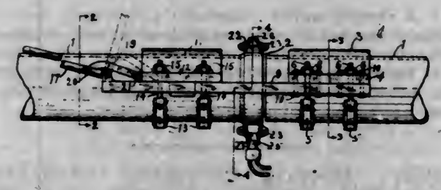
5. In a Venetian blind having slats with a plurality of lifting and lowering cables, a spool shaft having a spool thereon with the cables connected to the spool, means to rotate the shaft and hence the spool, means to move the shaft lengthwise during rotation, the rotating means for the shaft being connected thereto and mounted in a guide to move longitudinally with the shaft on the spool.

1,894,834. PUMP MECHANISM FOR EFFECTING A PRESSURE FEED OF LIQUIDS. WILLIAM PATRICK SILLINCE, London, England, assignor to Alfred Wiseman Limited, Birmingham, England. Filed Feb. 16, 1931, Serial No. 516,184, and in Great Britain Apr. 1, 1930. 3 Claims. (Cl. 123—139.)



1. Pump mechanism for effecting an intermittent pressure feed of liquids in which the pump or each pump element incorporates as a combination a liquid supply, a pair of cylinder barrels, ports in said barrels intermediate the ends thereof which place the barrels in communication with one another and with the liquid supply, outlet means from the said barrels to a common feeding passage, plunger members reciprocably mounted within said barrels and adapted to control the ports in the respective barrels and means for reciprocating the plunger members out-of-phase, the means for reciprocating the said plungers being such that no delivery can be effected until the inlet ports in both barrels have been closed by their respective plungers and the said plungers have each attained relatively high velocity for the purpose of minimizing dribble in the feeding operation.

1,894,835. METHOD OF AND APPARATUS FOR JOINING PIPES. FRANK H. SMITH, Kent, and HENRY A. STAINOFELLOW, Akron, Ohio. Filed Sept. 13, 1928. Serial No. 305,827. 2 Claims. (Cl. 254—29.)

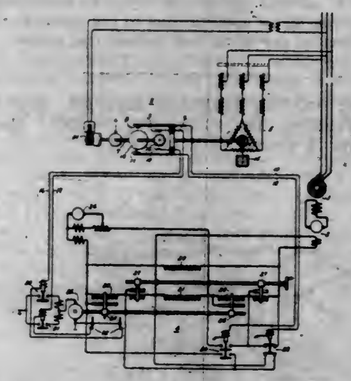


1. Apparatus for joining a pair of axially abutting pipes comprising rigid supporting members rigidly secured to one pipe and extending parallel to the axis of one pipe past the end thereof, means for slidably supporting the other pipe on said rigid members in axial alinement with the first pipe, and means for shifting the second pipe into telescopic engagement with the first.

1,894,836. METAL WORKING ALLOY. WESLEY P. SYKES, Cleveland Heights, Ohio, assignor to General Electric Company, a Corporation of New York. Filed Oct. 22, 1926. Serial No. 143,528. 22 Claims. (Cl. 148—21.5.)

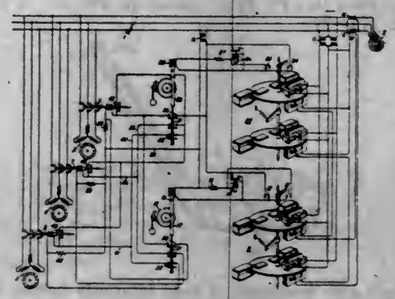
1. The method of producing substantially carbon free hard alloys of iron with metal from a group consisting of tungsten and molybdenum which consists in heating iron and said metal from a group consisting of tungsten and molybdenum in close association to a temperature at which a solid solution of said metal in the iron will take place, rapidly cooling the body thus formed and finally heating said body to and holding it for at least a few hours at an intermediate temperature, below the initial heating temperature, at which there will be a precipitation of a compound containing a relatively high percentage of said metal.

1,894,837. ELECTRICAL REGULATION. LOUIS W. THOMPSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 19, 1931. Serial No. 538,508. 11 Claims. (Cl. 171—119.)



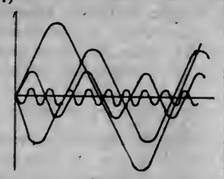
1. An electrical regulator having voltage-varying means in the form of a Wheatstone bridge whose state of balance is used to control regulating changes, means for unbalancing said bridge relatively slowing when a condition to be regulated changes relatively slightly, and means for unbalancing said bridge relatively rapidly when said condition changes by a relatively large amount.

1,894,838. ELECTRICAL CONTROL SYSTEM. WILLIAM E. WEAVER, Toronto, Ontario, Canada, assignor to General Electric Company, a Corporation of New York. Filed Jan. 12, 1932, Serial No. 586,172, and in Canada May 28, 1931. 8 Claims. (Cl. 171—97.)



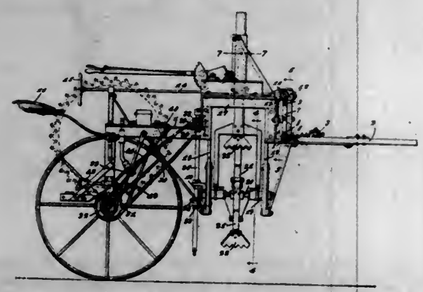
1. In combination, an electric circuit, a plurality of electric translating devices adapted for connection to said circuit, and means responsive to an electrical condition of said circuit for selectively connecting and disconnecting said translating devices to and from said circuit in the same sequence.

1,894,839. SUSPENSION SPRING. KARL WERNER, Nuremberg-Eibach, Germany. Filed Feb. 5, 1931, Serial No. 513,707, and in Germany Feb. 6, 1930. 6 Claims. (Cl. 267—47.)



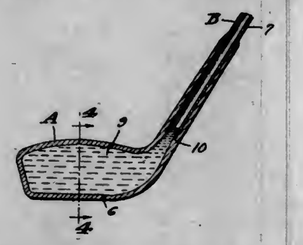
1. A laminated and stepped leaf spring especially for motor cars and the like, the lengths of the several steps from fixing point to plate end being dimensioned and brought in mutual relation so that the oscillation times of the spring plates appertaining to the different steps are proportionated according to a geometrical series.

1,894,840. COTTON HOE AND REAPER. RUFUS WHITING, Palestine, Tex. Filed Nov. 6, 1931. Serial No. 573,456. 3 Claims. (Cl. 97—15.)



1. A machine of the character described comprising a wheel mounted frame having an arched portion, guides carried by the frame at the forward and rear ends of the arched portion thereof, a shaft movable in the guides, means for raising and lowering said shaft, a second shaft journaled upon the frame behind the arched portion thereof and disposed at a right angle to the first-mentioned shaft, means for operating the second mentioned shaft from the mounting wheel and a tongue connected with the frame in advance of the arched portion thereof.

1,894,841. GOLF CLUB. PORTER H. ADAMS, Thetford, Vt. Filed May 27, 1931. Serial No. 540,402. 1 Claim. (Cl. 273—77.)



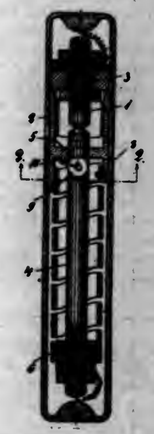
A golf club comprising a head interiorly hollow to define a chamber back of the impact face and extending throughout the area thereof, a tubular shaft connected with the head and interiorly in communication with the chamber, and a fluid filler entirely filling said chamber, the shaft being closed at the end remote from the head and the bore from the head to the point of closure being volumetrically sufficient to entirely receive the filler when the head is raised above the shaft.

1,894,842. THERMOSTAT SWITCH. CARL WILHELM APPELBERG, Stockholm, Sweden, assignor to Aktiebolaget Birka Regulator, Stockholm, Sweden, a Company of Sweden. Filed Mar. 10, 1931, Serial No. 521,572, and in Sweden Mar. 27, 1930. 6 Claims. (Cl. 200—138.)



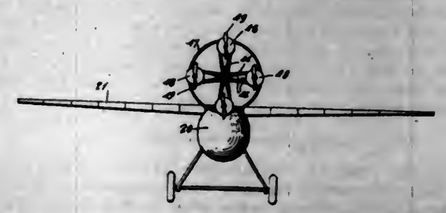
1. A thermostat electrical switch disposed in a receptacle and comprising a contact operating rod longitudinally slidable in said receptacle, a plurality of bimetallic heat sensitive plates slidably thrust on said rod with like plate sides facing each other, and means for transferring reciprocating heat deformation movements of said plates to said rod.

1,894,843. THERMAL SWITCH. CARL WILHELM APPELBERG, Stockholm, and HARRY OLOF BORGSTRÖM, Huvudsta, Sweden, assignors to Aktiebolaget Birka Regulator, Stockholm, Sweden, a Company of Sweden. Filed Apr. 24, 1931, Serial No. 532,634, and in Sweden May 21, 1930. 4 Claims. (Cl. 200—138.)



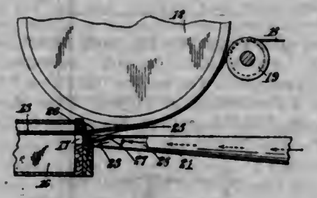
1. A thermal switch comprising a receptacle, mutually reciprocable contact members disposed in said receptacle, a heat sensitive member, and cam means for transforming heat deformation movements of said heat sensitive member into contact member reciprocations perpendicular to said deformation movements.

1,894,844. AIRCRAFT PROPULSION MECHANISM. LOUIS BALGA, Bridgeport, Conn. Filed Nov. 27, 1931. Serial No. 577,674. 10 Claims. (Cl. 244—14.)



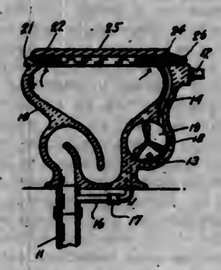
1. Airplane propulsion mechanism comprising a plurality of independently operable motor operated propellers, and means for bodily shifting the propellers in a circular path perpendicular to the longitudinal axis of the airplane.

1,894,845. FILM CASTING MACHINE. EDWARD JOHN BARNES, Sawston, England, assignor to Spicers Limited, London, England, a British Company. Filed Feb. 21, 1931, Serial No. 517,621, and in Great Britain Mar. 4, 1930. 7 Claims. (Cl. 18—15.)



1. The combination with the machine casing of a film casting machine of the kind in which evaporation of the solvent within the machine casing is effected solely by means of heat, said casing having at least one orifice through which solvent vapor might normally escape, of means to apply to each escape orifice in said casing a gas pressure which is sufficient to prevent the escape of solvent vapors from that orifice under conditions such that substantially no gas can enter the machine casing through that orifice.

1,894,846. TOILET BOWL. JAMES H. BENNETT, Detroit, Mich., assignor of one-half to Edward Donovan, Detroit, Mich.; Mary J. B. Pennoyed administratrix of said James H. Bennett, deceased. Filed Nov. 18, 1931. Serial No. 575,885. 1 Claim. (Cl. 4—213.)



In combination with a toilet bowl and its outlet pipe, said bowl having a transverse chamber therein opening out through the sides of the bowl, closure means for the ends of said chamber, a motor driven fan in said chamber, said bowl having a conduit therein connecting the chamber with the drain pipe, and said bowl having a second conduit therein connecting the chamber with the upper edge of the bowl, a seat for the bowl having an annular passage therein, and ports connecting the passage with the interior of the bowl, and said seat having a second port therein connecting the annular passage with the upper end of the second conduit when the seat is resting on the bowl, and means for closing the circuit to the motor when the seat is occupied.

1,894,847. CARBURETOR. ERNEST C. BERGMAN, York, Nebr., assignor of one-half to Anna H. Bergman and one-half to Charles F. Stroman, York, Nebr. Filed Dec. 1, 1931. Serial No. 578,355. 1 Claim. (Cl. 48—180.)

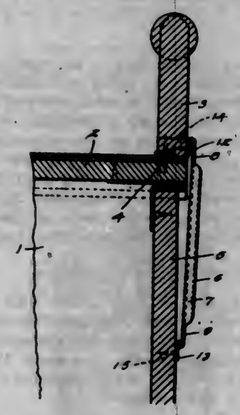
An attachment for auxiliary air mixing devices comprising a casing enclosing an auxiliary air mixing device and having walls thereof spaced from the inlet openings of the mixing device, an air intake nipple in communication with the interior of the casing and carried by the latter, a resilient arm having one end secured to the casing and extending across the nipple, a cup-shaped valve element carried by the arm and disposed over and normally spaced from the inlet end of the nipple, and an operating medium connected to the free end of the arm for flexing the latter to bring the valve element into engagement with the nipple for closing the interior of the casing to the atmosphere.



1,894,848. SULPHURIZED DYESTUFF AND PROCESS OF MAKING SAME. JULES BLANCHOD and ADOLF WIRZ, Basel, Switzerland, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 14, 1931, Serial No. 568,872, and in Switzerland Oct. 24, 1930. 1 Claim. (Cl. 260—19.)

In the manufacture of sulphurized dyestuffs by baking the leuco-compound of the indophenol from carbazole and nitrophenol in the presence of sulphur, of products splitting off ammonia when heated, and of organic bases, the improvement consisting in the feature of adding the whole sulphur in finely dispersed form, the fine dispersion of the sulphur being secured by decomposition of a polysulphide in the sulphurization mass.

1,894,849. CHEST. FRANK J. BOOK, Huntington, Ind. Filed Jan. 9, 1932. Serial No. 585,785. 2 Claims. (Cl. 217—60.)

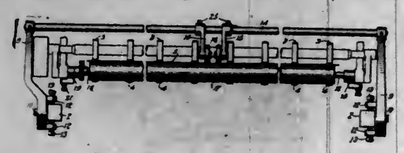


1. In combination with a chest with a hinged lid, a perpendicular seat rail and means for hingedly mounting the seat rail on top of the lid and hingedly connecting the same with the back of the chest, whereby, when the lid is raised, the seat rail will still assume a substantially perpendicular position.

1,894,850. ATTACHMENT FOR PRINTING PRESSES. CHARLES S. CARLSON, Dumont, N. J. Filed Oct. 29, 1930. Serial No. 492,064. 3 Claims. (Cl. 164—67.)

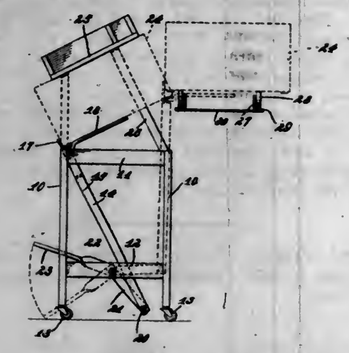
1. An attachment for printing presses, including a slicer, a roll over which the sliced paper is fed, pressure rollers engaging the paper above the roll, and rotatable thereby and located at opposite sides of the slice and compelling

both sections to move longitudinally and preventing lateral movement thereof, endless tapes between which the paper is fed over the roll, the rolls supporting and im-



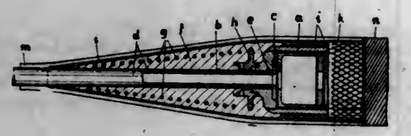
parting motion to the tapes, and a sprocket chain connecting the sprocket wheels on one of the tape rolls with the first mentioned roll.

1,894,851. AUTOMATIC PACKING STAND. LAWRENCE M. COCKRILL and HAROLD D. COUCH, Yakima, Wash. Filed Oct. 6, 1930. Serial No. 486,848. 1 Claim. (Cl. 226—129.)



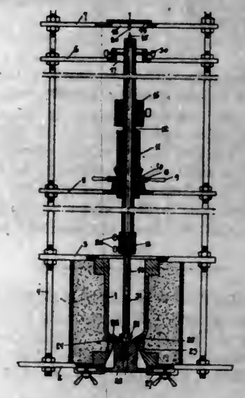
A packing stand comprising a supporting frame, said frame being provided at its upper end with angularly disposed bars, a lifting frame movable between said bars and having means for supporting a container, a treadle lever pivoted to the lower portion of the supporting frame and having an end portion pivoted to the lower part of the lifting frame, the arrangement being such that when the free end of the treadle lever is depressed the lifting frame is raised and the swinging movement of the lifting frame is limited by the bars of the supporting frame.

1,894,852. COIL PIECE FOR DEEP SEA SIGNALING CABLES. OTTO CORDS, Cologne-Mulheim, Germany, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Filed Mar. 1, 1932, Serial No. 596,081, and in Germany June 12, 1931. 4 Claims. (Cl. 178—46.)



1. A coil piece for deep sea signaling cables which have pressure protecting tubes between the cable core and the lead sheathing for taking up radial pressure, and armouring over the lead sheathing for taking up tensile stress, comprising a pressure-tight housing in which the Pupin coils are placed, a guide at each end of the housing, the pressure protecting tube and lead sheathing projecting into the housing at each end through the guides and being capable of longitudinal movement, conical running-on members of non-compressible elastic material arranged over the pressure protecting tubes and lead sheathing at each end of the coil housing, and a lead covering surrounding the coil housing and running-on members and secured to the lead sheathing of the cable.

1,894,853. APPARATUS FOR THE DRAWING OF TUBULAR ARTICLES. GASTON DELPECH, Nemours, France, assignor to The Société "Quartz & Silice," Paris, France, a Corporation of France. Filed Mar. 12, 1931, Serial No. 522,126, and in France Mar. 28, 1930. 6 Claims. (Cl. 49—17.1.)



1. An apparatus for drawing tubular articles of the type described, which comprises in combination, a crucible having an opening at its lower end, a hollow mandrel movably supported with respect to said crucible so as to extend thereinto and adapted to cooperate with said opening so as to form the ewith an annular passageway, a detachable bottom for said crucible adapted to obturate said opening and to cooperate with the lower end of said mandrel for accurately positioning the latter, means for removably fastening said bottom to said crucible, and adjustable means for fixing said mandrel with respect to said crucible, whereby the mandrel can be accurately positioned by means of the removable bottom, then securely fixed in that position with respect to said crucible, after which the detachable bottom is removed.

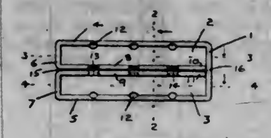
1,894,854. GLOBE-MOUNTING MEANS. LEVINUS PHILIP DENOYER, Kenilworth, Ill. Filed Nov. 16, 1931. Serial No. 575,435. 2 Claims. (Cl. 35—5.)



1. In a globe mounting, a hollow base having a flat top provided with a circular opening, a cup-like meridian support having a flat bottom and a boss on said bottom,

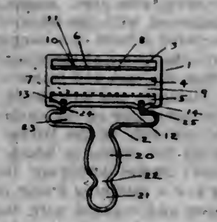
said boss extending through said opening, a friction washer surrounding said boss and lying against the lower side of said flat bottom and the upper side of said flat top, a second friction washer surrounding said boss and lying against the lower side of said flat top, a rigid washer lying against the lower side of said second friction washer, a headed screw passing through said rigid washer and threaded into said boss, and a locking screw threaded downwardly into said bottom and abutting the upper end of said headed screw.

1,894,855. SLIDE BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Sept. 26, 1931. Serial No. 565,321. 1 Claim. (Cl. 24—200.)



A slide buckle comprising a piece of wire of uniform diameter throughout its length and bent to form a pair of loops in a common plane, the loops being integrally connected at one side and free, but engaging one with the other, at the opposite sides, intermediate bar-structure portions integrally extending from the free sides to engage their extremities with the connected side, spaced nubs provided by the intermediate bar-structure portions, each nub being pressed out from said uniform diameter to extend beyond the bar-structure portion of which a full diameter is maintained between, and at the rear of said nubs, the nubs of one portion extending in an opposite direction to those of the other portion and into the path of a strap threaded into the slide buckle, means uniting in permanent intimate union the engaging metal surfaces of the free sides of the loops, and means likewise uniting the engaging metal surfaces of the extremities with the metal surface of the integrally connected side of the loops.

1,894,856. LOOP SLIDE BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Nov. 27, 1931. Serial No. 577,462. 3 Claims. (Cl. 24—73.)



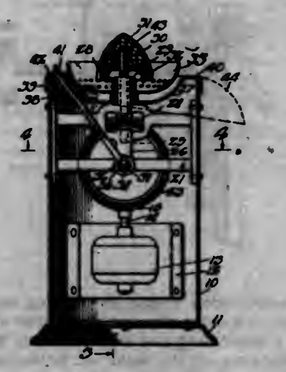
1. A loop slide buckle, the combination of a substantially rectangular sheet-metal frame having spaced intermediate bars with cut-metal edges, a cut-metal edged portion of each bar being bent perpendicularly to the plane of the frame, said bent portions projecting from said plane in opposite directions, one from the other, and a button loop axially associated with said frame in said plane.

1,894,857. ILLUMINATED SIGN. LEO B. DWYER and EDWIN DRALLMEIER, Hinsdale, Ill. Filed Oct. 21, 1931. Serial No. 570,126. 8 Claims. (Cl. 40—133.)



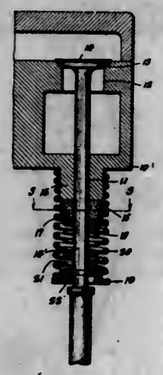
1. In combination with the hood of a car, an official sign of relatively long, narrow and flat configuration extending flatwise longitudinally along the side of the hood and, comprising an inner body portion adapted to be secured to the hood of the car, and a cover portion secured to the body portion and in spaced relation thereto to afford an inner illuminable space, the cover portion being of outwardly cylindrically curving configuration from the top edge to the bottom edge and being provided with perforations delineating a word of official import, a source of illumination within the illuminable space, and electrical wiring leading to a convenient point of control.

1,894,858. FRUIT JUICE EXTRACTOR. HERBERT FROMM, Hamburg, Wis. Filed May 20, 1931. Serial No. 538,849. 5 Claims. (Cl. 146—3.)



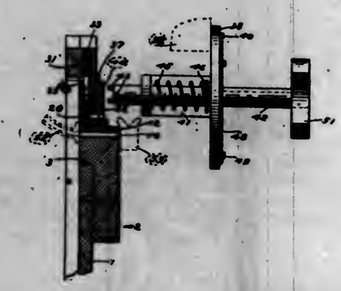
1. A juice extractor, comprising a rotative reamer, an oscillatory strainer co-axially mounted with respect to the reamer, rotative driven means for operating said reamer, and means associated with said driven means for converting the rotary movement thereof into oscillatory movement of said strainer.

1,894,859. VALVE. WILLIAM J. GABEL and JOHN S. BRETZ, Great Falls, Mont.; said Gabel assignor of five per cent to said Bretz. Filed Oct. 8, 1931. Serial No. 567,738. 1 Claim. (Cl. 251—144.)



The combination with the valve stem guide of an engine block, the valve stem in said guide, and the spring of said valve stem, of a packing therefor comprising an open-ended casing having an end bearing against said guide in surrounding relation to said stem and confined within and engaged by the coils of said spring, a compressible packing within said casing embracing said valve stem and having an end bearing against said guide, a disk in the other end of said casing, and a spring within the first spring bearing against said disk whereby to compress said packing against said valve stem and into the valve stem opening of said guide.

1,894,860. LINERLESS MOLD CAP. ARTHUR L. GAGNÉ and JOSEPH A. SNYDER, San Francisco, Calif., assignors to Intertype Corporation, Brooklyn, N. Y. Filed Dec. 8, 1930. Serial No. 500,910. 9 Claims. (Cl. 199—55.)



1. The combination with a line casting machine having a mold disc, of a mold disposed in the disc and having an upper and a lower half, and means entirely disposed within the boundaries of the mold for adjusting one of the halves while the mold is still in the mold disc for forming slugs of different point sizes.

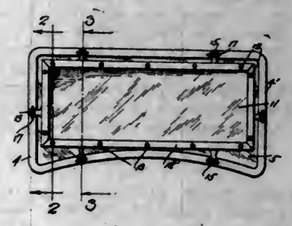
1,894,861. WINDSHIELD HEATER. EDWARD J. GALLAGHER, Jr., Baltimore, Md. Filed Dec. 21, 1931. Serial No. 582,432. 2 Claims. (Cl. 15—255.)

1. A windshield wiper element comprising a casing, a heating medium for said casing, a holder in the casing and spaced from the walls thereof, a wiper strip carried by the holder, a perforated heat conducting element carried by



the holder and adapted to absorb heat and transmit the same directly to a transparent panel by contacting therewith at opposite sides of the wiping strip.

1,894,862. CLEAR VISION ATTACHMENT FOR MOTOR VEHICLES. EMILIA W. GRUDNICKI, Ashley, Pa. Filed July 30, 1931. Serial No. 554,138. 1 Claim. (Cl. 296—84.)

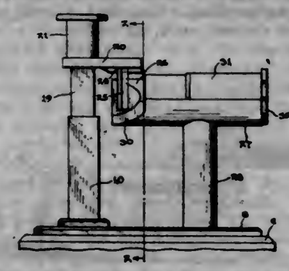


A clear vision attachment for motor vehicle windshields comprising a box-like casing having a glass panel in one side and the other side open, means for holding the open side in engagement with the glass of the windshield consisting of apertured lateral ears carried by the casing and extending over the frame of the windshield and screw bolts passed through the ears and frame of the windshield for securing the casing to the windshield, a gasket interposed between the open side of the casing and the glass of the windshield inwardly of the lateral apertured ears, a rabbetted edge on the casing in which the glass panel is placed, a rubber gasket overlying the edges of the panel and casing and a retaining frame for the panel secured to the casing and engaged with the gasket.

1,894,863. DEVICE FOR REPOINTING LIP STICKS OR THE LIKE. FRANK GUBING, Brooklyn, N. Y., assignor to Elizabeth Arden, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 14, 1932. Serial No. 586,655. 11 Claims. (Cl. 120—94.)

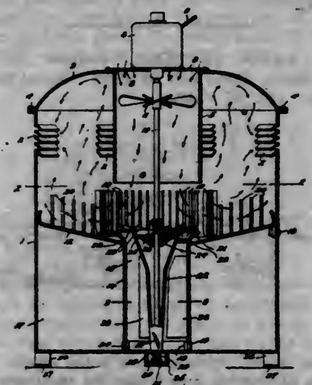
1. A lip stick pointer comprising a stationary lip stick support having a substantially V-shaped end, a spring

pressed plunger mounted for reciprocation adjacent to said support, and a substantially V-shaped knife carried



by the piston and adapted to repoint a lip stick resting on the support when the piston is depressed.

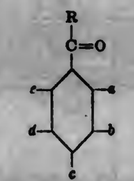
1,894,864. AIR HUMIDIFIER AND WASHER. HUGH M. HALL, Eaton Rapids, Mich., assignor of one-half to Charles L. Sprinkle, Lansing, Mich. Filed Nov. 2, 1928. Serial No. 316,826. 9 Claims. (Cl. 261—91.)



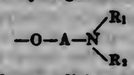
1. In a humidifier, a casing, means within the casing to convert water into mist, comprising a well adapted to contain water, a funnel in the well, means for rotating the funnel to raise the water, a water breaker carried by the funnel and stationary flat baffles adjacent the funnel and adapted to further break up the water received from the water breaker, and round baffles surrounding the flat baffles.

1,894,865. BASIC ETHER OF AROMATIC KETONES. MAX HARTMANN and HANS ISLER, Riehen, Switzerland, assignors to Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Aug. 20, 1931, Serial No. 558,420, and in Switzerland Aug. 28, 1930. 7 Claims. (Cl. 260—127.)

1. Basic ethers of aromatic ketones of the general formula

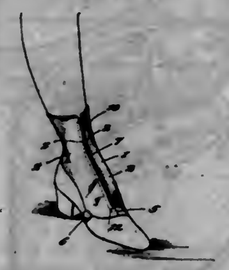


wherein R stands for alkyl, benzyl or phenyl and one of the letters a and c for hydrogen and the other for a group



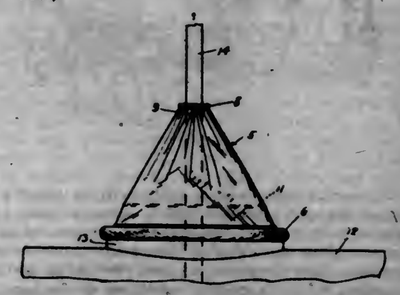
A meaning an alkylene radicle containing at least two carbon atoms and R_1 and R_2 alkyl, hydrophenyl or benzyl, and wherein b, d, and e stand for hydrogen, b and e may also stand for alkloxy or benzyloxy or for part of a benzene ring, and d for nitro or amino, which products form with acids water-soluble salts and are useful in therapeutics.

1,894,866. STOCKING PROTECTOR. ADELAIDE HEELAN, St. Louis, Mo., assignor of one-half to James G. Jones, junior, St. Louis, Mo. Filed Sept. 17, 1931. Serial No. 563,439. 1 Claim. (Cl. 36—2.)



A stocking protector comprising a body of waterproof material shaped to fit about the ankle and cover the upper portion of a person's foot, said body being formed of mating sections having their rear edges united and their front edges separated to form a front opening leading from the upper edge of the body and terminating in spaced relation to its lower edge to form between said lower edge and opening a flexible bridge piece connecting the front edges of the sections at the lower portion of the body interengaging fastening devices having attaching strips overlapping the inner faces of the body at the opposite sides of the front opening and extending downwardly beneath the upper edge of the bridge piece a tongue across the front opening and fasteners extending longitudinally of the body and being of greater width than the fasteners and their attaching strips and having its lower end spaced upwardly from the lower edge of the bridge piece and bearing against the inner face thereof lines of stitching extending longitudinally of the attaching strips and engaged through the body between the upper edge of the body and the upper edge of the bridge piece, one of said lines of stitching also extending through a side portion of said tongue, and a line of stitching extending transversely across the lower end of the tongue and engaged through the bridge piece and adjacent portions of the attaching strips to reinforce the body at said bridge piece.

1,894,867. SAFETY SHIELD. EARL W. HOFFMAN, Dubuque, Iowa, assignor to Johnson High Test Oil Company, Freeport, Ill., a Corporation of Illinois. Filed Aug. 25, 1931. Serial No. 559,313. 4 Claims. (Cl. 221—100.)



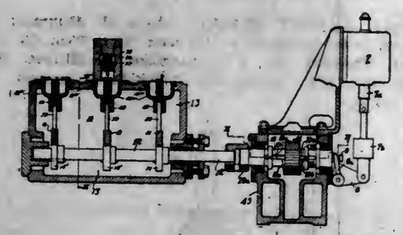
1. A shield formed of flexible material provided with a circular pocket at one end thereof, weight means in said pocket, and having its opposite end contractable.

1,894,868. SEWING BASKET. LYNDE DE F. HOKEBY, Utica, N. Y. Filed Oct. 16, 1931. Serial No. 569,342. 2 Claims. (Cl. 223—53.)



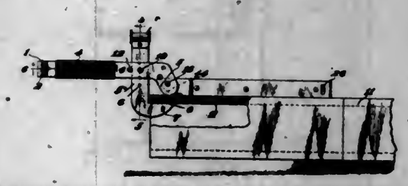
1. The combination with a box or like receptacle provided with certain members of separable fasteners secured in place at and to the upper outer portion of the box and a cover for the box completely removable therefrom, of a flexible handle in the form of a strap, said strap being secured to and extending the full width of and across the cover, said strap having an extension in each end thereof which is adapted to extend about the edge of the cover and overlap a side of the box and which extension is provided with a member of a separable fastener arranged so as to engage a companion member provided by one of the separable fastener members carried at the outer side portion of the box for connecting said strap extension to the box and whereby the cover may be detached from either side and swung into open position.

1,894,869. PUMP. JOSEPH E. HOLVECK, Pittsburgh, Pa. Filed June 27, 1931. Serial No. 547,301. 18 Claims. (Cl. 230—24.)



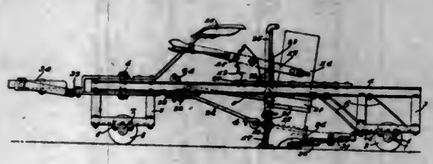
1. The combination with a multi-cylinder pump having a suction chamber provided with a series of inlet valves, one for each cylinder of the pump, of devices for holding said inlet valves open during the operation of the pump, to thereby unload the pump, an instrumentality moving in synchronism with the cycle of operation of the pump, and means for rendering said instrumentality effective in moving all said devices to an inoperative position with relation to said inlet valves.

1,894,870. LEVELING DEVICE. EDWARD A. HUTCHENS, La Grande, Oreg., assignor of one-half to Melvin G. Hutchens, Baker, Oreg. Filed Mar. 4, 1931. Serial No. 520,166. 2 Claims. (Cl. 33—207.)



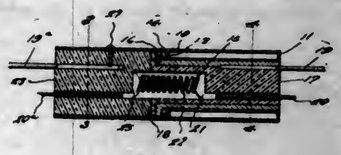
1. A device for the purpose set forth, including a handle having a nose end, a shank adjustably secured to the handle and having a hook portion disposed below the nose, a level stock having an ear which is pivotally secured to the nose, and an adjustable grade level bubble in the stock.

1,894,871. LAND LEVELER. JOSEPH L. IVERSON, Helena, Mont. Filed July 29, 1932. Serial No. 626,115. 3 Claims. (Cl. 37—146.)



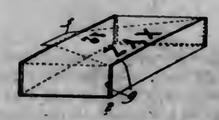
1. A land leveler comprising a main frame, front and rear rollers supporting said frame for the purpose of acting upon the ground to pulverize and roll the latter, a post adjustably mounted on the main frame and extending above and below the latter, a transverse shovel pivotally connected to the post for acting upon the ground, a plate pivoted to the main frame, links pivoted to the shovel and to the plate, and means for locking the plate in various adjusted positions for varying the angle of the shovel.

1,894,872. ELECTRICAL WIRE SWIVEL. WAYNE JACKSON, Paola, Kans. Filed Dec. 28, 1929, Serial No. 417,107. Renewed Sept. 13, 1932. 1 Claim. (Cl. 173—324.)



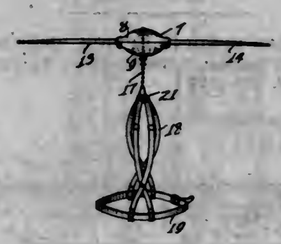
A swivel coupling for electricity conducting wires comprising an open ended tube of electric current conducting material, an inturned annular flange on one end of the tube, a substantially cylindrical bushing rigidly mounted in one end portion of the tube in spaced, concentric relation thereto, the outer end portion of the bushing being mounted in the flange, a sleeve mounted rotatably in the bushing, opposed flanges on the inner ends of the bushing and the sleeve having grooves in their opposed sides constituting a ball race, bearing balls operable in the grooves, a core of insulating material fixed in the sleeve, a flange on the inner end of the core disposed in abutting engagement with the sleeve flange, a conductor wire connected with the sleeve and having electrical connection with the tube, a conductor wire anchored in the core and insulated from the tube, a core of insulating material fixed in the other end portion of the tube, a conductor wire anchored in the last named core and having electrical connection with the tube, a conductor wire anchored in the last named core and insulated from the tube, and means electrically connecting the insulated conductor wires together, the inner end portions of the cores having communicating sockets therein, said means comprising metallic, substantially plano-convex plates mounted in the sockets and connected with the insulated wires, and a coil spring interposed between the plates and having its ends engaged therewith.

1,894,873. PACKING FOR AMMUNITION AND THE LIKE. BROR ANDERS EMIL JOHNSON, Alsten, Sweden, assignor to Aktiebolaget Gerh. Arehns Mekaniska Verkstad, Stockholm, Sweden, a Corporation of Sweden. Filed June 23, 1931, Serial No. 546,378, and in Germany Nov. 4, 1929. 4 Claims. (Cl. 229—33.)



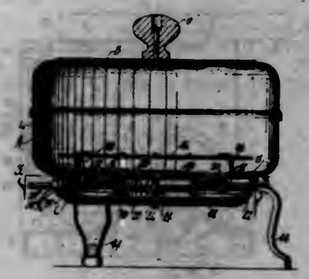
1. In a packing for ammunition, bandages and the like and made by folding a blank of pasteboard or similar material preferably into the shape of a box, the provision of two superposed flaps connected to the side walls respectively of the box and forming the lid of the same, the top flap being so shaped, that it leaves the subjacent flap partially uncovered and extends outside a label or the like fixed to the lid and holding the box together, so that the said flap may be grasped by the fingers and turned outwards together with the side wall for the opening of the box.

1,894,874. SWIMMING APPLIANCE. ALEXANDER KASK, San Mateo, Calif. Filed July 31, 1931. Serial No. 554,339. 1 Claim. (Cl. 9—21.)



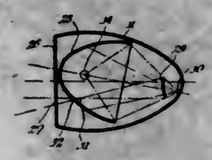
A device of the character described, comprising a sectional float member of spheroid configuration, a pair of paddles connected to said float member and serving as a propelling means adapted to be gripped by the hands of the user, a cross bolt connecting the sections of the float member, a clip secured to one end of said bolt and adapted to be detachably connected to a harness positioned about the body of the user.

1,894,875. BAKING OVEN. ANDREW S. KNAPP, Belleville, Ill., assignor to Knapp-Monarch Company, Belleville, Ill., a Corporation of Missouri. Filed Oct. 31, 1932. Serial No. 640,423. 7 Claims. (Cl. 219—43.)



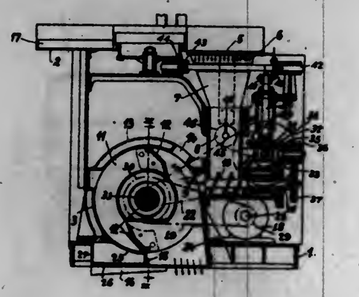
1. An appliance of the character described comprising a container, a cup-shaped heating element casing therebelow, tie means at the center of said appliance for holding said cup-shaped heating element casing assembled relative to said container, a heating element within said heating element casing and including a supporting plate and spacer means surrounding said tie means to space said supporting plate above the bottom of said heating element casing, said spacer means including a peripheral portion substantially spaced from said tie means.

1,894,876. ILLUMINATING DEVICE. GEORGE KUHN, Silver Spring, Md., assignor to Butler-Kuhn Corporation, Washington, D. C., a Corporation of Delaware. Filed Jan. 23, 1930. Serial No. 422,960. 12 Claims. (Cl. 240—41.1.)



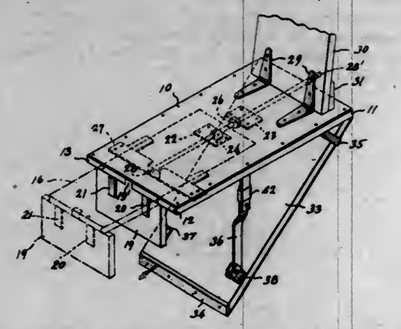
1. The combination with a source of light, of means for projecting a beam with the source and all projecting means entirely concealed, said projecting means comprising an ellipsoidal mirror and a secondary mirror, said ellipsoidal mirror being arranged relative to the source to project rays emanating therefrom on the secondary mirror, said secondary mirror being arranged in substantially upright position adjacent the point of convergence of the rays projected by the ellipsoidal mirror to re-project the rays past and clear of the source and past the ellipsoidal mirror with the rays projected from the lowermost portion of the secondary mirror substantially on the horizontal, said secondary mirror being vertically curved to converge and cross at a sharp angle the top and bottom rays projected thereby, and light obstructing means arranged in front of the secondary mirror no nearer the latter than the locality of ray convergence and extending downwardly substantially to the bottom of the secondary mirror to terminate immediately above the horizontal rays whereby the secondary mirror is obscured from any point of view above the horizontal plane of its lowermost reflecting portion, said light obstructing means not affecting the cross section of the beam projected by the secondary mirror.

1,894,877. CENTRIFUGAL MOLD FILLING APPARATUS. WILHELM KURZE, Hanover, Germany, assignor to Lange and Geilen, Halle, Saale, Germany, a German Firm. Filed May 2, 1931, Serial No. 534,651, and in Germany May 26, 1928. 1 Claim. (Cl. 22—36.)



In centrifugal mold-filling apparatus, the combination of a casing having a tangential sand outlet, a radial sand inlet, air outlets above said inlet and an air outlet at the side of said tangential outlet; rotary means in said casing to drive air out of the same and to project the sand from said tangential outlet, and a damper plate projecting into said tangential outlet to deflect air, carried along with the sand, through said adjacent air outlet.

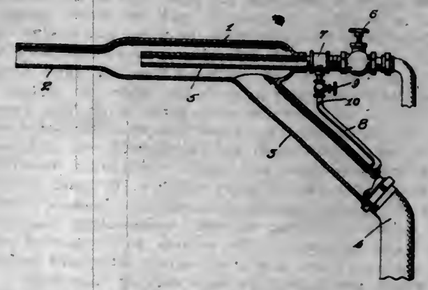
1,894,878. SAFETY WINDOW SEAT. WILLIAM LA GRANGE, Brooklyn, N. Y. Filed Oct. 18, 1930. Serial No. 489,670. 1 Claim. (Cl. 304—27.)



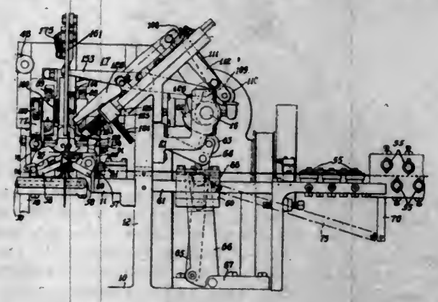
A window sent comprising a base, a gripping section slidably mounted in the base for projection beyond one end thereof, a wall engaging section hingedly connected to the remote end of the base, foldable struts connected with the last said section and with the base at intermediate points in the lengths of the two, said gripping section being provided at its free extremity with a retaining member hinged to the gripping section and limited to an angular position with reference to the same and a threaded rod threadedly engaged with the base and operatively connected with the retaining member for angular or turning movement with respect to the latter but precluded from axial movement with respect to the same.

1,894,879. AIR GUN. JOSEPH COY LAY, Rosiclare, Ill. Filed May 12, 1931. Serial No. 536,863. 1 Claim. (Cl. 91—45.)

An air cement gun comprising a mixing chamber having a closed end and reduced at its second end providing a nozzle, an angularly disposed suction pipe on and communicating with the chamber adjacent to the rear thereof, a valve controlled pipe for conducting air under pressure received through the closed back and extending for the major length of the mixing chamber, a tube coupled to the conducting pipe, a hand operated valve for controlling the passage of air from the air conducting pipe through the tube, and said tube having an air inlet port therein below the valve.

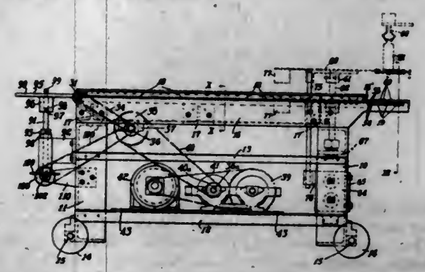


1,894,880. AUTOMATIC MACHINE FOR MAKING MARKING TAG CLIPS. FRANK MAGIDSON, Pittsburgh, Pa., assignor to Pittsburgh Tag Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 10, 1931. Serial No. 568,191. 26 Claims. (Cl. 140—71.)



1. A machine for bending a length of wire having a tag threaded thereon into a fastener comprising a mandrel, means for bending the wire around the mandrel to form straight, parallel legs, the ends of which cross one another above the mandrel, means for bending one end of the wire around the other end to form a closed guiding and retaining loop, and means for bending the end of the wire above said loop toward each other to form article engaging jaws on said fastener.

1,894,881. LEER FEEDING DEVICE. JOHN MAYO, Carnegie, Pa. Filed May 1, 1931. Serial No. 534,266. 21 Claims. (Cl. 198—127.)



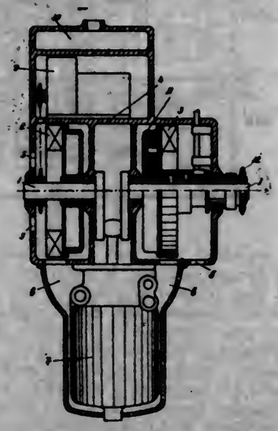
1. The combination in a device for conveying glassware from a forming machine to an annealing leer, comprising a reciprocating member having a plurality of idle rollers adapted to receive the ware from said forming machine, a conveyor formed from a plurality of closely spaced constantly rotating rollers, means for rotating said idle rollers so as to transfer said ware from said reciprocating member to said roller conveyor, and means for discharging said ware from said conveyor.

1,894,882. REMOVABLE BRUSH HEAD. SALVATORE MAZZELLA, Princeton, N. J. Filed May 20, 1932. Serial No. 612,559. 2 Claims. (Cl. 15—176.)



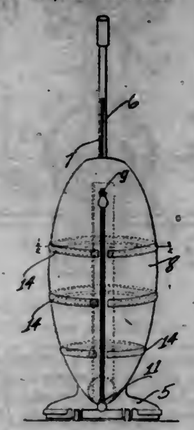
1. A brush comprising a back, a handle on the backing, the backing being cut-away on one face to provide side dove tailed flanges and an abutment shoulder on the outer end of the handle, said shoulder having an edge opening socket therein, an apertured threaded disk set into the handle above the socket, a brush head having side edge dove-tailed flanges slidable in the backing flanges and having an abutment shoulder at its inner end, and eye bolt projecting from the last named shoulder to be received in the backing socket when the two shoulders are in abutting engagement and a screw pin threaded through the disk and passing through the eye bolt to retain the brush head on the backing.

1,894,883. MOTOR FOR TREE SAWS. FRIEDRICH WILHELM MEYER, Vienna, Austria, assignor to Ural-Maschinen-Vertriebsgesellschaft m. b. H., Vienna, Austria. Filed June 4, 1929, Serial No. 368,305, and in Austria June 6, 1928. 4 Claims. (Cl. 123—171.)



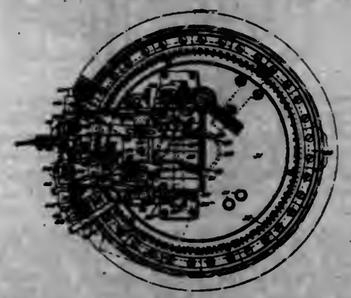
1. An internal combustion motor comprising a fan casing having air inlet openings, a housing extending from one side of the fan casing communicating therewith and having air discharge openings at its outer end, a cylinder in the housing and spaced from the wall thereof, a crank shaft extending through and having bearings in the fan casing and fans on the crank shaft on opposite sides of the crank thereof, to force cooling air directly from the fans through the housing and thence around the cylinder.

1,894,884. VACUUM CLEANER BAG ATTACHMENT. WARREN E. PAGE, San Francisco, Calif. Filed May 7, 1930. Serial No. 450,569. 1 Claim. (Cl. 150—3.)



A bag for a vacuum cleaner having a slit extending from the lower end thereof to a point adjacent the other end, means for opening said slit and closing said slit, a flap stitched within the bag and overlying the slit, and a plurality of spaced spring members carried by said bag for retaining the cross sectional area of said bag at its greatest dimension at all times.

1,894,885. SEWING MACHINE AND METHOD OF FORMING STITCHES. ROBERT N. PARKIN, Paducah, Ky., assignor to Southern Textile Machinery Company, Paducah, Ky., a Corporation of Kentucky. Filed July 17, 1930. Serial No. 468,656. 28 Claims. (Cl. 112—25.)

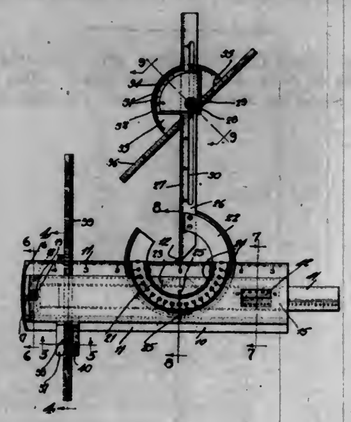


1. In a sewing machine, the combination of means for supporting a piece of fabric, a pair of thread carrying needles, means for advancing each needle through the fabric and then retracting the same, one needle being advanced while the other is retracted, and means for moving each needle laterally when retracted for passing the thread thereof through a loop in the thread of the other needle.

1,894,886. MATHEMATICAL INSTRUMENT. ADOLF PASKOWSKI, New Britain, Conn. Filed Oct. 24, 1929. Serial No. 402,187. 4 Claims. (Cl. 33—98.)

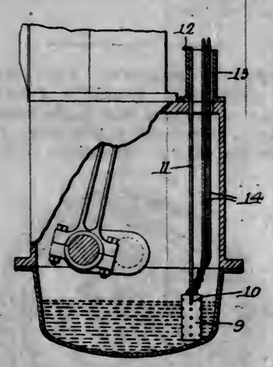
1. In an instrument of the kind described, a main member having a scale at one edge extending from a zero point

a blade on which said member is pivotally mounted, a protractor blade having an edge extending radially from said zero point and graduated to provide a second scale, said protractor blade being supported by the first named blade



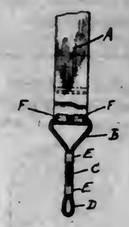
to swing on said zero point as a center, a slider on said protractor blade, a protractor segment pivotally mounted on said slider and having one straight edge, and a scale bar slidably mounted on said straight edge.

1,894,887. CRANK CASE OIL HEATER. WILSON HUDSON PINGREY, Blairstown, Iowa. Filed Apr. 22, 1931. Serial No. 532,039. 1 Claim. (Cl. 219—41.)



A portable electric heater to be submerged in liquid, comprising a tubular member having open ends, an inner member fitted within the tubular member and held within the tubular member by frictional contact, said inner member being constructed of insulating material and having longitudinal grooves providing compartments with the tubular member, a resistance coil, one end of the resistance coil being secured to the inner member near one end thereof, said inner member having grooves in one end thereof in which the intermediate portion of the coil is held, said tubular member having openings opposite to the compartments to allow liquids to pass therethrough, a rod having an offset lower portion terminating in a right angled end extended through openings in the tubular member, and the opposite end of the rod extending laterally to fit over the upper end of the filling opening of the crank case in which the heater is positioned, to support the heater in an upright position.

1,894,888. SHOULDER STRAP. RICHARD PONTON, Central Falls, R. I. Filed Aug. 6, 1932. Serial No. 627,727. 2 Claims. (Cl. 241—12.)

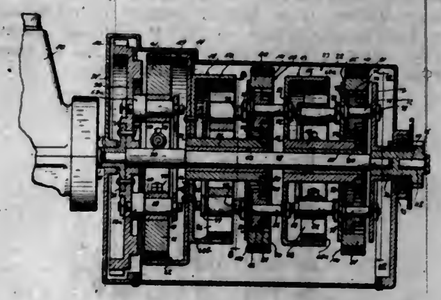


1. A shoulder strap for undergarments and the like comprising an inelastic intermediate webbing portion formed with a loop at each end, an elastic member for each end of the webbing of elongated form having the ends thereof overlapped, clips securing the overlapped ends together and confined within the loop of the webbing and a plurality of clips secured to the elastic member between the overlapped ends and intermediate portion of the elastic member and in spaced relation to provide a plurality of loops in the elastic member for selective engagements with garment buttons.

1,894,889. PHENOLPHTHALEIN COMPOSITION AND PROCESS OF MAKING SAME. EARL B. PUTT, New York, N. Y. Filed Nov. 19, 1926. Serial No. 149,530. 12 Claims. (Cl. 167—56.)

2. The composition comprising pure, finely divided crystalline phenolphthalein a major portion of which is made up of unground crystals of less than ten microns in diameter associated with other phenol- and phthalic acid radical containing compounds.

1,894,890. COMBINED AUTOMATIC CLUTCH AND TRANSMISSION MECHANISM FOR AUTOMOBILES. ANTONIO ROSSI, Silver Lake, N. J. Filed Apr. 28, 1932. Serial No. 608,056. 11 Claims. (Cl. 74—34.)



1. In a combined automatic clutch and transmission mechanism for automobiles, a series of inter-connected clutch and gear transmission devices, the clutch devices including drum members and clutch shoes centrifugally movable into engagement with the drum members, each gear transmission device including a drive gear operated by an adjacent clutch device, driven gears operated by the drive gear for operating a part of an adjacent clutch device a ring gear inclosing the driven gears of each gear transmission device, said ring gear having notches provided in its outer periphery, and spring pressed latch members normally seated in said notches and forming means for holding the ring gears stationary when the clutch shoes

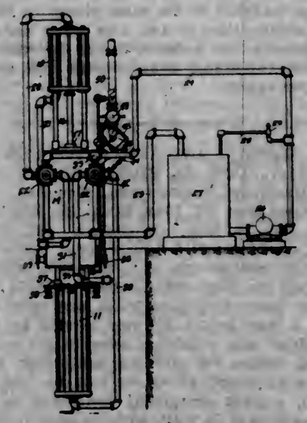
associated therewith are inoperative and the holding means of each gear unit being rendered inoperative when the associated clutch shoes are engaged with its drum to allow the ring gear, driven and drive gears to rotate as a unit.

1,894,891. HOSIERY. ELWOOD W. SACHSENMAIER, Charlotte, N. C., assignor to Larkwood Silk Hosiery Mills, Inc., Charlotte, N. C., a Corporation of Delaware. Filed June 12, 1931. Serial No. 543,966. 9 Claims. (Cl. 2—239.)



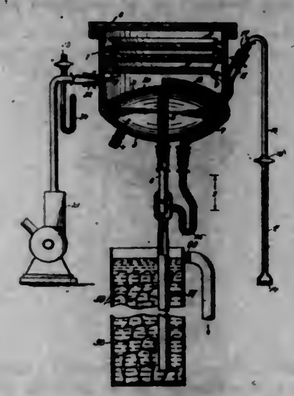
1. A seamed stocking having a welt of double thickness and a separately formed ravelling fabric piece attached to said stocking at a place of juncture of the fabric of the stocking welt and lying between the folds of said welt.

1,894,892. CARBON-DIOXIDE ICE MACHINE. NORMAN M. SMALL, Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Nov. 25, 1930. Serial No. 498,138. 9 Claims. (Cl. 62—121.)



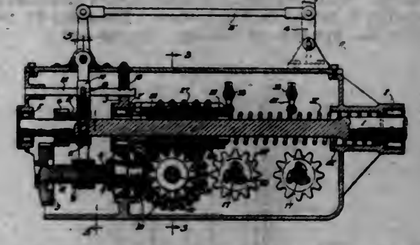
1. A machine for making carbon dioxide ice comprising a cylinder, an ice making chamber positioned within said cylinder, a relatively large tube extending into said chamber, an expansion nozzle extending into said tube, a plate covering one end of the ice making chamber, and means for holding said plate on said chamber by fluid pressure, and a piston movable in said chamber for compressing carbon dioxide into solid form in said chamber, said piston being movable on the compression stroke by an operating piston rod and returned by gravity, substantially as set forth.

1,894,893. APPARATUS FOR ABSORBING AQUEOUS VAPORS BY MEANS OF A HYGROSCOPIC LIQUID SUCH AS SULPHURIC ACID IN A VACUUM. PETER SCHLUMBOHM, Berlin, Germany. Filed Oct. 3, 1930, Serial No. 486,218, and in Germany Oct. 8, 1929. 11 Claims. (Cl. 62—153.)



1. A device for absorping aqueous vapors by means of a hygroscopic liquid such as sulphuric acid in a vacuum which comprises an absorber and a water-jet vacuum pump adapted to eliminate the spent acid from the absorber, and a trap of spent acid for shutting off the domain of the water-vapor pressure of the pump with relation to the domains of the water-vapor pressure in the absorber.

1,894,894. AUTOMATIC POWER TRANSMISSION. FREDERICK SLAVEK, New York, N. Y. Filed Mar. 23, 1932. Serial No. 600,782. 8 Claims. (Cl. 74—59.)



1. An automatic transmission means comprising a housing, a drive shaft, extending into the housing, a driven shaft extending into the housing, a worm having sliding movement on the drive shaft, a plurality of transverse shafts, sprockets of different ratios thereon, chains passing over the sprockets, gears including a worm wheel connecting one of said transverse shafts to the driven shaft, gear worm wheels on the other transverse shafts and spring means for normally holding the worm in engagement with the worm gear on one of said transverse shafts, the said worm being adapted to move into engagement with the other worm gears when the load on the driven shaft is greater than the pressure of the spring.

1,894,895. DETACHABLE SUSPENSION OR GRIPPING DEVICE. ARTHUR BEEVOR STEELE, Beltinge, Herne Bay, and JOHN LINES, Betteshanger, near Deal, England; said Lines assignor to said Steele. Filed Nov. 30, 1931, Serial No. 578,160, and in Great Britain Dec. 9, 1930. 4 Claims. (Cl. 248—32.)

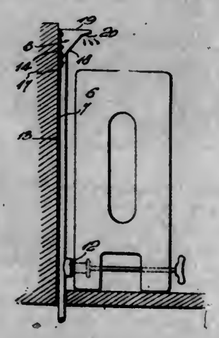
1. A self-locking detachable suspension device comprising in combination a U-shaped metal bar constituting a first holding member, hooks at the free ends of the arms

of the U, a second metal bar whose ends constitute respectively a second holding member and a suspension arm, a part of said second metal bar intermediate in its length being loosely coiled around that part of the first holding member which joins the arms of the U, forming a pivotal joint therewith to allow the free ends of the two holding members to be separated and applied



to a beam-like support at any point in its length regardless of its position and to be brought together to grip said support between them, and load-carrying means at the free end of said suspension arm, the load being transmitted by said arm to both holding members and acting to draw them together and maintain them in their operative gripping position.

1,894,896. WALL SHIELD, SHELF, AND VENTILATOR. TIMOTHY J. SULLIVAN, Butte, Mont. Filed May 31, 1932. Serial No. 614,511. 3 Claims. (Cl. 98—37.)



1. A combined wall guard and ventilator for use over the rear portion of a radiator, comprising a horizontally elongated casing provided with an air inlet and having a forwardly inclined front wall for directing ascending air forwardly, the upper portion of said wall having air discharge perforations, and means for mounting said casing against a wall behind the radiator.

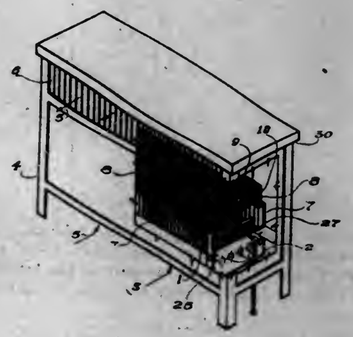
1,894,897. ICE TRAY. GUY L. TINKHAM, Detroit, Mich., assignor to General Utilities Mfg. Co., Detroit, Mich., a Corporation of Delaware. Filed June 29, 1931. Serial No. 547,473. 16 Claims. (Cl. 62—108.5.)

1. The method of producing ice or like cubes or units, consisting in freezing the cubes in connected mass form in a container having a width equal to that of the indiing at the lines for severance of the cubes, and then frac-



ing at the lines for severance of the cubes, and then fracturing the mass into the cubes at the scoring by flexing the container at the scoring.

1,894,898. HUMIDIFIER. REUBEN N. TRANE, La Crosse, Wis. Filed Nov. 8, 1928. Serial No. 318,000. 6 Claims. (Cl. 261—104.)

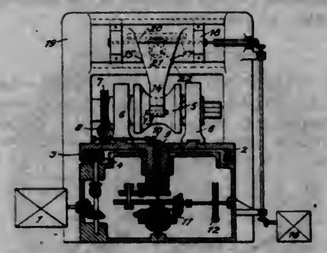


1. In a humidifier adapted to be secured in a casing above a radiator having air fins, parallel elongated water pans mounted on the side of said radiator, a cover to the water pan with apertures therein, wicking sheets and wicking legs mounted in the same planes as the radiator fins, said wicking sheets and legs being maintained in the same planes as the radiator fins by inserting the wicking legs into the water pans through the apertures in the water pan covers.

1,894,899. METHOD AND APPARATUS FOR MACHINING ROLLS SUCH AS PILGER ROLLS AND THE LIKE. HERMANN TSCHOCHNER, Komotau, Czechoslovakia. Filed Sept. 22, 1931, Serial No. 564,440, and in Germany Jan. 29, 1931. 19 Claims. (Cl. 82—18.)

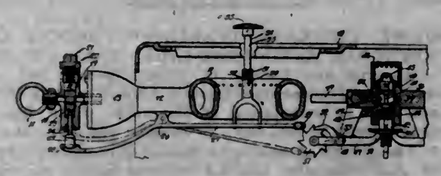
15. In a machine tool for machining rolls of the type described, the combination of a rotatable table provided with bearings for supporting a pair of rolls to be machined with their axes parallel to one another and to said table, a tool holder movably carried by the frame of the machine and extending between the pair of rolls so mounted, means for rotating said table, mechanism for rotating each roll about its axis to feed the same to the tool, a rack operatively connected to said tool holder and arranged in mesh with an oscillatable toothed segment rigidly connected to an oscillatable lever, an oscillatable arm normally arranged opposite and substantially parallel to said lever and extending in an opposite direction thereto, a connecting member between said lever and said arm, means for moving said member longitudinally of said lever and said arm, and an operative connection between said arm and a rotatable cam for the purpose specified and a driving connection between said cam and said table.

19. A method of machining rolls, for example, Pilger rolls, which consists in (a) rotating a pair of rolls having their axes disposed parallel to one another about an axis which extends between the rolls in a direction at right angles to the axes thereof (b) subjecting the rolls as they rotate to cuts across the peripheral faces thereof



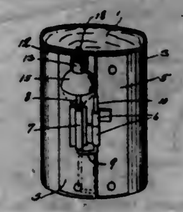
from a tool located between the rolls, and (c) periodically moving the tool radially with respect to the said axis of rotation of the pair of rolls in such a manner that the cuts are made in accordance with the desired contour of the rolls.

1,894,900. BURNER CONTROL AND PILOT LIGHT FOR GAS STOVES. BENJAMIN VICTOR and RICHARD E. ABRAMSON, New York, N. Y. Filed Nov. 23, 1931. Serial No. 576,854. 2 Claims. (Cl. 126—52.)



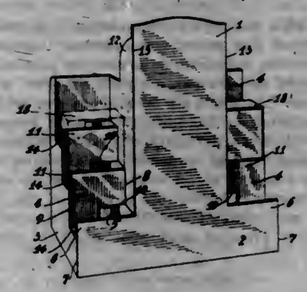
1. In combination with the gas burner of a gas stove, a gas supply pipe leading to said burner, a burner control valve for regulating the flow of gas from said gas supply pipe to said burner, a depressible member rising through and above the plane of the top of said gas burner, a pilot burner connected to a source of gas supply, a pilot burner control valve, spring means acting to normally shut off communication between said pilot burner and said source of gas supply, a restricted passage between said pilot burner and its source of supply to permit a limited amount of gas to flow to said pilot burner when said pilot control valve is closed, spring means tending to normally hold said pilot control valve in shut off position, a rock lever pivotally supported beneath said burner and to which said depressible member is connected, said burner control valve having a sliding valve member with which one end of said rock lever engages, said pilot burner control valve having a slidable valve member, a rock arm having one end engageable with said last mentioned slidable valve member, a ratchet mechanism carried by the other end of said rock arm and disposed in the path of downward movement of the other end of said rock lever, whereby downward movement of said depressible member will cause said rock lever to actuate the sliding valve member of said burner control valve to an open position, and simultaneously engage said ratchet mechanism to cause said rock arm to actuate said pilot valve member to open position until the rock arm moves to a position clear of said ratchet mechanism whereupon said spring means returns said pilot valve member to closed position, and spring means acting upon the burner control valve member to move the same to a closed position and to cause the rock lever and depressible member to likewise return to normal position upon the release of downward pressure upon said depressible member.

1,894,901. TOY PARACHUTE. CARL O. BOWMAN, Johnstown, Pa., assignor of one-half to Luke H. Swank, Johnstown, Pa. Filed Oct. 31, 1931. Serial No. 572,412. 8 Claims. (Cl. 46—52.)



1. A parachute carrier and releasing means comprising a casing designed to be closed about a folded parachute, latching means for the casing, a resilient element having connection with said latching means and normally urging the same to unlatching position, and adjustable means for controlling the action of said resilient means after the casing has been secured in closed position by the latch.

1,894,902. DISPLAY STAMP. DAVID M. CARMICHAEL, Maplewood, N. J., assignor to The Atlantic Lithographic & Printing Company, New York, N. Y., a Corporation of New York. Filed July 23, 1931. Serial No. 552,741. 5 Claims. (Cl. 211—73.)

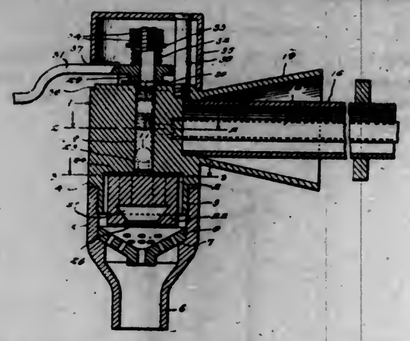


4. A display stand struck from a single blank of material and comprising a vertical front panel, intermediate panels connected to the front panel and scored at the connections, side step panels and intermediate step risers connected to the side panels and the intermediate panels and scored at the connections.

1,894,903. MIXING FAUCET. JAMES F. DAWSON, Galveston, Tex., assignor to Triple "XXX" Company, a Corporation of Texas. Filed Dec. 5, 1931. Serial No. 579,315. 15 Claims. (Cl. 225—26.)

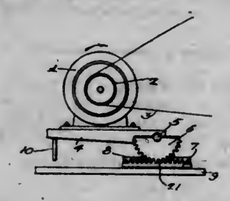
1. A mixing faucet comprising a body having a recess formed in one face and further having a pair of passages formed therethrough and each opening at one end into said recesses, means for connecting pipe lines with said passages, a valve element comprising a relatively thick body having a pair of passages therethrough and positioned within said recess with one face overlying the ends of the body passages opening thereinto, a chamber formed

in said valve body and having said apertures opening thereinto, means for rotatably securing the valve body in position in the recess, means for rotating said valve body



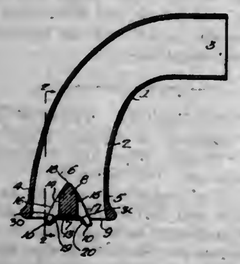
whereby the apertures therein may be brought into registration with said passages, and a nozzle secured to said first body and closing said recess.

1,894,904. MOTOR MOUNT. JOHN L. DE RABOT, Philadelphia, Pa. Filed Aug. 5, 1931. Serial No. 555,881. 3 Claims. (Cl. 308—11.)



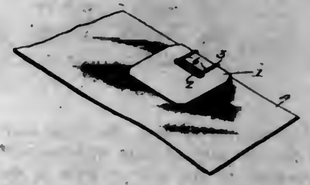
1. In a drive mechanism comprising a plurality of devices connected for power transmission therebetween by a flexible driving connection, means for pivotally mounting one of said devices about a variable pivot point offset from the gravitational axis of said device, whereby said device is maintained in equilibrium with respect to the pivot point by force moments due to its weight and the tension of said driving connection, said means comprising a stationary run-way and a rocker element in engagement with said run-way, whereby the position of the pivot point varies with movement of said device to maintain the ratio of the moment arms of said force moments substantially constant.

1,894,905. SUCTION COMB. JÖRGEN F. H. FECHTENBURG, Cheltenham Township, Montgomery County, Pa. Filed June 19, 1929. Serial No. 372,123. 6 Claims. (Cl. 119—84.)



1. A suction comb device comprising a suction nozzle having a mouth opening disposed in a predetermined plane, a comb comprising a relatively broad flat faced back bar disposed in the mouth opening, said broad face of the back bar being spaced inwardly from the plane of the mouth opening of the nozzle, and teeth on said back bar projecting from opposite sides of said back bar and extending beyond the plane of the mouth opening, said teeth being of relatively thin elongated cross-section and arranged with the longer dimension thereof disposed in the direction of normal operation of the device.

1,894,906. SALES TICKET AND CLIP. GEORGE W. HENAY, Jr., Philadelphia, Pa., assignor to Soabar Company, Frankford, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 16, 1929. Serial No. 363,605. 2 Claims. (Cl. 40—23.)



1. A clip for fastening loose tickets to fabric or othe goods, said clip being made of wire and having a U-shaped portion with arms extending from the outer ends of the U-shaped portion and being out of line with said portion, the loop of the U-shaped portion being less in width than the distance between the arms and being bent towards the plane of the arms to such an extent that when the clip is applied to the goods and ticket, the goods will be forced into fixed engagement with the ticket by the projecting loop of the clip.

1,894,907. INDURATED CELLULOSIC PRODUCT AND METHOD OF MAKING THE SAME. DUNCALF W. HOLLINGWORTH and LESTER W. TAAR, Newark, Del., assignors to Continental-Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed Jan. 8, 1932. Serial No. 585,634. 20 Claims. (Cl. 154—34.)

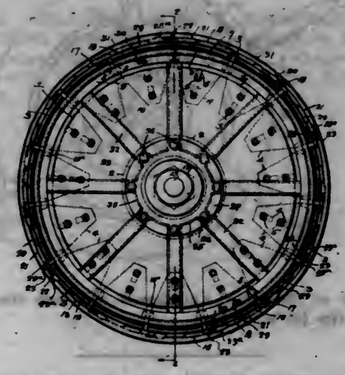
6. The process of making an indurated product of physically and chemically modified cellulose which comprises subjecting an absorbent paper sheet to the action of a bath comprising phosphoric acid, sulphuric acid and acetic acid.

1,894,908. AUTOMATIC TIRE PUMP. EUGENE HOPKINS, Glen Cove, N. Y. Filed Sept. 15, 1930. Serial No. 481,947. 9 Claims. (Cl. 152—11.)



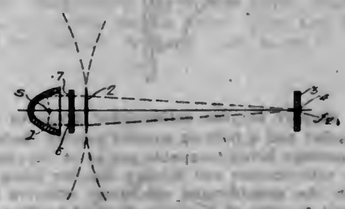
6. In combination with an air-chamber containing inner and outer compressible members disposed transversely of said air chamber, said outer member constituting an intermittently operable pump, valved means for controlling passage of air under pressure from the pump to the inner member and from the inner member to the air chamber, and inlet means for air from the atmosphere into said pump.

1,894,909. EXPANSIBLE WHEEL. JAMES M. MASON, Philadelphia, Pa., assignor to Abrasive Wheel and Equipment Co., Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 28, 1928. Serial No. 257,690. 28 Claims. (Cl. 51—190.)



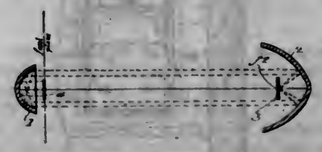
16. A resilient annulus for an expansible rim of a wheel comprising a plurality of circularly spaced portions of increased thickness.

1,894,910. HEADLIGHT TESTING APPARATUS. RAYMOND MORGAN and ENOS E. WITMER, Philadelphia, Pa. Filed Feb. 10, 1930. Serial No. 427,347. 3 Claims. (Cl. 88—14.)



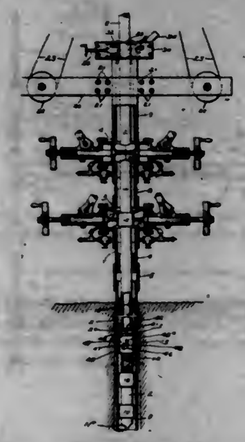
1. The method of testing and adjusting a headlight, adapted to reflect a beam from a source of light, which comprises isolating a plurality of components of said reflected beam, intercepting said components by means of a lens, obtaining an image of each of said components at the principal focus of said lens, adjusting the distance between the components until the images are clearly defined, and adjusting the source of light until the images are brought into substantial coincidence.

1,894,911. HEADLIGHT TESTING APPARATUS. RAYMOND MORGAN and ENOS E. WITMER, Philadelphia, Pa. Filed Feb. 25, 1930. Serial No. 431,248. 8 Claims. (Cl. 88—14.)



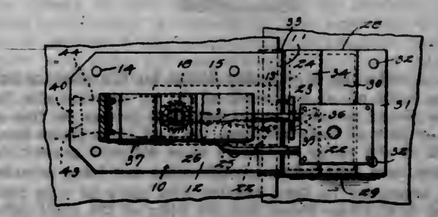
1. The method of testing and adjusting a headlight adapted to reflect a beam from a source of light, which comprises isolating a plurality of components of said reflected beam, intercepting said components by means of a curved reflecting surface, obtaining an image or pattern of each of said components in the principal focal plane of said curved reflecting surface, and adjusting said source of light until the images or patterns of said components are brought into substantial coincidence.

1,894,912. PROCESS AND APPARATUS FOR INSERTING TUBING IN WELLS. HERBERT C. OTIS, Shreveport, La. Filed Sept. 26, 1929. Serial No. 395,815. 11 Claims. (Cl. 166—15.)



1. A process for inserting tubing into well casings containing fluid under high pressures, said process comprising the application of force to the tubing tending to force the tubing into the well casing, snubbing the tubing to prevent its movement out of the casing under the influence of said high pressures, forming a temporary seal within the tubing to prevent the escape of said fluid from the casing through the tubing, forming a choke in the tubing after the tubing has been lowered into the casing, breaking the said temporary seal in the tubing to permit the fluid under pressure to flow therethrough to the choke, and subsequently breaking the choke to permit a full flow of said fluid through the tubing.

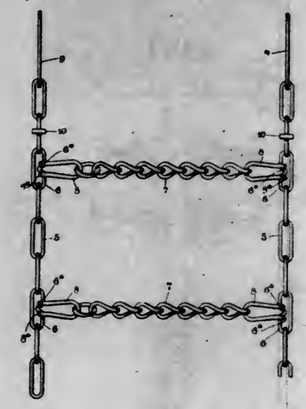
1,894,913. SLIDING DOORLATCH. LEO M. SADLER, Canova, S. Dak. Filed June 7, 1932. Serial No. 615,874. 2 Claims. (Cl. 292—136.)



1. A sliding door holder comprising a substantially U-shaped housing, a latch extending through the bight of the housing, a square shaft slidably engaging the latch and extending transversely of the housing, a handle for each end of the shaft, means engaging the shaft and the housing to rotatably mount the shaft in the housing while permitting slidable movement of the shaft transversely of the housing, a keeper, and means for mounting the

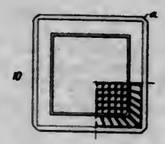
keeper for engagement with the latch, a flange integral with the housing below the latch and a spring carried by the latch and engaging the flange to constantly urge the latch into latching position.

1,894,914. ANTISKID TIRE CHAIN. FRANK E. STAHL, Tonawanda, N. Y., assignor to The Columbus McKinnon Chain Corporation, Tonawanda, N. Y., a Corporation of New York. Filed June 25, 1931. Serial No. 546,758. 2 Claims. (Cl. 152—14.)



2. In an anti-skid chain, a side chain having a link provided with a single bend forming a hump and a cross chain having a double-hook end connected with said link, the members of said double-hook end closely flanking said hump whereby said hook end is prevented from movement longitudinally on the bar of the link containing said hump.

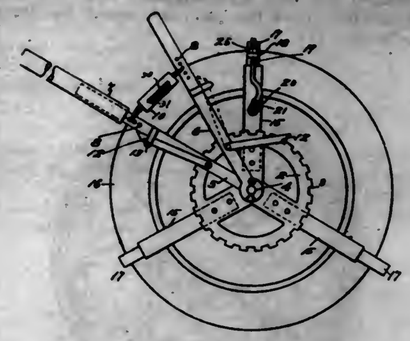
1,894,915. LUMINAIR. ERNEST STROUD, London, England. Filed Feb. 21, 1931, Serial No. 517,393, and in Great Britain Mar. 4, 1930. 17 Claims. (Cl. 240—106.)



1. A reflecting or diffusing fitting for illuminating purposes built up of a number of flat or substantially flat glass plates moulded or pressed with prisms or ribs on one or both of their surfaces, the said glass plates being made in the shape of two or more different geometrical figures, each bounded by straight sides and being mounted and assembled in fixed relation, the edges of each plate being in a single plane and the body of the plate being bulged out of said plane.

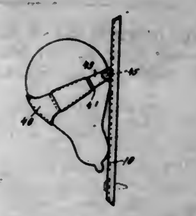
1,894,916. VEHICLE BRAKE TESTER. JOHN ZENZ and HOMER R. KENNEDY, Los Angeles, Calif.; said Zenz assignor to said Kennedy. Filed Oct. 6, 1930. Serial No. 486,636. 9 Claims. (Cl. 265—1.)

8. A brake tester including a ratchet ring having a trunnion, free levers mounted on the trunnion, a force scale linking the levers, means to reversibly connect the levers to the ring for pulling effect, selectively, in one



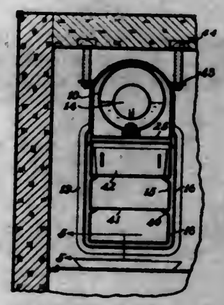
direction or the other, and means to clinch the ring to a wheel tire for brake test.

1,894,917. FIRE EXTINGUISHER SUPPORT. WILHELM B. BRONANDER, Montclair, N. J. Original application filed Mar. 16, 1928, Serial No. 262,201. Divided and this application filed June 6, 1929. Serial No. 368,844. 11 Claims. (Cl. 169—26.)



11. A support for fire extinguisher grenades comprising a bracket and a holding member carried thereby, said holding member being incapable per se of supporting the grenade; said bracket and holding member being engageable with the grenade and conjointly effective by such engagement to support the grenade, said holding member including a fusible portion connected to the bracket and effective to release the grenade under the influence of heat.

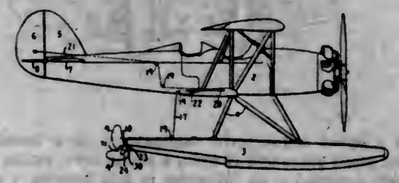
1,894,918. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 30, 1928. Serial No. 281,607. 10 Claims. (Cl. 62—126.)



6. An evaporator for refrigerating apparatus comprising in combination sheet metal walls forming an enclosure

for ice-making receptacles, the walls including a pair of sheets spaced apart to provide a chamber for receiving refrigerant, a tank forming a reservoir for liquid refrigerant disposed within the enclosure and detachably connected to the chamber.

1,894,919. SEAPLANE. BORIS V. KORVIN-KROUKOVSKY, Beechhurst, Long Island, N. Y., assignor to Edo Aircraft Corporation, College Point, N. Y., a Corporation of New York. Filed Apr. 9, 1931. Serial No. 528,775. 3 Claims. (Cl. 244—2.)



1. In a seaplane having a float, a blade normally disposed below the keel at the stern, and a transverse pivot on which said blade is adapted to retract automatically in a rearward arc to a position above the keel and behind the stern, said blade having a lower edge formed on a curve the properties of which are such that the blade will be retracted on encountering obstacles as well when the float moves rearward as when it moves forward.

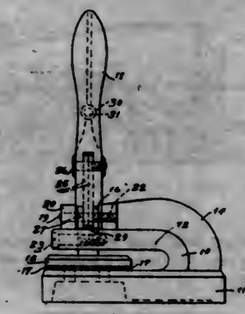
1,894,920. ONE-PIECE BATHING SUIT. THOMAS LA MAIDA, University Heights, Ohio. Filed Oct. 31, 1932. Serial No. 640,522. 1 Claim. (Cl. 2—67.)



A bathing suit, comprising connected skirt and trunk portions, the bifurcation of said trunk portion being covered front and rear, close crotch forming portions attached to said trunk portion at the front and rear thereof, said crotch forming portions comprising two inserts connected to form an up and down seam medially of each leg, said trunk portion having openings at the front and rear thereof and said openings having face pieces thereover, the edges of said face pieces, inserts and openings being seamed together in a single seam.

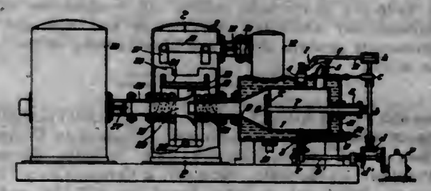
1,894,921. SEAL PRESS. EDWARD J. RANTSCH, Hollis, N. Y., assignor to Hill-Independent Manufacturing Company, Germantown, Pa. Filed June 25, 1932. Serial No. 619,171. 9 Claims. (Cl. 101—3.)

1. A seal press, comprising a frame of substantially U-shaped and turned upon one side so that one arm constitutes the bottom, the top arm being shorter than the bottom arm, the top arm of said frame being formed on the free end with laterally spaced projections, a jaw between the arms of said frame and having a stem extending between said projections, seal elements on opposite faces of said jaw and bottom arm, a pair of handles pivotally connected at their lower ends upon the end of



said top arm, and a pair of links pivotally connected upon the top of said stem and at their top ends of said handles.

1,894,922. PRESSURE FLUID GENERATOR. HERMANN RISSE, Berlin-Schoneberg, Germany. Filed Oct. 18, 1926, Serial No. 142,457, and in Germany Oct. 20, 1925. 1 Claim. (Cl. 60—46.)

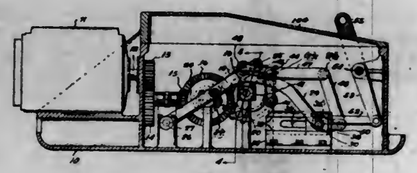


A gas steam generator comprising an explosion chamber, means for supplying fuel to said chamber, means for igniting the fuel, a water jacket surrounding said explosion chamber, a steam dome thereon, a steam chamber, an injector in said steam chamber communicating with said explosion chamber, a normally closed valve cooperative with said injector adapted to be opened by the pressure of the ignited gases, conduit means communicating said steam dome with said steam chamber, a check valve in said conduit, a plurality of spirally wound tubes around the nozzles of said injector, means for supplying the tubes with water, a vaporizing plate supported in the steam chamber, a tube having discharge openings disposed above said plate and communicating with said spirally wound tubes, a discharge tube in said steam chamber disposed above said plate communicating with the conduit means of said steam dome, and outlet means in said steam chamber having a check valve associated therewith.

1,894,923. DRIVE MECHANISM FOR SHAKER CONVEYERS. WILLIAM W. SLOANE, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 6, 1930. Serial No. 418,680. 11 Claims. (Cl. 198—220.)

10. In combination with a shaker conveyer drive, crank mechanism, a reciprocably movable member reciprocated thereby, a conveyer drive mechanism connectible therewith comprising an offset member pivotally mounted on said reciprocably movable member and reciprocated thereby, a conveyer drive member connectible with the offset

portion of said offset member and means for simultaneously reciprocably moving said offset member about its axis on said reciprocably movable member simultaneously with



and in coordination with said reciprocably movable member comprising a cam and lever mechanism connected with said offset member.

1,894,924. HYDROGENATION OF NAPHTHALENE. JOSEF VARGA, Budapest, Hungary, assignor to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 3, 1929, Serial No. 397,167, and in Germany Oct. 18, 1928. 13 Claims. (Cl. 260—168.)

1. A method of producing benzol and hydrocarbons of the benzene series comprising heating naphthalene with an excess of hydrogen in the presence of molybdenum catalysts and a sufficient quantity of hydrogen sulphide to increase the action of the molybdenum catalysts, until a sudden fall in temperature occurs, heating the naphthalene and hydrogen above said sudden fall temperature while simultaneously admitting naphthalene and hydrogen to continuously produce benzol and hydrocarbons of the benzene series.

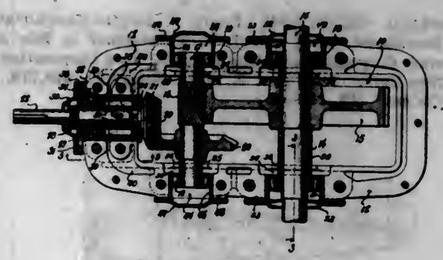
1,894,925. HYDROGENATION OF NAPHTHALENE. JOSEF VARGA, Budapest, Hungary, assignor to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 3, 1929, Serial No. 397,168, and in Germany Oct. 13, 1928. 12 Claims. (Cl. 260—168.)

1. A process for the production of primary hydrogenation products of naphthalene which consists in treating naphthalene in the presence of molybdenum catalysts with an excess of hydrogen at increased pressures and at temperatures below the sudden fall temperature, hydrogen sulphide being present in amount sufficient to increase the catalytic effect of the catalysts used.

1,894,926. PROCESS FOR THE DESTRUCTIVE HYDROGENATION OF CARBONACEOUS SUBSTANCES. JOSEF VARGA, Budapest, Hungary, assignor, by mesne assignments, to the Firm of Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation of Germany. Original application filed Oct. 24, 1928, Serial No. 314,849, and in Germany June 12, 1928. Divided and this application filed Apr. 24, 1930. Serial No. 447,105. 1 Claim. (Cl. 196—53.)

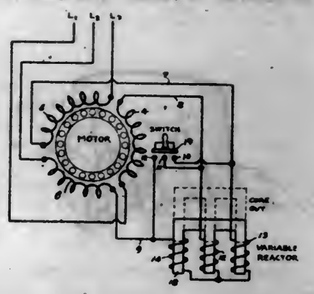
The method of destructive hydrogenation of carbonaceous substances, which consists of subjecting the substances to temperatures of from 250° C. to 700° C. and pressures of from 100 to 500 atmospheres, and treating the substances with hydrogen in the presence of tungsten catalyst and hydrogen sulphide, so that sulphide is continuously present in optimal amounts between the limits of from 1% to 6% by weight of the carbonaceous substances, so that the action of the tungsten catalyst is improved over the action of tungsten catalysts including tungsten sulphides when used alone, there being continuously present a quantity of hydrogen in minimum amount twice as much as the quantity necessary for the destructive hydrogenation.

1,894,927. GEAR SET. WALTER P. SCHMITTER, Milwaukee, Wis., assignor to The Falk Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 14, 1929. Serial No. 392,501. 8 Claims. (Cl. 74—7.)



1. In a speed reducer the combination of a housing, a driving shaft journaled therein, a spiral bevel pinion on said shaft, a second shaft journaled in said housing, a spiral bevel gear on said second shaft meshing with and driven by said pinion and imposing an end thrust on said second shaft, a third shaft journaled in said housing, a single-helical gear on said third shaft, and a single-helical pinion on said second shaft meshing with and driven by said single-helical gear and imposing an end thrust on said second shaft opposed to the end thrust imposed by said bevel gear.

1,894,928. VARIABLE SPEED REACTOR CONTROL. BJARNE A. WESCHE, Cincinnati, Ohio. Filed June 5, 1929. Serial No. 368,599. 11 Claims. (Cl. 172—274.)

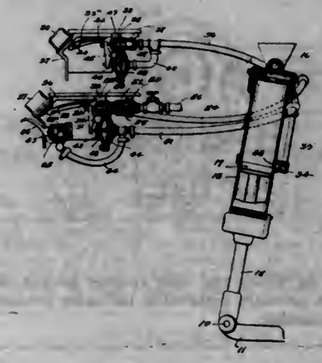


1. In combination in an alternating current motor of the squirrel cage type, a high resistance secondary having the characteristics of a deep and narrow conductor secondary, a primary circuit and a variable inductance connected into the primary circuit whereby the motor speed is adjusted.

8. A stator winding of an alternating current motor, a supply line connected thereto, a variable inductance reactance connected to said stator winding and a high reactance rotor whereby the voltage applied to the motor will be varied to vary the speed of the motor.

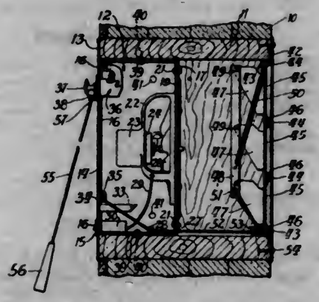
1,894,929. ACTUATING MECHANISM FOR PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 10, 1928. Serial No. 245,774. 14 Claims. (Cl. 121—38.)

1. An actuating mechanism for machines having an opening and closing movement, said mechanism including a fluid motor having a casing and a movable member therein, operator-operated valve means for controlling the flow of motive fluid to and from the motor to effect the opening and closing of the machine, an outlet port for the motive fluid arranged to be opened when the movable part of the



motor has been actuated a predetermined distance and the machine closed a predetermined distance, a normally open outlet valve connected to said port, and operator-operated means for closing the outlet valve.

1,894,930. VENTILATOR CABINET. HERMAN C. HUELIN, Chicago, Ill., assignor to Federal Merchandise Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 6, 1930. Serial No. 418,672. 2 Claims. (Cl. 98—43.)

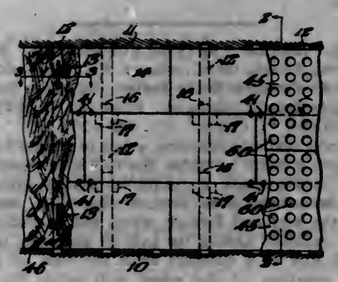


1. In combination in a wall ventilator appliance, an inner frame, a panel associated with said frame and adapted to support a fan, said panel being spaced from said frame, a door hinged to said frame, an outer frame, a multi-vane louvre closure for said outer frame, means normally urging said louvre closure to closed position, a flexible cable connecting said louvre closure and said door whereby opening of the door will open said louvre closure, said louvre closure being adapted to be retained in open position by the weight of said door and being adapted to automatically close upon closing of said door, and means operated by said door for controlling the operation of said fan.

1,894,931. PIGMENT AND METHOD OF PRODUCING THE SAME. WILLIAM J. O'BRIEN, Baltimore, Md., assignor to Glidden Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 10, 1930. Serial No. 443,249. 2 Claims. (Cl. 134—58.)

2. The process of producing pigments which comprises the steps of dissolving selenium in a solution comprising barium sulphide, precipitating with cadmium sulphate and calcining the precipitate.

1,894,932. BUILDING CONSTRUCTION. EDMOND F. VENZIE, Philadelphia, Pa., assignor to Frederick M. Venzie, Philadelphia, Pa. Filed Mar. 2, 1932. Serial No. 596,209. 6 Claims. (Cl. 72—46.)



1. In a building construction, laterally spaced metal studs, units or panels each comprising an integral structure the inner faces of said panels abutting said studs, metal clips for securing said units to said studs, flanged portions at a unit top and bottom arranged to form grooves for clip and tie-wire accommodation, tie-wires embedded in each unit and having their terminals arranged in said grooves prior to unit erection, the terminals of tie-wires of adjacent units being twisted together to form an interlock after unit erection, and thin sheets of perforated covering material adhesively secured to the outer faces of adjacent units.

1,894,933. BUILDING CONSTRUCTION. EDMOND F. VENZIE, Philadelphia, Pa., assignor to Frederick M. Venzie, Philadelphia, Pa. Filed Mar. 2, 1932. Serial No. 596,210. 4 Claims. (Cl. 72—46.)



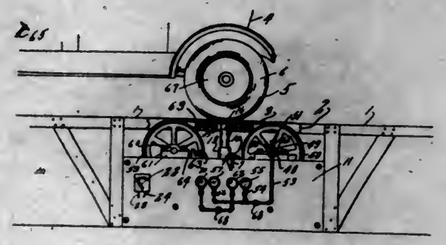
1. In a building structure, laterally spaced metal studs, inner panels arranged in staggered relation and abutting the opposed faces of said studs, metal clips for securing said inner panels to said studs, outer panels adhesively secured to the exposed faces of said inner panels after erection, and sheets of thin material adhesively secured to said other panels for covering the entire area thereof, said sheets being arranged edge to edge so as to provide a smooth surface.

1,894,934. PRODUCTION OF RESINS OF THE COUMARONE-INDENE TYPE. JOHN MORRIS WEISS, New York, N. Y. Filed July 10, 1929. Serial No. 377,347. 15 Claims. (Cl. 260—7.)

1. In the polymerization of bodies of the type of coumarone and indene, the use as a polymerising agent of a mixture of an absorbent earth and an acid ferric sulphate.

1,894,935. BRAKE TESTING EQUIPMENT. HARRY K. BIGELOW, Toledo, Ohio, assignor, by mesne assignments, to Bendix-Cowdrey Brake Tester, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 6, 1927. Serial No. 159,429. 1 Claim. (Cl. 265—25.)

In a brake testing apparatus, a roll for imparting motion to a wheel, a shaft to which the roll is fastened, an arm fastened to the shaft, a rotatable driving wheel having an axis coincident with that of the shaft, means connecting the arm and driving wheel and including a fluid pressure cylinder having its axis at an angle to that of the shaft and at a distance from the axis of the shaft whereby rotation of the wheel will cause the fluid in the cylinder to be compressed and to exert a torque upon the arm, a conduit connecting the cylinder with an axial bore in the shaft, a tube fastened in the bore, a stationary packing in which the tube rotates as the shaft is driven, and a pressure responsive indicator connected to the packing chamber.



CARNEGIE LIBRARY OF ATLANTA

Patents Nos. 1,894,936 to 1,895,434

THE

OFFICIAL GAZETTE

OF THE

United States Patent Office

Vol. 426—No. 4 TUESDAY, JANUARY 24, 1933 Price—$10 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscriptions, $10.00 per annum, including annual index; $12.35; single numbers, 25 cents each.

PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
Issue of January 24, 1933	637
Interference Notice	637
Notice of Cancellation	637
Adverse Decisions in Interference	637
Drawings	637
Applications Under Examination	638
Decisions of the U. S. Courts—	
In re Peller	639
In re Spreen	641
Patent Suits	642
Trade-Marks Published (108 Applications)	642
Trade-Mark Registrations Granted	669
Labels	667
Prints	667
Reissues	669
Plant Patent	670
Designs	670
Patents Granted	670

Issue of January 24, 1933.

Trade-Marks	108—No.	368,433 to No.	368,540, inclusive.
Labels	6—No.	41,429 to No.	41,434, inclusive.
Prints	3—No.	14,032 to No.	14,034, inclusive.
Reissues	5—No.	18,718 to No.	18,722, inclusive.
Plant Patent	1—No.	88	
Designs	41—No.	89,075 to No.	89,115, inclusive.
Patents	429—No.	1,894,936 to No.	1,895,434, inclusive.
Total	741		

Interference Notice

U. S. PATENT OFFICE, *Washington, Dec. 20, 1932.*

Leader Food Products Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of the New England Importation Company, 208 State Street, Boston, Mass., for registration of a trade-mark and trade-mark registered July 8, 1928, No. 243,997, to the Leader Food Products Co., 167 West Division St., Chicago, Illinois, and a notice of such declaration sent by registered mail to said Leader Food Products Co., at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Leader Food Products Co., their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, Dec. 20, 1932.*

Anderson Mfg. Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Nicholas Becharas, of 134 West Vernor Highway, Detroit, Mich., to effect the cancellation of the trade-mark registration of the Anderson Mfg. Co., of Flint, Mich., No. 111,547, dated July 25, 1916, and the notice of such proceeding sent by registered mail to the said Anderson Mfg. Co. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Anderson Mfg. Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,765,509, T. H. Thomas, Automatic train control equipment, decided December 7, 1932, claim 27.

Pat. 1,788,764, J. R. Adams, Process of case-hardening steel articles, decided December 28, 1932, claim 1.

Pat. 1,858,178, W. V. B. Roberts, Radio receivers, decided December 27, 1932, claims 1, 2, 3, 4, 5, 6, 7, 8, 9, and 11.

Drawings

PRECAUTIONS TO BE OBSERVED IN FORWARDING DRAWINGS TO THE UNITED STATES PATENT OFFICE

Where drawings are to be filed in connection with an application for Letters Patent in the United States Patent Office, each sheet, before it can be accepted by the Office as a part of the application, must be signed in the name of the inventor at the lower right-hand corner, either by him or by an attorney whose written authorization from the applicant is filed in connection with the application. The signatures should never be written on a line parallel with the longer edges of the sheet, one of the shorter edges being always regarded, for the purpose of locating the signatures, as the lower edge of the sheet. The signatures must all be within the margin-lines of the sheet and below the lines of the drawing. The title of the invention should be written with pencil on the back of each sheet of drawings.

When there are filed on the same day two or more applications by the same inventor, each of the documents and drawings belonging to the same application should have placed thereon the same letter or number, which should be different from the letter or number placed upon those of any other of the applications.

It is desirable that all parts of the complete application, including the drawings, be deposited in the Office at the same time. Should, however, the other parts of the application be filed before the drawings are sent, the latter when forwarded should be accompanied by a letter stating the number of sheets inclosed, and that the drawings are to be filed with the other parts of the application, giving the date at which such other parts were filed in the Office, the name of the inventor, and title of the invention. If the application has received a serial number, that should also be given, and it should be indorsed with pencil on the back of each sheet of drawings. The letter should also state, if such be the case, that the new drawings are to be substituted for those previously filed.

Condition of Applications Under Examination at Close of Business January 7, 1933

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 59,025; Trade-Mark Division, 1,094. Oldest new case, Aug. 6, 1932; oldest amended, Aug. 2, 1932.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Nov. 14	Nov. 19	221
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Sept. 8	Sept. 9	915
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Oct. 10	Oct. 7	716
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Nov. 7	Dec. 5	227
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Oct. 8	Oct. 17	311
4898C	6. LEWERS, A. M., Carbon Chemistry	Aug. 9	Aug. 8	1,627
5725	7. JARBOE, C. G., Optics; Photography	Sept. 8	Sept. 9	1,117
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Sept. 30	Sept. 28	650
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Oct. 7	Nov. 1	596
5612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Sept. 7	Sept. 7	626
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Aug. 17	Aug. 9	626
7701	12. HENRY, C. C., Machine Elements	Nov. 1	Oct. 7	324
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Sept. 7	Sept. 9	885
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Oct. 8	Oct. 4	618
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Aug. 24	Aug. 24	1,528
5612	16. SPENCER, C. J., Telegraphy; Telephony	Oct. 8	Oct. 8	637
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Aug. 8	Aug. 8	1,240
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Oct. 15	Oct. 20	462
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Aug. 8	Aug. 10	1,594
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Oct. 24	Oct. 27	372
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Sept. 12	Sept. 12	852
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Oct. 20	Nov. 5	350
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Aug. 9	Aug. 15	748
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Nov. 7	Nov. 8	510
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Aug. 15	Aug. 15	1,328
5893	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Aug. 16	Aug. 16	666
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Oct. 7	Oct. 7	754
4628	28. BENSON, A. R., Internal-Combustion Engines	Aug. 6	Aug. 2	1,297
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling.	Aug. 17	Aug. 9	569
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and flumidostats.	Sept. 7	Oct. 7	677
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Aug. 15	Aug. 13	1,327
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Oct. 6	Oct. 8	724
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Aug. 8	Aug. 8	1,850
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	Aug. 19	Aug. 17	802
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Nov. 17	Dec. 2	295
7624	36. MCFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Aug. 8	Aug. 8	1,440
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Sept. 10	Sept. 8	812
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Aug. 22	Aug. 10	194
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Aug. 8	Aug. 8	1,217
7880	40. OBERLIN, J. J., Receptacles	Aug. 25	Aug. 25	2,009
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Aug. 9	Aug. 9	641
5882	42. CUTTING, H. O., Electric Signaling	Aug. 8	Aug. 8	1,262
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Aug. 8	Aug. 9	1,505
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Aug. 8	Aug. 10	1,583
7007	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Oct. 13	Oct. 13	647
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Oct. 10	Oct. 21	416
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Aug. 9	Aug. 8	1,767
5731	48. ROEPKE, O. B., Electricity, General Applications	Sept. 10	Sept. 10	593
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Aug. 8	Aug. 8	1,275
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 8	Aug. 8	1,851
5628	51. BACKUS, C. D., Radiant Energy	Sept. 19	Sept. 19	964
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Nov. 7	Nov. 7	479
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Aug. 30	Aug. 3	398
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Aug. 16	Aug. 16	998
6887	55. BOWEN, S. T. — Bread, Pastry, and Confection Making; Cutlery	Oct. 12	Oct. 12	331
	Designs	Dec. 7	Dec. 21	285
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Aug. 13	Aug. 13	1,124
3623	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Sept. 8	Sept. 8	623
5605	58. DOWELL, E. F., Abrading; Typewriting	Aug. 11	Aug. 13	775
4709	59. RICHARD, V. L., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Aug. 8	Aug. 8	919
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Aug. 8	Aug. 8	1,232
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Aug. 10	Aug. 12	1,139
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Sept. 9	Sept. 8	1,211
4883	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Aug. 9	Aug. 9	1,238
4708	64. NASH, P. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Aug. 11	Aug. 8	616
5624	65. MCDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Aug. 8	Aug. 8	1,440
2099B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND — Trade-Marks	Dec. 5	Dec. 24	963
	Labels and Prints	Dec. 7	Dec. 27	131

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE PEILER

No. 3,001. Decided December 29, 1932

PATENTABILITY—DOUBLE PATENTING.

Claims for a method of feeding molten glass *Held* unpatentable over the claims of applicant's prior patent.

APPEAL from the Patent Office. Affirmed.

Mr. Vernon M. Dorsey, Mr. S. F. Parham, and *Mr. L. G. Bates* for Peiler.

Mr. T. A. Hostetler for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner rejecting claims 2, 3, and 15 of appellant's application for a patent for an alleged invention relating to improvements in the method of feeding molten glass, particularly to the method of selectively and variably controlling the weight and shape of successive mold charges of glass by changing the upper and lower limits of the stroke of a reciprocating plunger. The application discloses an apparatus for carrying out the involved method. Claim 15 is illustrative. It reads:

In the art of feeding molten glass in a regular succession of mold charges of definite shape and weight, the method which comprises superimposing molten glass upon a discharge outlet, reciprocating a discharge-controlling implement in the glass above said outlet in such a manner as to form an annular passage for the glass moving toward said outlet and with a stroke selected as to its upper position so as to determine the quantity of glass issuing upon each discharge, and selected as to its lower position so as to determine the shape of each discharged mass of glass, and producing mold charges of different weight by changing the upper limit of the stroke of said implement.

The involved application, filed March 14, 1922, was copending with another application of appellant relating to a method of, and an apparatus for, feeding molten glass, filed May 5, 1919, which matured into Patent No. 1,655,391, January 3, 1928.

The rejection of the involved claims by the Board of Appeals was based solely on the ground of double patenting in view of appellant's issued Patent No. 1,655,391.

In its decision, the Board of Appeals stated that the Peiler Patent No. 1,655,391 contained numerous references to changing the weight and shape of mold charges of glass by variations in the movements of the plunger; that adjustments of the apparatus, which would support the involved claims, were so disclosed in the specification of the patent as to convey the impression that the involved method was one of the important features of that invention. The Board was of opinion that the method defined by the appealed claims was covered by method claim 1 of the patent; that method claims 10, 13, and 17 involved controlling the shape of mold charges; that method claim 12 involved increasing the weight of such charges by extrusive pressure of the plunger; that apparatus claims 57 and 58 involved controlling the shape of such charges by varying the timing of the extrusive impulses of the plunger; and that apparatus claim 59 related specifically to adjusting the upper and lower limits of the stroke of the plunger, which, together with other adjustments, controlled the size and shape of mold charges. The Board concluded its opinion by holding that, considering the claims—method and apparatus—of the patent as a whole, they defined substantially the same invention as that here involved and differed from the appealed claims in scope and unpatentable variations only.

In his brief, the Solicitor for the Patent Office contends that the invention defined by the appealed claims is substantially the same as the invention defined in method claims 10, 37, 39, and 47 of the Peiler patent.

It is conceded by counsel for appellant that the involved method was disclosed, but it is contended that it was not claimed, in the Peiler patent.

The first question requiring our consideration is whether the method defined by the appealed claims was claimed in the Peiler patent. If it was, appellant is not entitled to a second patent for the same invention. If it was not, we must then proceed to determine whether the invention defined by the appealed claims is patentably distinct from the invention claimed in the Peiler patent. If the involved invention, although disclosed, was not claimed in the patent, and if it is patentably distinct from the invention therein claimed, appellant is entitled to a patent, and the decision of the Board of Appeals must be reversed. *In re Peiler,* 18 C. C. P. A. (Patents) 1,102, 48 F.(2d) 405, 409 O. G. 841, and cases cited.

Preliminary to a comparison and discussion of the involved claims and those contained in the Peiler patent, it may be helpful to refer briefly to the specification of the patent. It discloses an apparatus having, as stated in the specification,

the necessary mechanical movements and adjustments, and cooperating with a conduit projecting from a glass furnace, from which the molten glass is thus delivered in mold charges to an associated molding or shaping machine.

One of the many features of that apparatus is a gate for regulating the glass flow. In operation, the gate is raised to the proper point to maintain the desired head of glass over the outlet. The glass issues from the outlet, as stated in the specification,

under the combined influence of gravity and the action of the impeller, which times and controls its accumulation in gathers which are successively suspended from the outlet ring and from the impeller end. For each complete reciprocation of the impeller there is a reciprocation of the shears which sever a mold charge from each suspended gather. After each severing operation the freshly cut end or stub remaining below the outlet and forming the lower end of the succeeding gather, is moved upwardly or its downward movement is retarded by the action of the impeller.

The impeller acts upon the glass partly by displacement and partly by adhesion of the glass to it. The downward movement of the impeller gives an extrusive impulse to the glass issuing from the outlet

and increases its rate of discharge. The upward movement of the impeller tends to retard the discharge of glass from the outlet. The glass issues from the outlet at, at least, three different rates of speed: First, at a rate slower than gravity during the upward stroke of the plunger; second, at a rate determined by gravity, while the plunger pauses at the limit of its upward stroke; third, at an increased rate during the downward stroke of the plunger.

The extrusive impulse of the plunger, in proportion to its extent and strength, increases the diameter of the glass suspended below the outlet. The strength of that impulse may be varied by changing the size, the length of the stroke, and the working position, of the plunger. By making an adjustment in the apparatus of the patent, the extrusive impulse may be made to come earlier, which tends, according to the specification, to increase the diameter of the entire body of the charge rather than the diameter of its upper end only. By retarding the downward impulse of the plunger, the upper end only of the suspended glass is enlarged. By extending the downward impulse, which may be done by lengthening the stroke of the plunger, both the body and the upper end of the suspended glass are enlarged. The patentee stated that a—

faster downward stroke of shorter duration increases the strength of the impulse but applies it locally to a more limited portion of the gather. The decrease in diameter of the gather due to its elongation by gravity may thus be compensated for to any extent.

From what has been said, it is evident that a variety of effects may be obtained by varying the downward and upward movements of the plunger, and that the basic scheme of the patent is to increase or retard the rate of flow of glass from the outlet so that the shape and size of compact mold charges appropriate to the particular molds to be fed may be controlled. The acceleration and retardation of the flow through the outlet is primarily controlled by reciprocating the discharge controlling implement—the plunger—toward and from the outlet.

Claim 1 of the patent defines a method of delivering compact mold charges of molten glass—

of shape and weight appropriate to the particular molds to be fed, which method comprises superimposing a sufficient head of molten glass, of proper viscosity for suspension in mold-charge masses, upon a delivery orifice of a proper contour and area to permit the feeding of charges appropriate to the molds to be fed, and, for each mold charge, discharging the glass through said orifice, reciprocating a discharge-controlling implement toward and from said orifice to determine selectively the shape of the discharged glass suspended beneath said orifice, and severing a mold charge from the discharged glass before the shape imparted to the discharged glass is lost and before the discharged glass receives any substantial under-support.

It will be observed that claim 1 defines a method of controlling both the shape and weight of mold charges by—

superimposing a sufficient head of molten glass, of proper viscosity, * * * upon a delivery orifice of a proper contour and area to permit the feeding of charges appropriate to the molds to be fed,

and, by reciprocating the plunger toward and from the outlet, the shape of the discharged glass is selectively determined.

It is contended by counsel for appellant that the weight of mold charges, referred to in that claim, is determined solely by—

superimposing a sufficient head of molten glass, of proper viscosity for suspension in mold-charge masses, upon a delivery orifice of a proper contour and area,

and is uninfluenced, so far as that claim is concerned, by the movements of the plunger.

It may be observed that, in the normal operation of the apparatus disclosed and claimed in the patent, a sufficient head of molten glass of proper viscosity over an outlet of proper contour and area is always necessary. Furthermore, as the extrusive impulse of the plunger increases the rate of discharge of the glass from the outlet, and, in proportion to the extent and strength of such impulse, increases the diameter of the glass suspended below the outlet, it is evident, we think, that claim 1 of the patent is sufficiently broad to include controlling both the weight and shape by the movements of the plunger. That claim does not specify that the weight is controlled by one means and the shape by another, and such limitations ought not to be read into it.

Claim 10 of the patent defines a method of forming mold charges of molten glass of predetermined and controlled shapes appropriate to the molds to be fed,

which comprises extruding molten glass through an outlet submerged in a glass supply, *and so varying the extrusive pressure applied above the outlet*, during the extrusion of the charge, and in accordance with the desired cross-sections of the charge at different points along its length, as to impart the desired contour to the charge. (Italics ours.)

Having in mind the basic scheme of the patent hereinbefore explained, it is obvious that, if the extrusive pressure applied above the outlet is varied, that is to say, if the strength of the extrusive impulse of the plunger is increased or decreased, the diameter of the suspended glass will be increased or decreased in proportion to the extent or strength of such extrusive impulse, and, accordingly, both the weight and the shape of the glass will be affected.

Claim 12 of the patent defines a method of forming mold charges of molten glass. It—

comprises causing glass to flow downwardly through a discharge opening submerged by the parent body of glass, applying intermittent extrusive impulses to the glass above the opening to increase its rate of discharge from the said opening, and, after each impulse, severing a mold charge from the glass at a level spaced below the said opening while the discharged glass is hanging freely below the opening.

That claim relates to the application of extrusive impulses to the glass over the outlet to increase its rate of discharge, and, also, to the severing of the mold charges. The method of forming mold charges is broadly claimed and involves the basic scheme of the patent which is to control the weight and shape of mold charges by increasing or decreasing the diameter of the glass suspended below the outlet, including either the body or the upper end, or both, of the suspended glass, in proportion to the extent, strength, and timing of the extrusive impulse of the plunger.

Claim 17 of the patent defines a method of forming mold charges—

of controlled shape appropriate to the molds in which they are to be fabricated, that comprises discharging the glass through said outlet under the control of a reciprocating implement which accelerates the discharge of the glass to a sufficient extent and at the proper time to shape the glass, while hanging below said outlet, into an elongated mass at least as great as a mold charge.

Again, the patentee claimed a method involving the control of the discharge of the molten glass by the movements of the plunger. The discharge of the glass is accelerated to a sufficient extent and at the proper time to shape it into an elongated mass "at least as great as a mold charge." That is to say, that, by controlling the movements of the plunger, not only the shape, but a sufficient amount of glass to make proper mold charges, is obtained.

In each of the above mentioned claims of the patent, the movements of the plunger are claimed broadly and include not only varying its movements, but its working positions as well. Obviously then, those claims are sufficiently broad to include any variation in the stroke of the plunger disclosed in the specification of the patent, including any selected limit of its upward, or downward, stroke, for the precise purposes stated in the appealed claims, that is, for controlling the shape and weight of mold charges.

It is contended, however, by counsel for appellant that the gist of the appealed claims is the control of the weight of mold charges by—

regulation of the frictional resistance in the annular passage surrounding the plunger,

and that this feature was not included in any of the claims of the Peiler patent.

We have been unable to find such a limitation in the appealed claims. Nevertheless, it may be said that, as the plunger acts upon the glass partly by displacement and partly by adhesion of the glass to it, and as the downward movement of the plunger increases, and its upward movement tends to retard, the rate of discharge of the glass from the outlet, the frictional resistance in the annular passage surrounding the plunger in the normal operation of the apparatus, disclosed and claimed in the patent, is regulated by the positions and movements of the plunger.

Claim 39 of the patent claims a method of forming mold charges of appropriate *size* and *shape* to the molds in which they are to be fed, which, according to the claim, comprises discharging glass—

downwardly around an implement and through a passage having a discharge outlet, moving the implement downwardly in the glass toward the outlet, during the discharge of each mold charge, *so as to increase the resistance to the movement of glass in said passage, but at such speed as to accelerate the discharge of the glass through said outlet notwithstanding such increased resistance, and thereafter, and after sufficient glass has been discharged to form a mold charge, moving the implement upwardly so as to decrease the resistance to the movement of the glass in said passage, but at such speed as to retard the discharge of glass through the outlet passage notwithstanding such decreased resistance.* (Italics ours.)

Claim 39 defines a method of controlling the weight and shape of mold charges, which comprises regulating the frictional resistance in the passage above the outlet by varying the positions and movements of the plunger. It would seem to be obvious that, even if it could be argued that the patentee did not specifically claim the method of controlling the weight and shape of mold charges by regulating the frictional resistance in the passage around—the annular passage surrounding—the plunger, by varying the positions and movements of the plunger, claim 39 is sufficiently broad to include such method.

It has been suggested that, if properly construed, the appealed claims define a method whereby the weight may be changed without, at the same time, changing the shape of the mold charges, and that no such method was claimed in the Peiler patent.

It may be that the apparatus disclosed in the application might be so adjusted and operated as to make it possible to change the shape, without, at the same time, changing the weight, or to change the weight, without, at the same time, changing the shape, of the mold charges. However, we think that the claims define a method of controlling both the weight and shape of mold charges, and that they do not specify that either may be changed without, at the same time, changing the other. Nor may we read such a limitation into them. Such being the case, it is evident that the method defined in the appealed claims was claimed in the Peiler patent, and, as appellant is not entitled to another patent for the same invention, we must hold that the Board of Appeals reached the right conclusion.

The decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE SPREEN

No. 3,077. Decided December 19, 1932

PATENTABILITY—MECHANICAL REFRIGERATOR.

Claims for a mechanical refrigerator *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Ralph E. Baker and *Mr. J. W. Milburn* for Spreen.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

The application of the appellant in this case involves six claims for patent upon a mechanical refrigerator. The Board of Appeals having affirmed the Examiner's rejection, the instant appeal to this court was taken.

Claim 37 is quoted as representative:

37. A refrigerator comprising a heat insulated cabinet having a plurality of vertical walls closed at the ends by horizontal top and bottom walls, one of said vertical walls having a single opening formed throughout substantially the entire extent thereof and communicating with a compartment formed in the interior of said cabinet walls, a refrigerant evaporator rigidly suspended from a wall of said insulated cabinet in alignment with said opening and disposed in spaced relation to the side and top walls of said cabinet for free circulation of air in the compartment entirely around the evaporator, a freezing compartment comprising a sleeve disposed in the interior of the evaporator for supporting freezing trays directly insertible and removable through the aforesaid opening, a vertically disposed baffle adjacent the vertical front wall of the evaporator and having a baffle opening communicating with the freezing compartment for permitting the horizontal movement of the trays into the compartment through the baffle, a series of horizontally disposed shelves supported by the side walls of the compartment in alignment with said single opening and beneath the evaporator, and a swinging door for closing said single opening whereby direct access may be had to the aforesaid shelves, baffle opening, freezing trays and evaporator.

It is conceded that all the elements mentioned in the claims are old in the art, but invention is claimed in the combination.

The rejection was based upon lack of invention over prior art as disclosed in the following references:

Sullivan, 652,408, June 26, 1900; Whitaker, 795,015, July 18, 1905; Emerson et al., 962,704, June 28, 1910; and Tibbetts, 1,312,932, August 12, 1919.

In both the decision of the Examiner and that of the Board of Appeals specific application is made of the features of the references to the features of the claims. We have examined the matter with care, and fail to find wherein invention is involved in combining the elements as applicant has. No new result has been obtained and each element in its new relation performs practically the same function that it performed in the old relation.

To enter upon a minute analysis of the device and of the references could serve no good, or even interesting purpose, since the tribunals of the Patent Office have quite fully covered the ground.

The decision of the Board of Appeals is affirmed. Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,132,186, E. W. Kelley, Traffic signaling system, appeal filed Nov. 21, 1932, C. C. A., 2d Cir., Doc.——, *E. W. Kelley et al.* v. *The City of New York et al.*

1,164,587, A. N. Faulkner, Scaffold; 1,388,262, F. B. Johnston, Hoisting attachment for scaffolds, filed Nov. 17, 1932, D. C., E. D. N. Y., Doc., E 6667, *American Safety Device Co.* v. *Kurland Chemical Co. et al.*

1,256,509, E. D. Belknap, Addressing machine, D. C., S. D. N. Y., Doc. E 43/80, *E. D. Belknap et al.* v. *Roneo Co.* Consent decree for plaintiff (notice Nov. 15, 1932).

1,388,262. (See 1,164,587.)

1,450,091, A. E. Lard, Golf shaft, filed Nov. 18, 1932, D. C., E. D. N. Y., Doc. E 6680, *The Metallic Shaft Co.* v. *Davega-City Radio, Inc.*

1,469,910, St. C. Jacobs, Traveling swing, filed Nov. 18, 1932, D. C., E. D. N. Y., Doc. E 6681, *C. Jacobs* v. *J. Fezzo et al.*

1,470,524, H. B. Burt, Process of making frozen confections; 1,505,592, F. W. Epperson, Frozen confectionery; 1,718,997, H. B. Burt, same, D. C., N. D. Calif. (Sacramento), Doc. 995–S, *National Popsicle Corp. et al.* v. *E. L. Murphy et al.* Decree for plaintiff (notice Nov. 14, 1932).

1,505,592. (See 1,470,524.)

1,547,764, H. W. Kuehl, Waste valve mechanism, D. C., S. D. Ill. (Springfield), Doc. 1265, *Brass Products Co. et al.* v. *Mueller Co.* Decree for plaintiff Nov. 12, 1932.

1,554,898, A. F. Teigen, Tobacco pipe, C. C. A., 8th Cir. (St. Louis), Doc. 9349, *A. F. Teigen et al.* v. *United Cigar Stores Co. of America.* Decree affirmed Nov. 12, 1932.

1,630,495, N. Marcalus, Box for paper rolls, appeal filed May 2, 1932, C. C. A., 3d Cir., Doc. 4916, *Julius Levine Co. et al.* v. *Automatic Paper Machinery Co.*

1,643,150, S. Greenberg, Child's overcoat, D. C., S. D. N. Y., Doc. E 70/383, *Louis Greenberg & Bro., Inc.*, v. *Little Sister Coats, Inc.* Consent order of discontinuance (notice Nov. 18, 1932).

1,690,776, F. R. Elston, Woven material, D. C., S. D. N. Y., Doc. E 70/268, *B. F. Miller* v. *I. Rittenberg et al.* (*Rittenberg Bros.*) Consent decree for plaintiff (notice Nov. 18, 1932).

1,693,886, H. Caton et al., Method of slip-sheeting and means for practicing the same, filed Nov. 14, 1932, D. C., W. D. Wis. (Madison), Doc. E 2174, *The Caton Printing Co.* v. *Daniels Mfg. Co.*

1,718,997. (See 1,470,524.)

1,756,898, A. J. Bocz, Balancing device; 1,886,246, same, Harmonic antivibrator, filed Nov. 17, 1932, D. C., E. D. Mich. (Detroit), Doc. 5648, *A. J. Bocz* v. *Hudson Motor Car Co.*

1,757,001, G. C. Beidler, Photographic apparatus, D. C., S. D. N. Y., Doc. E 70/168, *G. C. Beidler* v. *Photostat Corp. of Rhode Island.* Dismissed (notice Nov. 11, 1932). Same, filed Nov. 15, 1932, D. C., W. D. N. Y., Doc. 1616, *G. C. Beidler* v. *Photostat Corp. of New York.*

1,790,636, C. P. Hollister, Locally controlling radio receiving apparatus, filed Nov. 21, 1932, D. C., E. D. N. Y. Doc. E 6683, *Brooklyn Metal Stamping Corp.* v. *F. Loeser & Co., Inc.*

1,801,128, A. E. Waller, Finding for a clasp, filed Nov. 11, 1932, D. C., S. D. N. Y., Doc. E 72/217, *A. E. Waller* v. *Apex Die & Tool Corp.*

1,805,251, C. L. Matthews et al., Guy guard, D. C., E. D. Pa., Doc. 7069, *W. N. Matthews Corp.* v *Utilities Service Co.* Dismissed Nov. 14, 1932.

1,858,757, R. Wolfe, Olla, filed Nov. 10, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y–35–M, *California Consolidated Water Co.* v. *I. N. Daubmyre et al.* (*Sierra Mountain Water Co.*).

1,865,037, A. Novick, Method of making window envelopes, filed Nov. 17, 1932, D. C. Del., Doc. E 1007, *Continental Paper & Bag Corp. et al.* v. *Milprint Products Corp.* Same, D. C., E. D. N. Y., Doc. E 6673, *Continental Paper & Bag Corp.* v. *Oneida Paper Products, Inc.* Same, D. C., S. D. N. Y., Doc. E 72/296, *Continental Paper & Bag Corp. et al.* v. *Union Bag & Paper Corp.*

1,886,246. (See 1,756,898.)

Re. 17,566, J. R. Belknap, Process for allaying dust in fuels, filed Nov. 16, 1932, D. C., S. D. W. Va., (Charleston), Doc. 3196, *J. R. Belknap* v. *Killarney Smokeless Coal Co.*

Des. 86,662, W. Bunzl, Therapeutic lamp, filed Nov. 17, 1932, D. C., S. D. N. Y., Doc. E 72/266, *W. Bunzl* v. *P. Zucker* (*Cosmo Sun Ray Products Co.*).

T. M. 128,472, T. Noonan & Sons Co., Hair tonic, filed Nov. 18, 1932, D. C. R. I., Doc. 437, *T. Noonan & Sons Co.* v. *Rhode Island Barbers Supply Co., Inc.*

TRADE-MARKS

OFFICIAL GAZETTE, JANUARY 24, 1933

[VOL. 426. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 331,267. LESTER S. RICHARDS, White Haven, Pa. Filed Oct. 14, 1932.



The representation of the lump of coal is disclaimed apart from the mark shown on the drawing.

For Coal, Charcoal, Coke; and Sawed, Split, and Prepared Firewood.

Claims use since Sept. 1, 1931.

Ser. No. 332,137. NEWDAY SEEDS, INC., Fargo, N. Dak. Filed Nov. 12, 1932.

NEWDAY

For All Types of Farm Seeds, Including Garden Seeds, Flower Seeds, and Field Seeds.

Claims use since September, 1929.

Ser. No. 332,348. NEWMARKET LEATHER CO., INC., New York, N. Y. Filed Nov. 21, 1932.



No claim is made to the words "Sharc" and "Saves Shoes" apart from the mark shown on the drawing.

For Leather for Shoe Uppers.

Claims use since October, 1931.

Ser. No. 332,398. CALIFORNIA FUEL & UTILITIES, INC., Los Angeles, Calif. Filed Nov. 23, 1932.

R

For Carboniferous Fuel Briquettes.

Claims use since Sept. 16, 1930.

Ser. No. 332,399. CALIFORNIA FUEL & UTILITIES, INC., Los Angeles, Calif. Filed Nov. 23, 1932.

For Carboniferous Fuel Briquettes.

Claims use since Sept. 16, 1930.

Ser. No. 332,400. CALIFORNIA FUEL & UTILITIES, INC., Los Angeles, Calif. Filed Nov. 23, 1932.

For Carboniferous Fuel Briquettes.

Claims use since Sept. 16, 1930.

CLASS 2

Receptacles

Ser. No. 327,986. ROSETH CORPORATION, Brooklyn, N. Y. Filed June 14, 1932.

FUMIDOR

For Moth and Vermin Repellent Bags and Boxes Made of Paper.
Claims use since May 10, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 332,834. BOND MANUFACTURING CORPORATION, Wilmington, Del. Filed Dec. 7, 1932.

GOLD BOND

For Shaving Soap.
Claims use since Aug. 31, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 315,938. SONTAG CHAIN STORES CO. LTD., doing business as Emdee Laboratories Co., Los Angeles, Calif. Filed June 16, 1931.

EMOLAGAR

For Medicinal Preparations—Namely, Lubricant Taken Internally for the Relief of Temporary Constipation and Bowel Sluggishness.
Claims use since Oct. 1, 1930.

Ser. No. 324,619. EDNA HARBELL MALEY, Long Beach, Calif. Filed Feb. 29, 1932.



The word "Product" in the drawing is disclaimed apart from the mark as shown.
For Face Cream, Hair Tonics, Hair Dressing, Nail Polishes and Creams, Face Powder, Hair Shampoo, Face and Hand Lotion, Rouge, Lip Stick, Eyebrow and Lash Coloring, Depilatory Powder, Deodorant.
Claims use since Dec. 15, 1931.

Ser. No. 325,101. FRIEDRICH KLEIN, Berlin-Neukolln, Germany. Filed Mar. 14, 1932.

Clairol

For Pharmaceutical Preparations—Namely, Hair Dyes and Hair Lotions.
Claims use since January, 1931.

Ser. No. 325,103. FRIEDRICH KLEIN, Berlin-Neukolln, Germany. Filed Mar. 14, 1932.

Kleinol

For Pharmaceutical Preparations—Namely Hair Dyes and Hair Lotions.
Claims use since March, 1930.

Ser. No. 326,864. SAMUEL A. LITTLE, Charlotte, N. C. Filed May 7, 1932.

Cream of Olives

For Hand Lotion, Cold Cream, Vanishing Cream, and Preparations Generally for the External Treatment of the Skin.
Claims use since Feb. 1, 1932.

Ser. No. 327,793. DR. GEORG FRIEDRICH HENNING CHEMISCHE FABRIK, Berlin, Germany. Filed June 7, 1932.

Somnaethyl

For Preparation for Producing Narcosis and for Anæsthetizing.
Claims use since Apr. 2, 1931.

Ser. No. 329,723. ELIZUR GOODRICH SMITH, Portland, Oreg. Filed Aug. 20, 1932.



For Medicine for the Treatment of Asthma and Hay Fever.
Claims use since July 26, 1932.

Ser. No. 330,076. CARL E. WRAY, Salina, Kans. Filed Sept. 1, 1932.



Applicant states that the words "Tubercular" and "Compound" appearing in the drawing are descriptive only of the goods and disclaims that the words "Tubercular" and "Compound" form any part of the trade-mark itself.
For Medicinal Preparation for the Treatment of Tubercular and Lung Diseases.
Claims use since Aug. 14, 1931.

Ser. No. 331,083. HAROLD M. HAYS, New York, N. Y. Filed Oct. 8, 1932.



For Medicines and Pharmaceutical Preparations to be Used in the Treatment of Colds (Rhinitis, Coryza) Nasal Sinus Inflamations and Infections and to Relieve the Nasal Symptoms of Hayfever.
Claims use since June 1, 1931.

Ser. No. 331,142. CAMPBELL LABORATORIES, INC., New York, N. Y. Filed Oct. 11, 1932.



For Cosmetics, Namely—Hair Tonic, Liquid Shampoo, Face Powder, Facial Cleansing Oil, Cold Cream, and Bath Essence.
Claims use since Oct. 1, 1932.

Ser. No. 331,270. TALCUM PUFF CO. INC., doing business as Page Perfumer, New York, N. Y. Filed Oct. 14, 1932.



The drawing being lined to indicate the color orange.
For Face Creams, Face and Hand Lotions; Face Powder, Talc, Body Powders, Lipstick, Rouge, Perfumes, and Brilliantine.
Claims use since January, 1931.

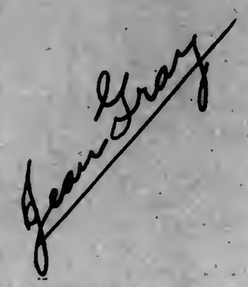
Ser. No. 331,292. HERBERT E. RILEY and HARRY J. TANNENBAUM, doing business as The Electric Moth Bomb Co., New York, N. Y. Filed Oct. 15, 1932.



No claim is made herein, to the illustration of the device, or to the wording other than the words "Moth Bomb" apart from the mark as shown.
For Fumigating Apparatus Containing a Fumigating Material and Fumigating Materials.
Claims use since Apr. 21, 1932.

Ser. No. 331,373. JEAN GRAY, Washington, D. C., Filed Oct. 19, 1932.

JEAN GRAY



The signature appearing on the drawing is that of the applicant, Jean Gray.
For Preparation for the Treatment of the Hair.
Claims use since Oct. 10, 1932.

Ser. No. 331,430. THE HAMMOND PAINT & CHEMICAL CO., INC., Beacon, N. Y. Filed Oct. 21, 1932.

NAPTOSIDE

For Insecticide Chemicals.
Claims use since Sept. 1, 1932.

Ser. No. 331,431. THE HAMMOND PAINT & CHEMICAL CO., INC., Beacon, N. Y. Filed Oct. 21, 1932.

PEST KIT

For Insecticide Chemicals.
Claims use since Sept. 1, 1932.

Ser. No. 331,541. BROOK HILL LABORATORIES, INC., Genesee Depot, Wis., and Chicago, Ill. Filed Oct. 25, 1932.

CAMS

For Medicine in the Form of a Confection Having an Acidophilus Content.
Claims use since Oct. 18, 1932.

Ser. No. 331,590. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y. Filed Oct. 26, 1932.

Corlon

For Rouge, Cleansing Cream, Bleach Cream, Foundation Cream, Pore Lotion, Wrinkle Cream, Dusting Powder, Toilet Water, Tooth Paste, Pore Paste, Massage Cream, Lipstick, Cold Cream, Depilatory, After Shaving Lotion, Nail Polish, Nail Polish Remover, (a Liquid Preparation); Talc, Witch Hazel, Vanishing Cream, Muscle Oil, Brilliantine, Hand Cream, Double Compact, Containing Powder, Rouge and Lipstick, Mouth Wash, Liquid Cleanser a Facial Preparation, Bleaching Lotion, Bath Salts, Bay Rum, Face Powder, Summer Tan Lotion, Wave Set, Shampoo, (a Liquid Preparation); Perfume, Astringent Tonic, Hand Lotion, Eyebrow Pencil, Nail White, Cuticle Remover, (a Liquid Preparation); Antiseptic, Skin Freshener, (a Liquid Preparation); Nourishing Cream, Sunburn Cream, Deodorant, Eye Shadow, Hair Tonic, Tissue Cream.
Claims use since Sept. 26, 1932.

Ser. No. 331,591. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y. Filed Oct. 26, 1932.

Leelon

For Rouge, Cleansing Cream, Bleach Cream, Foundation Cream, Pore Lotion, Wrinkle Cream, Dusting Powder, Toilet Water, Tooth Paste, Pore Paste, Massage Cream, Lipstick, Cold Cream, Depilatory, After Shaving Lotion, Nail Polish, Nail Polish Remover, (a Liquid Preparation); Talc, Witch Hazel, Vanishing Cream, Muscle Oil, Brilliantine, Hand Cream, Double Compact, Containing Powder, Rouge and Lipstick, Mouth Wash, Liquid Cleanser, a Facial Preparation; Bleaching Lotion, Bath Salts, Bay Rum, Face Powder, Summer Tan Lotion, Wave Set, Shampoo, (a Liquid Preparation); Perfume, Astringent Tonic, Hand Lotion, Eyebrow Pencil, Nail White, Cuticle Remover, (a Liquid Preparation); Antiseptic, Skin Freshener, (a Liquid Preparation); Nourishing Cream, Sunburn Cream, Deodorant, Eye Shadow, Hair Tonic, Tissue Cream.
Claims use since Sept. 26, 1932.

Ser. No. 331,604. WILLIAM ROOK NELSON, Dallas, Tex. Filed Oct. 25, 1932.

NELSON'S WORLD WONDER

For Preparation for Scalp Diseases, Rheumatism, and Skin Diseases.
Claims use since Oct. 29, 1929.

Ser. No. 331,622. H. J. MAYER & SONS CO., Chicago, Ill. Filed Oct. 27, 1932.

UNIVERSAL CURING SALZ

Applicant disclaims the words "Curing Salz" apart from the mark shown.
For Meat Curing Compound.
Claims use since Oct. 1, 1931.

Ser. No. 331,625. SKAT-A-RAT CORPORATION, Providence, R. I. Filed Oct. 27, 1932.

SKAT-A-RAT

For Preparation for Use as a Rodent Exterminator.
Claims use since Dec. 15, 1931.

Ser. No. 331,654. THE SKOOT COMPANY, Hamilton and Dayton, Ohio. Filed Oct. 28, 1932.

SKOOT

For Liniment.
Claims use since Sept. 1, 1932.

Ser. No. 331,780. GEORGE W. GARNER, doing business as The Gar-Herba-A Co., North Wales, Pa. Filed Nov. 1, 1932.

Gar-Herb-A

No claim is made to the word "Herb" apart from the mark shown in the drawing.
For Compound of Herbs for Making a Decoction to be Used by Diabetics.
Claims use since Oct. 22, 1932.

Ser. No. 331,820. EMPIRE STATE PRODUCTS CO., Yonkers, N. Y. Filed Nov. 2, 1932.

NO-KARBON



Applicant disclaims the words "No-Karbon" appearing in the drawing apart from the mark shown.
For Preparation for Use as a Carbon Remover for Internal Combustion Engines.
Claims use since Oct. 12, 1932.

Ser. No. 331,863. HARRY D. KOENIG, doing business as Anre, Cosmetician, New York, N. Y. Filed Nov. 3, 1932.



For Face Powder, Lip Stick, Face Rouge, Cleansing Cream, Cold Cream, Foundation Cream, Astringent Lotion, Nail Polish, Liquid Nail Polish Remover, Tissue Cream, Mascara, Eye Shadow Preparation, Hand Lotion, Cucumber Face Cream and Muscle Oil, Benzoin and Almond Skin Lotion, Lemon Skin Lotion, Cucumber Skin Lotion, and Brilliantine.
Claims use since Apr. 12, 1932.

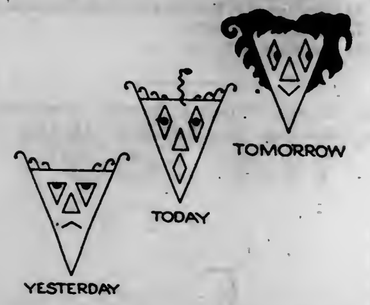
Ser. No. 331,875. J. L. SINYKIN, doing business as De Ciny Paris, St. Paul, Minn. Filed Nov. 3, 1932.



For Perfumes, Toilet Water, Face Powder, Face Cream, and Skin Cream.
Claims use since June, 1931.

Ser. No. 331,879. CLINTON TUSTIN, Denver, Colo. Filed Nov. 3, 1932.

GROWAGAIN



No claim is made to the words "Growagain", "Tomorrow", "Today", and "Yesterday" apart from the trade-mark as shown in the drawing.
For Hair Oil.
Claims use since Oct. 25, 1932.

Ser. No. 331,884. ELIZABETH ARDEN, INC., New York, N. Y. Filed Nov. 4, 1932.

TUBEROSE d'Elizabeth

No claim is made to the exclusive use of the word "Tuberose" apart from the mark shown.
For Perfumes and Perfumery.
Claims use since Sept. 26, 1932.

Ser. No. 331,922. PAULA S. EILERS, doing business as Sani-Skalp Co., Beverly Hills, Calif. Filed Nov. 5, 1932.

SANI-SKALP

The word "Skalp" is disclaimed apart from the mark shown.
For Oil Shampoo.
Claims use since Apr. 24, 1930.

Ser. No. 331,939. ERIN L. VAUGHAN, doing business as Lockhart Bros., Selma, Ala. Filed Nov. 5, 1932.

LEW, LEW!

For Preparation for Use as a Blood Purifier.
Claims use since 1900.

Ser. No. 331,971. JOHN H. WERNER, doing business as G. C. Medicine Company, Clarksville, Ark. Filed Nov. 7, 1932.

G-C

For Preparation for the Treatment of Gonorrhea.
Claims use since Oct. 1, 1932.

Ser. No. 332,084. BROGIROT, INCORPORATED, New York, N. Y. Filed Nov. 12, 1932.

Affroid

For Pharmaceutical Preparation Consisting of an Association of Galenicals and Gland Substances for the Treatment of Sexual Neurosthenia or Fatigue.
Claims use since Aug. 23, 1932.

Ser. No. 332,090. SAM HAGLER, doing business as Perbodent Laboratories, New York, N. Y. Filed Nov. 12, 1932.

PERBODENT

For Tooth Paste, Tooth Powder, and Mouth Wash.
Claims use since June, 1932.

Ser. No. 332,264. PARK DRUG COMPANY, INC., doing business as Park Laboratories, New York, N. Y. Filed Nov. 18, 1932.



The words "Ten Seconds" are disclaimed apart from the mark shown.
For Liquid Dentifrice and Antiseptic.
Claims use since September, 1931.

Ser. No. 332,273. TEXACO SALT PRODUCTS COMPANY, New York, N. Y. Filed Nov. 18, 1932.

TEXACO

For Calcium Chloride.
Claims use since Dec. 14, 1931.

Ser. No. 332,287. JULIA ZAHORAY, South St. Paul, Minn. Filed Nov. 18, 1932.



Julia Zahoray

The signature is the autograph of the applicant and the picture is a portrait of the applicant.
For Palliative for the Treatment of Lung Diseases.
Claims use since Aug. 18, 1932.

Ser. No. 332,302. KIN-SEPTIC COMPANY, doing business as York Pharmacal Company, St. Louis, Mo. Filed Nov. 19, 1932.

BOR-O-SAN

For Antiseptic Preparation Used as a Mouth Wash, Dentifrice, Breath Purifier, Throat and Nasal Spray, Deodorant, Gargle, and Skin Lotion.
Claims use since Apr. 4, 1932.

Ser. No. 332,334. MRS. DR. JOHN L. DAVIS, Irvine, Fla. Filed Nov. 21, 1932.

SAL-I-CAN

For Preparation to be Applied Locally for the Treatment of Groundditch, Creeping Eruption, Infected Wounds, Ringworm, Burns, Ingrown Toenails, Tetter, Eczema, Tender Feet, Corns, Bunions, Hard Shields Under Feet, Athlete's Foot, Warts, Soft Tumors, Small Fatty Tumors, Water Poison, Sores, Cuts, Bruises, Nail Wounds, Punctured Wounds, Insect Bites, Muck Poison, Barber's Itch, and Similar Ailments in Human Beings; and to be Applied Locally for the Treatment of Cuts, Galls, Sores, Wounds, Leaches in Horses and Mules, and Similar Ailments in Animals.
Claims use since April, 1920.

Ser. No. 332,353. THIOPHENE PRODUCTS COMPANY, Chicago, Ill. Filed Nov. 21, 1932.

THIOALBIN

For Protein Compound of Sulphonated Hydrocarbon Sulphur Bodies.
Claims use since Nov. 10, 1932.

Ser. No. 332,356. THIOPHENE PRODUCTS COMPANY, Chicago, Ill. Filed Nov. 21, 1932.

THIONON

For Colorless Hydrocarbon Sulfur Preparation Containing Cyclic Sulfur Compounds.
Claims use since Nov. 10, 1932.

Ser. No. 332,454. HOUBIGANT, INC., New York, N. Y. Filed Nov. 25, 1932.

DIAPASON

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, and Vegetal.
Claims use since Nov. 18, 1932.

Ser. No. 332,462. THE NEW YORKER COSMETIC CORP., New York, N. Y. Filed Nov. 25, 1932.

Sophisticate

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs; Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets; Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.

Claims use since Nov. 14, 1932.

CLASS 7

Cordage

Ser. No. 333,051. AMERICAN CABLE COMPANY, INC., Bridgeport, Conn. Filed Dec. 14, 1932.

'RED HEART'

For Wire Rope and Wire Strand.
Claims use since Nov. 16, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 332,646. COLUMBIA TOOL STEEL COMPANY, Chicago Heights, Ill. Filed Dec. 1, 1932.

UNI-DIE

No claim is made to the word "Die" apart from the mark shown.
For Tool Steel.
Claims use since Nov. 19, 1931.

CLASS 17

Tobacco Products

Ser. No. 331,222. EBY-LOSER COMPANY, Rockford, Ill. Filed Oct. 13, 1932.

Eby's SPECIALS

Any use of the word "Specials," apart from the mark shown is disclaimed.
For Cigars.
Claims use since August, 1889.

CLASS 20

Linoleum and Oiled Cloth

Ser. No. 333,202. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed December 19, 1932.

ALLSTATE

For Linoleum and Oil Cloth.
Claims use since Nov. 15, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 332,700. STEPHEN SLESINGER, INC., New York, N. Y. Filed Dec. 2, 1932.

WINNIE-THE-POOH
CHRISTOPHER ROBIN

The mark is the name of characters in "The Children's Story Book" by A. A. Milne, of London, England.
For Games—Namely, Card Games, Board Games, Educational Card Games, Puzzles, Parlor Board Games; Toys—Namely, Figure Toys, Dolls, Doll Houses, Mechanical Toys, Construction Toys and Roller Toys; and Sporting Goods—Namely, Baseball Bats, Gloves, Masks, Leg Guards, Balls; Tennis Rackets, Nets, Balls; Footballs, Football Masks, Leg Guards, Shin-Guards; Basket Balls and Nets; Lacrosse Clubs, Balls, Body Guards, Masks; Golf Balls, Clubs, Golf Bags; Skates, Both Roller and Ice.
Claims use since Jan. 20, 1930.

Ser. No. 332,793. FRED A. WHITAKER, Columbus, Ga. Filed Dec. 5, 1932.

Zip-Zip

For Toy of the Bandalore Type, Consisting of a Cardboard Disc and Rubber Ball Attached to an Elastic Cord.
Claims use since Sept. 26, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 332,381. PACKAGE MACHINERY COMPANY, Springfield, Mass. Filed Nov. 22, 1932.

CRYSTAL CAP

For Machines for Applying Hoods to Bottles.
Claims use since Nov. 10, 1932.

Ser. No. 332,830. THE BARBASOL COMPANY, Indianapolis, Ind. Filed Dec. 7, 1932.

Barbasol

For Razor Blades.
Claims use since Dec. 1, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 332,788. SHURON OPTICAL COMPANY, INC., Geneva, N. Y. Filed Dec. 5, 1932.



For Spectacles, Eyeglasses, and Parts Thereof.
Claims use since March, 1929.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 332,939. WESCO FOODS COMPANY, Cincinnati, Ohio. Filed Dec. 9, 1932.

Easy task

For Brooms.
Claims use since Nov. 15, 1932.

CLASS 35

Belting, Hose, Machinery Packing, and Non-Metallic Tires

Ser. No. 321,093. BALTIMORE BELTING COMPANY, Baltimore, Md. Filed Nov. 13, 1931.

NAVY SPECIAL
WATERPROOF

The words "Special" and "Waterproof" are disclaimed except when used in connection with the other features of the mark.
For Leather Belting.
Claims use since 1906.

Ser. No. 332,860. REX-HIDE RUBBER MANUFACTURING COMPANY, East Brady, Pa. Filed Dec. 7, 1932.

REX-HIDE

For Molded Friction Linings for Brakes and Clutches. Made Principally of Asbestos Mineral Wear-Resisting Materials Including a Minor Weight Proportion of Gas Black and Hardened Binder Including Rubber.
Claims use since May 7, 1932.

Ser. No. 333,158. THE KELLY-SPRINGFIELD TIRE COMPANY, New York, N. Y. Filed Dec. 17, 1932.



For Resilient Vehicle Tires and Inner Tubes Composed in Whole or in Part of Rubber.
Claims use since March, 1928.

CLASS 39

Clothing

Ser. No. 330,631. THE LAY & WAY COMPANY, New York, N. Y. Filed Sept. 24, 1932.

TROM-BONE

For Corsets, Girdles, Corselettes, Combinations of Brassières, and Underdrawers, Maternity Corsets, and Bandeaux.
Claims use since Aug. 26, 1932.

Ser. No. 331,777. DAVISON-PAXON COMPANY, Atlanta, Ga. Filed Nov. 1, 1932.

Paxleigh

For Leather Shoes.
Claims use since Sept. 12, 1932.

Ser. No. 332,344. JOHN E. LOCK, Milwaukee, Wis. Filed Nov. 21, 1932.

LOCKIX

For Leather Shoes.
Claims use since Feb. 19, 1928.

Ser. No. 332,567. A. H. GEUTING COMPANY, Philadelphia, Pa. Filed Nov. 28, 1932.

ENDURO

For Men's, Women's, and Children's Boots and Shoes Made of Leather, Fabric, Rubber, or Any Combination of One or More of Said Materials.
Claims use since Apr. 8, 1932.

Ser. No. 332,799. WOHL SHOE COMPANY, St. Louis, Mo. Filed Dec. 5, 1932.



The words "Scientifically Developed" and "Approved by Orthopedic Experts" are disclaimed apart from the other features of the mark.
For Women's, Misses' and Children's Arch-Support Shoes.
Claims use since Dec. 19, 1928.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 331,965. VAMP-EEZ COMPANY, New York, N. Y. Filed Nov. 7, 1932.

VAMP-EEZ

For Guard Applied to Shoes in the Nature of an Instep Protector.
Claims use since July 9, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 330,042. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Sept. 1, 1932.

Romanza

For Woolen Piece Goods.
Claims use since Aug. 1, 1932.

Ser. No. 331,829. LANDE & MISKEND, INC., New York, N. Y. Filed Nov. 2, 1932.

Alenchine

For Laces in the Piece and Sold by the Yard.
Claims use since Oct. 27, 1932.

Ser. No. 332,376. MAYO WOOLEN MILLS CO., Millbury, Mass. Filed Nov. 22, 1932.



For Woolen Piece Goods.
Claims use since Oct. 25, 1932.

Ser. No. 332,410. ROBERT HELLER, INC., New York, N. Y. Filed Nov. 23, 1932.



For Upholstery and Drapery Fabrics.
Claims use since Feb. 10, 1932.

Ser. No. 332,573. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Nov. 29, 1932.

Crystalvel

For Pile Fabrics in the Piece.
Claims use since Nov. 22, 1932.

CLASS 43

Thread and Yarn

Ser. No. 332,480. EVERLASTIK, INC., Chelsea, Mass. Filed Nov. 26, 1932.

Yarnlastik

For Yarn.
Claims use since Nov. 17, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 314,198. DENTAL LABORATORY SUPPLY COMPANY, INC., New York, N. Y. Filed May 5, 1931.

"DUPLI-COM"

For Molding Composition Used Primarily for Dental Purposes but Which in Addition Has Other Uses.
Claims use since Apr. 1, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 332,397. CALIFORNIA FRUIT GROWERS EXCHANGE, Los Angeles, Calif. Filed Nov. 23, 1932.

Growers

For Non-Alcoholic, Maltless, Fruit Juices, Fruit Juice Concentrates, Syrups, and Extracts for Making Soft Drinks; Non-Alcoholic, Maltless Fruit Juice Beverages.
Claims use since Nov. 7, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 311,780. HALLER BAKING COMPANY, Pittsburgh, Pa. Filed Mar. 5, 1931.

OLIVER TWIST

A DICKENS OF A GOOD LOAF

The lining shown on the drawing is used for shading purposes only. No claim is made to the words "Good Loaf" apart from the mark as shown.
For Bread.
Claims use since Feb. 4, 1931.

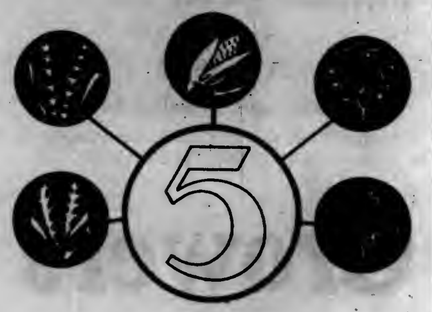
Ser. No. 321,203. FLORIDA FRUIT CANNERS, INC., Frostproof, Fla. Filed Nov. 17, 1931.

CITRA-SALAD

The descriptive word "Salad" is disclaimed apart from the mark shown on the drawing.
For Canned Orange and Grapefruit Sections.
Claims use since Oct. 1, 1931.

Ser. No. 321,610. J. M. PHILLIPS, doing business as Phillips Food Products Company, Tulsa, Okla. Filed Nov. 30, 1931.

PHILLIPS'
FIVE GRAIN FLAKES



Applicant disclaims the right to the exclusive use of the name "Phillips" and "Five Grain Flakes" apart from the trade-mark as shown in the drawing.

For Blended Breakfast Cereal.

Claims use since June, 1930.

Ser. No. 322,047. W. A. JOHNSON, doing business as California Fruit Chimes Co., San Gabriel, Calif. Filed Dec. 12, 1931.

Coffey Royals

For Toffy.

Claims use since Feb. 20, 1931.

Ser. No. 323,328. THE GOLDEN BIRD INC., Chicago, Ill. Filed Jan. 23, 1932.

The Golden Bird FOODS

The words "Bird Foods" except in the form and association shown is not claimed as a trade-mark. The representation of the bird is disclaimed.

For Sicily and Other Canary Seed, Holland and Other Rape Seed, and Mixtures of Such Seeds.

Claims use since Dec. 17, 1931.

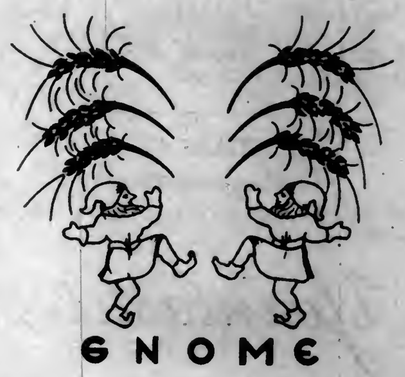
Ser. No. 328,837. CALIENTE FOOD PRODUCTS CO., San Bernardino, Calif. Filed July 16, 1932.

Caliente

For Smoked Fish, Potato, Macaroni, and Vegetable Salads, Mayonnaise, Pickles, Relishes (Pickled), Mush, Mincemeat (Fruit), Pickled Pigs Feet, Philadelphia Scrapple.

Claims use since Nov. 14, 1930.

Ser. No. 329,680. GNOME BAKERY, INC., New York, N. Y. Filed Aug. 19, 1932.



For Bread.

Claims use since Oct. 19, 1931.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 330,124. FEDERAL MILL, INC., Lockport, N. Y. Filed Sept. 6, 1932.

KORS-WEAT

For Wheat Flour and Bread Made from Wheat Flour.

Claims use since Aug. 24, 1932.

Ser. No. 330,191. P. BALLANTINE & SONS, Newark, N. J. Filed Sept. 8, 1932.

ROYAL MOUNTIE

For Malt Syrup.

Claims use since Aug. 29, 1932.

Ser. No. 330,941. WEDDLE TEA COMPANY, New York, N. Y. Filed Oct. 4, 1932.

RAJAH

For Tea.

Claims use since August, 1878.

Ser. No. 331,225. FRANK AND COMPANY, Milwaukee, Wis. Filed Oct. 13, 1932. Under 10-year proviso.

Frank's

For Canned and Prepared Food Products—Namely, Sausages, Meat Roll, Liver Loaf, Salami, Braunschweiger Style Wurst, Bacon, Loin Bacon, Butts, Meat Loaf, Head Cheese, Pig's Feet, Pork Loaf, Frankfurters, Hearts, Spiced Ham, Spiced Luncheon Meat, Minced Sausage, Pimiento and Meat Luncheon Spread, Sulze, Jellied Sulze, Liver Spread, Snouts, Boiled Ham, Jellied Corn Beef, Jellied Tongue, Smoked Ham, Beef Fat, and Chili Con Carne with Frijoles.

Claims use since 1860.

Ser. No. 331,308. GOLDBERG, BOWEN & CO., San Francisco, Calif. Filed Oct. 17, 1932. Under 10-year proviso.

SEA FOAM

For Canned Vegetables.

Claims use since Mar. 1, 1887.

Ser. No. 331,602. HOMER N. YOUNG, doing business as Zingo Products Company, Spokane, Wash. Filed Oct. 26, 1932.



The drawing is lined for red, golden yellow, and blue.

For Breakfast Cereals, Pancake or Waffle Syrups, and Pancake and Waffle Flour.

Claims use since Sept. 15, 1932.

Ser. No. 331,646. LACHOY FOOD PRODUCTS, INC., Detroit, Mich. Filed Oct. 28, 1932.



The trade-mark claimed consists of the characteristic design shown in the drawing irrespective of the particular color in which this design is printed. Although the drawing is lined to indicate the colors black, red, white, and yellow, and stippled to indicate the color gold, and are the colors in which the characteristic trade-mark is ordinarily printed, the lines and stippling shown in the drawing are not intended to be restrictively indicative of any particular color. No claim is made to the rectangular form of the label except in connection with the trade-mark embodying characteristic features of the design as shown in the drawing.

For Canned Food Products—Namely, Bean Sprouts, Water Chestnuts, Bamboo Shoots, Prepared Chop Suey, Chow Mein Noodles, Mixed Imported and Domestic Vegetables, Soy Sauce, and Brown Sauce (Bead Molasses) Containing Soya Bean Extract, Brown Sugar, Water and Salt, Used for Coloring and Sweetening Chop Suey, Chow Mein, and Other Chinese Dishes, as Well as Soups, Stews, Hashes, Gravies, Baking Beans, Ginger Snaps, Dark Breads, and Cakes.

Claims use since Jan. 2, 1932.

Ser. No. 332,038. GENERAL MILLS, INC., Minneapolis, Minn. Filed Nov. 10, 1932.

BEN-HUR

Applicant is the owner of United States registrations numbered 36,172, Apr. 2, 1901; 39,286, Nov. 18, 1902; 40,772, July 14, 1903; 40,936, Aug. 18, 1903; 136,250; Oct. 26, 1920; and 285,170, July 14, 1931.

For Poultry, Dairy, and Stock Feed.

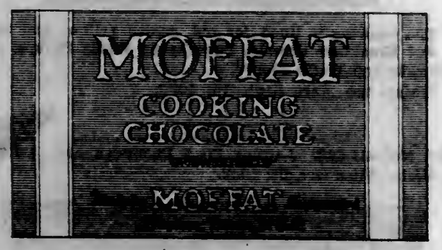
Claims use since Oct. 1, 1902, on dairy and stock feed; and Apr. 7, 1932, on poultry feed.

Ser. No. 332,088. EUROPA SALES CORPORATION, New York, N. Y. Filed Nov. 12, 1932.

RUMJES

For Candy.
Claims use since Nov. 4, 1932.

Ser. No. 332,196. MOFFAT INCORPORATED, Boston, Mass. Filed Nov. 16, 1932.



The background is colored blue, the wording shown being disclaimed apart from the mark shown except the name of the applicant and the name "Moffat" printed in the distinctive style shown.

For Cooking Chocolate.
Claims use since Oct. 10, 1932.

Ser. No. 332,262. CAESAR G. MONGELLI, Brooklyn, N. Y. Filed Nov. 18, 1932.



For Spaghetti Sauce.
Claims use since Oct. 1, 1931.

Ser. No. 332,317. WILLIAMSON CANDY COMPANY, Chicago, Ill. Filed Nov. 19, 1932.

SUNSURE

For Peanut Spread—Namely, Peanut Butter.
Claims use since Sept. 30, 1932.

Ser. No. 332 434. ALBERS BROS. MILLING COMPANY, Portland, Oreg. Filed Nov. 22, 1932.

Paks

For Animal Food.
Claims use since Aug. 12, 1932.

Ser. No. 332,501. VICTOR FLOUR MILLS, INC., Pittsford, N. Y. Filed Nov. 26, 1932.



The lining indicating shading only; no claim being made to the word "Flour" apart from the mark as shown.

For Wheat Flour.
Claims use since Oct. 15, 1916.

Ser. No. 332,558. VALENCIA HEIGHTS ORCHARDS, INC., Covina, Calif. Filed Nov. 28, 1932.

VAL-HI

For Fresh Citrus Fruits.
Claims use since Sept. 29, 1930.

Ser. No. 332,561. WEINRICH PICKLE CO., Los Angeles, Calif. Filed Nov. 28, 1932.

RICHWEIN

For Pickles.
Claims use since Aug. 27, 1930.

Ser. No. 332 650. C. D. KENNY CO., Baltimore, Md. Filed Dec. 1, 1932.

No 730

For Coffee.
Claims use since March, 1929.

CLASS 47

Wines

Ser. No. 331,705. GEO. G. SANDEMAN SONS & CO. LIMITED, London, England. Filed Oct. 29, 1932.



For Wines.
Claims use since Nov. 27, 1930.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 331,779. ALEXANDER FRASER, doing business as A. Fraser & Co., Manchester, England. Filed Nov. 1, 1932.



No claim is made to the words "Liqueur Scotch Whisky" and "Proprietors" except in the association shown on the drawing.

For Whiskey.
Claims use since Oct. 1, 1903.

Ser. No. 333,084. JOSEPH E. SEAGRAM & SONS LIMITED, Waterloo, Ontario, Canada. Filed Dec. 14, 1932.



For Potable Spirits, Whiskey, and Liquors.
Claims use since October, 1926.

Ser. No. 333,215. JOS. S. FINCH & COMPANY, New York, N. Y. Filed Dec. 20, 1932.

GOLDEN WEDDING

For Whiskey or Other Potable Spirits.
Claims use since 1869.

Ser. No. 333,216. JOS. S. FINCH & COMPANY, New York, N. Y. Filed Dec. 20, 1932.

OLD KING COLE

For Whiskey or Other Potable Spirits.
Claims use since Jan. 25, 1930.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 312,908. CARY FARROW, Houston, Tex. Filed Apr. 3, 1931.

Travel-ad

For Advertising Sign Frames for Use on Automobile Spare Tire Carriers.
Claims use since Apr. 1, 1930.

Ser. No. 331,371. S. GOLDSTEIN MONUMENT WORKS, INC., New York, N. Y. Filed Oct. 19, 1932.



The portrait appearing on the drawing is fanciful. No claim is made to the words "Genuine," "Granite," and "Guaranteed" apart from the mark shown on the drawing.
For Finished Monument Stones Used as Grave Stones.
Claims use since Mar. 25, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JANUARY 24, 1933

300,458. DEODORANT WHICH HAS INCIDENTAL CLEANSING PROPERTIES. THE PURO CO., INC., St. Louis, Mo.
Filed September 12, 1932. Serial No. 330,276. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,459. SOAP AND METAL POLISH PREPARATIONS. METRO CHEMICAL PRODUCTS CO., Brooklyn, N. Y.
Filed March 3, 1932. Serial No. 325,027. PUBLISHED NOVEMBER 1, 1932. Class 4.

300,460. BANDAGES FOR USE IN BEAUTY PARLORS. MARY J. PIDGEON, Great Neck, N. Y.
Filed April 30, 1932. Serial No. 326,645. PUBLISHED NOVEMBER 8, 1932. Class 44.

300,461. A DRY CLEANER. THE AMERICAN OIL COMPANY, Baltimore, Md.
Filed June 14, 1932. Serial No. 327,965. PUBLISHED AUGUST 9, 1932. Class 4.

300,462. COSMETIC PREPARATIONS, TOOTH POWDER, FOOT POWDER, ETC. RIMMEL, INC., West Orange, N. J.
Filed June 17, 1932. Serial No. 328,075. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,463. JEWELRY CLEANING SOLUTION. ROBERT E. SMITH, New York, N. Y.
Filed July 21, 1932. Serial No. 328,966. PUBLISHED AUGUST 30, 1932. Class 4.

300,464. VETERINARY PREPARATIONS. SIMEON MOUKAETOFF, Sofia, Bulgaria.
Filed July 26, 1932. Serial No. 329,090. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,465. CHEMICAL PRESERVATIVE FOR FABRICS, AND FIRE EXTINGUISHING FLUID. ELMER RICHARDS COMPANY, Chicago, Ill.
Filed August 17, 1932. Serial No. 329,614. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,466. HAIR RESTORER. LA GERARDINE INC., New York, N. Y.
Filed August 27, 1932. Serial No. 329,900. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,467. SOAP PREPARATIONS FOR TREATING TEXTILE FABRICS AND LEATHER. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany.
Filed August 12, 1932. Serial No. 329,495. PUBLISHED NOVEMBER 8, 1932. Class 4.

300,468. CLEANING COMPOUND FOR PAINTED OR SOILED SURFACES, ETC. AMEDEE M. GATIEN, doing business as P. W. Co., River Rouge, Mich.
Filed August 29, 1932. Serial No. 329,943. PUBLISHED NOVEMBER 8, 1932. Class 4.

300,469. MOISTURE AND ODOR ABSORBENT CHEMICAL COMPOUND TO BE PLACED IN REFRIGERATORS AND THE LIKE. CARDER & CARTER, New Orleans, La.
Filed September 6, 1932. Serial No. 330,119. PUBLISHED NOVEMBER 15, 1932. Class 6.

300,470. ARTIFICIAL ABRASIVE GRAINS. THE CARBORUNDUM COMPANY, Niagara Falls, N. Y.
Filed September 12, 1932. Serial No. 330,245. PUBLISHED NOVEMBER 8, 1932. Class 4.

300,471. ELASTIC BANDAGES. THE KENDALL COMPANY, Chicago, Ill.
Filed September 12, 1932. Serial No. 330,261. PUBLISHED NOVEMBER 8, 1932. Class 44.

300,472. ELECTRIC BLANKETS AND PADS USED FOR THERAPEUTIC PURPOSES. THERM-A-MODE, INC., Orange, N. J.
Filed September 13, 1932. Serial No. 330,319. PUBLISHED NOVEMBER 8, 1932. Class 44.

300,473. SOAP COMPOUND. NATIONAL MILLING & CHEMICAL COMPANY, Philadelphia, Pa.
Filed September 17, 1932. Serial No. 330,429. PUBLISHED NOVEMBER 8, 1932. Class 4.

300,474. INSECTICIDES. MCLAUGHLIN GORMLEY KING CO., Minneapolis, Minn.
Filed September 22, 1932. Serial No. 330,577. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,475. COD LIVER OIL. EZL. DUNWOODY CO., Philadelphia, Pa.
Filed September 23, 1932. Serial No. 330,610. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,476. LAUNDRY SOAP. IOWA SOAP COMPANY, Burlington, Iowa.
Filed September 24, 1932. Serial No. 330,627. PUBLISHED NOVEMBER 8, 1932. Class 4.

300,477. IODINE MOUTH AND THROAT LOZENGES. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y.
Filed March 28, 1932. Serial No. 325,572. PUBLISHED MAY 3, 1932. Class 6.

300,478. COFFEE. JOHN H. WILKINS COMPANY, Washington, D. C.
Filed March 30, 1932. Serial No. 325,670. PUBLISHED MAY 24, 1932. Class 46.

300,479. FOOD PREPARATION AND INGREDIENT CONTAINING MALT, MILK, HONEY, EGGS, AND COCOA. FABRIQUE DE CHOCOLAT ET DE PRODUITS ALIMENTAIRES DE VILLARS, S. A., Fribourg, Switzerland.
Filed April 2, 1932. Serial No. 325,749. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,480. BREAD, CAKES, BISCUITS, RUSKS, COOKIES, WHEAT FLOUR, MALTED WHEAT FLOUR, MALTED BARLEY FLOUR, INFANTS' AND INVALIDS' FOODS, MALT, AND MALT EXTRACTS. MONTGOMERIE & CO. LTD., Glasgow, Scotland.
Filed April 26, 1932. Serial No. 326,568. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,481. WHEAT FLOUR. SYLVESTER E. SANTANGELO, doing business as Baldwin City Mills Company, Youngstown, Ohio.
Filed April 28, 1932. Serial No. 326,594. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,482. CEREAL BREAKFAST FOOD. WILLIAM SAMUEL BROWN, doing business as Louisiana Yeast-Bran Products Company, New Orleans, La.
Filed June 15, 1932. Serial No. 328,000. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,483. FOOD PRODUCTS—NAMELY, FLAVORING EXTRACTS FOR FOOD PURPOSES, OLIVE OIL, SPICES, AND COCOA. PLOUGH, INC., doing business as Puck Food Products Co., Memphis, Tenn.
Filed June 28, 1932. Serial No. 328,250. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,484. TEA. DAVID S. ISRIN, doing business as D. Isrin Co., New York, N. Y.
Filed July 1, 1932. Serial No. 328,492. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,485. BAKERY PRODUCTS—NAMELY, BISCUIT. NATIONAL BISCUIT COMPANY, New York, N. Y.
Filed July 23, 1932. Serial No. 329,022. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,486. DOG FOODS. PURE FOOD FACTORY "HANSA", Mamaroneck, N. Y.
Filed August 3, 1932. Serial No. 329,316. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,487. DAIRY PRODUCTS—NAMELY, BUTTER, MILK, ICE CREAM, CREAM, CHEESE, AND EGGS IN THE SHELL. SIMPSON BROS., INC., doing business as Wakefield Dairy, Washington, D. C.
Filed August 27, 1932. Serial No. 329,904. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,488. CONFECTION—NAMELY, AN ICE CREAM AND CAKE COMBINATION. BEATRICE CREAMERY COMPANY, Chicago, Ill.
Filed September 13, 1932. Serial No. 330,289. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,489. ORANGES, LEMONS, GRAPE-FRUIT, TANGERINES, AND LIMES. THE CITRA PACKING COMPANY, Citra, Fla.
Filed August 9, 1932. Serial No. 329,421. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,490. VEGETABLE OIL FOR SALADS AND COOKING. LEVER BROTHERS COMPANY, Cambridge, Mass.
Filed September 15, 1932. Serial No. 330,374. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,491. VEGETABLE OIL FOR SALADS AND COOKING. LEVER BROTHERS COMPANY, Cambridge, Mass.
Filed September 15, 1932. Serial No. 330,376. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,492. VEGETABLE OIL FOR SALADS AND COOKING. LEVER BROTHERS COMPANY, Cambridge, Mass.
Filed September 15, 1932. Serial No. 330,375. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,493. CONDENSED BUTTERMILK. BORDEN'S PRODUCE COMPANY, INC., Omaha, Nebr.
Filed September 19, 1932. Serial No. 330,444. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,494. PUZZLES. WILLIAM M. ROSE, doing business as University Distributing Company, Boston, Mass.
Filed October 12, 1932. Serial No. 331,200. PUBLISHED NOVEMBER 15, 1932. Class 22.

300,495. FELT. THE FELTERS COMPANY, Boston, Mass.
Filed October 7, 1932. Serial No. 331,045. PUBLISHED NOVEMBER 15, 1932. Class 50.

300,496. PREPARATIONS FOR TREATING THE SCALP AND SKIN. MARTIN E. POPKIN, New York, N. Y.
Filed July 12, 1932. Serial No. 328,738. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,497. CIGARS. JOSE ESCALANTE & CO., Chicago, Ill.
Filed October 6, 1932. Serial No. 330,993. PUBLISHED NOVEMBER 15, 1932. Class 17.

300,498. BRAKE LINING. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio.
Filed October 8, 1932. Serial No. 331,080. PUBLISHED NOVEMBER 15, 1932. Class 35.

300,499. HOSIERY. GOTHAM SILK HOSIERY COMPANY, INC., New York, N. Y.
Filed October 5, 1932. Serial No. 330,950. PUBLISHED NOVEMBER 8, 1932. Class 39.

300,500. [WITHDRAWN.]

300,501. PLAYING CARDS. RUSSELL PLAYING CARD COMPANY, Jersey City, N. J.
Filed October 5, 1932. Serial No. 330,969. PUBLISHED NOVEMBER 15, 1932. Class 22.

300,502. PLAYING CARDS. RUSSELL PLAYING CARD COMPANY, Jersey City, N. J.
Filed October 5, 1932. Serial No. 330,968. PUBLISHED NOVEMBER 15, 1932. Class 22.

300,503. FUR SKINS. A. HOLLANDER & SON, INC., Newark, N. J.
Filed October 5, 1932. Serial No. 330,958. PUBLISHED NOVEMBER 15, 1932. Class 1.

300,504. BANDELORE TOY SPINNING TOPS. DONALD F. DUNCAN, INC., Chicago, Ill.
Filed October 4, 1932. Serial No. 330,924. PUBLISHED NOVEMBER 15, 1932. Class 22.

300,505. POULTRY LITTER. THE PACIFIC LUMBER COMPANY, San Francisco, Calif.
Filed October 1, 1932. Serial No. 330,863. PUBLISHED NOVEMBER 15, 1932. Class 1.

300,506. SAUSAGE CASINGS. BERTH, LEVI & CO. INC., New York, N. Y.
Filed September 29, 1932. Serial No. 330,774. PUBLISHED NOVEMBER 15, 1932. Class 1.

300,507. FOOTBALL GAME PLAYED WITH A BOARD AND PIECES. MUNICIPAL SERVICE CORP., LTD., Los Angeles, Calif.
Filed September 21, 1932. Serial No. 330,548. PUBLISHED NOVEMBER 15, 1932. Class 22.

300,508. CIGARS. LEWIS-LEIDERSDORF CO., Milwaukee, Wis.
Filed September 20, 1932. Serial No. 330,515. PUBLISHED NOVEMBER 15, 1932. Class 17.

300,509. LADIES' HATS. GERMAINE MILLINERY, INC., New York, N. Y.
Filed September 14, 1932. Serial No. 330,344. PUBLISHED NOVEMBER 8, 1932. Class 39.

300,510. MEN'S AND BOYS' HATS AND CAPS. CHICAGO MAIL ORDER COMPANY, Chicago, Ill.
Filed September 14, 1932. Serial No. 330,337. PUBLISHED NOVEMBER 15, 1932. Class 39.

300,511. RUBBER HEELS, RUBBER SOLES, AND HALF SOLES. BRADSTONE RUBBER COMPANY, Woodbine, N. J.
Filed September 7, 1932. Serial No. 330,157. PUBLISHED NOVEMBER 1, 1932. Class 39.

300,512. SHOES CONSTRUCTED OF COMBINATION LEATHER, RUBBER, AND FABRIC. JOHNSON-STEPHENS & SHINKLE SHOE COMPANY, St. Louis, Mo.
Filed September 6, 1932. Serial No. 330,128. PUBLISHED OCTOBER 25, 1932. Class 39.

300,513. HATS FOR MEN AND WOMEN. HAT CORPORATION OF AMERICA, Norwalk, Conn.
Filed September 2, 1932. Serial No. 330,063. PUBLISHED OCTOBER 25, 1932. Class 39.

300,514. LAWN SEEDS AND FIELD AND GRASS SEEDS. BENJAMIN S. GOLDBERG, doing business as Cover Lawn Seed Company, Baltimore, Md.
Filed September 1, 1932. Serial No. 330,031. PUBLISHED NOVEMBER 1, 1932. Class 1.

300,515. LEATHER AND FABRIC SHOES. THE MENIHAN COMPANY, Rochester, N. Y.
Filed August 29, 1932. Serial No. 329,956. PUBLISHED OCTOBER 25, 1932. Class 39.

300,516. LEATHER AND FABRIC SHOES. THE MENIHAN COMPANY, Rochester, N. Y.
Filed August 29, 1932. Serial No. 329,955. PUBLISHED NOVEMBER 8, 1932. Class 39.

300,517. LADIES' AND MEN'S LEATHER GLOVES. GLOVECRAFT, INC., Johnstown, N. Y.
Filed August 27, 1932. Serial No. 329,894. PUBLISHED NOVEMBER 8, 1932. Class 39.

300,518. BANDELORE TOY SPINNING TOPS. DONALD F. DUNCAN, INC., Chicago, Ill.
Filed June 1, 1932. Serial No. 327,628. PUBLISHED NOVEMBER 15, 1932. Class 22.

300,519. EMPTY PAPER BOARD BOXES USED IN THE SALE OF CLOTHING. KNOTHE BROTHERS COMPANY, INC., New York, N. Y.
Filed April 19, 1932. Serial No. 326,260. PUBLISHED NOVEMBER 15, 1932. Class 2.

300,520. LADIES' AND MISSES' HATS. LEECH & RAPPORT INC., New York, N. Y.
Filed July 13, 1932. Serial No. 328,756. PUBLISHED OCTOBER 18, 1932. Class 39.

300,521. SOCK LININGS FOR THE INSIDE OF SHOES. WILLIAM GREILICH & SONS, INC., Brooklyn, N. Y.
Filed July 5, 1932. Serial No. 328,554. PUBLISHED NOVEMBER 15, 1932. Class 39.

300,522. REPAIRED AND REBUILT SHOES FOR MEN, WOMEN, AND CHILDREN, OF LEATHER, FABRIC, RUBBER COMPOSITION, OR COMBINATION OF THESE MATERIALS. GEORGE BUREMAN, Omaha, Nebr.
Filed July 5, 1932. Serial No. 328,544. PUBLISHED OCTOBER 18, 1932. Class 39.

300,523. SILK FABRICS IN THE PIECE. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y.
Filed July 1, 1932. Serial No. 328,502. PUBLISHED AUGUST 9, 1932. Class 42.

300,524. LADIES' AND CHILDREN'S HATS. WILLIAMS HAT STORES INC., St. Louis, Mo.
Filed June 27, 1932. Serial No. 328,343. PUBLISHED OCTOBER 25, 1932. Class 39.

300,525. CHILDREN'S DRESSES, PAJAMAS, PLAY SUITS, CREEPERS, ROMPERS, SMOCKS, SUN-SUITS, BEACH-TOGS, BEACH ROBES, BATH-ROBES, COMBINED OVERALL PLAY SUITS, BLOOMERS, PANTIES, CAPS, BONNETS, AND BERETS. OSGOOD & SONS INC., Decatur, Ill.
Filed June 18, 1932. Serial No. 328,103. PUBLISHED NOVEMBER 1, 1932. Class 39.

300,526. SHOE STIFFENER PARTS—NAMELY, BOX TOES SUITABLE FOR USE IN STIFFENING THE FORE PARTS OF SHOES. ARDEN BOX TOE COMPANY, Watertown, Mass.
Filed June 2, 1932. Serial No. 327,644. PUBLISHED OCTOBER 25, 1932. Class 39.

300,527. MEN'S SHOES MADE OF LEATHER WITH EITHER LEATHER OR RUBBER SOLES. FRIENDLY SHOE COMPANY, Milford, Mass.
Filed May 20, 1932. Serial No. 327,275. PUBLISHED AUGUST 2, 1932. Class 39.

300,528. CHILDREN'S PLAYSUITS. NORTHBILT MANUFACTURING CO., Minneapolis, Minn.
Filed September 21, 1932. Serial No. 330,550. PUBLISHED NOVEMBER 8, 1932. Class 39.

300,529. MEN'S WORK, DRESS, AND NEGLIGEE SHIRTS. WORTHY MANUFACTURING COMPANY, Chicago, Ill.
Filed September 20, 1932. Serial No. 330,532. PUBLISHED NOVEMBER 8, 1932. Class 39.

300,530. HOSIERY. IPSWICH MILLS, INC., Gloucester, Mass.
Filed April 15, 1932. Serial No. 326,145. PUBLISHED NOVEMBER 1, 1932. Class 39.

300,531. SALTS OF AMMONIA FOR FERTILIZER. SHELL CHEMICAL COMPANY, San Francisco, Calif.
Filed April 11, 1932. Serial No. 326,000. PUBLISHED NOVEMBER 15, 1932. Class 10.

300,532. CERTAIN NAMED WEARING APPAREL. VANITY FAIR SILK MILLS, Reading, Pa.
Filed August 24, 1932. Serial No. 329,810. PUBLISHED NOVEMBER 8, 1932. Class 39.

300,533. FACE CREAMS. MAYNARD, INC., Chicago, Ill.
Filed September 12, 1932. Serial No. 330,270. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,534. CHEMICAL POWDER TO BE DISSOLVED IN WATER TO TREAT SILK STOCKINGS TO FURTHER WEAR. SYDNEY M. BRUCKHEIMER, doing business as Susco Sales Co., Buffalo, N. Y.
Filed September 9, 1932. Serial No. 330,197. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,535. PREPARATION FOR USE AS A DEODORANT AND PERSPIRATION CORRECTIVE. CLYDE S. SMITH, doing business as O-De-Co., Dallas, Tex.
Filed July 11, 1932. Serial No. 328,719. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,536. DIGITALIS IN SOLID AND LIQUID FORM. FREDERICK A. UPSHER SMITH, doing business as Upsher Smith Co., Minneapolis, Minn.
Filed July 2, 1932. Serial No. 328,540. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,537. HAIR PRESSING OIL AND HAIR RESTORER. ROBERTA GORDON, San Francisco, Calif.
Filed June 28, 1932. Serial No. 328,351. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,538. TRENCH COATS, MEN'S AND BOYS' TOP COATS, MEN'S AND BOYS' TROUSERS, RIDING BREECHES, KNICKERS, JACKETS, MACKINAWS, MEN'S AND BOYS' ONE AND TWO PIECE SUITS. JACOB C. LAMM, Baltimore, Md.
Filed August 30, 1932. Serial No. 329,974. PUBLISHED NOVEMBER 8, 1932. Class 39.

300,539. GELATINE SHEETS. CENTRAL IMPORT COMPANY, Chicago, Ill.
Filed August 25, 1932. Serial No. 329,829. PUBLISHED NOVEMBER 15, 1932. Class 1.

300,540. MEN'S AND BOYS' DRESS SHIRTS, WORK SHIRTS, FLANNEL SHIRTS, WINDBREAKERS, BLOUSES, PAJAMAS, NIGHT SHIRTS, UNDERSHIRTS, SHORTS, UNION SUITS, MADE OF COTTON, LINEN, RAYON, WORSTED, FLANNEL, WOOLEN, SILK, OR ANY COMBINATION OF THESE AND OTHER TEXTILES. H. D. BOB COMPANY, INC., New York, N. Y.
Filed August 17, 1932. Serial No. 329,593. PUBLISHED NOVEMBER 1, 1932. Class 39.

300,541. WOMEN'S, MISSES', AND CHILDRENS' DRESSES, SHIRTS, SHORTS, BLOUSES, SKIRTS, SLACKS, LONG PANTS, MIDDIES, PLAYSUITS, AND SUITS. STRAUS, ROYER & STRASS, INC., Baltimore, Md.
Filed August 11, 1932. Serial No. 329,483. PUBLISHED NOVEMBER 1, 1932. Class 39.

300,542. HOSIERY FOR MEN, WOMEN, AND CHILDREN; UNDERWEAR, BLOOMERS, PANTIES, COMBINATIONS (CONSISTING OF A SHIRT AND PANTIES), BRASSIÈRES, PAJAMAS, SHORTS (FOR UNDERWEAR), SHIRTS, (BOTH DRESS AND NEGLIGEE), AND ATHLETIC SHIRTS FOR MEN, WOMEN, AND CHILDREN. PEARCE-DUFFY COMPANY, Mount Pleasant, Mich.
Filed August 3, 1932. Serial No. 329,315. PUBLISHED NOVEMBER 1, 1932. Class 39.

300,543. FRENCH CORD BINDING FOR USE ON BOOTS AND SHOES. PEBO & DANIELS, INC., Jamaica Plain, Mass.
Filed July 30, 1932. Serial No. 329,239. PUBLISHED NOVEMBER 8, 1932. Class 40.

300,544. CERTAIN NAMED WEARING APPAREL. HOOK, LTD., Los Angeles, Calif.
Filed July 23, 1932. Serial No. 329,019. PUBLISHED NOVEMBER 1, 1932. Class 39.

300,545. LEATHER SHOES. WALTER A. FANKHAUSER, doing business as Walters Shoe Company, New York, N. Y.
Filed July 22, 1932. Serial No. 328,983. PUBLISHED NOVEMBER 1, 1932. Class 39.

300,546. LEATHER GLOVES. LOUIS MEYERS & SON, INCORPORATED, New York, N. Y.
Filed July 15, 1932. Serial No. 328,877. PUBLISHED NOVEMBER 15, 1932. Class 39.

300,547. LINOLEUM, FELT BASE FLOOR COVERINGS, AND LINOLEUM LINING FELT. SLOANE-BLABON CORPORATION, Trenton, N. J., and Nicetown, Philadelphia, Pa.
Filed July 18, 1932. Serial No. 328,878. PUBLISHED NOVEMBER 15, 1932. Class 20.

300,548. LINOLEUM WALL COVERING. SLOANE-BLABON CORPORATION, Trenton, N. J., and Nicetown, Philadelphia, Pa.
Filed July 18, 1932. Serial No. 328,877. PUBLISHED NOVEMBER 15, 1932. Class 20.

300,549. PAPER TOWELS. NATIONAL PAPER NAPKIN MFG. CO., Chicago, Ill.
Filed January 13, 1932. Serial No. 322,965. PUBLISHED OCTOBER 11, 1932. Class 37.

300,550. BRUSHLESS SHAVING CREAM. JACK ZWICK, doing business as Menth-A-Frost Products, Cleveland Heights, Ohio.
Filed February 6, 1932. Serial No. 323,927. PUBLISHED NOVEMBER 8, 1932. Class 4.

300,551. CERTAIN NAMED WEARING APPAREL. A. H. GEUTING COMPANY, Philadelphia, Pa.
Filed December 26, 1931. Serial No. 322,531. PUBLISHED OCTOBER 25, 1932. Class 39.

300,552. COSMETIC PREPARATIONS. HARRY D. KOENIG, doing business as Harry D. Koenig & Co., New York, N. Y.
Filed December 26, 1931. Serial No. 322,465. PUBLISHED OCTOBER 11, 1932. Class 6.

300,553. DIGESTIVE TABLETS. THE VIAVI COMPANY, San Francisco, Calif.
Filed December 21, 1931. Serial No. 322,343. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,554. SHOES MADE OF LEATHER, CLOTH, CANVAS, OR COMBINATIONS THEREOF. BROWN SHOE COMPANY, INC., St. Louis, Mo.
Filed November 19, 1931. Serial No. 321,269. PUBLISHED NOVEMBER 15, 1932. Class 39.

300,555. MALT SYRUP. VAN CAMP HARDWARE & IRON COMPANY, doing business as Ben Hur Food Products, Indianapolis, Ind.
Filed October 3, 1931. Serial No. 319,709. PUBLISHED NOVEMBER 17, 1931. Class 46.

300,556. LADIES' DRESSES. CHAS. KATZ, New York, N. Y.
Filed October 3, 1931. Serial No. 319,696. PUBLISHED NOVEMBER 8, 1932. Class 39.

300,557. COAL. WINDSOR COAL COMPANY, Kansas City, Mo.
Filed September 29, 1931. Serial No. 319,558. PUBLISHED NOVEMBER 15, 1932. Class 1.

300,558. WHEAT FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed September 28, 1931. Serial No. 319,485. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,559. PEANUT BUTTER SANDWICHES. CONSTANTINE ZURAS, doing business as Secret Food Specialty Co., Washington, D. C.
Filed September 25, 1931. Serial No. 319,426. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,560. SNEAKERS AND TENNIS SHOES MADE OF CANVAS AND RUBBER. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y.
Filed September 17, 1931. Serial No. 319,137. PUBLISHED JUNE 7, 1932. Class 39.

300,561. GENERAL TONIC AND COUGH MEDICINE. JOHN C. DEINZER, doing business as The Hy-Ca-Mel Remedy Co., Hamilton, Ohio.
Filed September 10, 1931. Serial No. 318,905. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,562. POPCORN CANDY CONFECTION. EMIL C. ROSCHMAN, doing business as Brownie's Corn Shop, Belvidere, Ill.
Filed September 4, 1931. Serial No. 318,810. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,563. ELECTRICALLY OPERABLE HEARING AIDS. E. A. MYERS AND SONS, Pittsburgh, Pa.
Filed August 26, 1931. Serial No. 318,459. PUBLISHED NOVEMBER 8, 1932. Class 44.

300,564. CHEWING GUM. THE BEE BEE CONFECTION COMPANY, Dayton, Ohio.
Filed June 24, 1931. Serial No. 316,229. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,565. APPAREL BELTS FOR MEN, SUSPENDERS AND GARTERS FOR MEN. PIONEER SUSPENDER COMPANY, Philadelphia, Pa.
Filed August 15, 1931. Serial No. 318,017. PUBLISHED SEPTEMBER 22, 1931. Class 39.

300,566. FERTILIZER. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed August 22, 1931. Serial No. 318,326. PUBLISHED NOVEMBER 15, 1932. Class 10.

300,567. CORRUGATED BOXES. CORRUGATED CONTAINER COMPANY, Philadelphia, Pa.
Filed March 11, 1931. Serial No. 311,996. PUBLISHED NOVEMBER 15, 1932. Class 2.

300,568. FRESH VEGETABLES, NAMELY, LETTUCE, CARROTS, PEAS, ETC. A. ARENA & CO., LTD., Los Angeles, Calif.
Filed August 26, 1930. Serial No. 305,024. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,569. AROMATIC SPIRITS OF AMMONIA, CASTOR OIL, CARBOLATED PETROLATUM, ETC. THE KENDALL COMPANY, Chicago, Ill., and Boston, Mass.
Filed March 14, 1932. Serial No. 325,098. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,570. MEDICINAL GARLIC PREPARATIONS, ERGOT PREPARATIONS, ETC. SANDOZ CHEMICAL WORKS, INC., New York, N. Y.
Filed April 8, 1932. Serial No. 325,920. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,571. CHEMICAL COMPOUNDS TO BE ADDED TO GASOLENE TO IMPROVE COMBUSTION. BURNOL PETROLEUM CO., Los Angeles, Calif.
Filed April 18, 1932. Serial No. 326,276. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,572. ASTHMA INHALANT. DR. ERNST SILTEN, Berlin, Germany.
Filed May 4, 1932. Serial No. 326,762. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,573. SALVE FOR THE TREATMENT OF HORNY INDURATIONS AND/OR THICKENED EPIDERMIC GROWTHS. THE BONTTOO CORN SALVE COMPANY, Toledo, Ohio.
Filed May 12, 1932. Serial No. 327,086. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,574. TEETHING RINGS OR INFANT PACIFIERS. HAROLD C. DESBECKER, doing business as Tic Toc Toy Company, Buffalo, N. Y.
Filed June 6, 1930. Serial No. 302,214. PUBLISHED NOVEMBER 8, 1932. Class 44.

300,575. TOOTH PASTE CONTAINING THE FOLLOWING NATURAL ELEMENTS: ALUMINUM, SILICA, IODINE, OXYGEN, HYDROGEN, CARBON, AND SODIUM FOR EXTERNAL APPLICATION IN THE TREATMENT OF INFECTED GUMS AND PUS POCKETS AROUND THE TEETH. GLY-SER-DINE CHEMICAL COMPANY, Milwaukee, Wis.
Filed August 8, 1932. Serial No. 329,414. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,576. MEDICINAL PREPARATION FOR THE RELIEF OF DISTRESS AND DISORDERS OF THE NERVOUS SYSTEM DUE TO CHANGE OF LIFE, SLEEPLESSNESS, NEURASTHENIA, AND CONDITIONS OF EXCITEMENT OF THE NERVOUS SYSTEM. P. O. BUGGE, Bisbee, N. Dak.
Filed August 6, 1932. Serial No. 329,370. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,577. ANTACID, ANTIPYRETIC TABLET. OTIS CLAPP & SON, INC., Boston, Mass.
Filed July 29, 1932. Serial No. 329,177. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,578. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. ELWOOD J. GOODIER, doing business as The Goodier Company, Dallas, Tex.
Filed August 1, 1932. Serial No. 329,260. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,579. EAU DE COLOGNE. FERD. MÜLHENS, INC., New York, N. Y.
Filed July 27, 1932. Serial No. 329,119. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,580. EAU DE COLOGNE, PERFUMERY, HAIR TONICS, SHAMPOO, POMADE, BRILLIANTINE, COLD CREAM, VANISHING CREAM, ROUGE, FACE POWDER, BABY POWDER, AFTER-SHAVING LOTION, TOOTH-PASTE, MOUTH WASH. PREPARATION FOR THE TREATMENT OF THE SCALP, AND ETHEREAL OILS. FERD. MÜLHENS, INC., New York, N. Y.
Filed July 27, 1932. Serial No. 329,118. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,581. HAIR DRESSING PREPARATIONS AND BRILLIANTINE. HELEN G. FLATEN, Los Angeles and Huntington Park, Calif.
Filed July 25, 1932. Serial No. 329,046. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,582. SPECIAL FOOD PREPARATIONS INTENDED TO FACILITATE X-RAY EXAMINATIONS OF THE STOMACH AND ALIMENTARY CANAL. CHARLES HEUDEBERT, Nanterre, France.
Filed March 4, 1932. Serial No. 324,789. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,583. FRUIT JELLIES, APPLE BUTTER, ORANGE MARMALADE, GRAPE JAM, RED CHERRIES, GREEN CHERRIES, FRUIT PRESERVES, AND PEANUT BUTTER. THE FRIEDMAN MANUFACTURING COMPANY, doing business as Pantry Maide Products Co., Chicago, Ill.
Filed February 27, 1932. Serial No. 324,555. PUBLISHED NOVEMBER 8, 1932. Class 46.

300,584. HOSIERY. MASSACHUSETTS KNITTING MILLS, Boston, Mass.
Filed February 23, 1932. Serial No. 324,389. PUBLISHED APRIL 26, 1932. Class 39.

300,585. MEDICINES AND CHEMICAL PREPARATIONS. AUGUST KARRETH, doing business as Luitpold-Werk, Chemisch-Pharmazeutische Fabrik, Munich, Germany.
Filed February 16, 1932. Serial No. 324,225. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,586. BEAUTY CREAMS. GLADYS V. MCCUNE, New York, N. Y.
Filed February 15, 1932. Serial No. 324,215. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,587. PERFUMES AND OTHER TOILET PREPARATIONS AND COSMETICS — NAMELY, TOILET CREAM, TOILET WATER, HAIR TONIC, FACE POWDER, BATH SALTS, BRILLIANTINE, BANDOLINE, ROUGE, VEGETAL, SHAMPOOS, AND TALCUM POWDER. D. F. MANAHAN, doing business as Chabot, Los Angeles, Calif.
Filed February 8, 1932. Serial No. 323,953. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,588. HAIR COLORING REMOVER. PARAGON DISTRIBUTING CORP., New York, N. Y.
Filed February 5, 1932. Serial No. 323,871. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,589. ANTISEPTIC OIL FOR THE TREATMENT OF THE HAIR AND SCALP. PARAGON DISTRIBUTING CORP., New York, N. Y.
Filed February 5, 1932. Serial No. 323,870. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,590. CORSETS, CORSELETTES, STEP-IN CORSETS, AND GIRDLES. FRANCO CORSET COMPANY, New York, N. Y.
Filed January 21, 1932. Serial No. 323,239. PUBLISHED JUNE 14, 1932. Class 39.

300,591. PREPARATION FOR THE TREATMENT OF SKIN DISEASES, SUMAC, OAK, AND IVY POISONS, WINDBURN, SUNBURN, HEAT RASH, ECZEMA, AND PIMPLES. CHARLES EDWIN JACKSON, doing business as The Charlain Co., Philadelphia, Pa.
Filed June 17, 1932. Serial No. 328,063. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,592. POWDER FOR TREATMENT OF EPIDERMOPHYTON, TRICHOPHYTON, AND SKIN DISEASES OF LIKE CHARACTER CAUSED BY PERSPIRATION, AND CHAFING OF THE SKIN. AARON B. COHN, doing business as The Athleve Company, Toledo, Ohio.
Filed June 15, 1932. Serial No. 328,050. PUBLISHED AUGUST 16, 1932. Class 6.

300,593. A FOOD PREPARATION IN THE NATURE OF A MEDICINE ADAPTED TO BE MIXED WITH OTHER FOODS FOR HELPING TO NATURALLY CORRECT CONSTIPATION AND CHANGE THE INTESTINAL FLORA AND TO REGULATE THE BOWELS. SYLADEX PRODUCTS CORPORATION, New York, N. Y.
Filed June 14, 1932. Serial No. 327,991. PUBLISHED SEPTEMBER 6, 1932. Class 6.

300,594. INSECTICIDE, DISINFECTANT, AND DEODORANT. THE AMERICAN OIL COMPANY, Baltimore, Md.
Filed June 14, 1932. Serial No. 327,966. PUBLISHED AUGUST 16, 1932. Class 6.

300,595. NITROCELLULOSE LIQUID SOLUTION FOR SIZING AND/OR WATERPROOFING TEXTILES, FABRIC, STRAW, WOOD, METAL, ETC. THE FEDERAL COMPOSITION & PAINT COMPANY, INC., New York, N. Y.
Filed June 11, 1932. Serial No. 327,957. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,596. CREAMS, ASTRINGENTS, FACE POWDER, ETC. MARTHA MATILDA HARPER, INC., Rochester, N. Y.
Filed June 8, 1932. Serial No. 327,821. PUBLISHED NOVEMBER 15, 1932. Class 6.

300,597. MEDICINAL PREPARATION FOR REDUCING THE WEIGHT. BIO MEDICO, INC., New York, N. Y.
Filed September 3, 1932. Serial No. 330,080. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,598. ASTRINGENT FOR THE GUMS. PI-RO-DRAM COMPANY, Lubbock, Tex.
Filed September 2, 1932. Serial No. 330,071. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,599. TOILET ARTICLES. FRANCES GLATZER, doing business as Dure, New York, N. Y.
Filed August 31, 1932. Serial No. 330,011. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,600. ANTISEPTIC, ASTRINGENT, AND STYPTIC PREPARATIONS. SIDNEY B. WOLF, doing business as Ice-It Products, New York, N. Y.
Filed August 30, 1932. Serial No. 330,002. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,601. TOOTH PASTE. CHARLES W. MATTISON, doing business as Citrovite Tooth Paste Co., Los Angeles, Calif.
Filed August 30, 1932. Serial No. 329,997. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,602. DENATURED ALCOHOL AND ALCOHOL OTHER THAN PURE ETHYL ALCOHOL FOR VARIOUS USES IN THE INDUSTRIAL ARTS. CARBIDE AND CARBON CHEMICALS CORPORATION, New York, N. Y.
Filed August 27, 1932. Serial No. 329,886. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,603. CARBON DIOXIDE. MICHIGAN ALKALI COMPANY, Wyandotte, Mich.
Filed August 24, 1932. Serial No. 329,807. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,604. CALCIUM CHLORIDE AND CARBON DIOXIDE. MICHIGAN ALKALI COMPANY, Wyandotte, Mich.
Filed August 24, 1932. Serial No. 329,806. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,605. OINTMENT AND CREAM TO PROTECT THE HANDS AGAINST CAUSTIC BURNS. BOON MANUFACTURING CO., INC., New York, N. Y.
Filed August 23, 1932. Serial No. 329,765. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,606. CREAM AND OINTMENT TO PROTECT THE HANDS AGAINST ACID BURNS AND ANTICORROSION ON BATTERY TERMINALS, CABLES, AND LUGS. BOON MANUFACTURING CO., INC., New York, N. Y.
Filed August 23, 1932. Serial No. 329,764. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,607. MEDICINAL HERB TEAS USED AS BLOOD PURIFIERS AND LAXATIVES. SYLPH LABORATORIES, Inc., New York, N. Y.
Filed August 19, 1932. Serial No. 329,691. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,608. WORM TABLETS FOR POULTRY; OINTMENT FOR TREATING POULTRY, RABBITS, PIGEONS, DOGS, AND CATTLE; PREPARATION FOR TREATING ACUTE BRONCHITIS OF POULTRY, MEDICINE FOR TREATING CHRONIC BOWEL TROUBLES IN POULTRY AND RABBITS, SALVE FOR TREATING CANNIBALISM IN POULTRY; A SPRAY FOR INCUBATORS, POULTRY HOUSES, HUTCHES, KENNELS, LOFTS, BARNS, AND MILK HOUSES; INSECTICIDE; SPRAY FOR POULTRY, PIGEONS, RABBITS, DOGS, AND STOCK; CHICK TABLETS AND CHICK POWDER. CHARLES B. FRETWELL, doing business as Spartan Grain & Mill Co., and Sparco Laboratories, Spartanburg, S. C.
Filed August 10, 1932. Serial No. 329,443. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,609. PREPARATION FOR USE IN REMOVING ODORS FROM REFRIGERATORS. EDWARD H. THOMAS, Philadelphia, Pa.
Filed August 9, 1932. Serial No. 329,434. PUBLISHED NOVEMBER 8, 1932. Class 6.

300,610. MEN'S, WOMEN'S, AND CHILDREN'S STRAW HATS. BRONSTON HAT CO., Plainfield, N. J.
Filed August 26, 1932. Serial No. 329,851. PUBLISHED OCTOBER 25, 1932. Class 39.

300,611. CERTAIN NAMED WEARING APPAREL. VANITY FAIR SILK MILLS, Reading, Pa.
Filed August 24, 1932. Serial No. 329,811. PUBLISHED NOVEMBER 8, 1932. Class 39.

300,612. MEN'S, WOMEN'S, AND CHILDREN'S SHOES, MADE OF LEATHER, FABRIC, RUBBER, AND COMBINATIONS OF SAID MATERIALS. THE P. SULLIVAN SHOE CO., Cincinnati, Ohio.
Filed August 8, 1932. Serial No. 329,415. PUBLISHED OCTOBER 18, 1932. Class 39.

300,613. HOSIERY AND KNITTED AND TEXTILE UNDERWEAR FOR WOMEN AND CHILDREN—DRAWERS, KNICKERBOCKERS, UNION SUITS, COMBINATION UNDERWEAR, STEP-INS, CHEMISES, CORSET COVERS, NIGHTGOWNS, PAJAMAS, PETTICOATS, PRINCESS SLIPS, BANDEAUX, BANDEAU CHEMISES; AND KNITTED AND TEXTILE UNDERWEAR FOR MEN—NAMELY, UNION SUITS, SHIRTS, AND DRAWERS. VANITY FAIR SILK MILLS, Reading, Pa.
Filed August 6, 1932. Serial No. 329,390. PUBLISHED OCTOBER 18, 1932. Class 39.

300,614. KNITTED OUTER GARMENTS FOR WOMEN AND CHILDREN, SUCH AS SWEATERS, KNITTED BLOUSES, KNITTED SKIRTS, KNITTED DRESSES, KNITTED SUITS, KNITTED CAPS, AND KNITTED SCARVES. GEIST & GEIST, INC., New York, N. Y.
Filed August 31, 1932. Serial No. 330,010. PUBLISHED NOVEMBER 1, 1932. Class 39.

300,615. KNITTED SWEATERS, DRESSES, COATS, VESTS, AND BATHING SUITS FOR MEN, WOMEN, AND CHILDREN. HOLLYWOOD KNITTING MILLS, INC., Los Angeles, Calif.
Filed August 30, 1932. Serial No. 329,989. PUBLISHED NOVEMBER 8, 1932. Class 39.

300,616. KNITTED CAPS, HATS, AND SWEATERS FOR WOMEN AND CHILDREN. EAGLE KNITTING MILLS, Milwaukee, Wis.
Filed August 4, 1932. Serial No. 329,327. PUBLISHED NOVEMBER 8, 1932. Class 39.

300,617. GOWNS, DRESSES, AND COATS FOR WOMEN AND MISSES. KIVIETTE POMERANZ, doing business as Kiviette, New York, N. Y.
Filed September 7, 1932. Serial No. 330,164. PUBLISHED NOVEMBER 1, 1932. Class 39.

300,618. LAWN AND FIELD GRASS SEEDS. BENJAMIN S. GOLDBERG, doing business as Cover Lawn Seed Company, Baltimore, Md.
Filed September 1, 1932. Serial No. 330,030. PUBLISHED NOVEMBER 1, 1932. Class 1.

300,619. SENSITIZED PHOTOGRAPHIC PLATES, SENSITIZED PHOTOGRAPHIC FILMS, AND CINEMATOGRAPHIC FILMS. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed May 25, 1932. Serial No. 327,440. PUBLISHED NOVEMBER 22, 1932. Class 26.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

300,620. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) H. P. HINMAN COMPANY, INC., Barre, Vt., assignor to Marr and Gordon, Inc., Barre, Vt., a Corporation of Vermont. Filed Sept. 21, 1928. Serial No. 272,758.

MASTERCRAFT

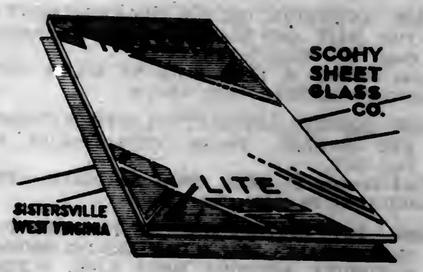
For Granite Monuments.
Claims use since June 2, 1928.

300,621. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) VESTA CONSOLIDATED CORPORATION, Chicago, Ill., Buffalo, N. Y., and Philadelphia, Pa. Filed Nov. 10, 1932. Serial No. 332,051.

PLATE LOCK

For Electric Batteries.
Claims use since 1922.

300,622. (CLASS 33. GLASSWARE.) SCOHY SHEET GLASS COMPANY, Sistersville, W. Va. Filed Sept. 6, 1932. Serial No. 330,148.



For Sheet Glass.
Claims use since Aug. 27, 1931.

300,623. (CLASS 39. CLOTHING.) BEST & COMPANY, INC., New York, N. Y. Filed Aug. 30, 1932. Serial No. 329,977.

SNOW PANTS

For Ladies', Misses' and Children's Overcoats, Hats, Caps, Gloves of Leather, Wool, and Fabric, Sweaters, Scarfs, Shoes of Leather, Rubber, Fabric, and Combinations Thereof, and Overshoes.
Claims use since Oct. 4, 1910.

300,624. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CRESSEY, DOCKHAM & CO., INC., Salem, Mass. Filed July 23, 1932. Serial No. 329,013

LESLIE

For Canned Sardines, Shrimp, Tuna Fish and Salmon, Canned Chicken, Canned Fruits—Namely, Apricots, Apples, Apple Sauce, Blueberries, Cherries, Cranberry Sauce, Peaches, Grape Fruit, Pineapples, Pears, Raspberries, and Fruits for Salads, Canned Vegetables—Namely, Asparagus, Beans, Beets, Corn, Peas and Tomatoes, Loganberries and Marachino Cherries, Fruit Cocktails and Tomato Juice, Potato Salad, Baked Beans, Sauerkraut, Mince Meat, Chili Sauce, Catsup, Picalilli Chow-Chow, and Pickles, Sliced Beef, Salt Fish and Fish Cakes, Bread and Pastry Flour, Rice, Rolled Oats and Corn Starch, Dates, Dried Prunes, Olives and Raisins, Jams, Jellies, Honey, Marmalade and Sandwich Spread, Table Syrups, Malt Syrup, Molasses, Mayonnaise, Mustard, Olive Oil and Vinegar; Macaroni and Spaghetti, Fresh and Salted Peanuts, and Peanut Butter, Tea, Coffee and Cocoa; Evaporated Milk, Canned Spinach and Canned Squash.
Claims use since Feb. 18, 1924.

300,625. (CLASS 39. CLOTHING.) ROMANO, INCORPORATED, New York, N. Y. Filed May 20, 1932. Serial No. 327,288.

Romano INCORPORATED NEW YORK

For Ladies' Shoes Made of Leather, Fabric, and Combinations of These Materials.
Claims use since Oct. 15, 1931.

300,626. (CLASS 45. BEVERAGES, NONALCOHOLIC.) FOSS SCHNEIDER COMPANY, Cincinnati, Ohio. Filed May 16, 1932. Serial No. 327,137.

MR. GOOD

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks, and Syrups, Extracts, and Concentrates Therefor.
Claims use since Nov. 20, 1930.

300,627. (CLASS 17. TOBACCO PRODUCTS.) PENN TOBACCO CO., Wilkes Barre, Pa. Filed Jan. 2, 1932. Serial No. 322,651.

POCONO

For Smoking Tobacco.
Claims use since Nov. 25, 1931.

300,628. (CLASS 15. OILS AND GREASES.) THE WARREN REFINING & CHEMICAL COMPANY, Cleveland, Ohio. Filed Dec. 21, 1931. Serial No. 322,345.

EXTREME PRESSURE

For Lubricating Oils, Gear Lubricating Oil Compounds or Grease Compounds, and Lubricating Greases.
Claims use since Dec. 1, 1931.

300,629. (CLASS 15. OILS AND GREASES.) ASSOCIATED OIL COMPANY, San Francisco, Calif. Filed Nov. 7, 1931. Serial No. 320,964.

Equi fractionated

For Gasoline.
Claims use since Sept. 14, 1931.

300,630. (CLASS 39. CLOTHING.) E. H. HORWOOD & Co., Hoboken, N. J., and New York, N. Y. Filed Oct. 23, 1931. Serial No. 320,360.

"The Shapely"

For Bandeaux and Garter Belts.
Claims use since Sept. 30, 1931.

300,631. (CLASS 39. CLOTHING.) MAIDEN FORM BRASSIERE CO., INC., New York, N. Y. Filed Oct. 26, 1931. Serial No. 320,469.

Lo-Bak

For Brassières, Bandeaux, Corsets, Corselettes, and Girdles.
Claims use since Oct. 15, 1931.

300,632. (CLASS 39. CLOTHING.) DALTON HAT CO., INC., Yonkers, N. Y. Filed Oct. 11, 1930. Serial No. 306,642.

Courtney

For Men's Felt Hats.
Claims use since Sept. 15, 1930.

300,633. (CLASS 39. CLOTHING.) SCOTT & COMPANY LIMITED, Boston, Mass. Filed Nov. 3, 1932. Serial No. 331,874.

Scott & Company
LIMITED

For Men's and Young Men's Suits, Topcoats, Overcoats, Ulsters, Fur Coats, Rain Coats, Trousers, and Sport Coats.
Claims use since January, 1904.

300,634. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) R. LISKA & SON, Chicago, Ill. Filed Oct. 28, 1932. Serial No. 331,647.

Liska's

For Malt Syrup.
Claims use since Oct. 10, 1931.

300,635. (CLASS 37. PAPER AND STATIONERY.) HOLYOKE CARD & PAPER COMPANY, Springfield, Mass. Filed Oct. 25, 1932. Serial No. 331,555.

Tint-cote

For Writing Paper and Printing Papers.
Claims use since May 19, 1930.

300,636. (CLASS 39. CLOTHING.) RICHARDS, SUTTON & THORNTON, INC., New York, N. Y. Filed Oct. 1, 1932. Serial No. 330,866.

WAKEFIELD

For Boys', Misses', Children's and Infants' Knitted Underwear—Namely, Union Suits, Waist Suits, Vests, and Pants; and Men's and Women's Knitted Cotton, Rayon, and Woolen Polo Shirts and Sweaters.
Claims use since Aug. 1, 1929.

300,637. (CLASS 12. CONSTRUCTION MATERIALS.) MADESTONE PRODUCTS ASSOCIATES, Boston, Mass. Filed Sept. 6, 1932. Serial No. 330,170.

"Madestone"

For Portland Cement Concrete Interior Finished Faced Sheathing and Portland Cement Concrete Finished Faced Partition Units.
Claims use since Sept. 1, 1931.

300,638. (CLASS 39. CLOTHING.) IDELLE JOSEPH, Chicago, Ill. Filed Nov. 6, 1931. Serial No. 320,911.

FORM FIT
HOSIERY

For Ladies' Hosiery.
Claims use since May 1, 1930.

300,639. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HERBERT JAMES LAVERS, doing business as Canada Tea Co., Niagara Falls, N. Y., assignor to Canada Tea Ltd., Niagara Falls, N. Y., a Corporation of New York. Filed Jan. 19, 1932. Serial No. 323,171.

CANADA
BLEND

For Tea.
Claims use since Nov. 15, 1931.

300,640. (CLASS 38. PRINTS AND PUBLICATIONS.) R. H. MACY & CO., INC., New York, N. Y. Filed Dec. 23, 1931. Serial No. 322,394.

THE MACY LIBRARY

For Books.
Claims use since Oct 17, 1931.

300,641. (CLASS 32. FURNITURE AND UPHOLSTERY.) WALTER LEARS & SONS, INC., Baltimore, Md. Filed Dec. 10, 1931. Serial No. 322,002.

WALTER
LEARS & SONS
INC.
Manufacturers of Bedding
"SINCE 1885"

For Beds, Bed Springs, Mattresses, and Pillows.
Claims use since Nov. 24, 1931.

300,642. (CLASS 12. CONSTRUCTION MATERIALS.) THE MAJESTIC COMPANY, Huntington, Ind. Filed Oct. 2, 1931. Serial No. 319,657.

ROLL-N-FOLD

For Multiple Section Door.
Claims use since Aug. 31, 1931.

300,643. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) JAMES FREDERICK ONTHANK, Newton, Mass. Filed July 25, 1931. Serial No. 317,329.

"FITZ-EM-ALL"

For Fruit Jar Rings.
Claims use since Feb. 6, 1912.

LABELS

REGISTERED JANUARY 24, 1933

41,683.—*Title:* VALOR SOLID LEATHER SHOES. For Shoes. BIRD & SON, INC., East Walpole, Mass. Published December 12, 1932.

41,684.—*Title:* ENGEL POC-KET ART CORNERS. For Picture Mounting Devices. ENGEL ART CORNERS MFG. Co., Chicago, Ill. Published November 14, 1932.

41,685.—*Title:* TASTEE. For Liquid Malt. GOLD STAR PRODUCTS INC., Detroit, Mich. Published September 6, 1932.

41,686.—*Title:* LASH-LURE THE NEW AND IMPROVED EYE BROW AND LASH DYE. For Eyebrow and Eyelash Dye. LASH-LURE RESEARCH LABORATORIES, INC., Los Angeles, Calif. Published November 21, 1932.

41,687.—*Title:* PRIDE OF RIDGEWAY. For Cantaloupes. THE "PRIDE OF RIDGEWAY" GROWERS ASSOCIATION, Ridgeway, N. C. Published August 6, 1932.

PRINTS

REGISTERED JANUARY 24, 1933

14,032.—*Title:* THIMBLEFULS OF BEAUTY. For Cleansing Cream, Skin Tonic, Antiwrinkle Cream, Ensemble Lipstick Set, Etc. ELIZABETH ARDEN OF NEW YORK LTD., doing business as Elizabeth Arden, New York, N. Y. Published November 1, 1932.

14,033.—*Title:* COON-CHICKEN INN. For Special Fried Quarter, Half, and Whole Chicken, Fried Chicken Sandwich, Chicken Pie, Etc. M. L. GRAHAM, Salt Lake City, Utah; Portland, Oreg.; and Seattle, Wash. Published August 2, 1929.

14,034.—*Title:* COON-CHICKEN INN. For Special Fried Quarter, Half, and Whole Chicken, Fried Chicken Sandwich, Chicken Pie, Etc. M. L. GRAHAM, Salt Lake City, Utah; Portland, Oreg.; and Seattle, Wash. Published August 2, 1929.

CARNEGIE LIBRARY OF ATLANTA

REISSUES

JANUARY 24, 1933

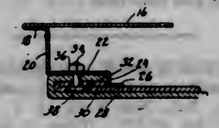
18,718. METHOD OF IMPREGNATING WOOL. EUGEN SCHLIEBER, Esslingen-on-the-Neckar, Germany, assignor to the Firm: Merkel & Kienlin G. m. b. H., Esslingen-on-the Neckar, Germany. Original No. 1,846,908, dated Feb. 23, 1932, Serial No. 414,216, filed Dec. 14, 1929, and in Germany Dec. 18, 1928. Application for reissue filed May 11, 1932. Serial No. 610,701. 8 Claims. (Cl. 91—68.)

8. The method of impregnating wool yarn comprising treating the wool with a saponaceous aqueous emulsion of an oleaginous material capable of forming a saponaceous emulsion and selected from a class consisting of fats and oils, then treating it with an aqueous solution of aluminum formate and drying at temperatures of about 60° to 80° C.

18,719. PROCESS FOR MAKING COD-LIVER-OIL TABLETS. BENJAMIN L. EICHER, Chicago, Ill., assignor, by mesne assignments, to The Dr. Gross Laboratories, Inc., Dayton, Ohio, a Corporation of Delaware. Original No. 1,552,549, dated Sept. 8, 1925, Serial No. 712,555, filed May 12, 1924. Application for reissue filed Jan. 15, 1926. Serial No. 81,569. 17 Claims. (Cl. 167—7.)

1. A process for making pills comprising forming charcoal pills, then applying to the pills a solution of cod liver oil extractives in a volatile solvent and evaporating the solvent.

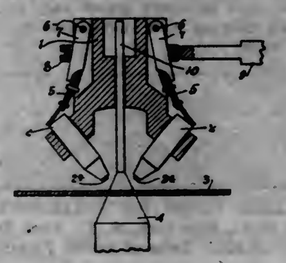
18,720. AUTOMOBILE CLOSED BODY CONSTRUCTION. HERBERT J. WOODALL and MEREDITH S. RANDALL, Detroit, Mich., assignors to Woodall Industries Incorporated, Detroit, Mich., a Corporation of Michigan. Original No. 1,740,489, dated Dec. 24, 1929, Serial No. 126,588, filed Aug. 2, 1926. Application for reissue filed May 5, 1930. Serial No. 449,994. 18 Claims. (Cl. 45—188.)



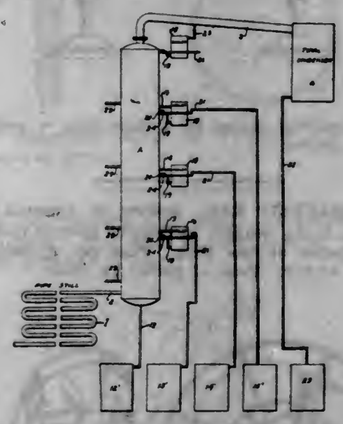
11. In combination, a trim panel, a support for the panel, a fastener connecting the panel with the support, said panel and fastener provided with interconnecting parts securing the fastener to the panel against accidental release therefrom while permitting limited relative movement of the panel with respect to the fastener, said interconnecting parts permitting while frictionally resisting complete disengagement of the fastener from the panel.

18,721. DEVICE FOR PRESSING ARTICLES. PAUL CHRISTEN CHRISTIANSEN, Copenhagen, Denmark. Original No. 1,772,707, dated Aug. 12, 1930, Serial No. 342,628, filed Feb. 25, 1929, and in Denmark Mar. 1, 1928. Application for reissue filed July 31, 1931. Serial No. 554,319. 12 Claims. (Cl. 113—52.)

1. An article pressing device for use in connection with a non-rotating blank including pressure members, a rotatable carrier for said pressure members, pressure exerting means mounted to swing in an axial plane with respect to said carrier and coacting with the pressure members to move the latter in the direction of the blank, and means for varying the position of the pressure exerting means with respect to the carrier.



18,722. METHOD OF AND MEANS FOR RECOVERING PRODUCTS FROM FRACTIONATING CONDENSERS. LESTER W. SNELL, Alton, Ill., assignor, by mesne assignments, to The Lummus Company, Boston, Mass., a Corporation of Delaware. Original No. 1,725,219, dated Aug. 20, 1929, Serial No. 131,012, filed Aug. 23, 1926. Application for reissue filed Feb. 12, 1931. Serial No. 515,394. 11 Claims. (Cl. 196—139.)



6. In the art of distilling hydrocarbons, the method of obtaining a fractional liquid product which consists in passing vapors through a plurality of condensing zones in a fractionating condenser, including passing the vapors from one zone into a mediate point of the succeeding zone, passing liquid condensate in counter-current flow to said vapors in said succeeding zone, continuing all of said condensate downwardly below said mediate point to the bottom of said succeeding zone, introducing steam into the bottom of said succeeding zone to strip light fractions from the condensate, withdrawing a portion of the stripped condensate as a fractional liquid product, and passing the remainder of the condensate as reflux directly into the preceding zone.

PLANT PATENTS

GRANTED JANUARY 24, 1933

53. COLORED SEEDLESS GRAPE FRUIT. ALBERT E. HENNINGER, McAllen, Tex. Filed Jan. 6, 1932. Serial No. 585,079. 1 Claim. (Cl. 47—1.)

A colored seedless grape fruit as shown and described, characterized by a deep pink almost ruby red color of the flesh, and an external pink rind blush, the fruit having few or no seeds.

DESIGNS

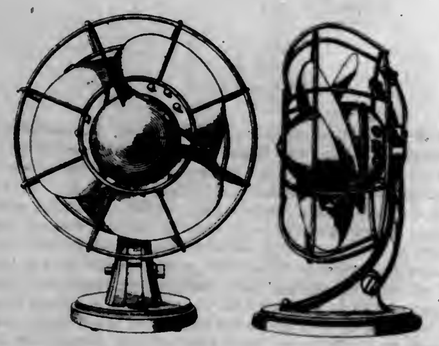
JANUARY 24, 1933

89,075. TABLE LIGHT OR ANALOGOUS ARTICLE. VASCO DA GAMA, New York, N. Y. Filed May 28, 1932. Serial No. 43,922. Term of patent 7 years.



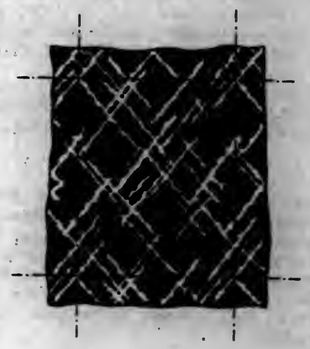
The ornamental design for a table light or analogous article, as shown.

89,076. ELECTRIC FAN. JOSEPH W. GOSLING, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 1, 1932. Serial No. 46,272. Term of patent 14 years.



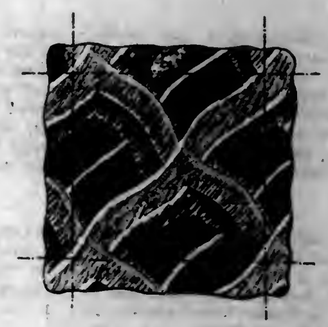
The ornamental design for an electric fan as shown.

89,077. TEXTILE FABRIC OR SIMILAR ARTICLE. ANTON GRULICH, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,367. Term of patent 3½ years.



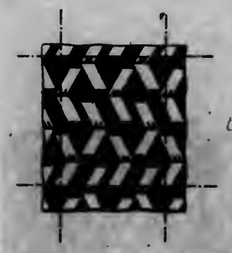
The ornamental design for a textile fabric or similar article as shown and described.

89,078. TEXTILE FABRIC OR SIMILAR ARTICLE. ANTON GRULICH, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,517. Term of patent 3½ years.



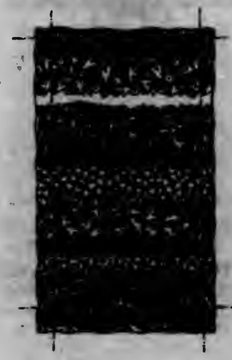
The ornamental design for a textile fabric or similar article as shown and described.

89,079. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,512. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,080. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,513. Term of patent 3½ years.



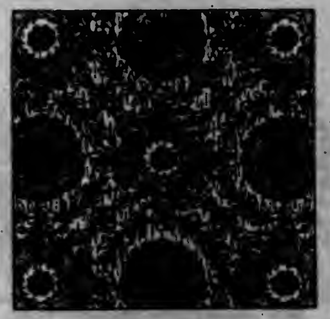
The ornamental design for a textile fabric or similar article as shown and described.

89,081. DRESS. JOSEPH KOHN, St. Louis, Mo. Filed Dec. 2, 1932. Serial No. 46,285. Term of patent 3½ years.



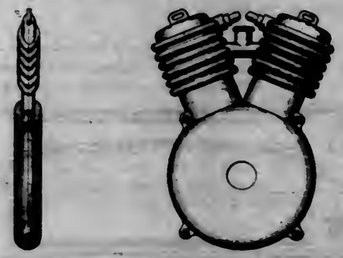
The ornamental design for a dress, as shown.

89,082. CARPET. HENRY C. LA COUTURE, Kearney Township, Hudson County, N. J., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Dec. 8, 1932. Serial No. 46,329. Term of patent 7 years.



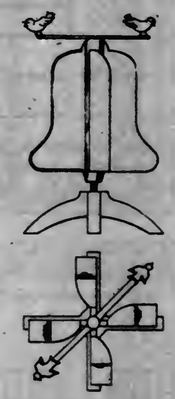
The ornamental design for a carpet substantially as shown and described.

89,083. BICYCLE SPROCKET WHEEL ORNAMENT. GEORGE S. LEWIS, Evanston, Ill., assignor to Metal Specialties Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 16, 1932. Serial No. 43,815. Term of patent 7 years.



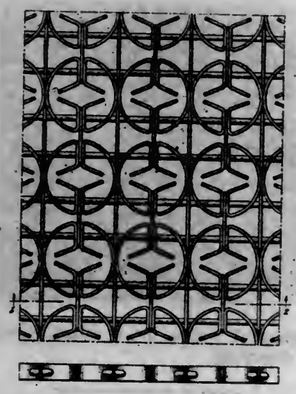
The ornamental design for a bicycle sprocket wheel ornament as shown.

89,084. REVOLVING TOY BELL. NILS LOFQUIST, Dalton, Mass. Filed Nov. 26, 1932. Serial No. 46,185. Term of patent 14 years.



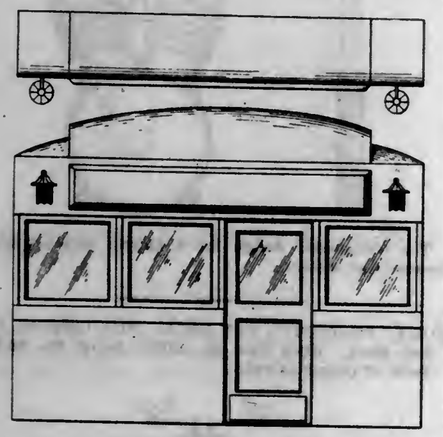
The ornamental design for a revolving toy bell as shown.

89,085. METALLIC MATTING. JOSEPH H. MCFAUL, Queens Village, N. Y., assignor to Cary Products Company, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 11, 1932. Serial No. 43,462. Term of patent 14 years.



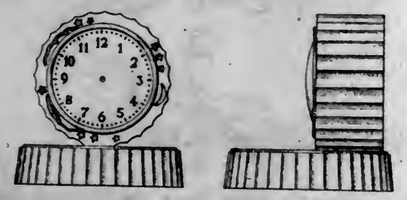
The ornamental design for a metallic matting, substantially as shown.

89,086. STORE FRONT. HUGH J. MCNEIL, Reading, Mass. Filed Mar. 28, 1932. Serial No. 43,805. Term of patent 14 years.



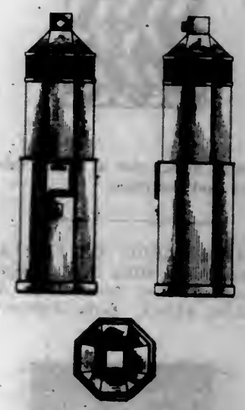
The ornamental design for a store front substantially as shown.

89,087. CLOCK CASE. ALFRED R. NATHAN, New York, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed June 10, 1932. Serial No. 44,045. Term of patent 14 years.



The ornamental design for a clock case, as shown.

89,088. HOT AIR GENERATOR. VICTOR C. NORQUIST, Kansas City, Mo., assignor to Butler Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed Nov. 21, 1932. Serial No. 46,101. Term of patent 3½ years.



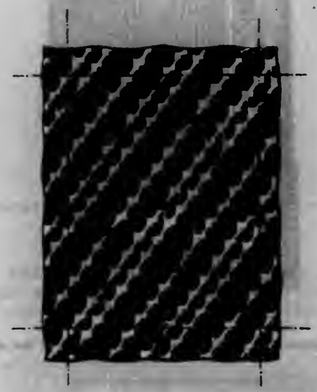
The ornamental design for a hot air generator, as shown.

89,089. TEXTILE FABRIC OR SIMILAR ARTICLE. LEON F. ORCUTT, Brooklyn, N. Y., assignor to William Wilhelm Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,870. Term of patent 3½ years.



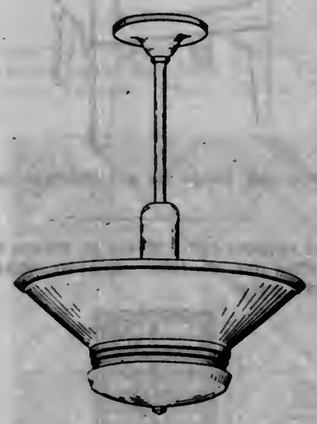
The ornamental design for a textile fabric or similar article as shown and described.

89,090. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN OVERMEYER, New York, N. Y., assignor to William Wilhelm Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,502. Term of patent 3½ years.



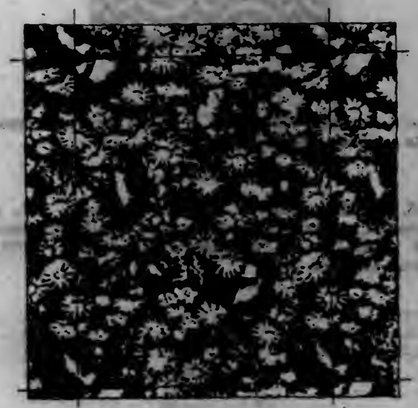
The ornamental design for a textile fabric or similar article as shown and described.

89,091. LIGHTING FIXTURE. RAYMOND V. OWEN, St. Louis, Mo., assignor to The Edwin F. Guth Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 23, 1932. Serial No. 46,134. Term of patent 14 years.



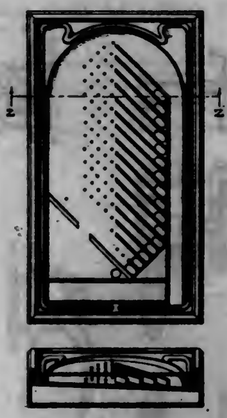
The ornamental design for a lighting fixture, as shown.

89,092. PRINTED TEXTILE FABRIC OR SIMILAR ARTICLE. JEAN PIÉNOZ, Lyon, France, assignor to L. J. Hyams and Company, New York, N. Y. Filed Nov. 23, 1932. Serial No. 46,129. Term of patent 3½ years.



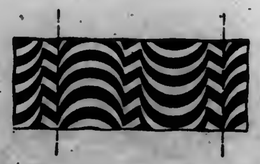
The ornamental design for a printed textile fabric or similar article, as shown and described.

89,093. GAME BOARD OR ANALOGOUS ARTICLE. OSCAR RAY, Dallas, Tex. Filed Nov. 10, 1932. Serial No. 45,869. Term of patent 3½ years.



The ornamental design for a game board or analogous article as shown.

89,094. TEXTILE FABRIC OR SIMILAR ARTICLE. LOUIS J. ROTHER, Westwood, N. J., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,506. Term of patent 3½ years.



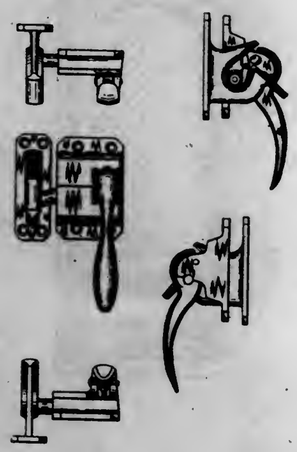
The ornamental design for a textile fabric or similar article as shown and described.

89,095. CAKE. SAMUEL SCHERR, Baltimore, Md., assignor of one-half to H. Merryman Tiralla, Baltimore, Md. Filed Oct. 28, 1932. Serial No. 45,603. Term of patent 14 years.



The ornamental design for a cake, as shown and described.

89,096. LATCH AND KEEPER COMBINATION. THOMAS O. SCHRADER, Allentown, Pa., assignor to The Dent Hardware Company, Fullerton, Pa., a Corporation of Pennsylvania. Filed Nov. 9, 1932. Serial No. 45,855. Term of patent 3½ years.



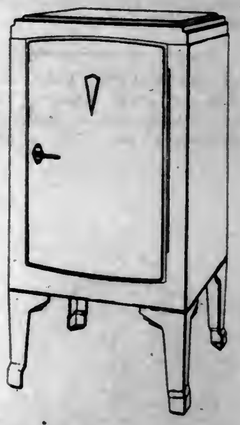
The ornamental design for a latch and keeper combination as shown.

89,097. RADIOCABINET. JOSEPH TAYLOR, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 11, 1932. Serial No. 45,888. Term of patent 7 years.



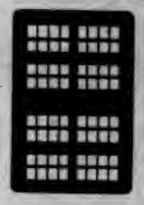
The ornamental design for a radiocabinet as shown.

89,098. REFRIGERATOR CABINET. CHARLES C. THOMAS, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 20, 1932. Serial No. 43,551. Term of patent 14 years.



The ornamental design for a refrigerator cabinet, as shown.

89,099. PLAYING CARD. EDWIN H. WHITE, Worcester, Mass. Filed Nov. 25, 1932. Serial No. 46,149. Term of patent 7 years.



The ornamental design for a playing card as shown and described.

89,100. BOX. JAMES R. WHITE, Flushing, N. Y., assignor to Jenkins Bros., New York, N. Y., a Corporation of New Jersey Filed Oct. 5, 1932. Serial No. 45,228. Term of patent 14 years.



The ornamental design for a box as shown and described.

89,101. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,344. Term of patent 3½ years.



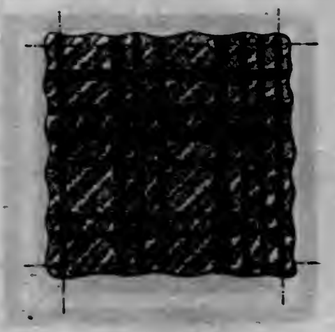
The ornamental design for a textile fabric or similar article as shown and described.

89,102. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,347. Term of patent 3½ years.



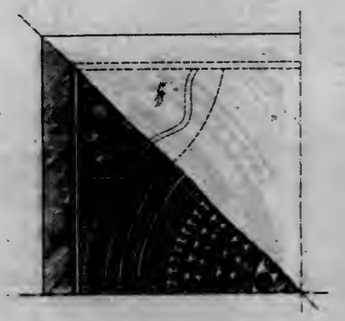
The ornamental design for a textile fabric or similar article as shown and described.

89,103. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,848. Term of patent 3½ years.



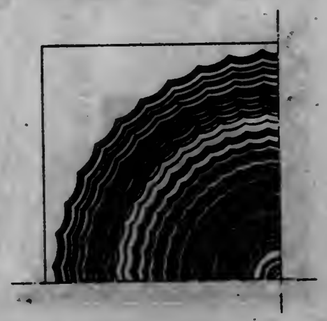
The ornamental design for a textile fabric or similar article as shown and described.

89,104. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,484. Term of patent 3½ years.



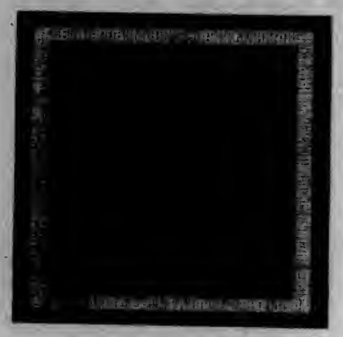
The ornamental design for a textile fabric or similar article as shown and described.

89,105. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,485. Term of patent 3½ years.



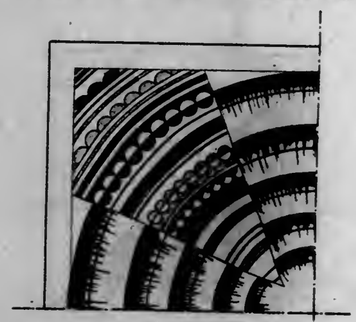
The ornamental design for a textile fabric or similar article as shown and described.

89,106. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,486. Term of patent 3½ years.



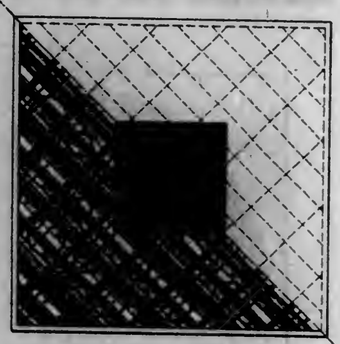
The ornamental design for a textile fabric or similar article as shown.

89,107. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,487. Term of patent 3½ years.



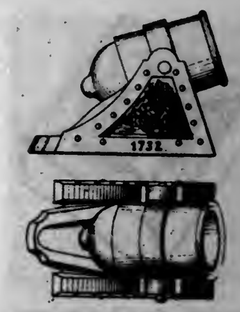
The ornamental design for a textile fabric or similar article as shown and described.

89,108. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,488. Term of patent 3½ years.



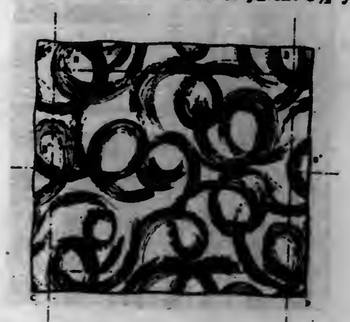
The ornamental design for a textile fabric or similar article as shown and described.

89,109. BOX OR SIMILAR RECEPTACLE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed June 10, 1932. Serial No. 44,043. Term of patent 14 years.



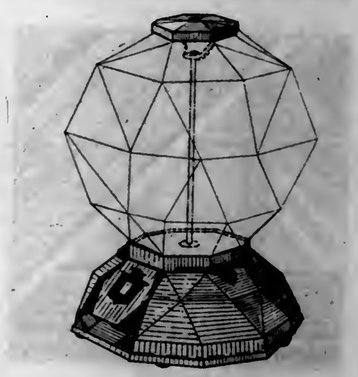
The ornamental design for a box or similar receptacle, as shown.

89,110. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,509 Term of patent 3½ years.



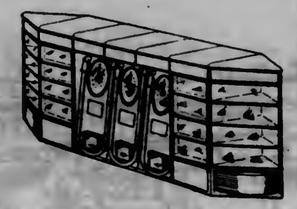
The ornamental design for a textile fabric or similar article as shown and described.

89,111. VENDING MACHINE CASING. DONALD F. HLADKY and JOSEPH F. HLADKY, Jr., Cedar Rapids, Iowa. Filed Nov. 14, 1932. Serial No. 46,072. Term of patent 14 years.



The ornamental design for a vending machine casing, as shown and described.

89,112. MERCHANDISING OR FLUID DISPENSING STRUCTURE. RUSSELL S. KATZ, Hamilton, Ohio. Filed June 10, 1932. Serial No. 44,041. Term of patent 14 years.



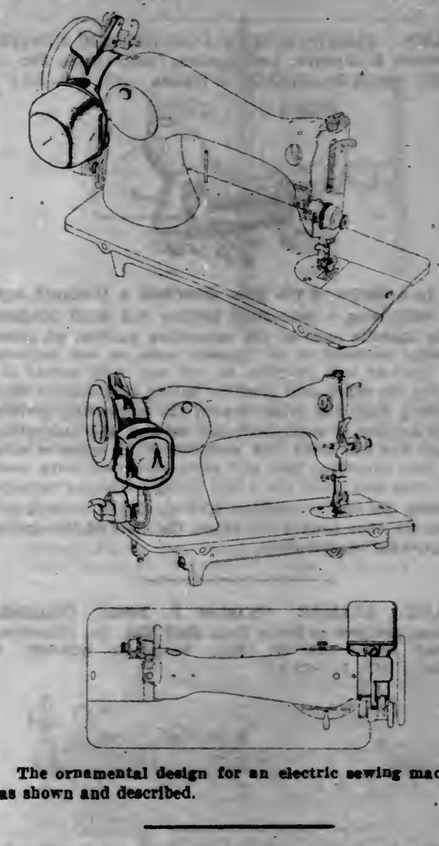
The ornamental design for a merchandising or fluid dispensing structure, substantially as shown and described.

89,113. BOX OR SIMILAR RECEPTACLE. ALFRED R. NATHAN, New York, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed June 10, 1932. Serial No. 44,044 Term of patent 14 years.



The ornamental design for a box or similar receptacle, as shown.

89,114. ELECTRIC SEWING MACHINE. WILBUR J. PEETS, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 8, 1932. Serial No. 45,261. Term of patent 14 years.



The ornamental design for an electric sewing machine, as shown and described.

89,115. DRESS. JOHNNYE LEE CASTON, Chicago, Ill., assignor to The Sterling Company, Chicago, Ill., a Corporation of West Virginia. Filed Dec. 12, 1932. Serial No. 46,487. Term of patent 3½ years.



The ornamental design for the dress as shown.

PATENTS

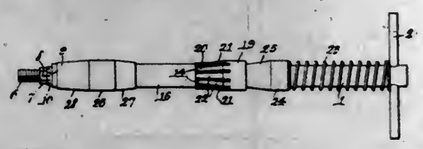
GRANTED JANUARY 24, 1933

1,894,936. FLEXIBLE TUBE COMPRESSING DEVICE. DWIGHT E. AUSTIN, Los Angeles, Calif. Filed Feb. 2, 1931. Serial No. 512,818. 2 Claims. (Cl. 221—60.)



1. In a device of the class described, a U-shaped support comprising a connecting portion and short brackets at the opposite ends of the connecting portion, an arbor rotatably mounted at its opposite ends on and between said brackets and provided at one end with means for rotating the same, said brackets having longitudinal slots extending from the arbor toward the connecting portion of the support, a shoe positioned between the connecting portion and the arbor and provided at its opposite ends with lugs extending into said slots, said shoe being bent away from said arbor, and a leaf spring positioned between the shoe and the connecting portion of the support for urging the shoe toward the arbor, the ends of the spring being located by said slots.

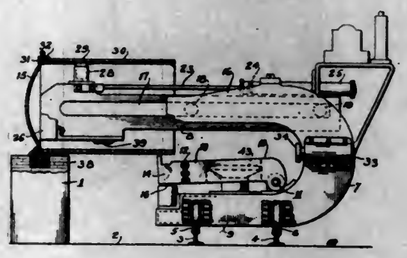
1,894,937. REAMER. CHARLES F. BERRY, Columbus, Kans., assignor to Berry Bros. Tool Mfg. Co., Columbus, Kans. Filed Jan. 20, 1931. Serial No. 510,005. 1 Claim. (Cl. 77—75.5.)



A reamer including a body having a bore extending into one end and a guide slot, a core slidable in the body and adjustable longitudinally thereof, there being an annular series of longitudinal grooves in the core, said grooves and slots registering and each of the grooves increasing in depth toward one end, a pin on the core slidable in the guide slot, radial blades seated in the series of slots and grooves and bearing inwardly against the core, a sleeve adjustably threaded at one end on the body and adjustable for clamping the blades against one end of the slots, said sleeve housing the guide slot and pin, a member slidably mounted on the body and including a collar and an annular series of fingers extending from the collar and between the blades, said fingers being tapered, and extending throughout the length of the blades, a follower slidable on the body and bearing against the fingered pilot, and a spring on the body thrusting constantly through the follower against the fingered member, thereby to hold said member between the blades and against the sleeve.

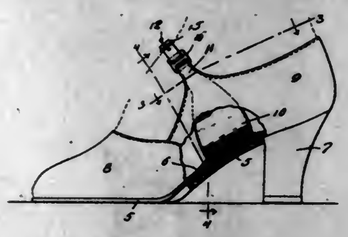
1,894,938. PRESSURE WELDING APPARATUS. FRANK J. BROWN, Washington, Pa., assignor to National Wrought Iron Annealing Box Company, Washington, Pa., a Corporation of Pennsylvania. Filed Sept. 27, 1930. Serial No. 484,889. 10 Claims. (Cl. 78—89.)

3. A pressure welding machine comprising an open gap frame having upper and lower substantially horizontal supports, an arm mounted to slide lengthwise on the upper support and past the end of the lower support, means for moving said arm on said upper support, a die detachably secured to one end of said arm, a bolster pivoted at one end



on the lower support, a die detachably secured to the free end of said bolster, means engaging the lower face of the last named die to swing said bolster toward said arm.

1,894,939. ARCH-SUPPORTING SHOE. LLOYD W. BROWN, Rochester, N. Y., and HERMAN T. WOOD, Camp Hill, Pa. Filed Mar. 10, 1932. Serial No. 598,048. 3 Claims. (Cl. 36—71.)

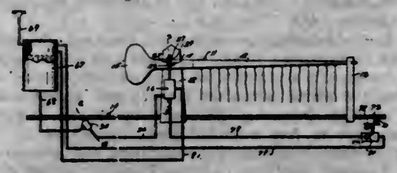


1. A low-cut arch-supporting shoe comprising a sole and heel, a vamp, quarters, an arch-supporting strap positioned upon the inside of the shoe so as to extend under the arch of the foot and upwardly along the inner side of the foot to a point above the inner quarter, an upward strap extension on the inner quarter joined to the adjacent upper end of the arch supporting strap to form a loop, the other end of said arch-supporting strap being connected to the outer side of the shoe, and an adjustable connection between the inner and outer quarters adapted to extend across the instep to secure the shoe on the foot, said loop being slidable through one end of said adjustable connection so that the arch-supporting strap will be pulled upwardly at the inner side of the shoe when said connection is shortened to raise and support the arch of the foot and rock the foot outwardly.

1,894,940. AUTOMATIC CROSSING GATE. JAMES R. BYRNE and DANIEL J. MACINTOSH, Liverpool, Nova Scotia, Canada. Filed Mar. 19, 1931. Serial No. 523,868. 3 Claims. (Cl. 246—272.)

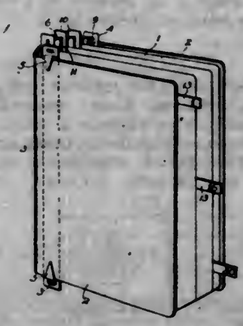
1. A crossing gate and operating means therefor, comprising a pivoted gate, means for constantly urging said gate into open position, a cylinder having an intake port near the bottom and a normally open outlet port intermediate the ends of the cylinder, a piston slidably mounted

in said cylinder and connected to said gate whereby to swing said gate into closed position upon movement of the piston in one direction, said piston closing the outlet port when the gate is open and opening the outlet port when the gate is closed, a pressure member interposed in the path of a car wheel for operation thereby, means connecting the pressure member to the cylinder whereby upon



operation of said pressure member to move said piston beyond the outlet port and coactively swing said gate into closed position, and a releasing member connected to said cylinder and interposed in the path of the car wheel whereby to release the pressure in the cylinder, said gate upon release of the pressure in said cylinder being adapted to automatically swing into open position.

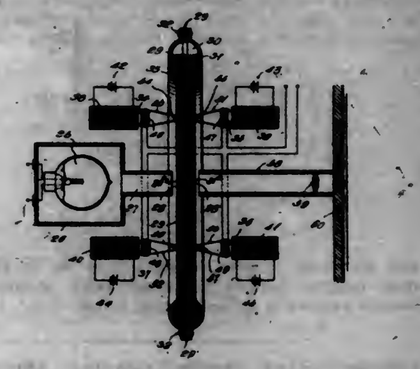
1,894,941. BOOKMARKER. CLARENCE A. CHARBENEAU, Mount Clemens, Mich. Filed Sept. 25, 1931. Serial No. 565,130. 9 Claims. (Cl. 116—119.)



1. A book mark comprising two spans of flexible material, extensible substantially from cover to cover of a book across the top and bottom of the book, means for attaching said spans to the book, in proximity to the book back, and a plurality of marker strips formed of flexible sheet material, insertable at desired points between the book leaves and adapted to project above and below such leaves to engage said spans, the end portions of each marker strip being formed with slots, opening terminally in opposite lateral edges of the strip and extending from their terminal openings toward the adjacent strip extremities.

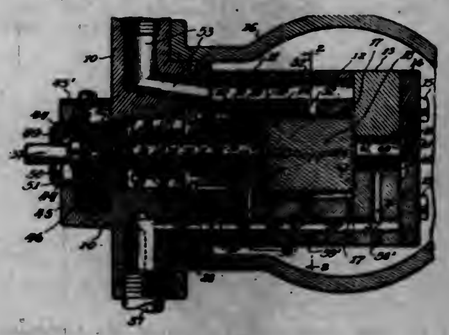
1,894,942. LIGHT MODULATING DEVICE. BEN J. CHROMY, Hopkins, Minn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 28, 1929. Serial No. 343,541. 4 Claims. (Cl. 88—61.)

1. In apparatus of the class described the combination of, a source of light, a diaphragm, a light absorbing medium of fluid consistency, means for directing light rays through said absorbing medium, and magnetically actuated means operated in accordance with signalling energy for actuating said diaphragm and changing the dimensions of the path through said absorbing medium



for causing said absorbing medium to absorb said light rays in variable quantities whereby said light rays are modulated in accordance with said signalling energy.

1,894,943. SEALED COUPLING. JAMES H. DENNEDY, Springfield, Mass., assignor to Rotorite Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 25, 1928. Serial No. 272,665. 1 Claim. (Cl. 286—11.)

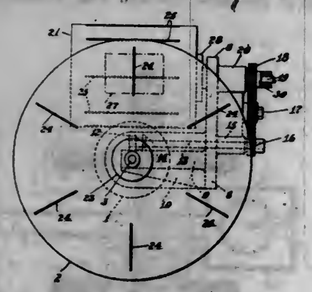


The combination with a compressor comprising a compressor casing, a compressor shaft journaled in the casing and extending out through a wall thereof, the compressor shaft outwardly of the wall being in two parts, a pair of relatively rotatable co-operating sealing members, one carried by the casing and the other mounted on one portion of the shaft, a flexible metallic bellows one end of which is sealed to the shaft mounted sealing member and the other end of which is sealed to the other shaft member,—of means for aligning the shaft mounted sealing member and the second shaft portion to minimize the flexing of the bellows during rotation, comprising a taper joint for the shaft portions which joint is located within the bellows.

1,894,944. TELEVISION APPARATUS AND METHOD. HAROLD P. DONLE, Meriden, Conn., assignor to Radio Inventions, Inc., a Corporation of New York. Filed Feb. 4, 1930. Serial No. 425,785. 5 Claims. (Cl. 178—6.)

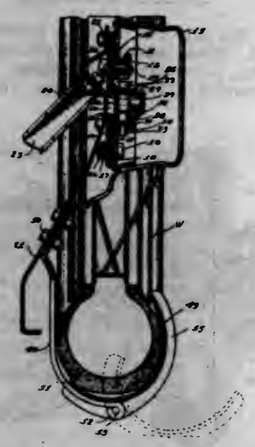
1. In a television apparatus, a drum shaped member having longitudinally disposed elongated slits and a disc

shaped member having radially disposed elongated slits, the slits in the respective members being so proportioned



and positioned relative to each other as to allow by their relative motions the transmission of light in a manner adapted to scan an optical image.

1,894,945. SPARE WHEEL CARRIER AND LOCK. CLARENCE M. ELLENBERGER, Detroit, Mich., and FREDERICK A. SMITH, North Chicago, Ill., assignors to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed July 8, 1931. Serial No. 549,342. 10 Claims. (Cl. 70—90.)



1. In spare wheel carrier structure, the combination of a support forming a seat for the hub of a spare wheel to be carried, an arcuate ledge of hook shaped cross section extending forwardly from said support near the top thereof for receiving the upper part of the wheel hub to suspend the wheel from the support, and means for locking the hub against removal from said ledge.

1,894,946. METHOD FOR ACTIVATING GLOWING CATHODES OR THE LIKE. WERNER ESPE, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany, a German Company. Filed Aug. 14, 1930, Serial No. 475,400; and in Germany Aug. 19, 1929. 3 Claims. (Cl. 250—27.5.)

1. In the manufacture of electron discharge devices comprising a cathode having a coating of barium carbonate, an electrode adjacent said cathode, and a mixture including barium oxide and a reducing agent upon said electrode, the method which comprises heating said carbonate to form barium oxide, applying a potential between said cathode and said electrode whereby said electrode and said mixture are out-gassed by electron bombardment, producing a reaction in said mixture to form metallic barium, applying a negative potential to said cathode and simultaneously heating said electrode to ionize said barium, and depositing said ionized barium on said cathode.

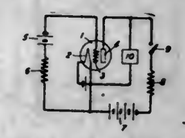
1,894,947. MANUFACTURE OF VACUUM TUBES. WERNER ESPE, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany, a German Company. Filed Aug. 14, 1930, Serial No. 475,401, and in Germany Aug. 17, 1929. 4 Claims. (Cl. 250—27.5.)

1. In the manufacture of electron discharge devices comprising an enclosing vessel, a cathode and an anode within said vessel and a reaction mixture carried by said anode, the method which comprises heating said anode and mixture by high frequency induced currents to a sufficient temperature to free occluded gases therefrom but insufficient to cause reaction in said mixture, supplementing the high frequency heating of said mixture by focussing a concentrated beam of light thereon in order to effect reaction in said mixture, and finally heating said anode to vaporize a product of the reaction.

1,894,948. MANUFACTURE OF ELECTRON DISCHARGE DEVICES. WERNER ESPE, Berlin-Charlottenburg, and HANS KOLLIGS, Berlin, Germany, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany, a German Company. Filed Sept 23, 1930, Serial No. 483,967, and in Germany Oct. 29, 1929. 5 Claims. (Cl. 250—27.5.)

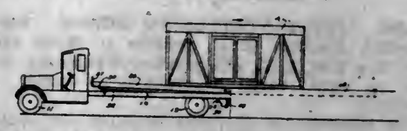
1. In the manufacture of electron discharge devices the method of producing free alkaline earth metal which comprises introducing a compound of said metal into the vessel of the device, decomposing said compound to an oxide, and changing said oxide in the presence of a reaction medium to liberate free metal of alkaline earth.

1,894,949. METHOD AND MEANS FOR ACTIVATING CATHODES. WERNER ESPE, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany, a Company of Germany. Filed Dec. 6, 1930, Serial No. 500,600, and in Germany Mar. 18, 1930. 6 Claims. (Cl. 250—27.5.)



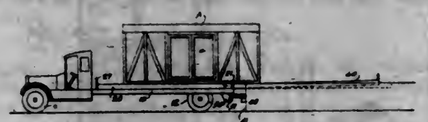
1. In combination, an electron discharge device comprising a cathode, an anode adjacent said cathode, a thermit mixture including an alkaline earth metal compound upon said anode, means for heating said cathode, series means including a source of potential and a stabilising resistance between said anode and said cathode, and indicating means in shunt with said series means.

1,894,950. APPARATUS FOR TRANSFERRING FREIGHT. BENJAMIN F. FITCH, Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 28, 1929. Serial No. 401,816. 11 Claims. (Cl. 214—38.)



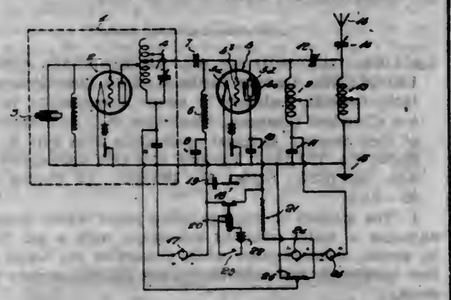
1. An apparatus for transferring demountable bodies between a truck and a station, comprising tipable supports on both the truck and station, and means operated by the movement of the truck for tipping up that end of each support which is distant from the meeting region of the truck and station, whereby a body on the support may be readily rolled from truck to station or vice versa.

1,894,951. APPARATUS FOR TRANSFERRING FREIGHT. BENJAMIN F. FITCH, Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Original application filed Oct. 23, 1929, Serial No. 401,816. Divided and this application filed Oct. 29, 1930. Serial No. 491,929. 12 Claims. (Cl. 214—38.)



1. The combination with a truck, of a tiltable and shiftable support, means for attaching the truck to the support, whereby the truck in driving out may pull the support with it a short distance, and means whereby such outward movement of the support causes the elevation of its inner end to assist in rolling a body from the support onto the truck.

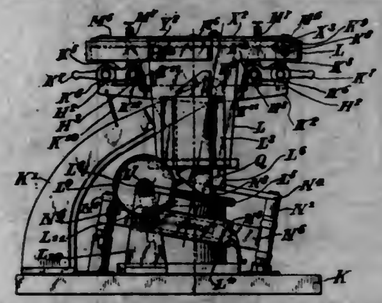
1,894,952. SIGNALING SYSTEM CONTROL. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 4, 1929. Serial No. 368,321. 6 Claims. (Cl. 250—17.)



1. In a keying system for a radio telegraph transmitter, an electron tube having cathode, anode, control grid and shielding grid, said shielding grid being adjacent said anode, a source of anode potential connected to said anode, oscillating circuits connecting the electrodes of said tube, a source of direct current negative biasing potential connected to said shielding grid of value sufficient to apply to said shielding grid a negative potential which will prevent the delivery of oscillations in the output circuit of said tube, a high current limiting resistance, a source of positive operating biasing potential connected through said current limiting resistance between said shielding grid and said cathode, and means inserted in the circuit connecting said source of negative biasing potetial to said shieldig grid for interrupting the application of said negative biasing potential to said shielding grid in accordance with a communication code, whereby the transmission of energy from the output circuit of said tube is controlled in accordance with said communication code.

1,894,953. ART OF MAKING MAPS FROM PHOTOGRAPHS. LODEWYK J. R. HOLST, Brookline, Pa. Filed May 15, 1926. Serial No. 109,257. 21 Claims. (Cl. 33—1.)

18. Apparatus for producing maps from aerial photographs which comprises a device for ascertaining and determining the tilt of the image plane of a photograph at the instant of exposure, which device comprises means for supporting a plurality of images in the same relation to each other as that which they occupied at the instant of exposure, a rotatable shaft for supporting said image-supporting means, the axis of said shaft extending at a predetermined acute angle with respect to a vertical line from



the viewpoint of the lens system of one of the cameras by which said images were produced and being inclined with respect to the plane of the said images, and means for determining when the said images occupy positions upon the tilt-indicating device in a plane having the same angular relation to a horizontal plane as that in which they were located at the instant of exposure.

1,894,954. AERIAL FLARE. LEE P. JOHNSON and THEODORE D. WESTFALL, U. S. Navy, and MAX W. FISCHER, Washington, D. C. Filed Apr. 15, 1932. Serial No. 605,456. 7 Claims. (Cl. 102—24.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

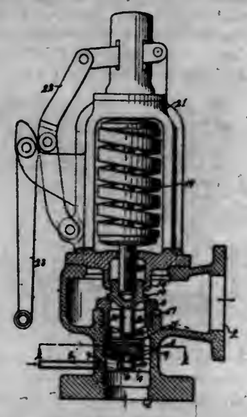


1. An aerial flare including a body, a parachute container within the body, a parachute stowable within the container, an illuminant holder therein and adapted to be supported by the parachute when released, a flexible member disengageably connected with said container and adaptd to sever the end of the flare body therefrom upon release of the latter from a carrying vehicle, and means for connecting the flexible member to the container.

1,894,955. SAFETY VALVE. WILLIAM A. JONES, Westerleigh, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Dec. 6, 1928. Serial No. 324,148. 8 Claims. (Cl. 137—53.)

1. In a safety valve for a steam boiler that produces saturated steam and superheated steam, a spring pressed

valve disc having a stem, means to cause superheated steam to press against the face of said valve disc and



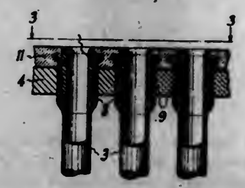
means located on the superheated steam side of said valve disc for causing differential pressure between the saturated and superheated steam to press against said valve stem.

1,894,956. AIR HEATER. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 16, 1929. Serial No. 333,009. 11 Claims. (Cl. 257—224.)



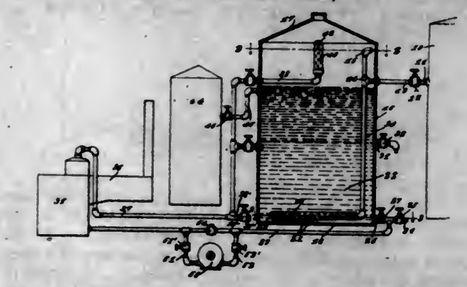
1. In an air heater, tubes, tube plates, a layer of heat insulating material on one of said plates, and extensions on said tubes passing through said layer having internal diameters as large as the internal diameters of said tubes.

1,894,957. AIR HEATER. CHARLES E. LUCKE, New York, N. Y., and PERRY R. CASSIDY, Short Hills, N. J., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Apr. 27, 1932. Serial No. 607,772. 4 Claims. (Cl. 257—224.)



1. In a fluid heat exchanger, a flue arranged for the passage of a heating fluid, a plate member extending across said flue in the path of said heating fluid and formed with a series of conduit openings therein, a plurality of conduit elements in said flue for the passage of said heating fluid and having enlarged end portions seated in the openings in said plate member and projecting beyond the outer side of said plate member, a layer of heat insulating material surrounding the projecting portions of said conduit elements and contacting with the outer side of said plate member, the projecting portions of said conduit elements being constructed to hold said material against the outer side of said plate member, heat insulating material positioned in and contacting with the enlarged end portion of each of said conduit elements forming a fluid passage registering with the passage in said conduit element, and means arranged to provide a flow of a fluid to be heated through said flue in contact with said conduit elements.

1,894,958. PURIFICATION OF OIL. JOHN S. MAIN, Wellington, Kans., assignor, by direct and mesne assignments, to Oil Reclamation Company, a Corporation. Filed May 8, 1929, Serial No. 361,489. Renewed Mar. 18, 1932. 2 Claims. (Cl. 196—146.)

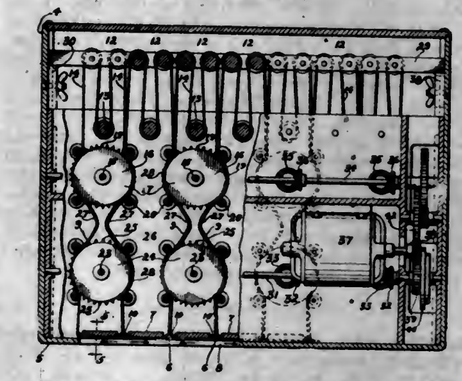


1. In an oil purifying apparatus, a washing tank, a flow pipe for introducing oil to the lower portion of the tank, means for introducing hot water and steam to the upper portion of the tank, means for admitting hot water and steam at a point intermediate of the upper and lower portions of the tank, means for discharging oil from above a body of water in the tank and from a zone between the means first named and the intermediate point, and means for discharging hot water from the tank.

1,894,959. METHOD OF WATERPROOFING FIBROUS PRODUCTS. GEORGE JAMES MANSON, Hawkesbury, Ontario, Canada, assignor, by mesne assignments, to Manson Chemical Company, Montclair, N. J., a Corporation of New Jersey. Original application filed July 8, 1926. Serial No. 121,261. Divided and this application filed Apr. 25, 1927. Serial No. 186,601. 12 Claims. (Cl. 92—21.)

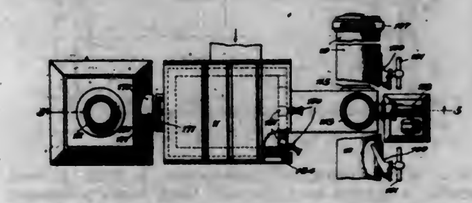
1. The method of waterproofing paper which comprises encasing a water-resistant substance with a gel formed by double decomposition while dispersing the water-repellent substance, and introducing the dispersion into paper stock.

1,894,960. CHANGEABLE SIGN. JAMES L. D. MORRISON, Jr., Los Angeles, Calif. Filed Feb. 24, 1930. Serial No. 430,782. 4 Claims. (Cl. 40—32.)



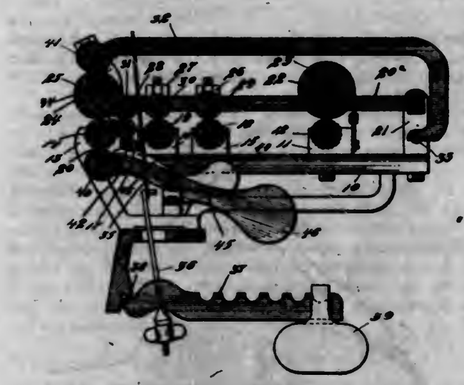
1. In a changeable sign construction the combination of a sign board, a plurality of webs each web having a plurality of individual pictures consisting of portions of a complete picture of an object arranged in a progressive enlarging or diminishing scale, means for guiding the webs respectively across adjacent portions of the sign board so that the portion of the picture on any web will match with the picture portions on adjacent webs to form a complete picture of the object illustrated, means for guiding said webs in the space back of the sign board, means disposed adjacent the rear face of the sign board for advancing each web with a step-by-step movement to bring the individual picture portions successively into view on the face of the sign, and means distinct from the last-named means for engaging the rear portions of the webs for advancing the rear portions of the webs, and maintaining slack in the same as the webs pass to the last named means.

1,894,961. SOOT DISPOSAL. WALTER W. OAKLEY, Corning, N. Y. Filed Sept. 17, 1927. Serial No. 220,229. 10 Claims. (Cl. 110—1.)



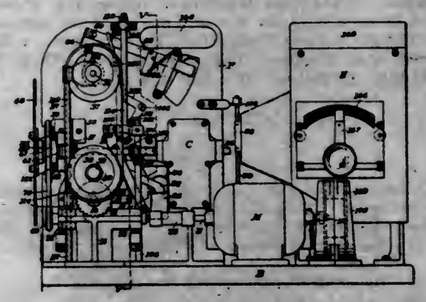
1. Apparatus for removing soot from gas mains and disposing of same which includes the combination of a gas main, an incinerator, a connection between the main and the incinerator, means for expelling the soot from the gas main, means for introducing the soot and a large volume of air into the incinerator, and means for heating the incinerator to promote the combustion of the soot and air.

1,894,962. YARN GUIDE FOR A SPINNING MACHINE. FERNAND PIRON, Woonsocket, R. I. Filed Aug. 4, 1931. Serial No. 554,978. 2 Claims. (Cl. 19—130.)



1. In a spinning machine, a plurality of pairs of rolls between which the yarn travels, including a pair of front rolls and a pair of rolls back of the front rolls with their surfaces closely adjacent and just clearing the front rolls, an overarm extending from the back of the machine, and an elongated member located between the front rolls and the next pair of rolls, said member being provided with guide surfaces between which the yarn extends, and means in substantially a plane passing thru said overarm for supporting said member from said overarm.

1,894,963. PHOTOGRAPHIC APPARATUS. BARTON A. PROCTOR, New York, N. Y., assignor, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 8, 1925. Serial No. 54,910. 154 Claims. (Cl. 88—17.)



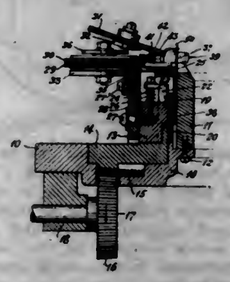
1. In a film handling apparatus, operable mechanism for moving a film to project or expose the same, operable means for taking-up said film, a source of power for said mechanism and said means, and sequential control means connecting said mechanism and said taking-up means and said source of power including means for initiating the operation of said apparatus by applying said source of power to said taking-up means and means for applying said source of power to said moving mechanism after the initiation of the taking-up means.

1,894,964. METHOD OF PERMANENT WAVING. JOHN SQUERSO, Brooklyn, N. Y. Filed Aug. 6, 1931. Serial No. 555,398. 10 Claims. (Cl. 132—36.)



1. The method of permanently waving hair, which consists in winding by hand hair upon a curler in a series of superimposed S-shaped twisted convolutions, moistening said hair, tightening the windings thus produced after the completion of the winding operation, and subsequently applying heat thereto for a relatively prolonged period, thereby causing said hair to be waved with, and to permanently retain a Marcel wave effect.

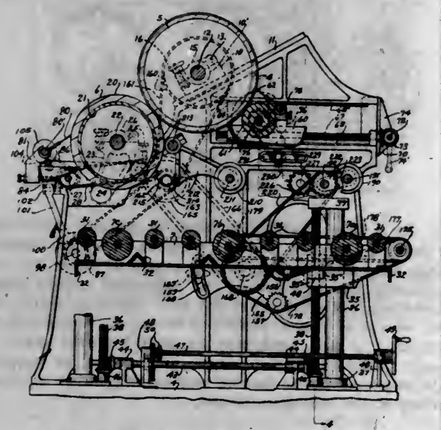
1,894,965. KNITTING MACHINE. FRANK TANSKI, Maspeth, N. Y. Filed Jan. 10, 1930. Serial No. 419,757. 9 Claims. (Cl. 66—33.)



1. In a circular knitting machine having a thread feeding station, the combination with the thread feeding

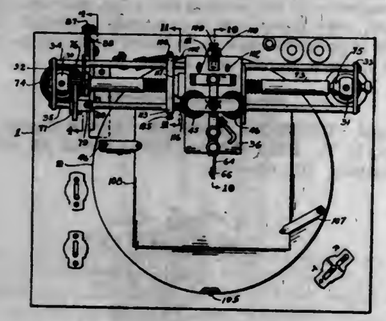
mechanism of a plurality of pattern wheels, each of said wheels being supported in a forked member for adjustment radially with respect to the needle cylinder and to each other.

1,894,966. GRAINING MACHINE. GUIDO VON WEBERN and EDWARD WILLIAM HAMANT, Dayton, Ohio, assignors to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 19, 1930. Serial No. 445,643. 10 Claims. (Cl. 105—154.)



1. In a graining machine, a pattern roll and a transfer roll, a frame supporting said rolls, means for movably mounting the pattern roll, including an inclined slideway disposed above the main portion of the frame, whereby pattern rolls of various diameters may be mounted in cooperative relation to the transfer roll, an ink applying mechanism, including an ink roll and supply receptacle unitarily mounted in cooperative relation to the pattern roll, and means to adjust the mechanism substantial distances while maintaining the ink roll axis in accurate parallelism with the pattern roll.

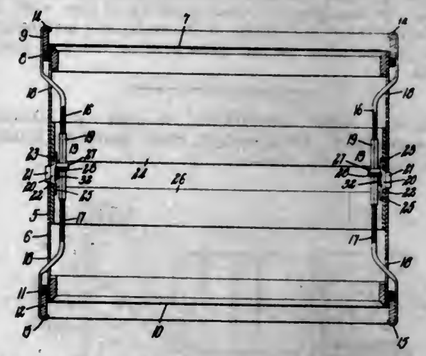
1,894,967. TELEGRAVURE APPARATUS. CECIL FRANCIS WATTS, Miami, Fla. Filed Dec. 31, 1930, Serial No. 505,855. Renewed Mar. 31, 1932. 30 Claims. (Cl. 90—24.4.)



1. In a telegravure system, an instrument including a table, a disc rotatable on said table, a guide on said table extending parallel to a diameter of said disc, a tool support movable rectilinearly on said guide, a tool adjustable on said support toward and from the said diameter, and means operated by the rotation of said disc for intermittently moving said tool support and tool along said guide.

30. In a telegravure system, the method of transmitting and reproducing an image or any part thereof, which consists in moving a tracer to describe concentric circles of radii increasing successively from a point selected as a center on said image, and then moving a reproducer synchronously in a similar series of concentric circles to reproduce the said image.

1,894,968. DRUM. HORACE E. WHITTEN, Somerville, Mass. Filed Aug. 15, 1931. Serial No. 557,213. 10 Claims. (Cl. 84—411.)

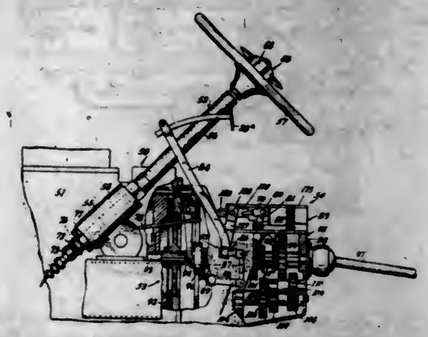


1. A drum having, in combination, a shell, a head therefor, a tension hoop for said head, hooks positioned within said shell and projecting outwardly therethrough and engaging said hoop, and means within said shell to actuate each of said hooks to regulate the tension upon the head.

1,894,969. DISINFECTANT OF WATER. CYRUS B. WOOD, Takoma Park, D. C. Filed Oct. 16, 1931. Serial No. 569,272. 6 Claims. (Cl. 210—28.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A solidified composition of matter for disinfecting water resulting from cooling a molten mixture of succinchlorimide and at least one normally solid organic acid compound formed into solid integrated bodies.

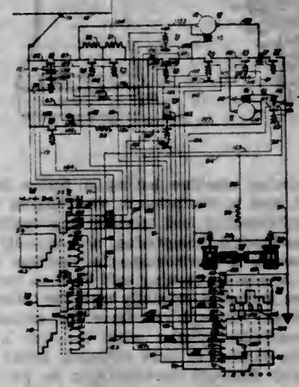
1,894,970. GEAR SHIFTING MECHANISM. FELIX WILLIAM ZELCER, New York, N. Y. Filed Sept. 22, 1931. Serial No. 564,376. 13 Claims. (Cl. 74—58.)



1. In combination with the operating member of a clutch and the slide blocks of a gear transmission, automatic shifting mechanism, comprising a sliding frame operable by the operating member of the clutch, a shaft rotatably mounted in said frame, a plurality of speed-selecting elements fixed upon said shaft, a plurality of gripping members cooperable with the slide blocks of the gear transmission, a plurality of locking members

cooperable with said speed-selecting elements and said gripping members, means, operable by the depression of the clutch-operating member, actuating said sliding frame and the speed-selecting elements carried thereby to bring about cooperation between said speed-selecting elements and said locking members to positively lock a predetermined gripping member to engage a predetermined slide block of the transmission and shift the gears thereof, and means, operated by the return of the clutch-operating member to its normal position, actuating said sliding frame and the speed-selecting elements carried thereby to progressively operate the latter for the predetermined selection of the next speed of the transmission.

1,894,971. AUTOMATIC CONTROL SYSTEM. BASCUM O. AUSTIN, Forest Hills, and NORMAN H. WILLEY and RALPH R. BROOKS, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 28, 1931. Serial No. 519,004. 8 Claims. (Cl. 172—179.)

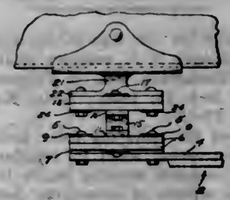


1. In a motor-control system, in combination, a plurality of motors, a plurality of switches for controlling the acceleration and the deceleration of the motors, means for controlling the operation of the switches to cause the motors to accelerate and decelerate at a predetermined rate, and means responsive to the current flowing in the motors for controlling the actuation of the switch-controlling means to vary the rate of acceleration and deceleration of the motors.

7. In an electric vehicle, in combination, a plurality of motors for propelling the vehicle, a source of power for the motors, means for connecting the motors to the power source to accelerate the motors, means for establishing motor connections to decelerate the vehicle by dynamic braking of the motors, air brake means for decelerating the vehicle, means for controlling the application of air brake means for decelerating the vehicle simultaneously with the dynamic braking, and interlocking means for preventing the simultaneous operation of the accelerating and the dynamic braking means but permitting the simultaneous operation of the accelerating and the air brake means.

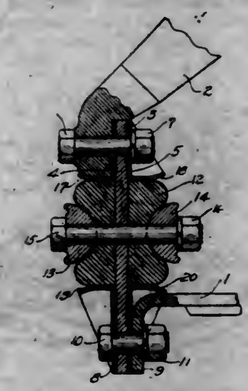
1,894,972. FLEXIBLE COUPLING. HARVEY W. BELL, Ardsley-on-Hudson, N. Y., assignor to The Beloyt Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Jan. 30, 1922, Serial No. 532,744. Divided and this application filed Oct. 19, 1927. Serial No. 227,317. 18 Claims. (Cl. 267—30.)

1. A pivotal connection for cooperating members comprising flexible disc-like connecting members, means for rigidly securing separated portions of one of said members to one of the cooperating members, means for securing separated portions of the other disc-like member to the other cooperating member and linkage between the disc-like members, having one arm rigidly secured to separated portions of one of the connecting members and another arm spaced from the first and rigidly secured to



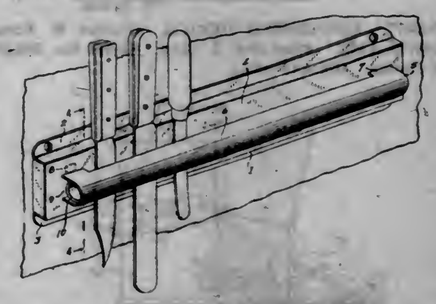
separated portions of the other connecting member, the points of attachment of the linkage arms being substantially at right angles to the points of attachment of the disc-like members with the cooperating members.

1,894,973. FLEXIBLE CONNECTION. HARVEY W. BELL, Ardsley-on-Hudson, N. Y., assignor to The Beloyt Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 27, 1926, Serial No. 97,838. Renewed June 17, 1932. 5 Claims. (Cl. 267—30.)



1. In combination, a supporting member, a supported member, and a flexible shackle comprising a distortable spacer, and means for adjusting the dimensions of the spacer.

1,894,974. SUPPORTING DEVICE FOR KNIVES AND THE LIKE. FREDERICK W. BLECKLEY, East Orange, N. J. Filed Dec. 31, 1928. Serial No. 329,579. 8 Claims. (Cl. 211—89.)



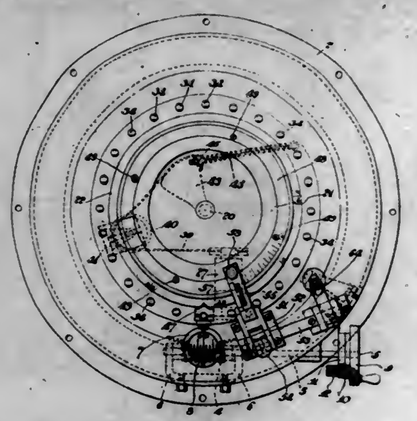
1. In tool holding devices of the character described, in combination, a supporting member having a rigid surface, a tubular member yieldable in a direction trans-

versely of its axis and positioned in proximate tangential relation to said surface, and means embracing said tubular member and holding it against bodily movement away from said surface.

1,894,975. METHOD OF REFINING ROSIN. JOSEPH N. BORGLIN, Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 11, 1930. Serial No. 494,926. 24 Claims. (Cl. 87—2.)

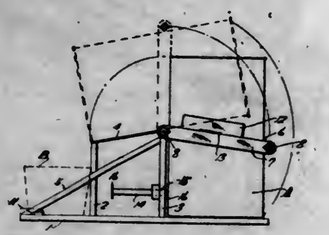
1. The method for removing color bodies from rosin which includes treating rosin in solution in a solvent therefor with a suitable metallic halide in solution in a solvent therefor capable of substantial immiscibility with the solvent for the rosin, separating the solutions and recovering refined rosin from the rosin-solvent solution.

1,894,976. DIAL ENGRAVING MACHINE. WILLIAM M. BROWER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed July 11, 1929. Serial No. 377,371. 12 Claims. (Cl. 33—19.)



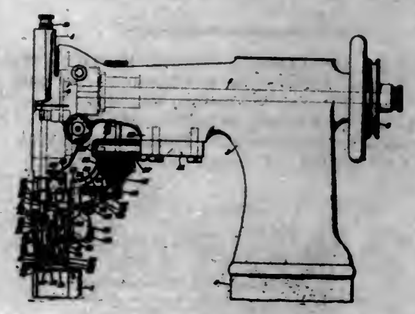
1. Apparatus for calibrating corrected scales comprising a bearing member, a rotatable member mounted upon said bearing member, a rotatable shaft supported by said bearing member, a graduated disc grooved to receive a scale blank mounted upon said shaft, a deformable cam, mechanism connecting said rotatable member and said shaft and permitting relative movement, and a cam follower carried by said rotatable member engaging said cam to control said relative movement.

1,894,977. DISPENSING DEVICE. GEORGE W. BURNS, Covelo, Calif. Filed Oct. 2, 1931. Serial No. 566,510. 2 Claims. (Cl. 248—58.)



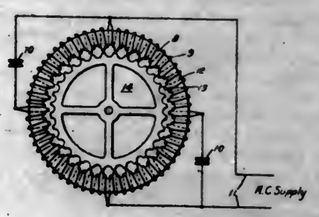
1. In a device of the kind described, a base, a stand on the base, a container carrier hinged on the stand, the said carrier comprising adjustable side pieces, auxiliary blocks hinged to the upper inner edges of the side pieces, and an auxiliary base slidably mounted in the stand above the said base.

1,894,978. TRIMMING MECHANISM FOR SEWING MACHINES. FREDERIC M. CARD, Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed May 1, 1931. Serial No. 534,274. 7 Claims. (Cl. 112—127.)



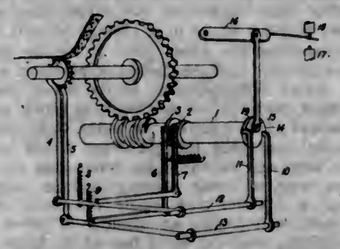
1. In a sewing machine having a frame including a work-support and a bracket-arm overhanging the work-support, stitch-forming and work-feeding mechanisms, a trimming mechanism comprising a vertically disposed rock-lever having a horizontal-axis fulcrum upon said bracket-arm, means for rocking said lever, a vertically depending frame journaled coaxially with the fulcrum of and disposed adjacent to said rock-lever for swinging movements substantially parallel with the line of feed, a trimmer blade carried by said swinging frame and having a vertically disposed work-severing fin provided with a cutting edge opposed to the direction of feed, and a latch releasably connecting said swinging frame and rock-lever.

1,894,979. VERNIER MOTOR. LEWIS W. CHUBB, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 26, 1931. Serial No. 559,401. 17 Claims. (Cl. 172—275.)



1. A vernier motor comprising magnetizable toothed stator and rotor members, and means for producing a rotating magnetic field therein, characterized by the tooth pitches of the stator and rotor members being different, and corresponding to total tooth numbers T_s and T_r for the stator and rotor, such that $360°/T_s$ and $360°/T_r$ are the stator and rotor tooth-pitches, in degrees, and $T_s - T_r = \pm np$, exactly, where p is the number of poles of the rotating field, and n is any small integer except zero, the actual numbers of stator and rotor teeth being both at least several times said difference $\pm(T_s - T_r)$.

1,894,980. TAPE CONTROLLED TELEGRAPH TRANSMITTER. FREDERICK GEORGE CREED and REGINALD DENNIS SALMON, Croydon, England, assignors to Creed and Company, Limited, Croydon, Surrey, England. Filed Dec. 23, 1930, Serial No. 504,256, and in Great Britain Feb. 12, 1930. 7 Claims. (Cl. 178—17.)



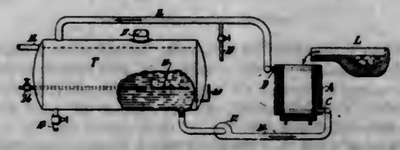
1. A tape controlled telegraph transmitter having in combination, a pecker co-operable with a perforated tape, a rotatable driving member, a rotatable member driven thereby, a detent holding the driven member against rotation and actuated according to the movements of said pecker to release the driven member for rotation, and signal contact means actuated by said driven member in accordance with the movements of said pecker.

1,894,981. BELT LACING HOLDER. JAMES K. DIAMOND, Grand Rapids, Mich., assignor to Clipper Belt Lacer Company, Grand Rapids, Mich. Filed Jan. 29, 1932. Serial No. 589,614. 4 Claims. (Cl. 1—56.)



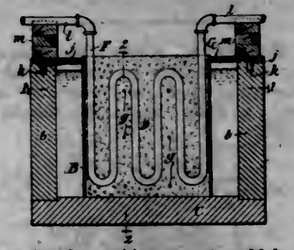
1. A belt lacing holder of flexible fibrous material of channel cross section and having a series of prong-receiving holes in the flanges thereof, one edge of said holder being outturned and having a reinforcing flexible fibrous binding strip folded over said out-turned edge and glued to the flange, the said out-turned edge and binding strip having slots therein alined with holes in the flange and adapted to receive the arms of fasteners whose prongs are engaged in the holes.

1,894,982. METHOD FOR CASTING COPPER OR EQUIVALENT METALS. WILLIAM F. EPPENSTEINER, Rahway, N. J., assignor to The American Metal Company, Limited, New York, N. Y., a Corporation of New York. Filed Mar. 6, 1930, Serial No. 433,591. Renewed Feb. 12, 1932. 3 Claims. (Cl. 22—212.)



1. The method of casting copper or equivalent metals in a water-cooled mold having a vertical casting cavity with substantially parallel walls which consists in cooling the mold by a constant and rapid circulation of water through its cooling passages, the water entering at temperatures approximating 190° to 200° Fahrenheit.

1,894,983. APPARATUS FOR CASTING CORE MOLDS. WILLIAM F. EPPENSTEINER, Rahway, N. J., assignor to The American Metal Company, (Limited), New York, N. Y., a Corporation of New York. Filed Mar. 4, 1931. Serial No. 519,936. 4 Claims. (Cl. 22—152.)



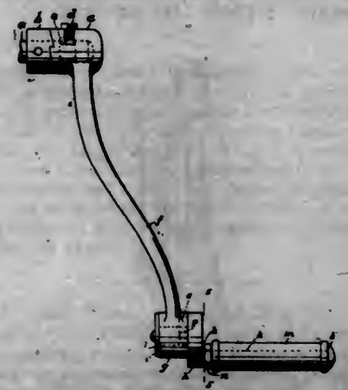
1. An apparatus for making a cast mold having a parallel casting cavity, comprising an outer mold having a cavity conforming to the exterior of the mold to be cast, a core of the shape of the object to be cast in such mold, such core comprising a shell of sheet metal with a heat-conducting filling material of comminuted metal within it, and a cooling coil within the core embedded in such filling material.

1,894,984. BATTERY TERMINAL CONNECTION. LOUIS E. ERICKSEN and ASA A. HAMMONS, Plains, Mont. Filed Sept. 2, 1930. Serial No. 479,242. 1 Claim. (Cl. 173—259.)



A battery terminal connection comprising an expansible binding post, a connector ring snugly embracing said post, means for expanding the latter to effect and maintain a tight electrical connection between said post and ring, and a conductor having an annular terminal end embedded within said ring and forming a reinforcing ring within the connector ring.

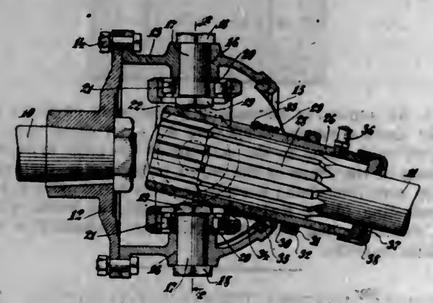
1,894,985. ADJUSTABLE CRANK. ALAN E. FLOWERS, Poughkeepsie, N. Y., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 18, 1928. Serial No. 269,645. 7 Claims. (Cl. 74—33.)

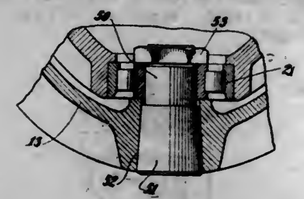


1. An adjustable crank arm construction comprising a crank arm, a hub thereon, a second hub turnable on the

first hub and a handle secured to the second hub at one side of the axis on which the second hub is turnable, and a pin and arcuate groove connection between the two hubs adapted to limit the turning movement of one hub relative to the other.

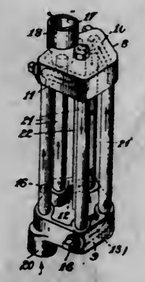
1,894,986. UNIVERSAL JOINT. MAXIMILIAN C. FRINS, Watchung, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 13, 1931. Serial No. 529,595. 1 Claim. (Cl. 64—102.)





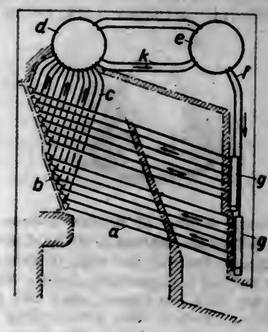
A universal joint for driving and driven members comprising a housing carried by one of the members, a driving ring, opposed pins having tapered heads mounted in tapered recesses in the housing, the walls of the heads and recesses tapering from a maximum diameter adjacent the exterior of the housing to a minimum diameter adjacent the interior walls thereof, anti-friction bearings on the pins, means to secure the bearings to the pins, and anti-friction bearings between the ring and driven member upon an axis at right angles to the axis of the first bearings.

1,894,987. SERVICE WATER HEATER. RUDOLPH V. FUSCO, Brooklyn, N. Y. Filed July 11, 1930. Serial No. 467,273. 1 Claim. (Cl. 257—227.)



In a water heater, a pair of heads, each head arranged with a series of passages and each passage having an outlet and an inlet opening through one and the same face of the head, and each head having an opening therethrough extended through a boss projecting from the face of the heads opposite to the face with the inlets and outlets to the passages, one opening constituting a water inlet and the other opening a water outlet, tubes having slip joint connections with the inlets to the passages of one head and the outlets of the passages in the other head and one tube connecting the water inlet opening in the one head with an inlet to a passage in the other head and another tube connecting the outlet opening in the other head with an outlet of a passage in said head and thereby connecting the water inlet in the one head in a continuous passage through the head passages and tubes with the water outlet opening in the other head, a tie rod arranged centrally of the heads to draw and unite the heads and tubes together in water tight connection, and a jacket enclosing the connected heads and tubes having an inlet and an outlet for connecting the same in circulation with a liquid heating medium, said jacket comprising a cylinder and heads releasably connected thereto, each head having an opening extended through a boss projecting from the outer face of the heads adapted for connection of water inlet and outlet pipes, and the opening at the inner sides of the heads being enlarged and adapted for engagement of the bosses of the tube connecting heads to position the same within the jacket in spaced relation to the walls thereof as the jacket heads are secured to the jacket cylinder and in water tight connection with the openings in the jacket heads.

1,894,988. WATER TUBE BOILER. HERMAN GARBE, Glogau, Germany. Filed Mar. 19, 1931, Serial No. 523,702, and in Germany Mar. 19, 1930. 2 Claims. (Cl. 122—331.)

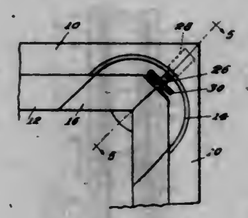


1. In a water-tube boiler, the combination with an upper drum, of inclined water-tubes disposed in vertical rows, risers connecting the forward ends of said inclined water-tubes to said upper drum, said risers being located between the vertical rows of said inclined tubes, a plurality of separate headers receiving the rear ends of said inclined water-tubes, a head interposed between the forward end of each water-tube and the lower end of the corresponding riser, and descending tubes connected to said headers and being disposed outside of the rows of said inclined tubes.

1,894,989. CAROM PLUG FOR TABLES. PETER HANSEN, Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 27, 1931. Serial No. 518,728. 1 Claim. (Cl. 273—4.)

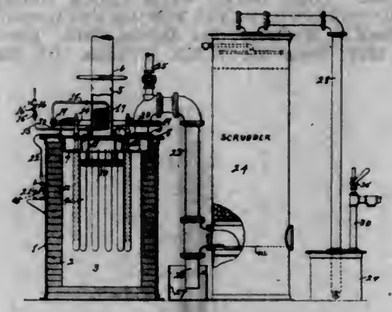
A carom plug for pocket-billiard tables, comprising a member similar in cross-section to the cushion, means for positively retaining said member in the pocket opening of the cushion, said means comprising a screw-threaded element, a head on the element rotatably mounted in the plug the free end of said element adapted to be fitted into a corresponding opening in the side rail of the table together with an interiorly screw-threaded ferrule mounted

in the opening to receive said screw-threaded element, a cushioned guard for the inner end of said ferrule, and a knurled operating wheel on the screw-threaded element,



said operating wheel being of a diameter as to have its upper rim substantially flush with the top plane of the cushions and rails.

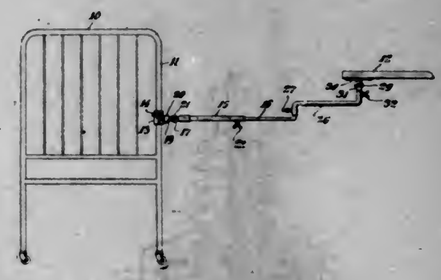
1,894,990. OIL GAS GENERATOR. LEONARD B. HARRIS, New York, N. Y., assignor, by mesne assignments, to International Oil Gas Corporation, Dover, Del., a Corporation of Delaware. Filed Nov. 9, 1929, Serial No. 405,913. Renewed Apr. 16, 1932. 6 Claims. (Cl. 48—94.)



4. In an oil gas generating apparatus having a plurality of retorts and an atomizer for each individual retort, means to intermittently atomize and introduce the oil from which the gas is to be made into said retorts in a predetermined sequence, and separate means for delivering a constant supply of jets of steam directly into said retorts during the oil gas generation in the entire apparatus.

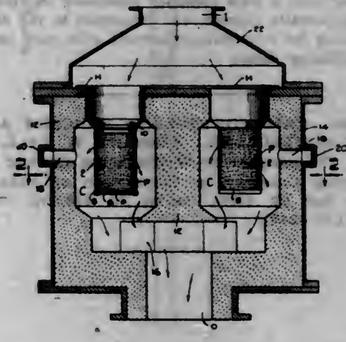
1,894,991. BED TRAY. JOHN H. HAYES, Kew Gardens, N. Y. Filed Feb. 5, 1931. Serial No. 513,486. 2 Claims. (Cl. 45—82.)

1. An attachment for beds and comprising in combination, a bracket adapted to be secured to an upright of a bedstead, an arm pivotally connected to said bracket for adjusting movement about a horizontal axis substantially at right angles to said arm, manually settable means whereby said arm may be held in any one of a plurality of selectable positions about said horizontal axis, each of which selectable positions differs from the adjacent one by a relatively small angle, a second arm pivotally connected to said first mentioned arm for pivotal movement with respect thereto about a substantially vertical axis, a tray, means connecting said second arm and tray for relative pivotal movement about a substantially vertical axis, means connecting said tray and second arm for relative pivotal movement about a substantially horizontal axis,



and manually settable means for holding said tray in any one of a multiplicity of selectable positions about said last mentioned horizontal axis whereby the tray may be leveled or adjusted to an inclined reading position.

1,894,992. CONVERTER. INGENUIN HECHENBLEIKNER and NICOLAY TITLESTAD, Charlotte, N. C., assignors, by mesne assignments, to Chemical Construction Corporation, Charlotte, N. C., a Corporation of Delaware. Filed Feb. 6, 1930. Serial No. 426,269. 4 Claims. (Cl. 23—288.)

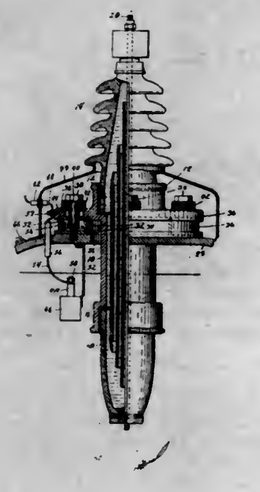


1. A catalytic converter comprising a relatively large converter shell or housing, a plurality of gauze baskets supported in said converter housing and arranged to collectively receive the full gas flow and to operate thereon in parallel, the length and the diameter of each of said gauze baskets being made in optimum ratio for best gas flow distribution and a maximum conversion efficiency, a common gas inlet to the converter housing, and a common gas outlet for discharging the reaction products from the conversion chambers.

1,894,993. ELECTRICAL APPARATUS AND INSULATING BUSHING THEREFOR. GUSTAV E. JANSSON, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Mar. 30, 1928. Serial No. 266,064. 7 Claims. (Cl. 175—41.)

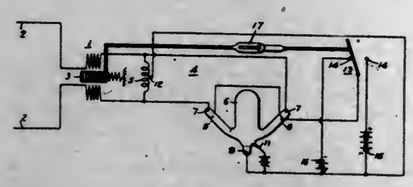
1. The combination of the oil-containing casing of an electric apparatus and a high tension bushing therefor

extended into the oil in and insulated from said casing and having an attaching flange carried by and insulated from said casing constituting a low tension condenser terminal, said casing and flange constituting a low capacity



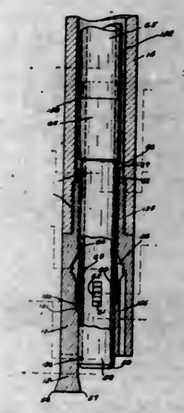
condenser and a high capacity condenser carried by said casing internally thereof, and immersed in the oil therein and having its terminals connected with said casing and said attaching flange.

1,894,994. GRID CONTROLLED MERCURY ARC CIRCUIT CONTROLLER. FREDERICK W. LYLE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 27, 1929. Serial No. 410,092. 7 Claims. (Cl. 172—240.)



1. In combination, a reciprocating electric motor having windings, an inductance in series with said windings and a gaseous discharge device in circuit with said inductance, sad gaseous discharge device having anodes connected to opposite portions of said inductance and a cathode connected to substantially the midpoint of said inductance and means to short circuit a portion of said inductance by said gaseous discharge device in response to the movement of said motor.

1,894,995. CORE DRILL AND MEANS FOR ASCERTAINING DIP. GEORGE A. MACREADY, Los Angeles, Calif. Filed May 10, 1926. Serial No. 107,980. 24 Claims. (Cl. 255—72.)



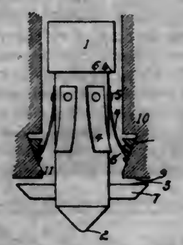
23. A core drill comprising an outer barrel and an inner barrel rotatable therein provided with an orientation identification mark on the external surface thereof adjacent the cutter end.

1,894,996. CORE DRILL WITH CLOCK OPERATED PHOTOGRAPHIC MEANS FOR ASCERTAINING DIP. GEORGE A. MACREADY, Los Angeles, Calif. Filed Apr. 21, 1928. Serial No. 271,932. 6 Claims. (Cl. 234—1.)



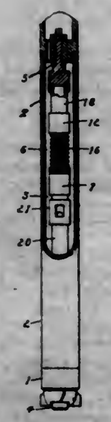
1. In a core drill organization for determining the dip of strata, which comprises: means for suspending said organization from a drill string; an outer shell directly supported by said suspending means; an inner core receiving and orienting organization supported by and rotatable relative to said shell, and said core receiving and orienting organization comprising a lower core receiving barrel, compass supporting means upwardly mounted thereon, a magnetic compass upwardly mounted on said supporting means, and clock operated means for photographically registering the position of said compass at a predetermined time; and means for determining the relation between the position of a photographed image of said compass and the position of a core in said barrel.

1,894,997. MUD GUARD FOR CORE DRILLS. GEORGE A. MACREADY, Los Angeles, Calif. Filed Mar. 14, 1929, Serial No. 346,955. Renewed Nov. 23, 1932. 2 Claims. (Cl. 255—72.)



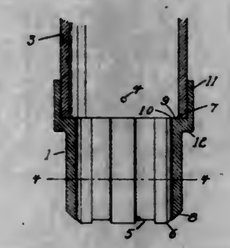
1. A mud guard for core drills comprising a body provided with a lateral projection thereon, a shoulder on said body facing said projection, and resilient barbs attached to said body between said projection and said shoulder projecting from said body and pointing in the direction of said projection.

1,894,998. ROTARY CORE DRILL. GEORGE A. MACREADY, Los Angeles, Calif. Filed Mar. 14, 1929, Serial No. 346,956. Renewed Oct. 12, 1932. 4 Claims. (Cl. 255—72.)



1. A rotary core drill comprising an outer barrel, an inner barrel having a limited longitudinal movement relative to said outer barrel, a thrust bearing permitting relative rotation between said barrels, and a compression spring adapted to transmit thrust between said barrels, the longitudinal travel of said spring being substantially equal to the longitudinal movement between said inner and outer barrels.

1,894,999. CORE BARREL NOSE. GEORGE A. MACREADY, Los Angeles, Calif. Filed Mar. 14, 1929. Serial No. 346,957. 2 Claims. (Cl. 255—72.)



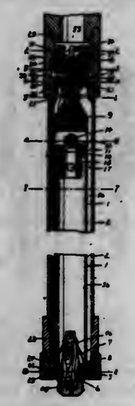
1. A core barrel nose provided with an annular chisel-like cutting edge at the lower end thereof and a plurality of longitudinal grooves on the interior surface of said nose.

1,895,000. ORIENTATION CORE DRILL. GEORGE A. MACREADY, Los Angeles, Calif. Filed Feb. 24, 1930. Serial No. 430,908. 11 Claims. (Cl. 255—72.)



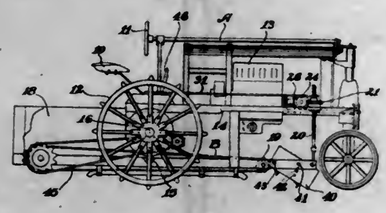
11. A method of orienting cores with a core drill having a photographic recording instrument on the inner barrel which consists of lowering the core drill on drill pipe into a well to a level above the bottom of the well, rotating said pipe and drill while hanging to make illegible photographic records, lowering said drill thereafter to the bottom of the well, drilling a core with said drill and making photographic records during coring, causing said drill to remain quiet after completion of said core and before raising said drill from the bottom of the well to make a clear photographic orientation record, raising said drill off bottom and rotating while hanging to make a second set of illegible photographic records, removing said drill from said well, developing the photographic records, identifying the clear orientation record by its position between illegible records, and comparing the records during coring with the clear orientation record to determine whether the core had twisted from its position before the clear record was made.

1,895,001. CORE DRILL. GEORGE A. MACREADY, Los Angeles, Calif. Filed Sept. 19, 1930. Serial No. 482,925. 7 Claims. (Cl. 255—72.)



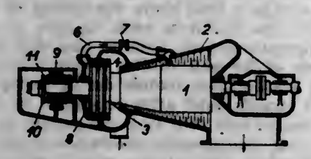
1. A core drill for orienting cores comprising an outer barrel, a rotary core cutting shoe on the lower end of said barrel, an inner core receiving tube within said outer barrel, said barrels being rotatable relative to each other when supported from the bottom and locked against relative rotation when suspended from drill pipe.

1,895,002. DIRT SCRAPING CONVEYING TRACTOR. JOSEPH W. MARKUS, Plainview, Minn. Filed Oct. 11, 1929. Serial No. 398,972. 9 Claims. (Cl. 37—7.)



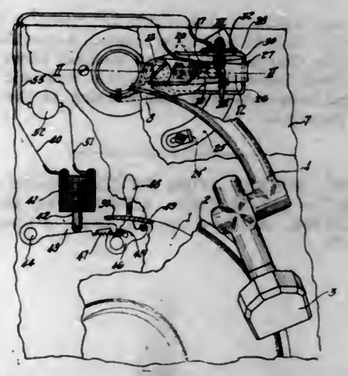
5. A tractor conveyor including, a tractor, a rear axle thereupon, an underslung body portion, a conveyor bottom in said body portion, and means for pivoting said body portion midway the ends thereof below said rear axle.

1,895,003. STEAM TURBINE. ADOLF MEYER, Kusnacht near Zurich, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed May 21, 1931, Serial No. 538,952, and in Germany May 26, 1930. 8 Claims. (Cl. 253—39.)



1. In a steam turbine, a shaft supported for rotation and for substantially free axial movement, a rotor fixed on said shaft and provided with blades, a stator provided with blades complementary to said first-named blades, means responsive to conditions of the steam pressure at said rotor over the normal operating range to balance the axial thrust on the rotating blades when said rotor is in a definite axial position whereat the clearance between the adjacent working faces of said blades is a definite amount, said balancing means being effective when said clearance becomes less than said amount to predominate over said thrust and effect axial movement of said rotor in a direction to increase said clearance, said balancing means being effective when said clearance becomes greater than said amount to permit said thrust to predominate and effect axial movement of said rotor in the opposite direction to decrease said clearance, means operable when said turbine is in the relatively cold and non-operating state to limit axial movement of said rotor in said opposite direction to a position whereat there is some clearance between the adjacent working faces of said blades, and means responsive only to conditions whereat the steam pressure is in a range below the normal operating range and operable at such conditions to effect axial movement of said rotor in the direction to increase said clearance.

1,895,004. CONTROL DEVICE FOR PHONOGRAPHS. MARTIN NYSTROM, Chicago, Ill., assignor to United Research Corporation, a Corporation of Delaware. Filed Mar. 13, 1931. Serial No. 522,481. 10 Claims. (Cl. 192—128.)



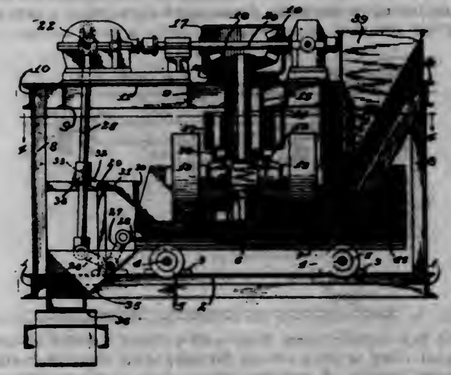
2. In a control device for a phonograph, the combination of a suspension arm, a pair of contacts constituting a switch, yieldable mountings for said contacts, and means operative on the reverse movement of said suspension arm or on its forward movement to a predetermined point to engage said contacts, said yieldable mountings permitting further continued movement of said suspension arm after engagement of said contacts.

1,895,005. HAIRPIN PACKAGE. JAMES A. O'BRIEN, Rosemont, Pa., assignor to The De Long Hook and Eye Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 1, 1932. Serial No. 602,433. 3 Claims. (Cl. 206—66.)



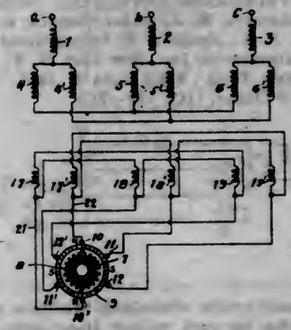
1. In a hairpin package, an elongated sheet of rigid material folded on two lines extending transversely thereof to provide three overlying rectangular portions of substantially equal length, one of the end portions having a slit extending transversely thereof adjacent a line of fold, a plurality of hairpins mounted astride the edge of said end portion with the ends of the legs on one side of said portion extending through said slit and the loops in engagement with said edge, the free edge of the opposite end portion being inserted within said slit.

1,895,006. SAND MULLING MACHINE. AXEL G. J. RAFF, Chicago, Ill., assignor to Herbert S. Simpson, Chicago, Ill. Filed Feb. 14, 1931. Serial No. 515,774. 3 Claims. (Cl. 83—45.)



1. In a sand mulling machine, a mulling pan, means for mounting said pan for reciprocating movement, a sand discharging element having vertical movement with respect to said pan, mechanism for reciprocating said pan and operating said discharging element, mullers mounted in said pan, and means for rotating said mullers during the reciprocation of said pan.

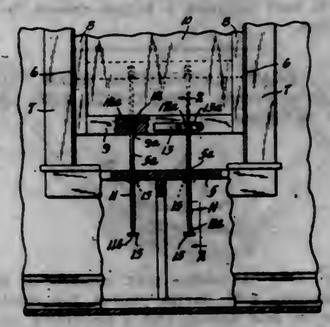
1,895,007. ALTERNATING CURRENT MOTOR. RUDOLF RICHTER, Durlach, Germany, assignor to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 8, 1928, Serial No. 317,974, and in Germany Nov. 23, 1927. 5 Claims. (Cl. 172—280.)



1. In an alternating current, multiphase, multipolar motor, a primary winding, a secondary winding movable with respect to said primary winding, a further primary winding forming an exciting winding, said exciting winding comprising a plurality of equal phase sections, one for each pair of poles of said motor, a secondary compensating winding, a commutator connected to said compensating winding, a plurality of brushes wiping over said commutator and connections from said brushes to equal phase sections of said exciting winding, the equal phase brush terminals being separated by at least one of said sections.

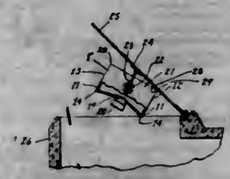
1,895,008. GRATING STRUCTURE FOR WINDOWS. WALLACE N. ROBINSON, Minneapolis, Minn. Filed Feb. 18, 1931. Serial No. 516,588. 4 Claims. (Cl. 20—71.)

1. A grating attachment for windows comprising a plurality of relatively indestructible bars spaced apart to divide the opening of the window and each secured at one end to one of the rails of a sash and slidably working through apertured portions of a member of the window frame and means attached to the free ends of



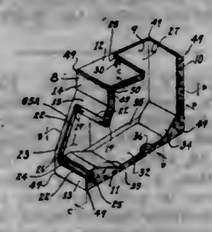
said bars adapted to be collapsed to permit insertion of said ends through said frame member and adapted upon insertion to expand to prevent withdrawal of said bars.

1,895,009. LIQUID RECEPTACLE AND SPRINKLER. HERBERT F. SIELAFF, Chicago, Ill. Filed Mar. 16, 1928. Serial No. 262,084. 4 Claims. (Cl. 220—87.)



1. A liquid sprinkling device of the character described comprising; a box-like receptacle being supported by a ball upon the closure of a refuse box, a series of comparatively small orifices arranged in opposite sides of said receptacle and near the lower corners thereof, a filling aperture centrally arranged in the underside of said receptacle, a screw-cap for closing said aperture, a socket secured on the ends of said receptacle and disposed slightly above the center of gravity thereof, a bail secured in said sockets, and said sockets providing bearings for the ends of said bail.

1,895,010. MOLDED GARBAGE RECEPTACLE. HERBERT F. SIELAFF, Chicago, Ill. Filed Mar. 31, 1928. Serial No. 266,363. 2 Claims. (Cl. 220—82.)



1. A garbage receptacle, of the character described, comprising a hollow box-like form having opposite vertical side walls, a vertical back wall, a front wall comprising upper and lower vertical wall portions joined by an intermediate inclined wall portion, a recessed opening through said inclined portion, a bottom comprising a floor

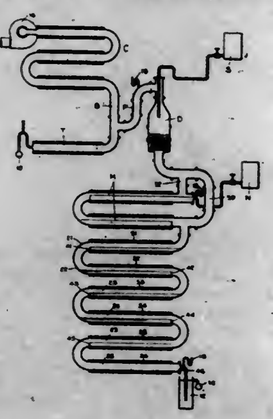
having upper and lower horizontal portions joined by an inclined portion, a recessed drain outlet arranged in said lower horizontal portion, and closures therefor, an inclined top extending downwardly from said upper front wall portion to said back wall, a ridge outlined opening arranged in said top, and a hinged closure for each of said openings.

1,895,011. BOAT LAUNCHING GEAR. CHRISTEN SMITH, Oslo, Norway. Filed Oct. 22, 1930. Serial No. 490,389. 6 Claims. (Cl. 9—22.)



2. Ships' boat launching gear comprising davits, a shaft connecting said davits, means for rotating said shaft to move said davits, and a protective rail moved into position by said shaft when it is rotated to move said davits to the outboard position.

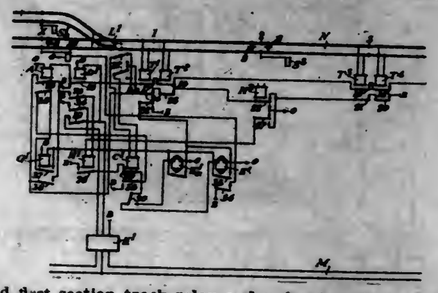
1,895,012. NITRIC ACID CONCENTRATION. SAMUEL F. SPANGLER, Philadelphia, Pa., assignor to Chemical Construction Corporation, Charlotte, N. C., a Corporation of Delaware. Filed May 16, 1930. Serial No. 452,903. 20 Claims. (Cl. 23—160.)



1. In the operation of a nitric acid concentrator comprising a series of heated retort tubes, the method which includes mixing the dilute nitric acid with sulphuric acid in a body of liquid having a volume substantially greater than that of the liquid content in a retort tube in order to insure thorough mixing of the acids, and passing the resulting acid mixture through the retort tubes.

1,895,013. RAILWAY SIGNALING. PAUL P. STOKER, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 18, 1930, Serial No. 429,283. Renewed Jan. 18, 1932. 4 Claims. (Cl. 246—3.)

1. In combination, a stretch of railway track along which traffic moves in both directions, such stretch being divided into sections each of which is provided with the usual track circuit including a track relay, a normally deenergized despatcher's relay, means controlled from a remote point for energising said despatcher's relay, a directional relay controlled by a front contact of said despatcher's relay and a front contact of each of said track relays, a home relay, a circuit for said home relay including a front contact of said despatcher's relay and a front contact of said directional relay as well as a front contact of the track relay for the first track section in said stretch, a slow-releasing signal relay controlled by a front contact of said home relay, a signal governing traffic into said stretch and controlled by said signal relay, a normally deenergized stick relay, a pick-up circuit for said stick relay including a back contact of

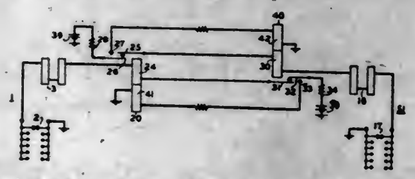


said first section track relay and a front contact of said signal relay, a stick circuit for said stick relay including a back contact of said directional relay and a front contact of said despatcher's relay, and a branch for said home relay circuit around the front contact of the directional relay and including a front contact of said stick relay.

1,895,014. LUBRICATING COMPOSITION AND METHOD OF MAKING THE SAME. JORGEN E. THOMSEN and JAMES J. O'LAUGHLIN, Jersey City, N. J., assignors to Joseph Dixon Crucible Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 1, 1930. Serial No. 499,405. 6 Claims. (Cl. 87—9.)

1. A lubricating composition comprising a solid lubricant, a solution of a gum, and triethanolamine.

1,895,015. TELEGRAPH REPEATER. GILBERT S. VERNAM, Hackensack, N. J., and FREDERICK G. HALLDEN, Bellerose, N. Y., assignors to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed June 1, 1931. Serial No. 541,254. 5 Claims. (Cl. 178—71.)

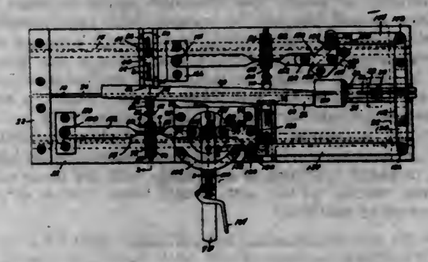


1. A repeater system comprising two lines, a normally energized relay for each of said lines, each relay provided with a line winding, a local winding and circuits therefor, each of said lines directly connected to the line winding of its respective relay, a resistance element associated with each of said relays, means associated with each of said lines for de-energising its respective relay, the de-energizing of one of said relays serving to open the circuit of the line winding of the other relay but maintaining it energized by closure of the circuit through the local winding and the resistance element associated with the de-energized relay.

1,895,016. SHINGLE SAWING MACHINE. MAURICE T. WHITING, Duxbury, Mass. Filed Sept. 18, 1931, Serial No. 563,561, and in Canada Aug. 27, 1931. 10 Claims. (Cl. 143—5.)

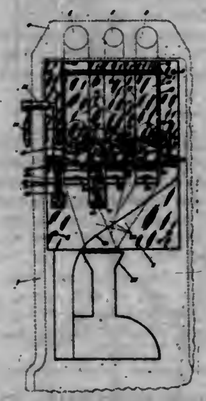
1. In a shingle sawing machine, a device for holding a shake at a diagonal to the saw path so that the shake is severed into two tapered shingles, said device comprising

a forward abutment which is located on one side of the saw path and is adapted to be engaged by the forward portion of one broad face of the shake, a rear abutment which is located on the opposite side of the saw path and is adapted to be engaged by the rear portion of the opposite broad face of the shake, and clamping devices



which oppose said aubtments on opposite sides of the saw path and are normally biased for holding the shake against said abutments, and means for holding said clamping devices in an inoperative position for permitting a shake to be inserted between them and said abutments and also for releasing said devices to engage the shake.

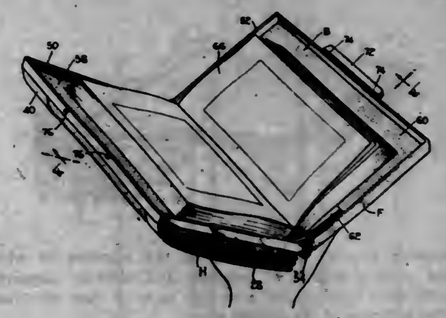
1,895,017. COIN SLOT DEVICE. DANIEL M. WINANS, Binghamton, N. Y., assignor to Daniel M. Winans Corporation, Binghamton, N. Y. Filed Dec. 10, 1931. Serial No. 580,125. 16 Claims. (Cl. 194—97.)



1. A coin slot device comprising a movable coin carrying member, a coin holding device thereon, a coin chute, means for moving said member towards and away from said chute, means independent of said holding device for ejecting a coin from said member into said chute in one position of said member, and means operable upon movement of said member away from said chute for releasing said holding means.

1,895,018. HAND BAG. CHARLES WOLF, New York, N. Y., assignor to Schoenfeld & Wolf, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 11, 1932. Serial No. 642,259. 5 Claims. (Cl. 150—35.)

1. A book compartment comprising flexible covering material and two inverted U-shaped stiff frame members pivoted at their lower ends, the covering material being secured to and held in shape by the frame members, said frame members defining the length and width of the book compartment and being dimensioned to readily receive a book of normal size, means to lock the frame members in closed relation, said frame members serving to bring and hold the edges of the compartment together despite the flexibility of the covering material so as to protectively house and conceal the book carried thereby, the pivoting of the frame members at the lower edge of the compart-

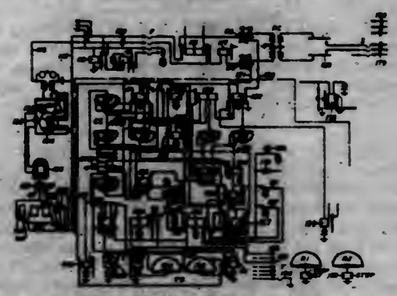


ment permitting the book to be fully opened and read without removing the same from the compartment, said compartment being further provided with means to hold the book therein.

1,895,019. ART OF COLORING. RONALD SIDNEY BARNES, Grangemouth, DUNCAN SERVICE, Falkirk, and JOHN THOMAS, Polmont, Scotland, assignors to Scottish Dyes Limited, a Corporation of Great Britain. Filed Mar. 26, 1931, Serial No. 525,600, and in Great Britain Mar. 31, 1930. 36 Claims. (Cl. 8—5.)

1. Process for the production of dyeings (including printings) on textile materials, which comprises applying to the material, a soluble sulphuric ester of an anthraquinone body having at least two hydroxyl groups, two hydroxyl groups being in adjacent α- and β- positions, and at least the β-hydroxyl group being sulphated.

1,895,020. TELEPHONE SYSTEM. HENRY M. BASCOM, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 15, 1931. Serial No. 508,980. 11 Claims. (Cl. 179—6.3.)

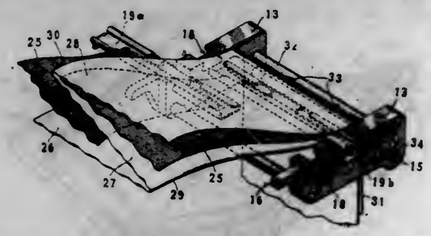


1. In combination, a telephone line having a substation thereon, coin mechanism at said substation for receiving coins of different denominations, and means for making a test of the line to determine the denomination of a coin deposited in said mechanism.

1,895,021. MANIFOLDING RECORD MACHINE. EDWARD C. BORCHARDT, Minneapolis, Minn., assignor to Cosby-Wirth Manifold Book Company, Minneapolis, Minn., a Corporation of Minnesota. Filed May 1, 1928, Serial No. 274,186. Renewed June 16, 1932. 8 Claims. (Cl. 282—19.)

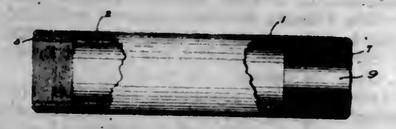
1. In a machine of the character described, means for supplying carbon transmission sheets between superposed

recording strips, including holding means adapted to grasp a carbon sheet at an extremity, the other extremities of the carbon sheet being free, means for mounting the holding means on the machine including a supporting



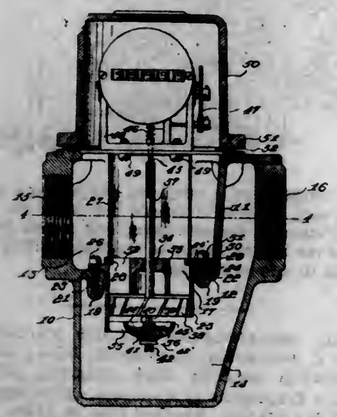
slideway aligned transversely of the machine in which said holding means is received and slidably supported in different longitudinal positions so as to vary the transverse position of the carbon sheet.

1,895,022. INSULATED CASING. HOMER P. CHANDLER, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Dec. 22, 1930. Serial No. 504,055. 6 Claims. (Cl. 247—38.)



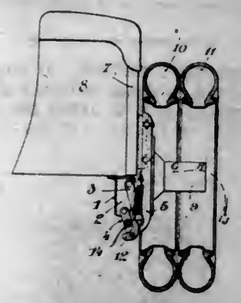
1. A casing comprising an inner tube of asbestos impregnated with sodium silicate and an outer tube of fibrous material impregnated with a synthetic resin and having its inner surface for a distance back from each end threaded and an internally threaded sleeve secured within one end of the threaded portion by threads on the exterior surface of the sleeve, the inner sleeve ending at the thread and the sleeve butting against the end of the inner sleeve.

1,895,023. LIQUID METER. HORACE CHRISMAN, Pittsburgh, and EARL M. KREIDLER, Wilkinsburg, Pa., assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Filed Nov. 29, 1927. Serial No. 236,551. 7 Claims. (Cl. 73—37.)



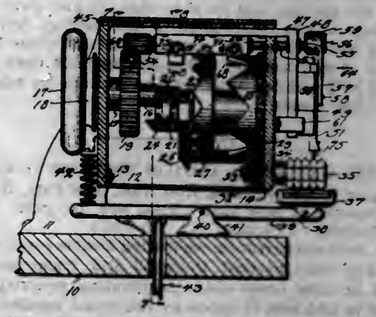
1. A liquid meter comprising a casing having inlet and outlet ports, means dividing said casing into two compartments, there being a port in said means establishing communication between said compartments, said means provided with a plurality of lugs adjacent the periphery of said port, some of said lugs provided with threaded apertures, the other lugs provided with drilled holes, a flanged casting member supported within said communicating port, the flange of said casting member provided with a plurality of drilled and threaded apertures equal in number to and adapted to register with said threaded apertures and said drilled holes respectively, securing elements extending through said drilled holes in said flange and threadedly engaged within said threaded apertures in said lugs to secure said flange to said means, a ring supported on said flange, said ring provided with a plurality of apertured lugs, securing members extending through said apertured lugs and threadedly engaged with said threaded apertures in said flange with the inner ends thereof resting within said drilled holes, and a screen supported by said ring.

1,895,024. WHEEL SUPPORT. EMILE HENRI COQUILLE, Paris, France, assignor to Societe Anonyme des Usines Chausson, Asnieres, Seine, France. Filed July 16, 1931, Serial No. 551,238, and in France Aug. 13, 1930. 8 Claims. (Cl. 224—29.)



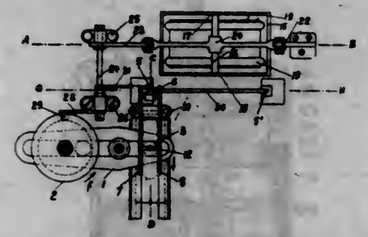
1. A support for motor car spare wheels comprising, in combination, means adapted to rigidly support the spare wheels, at least one lever integral with said means, at least one member adapted to be rigidly secured to the car frame, a plurality of links pivoted at one end to said member and at the other end to said lever, at least one spring connected at one end to said lever, and means for connecting the other end of said spring to said member in such a manner that the resisting strength of said spring varies in accordance with the torque due to gravity.

1,895,025. PROCESS OF CUTTING FUR. OSCAR M. DEAN Sioux City, Iowa. Filed Oct. 22, 1930. Serial No. 490,485. 4 Claims. (Cl. 149—28.)



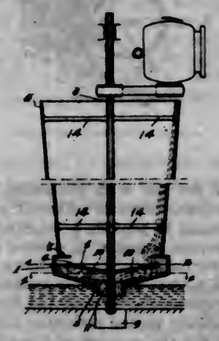
1. The method of cutting a fur bearing hide which comprises repeatedly piercing the hide progressively along the desired line of cut, the individual cuts being relatively narrow, and made between the hairs.

1,895,026. FILM FEEDING DEVICE IN CINEMATOGRAPHIC VIEW TAKING APPARATUS. ANDRÉ LÉON VICTOR CLÉMENT DENNIS, Paris, France. Filed Oct. 20, 1930, Serial No. 490,047, and in France Dec. 9, 1929. 2 Claims. (Cl. 88—18.4.)



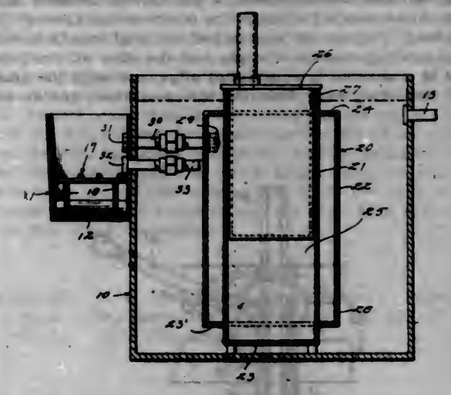
1. In a cinematographic view taking apparatus, the combination of a control plate, film driving pins adapted to intermittently advance the film, means whereby the control plate controls the reciprocating longitudinal movement of the driving pins, a film pressing device, registering pins adapted to engage perforations in the film, a rocking shaft controlling the pressing device, an arm carried by said shaft, a projection thereon, cam-shaped means carried by the control plate engaging said projection for controlling the angular position of the projection, arm and shaft arrangement, means whereby the shaft is adapted to operatively engage the registering pins and pressing device with the film during the periods when the driving pins do not advance the film and to disengage same in the intermediary period, a lever adapted to pivot round a stationary point in a plane perpendicular to the film and pivotally carrying at its free ends the driving pins and the reciprocating pins respectively and means for allowing the driving pins to be moved parallel to the displacement of the film by the first mentioned means without disturbing the lever.

1,895,027. APPARATUS FOR RAISING LIQUIDS. JEAN BAPTISTE DE MEES, Berchem-Antwerp, Belgium. Filed Mar. 31, 1930, Serial No. 440,546, and in Belgium Apr. 5, 1929. 2 Claims. (Cl. 103—99.)



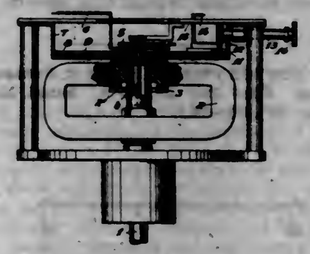
1. A centrifugal apparatus for raising liquids, comprising in combination: a vertical container in the shape of a truncated cone with upwardly increasing diameter, a central suction mouth in the bottom of said container, a central vertical shaft supporting said container by means of radial arms, a disc fixed on said shaft at a short distance above said suction mouth, the diameter of said disc being smaller than that of the container, an annular flange projecting from the inner wall of the container at a short distance above said disc, the smaller diameter of said annular flange being less than the diameter of the disc, and means for rotating the shaft and the container for the purpose set forth.

1,895,028. WATER HEATER FOR STOCK. EDWARD A. DREW, Delta, Iowa. Filed Dec. 16, 1930. Serial No. 502,781. 6 Claims. (Cl. 119—72.)



1. In combination, a water reservoir, a trough disposed exteriorly of the reservoir, a chambered member mounted within the reservoir and having an opening communicating with the interior of the reservoir, conduits connecting the member with the trough, and a heater disposed in said member for heating the water therein whereby to cause the circulation of water in said trough member.

1,895,029. SPEEDOMETER. ALBERT EISELE, Berlin-Wertend, Germany. Filed Apr. 17, 1930, Serial No. 445,098, and in Germany Apr. 23, 1929. 2 Claims. (Cl. 264—13.)

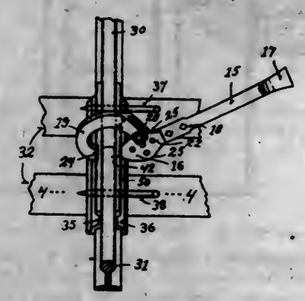


1. In a speedometer, a rotating magnet, an armature rotatable about the same axis as the magnet and forming the speed indicating member, a plurality of radially adjustable members of a good conductor of magnetism arranged coaxially with and above the rotating magnet and the armature, and adapted to divert a part of the lines of force out of the magnetic field cutting the armature, and means accessible outside of the speedometer, for operating the said adjustable members.

1,895,030. RAIL JOINT CLAMP. PAUL W. ELMORE, Cincinnati, Ohio, assignor to The American Valve and Meter Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 11, 1929. Serial No. 362,391. 1 Claim. (Cl. 254—44.)

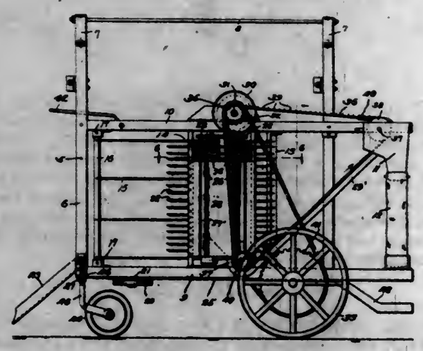
A tool for aligning adjacent ends of a pair of rails between rail joint members, comprising a hook shaped yoke having a bifurcated or forked end and having its other end inturned toward the forked end, the inturned end having a shoe or free end for contact upon a rail joint member disposed on one side of a pair of end to end abutting rails, a flat head of substantially oval or pear shape and

having a nose formed at its one end, the head having a pin receiving aperture offset from its longitudinal center line and at the approximate shoulder or widest part thereof, the arms at the bifurcated end of the yoke receiving the head flatwise between them, a pin carried between said arms and extending through the pin receiving aperture in the head, whereby the nose end of the head may be moved to a position between the pin and the shoe on the yoke and to a position in substantial alignment with the arms and projecting away from the shoe and arms, and an ac-



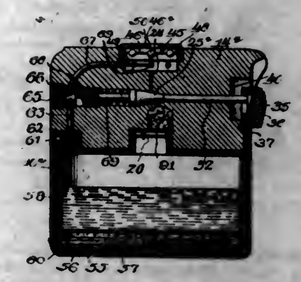
tuating handle secured on the head at the end thereof remote from the nose and beyond the aperture in the head, whereby to apply leverage force by contact of the nose upon a second rail joint member disposed opposite to the first mentioned rail joint member, for aligning abutting rails disposed between the rail joint members, the nose assuming a position in substantial opposition to the shoe and in substantial alignment with the shoe and pin when the rail ends have been brought into registry and alignment.

1,895,031. COTTON PICKER. JESSE T. FERGUSON, Meridian, Miss. Filed July 28, 1930. Serial No. 471,278. 6 Claims. (Cl. 56—48.)



1. In a cotton picking machine, a frame, a plurality of picking fingers mounted within the frame, guide rods for guiding material to the picking fingers, wheels operating in horizontal planes, disposed under the picking fingers to elevate the cotton plants over which the machine is moving, and means for removing material from the picking fingers.

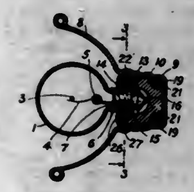
1,895,032. PORTABLE LIGHTING DEVICE AND FUEL THEREFOR. THOMAS H. FISHER, Chicago, Ill. Filed Jan. 24, 1927. Serial No. 163,116. 4 Claims. (Cl. 44—8.)



1. A fuel for lighting devices comprising a mixture of liquefied ethylene oxide and methanol mixed with said liquefied ethylene oxide in less than equal proportions of said methanol.

4. A lighting device comprising a container, and ethylene oxide maintained in liquid form therein under its own vapor pressure and means for releasing said ethylene oxide therefrom in gaseous form.

1,895,033. ELECTRIC INCANDESCENT LAMP AND HOLDER THEREOF. EDWIN RUDOLPH GROTE, Wimbledon, London, England. Filed Sept. 18, 1930, Serial No. 482,886, and in Great Britain Oct. 9, 1929. 2 Claims. (Cl. 240—6.)

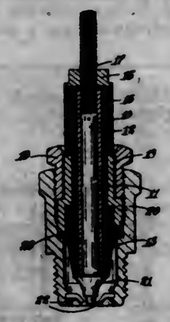


1. A reflector for use with elongated, tubular electric lamps having lateral contacts adjacent each end, the reflector being formed to provide a longitudinally extending channel in its bottom adapted to receive sockets and having outwardly flaring reflecting surfaces on each side of the channel, and a plate detachably engaged with the channel and extending over the channel and forming a continuation of the outwardly flaring reflecting surfaces, said plate being apertured for the passage of lamp bases.

1,895,034. METHOD OF SHEATHING SPARK PLUG ELECTRODES. KENELM EDWARD LEE GUINNESS, London, England, assignor of one-half to K. L. G. Sparking Plugs Limited, London, England, a British Company. Filed May 23, 1931. Serial No. 539,530. 4 Claims. (Cl. 29—155.5.)

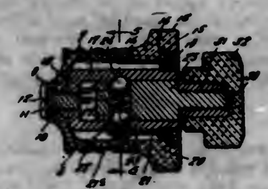
2. In a method of manufacturing a central electrode for a spark plug, the preliminary step of sheathing a current-conducting core having a head at the end at which sparking takes place and is screw-threaded at the other end, with a sheath of metal having high thermal conductivity, which

comprises threading said sheath onto said core, pressing the sheath onto the threaded end so that it is held stationary at that part and subjecting said sheath to a drawing



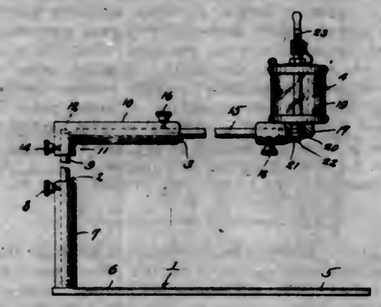
process by means of dies whereby it is compressed into close contact with the core and extended into close contact with the head.

1,895,035. SWITCH. DAVE HANSON, McCallsburg, Iowa. Filed May 29, 1931. Serial No. 540,980. 3 Claims. (Cl. 200—51.)



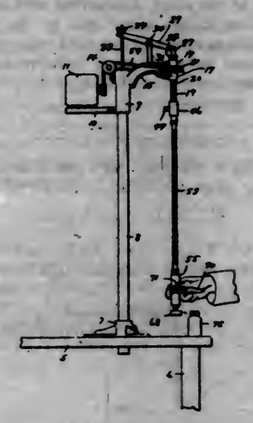
1. A switch of the character described comprising a body of insulating material provided with a threaded jacket thereon, a contact on one end of the body, rotary means in the body connecting or disconnecting the contact with respect to the jacket, said rotary means comprising a barrel in the body having a circumferentially extending groove on its inner side, a rotary plug in the barrel, a contact on the rotary plug, a contact on the barrel, and a connection between the last-mentioned contact and the said jacket, said barrel and plug being of current conductive material and a connection between the contact on the body and the said barrel.

1,895,036. ANÆSTHETIC DROPPING STAND. LEO E. HAUGHEY, Concordia, Kans. Filed Apr. 30, 1931. Serial No. 534,109. 1 Claim. (Cl. 128—188.)



An anæsthetic dropping stand comprising a base provided at one end with a horizontal fork which receives and determines the position of the patient's head, so far as horizontal movement of the head is concerned, a vertical standard at the opposite end of the base, a horizontal rod carried by the standard, a support, a dropper carried by the support and located above and between the sides of the fork, the standard comprising parts which are relatively adjustable about a vertical axis thereby to give the dropper a gross adjustment horizontally with respect to the sides of the fork, means for mounting the support for rotation about a horizontal axis on the rod, to give the dropper a fine adjustment with respect to the sides of the fork, and clamp means connecting the support with the rod and holding the support against rotary movement on the rod, the lower end of the dropper being so close to the support, and the clamp means being so close to the lower end of the dropper that while the hand of an operator is on the clamp means, the same hand can catch the drip from the dropper.

1,895,037. CAP DRIVER. ALTON HERNDON, Waltham, Mass. Filed Mar. 16, 1932. Serial No. 599,281. 5 Claims. (Cl. 226—88.)



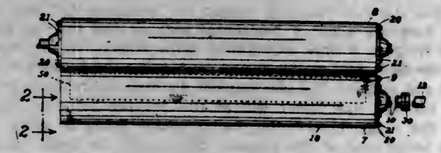
1. A cap applying mechanism comprising a platform, a post vertically adjustable on the platform, a motor supported by the post, a flexible drive shaft, a pulley having a fixed support, drive means between the motor and the pulley, a shaft splined to the pulley, one end of the shaft being secured to the flexible drive shaft, tensioning means associated with the opposite end of the splined shaft for normally elevating the shaft and a cap applying device at the other end of the flexible shaft.

1,895,038. SHINGLE. JOSEPH O. JONES, Kingsville, Tex., assignor of one-half to Jacob L. Gregg, Kingsville, Tex. Filed Feb. 28, 1930. Serial No. 432,157. 1 Claim. (Cl. 108—33.)



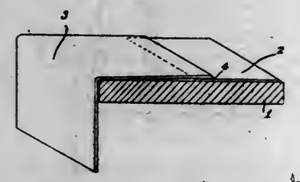
A shingle anchoring device comprising a strand of wire bent intermediate its length to form a shingle engaging bill and a cross head at one end of the bill projecting from opposite sides thereof, end bars of the cross head being crimped to form inwardly extending seats, and end portions of the strand forming an outer bar for said head being disposed in crossed relation to each other and having their ends bent to form prongs extending through the seats and of a length to be passed through a shingle and bent inwardly toward each other across the end bars.

1,895,039. SUCTION PRESS ROLL FOR PAPER MAKING MACHINERY. JOHN F. JOSEPH, Cincinnati, Ohio, assignor to The Cincinnati Rubber Manufacturing Company, Norwood, Ohio, a Corporation of Ohio. Filed July 30, 1932. Serial No. 626,285. 6 Claims. (Cl. 92—53.)



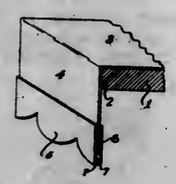
1. A suction press roll for paper making machinery comprising a hollow cylindrical shell provided with a multiplicity of radial suction holes, said shell having a head at each end and means for associating the interior of the roll with a suction pipe, a series of shallow channels formed in the material of the shell, said channels being spaced apart in substantial parallelism to extend longitudinally of the shell, a covering of hardened elastic substance applied to the outer face of the shell and extended into the channels, and a second covering of resilient rubber superposed upon the first covering and vulcanized thereto, the suction holes of the shell being continued through both coverings.

1,895,040. SHELF PAPER. EDWARD KARFIOL, New York, N. Y. Filed May 20, 1932. Serial No. 612,621. 3 Claims. (Cl. 41—10.)



3. A shelf paper embodying a paper shelf covering portion adapted to overlie at least a part of the width of the upper surface of a shelf, and a plurality of edging strips adhesively secured to said shelf covering portion and adapted to extend to and hang over the edge of the shelf.

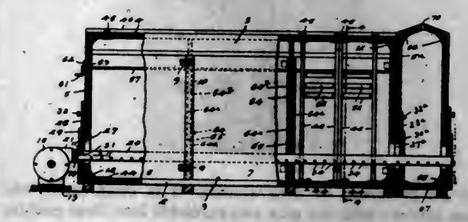
1,895,041. SHELF PAPER. EDWARD KARFIOL, New York, N. Y. Filed Apr. 30, 1932. Serial No. 608,379. 9 Claims. (Cl. 41—10.)



7. A shelf paper comprising a paper shelf covering portion, a longitudinal margin of which is extended to hang over the edge of a shelf as a flap, and a plurality of reinforcing bands mounted on the flap in overlapping positions, to be visible to an observer from the front of the shelf when the shelf paper is positioned thereon, and adhesively secured in place for reinforcement of the flap portion.

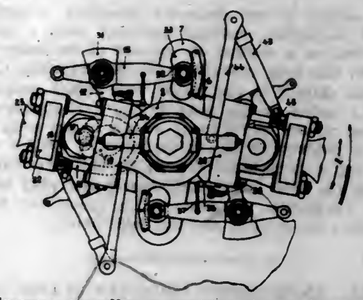
9. A paper shelf edging embodying a longitudinally extending foundation strip of paper, and a plurality of separate supplementary reinforcing bands, of lesser width than the width of the foundation strip, extending continuously along and adhesively secured to the front face of the foundation strip for reinforcement, to be visible to an observer from the front edge of a shelf when the edging is positioned thereon, whereby a stiffened edging is produced by adhesively uniting a plurality of plies.

1,895,042. INCUBATOR. WILBER L. LONG, Kirksville, Mo. Filed Oct. 8, 1929. Serial No. 398,242. 6 Claims. (Cl. 119—37.)



1. An incubator comprising a cabinet provided in opposite walls thereof with vertical slots, egg carrying trays within the cabinet, a conduit arranged horizontally within the cabinet and extending through said slots, the conduit having one end closed and provided in its lower side with discharge ports, slides closing the slots and having the ends of the conduit passing therethrough, means supporting the slides for vertical adjustment, means for securing the slides in adjusted position, and means for delivering heated air to the other end of the conduit.

1,895,043. PROPELLER. EUGENIO MACALUSO, Turin, Italy. Filed Nov. 13, 1931, Serial No. 574,819, and in Italy Nov. 14, 1930. 13 Claims. (Cl. 170—162.)

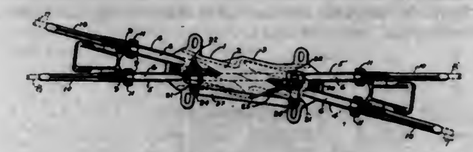


1. Airscrew propeller comprising, in combination with a propeller shaft, a hub fixed on said propeller shaft, a blade-carrier loosely mounted on said hub and having a pair of opposite flanges, universal supports mounted between said flanges in diametrally opposed positions, blades carried by said universal supports, diametrally opposite arms on said hub, diametrally opposite arms on said blade-carrier substantially at right angles to the arms on the hub, toggles connecting adjacent arms on said hub and blade-carrier, centrifugal weights carried by said toggles, a cross bar secured to the hub and forks pivoted to the universal supports and connected by a telescopic and spherical joint to the ends of said cross bar.

1,895,044. CROSSOVER DEVICE. SAMUEL S. MATTHES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Apr. 20, 1932. Serial No. 606,351. 20 Claims. (Cl. 191—37.)

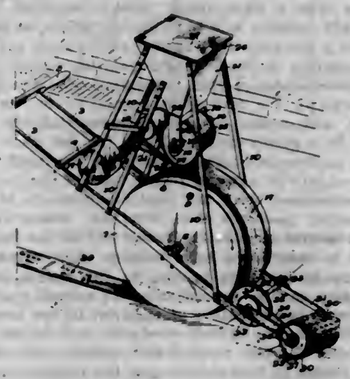
1. A trolley device comprising a body and a plurality of spaced arms to guide a current collector onto and off

of the body, a pair of guides pivotally mounted at their remote ends to the body and arranged to be normally in longitudinal alignment with each other and two of the oppositely disposed arms, means to move the guides in



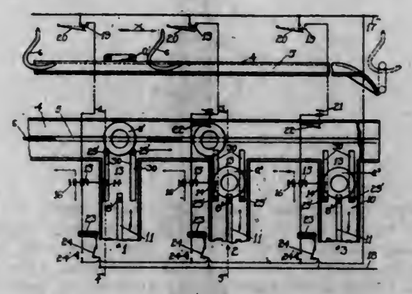
unison with each other upon their pivotal mountings into and out of alignment with each other and the said two arms and yielding means to return the guides to and hold them in their normal positions.

1,895,045. METHOD AND MEANS FOR MARKING SURFACES. JAMES L. MOORE, Middlesboro, Ky. Filed July 17, 1931. Serial No. 551,513. 20 Claims. (Cl. 216—20.)



1. A method of marking surfaces subject to mark-obliterating traffic, consisting of applying paint to the surface to be marked and covering the wet paint with a protective covering of sheet material.

1,895,046. CONVEYER MECHANISM. MYLES MORGAN, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 15, 1930. Serial No. 502,447. 15 Claims. (Cl. 198—21.)



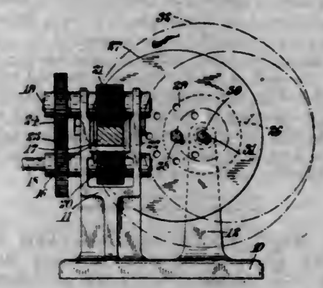
1. In conveyer mechanism of the class described, a conveyer providing a succession of article-engaging members travelling in a common path, for the movement of articles delivered into said path at different points in the length thereof, means responsive to the presence of an article at a delivery point for procuring the transfer of said article to said path, and means for preventing the operation of said transfer means when said delivery point is approached by one of said members in engagement with a previously-delivered article.

1,895,047. GAS PRESSURE REGULATOR. RUDOLF NEUMANN, Berlin-Charlottenburg, Germany. Filed June 15, 1931, Serial No. 544,660, and in Germany Aug. 9, 1930. 3 Claims. (Cl. 50—24.)



1. A regulator of the class described comprising a regulating chamber formed by two diaphragms one of which is adapted to be acted upon by the pressure prevailing behind the regulator, a throttle valve cooperable with this diaphragm, the other diaphragm being adapted to shut off said chamber against the entrance pressure, at least two nested nozzles disposed behind said throttle valve, and a communication from at least one of these nozzles to said regulating chamber.

1,895,048. APPARATUS FOR CUTTING STRIPS OR BARS OF MATERIAL INTO SEPARATE PORTIONS. ALFRED GERMAN ROSE, Gainsborough, England, assignor to Rose Brothers (Gainsborough) Limited, Gainsborough, England, a British Company. Filed Mar. 3, 1931, Serial No. 519,861, and in Great Britain Mar. 29, 1930. 4 Claims. (Cl. 107—22.)

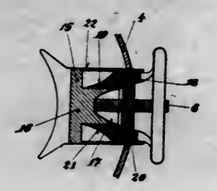


2. Cutting apparatus comprising a rotatable knife carrier, a disc knife having a peripheral cutting edge and a number of apertures spaced on an arcuate pitch-line struck from the center of the disc, means for adjustably clamping the disc by its center to the carrier at a point which is offset from the center of the latter to a distance which equals the radius of said pitch-line, in such manner that the disc may be adjusted about its own center in relation to the carrier, and means for engaging any one of said apertures selectively and clamping the knife at the center of rotation of the carrier.

1,895,049. REGULATING POLE FOR ELECTRIC MACHINES. EMANUEL ROSENBERG, Weiz, Austria. Filed Nov. 5, 1929, Serial No. 404,988, and in Austria Nov. 16, 1928. 8 Claims. (Cl. 171—227.)

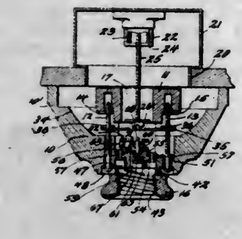
1. A dynamo electric machine with a magnetic structure and a regulating part therein comprising a stationary

and a movable element with a common axis and means to shift one element axially within the other, the stationary



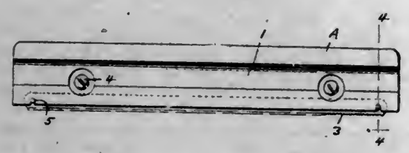
element having at right angles to the axis a section of magnetic material, large at one end and diminishing progressively to a small quantity.

1,895,050. ELECTRIC FIXTURE. MARK N. RUSSELL, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Solvay, N. Y., a Corporation of New York. Filed Apr. 17, 1928. Serial No. 270,737. 5 Claims. (Cl. 173—334.)



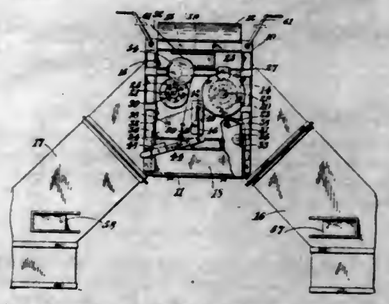
1. In an electric fixture, in combination, a base adapted to be attached to a terminal box in a wall, circuit terminals on said base adapted to be connected to a source of power, a canopy to cover said base and having a surface to engage the wall, a lamp receptacle carried within said canopy and having terminals thereon, and screws passing through said canopy and electrically connecting said lamp terminals to said circuit terminals and holding said canopy against said wall, said base being of such size as to always be out of physical contact with the canopy.

1,895,051. MEAT BLOCK CLEANER AND EVENER. VALENTINE ADAM SCHNEIDER, St. Louis, Mo. Filed May 16, 1932. Serial No. 611,729. 2 Claims. (Cl. 145—47.)



1. A meat block cleaning device comprising an elongated block having parallel slots passing through the lower face, hack saw blades located in the slots, transversely arranged bolts passing thru the block for clamping the blades in the slots, pins passing through holes in the ends of the blades and the lower face of the block having grooves therein for receiving the pins, and said block having grooves in its sides forming finger holds.

1,895,052. APPARATUS FOR SUPPLYING FIBROUS MATERIAL SUCH AS COTTON DURING PREPARATION FOR SPINNING. CHARLES SCHOFIELD, Bolton, England, assignor to Dobson & Barlow Limited, Bolton, England, a British Company. Filed Dec. 28, 1931, Serial No. 583,496, and in Great Britain Dec. 31, 1930. 8 Claims. (Cl. 19—69.)



1. Apparatus for providing a regulated supply of fibrous material, comprising a feed chamber having an inlet for receiving from a main supply conduit material to serve as a supply common to a plurality of outlets leading each to one of a plurality of branch conduits each for feeding a manipulating machine, feed regulating means comprising a control member that is responsive to the quantity of material in the feed chamber and/or in the branch conduits, and means operatively connecting the control member to a supply-varying device for the main conduit whereby said control member serves automatically to control the supply of material to the inlet of the feed chamber in accordance with the total requirements of all the manipulating machines fed therefrom, characterized in that the control member is situated within the feed chamber and is constituted by a balance plate arranged between the said outlets leading to the branch conduits, which plate can be shifted from its normal position by an abnormal accumulation of material in the feed chamber and/or in the branch conduits, and serves to distribute the material among said outlets, and, when so shifted, serves to diminish or stop the supply of material to the inlet.

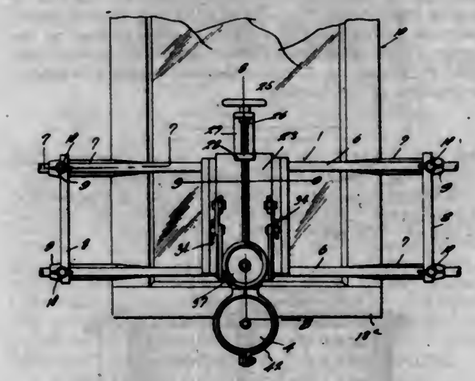
1,895,053. PROP FOR MINES AND MEANS FOR WITHDRAWING THE SAME. JOHN JAMES STALEY, Brereton, near Rugeley, England. Filed Feb. 27, 1931, Serial No. 518,802, and in Great Britain July 15, 1930. 1 Claim. (Cl. 248—2.)



In props for mines, the combination of a tubular member having a flared end, a tapered wooden or like plug disposed in the flared end of said member, a wooden or

like plug disposed in the opposite end of said tubular member, a second tubular member into which the first tubular member is adapted to telescope, said tubular member having a flared end, a tapered wooden or like plug adapted to be disposed in the flared end of said tubular member and a slotted collar mounted on the first mentioned tubular member to which can be connected the prop withdrawing means.

1,895,054. WOODWORKING MACHINE. WILLIAM STEINMEYER, Elgin, Ill. Filed Sept. 6, 1932. Serial No. 631,925. 6 Claims. (Cl. 144—136.)



1. In a machine for grooving and routing window sashes, a frame having means for clamping it to the window sash, a carriage mounted for movement longitudinally of the frame, a platform shiftably mounted on the carriage transversely of the frame, a guide structure pivotally mounted on the platform, means for securing the guide structure at the desired angular adjustment relative to the platform, a slide arranged to reciprocate within the guide structure, means for securing the slide at the desired adjustment, a motor mounted on the slide, and a cutting tool having driving connection with the motor.

1,895,055. PUSH HOE. JOHN E. STEINOUR and PETER BRUBAKER, Los Angeles, Calif. Filed June 9, 1931. Serial No. 543,165. 2 Claims. (Cl. 97—68.)



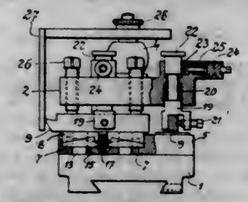
1. A ground working implement comprising a blade, a marginal portion of which being formed into a knife edge, said knife edge having recesses formed therein, the under surface of the blade having corrugations leading from the recesses, said recesses being spaced apart in a direction along each cutting edge, adjacent recesses being spaced apart a distance materially greater than the major width of a recess to provide a material cutting edge between each adjacent recess.

1,895,056. PROCESS OF PREPARING OIL AND COAL AMALGAM. WALTER E. TRENT, New York, N. Y., assignor to The Trent Process Corporation, a Corporation of Delaware. Filed Oct. 20, 1928. Serial No. 313,940. 13 Claims. (Cl. 44—10.)

3. A process which comprises treating finely divided coal with unheated water and a light oil to form an amalgam, separating the amalgam from the water and the ash constituents, adding a fresh supply of unheated water, adding a heavy asphaltic base oil to the amalgam, forming the amalgam into briquets, and in heating said briquets, to distill off said light oil, and to asphaltize said heavy oil.

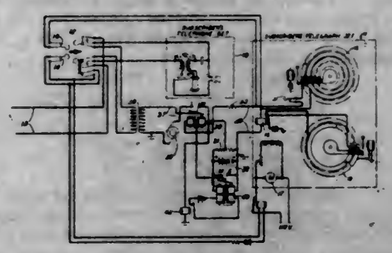
13. A fuel producing process which comprises amalgamating finely divided coal in the presence of water, first with a light oil and then with a heavy oil, separating the resultant amalgam from the water and noncarbonaceous constituents of the coal, molding the amalgam into shaped masses, and baking the masses.

1,895,057. TOOL HOLDER. RUDOLF VON FROMMER, Budapest, Hungary. Filed Apr. 7, 1931, Serial No. 528,417, and in Hungary May 20, 1930. 5 Claims. (Cl. 29—49.)



1. A tool holder comprising a support, a tool post adapted to be fixed on said support and to accommodate several tools, a base arranged between the tool post and the support and having a pair of holes for each tool, adjusting rings rotatable in the said holes and having double threaded helical working surfaces, teeth on the circumference of said adjusting rings, a driving worm for each pair of said adjusting rings meshing with said teeth, compensating rings resting on said adjusting rings and having double threaded working surfaces adapted to fit on the working surface of said adjusting rings, a pair of the compensating rings lying under each tool and thrust screws pressing the tools to the compensating rings.

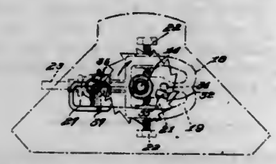
1,895,058. COMBINED TELEGRAPHY AND TELEPHONY. ALLAN WEAVER, Port Washington, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 10 1930. Serial No. 494,797. 7 Claims. (Cl. 179—4.)



2. In a communication system, a transmission line, two communication mechanisms connectible alternatively to said line, one of said mechanisms being a printing tele-

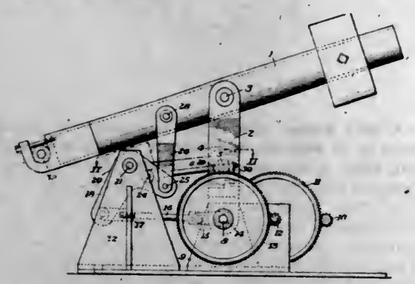
graph set having a motor, instrumentalities whereby the motor may be started from rest while the other communication mechanism is still connected to the line and instrumentalities for disconnecting said other mechanism from and connecting the telegraph set to the line without interrupting the rotation of the motor.

1,895,059. METER REVERSE CONTROL MECHANISM. HARRY G. WEYMOUTH, Pittsburgh, Pa., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 15, 1928. Serial No. 261,798. 6 Claims. (Cl. 73—1.)



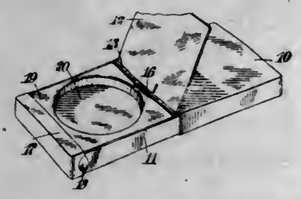
1. In a gas meter the combination of a driven shaft; a tangent arm carried by said shaft; and stop means for arresting movement of said tangent arm and said shaft after a substantially fixed range of reverse movement thereof.

1,895,060. PUMPING JACK. JOHN M. WOLFE, Poland, Ohio. Filed June 2, 1932. Serial No. 614,868. 5 Claims. (Cl. 74—5.)



1. In a pumping jack, driving mechanism, a floating lever operatively connected thereto and driven thereby for reciprocating a pump element, and mechanism for mounting and controlling the motion of said floating lever to impart straight-line motion to said pump element comprising a rockable member pivotally supporting said floating lever and a toggle extending between a fixed pivot and a pivotal connection to said rockable member.

1,895,061. BOX OF THE SLIDE-AND-SHELL TYPE. GEORGE STEPHENSON WORSSAM, Watford, England, assignor of one-half to Saville Perfumery Limited, Watford, England, a British Company. Filed Dec. 16, 1930, Serial No. 502,717, and in Great Britain Feb. 1, 1930. 5 Claims. (Cl. 206—37.)

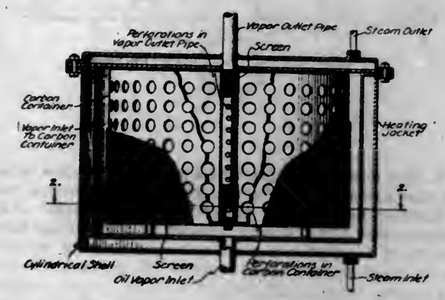


4. A vanity box comprising the combination with a slide-and-shell container, of a tray fitted within the slide, a hinged metal flap constituting a mirror and articulated to the slide and movable to cover and uncover the contents of the tray aforesaid, spring means arranged to urge the slide towards the open position and simultaneously to constrain the tray against dislodgement from the slide and a catch operable at will to lock the slide in the closed position against the action of the spring aforesaid.

1,895,062. REVIVIFICATION OF CARBONS. PAUL ZURCHER, Florence, Colo., assignor, by mesne assignments, to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed Aug. 13, 1928. Serial No. 299,443. 2 Claims. (Cl. 252—3.)

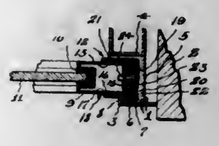
1. In a hydrocarbon refining process employing activated carbon made from petroleum coke for removal of sulphur, the method of regenerating the carbon which comprises subjecting the sulphur-bearing carbon to the action of high temperature steam heated to substantially 1050° F. whereby a chemical reaction occurs to expedite the removal of the sulphur.

1,895,063. CRACKING PROCESS. PAUL ZURCHER, Florence, Colo., assignor, by mesne assignments, to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed May 7, 1929. Serial No. 361,264. 4 Claims. (Cl. 196—52.)



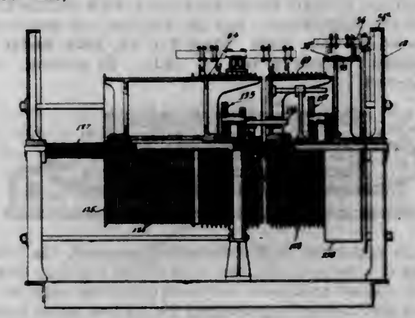
1. The method of cracking hydrocarbons to produce lighter fractions in the nature of gasoline which comprises subjecting vapors of the hydrocarbon at substantially atmospheric pressure to the catalytic action of carbon heated to a temperature of 300° C. to 510° C. and previously activated by the combined action of steam and phosphoric acid.

1,895,064. WINDOW SASH AND WEATHER-STRIP CONSTRUCTION. ROY T. AXE, Syracuse, N. Y., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y., a Corporation of New York. Filed July 1, 1929, Serial No. 375,133. Renewed Aug. 15, 1932. 13 Claims. (Cl. 189—65.)



1. The combination with a window sash, of a weather strip member having means for embracing the margin of a sash member and engaging the inner and outer sides thereof and being also formed with an offset flange opposed to the intermediate part of the weather strip member which overlies the edge of the sash to form a recess, and a weather strip in the recess and means for holding the weather strip from lengthwise movement relative to the weather strip member.

1,895,065. AUTOMATIC STOPPING ELEVATOR CONTROL SYSTEM. MILTON BARUCH, Los Angeles. RAY E. DE CAMP, Glendale, and CRANFORD P. WALKER, Los Angeles, Calif., assignors to Llewellyn Iron Works, Los Angeles, Calif., a Corporation of California. Filed Nov. 16, 1925. Serial No. 69,353. 15 Claims. (Cl. 187—29.)



1. In an elevator, the combination with an electric hoisting motor and an elevator car, of an operator's switch within the car, a direction relay, a holding circuit for said relay adapted to close upon operation of the operator's switch for starting the car, a holding circuit transferring relay operated to open said first holding circuit and close a second holding circuit for the direction relay upon slowing of the elevator car, and a car stopping and leveling mechanism provided with a cam operated switch for closing a third holding circuit for the direction relay until the car has stopped.

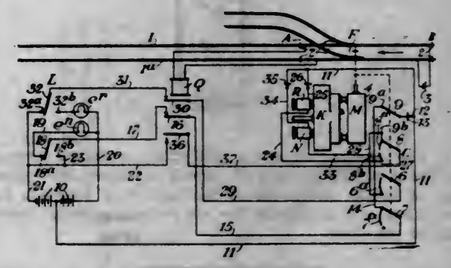
1,895,066. CATTLE DRINKING CUP OR THE LIKE. CARL JOHAN OSCAR BERGSTRÖM, Huskvarna, Sweden. Filed Aug. 30, 1930, Serial No. 478,908, and in Sweden Sept. 2, 1929. 4 Claims. (Cl. 119—74.)



1. A cattle drinking cup comprising a cup-shaped member at least partially surrounding a feeding pipe, said feed-pipe having a plurality of small openings in its upper side, said cup-shaped member having one relatively large opening directed downwardly and registering with all the said small openings in the upper side of the pipe.

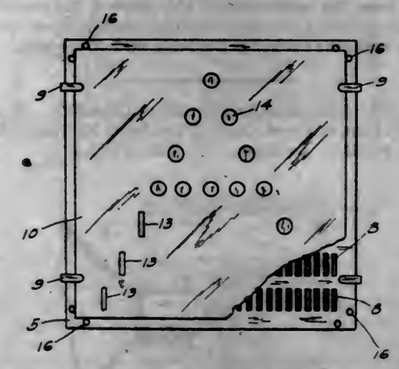
1,895,067. APPARATUS FOR CONTROLLING RAILWAY SWITCHES. HERBERT L. BONE, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 2, 1931. Serial No. 506,061. 1 Claim. (Cl. 246—258.)

In combination, a section of railway track including a switch, fluid pressure means for moving said switch between normal and reverse positions, a normal magnet for controlling the normal operation of said fluid pressure means, a reverse magnet for controlling the reverse operation of said fluid pressure means, a circuit controller operated by said switch and having a first contact which is closed in all positions of said switch except when said switch occupies its extreme normal position, a second contact which is closed in all positions of said switch except when said switch occupies its extreme reverse position, a third contact which is closed in all positions of said switch from the normal position to an intermediate position thereof, a fourth contact which is closed in all positions of said switch from the reverse position to an intermediate position thereof, a fifth contact which is closed when and only when said switch occupies its extreme normal position, and a sixth contact which is closed when and only when said switch occupies its extreme reverse position, a manually operated contact device having a first normal contact, a second normal contact, a first reverse contact and a second reverse contact, a track relay associated with said section and having a first front contact, a second front contact and a back contact, a normal signal for indicating when said switch occupies its extreme normal position, a reverse signal for indicating when said switch occupies its extreme reverse position, an operating circuit for said normal magnet including the first normal contact of said contact device as well as the first front contact of said track relay and the first contact of said circuit controller, an operating circuit for said reverse magnet in-



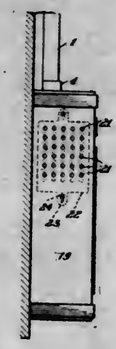
cluding the second reverse contact of said contact device as well as the second front contact of said track relay and the second contact of said circuit controller, a normal restoring circuit for said normal magnet including the back contact of said track relay and the third contact of said circuit controller, a reverse restoring circuit for said reverse magnet including the back contact of said track relay and the fourth contact of said circuit controller, a circuit for said normal signal including the second normal contact of said contact device, the second front contact of said track relay, and the second and fifth contacts of said circuit controller, and a circuit for said reverse signal including the first reverse contact of said contact device, the first front contact of said track relay and the first and sixth contacts of said circuit controller.

1,895,068. TOY. JOSEPH N. BORROUGHS, Oakland, Calif. Filed Nov. 14, 1930. Serial No. 495,695. 2 Claims. (Cl. 35—9.)



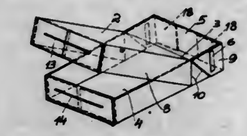
1. Means for positioning and securing a superposed rectangular diagram sheet on a base comprising a positioning pin for each side of each corner of the sheet and secured in the base, for positioning the sheet, and inwardly projecting spring fingers secured to the base and cooperating therewith and having the inner ends upturned whereby the sides of the sheet may be inserted between the fingers and the base and frictionally retained therebetween.

1,895,069. MAIL CHUTE. JOSEPH WARREN CUTLER, Rochester, N. Y., assignor to Cutler Mail Chute Co., Rochester, N. Y., a Corporation of New York. Filed June 3, 1931. Serial No. 541,703. 7 Claims. (Cl. 193—8.)



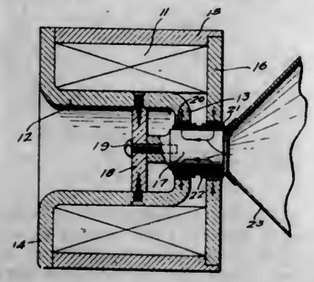
7. The combination with a mail chute extending through the floors of a building and embodying letter drop openings, of means additional to the mail drop openings for controlling and modifying the air pressure and air movement in the chute.

1,895,070. CARDBOARD BOX AND THE LIKE. VIKTOR CZERWENY, Waltendorf near Graz, Austria. Filed Apr. 11, 1930, Serial No. 443,478, and in Austria Apr. 18, 1929. 5 Claims. (Cl. 229—33.)



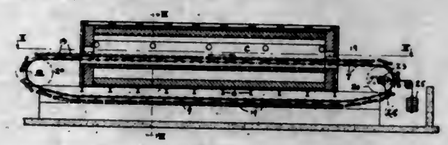
1. A single-piece cardboard box having a rectangular, trough-like underpart with walls permanently enclosing the interior of the box like a frame also when the box is open and a lid overlapping said underpart on all sides when the box is closed, said lid being subdivided by a hinge into a movable part fixed to the underpart and permanently covering a portion of the interior of the box, the side flaps of the said movable part of the lid being separated from the corresponding side flaps of the immovable part of the lid by incisions running obliquely from the end of the said hinge towards the back wall of the box.

1,895,071. DYNAMIC LOUD SPEAKER UNIT. HERMAN J. FANGER, Oakland, Calif. Filed Sept. 25, 1928. Serial No. 308,152. 4 Claims. (Cl. 179—115.5.)



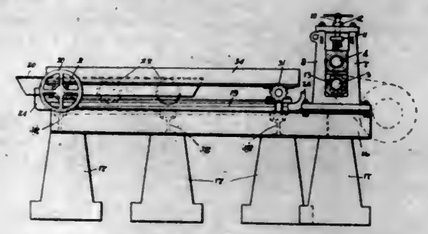
1. In a dynamic signal reproducer, a hollow magnetic member, a field coil disposed over the member, an annular pole piece axially spaced from the end of said member, a core centrally supported with respect to both the tubular member and the annular pole piece to form therewith a pair of annular air gaps, a tubular movable support disposed in said gaps, and a pair of coils mounted on the support, one in each gap.

1,895,072. CONTINUOUS FURNACE FOR METALLURGICAL PURPOSES. RAY M. FENTON and EDWARD F. CLARK, Monroe, Mich. Filed Feb. 17, 1927, Serial No. 168,924. Renewed Dec. 3, 1931. 13 Claims. (Cl 263—8.)



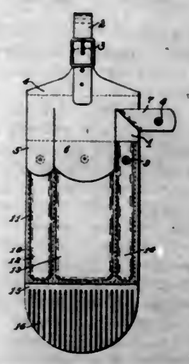
1. In apparatus of the character described, the combination of a furnace chamber, a travelling conveyor therein having hollow transverse members, receiving cups at the end of said members, and means for feeding water to said cups.

1,895,073. SHEET FEEDING APPARATUS. RAY M. FENTON, Youngstown, Ohio, assignor to The Newton Steel Company, Youngstown, Ohio, a Corporation of Ohio. Filed June 23, 1930. Serial No. 463,073. 4 Claims. (Cl. 271—55.)



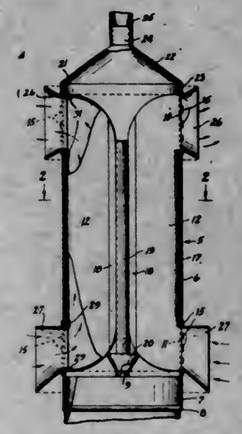
1. In combination with rolls for sheets, of a movable carriage for feeding such sheets to such rolls, a longitudinally inclined track sloping away from such rolls supporting said carriage, a stop extending longitudinally and along one side only of said track adapted to engage the edges of such sheets, and means for moving said stop laterally relative to said track.

1,895,074. ARTICLE HOLSTER. EDWARD R. HAGERSTROM, Waterloo, Iowa. Filed Mar. 30, 1931. Serial No. 526,421. 1 Claim. (Cl. 224—26.)



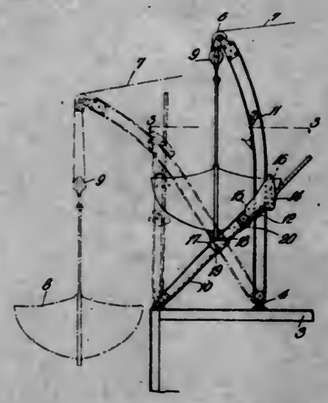
In a device of the character described, a backing member having its upper end reduced to form a strap end perforated to receive a buckle tongue, a front member secured upon the backing member, having its upper end reduced to form a strap and having a buckle thereon to cooperate with said perforated strap as a suspension means, open top pockets of different sizes mounted on the front and a single pocket also on the back of said backing member, separated integral closure flaps shaped from the lower part of said front member and releasably secured to said pockets on the front member, and means for releasably fastening the open end of the rear pocket to the backing member.

1,895,075. HEAT CIRCULATOR. JOHN B. HORTON, Saugatuck, Conn. Filed Apr. 15, 1931. Serial No. 530,157. 9 Claims. (Cl. 257—167.)



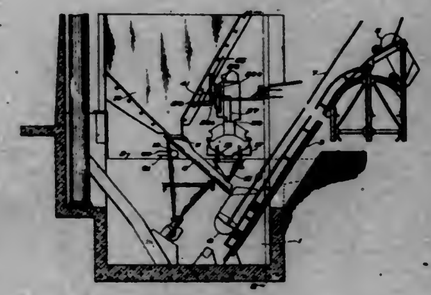
3. In a heat circulator, a cylindrical body having an open end adapted to receive the upper end portion of a heater, a centrally arranged tube in said body, open end tubes within the body and having their ends disposed to receive and discharge air at the outer sides of the body, said tubes at their inner edges abutting the centrally arranged tube and held in position thereby, and said tubes spaced apart in the body to provide channels for the circulation of products of combustion about the tubes.

1,895,076. BOAT LOWERING GEAR. JOHN BLAIN HUNT, Penylan, Cardiff, Wales. Filed Apr. 13, 1932, Serial No. 604,924, and in Great Britain Apr. 17, 1931. 4 Claims. (Cl. 9—22.)



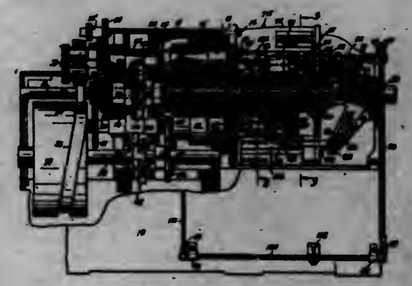
1. In boat lowering gear the combination of a pair of davits each pivotally supported at its base upon the deck of the vessel at a point spaced from the side thereof so as to be swingable laterally from an inboard to an outboard position, a pair of struts each of which is pivotally connected to the deck of the vessel at a point disposed above the side thereof, a slidable connection between each strut and one of said davits and means for limiting sliding movement between each davit and its associated strut.

1,895,077. INTERLOCKING SKIP LOADING SYSTEM. JAMES D. KELVIE, Canton, Ohio, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed June 27, 1928, Serial No. 288,658. Renewed Dec. 29, 1931. 17 Claims. (Cl. 214—40.)



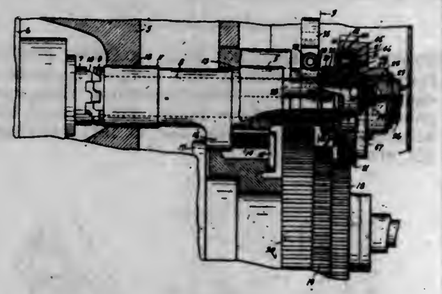
16. In combination, two material transfer elements each movable angularly to the other, a power operable gate means between said elements, means for operating said gate means, and contact members controlled by the position of both of said elements to effect the transmission of power for permitting the operation of said gate means.

1,895,078. MULTIPLE SPINDLE LATHE. ARTHUR J. LEWIS, Stratford, Conn., assignor to The Baird Machine Company, Stratford, Conn., a Corporation of Connecticut. Filed Oct. 18, 1930. Serial No. 489,584. 18 Claims. (Cl. 29—38.)



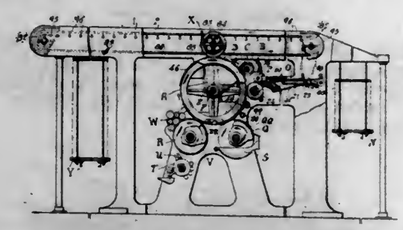
1. In a machine of the character described, an indexing turret, a plurality of spindles in the turret, means on each spindle for supporting one end of a piece of work and driving it, an extension connected to the turret and extending forwardly therefrom, means on the extension for supporting the other ends of the work and movable toward and from the work, means for indexing the turret and extension, means for clamping the movable work supporting means in position at the working stations, means operated in timed relation with the indexing means for operating the clamping means, and means to urge the holding means on the extension toward the holding means on the turret during the indexing operation.

1,895,079. WORK SPINDLE DRIVE FOR CHUCKING MACHINES. ARTHUR J. LEWIS, Stratford, Conn., assignor to The Baird Machine Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 31, 1931. Serial No. 512,532. 6 Claims. (Cl. 29—38.)



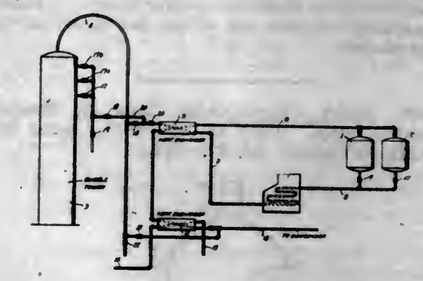
5. In a machine of the character described, a frame, a rotary turret in the frame, a work spindle carried by the turret, a spindle drive shaft mounted for longitudinal movement in the frame, cooperating clutch means on the spindle and the shaft and engaged and released by said movement, a driven member on the shaft, a second driven member having driving connection with the shaft and movable longitudinally therewith, and a driving connection from the first member to the second member adapted to drive the second member at a different speed from that of the first member.

1,895,080. SHEET-FED RELIEF-INTAGLIO ROTARY PRINTING PRESS. CHARLES J. MACARTHUR, Glen Ridge, N. J. Filed Nov. 7, 1929. Serial No. 406,732. 11 Claims. (Cl. 101—152.)



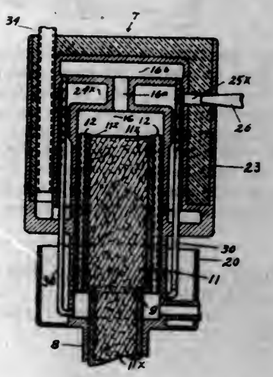
5. In a printing press, the combination of a printing cylinder, means for inking said printing cylinder, a single impression cylinder cooperating with said printing cylinder and having its periphery divided into a plurality of sheet receiving sections said printing cylinder and each of said sheet-receiving sections having a circumferential length substantially equal to that of the largest sheet to be printed, means rotating said impression cylinder and said printing cylinder, and means for feeding and applying a sheet to each of said sheet receiving sections of the impression cylinder during each complete revolution of said impression cylinder including a rotatable intake cylinder having guides to temporarily stop advancement of said sheet and position it with respect to said impression cylinder, said intake cylinder being of a diameter substantially less than said printing cylinder and having means for gripping the leading edge of the sheet after it has been adjusted to said guides, means for actuating said intake cylinder so as to successively stop the latter to present said guides to an incoming sheet as the leading edge of each section of the impression cylinder approaches the intake cylinder and then rotate said intake cylinder at the same peripheral speed as said impression cylinder to apply said sheet to said section of the impression cylinder, and means for advancing a sheet to said guides of the intake cylinder upon each stopping of the latter.

1,895,081. METHOD FOR CONVERTING HYDROCARBON MATERIALS. WALTER MILLER, ALFRED HENRIKSEN, and PAUL ZURCHER, Ponca City, Okla., assignors to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed Jan. 26, 1931. Serial No. 511,828. 4 Claims. (Cl. 196—96.)



1. A method of increasing the antiknock qualities of motor fuels comprising the steps of vaporizing the fuel in a primary heating zone without substantial pyrolytic decomposition and superheating the vapors above their normal vapor temperatures in a subsequent heating zone and, while substantially at such temperatures and without substantial condensation, passing the vapors through a mineral material of the clay type.

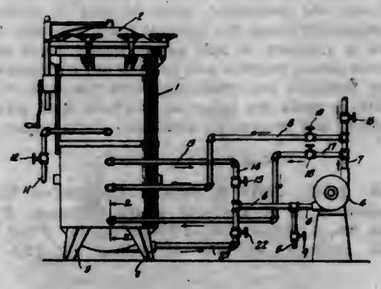
1,895,082. ENGINE. BRUNO MONTERO, Los Angeles, Calif. Filed Oct. 14, 1931. Serial No. 568,755. 2 Claims. (Cl. 60—24.)



1. In an engine of the kind described, a piston cylinder having a diametrically enlarged end portion which forms an air chamber, a piston member having a shank portion which has a working fit within the part of said piston cylinder which is not enlarged, said piston having an extension occupying said chamber, said extension being provided with temperature radiating elements, the end portion of said chamber which is farthest from said piston being provided with a contracted neck-portion, and a jacket provided with a heating chamber which surrounds said contracted neck portion.

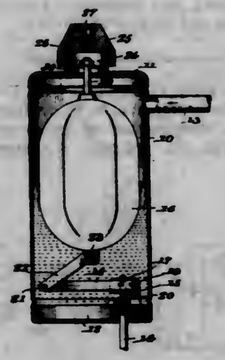
1,895,083. FILTER. VICTOR C. NORQUIST and EARL E. TREANOR, Kansas City, Mo., assignors to Butler Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed June 6, 1930. Serial No. 459,578. 1 Claim. (Cl. 210—177.)

A flushing assembly for filters used in purifying dry-cleaners solvent, comprising a pump, a connection to the suction of the pump for removing solvent from the filter, a connection to the pump discharge for reintroducing the solvent near the bottom of the filter, and a second connection to the pump discharge for diverting the suspensoid



from the filter, and a connection to the filter below the pipe for reintroducing the solvent thereto, said connection leading to the suction of the pump.

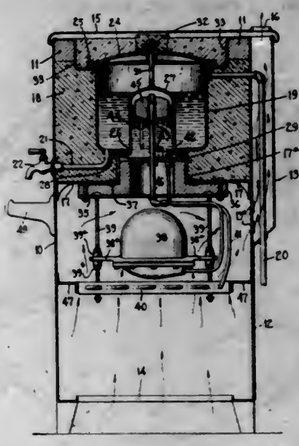
1,895,084. FLOAT VALVE. FRANK D. PELTIER, Evansville, Ind., assignor to Servel Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 9, 1930. Serial No. 474,127. 6 Claims. (Cl. 137—103.)



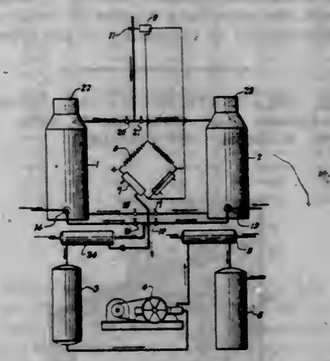
1. The combination of a float chamber, means for the admission and discharge of fluid into and from said chamber, means for controlling the discharge of fluid from the chamber, a float operating said discharge controlling means, a piston connected to said float and means for venting the chamber on the remote side of the piston to the atmosphere to permit pressure within the float chamber to move said piston and raise the float to render inoperative the discharge controlling means.

1,895,085. WATER COOLER. FRANK D. PELTIER, Evansville, Ind., assignor to Servel Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 14, 1930. Serial No. 488,606. 19 Claims. (Cl. 62—141.)

1. A water cooler comprising a cabinet, a container for water permanently secured within the cabinet, and a refrigerating apparatus removable as a unit from the cabinet and mounted beneath said container, said refrigerating apparatus having a cooling element associated in good thermal contact with the container in a manner to cool water within the container.

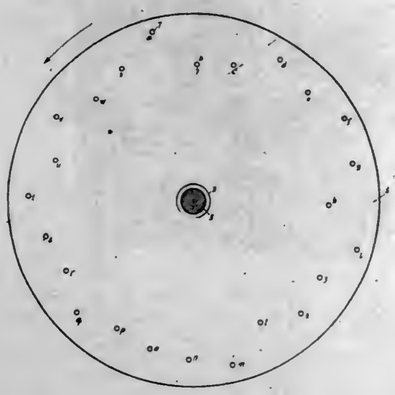


1,895,086. APPARATUS FOR THE MANUFACTURE OF BENZOL AND VALUABLE BY-PRODUCTS FROM A GAS CONTAINING EITHER BUTANE, PROPANE, OR ETHANE, OR PORTIONS OF EACH. FRANK PORTER, Syracuse, N. Y., assignor to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Original application filed Apr. 27, 1927, Serial No. 186,851. Divided and this application filed Jan. 18, 1930. Serial No. 421,800. 2 Claims. (Cl. 23—262.)



1. An apparatus for the production of benzol and by-products from a gaseous hydrocarbon material comprising a plurality of furnaces adapted to be alternately heated, inlet lines leading to said furnaces for introducing gaseous hydrocarbon material alternately thereto, heating means for the furnaces and means for cooling the gas after it has been discharged from the furnace, a tar extractor for removing liquid from the cracked gas, and a compressor connected to the tar extractor, and an accumulating and separating tank for removing benzol from the remaining gases.

1,895,087. SCANNING ELEMENT FOR USE IN TELEVISION SYSTEMS. THEODORE A. SMITH, Ridgewood, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 27, 1929. Serial No. 374,077. 1 Claim. (Cl. 178—6.)

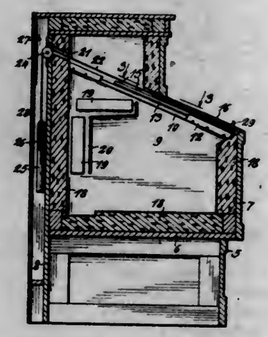


In a television system, a scanning device having a plurality of scanning elements so arranged thereon that each element is spaced a different radial distance from each preceding and succeeding element.

1,895,088. COLORED RUBBER PRODUCT AND METHOD OF COLORING RUBBER. BERT S. TAYLOR, Stow, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 28, 1930. Serial No. 439,859. 17 Claims. (Cl. 18—50.)

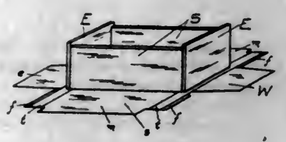
1. The method of manufacturing a colored rubber article which comprises incorporating in rubber from 5 to 20 per cent. by volume of inert pigment of medium covering power, but only minor proportions of pigments of good covering power, shaping the rubber to approximately its final shape, and applying a solution of an oil soluble dye in a rubber solvent to the surface of the rubber.

1,895,089. SELF-SERVE FOOD CASE. TYLER F. SNODGRASS, Denver, Colo. Filed Jan. 16, 1932. Serial No. 587,089. 3 Claims. (Cl. 312—138.)



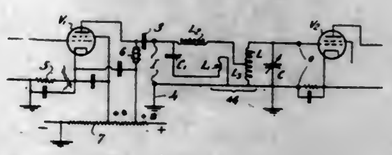
1. A refrigerator comprising, a case having an opening at the top, a straight inclined track at each end of the opening, the two tracks being parallel and lying in the same plane, a roller assembly supported on each track, a glass plate having its ends supported on the rollers, a pair of flexible tension members attached to the upper edge of the glass plate, pulleys secured to the refrigerator case above the upper edge of the inclined glass plate, said members passing over the pulleys, a weight secured to the end of each member, the value of the weights being slightly less than the component force tending to move the plate downwardly along the inclined track whereby, when the plate is released, it will automatically move downwardly into closed position and holding devices secured to the track members and projecting over the ends of the glass plate to guide the latter and to hold it in position on the rollers and prevent its accidental displacement.

1,895,090. BOX. JOHN S. STOKES, Huntingdon Valley, Pa., assignor to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 5, 1930. Serial No. 493,500. 15 Claims. (Cl. 225—23.)



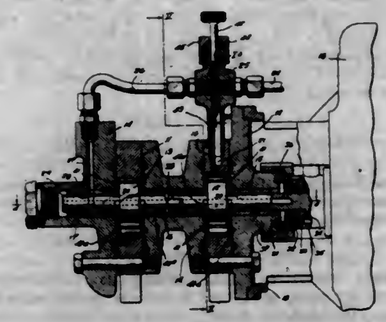
1. The method of forming a cardboard cigar box, which comprises bending a box component of substantial thickness in position to form the box bottom and sides, effecting adhesive engagement between each of the thick end edges of said component and the box-interior face of an end wall component, and adhesively applying sheet-material to overlie the end corners of the box.

1,895,091. ELECTRIC COUPLING CIRCUIT. HAROLD A. WHEELER, Jackson Heights, N. Y., assignor to Hazeltine Corporation, a Corporation of Delaware. Filed Aug. 19, 1930. Serial No. 476,393. 8 Claims. (Cl. 178—44.)



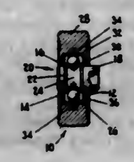
1. An electrical coupling system comprising a tunable secondary circuit including a fixed secondary winding and variable capacity bridged between output terminals, a primary circuit including in closed series connection, in the order recited, a portion of said secondary winding, a fixed inductance, a fixed capacity and a primary winding magnetically coupled to said secondary and of small inductance relative to said fixed inductance, a pair of input terminals connected to said primary circuit for providing shunt paths therebetween, one path including said fixed inductance and said secondary winding portion, and the other including said fixed capacity and primary winding, the inductance of said primary circuit in conjunction with associated capacity being resonant at a frequency below the tunable range for controlling the variation in coupling between said primary and secondary circuits throughout a tunable frequency range.

1,895,092. SYSTEM AND METHOD OF LUBRICATING COMPRESSORS. EDWARD T. WILLIAMS, New Rochelle, N. Y. Original application filed July 31, 1926, Serial No. 126,172, now Patent No. 1,750,293. Divided and this application filed Apr. 2, 1929. Serial No. 352,012. 15 Claims. (Cl. 184—6.)



15. In a lubricating system, a resistance unit comprising, in combination, a conduit member, a second member threaded therein, the threads on the two members being of different conformation to provide a spiral lubricant passageway therebetween.

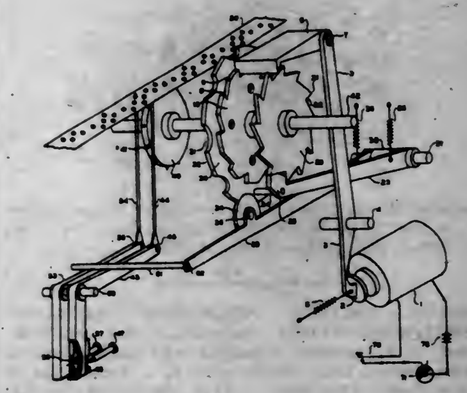
1,895,093. ROLLER SKATE WHEEL. OSCAR A. CARLSON, West Lawn, Pa., assignor to D. P. Harris Manufacturing Co., Reading, Pa. Filed July 16, 1930. Serial No. 468,334. 21 Claims. (Cl. 208—181.)



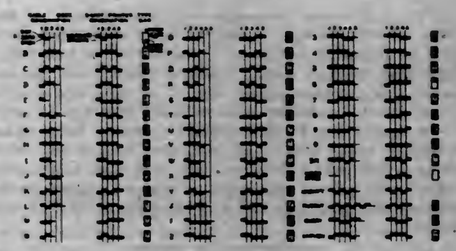
1. As an article of manufacture, an axle, a pair of mated abutted shells cooperating with said axle to form a ball race therebetween, each of said shells having substantially rounded surfaces except at the points of mating thereof, a sealing ring at the abutted edges of said shells, and a one-piece tread molded on said shells around said sealed edges and retaining said shells in permanently associated relation.

1,895,094. STEP-BY-STEP TRANSMITTER. WILLIAM F. CASSEDY, Jr., Milburn, N. J., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 7, 1931. Serial No. 520,857. 12 Claims. (Cl. 178—17.)

1. In a step-by-step transmitter, the combination of a perforated tape and a feed wheel therefor, a ratchet wheel and a cam wheel, an intermittently operated electromagnet common to and for operating said ratchet and cam wheel, a pecker rod for engaging said tape, the operation of said cam wheel first causing said rod to disengage said tape, the operation of said ratchet wheel then causing the operation of said feed wheel to advance said tape and afterward to permit said rod to again engage perforations in said tape.



1,895,095. CABLE CODE PRINTER. ALDER F. CONNERY and MARION H. WOODWARD, Brooklyn, N. Y., assignors to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 15, 1930. Serial No. 502,404. 17 Claims. (Cl. 178—26.)

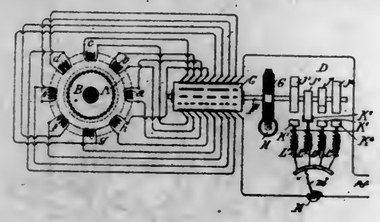


1. In a telegraph system wherein signals are received according to a code in which the characters are not of uniform length, a printer having selector magnets operable by signal combinations of a code in which the characters are of equal length, and relay means responsive to said signals and producing signal combinations suitable for operating a plurality of said printer magnets in various combinations.

1,895,096. ELECTRICAL MACHINE. MICHEL DOLOUKHANOFF, Versailles, France. Filed Jan. 4, 1927, Serial No. 158,975, and in Belgium Jan. 4, 1926. 6 Claims. (Cl. 172—274.)

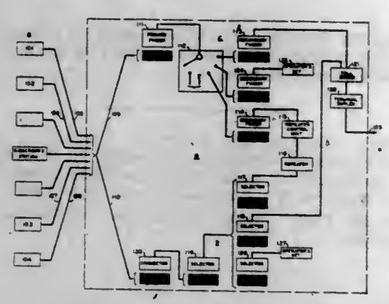
6. In a dynamo-electric machine, a first group of coils adapted to be interconnected in parallel and series relation, a second group of coils in inductive relation to said

first group, said first and second groups of coils being rotatable relatively to one another, a transmission line connected to one of said groups of coils, and means



operative by variations in the electrical characteristics of the load in the transmission line to vary the interconnections of said first group of coils.

1,895,097. PRINTING TELEGRAPH EXCHANGE SWITCHING SYSTEM. FREDERICK G. HALLDEN, Bellerose, N. Y., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 5, 1931. Serial No. 561,323. 17 Claims. (Cl. 178—2.)



1. In a printing telegraph exchange system, a first and a second station, a central office associated therewith, an incoming and an outgoing branch of switches, a single line repeater and a repeater control unit at said central office, means under control of said first station for selectively operating said incoming switches to establish a connection to said repeater control unit, means thereafter under control of said first station for establishing a connection between said unit and said second station, and means responsive to said connection for interconnecting said first and second stations through said repeater.

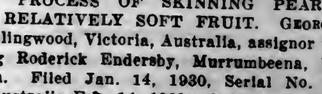
1,895,098. SASH WINDOW AND SASH DOOR. OSKAR OLOF HULT, Stockholm, and OLOF FREDRIK HELLSTRÖM, Gottenborg, Sweden. Filed Aug. 12, 1931, Serial No. 556,650, and in Sweden Aug. 30, 1930. 8 Claims. (Cl. 20—52.1.)



1. In windows or doors with double sashes or frames adapted to be slid horizontally or vertically, said frames or sashes being adapted to be slid simultaneously to open or closed condition, the sashes and the frames respectively being adapted to be approached and separated in order to enable and prevent the sliding respectively, the sashes and the frames respectively being positively governed relatively to each other from a single manipulation point in order to approach or separate said frames and sashes respectively, and thus the window or door respectively is opened.

1,895,099. SOLID PREPARATION YIELDING NITROSO DIAZO SOLUTIONS OF THE DIPHENYLAMINE SERIES AND PROCESS OF MAKING SAME. RUDOLPH JUNG, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1929, Serial No. 345,599, and in Germany Mar. 15, 1928. 4 Claims. (Cl. 8—6.)

1. Compositions of matter comprising a solid diazo preparation of an amino-diphenylamine compound of the general formula:



wherein X stands for hydrogen or an alkoxy group, and solid substances capable of producing nitrous acid when the mixture is dissolved in water.

1,895,100. ORTHO-HALOGENANTHRAQUINONECARBOXYLIC ACID AND PROCESS OF PREPARING IT. GEORG KRÄNZLEIN, MARTIN CORELL, HEINRICH VOLLMANN, and EMIL HAUSDÖRFER, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 21, 1928, Serial No. 301,162, and in Germany Sept. 9, 1927. 6 Claims. (Cl. 260—57.)

4. As a new product, 4-bromo-2-chloranthraquinone-1-carboxylic acid of the formula:

forming yellowish crystals.

1,895,101. VAT DYESTUFF OF THE ANTRAQUINONE SERIES. MAX ALBERT KUNZ, Mannheim, and KARL KORBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 22, 1929, Serial No. 387,799, and in Germany Oct. 20, 1928. 8 Claims. (Cl. 260—61.)

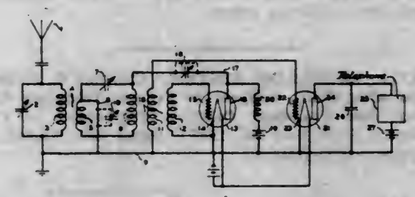
1. As new articles of manufacture, the new vat dyestuffs corresponding to the general formula

in which R represents a dibenzanthrone or isodibenzanthrone radicle, R'—CO— a radicle of a carboxylic acid of an aromatic compound containing a system of at least 3 condensed rings and capable of being vatted and X a hydrogen atom or a hydrocarbon radicle.

1,895,102. PROCESS OF SKINNING PEARS AND OTHER RELATIVELY SOFT FRUIT. GEORGE MAYHEW, Collingwood, Victoria, Australia, assignor to David Pickering Roderick Endersby, Murrumbeena, Victoria, Australia. Filed Jan. 14, 1930, Serial No. 420,820, and in Australia Feb. 14, 1929. 3 Claims. (Cl. 146—219.)

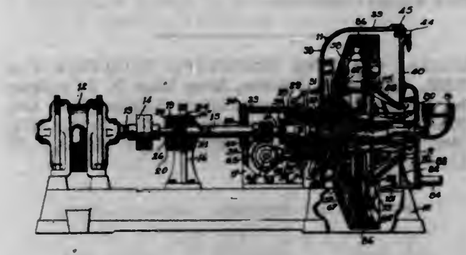
1. An improved process of skinning soft fruits consisting in immersing the fruit in a hot bath containing an alkaline filler and an alkaline skin fibre destroying agent, immersing in a cold water bath, and washing the skin from the fruit by jets of cold water.

1,895,103. HETERODYNE OSCILLATOR. EARL G. PORTA, Woodside, N. Y., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 7, 1931. Serial No. 520,783. 9 Claims. (Cl. 250—20.)



1. In a radio receiving system adapted to receive signals of either damped or undamped waves, an electron discharge device having input and output circuits, a tuned frequency selecting network having an output circuit, a detector having an input circuit, inductances individual to each of said input circuits, an inductance common to said output circuits, all of said inductances being coupled together, and a variable condenser in circuit with said first output circuit and said frequency selecting network for controlling the operation of said electron discharge device.

1,895,104. APPARATUS FOR SEPARATION. FRANCISCO A. QUIROZ, Brooklyn, N. Y. Filed May 29, 1929. Serial No. 366,841. 24 Claims. (Cl. 233—20.)



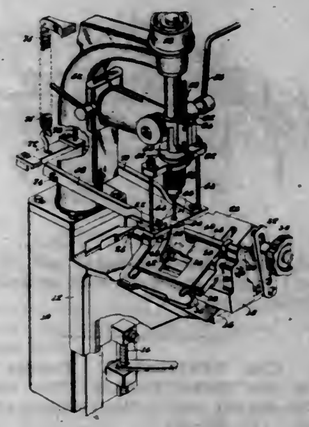
1. In apparatus of the character described, in combination, a drive shaft, a separating vessel mounted thereon, a universal drive connection between said shaft and said vessel, and an elastic sleeve interposed between said shaft and said vessel to limit the free operation of said universal connection.

1,895,105. PYRACRIDONE AND PROCESS OF MAKING SAME. CURT RÄTH, Leverkusen-on-the-Rhine, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 24, 1929, Serial No. 394,929, and in Germany Sept. 29, 1928. 3 Claims. (Cl. 260—40.)

1. The process which comprises heating about molecular quantities of a 2-halogen pyridine with free 3-position and anthranilic acid to about 100° to 100° C. for several hours.

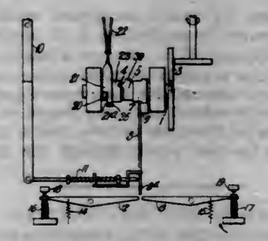
1,895,106. DOWELING MACHINE. HARLEY W. RUSS, Haverhill, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 10, 1932. Serial No. 637,071. 11 Claims. (Cl. 144—278.)

1. In a machine for doweling heels, a reciprocable tool, a table arranged to support the attaching face of a heel blank, and so positioned that a normal to the table appears oblique to the line of reciprocation of the tool when viewed both from the side and from the back of a heel blank on the table, said table being adjustable about an axis lying in front of the driver and extending laterally of the heel blank, and so positioned as substantially to



intersect the line of reciprocation of the tool, and a gage arranged to contact with the breast of the heel blank at a fixed distance from the line of reciprocation of the tool.

1,895,107. TELEGRAPHIC SIGNAL REPRODUCING APPARATUS. REGINALD DENNIS SALMON, Croydon, England, assignor to Creed and Company Limited, Croydon, England. Filed Sept. 24, 1930, Serial No. 484,073, and in Great Britain Oct. 9, 1929. 8 Claims. (Cl. 178—70.)

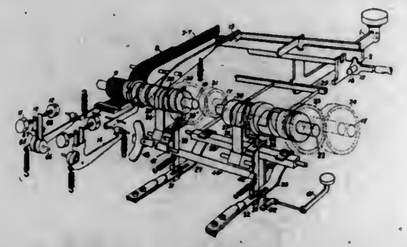


1. Telegraphic signal reproducing apparatus comprising, a relay responsive to received signals, a rotatable member released for rotation at the first response of said relay, a second rotatable member released for rotation by the first said rotatable member after an adjustably fixed portion of a revolution thereof, means actuated by said relay to prevent the release of said second rotatable member upon cessation of a received signal before completion of said adjustably fixed portion of a revolution, and means actuated by said second rotatable member to reproduce received signals.

1,895,108. TELEGRAPH KEYBOARD CONTROLLED APPARATUS. REGINALD DENNIS SALMON and STANLEY ELLIS KIRK, Croydon, England, assignors to Creed and Company, Limited, Croydon, England. Filed Dec. 2, 1930, Serial No. 499,504, and in Great Britain Oct. 23, 1930. 5 Claims. (Cl. 178—17.)

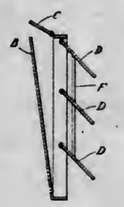
1. Telegraph apparatus comprising in combination, a keyboard, a series of combination bars actuated therefrom, a series of signal impulse selecting means controlled by said combination bars, a series of punch selecting means also controlled by said combination bars, a driving shaft

and two separate cam sleeves independently driven from said driving shaft at different relative speeds, one for transmitting signals in accordance with the setting of



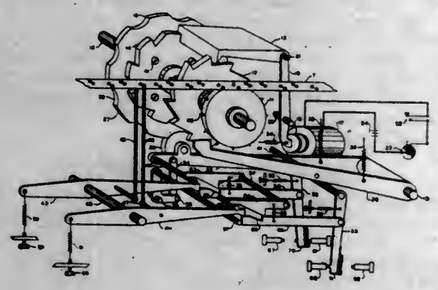
said signal impulse selecting means and the other for perforating a tape in accordance with the setting of said punch selecting means.

1,895,109. CAR VENTILATOR. THOMAS DENNISON SUDDARDS, New Barnet, England. Filed July 7, 1930, Serial No. 466,221, and in Great Britain Oct. 2, 1929. 2 Claims. (Cl. 98—2.)



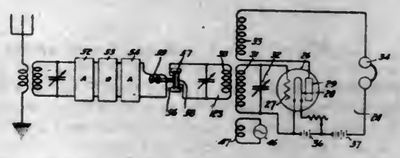
1. A ventilator for closed motor-cars, coaches and the like, having a louvre for positioning in the aperture usually occupied by the rear light or rear window, comprising a number of strips pivotally mounted each about one edge and operatively connected for movement together, and a deflector screen associated with the louvre so as to provide an opening at its upper portion, and a movable flap for controlling the flow of air through the ventilator.

1,895,110. STEP-BY-STEP TRANSMITTER. EMANUEL W. SUNDBERG, Brooklyn, N. Y., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 1, 1931. Serial No. 566,263. 8 Claims. (Cl. 178—17.)



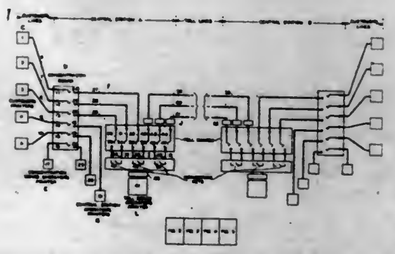
1. In a step-by-step transmitter, the combination of a tape and intermittently operated feeding means therefor, a pecker rod, means for biasing said pecker rod into engagement with said tape, a pair of contacts, means operable in response to the character of the engagement of said rod with said tape for opening and closing said contacts and adapted to maintain said contacts closed with a pressure independent of the pressure exerted by the means for biasing said rod, means for adjusting the tension of said biasing means, and means for adjusting the pressure exerted on one of said contacts independently of said first adjusting means.

1,895,111. SIGNALING SYSTEM. CLINTON H. SUYDAM, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Mar. 30, 1927. Serial No. 179,445. 6 Claims. (Cl. 250—8.)



1. In a signal receiving system a local oscillator, an oscillation circuit electrically coupled to said oscillator, said oscillator being characterized in that it changes its frequency suddenly to a new value following a predetermined change in the constants of said oscillation circuit beyond a critical limit, means responsive to signal energy modulations for varying the electrical characteristics of said oscillation circuit beyond said critical limit past which the oscillator frequency flips to a different value, and means for translating said frequency variations to secure a signal indication.

1,895,112. PRINTING TELEGRAPH EXCHANGE SYSTEM. GILBERT S. VERNAM, River Edge, N. J., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed May 12, 1930. Serial No. 451,693. 47 Claims. (Cl. 178—2.)

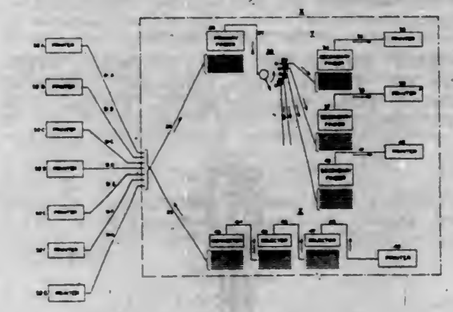


1. In a telegraph system, the combination of a first central station, a second central station, a two-way telegraph line connecting said central stations, transmitting and receiving printers at each of said stations, supervisory signal means at each of said stations, means for operating the line circuit between said stations full duplex for the purpose of controlling the supervisory signal means, and means for automatically converting the said line circuit for half duplex operation.

1,895,113. AUTOMATIC TELEGRAPH SWITCHING SYSTEM. GILBERT S. VERNAM, River Edge, N. J., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed July 23, 1930. Serial No. 470,007. 40 Claims. (Cl. 178—2.)

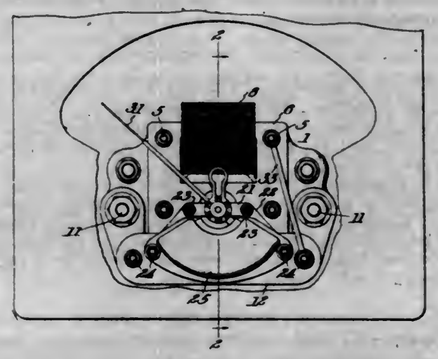
1. In a printing telegraph exchange system, a plurality of customers' stations, a printer at each of said stations,

a central station, a plurality of printer groups at said central station, each furnishing a particular class of telegraphic service, means under control of any one of



said customers' stations for selecting a particular group of said printers and automatic means for selecting an idle printer in said group.

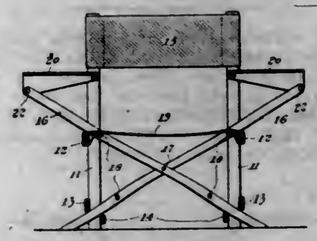
1,895,114. ELECTRICAL MEASURING INSTRUMENT. EDWARD F. WESTON, Newark, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a Corporation of New Jersey. Filed Jan. 12, 1931. Serial No. 508,228. 10 Claims. (Cl. 171—95.)



2. In an electrical measuring instrument, the combination of a base, a magnet carried by said base and having opposed pole pieces, pins projecting from said base on opposite sides of said magnet, a yoke of non-magnetic material having holes to receive said pins, and a core and coil unit mounted on said yoke, the yoke being slidable upon said pins to carry said core and coil unit into and out of position between said pole pieces.

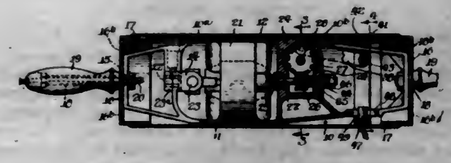
1,895,115. FOLDING CHAIR. LEWIS S. WILLIAMS, Berrien Springs, Mich. Filed Jan. 15, 1932. Serial No. 586,849. 5 Claims. (Cl. 155—140.)

1. A folding chair comprising two side frames; a flexible seat connecting said side frames; two pairs of crossed folding bars cooperating therewith, the bars of each pair being pivotally connected at the point of crossing, the lower ends of said bars being slidably connected with the lower portions of the corresponding side frame;



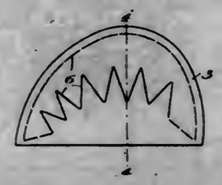
and arm rests pivotaly connected with the upper portions of said side frames and with the upper ends of the corresponding bars.

1,895,116. EXERCISING AND MASSAGING DEVICE. IRVEN H. WILSEY, Chicago, Ill. Filed July 18, 1929. Serial No. 379,098. 5 Claims. (Cl. 128—57.)



3. A portable exercising and massaging device comprising, in combination, a hollow casing, an electric motor mounted within said casing, said motor and casing having relative movement one to the other axially of the casing, and driving connections between said motor and said casing for producing such movement in rapid reciprocatory strokes.

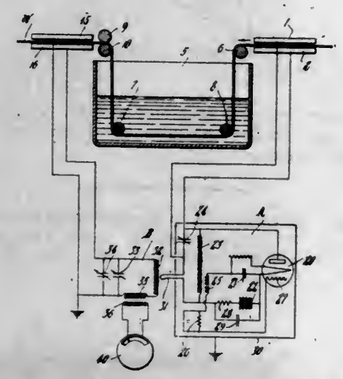
1,895,117. SHOULDER PAD AND METHOD OF MAKING SAME. NICHOLAS ZUCK, Rochester, N. Y. Filed Feb. 7, 1931. Serial No. 514,255. 2 Claims. (Cl. 2—268.)



1. The method of making a pair of complementary shoulder pads which consists in forming a blank comprising a filler of soft, yielding, substantially homogeneous material, thickest at a point at or adjacent its center and having its upper surface inclined in all directions therefrom to meet its lower surface in an oval curve, arranging layers of fabric on its upper and lower sur-

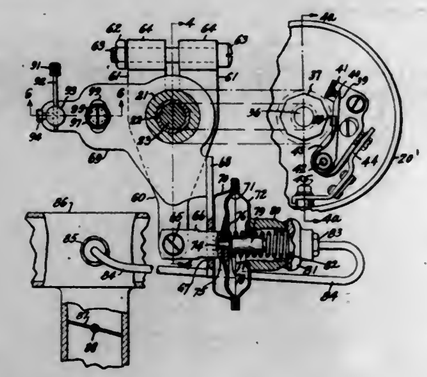
faces to form a pile, flexing the pile to form the lower surface in a hollow curve, stitching the layers to each other and to the filler in two separate seams corresponding to the pads to be formed, and cutting the blank between said seams to form a pair of pads.

1,895,118. METHOD AND MEANS FOR MEASURING MATERIAL TAKEN UP BY A TREATED WEB. ALBERT ALLEN, Winchester, Mass., assignor, by mesne assignments, to Atlantic Precision Instrument Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 17, 1925, Serial No. 56,923. Renewed June 29, 1932. 13 Claims. (Cl. 175—183.)



7. The method of measuring the amount of material taken up by a traveling web treated with such material, which comprises measuring in terms of the running weight of such material electrical characteristics due to the web and material taken up thereby diminished by the amount of such characteristics due to the web alone.

1,895,119. IGNITION APPARATUS. JAMES L. ARTHUR, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Dec. 30, 1931. Serial No. 583,908. 8 Claims. (Cl. 123—117.)



1. Ignition apparatus for an internal combustion engine comprising, in combination, a housing having a tubular shank providing a bearing and adapted to be journalled in a well provided by the frame of an engine, a shaft journalled in the bearing of the shank, a circuit breaker carried by the housing, a cam driven by said shaft for operating the circuit breaker, a plate member secured to the shank of the housing and located adjacent a surface of the engine frame providing the well, a hold-down member located against the side of the plate member remote from said surface of the engine frame, means connecting the hold-down member to the engine frame while permitting rotation of the housing by the plate member, and fluid pressure operated means responsive to engine operation for varying the angular relation between the two members.

1,895,120. CONNECTER FOR ELECTRICAL APPLIANCES. HENRY G. BAKER, Des Moines, Iowa. Filed Mar. 1, 1930. Serial No. 432,515. 6 Claims. (Cl. 173—332.)

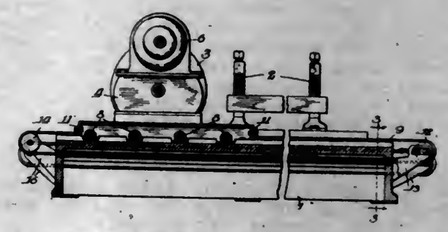


6. A connecter for electrical appliances, comprising an elongated shell of insulating material having spaced openings in one end to receive the contact studs of an appliance, a pair of rigidly mounted, grooved contact plates, means for connecting said plates to electric line wires, a pair of rigid and inflexible gripping levers fulcrumed between their ends in said shell, said levers being grooved at one end to coact with said contact plates for engaging contact studs, and coil springs engaging the opposite ends of said levers, at points remote from the contact portions, for urging the grooved portions thereof toward the contact plates, said shell being formed with openings axially of and at both ends of said springs to permit the circulation of air therethrough for cooling purposes.

1,895,121. ZEOLITE PREPARATION. ABRAHAM SIDNEY BEHRMAN, Chicago, Ill., assignor to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Filed June 17, 1929. Serial No. 371,735. 6 Claims. (Cl. 23—113.)

1. A method of producing zeolites which comprises interreacting a solution of an amphoteric metal hydroxide and a soluble silicate in such proportions as to produce a gel embracing the major portion of the reaction mixture and maintaining the reaction mixture at a pH of about 4.4 to 8.3 during the reaction.

1,895,122. TRAVELING WHEEL GRINDER. FREDERICK K. BENEDICT, Big Rapids, Mich., assignor to Hanchett Manufacturing Co., Big Rapids, Mich., a Corporation of Michigan. Filed Mar. 31, 1930. Serial No. 440,186. 1 Claim. (Cl. 51—56.)



In a machine for operating upon material, a bed, a work support mounted on said bed, an operating head supported upon said bed, said head and support being

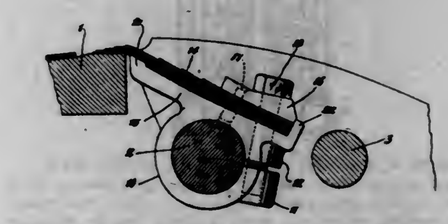
movable with respect to each other, guideways formed on said bed for said movable member and flexible covers for said ways arranged to protect those portions of the ways not covered by the movable member as the latter changes its position during operation of the machine, said covers being secured at one end to one end of the movable member and extending over the exposed portion of said ways adjacent the latter end of said movable member and continuing beneath the ways and over the other exposed portion of the ways, the opposite ends of said covers being secured to the opposite end of said movable member whereby the covers move with said movable member to maintain the exposed portions of said ways protected during operation of the machine.

1,895,123. AUTOMOBILE DIRECTION INDICATOR. JOHN BRYKOWICZ, Wetaskiwin, Alberta, Canada. Filed June 19, 1929. Serial No. 372,207. 2 Claims. (Cl. 177—329.)



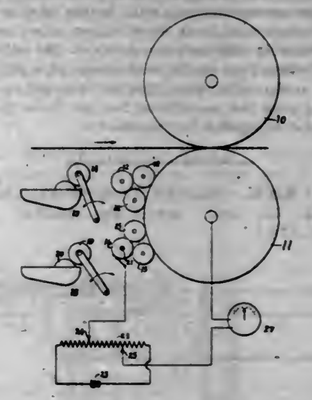
1. In a signaling device of the class described, a base plate with a seat, a support plate pivotally mounted on the base plate, a figure mounted on the support plate and arranged to normally sit on the seat, said figure including a body portion, legs pivotally connected on the lower end of the body and formed of two sections pivotally joined, a pintle support fixed to the support plate and rotatively mounted through said base plate, an arm rigidly attached on the pintle support for turning the same, means connected between the pintle support and the base plate normally urging the figure to assume a frontward position, a pin rigidly attached to the upper portion of one of said legs and rotatively mounted in the lower portion of said leg, a weight attached on the body and extending below the pivotal connection of said body and legs for the purpose of maintaining the body in a vertical position, and means for moving said pintle support arm and said leg pin to cause said figure to rise and turn.

1,895,124. FOLDING MECHANISM. CURTIS S. CRAFTS and CHARLES ALONZO HARLESS, Oak Park, Ill., assignors to The Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 14, 1931. Serial No. 580,930. 18 Claims. (Cl. 101—409.)



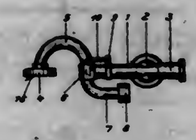
1. A gripping device including in combination a laminated leaf spring jaw and means for moving it between open and closed positions.

1,895,125. PLANOGRAPHIC PRINTING. HOBART N. DURHAM, Jackson Heights, N. Y. Filed Feb. 2, 1931. Serial No. 512,983. 16 Claims. (Cl. 101—148.)



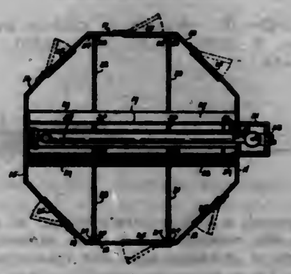
4. In a planographic press, a plate supported on a plate cylinder, dampening roller for moistening the plate during the printing operation, said plate and dampening means having an electric current flowing between them and means for neutralizing the electrolytic action between the plate and the roller.

1,895,126. TALKING MACHINE. ROBERT HILGENBERG, Leipzig-Marienhohe, Germany. Filed Sept. 11, 1929, Serial No. 391,934, and in Germany Aug. 5, 1929. 1 Claim. (Cl. 274—23.)



A talking machine comprising a bracket adapted to rock about an axis, a sound arm mounted to rock about an axis at right angles to said first-mentioned axis at one end of said bracket, a balance weight at the opposite end of said bracket, a sound box at one end of said sound arm, a balance weight at the opposite end of said sound arm, and resilient means connecting said sound arm and said bracket, and tending to hold the needle of said sound box in the groove of a sound record.

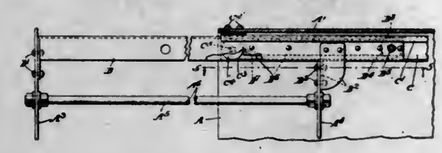
1,895,127. ANIMAL BROODER. BENTON FRANKLIN JENSEN, Exira, Iowa. Filed Oct. 14, 1929. Serial No. 399,629. 3 Claims. (Cl. 119—34.)



1. In a device of the class described, a house, an elongated box member extending across the floor of said house,

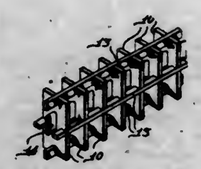
openings in each side of said box member for allowing the smaller animals access to said box member, a pen communicating with each of said openings, a heat distributing pipe supported in said elongated box member, a stove, a smoke pipe communicating with inside of said stove and passing through said heat distributing pipe; said smoke pipe progressively approaching closer to the bottom of the heat distributing pipe as the said smoke pipe extends from said stove, and a gate valve slidably mounted on said heat distributing pipe for permitting hot air from the same to pass into said elongated box member.

1,895,128. RACK. FRANCIS T. JOHNSON, Chicago, Ill. Filed Mar. 15, 1930. Serial No. 435,991. 2 Claims. (Cl. 312—176.)



1. In combination in a movable supporting rack, a housing in which said rack is mounted and from which it may be moved outwardly and a supporting means for said rack, said supporting means including a fixed channel carried by said housing and having a roller positioned within it, and an angle member positioned on said rack, said angle member penetrating within said channel, there being a roller mounted on said angle member, the roller of the angle member bearing upon the upper flange of said channel and the roller mounted on said channel contacting the upper flange of said angle member.

1,895,129. MAGNETIC WORK-HOLDING DEVICE. DAVID JONES, Detroit, Mich. Filed Mar. 30, 1931. Serial No. 526,448. 5 Claims. (Cl. 175—367.)



1. A magnetic work-holding device comprising a plurality of spaced members, means loosely connecting said spaced members, a cast material having a positive co-efficient of expansion and of opposite magnetic character enclosing said members and leaving certain edges thereof exposed at the surfaces of said material.

1,895,130. PENCIL. CHARLES R. KEERAN, Evanston, Ill. Filed Nov. 7, 1930. Serial No. 493,931. 3 Claims. (Cl. 120—84.)



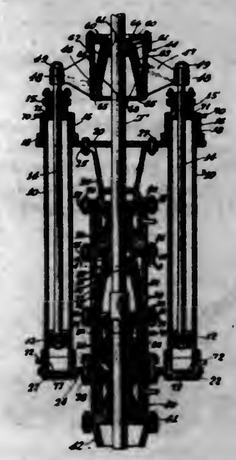
3. In a pencil, a hollow barrel having an aperture in its wall, a clip comprising a portion extending through said aperture, a yieldable arm bent transversely of said portion and lying along the outside of the barrel, and a tang also bent transversely of said portion extending within the barrel in contact with the inner wall thereof, together with a plug inserted in the barrel and firmly held therein against longitudinal movement to grip the tang between its outer wall and the inner wall of the barrel, said plug being in the form of a hollow shell closed at the inner end having a portion adapted to serve as a spare lead magazine for the pencil, and a portion at its outer end of larger diameter serving to hold an eraser and forming a shoulder at the junction of said portions to abut the end of the barrel for limiting the insertion of the smaller portion therein.

1,895,131. FLUID PRESSURE ACTUATOR. WELDON C. LEONARD, Daisetta, Tex., assignor of one-half to Charles Lisman, Liberty County, Tex. Filed Jan. 2, 1929. Serial No. 329,772. 1 Claim. (Cl. 60—62.6.)



In a device of the character described, a cylinder arranged to receive fluid under pressure, a hollow plunger therein whose inner end is open and whose outer end is permanently closed, the outer end of said cylinder being enlarged, a cage, one end of which is threaded onto said enlarged end of the cylinder, said cage having spaced tracks and also having an outer end plate connecting said tracks, an adjustable abutment in the cage having a slidable engagement with said tracks, a yieldable member between the plunger and abutment, said plunger being balanced between fluid under pressure on one side and said yieldable member on the other side, means connected to said end plate for adjusting said abutment, a rod attached to the plunger and working through a bearing in said end plate and forming a guide for the plunger.

1,895,132. SNUBBING DEVICE FOR OIL WELL TUBING. BURT S. MINOR, San Pedro, Calif. Filed Oct. 21, 1929. Serial No. 401,282. 4 Claims. (Cl. 255—1.)



1. A snubbing device for forcing tubing into a well against confined gas pressure, comprising a plate, a cylinder secured to said plate, and disposed at one side thereof, a relatively stationary member secured to said plate

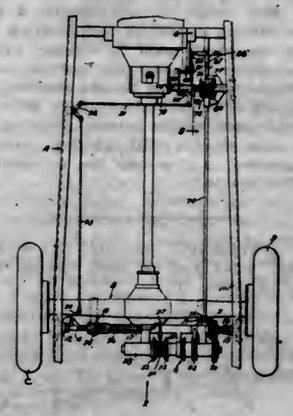
and extending downwardly therefrom, packing and sealing members carried by said stationary member, a relatively movable member disposed above said plate and connected to the piston rod of said cylinder, a tubing gripping device carried by said movable member, there being aligned openings in said stationary and movable members and said plate to permit the passage of tubing therethrough, means for admitting gas pressure from said well into said cylinder to operate said movable member, and means whereby the snubbing device may be secured to the control head of a well.

1,895,133. TUBING. BERT L. QUARNSTROM, Detroit, Mich., assignor to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed May 2, 1930. Serial No. 449,118. 1 Claim. (Cl. 137—75.)



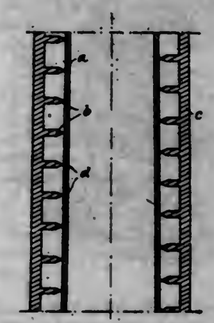
A lap seam tube comprising a strip of metal fashioned into hollow cross sectional shape to form a smooth walled tube, one edge of the strip being offset radially of the tube, the longitudinal edges of the strip being lapped one over the other with one edge fitting upon the offset portion of the other edge, both of said lapped edges being corrugated with the corrugations extending substantially in a circumferential direction with the body of the strip remaining smooth, said corrugations on the two edges being of similar size and shape and interfitting whereby the edges are in close and substantial contact throughout the length of the tube, said edges being united by molten sealing metal.

1,895,134. ELEVATOR AND LATERAL SHIFT APPLIANCE FOR MOTOR VEHICLES. MERRIT H. RICE, Pasadena, Calif., assignor of one-half to George R. Langtree and Beatrice E. S. Langtree, Pasadena, Calif. Filed May 16, 1930. Serial No. 453,062. 7 Claims. (Cl. 180—1.)



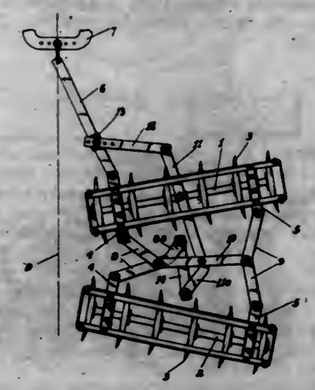
1. In a vehicle lift and shift appliance, a revoluble shaft, a swinging support for said shaft, means for rotating said shaft, a non-rotatable sleeve slidable longitudinally of said shaft, a screw connection between said sleeve and shaft, a second sleeve splined on said shaft connected to said first named sleeve to move therewith, feathers on said second sleeve, a pair of gear wheels loosely encompassing said shaft having key-ways, said wheels being arranged to be successively engaged with said second sleeve through said feathers and key-ways, a vertically swinging wheeled dolly, an axle engaging jack carried by said dolly, a fixed segmental rack engaged by one of said gear wheels arranged to be traversed by the latter, connections for effecting swinging movement of said dolly on the last named gear wheel traversing said rack, and gear connections between the other of said gear wheels and said jack for actuating the latter.

1,895,135. WATER-COOLED MOLD. WILHELM ROHN, Hanau-on-the-Main, Germany. Filed Oct. 7, 1930, Serial No. 487,084, and in Germany July 8, 1929. 2 Claims. (Cl. 22—177.)



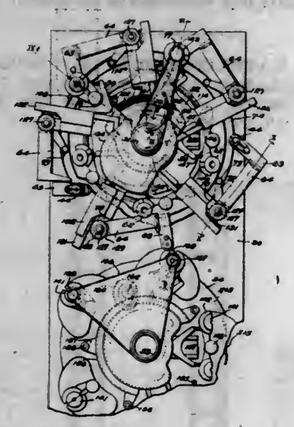
1. A water-cooled ingot-mold having a thin wall of suitable metal adapted to surround the ingot to be cast, comprising a jacket and ribs for guiding the cooling water arranged in the space between the said wall and jacket and forming a helical path for the cooling medium, the said ribs being formed on the side turned towards the inner wall as a cutting edge.

1,895,136. OFFSET HARROW. BAUCE E. ROSE, Porterville, Calif. Filed Mar. 17, 1930. Serial No. 436,416. 19 Claims. (Cl. 55—83.)



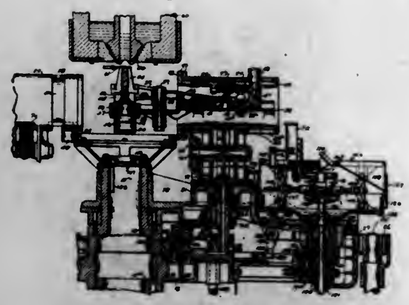
1. An offset harrow structure comprising front and rear harrow gangs, a draft arm connected to the front gang, pairs of toggle-links connecting the gangs on opposite sides of the harrow, and means between the draft arm and said links for controlling the folding and extending action of the opposite pairs of links simultaneously with the transverse swinging movement of the draft arm.

1,895,137. GLASS BLOWING MACHINE. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Original application filed Aug. 27, 1923, Serial No. 659,451, now Patent No. 1,705,341, dated Mar. 12, 1929. Divided and this application filed Feb. 12, 1929. Serial No. 339,464. 3 Claims. (Cl. 49—9.)



1. In a machine for forming hollow glass articles, the combination of a rotating mold carriage, a series of finishing molds thereon, a blowing head, means to oscillate said head and thereby cause it to register with each of said molds in succession, travel with the mold a predetermined distance and then return and register with the next succeeding mold, blank molds, means for forming parisons of glass in the blank molds, means for transferring the parisons and introducing them into the finishing molds, and means for supplying air under pressure through said blowing head and thereby blowing the parisons to finished form in the finishing molds.

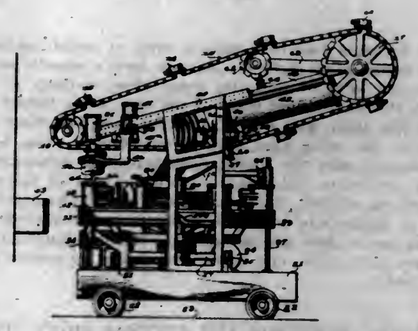
1,895,138. GLASSWARE FORMING MACHINE. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 23, 1929. Serial No. 416,129. 21 Claims. (Cl. 49—5.)



1. In a glassware forming machine, the combination of an annular series of mold groups, means for continuously rotating the mold groups about a vertical axis, each mold group including a partible finishing mold, a partible blank mold, means for rotating the blank mold about a vertical axis disposed between the finishing mold and axis of rotation of the mold groups to alternately place the mold in charge gathering and blank transfer positions, means for alternately inverting and reinverting said blank mold during rotation thereof, whereby it opens upwardly at the charge gathering position and downwardly at the blank transfer position, means for delivering mold charges to the blank mold at the charging position, and means for transferring blanks to the finishing mold at the transfer position.

19. In a glassware forming machine, a finishing mold table, a partible finishing mold thereon, a tilting bottom plate associated with said mold, a slide carried by the table beneath said bottom plate and forming a support therefor, link connection between the slide and finishing mold, and means for imparting such movement to the slide that the finishing mold is opened thereby and the slide then withdrawn from its bottom plate supporting position and the bottom plate allowed to tilt by gravity for discharging an article.

1,895,139. GLASS BLOWING MACHINE. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Aug. 28, 1930. Serial No. 478,352. 15 Claims. (Cl. 49—5.)



15. In a machine for forming glass articles, the combination of a mold carriage, an annular series of finishing molds thereon, means for rotating the carriage about a vertical axis, a mold carrier mounted for reciprocation along an inclined path in a plane above said mold carriage, a series of neck molds on said carrier, a single blank mold on the carrier, means for reciprocating said carrier and causing the blank mold to register with the neck molds in succession at a charging position, means whereby movement of the carrier in one direction places the blank mold and neck mold in register with a finishing mold and movement in the reverse direction brings the blank mold into register with another neck mold at a gathering position, and means for transferring blanks to the finishing molds.

1,895,140. AIRPLANE. DARRELL LEWIS STAGE, Palo Alto, Calif. Filed Apr. 26, 1930. Serial No. 447,569. 2 Claims. (Cl. 244—12.)



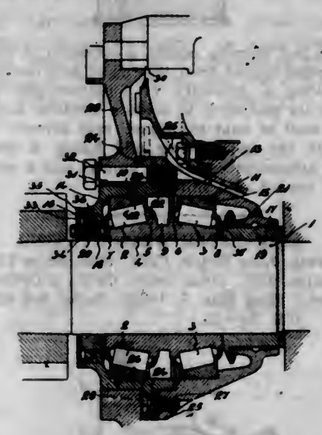
1. The combination of a plurality of airfoils of high aspect ratio, positioned in parallel planes and being spaced apart rearwardly and downwardly in succession relative to the leading airfoil, fastened together with cross spars to form a wing of low aspect ratio, and with the outer section of the trailing airfoil pivotally mounted between the two outer cross spars to form an aileron.

1,895,141. SHOE GUARD. CHIKAZO WATANABE, Los Angeles, Calif. Filed Nov. 13, 1931. Serial No. 574,725. 2 Claims. (Cl. 36—55.)



1. A shoe guard, comprising a celluloid body, a tip on the upper edge thereof adapted to extend over the top of a shoe, a cloth fabric layer on the surface of the body, a layer of gummy material on the cloth fabric, and a cover over the gummy material.

1,895,142. BEARING FOR ARMATURE SHAFTS OF ELECTRIC MOTORS AND DYNAMOS. FREDERICK WOOD, Aston, Birmingham, England, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Aug. 24, 1931, Serial No. 559,028, and in Great Britain Feb. 7, 1931. 7 Claims. (Cl. 308—178.)



1. In an electric motor, the combination with a body casing of an end cover having a central opening, an armature shaft extending through said opening, an inner bearing pressed on said armature shaft entirely inwardly of the end face of said end cover and having two raceway surfaces, two axially spaced outer bearing cups, spaced sets of antifriction rolling elements between said inner and outer bearing members, an inner housing member extending inwardly from and supported by the end cover and containing and supporting the innermost of said bearing cups, an annular outer housing member surrounding the shaft and having a portion detachably fitting said central opening in said end cover, said outer housing member containing and supporting the outermost of said bearing cups substantially inwardly of the inner surface of said end cover, and means for detachably securing said outer housing member in position.

1,895,143. INCANDESCENT LAMP. FREDERICK JACKSON ALDERSON, Kingston, Ontario, Canada, assignor of one-half to John McArthur Patrick, Kingston, Ontario, Canada. Filed Oct. 28, 1927, Serial No. 229,469, and in Canada Oct. 1, 1927. 1 Claim. (Cl. 176—16.)

In an incandescent lamp of the character described, the combination with a forward light diffusing zone surrounding the front end of the lamp and extending midway thereof, a second restricted light diffusing zone around the base of the lamp, a light diffusing band intermediate of the aforementioned light diffusing zones and light transmitting zones between the light diffusing band and the front and base light diffusing zones and of substan-

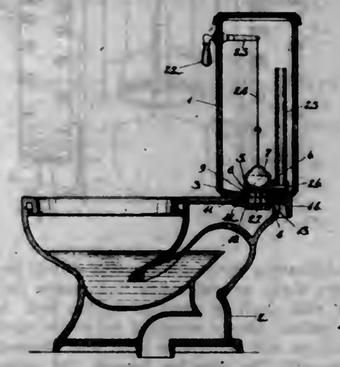


tially equal area, of a filament cooperative with all the aforementioned zones and terminating within the forward light diffusing zone, whereby direct radiation from the filament is eliminated and the diffused light spread to illuminate the sides of a road and the like.

1,895,144. EXPLOSIVE. HENRY W. BOTTS, Kenvil, and HUBERT H. CHAMPNEY, Succasunna, N. J., assignors to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 24, 1930. Serial No. 423,259. 4 Claims. (Cl. 52—13.)

2. An improved plastic explosive including as ingredients explosive oil and nitrocellulose in amounts respectively in about the proportion 20 : 0.2, ammonium nitrate in excess of 50% and substantially non-absorbent carbonaceous material.

1,895,145. TANK AND BOWL CONNECTION. FRANK G. BROTZ, Kohler, Wis. Filed June 29, 1931. Serial No. 547,531. 4 Claims. (Cl. 4—14.)

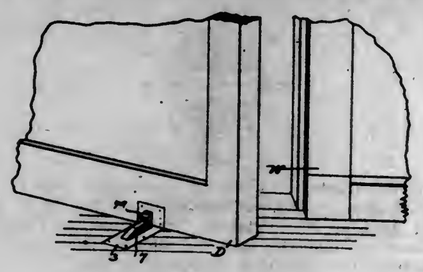


3. In combination, a water closet bowl having an extended rear portion forming a shelf, a flush tank seated on said shelf, coinciding apertures in said bowl and tank, a flush ball seat member positioned within said apertures, coinciding recessed portions of the tank and bowl contiguous to the aforesaid apertures, a gasket of spongy, resilient material fitting within said apertures, said gasket being of a thickness, when uncompressed, greater than the combined thickness of the aforesaid recessed portions of the tank and bowl, coinciding apertures in the tank and the aforesaid shelf of the bowl, bolts passing through said apertures and adapted, when drawn tight, to fasten the tank on the shelf of the bowl and to compress the gasket into the aforesaid recessed portions of the tank and bowl and to force it into firm engagement with the flush ball seat member.

1,895,146. DOOR OPENING SAFETY GUARD. GEORGE E. BROWN, Monrovia, Calif. Filed Mar. 7, 1931. Serial No. 520,817. 6 Claims. (Cl. 292—228.)

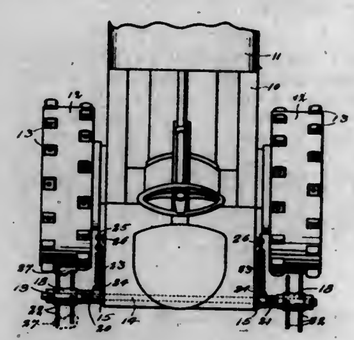
1. A door opening guard comprising a movable stop member countersunk in a floor and in a door range and

when in effective position stopping the door at a desired limit in its opening range and permitting the door to be closed without interference of the stop, means to spring the stop up, and means whereby the stop is held in coun-



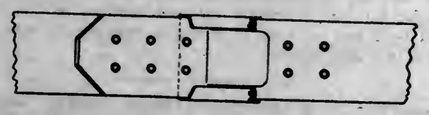
tersunk position and rendered inoperative as an obstruction in the door range and including pivoted and depressible trigger and a sear controlling said member and operative by a swinging action only of the trigger.

1,895,147. TRACTOR WHEEL LUG CLEANER. FRANK W. BURGESS, Cook, Nebr. Filed Nov. 25, 1930. Serial No. 498,160. 1 Claim. (Cl. 280—158.)



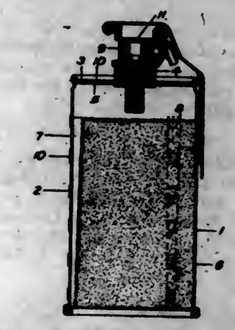
A mud clearing device for traction wheels comprising a transverse shaft, pivotal supporting means for the shaft whereby said shaft is mounted to the rear frame of a tractor, spiked wheels mounted to rotate upwardly and outwardly on said transverse shaft and disposed in a medial line with the traction wheels, the spikes of said spiked wheels adapted to engage against the periphery of and be frictionally driven by the traction wheels whereby clods of mud adhering to the traction wheels become impinged on said spikes and thrown rearwardly to clear the traction wheels, and means for holding said transverse shaft toward the traction wheels.

1,895,148. BELT AND BUCKLE. JOSEPH CHIEROTTI, Los Angeles, Calif. Filed Aug. 13, 1932. Serial No. 628,704. 3 Claims. (Cl. 24—180.)



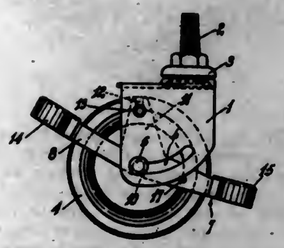
1. A buckle having a frontal plate, with top and bottom flanges turned back and having coplanar lips to form a guide channel for a free strap end insertable at rear of the plate, and a latch leaf pivoted in the plate and having a prong device to engage keeper means on said belt end; said leaf lying in the plane of the lips while engaging said strap end; the leaf being a lever of the first order on one end of which is provided said prong device and the opposite end of which forms a depressible lever.

1,895,149. FAST BURNING TYPE CANDLE. LESTER J. CONKLING, Edgewood, Md. Filed Mar. 30, 1932. Serial No. 602,015. 23 Claims. (Cl. 102—26.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757).



23. In a fast burning candle, a container, a combustible filling therefor spaced from the top of said container, said filling having a plurality of longitudinally extending grooves in its periphery to provide ignitible areas spaced from the wall of said container, said grooves communicating with the space above said filling, a plurality of outlets in alignment with each groove, and a starter substance on top of said filling.

1,895,150. ADJUSTABLE WHEEL CASTER. WILLIAM R. DARNELL, Long Beach, Calif., assignor to The Darnell Corporation, Ltd., Long Beach, Calif., a Corporation of Delaware. Filed Mar. 5, 1932. Serial No. 597,000. 2 Claims. (Cl. 16—35.)

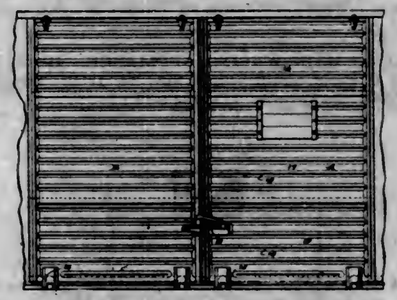


1. An adjustable wheel caster comprising a yoke, said yoke having arcuate slots formed therein, a wheel, an axle on which the wheel is mounted, the ends of said axle extending into the slots, a shift frame comprising a pair of arms positioned one on either side of the wheel, said arms being provided with a notch into which the axle fits, a lug rising from each arm, and means pivotally mounting said lugs on the yoke, a lever pin on the arms, said lever pin engaging the edge of the yoke when the wheel is in rolling position, and said slot having a recess at one end thereof into which the axle fits when the wheel is in rolling position.

1,895,151. DOOR. FRANK DITCHFIELD, Cleveland, Ohio, assignor to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 15, 1929. Serial No. 355,057. 10 Claims. (Cl. 189—46.)

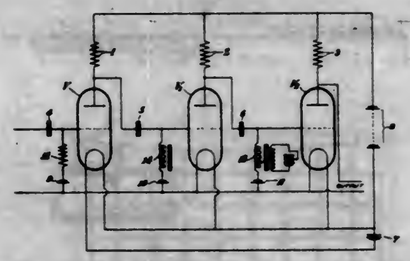
1. In door construction, the combination with a sheet metal body portion laterally offset along one edge to

provide a partial corrugation terminating in a flange parallel to the main plane, the ends of said partial corrugation terminating within the area of the body portion;



and means for reinforcing said edge including a bar of angular cross section extending lengthwise of said edge and provided adjacent its ends with cap sections adapted to overlap the ends of said partial corrugation.

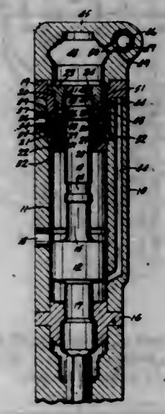
1,895,152. AMPLIFYING SYSTEM. JOSEF ENGL, Berlin-Grunewald, Germany, assignor to Engl Products Corporation, New York, N. Y., a Corporation of New York. Filed June 19, 1930, Serial No. 462,199, and in Germany Feb. 4, 1929. 3 Claims. (Cl. 179—171.)



1. In an amplifying system, a plurality of vacuum tubes, a connection including a capacity coupling between the anode of one tube and the grid of the next succeeding tube, a leakage path connected to said connection, said leakage path including a choke coil of relatively low ohmic resistance and high impedance, and a core of magnetic material for said choke coil, said core being of high initial permeability and adjustable whereby the impedance of said choke coil may be adjusted.

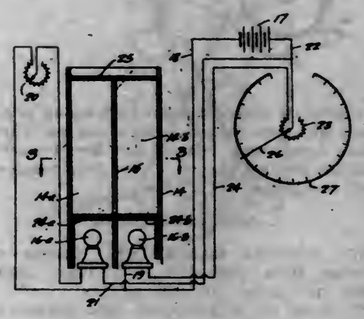
1,895,153. VALVE FOR ROCK DRILLS. ALBERT FEUCHT, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 7, 1932. Serial No. 631,981. 4 Claims. (Cl. 121—18.)

1. A rock drill comprising a cylinder formed with a piston chamber, a piston reciprocably mounted within said piston chamber, said piston having a stem extending therefrom, a valve block within said cylinder formed with a bore within which said stem is reciprocably guided, a valve within said valve block having opposed enlarged and restricted pressure areas subjected to the pressure fluid for shifting and holding said valve in opposite directions, fluid conveying passages opened by said valve for allowing the admission of the pressure fluid into the rear end of said piston chamber to drive said piston forwardly, said fluid conveying passages being subsequently closed by said stem to terminate said admission, fluid conveying ports opened by said valve for allowing the admission of the pressure fluid into the front end of said piston chamber to drive said piston rearwardly, said admission through said ports being subsequently prevented by said stem, an



exhaust passage controlled by said piston through which the pressure fluid from both ends of said piston chamber is free to exhaust, and additional exhaust passages controlled by said valve through which the atmosphere compressed by the piston in the rear of said piston chamber is free to exhaust.

1,895,154. METHOD FOR MEASURING OILINESS OF SUBSTANCES. SIEGFRIED FISCHER, Jr., Los Angeles, Calif. Filed Nov. 4, 1929. Serial No. 404,828. 19 Claims. (Cl. 23—230.)

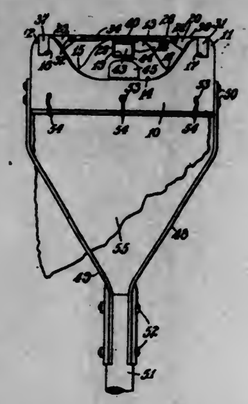


1. The method of determining unctuousness of oily substances which comprises introducing a standard unctuous substance into a porous medium permeable to oily substances, introducing a test oily substance to be measured into a duplicate medium and making perceptible the partial penetration of said standard and said test substances in said media for comparison.

1,895,155. FRUIT PICKER. CLEMENT R. FISHER, Terre Haute, Ind. Filed Oct. 7, 1932. Serial No. 636,625. 10 Claims. (Cl. 56—333.)

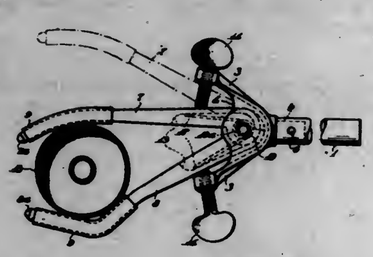
1. A device of the class described, comprising a closed frame, a plurality of counterweighted fingers pivoted on

said frame and projecting respectively toward a common center, said fingers being pivoted substantially midway



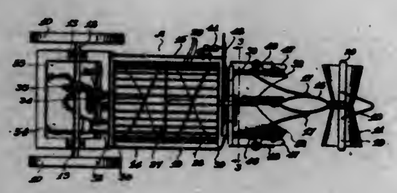
between their ends, and a plurality of other fingers rigid with said frame and positioned in a plane axially spaced below the plane of said pivoted fingers.

1,895,156. LABORATORY CLAMP. EDWIN H. FISHER, Pittsburgh, Pa., assignor to Fisher Scientific Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 16, 1932. Serial No. 622,836. 4 Claims. (Cl. 248—20.)



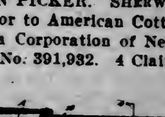
1. A laboratory utility clamp comprising an arm, a pair of opposed jaws pivotally connected to one end of said arm, and means acting upon each of said jaws for selectively adjusting the position of each of said jaws relative to the other and to said arm.

1,895,157. POTATO HARVESTER. GEORGE GAILUS, Stillwater, Minn. Filed May 11, 1931. Serial No. 536,343. 10 Claims. (Cl. 55—58.)



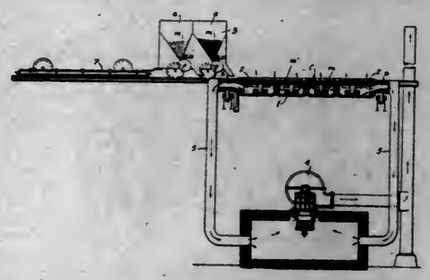
1. A potato digger including, a frame, wheels supporting said frame, a rotary separator mounted upon said frame, gear means for driving said separator from one of said wheels, means for digging potatoes and introducing them into said separator, a pair of sprockets transversely aligned on a vertical plane, a chain on said sprockets interposed between said digging means and said separator and prongs on said chain for extracting the vines and foliage from the earth and potatoes passing into said separator.

1,895,158. HAIR WAVING APPLIANCE. HENRY GERKIN, Oakland, Calif. Filed Nov. 14, 1932. Serial No. 642,583. 18 Claims. (Cl. 132—36.)



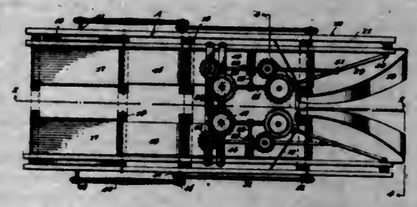
1. A hair waving appliance, in combination, a core on which the hair is wound, a housing for the core and a heating unit insertible in said housing and remotely located relative to the core whereby the hair on the core is indirectly heated, said housing having a dividing wall for dividing the housing into a heating unit compartment and a core compartment.

1,895,159. METHOD OF DISPOSING OF SEWAGE SLUDGE. JOHN E. GREENAWALT, New York, N. Y. Filed July 31, 1931. Serial No. 554,362. 6 Claims. (Cl. 106—24.)



1. The process of manufacturing a concrete aggregate which comprises thoroughly commingling sewage sludge with finely divided material capable of absorbing moisture, disposing said mixture as a layer on a pervious support, igniting the layer at one surface, and forcing air through said layer toward the opposite surface to cause combustion to proceed through the layer.

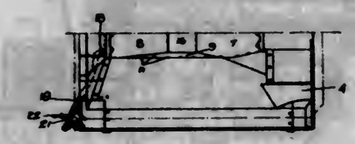
1,895,160. COTTON PICKER. SHERWOOD GREEN, Berkeley, Calif., assignor to American Cotton Machinery Co., Berkeley, Calif., a Corporation of Nevada. Filed Sept. 11, 1929. Serial No. 391,932. 4 Claims. (Cl. 56—48.)



1. In a cotton picking machine, a frame, a front and rear vertically disposed toothed cotton picking drum on each side of the longitudinal center of the frame, thereby

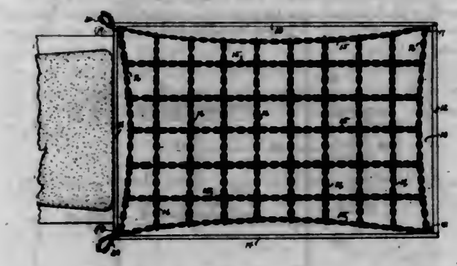
forming front and rear pairs of drums, means normally urging the drums of each pair toward one another, brushes extending longitudinally of the picking drums, means for driving the brushes from the picking drums, and means for maintaining the axis of rotation of each drum a fixed distance from the axis of its associated brush.

1,895,161. ASHPAN AND BLOW OFF MUFFLER STRUCTURE. EDMOND I. HETSCH, New York, N. Y. Filed May 18, 1931. Serial No. 538,105. 6 Claims. (Cl. 122—382.)



1. As a new article of manufacture, a locomotive integral ashpan structure including a hopper portion having imperforate depending walls, a portion cooperating with one of said walls to form a downwardly disposed blow off muffler conduit, said conduit having an opening for connection with a blow off cock and an opening at the bottom for discharging the exhaust from said conduit, and the plates in said conduit disposed to break the force of steam passing therethrough.

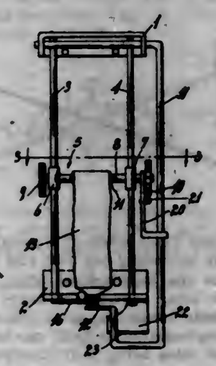
1,895,162. DETACHABLE SURE-FOOTING APPLIANCE FOR VEHICLE FLOOR COMPARTMENTS. BENTON FRANKLIN JENSEN, Exira, Iowa. Filed Jan. 20, 1932. Serial No. 587,679. 5 Claims. (Cl. 119—28.)



1. In combination with a vehicle hauling compartment, having two spaced apart holes in one end, two spaced apart hook members secured to said compartment and near the end opposite from the end having said holes, a strand of chain secured to each of said hook members and extending through one of said holes respectively, a pin extending through one link of each of said chains for preventing the removal of said chains through said holes, and a plurality of cross chains extending between and secured to said first mentioned chains; said last mentioned chains having longer lengths as they progress at each side of the centrally positioned cross chains.

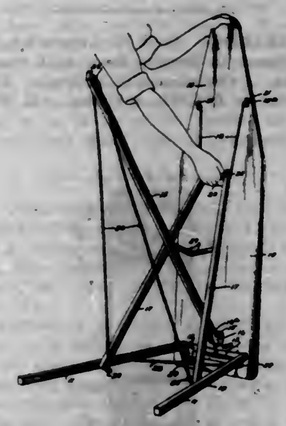
1,895,163. TOOTH PASTE DISPENSER. FREDERICK O. JOHNSON, Long Beach, Calif. Filed June 28, 1931. Serial No. 546,195. 6 Claims. (Cl. 221—60.)

3. A collapsible tube holder comprising upper and lower brackets, a pair of spaced rods secured to said brackets, a carriage comprising a pair of slidably mounted sleeves, one on each of said rods, a shaft rotatably mounted on the sleeves, means on said shaft for attaching the flattened end of a collapsible tube, means securing the lower end of a tube in said lower bracket, an operating arm



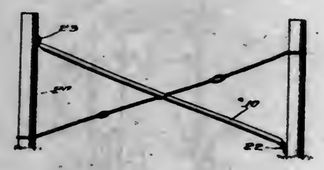
journaled in said upper bracket, a means on said arm extending to said shaft whereby the shaft is rotated as the arm is swung.

1,895,164. IRONING TABLE. JOHN E. KALGREN, Minneapolis, Minn., assignor to J. R. Clark Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Aug. 28, 1931. Serial No. 559,890. 5 Claims. (Cl. 68—10.)



1. An ironing table comprising a top board, rear legs pivoted to said board for swinging movements toward and from said board, another leg element pivoted to said board, and cooperating pivotally connected brace elements pivotally connected to said board and to said rear legs, one of said elements providing an unobstructed cross bar at the pivotal connection between said brace elements free of interference by said other leg element in all of its positions so as to enable an operator free access thereto for grasping the same, said bar being swingable from a position adjacent the board on one side of its connection therewith to a position adjacent the board on the opposite side of said connection, whereby in one position of the cross bar the board brace elements and rear legs are automatically set in board bracing and supporting positions, and in the other extreme position said brace elements and rear legs are folded against the board.

1,895,165. FENCE POST BRACE. RUDOLPH J. LANGER, Monticello, Iowa, assignor to Franklin Equipment Co., Monticello, Iowa, a Corporation of Iowa. Filed Jan. 5, 1931. Serial No. 506,657. 4 Claims. (Cl. 256—35.)

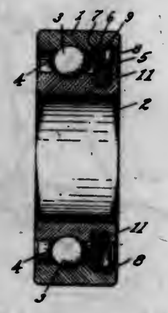


1. A fence post brace made of a metal strip, comprising a longitudinally extending top wall and integral side walls depending from the longitudinal edges of said top wall, said side walls being curved outwardly and then inwardly adjacent their lower edges to provide strengthening means extending longitudinally of the brace, and the ends of the top and sides being bent into post attaching portions.

1,895,166. CORN PRODUCT AND METHOD OF MAKING SAME. HERMON B. LAYMON, Spencer, Ind. Filed July 1, 1930. Serial No. 465,247. 3 Claims. (Cl. 99—10.)

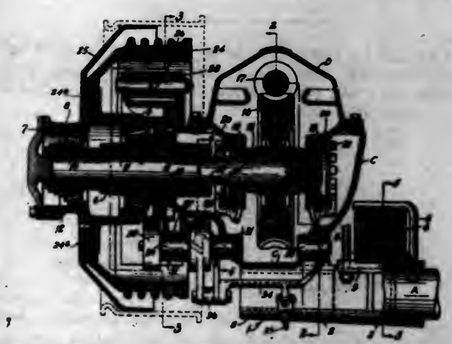
1. The method of preparing a corn product which includes immersing a quantity of dry shelled uncooked sweet corn in a body of cocoanut oil heated to a temperature of substantially 400 degrees Fahrenheit, removing the corn from the oil after a few minutes time interval, draining excess oil off of the corn, and allowing the corn to cool and the oil to harden on the surface of the corn.

1,895,167. BEARING. CONE W. LIGHTHALL, Ann Arbor, Mich., assignor to Hoover Steel Ball Company, Ann Arbor, Mich., a Corporation of Michigan. Filed Mar. 5, 1932. Serial No. 596,994. 4 Claims. (Cl. 308—187.)



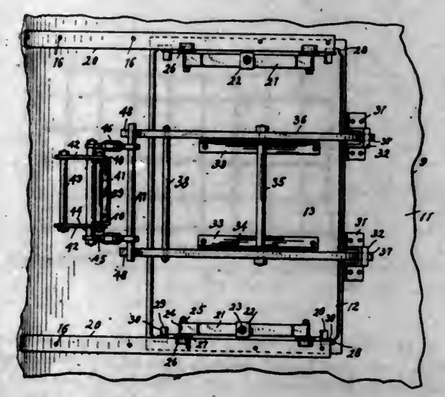
1. In an anti-friction bearing, an outer race member, an inner race member, anti-friction elements disposed between the races, said race members and elements being assembled into a self-contained unit, one of the race members having a circumferential groove formed directly in the metal thereof, a sealing ring located in the groove loosely whereby to permit relative rotation between the ring and grooved race member, the other race member having a circumferential shoulder in substantial alignment with the groove in the other race member, a solid ring associated with the shouldered race member and positioned up against said shoulder, said solid ring and sealing ring having engaging surfaces whereby to effect a seal, and means for retaining the said solid ring up against the shoulder of the race member.

1,895,168. AUTOMOTIVE DRIVING AXLE. MATHEW B. MORGAN, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed July 18, 1931. Serial No. 551,691. 14 Claims. (Cl. 74—7.)



1. An automotive driving axle comprising a fixed axle, a housing member mounted on each end of said fixed axle, a live axle mounted in said housing, gearing in said housing for driving said live axle, and a carrier for said gearing removably secured to said housing member, said carrier being removable from said housing member in a plane perpendicular to said axle.

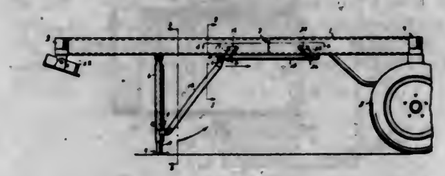
1,895,169. CLOSURE. JOSEPH H. MOSEL, Lakewood, Ohio, assignor to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 14, 1930. Serial No. 435,843. 7 Claims. (Cl. 220—38.)



1. In a device of the character described, in combination with a rotatable receptacle having a wall with an opening therein, a closure member adapted to close said opening, a toggle device for urging said closure member toward closed position, and means effective upon release of said toggle device for guiding said closure member along a path adjacent to said receptacle wall and substantially parallel thereto from closed position to an open position and for urging said closure member to a position clear of said toggle device.

1,895,170. VEHICLE. WILLIAM C. NABORS, Mansfield, La. Filed Dec. 30, 1930. Serial No. 505,527. 2 Claims. (Cl. 280—33.1.)

1. In a trailer having a frame formed with side members having slots and supporting wheels for the rear end of the frame; supporting legs swingably connected to the frame and movable into one position to support the forward end of the frame and movable into another, or non-supporting position, tracks on the frame, links pivoted to the legs and having means movable along said



tracks as the legs are swung from one of said positions to the other position, dogs working through said slots and effective to engage said means to lock said legs in either of said positions, and cross rods connected to said dogs for controlling the operation thereof.

1,895,171. AUTOMOBILE BODY SILL. AUGUST L. NELSON and FRANK W. PEASE, Grand Rapids, Mich., assignors to Hayes Body Corporation, Grand Rapids, Mich., a Corporation of Michigan. Filed Oct. 26, 1931. Serial No. 571,015. 5 Claims. (Cl. 296—28.)



1. A sill including upper and lower parallel sheet metal plates, said upper plate having a longitudinal downwardly extending trough therein of sigzag form, and the lower plate having a longitudinally extending upwardly pressed trough of sigzag form, the inner portions or bottoms of said troughs crossing and contacting with each other at spaced apart points and having permanent connection together.

1,895,172. STRINGER FOR FASTENERS. GEORGE E. PRENTICE, Berlin, Conn. Filed Mar. 22, 1932. Serial No. 600,400. 5 Claims. (Cl. 24—205.)



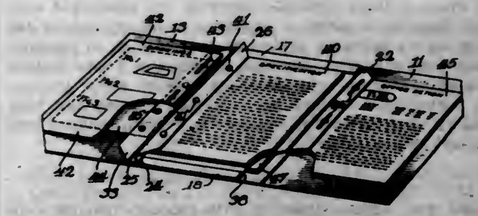
5. A slide operated fastener comprising a pair of flexible stringers having thickened edge portions, each having a body portion of textile material adapted to be secured to material bordering the edge of a gap, a series of fastener elements secured to the thickened edge portion of each stringer, and a slider for moving the opposed series of fastener elements into and out of engagement with each other, each stringer having a closure flap united to the body portion of the stringer along a longitudinal line intermediate the edges of the latter, said closure flaps being of such width that when disposed in substantially parallel relation to the body portion of the stringers, their free edges abut so that the closure flaps completely conceal and cover the corresponding series of fastener elements, each closure flap having a tubular bead substantially circular in cross-section at its free edge.

1,895,173. REFLECTING DEVICE. PHILIP PURNOY SANDFORD, Teddington, England, assignor, by mesne assignments, to Jonathan C. Stimson, St. Louis, Mo. Original application filed Dec. 3, 1924, Serial No. 753,744, and in Great Britain Dec. 3, 1923. Divided and this application filed Aug. 8, 1928. Serial No. 298,383. 5 Claims. (Cl. 88—1.)



1. A sign forming element comprising a glass body having a slightly curved front face and a plurality of right angled tetrahedra projecting from its rear face.

1,895,174. FILE FOLDER. LEROY C. SHONTS, Chicago, Ill. Filed Sept. 3, 1929. Serial No. 389,951. 24 Claims. (Cl. 129—1.)



1. A file folder comprising a body having a central portion with two side portions hinged thereto forming covers foldable over said central portion, a pocket member connected to said central portion to form a pocket to receive loose papers, and a paper-holding means at each side edge of said pocket member to which papers may be attached so as to lie on the outside of said pocket, said cover portions being foldable over said papers.

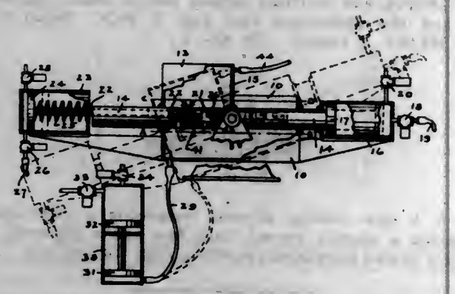
1,895,175. PROTECTIVE COATING AND METHOD OF PRODUCING THE SAME. HORACE A. STAPLES, Plainfield, N. J., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 29, 1930. Serial No. 485,313. 8 Claims. (Cl. 148—7.)

1. The method of providing a protective coating for the surface of a copper or copper alloy article which includes the step of adding an oxidizing accelerating agent comprising kerosene to the drawing compound for accelerating the oxidation of the material, and the step of subsequently, after drawing, effecting oxidation by heating the article in the presence of an excess of an oxygen.

1,895,176. PROTECTIVE COATING AND METHOD OF PRODUCING THE SAME. JOHN A. STAPLES, Plainfield, N. J., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 29, 1930. Serial No. 485,314. 6 Claims. (Cl. 148—7.)

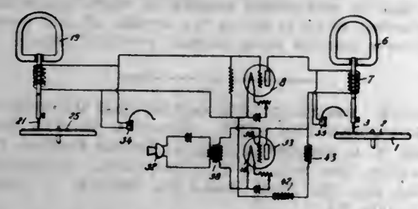
1. The method of improving the character of a protective coating upon a copper or copper alloy article such as a brass alloy which comprises creating the coating in part by the oxidation of the surface of the alloy itself and in art by forcing into the surface to be oxidized a substance comprising copper carbonate, and thereafter converting said copper carbonate into oxide form which joins and merges with oxide formed from and upon the surface of the alloy.

1,895,177. MEANS FOR GAS FILLING AND SEALING OF TUBES. JOSEPH H. STALEY, Columbus, Ind. Filed May 31, 1932. Serial No. 614,462. 16 Claims. (Cl. 200—152.)



3. The method of filling a mercury switch tube having a body, and a body closing member adapted to be telescoped to form a closed tube, which comprises submerging the body and closing member in a bath of mercury to displace the air therein, carrying the submerged body and member to within a gas filled chamber, rocking the body and member in the presence of the gas to partially drain the mercury therefrom to leave a predetermined amount of mercury in the body and to allow the gas to replace the drained mercury, and pushing the body and member together to enclose the residual mercury and the gas therewithin.

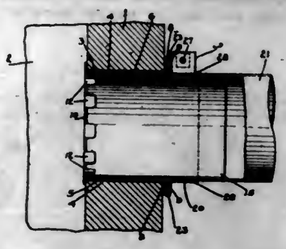
1,895,178. ARRANGEMENT FOR PRODUCING PHONOGRAPH RECORDS. RALPH H. TOWNSEND, Mount Vernon, N. Y., assignor, by mesne assignments, to United Research Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Dec. 29, 1924. Serial No. 758,603. 10 Claims. (Cl. 179—100.4.)



1. In a system for recording sound waves, means for electrically transmitting and amplifying sound wave undulations from an existing phonograph record to a record blank, and electrical means in circuit with said means for simultaneously impressing supplementary and amplified sound wave undulations on said record blank.

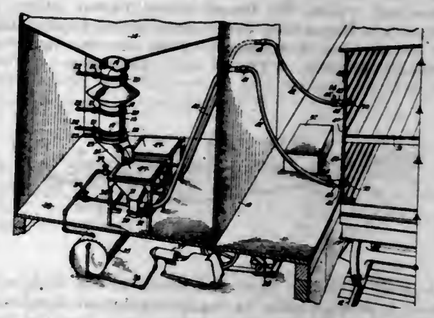
1,895,179. FLUE COUPLING. CHARLES A. THRESHER, Schofield, Wis. Filed Oct. 24, 1930. Serial No. 490,955. 8 Claims. (Cl. 126—318.)

1. A device of the class described comprising a tubular section adapted to fit within a flue liner, and to receive within it a pipe section and having two terminal sets of tabs at each opposite end, inner and outer sets at one end both adapted to be bent radially, one set to form stops for limiting axial motion of the liner during introduction into the flue liner and the other set spaced from the first in a direction axially of the liner, and one of the sets at the other end adapted to be bent outwardly to form stops for limiting motion of the liner in withdrawal direction, the other set to be bent inwardly to form stops to limit introductory motion of a pipe section, and a split collar having tabs bent to form radially arranged hooks adapted to engage the outer set of tabs of the tubular section and means for constricting the clamping element after the hooks are engaged with tabs



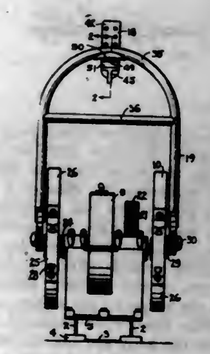
to cause said element to clampingly engage a stove pipe section telescopically engaged with a pipe section which is in the tubular section.

1,895,180. GRAIN FEEDING DEVICE. JOHN SLOAN TOUGH, Kansas City, Mo. Filed May 11, 1932. Serial No. 610,578. 3 Claims. (Cl. 302—63.)



1. A nozzle device for discharging feed into stock cars as driven through the nozzle under air pressure, said device comprising a casing flaring towards its discharge end and having a flat tip or discharge end formed with an internal baffle projecting upward in the direction of the mouth of the nozzle, and also having an external lip projecting downward over the mouth of the nozzle.

1,895,181. PUMPING UNIT. WALTER C. TROUT, Lufkin, Tex. Filed Dec. 15, 1930. Serial No. 502,407. 7 Claims. (Cl. 74—14.)



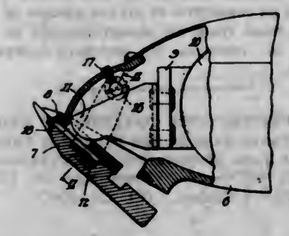
1. A pumping unit for use with a well rig pumping equipment, said unit including a housing, a crank shaft extending from opposite sides thereof, a counter-balanced crank arm on each end of said shaft, and a pitman straddling said pumping unit with opposite sides of its lower end attached to each of said arms, and having its upper end adapted for connection to the well rig pumping equipment.

1,895,182. PAPER FASTENER. PAUL O. UNGER, Glen Ellyn, Ill., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Sept. 24, 1932. Serial No. 634,757. 4 Claims. (Cl. 24—153.)



1. In a paper fastener, a base strip and a plurality of bendable prong members, said base strip having means to retain each of said prong members in a plurality of predetermined positions on said strip.

1,895,183. CLIPPER BLADE CONTROL. LEO J. WAHL, Sterling, Ill., assignor to Wahl Clipper Corporation, Sterling, Ill., a Corporation of Illinois. Filed June 22, 1931. Serial No. 545,964. 7 Claims. (Cl. 30—1.)

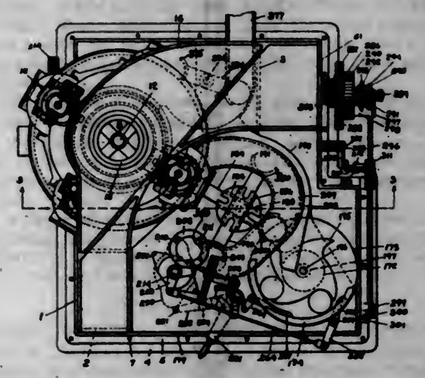


1. In combination, a clipper frame, a comb, means swingingly mounting said comb on said frame, a cutter blade interposed between the comb and the frame, and driving means for said blade mounting said blade for angular movement with respect to the frame so that the blade and comb are both angularly movable with respect to the frame, the radius on which the comb swings being materially greater than the radius on which the cutter swings.

1,895,184. MULTIPLE SPINDLE VACUUM DOUBLE SEAMER. HENRY JAMES DOUGLASS, CHARLES D. DOUGLASS, and MARCUS S. LEVE, San Francisco, Calif., assignors to Pacific Can Company, San Francisco, Calif., a Corporation of Nevada. Filed Oct. 19, 1931. Serial No. 569,758. 29 Claims. (Cl. 113—1.)

5. In a machine of the character described a rotatory member adapted to receive and convey can bodies at a low velocity, a plurality of seaming spindles, a turret adapted to support and convey said spindles along a circular path at a higher velocity, and accelerating devices adapted to engage said can bodies while moving at said low velocity, carry them with an accelerating velocity along a curved path to the circular path of the seaming spindles and then carry them for some distance along said circular path in vertical alignment with said spindles.

26. In a machine of the character described a plurality of seaming spindles, means for supplying can bodies to said spindles, a can-end magazine carrying a stack of can-ends, a can-end marking device stationarily mounted, and provided with an operating arm, a vertical separating shaft, a rotary can-end separating device mounted upon said vertical separating shaft and adapted to separate the lowermost can-end in the stack, and deliver it to said marking device, and means for actuating said operating



arm; said means comprising a cam secured upon said separating shaft, a swinging arm provided at the end with a cam roller receiving motion from said cam, and carrying a rib, having its upper surface formed into a cam operatively connecting with said operating arm.

1,895,185. DEVICE FOR DISTRIBUTING AND PACKING COSSETTES IN DIFFUSION BATTERY CELLS. ANSELL R. FINLEY and SAM SMITH, Mason City, Iowa. Filed Dec. 18, 1931. Serial No. 581,980. 2 Claims. (Cl. 214—17.)



1. In a device for distributing and packing cossettes in diffusion battery cells, a distributor head comprising a conical body having a pair of vertical vanes projecting radially therefrom at diametrically opposite sides of the body, and a circumferentially extending ledge at the largest end of said body for each vane, said ledge being disposed immediately in advance of its vane, and also being disposed at an angle to the horizontal and sloping toward the base of said vane, said ledge also having a top face sloping inwardly from the outer edge of the ledge toward said head.

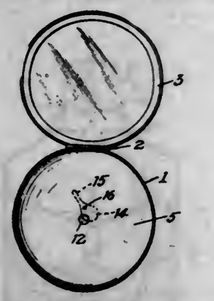
1,895,186. FENCE POST. JOHN ROBERT FREE, Limerick, Saskatchewan, Canada. Filed Mar. 6, 1929. Serial No. 344,804. 1 Claim. (Cl. 189—28.)

In a fence post, an upper section located above ground and adapted to retain fence wires, and a lower detachable section to be driven in the ground when detached

from the upper section, said lower detachable section including a short length of metallic tube having one end closed to provide a wedge-shaped point made by compressing toward each other opposite wall of said tube to facilitate driving of the tube in the ground and providing within the tube at the lower end thereof a restricted seat, said upper section including parallel portions connected at their lower ends by a rounded bottom portion to rest against the rstricted seat whereby the upper section is supported.

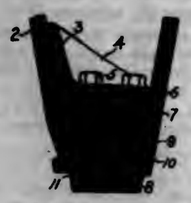


1,895,187. TOILET ACCESSORY. WILLIAM FRIEDMAN, New York, N. Y. Filed June 25, 1931. Serial No. 546,825. 9 Claims. (Cl. 132—83.)



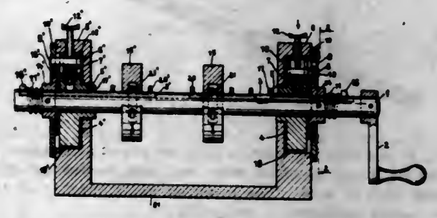
1. A toilet accessory comprising a circular dispensing member having a discharge orifice at a middle part thereof, and means for feeding powder or the like lying contiguous to the member toward the middle part of said member and discharge the same from said orifice.

1,895,188. BREAKER AND BEATER ROLL. JOHN D. HASKELL, Fulton, N. Y., assignor to Dilts Machine Works, Inc., Fulton, N. Y., a Corporation of New York. Filed June 1, 1932. Serial No. 614,781. 15 Claims. (Cl. 92—22.)



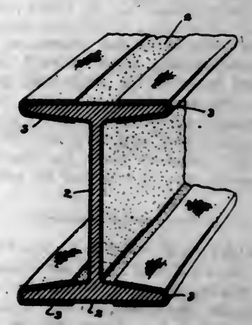
1. In a beater and breaker roll, the combination with internally disposed supporting spider frames, of fly bars carried by the spiders, filling pieces arranged between said bars, bracing members arranged between said bars and upon said filling pieces, the said brace members having extended portions on one side thereof and arranged to brace the upper outermost end portions of the fly bars on one side thereof, and means securing the filling pieces and brace members to said spiders.

1,895,189. CALCULATING MACHINE. HERMANN HOFFMEISTER, Gliesmarode near Brunswick, Germany, assignor to Brunsviga-Maschinenwerke Grimme, Natalis & Co., Aktiengesellschaft, Braunschweig, Germany, Brunswick, Germany, a Corporation of Germany. Filed July 23, 1927, Serial No. 208,012, and in Germany May 9, 1927. 10 Claims. (Cl. 235—144.)



1. In a calculating machine, the combination of registering means comprising a plurality of groups of axially alined registering members, a rotatable resetting shaft common to all of said groups said shaft having a continuous groove resetting means for each of said groups, including elements arranged in said groove in operative relation to the individual groups and means whereby said elements can be connected to all the groups of registering members to reset them all simultaneously or to any desired group for resetting its members independently of other groups.

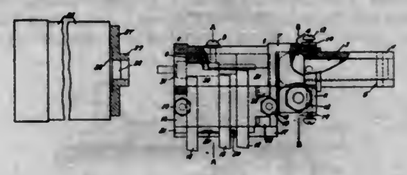
1,895,190. PROTECTING COATING OF STRUCTURAL STEEL. EMILE JANSEN, San Francisco, Calif., assignor to General Paint Corporation, San Francisco, Calif., a Corporation of Nevada. Filed May 28, 1930. Serial No. 456,779. 7 Claims. (Cl. 72—109.)



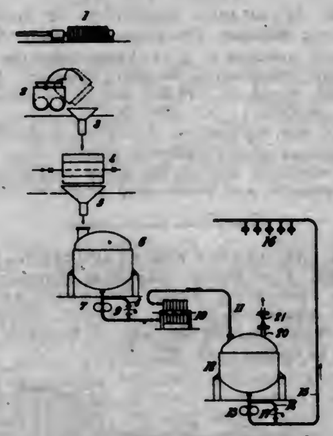
3. An article of manufacture comprising irregular structural steel shapes, a coating of rust-resisting composition, and a relatively heavy textile material bonded into said composition about the edge of the steel shapes.

1,895,191. BOX TOOL FOR AUTOMATIC AND TURRET OR CAPSTAN LATHES OR MACHINES. WILLIAM HENRY JONES, Wallasey, England. Filed Jan. 7, 1931, Serial No. 507,255, and in Great Britain Jan. 18, 1930. 2 Claims. (Cl. 82—35.)

1. A machine box tool comprising an inner sleeve part to be fitted in the turret of the machine, a stem fitting within and having limited play relative to the sleeve part, one end of the stem projecting beyond the sleeve and being formed as a ball, and a tool carrying part having means to removably clamp the tools thereon, said tool carrying part being formed with a socket to cooperate with the ball at the end of the stem for rotary adjustment of the tool carying part relative to the sleeve part.

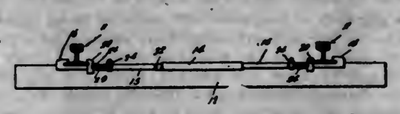


1,895,192. SPINNING CELLULOSE SOLUTION. ADOLF KÄMPF, Dessau-Ziebigk, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 13, 1929, Serial No. 346,680, and in Germany Mar. 12, 1928. 2 Claims. (Cl. 18—8.)



1. An apparatus for the manufacture of artificial materials from a solution containing a cellulose compound, comprising a dissolving vessel, filter presses, a deaerating and spinning vessel, and a spinning machine, tubes connecting the aforesaid parts of the machine, liquor pumps arranged in the said tubing and by-passes between the pressure side and the suction side of the said pumps.

1,895,193. RAIL BRACE. WILLIAM KOCH and MACK ROGERS, McKittrick, Mo. Filed June 9, 1932. Serial No. 616,338. 5 Claims. (Cl. 238—50.)



1. In a structure of the class described, in combination, a pair of spaced parallel track rails, cross ties located beneath said rails, the rails being fastened to said cross ties in the usual way, a brace located between adjacent cross ties, said brace comprising a pair of adjustably connected clamping units, the outer ends of said units being constructed for releasable engagement with the rails, longitudinally spaced pairs of stay links pivotally connected together at their inner ends to the respective units and having their outer ends fastened to the adjacent cross ties.

1,895,194. PROCESS OF THE PRODUCTION OF DRY GLUE. WILLY KUTZNER and FRED KUTZNER, Potsdam near Berlin, Germany. Filed Nov. 14, 1931, Serial No. 575,146, and in Germany Mar. 28, 1931. 3 Claims. (Cl. 87—17.)

2. The method of preparing a dry glue soluble in water at normal temperatures, which comprises agitating dextrin in a fine state, and simultaneously adding water in a finely divided state thereto, the quantity of water added being just sufficient to form a gritty non-hygroscopic product.

3. A dry glue soluble in water at normal temperatures, comprising fine-grained dextrin formed by the agitation of dextrin in a finely divided state and simultaneous addition thereto of water in a finely divided state.

1,895,195. PROCESS OF PRODUCING SULPHONIC ACIDS. HYMAN LIMBURG, Amsterdam, Netherlands, assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 15, 1928, Serial No. 319,729, and in the Netherlands Nov. 15, 1927. 4 Claims. (Cl. 260—159.)

1. A process for producing sulphonic acids which comprises separating mineral oil of relatively high boiling point into the constituents thereof which are soluble in liquid sulphur dioxide and the constituents thereof which are insoluble in liquid sulphur dioxide, subjecting the insoluble constituents in the absence of free sulphur dioxide to sulphonation at a temperature above normal to produce water soluble sulphonic acids whose calcium salts are soluble in water and in calcium chloride solutions, separating the upper layer from the lower layer containing said sulphonic acids, and recovering the sulphonic acids contained therein.

1,895,196. TRAVERSE BUTTON. JESSE F. MADDEN, Brooklyn, N. Y. Filed May 1, 1930. Serial No. 449,000. 3 Claims. (Cl. 242—157.)



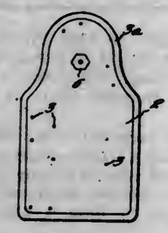
1. In combination, a traverse button and a holder therefor, the button having a shank, and the holder having an opening for receiving the same, said shank projecting beyond the side of said holder into which it is received, said projecting portion having an opening; and an upwardly-humped spring pin for extending through said opening to hold the button on the holder, said pin having a T-head extending in a direction at right angles to the plane of said hump.

2. In a device of the character described, a traverse button having its working side in the form of a spherical surface cut away centrally across the face thereof to produce a zone in the form of the segment of a cylinder extending in the direction in which the button is designed to travel on the cone, said zone merging at each side thereof into said spherical surface.

1,895,197. SHIELD. MARTIN MARTINSON, Princeton, Ill. Filed Aug. 10, 1931. Serial No. 556,216. 2 Claims. (Cl. 89—36.)

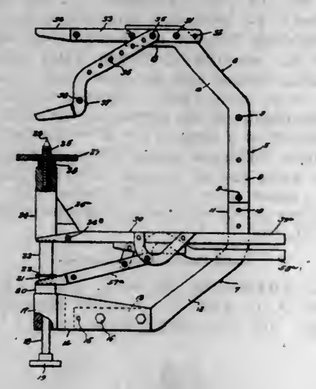
1. In a shield, a body portion, a covering therefor, said body and covering being formed with aligned perforations,

a plug having a leather portion to fit snugly and removably in said perforations and a metal portion to then fit



against said covering, a chain engaging said plug for seating same in said perforations, and a lug for said body portion.

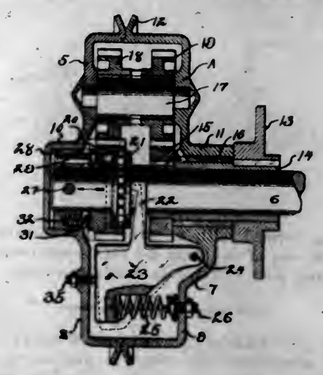
1,895,198. VALVE SPRING LIFTER. JAMES P. MCCREADY, Berlin, N. H. Filed Jan. 31, 1931. Serial No. 512,696. 3 Claims. (Cl. 29—86.3.)



1. A valve spring tool of the type described comprising a substantially U-shaped frame having its bight and legs capable of extension for bringing into required operative positions motor block and valve spring engaging portions of the tool in working upon different types of motors, a vertically slidable and screw-threadedly adjustable valve head engaging means on one leg of the frame, and a stationary and an auxiliary movable valve spring engaging means on the other leg of the frame, and manually operable means associated with the slidable valve head engaging means for vertically moving said valve head engaging means while said valve spring engaging means is engaged with a valve spring, whereby to adjustably compress the valve spring, and means on said manually operable means to lock the tool in valve spring compressing position.

1,895,199. SPEED GOVERNOR AND DRIVING MECHANISM. LA MONT A. MCDOWELL, Racine, Wis. Filed Feb. 13, 1932. Serial No. 592,728. 5 Claims. (Cl. 74—34.)

1. In a combined speed governor and drive transmission, a driven shaft, a hollow drive member rotatable about the driven shaft, a stationary spur gear arranged within the drive housing, pairs of connected gears rotatably carried by the housing and arranged at equally distant spaced points around the driven shaft, one of the gears of the pair of gears meshing with the stationary gear, a clutch including a stationary section secured to the driven shaft, a shiftable clutch section rotatable about the driven shaft having gear teeth meshing with the other gear of the pairs

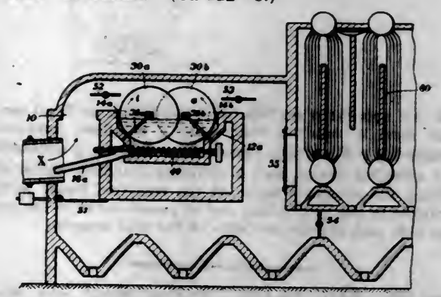


of gears, and means including a movable weight carried by the drive housing for actuating the shiftable section of the clutch.

1,895,200. STABILIZED SOLUTIONS OF SICCATIVES. FRIEDRICH MEIDERT, Frankfort-on-the-Main, Griesheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 25, 1931, Serial No. 518,302, and in Germany Feb. 25, 1929. 20 Claims. (Cl. 134—26.)

1. As a new composition of matter, a stabilized solution consisting of a siccative, a volatile solvent and an organic carboxylic acid of the group consisting of aromatic carboxylic and unsaturated aliphatic acids.

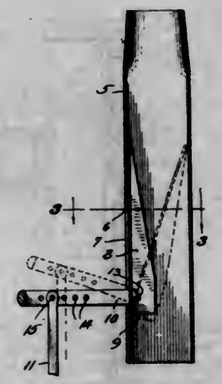
1,895,201. APPARATUS FOR EVAPORATING CEMENT SLURRY. CARL MITTAG, Magdeburg, Germany, assignor to the Firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Filed Dec. 8, 1930, Serial No. 500,958, and in Germany Dec. 21, 1929. 10 Claims. (Cl. 222—5.)



1. The combination with a kiln of a flue structure communicating therewith, a slurry evaporating plant within said flue structure comprising a tank at the bottom of said flue, a plurality of rotatable disks mounted on an axis transverse to the flue and extending from substantially the bottom of said tank to the top of said flue, said disks being spaced axially from one another forming a plurality of narrow channels therebetween through which the gases of combustion from said kiln have to pass to escape from said flue.

1,895,202. DAMPER CONTROL. SAMUEL E. MONTGOMERY, Tate, Ga. Filed June 26, 1930. Serial No. 464,014. 1 Claim. (Cl. 126—292.)

The combination with a chimney of rectangular cross-section having an opening in the front wall thereof, of a damper for controlling the passage of air through the opening, said damper comprising a body portion of a length to extend an appreciable distance beyond the opening to direct air entering the opening, upwardly, said body portion being of a width greater than the width of the opening to overlap the side edges of the opening, flanges extending inwardly from the side edges of the

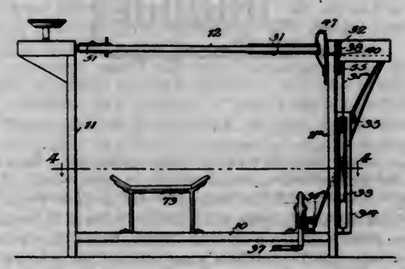


body portion and disposed adjacent to the side walls of the chimney preventing the passage of air around the side edges of the body portion, said flanges having openings formed therein, said chimney having openings, a pivot pin extending through the openings of the damper and chimney pivotally supporting the damper, and an operating arm extending from the damper.

1,895,203. PRODUCTION OF ANTHRAQUINONE AZINES. PAUL NAWIASKY and LUDWIG EIFFLAENDER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 11, 1930, Serial No. 501,745, and in Germany Oct. 8, 1926. 3 Claims. (Cl. 260—31.)

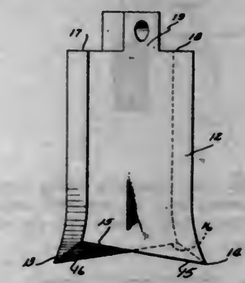
1. The process of producing N-dihydro-1.2.2'.1'-anthraquinoneazines, which comprises subjecting a 2-aminoanthraquinone to the action of a caustic alkali melt in the presence of a salt of a low fatty acid in conjunction with a salt of a fatty acid containing at least 5 carbon atoms.

1,895,204. SHIRT FOLDING APPARATUS. JAMES J. O'SHEA, Dallas, Tex. Filed Feb. 4, 1930. Serial No. 425,847. 23 Claims. (Cl. 223—15.)



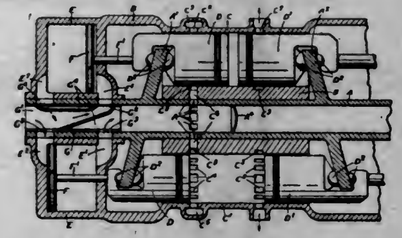
1. In a shirt folding apparatus, a frame, an elongated form around which a shirt may be placed, supporting means for said form, said form being invertible in said support, and means carried by said frame for holding a shirt along the side edges and one end of said form.

1,895,205. FISHTAIL POINT FOR AUGERS. FRANK OSCAR PRIOR, Tulsa, Okla., assignor to Four Wheel Drive Auto Company, Clintonville, Wis., a Corporation of Wisconsin. Original application filed Sept. 12, 1927, Serial No. 219,051. Divided and this application filed Jan. 30, 1930. Serial No. 424,534. 11 Claims. (Cl. 255—61.)



1. A fish-tail auger point comprising a plate having its lower end provided with a rolling bevel varying substantially continuously in angle of inclination from one side of the plate to the other, and having straight line edges extending entirely across said plate the bevel of said lower end being opposite in angle of inclination at opposite side margins of the plate.

1,895,206. SWASH PLATE INTERNAL COMBUSTION ENGINE OPERATING ON THE TWO-STROKE CYCLE. HARRY RALPH RICARDO, London, England. Filed July 27, 1931, Serial No. 553,439, and in Great Britain Sept. 29, 1930. 5 Claims. (Cl. 123—51.)



1. A multi-cylinder internal combustion engine operating on the two-stroke cycle including in combination a hollow engine shaft, a swash plate on the engine shaft, a series of working cylinders disposed around the engine shaft with their axes parallel to such shaft and having scavenging ports communicating with the interior of the shaft, a series of scavenging pump cylinders separate from the working cylinders disposed around and with their axes parallel to the axis of the engine shaft with inlet and outlet ports at both ends of each of the scavenging pump cylinders, double-acting pistons in the pump cylinders, operative connections between the swash plate and the pump pistons and a rotary valve coaxial with the hollow engine shaft whereby each end of each pump cylinder is brought into communication with the interior of the hollow engine shaft during its delivery period and into communication with a source of scavenging fluid during its suction period.

1,895,207. METHOD OF FORMING PROJECTILES. OTTO RINKEL, Baden, Germany, assignor to Berlin-Karlsruher Industriewerke Aktiengesellschaft, Baden, Germany, a Company of Germany. Filed June 9, 1932, Serial No. 616,296, and in Germany June 25, 1929. 4 Claims. (Cl. 29—1.22.)

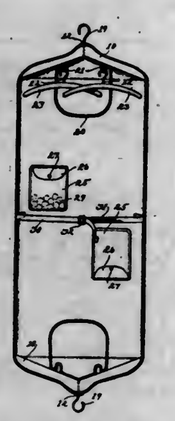
1. A method of manufacturing a projectile which comprises the steps of forming indentations on the bearing

surface of the projectile, inserting lubricating means in said indentations, and working the projectile surface to substantially completely close the mouths of the indenta-



tions to maintain the lubricant means therein, whereby the lubricant means may be retained until the mouths of the indentations are opened by the action of the rifling of a weapon.

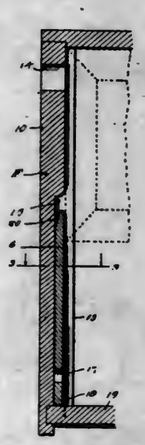
1,895,208. GARMENT CARRYING CONTAINER FOR USE WITH CLOSED VEHICLES. KEVA SALAVSKY, Brooklyn, N. Y. Filed June 24, 1931. Serial No. 546,648. 1 Claim. (Cl. 206—7.)



A garment container of the class described comprising an elongated bag having an elongated slit at one face thereof and at the center thereof, means for closing said slit, a member in each end of the bag of garment hanger shape, for shaping said ends of the bag, a member formed of wire in each end of the bag, each member forming a closed loop, the outer end of which contacts the inner edge of the end shaping member with a part of the wire passing through said member and through the end of the bag with the projecting part thereof bent into hook shape, the bight part of each loop forming member forming means for supporting a garment, and the outer end of each loop forming member having U-shaped portions formed therein extending inwardly to receive hooks of garment hangers and a pair of straps having their outer ends connected to inner portions of the bag adjacent the edges thereof, with a buckle on one strap adapted to receive the free end of the other strap.

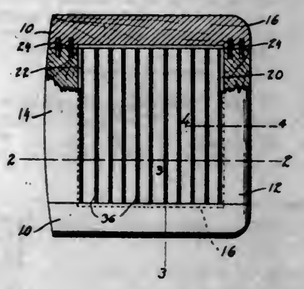
1,895,209. PULLEY STILE FOR WINDOW FRAMES. FREDERICK SCHAFFERT, Carlstadt, N. J. Filed Feb. 6, 1932. Serial No. 591,373. 2 Claims. (Cl. 20—12.)

1. In a window frame construction, a pair of side frame members, a plurality of parallel vertically extending stop members carried by the side members, each of said side members having an inwardly offset rabbeted portion disposed between pairs of stops, said rabbeted portion terminating at one end intermediate the ends of the side member and extending to the extremity of the opposite end of the side member, an elongated member seated in the rabbeted portion and having the inner face thereof substantially coplanar with the adjacent face of the side



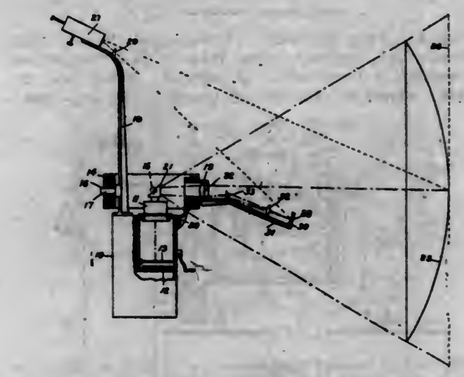
member, said elongated member being of a thickness substantially equal to the depth of the stop members, and means engaging the window sill for removably mounting the elongated member in the rabbeted portion, said elongated member having the inner surface thereof adjacent the upper end inclined upwardly and outwardly to provide a reduced upper end to permit removal thereof.

1,895,210. CHAIR ELEMENT. GEORGE D. SCHERMERHORN, Reading, Mich. Filed Aug. 19, 1929. Serial No. 386,814. 5 Claims. (Cl. 155—186.)



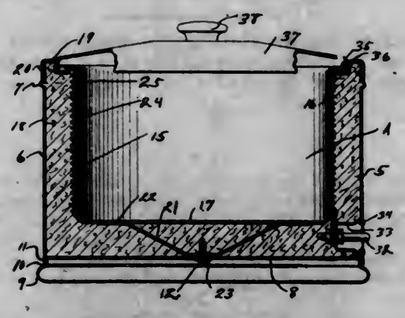
1. A chair seat having a frame comprising front and rear frame members connected and spaced apart by side frame members, each frame member provided with a groove extending along its inner edge and forming a continuation of the groove of the adjacent frame members whereby a continuous groove extends about the inner edge of the frame, a ply wood seat section shaped to fit within said frame and having a plurality of plies received within said groove and having at least its uppermost ply not received within the groove but disposed in abutting relationship to the inner edge of the frame above the groove and lying flush with the upper surface of the frame and scored at intervals transversely of the seat.

1,895,211. MOTION PICTURE CAMERA. FRANK SHORT, Poughkeepsie, N. Y. Filed Aug. 16, 1926. Serial No. 129,644. 4 Claims. (Cl. 88—16.)



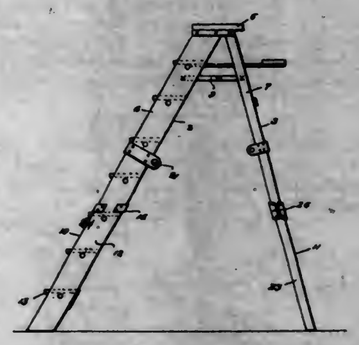
1. In a motion picture camera, a gimbel ring provided with a tubular pivot, a camera mounted on the gimbel, a separate lens system mounted on the gimbel the axis of the lens system passing through the tubular pivot, and means for directing rays passing through the lens system into the camera.

1,895,212. HEAT INSULATED COOKING VESSEL. ALVA T. SMITH, Milwaukee, Wis., assignor to National Enameling & Stamping Company, Milwaukee, Wis. Filed Sept. 17, 1931. Serial No. 563,329. 1 Claim. (Cl. 219—44.)



An electric heat insulated cooking vessel comprising an outer shell having a side casing wall provided with a struck-out bead adjacent to its upper end, and a removable bottom wall having a depending offset flange defining a shoulder and a vertical abutment wall, a cooking receptacle received within the shell including a side wall arranged in spaced parallel relation to the side casing wall, and a bottom wall disposed in spaced parallel relation to the first mentioned bottom wall, the side wall of the cooking receptacle having an outstanding upper spacing wall provided with a depending flange receiving the upper edge of the side casing wall and engaging said struck-out bead, the lower edge of the side casing wall receiving the first mentioned bottom wall and engaging the vertical abutment wall and shoulder thereof, heat insulated material packed between the side wall, bottom wall and spacing wall of the cooking receptacle and the side casing wall and bottom wall of the shell, a depending substantially V-shaped spacing bracket carried by the bottom wall of the cooking receptacle, a single fastening element extending through the bottom wall and into the bracket, and an electrical heating element arranged in close relation to the cooking receptacle.

1,895,213. STEPLADDER EXTENSION. EDWARD STINDL, Beloit, Wis. Filed July 11, 1928, Serial No. 291,814. Renewed June 27, 1932. 1 Claim. (Cl. 228—29.)



In a ladder construction, a main ladder section, an extension section, a socket forming member carried by each side member of the extension section for receiving the lower end of each side member of the main ladder section, a U-shaped member having one of its limbs connected to the upper end of each side member of the extension section with its bight extending across and to a considerable distance beyond an end edge of said side member, whereby the other limb of the U-shaped member is spaced from the opposite side of the said side member for receiving a side member of the main section, the ends of the limbs projecting beyond the side members and detachable means for connecting the ends of the limbs together.

1,895,214. TRANSPLANTER. RICHARD STORK, Greenwich, Conn. Filed Aug. 12, 1932. Serial No. 628,600. 1 Claim. (Cl. 55—68.)

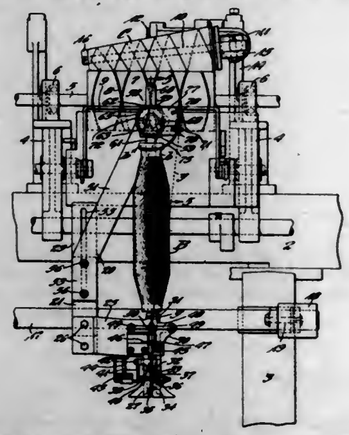


A transplanter of the class described comprising a pair of elongated shanks, shovel elements on adjacent ends of the shanks handles on the other ends of the shank, a cross bar, means pivoting intermediate portions of the shank to the ends of the cross bar, a spring engaged with the shank below the cross bar to hold the shovels normally in abutment.

1,895,215. SUPPLY-HOLDER. ERNEST R. SWANSON, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 5, 1930. Serial No. 493,601. 16 Claims. (Cl. 242—130.)

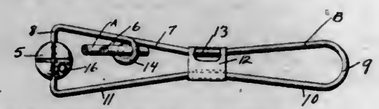
1. The combination of means for rotating a package, means for winding yarn thereon, means for supporting a

supply-bobbin in inverted position, and guiding-means for directing the yarn downwardly from the bobbin and then upwardly to the package being wound.



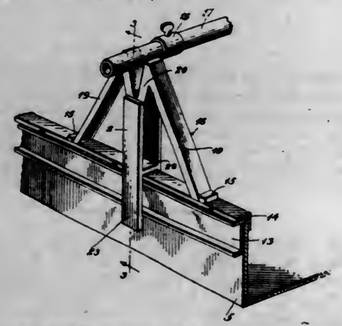
13. In a supply-holder, the combination of a rotatable member, a spindle projecting from said member radially of its axis, a rockable latch adapted to engage with a bobbin placed on the spindle to secure it thereto, and means operated automatically by the turning of the rotatable member on its axis through an arc of substantially ninety degrees to rock the latch to engage it with the bobbin when the spindle is turned toward its down position.

1,895,216. TOY HOOP. FRANK A. THALMANN, Milwaukee, Wis. Filed June 6, 1931. Serial No. 542,504. 4 Claims. (Cl. 272—85.)



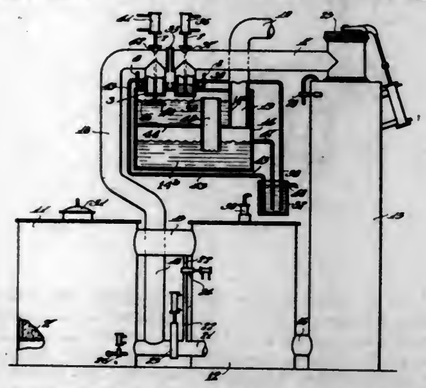
1. An amusement device comprising a hoop, an operating and guide handle for the hoop comprising an open frame including spaced longitudinal side bars and a front connecting cross bar, a guide-eye for the hoop carried by one of the side rails adjacent to the front cross bar said guide eye being of a diameter slightly greater than the diameter of the material from which the hoop is formed, a bell on said front cross bar, and means on the hoop for engaging the guide-eye during the passage of the hoop therethrough for vibrating said handle to sound the bell.

1,895,217. REEL CARRIER. JOHN VAN VORST, Schenectady, N. Y. Filed June 8, 1931. Serial No. 542,959. 4 Claims. (Cl. 242—85.)



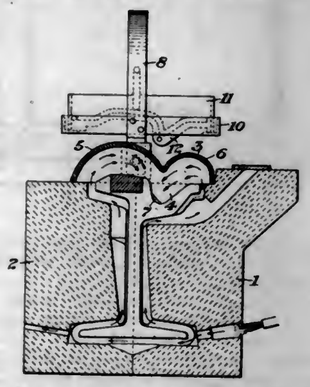
1. In a reel shaft support, a horizontal bar having two longitudinally spaced upwardly projecting lugs on its upper side, a vertical frame resting upon and straddling said bar between said lugs, said frame being free of attachment to said bar and abutting said lugs, and a reel shaft bearing carried by said frame.

1,895,218. TAR BATTER. THOMAS W. STONE, Fort Wayne, Ind., assignor to The Western Gas Construction Company, a Corporation of Indiana. Filed Jan. 25, 1930. Serial No. 423,892. 2 Claims. (Cl. 202—256.)



1. A tar batter for a gas generator, comprising two superimposed compartments, a pair of inlets in the upper compartment, valve members adapted to alternately and oppositely open and close said inlets, an overflow conduit for the lower compartment, a gas conduit leading from a point within said upper compartment to a point in the lower compartment lying below the level of said overflow conduit, and a gas offtake for said lower compartment.

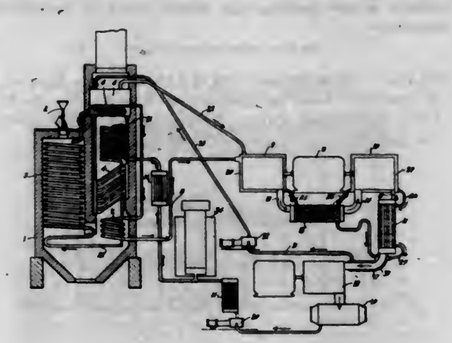
1,895,219. MEANS FOR DRYING MOLD COPES. EDWARD F. BEGTRUP, Jersey City, N. J. Filed Apr. 9, 1932. Serial No. 604,206. 5 Claims. (Cl. 22—87.)



5. A hood for welding molds, comprising a body portion adapted to span the open top of the mold and having perpendicular side walls and a double arched top, a bail fixed to the side walls and spanning the top, and a mold cope supporting rack secured between the side members of the bail.

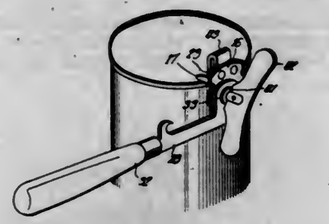
1,895,220. METHOD OF VAPORIZING. JOHN J. GREBE, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Aug. 15, 1927. Serial No. 212,913. 5 Claims. (Cl. 122—33.)

2. In a method of one-pass evaporation of water under pressure, the steps which consist in evaporating a substantial portion of said water by means of heat from a hot fluid, subjecting the so heated fluid products of said



evaporation step to a temperature balancing heat transfer with another heated fluid of higher boiling point than water, and then further heating the so generated steam.

1,895,221. CAN OPENER. WILLIAM E. JENSEN, Chicago, Ill., assignor, by mesne assignments, to F. W. Norton, Oak Park, Ill. Filed Jan. 31, 1931. Serial No. 512,625. 8 Claims. (Cl. 30—3.)



7. In a can opener, a body portion, a knife, means including a feed wheel for moving the knife around the can to excise the top thereof, a magnet, and means for releasably attaching one pole piece of the magnet to the body member, the other pole piece disposed near said knife to pick up metal particles removed from the can.

1,895,222. AIRPLANE SAFETY BELT. CORYDON M. JOHNSON, Farmingdale, N. Y., assignor to The Aviation Patent and Research Corporation, a Corporation of New York. Filed Apr. 6, 1932. Serial No. 603,506. 3 Claims. (Cl. 244—1.)

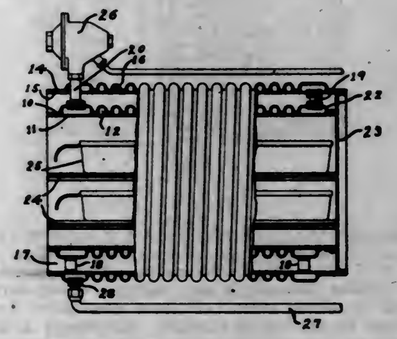


1. In combination with a chair, a restraining belt for the occupant thereof, said belt comprising two pieces with a quick release fastening device for the ends thereof, and means for connecting said pieces to said chair, said connecting means being adjustable for varying the effective length of said belt, said means comprising a channeled frame and a locking bolt assembly slidably arranged therein.

1,895,223. PROCESS OF REFINING GASOLINE WITH BERYLLIUM SALTS. FRANKLIN H. KIMBALL, Long Beach, Calif. Filed July 16, 1932. Serial No. 623,027. 12 Claims. (Cl. 196—36.)

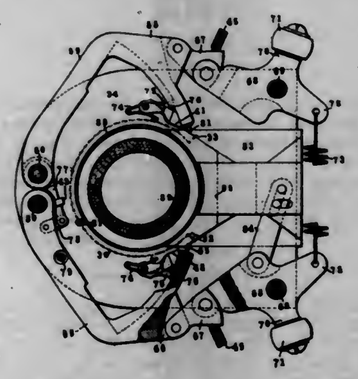
1. A method of refining gasoline comprising, heating mineral oil thereby forming hot gasoline vapors, passing the vapors into contact with a hot maintained mixture of water, beryllium chloride and ammonium chloride, separating the vapors from the mixture and cooling the withdrawn vapors to condense the vapors to form gasoline.

1,895,224. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 30, 1928. Serial No. 281,609. 17 Claims. (Cl. 62—99.)



7. An evaporator comprising a plurality of shells each having at least a portion thereof spaced from the other and sealed at the edge of said spaced apart portion to provide a plurality of spaced concentric refrigerant passages or chambers therebetween, said passages or chambers being in communication with each other, a liquid refrigerant supply connection to one of said passages or chambers and a refrigerant suction connection to another of said passages or chambers.

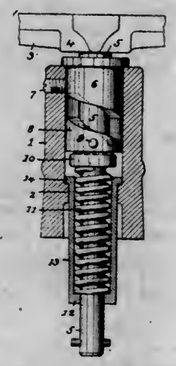
1,895,225. CAPPING AND SEALING MACHINE. WILLIAM H. KNOWLES, Port Chester, N. Y., assignor, by mesne assignments, to General Cap Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 14, 1925. Serial No. 9,128. 48 Claims. (Cl. 226—80.)



1. A machine for applying a band to a rigid receptacle neck, said band being previously formed and cut substantially to length, said machine including means en-

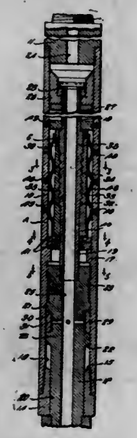
gaging the two ends of said band and pressing the same toward each other, and means for interlocking such ends solely by directly contacting and merging integral end portions with each other.

1,895,226. STOOL SEAT POSITIONING MEANS. JOSEPH KUPSKI, North Chicago, Ill., assignor to Chicago Hardware Foundry Company, North Chicago, Ill., a Corporation of Illinois. Filed May 11, 1931. Serial No. 536,333. 3 Claims. (Cl. 155—95.)



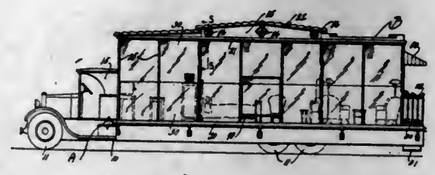
1. In a stool seat positioning means, the combination of a tubular pedestal, a seat carrying spider having a central depending pintle, an upper cam sleeve fixed in the bore of the tubular pedestal and having a central passage for guiding engagement with the aforesaid pintle in the vertical movement thereof, a lower cam sleeve having fixed attachment to said pintle at the mid-height of the same, the adjacent faces of the cam sleeves having a cam formation adapted to impose independent vertical movement on the lower cam sleeve, a coiled spring encircling the lower portion of said pintle and having abutment at one end with the under face of the lower cam sleeve and at its other end on a fixed member of the tubular pedestal.

1,895,227. JARRING TOOL. IRA J. MCCULLOUGH, Huntington Park, Calif. Filed June 13, 1930. Serial No 460,896. 20 Claims. (Cl. 255—27.)



1. A well tool of the character described including, two sections related for limited relative longitudinal movement, and means for releasably holding the sections against relative longitudinal movement including, cooperating toothed clutch parts carried by the sections, and yieldable means holding the clutch parts in cooperative engagement.

1,895,228. VEHICULAR DWELLING. EDNA MENNILLO, Hollywood, Calif., assignor of one-half to Ciro R. Mennillo, Hollywood, Calif. Filed Oct. 11, 1930. Serial No. 488,163. 8 Claims. (Cl. 296—21.)



1. In display apparatus of the class described, an elongate housing having a floor, transparent side walls and at least one transparent end wall, and partitions, transparent from the floor upwardly, provided with door openings and transparent closures for the openings whereby household furniture and the like and operations performed within said housing may be viewed from various points without the housing at opposite sides and end thereof and thru said partitions.

1,895,229. SWEEPING BROOM AND HANDLE CONNECTION THEREFOR. MARCUS R. MORTON, Spokane, Wash. Filed June 1, 1931. Serial No. 541,861. 6 Claims. (Cl. 287—86.)

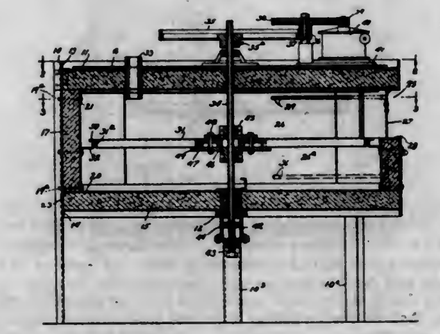


5. In a flexible broom handle structure, handle and broom sections having hollow ends, a coil spring having relatively closely disposed convolutions and having its end portions disposed in said hollow ends of said sections and extending across the juncture thereof and normally acting to maintain said sections in alined relation, and a sleeve-like tube of yielding material outwardly telescoping said spring across the juncture of and disposed in endwise abutting relation against the hollow ends of said sections and extending along a series of convolutions of said spring whereby flexing stress will be sustained by a plurality of convolutions of said spring.

1,895,230. ROTARY OVEN. JOSEPH NEEDHAM, Passaic, N. J. Filed Oct. 27, 1931. Serial No. 571,347. 9 Claims. (Cl. 107—60.)

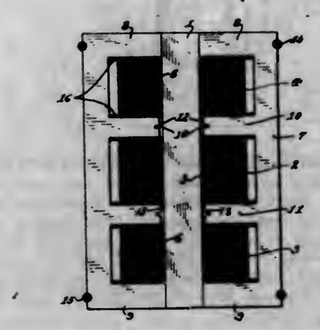
1. An oven of the class described comprising a frame consisting of a plurality of vertical frame members, two opposed frame members being coupled by one transverse

top frame, two other vertical frame members coupled by a lower cross frame arranged at right angles to the first named cross frame, a rotatable table including a shaft



supported upon the bottom cross frame, and means for vertically adjusting said shaft and table with respect to said cross frame.

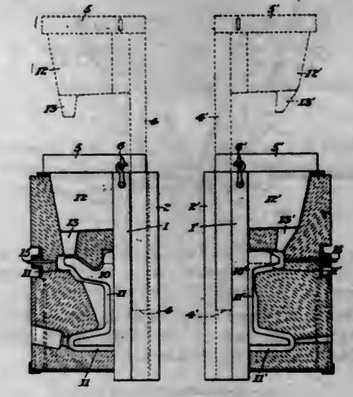
1,895,231. CONSTANT CURRENT TRANSFORMER. OSCAR A. PEARSON, Oak Park, and CHESTER H. THORDARSON, Chicago, Ill., assignors to Thordarson Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 19, 1931. Serial No. 516,853. 9 Claims. (Cl. 171—119.)



1. In a constant current transformer a core structure comprising a straight primary core portion, a secondary core portion having a pair of legs at opposite ends abutting against said primary core portion, and a foreshortened leg intermediate the ends providing a gapped magnetic shunt between the primary and secondary core portions.

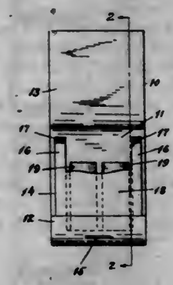
1,895,232. PATTERN FOR RAIL WELDING MOLDS. BELA RONAY, Annapolis, Md., assignor to Metal & Thermit Corporation, Carteret, N. J., a Corporation of New Jersey. Filed Aug. 5, 1932. Serial No. 627,583. 6 Claims. (Cl. 22—158.)

1. Pattern sets for rail welding molds, comprising backboards having pattern sections defining the mold cavity proper thereon, headboards normal to the planes of the respective backboards and having pattern sections thereon defining the cavities in the cope, and means for connecting the corresponding backboards and headboards to



permit movement of each headboard in a direction parallel to the plane of the corresponding backboard and normal to its own plane.

1,895,233. PACKAGE. MAURICE A. ROSSEN, Akron, Ohio. Filed May 15, 1931. Serial No. 537,563. 9 Claims. (Cl. 206—37.)

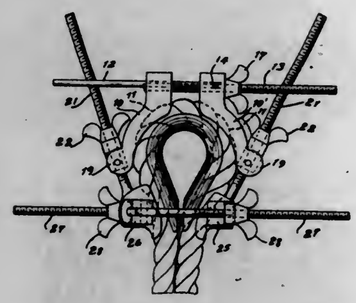


1. A package of the paper match-book type comprising a cover having front and back portions including a flap, and an inner holder having paper-board leaves with side portions appearing as separate laminations at their outer edges to simulate matches and a front wall providing, with said side portions and the back of the cover, a receptacle for holding and concealing articles within the package when the latter is closed.

1,895,234. APPARATUS FOR SPLICING CABLES AND ROPES. ANDERS J. SANDE, Brooklyn, N. Y. Filed July 1, 1932. Serial No. 620,386. 3 Claims. (Cl. 117—6.)

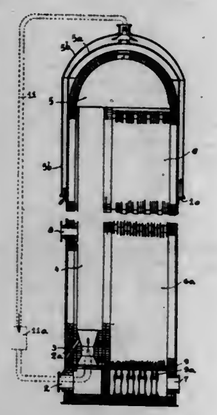
1. A device of the class described, comprising two top-sections formed with slightly curved inner surfaces, means for adjustably securing the upper parts of the two top-sections together, two clutch-members, each one of the latter having two bars pivotally mounted therein, and

means arranged upon the two top-sections for receiving and adjusting, relatively to the latter, one upwardly projecting bar from each of the said clutch-members, and



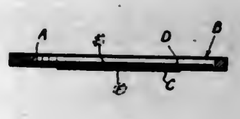
further means arranged upon each clutch-member for receiving the second bar of the other clutch-member in interlocking the said clutch-members.

1,895,235. HEAT RECUPERATING APPARATUS OF THE COWPER TYPE AND A BRICK FOR THE HONEYCOMB STRUCTURE. GEORGES SIMON, Brussels, Belgium, assignor to Société Anonyme d'Ougree Marihaye, Ougrée, Belgium, a Company of Belgium. Filed Dec. 23, 1931. Serial No. 582,897. 2 Claims. (Cl. 263—19.)



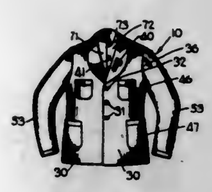
1. In a heat recuperating apparatus of the Cowper type, a checkerwork of refractory material formed by superposed horizontal layers of joined bricks, each brick being elongated and provided with a plurality of apertures for the formation of channels for the passage of gas, the bricks of successive layers being intercrossed in a manner such that the apertures forming passages of one brick of one layer correspond with the apertures of a plurality of bricks of adjacent layers, annular seats surrounding one extremity of two of the apertures of each brick, annular projections corresponding to the seats formed at the other extremity of the two apertures, the bricks of each layer being constructed in a manner such that the apertures provided with seats and the annular projections are positioned at the angles of regular polygonal figures, the sides of which are equal and parallel, the projections provided on one brick of one layer being engaged in the seats of two bricks of an adjacent layer.

1,895,236. PACKAGE AND METHOD OF FORMING SAME. DALLAS M. SMITH, St. Louis County, and CHARLES C. TAPSCOTT, St. Louis, Mo., assignors to McQuay-Norris Manufacturing Company, St. Louis, Mo., a Corporation of Delaware. Filed Apr. 24, 1931. Serial No. 532,398. 3 Claims. (Cl. 206—46.)



1. A package comprising in combination an article having a cavity extending completely therethrough, a wrapper of transparent material extending over one face of said article and having the margin thereof folded around the sides of said article and inwardly from said sides over the other face thereof whereby said wrapper will be smooth over said first face and will be gathered over said other face, and a label separate from said wrapper included in said package and bearing indicia on the face thereof presented toward the smooth face of said wrapper whereby said indicia will be visible through said smooth face.

1,895,237. GARMENT. MORRIS STAW, New Brunswick, N. J. Filed Nov. 3, 1931. Serial No. 572,759. 6 Claims. (Cl. 2—93.)



1. A garment having a rear section and a pair of front sections stitched to said rear section and buttoned together at the front, and a shirt front simulating member attached to said front sections, said front sections having openings therein on opposite sides of the collar to permit a tie to be passed between the collar and other portions of the garment into the interior of the garment and through said openings whereby the tie ends may be tied at the front of the garment.

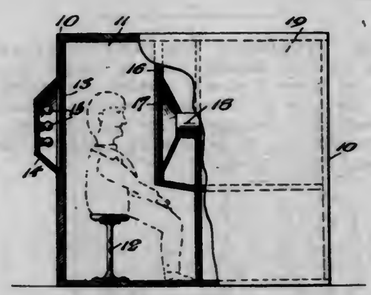
1,895,238. PROCESS FOR THE PREPARATION OF FORMIC ACID. WALTER E. VAIL, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 31, 1931. Serial No. 584,295. 4 Claims. (Cl. 260—114.)

1. In a process of producing formic acid from a gaseous mixture containing carbon monoxide and steam, the step which comprises effecting the reaction in the presence of a boron phosphate catalyst.

1,895,239. CAMERA-SILHOUETTE MACHINE. WALTER H. VENZIE, Philadelphia, Pa. Filed Sept. 21, 1931. Serial No. 563,981. 6 Claims. (Cl. 95—82.)

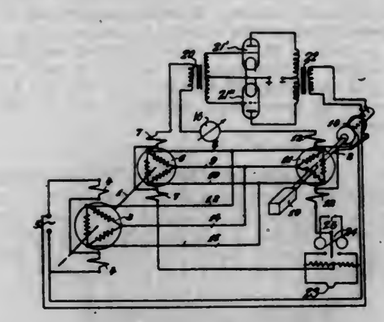
1. In a photographic apparatus, an enclosed cabinet provided with an entrance having a seat for a subject

to be photographed, a camera within said cabinet, a lighting system arranged in the rear of said seat, a fixed



translucent panel arranged in advance of said seat and adapted to transfer the subject's image to the lens of said camera for reproduction.

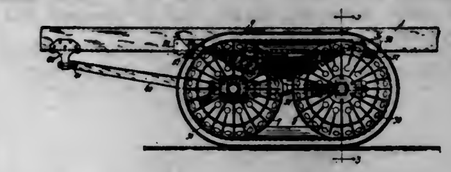
1,895,240. ELECTRICAL DISTANT CONTROL SYSTEM. JOHANNES VOPEL, Berlin-Zehlendorf-Mitte, and RUDOLF OETKER, Berlin, Germany, assignors to Gesellschaft für Elektrische Apparate m. b. H., Marienfelde near Berlin, a Corporation of Germany. Filed June 6, 1931, Serial No. 542,558, and in Germany May 10, 1930. 8 Claims. (Cl. 172—239.)



1. An apparatus for determining and equalizing differences in the positions of two shafts located at a distance apart, comprising a network, a rotary transformer mounted upon one of said shafts, two rotary transformers mounted upon the other shaft, each of said rotary transformers having two relatively movable parts and windings on each of said parts, the windings of one of said parts of the three rotary transformers being connected with each other, the winding of the other part of one of the two transformers mounted on the same shaft being connected to the network and the windings of the other parts of the other two transformers being connected with each other, and voltage-responsive means connected in the connecting leads of the last-mentioned two windings.

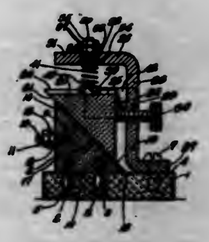
1,895,241. TRACTOR ATTACHMENT FOR TRUCKS. GEORGE I. WORLEY, Akron, Ohio, assignor to The McNeil Boiler Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 29, 1926, Serial No. 151,285. Renewed Feb. 5, 1931. 22 Claims. (Cl. 305—8.)

1. In a tractor device for trucks or the like, front and rear wheels constituting a pair on either side of the truck, a sub-member, means for supporting said sub-member, upon each pair of wheels, a truck body support normally slidably carried upon each sub-member between the wheels, means providing a pivotal connection from the sub-member to the truck body on one side of the



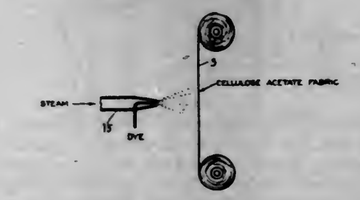
truck, a tractor belt over the wheels, and a torque preventing member connecting the truck body and the sub-member on the other side of the truck.

1,895,242. VARIABLE MICA CONDENSER. EDWARD J. COWAN, Dedham, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Oct. 24, 1928. Serial No. 314,603. 4 Claims. (Cl. 175—41.5.)



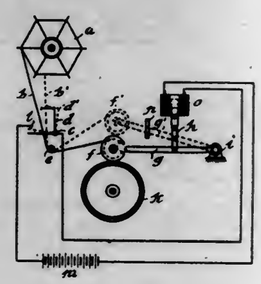
2. A variable capacitor of the solid dielectric type and including a flat dielectric sheet, cooperating armatures opposite one another and having flat faces engaging opposite faces of said dielectric sheet, adjusting means for sliding one of said armatures linearly along the dielectric sheet and varying the cooperating areas of the opposite armatures; and a spring holding said movable armature in responsive relation to said adjusting means in various adjusting positions thereof; said spring also holding said movable armature in its face-to-face relation with its cooperating armature in various adjusted positions of the movable armature corresponding to said various adjusting positions of said adjusting means.

1,895,243. METHOD OF COLORING TEXTILE MATERIALS AND PRODUCT THEREOF. ROBERT G. DORR, New York, N. Y., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Mar. 15, 1929. Serial No. 347,452. 16 Claims. (Cl. 41—26.)



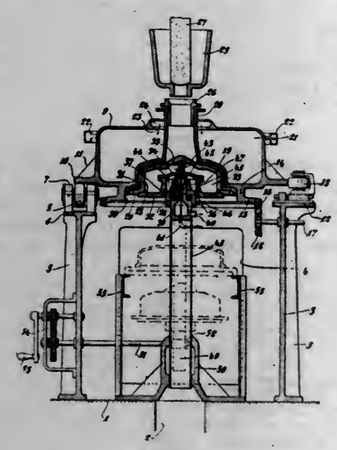
1. The method of coloring textile materials comprising applying thereto on at least part of the surface thereof a readily volatilizable coloring material in substantially volatile form.

1,895,244. AUTOMATIC STOP-MOTION FOR BOBBIN WINDING MACHINES. KARL MEYER-GAUS and ALBERT SAURE, Barmen, Germany, assignors to American Bemberg Corporation, New York, N. Y. Filed Mar. 19, 1929, Serial No. 348,174, and in Germany Mar. 29, 1928. 7 Claims. (Cl. 242—36.)



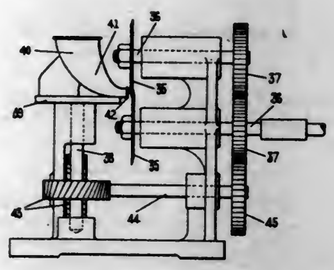
1. A stop motion for bobbin winding machines, comprising in combination a feeler disposed at a distance from the normal path of the thread from the reel of the machine to the bobbin during the winding operation and out of contact with the thread, a circuit-controlling member in operative connection with said feeler, a source of electric current, a driving member for the bobbin, an electrically-operated disconnecting device for said driving member, and circuit connections between said circuit-controlling member, said source and said disconnecting device.

1,895,245. CENTRIFUGAL MOLDING MACHINE. WILLIAM A. GEISLER, Newark, N. J., assignor, by mesne assignments, to Durafer (Inc.), Dover, Del., a Corporation of Delaware. Filed Sept. 13, 1930. Serial No. 481,627. 12 Claims. (Cl. 22—65.)



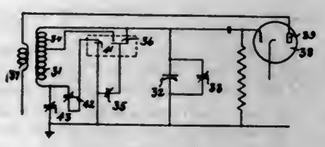
1. A molding machine comprising a permanent mold mounted on a vertical axis, a cooling chamber on the mold, means to supply a cooling medium to the chamber, a permanent core, a supporting plate secured to the core to form a cooling chamber thereon, means to journal the plate on a vertical axis, means to supply a cooling medium to the chamber, and means to rotate the mold and core.

1,895,246. APPARATUS FOR CUTTING FILAMENTS INTO STAPLE FIBERS. FRANK CORBYN HALE and WILLIAM HARRY KIMPTON, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Apr. 10, 1931, Serial No. 529,036, and in Great Britain June 16, 1930. 3 Claims. (Cl. 164—60.)



1. Apparatus for cutting filaments into staple fibers, said apparatus comprising a pair of circular knives overlapping to form a nip, means for rotating said knives, means adapted to feed filaments endwise to said knives and to pass the filaments laterally into the nip of the knives so as to sever staple lengths from the ends of the filaments.

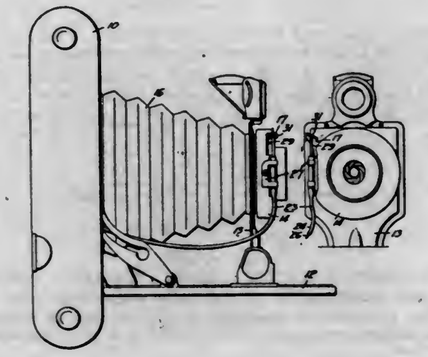
1,895,247. METHOD AND MEANS OF EXTENDING FREQUENCY RANGE OF RADIO APPARATUS. MATT J. JELEN, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of New York. Filed May 13, 1931. Serial No. 536,993. 19 Claims. (Cl. 250—20.)



11. In an apparatus of the type described the combination comprising an inductance, a condenser connected to said inductance for tuning it, means for cutting a number of turns of the inductance out of circuit, and means for connecting a condenser in circuit with the remaining turns of the inductance.

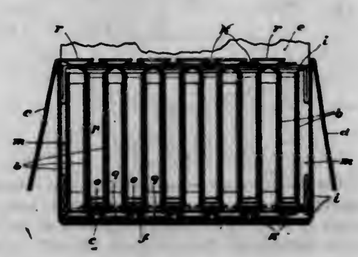
1,895,248. CAMERA. WINSOR JOSSELYN, Carmel, Calif. Filed Feb. 2, 1931. Serial No. 512,873. 7 Claims. (Cl. 95—32.)

1. In a camera, a shutter mechanism including a member necessarily movable in effecting an exposure, and means for locking said member against movement, said locking means comprising a flexible elongated member having one end thereof connected to said first member and movable therewith under a compressional force, and



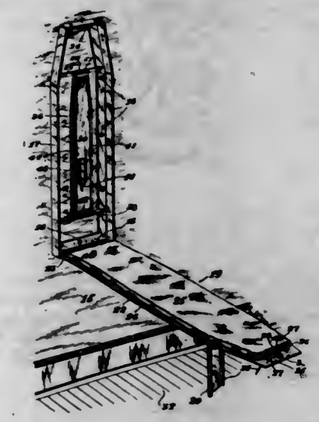
means associated with the other end of said elongated member for locking the same against movement under a compressional force.

1,895,249. CONTAINER FOR THE PACKING OF ARTICLES. WILHELM JUFFA, Ilmenau, Germany. Filed Feb. 21, 1931, Serial No. 517,471, and in Germany Feb. 24, 1930. 2 Claims. (Cl. 206—65.)



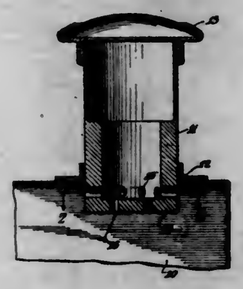
1. The means for packing articles having a cylindrical stem and a laterally projecting foot portion, said means comprising a container, partitions forming rows of compartments within said container, lids for two sides of said container, every second compartment of every second row receiving a series of articles with their foot portions projecting beyond said partitions on one side of said container, intermediate compartments of the same rows receiving a second series of articles with their foot portions projecting beyond said partitions on the opposite side of said container, an insert having openings at least equal to the diameter of the stems of the articles, said insert being situated between the foot portions of the first-mentioned series of articles and the foot portions of a third series of articles situated in every second compartment of intermediate rows, the third-mentioned series of articles projecting through the openings of said insert and having foot portions situated on the first-mentioned side of said container, and a second insert having openings at least equal to the diameter of the stems of the articles and situated between the foot portions of the second-mentioned series of articles and the foot portions of a fourth series of articles situated in intermediate compartments of intermediate rows, the last mentioned series of articles projecting through the openings of the second-mentioned insert and having foot portions situated on the second-mentioned side of said container.

1,895,250. CABINET IRONING BOARD. OBEL JUVET, Ferndale, Wash. Filed Mar. 7, 1928. Serial No. 259,787. 6 Claims. (Cl. 68—10.)



1. An ironing board having a continuous perimetral groove formed thereon with the outer side of said groove extending beyond the outer margin of said board, a cover for said board having casings formed upon its edges and tension springs extending through said casings having their terminals projecting therefrom and detachably secured to said board for restrainingly engaging the edges of said cover within said groove.

1,895,251. THEFT PREVENTING DEVICE. GEORGE KARL, Altoona, Pa. Filed Oct. 2, 1931. Serial No. 566,440. 1 Claim. (Cl. 70—90.)



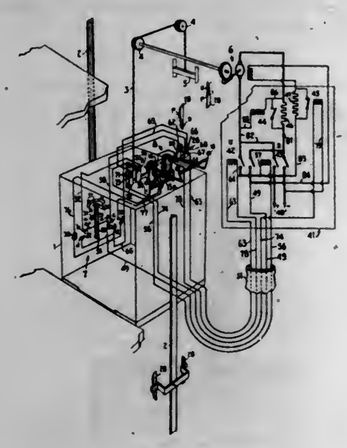
In a closure for the drain opening of tanks, a socket having a plurality of notches in its inner wall and attached to the tank, a plug in said socket having a plurality of radial bores, said plug normally closing the drain opening and a pair of opposed bolts slidable transversely in said plug and having inner overlapping ends provided with aligned openings the outer ends of said bolts being engageable with the notches in the inner wall of the socket, said plug having an axial key-hole for the introduction of a key operating the bolts.

1,895,252. PROPELLER. EMMANUEL G. KONTOS, Chicago, Ill. Filed Jan. 23, 1931. Serial No. 510,663. 5 Claims. (Cl. 170—159.)



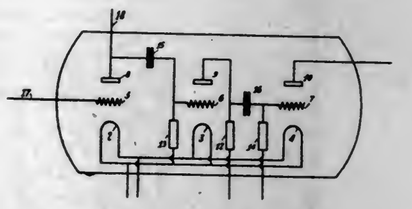
1. A propeller blade cut from a disc having a dished central portion and a downwardly curved circumferential edge, the entering edge of said blade being cut substantially on a radial line conforming to a radial section of said disc, and the trailing edge of said blade having a similar curvature.

1,895,253. ELEVATOR CONTROL DEVICE. NILS O. LINDSTROM, Nutley, N. J., assignor to A. B. See Elevator Company, Inc., a Corporation of Delaware. Filed July 13, 1927. Serial No. 205,288. 12 Claims. (Cl. 187—29.)



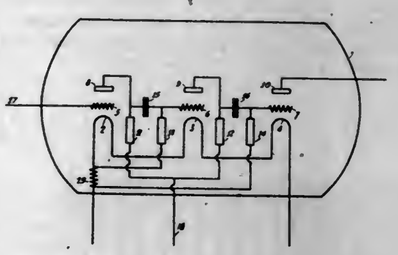
1. In an elevator mechanism, a car controller having running contacts, a hand lever having an auxiliary member, and a stopping contact cooperating with the auxiliary member of the hand lever, and means cooperating with said stopping contact for the automatic stopping of said elevator at a predetermined point, comprising shaftway cams, a cooperating cam lever member, an auxiliary contact device and a magnet cooperating therebetween under the control of said stopping contact.

1,895,254. MULTIPLE-UNIT TUBE. SIEGMUND LOEWE, Berlin, Friedenau, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 29, 1927, Serial No. 187,680, and in Germany July 19, 1926. 4 Claims. (Cl. 250—27.5.)



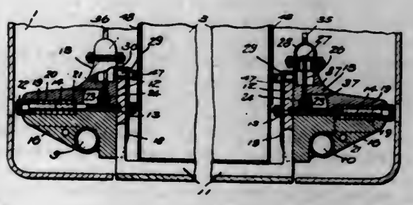
1. A multiple unit tube enclosing a plurality of capacity-coupled amplification stages, each stage comprising an anode, a control electrode and a cathode, and an external lead directly connected to the anode of a stage preceding the last.

1,895,255. MULTIPLE UNIT TUBE. SIEGMUND LOEWE, Berlin, Friedenau, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 29, 1927, Serial No. 187,684, and in Germany July 19, 1926. 5 Claims. (Cl. 250—275.)



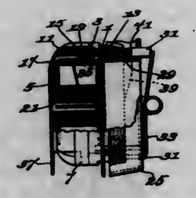
1. A multiple-unit tube having a plurality of stages, each stage comprising a filament, control electrode, and anode, the filaments of said stages being connected in series and a connection within the tube between the grid of one of the stages and the filament of the preceding stage for biasing the said grid.

1,895,256. DROP CABIN PLANE. FRANK F. LOVE, San Antonio, Tex. Filed Oct. 9, 1931. Serial No. 567,794. 4 Claims. (Cl. 244—21.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



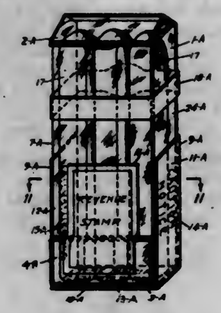
1. An airplane having a droppable cabin, a vertical hanger arm on said cabin, a horizontal movable detent member engageable with said hanger arm for holding the cabin in place, elastic means normally holding the detent member engaged with the said arm, a pusher rod movable against the said detent member for disengaging it from the hanger arm, and means responsive to fluid pressure for actuating said pusher rod.

1,895,257. SEWING MACHINE. WILFRID THOMAS MINETT, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 19, 1930, Serial No. 488,026, and in Great Britain Oct. 8, 1929. 5 Claims. (Cl. 112—232.)



1. The combination with a loop taker, suitable for use in a shoe sewing machine, adapted to move in a circular path and having within it a housing for a spool of thread, of retaining means arranged to retain the spool against rotary movement with the loop taker and withdrawing means, exterior to the housing for the spool, for engaging said retaining means at a certain time during the sewing of a stitch to withdraw said retaining means from retaining position to allow thread to pass between the retaining means and the spool.

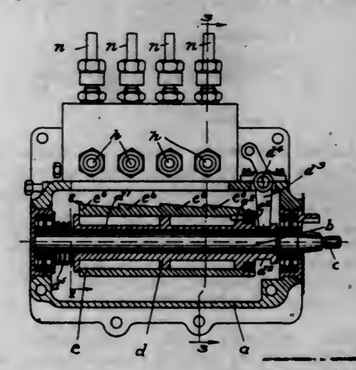
1,895,258. CONTAINER FOR CIGARS. ROBERT E. PENT, Jenkintown, Pa. Filed Oct. 16, 1931. Serial No. 569,151. 16 Claims. (Cl. 131—11.)



1. As an article of manufacture a merchandising packet of cigars fully meeting the statutory requirements consisting of an envelope member made of soft, flexible material, a plural number of cigars carried in said envelope, and an indicia-and-reinforcing member associated with the said packet and positioned for stiffening the same, the said indicia-and-reinforcing member having the required statutory indicia inscribed on the outer face thereof.

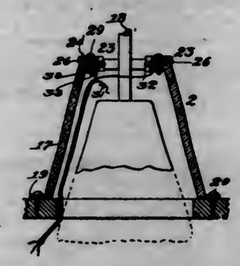
3. As an article of manufacture a merchandising packet of three cigars fully meeting the statutory requirements, consisting of an envelope made of transparent, thin, flexible material, the said envelope being permanently sealed at one end and temporarily sealed by a revenue stamp of proper amount at its other end, the said revenue stamp being positioned for being broken when the temporarily sealed end is opened for the purpose of removing the said cigars from the said envelope; and indicia-and-reinforcing member carried by the said envelope, the said indicia-and-reinforcing member being formed and positioned so as to encompass, protect and stiffen the sides and an end of the said envelope, the said indicia-and-reinforcing member having the required statutory indicia inscribed on the outer face thereof.

1,895,259. CAM OPERATING MEANS. RUDOLF MÜLLER, Oberursel near Frankfort-on-the-Main, Germany, assignor to Motorenfabrik Deutz, Aktiengesellschaft, Köln-Deutz, Germany. Filed July 2, 1929, Serial No. 375,543, and in Germany July 11, 1928. 2 Claims. (Cl. 74—1.)



1. A cam assembly for operating the fuel pumps of a multi-cylinder Diesel engine comprising, in combination, a cam shaft, an inner sleeve splined to said shaft for movement longitudinally thereof, an outer sleeve having a plurality of cams integrally formed therewith, said outer sleeve fitting over said inner sleeve, means on said inner sleeve at one end portion thereof forming a shoulder against which one end of said outer sleeve abuts, the opposite end of said inner sleeve being screw threaded, and a nut on the screw threaded portion of said inner sleeve for engaging with the corresponding end of said outer sleeve for forcing the latter against said shoulder.

1,895,260. GEAR-SHIFT LEVER SWITCH. GODDARD TREESE, Globe, Ariz., assignor of one-half to Richard J. Lobb, Globe, Ariz. Filed Nov. 13, 1930. Serial No. 495,498. 2 Claims. (Cl. 200—59.)

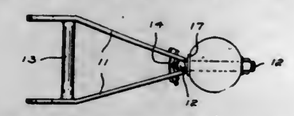


1. In a gear-shift lever switch for a signal system, the combination with a lever, of a casing around said lever and provided with an upper inwardly-extending annular flange, said inwardly-extending flange provided with curved elongated vertical slots, contact devices over said slots, and means extending through said contact devices and adjustably positioned in said curved slots for securing said contact devices in an adjusted position upon said inwardly-extending flange.

1,895,261. METAL ALLOY. HARRY K. HERSCHMAN, Washington, D. C., and JOHN L. BASIL, Annapolis, Md. Filed Aug. 17, 1932. Serial No. 629,392. 6 Claims. (Cl. 75—1.) (Granted under the act of Mar. 3, 1883 as amended Apr. 30, 1928; 370 O. G. 757.)

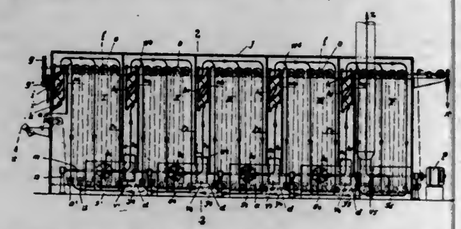
1. An alloy composed of, about 60 percent by weight of copper, about 38 percent by weight of lead, about 1.5 percent by weight of silicon-zirconium alloy and about 0.4 percent by weight of sulpiur.

1,895,262. HIGHWAY GUARD-FENCE CONSTRUCTION. ALF JOHNSON, Revloc, Pa. Filed Nov. 13, 1931. Serial No. 574,862. 2 Claims. (Cl. 248—31.)



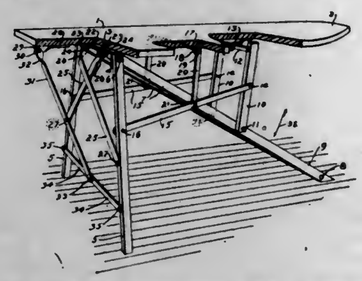
1. A fence cable holder comprising a supporting bracket formed from a metal strip bent intermediate its ends to provide diverging arms having apertures in their free ends to receive a cable, a pivot pin disposed in the bight of said bracket adapted to be secured to a support, and a bolt passing through the arms of said bracket adjacent the bight thereof pivotally securing the bracket and pivot pin together.

1,895,263. METHOD FOR CARBONIZING WOOLEN FABRICS. PETER KELLER, Gera, Germany, assignor to the Firm M. Rudolf Jahr, Gera, Germany, a Joint Stock Company of Germany. Filed Dec. 27, 1929, Serial No. 417,016, and in Germany Dec. 29, 1928. 2 Claims. (Cl. 8—12.)



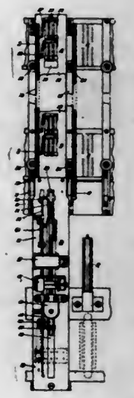
1. The method of carbonizing fabrics which comprises passing the fabric to be carbonized through a series of separate zones in succession, passing heated air through said zones in like succession, and supplying sufficient additional heat to the air passing through said zones to prevent decrease in the temperature thereof.

1,895,264. IRONING BOARD. LOUIS C. LARSON, San Jose, Calif. Filed Feb. 16, 1932. Serial No. 593,376. 4 Claims. (Cl. 68—10.)



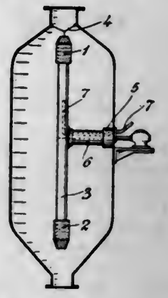
1. An ironing board comprising, a board, a leg structure pivotally mounted thereon and adjacent one end thereof, a second leg structure pivotally mounted thereon adjacent the same end of the board, supporting means pivotally mounted upon one of said leg structures and adapted to seat against the bottom of the board, rigid means pivotally connecting the first means and the other leg structure, and link means pivotally connected to said rigid means midway their length and to said board.

1,895,265. MULTIPLE BRUSH SELECTOR WITH MECHANICAL BRUSH SELECTION. FRIEDRICH MERK, Frankfort-on-the-Main, Germany. Filed June 2, 1932, Serial No. 615,011, and in Germany June 2, 1931. 10 Claims. (Cl. 179—27.53.)



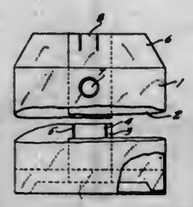
1. A multiple brush selector with mechanical brush selection, comprising a contact field, a movable switch member carrying a plurality of brush sets, a setting mechanism; said setting mechanism being connected to a control switch adapted to actuate contacts in various positions, and means for mechanically actuating a brush set selected by a setting movement of the switch member so as to move it into the operative position for making contact with the contact field; said control switch mechanically actuating the means for actuating a brush set in one of its positions.

1,895,266. WOOD PULP DIGESTER WITH INTERNAL CIRCULATION CONDUIT. EINAR MORTERUD, Oslo, Norway. Filed July 16, 1932, Serial No. 622,962, and in Germany July 14, 1931. 5 Claims. (Cl. 92—7.)



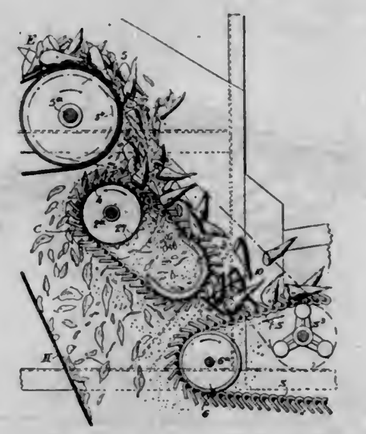
1. In a pulp digester a circulation pump located inside the digester adjacent the wall thereof, sieves in the upper and lower part of the digester respectively and a circulation pipe for conveying liquor from one of said sieves to the other, said circulation pipe being located substantially coaxially with the digester.

1,895,267. PAPER BAG CONSTRUCTION. GEORGE W. POPPE, Brooklyn, N. Y., assignor to Equitable Paper Bag Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 6, 1931. Serial No. 506,845. 3 Claims. (Cl. 229—68.)



1. A paper bag formed of a web overlapped to form a seam, a line of paste along the edge of the seam and a finger opening through the bag walls spaced from the paste line, and a closing flap having slits extending inwardly from the margin thereon and wholly within the seam, forming a tongue arranged to be passed through said opening.

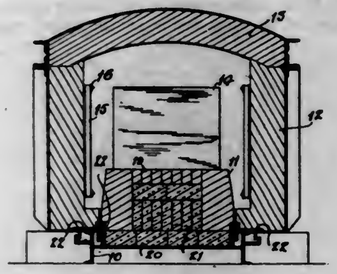
1,895,268. LEAF CATCHER FOR BEET DUMPS, ETC. JAMES W. SILVER, Ogden, Utah. Filed Aug. 22, 1930. Serial No. 477,169. 5 Claims. (Cl. 209—114.)



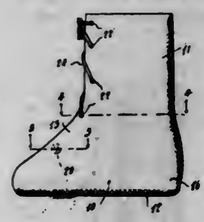
3. In a machine of the character specified having a separating screen and conveyor for discharging beets and leaves onto the screen; an upwardly moving inclined leaf catcher comprising an endless series of parallel bars interposed between the conveyor and screen; spaced sprockets over which the upper bend of the catcher runs, and a cylindric shield arranged within the bend of the catcher between the sprockets and against which leaves adhering to the bars will be rubbed and disintegrated.

1,895,269. ELECTRIC FURNACE. GEORGE L. SIMPSON, Coraopolis, Pa., assignor to Pittsburgh Research Corporation, Pittsburgh, Pa. Filed Dec. 12, 1931. Serial No. 580,690. 8 Claims. (Cl. 13—20.)

1. An electric furnace comprising a heating hood, a hearth extending a substantial distance into said hood and adapted to receive the furnace charge, and a resistance element arranged in the hood and extending from a point spaced a substantial distance above the upper level of the hearth to a point spaced a substantial distance below the upper level of the hearth.



1,895,270. INFANT'S SHOE. JOSEPHINE SIRAGUSA, New York, N. Y. Filed Apr. 23, 1931. Serial No. 532,287. 1 Claim. (Cl. 36—11.)



A shoe of the class described comprising a flexible blank having a main portion, side portions extending therefrom having substantially straight rear edges, an enlarged forward portion, a tongue extending from the enlarged forward portion, means to separably secure the rear edges of the side portions together, means to separably secure the front edges of the side portions, the enlarged forward portion and the tongue together, said blank being slit inwardly from said rear edges to provide a tongue centrally at the rear adapted to be disposed within the shoe.

1,895,271. PHOTOGRAPHIC EXPOSUREMETER. HANS FERDINAND TÖNNIES, Altona-Grossflottbek, Germany. Filed Oct. 24, 1930. Serial No. 490,907. 2 Claims. (Cl. 235—88.)

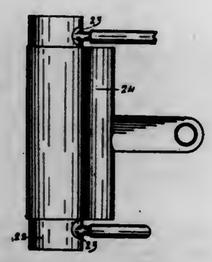
1. A tabular exposuremeter of the type referred to, in combination with a round shaped, stationary plate and a notched disk, rotarily and elastically attached to said plate by a rivet, said stationary plate having two projecting portions facing each other and by which the device may be held, shoulders acting as finger stops, two lateral recesses in arc-shaped form and facing each other, scales upon the stationary plate and indications near and along the periphery of said rotatable disk, consisting in the notches of said disk having wavelike shape, the said scales being arranged in juxtaposition and forming rows of blocks in which the respective factors are printed,

said blocks being constituted by semi-circular lines which are crossed by parallel lines, the one row of said blocks bordering the right-hand side recess, being made longest and the other rows of blocks being arranged in stair-case-like position, a circularly disposed scale of the diaphragms of the camera-lens at the border of the left-hand side recess, a starting arrow at the upper extremity of



said diaphragm scale, the indications along the periphery of said rotatable disk comprising a scale for the exposure times and a scale for plate-speeds, the result indicating the exposure times to be selected and obtained by consecutively turning the said disk in succession of the respective factors being clearly readable in front of the corresponding diaphragms.

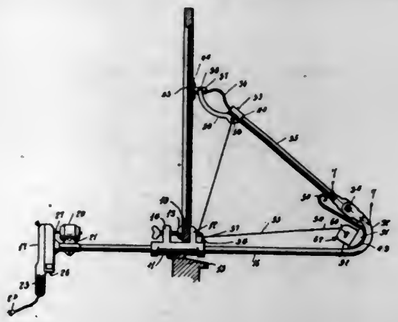
1,895,272. NOVEL DEVICE TO WAVE THE HAIR AND STEAM CHAMBER TO MAINTAIN THE PERMANENT WAVE OR CURL. JOSÉ VASTA, Buenos Aires, Argentina. Filed Nov. 16, 1929, Serial No. 407,733, and in Argentina Mar. 20, 1929. 2 Claims. (Cl. 132—36.)



2. Novel device to wave the hair and steam chamber to maintain wave or curl, the combination of two longitudinal semi-circular steam chambers in connection with a casing of the same length consisting of two semi-circular halves which comprise notches coinciding with the steam inlets and outlets so as to be adapted to embrace the combined chamber, and in connection with a combined clasp and handle member of any convenient construction and formed so as to receive in its interior the combined steam chamber together with the casing of same, to cover and to compress the entire construction facilitating the operating and handling of the curling device.

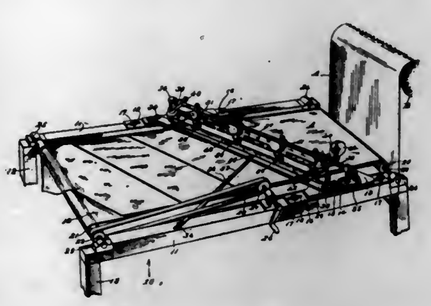
1,895,273. WINDOW WASHER. DARRELL F. WOLF, Punxsutawney, Pa. Filed Apr. 2, 1931. Serial No. 527,311. 6 Claims. (Cl. 15—250.)

1. A window washer of the class described, comprising an attaching bearing, a tubular member slidable and rotatable in said bearing, a tubular section pivoted to said tubular member, a brush carried by said tubular section, a flexible element connected to said tubular section adjacent to its free end and to the tubular member adjacent to the pivoted connection with said section, means on said bearing for guiding the flexible element, said flexible element adapted to move the tubular section in one direction by sliding movement of the tubular member, spring means on said member and engaging said



tubular section to move it in the opposite direction, and a flexible shaft in the tubular member and section to operate the brush.

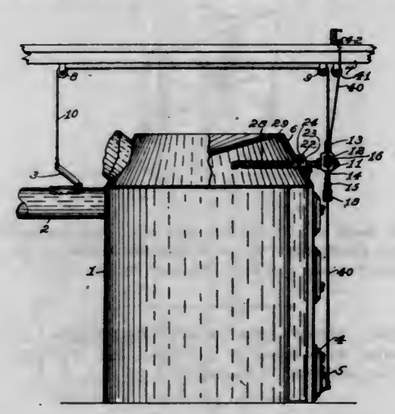
1,895,274. BIAS CUTTING MACHINE. HARRY S. ALEXANDER and FRED B. PFEIFFER, Akron, and JOHN W. WHITE, Barberton, Ohio, assignors to Seiberling Rubber Company, a Corporation of Delaware. Filed Oct. 10, 1928. Serial No. 311,433. 5 Claims. (Cl. 164—35.)



1. A bias cutting machine comprising, in combination, an endless belt conveyor for advancing fabric from a source of supply to a cutting position, a transversely extending frame disposed obliquely with reference to the path of movement of the conveyor, a power-driven endless band cutter extending obliquely over the conveyor and rockably supported by the frame, a plate or bar associated with said frame and adapted to support the fabric at the cutting line, presser members adapted to engage the fabric to maintain the same against displacement, means moving the endless band cutter into and out of cutting position independently of the action of said conveyor, and means for independently and intermittently operating the conveyor.

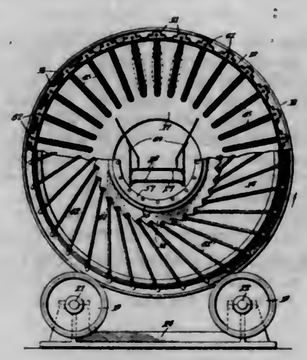
1,895,275. HEAT CONTROLLING MEANS FOR FURNACES. HOBART B. BROWN, Cedar Falls, Iowa. Filed Feb. 1, 1932. Serial No. 590,146. 2 Claims. (Cl. 236—16.)

1. In combination, a furnace having a draft door and a damper, a thermostatic device within the furnace consisting of a rock-shaft traversing the furnace wall outwardly and mounted thereon adjustably, a sleeve around said shaft having a segmentally spheric annulus around it, a pair of registering bearing elements with spheric hollow to receive said spheric annulus, one of the elements being clampingly connected to the other element



to hold said annulus and sleeve with said rock-shaft in a desired position of adjustment relative to the wall part of the furnace casing upon which the bearing is mounted, and opposite connections between said shaft and the draft door and damper to operate them reversely.

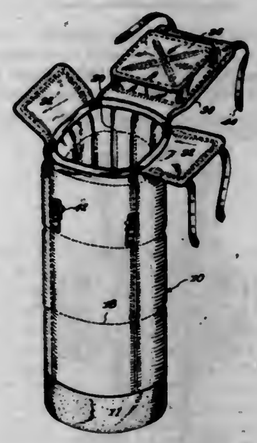
1,895,276. CONTINUOUS FILTRATION. DAVID COLE, El Paso, Tex. Filed Feb. 27, 1928. Serial No. 257,281. 18 Claims. (Cl. 210—200.)



1. The method of continuous filtering, which consists in passing a series of filtering units through recurrent cycles each including a suction filtering phase while submerged in liquid to be filtered, a suction draining phase while in the air and a pressure cake-discharging phase; drawing liquid filtrate and air from the interior of filter units in the filtering and draing phases; separating said filtrate and air; discharging said filtrate; and discharging said air at an elevated pressure through the filtering uniits in the discharge phase.

6. In a continuous filter, the combination of a rotatable liquid containing drum formed with removable wall portions; and a plurality of hollow filter units mounted on said removable wall portions and capable of withdrawal outward from the drum by removal of such wall portions, the parts being so arranged that the rotation of the drum carries said units alternately above and below the liquid level therein, whereby such removal may be effected without draining said drum.

1,895,277. SHIPPING JACKET FOR PERISHABLE COMMODITIES. WILBUR FRANCIS CRAWFORD, Waco, Tex. Filed Feb. 26, 1931. Serial No. 518,540. 4 Claims. (Cl. 150—152.)



1. In a jacket for shipping perishable commodities, a tubular insulating body adapted for the snug reception of a commodity container and having an inner fabric wall provided with a series of spaced pleats, pliable cores within said pleats and terminating short of the upper ends of said body leaving the upper portions of said pleats unoccupied to form a gradually restricted entrance opening to the body, the unoccupied portions of said pleats being secured flatly to the upper portion of the body, and a closure having a depending plug adapted to be snugly received within the enlarged entrance opening to said body and bearing against the unoccupied portions of said pleats.

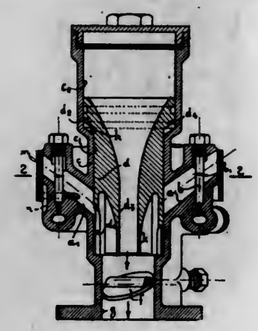
1,895,278. SHIPPING CONTAINER. WILBUR FRANCIS CRAWFORD, Waco, Tex. Filed Feb. 26, 1931. Serial No. 518,541. 5 Claims. (Cl. 150—52.)



1. In a shipping jacket, a tubular body of insulating material and having side walls, an inner flap secured to the upper end of one of said side walls, the entire upper end of the opposite side wall of said body being free for engagement by the outer end portion of said inner flap and to facilitate the introduction of a commodity container into said tubular body, the under side of the flap being provided with a depending portion spaced inward from the edges of the flap and snugly received within the upper portion of the tubular body, means to secure said inner flap in closed position with the depending lower portion there-

of within the tubular body, and a pair of outward flaps secured to the upper ends of the other side walls of the tubular body and having means by which the same may be secured in overlying relation to said inner flap.

1,895,279. MULTIPLE CARBURETOR. ROBERT CONSTENSOUX, Paris, France, assignor to Georges Bariquand, Paris, France. Filed Mar. 20, 1931, Serial No. 524,168, and in France Mar. 27, 1930. 3 Claims. (Cl. 261—41.)



1. In a downdraft carburetor a carburetor body, a mixture outlet conduit, multiple mixture channels arranged with their axes converging downwardly, a suction actuated element forming a valve for regulating the outlets of the said channels, said carburetor body having a chamber formed therein above said element, a central channel in said element effecting communication between said chamber and said conduit, a throttle valve in said conduit, partitions in said element forming chambers therein located around said central channel, said chambers effecting communication between the said channels and said conduit, said partitions acting to prevent formation of eddies in said element.

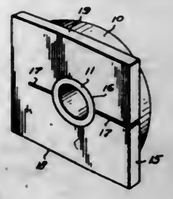
1,895,280. WRENCH. THOMAS D. CURRIE, Detroit, Mich. Filed Aug. 25, 1932. Serial No. 630,441. 5 Claims. (Cl. 81—53.)



1. A wrench comprising an elongated body of resilient metal elongated to provide a handle and having an opening therethrough to receive snugly the work to be held, the material of the body being thinned adjacent the sides of the opening transversely of the body, and being slitted on a radius between the thinned parts at one side the main wall of the opening being otherwise continuous, the material of the body being extended beside the slit a distance forming non-flexing jaw heads of exceeding length beyond the opening, and closing means at the extremities of the jaws.

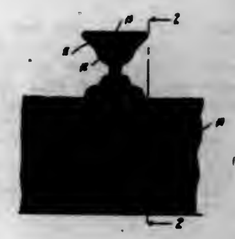
1,895,281. VISE AND THE LIKE. THOMAS D. CURRIE, Detroit, Mich. Filed Jan. 21, 1931. Serial No. 510,264. 1 Claim. (Cl. 81—39.)

A clamping but compression limiting device comprising a block having a work receiving aperture and slits radiating from said aperture to allow compressibility to the extent of the width of said slits but limiting the compressibility to this range, said block having opposite outer walls to engage the jaws of a vise, press or the like, of such contour that the pressure of such jaws is first concentrated



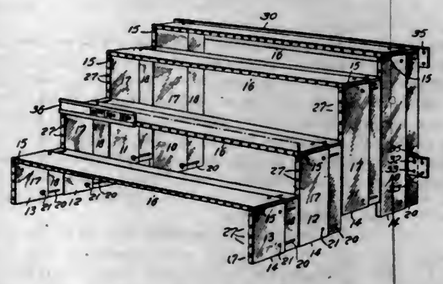
on the walls of the opening and slits and gradually distributed throughout the said opposite walls as the compression reaches the limit afforded by the slits.

1,895,282. MEANS FOR SHAPING HEDGES. RAYMOND FISHER, Ridgewood, N. J. Filed Jan. 28, 1932. Serial No. 589,463. 1 Claim. (Cl. 47—4.)



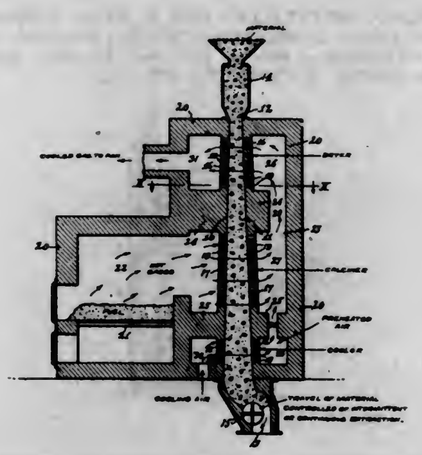
A figure form for decorating hedges, comprising a form outlined by marginal wire, a filling for said form consisting of metallic netting secured to said marginal wire and providing means for supporting branches growing from a hedge, said form being initially secured in position above the hedge by means of a stake secured thereto and driven through the hedge into the ground, the metallic netting providing means for holding and training the hedge into a configuration involving the form.

1,895,283. ADJUSTABLE STEPPED DISPLAY DEVICE. MATTHEW M. FRIEDEMANN, New York, N. Y. Filed Feb. 28, 1931. Serial No. 518,983. 8 Claims. (Cl. 211—137.)



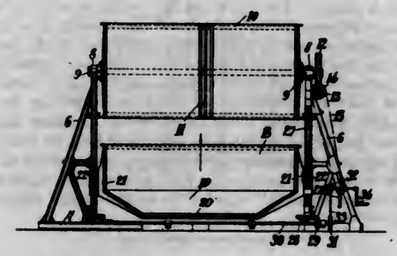
1. A display assembly, comprising a plurality of uprights arranged to be disposed in stepped formation, for supporting shelves in echelon, and means for separably and interchangeably connecting said uprights to each other.

1,895,284. DIRECT HEATED VERTICAL RETORT. SAMUEL F. HAY, Metuchen, N. J., assignor to Isbell-Porter Company, Newark, N. J., a Corporation of New York. Filed May 9, 1931. Serial No. 536,301. 1 Claim. (Cl. 202—215.)



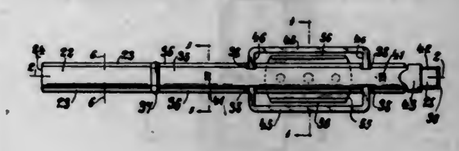
A vertical retort apparatus, including in combination, a vertical retort, a material feeder at the top thereof, a treated material discharge outlet having a discharge valve at the lower portion thereof, said retort having side walls including upper, intermediate, and lower perforated sections having solid wall extensions therebetween, a vertical flue adjacent one retort wall and extending from the lower perforated wall section to the upper perforated wall section, spaced upper, intermediate, and lower flues adjacent the perforated sections in the opposite retort wall, said upper spaced flue being opposite the upper portion of said vertical flue, and said lower spaced flue being opposite the lower portion of said vertical flue and open to the atmospnere, and a furnace for producing heating gases and adjacent said intermediate spaced flue and directly connected thereto.

1,895,285. TRACK APPARATUS FOR SPECTACULAR PERFORMANCES. ROBERT PARKER HAYHURST, Nelson, England. Filed Aug. 7, 1931, Serial No. 555,846, and in Great Britain Aug. 16, 1930. 13 Claims. (Cl. 272—3.)



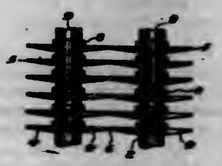
1. Exhibition track apparatus for vehicles comprising a continuous running track, means for so supporting said track that the same can turn on a diametral axis, a starting track, and means for bringing said starting track into engagement with the running track to enable a vehicle to be transferred from one track to the other.

1,895,286. RAZOR BLADE HOLDER. JOHN HOLTZMAN, New York, N. Y. Filed Jan. 14, 1925. Serial No. 2,329. 8 Claims. (Cl. 51—218.)



8. In a razor blade holder, a pair of members each constituting an integral handle and blade holder element, one of said members having blade receiving and retaining lugs secured thereto and directed toward the other member, said members being pivoted together to move toward and from one another for placing a razor blade on and removing the same from said lugs, said members when together constituting a blade holder device for securing the razor blade in position, means to clamp said members together in operative position, and a guard pivotally mounted on one of said members on the side thereof adjacent the other member, said guard issuing from between said members.

1,895,287. FIN RADIATOR. ALBERT L. LAMBERT, Narberth, Pa., assignor to Heintz Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 15, 1931. Serial No. 568,943. 2 Claims. (Cl. 257—139.)

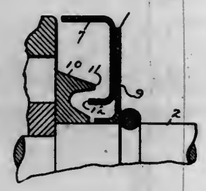


2. In a radiator construction, the combination of a plurality of spaced, parallel fins each having a plane face and comprising a plate member having a central section of substantially uniform thickness adapted to extend in the direction of the convection currents, and a marginal section secured to each lateral edge of the central section and decreasing in thickness from the central section outwardly to the lateral edge of the marginal section, the central sections of the plate members extending throughout the length of the fins and being provided with alined openings and a flange projecting from the plane face of the central section of each plate member around the opening therein, and a radiator tube extending through said alined openings.

1,895,288. BEARING MOUNTING. EVERETT P. LARSH, Dayton, Ohio, assignor to The Master Electric Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 24, 1927. Serial No. 215,219. 5 Claims. (Cl. 286—5.)

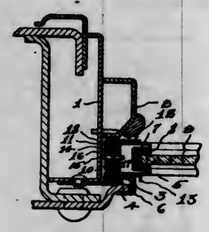
1. The combination with a rotary shaft, a mounting therefor, and a bearing therein for said shaft, of a pair of overlapping guard members located in parallel spaced relation and carried by the shaft and mounting respectively, the shaft carried member having an annular

groove in its outer lateral face, the mounting carried member having an inwardly projecting flange extending within the annular groove of the first member in spaced



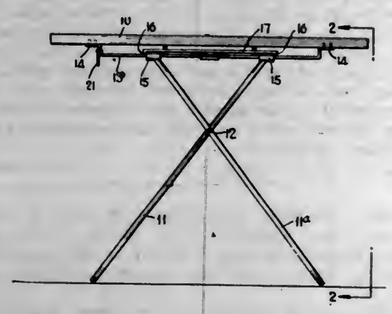
relation with the sides and bottom thereof, and a tortuous passage intermediate said members affording open and unrestricted access radially past said flange.

1,895,289. AUTOMATIC ADJUSTABLE WEATHER-STRIP FOR WINDOW SASHES. JOHN F. LEVAN, Elkhart, Ind., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 4, 1930. Serial No. 441,625. 12 Claims. (Cl. 189—65.)



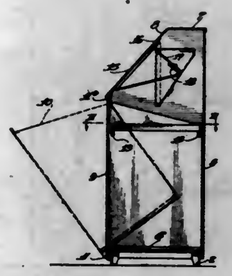
1. The combination of a sheet metal window sash and guide therefor, the guide being provided with inner and outer stops opposed to the front and rear walls of the sash, the stiles of the sash having straight flat side walls, a weather strip carried by the edge wall of the sash stile within the guide, and spring means acting on the weather strip to thrust the same transversely of the edge of the sash against one of the stops.

1,895,290. BRIDGE TABLE OR SIMILAR ARTICLE. PAUL A. LOBEL, New York, N. Y. Filed July 18, 1930. Serial No. 468,795. 12 Claims. (Cl. 45—11.)



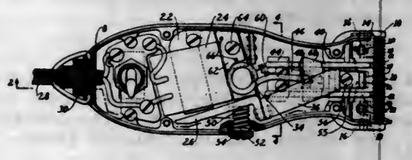
1. In a folding table, the combination of a table-top, horizontal bars attached to the underside of said table-top, leg members attached and pivoted to the underside of said horizontal bars, sleeves attached to the ends of said leg members, said sleeves sliding in said horizontal bars, means limiting the movement of said sleeves by which said sleeves may be locked into position.

1,895,291. RECEPTACLE. PAUL H. MEYER, Bellewood, Ill., assignor to Solar-Sturges Mfg. Co., Bellewood, Ill., a Corporation of Illinois. Filed Sept. 25, 1931. Serial No. 565,043. 5 Claims. (Cl. 220—32.)



1. In combination, a receptacle having two oppositely disposed side walls, a back wall, a bottom wall and a top wall connecting said side walls, a waste can adapted to fit in and substantially occupy the lower portion of said receptacle, and a front wall of said waste can including marginal flanges completely concealing the front edges of the side walls and the bottom wall, and adapted to form the front wall of said receptacle.

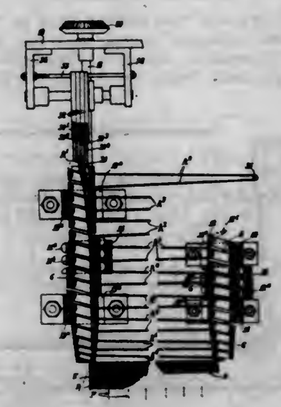
1,895,292. CLIPPER. IRVING O. MINER, Providence, R. I., assignor to Brown & Sharpe Manufacturing Company, a Corporation of Rhode Island. Filed Apr. 24, 1931. Serial No. 532,458. 12 Claims. (Cl. 30—1.)



1. In a clipper, the combination with a casing, of a stationary clipper blade carried by the casing, a movable clipper blade cooperating with the stationary blade, means carried by the casing for imparting vibratory movements to the movable blade, and a dynamic vibration absorber actuated only by vibrations tending to be set up in the casing and comprising a weighted spring member having a natural period of oscillation corresponding to that impressed on the clipper by the vibratory movements of the movable blade and said actuating means and rigidly secured to the casing at a point to substantially eliminate said vibrations.

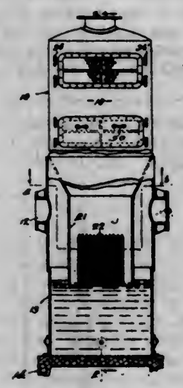
1,895,293. SUPPLYING FIBROUS MATERIAL FOR INCORPORATION INTO FABRICS. JAMES MORTON, West Lothian, Scotland. Filed Jan. 30, 1932, Serial No. 589,828, and in Great Britain Mar. 27, 1931. 22 Claims. (Cl. 66—85.)

1. Means for supplying fibrous material in lengths, comprising feeding devices formed with material-receiving convolutions and having a hollow interior, means for leading said material to the hollow interior of one of said devices so as to be engaged by the convolutions thereof, means for looping said material in lengths extending



from the one to the other of said devices, and means for rotating said devices so that they feed said lengths to a place of discharge.

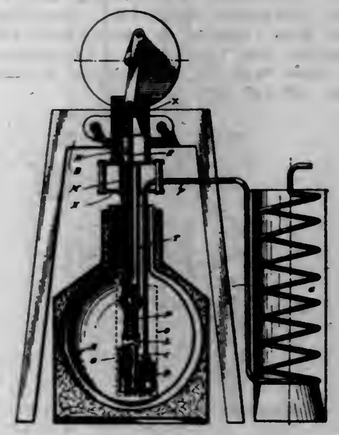
1,895,294. CONDENSER. RICHARD B. PARKER, Skaneateles, N. Y., assignor to Samuel E. Darby, as trustee, Palisade, N. J. Filed Dec. 11, 1929. Serial No. 413,172. 4 Claims. (Cl. 257—230.)



1. In a condenser column, the combination of groups of nested tubes maintained at successively lower temperatures, a truncated baffle beneath each of said groups of tubes for collecting condensates, the last of said baffles being inverted, and an extension on said inverted baffle, said extension being provided with vertical slots, and a reservoir for said condensates.

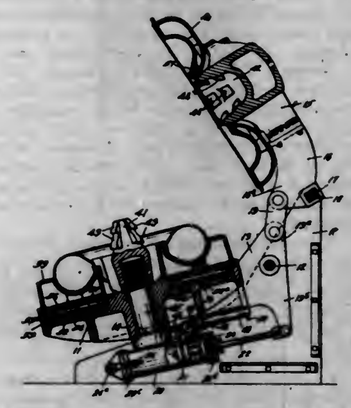
CARNEGIE LIBRARY OF ATLANTA

1,895,295. APPARATUS FOR THE DISTRIBUTION OF GASES UNDER PRESSURE BY MEANS OF LIQUEFIED GASES. CHARLES PICARD, Joinville Le Pont, France, assignor to l'Air Liquide Société Anonyme pour l'Etude & l'Exploitation des Procedes Georges Claude, Paris, France. Filed Dec. 18, 1928, Serial No. 326,895, and in France Dec. 20, 1927. 8 Claims. (Cl. 62—1.)



1. In a pump for liquefied gases at low boiling point, a cylinder dipping in the liquefied gases and means for dissipating the heat developed in the cylinder by the movement of the piston in its cylinder.

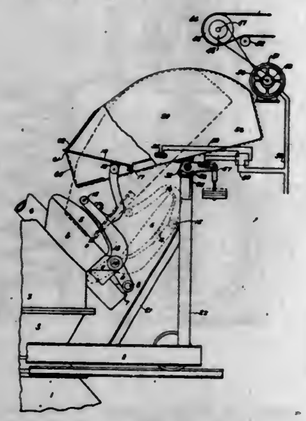
1,895,296. VULCANIZER. FLORAIN J. SHOOK and CATO IVERSON, Akron, Ohio, assignors to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed July 11, 1930. Serial No. 467,195. 16 Claims. (Cl. 18—17.)



6. A vulcanizer comprising lower and upper members, an arm supporting the lower member, a pivotal mounting for said arm, a second arm supporting the upper member, a second pivotal mounting for said second arm, a link

between said arms providing a toggle whereby when the lower member is lowered the upper member is raised, said lower member overbalancing the upper member normally to hold the vulcanizer open, means connected to the first arm for closing the vulcanizer, means cooperating when the vulcanizer is closed for locking the vulcanizer, and means for exerting pressure between the vulcanizer sections independently of said closing means.

1,895,297. WEIGHING MECHANISM ADAPTED FOR USE IN CHARGING MACHINES. GEORGE R. STEERE, Owosso, Mich., assignor to Semet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 13, 1928. Serial No. 305,849. 9 Claims. (Cl. 249—2.)



1. In combination, a hopper movable from a position to receive a charge to a different position to discharge said charge, means for delivering a charge to said hopper, means for interrupting the operation of said delivery means, means for moving said hopper from a position to discharge the charge to a position to receive a further charge, and means for maintaining the delivery means inoperative while the hopper is in discharge position and for initiating the delivery of a further charge to said hopper upon its movement into position to receive a further charge.

1,895,298. METHOD OF TREATING CELLULOSIC FIBERS. ERNST STOCKER, Basel, Switzerland, assignor to Munitex Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 29, 1930, Serial No. 424,460, and in Germany Feb. 20, 1929. 9 Claims. (Cl. 8—20.)

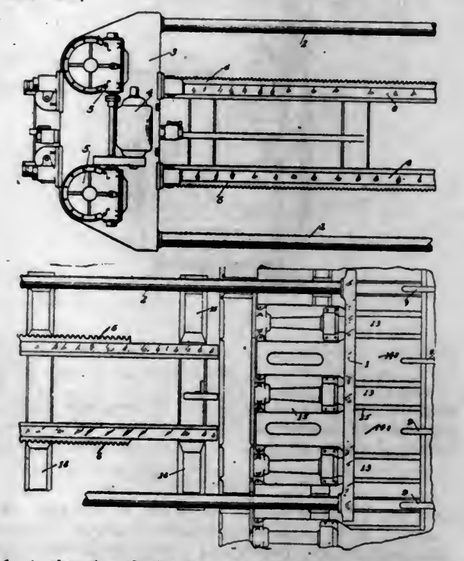
1. A method of changing the properties of cellulosic fibers or fabrics containing the same which comprises treating said fibers with a boiling aqueous alkali solution and esterifying the alkalized fibers with a member of the group consisting of carboxy and sulpho-chloride compounds of non-substituted and substituted aromatic hydrocarbons, inorganic sulphochloride compounds and phosphorous halogen compounds.

1,895,299. ROLLING SHEET METAL. JOHN B. TYTUS, Middletown, Ohio, assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Oct. 20, 1927. Serial No. 227,600. 2 Claims. (Cl. 29—18.)



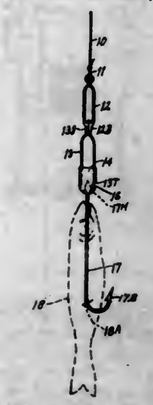
1. That process of rolling sheet metal, which consists in continuously producing single thickness thin plate or sheet metal by rolling the same when hot, letting the piece cool, giving the piece a cold rolling, in which definite gauge and good surface of the cold rolled piece is assured, the contour of the cold rolled piece being one in which there is a convexity of cross section of the cold rolled piece, and then heating and forming packs of the product, and finally reducing the hot packs to finished gauge by the use of a single stand of rolls which repeatedly acts on each pack.

1,895,300. FURNACE CHARGER. JOHN B. TYTUS, Middletown, Ohio, assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Oct. 29, 1928. Serial No. 315,697. 3 Claims. (Cl. 214—18.)



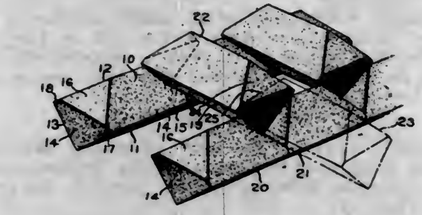
1. A charging device for use with a reheating furnace for preparing metal pieces for hot-working, comprising a conveying means for bringing pieces into position for charging, a ram head and a carriage, guide means for guiding the movement of said carriage, said guide means being in length at least the width of said conveying means plus the distance of forced travel of said pieces through the furnace, and means for controllably moving said carriage along said guides whereby said ram head may be advanced in said furnace to the delivery point thereof.

1,895,301. FISHHOOK AND LINK. CHRIS W. VANDERMARK, St. Paul, Minn. Filed Aug. 12, 1931. Serial No. 556,487. 3 Claims. (Cl. 43—28.)



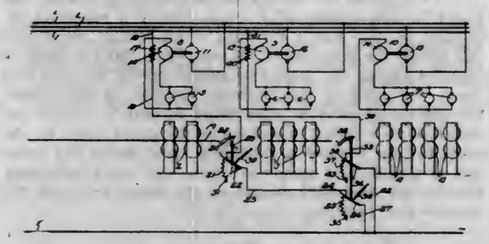
1. A fishhook and holder therefor in which said fishhook comprises an elongated metal shank with any desired form of pointed hook means integrally formed at one end thereof, a pointed spear-like head formed integrally of the end of said shank opposite the hook end, a holder for removably engaging said head and comprising a hollow metal keeper provided with a side opening for insertion of said head and a comparatively narrow slit extending from said opening toward the one end of the keeper, a bifurcated wire member with one arm fixed in the keeper opposite said opening, the other arm extending downwardly and normally projecting into said side opening, the latter arm yieldable inwardly from the opening to permit insertion of the head part of the hook.

1,895,302. FIRE BRICK FOR CHECKER WORK REGENERATORS. BRADLEY P. WHEELER, Buffalo, and WILLIAM G. SMITH, Wanakah, N. Y. Filed Apr. 23, 1931. Serial No. 532,356. 10 Claims. (Cl. 263—51.)



8. A fire brick having side faces angularly disposed to each other, a pair of end faces intersecting the side faces, and a face forming a plane surface intersecting an end face and two side faces.

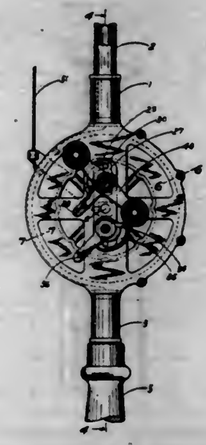
1,895,303. METHOD AND APPARATUS FOR METAL ROLLING. PARKER F. WILSON, Wheeling, W. Va. Filed June 6, 1929. Serial No. 368,887. 17 Claims. (Cl. 80—35.)



12. In a continuous rolling mill, a roughing mill, a finishing mill, separate motors for operating the mills, means for operating the roughing mill at a speed higher than that corresponding to the speed of the finishing mill, and means controlled by the passage of the material between the roughing and finishing mills for reducing the speed of the roughing mill during the rolling operation to correspond to the speed of the finishing mill before the material being rolled enters the finishing mill.

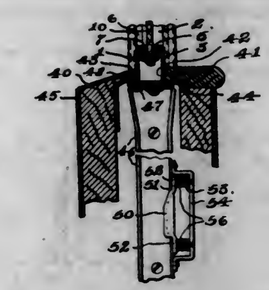
1,895,304. FISHING REEL. JOHN F. ANCONA, Reading, Pa. Filed Oct. 14, 1929. Serial No. 399,588. 2 Claims. (Cl. 43—20.)

1. Fishing reel apparatus of the class described, comprising, in combination, a housing, means for attaching a fishing rod to the housing, means for attaching a handle to the housing at a point remote from the connection with the rod, a reel located within the housing for operation therein, a shaft mounted axially with respect to the reel and having bearing in the housing, a spur gear on said shaft, the housing being formed with a pair of elongated openings, a shaft in each of said openings and movable therein, pinions carried by each of said shafts, said pinions



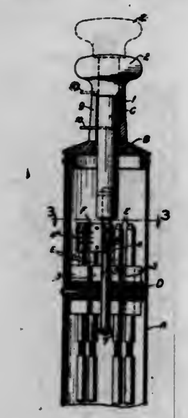
being of different diametric dimensions, means for moving the shafts in said openings to engage or disengage the pinions from the gear, and means at the end of each shaft for detachably mounting an operating member thereon.

1,895,305. WINDOW SASH AND GUIDE MEANS. ROY T. AXE, Syracuse, N. Y., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y., a Corporation of New York. Original application filed June 4, 1929, Serial No. 368,315. Divided and this application filed May 15, 1930. Serial No. 452,748. 1 Claim. (Cl. 296—44.)



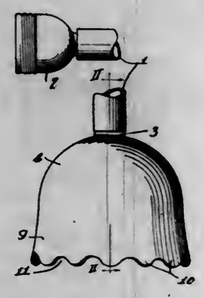
In a window construction, the combination of a window frame including a sill construction formed with a slot, and guides above and below the slot, a sash movable in the guides, the sill construction being formed with flanges projecting toward the sash and overhanging the guides below the sill, a weather strip overlying the lower edge of the bottom rail and having an angular portion at one edge thereof extending upwardly along one of the upright faces of the bottom rail and entering the space between one of the overhanging portions of the sill and the bottom rail, the weather strip also having a portion extending beyond the opposite upright face of the bottom rail into position to hook under the other overhanging portion of the sill, whereby when the sash is raised into closed position, the crevices between the bottom rail and the overhanging portions are closed by said weather strip.

1,895,306. RATIO ADJUSTER OR TAP CHANGER. FREDERICK H. BARRINGTON, St. Louis, Mo., assignor to Moloney Electric Company, St. Louis, Mo., a Corporation of Delaware. Filed June 19, 1931. Serial No. 545,467. 4 Claims. (Cl. 200—16.)



1. A ratio adjuster or tap changer for transformers, comprising a plurality of stationary, cylindrical contacts arranged in an arc, a manually-operable plunger arranged in concentric relation with said stationary contacts, and a pair of angularly-disposed, movable contacts carried by said plunger and formed by a strip of metal rigidly attached to said plunger and bent to form two legs that are adapted to engage adjacent contacts when the plunger is depressed, and metal devices attached to said legs so as to co-operate with same to form resilient elements that surround the contacts.

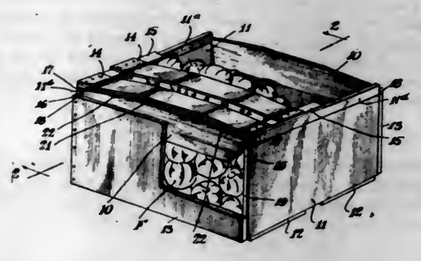
1,895,307. SPRAY. EMIL BECK, Chicago, Ill. Filed July 10, 1930. Serial No. 467,009. 1 Claim. (Cl. 4—159.)



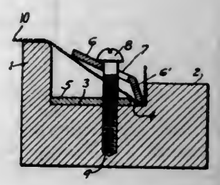
In a one piece spray applicator comprising an inflexible body section, a passaged neck integrally formed thereon, an apertured partition internally formed in said body section dividing the body section into intake and outlet chambers, with said outlet chamber having the margin thereof formed to provide an inflexible scalloped edge.

1,895,308. FRUIT GUARD. GEORGE D. BISHOP, Sanford, Fla., assignor to Crown Paper Company, Sanford, Fla., a Corporation of Delaware. Filed Dec. 22, 1931. Serial No. 582,514. 4 Claims. (Cl. 217—3.)

1. A packing medium for produce including in combination, a container having side walls and end walls, the end walls being higher than the side walls, a fruit guard of a single piece of unfolded semi-rigid material positioned along each side wall of the container, each of said guards having tapered ends resting against the top edge of the side walls and on the opposite end walls adjustably supporting the guard in position, and a cover member for said container adapted to be bulged outwardly by produce packed therein, each of said guards also having a portion extending some distance above the top edge of the container to protect the produce otherwise exposed along the side of the container when said cover is in bulged condition.

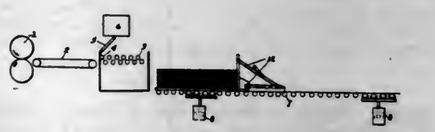


1,895,309. STRETCHING AND SECURING MEANS FOR FLEXIBLE MATERIAL. ADAM BOOMERSHINE, Dayton, Ohio. Filed Oct. 12, 1931. Serial No. 568,493. 9 Claims. (Cl. 45—24.)



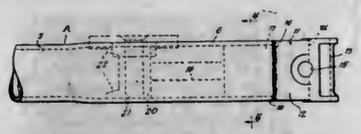
1. In a device for stretching and securing flexible material in taut condition, a frame having a marginal depressed portion, and a plurality of stretching and clamping strips, the outer edges of each strip being formed to initially engage the marginal portion of the material and clamp the same to the depressed portion of the frame, the inner edge of each strip being formed to engage the material at a point intermediate the outer edge of the strip and the surface of the frame over which the material is placed, and means to draw the strips gradually towards the depressed portion of the frame and hold the same in that position.

1,895,310. HANDLING METALLIC SHEETS. CLYDE BURGESS, Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Oct. 23, 1929. Serial No. 401,928. 3 Claims. (Cl. 29—17.)



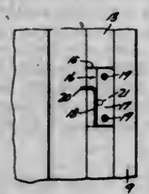
1. In sheet metal apparatus, cold rolls, a conveyor, a roller leveler and means for feeding oil upon the faces of the rolls therein, and a device for forming metallic sheets into a pile, said devices arranged serially for the uninterrupted movement of said sheets.

1,895,311. AXLE. EUGENE B. CLARK, Buchanan, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed June 13, 1930. Serial No. 460,818. 9 Claims. (Cl. 301—124.)



1. An axle comprising a seamless steel tube having its end portions formed to generally oblong shape in cross-section, and correspondingly shaped knuckle pieces each comprising spaced members inserted into and fitting closely the end portions of the tube, and fixedly secured thereto.

1,895,312. SCREEN AND STORM SASH MOUNTING FOR WINDOWS. PETER DIETZ, Lorain, Ohio. Filed Sept. 8, 1931. Serial No. 561,595. 1 Claim. (Cl. 292—300.)



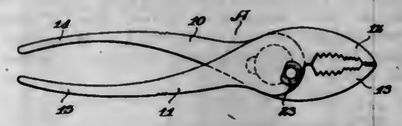
In a device of the kind described, a sash lock for mounting medially at one side of a window frame, the said lock comprising an attached plate and an integrally formed lug extended perpendicularly from one margin of the plate, the said lug having an end turned again outwardly substantially perpendicularly to the lug, to form a rest for the pin extended from the side rail of a storm sash fitted to said frame.

1,895,313. LOOP PRONG BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Aug. 10, 1932. Serial No. 628,193. 2 Claims. (Cl. 24—73.)



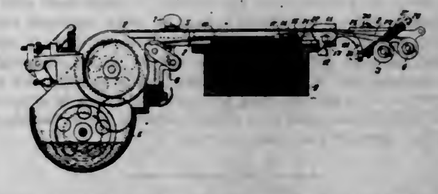
1. A loop prong buckle comprising a buckle frame and a pronged member having spaced pivotal connections, one with the other, providing a space between the pronged ends of the pronged member, the frame and the member together providing upper and lower associated buckle loops, the pronged member having a button loop portion providing a seat for the shank of a button, the said portion being so formed that a button is insertable within and releasable from said button loop portion only through said lower buckle loop, and a strap threaded from the rear into said upper buckle loop and back into the lower buckle loop and thus maintaining a flexible strap portion extending across said space along a line intersecting the diameter of a button entering or leaving the button loop portion.

1,895,314. PLIERS. ROBERT G. DRIPPS, Minneapolis, Minn., assignor of one-half to Irene M. Dripps, one-sixth to Fred C. Wick, one-sixth to Obert E. Bergstrom, and one-sixth to Gustav F. Thompson, Minneapolis, Minn. Filed July 10, 1931. Serial No. 549,851. 7 Claims. (Cl. 81—51.)



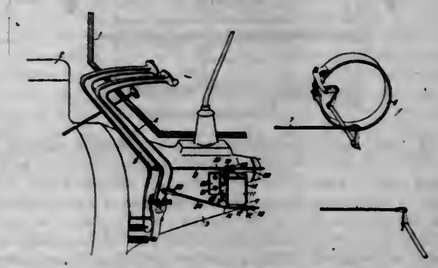
1. A pliers including, a pair of levers, an enlarged pivot work opening formed in one of said levers, a small stud receiving opening formed in the other of said levers, and a connector having a working surface to fit into said first enlarged opening in said first lever and an offset stud having a threaded end for receiving a nut adapted to project through said small opening in said second lever, said offset stud being positioned to extend with its axis lying in the working surface of said connector which operates in said enlarged opening in said first lever.

1,895,315. TENSION CONTROL FOR LABEL PASTING BELTS. ADAM FISHER, Palisades Park, N. J., assignor to International Patents Development Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 26, 1931. Serial No. 565,397. 11 Claims. (Cl. 91—54.)



1. A guide and tensioning means for the lower paste applying run of a label pasting belt comprising a fixed support, a lever pivoted on said support, said lever comprising an arm adapted to rest on the labels and having means for guiding the belt into engagement with the labels, and spring means interposed between the lever and the support for holding the arm yieldingly in engagement with the labels.

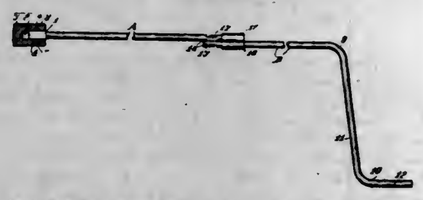
1,895,316. BRAKE CONTROL MECHANISM. WALTER R. FREEMAN, Tulsa, Okla., assignor to Midwest Engineering Corporation, Tulsa, Okla., a Corporation of Oklahoma. Filed Mar. 27, 1929. Serial No. 350,208. 11 Claims. (Cl. 192—13.)



1. In combination with the brake and clutch actuators of a motor vehicle, a brake actuator control mechanism including a rod connected to the brake actuator, stop means adjustably mounted on the rod, a lever operably engageable with said stop means, hydraulic means for re-

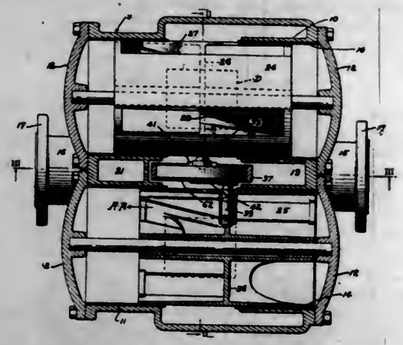
taining the lever in engaging position to retain the brake actuator in functional position, and means actuated by the clutch actuator to release the hydraulic retaining means.

1,895,317. LIFTING JACK HANDLE. JOSEPF GENICH, Racine, Wis., assignor to Walker Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed July 16, 1932. Serial No. 622,890. 1 Claim. (Cl. 287—98.)



A jack handle comprising a pair of rod sections of substantially circular cross-section, the adjacent ends of said rod sections being stamped to form, in each case, a flattened portion one side of which is substantially tangent to one side of the circular rod, the two sections being overlapped at these stamped ends with the tangential surfaces of the flattened portions in engagement, the flattened portions being formed with aligned openings, a pivot pin secured through the openings, the flattened portion of one section being spaced somewhat from the end of the section so that the rod extends beyond the pivotal connection in the form of a short arm of circular cross-section, and a locking member comprising a loop of sheet material having its opposite sides crimped in to form a pair of connected parallel tubular portions, one of which surrounds and engages one of the rod sections and is slidable and rotatable on this section, and the other of which is adapted to be slidably engaged in a similar manner about the short arm extension of the other section.

1,895,318. FLUID METER. ALBERT J. GRANBERG, Berkeley, Calif., assignor to Ralph N. Brodie Company, Oakland, Calif., a Corporation of California. Filed Apr. 14, 1930. Serial No. 444,095. 8 Claims. (Cl. 73—30.)



6. A fluid meter comprising a body casting having a pair of cylinders formed therein, each cylinder being formed with a pair of intake ports 180 degrees apart and a pair of discharge ports 180 degrees apart and disposed at 90 degrees relative to the intake ports, a piston in each cylinder, each piston being centrally and transversely divided, the periphery of each piston end being formed with a pair of ports 180 degrees apart, the pairs of ports in opposite ends of the piston being disposed 90 degrees apart, crank means operatively connected to the pistons to oscillate the same during the reciprocation thereof whereby the ports therein will alternately register with the intake and discharge ports in the cylinders.

1,895,319. METHOD OF PACKING ICED VEGETABLES. JOSEPH H. GRANDE, Los Angeles, Calif. Filed Feb. 21, 1928. Serial No. 256,030. 1 Claim. (Cl. 217—5.)

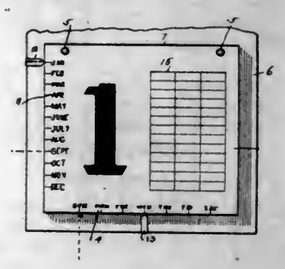


The method of packing iced vegetables and the like which consists in folding a cardboard lining impervious to moisture upon the bottom and opposing walls of a crate, taking two additional linings lapping them respectively under the first lining, causing them to overlie the other sides of the crate and project foldably over the top edges of the last named sides, then preparing a layer of chopped ice upon the bottom overlying portion of the first lining, thereafter placing in rows so as to rest upon the ice layer lettuce or the like, then placing a moisture-proof partition upon another layer of cracked ice resting upon the lettuce, and again proceeding as hereinbefore set forth until the folded portions of the other linings are brought back to overlie the uppermost partition, and ultimately closing said crate.

1,895,320. MATERIAL FOR AND PROCESS OF COATING METAL. JAMES H. GRAVELL, Elkins Park, Pa., assignor to American Chemical Paint Company, Ambler, Pa., a Corporation of Delaware. Filed Mar. 4, 1930. Serial No. 433,187. 8 Claims. (Cl. 91—70.)

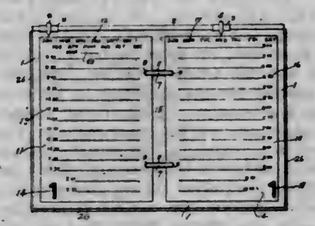
1. A material for coating metal, being an admixture comprising kerosene, stearine pitch and orthophosphoric acid.

1,895,321. MONTHLY-YEARLY CALENDAR PAD. ROY M. HALL, Valparaiso, Ind. Filed Oct. 25, 1930. Serial No. 491,293. 2 Claims. (Cl. 40—107.)



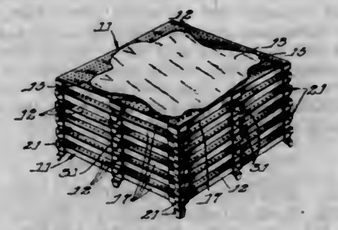
1. In calendar pads, a plurality of separate groups of sheets, the sheets of each group numbered consecutively from 1 to 31, monthly indicia imprinted near one edge of each sheet comprising all the months of a year such indicia being in duplicate for a single monthly group, the monthly indicia of succeeding monthly groups advancing month by month all the indicia of all the groups bearing the same spaced apart relation to each other, a suitable support, means for holding the sheets assembled on the support, an adjustable indicator slidable on the support adjacent the monthly indicia, an imprint of the seven days of a week adjacent the edge of each sheet of a given month imprinted opposite each other and advancing day by day from sheet to sheet, and an indicator movable on the support adjacent the imprinted days of the week.

1,895,322. UNIVERSAL DESK CALENDAR. ROY M. HALL, Valparaiso, Ind. Filed Nov. 3, 1930. Serial No. 492,939. 3 Claims. (Cl. 40—107.)



1. In calendars, a plurality of sheets divided into twelve groups of thirty-one sheets each days of the month numerals printed consecutively on both faces of the sheets in each group, the seven days of a week printed on one face in close proximity to the same edge of each sheet, the twelve months of a year printed on the other face adjacent the same edge of each sheet, the names of the months positioned in register with each other on all the sheets, the names of the week positioned in register with each other on all the sheets, the monthly indicia progressing one month from group to group, the week day indicia advancing one day from sheet to sheet, a base for the sheets, means adapted to hold the sheets loosely assembled in turn-over relation, and separate pointers movable on the base adjacent the monthly indicia and the week day indicia respectively.

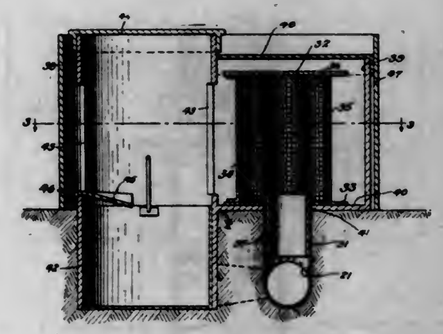
1,895,323. DRYING TRAY. GEORGE F. HAUF, Chicago, Ill., assignor to Chicago Metal Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 13, 1930. Serial No. 474,989. 8 Claims. (Cl. 34—17.)



1. A drying tray comprising a sheet metal drying element, said element including relatively wide reinforcing flanges on the edges thereof bent out of the plane of the drying element, spacing members adapted to support the tray on and in spaced relation to an adjacent tray, said spacing members comprising a vertical portion fixed to the face of said reinforcing flange, an offset shoulder engaging the edge thereof for supporting the same, a spacing portion, a bearing portion adapted to rest on the margin of a similar drying tray, and an offset guide portion depending from said bearing portion.

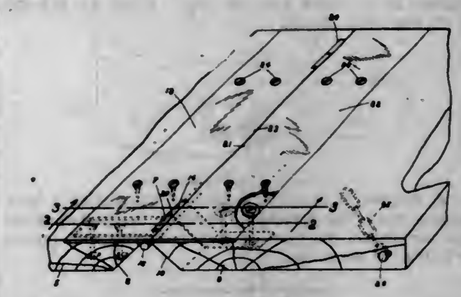
1,895,324. IRRIGATION AND DRAINAGE SYSTEM. NATHAN A. HEACOCK, Decatur, Ill. Filed Feb. 13, 1932. Serial No. 592,820. 4 Claims. (Cl. 61—10.)

1. In an irrigating system, a drain pipe, a housing having one end adapted to extend below the ground level and having a lateral extension at the ground level, ports in the housing above the ground level, a vessel for sediment removably disposed in the bottom of the housing, a screen element housed within said extension over the open end



of the drain pipe, and a valve encircling the housing and extension above the ground level and normally closing said ports.

1,895,325. VEHICLE UNLOADING CLOSURE AND MOUNTING. EDWARD F. HERBERT, Cincinnati, Ohio. Filed Apr. 12, 1930. Serial No. 443,710. 6 Claims. (Cl. 296—57.)

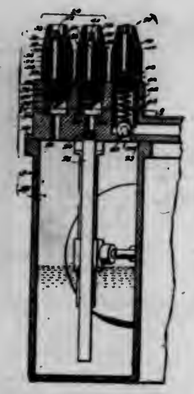


1. In an unloading closure for vehicles the combination with a vehicle bed and closure gate each chamfered at their adjacent ends, of hinge members secured to the top of the bed and having an eye portion projecting beyond the edge of the bed, complementary hinge members extending over the chamferred edge and bottom of the gate and secured thereto, said hinge members having eyes cooperating with the eyes on the bed hinge members, a pin extending through the eyes and connecting the hinge members, a wear plate covering the bed-hinge members and projecting beyond the edge of the bed, the projecting portion of said plate being notched to receive the eye portions of all of the hinge members, and a straight edge wear plate on the gate arranged to substantially close the notches in the wear plate on the bed when the gate is positioned in the plane of the bed.

1,895,326. VALVE APPARATUS. FRANK E. HERR, Lancaster, Pa. Filed Mar. 17, 1930. Serial No. 436,606. 4 Claims. (Cl. 137—21.)

3. In a control tank arranged to contain air and oil under pressure and having a cover, valve apparatus for the control tank comprising a boss having three chambers formed therein, each with an opening directed into the tank, a pipe depending from one of the openings and ex-

tending into the oil, the remaining two openings being for the escape of air, a twin mixing valve having valve members, of which one member is adjustable in respect to the oil opening and of which the other member is adjust-



able in respect to one of the air openings, a ball arranged to be seated upon the remaining air opening, and means for yieldably holding the ball to its seat for an escape of air from the tank under excessive pressure.

1,895,327. ARCH SUPPORT. GEORGE D. HORNING, Washington, D. C. Filed Aug. 26, 1927. Serial No. 215,679. 2 Claims. (Cl. 36—71.)

1. A support of the kind described, comprising a base, a pocket, means for detachably securing the pocket to the upper surface of the base, and an insertable and removable filling for the pocket.

1,895,328. AUTOMATIC SPARK CONTROL FOR INTERNAL COMBUSTION ENGINES. VICTOR L. HOWE, Ferndale, Mich. Filed May 27, 1931. Serial No. 540,373. 4 Claims. (Cl. 123—117.)

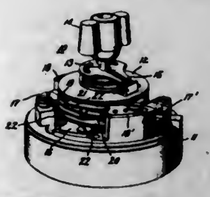
1. In combination, the throttle valve and ignition distributor of an internal combustion engine, and means connecting the distributor to the valve so that the distributor will be moved into spark retarding condition as the valve is closed and into spark advancing condition as the valve is opened, said means being yieldable when the distributor is in position to fully advance the spark when the valve is partly open so that the valve may be fully opened.

1,895,329. PROCESS OF PRODUCING PHOSPHORIC ACID AND HYDROGEN. WLADIMIR IPATIEFF, Berlin-Wilmersdorf, and CARL FARITAG, Berlin-Neukölln, Germany. Filed Feb. 27, 1930, Serial No. 431,971, and in Germany Feb. 28, 1929. 2 Claims. (Cl. 23—165.)

1. The process for the oxidation of phosphorus, phosphine, and low oxidation products of phosphorus with water at superatmospheric pressures and temperatures, which consists in adding to the initial substances soluble compounds of metals of the first and eighth group of the periodic system to catalyze the reaction and form catalytically active precipitates by control of pressure and temperature, said precipitates being used as catalysts for further conversions.

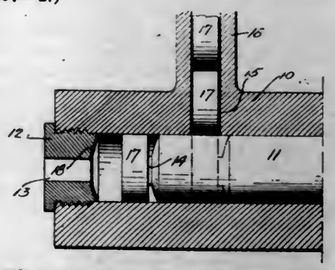
1,895,330. ROTARY SNAP SWITCH. LESLIE A. KEMPTON, Trumbull, Conn., assignor to General Electric Company, a Corporation of New York. Filed July 24, 1931. Serial No. 552,915. 5 Claims. (Cl. 200—66.)





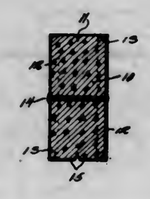
5. A rotary snap switch comprising a base of insulating material, a plurality of contacts secured to said base, a rotor, contacts secured to said rotor, insulated therefrom and arranged one above the other, thin horizontal discs of insulating material located between said rotor contacts and secured to said rotor, and a flexible sleeve of insulating material closely surrounding the edges of all of the discs, said discs and sleeve cooperating to define restrictive paths for arcs drawn by the separation of the rotor and the base contacts.

1,895,331. METHOD OF MANUFACTURING LEAD TAPES. HUGH WILLIAMSON KELLY, Woodbridge, N. J. Filed July 11, 1930. Serial No. 467,344. 1 Claim. (Cl. 207—2.)



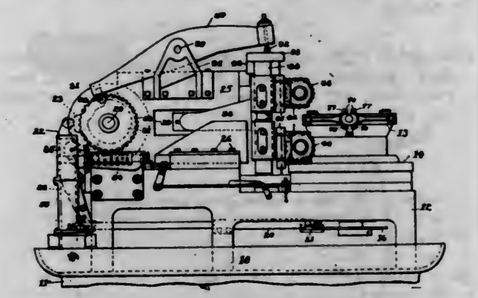
The method of producing tapes of ductile material having a relatively low fusing point, consisting in extruding a slug of the metal through a die by means of a plunger, cutting off the tape at the die opening by the plunger whereby a residue is left in the press and employing the heat generated by pressure of a successive press charge to integrate said residue with the succeeding charge.

1,895,332. RAZOR BLADE SHARPENER. HENRY J. LINN, Zanesville, Ohio. Filed Aug. 25, 1931. Serial No. 559,255. 4 Claims. (Cl. 51—185.)



1. A razor blade sharpener of the character described, comprising a cylindrical body of cork having in its circumference a V-shaped groove through which the edge of a razor blade may be drawn, and relatively stiff end members disposed against the sides of the cylindrical body to prevent the disintegration of the cork.

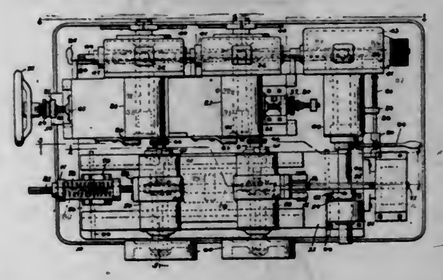
1,895,333. MILLING MACHINE. NEWMAN M. MARSILIUS, Bridgeport, Conn., assignor to The Producto Machine Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 30, 1929. Serial No. 336,067. 10 Claims. (Cl. 90—15.)



1. In a milling machine, a bed, a turret mounted forwardly on said bed, a guide on said bed rearwardly of said turret, a cutter carriage in said guide and mounted for horizontally reciprocating movement, means to impart said movement to the carriage, guides mounted on the forward end of said carriage, upper and lower cutters on said guides, means to rotate said cutters, said cutters mounted for movement toward and from each other, spring means normally tending to move said cutters from each other, and other means for moving said cutters toward each other and against the action of said spring means.

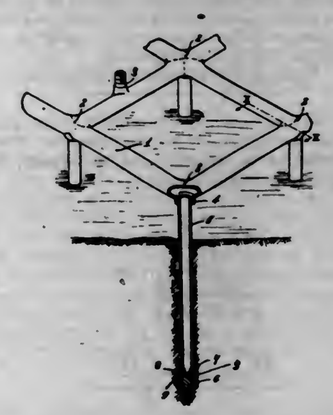
1,895,334. CAM MILLER. NEWMAN M. MARSILIUS, Bridgeport, Conn., assignor to The Producto Machine Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Aug. 9, 1929. Serial No. 384,627. 4 Claims. (Cl. 90—13.4.)

1. In a milling machine, a bed having a guide-way, a guide block operatable in said guide-way, adjusting means for the guide block, a pair of work holders movably mounted upon the guide block and each including a bearing, a sleeve rotatably mounted in each of said bearings, chucking means within each sleeve to hold the work, a worm and worm gear drive for rotating each of said sleeves and work carried therein, a second guide-way on said bed, a pair of reciprocatory carriages mounted on the bed in said second guide-way and adapted to be operated in a plane parallel to the plane of movement of the guide block, a pair of cooperating cutter spindles adapted to be moved toward and from the axis of the work spindle, worm and worm gear connections for driving the cutter



spindles, and means for reciprocating the carriages and thereby the cutter spindles, to and from the work holders during the rotation of the work.

1,895,335. TINE FOR USE IN SOIL STERILIZING APPARATUS. FRANK MAXEN, Brimsdown, England. Filed Apr. 25, 1929, Serial No. 358,144, and in Great Britain Apr. 26, 1928. 1 Claim. (Cl. 47—49.)

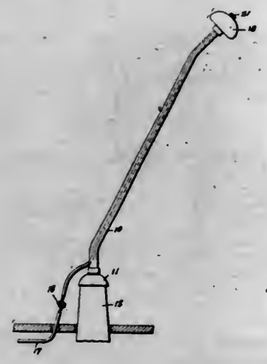


A one piece tine for use in sterilizing soil by impregnation with a sterilizing medium, comprising a one-piece tube of uniform cross section throughout the greater part of its length, said tube being open at its upper end and provided with means to connect it to a gas supply and closed and pointed at its lower end, a constricted neck portion being formed adjacent and behind said pointed end and constantly open outlet orifices in said constricted portion.

1,895,336. VAT DYESTUFF DERIVATIVES. JAMES MORTON, JAMES IVOR MORGAN JONES, and BIRKETT WYLAM, Lancaster, and JOHN EDMUND GUY HARRIS, Carlisle, England, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Filed Aug. 10, 1925, Serial No. 49,454, and in Great Britain Aug. 11, 1924. 6 Claims. (Cl. 260—1.)

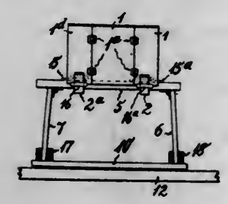
1. Products which may be prepared by a process which consists in heating together a vat dyestuff, a liquid tertiary organic base, a metal of the group consisting of magnesium, aluminium, zinc, cadmium, iron, cobalt, tin, antimony and copper and cooling the product and mixing it with an alkyl sulphuric acid halide.

1,895,337. GEAR SHIFT LEVER HORN BUTTON SYSTEM. ELIJAH T. NESTER, Hillsville, Va. Filed Feb. 24, 1931. Serial No. 517,993. 1 Claim. (Cl. 200—59.)



In combination with an automobile gear shift lever, a bushing of electric conducting material having contact with the lever and provided with a contact finger, a knob of insulating material surrounding the bushing and enclosing the finger thereof, a plunger slidable in the knob, an insulator located within the knob and disposed against the end of the lever, a spring interposed between the plunger and the insulator, a flange carried by the plunger, a conductor wire threaded through the lever and connected with the flange, said flange adapted to engage the contact finger when the plunger is depressed.

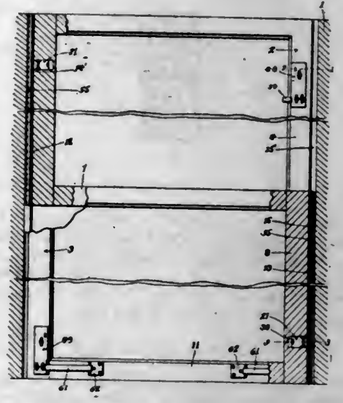
1,895,338. FOLDABLE TRAVELER'S TABLE AND THE LIKE. GEORG NEUMANN, Berlin, Germany. Filed Jan. 29, 1930, Serial No. 424,291, and in Germany Dec. 11, 1928. 6 Claims. (Cl. 45—46.)



1. In a device of the kind described in combination, a substantially beam-like supporting base, and a substantially beam-like top portion above the base portion and parallel therewith, a pair of upright, downwardly diverging, spaced supporting legs on the top portion, a detachable table plate, projecting fastenings means at one edge portion of the table plate, and securing means on said top portion engaging the fastening means.

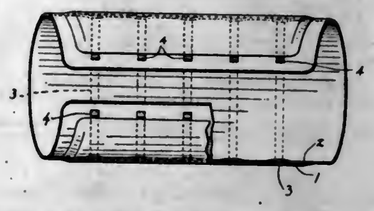
1,895,339. WINDOW CONSTRUCTION. GABRIEL E. OSTROOT, Minneapolis, and SAM WESTERHEIM, St. Paul, Minn. Filed Apr. 7, 1931. Serial No. 528,414. 31 Claims. (Cl. 20—52.)

1. In window construction, a combined sash guide and weather strip forming element adapted to be secured to the side of a window frame and formed with an angularly disposed extension, a pair of opposed, spaced latching elements adapted to be mounted in the side rail of a window sash, one of said elements of said pair being shiftable and the other supporting the shiftable element, a resilient retaining element interposed between said latching elements and supported by the said other latching element and acting on said shiftable element of said pair, said extension positioned between the outer ends of said pair of latching elements and normally acted upon by said shiftable element for latching the sash in set position, a weather strip forming element adapted to be secured to the window sash and including a portion



projecting into said extension, and means slidably carried by the window sash and coupled with the said other latching element for shifting the shiftable element against the action of said retaining element to release the sash.

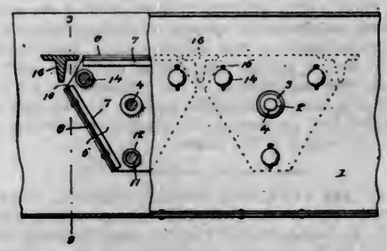
1,895,340. TIRE BOOT. JOHN F. PANYARD, Detroit, Mich., assignor to Minnie B. Panyard, Detroit, Mich. Filed Sept. 19, 1929. Serial No. 393,679. 2 Claims. (Cl. 152—26.)



1. A tire boot comprising a flexible piece of reenforcing material, and resilient means extending transversely through said material and beyond the edges thereof adapted to anchor in the side walls of the tire casing beyond the edge of said reenforcing material.

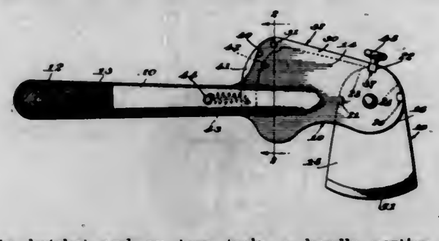
1,895,341. SCREEN. EDWARD E. PARSONAGE, Oakland City, Ind. Filed Apr. 6, 1931. Serial No. 528,158. 1 Claim. (Cl. 209—397.)

In a device for the purpose set forth, a screen box having alining transverse shafts journaled therethrough, screens in the box centrally journaled on the respective shafts, each screen comprising end members which are of triangular formation but which have their points cut-away, and their edges except at the cut-away portions thereof widened laterally, each of said members, inward of the cut-away portions having an opening surrounded by a boss, plates fixedly secured on the widened edges of the members, and each of said plates having a series of apertures therethrough, and the apertures on the respective plates varying in area, the sides of the box having openings therethrough adapted to aline with the openings in the end members of the screen when the screens are turned on their shafts to bring certain of their apertured plates uppermost and in horizontal alinement, said openings being surrounded by bosses, headed pins passed through said alining openings to hold the screens from turning, removable means for securing the pins in the openings, and T-shaped braces between the sides of the box having their upper and widened portions in a line



with the horizontally arranged screen plates and arranged between the confronting cut-away portions of the horizontally disposed screen plates and at the outer cut-away portions of the said screen plates.

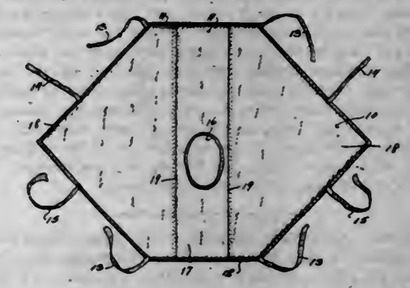
1,895,342. AX. WILLIAM E. PELTON and ERNEST H. HOLCOMBE, Canton, Pa. Filed Jan. 25, 1932. Serial No. 588,698. 1 Claim. (Cl. 145—2.)



In hatchet and ax type tools, a handle portion, a guard formed at one end of the handle and adapted to house a cutting blade, a cutting blade pivotally mounted at one end of the outer end of the guard, the end of the cutting blade adjacent the pivoted portion being semi-circular and provided with peripheral notches formed in the opposite side edges of the blade and a peripheral notch intermediate the last-mentioned notches, a locking bar normally housed within the guard and having a lug at one end provided with an inner face and an outer face which has greater height than the inner face, the lug being adapted to engage any one of the notches for retaining the blade either in an inoperative position, in a position simulating an ax, or in a position simulating a chisel, one wall of two of the notches which is engaged by the inner face of the lug being of less height than the opposite wall, the peripheral edge of the inner end of the cutting blade being cut away on an arc of a curve adjacent the inner wall of two of the notches in the blade to provide for the complete housing of the locking bar when in locking position with the blade.

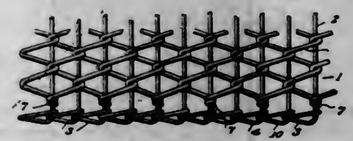
1,895,343. PROTECTOR FOR SURGICAL OPERATIONS. BRITTON E. PICKETT, Carrizo Springs, Tex. Filed Oct. 24, 1931. Serial No. 570,919. 2 Claims. (Cl. 2—224.)

1. A protector for use in abdominal operations of the character described, consisting of a hexagonal sheet of fabric adapted to be folded transversely beneath the crotch of a patient, the forward and rear edges of the sheet being shorter than the lateral edges of the sheet, the lateral portions of the sheet being approximately triangular, the sheet being formed with an approximately central observation and operating opening and having tapes at its corners whereby when folded it may be attached around the waist of a patient, the sheet when folded transversely providing laterally disposed leg openings and the lateral edges of the sheet having coacting tapes adapted to extend over the leg openings, the sheet



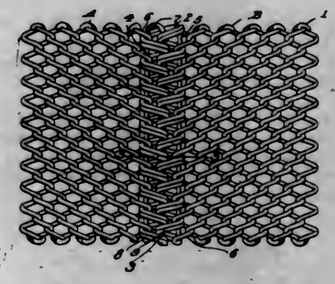
being formed of a medial breadth of fabric extending from one end of the sheet to the other and of two lateral pieces of fabric stitched to the first named breadth.

1,895,344. WOVEN WIRE CONVEYER BELT. CLARENCE E. PINK, Cambridge, Md. Filed Feb. 20, 1932. Serial No. 594,361. 1 Claim. (Cl. 198—193.)



A woven wire conveyer belt comprising a plurality of relatively spaced bars, each of said bars having each end bent to form a pair of loops extending at right angles thereto, one loop of each pair extending about its respective bar and the other loop extending about the bar adjacent to said respective bar for hingedly connecting the bars and forming a selvage at each end of the bars, the ends of the bars after forming the loops terminate inwardly of the selvages, and a plurality of coiled and interwoven wires having the bars extending therethrough and cooperating therewith in forming a flexible belt, the ends of said coiled wires being secured to every other bar.

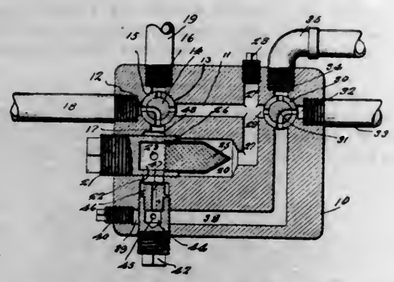
1,895,345. CONNECTERS FOR WOVEN WIRE CONVEYER BELTS. CLARENCE E. PINK, Cambridge, Md. Filed Feb. 20, 1932. Serial No. 594,362. 1 Claim. (Cl. 198—193.)



A connecter comprising a center hinge bar, reinforcing bars located at opposite sides of the center hinge bar and extending through end coiled wires of belting sections, and spirally formed connecting elements passing about the center hinge bar and contacting with each other where passing

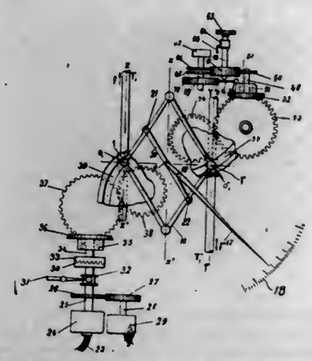
about said center hinge bar, said connecting elements passing about the reinforcing bars and through the end coiled wires of the belting sections and engaging the coils of said end coiled wires to prevent the belting sections from shifting relative to each other and the reinforcing bars, one of the connecting elements having the ends thereof secured to one of the reinforcing bars and the other connecting element having its ends secured to the center hinge bar, each of said connecting elements including a pair of coiled wires contacting with each other throughout their length and lying in the same plane with each other and also in the plane of the coiled wires of the belting sections, said center hinge bar having one end thereof fixed to one end of one of the reinforcing bars.

1,895,346. CONTROL APPARATUS FOR BLOWDOWN WATER. CYRUS WILLIAM RICE, Pittsburgh, Pa. Filed July 30, 1927. Serial No. 209,504. 1 Claim. (Cl. 210—164.)



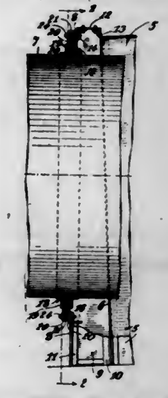
In a device of the class described, a housing having a plurality of inlet connections and outlet connections and having channels for the passage of fluid, said housing having two valve chambers, one chamber being in communication with the plurality of inlet connections and the other with the outlet connections, valves within the chambers, a third chamber in the housing and a strainer in the chamber last named, said third chamber having communication with the channels and with a point of discharge, one of said valves communicating with the inlet connections and with those channels admitting fluid to the housing, and this valve controlling the flow, in either direction, through the strainer, thereby effecting straining or strainer-cleaning action, and a ported and adjustable plug mounting the strainer.

1,895,347. DEVICE FOR PRODUCING A MOVEMENT FOLLOWING A LOGARITHMIC LAW. FRANÇOIS MARIE MICHEL BERNARD SALOMON and HARRY PAUL GOVARE, Paris, France. Filed Dec. 30, 1927, Serial No. 243,714, and in Germany Jan. 5, 1927. 3 Claims. (Cl. 235—61.)



1. A pivoted-link differential for subtracting two logarithms in mean speed indicators comprising four arms each of which is pivotally secured to the next through the adjacent ends of the arms considered, said elements forming a closed four-link figure, means for constraining the pivotal connection between two adjacent arms, on one hand and the two other adjacent arms, on the other, to remain on two parallel lines; a slide adapted to move each of the pivotal connections considered in opposite directions through distances proportional to the corresponding logarithms, a graduated dial, a pointer cooperating with said dial and means whereby the position of the pointer with reference to the dial is controlled by the position of the middle of the straight line connecting the pivotal connections submitted to the action of the slides.

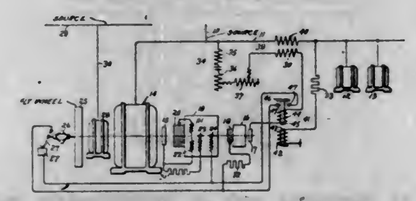
1,895,348. AIR SEAL FOR ROTARY DRUMS. JOHN W. SCHLEGEL, New York, N. Y., and EMIL A. CLAUS, Arlington, N. J., assignors to The National Sugar Refining Company of New Jersey, Edgewater, N. J., a Corporation of New Jersey. Filed Jan. 19, 1931. Serial No. 509,870. 1 Claim. (Cl. 286—11.)



An air seal for a housing for calcining, drying and the like, having a rotary drum at an angle within the housing, and intermediate said housing and the drum, comprising an annular member on the drum and having radially extending flanges thereon parallel with each other to provide an annular elongated groove having parallel side walls therebetween, a rigidly fixed annular sealing member having parallel sides and a thickness substantially equal to the width of the groove adapted to fit radially and slidably within the groove and in close contact with the walls of said member and form therewith a seal by the exterior sides of the sealing member contacting with the interior parallel sides of the groove irrespective of a slight longitudinal shifting of the drum, and means in connection with the housing for holding said sealing member in alignment with the sides of the flanges, said sealing member being flexible and adapted to maintain contact with the sides of the flanges of the annular groove when the drum is tilted, whereby to prevent the entrance of air or dust into the housing.

1,895,349. REGULATION OF ASYNCHRONOUS MACHINES. WALTER SEIZ, Baden, Switzerland, assignor to General Electric Company, a Corporation of New York. Filed Jan. 16, 1930, Serial No. 421,235, and in Germany Jan. 18, 1929. 16 Claims. (Cl. 172—274.)

1. In combination, an alternating current dynamo electric machine comprising primary and secondary windings, a source of alternating current connected to said primary windings, additional alternating current electrical apparatus connected to said source, a commutator machine electrically connected to said secondary windings, means to rotate said commutator machine, a plurality of exciting windings for said commutator machine, means for impressing on one of said exciting windings a voltage whose magnitude is substantially directly proportional to the voltage of said secondary winding, and means for impressing on a second one of said exciting windings a voltage consisting of one component whose magnitude is substantially directly proportional to the voltage of said source and another component whose magnitude is substantially directly proportional to the magnitude of the current flowing between said source and said additional electrical apparatus.



1,895,350. TIME SWITCH. CARL SNAY, Berlin-Schmargendorf, Germany. Filed Feb. 13, 1932, Serial No. 592,785, and in Germany Mar. 25, 1931. 7 Claims. (Cl. 200—38.)



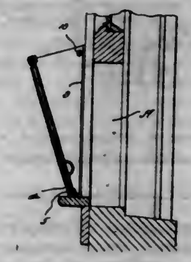
1. In a time switch of the class described in combination a casing, a contact-making tilting member fulcrumed therein and a contact member cooperable therewith, an actuating handle for said tilting member adapted to move like a vise handle relatively to the fulcrum of said tilting member and enclosed in said casing, and means in connection with said casing for guiding said handle in its circuit-closing movement in the prescribed path and for rendering it free for repeated circuit-closing manipulation only after the preceding closure has been broken.

1,895,351. THE HYDROLYSIS OF CELLULOSE ESTERS USING NEUTRAL SALTS AS INHIBITORS. CYRIL J. STAUD and JAMES T. FUESS, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 10, 1929. Serial No. 398,807. 7 Claims. (Cl. 260—102.)

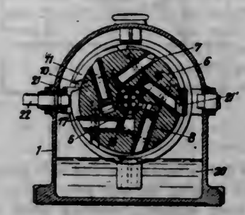
1. In the process of making cellulose acetate, the step which comprises adding a neutral salt of an alkali metal to the hydrolyzing bath when the cellulose acetate has reached approximately the desired acetyl content, to inhibit further hydrolysis of the cellulose acetate.

1,895,352. AIR DEFLECTOR. EUNICE STRONG, Stockton, Calif. Filed Jan. 2, 1931. Serial No. 506,217. 1 Claim. (Cl. 98—99.)

An air deflector for a window comprising a pair of laterally slidable plates, one of said plates being flanged longitudinally of its upper and lower edges to provide guide grooves, and being provided adjacent each groove with a longitudinally extending rib, the other plate being slidable in said guide grooves and having its upper and lower edges respectively folded upon themselves for frictional engagement with the said ribs, and a flanged corner plate hinged to the outer end of each slidable plate having means for attachment to a window frame.



1,895,353. ROTARY ENGINE. ERWIN STURM, Stuttgart-Botnang, Germany. Filed Jan. 20, 1930, Serial No. 422,123, and in Germany Dec. 18, 1929. 2 Claims. (Cl. 103—160.)



1. An engine adapted to be employed as liquid pump or as liquid motor having pistons reciprocatable in cylindrical bores arranged tangentially to the direction of rotation, the movement of said pistons being effected by the relative movement of two mutually eccentric elements, one of said elements carrying the cylinder and the other the piston, comprising in combination with the pistons and the cylinder body two discs forming the piston carriers provided with slots serving as guides, and shoes on two opposite sides in the middle portion of said piston adapted to engage in the slots in said discs and positively connecting said cylinder body to said piston carriers so that a relative movement of the parts can only take place when they are rotating at the same speed.

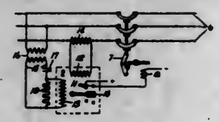
1,895,354. RESINTERED HARD METAL COMPOSITION. GEORGE F. TAYLOR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 23, 1929. Serial No. 401,977. 9 Claims. (Cl. 75—1.)

9. The method of forming a hard metal composition which comprises placing in a mold pieces of a sintered composition consisting largely of tungsten carbide and containing appreciable but minor quantities of a metal of the iron group, applying pressure thereto and simultaneously heating said composition to its sintering temperature to thereby form said composition into a hard, dense mass.

1,895,355. PROTECTIVE APPARATUS. OLIVER C. TRAVER, Drexel Hill, Pa., assignor to General Electric Company, a Corporation of New York. Filed Apr. 28, 1930. Serial No. 447,810. 11 Claims. (Cl. 175—294.)

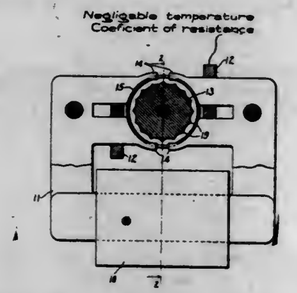
1. In combination with an electroresponsive device having an operating winding a substantially resonant

energizing circuit including said winding, and means for impairing the resonance of said circuit when the voltage



thereof differs from a predetermined value including a resistance whose ohmic value decreases with increase of voltage.

1,895,356. ALTERNATING CURRENT MOTOR. HENRY E. WARREN, Ashland, Mass., assignor to Warren Telechron Company, Ashland, Mass., a Corporation of Maine. Filed Sept. 17, 1930. Serial No. 482,557. 25 Claims. (Cl. 172—278.)



1. A stator for alternating current motors comprising a field magnet having salient pole pieces, an energizing winding for such magnet, shading coils on portions of said pole pieces whereby a distributed, rotating magnetic field component is produced between such pole pieces, and magnetic extensions on the shaded and unshaded portions of said pole pieces for producing concentrated pulsating flux components between the extensions on shaded and unshaded portions of different pole pieces.

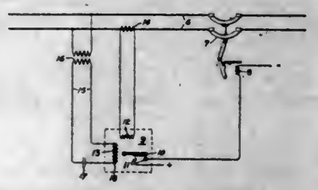
6. A synchronous motor comprising a single phase shaded pole stator element and a rotor element having magnetic material shaped to give the rotor salient pole effects, and shading coils on the stator element having a temperature coefficient of resistance materially less than that of copper.

7. An alternating current motor comprising cooperating stator and rotor elements, the field element having means thereon for producing a flux through the rotor having a distributed, rotating field component and concentrated pulsating flux components confined to limited portions of the air gap space between stator and rotor, the rotor element having means thereon for developing induction motor torque due to the action of the rotating magnetic field component and a damping torque due to the pulsating field component, the first mentioned torque decreasing with speed and the last mentioned torque increasing with speed, said two torques being proportioned to give the motor constant speed characteristics.

20. A rotor for a self starting synchronous motor comprising a hollow cylindrical magnetic element having a plurality of evenly spaced teeth cut in its outer periphery forming salient magnetic poles, said magnetic element being completely incased in nonmagnetic conducting material.

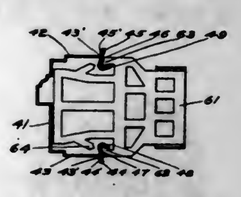
24. In combination with a non-self-starting synchronous motor, means for assisting the motor to fall into synchronism after being started comprising a substantially horizontal shaft normally driven by the motor at a slower speed than the synchronous speed of the motor, and an unbalanced weight mounted on and rotated by said shaft.

1,895,357. PROTECTIVE APPARATUS. ALBERT R. VAN C. WARRINGTON, Drexel Hill, Pa., assignor to General Electric Company, a Corporation of New York. Filed Apr. 28, 1930. Serial No. 447,934. 14 Claims. (Cl. 175—294.)



1. In combination with an electroresponsive device having an operating winding, a substantially resonant energizing circuit for said winding, and means for normally impairing the resonance of said circuit operative to restore the resonant condition when the voltage of the circuit is below a predetermined value.

1,895,358. DOOR FRAME CONSTRUCTION. AXEL G. W. WEDBERG, Chicago, Ill. Filed Feb. 6, 1928. Serial No. 252,164. 7 Claims. (Cl. 72—98.)



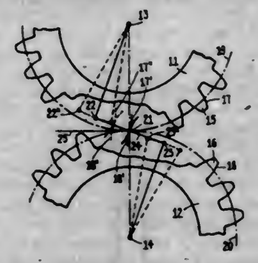
1. In a sheet metal trim, a member of substantially channel cross-section having its side portions folded forming outwardly projecting flanges, the rearward arms of said flanges extending inwardly beyond the forward arms and having their inner edge portions bent into substantially hook-shape in transverse section, an anchor having inwardly projecting angularly placed prongs adapted to cooperate with the hooked portion of said arms to hold the trim firmly in position, said anchor having an extension adapted to be enclosed by said trim.

1,895,359. PENCIL SHARPENER. WILLIAM H. WHITFORD, Tulsa, Okla. Filed Jan. 18, 1932. Serial No. 587,331. 1 Claim. (Cl. 120—86.)



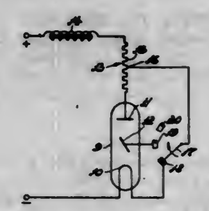
A pencil sharpener that can be carried by a pencil and comprising a housing, a pair of shafts arranged in said housing, a disk rotatably receiving one of the ends of said shafts, a rack member secured to one end of said housing and provided with a bore, means passing through said bore and secured to said disk, a knob secured to the last mentioned means for rotating said disk to rotate the shafts about the axis of the disk, sprocket gears secured to said shafts and meshing with the teeth of the rack member to rotate each of the shafts about its axis, a block having recesses arranged therein to receive the opposite ends of said shafts, strips secured to the block and disk respectively, a spring member secured to said strips and including arms having free ends formed to cooperate with the recesses to provide bearings for the said opposite ends of the shafts, sharpening rollers secured to said shafts and disposed for cooperation, and means for directing lead to the sharpening rollers.

1,895,360. GEARING. ERNEST WILDHABER, Brooklyn, N. Y. Filed Feb. 17, 1930. Serial No. 429,092. 15 Claims. (Cl. 74—41.)



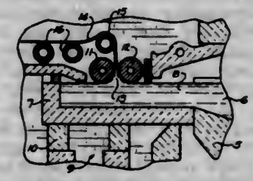
1. A gear shaped article, containing a plurality of equal tooth like projections, the side profiles of said projections being wholly convex and having a minimum radius of curvature at a point intermediate the ends of a profile, said profile being substantially symmetrical with respect to the profile normal at said point.

1,895,361. ELECTRIC DISCHARGE TUBE ENERGIZING CIRCUIT. GUSTAV ZECHER and CORNELIS HENRI GERARD MELLEMA, Eindhoven, Netherlands, assignors, by mesne assignments, to General Electric Company, a Corporation of New York. Filed July 30, 1928, Serial No. 296,202, and in the Netherlands and Germany Sept. 2, 1927. 3 Claims. (Cl. 250—27.)



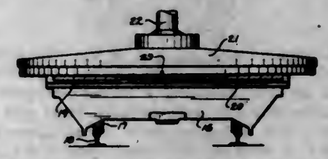
1. A circuit arrangement for operating from a source of direct current a gaseous electric discharge tube provided with an anode and an incandescent cathode, comprising a choke coil serially connected in the anode circuit of said tube, and a heating circuit for said cathode including circuit interrupting means, said heating circuit being in parallel with a portion of said anode circuit including the discharge path of said tube and excluding said choke coil.

1,895,362. APPARATUS FOR THE MANUFACTURING OF PLATE GLASS BLANKS AND THE ARTICLE PRODUCED THEREBY. WILLIAM H. ALLISON, Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 7, 1931. Serial No. 549,284. 2 Claims. (Cl. 49—33.)



1. In apparatus for forming plate glass blanks, a receptacle containing a mass of molten glass, a pair of rotatable forming rolls positioned above said mass and adapted to draw a relatively heavy body of glass upwardly therefrom and reduce it to sheet form, said rolls tapering from their centers toward their opposite ends to form a sheet which is relatively thinner at its center than at the sides thereof, a roll for deflecting the sheet from the vertical into the horizontal plane, and a plurality of horizontally arranged rolls for supporting and conveying the sheet horizontally, said bending roll and conveying rolls also tapering from their centers toward their opposite ends so as to prevent sagging of the thinner central portion of the sheet relative to the thicker side portions thereof until the said sheet has become sufficiently set to support its own weight.

1,895,363. PROCESS FOR PRODUCING PLATE GLASS. WILLIAM H. ALLISON, Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 7, 1931. Serial No. 549,285. 2 Claims. (Cl. 49—87.)

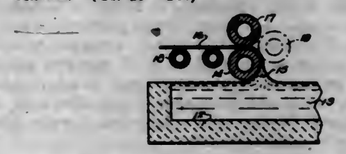


1. The process of producing plate glass, which consists in first forming a plate glass blank comprising a sheet of glass, the surface thereof which is to be ground and polished being concave, mounting the sheet horizontally upon a support with the concave surface uppermost, then passing the said sheet forwardly in a definite substantially horizontal path, in subjecting the upper surface of said sheet during the forward travel thereof to a grinding action to remove the depression therein and render it plane or flat by bringing into engagement therewith successively a plurality of revolving grinding disc runners which operate upon the glass sheet across its entire width, and in then polishing the ground surface.

1,895,364. METHOD FOR SALVAGING AND RESINTERING CEMENTED CARBIDES. STANLEY P. BILLINGS, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Oct. 2, 1931. Serial No. 566,592. 6 Claims. (Cl. 75—1.)

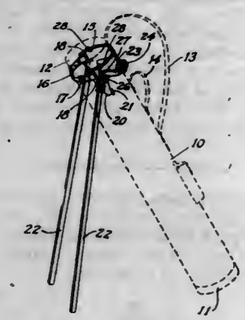
1. The method of salvaging a sintered hard metal composition consisting mainly of a refractory carbide which comprises heating large pieces of said composition in a mold at a temperature above 1000° C. while pressure is simultaneously applied thereto.

1,895,365. METHOD AND APPARATUS FOR PRODUCING SHEET GLASS. JAMES C. BLAIR, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Original application filed Feb. 6, 1925, Serial No. 7,251. Divided and this application filed Jan. 8, 1930. Serial No. 419,271. 14 Claims. (Cl. 49—33.)



1. In sheet glass apparatus, a receptacle containing a bath of molten glass, and a plurality of rotatable imperforate members arranged above said bath for drawing an unformed mass or body of molten glass upwardly from the molten bath which is unconfined in the region of draw and reducing it to a sheet of final predetermined and uniform thickness, one of said rotatable members being positioned substantially at the surface of said molten bath.

1,895,366. ATTACHMENT FOR GOLF BAGS OR THE LIKE. CLAUDE A. BEARD, Chicago, Ill. Filed Apr. 23, 1930. Serial No. 446,662. 1 Claim. (Cl. 150—1.5.)

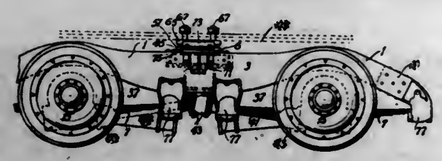


An attachment for a golf bag or the like including a substantially semi-circular yoke having depending wing portions, a member including a buckle structure for detachably connecting said yoke to the neck of said golf bag or the like, a pair of leg members having upper end portions curved to embrace said yoke, means for pivotally connecting said leg members to said yolk spring means for urging said leg members to pivot in one direction, means provided by said wing portions to limit movement of said leg members in said one direction, and thumb engageable means for connecting the said end portions of the leg members together and for moving said leg members in an opposite direction when thumb pressure is applied to said last mentioned means.

1,895,367. ADHESIVE PLASTIC COMPOSITION. ROBERT ADOLPH BERNHARD, Brighton, N. Y. Filed May 9, 1930. Serial No. 451,195. 3 Claims. (Cl. 87—17.)

1. A plastic adhesive composition adapted for fastening bandages, surgical dressings and the like, comprising 5 to 40% of cellulose ester of the viscosity between 5 sec. and 480 sec., ½ to 10% of a mixture in any proportion of gum benzoin and camphor, 0 to 20% of zinc oxide, 40 to 80% of acetone, 0 to 40% of ethyl alcohol.

1,895,368. TRUCK. JOHN ROBERT BLACKHALL, Joliet, Ill. Filed May 23, 1927. Serial No. 193,672. 9 Claims. (Cl. 105—119.)



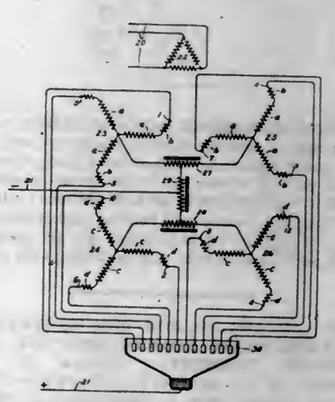
1. The railway truck comprising a frame, a plurality of driving axles, spring supporting means joining the axles and said frame, driving motors diagonally arranged on said frame in the region of opposite ends of opposite axles, driving means joining each of said motors in driving arrangement with the alternate regions of opposite ends of opposite axles, said driving means including a worm and wheel drive on each axle.

1,895,369. GOLF CLUB. FRANCIS JOHN BLATZ, New York, N. Y. Filed May 2, 1931. Serial No. 534,674. 3 Claims. (Cl. 273—81.)

1. A golf club including a handle and a club section formed independent of the handle, part of said club section telescoping into part of said handle, a spring carried by said handle for urging said club section away from the handle, a pivotally mounted catch pivotally connected with said handle, said catch having a hook portion and a beveled end and a link fixedly connected with said club section and positioned to interlock with said catch when the parts are in operative position, said beveled end acting to guide the catch over said link when the parts are being assembled.



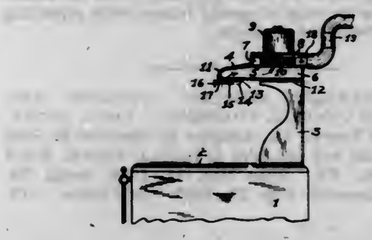
1,895,370. ELECTRIC TRANSLATING SYSTEM. ARAM BOYAJIAN, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed June 17, 1932. Serial No. 617,821. 20 Claims. (Cl. 175—363.)



1. An electric translating system comprising a pair of electric translating circuits, one of said circuits being a polyphase alternating current circuit, transforming means interconnecting said circuits and including primary and secondary winding systems, one of said winding systems comprising multiple polyphase networks operating in parallel and the other comprising a single polyphase network connected to said polyphase circuit, each phase of certain of said multiple networks comprising winding elements inductively related to a plurality of the phases of said single network, said winding elements being displaced in phase by an angle different than that between any component elements of the phases of certain other of said multiple networks, and the leakage reactances of the component elements of each phase of said multiple networks being so proportioned that, when said networks are carrying current in proportion to their ratings, their resultant counter-electromotive forces will have the same vectroial relation to their respective terminal voltages.

12. An electric translating system comprising a pair of electric translating circuits, one of said circuits being a three-phase alternating current circuit, transforming means interconnecting said circuits and including primary and secondary winding systems, one of said winding systems comprising a single three-phase network connected to said three-phase circuit, and the other comprising four three-phase zigzag networks operating in parallel and comprising long and short coils, the long and short coils of each phase of said zigzag networks being so proportioned as to give the equivalent of twelve phase operation and two of said networks being zigzagged oppositely to the other two, the long coils and the short coils of the same phase relation being substantially completely coupled, inductive means interconnecting said four networks to force them to operate approximately as three-phase circuits, and the leakage reactance of the long coils being substantially twice that of the short coils.

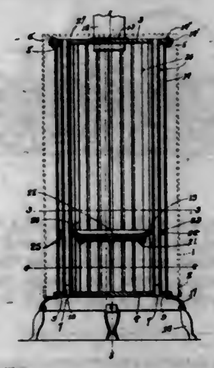
1,895,371. VENTILATING UNIT FOR STOVES. ANTHONY J. BRIEGEL, Pittsburgh, Pa. Filed Jan. 21, 1932. Serial No. 587,898. 1 Claim. (Cl. 230—114.)



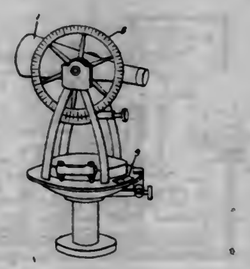
In combination, a stove ventilator comprising a hollow body portion, a horizontally extending partition wall in said body portion and dividing the interior of the latter into a passage chamber and a fan chamber, a suction fan mounted in said fan chamber, a motor for driving said fan and mounted on the top of said body portion, said partition wall having a passage opening disposed directly beneath said fan, the bottom of said passage chamber having an air inlet slot at the front thereof, a pair of guides carried by said bottom and disposed at respective ends of said air inlet slot, a plate shiftably mounted in said pair of guides and provided with a depending lip, a depending lip carried by said body portion, and an adjusting screw engaging said depending lips and operable for shifting said plate to regulate said air inlet passage, substantially as described and for the purpose set forth.

1,895,372. HEATER. MICHAEL P. BROUN, Gettysburg, S. Dak. Filed Mar. 8, 1932. Serial No. 597,557. 6 Claims. (Cl. 126—72.)

1. In a heater, a bottom member formed with openings and upstanding tubular nipples registering with said openings, a grate structure formed with openings aligning with said nipples and arranged in superposed relation with respect to said bottom member, a top member formed with openings aligning with the openings in said grate structure and arranged in superposed relation with respect to said grate structure, a set of parallel heating flues seated at their upper ends in said top member, extending through the openings in the latter and through the opening in said grate structure, extending to said bottom member and encompassing and seated on said nipples, a tubular body part interposed between said members, supporting said grate structure and surrounding said flange, that portion of the heater below the grate structure providing an ash pit, that part of the heater above said grate structure providing a fire pot, said body part having a door for the ash pit and a door for the fire pot, the end flues of said set of flues arranged at opposite sides of the front of said grate structure and members, and an upstanding fitting positioned between the end flues of said set, supported upon said grate structure and arranged below the top of the door for the fire pot.



1,895,373. APPARATUS FOR MEASURING MAGNETIC FIELDS. ERNST BRÜCHE, Danzig, Free City of Danzig, assignor to General Electric Company, a Corporation of New York. Filed Dec. 24, 1930, Serial No. 504,619, and in Germany Mar. 8, 1930. 5 Claims. (Cl. 175—183.)

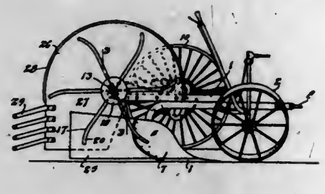


1. Apparatus for measuring the strength of a magnetic field comprising a cathode ray tube having means for indicating the non-deflected position of the ray and calibrated means for holding the tube in various angular positions.

1,895,374. PENETRATING OIL COMPOSITION. ARTHUR W. BURWELL, Niagara Falls, N. Y., assignor to Alox Chemical Corporation, New York, N. Y., a Corporation of New York. Filed May 18, 1931. Serial No. 538,396. 6 Claims. (Cl. 87—9.)

1. A penetrating oil composition comprising in major proportion a light low-viscosity petroleum distillate and a relatively small but effective amount of a normally liquid acidic mixture insoluble in water but freely soluble in said distillate and consisting essentially of alifatic saturated carboxylic acids, of mineral origin, having a range of carbon atoms in the molecule of from 4 to 12 and an average molecular weight of from 160 to 165.

1,895,375. WEEDING ATTACHMENT TO PLOWS. WILLIAM T. CANTLON, Cartwright, Manitoba, Canada. Filed Feb. 16, 1931, Serial No. 515,994, and in Canada July 28, 1930. 6 Claims. (Cl. 97—40.)

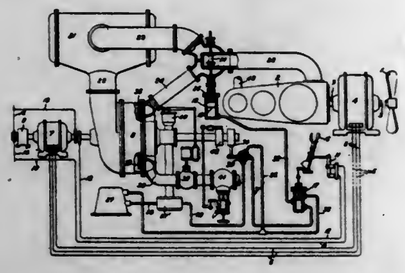


1. The combination with a plough, of a suitably mounted rotary pronged weeder positioned and driven so that the prongs will sweep rearwardly across the path of travel of the soil discharging from the plough mould board and deflecting prongs located rearwardly of the weeder.

1,895,376. ELECTRIC CAPACITOR. FRANK M. CLARK, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 1, 1930. Serial No. 425,357. 9 Claims. (Cl. 175—41.)

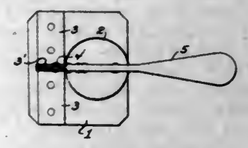
1. An electric capacitor comprising electrode plates, and kraft paper interposed between said plates, said paper being impregnated with tricresyl phosphate which has a resistivity of at least about 1 x 10^9 ohms per centimeter cube.

1,895,377. SHIP PROPULSION SYSTEM. ROBERT H. COLLINGHAM, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Oct. 24, 1929, Serial No. 402,223, and in Great Britain Nov. 22, 1928. 12 Claims. (Cl. 172—8.)



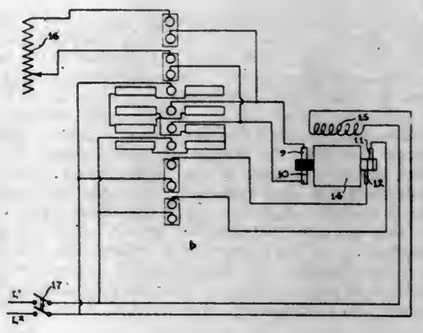
1. In a power system including a main prime mover and a second prime mover which normally receives and is driven by exhaust from said main prime mover, means for connecting both of said prime movers to a common load device, and a generator adapted to be driven by said second prime mover at a substantially constant speed for supplying power to auxiliaries, the method of operation which includes the steps of disconnecting said second prime mover from said load device, diverting the exhaust of said main prime mover from said second prime mover to a region of low pressure, admitting motive fluid from another source to said second prime mover in sufficient quantity to maintain the speed of said prime mover and its connected generator, controlling the speed of said main prime mover in order to control said load device, and reestablishing the steam and load connection between said main prime mover and said second prime mover, and interrupting the direct supply of motive fluid to said second prime mover when the speed of said main prime mover is again substantially normal.

1,895,378. CAN PUNCH. JOHN M. DE VILBISS, Modesto, Calif. Filed Jan. 5, 1932. Serial No. 584,853. 1 Claim. (Cl. 164—119.)



A can puncturing device constructed wholly of metal to include a flat base, straps arranged in lapping relation and provided with offset ends which are secured to the base and affording a standard, a rolled handle having its sides and one of its ends pivotally secured to the standard, a plunger formed from a sheet of metal which is centrally bent upon itself to provide spaced sides, and which plunger is arranged for slidable movement on the standard, anti-friction means between the sides of the plunger to contact with one edge of the standard, an arched link having one end pivoted to the handle and its other end pivoted between the sides of the plunger adjacent said anti-friction means, a plate fixed between the sides of the plunger having one of its edges in contact with the standard and having its ends integrally formed with depending pointed and sharpened elements.

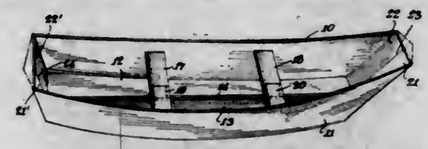
1,895,379. DYNAMO ELECTRIC MACHINE AND SYSTEM OF CONTROL THEREFOR. VICTOR DUDICK, North Belle Vernon, Pa., assignor of one-third to John E. Coughenour and one-third to Louis J. Vezzani, North Belle Vernon, Pa. Filed Mar. 11, 1931, Serial No. 521,788. Renewed July 18, 1932. 10 Claims. (Cl. 172—179.)



1. In a control system, the combination with an electric motor, a supply circuit therefor, a controller for determining the direction of motor rotation, said motor having a constantly energized field winding and having on its rotor a separate polarizing braking winding independent of the motor winding, and means on said controller for connecting said braking winding to the supply circuit when said controller is in off position.

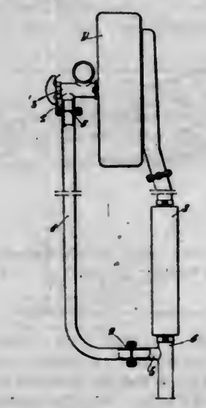
1,895,380. FOLDABLE OR COLLAPSIBLE BOAT. WILLIAM E. ELLING, Long Island City, N. Y. Filed Jan. 14, 1931. Serial No. 508,654. 8 Claims. (Cl. 9—2.)

6. In a collapsible, portable boat of the class described, the combination of a straight connection of the bottom halves to the keel at the center line of the boat, and a curved hinge connection between the bottom halves and the sides of the boat, with an action limit of 90° of the hinges between bottom halves and sides, forcing the last named parts to form a true W at mid-ship section for



keeping said parts horizontal and vertical respectively at the ends of the boat, two end plates hingedly connected to each other and to the sides of the boat.

1,895,381. DEVICE FOR FEEDING EXPLOSION ENGINES HAVING AN OVER-HIGH PRESSURE OF COMPRESSION. LOUIS MARIE FRANÇOIS GENETY, Paris, France. Filed Dec. 27, 1929, Serial No. 416,963, and in France Jan. 5, 1929. 2 Claims. (Cl. 123—119.)



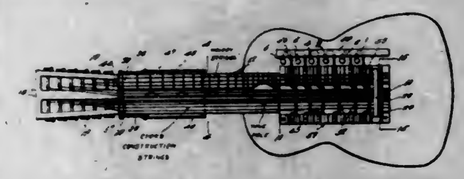
1. The combination with an internal combustion engine and its exhaust pipe, of a conduit affording communication between the exhaust pipe and the air intake pipe of the engine carburetor, said conduit having diaphragms mounted therein and located respectively at points adjacent the exhaust pipe and the air intake pipe, said diaphragms having apertures therein.

1,895,382. DIRECT DYEING WATER SOLUBLE STABLE DERIVATIVES OF VAT DYESTUFFS AND PROCESS OF MAKING THE SAME. JOHN EDMUND GUY HARRIS, Carlisle, England, assignor to Scottish Dyes, Limited, Grangemouth, Scotland. Filed Oct. 19, 1925, Serial No. 63,548, and in Great Britain Oct. 16, 1924. 19 Claims. (Cl. 260—1.)

1. A process for the preparation of dye materials which comprises treating vat dyestuffs selected from the anthraquinone, indigo, indigoid, halogenated indigo, thio-indigo, pyranthrone, flavanthrone and dibenzanthrone series with an alkyl sulphuric acid halide in the presence of a metal selected from aluminium, zinc, cadmium, iron, cobalt, tin, antimony, copper and a liquid organic tertiary base.

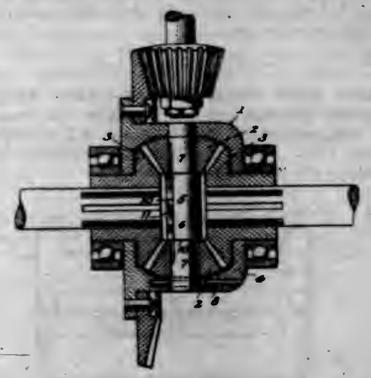
1,895,383. STRINGED MUSICAL INSTRUMENT. ROY M. SULLIVAN, Atlanta, Ga., assignor of one-half to Horace W. Sullivan, Atlanta, Ga. Filed May 4, 1932. Serial No. 609,202. 7 Claims. (Cl. 84—263.)

3. A musical instrument of the class described comprising a guitar including a body having a neck and a head at one end of said neck, string tuning devices carried by said head, said neck including a fingerboard and said fingerboard having a limited portion fretted and the remaining portion smooth and without frets, a group of three melody strings overlying the fretted portion of the fingerboard and anchored at one end on the body and at the opposite end to the tuning devices and adapted to be played with a Hawaiian guitar steel slide for producing the desired melody, a plurality of chord construc-



tion strings overlying the smooth fretless portion of the fingerboard, the last-named strings being anchored at one end on the body and attached at their opposite ends to said tuning devices, and finger depressed mechanism for said chord construction strings supported on the body and including a plurality of keys operable by the fingers of the right hand, and crank-like frets underlying and co-operable with said chord construction strings.

1,895,384. AUTOMOBILE GEAR PIN. JOHN LORIMOR, Imogene, Iowa. Filed May 9, 1932. Serial No. 610,191. 1 Claim. (Cl. 74—99.)

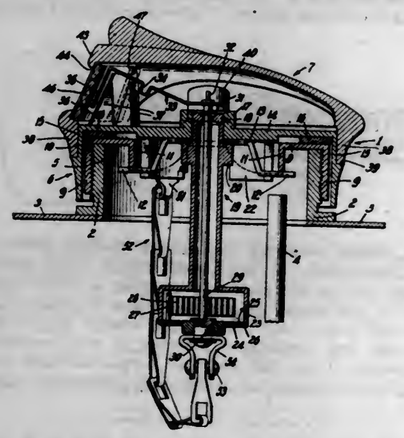


In combination with a differential having a ring gear mounting with axle pinions and spider gears located therein, a pin having end and intermediate portions with said end portions secured to the mounting and with the spider gears journalled thereon and abutting the intermediate portion, said intermediate portion having flattened portions to catch lubricant, said end portions having channels communicative with the flattened portions to receive lubricant therefrom and to direct the lubricant to the hubs of the spider gears and about the end portions.

1,895,385. MOTOR HEAT INDICATOR. GEORGE H. TOWNSEND, Greenwich, Conn., and ROY T. HURLEY, Dobbs Ferry, N. Y., assignors, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Feb. 18, 1929. Serial No. 340,861. 21 Claims. (Cl. 73—118.)

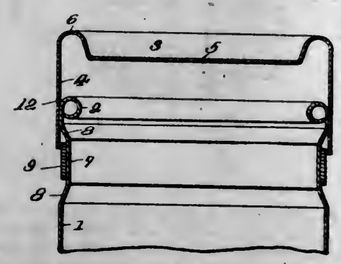
1. In a combined radiator cap and motor heat indicating instrument, in combination, an inner shell, a downwardly extending stem mounted centrally upon said shell, a temperature responsive element in the lower end of said stem, a vertical shaft having bearing engagement with the stem at the upper and lower ends thereof, and

connected for rotation by the temperature responsive element, a forwardly inclined pointer carried by the shaft, an upstanding scale plate carried by the shell, said pointer extending across an edge of the scale plate and having its outer end bent sharply across the face there-



of to travel across the face of the scale plate in proximity thereto, an outer shell cooperating with the inner shell to form a housing, for the pointer and the scale plate, and a window carried by the outer shell in alignment with the scale plate.

1,895,386. EASY OPENING CONTAINER. CHARLES J. AULBACH, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 9, 1929. Serial No. 384,714. 1 Claim. (Cl. 220—53.)



A container comprising a body portion, a closure having a depending flange for engaging the body portion, said depending flange being scored to form a rip strip, a plastic sealing gasket disposed between the wall of the container and the rip strip in the flange of the closure, said rip strip and body wall being deformed so as to retain the closure on the container body and compress the sealing gasket for sealing the container, whereby when said rip strip is removed to release the closure, a portion of the sealing gasket is released and exposed so that said portion can be grasped for removing the gasket, thereby breaking the seal of the container.

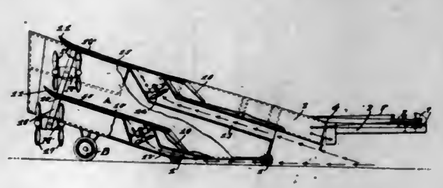
1,895,387. LOGGING BOLSTER. HOLMAN H. LINN, Morris, N. Y., assignor to The Linn Manufacturing Corporation, Morris, N. Y., a Corporation of New York. Filed Feb. 20, 1930. Serial No. 429,992. 7 Claims. (Cl. 280—145.)

1. A vehicle body including a bolster, a pocket including side walls formed at the end of the bolster, a stake including a pivot section and a body section, means for pivotally connecting the sections, and means for pivotally mounting the pivot section of the stake in said



pocket, the side walls of the pocket preventing relative movement of the body and pivot sections of the stake when the stake is in operative position.

1,895,388. AEROPLANE. TANASE GHEORGHE, Baltimore, Md. Filed May 31, 1930. Serial No. 458,092. 9 Claims. (Cl. 244—14.)



4. A wing for use with aeroplanes of the class described, said wing having its front and end edges curved slightly upward.

1,895,389. HEEL PROTECTING CAP. MARGARETE THEUSNER, geb. RECKTENWALD, Berlin-Steglitz, Germany. Filed Oct. 29, 1930, Serial No. 492,008, and in Germany Dec. 17, 1929. 1 Claim. (Cl. 36—55.)

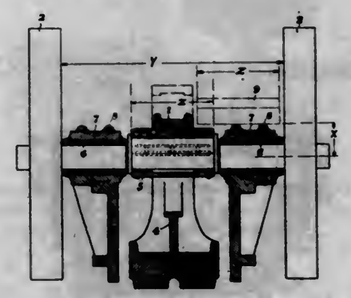


A heel protecting cap adapted to be used loosely within the shoe comprising a substantially straight bottom plate of celluloid, a lateral part made separately from the bottom plate and conforming to the shape of the heel of the wearer and also formed of celluloid, and a connecting member of flexible material cemented to the bottom plate and to the lateral part as the only means for connecting those parts.

1,895,390. ECCENTRIC OR DRAW ROD FOR STONE CRUSHERS. FRIEDRICH HELMRICH, Magdeburg, Germany, assignor to the Firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Filed Jan. 18, 1931, Serial No. 508,502, and in Germany Feb. 2, 1930. 5 Claims. (Cl. 74—17.)

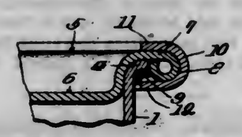
1. In the combination of a stone crusher, a drive shaft, an eccentric on said drive shaft, lateral bearings for said shaft on both sides of said eccentric, a flywheel mounted on said shaft beyond one of said lateral bearings, a bearing bush composed of two semi-cylindrical halves disposed upon said eccentric, a draw rod having a head integral therewith fixed to the bearing bush, a recess in said head immediately below the bearing bush

at least as long as the distance between the axis of one of the lateral bearings and the upper extremity thereof, said head being shorter in axial length than said bearing



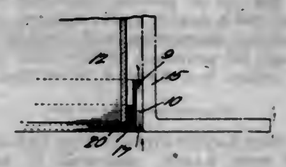
bush and centrally disposed upon said bush, having the edge thereof nearer the flywheel spaced from said flywheel a distance greater than the axial length of said bearing bush.

1,895,391. METAL CONTAINER. WILLIAM F. PUNTE, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 2, 1931. Serial No. 527,304. 1 Claim. (Cl. 220—61.)



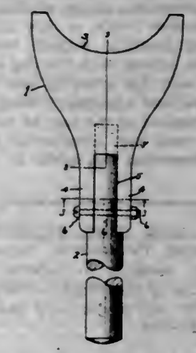
A metal container comprising a body portion having a projecting flange at its upper end, a cover having a depressed central portion fitting within the container body and a portion projecting beyond the flange of the container body, the outer edge of which is curled downwardly and inwardly to form a bead disposed beyond the edge of the flange on the body and of greater thickness than the flange, a sealing gasket beneath the flange on the can body for sealing the space between the edge of the flange and the bead on the cover and a retaining strip overlying the cover and extending beneath the flange on the can body, a portion of the retaining strip beneath the flange and inside of the bead being deflected upwardly for pressing the sealing material into sealing contact with the flange and bead and for holding said strip in place on the container until forcibly removed therefrom.

1,895,392. VENTILATING STRIP FOR HATS AND THE LIKE. MAX POPPER, New York, N. Y. Filed June 29, 1929. Serial No. 374,802. 4 Claims. (Cl. 2—182.)



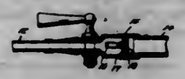
1. A ventilating strip for hats and the like, having a bias cut fabric backing and a rubber face, the rubber face being provided with integral outstanding ribs, spaced apart to provide ventilating channels.

1,895,393. SHUFFLE BOARD CUE. CHARLES B. ISBELL, Elkhart, Ind., assignor to Shuffleboard Equipment Co., St. Petersburg, Fla., a Corporation of Florida. Filed May 27, 1930. Serial No. 456,201. 3 Claims. (Cl. 273—129.)



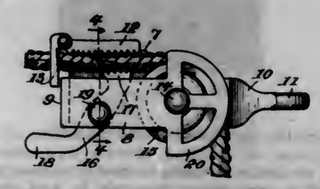
3. A shuffle board cue comprising a head formed at one end with a recess to cooperate with a playing disk, the head being of reduced width beyond the recess to provide a shank including spaced parallel arms having inner surfaces at right angles to the plane of the head, the body of the head immediately beyond the space between the arms being formed with a longitudinal recess, and a handle having opposed squared surfaces to fit between and bear substantially throughout the squared surfaces of the inner sides of the arms, and an end extension to fit within said recess, the handle presenting shoulders at right angles to the plane of the head to bear squarely against the ends of the arms and shoulders at right angles to the first mentioned shoulders to bear against the end of the space between the arms above and below the recess.

1,895,394. GAS ESCAPE WARNING DEVICE. BOYCE TURNER MORRISON, Beaumont, Tex. Filed Sept. 6, 1932. Serial No. 631,915. 5 Claims. (Cl. 116—70.)



1. A gas escape warning device comprising a gas supply line, an L connection in said supply line, a whistle, and means for mounting said whistle in said L connection whereby the entire gas supply passes through said whistle and operates said whistle when the pressure on one side thereof is substantially in excess of the pressure on the other side thereof, said mounting means comprising an internal apertured flange in said L connection.

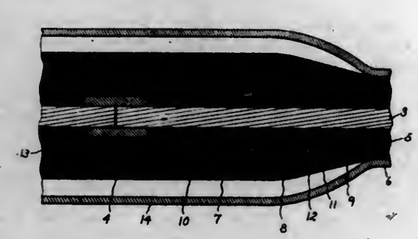
1,895,395. ROPE HOLDER. JOHN J. OLSEN, Cleveland, Ohio. Filed July 29, 1932. Serial No. 626,119. 3 Claims. (Cl. 24—134.)



3. A gripping holder for a line, comprising a housing including a relatively wide side wall and a relatively narrow side wall, a top wall formed with the relatively

wide side wall and being provided with a serrated inner surface, said relatively narrow side wall being spaced from the top wall to provide a space for the passage of the line, a grooved pulley journaled between the side walls, a line guard formed with the relatively narrow side wall and following the shape of the pulley, a rear wall connecting the side walls, a line guide secured to the top wall, a dog pivotally secured between the side walls, a serrated jaw formed with the dog and cooperating with the serrated wall for gripping the line, a handle formed with the jaw and engageable with the rear wall to limit pivotal movement of the dog, an extension formed with the wide side wall and terminating into an eye to receive means for fastening the holder to a suitable supporting means.

1,895,396. JOINT FOR HIGH TENSION ELECTRIC CABLES. WILHELM PFANNKUCH, Copenick-Wendenschloss, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 14, 1929, Serial No. 399,435, and in Germany Mar. 15, 1929. 3 Claims. (Cl. 173—268.)



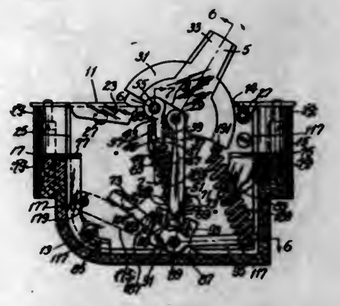
1. In a cable joint, the combination of a pair of conductors, insulation on each of the conductors which is arranged in concentric layers, said insulation being cut away toward the adjacent end of the conductors by a series of steps, each of which is equal in depth to a number of layers of insulation, a connector for uniting the conductors, a wrapping of insulation also arranged in concentric layers and covering the joint between the conductor insulations, and short circuiting devices located between the two bodies of insulation where their edges are in abutting relation.

1,895,397. NEGATIVE ELECTRODE FOR ELECTRIC ACCUMULATORS. ADOLFO POUCHAIN, Turin, Italy. Filed July 8, 1931, Serial No. 549,504, and in Italy July 16, 1930. 11 Claims. (Cl. 136—31.)



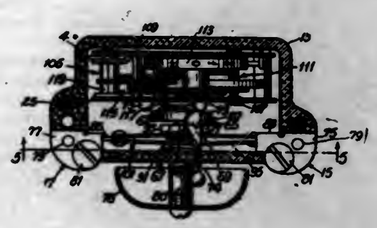
1. A negative electrode for the deposition of zinc during the charge in zinc-lead electric accumulators, comprising a conducting frame, a circuit connector on said frame, and a wire gauze mounted in said frame, said wire gauze having a portion of its edge connected with said frame and being separated from it in its portion adjacent to said connector.

1,895,898. SWITCH. MARCUS H. RHODES, New Haven, Conn., assignor to M. H. Rhodes, Inc., New Haven, Conn., a Corporation of Delaware. Filed Feb. 14, 1931. Serial No. 515,726. 6 Claims. (Cl. 200—39.)



1. An electric switch comprising a pair of terminals, a contactor bar adapted to rotate in and out of contact with said terminals, a control handle, a tension spring adapted to return said control handle to a normal position, a hammer saddle actuated by said control handle and actuating said contactor bar, said hammer saddle being adapted to rotate said contactor bar out of contact with said terminals when said control handle is returned to its normal position, a latch adapted to intercept said hammer saddle to prevent disconnecting of said contactor bar from said terminals, and a timing train adapted to remove said latch from operating position after a predetermined time interval has elapsed.

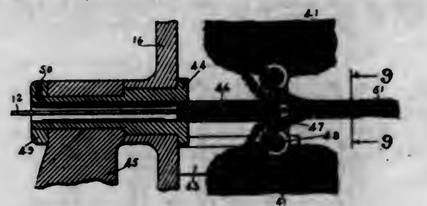
1,895,399. SIGNAL. MARCUS H. RHODES, New Haven, Conn., assignor to M. H. Rhodes, Inc., New Haven, Conn., a Corporation of Delaware. Filed Feb. 14, 1931. Serial No. 515,727. 5 Claims. (Cl. 116—155.)



1. A signal comprising a bell, a clapper adapted to strike said bell, a time delay means, a latch controlled by said time delay means adapted to prevent operation of said clapper to strike said bell until a predetermined time interval has elapsed, a lever adapted to throw said latch into and out of position regardless of said time delay means, and a control handle adapted, on movement in one direction, to position said clapper for striking said bell, and on movement in the other direction, to throw said clapper in a direction for striking said bell.

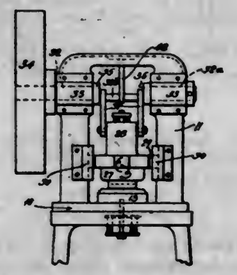
1,895,400. INSULATED CONDUCTOR AND METHOD OF MAKING THE SAME. BEAUFORD H. REEVES, New Haven, Conn., assignor to Rockbestos Products Corporation, New Haven, Conn. Filed Aug. 20, 1926. Serial No. 130,550. 10 Claims. (Cl. 173—264.)

1. The method of forming an insulating covering, which consists in wrapping a plurality of strands of untwisted fibrous slivers directly upon the uncovered surface of a core member, applying a binding compound to the sliver



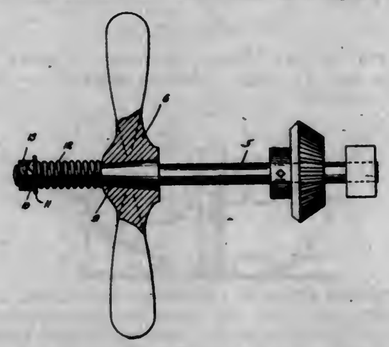
and smoothing the applied sliver by means of pressure to intermingle the fibres of said fibrous slivers, and thereby form a densely matted structure thereof.

1,895,401. MAGNETIC DIE. IRVING PERCY SIMONSEN and ARCH C. HUSTON, Los Angeles, Calif.; said Simonsen assignor to said Huston. Filed Aug. 4, 1930. Serial No. 473,112. 4 Claims. (Cl. 118—50.)
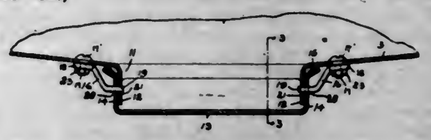


2. In a device of the character described, a lower die, a vertically movable head above said lower die, an upper magnetized die comprising a magnetized core carried on said head and movable toward and away from said lower die in the operation of shaping a paramagnetic work-piece placed therebetween, said magnetized die carrying the shaped piece with it after operation thereon, means providing a stationary abutment, and a relatively vertically movable member carried by said head and extending through said core, said member being adapted to engage said stationary abutment upon upward movement of the head, a predetermined distance and to disengage the shaped piece from said upper magnetized die.

1,895,402. PROPELLER AND SHAFT COUPLING. MELVILLE MARTIN SOBEY, Hudson, N. Y. Filed Sept. 1, 1931. Serial No. 560,630. 1 Claim. (Cl. 115—34.)



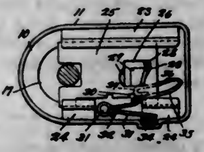
A propeller comprising a propeller shaft, an integral enlarged tapered portion formed on the shaft and disposed an appreciable distance from the free end of the shaft, said tapered portion merging into the shaft, a propeller member having a hub formed with a tapered opening, the ends of the hub normally lying flush with the ends of the tapered portion of the shaft, and a coiled spring on the shaft and engaging the outer end of the propeller, forcing the propeller into close engagement with the tapered portion of the shaft.

1,895,403. WRINGER. OSCAR A. SWANSON, Erie, Pa. Filed Apr. 4, 1932. Serial No. 603,054. 5 Claims. (Cl. 68—32.)



1. In a wringer, the combination of a frame comprising side stiles and a base, rolls in said frame, said base having a rounded bottom wall with a drain opening therein, a drip board having side flanges, upwardly extending rounded extensions on said side flanges, and means pivotally securing said board to said base beneath said drain opening and yieldingly pressing said rounded extensions on said flanges toward and against the rounded bottom wall of said base to cause vertical movement and locking of the drain board in different positions, when said drain board is tilted with respect to said frame to different positions of adjustment.

1,895,404. TRANSMISSION LOCK FOR AUTOMOBILES. WALTER R. TRETBAR, Govans, Md. Filed Aug. 21, 1931. Serial No. 558,510. 1 Claim. (Cl. 70—75.)



In a lock of the kind described, a key operated reciprocable bolt movable between locking and unlocking positions, a tumbler lever releasably holding the bolt selectively in locking and unlocking positions, an arm of resilient material extending from said lever and having a portion bent backwardly and lying in the path of a ward of the operating key whereby to form a U-shaped spring arm for releasing the lever as the key is turned, and a rebent end on the backwardly bent portion of the spring arm arranged to engage the main portion of said spring arm and limit the yielding thereof under influence of the key.

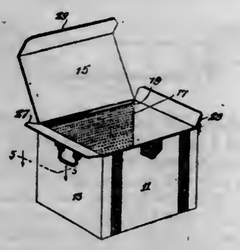
1,895,405. METHOD AND APPARATUS FOR REDUCING A SHEET TO THICKNESS. JAMES C. BLAIR, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 6, 1925. Serial No. 7,251. 13 Claims. (Cl. 49—33.)



13. In sheet glass apparatus, a receptacle containing a mass of molten glass, a roll arranged above the molten glass for drawing a sheet of glass upwardly therefrom and shaping it during its upward movement into a sheet of relatively greater thickness than that desired of the fin-

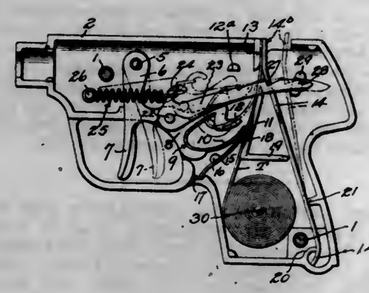
ished sheet, said sheet being deflected over said roll into a substantially horizontal plane, a second roll positioned opposite to and coacting with the first roll to effect an actual reduction in the thickness of the sheet during the deflecting thereof so that the sheet issuing from between the rolls is of less thickness than the preformed sheet passing thereto.

1,895,406. CLOTHING CONTAINER. IRVING BLECHMAN, New York, N. Y. Filed Oct. 24, 1931. Serial No. 570,931. 4 Claims. (Cl. 206—10.)



1. A collapsible container for clothing including side walls and top and bottom walls flexibly connected together at certain of their edges to permit the folding of said container into substantially flat arrangement, the said walls when in set up condition forming a chamber for the reception of clothing, one of said walls having a foraminous sheet secured thereto, an absorbent medium impregnated with a volatile insecticide material arranged between the said foraminous sheet and the said wall, the said sheet and the said absorbent medium being arranged in close relationship with the said wall, whereby the said container may be collapsed with all parts in substantially compact arrangement.

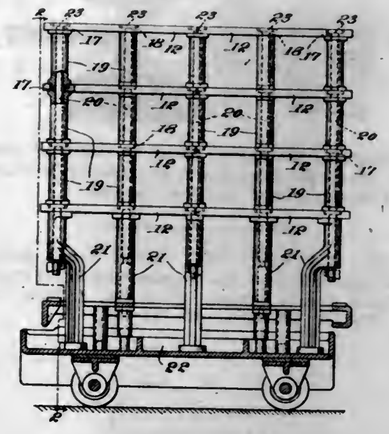
1,895,407. TOY PISTOL. JACOB E. BRUBAKER, Lancaster, Pa. Filed Feb. 1, 1932. Serial No. 590,232. 5 Claims. (Cl. 42—57.)



1. In a toy pistol the combination with an anvil, hammer means cooperating therewith, a tape guiding wall, a baffle associated with said wall for preventing incorrect leading of the tape, tape feeding means cooperating with said wall and spring controlled trigger operated means for controlling said tape feeding means and said hammer.

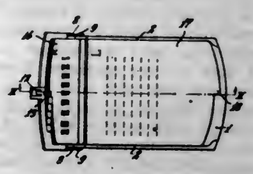
2. In a toy pistol having detonating means, the combination of said means with tape feeding means, said tape feeding means comprising a pivoted member having a trigger portion and an offset forked portion providing a socket, a tape guiding wall, a tape feeding spring fitted in said socket and cooperating with said wall, and a débris clearing foot carried by one of the arms of said forked portion and operating in advance of the tape feeding spring.

1,895,408. BAT. ALBERT G. DAVIS, Columbiana, Ohio, assignor to The Production Foundry Co., Columbiana, Ohio, a Corporation of Ohio. Filed June 8, 1932. Serial No. 616,138. 6 Claims. (Cl. 25—142.)



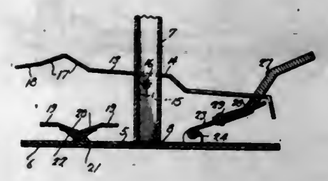
1. A kiln car bat comprising a grid-like body having a marginal pendent flange and transverse and longitudinal ribs on the under side.

1,895,409. REGISTER OR INDEX. RUDOLF DRUCKER, The Hague, Netherlands. Filed Apr. 28, 1932, Serial No. 608,048, and in the Netherlands Apr. 28, 1931. 7 Claims. (Cl. 40—104.)



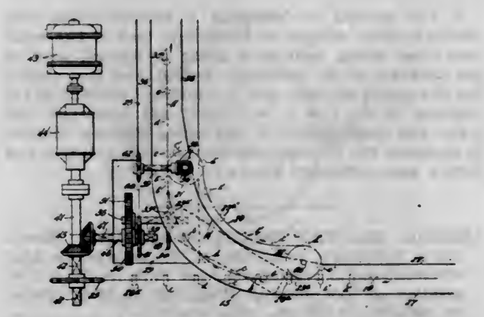
1. An index comprising a base, a plurality of index sheets swingably mounted on the base, a cover hingedly connected with the base, and means carried by the cover and selectively engageable with a sheet for swinging the selected sheet with the cover.

1,895,410. CLAMP. VINCENT DI FIGLIA, Brooklyn, N. Y. Filed Sept. 22, 1932. Serial No. 634,438. 10 Claims. (Cl. 248—20.)



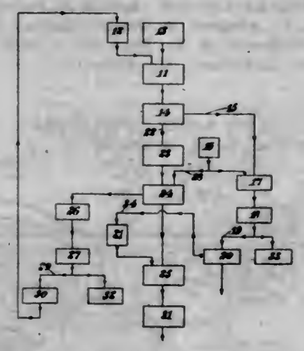
2. A clamp of the character described comprising a base plate, a post rising therefrom, a clamping plate pivoted on the post and cooperating with the base plate, a plate lever pivoted on the base plate engageable with the clamping plate for moving the latter into clamping position and cooperating means carried by the lever plate and clamping plate for holding the latter in clamping position.

1,895,411. TRANSFER CONVEYER. STANLEY H. DURBIN, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed June 19, 1931. Serial No. 545,516. 14 Claims. (Cl. 198—23.)



1. In combination with an endless chain flight conveyer, a second conveyer extending at an angle thereto; means to guide articles from one conveyer to the other at the junction thereof; a third chain conveyer at the junction of the two conveyers having means to engage in rear of the articles being guided automatically to transfer articles from the first to the second conveyer, and synchronized with the first conveyer; and power-actuated means for driving all three conveyers.

1,895,412. RECOVERY OF VALUES FROM CYANIDE SOLUTIONS. HENRY THOMAS DURANT, Crawley, and HENRY LIVINGSTONE SULMAN and HUGH FITZALIS KIRKPATRICK PICARD, London, England, assignors to The General Engineering Company, Incorporated, London, England, a Corporation of Utah. Filed Sept. 5, 1931, Serial No. 561,472, and in Great Britain Sept. 8, 1930. 10 Claims. (Cl. 75—185.)



1. A process for the recovery of values from cyanide solutions, characterized by the fact that excess cyanide is recovered from the solutions, after they have been employed for the extraction of values from an ore, by the addition to the solution of sulphate of zinc, the liquors being maintained acid-free so that zinc cyanide is precipitated.

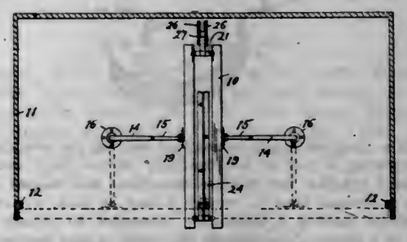
1,895,413. METHOD OF REMOVING CARBON. PETER GRANEAS, Brooklyn, N. Y. Filed June 23, 1928. Serial No. 287,878. 3 Claims. (Cl. 87—5.)

1. The method of removing carbon from internal combustion engines, which consists in burning a composition embodying charcoal impregnated with sea water exteriorly of the engine and drawing the vapors from the burning composition into the engine during the normal running of the engine.

1,895,414. SEPARATION OF KETOSES FROM MIXTURES. EDWARD L. HELWIG, Bristol, Pa., assignor to Röhm & Haas Company, Philadelphia, Pa. Filed Mar. 30, 1931. Serial No. 526,569. 10 Claims. (Cl. 204—9.)

9. In the process for the simultaneous isolation of ketoses and oxidation of aldoses, the step which comprises electrolyzing the mixture in the presence of one of the group consisting of hydroxides, carbonates, and bicarbonates of the alkalies and alkali earth metals and in the presence of a salt containing a halogen of higher molecular weight than chlorine.

1,895,415. RECEDING COMPARTMENT DOOR. GILBERT W. ISLEY, Cleveland, Ohio. Filed Oct. 11, 1929. Serial No. 399,027. 2 Claims. (Cl. 20—20.)



1. The combination with a compartment having an opening to be closed, of a pair of doors for closing said opening, said doors having edges thereof in adjoining relation, means supporting said doors whereby said adjoining edges are adapted to recede into said compartment during opening movement, means extending into said compartment for guiding said adjoining edges, a member supported by the guiding means, said member having oppositely extending arm portions, and means pivotally connecting said arm portions with said doors.

1,895,416. PIN BOARD. JOHN ELWIN JOHNSON, Wilkes-Barre, Pa. Filed May 20, 1932. Serial No. 612,586. 5 Claims. (Cl. 242—130.)

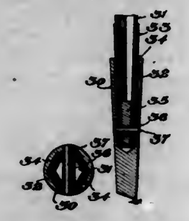


1. A pin board including a frame, cross strips carried thereby, spaced longitudinal runners secured at their ends to the frame and extending under the cross strips, and pins secured to the strips and runners, all portions of the frame and pins being above the level of the bottom faces of the runners.

1,895,417. GOLF CLUB. ALLAN E. LARD, Washington, D. C., assignor to The Metallic Shaft Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 19, 1930. Serial No. 496,726. 10 Claims. (Cl. 273—80.)

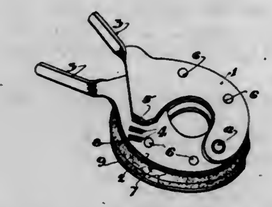
1. In a golf club, a metallic shaft and a hosel provided with compressing faces movable towards each other by

relative turning of the shaft and hosel and a resilient material interposed between said faces and acting to permit



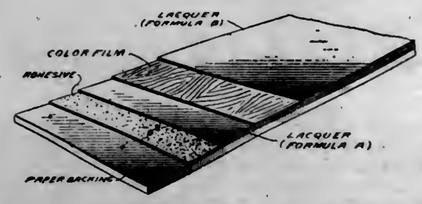
limited relative turning of the shaft and hosel whereby a yield and rebound take place in the club head under the twisting stress of impact.

1,895,418. PERMANENT WAVE CLASP. MYRTLE LINDSAY, Dallas, Tex. Filed Oct. 3, 1931. Serial No. 566,710. 1 Claim. (Cl. 132—36.1.)



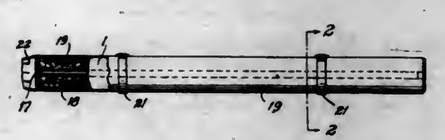
In a clasp for use in permanent waving, the combination comprising a pair of substantially curved clasp members pivoted together for relative movement and shaped to define a circular area to receive a lock of hair, one of said members having a projection arranged to engage with one of a series of recesses in the other of said members for locking said members together, fiber heat insulating members secured to the undersides of each of said clasp members and whose edges are disposed flush with the edges of said clasp members, a felt disc secured to the underside of said heat insulating members of greater diameter than the overall diameter of said clasp members whereby to overreach the edges thereof, a rubber disc affixed to said felt disc and of a diameter equal thereto and means to effect opening and closing of said clasp members.

1,895,419. METHOD OF MAKING DECORATED DRAWN METAL ARTICLES. JOHN S. MITCHELL and HARRY C. RATHKE, Chicago, Ill., assignors to The Meyercord Company, a Corporation of Illinois. Filed Mar. 29, 1930. Serial No. 440,162. 9 Claims. (Cl. 41—33.)



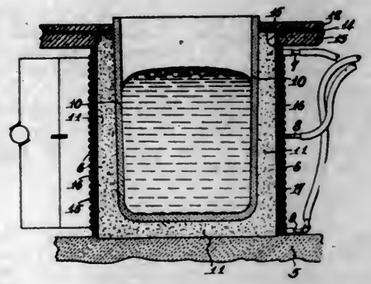
1. The method of producing a decorated drawn sheet metal article which consists in coating a metal blank with materials presenting a pyroxilin surface, applying to the said surface, with a cellulose ester solvent interposed between them, a decalcomania printed face down on a gummed backing and having a pyroxilin coat on the exposed side to engage the blank, forming the blank and decalcomania in dies, and then removing the backing.

1,895,420. PIPE COVERING. OLIVER F. MOTTWEILER, Alexandria, Ind., assignor to General Insulating and Manufacturing Company, Alexandria, Ind. Filed Sept. 26, 1930. Serial No. 484,502. 11 Claims. (Cl. 154—28.)



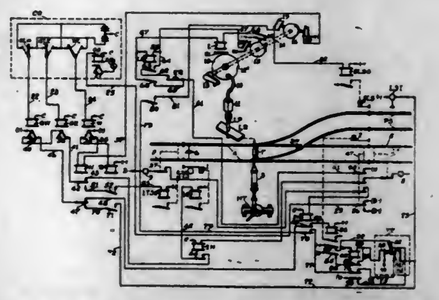
1. The method of producing a non-conducting pipe covering which consists in fitting into each of two semi-cylindrical casing sections a filling of mineral wool of the thickness of the insulation desired, and then closing the two casing sections over a cylindrical mandrel of the diameter of the pipe to be covered and positioned centrally and longitudinally of said casing sections, whereby to compress the mineral wool in each casing section and form a semi-cylindrical groove in each filling.

1,895,421. ELECTRIC INDUCTION FURNACE. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed Oct. 7, 1929. Serial No. 397,787. 6 Claims. (Cl. 13—27.)



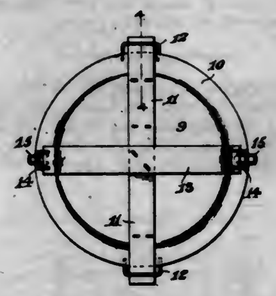
1. In an induction electric furnace, a furnace inductor coil and a solid sinterable lining shield adjacent to the coil.

1,895,422. CENTRALIZED TRAFFIC CONTROL SYSTEM FOR RAILROADS. ROBERT M. PHINNEY, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 1, 1930. Serial No. 485,579. 21 Claims. (Cl. 246—3.)



1. In a traffic controlling system for railroads, the combination with a spring switch at the end of a passing siding, of a manually releasable lock for holding said switch in the normal position, a signal governing traffic from said siding over said switch in the reverse position and in a switch trailing direction, remote controlled means for governing the indications of said signal, and means for preventing the clearing of said signal while said lock is effective.

1,895,423. FRUIT BASKET. JOHN C. RAMSEY, Suffolk, Va., assignor to Ramsey Package Corp., Suffolk, Va., a Corporation. Filed Aug. 5, 1931. Serial No. 555,300. 2 Claims. (Cl. 217—124.)



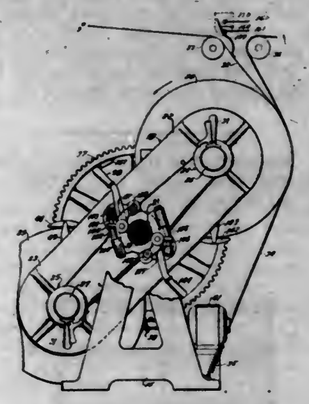
1. In a basket of that type having an open top body portion and a cover for said top, the combination of a pair of diametrically opposed upstanding handles of inverted yoke-shape adapted to be secured to said body portion exteriorly of the latter, a pair of upstanding, diametrically opposed bendable latching members adapted to be secured to said body portion interiorly of the latter and for extension through the cover, a lower flexible securing strip extending through and abutting the tops of said handle and adapted to be secured upon said cover, an upper flexible securing strip disposed at right angles to and secured centrally thereof to the lower strip, and loops carried by the ends of said upper strip, encompassing the latching members and coacting with the latter when said members are bent outwardly upon themselves for securing the cover in closing position with respect to the top of said body portion.

1,895,424. LIGHT COLORED MIXTURE OF VEGETABLE PHOSPHATIDES AND FATTY OIL. BRUNO REWALD, Hamburg, Germany. Filed May 6, 1931, Serial No. 535,553, and in Germany Oct. 21, 1929. 3 Claims. (Cl. 99—11.)

1. Method of making light colored mixtures of vegetable phosphatides and fatty oil, comprising mechanically freeing soya lecithin from the main quantity of the original oil contained therein, treating the soya lecithin with a solvent which will dissolve the oil still present but in the cold does not dissolve the lecithin, separating the lecithin, mixing it with refined oil and thereafter removing the rest of the solvent present in the mixture by distilling under vacuum.

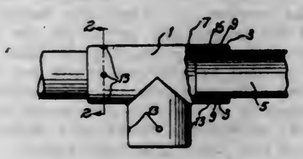
1,895,425. METHOD AND APPARATUS FOR MAKING PASTERS BETWEEN THE WEBS OF SUCCESSIVE ROLLS OF PAPER SUPPLYING A PRINTING PRESS. LOYD M. STRAND, Chicago, Ill., assignor to Allan J. Cline, Chicago, Ill. Filed Nov. 20, 1931. Serial No. 576,300. 18 Claims. (Cl. 242—58.)

1. The method of joining the expiring web of a roll of paper supplying a printing press to the end of the web of a reserve roll which has been preliminarily treated with an adhesive, which comprises bringing the reserve roll up to desired speed while shielding the adhesive thereon by means of a protective covering superposed over the treated portion of the web and rotatable with the roll, removing said protective covering from the adhesive when the reserve roll has attained the desired speed, and producing pressure between the reserve roll and the web from the expiring roll, whereby the



adhesive is caused to contact with and adhere to the expiring web thus connecting the new web thereto without stopping the press.

1,895,426. PIPE COUPLING. LEON M. YOUNG, SAMUEL EUSEY, and DAVID E. LINDQUIST, Port Huron, Mich., assignors to Mueller Brass Co., Port Huron, Mich., a Corporation of Michigan. Filed Dec. 28, 1929. Serial No. 417,167. 4 Claims. (Cl. 285—118.)



1. In a pipe coupling comprising a fitting having a portion thereof adapted to receive a pipe end, means for introducing a bonding material between the fitting and the introduced pipe end comprising at least one place on the walls of said portion thinner than the remainder of the walls of said portion adapted to be opened from the exterior of the fitting to provide a sprue.

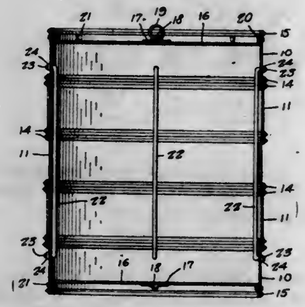
1,895,427. DRUM FOR REENFORCING CAGE MACHINES. OTTO A. STEUER and JOHN A. CARR, Los Angeles, Calif. Original application filed Sept. 25, 1928, Serial No. 308,328. Patent No. 1,846,767, dated Feb. 23, 1932. Divided and this application filed Aug. 4, 1930. Serial No. 473,036. 5 Claims. (Cl. 140—92.2.)



1. In a reenforcing cage machine, a sectioned drum, spreading members on each of the drum sections, a hollow shaft having means by which to receive rotating

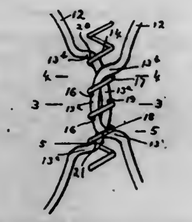
motion, operating blocks shiftable axially within the hollow shaft, a spindle turnably mounted within the hollow shaft including means whereby the shifting blocks can be moved within the shaft axially in opposite directions in relation to one another, and guiding means on the outside of the hollow shaft designed to engage the spreading members of the drum sections and operatively connected with the shifting blocks within the hollow shaft for controlling the drum sections in certain diameters.

1,895,428. KNOCKDOWN HOGSHEAD. JAMES E. EDGIN, Charlotte, Tenn. Filed Apr. 1, 1932. Serial No. 602,585. 4 Claims. (Cl. 220—5.)



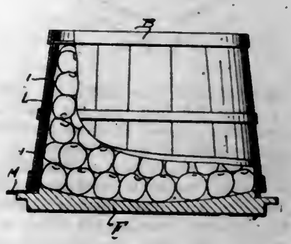
1. A container of the character described comprising a plurality of cylindrical sections, means on the meeting edges of said sections for interfitting thereof, means interiorly of the sections and carried by the outermost sections thereof for rigidly coupling the same together, whereby the sections therebetween can be removed, said sections having slits, means for detachably securing said sections overlapped at the slits, end heads detachably secured in the outermost sections, and reinforcements transversely of said heads exteriorly thereof.

1,895,429. SPRING CONSTRUCTION. WILLIAM B. FOSTER, Utica, N. Y., assignor to Foster Brothers Manufacturing Company, Utica, N. Y. Filed Jan. 2, 1930. Serial No. 417,958. 2 Claims. (Cl. 5—269.)



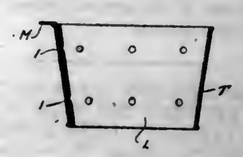
1. In a spring assembly, a pair of coiled springs each having an outwardly offset portion with said offset portions arranged opposite to each other and in overlapping engagement with each other and a spiral wire extending between said springs and threaded upon the overlapping pair of offset portions and forming a hinged connection between said springs, the interior diameter of said spiral wire being more than twice the diameter of the wire of the coiled springs, each of the said offset portions being intermediate its length extended outwardly relative to the axis of its spring so that its middle part engages the inner surface of the half of the spiral that is farther from the axis of the spring having said offset and with the parts of the said offset near its opposite ends engaging the half of the spiral that is nearer to the axis of said spring whereby both offsets are retained in their originally-assembled overlapping position, one offset of a joint spanning more turns of the spiral wire than the other offset whereby said opposing offsets and their springs are held in central alignment by the spiral wire.

1,895,430. METHOD OF PACKING FRUIT AND THE LIKE. ARTHUR E. RICE, Biglerville, Pa., assignor to Rice, Trew & Rice Co. Inc., Biglerville, Pa., a Corporation of Pennsylvania. Filed Mar. 20, 1931. Serial No. 524,159. 7 Claims. (Cl. 226—17.)



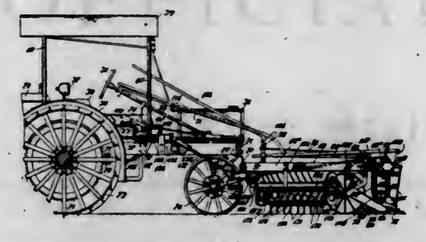
1. A method of packing fruit which consists in applying means to the end portions of a split liner to allow said liner to be placed upon a facing form, placing the liner upon the form, filling the liner, placing an inverted container over the filler liner, removing the means holding the end portions of the liner together while the container is in inverted position over the liner and its content to allow the liner and its content to conform to the container before upending the container.

1,895,431. PACKING LINER. ARTHUR E. RICE, Biglerville, Pa., assignor to Rice, Trew & Rice Co. Inc., Biglerville, Pa., a Corporation of Pennsylvania. Original application filed Mar. 20, 1931, Serial No. 524,159. Divided and this application filed Dec. 15, 1931. Serial No. 581,177. 4 Claims. (Cl. 217—3.)



1. A holding key for a basket liner having registering openings in overlapping portions, said key comprising a bar bendable at any point intermediate its ends to substantially a right angle position, said bar initially having sufficient rigidity to maintain the overlapping portions of the liner in engaged position, said key being of a length when applied to a liner to extend a substantial distance beyond an end of the liner.

1,895,432. AGRICULTURAL IMPLEMENT. CHARLES E. WHITE, deceased, Moline, Ill., by Charles Harold White and Peoples Savings Bank & Trust Co. of Moline, Moline, Ill., joint executors; said White assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Original application filed Nov. 8, 1918, Serial No. 261,657. Divided and this application filed Dec. 30, 1929. Serial No. 417,484. 23 Claims. (Cl. 56—10.)



1. An agricultural implement comprising a tractor element, raking devices in advance of and connected with said tractor element, said raking devices being arranged at opposite sides of the longitudinal axis of the implement and converging rearwardly, and means for rotating said raking devices in opposite directions.

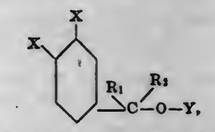
1,895,433. METHOD OF IMPROVING THE WATER-RESISTANCE OF CASEIN GLUES. LAWRENCE BRADSHAW, Bainbridge, N. Y. Filed June 21, 1929. Serial No. 372,801. 11 Claims. (Cl. 87—17.)

2. A casein glue of the type comprising casein, lime and alkali water in admixture with a minor fraction of an aldehyde which in its unpolymerized state contains a plurality of carbon atoms, together with an agent selected from the herein described group consisting of aromatic sulfonic acids and their alkali metal salts, and the soluble salts of copper, nickel and calcium, which agent is capable of retarding the setting of the glue.

9. In the treatment of casein glue, as defined herein, containing milk casein, hydrated lime and alkaline salts, the herein described step of adding to the glue, after the water is added to the dry glue base, a polymerized acetaldehyde.

1,895,434. STABLE AQUEOUS SOLUTION OF NITROGEN-CONTAINING ORGANIC COMPOUNDS AND A PROCESS OF PREPARING THEM. ALFRED FEHRLE, Bad Soden-on-the-Taunus, and KARL STREITWOLF and WALTER HERRMANN, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 3, 1930, Serial No. 441,421, and in Germany Sept. 26, 1927. 14 Claims. (Cl. 260—105.)

1. The process which consists in causing carbon dioxide to act in the presence of water on a compound of the following general formula:



wherein X stands for hydrogen, alkyl, hydroxyl, amino or a substituted amino group, Y for hydrogen or an alkyl group substituted by a basic radical containing a N atom, R_1 for hydrogen and R_2 for an alkyl group substituted by a basic radical or R_1 and R_2 together for oxygen.

THE

OFFICIAL GAZETTE

OF THE

United States Patent Office

Vol. 426—No. 5 TUESDAY, JANUARY 31, 1933 Price—$16 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscriptions, $16.00 per annum, including annual index, $18.25; single numbers, 35 cents each.
PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.
CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
Issue of January 31, 1933	783
Adverse Decisions in Interference	783
Disclaimers	783
Suggestion For The Use of Coupons	783
Applications Under Examination	784
Decisions of the U. S. Courts—	
In re Fischer	785
In re Williams and McCabe	785
Patent Suits	788
Trade-Marks Published (99 Applications)	789
Trade-Mark Registrations Granted	803
Trade-Mark Registrations Renewed	805
Labels	807
Prints	808
Reissues	809
Plant Patent	810
Designs	810
Patents Granted	821

Issue of January 31, 1933

Trade-Marks	65	No. 300,644 to No.	300,706,	inclusive.
T. M. Renewals	48			
Labels	27	No. 41,689 to No.	41,715,	inclusive.
Prints	9	No. 14,035 to No.	14,043,	inclusive.
Reissues	5	No. 18,723 to No.	18,727,	inclusive.
Plant Patent	1	No. 54		
Designs	48	No. 89,116 to No.	89,163,	inclusive.
Patents	626	No. 1,895,435 to No.	1,896,060	inclusive.
Total	829			

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,608,700, B. S. Lacy, Method for the production of hydrocyanic acid, decided December 5, 1932, claim 12.

Pat. 1,709,304, G. B. Bogart, Treating hydrocarbon oils, decided January 3, 1933, claims 1 and 5.

Pat. 1,735,407, Eduard Münch, Process for vaporizing formamid, decided December 1, 1932, claims 1, 2, and 3.

Pat. 1,769,455, Theodore Pickering, Core for undercut cup-shaped articles, decided January 5, 1933, claim 1, 2, and 3.

Pat. 1,769,904, E. M. Bagley, Liquid mixer, decided January 3, 1933, claims 1, 2, 3, 4, 15, 16, 17, 18, and 23.

Pat. 1,797,378, T. A. Smith, Television system, decided December 13, 1932, claim 10.

Pat. 1,850,632, G. R. Kelly, Device for use in cutting glass, decided January 3, 1933, claim 2.

Pat. 1,855,607, A. G. Lyons, Cylinder lock, decided January 3, 1933, claim 1.

Disclaimers

1,797,378.—*Theodore A. Smith*, Ridgewood, N. J. Television System. Patent dated March 24, 1931. Disclaimer filed January 3, 1933, by the patentee, assignee, *Radio Corporation of America*, assenting.

Hereby enters this disclaimer to claim 10 in the said specification which is in the following words, to wit:

"A scanning device for use in the television transmission of motion picture films comprising a rotatable member having a plurality of scanning elements arranged thereon in such manner as to scan the picture portion only of the said motion picture film."

1,813,736.—*Pasquale Galassi*, New York, N. Y. Bimetallic Floor Strips. Patent dated July 7, 1931. Disclaimer filed December 28, 1932, by the patentee.

"I disclaim from the scope of claims 2, 4 and 6 that type of floor strip which is composed of an upper and a lower section permanently connected to each other, in which the longitudinally spaced openings provided in at least one of said sections, and the means passing through said openings rigidly connecting said sections to each other are produced simultaneously by partially punching and forcing out laterally burrs or lugs from the adjoining thicknesses of metal, forming spaced prong members laterally offset from the body of the strip."

1,868,346.—*Roland Chilton*, Ridgewood, N. J. Engaging and Driving Mechanism for Rotary Parts. Patent dated July 19, 1932. Disclaimer filed January 16, 1933, by the patentee.

Hereby disclaims from the scope of claim 15 of the above-named patent all starter mechanisms except those in which the driving means is caused to follow up, at relatively high speed, any acceleration of the engine during starting.

Suggestion for the Use of Coupons

The execution of orders for printed copies of U. S. patents, trade-marks, etc., will be considerably expedited if coupons are used. Such coupons may be purchased at the Patent Office in lots of 20 at $2.00 and 100 at $10.00.

Coupon orders do not have to be accompanied by letters of transmittal. They require nothing but the filling in of the patent number, the name of the inventor, the date of issue, and the name and address of the party desiring the service.

Condition of Applications Under Examination at Close of Business January 14, 1933

(Total number of applications awaiting action, excluding Trade-Mark Division, 58,546. Trade-Mark Division, 1,053. Oldest new case, Aug. 8, 1932; oldest amended, Aug. 8, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Aug. 13	Aug. 13	618
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Sept. 16	Sept. 17	977
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Oct. 17	Oct. 19	691
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Sept. 3	Sept. 1	439
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Oct. 15	Oct. 17	443
4898C	6. LEWERS, A. M., Carbon Chemistry	Aug. 17	Aug. 17	1,294
5725	7. JARBOE, C. O., Optics; Photography	Sept. 15	Sept. 15	1,120
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Oct. 10	Oct. 10	631
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Oct. 15	Nov. 10	587
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Sept. 14	Sept. 14	612
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Aug. 17	Aug. 18	628
7701	12. HENRY, C. C., Machine Elements	Aug. 22	Aug. 10	480
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Sept. 15	Sept. 20	879
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Oct. 18	Oct. 15	608
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Sept. 1	Sept. 1	1,499
5612	16. SPENCER, C. J., Telegraphy; Telephony	Oct. 15	Oct. 15	640
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Aug 15	Aug. 15	1,223
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Oct. 24	Oct. 24	444
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Aug. 15	Aug. 15	1,382
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Oct. 25	Nov. 2	374
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Sept. 13	Sept. 14	872
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Aug. 16	Aug. 16	690
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Aug. 18	Aug. 24	731
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Nov. 14	Nov. 14	513
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Aug. 22	Aug. 23	1,265
5893	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Aug. 29	Aug. 30	646
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Oct. 17	Oct. 15	748
4628	28. BENSON, A. R., Internal-Combustion Engines	Aug. 14	Aug. 14	1,075
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Aug. 24	Aug. 17	559
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	Sept. 19	Oct. 15	670
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Aug. 22	Aug. 20	1,298
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Oct. 15	Oct. 15	716
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Aug. 19	Aug. 16	1,512
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	Aug. 17	Aug. 17	976
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Aug. 9	Aug. 20	845
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Aug. 15	Aug. 15	1,444
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Sept. 15	Sept. 17	798
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Aug. 8	Aug. 8	706
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Aug. 15	Aug. 15	1,060
7880	40. OBERLIN, J. J., Receptacles	Sept. 1	Sept. 1	1,967
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Aug. 16	Aug. 22	661
5882	42. CUTTING, H. O., Electric Signaling	Aug. 15	Aug. 16	1,237
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Aug. 17	Aug. 17	1,267
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Aug. 15	Aug. 15	866
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Oct. 20	Oct. 20	619
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Aug. 15	Aug. 18	623
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Aug. 20	Aug. 20	1,516
5731	48. ROEPKE, O. B., Electricity, General Applications	Aug. 15	Aug. 15	714
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Aug. 16	Aug. 15	1,060
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 16	Aug. 16	1,338
5628	51. BACKUS, C. D., Radiant Energy	Sept. 26	Sept. 26	948
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Aug. 15	Aug. 15	617
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders: Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Oct. 7	Sept. 22	475
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Aug. 25	Aug. 25	978
6887	55. BOWEN, S. T.—(Bread, Pastry, and Confection Making; Cutlery	Oct. 20	Oct. 20	329
	(Designs	Dec. 16	Dec. 24	294
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Aug. 19	Aug. 20	1,098
3623	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Sept. 15	Sept. 14	624
5605	58. DOWELL, E. F., Abrading; Typewriting	Aug. 17	Aug. 19	767
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Aug. 16	Aug. 16	883
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Aug. 15	Aug. 15	1,231
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Aug. 17	Aug. 20	960
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Sept. 17	Sept. 17	1,172
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Aug. 16	Aug. 16	1,265
4708	64. NASH, P. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Aug. 13	Aug. 18	912
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Aug. 16	Aug. 15	1,432
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND—(Trade-Marks	Dec. 13	Dec. 31	918
	(Labels and Prints	Dec. 16	Jan. 3	135

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE FISCHER

No. 3,019. Decided December 19, 1932

PATENTABILITY—ROOFING TAPE.

Claims for a roofing tape *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Albert F. Robinson for Fischer.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.:*

Appellant has appealed here from the decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner denying patentability of claims 7 to 13, inclusive, being all of the claims in appellant's application.

The application relates to roofing tape. There are no drawings accompanying the application, but the claimed invention is described as a tape of open weave fabric, the fibers of which are saturated with a starchy material rendering the fabric relatively stiff. The tape carries a coating of normally tacky bituminous material, having a solvent action upon asphaltic material.

Claim 7 is illustrative and follows:

7. Construction material of the class described, comprising a strip of open weave fabric carrying in the spaces between the threads of said fabric a coating of normally tacky bituminous material, having a solvent action upon asphaltic material.

The references relied upon are: Crowell, 1,276,730, August 27, 1918; Abraham, Asphalts and Allied Substances, p. 439, 1920 Edition.

The Board said:

The Examiner has rejected all the claims as functional and indefinite because they define the tacky material used by stating that it has a solvent action upon asphaltic material. We believe the Examiner's position is correct as the language used clearly fails to clearly define the tacky material employed. The term asphaltic material covers such a wide range in view of the different kinds of asphaltic materials known that defining a tacky material with reference to its solvent action on asphaltic material is clearly indefinite.

The claims have also been rejected as unwarranted by the disclosures because there is no specific statement of the particular composition of the adhesive used which has the characteristics recited in the claims. To supplement the disclosures applicant refers to four of his patents granted on copending applications and to two of his applications. We have carefully studied all of the patents and applications referred to but find no clear disclosure in any of them. We have noted particularly the description in lines 93–114, page 3, and lines 1–40, page 4, and claims 13–16 of No. 1,595,079, but we regard the disclosure therein as incomplete. Applicant has not pointed out any particular portion of the prior patents and applications where the disclosures may be found.

Claims 7, 8, 10 and 13 have also been rejected on the tape shown by Abraham. The claims are believed to be unpatentable over this reference as the functional statement describing the solvent action of the adhesive is not sufficiently definite to define over it. If it be desirable to employ an adhesive which will soften and dissolve the material on the roofing sheets so as to form a good union we do not believe that any invention is involved in doing so. Applicant states that the Abraham reference has been held to be from a non-analogous art in a copending application for a claim to a building material. The present claims are not limited to a building material but are broad enough to cover electrical tapes and hence we regard the reference used as proper.

Claims 9, 11 and 12 are also regarded unpatentable for the same reasons as assigned in connection with claims 7, 8, 10 and 13 since there is no invention involved to size the fabric of the tape in the manner shown by Crowell.

It is pointed out by the appellant that the Board and the Examiner did not agree on their grounds of rejection as to part of the claims. We have considered this phase of the case carefully as well as each of the arguments presented in appellant's brief. Detailed discussion of all the points raised would not be helpful in view of the fact that we agree with the conclusions of the Board. The decision of the Board is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE WILLIAMS AND MCCABE

No. 3,007. Decided December 19, 1932

1. PATENTABILITY—FLUID FUEL BURNERS.

Claims for a fluid fuel burner *Held* patentable over what was disclaimed by the applicants in an interference in which they were involved.

2. SAME—AGGREGATION.

Claims for a fluid fuel burner including specific automatic means for stopping the operation of the apparatus *Held* not for a mere aggregation since "These means cooperate with the other elements named in the claims with the result that the flow of oil, upon failure of combustion, ceases at an earlier point of time than would be the case were not such specific means used."

APPEAL from the Patent Office. Reversed.

Mr. Langdon Moore and *Mr. James Atkins* for Williams and McCabe.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner, rejecting claims 27, 28, 29, and 30 of appellants' application, filed March 27, 1925, as being not patentably distinct from subject matter disclaimed by appellants, in view of the cited references, and as being a mere aggregation. Claim 27 is illustrative of the claims here involved and reads as follows:

27. In a fluid fuel burner construction including an electric motor operating a fuel pump and fan blower with an air conduit leading from the blower to the furnace and a fuel pipe leading from the pump passing through the conduit terminating in a nozzle at the open end of said conduit, a double unit safety switch in the motor circuit, one unit having an actuating thermal element to make and break the circuit through said unit upon ignition and failure of the burner flame, respectively, said thermal unit including a tubular member connected to said unit and terminating in a coil arranged on the exterior of the air conduit adjacent the furnace end thereof, a housing about said coil having an open end adapted to enter the furnace, and means upon the air conduit for deflecting a portion of the air therefrom to pass through the said housing over the coil into the furnace, the other element comprising a manually operable switch to close the motor circuit therethrough, a thermal device for holding it in closed position, a shunt circuit, a heating element in said shunt circuit adapted when the main circuit is broken through the first unit, to receive the full current of the motor circuit to operate the heating element to release the latter switch to break the motor circuit.

The references relied upon are: Applicants' disclaimer of the issue of interference No. 55,232. Fournier, 1,144,649, June 29, 1915; Delaunay-Belle-

ville, 1,164,268, December 14, 1915; Haas, 1,476,201, December 4, 1923; Scott, 1,602,175, October 5, 1926.

The application relates to oil burner construction, including an electric motor operating a fuel pump and fan blower, with an air conduit leading from the blower to the furnace and a fuel pipe leading from the pump, passing through the conduit, terminating in a nozzle at the open end of the conduit. There is provided a double unit safety switch in the motor circuit, operated by a time element member and a thermo member connected by a tube to a thermo coil in a casing or housing arranged near the furnace end of the air conduit. The bottom of the air conduit, at the rear of the nozzle, but forward of the end closure of the housing, is struck up to form a baffle which deflects a portion of the air passing from the fan on its way to the nozzle and causes it to pass over the coil into the furnace, whereby the passage of this cool stream of air tends to protect the coil from the intense heat of the burning oil and assists in rapid cooling of said coil upon failure of combustion.

Appellants were parties to an interference proceeding, No. 55,232, with one Duemler and one Koeln, joint applicants, the counts of which interference read as follows:

1. The combination with a heating element, of a burner, a motor for operating said burner, an ignition device for said burner, a power circuit for said motor and said ignition device, a resistance circuit connected with the power circuit, a switch for controlling said power circuit, a thermostatic switch under the influence of heat from the burner operable to close the power circuit after the burner has heated the device to a predetermined temperature, and means for opening the power switch operable upon a predetermined temperature developed in said resistance circuit.

2. The combination with a heating element, of a burner, a motor for operating said burner, a power circuit for said motor, a resistance unit connected in the power circuit in series with said motor, a switch for controlling said power circuit, a switch under the influence of combustion conditions of the burner, said switch being normally open and operating upon the establishment of combustion to close and thereby short-circuit the resistance unit preventing further heating thereof, and means for opening the power circuit operable upon a predetermined temperature developed in the resistance unit.

After the declaration of said interference, appellants filed a disclaimer and canceled the claims which corresponded to said interference counts, stating in their letter of disclaimer that it was found that the subject matter of said counts was broader than the joint invention of appellants and was the subject matter of the sole invention of appellant McCabe.

The Examiner and the Board of Appeals held that the subject matter involved in this appeal is not patentably distinct from that disclaimed by the applicants in the interefrence referred to, when considered in connection with the cited patents.

Appellants contend that their said disclaimer of the broad combination, which included—

a thermostatic switch under the influence of heat from the burner operable to close the power circuit after the burner has heated the device to a predetermined temperature

and—

a switch under the influence of combustion conditions of the burner,

can have no possible effect upon the patentability of appellants' present claims, which are limited to a structure which produces a result not possible of accomplishment by the structure of the interference claims. While this statement, standing alone, may be true, it is also true, as contended by the Solicitor for the Patent Office, that, appellants having admitted that they are not entitled to the interference counts, they also are not entitled to any subject matter failing to define invention thereover, and the disclaimed interference issue is available with the same effect as a prior art reference disclosing such subject matter. *In re Wickers and Furlong*, 29 App. D. C. 71, 129 O. G. 2074; *In re Somer*, 19 C. C. P. A. (Patents) 1030, 56 F.(2d) 893, 420 O. G. 4.

The features relied upon by appellants to lend patentability to the claims here involved over the interference issue relate to the—

thermal unit including a tubular member connected to said unit and terminating in a coil arranged on the exterior of the air conduit adjacent the furnace end thereof, a housing about said coil having an open end adapted to enter the furnace, and means upon the air conduit for deflecting a portion of the air therefrom to pass through the said housing over the coil into the furnace.

The Patent Office tribunals found that these features are suggested by the prior art, and that therefore there was no invention in specifically including them as an element in the claims here involved.

With respect to the reference Scott, appellants call our attention to the fact that at the time said Scott patent was issued appellants' application was pending, but they do not urge that it is not a proper reference. That it is a proper reference under the facts in this case, no claim having been made by appellants in the Patent Office that their invention was in fact prior to that of Scott, and the application of Scott having been filed prior to the application of appellants, is established by our decisions in the cases of *In re Smith*, 17 C. C. P. A. (Patents) 752, 36 F.(2d) 522, 393 O. G. 1029, and *In re Germantown Trust Co.*, 19 C. C. P. A. (Patents) 1140, 57 F.(2d) 365, 421 O. G. 857.

It is conceded by appellants that the references Fournier and Delaunay-Belleville disclose a thermostat similar to that disclosed and claimed by them, but they contend that there is no disclosure in said references of a use of such thermostat in connection with an oil burner, or any implication that the thermostat may be so used with a coil in proximity to the burner flame and in the path of the air on its way to the nozzle. We are in agreement with this contention of appellants.

The Haas patent relates to an oil burner in which there is an air tube, one end of which also constitutes a combustion chamber, adjacent to which is the nozzle of a fuel atomizer and two electrodes between which passes the igniting spark; a chamber is placed around one of the electrodes and a pipe leads therefrom to a funnel positioned to receive a portion of the air passing from the blower, and this air, passing up through an opening in said electrode housing, is designed to prevent soot and other objectionable material from lodging around the electrode; a thermostat is located upon the exterior of the combustion chamber, with one arm extending into said chamber, near and forward of the nozzle. Therefore, by virtue of the positioning of the thermostat with respect to the nozzle, any air passing said thermostatic member during combustion is heated before it reaches it.

We agree with the Patent Office tribunals that the Fournier and Delaunay-Belleville references show that the particular form of thermal unit described in the claims is old, and that the references Haas and Scott show it to be old to place a thermal actuating member in such a position as to be affected by the heat in the combustion chamber and in the path of the air supply.

It will be observed that the claims in issue include the following elements: a coil, which is the actuating member of a thermostat, arranged on the exterior of the air conduit, adjacent the furnace end thereof, a housing about said coil having an open end adapted to enter the furnace, and means upon the air conduit for deflecting a portion of the air therefrom to pass through said housing over the coil into the furnace.

The reference Haas does not show an actuating member of a thermostat upon the exterior of the air conduit, adjacent the furnace end thereof; it does not show a housing about said actuating member and, not showing any such housing, it of course does not show any means upon the air conduit for deflecting a portion of the air therefrom to "pass through the said housing" over the coil into the furnace. It does show an actuating thermostatic member *within* the furnace or combustion chamber; it shows a housing over the lower electrode, and means upon the air conduit for deflecting a portion of the air therefrom to pass through the housing of the said electrode, and from thence into the combustion chamber in which the actuating thermostatic member is located. In the Haas reference, however, the fuel stream from the nozzle is interposed between said thermostatic actuating member and the air emerging from said electrode housing.

The reference Scott does not show an actuating member of a thermostat upon the exterior of the air conduit, but does show such a member adjacent to the furnace, and located within a burner with which the air conduit is connected. It shows no housing over such actuating member and no means upon the air conduit for deflecting a portion of the air therefrom over said thermostatic actuating member.

While, as shown above, neither singly nor together do the references show all of the elements of the thermal unit assembly recited in said claims, upon which elements appellants rely for patentability of the claims on appeal over the interference issue, the question remains whether the inclusion of the particular elements relied upon, as claimed, required the exercise of the inventive faculty, in view of these references.

We think the fair construction of appellants' claims is that, during combustion, air which has not been heated by direct contact with any flame passes over said coil, which is the actuating member of the thermostat, and thence into the furnace, while in the references, so long as combustion continues, air heated by direct flame passes over the thermostatic members.

Appellants contend that this fact constitutes a great improvement over the prior art, requiring the exercise of the inventive faculty. The fact is, however, that neither in appellants' device nor in the devices of the references do the thermostatic actuating members begin to function for the purpose of opening the circuit until there is a failure of combustion. In all of these, the circuit is opened by the cooling of the actuating members of the respective thermostats (being the thermostat first mentioned in the claims on appeal), and there is at such time no air heated by direct contact with any flame in any of the structures. In Haas and Scott, however, after the flame has been extinguished, the burner or nozzle will retain heat for some length of time, and consequently the air passing over it will absorb some degree of this heat, so that the air passing over the thermal actuating member will be heated to some extent. In appellants' device, the air passing over the coil, which constitutes appellants' thermal actuating member, will not have come in contact with the burner or nozzle at all, as a result of which appellants' thermostat may function to open the circuit somewhat sooner than will the thermostats of the references after the flame has been extinguished.

Appellants contend that, due to the fact that in their device cool air is directed over the thermal actuating member both during combustion and after combustion has ceased, a double benefit is obtained in that their thermal element is never heated during combustion to the degree to which the thermal elements of the references are heated during combustion, and requires less cooling in order to permit it to function upon failure of combustion, and further that the direction of cool air upon their thermal element after combustion, as opposed to air which has absorbed some heat from the heated nozzle as in each of the references, also tends to secure a quicker cooling of the thermal element.

[1] We think it may fairly be said that appellants' device, when used in combination with the other elements set forth in the claims, does bring about a new and useful result, and while there may be a question as to whether, in view of the references, especially the Scott reference, appellants have done more than would be obvious to one skilled in the art, we think there is sufficient doubt upon this question to require the application of the rule that doubts as to patentability shall be resolved in favor of the applicant.

[2] Applying this rule, the decision of the Board of Appeals should be reversed unless the second ground of rejection, viz., that appellants' claims are mere aggregations, should be sustained. Upon this question the Board said:

Respecting the rejection of the claims on the ground of aggregation, it may be stated that there is no interdependence in action in the production of a unitary result between the specific devices for delivering the fuel elements to the combustion zone and the specific automatic means claimed for stopping the operation of the apparatus in the event that the flame becomes extinguished.

We cannot agree with the above conclusion of the Board of Appeals. It seems to us that there is interdependence of action in the production of a unitary result between the specific devices for delivering the fuel elements to the combustion zone and the specific automatic means set forth in said claims, hereinbefore discussed in connection with the first ground of rejection. These means cooperate with the other elements named in the claims with the result that the flow of oil, upon failure of combustion, ceases at an earlier point of time than would be the case were not such specific means used. It seems to us that this constitutes such interdependence in action as to constitute a true combination of the elements named in the claims, and therefore the rejection of the claims upon the ground of aggregation should not be sustained.

For the reasons stated, the decision of the Board of Appeals is reversed as to all of the appealed claims.

Reversed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,089,405, W. S. Ferguson, Reinforced concrete dock or pier, D. C., S. D. N. Y., Doc. E 58/239, *The Dock & Terminal Engineering Co. et al.* v. *Atmospheric Nitrogen Corp.* Dismissed (notice Nov. 25, 1932).

1,213,695, J. B. Scutti, Cloth covered buckle, filed Nov. 23, 1932, D. C., E. D. N. Y., Doc. E 6686, *Liberty Die Button Mould Co., Inc.*, v. *H. Salpeter et al.*

1,312,009, H. C. Thrift, Pipe pulling device, filed Nov. 9, 1932, D. C., E. D. Tex. (Beaumont), Doc. 497, *Oil Equipment Sales Corp.* v. *W. J. Miller et al.*

1,359,124, A. M. Springer, Ironing board, D. C. Minn., 4th Div., Doc. E 2498, *Rid-Jid Products, Inc., et al.* v. *H. V. Keller Mfg. Co. et al.* Dismissed by consent Nov. 1, 1932.

1,376,154, J. M. Morris, Electrical lighting device, D. C., W. D. N. Y., Doc. 69, *F. A. Smith Mfg. Co., Inc.*, v. *W. H. Almy.* Dismissed Nov. 9, 1932.

1,488,209, J. Leonard, Corset, D. C., W. D. N. Y., Doc. 389, *Charis Corp.* v. *Kobacker Stores, Inc.* (*Baker's Dept. Store*). Dismissed Nov. 9, 1932.

1,630,423, A. W. Gothberg, Cable support, D. C., W. D. N. Y., Doc. 319, *A. W. Gothberg et al.* v. *Lapp Insulator Co., Inc.* Dismissed Nov. 9, 1932.

1,648,800, G. E. Ditzler, Surprise device, filed Nov. 25, 1932, D. C., S. D. N. Y., Doc. E 72/363, *Haseltine Corp.* v. *John Wanamaker New York, Inc., et al.*

1,653,501, W. L. Fry, Seat back slip cover, D. C., S. D. N. Y., Doc. E 53/866, *Wil-Fry Corp.* v. *Gimbel Bros.* Dismissed without prejudice (notice Nov. 26, 1932). Doc. E 53/367, *Wil-Fry Corp.* v. *Arnold Constable & Co., Inc.* Decree as above.

1,664,466, M. B. Reach, Tennis racket, filed Nov. 9, 1932, D. C., N. D. N. Y., Doc. E 2633, *A. G. Spalding & Bros.* v. *Ken-Wel Sporting Goods Co., Inc.*

1,706,044, L. H. Wessel, Machine for refining paper and pulp, D. C., S. D. Ohio, W. Div., Doc. E 654, *The Herman Mfg. Co.* v. *The Black-Clawson Co.* Bill and counterclaim dismissed without prejudice Nov. 23, 1932.

1,713,726, H. Vogt et al., Device for phonographs with linear phonogram carriers, filed Oct. 10, 1932, D. C., M. D. Pa., Doc. 971, *American Tri-Ergon Corp. et al.* v. *Altoona Public Theatres, Inc., et al.* Doc. 972, *American Tri-Ergon Corp. et al.* v. *Wilmer & Vincent Amusement Co.*

1,734,627, J. E. Kalgren, Ironing board, D. C. Minn., 4th Div., Doc. E 2190, *The J. B. Clark Co.* v. *H. V. Keller Mfg. Co. et al.* Dismissed Nov. 1, 1932.

1,755,114, L. A. Hazeltine, Unicontrol signaling system; 1,755,115, same, Variable condenser, D. C. Del., Doc. E 841, *W. Kidde & Co., Inc.*, v. *J. M. Castle, Inc.* Dismissed Oct. 1, 1932.

1,755,115. (See 1,755,114.)

1,760,274, H. R. Minor, Fire extinguisher, D. C. Del., Doc. E 841, *W. Kidde & Co., Inc.*, v. *J. M. Castle, Inc.* Dismissed upon stipulation Oct. 1, 1932.

1,763,380, 1,798,962, C. E. Trube, Electric coupling system, filed Nov. 25, 1932, D. C., S. D. N. Y., Doc. E 72/365, *Hazeltine Corp.* v. *John Wanamaker New York, Inc., et al.*

1,785,326, H. B. Rudd, Method of and apparatus for utilizing phase-changeable material, filed Sept. 14, 1932, D. C. Del., Doc. E 995, *Rudd Patents Corp. et al.* v. *Dryice Corp. of America.*

1,787,235, F. A. Donaldson, Air cleaner and coupling, filed Sept. 20, 1932, D. C. Minn., 4th Div., Doc. E 2500, *Donaldson Co., Inc.*, v. *The Maytag Co. et al.* Dismissed Nov. 10, 1932. Same, filed Nov. 10, 1932, D. C. Minn., 4th Div., Doc. 2544, *Donaldson Co., Inc.*, v. *The Maytag Co. et al.*

1,797,205, H. W. Houck, Electron tube apparatus, D. C. Del., Doc. E 898, *Dubilier Condenser Corp.* v. *National Union Radio Corp.* Dismissed Nov. 10, 1932. Doc. E 900, *Dubilier Condenser Corp.* v. *Radio Corp. of America.* Decree as above Nov. 1, 1932.

1,798,962. (See 1,763,380.)

1,822,488, E. N. Joha, Knitted hat and process for making same, filed Nov. 21, 1932, D. C., S. D. N. Y., Doc. E 72/313, *Reliable Knitting Works* v. *Rittan Knitting Mills, Inc.*

1,851,568, C. H. Davis, jr., Circuit breaker lever, filed Nov. 25, 1932, D. C., E. D. N. Y., Doc. E 6693, *Delco-Remy Corp.* v. *Automotive Specialty Corp.*

1,854,158, A. S. MacDonald, Library construction, filed Nov. 17, 1932, D. C. Del., Doc. E 991, *Snead & Co.* v. *Remington-Rand, Inc.*

1,855,168, C. L. Farrand, Loud speaker, filed Nov. 21, 1932, D. C., N. D. Ohio, E. Div., Doc. 4529, *Utah Radio Products Co.* v. *The Rola Co.*

1,865,080, F. Bowers, Soot blower, filed Aug. 15, 1932, D. C. Del., Doc. E 900, *Diamond Power Specialty Corp.* v. *The Vulcan Soot Cleaner Co.*

1,885,047, O. A. Berman, Uniform dress, filed Nov. 14, 1932, D. C. Md., Doc. E 2114, *Morris & Co., Inc.*, v. *Jacobs Bros., Inc.*

TRADE-MARKS

OFFICIAL GAZETTE, JANUARY 31, 1933

[VOL. 426. No. 5]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 320,991. SEGERS BROTHERS, N. V., Lisse, Netherlands. Filed Nov. 10, 1931.



The lining on the drawing would serve to indicate shading.

For Tulip Bulbs.

Claims use since Mar. 17, 1931.

Ser. No. 332,599. LEON A. SACKETT, doing business as Glendale Distributing Company, Glendale, Long Island, N. Y. Filed Nov. 29, 1932.



The lining on the drawing represents green color. No claim is made to the words "Guaranteed," "Rose Bush" and "Rose Bushes of Distinction" apart from the mark shown on the drawing and to the representation of the carton.

For Rose Bush Plants.

Claims use since July 1, 1932.

CLASS 2

Receptacles

Ser. No. 331,864. KNAPP-MONARCH COMPANY, Belleville, Ill. Filed Nov. 3, 1932.

RANGER JUG

The word "Jug" is disclaimed apart from the mark shown.

For Insulated Jugs and Vacuum Bottles.

Claims use since May 15, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 290,182. GEO. J. KELLY, INC., Lynn, Mass. Filed Sept. 24, 1929.

CHAIN LIGHTNING

The trade-mark is used in the color green.

For Shoe Polish Creams.

Claims use since Sept. 5, 1916.

Ser. No. 322,425. ARDO HERING, New York, N. Y. Filed Dec. 24, 1931.



No claim is made to the outline of the label.
For Dry Cleaner, Metal Cleanser and Metal Polishes; Cleansers for Textile Fabrics and for a Preparation for Cleaning Spark Plugs, Commutators, Typewriters, Typewriter Rolls, Type, and Similar Objects.
Claims use since Dec. 19, 1931.

Ser. No. 331,324. SAMUEL TINSKY, Brooklyn, N. Y. Filed Oct. 17, 1932.

FORMULA-T

The word "Formula" is disclaimed in and apart from the mark as shown on the drawing.
For Brushless Shaving Cream.
Claims use since September, 1931.

Ser. No. 332,927. THE J. T. ROBERTSON COMPANY, doing business as Plymouth Products Company, Syracuse, N. Y. Filed Dec. 9, 1932.



For Soaps.
Claims use since May 16, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 329,490. M AND M CHEMICAL CORPORATION, Lonaconing, Md. Filed Aug. 11, 1932.



No claim is made to the words "Prepared by" and "Lonaconing, Md." apart from the mark as shown.
For Medicinal Preparation for the Treatment of Alcoholism.
Claims use since Dec. 2, 1931.

Ser. No. 330,609. YEAST-VITE (U. S. A.) INC., Niagara Falls, N. Y. Filed Sept. 23, 1932.

YEAST-VITE
COMPOUND

No claim being made to the exclusive use of the words "Yeast" and "Compound" apart from the mark shown in the drawing.
For Tonic Intended for the Relief of Headache and Nerve Pains.
Claims use since Sept. 19, 1932.

Ser. No. 331,164. RIMMEL, INC., West Orange, N. J. Filed Oct. 11, 1932.

Dep-pil-dry

Applicant disclaims sole use to the word "Dry" apart from the mark as shown.
For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs; Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Oct. 4, 1932.

Ser. No. 331,252. THOMAS A. EDISON, INCORPORATED, West Orange, N. J. Filed Oct. 14, 1932. Under section 5b of the act of 1905 as amended in 1920.

EDISON

For Electrolyte and Electrolyte Material for Electric Batteries.
Claims use since 1902 on electrolyte; since 1929 on electrolyte material.

Ser. No. 331,266. REISS-PREMIER PIPE CO., West New York, N. J. Filed Oct. 14, 1932.

julip

For Tooth Paste.
Claims use since Sept. 22, 1932.

Ser. No. 331,295. CARL AUGUST TANCRÉ, Naumburg/Saale, Germany. Filed Oct. 15, 1932.

HEIDEQUELL

For General Tonic.
Claims use since December, 1928.

Ser. No. 331,516. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Oct. 24, 1932.

DIASTAFOR

For an Amyloiytic or Starch-Liquefying Preparation Suitable for Use as a Desizing Agent in the Textile Industry, as an Ingredient of Pastes and Finishing Compositions or Fillers for Paper or Leather and for Like Purposes.
Claims use since November, 1904.

Ser. No. 331,858. HAMPDEN SALES CORPORATION, Springfield, Mass. Filed Nov. 3, 1932.

VITALEX

For Filling or Sizing Material for Textiles.
Claims use since Oct. 19, 1932.

Ser. No. 331,859. HAMPDEN SALES CORPORATION, Springfield, Mass. Filed Nov. 3, 1932.

NU-TEX

For Filling or Sizing Material for Textiles.
Claims use since Oct. 24, 1932.

Ser. No. 331,954. HOLLAND PHARMACAL COMPANY, Philadelphia, Pa. Filed Nov. 7, 1932.

FLASH

For Skin Lotion for Relieving Burns, Scalds, and Sunburn.
Claims use since Oct. 2, 1932.

Ser. No. 332,031. THE CHATTANOOGA MEDICINE COMPANY, Chattanooga, Tenn. Filed Nov. 10, 1932.



For Cod Liver Oil and Cod Liver Oil Emulsion.
Claims use since Feb. 3, 1932.

Ser. No. 332,068. THEODOR LEONHARD WAX CO. INC., Haledon, N. J. Filed Nov. 11, 1932.



The word "Brand," the letters "U. S. P." and the indication of the color (green) are disclaimed apart from the mark as shown.
For Beeswax.
Claims use since Feb. 29, 1932.

Ser. No. 332,411. HIPWELL MANUFACTURING COMPANY, Pittsburgh, Pa. Filed Nov. 23, 1932.

TRAPENE

For a Drain Pipe Solvent Having Incidental Cleaning and Deodorizing Properties.
Claims use since Nov. 16, 1932.

Ser. No. 332,515. BORUN BROS., doing business as Rite Laboratories, Los Angeles, Calif. Filed Nov. 28, 1932.

Rite

For Pharmaceutical Preparations—Namely, Nasal Balm, White Liniment for External Use, Diuretic Compound, Vegetable Compound a Product Composed of Squaw Vine, False Unicorn, Life Root, Cascarilla, Black Haw, Jamaica Dogwood, Cascara Sagrada, Rhubarb, and Aromatics; Liquid Corn Remover, Tooth Paste, Hair Tonic.
Claims use since 1928.

Ser. No. 332,560. ELMI WATERS, INC., Lincoln Park, Mich. Filed Nov. 28, 1932.

ELMI

For Artificial Mineralized Water.
Claims use since Nov. 7, 1932.

Ser. No. 332,595. NATIONAL CHEMICAL CORPORATION, Washington, D. C. Filed Nov. 29, 1932.

ETHO-PHOS
Ethical Laxative
TRADE MARK

E I P

No claim is made herein, under the statute, to the words "Laxative" and "Trade Mark".
For Laxative Medicine.
Claims use since July, 1932.

Ser. No. 332,745. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y. Filed Dec. 3, 1932.

ATABRINE

For Antimalarial Preparation.
Claims use since Nov. 17, 1932.

Ser. No. 332,752. CALIFORNIA MEDICINAL WINE CO., Los Angeles, Calif. Filed Dec. 5, 1932.



For Medicinal and Pharmaceutical Preparations—Namely, Wine Elixir or a Medicinal Wine for Use as a General Tonic.
Claims use since Jan. 21, 1932.

Ser. No. 332,959. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y. Filed Dec. 10, 1932.

AMORA

For Chemicals for Controlling the Odor of Rubber and Rubber Compounds.
Claims use since Oct. 7, 1932.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 332,542. NATIONAL AUTOMATIC CONTAINER CORPORATION, Baltimore, Md., and New York, N. Y. Filed Nov. 28, 1932.

Pakutter

For Container for Packages of Cigarettes.
Claims use since June, 1932.

Ser. No. 333,203. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 19, 1932.



For Smokers' Pipes.
Claims use since Nov. 15, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 330,750. THE KENNEDY VALVE MFG. CO., Elmira, N. Y. Filed Sept. 28, 1932.

SAFETOP

For Hydrants.
Claims use since Sept. 24, 1932.

Ser. No. 331,830. LARKIN REFRIGERATING CORPORATION, Atlanta, Ga. Filed Nov. 2, 1932.

POSI-TROL

For Pressure Control Valve for Refrigeration Apparatus.
Claims use since Oct. 4, 1932.

Ser. No. 331,898. LARKIN REFRIGERATING CORPORATION, Atlanta, Ga. Filed Nov. 4, 1932.

LARKIN POSI-TROL SYSTEM

No claim is made to the word "System" apart from the mark as shown.
For Pressure Control Valve for Refrigeration Apparatus.
Claims use since Oct. 4, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 333,136. GEORGE H. ABEL, Roslyn, Pa. Filed Dec. 17, 1932.

AMERROD

For Metallic Arc-Welding Electrodes and Oxy-Acetylene Welding Wire.
Claims use since Dec. 5, 1932.

CLASS 15

Oils and Greases

Ser. No. 323,840. PRODUCERS DIAMOND QUALITY OIL & GAS CO., Topeka, Kans. Filed Feb. 4, 1932.

P
OIL D GAS
Q

No claim is made herein to the words "Oil" and "Gas" apart from the mark shown in the drawing or in connection or relation with the letters.
For Motor Fuel Oils, Lubricating Oils, Lubricating Greases, and Gasoline.
Claims use since Oct. 17, 1930.

Ser. No. 331,440. THE PURE OIL COMPANY, Chicago, Ill. Filed Oct. 21, 1932.

cold-proof Tiolene

No claim is made to the exclusive use of the words "Cold-Proof" apart from the mark shown in the drawing.
For Lubricating Oils for Various Kinds of Machinery and Vehicles.
Claims use since Oct. 1, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 326,162. RUSSELL SABOR, doing business as Aeronautical Industries Research, Minneapolis, Minn. Filed Apr. 15, 1932.

HANGAIR

For the Following Articles in Ready Mixed Form: Floor Seals and Paint Preservatives for Filling the Pores of Any Surface, Paints for All Purposes Including Concrete and Cement, Varnishes, Polishes for Use on Furniture, Woodwork and Other Painted, Varnished or Lacquered Surfaces and for Airplane and Automobile Polishing, Cedar Polishing Oils and Floor Waxes.
Claims use since Mar. 7, 1932.

Ser. No. 328,844. NU-RA WAXCOAT CORPORATION, Brooklyn, N. Y. Filed July 16, 1932.

CLEANS NU-RA WAXCOTE POLISHES

The words "Cleans," "Waxcote," and "Polishes" are hereby disclaimed apart from the mark as shown.
For Automobile Polish and Furniture Polish as Well as Polish Which Cleans and Polishes Automobiles in One Operation.
Claims use since May 17, 1932.

Ser. No. 331,720. AMERICAN DISINFECTING COMPANY, Sedalia, Mo. Filed Oct. 31, 1932.

VANBRITE

For Liquid Wax Preparation for Polishing Purposes.
Claims use since Oct. 25, 1932.

Ser. No. 332,732. RAYNORSHYNE PRODUCTS, INC., San Antonio, Tex. Filed Dec. 3, 1932.

RAYN-O-SHYNE

For Furniture Polish, Floor Polish-Wax, and an Automobile Polish for the Bodies of Automobiles.
Claims use since Apr. 19, 1932.

CLASS 17

Tobacco Products

Ser. No. 333,181. BAYUK CIGARS INCORPORATED, Philadelphia, Pa. Filed Dec. 19, 1932.

BETTER BUSINESS

For Cigars.
Claims use since Nov. 25, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 325,442. THE "SOCIÉTÉ FRANÇAISE HISPANO-SUIZA," Bois-Colombes, France. Filed Mar. 24, 1932.

For Motor Vehicles, Consisting of Passenger Automobiles, Motor Trucks, Buses, Taxi Cabs, Funeral Cars, and Their Component Parts, Motor Boats, Motor Launches, Cruisers, Excursion Boats, Motor Barges, Speed Boats, Marine Runabouts, Hydroplanes, and Their Structural Parts, Aeroplanes, Seaplanes, Flying Boats, Amphibian Planes, and Structural Parts Thereof.
Claims use since Oct. 2, 1931.

Ser. No. 331,020. HARRY L. ZOBEL 3RD, Seabright, N. J. Filed Oct. 6, 1932.

ZOBEL'S SEA FOX

For Motor Boats and Cruisers.
Claims use since Oct. 1, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 332,332. THE CROSLEY RADIO CORPORATION, Cincinnati, Ohio. Filed Nov. 21, 1932.

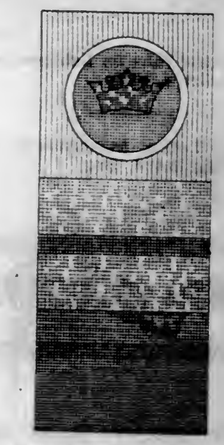
FIVER

For Radio Receiving Sets.
Claims use since Oct. 13, 1932.

CLASS 22

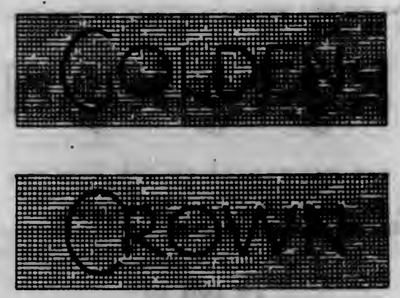
Games, Toys, and Sporting Goods

Ser. No. 327,952. WALGREEN CO., Chicago, Ill. Filed June 13, 1932.



The drawing is lined for red, gold, and black.
For Golf Balls.
Claims use since July 10, 1931.

Ser. No. 327,954. WALGREEN CO., Chicago, Ill. Filed June 13, 1932.



The drawing is lined for gold.
For Golf Balls.
Claims use since July 10, 1931.

Ser. No. 332,635. STYLECRAFT, Los Angeles, Calif. Filed Nov. 30, 1932.

BALLERO

For an Indoor and Outdoor Game Played with a Peg, Cord, and Ball.
Claims use since Nov. 12, 1932.

Ser. No. 332,636. STYLECRAFT, Los Angeles, Calif. Filed Nov. 30, 1932.

SOMBRERO

For Indoor and Outdoor Game Played with a Peg, Cord and Ball.
Claims use since Nov. 12, 1932.

Ser. No. 332,708. WALTER E. WILSON, doing business as Kolorkraft Company, Detroit, Mich. Filed Dec. 1, 1932.



The drawing is lined for the color blue but applicant makes no claim to any specific color.
For Toy Paint Box Kits, Including Paints, Charts, and Duplicating Materials.
Claims use since Apr. 15, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 310,817. WEED DESTROYER CO., INC., Aberdeen, Wash. Filed Jan. 28, 1931.



Applicant disclaims the representation of the goods apart from the mark as shown.
For Weed Guns in the Nature of Hand Tools for the Administration of an Exterminating Poison to the Roots of Weeds and Parts Thereof.
Claims use since Aug. 1, 1929.

Ser. No. 331,599. THE UNITED STATES OZONE COMPANY OF AMERICA, Scottdale, Pa. Filed Oct. 26, 1932.



No claim being made to the word "Ozone" apart from the mark shown in the drawing.
For Water-Purifying Machinery and Parts Thereof.
Claims use since Jan. 27, 1921.

Ser. No. 332,387. TARK ELECTRIC RAZOR CO., INC., Long Island City, N. Y. Filed Nov. 22, 1932.

Tark

For Electric Razors and Blades Therefor.
Claims use since May 18, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 332,203. WARNER BROS. PICTURES, INC., New York, N. Y. Filed Nov. 16, 1932.

SPORT THRILLS

No claim is made to the word "Sport" except as the same is used in conjunction with the other features of the mark.

For Series of Different Motion Picture Films.
Claims use since Sept. 24, 1932.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 320,085. THE DESHLER BROOM FACTORY, Deshler, Nebr. Filed Oct. 15, 1931.

WHALEBONE

For Whisk Brooms.
Claims use since July 1, 1914.

Ser. No. 332,288. AR. WINARICK, INC., New York, N. Y. Filed Nov. 19, 1932.

JERIS

For Powder Puffs, Dusting Mittens, Dish Mops, Floor Mops, Whisk Brooms, Wall Brushes, Scrub Brushes, Dusting Brushes, Floor Brushes, Clothes Brushes, Hair Brushes, Nail Brushes, Tooth Brushes, Complexion Brushes, Shaving Brushes, Bath Brushes, Paint Brushes, and Artists' Brushes.
Claims use since Mar. 3, 1932.

CLASS 30

Crockery, Earthenware, and Porcelain

Ser. No. 332,663. STEPHEN SLESINGER, INC., New York, N. Y. Filed Dec. 1, 1932.

WINNIE-THE-POOH

CHRISTOPHER ROBIN

The mark is the name of characters in "The Children's Story Book" by A. A. Milne, of London, England.
For Chinaware and Pottery, Bric-a-Brac, and Reflectors, Globes and Shades of China and Porcelain.
Claims use since Jan. 20, 1930.

CLASS 31

Filters and Refrigerators

Ser. No. 331,386. TREMBLETT & DAVIN, Chicago, Ill. Filed Oct. 19, 1932.

Kitchen

THE PAYMASTER OF THE KITCHEN

For Household and/or Store Refrigerators.
Claims use since Oct. 11, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 332,152. INTERNATIONAL DISTRIBUTING CO., Janesville, Wis. Filed Nov. 15, 1932.

ECONOMY

For Porch Shades.
Claims use since Nov. 5, 1932.

Ser. No. 332,259. JACK LATHAM, doing business as Latham and Bower, Cos Cob, Conn. Filed Nov. 18, 1932.

CLEAR DECK

For Card Tables.
Claims use since Nov. 1, 1932.

CLASS 33

Glassware

Ser. No. 332,960. THE C. F. PEASE COMPANY, Chicago, Ill. Filed Dec. 10, 1932.

Thermex

For Arc Lamp Globes of Glass.
Claims use since Nov. 23, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 328,429. KELVINATOR CORPORATION, Detroit, Mich. Filed June 30, 1932.

RIGHTWAY

For Oil Burners and Parts Thereof.
Claims use since Oct. 18, 1930.

CLASS 37

Paper and Stationery

Ser. No. 325,715. LEVIN BROTHERS PAPER CO., Chicago, Ill. Filed Apr. 1, 1932.

DEFIANCE

For Toilet Paper.
Claims use since June 12, 1922.

Ser. No. 329,432. STRATHMORE PAPER COMPANY, West Springfield, Mass. Filed Aug. 9, 1932.



For Writing and Printing Paper.
Claims use since June, 1912.

Ser. No. 331,769. GEORGE J. BOWMAN, Rochester, N. Y. Filed Nov. 1, 1932.

AUTODEX

For Partially Printed Forms.
Claims use since Sept. 24, 1932.

Ser. No. 332,369. THE EGRY REGISTER COMPANY, Dayton, Ohio. Filed Nov. 22, 1932.

HANDIPAK

For Autographic Registers and Paper Fillers Therefor.
Claims use since Oct. 25, 1932.

Ser. No. 332,401. CRECO COMPANY, INC., Long Island City, N. Y. Filed Nov. 23, 1932.

CRECO

For Paper Towels, Toilet Papers.
Claims use since May, 1919.

Ser. No. 332,472. THE STANDARD ENVELOPE MANUFACTURING COMPANY, Cleveland, Ohio. Filed Nov. 25, 1932.

Bottlope

For Envelopes for Correspondence, Bills, and Advertisements.
Claims use since Sept. 22, 1932.

Ser. No. 332,820. PACIFIC MANIFOLDING BOOK COMPANY, Emeryville, Calif. Filed Dec. 6, 1932.

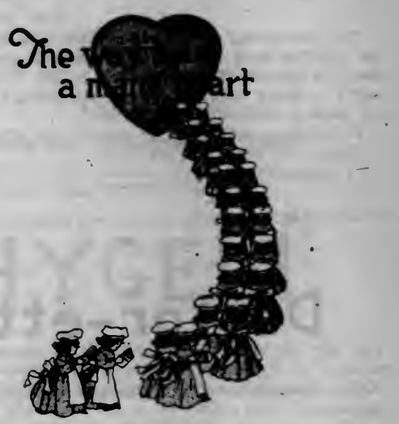
SPEEDICOPIES

For Paper and Stationery, Particularly Units Consisting of Assembled Sheets of Paper with or without Carbon Paper.
Claims use since Aug. 26, 1932.

CLASS 38

Prints and Publications

Ser. No. 332,076. THE SETTLEMENT COOK BOOK COMPANY, Milwaukee, Wis. Filed Nov. 11, 1932.



The representation of a heart in the drawing is lined for the color red, although the color of the heart is not an essential feature of the trade-mark.
For Printed Books.
Claims use since Dec. 15, 1921.

Ser. No. 332,132. UNION PUBLISHING COMPANY, Dallas, Tex. Filed Nov. 14, 1932.

TEXAS FREEMASON
And EASTERN STAR

For Magazine Published Monthly.
Claims use since June 1, 1927.

Ser. No. 333,168. ANDREW R. PEARSON and ROBERT S. ALLEN, Washington, D. C. Filed Dec. 17, 1932.

MERRY GO ROUND

For News Columns and Special Articles Appearing Daily or from Time to Time.
Claims use since Oct. 1, 1932.

CLASS 39

Clothing

Ser. No. 322,388. JACOBS, GROSSMAN & ROSENBERG, INC., Philadelphia, Pa. Filed Dec. 23, 1931.

RED DOT

FROCKS

The cross-lining of the dot symbol indicates the color red and the word "Frocks" is disclaimed apart from the mark as shown. The trade-mark is not intended necessarily to imply that the fabric from which the garments are made is marked with red dots.
For Dresses and Suits for Infants and Children.
Claims use since Nov. 24, 1931.

Ser. No. 326,269. CLARA H. RAINEY, Malone, N. Y. Filed Apr. 19, 1932.

Doctor-ette

For Kimonos, and Baby Garments—Namely, Rubber Diapers.
Claims use since Apr. 7, 1932.

Ser. No. 328,283. SWEET-ORR & CO., INC., Wappingers Falls and New York, N. Y. Filed June 24, 1932.



For Negligee Shirts and Breeches, Pants, Coats, Knickers, and Shorts for Men and Boys.
Claims use since June 4, 1932.

Ser. No. 330,443. STANLEY L. BELLEMERE, doing business as Layne Hosiery Company, Reading, Pa. Filed Sept. 19, 1932.

HOSIERY by Layne

No claim is made to the words "Hosiery by" apart from the mark as shown.
For Ladies' Hosiery.
Claims use since Sept. 8, 1932.

Ser. No. 331,582. HOWLETT & HOCKMEYER CO. INC., New York, N. Y. Filed Oct. 26, 1932.

"DRI-PLAY"

For Leggings, Windbreakers, Blouses, Ski-Pants, Ski-Suits, and Play-Suits.
Claims use since Sept. 1, 1932.

Ser. No. 332,900. J. SCHOENEMAN, INCORPORATED, Baltimore, Md. Filed Dec. 8, 1932.

SPORTREND

For Coats, Vests, Trousers, Knickerbockers, Top Coats, and Overcoats for Men, Youths, and Boys.
Claims use since February, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 318,096. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Aug. 18, 1931.

SHEERANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Aug. 17, 1931.

Ser. No. 322,419. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Dec. 24, 1931.

RIPPLANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Dec. 22, 1931.

CLASS 43

Thread and Yarn

Ser. No. 331,843. SADIE BLUMENTHAL, New York, N. Y. Filed Nov. 2, 1932.

ORCHARD THREADS

The descriptive word "Threads" is hereby disclaimed as a part and aside from the mark as shown on the drawing.
For Machine Threads.
Claims use since July 10, 1932.

CLASS 44

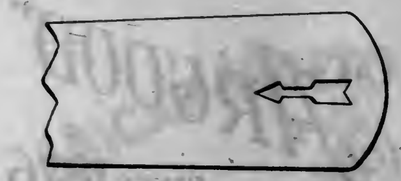
Dental, Medical, and Surgical Appliances

Ser. No. 331,624. RICHTER & HOFFMAN HARVARD GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Berlin, Germany. Filed Oct. 27, 1932.

HC

For Wax and Moulding Compounds for Purposes of Dental Surgery, Filling Material for Teeth, and Tooth Polishing Material for the Purpose of Dental Surgery.
Claims use since June 28, 1932.

Ser. No. 332,562. BERNARD WIGDER, doing business as The Wigder Manufacturing Co., Newark, N. J. Filed Nov. 28, 1932.



No claim is made to the representation of the portion of the handle of a nail file appearing in the accompanying drawing.
For Manicure Implements—Namely, Nail Files, Tweezers, Nail Clippers, Blackhead Removers, Cuticle Shapers, and Cuticle Scissors.
Claims use since Oct. 19, 1932.

Ser. No. 332,673. JULIUS ADERER, INC., New York, N. Y. Filed Dec. 2, 1932.



The trade-mark consists in spaced blue bands or markings along the substantial length of the wire. The shaded lines upon the drawing indicate the color blue. The representation of the wire in the drawing is disclaimed.
For Dental Wire.
Claims use since July 25, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 315,134. CHITTENDEN, TURNER & COMPANY, INC., Boston, Mass. Filed May 28, 1931.

HYGELL

For a Granular or Powdered Preparation for Use as a Colloid, Thickener, or Stabilizer for Liquids to Produce Body and Viscosity and Perfect Homogenization of Ingredients in Mixtures Such as Ice Cream and Other Foods.
Claims use since Apr. 20, 1931.

Ser. No. 328,821. KRESGE DEPARTMENT STORES CORPORATION, Newark, N. J. Filed Feb. 4, 1932.



For Coffee, Tea, Candy, Fruit Preserves, Cocoa, Cereal Breakfast Foods, Bread, Salted Nuts, and Pastry.
Claims use since June 20, 1929.

Ser. No. 325,277. THE WEBER COFFEE COMPANY, Philadelphia, Pa. Filed Mar. 4, 1932.

"ARGOOD"

SINCE 1876

For Canned and Packaged Coffee and Tea.
Claims use since Mar. 1, 1908.

Ser. No. 327,684. ERNEST D. FEAR, Kansas City, Mo. Filed June 3, 1932.

DE-RAEF PRO-LAC

For Milk Powder for Human Consumption.
Claims use since July 1, 1931.

Ser. No. 328,702. PLANTERS EDIBLE OIL COMPANY, Suffolk, Va. Filed July 11, 1932.

"HI-HAT"

For Edible Oils for Salads and for Cooking Purposes.
Claims use since June 3, 1932.

Ser. No. 330,605. RICHMOND DAIRY COMPANY, Richmond, Va. Filed Sept. 23, 1932.

RICHELAC

For Fresh Milk.
Claims use since 1914.

Ser. No. 331,644. OTTO L. KUEHN CO., Milwaukee, Wis. Filed Oct. 28, 1932.

O.K.

For Pickled Herring, Salted Herring, Smoked Herring, and Canned Fish.
Claims use since 1896.

Ser. No. 331,662. MERKEL INC., New York, N. Y. Filed Oct. 28, 1932.

Sunrise Tender Treats

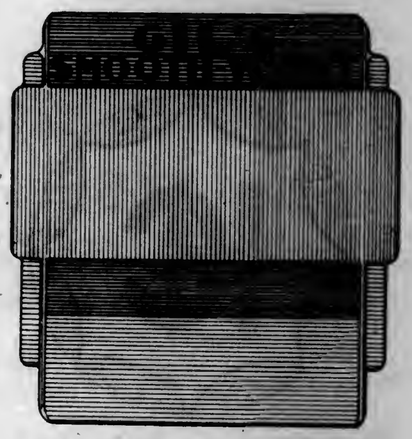
Applicant disclaims the word "Tender" apart from the mark as used in the drawing.
For Smoked Butts.
Claims use since Aug. 27, 1932.

Ser. No. 331,940. WINTERFRESH FOODS, INC., Chicago, Ill. Filed Nov. 5, 1932.

Winterfresh

For Preserved Fruits and Vegetables.
Claims use since Sept. 8, 1932.

Ser. No. 331,989. EMERY J. GUILBERT, doing business as Springdale Mayonnaise Company, Springdale, Conn. Filed Nov. 8, 1932.



No claim is made to the word "Smooth" or the word "Whipt" apart from the mark as shown. The drawing is lined for red, dark blue and light blue. No claim is made to the representation of the label.
For Mayonnaise.
Claims use since June 1, 1932.

Ser. No. 332,439. SEGUIN MILLING & POWER COMPANY, Seguin, Tex. Filed Nov. 25, 1932.

WHITE HOUSE

Applicant is the owner of registration No. 116,006, registered Mar. 27, 1917.
For Corn Meal, Scratch Feed, Developer Scratch Feed, Baby Chick Scratch Feed, Laying Mash, Growing Mash, Chick Starter, Poultry Fattener, 24% Protein Dairy Feed, Pig Feed, Protein Supplement for Pigs.
Claims use since March, 1919.

Ser. No. 332,538. S. STEPHEN MARVIN, doing business as Du Barry & Company, Burbank, Calif. Filed Nov. 28, 1932.

Du Barry's

For Powdered Food Product Prepared from Oriental Lentils and Grain.
Claims use since 1846.

Ser. No. 332,647. DAGGETT CHOCOLATE COMPANY, doing business as Belle Rose Chocolate Co., Cambridge, Mass. Filed Dec. 1, 1932.

SHERATON

For Candy.
Claims use since Nov. 23, 1932.

Ser. No. 332,780. MICKY MALTO PRODUCTS CO., San Francisco, Calif. Filed Dec. 5, 1932.

MICKY MALTO



For Powdered Composition Including Malt, Eggs and Milk Used as a Base for Food Beverages.
Claims use since Aug. 15, 1932.

Ser. No. 332,827. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, New York, N. Y. Filed Dec. 7, 1932.

EIGHT
THE GREAT ATLANTIC &
O'CLOCK
PACIFIC TEA COMPANY
COFFEE
MAIN OFFICE NEW YORK

No claim is made to the exclusive use of the words "Coffee Main Office New York" apart from the mark as shown in the drawing.
For Coffee.
Claims use since Oct. 1, 1932.

CLASS 48

Malt Beverages and Liquors

Ser. No. 332,888. K B BEVERAGE COMPANY, Bay City, Mich. Filed Dec. 8, 1932.

Trueworth

For Malt Beverages Containing Less Than One-Half (½) of One Per Cent (1%) of Alcohol by Volume.
Claims use since Oct. 18, 1931.

Ser. No. 333,312. CLOVERDALE SPRING CO., Baltimore, Md. Filed Dec. 23, 1932.



For Malt Beverages Having an Alcoholic Content Not in Excess of That Permitted by Law.
Claims use since Dec. 9, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 331,997. SLATER RODGER & COMPANY LIMITED, Glasgow, Scotland. Filed Nov. 8, 1932.



No claim is made herein broadly to any matter appearing on the drawing with the exception of the pictorial representation of the music stand and the name "Huntly Bottling Stores".
For Whisky.
Claims use since December, 1897.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JANUARY 31, 1933

300,644. ELECTRICAL FIRE ALARM SYSTEMS, FOR ELECTRICAL POLICE SIGNALING SYSTEMS, AND FOR ELECTRICAL TELEPHONE SYSTEMS, AND PARTS OF SUCH SYSTEMS. THE GAMEWELL COMPANY, Newton and Newton Upper Falls, Mass.
Filed September 19, 1932. Serial No. 330,475. PUBLISHED NOVEMBER 15, 1932. Class 21.

300,645. ELECTRIC SADIRONS. THE FITZGERALD MANUFACTURING CO., Torrington, Conn.
Filed September 19, 1932. Serial No. 330,473. PUBLISHED NOVEMBER 15, 1932. Class 21.

300,646. ELECTRIC HEATING PADS FOR MISCELLANEOUS PURPOSES. HABE MFG. CO., Philadelphia, Pa.
Filed September 3, 1932. Serial No. 330,087. PUBLISHED NOVEMBER 8, 1932. Class 21.

300,647. MOTOR LUBRICATING OIL. WHITE STAR REFINING COMPANY, Detroit, Mich.
Filed August 19, 1932. Serial No. 329,694. PUBLISHED NOVEMBER 15, 1932. Class 15.

300,648. OILS AND GREASES HAVING A HYDROCARBON BASE, CONSISTING OF BURNING OILS, MOTOR FUELS, FUEL OILS, AND LUBRICANTS. THE GENERAL REFINING COMPANY, Baltimore, Md.
Filed August 19, 1932. Serial No. 329,679. PUBLISHED NOVEMBER 8, 1932. Class 15.

300,649. GENERATORS, MOTORS, DOMESTIC LIGHTING PLANTS, AND MAGNETOS. FAIRBANKS, MORSE & CO., Chicago, Ill.
Filed August 18, 1932. Serial No. 329,630. PUBLISHED NOVEMBER 15, 1932. Class 21.

300,650. DRY CLEANING SOLVENT. ELMER RICHARDS COMPANY, Chicago, Ill.
Filed August 17, 1932. Serial No. 329,615. PUBLISHED NOVEMBER 15, 1932. Class 4.

300,651. LIQUID CLEANER FOR VITREOUS SURFACES. THE DRACKETT CHEMICAL COMPANY, Cincinnati, Ohio.
Filed August 1, 1932. Serial No. 329,258. PUBLISHED NOVEMBER 15, 1932. Class 4.

300,652. DEODORANTS AND PREPARATIONS FOR PREVENTING EXCESSIVE PERSPIRATION. THE ODORONO COMPANY, INC., New York, N. Y.
Filed December 18, 1931. Serial No. 322,264. PUBLISHED NOVEMBER 1, 1932. Class 6.

300,653. WRITING INK. SYDNEY E. SOLOMON, Boston, Mass., assignor, by mesne assignments, to American Writing Ink Company, Inc., Boston, Mass.
Filed September 28, 1931. Serial No. 319,515. PUBLISHED DECEMBER 8, 1931. Class 11.

300,654. GASOLINE, MOTOR OIL, TRANSMISSION LUBRICANT, PRESSURE GUN LUBRICANT, STEERING-GEAR LUBRICANT, MOTOR CUP GREASE, UNIVERSAL GREASE, AND WATER PUMP GREASE. SUN OIL COMPANY, Philadelphia, Pa.
Filed September 24, 1931. Serial No. 319,376. PUBLISHED NOVEMBER 15, 1932. Class 15.

300,655. RADIATOR VALVES. SALTSER & WEINSIER, INC., Brooklyn, N. Y.
Filed October 5, 1932. Serial No. 330,970. PUBLISHED NOVEMBER 15, 1932. Class 13.

300,656. METAL CUTTING SAWS AND PARTICULARLY HACK-SAW BLADES. SPARTAN SAW WORKS, Springfield, Mass.
Filed October 3, 1932. Serial No. 330,902. PUBLISHED NOVEMBER 15, 1932. Class 23.

300,657. RAZOR BLADES. PLOUGH, INC., Memphis, Tenn.
Filed October 3, 1932. Serial No. 330,898. PUBLISHED NOVEMBER 15, 1932. Class 23.

300,658. COMBINATION TELEPHONE STANDS AND BOOKHOLDERS. ONEIDACRAFT, INC., Oneida, N. Y.
Filed September 30, 1932. Serial No. 330,827. PUBLISHED NOVEMBER 15, 1932. Class 32.

300,659. FOLDING CHAIRS DESIGNED ESPECIALLY FOR USE IN CHURCHES, SCHOOLS, HOMES, ETC. SAMUEL LEWIS CO. INC., New York, N. Y.
Filed July 13, 1932. Serial No. 328,770. PUBLISHED NOVEMBER 8, 1932. Class 32.

300,660. BOX-SPRINGS AND MATTRESSES. SLEEPER PRODUCTS, INC., Wilmington, Del., and Philadelphia, Pa.
Filed September 21, 1932. Serial No. 330,678. PUBLISHED NOVEMBER 8, 1932. Class 32.

300,661. JACKETS AND FILLERS. KEYES FIBRE COMPANY, INC., Waterville, Me.
Filed March 23, 1932. Serial No. 325,403. PUBLISHED MAY 24, 1932. Class 2.

300,662. SCYTHE STONES, WHETSTONES, AND ABRASIVE STONES. NORTON PIKE COMPANY, Pike, N. H.
Filed October 6, 1932. Serial No. 331,003. PUBLISHED NOVEMBER 15, 1932. Class 4.

300,663. INTERNAL MEDICINE. MENDEL R. MENDELSOHN, doing business as The Mendum Laboratories, Newark, N. J.
Filed October 4, 1932. Serial No. 330,928. PUBLISHED NOVEMBER 15, 1932. Class 6.

300,664. BRACELETS. THE HADLEY COMPANY, INC., Providence, R. I.
Filed September 30, 1932. Serial No. 330,815. PUBLISHED NOVEMBER 8, 1932. Class 28.

300,665. LUBRICATING OILS AND GREASES AND GASOLINE. GASETERIA INCORPORATED, Indianapolis, Ind.
Filed September 29, 1932. Serial No. 330,786. PUBLISHED NOVEMBER 8, 1932. Class 15.

300,666. SOPRANO CLARINETS, BASS AND ALTO CLARINETS, FLUTES, PICCOLOS, OBOES, AND BASSOONS. HARRY BETTONEY, doing business as The Cundy-Bettoney Co., Boston, Mass.
Filed September 21, 1932. Serial No. 330,677. PUBLISHED NOVEMBER 8, 1932. Class 26.

300,667. FINGER RINGS AND MOUNTINGS THEREFOR. BENJAMIN & EDWARD J. GROSS CO., INC., New York, N. Y.
Filed September 27, 1932. Serial No. 330,702. PUBLISHED NOVEMBER 8, 1932. Class 28.

300,668. LUBRICATING OILS. ALTA-VIS OIL COMPANY, Portland, Oreg.
Filed September 24, 1932. Serial No. 330,618. PUBLISHED NOVEMBER 8, 1932. Class 15.

300,669. OIL FOR FINISHING LEATHER. GENERAL DYESTUFF CORPORATION, New York, N. Y.
Filed September 20, 1932. Serial No. 330,511. PUBLISHED NOVEMBER 15, 1932. Class 4.

300,670. SUN GLASSES, SNOW GLASSES, LEATHER GOGGLES, AND EYE PROTECTORS. COLUMBIA PROTEKTOSITE CO., INC., Carlstadt, N. J.
Filed September 24, 1932. Serial No. 330,619. PUBLISHED NOVEMBER 15, 1932. Class 26.

300,671. SAFETY RAZOR BLADES. ALEXANDER KAPLAN, doing busines as Jockey Razor Blade Co., New York, N. Y.
Filed September 23, 1932. Serial No. 330,599. PUBLISHED NOVEMBER 15, 1932. Class 23.

300,672. SEWING MACHINES. WHITE SEWING MACHINE CORPORATION, Cleveland, Ohio.
Filed September 22, 1932. Serial No. 330,588. PUBLISHED NOVEMBER 15, 1932. Class 23.

300,673. CASSETTES HOLDING PHOTOGRAPHIC FILMS FOR X-RAY PICTURES. GENERAL ELECTRIC X-RAY CORPORATION, Chicago, Ill.
Filed September 16, 1932. Serial No. 330,403. PUBLISHED NOVEMBER 15, 1932. Class 26.

300,674. MACHINES AND PARTS THEREOF AND THEREFOR, FOR SLITTING, REWINDING, CUTTING, AND PERFORATING FLEXIBLE MATERIALS. CAMERON MACHINE COMPANY, Brooklyn, N. Y.
Filed September 1, 1932. Serial No. 330,035. PUBLISHED NOVEMBER 15, 1932. Class 23.

300,675. ICE VENDING MACHINES AND AUTOMATIC ICE VENDING MACHINES. CALIFORNIA CONSUMERS COMPANY, Los Angeles, Calif.
Filed August 22, 1932. Serial No. 329,735. PUBLISHED NOVEMBER 15, 1932. Class 23.

300,676. ROASTED COFFEE. H. L. CAPLAN & CO. INC., doing business as Belvedere Coffee & Tea Co., Baltimore, Md.
Filed September 22, 1932. Serial No. 330,569. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,677. FRESH VEGETABLES SUCH AS TOMATOES, CELERY, CANTALOUPES, HONEY-DEW MELONS, CARROTS, AND BEETS. LEEF, SOMMER & CO., New York, N. Y.
Filed September 10, 1932. Serial No. 330,229. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,678. TABLE SYRUP. OELERICH & BERRY COMPANY, doing business as Oelerich & Berry Co., Chicago, Ill.
Filed September 9, 1932. Serial No. 330,207. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,679. DOG FOOD. VALENTINE'S MEAT-JUICE COMPANY, Richmond, Va.
Filed September 3, 1932. Serial No. 330,110. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,680. ICE CREAM AND SHERBET. SWIFT AND COMPANY, Chicago, Ill.
Filed September 3, 1932. Serial No. 330,108. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,681. FRESH FRUITS—NAMELY, FRESH APPLES, APRICOTS, CHERRIES, PEACHES, PLUMS, PEARS, GRAPES, PERSIMMONS, POMEGRANATES, FIGS, QUINCES, NECTARINES, OLIVES, AND PRUNES. CALIFORNIA FRUIT EXCHANGE, Sacramento, Calif.
Filed August 31, 1932. Serial No. 330,009. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,682. CHOCOLATE MALT SYRUP. KESSLER FOODS, Brooklyn, N. Y.
Filed August 5, 1932. Serial No. 329,350. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,683. FRESH LETTUCE. ORRIN O. EATON, Watsonville, Calif.
Filed March 14, 1932. Serial No. 325,091. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,684. COSMETIC PREPARATIONS. ASSOCIATED MOTION PICTURE MAKE-UP ARTISTS, INC., LTD., Los Angeles, Calif.
Filed March 14, 1932. Serial No. 325,085. PUBLISHED NOVEMBER 15, 1932. Class 6.

300,685. FURNACE-CONTROLLING DEVICE COMPRISING AN ELECTRICALLY-OPERATED BLOWER HAVING CONNECTIONS BY WHICH TO BLOW AIR INTO THE FURNACE PARTLY BELOW THE FIRE GRATE AND PARTLY ABOVE THE FIRE. THORNTON W. PRICE, doing business as The Coal Carburetor Company, New Brunswick, N. J.
Filed September 18, 1930. Serial No. 805,825. PUBLISHED NOVEMBER 4, 1930. Class 34.

300,686. ELECTRICAL MOTORS. SETH THOMAS CLOCK COMPANY, Thomaston, Conn.
Filed June 5, 1931. Serial No. 315,479. PUBLISHED NOVEMBER 8, 1932. Class 21.

300,687. ELECTRIC GENERATING, STORAGE, AND STARTING SYSTEMS, ETC., AND PARTS THEREFOR. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio.
Filed April 3, 1931. Serial No. 312,905. PUBLISHED NOVEMBER 8, 1932. Class 21.

300,688. LATHER, FOAM, AND EMULSION FORMING MACHINES, OPERATING BY BEATING OR MIXING. ELECTROFOAM CORPORATION, LTD., Pasadena, Calif.
Filed February 10, 1931. Serial No. 310,915. PUBLISHED NOVEMBER 15, 1932. Class 23.

300,689. LUBRICATING OILS. PANTHER OIL & GREASE MFG. CO., Fort Worth, Tex.
Filed June 11, 1930. Serial No. 302,329. PUBLISHED NOVEMBER 1, 1932. Class 15.

300,690. MILK CHOCOLATE. WALTER BAKER & COMPANY, LIMITED, Boston, Mass., assignor to Walter Baker & Company, Inc., Boston, Mass.
Filed October 15, 1927. Serial No. 256,155. PUBLISHED JANUARY 3, 1928. Class 46.

300,691. SHOULDERS, DRIED BEEF, SAUSAGE, LARD, BACON, AND OTHER MEAT SPECIALTIES—NAMELY, COTTAGE BUTTS, JOWL BUTTS, HAM, DRY SALT, EXTRA, PICNIC, LUNCHEON MEAT, PIG FEET, AND DRY SALT BELLY. THE H. H. MEYER PACKING COMPANY, Cincinnati, Ohio.
Filed July 3, 1931. Serial No. 316,605. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,692. ELECTRIC BLANKETS AND HEATING PADS. BEAUTYBATH, INC., Newark, N. J.
Filed March 8, 1932. Serial No. 324,869. PUBLISHED NOVEMBER 15, 1932. Class 44.

300,693. FOOD PRODUCT, CONSISTING OF CHOCOLATE, MALT, YEAST, CANE SUGAR, AND OTHER INGREDIENTS FOR USE IN PRODUCING FOOD BEVERAGES. BERNARD FIEG, Brooklyn, N. Y.
Filed February 26, 1932. Serial No. 324,509. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,694. PHARMACEUTICAL PREPARATIONS, INSECTICIDES, ETC. POLK MILLER PRODUCTS CORP., Richmond, Va.
Filed February 15, 1932. Serial No. 324,191. PUBLISHED MAY 3, 1932. Class 6.

300,695. HAIR WAVING PADS. LAFOREST D. CLINKENBEARD, doing business as Lee's Beauty Shop, Sioux City, Iowa.
Filed July 13, 1932. Serial No. 328,753. PUBLISHED NOVEMBER 15, 1932. Class 44.

300,696. UNITARY TELEVISION TRANSMITTING AND RECEIVING EQUIPMENT AND PARTS THEREOF, ETC. SCOPHONY LIMITED, London, England.
Filed June 22, 1932. Serial No. 328,227. PUBLISHED NOVEMBER 8, 1932. Class 21.

300,697. DRY CLEANING AND SPOT-REMOVING PREPARATIONS. THE RENOU CHEMICAL CORPORATION, Akron, Ohio.
Filed May 31, 1932. Serial No. 327,604. PUBLISHED JULY 12, 1932. Class 4.

CARNEGIE LIBRARY OF ATLANTA

300,698. GRANULATED ABRASIVE MATERIALS. ABRASIVE PRODUCTS COMPANY, Lansdowne, Pa.
Filed May 23, 1932. Serial No. 327,330. PUBLISHED NOVEMBER 15, 1932. Class 4.

300,699. ELECTRIC STOVES AND RANGES. ELECTROMASTER, INC., Detroit, Mich.
Filed April 18, 1932. Serial No. 326,206. PUBLISHED NOVEMBER 8, 1932. Class 21.

300,700. JOINTS FOR VEHICLE DRAG LINKS, TIE RODS, AND SHOCK ABSORBER LINKS. THOMPSON PRODUCTS, INCORPORATED, Detroit, Mich.
Filed March 31, 1932. Serial No. 325,698. PUBLISHED NOVEMBER 15, 1932. Class 19.

300,701. POLISHING POWDER FOR POLISHING AND CLEANING METALS, GLASS, PORCELAIN, ETC. GLEAM PRODUCTS CORPORATION, New York, N. Y.
Filed August 3, 1932. Serial No. 329,307. PUBLISHED NOVEMBER 15, 1932. Class 4.

300,702. TECHNICAL GRADE CALCIUM HYPOCHLORITE. THE MATHIESON ALKALI WORKS, INC., New York, N. Y.
Filed October 1, 1932. Serial No. 330,854. PUBLISHED NOVEMBER 15, 1932. Class 6.

300,703. PHARMACEUTICAL PREPARATION FOR THE PREVENTION OF COLDS. LEDERLE LABORATORIES, INC., New York, N. Y.
Filed September 30, 1932. Serial No. 330,821. PUBLISHED NOVEMBER 15, 1932. Class 6.

300,704. RECONSTRUCTIVE TONIC. CONADWEL LABORATORIES, INC., New York, N. Y.
Filed September 28, 1932. Serial No. 330,742. PUBLISHED NOVEMBER 15, 1932. Class 6.

300,705. MEAT AND MEAT PRODUCTS. THE E. KAHN'S SONS COMPANY, Cincinnati, Ohio.
Filed September 26, 1932. Serial No. 330,659. PUBLISHED NOVEMBER 15, 1932. Class 46.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

300,706. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) JOHN LLOYD WRIGHT, INC., Chicago, Ill. Filed Dec. 18, 1931. Serial No. 322,279.

LINCOLN STONES

For Toy Sets of Building Stones for Erecting Miniature Buildings.
Claims use since Dec. 12, 1931.

300,707. (CLASS 39. CLOTHING.) THE ESTATE OF NATHAN BYERS, S. GEORGE BURRIS, BUSINESS TRUSTEE, doing business as American Brassiere Company, New York, N. Y. Filed Aug. 28, 1931. Serial No. 318,507.



For Corselettes, Girdles, Corsets, and Brassières.
Claims use since June 15, 1931.

300,708. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE WHITCOMB LOCOMOTIVE CO., Rochelle, Ill. Filed June 4, 1931. Serial No. 315,421.

WHITCOMB

For Gasoline, Oil, Diesel, and Mechanical Locomotives or Combinations of These and Parts or Assemblies Entering into the Manufacture of These Locomotives—Namely, Clutches, Bearings, and Bearing Boxes, Radiators, Bumper-Castings, Side Frames; Haulage Equipment and Apparatus and Accessories for the Same—Namely, Bearings; Road Building Machinery—Namely, Road Shouldering Machines, Machines for Removing or Filling in the Earth During the Building of a Road, Machinery for Conveying and Loading Earth, Machinery for Handling Material in Combination with Devices for Digging Ditches, Together with All Manner of Parts for Such Machinery.
Claims use since 1907.

TRADE-MARK REGISTRATIONS RENEWED

39,227. ANTISEPTIC WATERPROOF SHEETINGS, DIAPERS, AND WATERPROOF UNDERGARMENTS. Registered November 11, 1902. ARTHUR L. SWEETSER, Boston, Mass. Renewed November 11, 1932, to The Stork Company, East Weymouth, Mass., a Corporation of Maine, successor.

39,236. CANNED FRUITS, VEGETABLES, AND SOUPS. Registered November 11, 1902. WARFIELD-PRATT-HOWELL CO., Des Moines, Sioux City, and Cedar Rapids, Iowa. Renewed November 11, 1932, to Pratt-Mallory Company, Sioux City, Iowa, a Corporation of Iowa, assignee by mesne assignments.

39,436. BEER. Registered December 9, 1902. "SAAZER GENOSSENSCHAFTSBRAUEREI, REG. GENOSSENSCHAFT MIT BESCHRÄNKTER HAFTUNG, SAAZ," Saaz, Austria-Hungary. Renewed December 9, 1932, to Anton Dreher's Export-Brauerei Gesellschaft Mit Beschränkter Haftung Saaz, Saaz, Czechoslovakia, a Corporation of Czechoslovakia, successor.

39,438. SCOTCH WHISKY. Registered December 9, 1902. HILL, THOMSON & COMPANY, Edinburgh, Scotland, a Firm. Renewed December 9, 1932.

39,629. CORDAGE. Registered January 13, 1903. HOOPER SONS MFG. CO., Philadelphia, Pa., a Corporation of Pennsylvania. Renewed January 13, 1933.

39,841. STARCH AND STARCH COMPOUNDS. Registered February 24, 1903. AD. F. LAHUSEN, Hamburg, Germany. Renewed February 24, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

39,849. TANNING EXTRACTS AND TANNING LIQUORS. Registered February 24, 1903. LOUIS PRENZLAU, Hamburg, Germany. Renewed February 24, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

40,060. CHEESE. Registered April 7, 1903. SOCIÉTÉ DES CAVES ET DES PRODUCTEURS RÉUNIS DE ROQUEFORT, (AVEYRON), Roquefort, France. Renewed April 7, 1933, to B. M. Douglas, New York, N. Y., assignee.

40,166. WHISKY. Registered April 21, 1903. JAMES BUCHANAN, London, England; Glagow, Leith, and Glenlivet, Scotland. Renewed April 21, 1933, to James Buchanan & Co., Limited, London, England, a Corporation of Great Britain, assignee.

40,329. MANUFACTURED FERTILIZERS. Registered May 12, 1903. SWIFT FERTILIZER WORKS, Chicago, Ill., and Atlanta, Ga. Renewed May 12, 1933, to Swift and Company, Chicago, Ill., a Corporation of Illinois, assignee.

40,401. REMEDY FOR PILES. Registered May 19, 1903. D. WEEKS & CO., Des Moines, Iowa, a Corporation of Iowa. Renewed May 19, 1933.

47,951. ALE. Registered November 28, 1905. C. H. EVANS & SONS. Renewed November 28, 1925, to C. H. Evans & Sons, Hudson, N. Y., a Corporation of New York, assignee.

87,920. OVERGAITERS AND LEGGINGS. Registered August 13, 1912. PERFECTION OVERGAITER CO. Renewed August 13, 1932, to Perfection Overgaiter Company, Inc. Burlington, Vt., a Corporation of Vermont, successor.

88,734. VELVET RIBBONS. Registered October 22, 1912. COLCOMBET FOIS & CO. Renewed October 22, 1932, to Colcombet Fois & Co-Societe Anonyme, St. Etienne, France, a Corporation of France, assignee.

88,735. VELVET RIBBONS. Registered October 22, 1912. COLCOMBET FOIS & CO. Renewed October 22, 1932, to Colcombet Fois & Co-Societe Anonyme, St. Etienne, France, a Corporation of France, assignee.

89,347. IDENTIFICATION-TAGS. Registered December 10, 1912. WILLIAM L. DEMING, Salem, Ohio. Renewed December 10, 1932.

89,521. PAPER HANGINGS. Registered December 17, 1912. THE WALLPAPER MANUFACTURERS LIMITED. Renewed December 17, 1932, to The Walpamur Company, Limited, London, England, a Corporation of Great Britain, assignee.

89,528. KNITTED AND TEXTILE UNDERWEAR—NAMELY, UNDERSHIRTS, UNDERVESTS, AND UNDERDRAWERS, AND HOSIERY. Registered December 24, 1912. JOEL BAILY DAVIS COMPANY, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed December 24, 1932.

89,680. CANDY. Registered December 31, 1912. MASON, AU & MAGENHEIMER CONFECTIONERY MANUFACTURING COMPANY, New York, N. Y., a Corporation of West Virginia. Renewed December 31, 1932.

89,747. NETS AND VEILINGS. Registered January 7, 1913. JOHN HEATHCOAT & CO., Tiverton and London, England. Renewed January 7, 1933, to John Heathcoat & Co., Tiverton, England, a Corporation of Great Britain, successor.

89,765. MULTIPLE-SPINDLE AUTOMATIC LATHES. Registered January 7, 1913. THE NATIONAL-ACME MANUFACTURING COMPANY. Renewed January 7, 1933, to The National Acme Company, Cleveland, Ohio, a Corporation of Ohio, successor.

89,839. BOOKS AND PRINTED PUBLICATIONS. Registered January 14, 1913. THE GIDEONS, Chicago, Ill., a Corporation of Illinois. Renewed January 14, 1933.

89,852. ICE-SKATES. Registered January 14, 1913. NESTOR JOHNSON. Renewed January 14, 1933, to Nestor Johnson Mfg. Co., Chicago, Ill., a Corporation of Illinois, assignee.

89,891. EVAPORATED MILK. Registered January 14, 1913. UNION CONDENSED MILK COMPANY. Renewed January 14, 1933, to Union Condensed Milk Company, Chicago, Ill., a Corporation of Illinois, assignee by mesne assignments.

89,925. PIANOS. Registered January 21, 1913. THE JOHN CHURCH COMPANY, Cincinnati, Ohio. Renewed January 21, 1933, to Everett Piano Company, South Haven, Mich., a Corporation of Illinois, successor.

89,956. FILTERING-PAPER. Registered January 21, 1913. CARL SCHLEICHER & SCHÜLL, Duren, Germany. Renewed January 21, 1933, to Carl Schleicher & Schull Co., New York, N. Y., a Corporation of Delaware, assignee.

90,008. CONDENSED SKIMMED MILK. Registered January 28, 1913. FOSTER PACKING COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed January 28, 1933.

90,100. STEEL SHEETS, STEEL BARS, AND STEEL FORGINGS. Registered February 4, 1913. HENRY DISSTON & SONS INCORPORATED, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed February 4, 1933.

90,154. DROP-GLASSES. Registered February 11, 1913. GEBRÜDER BANDEKOW, Berlin, Germany. Renewed February 11, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,171. FRUIT JELLY. Registered February 11, 1913. CORN PRODUCTS REFINING COMPANY, New York, N. Y., a Corporation of New Jersey. Renewed February 11, 1933.

90,256. A PRODUCT OF THE CONDENSATION OF TANNIC ACID WITH THYMOL. Registered February 11, 1913. SCHIMMEL & CO., Miltitz-Leipzig, Germany. Renewed February 11, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,299. CERTAIN NAMED PHOTOGRAPHIC APPARATUS AND SUPPLIES THEREFOR. Registered February 18, 1913, FRIEDRICH DECKEL G. M. B. H., Munich, Germany. Renewed February 18, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,303. STEEL SHEETS, STEEL BARS, AND STEEL FORGINGS. Registered February 18, 1913. HENRY DISSTON & SONS INCORPORATED, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed February 18, 1933.

90,353. WATER-REPELLING PRESERVATIVE PAINTS FOR CERTAIN NAMED SURFACES. Registered February 18, 1913. PAUL LECHLER, Stuttgart, Germany. Renewed February 18, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,965. CERTAIN NAMED CONSTRUCTION MATERIALS. Registered April 8, 1913. THE PHILIP CAREY MANUFACTURING COMPANY, Lockland, Ohio, a Corporation of Ohio. Renewed April 8, 1933.

91,367. WHEAT-FLOUR. Registered April 29, 1913. WILLIS NORTON & CO. Renewed April 29, 1933, to The Wichita Flour Mills Company, doing business as The Willis Norton Company, Topeka, Kans., a Corporation of Kansas, assignee.

91,507. WHEAT-FLOUR. Registered May 6, 1913. NEW PRAGUE FLOURING MILL COMPANY, New Prague, Minn. Renewed May 6, 1933, to International Milling Company, Minneapolis, Minn., a Corporation of Delaware, assignee.

91,510. CERTAIN NAMED PACKING FOR STEAM, AMMONIA, AND HYDRAULIC PURPOSES. Registered May 6, 1913. ORIENTAL OIL COMPANY, Dallas, Tex., a Corporation of Texas. Renewed May 6, 1933.

91,691. CIGARETTES. Registered May 20, 1913. POULIDES BROS., New York, N. Y., a Firm. Renewed May 20, 1933.

91,859. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS. Registered June 3, 1913. DEERE & COMPANY, Moline, Ill., a Corporation of Illinois. Renewed June 3, 1933.

91,860. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS. Registered June 3, 1913. DEERE & COMPANY, Moline, Ill., a Corporation of Illinois. Renewed June 3, 1933.

91,861. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS. Registered June 3, 1913. DEERE & COMPANY, Moline, Ill., a Corporation of Illinois. Renewed June 3, 1933.

91,893. BATTERY-CELLS. Registered June 3, 1913. THE NUNGESSER CARBON & BATTERY CO., Cleveland, Ohio. Renewed June 3, 1933, to National Carbon Company, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

91,971. CORDS, TWINES, ROPES, AND LINES OF CERTAIN NAMED MATERIALS. Registered June 10, 1913. HENRY C. KELLEY COMPANY. Renewed June 10, 1933, to The Grady-Travers Company, Incorporated, New York, N. Y., a Corporation of New York, assignee.

92,007. CERTAIN NAMED CLOTHING. Registered June 10, 1913. A. G. SPALDING & BROS., Jersey City, N. J., and New York, N. Y., a Corporation of New Jersey. Renewed June 10, 1933.

92,008. COMPOSITION FOR MAKING CERTAIN NAMED CONSTRUCTION MATERIALS WATERPROOF. Registered June 10, 1913. Standard Paint Company. Renewed June 10, 1933, to The Ruberoid Co., Bound Brook, N. J., and New York, N. Y., a Corporation of New Jersey, by change of name.

92,021. CERTAIN CHEMICAL PREPARATIONS. Registered June 10, 1913. NORTHAM WARREN. Renewed June 10, 1933, to Northam Warren Corporation, New York, N. Y., a Corporation of New York, assignee.

92,279. CERTAIN NAMED SPORTING GOODS. Registered June 24, 1913. A. G. SPALDING & BROS., Jersey City, N. J., and New York, N. Y., a Corporation of New Jersey. Renewed June 24, 1933.

LABELS

REGISTERED JANUARY 31, 1933

41,689.—*Title:* DESIGN 757. For Eggs. BLOOMER BROS. COMPANY, Newark, N. Y. Published October 25, 1932.

41,690.—*Title:* DESIGN 512. For Ice Cream. BLOOMER BROS. COMPANY, Newark, N. Y. Published October 15, 1932.

41,691.—*Title:* DESIGN 513. For Ice Cream. BLOOMER BROS. COMPANY, Newark, N. Y. Published December 24, 1932.

41,692.—*Title:* DESIGN 536. For Ice Cream. BLOOMER BROS. COMPANY, Newark, N. Y. Published November 10, 1932.

41,693.—*Title:* HI-JINKS, DOUBLE BAKED. For Bread. FRANCO-AMERICAN BAKING CO., Los Angeles, Calif. Published October 7, 1932.

41,694.—*Title:* CONCENTRATED POWER LINE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 16, 1932.

41,695.—*Title:* WONDER CLEANER. For Cleaning Compound. GUSTAV EDWARD KUCHLE, doing business as Okay Distributing Service, Lakewood, Ohio. Published May 9, 1932.

41,696.—*Title:* CERTIFIED CHOICE HAND PICKED MICHIGAN (NAVY) PEA BEANS. For Pea Beans. MICHIGAN BEAN JOBBERS ASSOCIATION, INC., Saginaw, Mich. Published October 14, 1932.

41,697.—*Title:* N. B. YEAST FLAKES. For Yeast. THE NATIONAL BREWERIES, LIMITED, Montreal, Canada. Published September 1, 1932.

41,698.—*Title:* ATTABOY BREAD. For Bread. NEWARK PARAFFINE & PARCHMENT PAPER CO., Newark, N. J. Published December 29, 1932.

41,699.—*Title:* DUGANS RYE BREAD. NO SEEDS. For Rye Bread. NEW YORK DUGAN BROTHERS, INC., Brooklyn, N. Y. Published December 19, 1932.

41,700.—*Title:* DUGANS RYE BREAD SEEDS. For Rye Bread. NEW YORK DUGAN BROTHERS, INC., Brooklyn, N. Y. Published December 19, 1932.

41,701.—*Title:* DUGANS CHOCOLATE FUDGE BAR. For Chocolate Fudge Bars. NEW YORK DUGAN BROTHERS, INC., Brooklyn, N. Y. Published December 27, 1932.

41,702.—*Title:* CHIEF OSHKOSH SPECIAL. For Cereal Beverage. OSHKOSH BREWING CO., Oshkosh, Wis. Published August 16, 1932.

41,703.—*Title:* PASTENE. For Ripe Olives. P. PASTENE & CO. INC., Boston, Mass. Published October 28, 1932.

41,704.—*Title:* GUARDSMAN. For Malt Syrup. RIVERSIDE PRODUCTS COMPANY, Cincinnati, Ohio. Published November 20, 1932.

41,705.—*Title:* GOLD KUP BREAD. For Bread. SCHEYER-LOVELESS SERVICE, New York, N. Y. Published December 28, 1932.

41,706.—*Title:* FRANKLIN CLUB. For Cigars. BENJAMIN SHILS, Philadelphia, Pa. Published September 5, 1932.

41,707.—*Title:* SOFT-LITE LENSES. For Lenses. SOFT-LITE LENS COMPANY, INC., New York, N. Y. Published July 15, 1932.

41,708.—*Title:* SOFT-LITE LENSES. For Lenses. SOFT-LITE LENS COMPANY, INC., New York, N. Y. Published July 15, 1932.

41,709.—*Title:* SORRY. For a Card Game. W. H. STOREY & CO. (AMERICA) INC., New York, N. Y. Published August 6, 1932.

41,710.—*Title:* FIVE GRAND. For Cigars. ELLIS B. STRICKLER, Yorkana, Pa. Published November 23, 1932.

41,711.—*Title:* MOTOR OIL. For Motor Oils. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published July 25, 1932.

41,712.—*Title:* UNION CLEAN-LUBE. For Pure Mineral Lubricant for Automobiles, Households, and Sport Kits. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published November 15, 1932.

41,713.—*Title:* UNION RE-TONE CLOTH. For Cloth—Hot Wax Treated. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published November 15, 1932.

41,714.—*Title:* NO. 6035—ONE QUART OF ZOTION Q. M. For Waving Lotion. ZOTOS CORPORATION, New York, N. Y. Published June 12, 1932.

41,715.—*Title:* NO. 6045—ONE QUART OF ZOTION QS. For Waving Lotion. ZOTOS CORPORATION, New York, N. Y. Published June 12, 1932.

PRINTS

REGISTERED JANUARY 31, 1933

14,035.—*Title:* BUGLER. For Tobacco. BROWN & WILLIAMSON TOBACCO CORPORATION, Louisville, Ky. Published September 9, 1932.

14,036.—*Title:* CATCHER. For Tobacco. BROWN & WILLIAMSON TOBACCO CORPORATION, Louisville, Ky. Published September 9, 1932.

14,037.—*Title:* CAP'N KIDD'S TREASURE CHEST. For Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published December 20, 1932.

14,038.—*Title:* WHERE'S THE FIRE?—ADFORM 129. For Coffee. HILLS BROS., San Francisco, Calif. Published December 13, 1932.

14,039.—*Title:* K. For Beverage. D. F. KELLER & CO., Chicago, Ill. Published May 25, 1932.

14,040.—*Title:* Q. For Beverage. D. F. KELLER & CO., Chicago, Ill. Published May 25, 1932.

14,041.—*Title:* J. For Beverage. D. F. KELLER & CO., Chicago, Ill. Published May 25, 1932.

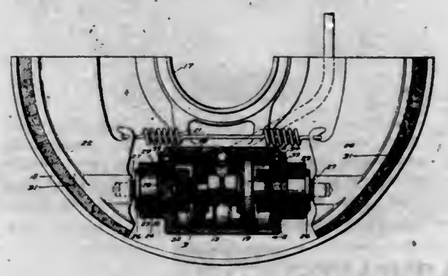
14,042.—*Title:* ASPARAGUS. For Canned Asparagus. ROCHELLE ASPARAGUS COMPANY, Rochelle, Ill. Published November 29, 1932.

14,043.—*Title:* ZOTOS. For Permanent Wave Pads. ZOTOS CORPORATION, New York, N. Y. Published June 29, 1932.

REISSUES

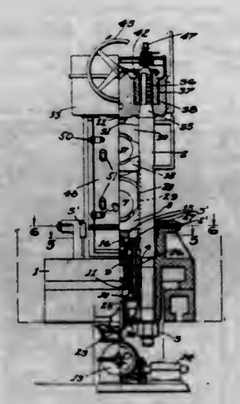
JANUARY 31, 1933

18,723. BRAKE OPERATING MECHANISM. HORACE L. HIRSCHLER, San Francisco, Calif., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Original No. 1,644,378, dated Oct. 4, 1927, Serial No. 552,356, filed Apr. 18, 1922. Application for reissue filed July 31, 1931. Serial No. 554,321. 24 Claims. (Cl. 188—152.)



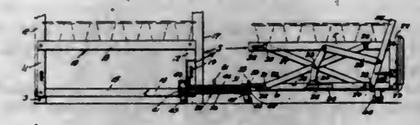
15. In braking mechanism for vehicles, a brake drum, a brake shoe, a lining therefor, a stem for forcing said lining into engagement with said drum, a cylinder, a piston within said cylinder for operating said stem, a take-up associated with said stem, and means for automatically adjusting said take-up so as to permit a substantially equal retractile movement of said stem regardless of the condition of wear of said lining.

18,724. ROLLING MILL HOUSING. JEROME R. GEORGE, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Original No. 1,786,296, dated Dec. 23, 1930, Serial No. 265,446, filed Mar. 28, 1928. Application for reissue filed Oct. 22, 1931. Serial No. 570,478. 19 Claims. (Cl. 80—55.)



9. In a rolling mill housing, a plurality of upright columns rising from the housing base, a housing cap wherein the upper ends of said columns are received, a plurality of sleeves rotatably mounted in said cap and each adapted to pass telescopically over one of said columns when said cap is lowered into position on said columns, a matching series of lateral grooves and projections formed externally of each column and internally of each sleeve, which are circumferentially displaced, one from the other, when said cap is lowered into position on said columns, means for rotating said sleeves in unison to interlock the sleeve projections and grooves with the column projections and grooves, for transmission to said columns of the upward rolling pressures exerted on said cap, and means acting between said cap and each of said columns for eliminating lost motion or play between said interlocked projections and grooves.

18,725. BED STRUCTURE. BENJAMIN M. FRANK and JOSEPH BASILE, New York, N. Y., assignors to Greenpoint Metallic Bed Co., Inc., Brooklyn, N. Y., a Corporation of New York. Original No. 1,820,658, dated Aug. 25, 1931, Serial No. 360,388, filed May 4, 1929. Application for reissue filed Jan. 6, 1932. Serial No. 585,132. 24 Claims. (Cl. 5—21.)

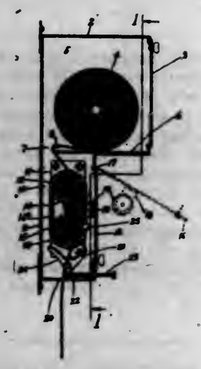


19. In a bed structure, the combination of a main bed frame, an auxiliary bed frame having an elevating mattress section, and intermediate bars arranged transversely between and connecting the two frames, and movable inwardly and outwardly of one of the bed frames, the intermediate bars forming guides and the other bed frame slidably connected with the guide portions of the bars, and means for releasably connecting the bars with the other frame for effectuating simultaneous movement with the said other frame and providing for the independent movement of said other frame, whereby such other bed frame may be adjusted to a position directly adjoining the said one frame so as to provide a double bed, and in spaced relation to said one frame to provide isolated twin beds, and the intermediate bars and the thus positionable bed frame may be moved together, when the mattress sections is lowered, with a range of movement sufficient to convert the two bed frames into a single bed.

18,726. TOWEL CABINET. THOMAS D. O'BRIEN, Vancouver, British Columbia, Canada, assignor, by mesne assignments, to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Original No. 1,514,393, dated Nov. 4, 1924, Serial No. 483,788, filed July 11, 1921. Application for reissue filed Jan. 29, 1926. Serial No. 84,786. 10 Claims. (Cl. 312—38.)

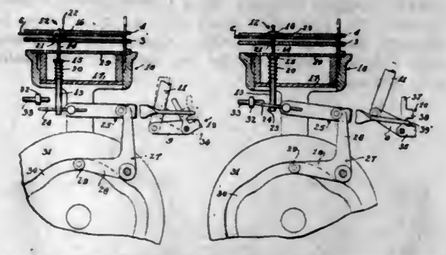
9. A towel cabinet comprising a support for a bolt of clean toweling, rolls positioned in the path of the towel and spaced apart, a roll mounted to engage the towel and press it into frictional engagement with said other rolls whereby all the rolls will be driven when a pull is applied to the towel, a device for locking said rolls against feeding movement, means to be actuated by the

user of the towel for moving said locking device to its release position and allowing a feeding movement of the rolls, means operated through the revolution of said



rolls for returning said locking device to its normal locking position to check delivery of the towel when said rolls have completed a stroke or movement.

18,727. AUTOMATIC TOTAL-TAKING MECHANISM FOR ACCOUNTING MACHINES. JAMES POWERS, Los Angeles, Calif., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Original No. 1,245,506, dated Nov. 6, 1917, Serial No. 60,629, filed Nov. 10, 1915. Renewed May 2, 1917, Serial No. 166,050. Application for reissue filed Feb. 8, 1919. Serial No. 275,884. 13 Claims. (Cl. 235—58.)



6. In a card accounting machine, the combination of an automatic registering mechanism; a total-taking mechanism; a stop mechanism; and means acting to automatically take a total and to automatically stop the machine after totalizing.

PLANT PATENTS

GRANTED JANUARY 31, 1933

54. EVERGREEN PLANT. WILLIS RUSSELL GRAY, Oakton, Va. Filed Oct. 24, 1931. Serial No. 570,925. 1 Claim. (Cl. 47—1.)

The evergreen as described and shown characterized by being narrowly upright, the leaves wide and stiff, set nearly at right angles to the branches, dark green beneath, blue on top, the width of the leaves accentuating the color appearance of the whole plant and their stiffness and approximately perpendicular relation to the branches giving the plant the characteristic of prickliness.

DESIGNS

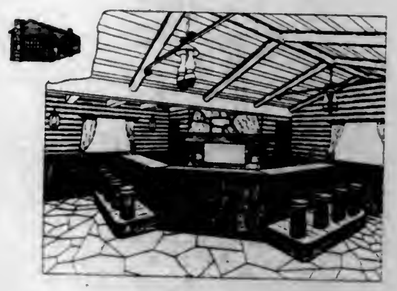
JANUARY 31, 1933

89,116. PAPER WEIGHT OR SIMILAR ARTICLE. ORVILLE H. BEALL and OTTO DE CARDY, Chicago, Ill. Filed Nov. 7, 1932. Serial No. 45,805. Term of patent 3½ years.



The ornamental design for a paper weight or similar article as shown.

89,117. BUILDING STRUCTURE. KENNETH E. BEMIS, Glendale, Calif. Filed June 20, 1932. Serial No. 44,146. Term of patent 14 years.



The ornamental design for a building structure as shown and described.

89,118. SHOE HEEL. FRANK BERENSTEIN, Chelsea, Mass., assignor to Panco Rubber Company, Chelsea, Mass., a Corporation of Massachusetts. Filed June 20, 1932. Serial No. 44,142. Term of patent 14 years.



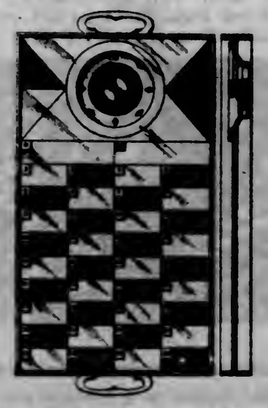
The ornamental design for a shoe heel as shown.

89,119. TEXTILE FABRIC OR SIMILAR ARTICLE. MICHEL BRODSKY, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,492. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,120. COMBINED SERVING TRAY AND GAME BOARD. DAMARIS BUSTANOBY, Teaneck, N. J. Filed Sept. 1, 1932. Serial No. 44,735. Term of patent 14 years.



The ornamental design for a combined serving tray and game board as shown.

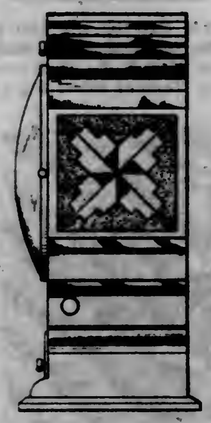
89,121. SHOE. CHARLES H. CALDWELL, Brockton, Mass., assignor to Geo. E. Keith Company, Campello, Mass., a Corporation of Massachusetts. Filed Nov. 26, 1932. Serial No. 46,188. Term of patent 7 years.



The ornamental design for a shoe, as shown and described.

89,122. CLOCK CASE. CHRISTOPHER CANEPA, Bronx, N. Y. Filed May 2, 1932. Serial No. 43,699. Term of patent 3½ years.





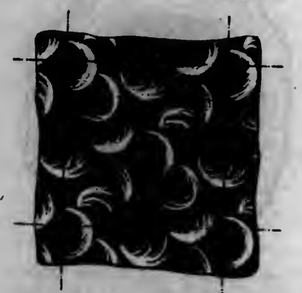
The ornamental design for a clock case, as shown and described.

89,123. SHOE. EDWARD R. CASEY, Brockton, Mass. Filed Dec. 17, 1932. Serial No. 46,479. Term of patent 3½ years.



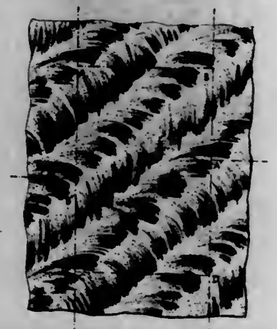
The ornamental design for a shoe, as shown and described.

89,124. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM COHEN, New York, N. Y., assignor to L. & E. Stirn, Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,583. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,125. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM COHEN, New York, N. Y., assignor to L. & E. Stirn, Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,586. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,126. CHAISE LOUNGE. FRANK DEBSKI, Brooklyn, N. Y. Filed Nov. 23, 1932. Serial No. 46,130. Term of patent 3½ years.



The ornamental design for a chaise lounge, as shown.

89,127. LETTER BOX PLATE. ANTON FAZEKAS, San Francisco, Calif. Filed Dec. 21, 1932. Serial No. 46,544. Term of patent 14 years.



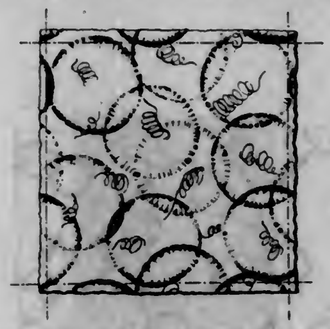
The ornamental design for a letter box plate, as shown.

89,128. HOT DISH PAD OR SIMILAR ARTICLE. GEORGE W. FUNK, Elgin, Ill. Filed Nov. 23, 1932. Serial No. 46,139. Term of patent 7 years.



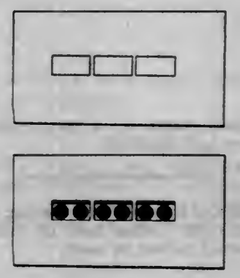
The ornamental design for a hot dish pad or similar article, as shown.

89,129. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,615. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,130. ACOUSTIC PANEL FOR VEHICLES. LELAND S. HANNOLD, Camden, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 30, 1932. Serial No. 42,683. Term of patent 7 years.



The ornamental design for an acoustic panel for vehicles, as shown and described.

89,131. LAMP BASE OR SIMILAR ARTICLE. JOHN HENDRIKSEN and JOSEF HERAN, New York, N. Y. Filed Sept. 30, 1932. Serial No. 45,183. Term of patent 7 years.



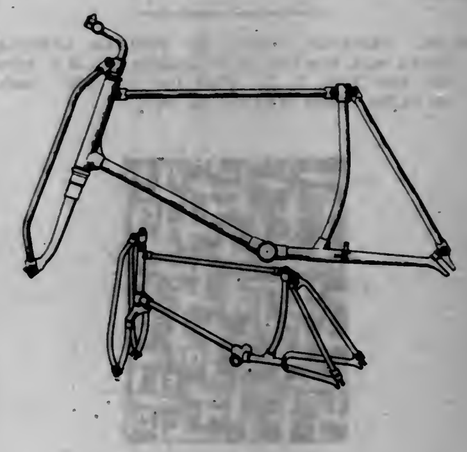
The ornamental design for a lamp base or similar article substantially as shown.

89,132. BICYCLE FRAME. GEORGE S. LEWIS, Evanston, Ill., assignor to Metal Specialties Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 16, 1932. Serial No. 43,811. Term of patent 7 years.



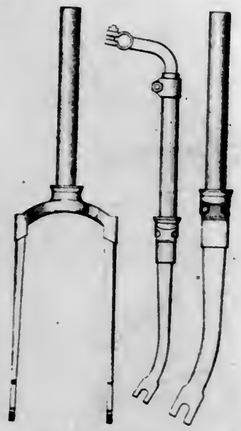
The ornamental design for a bicycle frame as shown.

89,133. BICYCLE FRAME. GEORGE S. LEWIS, Evanston, Ill., assignor to Metal Specialties Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 16, 1932. Serial No. 43,812. Term of patent 7 years.



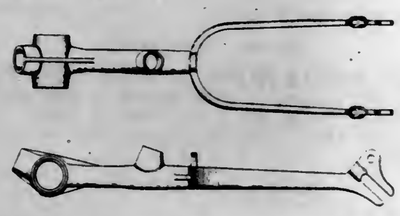
The ornamental design for a bicycle frame as shown.

89,134. BICYCLE FRONT FORK. GEORGE S. LEWIS, Evanston, Ill., assignor to Metal Specialties Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 16, 1932. Serial No. 43,813. Term of patent 3½ years.



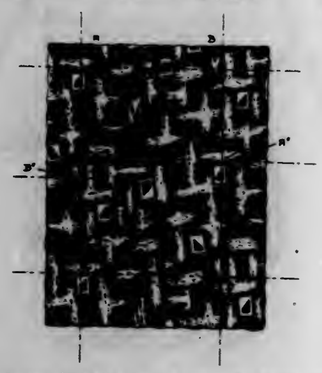
The ornamental design for a bicycle front fork as shown.

89,135. BICYCLE LOWER REAR FORK. GEORGE S. LEWIS, Evanston, Ill., assignor to Metal Specialties Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 16, 1932. Serial No. 43,814. Term of patent 7 years.



The ornamental design for a bicycle lower rear fork as shown.

89,136. TEXTILE FABRIC OR SIMILAR ARTICLE. JULIA LUKAS, New York, N. Y., assignor to L. & E. Stirn, Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,591. Term of patent 3½ years.



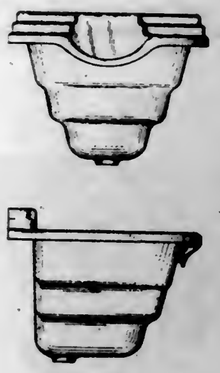
The ornamental design for a textile fabric or similar article as shown and described.

89,137. TEXTILE FABRIC OR SIMILAR ARTICLE. JULIA LUKAS, New York, N. Y., assignor to L. & E. Stirn, Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,592. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,138. SHAMPOO LAVATORY. ROBERT A. NORTHCOTT, Los Angeles, Calif. Filed Nov. 12, 1932. Serial No. 45,946. Term of patent 14 years.



The ornamental design for a shampoo lavatory as shown.

89,139. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN OVERMEYER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,607. Term of patent 3½ years.



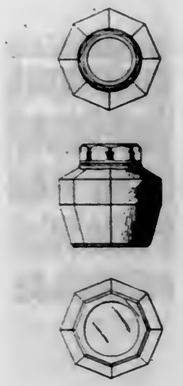
The ornamental design for a textile fabric or similar article as shown and described.

89,140. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 27. 1932. Serial No. 46,597. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,141. BOTTLE. WALTER E. WILSON, Detroit, Mich., assignor to The Robert Keller Ink Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 1, 1932. Serial No. 46,269. Term of patent 7 years.



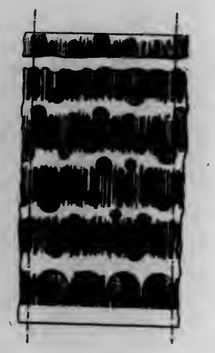
The ornamental design for a bottle substantially as shown.

89,142. BOOKMARK. ROBERT NELSON ROYLE, Ossining, N. Y. Filed Nov. 19, 1932. Serial No. 46,087. Term of patent 3½ years.



The ornamental design for a bookmark, as shown.

89,143. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,599. Term of patent 3½ years.



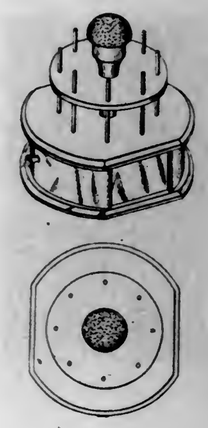
The ornamental design for a textile fabric or similar article as shown and described.

89,144. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,601. Term of patent 3½ years.



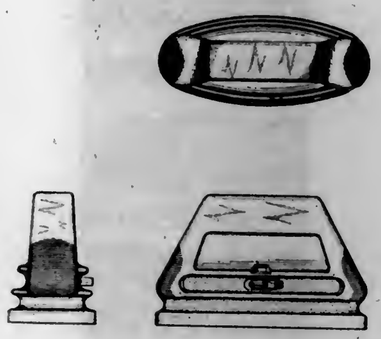
The ornamental design for a textile fabric or similar article as shown and described.

89,145. SEWING CABINET. JOHN SELBY-HELE, Santa Monica, Calif. Filed Nov. 2, 1932. Serial No. 45,706. Term of patent 3½ years.



The ornamental design for a sewing cabinet, as shown.

89,146. CASING FOR A HAND MANIPULATED THERAPEUTIC DEVICE. THOMAS S. WARREN, Hermosa Beach, Calif. Filed Oct. 1, 1932. Serial No. 45,190. Term of patent 14 years.



The ornamental design for a casing for a hand manipulated therapeutic device, as shown.

89,147. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,617. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,148. TXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM COHEN, New York, N. Y., assignor to L. & E. Stirn, Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,585. Term of patent 3½ years.



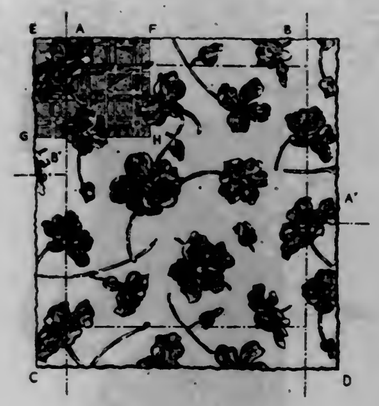
The ornamental design for a textile fabric or similar article as shown and described.

89,149. BEVERAGE DISPENSER. RAYMOND H. DOWNER, San Francisco, Calif., assignor to Frigidrinks, Inc., San Francisco, Calif, a Corporation of Nevada. Filed Nov. 14, 1932. Serial No. 45,966. Term of patent 14 years.



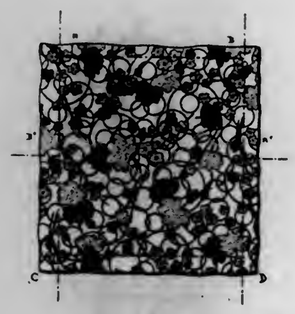
The ornamental design for a beverage dispenser, substantially as shown.

89,150. TEXTILE FABRIC OR SIMILAR ARTICLE. EDITH MARGARET FOGELBERG, Ozone Park, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,616. Term of patent 3½ years.



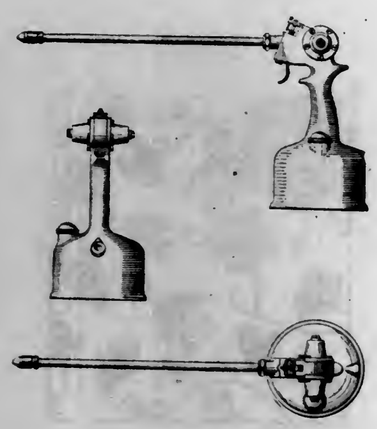
The ornamental design for a textile fabric or similar article as shown and described.

89,151. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 27, 1932. Strial No. 46,613. Term of patent 3½ years.



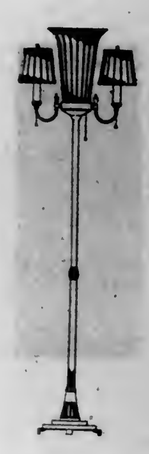
The ornamental design for a textile fabric or similar article as shown and described.

89,152. HAND SPRAY DEVICE. ABRAHAM H. HERBSMAN, Huntington Park, and RODNEY B. CAMPBELL, Walnut Park, Calif.; said Campbell assignor to said Herbsman. Filed Nov. 11, 1932. Serial No. 45,886. Term of patent 14 years.



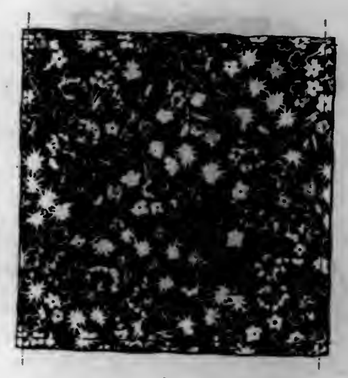
The ornamental design for a hand spray device as shown.

89,153. FLOOR LAMP. ROBERT C. PIERCE, Niles, Mich., assignor to National Standard Company, Niles, Mich., a Corporation of Michigan. Filed Oct. 19, 1932. Serial No. 45,416. Term of patent 14 years.



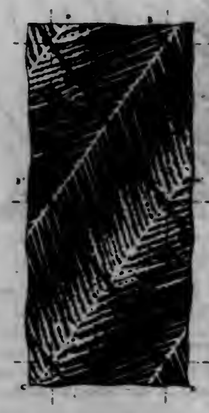
The ornamental design for a floor lamp as shown and described.

89,154. TEXTILE FABRIC OR SIMILAR ARTICLE. EDGAR WALLACE RICHARDS, Jackson Heights, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,602. Term of patent 3½ years.



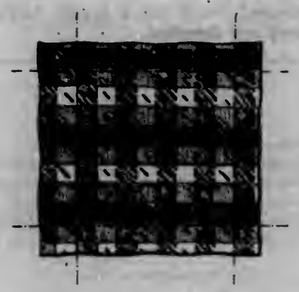
The ornamental design for a textile fabric or similar article as shown and described.

89,155. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,374. Term of patent 3½ years.



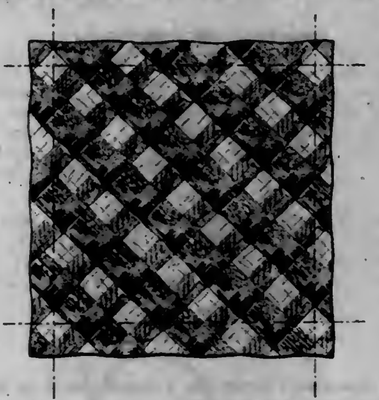
The ornamental design for a textile fabric or similar article as shown and described.

89,156. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York. N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,375. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,157. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,376. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,158. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,377. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,159. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 9, 1932. Serial No. 46,381. Term of patent 3½ years.



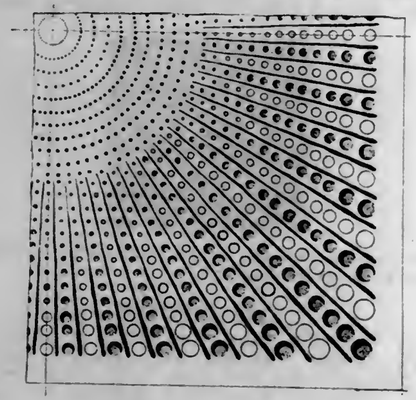
The ornamental design for a textile fabric or similar article as shown and described.

89,160. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willhelm Co., Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,595. Term of patent 3½ years.



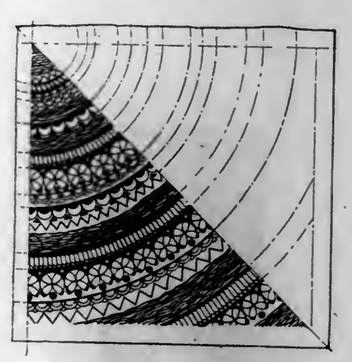
The ornamental design for a textile fabric or similar article as shown and described.

89,161. TEXTILE FABRIC. SOPHIA SOLOMON, Brooklyn, N. Y., assignor to Joseph Berlinger Company, New York, N. Y., a Corporation of New York. Filed Dec. 27, 1932. Serial No. 46,620. Term of patent 3½ years.



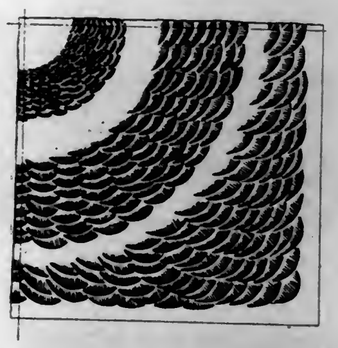
The ornamental design for a textile fabric, substantially as shown and described.

89,162. TEXTILE FABRIC. SOPHIA SOLOMON, Brooklyn, N. Y., assignor to Joseph Berlinger Company, New York, N. Y., a Corporation of New York. Filed Dec. 30, 1932. Serial No. 46,657. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

89,163. TEXTILE FABRIC. JEAN VAN DER DOES, New York, N. Y., assignor to Joseph Berlinger Company, New York, N. Y., a Corporation of New York. Filed Dec. 30, 1932. Serial No. 46,656. Term of patent 3½ years.

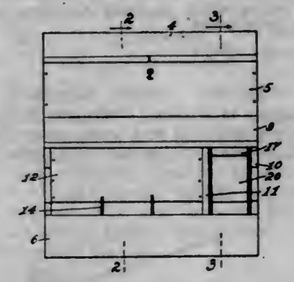


The ornamental design for a textile fabric, substantially as shown and described.

PATENTS

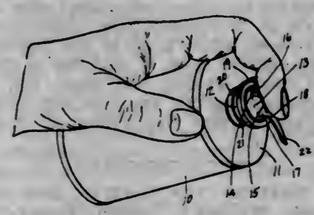
GRANTED JANUARY 31, 1933

1,895,435. FEEDER FOR LITTLE PIGS. HENRY W. AHRENS, South Amana, Iowa. Filed Mar. 10, 1931. Serial No. 521,502. 2 Claims. (Cl. 119—52.)



1. A feeder for little pigs, comprising in combination, a housing having a vertically disposed front wall consisting of upper and lower sections in one plane spaced apart, the lower section being a trough front wall, a hopper wall within the housing inclined rearwardly to open above the floor of the trough, a filler body below and spaced from the hopper mouth to receive and deliver feed from the hopper mouth forwardly into the trough, division devices across the upper part of the trough from the lower front wall section to the lower part of the hopper front wall, and a closed end inclined canopy leading from the lower part of the upper front wall section forwardly, the closed end parts extending downwardly substantially to the upper edge of the lower wall section, whereby little pigs only have access to the trough under the canopy and under its ends.

1,895,436. REGULATING DROPPER. EVERETT M. AIKMAN, Indianapolis, Ind. Filed Nov. 3, 1930. Serial No. 492,923. 2 Claims. (Cl. 221—23.)

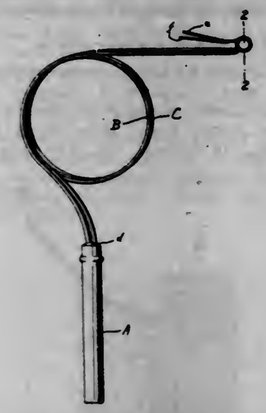


1. An attachment mountable on the restricted neck of a container having a perforatable imperforate mouth seal, comprising a pair of substantially encircling neck anchoring arms, an extension therefrom, seal puncturing means carried thereby and a dropper constituting an extension of the first mentioned extension.

1,895,437. METHOD OF DEGASSING CATHODES OF ELECTRON DISCHARGE TUBES. WILHELM ALBRICHT, Voorburg, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 9, 1932, Serial No. 591,923, and in France Mar. 24, 1931. 5 Claims. (Cl. 250—27.5.)

1. The method of degassing the cathode of an electron discharge device having a cathode and a cooperating electrode which consists in applying an electron emitting material to said cooperating electrode, heating said cooperating electrode to cause said material to emit electrons, and maintaining said cathode sufficiently positive with reference to said cooperating electrode to cause bombardment of said cathode by electrons from said material.

1,895,438. BLASTING CAP. JACOB BARAB, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed July 18, 1931. Serial No. 551,635. 7 Claims. (Cl. 102—10.)



1. In combination with a blasting cap adapted for electrical firing and provided with lead wires having uninsulated end portions, a conducting member provided with a peripheral groove the uninsulated end portions of the lead wires as a pair being extended about said member within said groove.

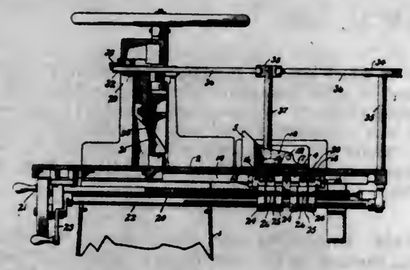
1,895,439. HARDENING METAL ARTICLES BY NITROGENIZATION. PIERRE FRANÇOIS MARIE AUBERT, ADRIEN JULES PIERRE DUVAL, and HENRI AUGUSTE MARGUERITE DUVAL, Paris, France, assignors, by mesne assignments, to The Nitralloy Corporation, a Corporation of Delaware. Filed Oct. 18, 1927, Serial No. 227,047, and in Germany May 10, 1927. Renewed Apr. 4, 1930. 6 Claims. (Cl. 148—16.)

1. In the hardening by nitrogenization of selected portions of a metal article, the steps which comprise applying on the portions to be protected a coating of tin or a tin alloy, and thereafter subjecting said article to a nitrogenizing treatment.

1,895,440. PAPER CUTTER. FREEMAN BARNEY, Grand Haven, Mich., assignor to Challenge Machinery Company, Grand Haven, Mich., a Corporation of Michigan. Filed Jan. 30, 1928. Serial No. 250,380. 3 Claims. (Cl. 164—59.)

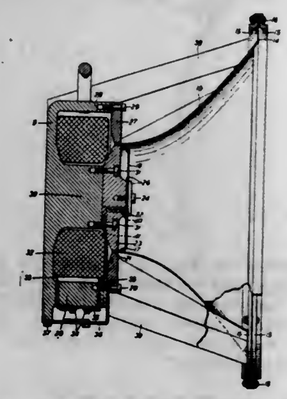
1. In a paper cutter, a horizontal table having a longitudinal slot therein, an elongated rib depending from the lower side of said table and extending parallel with said slot, said rib having faced vertical sides, a back gauge slidably mounted on the upper surface of said table, a guide member attached to and depending from said back gauge through said slot and engaging a vertical

side of said rib, said guide member being free of engagement with the sides of said slot, a gib associated with said guide member and engaging the opposite vertical



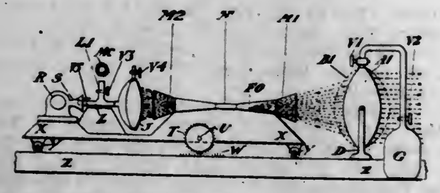
side of said rib, a lever pivoted on said guide member and engageable with said gib, and manual means for moving said lever to clamp said gib against said rib.

1,895,441. SOUND TRANSLATING DEVICE. LEE G. BOSTWICK, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 4, 1930. Serial No. 486,381. 12 Claims. (Cl. 179—115.5.)



1. A sound translating device comprising a vibratory element adapted to vibrate as a whole over the lower portion of the audio-frequency spectrum, and electrodynamic means for actuating said vibratory element, the mechanical motional resistance of said means and the mechanical impedance of said vibratory element being substantially equal at a frequency between the lowest frequency it is desired to translate and the approximate frequency at which the vibratory element ceases to vibrate as a whole.

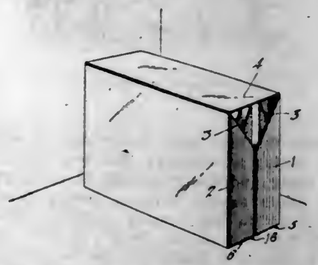
1,895,442. SOUND CONTROL AND TRANSMISSION SYSTEM. WILLIAM RUSHTON BOWKER, Coronado, Calif. Filed Mar. 13, 1930. Serial No. 435,611. 18 Claims. (Cl. 274—1.)



1. The method of transmitting sound waves which consists in refracting the sound waves to produce a wave front of small diameter, transmitting the sound wave energy while confined in this small wave front, and subsequently again refracting the sound waves.

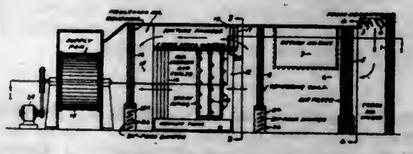
17. Means to transmit sound wave vibrations comprising, a refracting lens to catch the sound waves and refract and reduce the same to a wave front of small diameter at a focal point, a converging trumpet conforming to the focal angle and disposed to catch the refracted sound waves with its reduced end terminating substantially at the focal point, and a transmission tube leading from the reduced end of the trumpet to transmit the sound waves while confining the same to the wave front of small diameter.

1,895,443. CARTON. ARTHUR BROCKMAN, Woodridge, N. J., assignor to Eberhard Faber Pencil Co., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 20, 1932. Serial No. 587,649. 2 Claims. (Cl. 229—27.)



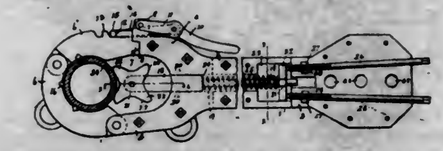
1. A carton comprising two compartments each having an open end and a closure flap at the other end, said compartments being hingedly connected at their open ends so that said open ends may be closed by folding one compartment upon the other with one side of one compartment in juxtaposition to one side of the other, said closure flaps being hinged to said compartments with their free edges disposed at the juxtaposed sides of said compartments, each of said closure flaps having a main portion to close the end of the corresponding compartment and a flange at an angle to said main portion on the free edge thereof to tuck into said compartment, the closure flap of one compartment having a tongue struck up from said flange of said flap and hinged at the juncture of said flange and the main portion of the flap and projecting toward the other compartment when said compartments are in juxtaposition, the closure flap of the other compartment having a slit at the juncture of the main portion and the flange of said flap to frictionally receive said tongue, whereby said tongue and slit hold said compartments together and lock said closure flaps together to restrain them from pulling out of said compartments.

1,895,444. HEATING, VENTILATING, AND AIR CONDITIONING. WILLIAM L. CASSELL, Kansas City, Mo., assignor to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 18, 1931. Serial No. 538,071. 6 Claims. (Cl. 257—9.)



1. In an air conditioning system having an enclosure, means of withdrawing air from the enclosure, means of exhausting a portion of said air, means for filtering and introducing filtered air into the air withdrawn from the enclosure and mixing it therewith, means for tempering said mixed air, means of washing and cooling a portion of the mixed air, means of reheating the air, and means of returning it to the enclosure.

1,895,445. TONG. JOHN B. CHARPIOT, JR., Houston, Tex. Filed Nov. 17, 1930. Serial No. 496,239. 4 Claims. (Cl. 81—53.)



1. A tong including a handle, pipe gripping means at one end of the handle, said gripping means comprising a clamp arranged to be releasably engaged about the pipe, a jaw anchor slidably mounted in the handle, a rotatable jaw on said anchor having toothed prongs arranged to cooperate with said clamp to grip the pipe, yieldable means acting against said anchor to hold the jaw yieldingly against the pipe.

1,895,446. GLUE PRODUCT AND METHOD OF PREPARING THE SAME. EDWARD F. CHRISTOPHER and FRANK L. DE BEUKELAER, Chicago, Ill., assignors to Swift & Company, Chicago, Ill., a Corporation of Illinois. Filed July 13, 1931. Serial No. 550,619. 6 Claims. (Cl. 87—17.)

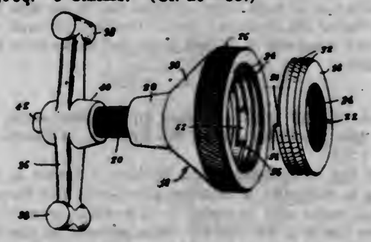
2. The process of producing a transparent clear bone glue or bone gelatine solution, which consists in treating ordinary bone glue or bone gelatine solutions with acids, acid reacting salts, acid producing substances or mixtures thereof, so that the acidity of the bone glue or bone gelatine solution is adjusted to substantially a pH of 5.0 or lower, at which degree of acidity the alkaline earths are not substantially affected, and light scattering organic material present in colloidal suspension flocculates out thereafter removing the flocculated material formed, and mixing or blending the resulting clear solution with hide glue or hide gelatine for the production of a clear transparent final product.

5. A glue product produced by the method set forth in claim 2.

1,895,447. GLUE PREPARATION AND PRODUCT. EDWARD F. CHRISTOPHER and FRANK L. DE BEUKELAER, Chicago, Ill., assignors to Swift & Company, Chicago, Ill., a Corporation of Illinois. Filed July 13, 1931. Serial No. 550,620. 2 Claims. (Cl. 87—17.)

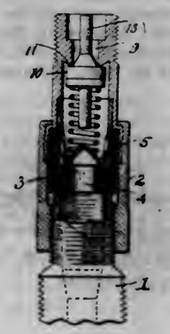
2. The process of treating glue or gelatin which comprises first rendering the glue or gelatin insoluble by the action of formaldehyde and subsequently rendering the insoluble glue or gelatin soluble by the action of urea.

1,895,448. WHEEL PULLER. ARTHUR L. CORNWELL, Wellsville, N. Y. Filed Nov. 14, 1931. Serial No. 574,966. 6 Claims. (Cl. 29—85.)



1. A wheel puller comprising a relatively narrow and contractible collet having internal threads for engaging the hub of a wheel and relatively coarse external threads and providing a light-weight ring to be threaded onto a wheel hub as the initial step in pulling the wheel, a shell having an open front end and a relatively smaller rear end integrally connected by an intermediate conical portion, the open front end of the shell being provided with internal threads corresponding to said external threads and adapting the shell to be threaded into full position onto the collet in place on the hub as the second step in pulling the wheel, cooperating stop means on the shell and collet for limiting the threading on of the shell to said position but not preventing the threading off movement thereof or relative axial movement of the shell and collet, and a screw threaded into an axial bore through the rear end of the shell for engaging against the end of the axle on which the wheel is mounted to draw the shell outward and thereby contract the collet onto the hub and withdraw the wheel, the shell being thereafter freely rotatable from the collet while the collet remains on the hub, and the internal and external threads on the collet and the thread on the screw all running in the same direction whereby rotation of the screw in the wheel pulling direction will not tend to separate the shell from the collet nor the collet from the hub.

1,895,449. VALVE MECHANISM. JOHN C. CROWLEY, Cleveland Heights, Ohio, assignor to The Dill Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 25, 1928. Serial No. 272,593. 8 Claims. (Cl. 152—12.)

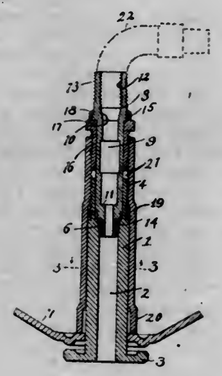


1. A valve mechanism comprising a casing adapted to be movably mounted upon the end of a valve stem, a gasket arranged in said casing adapted to bear upon the end of the valve stem and having a central opening therein and provided with a flange disposed longitudinally of said casing, and a plunger within said casing and movable thereby toward and away from said gasket, said plunger having an opening therein and an end portion arranged to engage the gasket when the plunger is moved inwardly to seal the opening in said gasket and another portion which engages the flange of said gasket and compresses the same.

1,895,450. VALVE STEM. JOHN C. CROWLEY, Cleveland Heights, Ohio, assignor to The Dill Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 31, 1929. Serial No. 367,314. 8 Claims. (Cl. 152—12.)

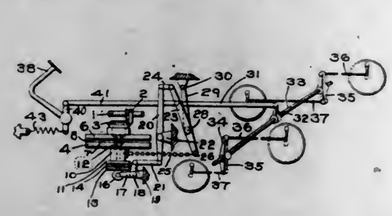
1. In combination with an externally threaded valve stem having an internal bore and a head at one end, an adapter member extending within said bore and having a portion cooperating with the wall thereof to form an air-tight seal, an internally threaded sleeve arranged on said valve stem and extending from adjacent the valve

stem head beyond the outer end of the stem a substantial distance, and externally threaded means having a swivel connection with said adapter cooperating with the extend-



ing end of said internally threaded sleeve for securing the adapter to the valve stem and for moving the same thereinto to form the aforesaid airtight seal.

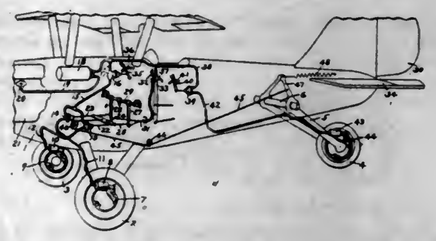
1,895,451. BRAKE MECHANISM. JULES MARIE JOSEPH DORMOY, Paris, France, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Apr. 17, 1930, Serial No. 444,944, and in France May 14, 1929. 5 Claims. (Cl. 188—140.)



1. In a brake mechanism, the combination with a friction clutch comprising a driven friction element and a normally stationary friction element, of a brake, a lever controlled manually for initially effecting an application of the brake, lever means operated by said lever for pressing said stationary friction element into frictional engagement with said driven friction element, and a connection from said stationary friction element to said lever for transmitting power from said stationary friction element as imparted thereto by said driven friction plate to said lever to augment the braking power applied manually, said lever means being operative by said lever upon the application of power thereto through said connection for relieving some of the pressure on said stationary friction element.

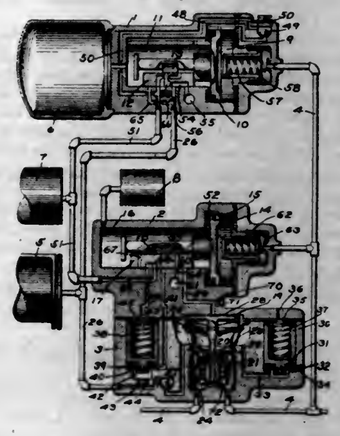
1,895,452. BRAKE FOR AIRCRAFT. JULES MARIE JOSEPH DORMOY, Paris, France, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 17, 1931, Serial No. 563,288, and in France Nov. 10, 1930. 5 Claims. (Cl. 244—2.)

1. In an airplane, the combination with landing wheels and a control member for the directional rudder of the airplane, of fluid pressure operated braking mechanisms for the airplane landing wheels, a valve device for each braking mechanism for controlling the supply of fluid pressure to the corresponding brake mechanism, means controlled



by said control member for operating either of said valve devices, and separate manually controlled means for also operating said valve devices.

1,895,453. FLUID PRESSURE BRAKE. SIDNEY G. DOWN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 14, 1931. Serial No. 537,259. 3 Claims. (Cl. 303—46.)

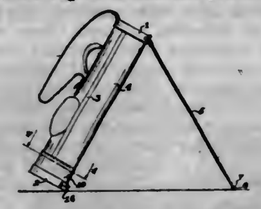


1. In fluid pressure brake, the combination with a brake pipe, auxiliary reservoir, and a brake cylinder, of a triple valve device operated upon a sudden reduction in brake pipe pressure for supplying fluid under pressure from the auxiliary reservoir to the brake cylinder at a restricted rate, a quick action valve mechanism operable to vent fluid under pressure from the brake pipe to the brake cylinder, and valve means operated upon a predetermined increase in the pressnre of fluid supplied from the brake pipe to the brake cylinder for opening a communication through which fluid under pressure is vented from the brake pipe to the atmosphere.

1,895,454. GOLF BAG. GEORGE DUCAT, Rochester, N. Y. Filed Apr. 20, 1932. Serial No. 606,408. 1 Claim. (Cl. 150—1.5.)

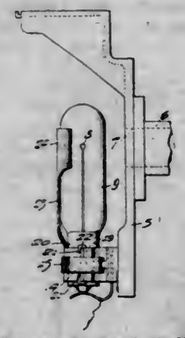
A golf bag comprising a bag portion, a frame in which said bag is mounted, a support pivoted to the frame adjacent its upper end to swing in a vertical plane toward and from the bag, an arcuate plate secured to the frame adjacent the bottom of the bag and having its ends bent outwardly to afford radially projecting lugs which are

adapted to engage the ground at points approximating the width of the bag and to cooperate with the pivoted support to hold the bag in an inclined position, and resil-



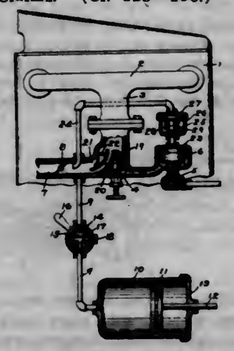
ient means secured to said plate and intermediate the lugs for retaining said supporting member in an inoperative position adjacent the side of the bag.

1,895,455. EXCITER LAMP MOUNTING FOR SOUND-ON-FILM REPRODUCERS. CHARLES W. EBELING, New York, N. Y., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 10, 1931. Serial No. 514,885. 6 Claims. (Cl. 240—52.)



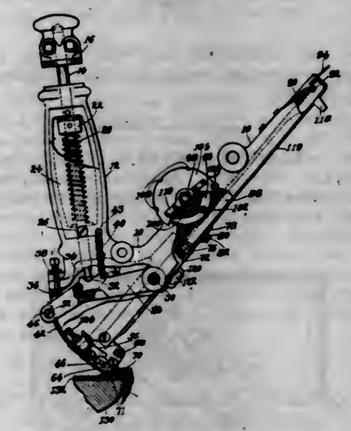
1. A lamp socket structure including a support, a member to bodily retain the lamp and having oppositely extending wings, cooperative means carried by the wings of said member and said support for centering the winged member in fixed position, and a clamping device mounted upon one portion of the said support and adapted to embrace the winged member and engage the opposite end of the support to hold the winged member securely in position.

1,895,456. VACUUM BRAKE APPARATUS. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 15, 1928. Serial No. 254,416. 2 Claims. (Cl. 123—198.)



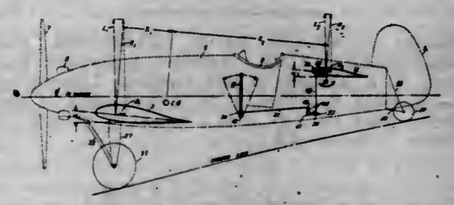
1. The combination with the intake manifold of an internal combustion engine and a carburetor having an air intake pipe, of a throttle valve for the engine located in the air intake pipe, a pressure element operable by the reduced pressure of air in said air intake pipe and connected to the air intake pipe between said throttle valve and the carburetor, and means for controlling communication from said element to the air intake pipe.

1,895,457. FASTENING INSERTING MECHANISM. GEORGE GODDU, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 3, 1929. Serial No. 375,707. 17 Claims. (Cl. 1—49.)



1. A hand staple inserting device having, in combination, removable supporting means for a strip of staples, yielding means for locating the supporting means laterally and longitudinally of the device, and means for locking the support in its located position whereby the supporting means is rigidly held in located position.

1,895,458. AIRCRAFT. DONALD A. HALL, San Diego, Calif. Filed Aug. 9, 1929. Serial No. 384,592. 30 Claims. (Cl. 244—29.)

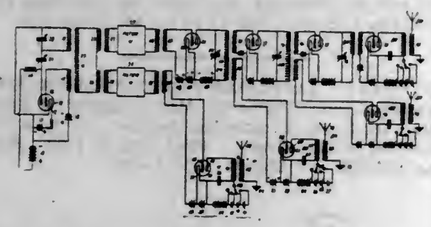


10. In combination with an aircraft, a fore and aft stabilizing surface comprising a pivoted control surface substantially neutrally stable at normal cruising speeds with a center of pressure of resultant force passing substantially through the pivot point at said cruising speeds and at higher speeds moving to one side of the pivot point.

1,895,459. RADIO TRANSMISSION SYSTEM. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed July 16, 1927. Serial No. 206,331. 11 Claims. (Cl. 250—8.)

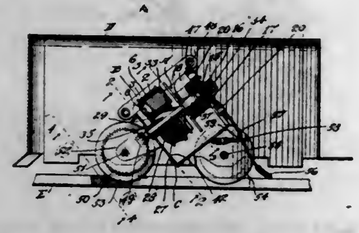
1. The method of radio transmission which comprises generating a fundamental frequency, amplifying and transmitting said frequency, doubling the fundamental frequency and amplifying and transmitting the double

frequency, redoubling said fundamental frequency and amplifying and transmitting said quadrupled frequency, selectively altering the amount of energy transmitted at



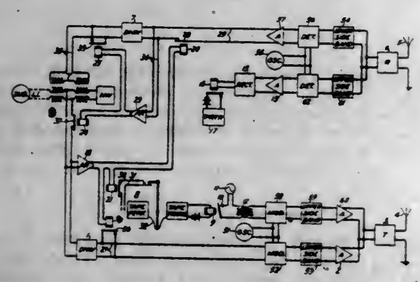
each of said frequencies and thus varying the total amount of transmitted energy at said frequencies to send a single message.

1,895,460. ELECTROMAGNETIC COIL FOR TOY ELECTRIC MOTORS. JOHN A. HANLEY, Irvington, N. J. Filed Dec. 19, 1929. Serial No. 415,145. 1 Claim. (Cl. 175—21.)



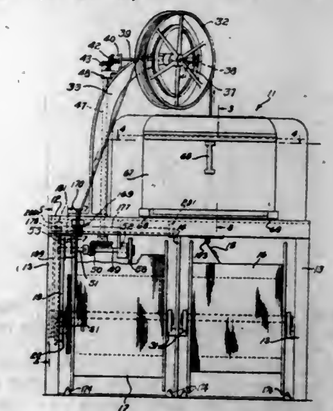
An electromagnetic coil for motors and the like comprising a solid iron core having a shoulder at each end and a reduced end portion outwardly of said shoulder, an insulation end plate mounted against each said shoulder and held on said core by metal upset over the end plate from said core, a helical winding of wire between said end plates on said core, and a shoe having an opening to receive one reduced end portion of the core which is upset to secure the shoe on the core, the other reduced end serving to secure the coil upon a support.

1,895,461. COMBINED RADIO TELEPHONE AND TELEGRAPH SYSTEM. RAYMOND A. HEISING, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1929. Serial No. 351,037. 1 Claim. (Cl. 179—2.5.)



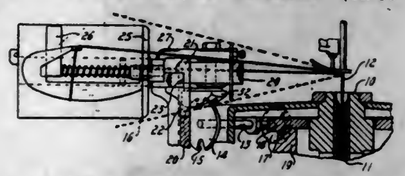
In a two-way two-channel carrier transmission system comprising normally inoperative telephone transmitting apparatus and normally operative telegraph signaling apparatus at a sending station, a source of carrier frequency waves, the carrier currents from said source of carrier frequency waves adapted to be modulated by signaling currents from said telephone transmitting apparatus and by signaling currents from said telegraph transmitting apparatus, said telephone transmitting apparatus and telegraph transmitting apparatus adapted to be associated with one channel for transmission in the same direction, normally inoperative telephone receiving apparatus and normally operative telegraph receiving apparatus at a receiving station associated with said channel, means adapted to demodulate said received carrier frequency waves, similar apparatus associated with said other channel for transmission in the other direction, voice-operated relays associated with each channel to prevent said telegraph transmitting apparatus from becoming operative when said telephone currents are being transmitted thereover, and means to prevent signals from said telegraph apparatus from reaching said telephone receiving apparatus.

1,895,462. BRAIDING MACHINE. GEORGE E. HENNING, Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 1, 1930. Serial No. 417,837. 12 Claims. (Cl. 96—3.)



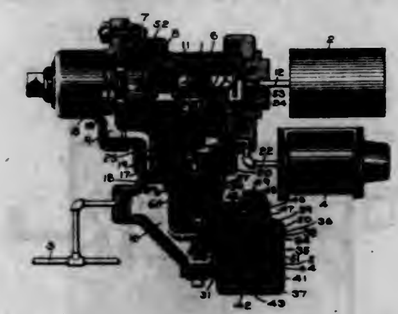
1. In a braiding machine, inner and outer sets of strand supply carriers, means for rotating said sets of carriers in opposite directions about a common axis, a track provided with an annular groove and supporting means for said carriers at one end thereof, comprising a member for engagement with said groove, and an anti-friction disk for engaging an opposite surface of said annular track.

1,895,463. SELF-ALIGNING STRAND CARRIER FOR BRAIDERS. GEORGE E. HENNING, Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 2, 1931. Serial No. 560,729. 14 Claims. (Cl. 96—18.)



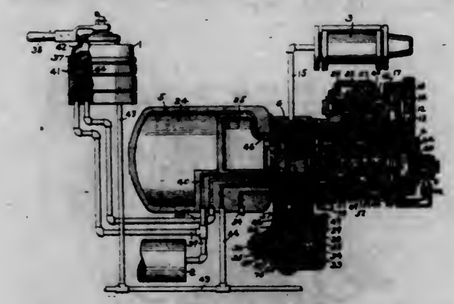
1. In a braiding machine, a guide track, a braid strand carrier rotatable around said track, and a guide roller carried by said carrier and engaging the inner surface of said track adapted to be adjustably moved toward and away from the inner surface of said track.

1,895,464. FLUID PRESSURE BRAKE DEVICE. ELLIS E. HEWITT, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 7, 1931. Serial No. 520,789. 6 Claims. (Cl. 303—37.)



1. In a fluid pressure brake, the combination with a brake pipe, a triple valve device, and a quick action valve mechanism controlled by said triple valve device upon a sudden reduction in brake pipe pressure for venting fluid from the brake pipe, of valve means normally subject to opposing fluid pressures and operated by venting fluid from one side to vent fluid from the brake pipe, the venting of fluid from said valve means being effected by said quick action valve mechanism.

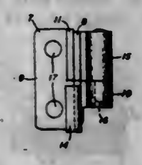
1,895,465. FLUID PRESSURE BRAKE. ELLIS E. HEWITT, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 28, 1931. Serial No. 525,942. 19 Claims. (Cl. 303—40.)



1. In a fluid pressure brake, the combination with a brake pipe, of an equalizing valve device operative upon a reduction in brake pipe pressure to supply fluid under pressure to a chamber, an increase in pressure in which effects an application of the brakes, and valve means for controlling communication through which said valve device supplies fluid to said chamber and operative by the pressure of fluid supplied by said equalizing valve device to open said communication.

1,895,466. HINGE. FRANK A. KUNTZ, Woodhaven, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 30, 1930. Serial No. 485,383. 2 Claims. (Cl. 16—128.)

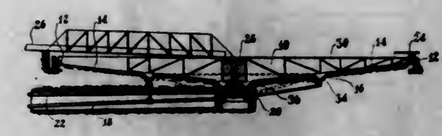
1. In an enclosure comprising a base member, a cover and hinges connecting the base and the cover, said hinges each comprising two leaf members having knuckle portions, means to attach the knuckle portions in movable relationship and one at least of said hinges having tabs extending perpendicular from the plane of the leaf members and adapted to be brought into cooperative relationship one with the other to prevent separation of the leaf members when the cover is closed, said tabs when brought into such cooperative relationship standing so that the plane of one intersects the plane of the other.



1,895,467. ART OF MAKING SHOE STIFFENERS. DAVID BAIRD MACDONALD, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 27, 1931, Serial No. 533,373, and in Great Britain May 24, 1930. 14 Claims. (Cl. 12—146.)

1. The method of making shoe stiffener blanks which comprises treating a fabric base with a stiffening substance in solution in a volatile solvent whereby a limp and sticky blank results, treating the limp and sticky blank with a non-solvent for the stiffening substance which is miscible with the solvent to reduce the stickiness of the blank, and operating upon the blank in its limp and substantially non-sticky condition.

1,895,468. CLASSIFIER. FRANK W. MACLENNAN, Miami, Ariz. Filed Oct. 17, 1929. Serial No. 400,194. 8 Claims. (Cl. 209—208.)



1. A classifier comprising a shallow settling container having an extended bottom area upon which settled solids may collect and rest by gravity, a liquid overflow launder and a feed well associated therewith, said launder and feed well being so spaced that liquid introduced to the container through said feed well follows a generally horizontal path to the launder of such length as to permit settling out of solids carried thereby and their collection upon the bottom of said container, means in the bottom of said container at spaced points between said feed well and said launder for separately withdrawing solids so settling, means for leading the portions of material so withdrawn to separate places of collection, and scraping means movable over the bottom for moving settled solids to said first-mentioned means.

1,895,469. DETACHABLE LIFT FOR THE HEEL OF A SHOE. HERMAN MAKRUZIN, Philadelphia, Pa., assignor to Louis Necho, Philadelphia, Pa. Filed Aug. 8, 1931. Serial No. 555,921. 2 Claims. (Cl. 36—42.)

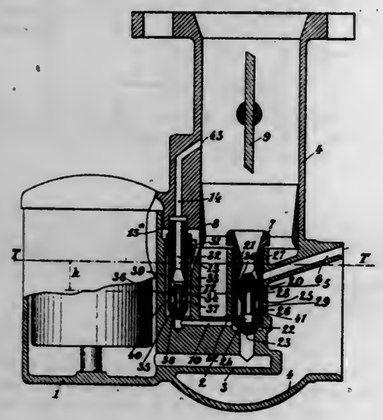
1. The combination with the heel of a shoe and a top lift adapted to be attached to said heel, of means for rigidly and detachably securing said top lift to said heel, comprising a plate adapted to be permanently attached to the bottom of said heel, said plate having a pendant flange along the straight edge thereof, there being relatively small openings disposed in angular relation with respect to each other, and relatively large guide openings in the

body of said plate, a second plate adapted to be permanently secured to said top lift in countersunk relation with respect thereto, said plate having a plurality of relatively small prongs disposed in angular relation to each other and adapted to engage said small openings, and relatively large guide prongs adapted to engage said guide



openings in said first mentioned plate to guide said small prongs into said small openings, to facilitate application of said top lift to said heel, the straight edge of said second mentioned plate being adapted to abut against the pendant flange on the straight edge of said first mentioned plate.

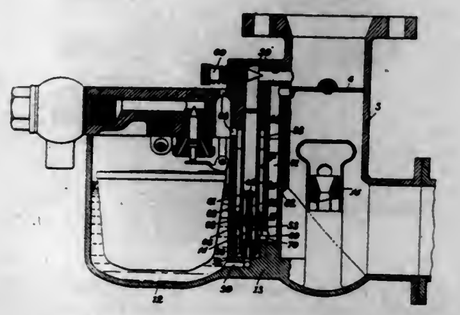
1,895,470. CARBURETOR. EUGÈNE MATHIEU, Neuilly-sur-Seine, France. Filed Apr. 9, 1930, Serial No. 442,786, and in France Apr. 30, 1929. 12 Claims. (Cl. 261—121.)



1. In a carburetor, a constant level fuel tank, an intake pipe adapted to be connected with an engine and an atomizer for the primary fuel mixture, said atomizer embodying means, below said constant level, for spraying fuel from said tank in a spread out spray, an annular conduit surrounding said spraying means, opening into said intake pipe and having a restricted cross section at the spraying level, and air inlet means opening into said conduit for supplying primary air thereto, the arrangement being such that the air flow assumes an increased speed and a smaller thickness through said restricted part and meets the fuel spray at an angle substantially equal to 90°.

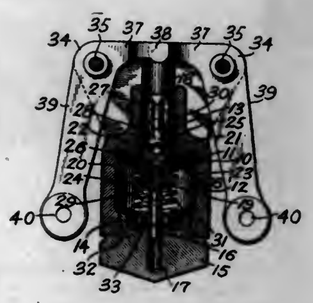
1,895,471. CARBURETOR. EUGÈNE MATHIEU, Neuilly-sur-Seine, France. Filed May 2, 1931, Serial No. 534,467, and in France May 14, 1930. 10 Claims. (Cl. 261—121.)

1. A carburetor comprising in combination, a pipe connected to the engine manifold, a throttle in said pipe, a main nozzle disposed in said pipe on the carburetor side of said throttle, a float chamber, an idling well communicating with the atmosphere, an idling nozzle axially disposed in said well connected with said float chamber, said idling nozzle being provided with spraying orifices, a tube concentrically disposed in said well around said nozzle and provided with apertures located above said spraying orifices, said tube communicating with the above mentioned pipe on the engine side of said throttle, an annular



threaded collar on said tube adapted to screw in said well, said tube being provided with an aperture in its wall below said collar, a conduit opening at its lower end opposite the last mentioned aperture of said tube and opening at its upper end into said pipe exactly at the level of the edge of said throttle when the latter is in the closed position.

1,895,472. RELEASE VALVE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 19, 1929. Serial No. 341,168. 6 Claims. (Cl. 303—80.)

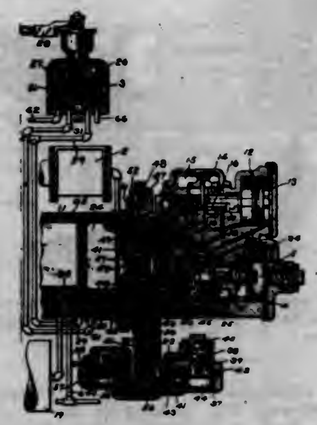


1. A release valve device comprising a body having a plurality of chambers formed therein, a seat rib between adjoining chambers, a valve engaging the seat rib and controlling communication between the chambers, a stem supporting the valve, and a conical plug carried by the stem for variably restricting the flow of fluid when the valve is unseated.

1,895,473. FLUID PRESSURE BRAKE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 24, 1929. Serial No. 373,169. 22 Claims. (Cl. 303—26.)

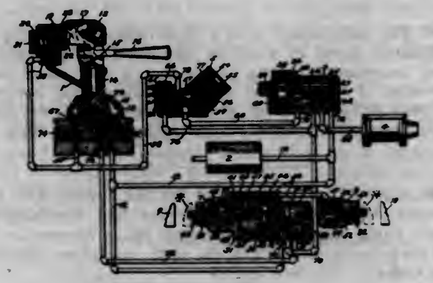
3. In a fluid pressure brake, the combination with a brake cylinder, of a valve device operated by variations in fluid pressure for controlling the supply of fluid under

pressure to the brake cylinder and having a passage through which fluid under pressure is supplied to said valve device, a check valve for normally preventing back



flow from said valve device through said passage, and a movable abutment operated by fluid pressure for opening said check valve upon releasing the brakes.

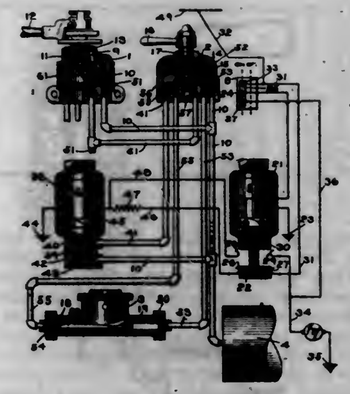
1,895,474. SAFETY CAR EQUIPMENT. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 2, 1930. Serial No. 417,873. 16 Claims. (Cl. 303—6.1.)



1. The combination with a fluid pressure brake equipment for a car, of a brake cylinder, a brake valve device operative to normally supply and release fluid under pressure to and from the brake cylinder, a door for the car and means operated by said door as the door is operated from its closed position for effecting an application of the brakes and for rendering the brake valve device ineffective to release fluid under pressure from the brake cylinder while said door is open.

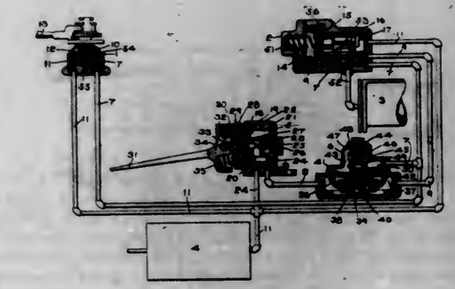
1,895,475. SAFETY CAR EQUIPMENT. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 10, 1930. Serial No. 419,839. 17 Claims. (Cl. 303—6.1.)

1. In a controlling apparatus for a vehicle, the combination with a door engine operative by fluid under pressure for effecting the opening of a door of the vehicle, of a valve device for controlling the supply of fluid under pres-



sure to said door engine, and electrically controlled valve means for controlling communication through which fluid under pressure is supplied to said valve device.

1,895,476. SAFETY CAR CONTROL DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Apr. 21, 1930. Serial No. 445,860. 8 Claims. (Cl. 303—19.)

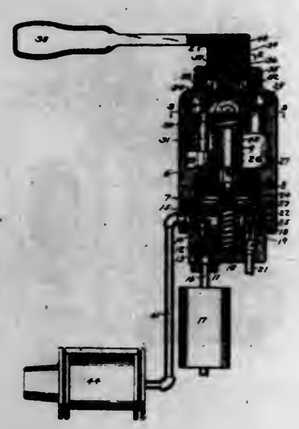


1. In a safety car control equipment, the combination with a control pipe, of a valve device subject to manual pressure for supplying fluid under pressure to the control pipe and operative upon the relief of manual pressure for venting fluid under pressure from the control pipe to effect an application of the brakes, manually controlled means for supplying fluid under pressure to effect an application of the brakes, and means operated by fluid supplied in manually applying the brakes for closing off the flow of fluid from the control pipe when said valve device is relieved of manual pressure.

1,895,477. BRAKE VALVE DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 18, 1930. Serial No. 461,944. 5 Claims. (Cl. 303—54.)

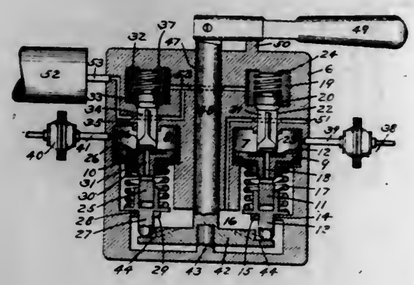
1. In a fluid pressure controlling valve device, the combination with a movable abutment and means operated

by said abutment for controlling the supply of fluid under pressure, of a spring acting on said abutment, a cap en-



gaging said spring, rollers carried by said cap, and a rotatable cam having cam faces adapted to engage each roller.

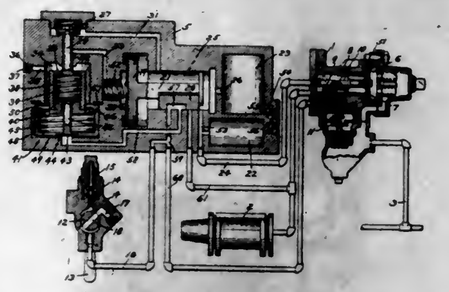
1,895,478. AIRPLANE BRAKE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 24, 1930. Serial No. 463,388. 2 Claims. (Cl. 303—6.)



1. In a fluid pressure brake, the combination with two brake chambers, of valve means operable to supply fluid under pressure to one brake chamber, separate valve means operable to supply fluid under pressure to the other brake chamber, and a rotatable and axially movable element for operating both valve means upon axial movement, and one of said valve means upon rotary movement.

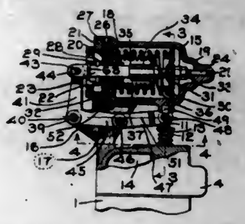
1,895,479. FLUID PRESSURE BRAKE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 25, 1930. Serial No. 484,294. 7 Claims. (Cl. 303—72.)

1. In a fluid pressure brake, the combination with a brake cylinder, an auxiliary reservoir, and a valve device operative to supply fluid under pressure from the auxiliary reservoir to the brake cylinder, of means operative to retain pressure in the brake cylinder, and means operative upon retaining pressure in the brake cylinder for reducing the volume of the auxiliary reservoir from which



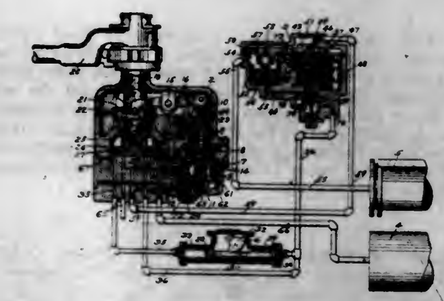
fluid under pressure is supplied to the brake cylinder by operation of said valve device in successive applications of the brakes.

1,895,480. COMPRESSOR UNLOADER. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 26, 1931. Serial No. 518,375. 7 Claims. (Cl. 230—22.)



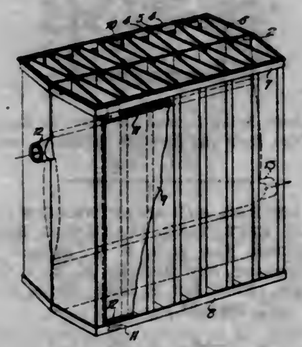
1. The combination with a fluid compressor having an unloading valve, of a device responsive to pressure of fluid compressed by the compressor, a bell crank lever operated by said device, and a floating lever operated by said bell crank lever and movable successively about two pivotal points for operating said unloading valve.

1,895,481. FLUID PRESSURE BRAKE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 19, 1932. Serial No. 593,959. 9 Claims. (Cl. 303—6.1.)



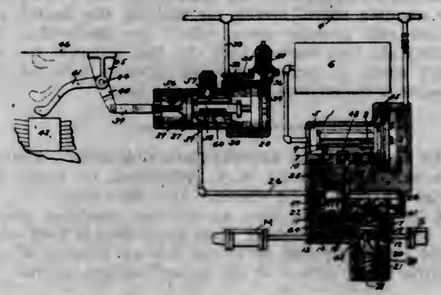
1. In a car door and brake controlling apparatus, the combination with a fluid operated door engine for effecting opening and closing of a car door, and a fluid operated means for effecting operation of the brakes, of a means for controlling the rate of supply of fluid to the fluid operated means, and a fluid pressure operated means for controlling the operation of the door engine and the second said means.

1,895,482. RADIATOR. THOMAS E. MURRAY, Brooklyn N. Y.; Joseph Bradley Murray, Thomas E. Murray, jr., and John F. Murray executors of said Thomas E. Murray, deceased. Original application filed July 14, 1925, Serial No. 43,444, now Patent No. 1,723,573, dated Aug. 6 1929. Divided and this application filed Dec. 27, 1928. Serial No. 328,675. 4 Claims. (Cl. 219—38.)



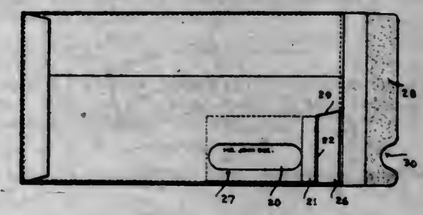
1. An electric heater comprising a substantially horizontal electric heating element, a longitudinal series of transverse heat conducting plates separate from and fixed in heat conducting relation to said heating element, and a series of longitudinal plates spanning the spaces between the outer edges of said transverse plates, the spaces within such plates constituting unobstructed flues open at the top and bottom and of a vertical length relatively great compared with their width for inducing a rapid circulation of the heated air, the inner portions of the plates being in contact with the heating element and the remaining portions being exposed on both faces to the air of the room.

1,895,483. LOAD BRAKE APPARATUS. ANSELME NEVEU, Livry-Gargan, France, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 28, 1929, Serial No. 417,030, and in France Feb. 9, 1929. 7 Claims. (Cl. 303—22.)



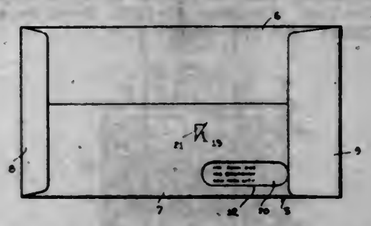
1. In a fluid pressure brake system, the combination with a valve mechanism operative to adjust the braking power according to the light or loaded condition of the vehicle, of a member movable according to the load for operating said valve mechanism, and means controlled by the fluid pressure in the brake system and operated upon a predetermined increase in fluid pressure in the brake system for moving said member out of its operative position.

1,895,484. ENVELOPE CONSTRUCTION. ELMER G. OVERLY, Greensburg, Pa. Filed Feb. 27, 1930. Serial No. 431,688. 8 Claims. (Cl. 229—72.)



1. A large mailing envelope for transporting bulky objects through the mail, comprising a front wall, a rear wall, a closure flap integral with said front wall and adapted to overlap the rear wall to close the insertion opening of the envelope, one of said walls being formed with an address window, and said rear wall having a transverse cut out portion along the edge of said insertion opening; in combination with a relatively small body having an address receiving portion and an integral foldable lip, said body being adapted to be placed within said envelope with said portion in registry with said window, said lip being adapted to fit into said cut out portion and foldable over said edge and to cooperate with said flap to hold said body securely in position when said flap is closed.

1,895,485. LICENSE PLATE ENVELOPE. ELMER G. OVERLY, Greensburg, Pa. Filed Mar. 20, 1930, Serial No. 437,535. Renewed June 7, 1932. 3 Claims. (Cl. 229—72.)

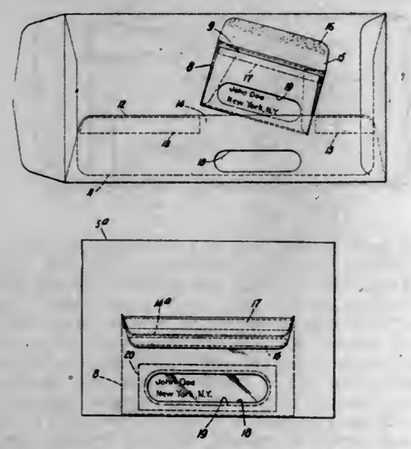


1. A double compartment envelope comprising a blank having a body portion, a relatively large side flap extending from one edge of said body portion and folded over said body portion to provide a relatively large compartment between said large flap and body portion, said large flap being approximately equal in length and width to said body portion, a relatively small side flap extending from said body portion at the edge opposite to the first mentioned edge, said small side flap being folded over said large side flap to provide a second compartment directly between said side flaps, the two compartments having one common boundary line, said small side flap having a gummed margin sealed to the outer face of said large side flap in a line between and parallel with said edges, an end flap extending from the lower edge of said body portion and sealed to the outer faces of both of said side flaps, said small side flap having an angularly disposed slot intermediate the ends of the flap and adjacent to said gummed margin, and a gummed area between said slot and said margin.

1,895,486. ENVELOPE CONSTRUCTION. ELMER G. OVERLY, Greensburg, Pa. Filed Apr. 23, 1931, Serial No. 532,170. Renewed Oct. 31, 1932. 6 Claims. (Cl. 229—72.)

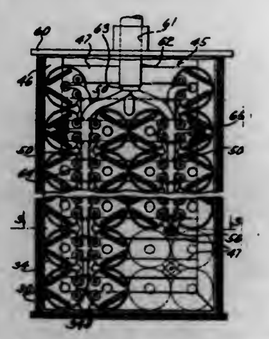
2. A combination envelope comprising a large envelope and a small envelope, the larger envelope having two walls, one of said walls having a slot therein through

which the small envelope may be inserted, the small envelope having a seal flap to be folded over and secured to a portion of said wall adjoining the slot, and a gum



stripe on one of said envelopes to secure the smaller envelope at its upper edge to the wall of the larger envelope to seal said slot.

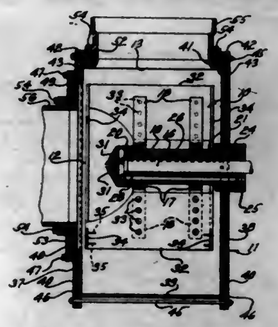
1,895,487. METHOD OF AND APPARATUS FOR CONSTRUCTING ELECTRICAL COILS. AMOS L. QUINLAN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 10, 1930. Serial No. 480,864. 35 Claims. (Cl. 178—46.)



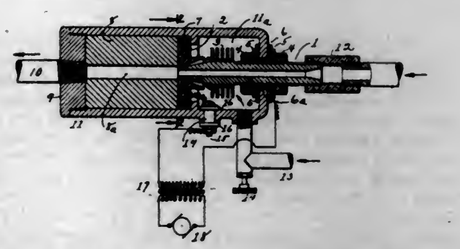
1. A method of constructing a unit comprising a plurality of electrical coils, which comprises fixing the coils relative to each other to provide a predetermined inductive effect, mounting the adjusted coils in containers with said adjustment maintained and mounting the containers in a casing.

1,895,488. POWER-DRIVEN FAN. JAMES C. REISINGER, Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 3, 1930. Serial No. 499,649. 3 Claims. (Cl. 230—134.)

1. A fan adapted for use with metal-corroding fumes and gases including a plurality of spaced hubs having integral radial arms blades interconnecting the arms of the spaced hubs, screw means for securing the blades to the arms, a spacing member abutting the inner ends of the hubs, elements abutting the outer ends of the hubs, securing members extending through the hubs, the spacing member and the elements for securing them together as a unit, and a cap threaded to one of said elements for enclosing the adjacent ends of the securing members, each element, with the exception of said securing members, being formed previous to its assemblage into the fan from a finished phenolic condensation product.



1,895,489. METHOD AND AN APPARATUS FOR ELECTRICALLY EFFECTING SYNTHETIC REACTIONS. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Patents Company, New Rochelle, N. Y., a Corporation of Delaware. Filed Jan. 9, 1930. Serial No. 419,725. 6 Claims. (Cl. 204—31.)



2. An apparatus for promoting electrochemical reactions which comprises a vessel having co-axially arranged opposing electrodes separated by an annular gas ionization space, the inner of said electrodes affording a conduit for a fluid stream, a partially closed chamber through which said inner electrode projects, a plurality of metal plates extending within said chamber, means for heating said plates, means for admitting gas into the chamber, an outlet from the chamber for the gas through the annular space, means for ionizing the heated gas within said annular space, means for discharging the ionized gas into contact with the fluid adjacent the annular space, a conduit open at opposite ends for the passage of the mixture of the gas and fluid.

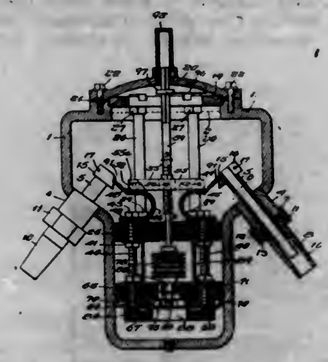
1,895,490. GAS ABSORPTION ELEMENT. SAMUEL RUBEN, New Rochelle, N. Y. Filed Feb. 10, 1932. Serial No. 592,195. 5 Claims. (Cl. 250—275.)

1. In combination with an electron discharge device an element for absorbing gases comprising a body composed of a compound of silicon and an element of the alkaline earth metals of the second periodic group.

1,895,491. ELECTRIC CUT-OUT. EDMUND O. SCHWEITZER, Northbrook, Ill. Continuation of application Serial No. 460,582, filed June 12, 1930. This application filed Sept. 11, 1931. Serial No. 562,243. 5 Claims. (Cl. 200—150.)

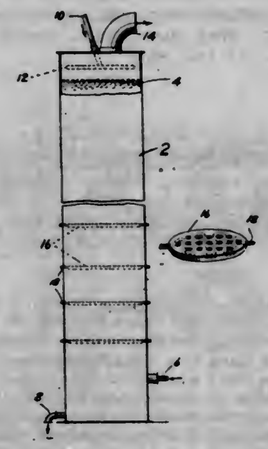
1. In an electric switch comprising a closed container adapted to be filled with liquid and having a hole formed

therein for receiving a bushing structure, a sleeve extending through the hole and making a tight fit therewith, a tubular insulator extending into the container through said sleeve and having a flange abutting against the outside of the sleeve, said tube constituting a closure for the sleeve, a conductor extending outwardly from



the container through the tube of insulation, switch contact means supported on the portion of the conductor within the container and limiting the extent of withdrawal of the conductor through the tube of insulation, and clamping means for clamping the flange of the tube of insulation against the outside of the sleeve.

1,895,492. METHOD OF AND APPARATUS FOR CONCENTRATING NITRIC ACID. JAMES H. SHAPLEIGH, Mount Lakes, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 17, 1929. Serial No. 400,198. 9 Claims. (Cl. 23—160.)



1. An apparatus for concentrating nitric acid including an upright tower, packing within the tower, a conduit for leading a mixture of nitric acid, sulphuric acid and water into the top of the tower, a conduit for leading nitric acid vapors from the top of the tower, a conduit for leading a hot gaseous medium into the bottom of the tower, a conduit for leading liquid from the bottom of the tower, and indirect heating means adapted to impart heat to the mixture therein below the top thereof.

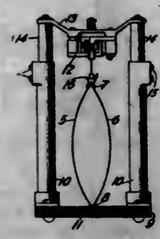
7. The method of concentrating nitric acid which includes counterflowing a mixture of nitric acid, sulphuric acid and water with a hot gaseous medium introduced from an external source into the path of flow of the mixture whereby the mixture is directly heated in its initial flow and simultaneously indirectly heating the mixture during a part of its counterflow with the hot gaseous medium and while the mixture still contains a substantial amount of nitric acid.

1,895,493. RADIO APPARATUS. MORRIS SHEEMAN, New York, N. Y. Filed Sept. 7, 1929. Serial No. 390,908. 2 Claims. (Cl. 250—33.)



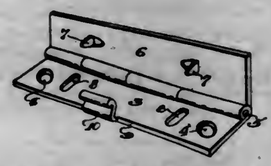
1. In a radio apparatus of the character described an aerial antenna wire terminating at each end thereof in insulating elements; fixed supports therefor, an oblong element composed of insulating material interposed between the two ends of the antenna, having an interior compartment housing a reel on which is wound the antenna wire, said reel having exterior means for operating the same and means for connecting and disconnecting said aerial antenna with a wire leading to sending or receiving instruments.

1,895,494. SOUND REPRODUCER. EDWIN H. SMYTHE, Evanston, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 17, 1926. Serial No. 129,731. 21 Claims. (Cl. 181—31.)



8. A sound reproducer comprising a hollow structure having oppositely disposed curved walls joined together along two edges, a support for said structure to which one of the joined edges of said walls in secured, and means for driving the other joined edges of said walls toward and away from said support in response to sound vibrations.

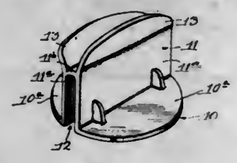
1,895,495. FABRIC TENSIONING AND FASTENING DEVICE. JAMES W. STEELE, Kansas City, Mo. Filed Mar. 4, 1932. Serial No. 596,790. 3 Claims. (Cl. 24—68.)



3. A fabric tensioning and fastening device comprising two leaf members, one of said members being capable of rigid attachment to a surface and having openings therein to receive corresponding tapered projections carried by the second leaf member, the second of said members being hingedly attached to the first of said leaf members, whereby to tension a fabric held around the second of said members as the latter is swung to a position adja-

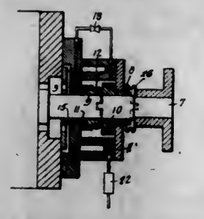
cent the first of said leaf members, and an integral spring latch carried by the first of said leaf members to hold said fabric in tensioned position.

1,895,496. STEEL WOOL HOLDER. PERCY W. STEPHENS, Chicago, Ill. Filed Mar. 6, 1930. Serial No. 433,607. 1 Claim. (Cl. 15—210.)



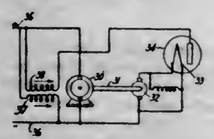
A holder of the class described, comprising a U-shaped body formed of resilient material and including two normally vertically-extending walls arranged in substantial parallelism, in combination with a laterally extending supporting flange projecting outwardly from the lower edge of each wall, and an inclined flange integrally connected to the upper edge of each wall and extending outwardly at an angle therefrom.

1,895,497. PACKING. ERNST STIEFEL, Bauma, Switzerland, assignor to Swiss Locomotive and Machine Works, Winterthur, Switzerland, a Corporation of Switzerland. Filed Oct. 11, 1929, Serial No. 398,880, and in Germany Nov. 7, 1928. 4 Claims. (Cl. 286—11.)



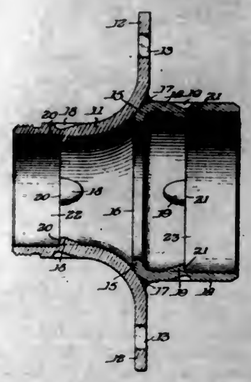
1. A shaft, a casing through an opening in a wall of which the shaft extends into the casing, and means to prevent flow of fluid through said opening into said casing comprising a sealing member snugly slidably mounted on the shaft within the casing and having sealing cooperation with the wall of the casing surrounding the shaft opening therein, means to maintain a liquid under higher pressure within said casing than the pressure of any liquid tending to flow through said opening into the casing, said casing wall having a liquid chamber disposed outwardly with respect to said sealing member and surrounding the shaft, a connection between said chamber and the liquid space within the casing, and a valve in said connection effective to maintain the liquid pressure in said chamber lower than the liquid pressure in the casing.

1,895,498. ELECTRIC REGULATOR. HUGH M. STOLLER, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 11, 1919. Serial No. 303,326. 19 Claims. (Cl. 171—119.)



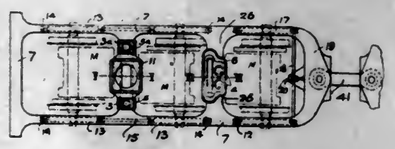
2. In combination, an electric machine having a stator and a rotor, a tuned circuit responsive to changes in a characteristic of said machine, and a vacuum tube regulator responsive to said circuit for regulating a characteristic of said machine.

1,895,499. PRESSED STEEL HUB. CHARLES R. STOUGH, Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed May 1, 1931. Serial No. 534,186. 3 Claims. (Cl. 301—105.)



1. A hub structure comprising front and rear tubular barrel portions arranged end to end in abutting fixedly attached relation, one of the abutting ends expanded and the other contracted to form respectively an outwardly projecting wheel-attaching flange and an inwardly projecting stiffening flange in a common transverse plane.

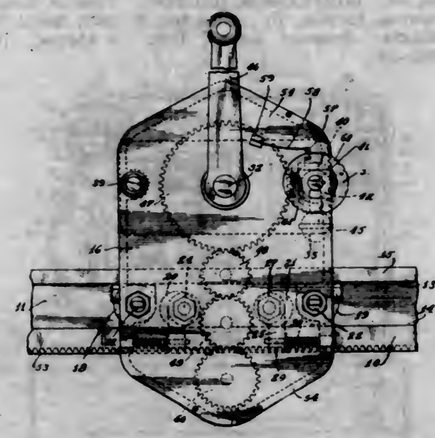
1,895,500. LOCOMOTIVE. CHARLES W. TODD, Schenectady, N. Y. Filed May 7, 1929. Serial No. 361,088. 16 Claims. (Cl. 105—82.)



1. A locomotive comprising a truck; a superimposed load; pivotal connecting means between the load and the truck; resilient load carrying elements interposed between said load and truck, in a symmetrical triangular position, said elements being adapted to slide on one of them and radially movable in unison about the pivotal connecting means, whereby the load centroid of said load and said truck is maintained in a central position with relation to the resilient elements; and resilient means for supporting the truck frame on the axles of the truck, pivotally connected to the truck frame at three points.

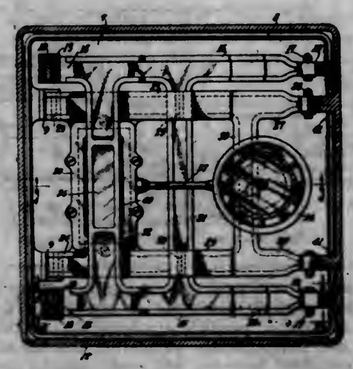
1,895,501. PROOF PRESS CYLINDER ADJUSTMENT. EDWARD O. VANDERCOOK, DAVID D. VANDERCOOK, and FREDERICK R. VANDERCOOK, Evanston, Ill., assignors to Vandercook & Sons, Chicago, Ill., a Corporation of Illinois. Filed July 17, 1931. Serial No. 551,398. 9 Claims. (Cl. 101—269.)

1. In a proof press, the combination of the press bed, a carriage mounted on said bed for reciprocation thereon, a printing cylinder, vertically movable bearing frames for said cylinder on said carriage, a cam associated with each



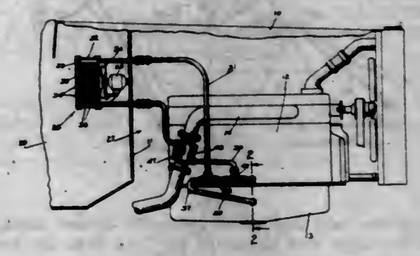
bearing frame, and a common actuating means for said cams for moving said frames to thereby adjust the cylinder relative to the press bed.

1,895,502. WEIGHING SCALE. SERGIUS VERNET, Brooklyn, and ARTEMAS J. HAYNES, Forest Hills, N. Y. Filed July 24, 1931. Serial No. 552,878. 19 Claims. (Cl. 265—47.)



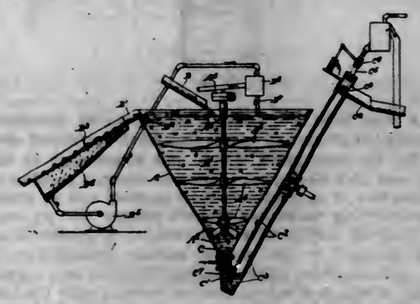
1. A weighing scale comprising in combination with crossed scale levers and a scale platform acting thereon, a fluid pressure device having companion elements interposed between and carried by said crossed scale levers and a suitably calibrated pressure gage operatively connected with said pressure device.

1,895,503. HEATING APPARATUS FOR AUTOMOTIVE VEHICLES. CARL H. WILL, Minneapolis, Minn., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Jan. 16, 1930. Serial No. 421,184. 8 Claims. (Cl. 237—123.)



1. A heating apparatus for automotive vehicles having a body and an engine provided with a lubricating system, comprising a heating element located within said body, and means for supplying heated oil from said lubricating system to said heating element.

1,895,504. APPARATUS FOR CLASSIFYING MATERIALS. CHARLES ERB WUENSCH, Joplin, Mo., assignor to Mineral's Beneficiation Incorporated, Joplin, Mo., a Corporation of Delaware. Filed Aug. 15, 1932. Serial No. 628,777. 5 Claims. (Cl. 209—173.)

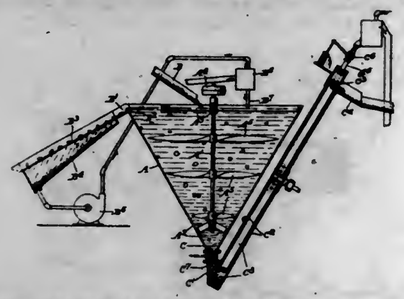


1. A gravity separator comprising a tank adapted to contain a liquid separating medium, means for supplying liquid of relatively high specific gravity to the bottom, and liquid of relatively low specific gravity to the top, of the tank, means for withdrawing from the tank a sufficient quantity of the medium to maintain the volume thereof substantially constant during operation and a means for feeding raw material to be separated to the tank, means for withdrawing that part of the raw material whose specific gravity is relatively high from the bottom and that part of the raw material whose specific gravity is relatively low from the top of the tank.

1,895,505. PROCESS OF CLASSIFYING MATERIALS. CHARLES ERB WUENSCH, Joplin, Mo., assignor to Mineral's Beneficiation Incorporated, Joplin, Mo., a Corporation of Delaware. Filed Aug. 15, 1932. Serial No. 628,778. 19 Claims. (Cl. 209—178.)

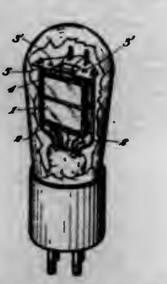
1. A gravity separating process which consists in feeding material to be separated into and suspending it in a substantially self-maintaining fluid bath, controlling the

specific gravity of the bath so that it increases continuously and gradually from the top downwardly, separating the material between the top and bottom of the bath, gently



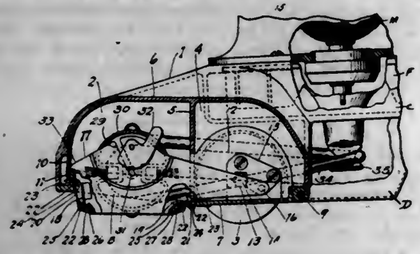
stirring the bath and withdrawing the lighter particles from the upper and the heavy particles from the lower portion of the bath.

1,895,506. RADIOTUBE. ROBERT H. FIDLER, North Arlington, N. J., assignor to Tung-Sol Lamp Works, Inc., Newark, N. J., a Corporation of Delaware. Filed June 18, 1930. Serial No. 461,946. 9 Claims. (Cl. 250—27.5.)



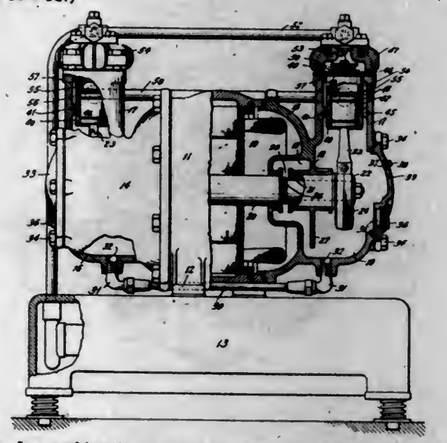
1. A radio tube including a filament, a pair of supporting posts, an insulating spacer disk having eyeleted openings for the accommodation of and attachment to said posts, said disk having an additional eyeleted opening for the reception of an anchor support member and an anchor unit comprising an anchor support member and an angularly disposed tension wire hook member of predetermined length fastened to the support member intermediate its ends, said unit being adjustable lengthwise of said support member in said last named eyeleted opening with the hook member engaging the filament for adjusting the tension during the operation of fastening the member to the eyelet of the opening.

1,895,507. SUCTION CLEANER. FRANCIS M. CASE, Cleveland, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Jan. 2, 1929. Serial No. 329,763. 9 Claims. (Cl. 15—8.)



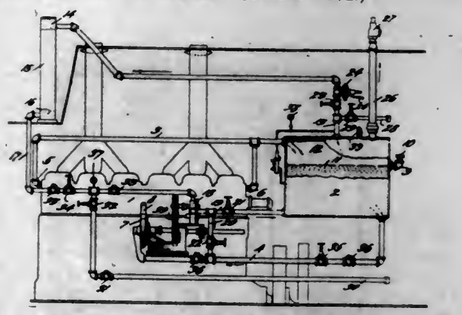
1. A suction cleaner comprising a motor, a fan, and a nozzle carried at a fixed elevation above the surface undergoing cleaning, arms pivoted outside said nozzle and extending thereinto, transverse members connecting said arms within said nozzle and forming lips and flexible wall members connecting said lips to said nozzle in air tight relation.

1,895,508. COMPRESSOR HOUSING. THOMAS JOSEPH FOWLER, Chicago, Ill. Filed Oct. 9, 1929, Serial No. 398,284. Renewed Apr. 6, 1932. 9 Claims. (Cl. 230—58.)



1. In combination, a brushless motor, a housing therefor having a bearing support, a motor shaft journalled in said support, said housing having an annular recess adjacent said support and an oil ring carried by said shaft in alignment with said recess whereby oil is prevented from creeping along said shaft and entering said motor, and is discharged into said recess.

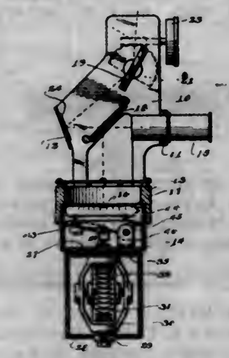
1,895,509. COOLING SYSTEM FOR INTERNAL COMBUSTION ENGINES. CLINTON R. FOUTZ, Baltimore, Md. Filed Jan. 11, 1930, Serial No. 420,176. Renewed Apr. 26, 1932. 15 Claims. (Cl. 123—174.)



1. A method of providing a cooling system for internal combustion engines, consisting in circulating a cooling medium in a system permanently closed against the admission of air, independently circulating the initial air in the system under pressure, and combining the circulating air and circulating cooling medium in selective proportion.

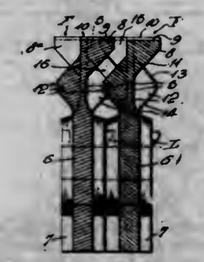
1,895,510. SEXTANT FOR AIRCRAFT. ALBERT F. HEGENBERGER, Dayton, Ohio. Filed Dec. 16, 1930. Serial No. 502,718. 12 Claims. (Cl. 88—2.4.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. In an instrument to be sighted through, the combination of a casing, a sight thereon, a level therein serving as a horizontal reference, a gyroscope having its frame mounted in said casing to pivot on a vertical axis and having the axis of the flywheel thereof directed to tilt



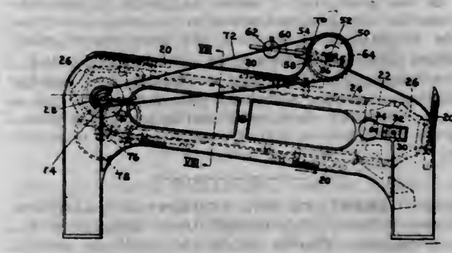
in a plane approximately coincident with the plane of sight wherein said level tilts, and connections between said level and said gyroscope frame for tilting the latter in the precessional movements of said gyroscope.

1,895,511. FURNACE GRATE. ARTHUR W. HULSON, Keokuk, Iowa. Filed Nov. 2, 1931. Serial No. 572,650. 6 Claims. (Cl. 126—163.)



6. In a grate, adjacent fingers provided with vertically spaced rows of lateral partially intermeshing lugs having beveled ends which co-operate in providing zig-zag air-heating passages from the lower to the upper side of the grate.

1,895,512. GRAINING MACHINE. ALBERT F. JONES, Salem, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed Apr. 3, 1926. Serial No. 99,549. 36 Claims. (Cl. 149—19.)



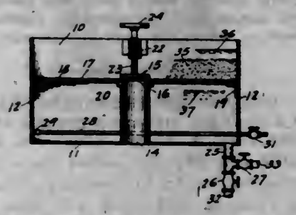
36. In a boarding or graining machine, a boarding or graining member mounted to rotate upon an axis and having a frictional surface for contacting with a piece of work, an endless carrier having a plurality of work-supporting surfaces for co-operation with the boarding or graining member, said endless carrier having its upper run moving along in a substantially horizontal plane from front to rear of the machine, and means for moving the boarding or graining member about its axis to cause its frictional surface to move in a direction the reverse of the movement of the upper run of the carrier and at the same speed whereby each piece of work is boarded or grained in turn and presented for removal at the rear end of the machine.

1,895,513. FUSE. JOHN M. KING, Dover, N. J. Filed Sept. 29, 1930. Serial No. 485,086. 3 Claims. (Cl. 102—39.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A fuse including a body, a plunger in the body, an element of an ignition train carried by the body and the plunger, a cup secured to the inner end of the body, a booster charge in the cup, a disk over the booster charge, means for spacing the disk from the body to form a chamber, a rotor in said chamber having a pointed end and an offset rounded end and a notched face intermediate the ends, a detonator in the rounded end, means for pivotally mounting the rotor at its pivoted end, means removable during flight for holding the plunger and rotor in unarmed position, and a torsion spring having an arm engaging the rotor to move it to armed position, the arm engaging in the notched face of the rotor to hold the rotor against counter movement.

1,895,514. GRAIN MALTING UNIT. REINHOLD E. KUSSEROW, Oakland, Calif. Filed May 12, 1931. Serial No. 536,793. 3 Claims. (Cl. 195—21.)



2. A combination soaking and germinating malting unit comprising a tank, a pervious floor intermediately supported and co-extensive with said tank, a chute extending from said floor through the bottom of said tank, a closure for said chute, a drain pipe and a water supply pipe communicating with the bottom of said tank, and air distributing pipes below said floor.

1,895,515. CATALYTIC HYDROGENATION PROCESS. WILBUR A. LAZIER, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed May 18, 1928. Serial No. 278,910. 7 Claims. (Cl. 260—156.)

1. The catalytic process of preparing an alcohol which comprises hydrogenating a ketone in the presence of a difficultly reducible oxide catalyst that has both a hydrogenating and a dehydrating effect, the catalyst having mixed therewith a basic compound of an alkali forming metal, to repress the normal dehydrating effect of said catalyst, said alcohol having the same number of carbon atoms as said ketone.

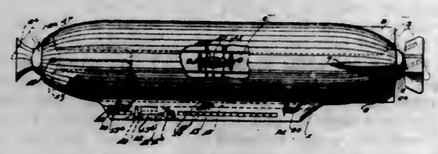
1,895,516. CATALYTIC PROCESS OF PRODUCING KETONES. WILBUR A. LAZIER, Elmhurst, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 9, 1930. Serial No. 419,743. 16 Claims. (Cl. 260—134.)

1. In the process of dehydrogenating secondary alcohols, the step which comprises passing the vapor of a secondary alcohol in contact with a catalyst composition comprising a difficultly reducible oxide of a dehydrogenating metal and an oxide of a metal belonging to group 6 of the periodic table.

1,895,517. MANUFACTURE OF POLYHYDRIC ALCOHOLS. HAROLD A. LEWIS, Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed July 21, 1926. Serial No. 123,914. 16 Claims. (Cl. 260—156.5.)

1. The process which comprises making a polyhydric alcohol by hydrolyzing a chlorhydrin in a series of steps at progressively increasing temperatures.

1,895,518. DIRIGIBLE AIRCRAFT. GARRETTE W. PECK, San Diego, Calif. Filed Feb. 27, 1930. Serial No. 431,704. 8 Claims. (Cl. 244—10.)



1. In a dirigible structure, a main air passage extending therethrough, impeller means for causing a flow of air through said passage, a control means having the cross section of a regular polygon and a universal joint connecting said control means with said passage so that said control means may be angularly displaced in any desired direction relative to said air passage.

1,895,519. METHOD OF PREPARING CARBON RESISTANCE STACKS. ORVILLE S. PETERS, Chevy Chase, Md. Filed June 6, 1929. Serial No. 368,885. 4 Claims. (Cl. 201—51.)



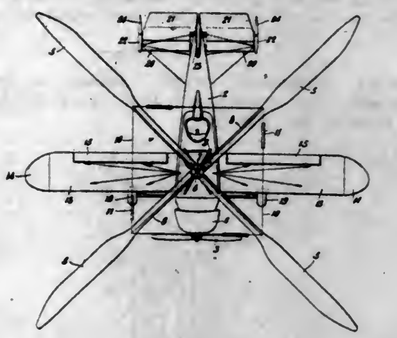
3. The method of forming resistance stacks composed of a plurality of disks having non-uniform pressure resistance characteristics, which comprises selecting and assembling sufficient disks to produce a stack having the pressure resistance characteristics desired, and forming each subsequent stack of the same number of disks as is contained in the first stack but selecting the disks so that the sum of the resistances is equal to the resistance offered by the first stack under a similar pressure, whereby the resistance offered by said subsequent stacks will be the same as that of the first stack at every common pressure.

1,895,520. SYSTEM OF JUSTIFYING TYPE LINES. REGINALD G. A. PHILLIPS, Cleveland Heights, Ohio, assignor, by mesne assignments, to American Multigraph Co., Wilmington, Del., a Corporation of Delaware. Filed Nov. 25, 1930. Serial No. 497,974. 17 Claims. (Cl. 101—403.)



1. A method of justifying comprising assembling of lines of various length with quads between the words and thereafter twisting the quads about up-and-down axes to cause them to spread the line in which they are set.

1,895,521. AIRCRAFT. HAROLD F. PITCAIRN, Bryn Athyn, and AGNEW E. LARSEN, Huntingdon Valley, Pa., assignors to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed July 17, 1930. Serial No. 468,598. 21 Claims. (Cl. 244—19.)



1. In an aircraft having propelling means and a sustaining blade system mounted for rotation by relative airflow, a control surface for the aircraft, means whereby said surface may be utilized to deflect slip-stream from the propelling means against the sustaining blade system, and means acting under the influence of the effect of the slip-stream on said surface for maintaining the same in deflecting position.

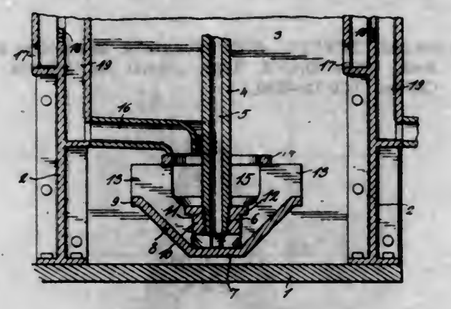
1,895,522. PRODUCTION OF MALEIC ANHYDRIDE. ELTON B. PUNNETT, Buffalo, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 2, 1928. Serial No. 297,091. 19 Claims. (Cl. 260—123.)

1. In the production of maleic anhydride by the catalytic partial oxidation of benzene in the vapor phase and in the presence of a catalyst, the improvement which comprises passing a mixture of benzene vapor and a gas containing free oxygen in contact with a catalyst comprising a mixture containing vanadium oxide and an activator deposited upon and in intimate contact with a relatively inert, porous carrier containing fused aluminum oxide.

1,895,523. IMPELLER FOR FLOTATION MACHINES. JOSEPH P. RUTH, Jr., Denver, Colo., assignor to The Ruth Company, Denver, Colo., a Corporation of Colorado. Filed Sept. 14, 1931. Serial No. 562,749. 13 Claims. (Cl. 261—87.)

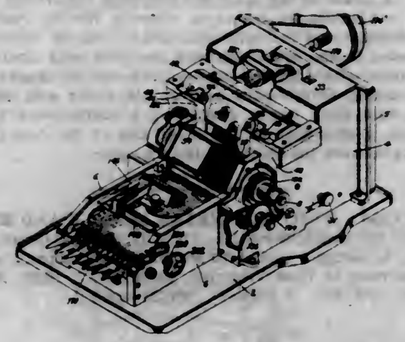
1. An impeller for flotation machines, comprising, a hollow member having a side wall of frusto-conical shape,

a hub extending upwardly from the hollow side thereof, said hub having an axial opening for the reception of a



hollow shaft, the lower end of the hub being spaced from the upper surface of the bottom of the impeller, and a plurality of vanes extending outwardly from the hub.

1,895,524. BOX TOE CONDITIONING MACHINE. AUGUST R. SCHOENKY, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 19, 1928. Serial No. 262,856. 58 Claims. (Cl. 91—46.)

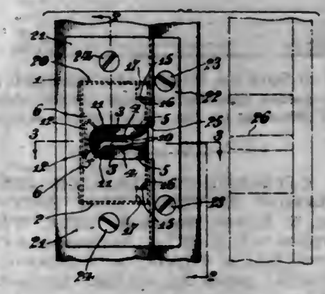


1. A conditioning machine having, in combination, means constructed and arranged to increase the porosity of a work piece, and means for subjecting the work piece, at a locality of the work piece which is being acted upon by said porosity-increasing means, to the influence of a conditioning medium.

27. A conditioning machine comprising a receptacle for a conditioning fluid and a member having a surface adapted upon pressure of a blank against said surface to increase the porosity of the blank, said member being constructed and arranged to pass the blank through conconditioning fluid in said receptacle.

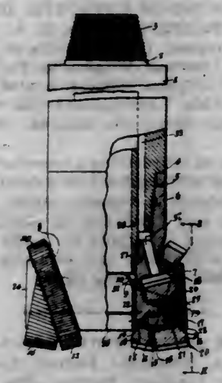
1,895,525. DOOR RETAINER. JOSEPH J. SEITZ, Philadelphia, Pa., assignor to Mitchell Specialty Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 14, 1928. Serial No. 285,283. 5 Claims. (Cl. 16—86.)

1. A door retainer comprising oppositely disposed elastic blocks, a box within the opposite end portions of which the said blocks are located and retained in spaced relation to each other, and face strips of metal mounted upon the opposing faces of said blocks and held thereon, the inner ends of said plates projecting toward each other and



being overlapped and in contact, the outer of said overlapping projecting ends being in contact with the adjoining side of said box.

1,895,526. EARTH DRILLING BIT. CONRAD R. SOLUM, Huntington Park, Calif. Filed Aug. 21, 1931. Serial No. 558,446. 9 Claims. (Cl. 255—72.)



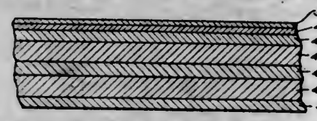
1. In an earth drilling bit, two sets of substantially disc-like cutters, a support for said cutters having means to attach the same to a drill string, means on said support for rotatably mounting said cutters, including a trunnion for mounting a cutter of one of said sets formed on said support with the axis thereof forming an acute angle to the axis of rotation of said drill string, and a second trunnion for mounting a cutter of the other set formed on said first trunnion with its axis extending at a different angle with respect to the axis of rotation of said drill string.

1,895,527. PAPER MANUFACTURE. JOSEPH H. SWAN, 3d, Middletown, Ohio, assignor to The Gardner-Richardson Company, Middletown, Ohio, a Corporation of Ohio. Filed Aug. 30, 1929. Serial No. 389,421. 19 Claims. (Cl. 154—50.)

1. A paper product of the character described comprising a hard sized sheet having a coating including a polyhydric alcohol, an alkali metal silicate and an alkali metal compound which is alkaline in character, the coating being primarily maintained on the surface of the sheet by the sizing in the sheet.

14. A container board adapted for the packaging of greasy materials, comprising a laminated sheet made up

of a plurality of plies of paper with an intermediate asphalt layer, the surface of said laminated sheet which



is adapted to form the interior of a container having a non-fibrous grease proofing coating applied thereto and maintained primarily on the surface of the said sheet.

1,895,528. CATALYTIC DEHYDRATION AND DEHYDROGENATION PROCESS. HUGH STOTT TAYLOR, Princeton, N. J., and WILBUR A. LAZIER, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed June 24, 1926. Serial No. 118,356. 10 Claims. (Cl. 260—134.)

1. The process of dehydrogenating an oxygen containing organic compound capable of dehydrogenation which comprises passing said compound, in the absence of any compound which will react therewith, in contact with an oxide catalyst having both a dehydrogenating and a dehydrating effect, said catalyst having admixed therewith an alkaline compound of an alkali metal which depresses the dehydrating effect of said oxide catalyst.

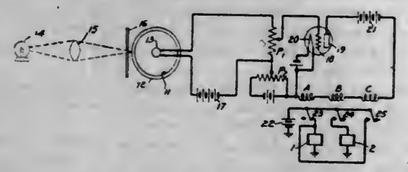
1,895,529. PROCESS OF CATALYTIC DEHYDRATION. HUGH STOTT TAYLOR, Princeton, N. J., and WILBUR A. LAZIER, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Original application filed June 24, 1926, Serial No. 118,356. Divided and this application filed July 28, 1927. Serial No. 209,168. 8 Claims. (Cl. 260—170.)

1. The process of dehydrating a secondary alcohol which comprises passing said alcohol over a catalyst composition containing essentially a catalytic oxide having both a dehydrogenating and a dehydrating effect, said composition also containing essentially an acidic oxide which is markedly more acidic than said catalytic oxide whereby to repress said dehydrogenating effect.

1,895,530. FIRE EXTINGUISHER. CHARLES A. THOMAS and CARROLL A. HOCHWALT, Dayton, Ohio, assignors to The Fyr-Fyter Company, Dayton, Ohio, a Corporation of Ohio. Filed Feb. 27, 1928. Serial No. 257,400. 7 Claims. (Cl. 23—9.)

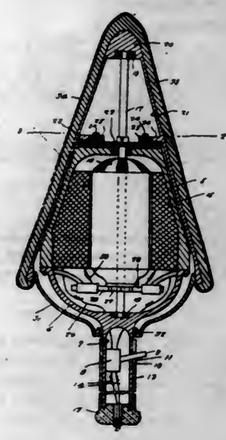
4. The method in the extinguishing of fire, which comprises projecting upon the fire a solution of an oxygenated compound of an alkali metal element of Group I of the periodic table combined with a halogen.

1,895,531. ELECTROOPTICAL SYSTEM. ALLAN WEAVER, Port Washington, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Original application filed Mar. 26, 1924, Serial No. 702,109. Divided and this application filed June 18, 1930. Serial No. 462,025. 3 Claims. (Cl. 250—415.)



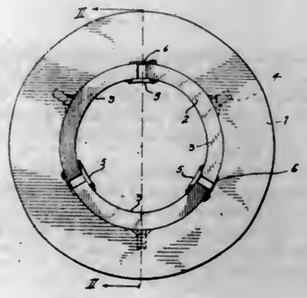
1. A reproducing amplifier comprising a bulb containing a filament and a grid, a circuit connecting the filament and grid and containing a source of potential and a light reactive cell, and a potentiometer connected across the filament and grid for controlling the grid potential whereby uniform reproduction with light reactive cells of varying characteristics can be effected.

1,895,532. BUFFER. SVEN BÄCKSTRÖM, Helsingfors, Finland. Filed Oct. 5, 1931. Serial No. 567,034. 2 Claims. (Cl. 15—230.)



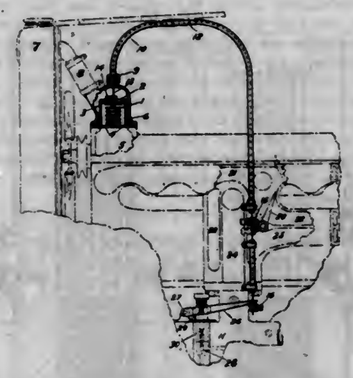
1. A buffer of the character described comprising a hollow conical-shaped casing, a covering for the casing, a shell projecting inwardly of the large end of the casing, a motor in and concentric with the shell, said shell being provided with a handle journaled through the large end of the casing, drive means between the motor and the casing, said drive means comprising a shaft driven by the motor, a ring gear on the inner side of the casing, and gears between the shaft and the ring gear.

1,895,533. COMPOSITE METAL ARTICLE AND METHOD OF MAKING SAME. GLEN D. BAGLEY, Great Neck, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Oct. 7, 1929. Serial No. 397,971. 10 Claims. (Cl. 22—203.)



1. A method of making a composite article having a hollow core of soft metal and an outer portion of harder metal, comprising; forming said core by providing a plurality of radial segments, welding a plurality of lugs to the outside of each of said segments, and placing said segments in a mold in the form of a circle with the adjacent edges thereof spaced apart; and pouring said harder metal, while molten, in said mold around said core.

1,895,534. THERMOSTATIC CONTROL FOR INTERNAL COMBUSTION ENGINES. HAROLD LANGLEY BLOOD, Hinsdale, Ill. Filed Jan. 2, 1929. Serial No. 329,884. 7 Claims. (Cl. 123—174.)



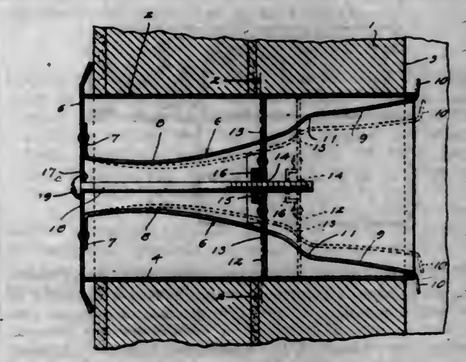
1. In apparatus of the class described, a thermosensitive valve adapted to regulate the flow of cooling fluid in an internal combustion engine, a housing for said valve, a carburetor, means for regulating said carburetor, a tube extending upwardly from the housing to a point above the level of the cooling fluid, and a wire guided by said tube, said wire connecting the regulating means for the carburetor and the movable portion of said valve.

1,895,535. DISPLAY RACK OR STAND. GEORGE F. BRECHT, Dayton, Ohio, assignor to Weston Paper and Manufacturing Co., Dayton, Ohio, a Corporation of Ohio. Filed Jan. 30, 1932. Serial No. 589,917. 3 Claims. (Cl. 211—149.)



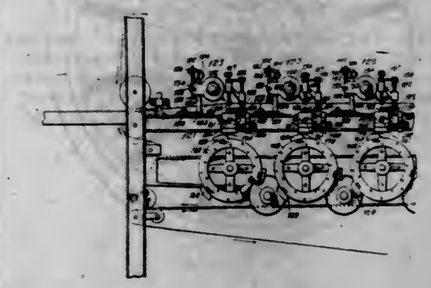
1. A rack or stand of the character described comprising front and back legs arranged at opposite sides of the rack or stand and connected in respective front and back pairs, a frame pivotally connected at its sides to each of the legs and pivotally connecting the respective pairs whereby one of said pair of legs can be folded against the other pair of said legs, front and back arms of said frame extending between the sides thereof in substantial alinement, a shelf having flanges at its front and back edges for engagement against the outer faces of the front and back arms of the frame, said shelf being formed with inclined troughs arranged substantially parallel to the flanges to receive articles, and a second frame pivotally connected to said legs above said first frame and having arms across the sides and back of the frame between the legs.

1,895,536. FLUE OPENING STOP OR CLOSER. FREDERICK C. BRITTON, Sr., Petersburg, Ind. Filed Aug. 20, 1931. Serial No. 558,352. 3 Claims. (Cl. 126—319.)



1. A chimney pipe opening cover comprising a plate adapted to cover one end of the opening, a pair of relatively long resilient arms each secured at one end to one face of the plate and each having its other end formed for engagement across the edge of the opposite end of the opening, a shield disk disposed in spaced relation to said plate and slidably mounted on said arms and of a diameter to snugly close the opening, means connecting said disk with the plate whereby the disk may be shifted relative to the plate, and means whereby the shifting of the disk will effect the flexing of the arms relative to one another, to move their free ends into position across an edge of the opening.

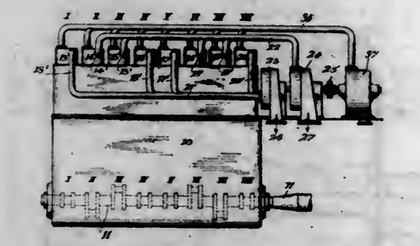
1,895,537. PEN OPERATING MECHANISM FOR RULING MACHINES. ALBERT BROADMEYER, Harrisburg, Pa., assignor to W. O. Hickok Manufacturing Company, Harrisburg, Pa., a Corporation of Pennsylvania. Filed Nov. 19, 1929. Serial No. 408,333. 27 Claims. (Cl. 33—39.)



2. In a ruling machine, the combination with a frame bar, of a swinging pen-carrying member mounted thereon, a cam member below the frame bar, a box mounted on the frame bar and adjustable along the same, a vertically reciprocal motion transmitting plunger on the box between the cam member and pen-carrying member, and means for adjusting the box and holding it in different positions.

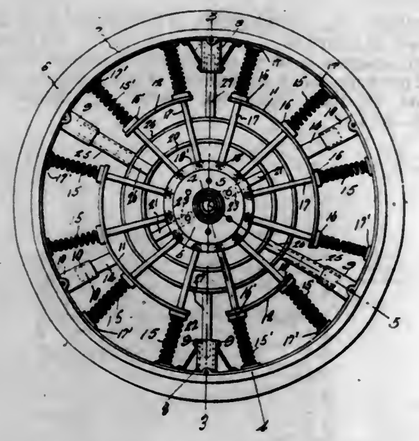
25. In a ruling machine, the combination with a post, of a pen beam actuating arm having a sleeve journaled in the post, a pen beam having a gudgeon engaged in the sleeve, means for fixing the gudgeon and sleeve together, and means that operates on the arm to rock the pen beam.

1,895,538. INTERNAL COMBUSTION ENGINE. ALFRED BÜCHI, Winterthur, Switzerland. Filed Nov. 26, 1926, Serial No. 150,951, and in Switzerland Nov. 30, 1925. 4 Claims. (Cl. 60—13.)



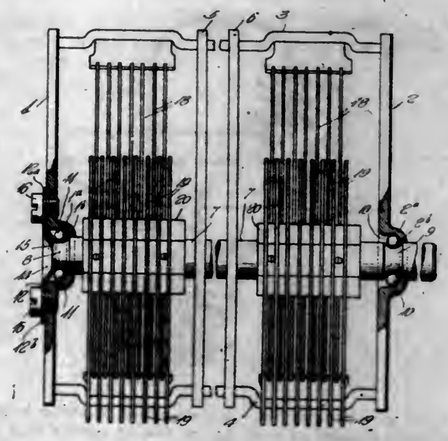
1. A prime mover aggregate comprising in combination, an internal combustion engine having a plurality of combustion cylinders divided into groups, an exhaust pipe for each group of cylinders, a compressor for precompressing the charge of the engine, at least one exhaust turbine having several admission chambers, and each exhaust pipe being separately connected to a turbine admission chamber, and inlet and outlet means provided for the combustion cylinders, the dimensions of said exhaust pipes and of the inlet section of the turbine being so small and the moment of the discharge of the exhaust gases from the combustion cylinders being so late as to built up a pressure head of the turbine higher than the charging pressure near the beginning of the exhaust period with a subsequent drop of pressure to below precompression pressure near the end of said exhaust period.

1,895,539. SPRING WHEEL. ELMER CLEM, Baytown, Tex. Filed Dec. 3, 1931. Serial No. 578,819. 4 Claims. (Cl. 152—52.)



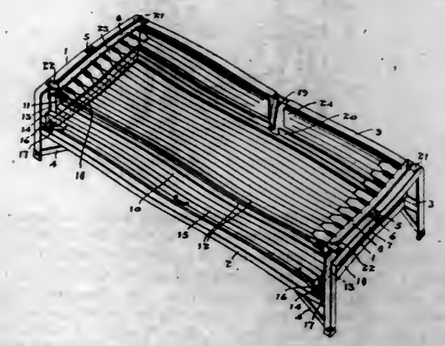
1. In a wheel of the class described, a hub, an annular member circumjacent the hub in spaced relation thereto, and having inwardly directed lugs extending into seats formed in the periphery of the hub and formed with outwardly directed sleeves, a second annular member circumjacent the first annular member and in spaced relation thereto and having outwardly directed sleeves radiating therefrom and in registry with openings into which the sleeves of the first annular member extend to telescope in the sleeves of the second annular member, a rim, sockets radiating inwardly from the rim, and sleeve members radiating outwardly from the second annular member to terminate telescopically in the sockets, and spring resilient means interposed between the hub and the rim.

1,895,540. VARIABLE CONDENSER. SAMUEL COHEN, Brooklyn, N. Y., assignor to General Instrument Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 9, 1931. Serial No. 514,682. 2 Claims. Cl. 308—178.)



1. In a bearing for a variable condenser, a frame including a pair of end plates each having a ball race mounted therein, a rotatable shaft extending through one of said ball races and projecting into and terminating within the other of said ball races, a centering plate having a pair of diametrically opposite lug portions secured to one of the end plates of said condenser frame, said centering plate having a frusto-conical resilient portion projecting into said last mentioned ball race and apertured for encircling the projecting end of said rotatable shaft, the edge of said centering plate lying in the plane of the projecting end of said rotatable shaft, the frusto-conical portion of said centering plate bearing against ball bearings confined within an annular path of movement in the ball race in said last mentioned end plate.

1,895,541. FOLDING COUCH. ABBEY CRONENBERG, Toronto, Ontario, Canada, assignor of one-half to Nathan Phillips, Toronto, Ontario, Canada. Filed May 6, 1931, Serial No. 535,418. Renewed Dec. 14, 1932. 5 Claims. (Cl. 5—27.)

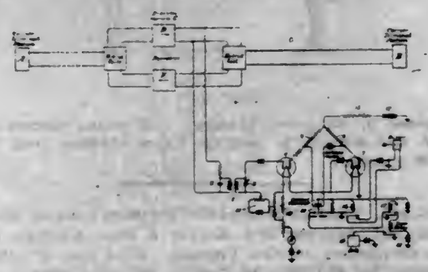


1. A folding couch, comprising the combination with a pair of metal ends formed of an inverted U shape and longitudinal bars supporting and spacing said ends and connected to the sides thereof intermediate of their height, of a couch seat frame pivotally connected at the ends to the intermediate top portion of the inverted U-shaped members, a supplementary bed frame pivotally connected

CARNEGIE LIBRARY OF ATLANTA

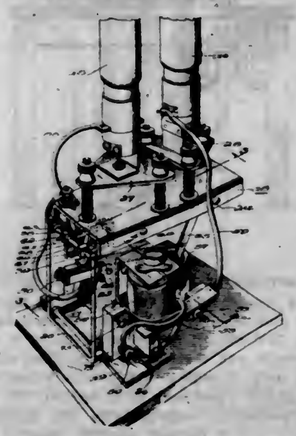
to one of the free longitudinal sides of the couch seat frame and adapted to swing thereunder, springs carried by said respective frames, means for locking said hinged frames together in substantially parallelly spaced relation whereby they may swing as a unit on the pivotal connection of said seat frame, and means permanently associated with one of said frames forming with the springs of the respective frames an enclosure for receiving and retaining bedding, said locked frames being adapted to be swung in unison a half revolution in one direction to permit removal of the bedding whereupon the first-mentioned frame is adapted to be returned to its normal position while the other frame is swung on the frame-connecting pivots to an extended position in horizontal alignment with said normally positioned first-mentioned frame.

1,895,542. PILOT CHANNEL INDICATING SYSTEM. RALPH W. DEARDORFF, Seattle, Wash., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 25, 1928. Serial No. 308,260. 6 Claims. (Cl. 178—44.)



5. In a volume indicating system, the combination with a source of current normally of fixed value but adapted to vary therefrom, an indicating circuit connected with said source and having means responsive to a variation of predetermined magnitude in said current, and a delay device to render said indicating circuit unresponsive to transient variations of the said predetermined magnitude.

1,895,543. REVOLUBLE ILLUMINATED SIGNAL. BRENT S. FINCH and ROBERT S. FINCH, Cincinnati, Ohio. Filed Apr. 2, 1930. Serial No. 441,037. 23 Claims. (Cl. 240—37.1.)



1. In a beacon, a plurality of lamps one of which is normally in effective position at the focal axis of the beacon, a horizontal support for the lamps comprising a movable platform including individual yieldable supporting means for maintaining each of said lamps in normal vertical position, mechanism for moving the platform vertically and laterally to effect a transposition of the lamps relative to the focal axis of the beacon, and means for adjusting the vertical alignment of each of said lamps relative to the focal axis of said beacon.

1,895,544. CELLULOSE DERIVATIVE AND PROCESS OF MAKING SAME. ROBERT HALLER, Riehen, near Basel, and ALPHONSE HECKENDORN, Basel, Switzerland, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Feb. 20, 1930, Serial No. 430,122, and in Switzerland June 1, 1929. 2 Claims. (Cl. 260—100.)

1. A process for the manufacture of new cellulose derivatives by causing cyanogen halides to act in the presence of indifferent diluents on alkali cellulose obtained by treating cellulose with a solution containing potassium hydroxide and alcohol.

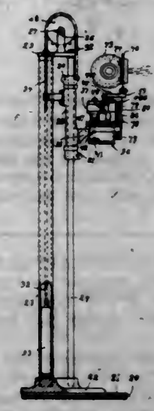
1,895,545. GALLOCYANINE DYESTUFF. ERNST HUG and HEINRICH WERDENBERG, Neu-Allschwil near Basel, Switzerland, assignors to the Firm of "Durand & Huguenin, S. A.," Basel, Switzerland. Filed Nov. 20, 1928, Serial No. 320,746, and in Germany Nov. 26, 1927. 4 Claims. (Cl. 260—28.)

1. The herein described new gallocyanine dyestuffs, having in their free state the probable general formula:



wherein X stands for alkyl or halogen, R_1 for an alkyl group, R_2 for hydrogen or an alkyl group, Y for hydrogen or a carboxyl group, which may be free or substituted by alkyl, NH_2 or NH-aryl, and V represents a benzene or naphthalene nucleus, which may be substituted by alkyl, halogen, free or alkylated NH_2—or sulpho groups, said products being valuable dyestuffs for discharge printing, yielding bright reddish blue to greenish blue shades and being also usable in form of their leuco derivatives.

1,895,546. RADIOGRAPHIC APPARATUS. JOHN ROBERT KELLEY, Covington, Ky., assignor to The Kelley-Koett Manufacturing Company, Covington, Ky., a Corporation of Kentucky. Filed Jan. 15, 1929. Serial No. 332,618. 7 Claims. (Cl. 250—34.)



1. Radiographic apparatus comprising a vertically movable X-ray generator carriage, a fluid reservoir mounted

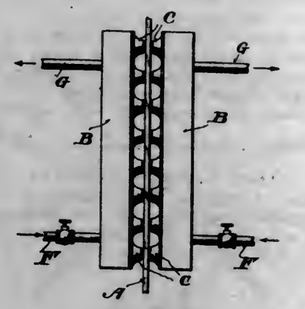
upon said carriage, a cylinder mounted upon said carriage and supplied with fluid from said reservoir, a plunger movable in said cylinder, an X-ray generator mounted upon said plunger, means to force fluid from said reservoir into said cylinder to move said plunger relative to said cylinder, and a valve controlled fluid exit port from said cylinder.

1,895,547. APPARATUS FOR ANNEALING GLASS. HENRY LEBEL, Paris, France, assignor to Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint Gobain, Chauny & Cirey, Paris, France. Filed Jan. 30, 1930, Serial No. 424,669, and in France Feb. 7, 1929. 9 Claims. (Cl. 49—47.)



3. The combination with a lehr structure having a roof, the medial longitudinal portion of which near the entrance end of the lehr is lower than the portions on each side thereof, of a conveyor for feeding sheet glass through the lehr.

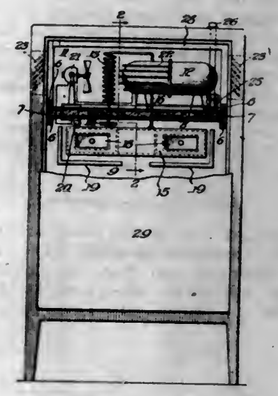
1,895,548. METHOD OF AND APPARATUS FOR TEMPERING GLASS SHEETS. HENRY LEBEL, Paris, France., assignor to Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint Gobain, Chauny & Cirey, Paris, France. Filed July 22, 1930, Serial No. 469,745, and in France Aug. 8, 1929. 3 Claims. (Cl. 48—89.)



1. The hereinbefore described method of tempering glass sheets which comprises uniformly heating the sheet to a temperature close to its softening point and similarly chilling the opposite surfaces of the sheet while so heated by bringing such surfaces simultaneously into proximity to but out of contact with cool surfaces.

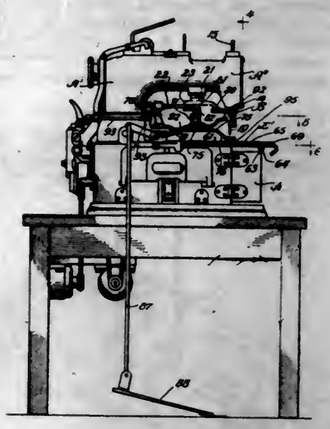
1,895,549. REFRIGERATING APPARATUS. CARL E. L. LIPMAN, Beloit, Wis., assignor to Lipman Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 6, 1926. Serial No. 92,704. 18 Claims. (Cl. 62—116.)

1. In a refrigerating apparatus the combination of a cabinet provided with guideways intermediate its top and bottom walls, a support composed of heat insulating material removably supported in said guide-ways and dividing the cabinet into an upper and a lower chamber, a refrigerating apparatus carried by said support and including a compressing means and a condensing means disposed in the upper chamber and a refrigerating element



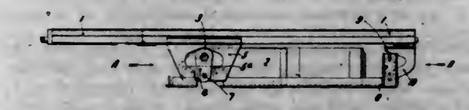
disposed in the lower chamber, and means cooperating with said support to seal the upper chamber from the lower chamber.

1,895,550. EYELET MACHINE. CHARLES LOFMAN, Riverside, Ill., assignor to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed Mar. 27, 1931. Serial No. 525,750. 16 Claims. (Cl. 112—66.)



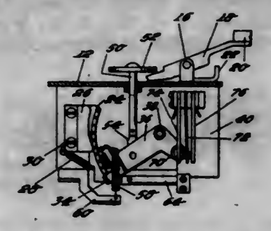
1. In a machine of the character set forth, a casing comprising a base casing, a vertical casing portion at one end thereof and an overhead casing carried by said vertical casing, said casing members affording a work channel therebetween, eyelet-stitching mechanism supported by said casing and including upper and lower needles, a slidably mounted apertured deck carried by said base casing and extending substantially the length of said work channel, and a presser member secured to a perimetrical portion of said deck and adapted to engage the work at a point adjacent said needles, said presser member and deck affording a space between them along which said work may be freely passed.

1,895,551. CONVEYER. JOHN BRIDIE MAYOR, Mile End, Glasgow, Scotland, assignor to Mayor & Coulsons, Limited, Glasgow, Scotland. Filed July 16, 1932, Serial No. 622,946, and in Great Britain Nov. 20, 1931. 3 Claims. (Cl. 198—220.)



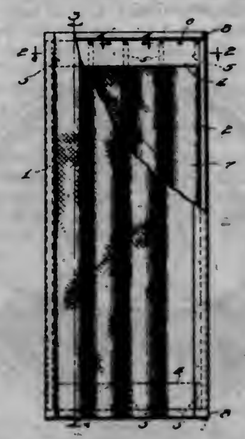
1. In a conveyer of the kind referred to, a gear box comprising two driving arms one situated at each side of the box and downwardly directed, a trough pan above the gear box and a saddle attached to the pan pivotally connected to the lower ends of the driving arms.

1,895,552. DIAL TELEPHONE OPERATING MEANS. ABRAM L. MYERS, Chicago, Ill. Filed Aug. 28, 1931. Serial No. 559,961. 10 Claims. (Cl. 179—90.)



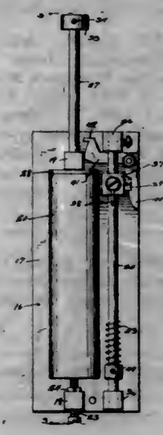
1. A means for operating automatic telephones, comprising a series of levers for variable movement, a central operating shaft about which the levers are circularly grouped and an electrical make and break contact element connected to said central operating shaft.

1,895,553. DOOR OR SCREEN AND FASTENING MEANS. CARL H. NORDELL, Chicago, Ill. Filed Aug. 18, 1930. Serial No. 475,971. 9 Claims. (Cl. 20—35.)



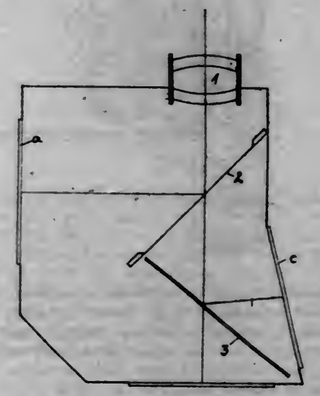
2. In combination, a supporting member having distributed openings near one edge, a curtain extending across one side of said member, flexible elements secured to said curtain and extending over said edge and back through said openings, the free ends of said elements lying in contact with said side of said member and being pressed against the same by the curtain.

1,895,554. DRAFT REGULATOR. EDISON E. RANDALL, Kankakee, Ill. Filed Apr. 30, 1931. Serial No. 534,028. 2 Claims. (Cl. 161—8.)



1. A draft controlling means comprising a cylinder, a piston slidable in the cylinder, retarding means carried by the cylinder and the piston for retarding the movement of the piston in one direction, a spring engaging the piston for constantly urging the piston in said one direction, a stem secured to the piston and extending outwardly of one end of the cylinder, a collar on the stem, a guide rod, a slide on the rod and adapted to be connected to a draft means, a cushioning spring carried by the guide rod for engagement with the slide to cushion the movement thereof in one direction, and a slide holding member disposed in the path of said collar for movement in released position upon movement of the piston and collar in said one direction.

1,895,555. THREE-COLOR PHOTOGRAPHIC CAMERA. EMIL RECKMEIER, Berlin, Germany. Filed June 11, 1930, Serial No. 460,488, and in Germany Sept. 25, 1929. 1 Claim. (Cl. 88—1.)
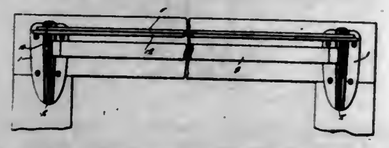


A three-color camera comprising an objective lens, a photographic plate and a pair of diagonally placed mirrors so arranged that the light coming from an object to be reproduced is distributed by the two diagonally placed mirrors to the three color negatives by inserting color filters, one of said mirrors being a skin mirror arranged nearest the lens, the violet (blue) filter being placed in the ray passage of the reflection picture of the

skin mirror and the other mirror being a glass mirror so that the light striking the same is distributed correspondingly to the two remaining negatives.

1,895,556. MAGNETIC ALLOY. WILLOUGHBY STATHAM SMITH, Newton Poppleford, HENRY JOSEPH GARNETT, Sevenoaks, and WALTER FREDERICK RANDALL, Ewell, England. Filed Feb. 3, 1932, Serial No. 590,777, and in Great Britain Feb. 5, 1931. 8 Claims. (Cl. 175—21.)

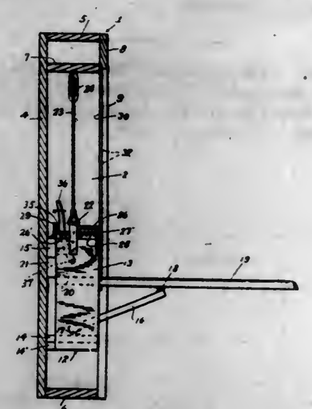
1. Magnetic substantially carbon free nickel iron alloys, comprising nickel 62–75%, iron 10–22%, and 10–20% of a third element selected from the group comprising chromium, molybdenum, tungsten, vanadium, zirconium, titanium.

1,895,557. COMBINATION CURTAIN AND SHADE BRACKET. SAMUEL WILEY SNIDOW, Roanoke, Va. Filed Sept. 2, 1932. Serial No. 631,559. 3 Claims. (Cl. 156—23.)



1. A combination curtain and shade bracket comprising a holder having a downwardly tapered guideway therein, a bracket having a wedge-shaped base fitting in the guideway and said bracket having openings therein, one of which receives a trunnion of a shade roller and another a part of a curtain or drape rod.

1,895,558. IRONING BOARD. GEORGE SPIES, Oak Creek, Wis. Filed May 12, 1932. Serial No. 610,931. 5 Claims. (Cl. 68—10.)

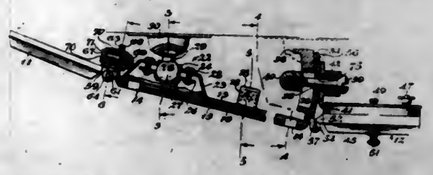


1. An ironing board comprising a cabinet, a frame mounted in the cabinet, said frame including vertical, opposed side members, a bottom member, and a cross member secured to vertical edges of the side members on the upper end portions of said side members, the side members being spaced from the rear wall of the cabinet, a support hingedly connected, at one end, to the bottom member of the frame, a board hingedly connected, at an intermediate point, to the other end of the support, and a transverse bar hingedly connected to one end of the board and slidably mounted in the cabinet between the back wall of said cabinet and the side members of the frame, said transverse bar being engageable beneath the cross member of the frame for limiting the swinging movement of the board toward operative position.

1,895,559. DYESTUFF CONTAINING METAL AND PROCESS OF MAKING SAME. FRITZ STRAUB and HANS MAYER, Basel, Switzerland, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 3, 1929, Serial No. 397,140, and in Switzerland Oct. 5, 1928. 9 Claims. (Cl. 260—11.)

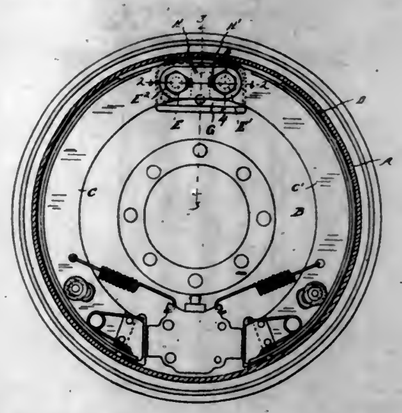
1. As new products the metal compounds of non-sulfonated azo-dyestuffs deriving from non-sulfonated aromatic diazo-compounds containing in o-position to the diazo-group lake forming groups, and such coupling components which contain at the most one carboxyl group and of which the carbon atom capable of being coupled is a member of a ring system, which metal compounds are obtained by treating these non-sulfonated azo-dyestuffs in a medium the pH of which is higher than 10, with agents yielding metals capable of forming lakes, and which products, when dry, form dark powders, soluble in many organic solvents and in the usual commercial pyroxyline varnishes with various colors.

1,895,560. COMBINED REAR VIEW MIRROR AND INSTRUMENT. JAMES B. WEIR, Oakwood Heights, N. Y., assignor to Standard Mirror Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Oct. 23, 1929. Serial No. 401,946. 5 Claims. (Cl. 45—97.)



1. A device of the character described, comprising a plate, means for supporting said plate for universal movement and including a part rigid with and movable with said plate and an instrument pivotally connected to said movable part of said supporting means and permitting universally adjustable movement of said instrument relative to said plate.

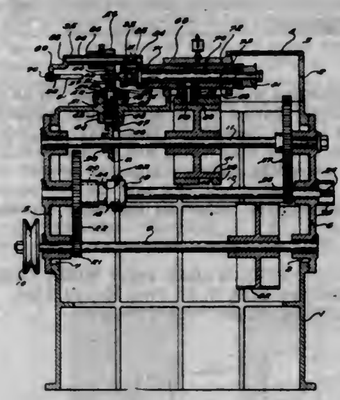
1,895,561. VEHICLE BRAKE. JOHN WILLIAM WHITE, Detroit, Mich. Filed Apr. 27, 1931. Serial No. 533,296. 5 Claims. (Cl. 188—79.5.)



1. The combination with a brake drum, of a brake shoe therein, a brake head or carrier, an anchor bolt forming a pivotal bearing for said shoe engaging a slotted aperture in said brake head to be adjustable radially thereof, a serrated bearing on said anchor bolt for engaging said head or carrier, a clamping nut for forcing said serrated bearing to bite into said head and means for applying

braking pressure to said shoe adapted when said nut is released to force all portions of the friction surface of said shoe into contact with said drum whereby on the tightening of said nut the pivot for the shoe will be properly positioned.

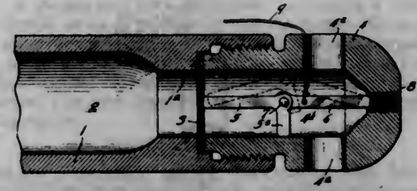
1,895,562. FACING AND CHAMFERING MACHINE. GEORGE F. YAGER, Toledo, Ohio, assignor to The Bunting Brass and Bronze Company, Toledo, Ohio, a Corporation of Ohio. Filed July 14, 1930. Serial No. 467,908. 20 Claims. (Cl. 82—2.)



1. In a machine of the class described, a work holder, a reciprocating member upon one side of said holder, a rotating tool carried by said member and engageable with work in the holder, a reciprocating element upon the opposite side of the holder adapted to move work relative to the holder, and a connection between said element and member causing said element to reciprocate when said member reciprocates.

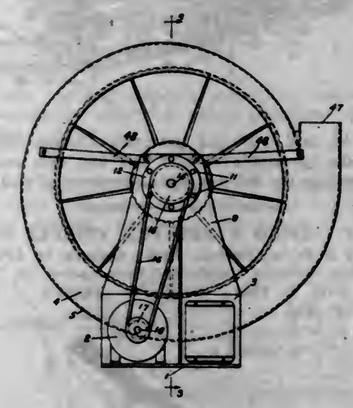
20. In a machine of the class described, a work holder, a work engaging tool upon one side of the holder and engageable with the work in the holder, a member upon the other side of the holder for moving the work into engagement with the holder, a support for the tool capable of moving the tool to and from the holder, and a connection between the member and tool support adapted when the tool is moved toward the holder to move the member away from the holder and adapted when the tool is moved away from the holder to move the member toward the holder.

1,895,563. BLASTING CARTRIDGE CHARGED WITH A COMPRESSED GAS. FRANK H. ARMSTRONG, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Sept. 16, 1932, Serial No. 633,406, and in France May 19, 1932. 18 Claims. (Cl. 102—6.)



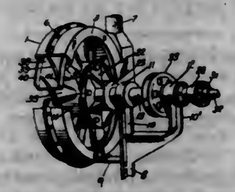
1. A material blasting device comprising a container constructed to withstand any pressures to which it might be subjected while performing the work for which it is designed, a charge of gas within said container at a pressure sufficient to perform said work, and means for liberating said charge when desired.

1,895,564. GAS FIRED REVOLVING HEATER. WILLIAM D. BELL, Columbus, Ohio, assignor, by mesne assignments, to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Oct. 29, 1930. Serial No. 492,070. 6 Claims. (Cl. 126—110.)



1. In a revolving heater, the combination of a fan having a hollow hub forming a combustion chamber and having hollow blades in communication with said chamber, means for rotating said fan including a head forming a closure for one end of said chamber, and means for introducing at least one of the constituents of combustion through said head.

1,895,565. ROTATING HEAT RADIATOR. WILLIAM D. BELL, Columbus, Ohio, assignor, by mesne assignments, to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Feb. 19, 1931. Serial No. 516,926. 7 Claims. (Cl. 126—110.)



1 A rotating heat radiator comprising a casing, a fan rotating within said casing and having a combustion chamber within the interior of its hub, said fan comprising hollow blades for conducting the products of combustion away from the combustion chamber within said hub, an aperture in said hub, and an ignition device so positioned with reference to the aperture in said hub that rotation of said fan will draw an igniting flame into the interior of said hub.

1,895,566. REAR VIEW MIRROR ASSEMBLY. PAUL BERTELL and WILLIAM LA HODNY, Buffalo, N. Y., assignors to Standard Mirror Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Dec. 7, 1929. Serial No. 412,482. 6 Claims. (Cl 45—97.)

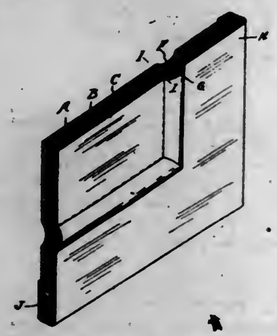
1. A device of the character described, comprising a relatively heavy rear vision mirror assembly, a support at one end of said mirror, a universal connection between that end of said mirror and said support, a second sup-

port at the opposite end of said mirror, a slot and bolt connection between the opposite end of said mirror and said second support and a presser member and a spring



carried by said bolt and providing friction means resisting the movement of said slot and bolt connection but permitting the direct manual movement of said mirror.

1,895,567. LINING PANEL FOR VEHICLE BODIES. SIDNEY J. BLUM, Detroit, Mich., assignor to Arvey Corporation, Detroit, Mich., a Corporation of Illinois. Filed July 6, 1931. Serial No. 549,076. 5 Claims. (Cl. 154—46.)



1. A lining panel for vehicle bodies comprising a semi-rigid board, a felt layer of equal area applied to the inner face of said board, said layer being cemented to the board through the greater portion of its area but leaving an uncemented marginal flap for the purpose described.

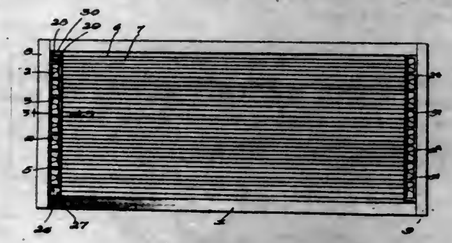
1,895,568. RUST PROOFING IRON AND STEEL ARTICLES. LEO P. CURTIN, Cranbury, N. J., and BERNARD L. KLINE, Brooklyn, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed May 22, 1931. Serial No. 539,412. 8 Claims. (Cl. 148—6.5.)

2. Process of producing protective coatings on iron and steel articles which comprises subjecting a clean metallic surface thereof to the action of a solution containing from about 1% to about 10% of oxalic acid dihydrate and a relatively small amount of an agent serving to accelerate the formation of the coating of the group consisting of sulfuric acid and a ferric salt at a temperature of from about normal atmospheric temperature to about 100° C. for at least about 5 minutes until a coating of the desired thickness is formed thereon.

1,895,569. PRODUCTION OF PROTECTIVE COATINGS ON IRON AND STEEL ARTICLES. LEO P. CURTIN Cranbury, N. J., and BERNARD L. KLINE, Brooklyn, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Feb. 9, 1932. Serial No. 591,932. 7 Claims. (Cl. 148—6.5.)

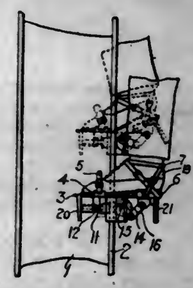
2. In the coating of iron and steel articles, the process which comprises exposing a surface of such an article to the action of an acidulated aqueous solution containing a substantial amount of oxalates of iron until a coating of substantial thickness forms.

1,895,570. ELECTRIC INSECT DESTROYER. WILLIAM M. FROST, Spokane, Wash. Filed Nov. 18, 1930. Serial No. 496,546. 15 Claims. (Cl. 43—112.)



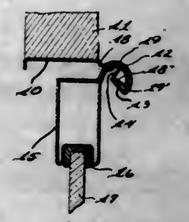
1. An insulating wire-supporting member for an electric insect destroyer having a rib at one longitudinal edge, a series of spaced projections along the opposite longitudinal edge, and an intervening web portion having transverse ribs extending between adjacent projections and flush with said projections and said rib, the portions of the web between said transverse ribs being depressed.

1,895,571. STRUCTURAL IRON WORK CLIMBER. JOHN HEIN, New York, N. Y. Filed May 14, 1931. Serial No. 537,477. 4 Claims. (Cl. 227—8.)



1. In a structural iron work climber, a plate provided with toe and heel straps, said plate having a side recess, an adjustable gripping bolt provided with a lock nut and extending into the recess, said bolt being attached to the plate, and means operated by the movements of the heel of the wearer for drawing said bolt against an iron body capable of engaging in the said recess.

1,895,572. HINGE. HOMER G. KELLOGG, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed Mar. 16, 1931. Serial No. 523,073. 5 Claims. (Cl. 296—92.)



5. A sheet metal frame member having its longitudinal edges superposed and shaped to form a locked seam, said seam being in the form of a hinge bead part adapted for interfitting pivotal engagement with a companion bead carried by another hinge part.

1,895,573. WELDING ELECTRODE HOLDER. STANLEY T. KIESS, Youngstown, Ohio. Filed Apr. 22, 1932. Serial No. 606,771. 5 Claims. (Cl. 219—8.)



1. A welding electrode holder comprising an insulated handle, jaw-carrying means associated therewith, a pair of elongate jaws pivotally mounted at one end on the outer end of said means and extending therefrom at an angle, the gripping faces of the jaws being provided with a plurality of angularly disposed pairs of cooperating electrode-receiving grooves, resilient means for normally keeping the jaws closed, manually-operable means for releasing them, and means for connecting the jaws to an electric current supply.

1,895,574. COMBINED CIGARETTE AND MATCH BOX. WENDEL KNAEBEL, Sauquoit, N. Y. Filed Nov. 19, 1931. Serial No. 576,004. 2 Claims. (Cl. 206—83.5.)



1. A combination cigarette case and lighter, having a cover with a number of openings, a striker surface, a match holder adjacent said surface, and means for carrying a match introduced into said holder through one of the cover openings against said striker to ignite a cigarette introduced through the other of the cover openings.

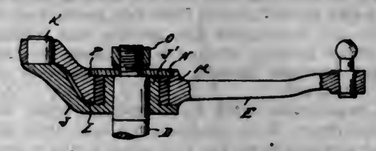
1,895,575. CLOSURE CAP FOR PAPER MILK BOTTLES. LYDIA B. KOCH, New York, N. Y. Filed May 21, 1930, Serial No. 454,295. Renewed Oct. 15, 1932. 4 Claims. (Cl. 229—5.6.)



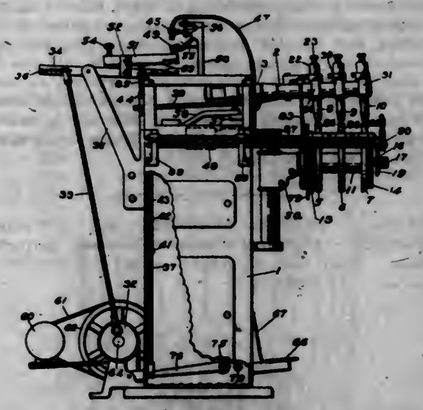
1. A closure cap for milk bottles comprising a circular top dished so as to provide an annular hollow flange with the outer flange which depends around the neck formed at the upper end of the tapered portion and is provided with circumferential corrugations designed to register, fit into, interlock and grip the corrugations in the upper portion of the bottle.

1,895,576. SHIMMY SHOCK ABSORBER FOR MOTOR VEHICLE STEERING GEARS. THEODORE W. KOERNER, Detroit, Mich., assignor to Gemmer Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 14, 1931. Serial No. 562,789. 6 Claims. (Cl. 280—89.)

1. In a steering mechanism the combination with a hand wheel and a mechanism mounted on the axle, of intermediate mechanism including adjacent rockable members normally having a common axis and a cushion connection between said rockable members permitting relative axial displacement for absorbing small amplitude shocks or vibrations.

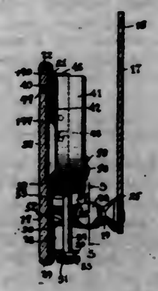


1,895,577. AUTOMATIC WELDING MACHINE. EARL W. LITTLE, Indianapolis, Ind. Filed Mar. 31, 1930. Serial No. 440,295. 10 Claims. (Cl. 219—4.)



2. In an automatic welding machine, a plurality of rotating electrodes adapted to form a support for a cage structure, means for rotating said electrodes, means for directing an electric current through parts of said cage structure into said electrodes for welding the cage structure together, and means for moving the next succeeding part of said cage structure to be welded toward the part of said cage structure last previously welded for compensating for expansion.

1,895,578. COMBINED MIRROR AND INSTRUMENT. WILLIAM LA HODNY, Buffalo, N. Y., assignor to Standard Mirror Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Apr. 30, 1930. Serial No. 448,484. 11 Claims. (Cl. 45—97.)



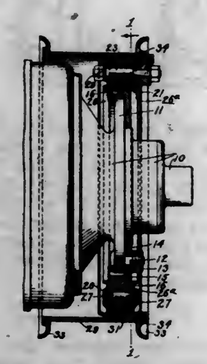
1. Means for supporting an instrument case behind a transparent panel comprising a panel supporting plate having an opening therein and having a rim surrounding

said opening, means for supporting said panel in front of said rim, said panel having in its rear face an indentation adjacent said rim, said case being fitted in said rim from the side thereof remote from said panel, and means fitting in said indentation and holding said instrument case in proper position relative to said panel whereby an instrument arranged in said instrument case is visible through said panel.

3. In combination with a transparent panel having an annular groove in its rear face, an open sided instrument case arranged in rear of said panel, a ring interposed between said instrument case and panel and fitted into the rim of said instrument case and also bearing against the rear face of said panel, said ring also being formed to provide a forward projection which fits into said groove, and means for holding the instrument case against the ring and for holding the ring against the rear side of said panel, whereby an instrument arranged in said instrument case is visible through said panel.

9. Means for mounting an instrument case behind a transparent panel, comprising a panel supporting plate having an opening therein and having a tubular rim surrounding said opening, means for supporting said panel in front of said rim, said case being fitted in said rim from the side thereof remote from said panel whereby an instrument arranged in said instrument case is visible through said panel, and means for securing said case in said rim and including wedge means holding said case firmly against the face of said panel.

1,895,579. CUSHION ASSEMBLY OF RESILIENT WHEELS. ALPHONSE LORRAINE LUSSIER, Springfield, Mass. Filed Nov. 14, 1931. Serial No. 575,070. 5 Claims. (Cl. 152—32.)



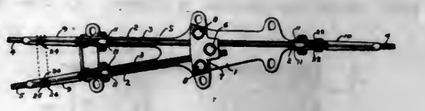
1. In a cushion assembly of a resilient wheel, the combination of two apertured annular retaining and guiding rings, recessed securing and spacing members extending through apertures of said rings and uniting them in parallel spaced relation, a recessed floating felloe slidingly fitted between said rings, and resilient cushions fitted in recesses of said felloe and of said securing and spacing members.

1,895,580. TREATMENT OF BAUXITE, ALUNITE, AND LIKE ALUMINOUS MATERIAL. MICHAEL JAMES MARTIN, Armadale, Victoria, and HARRY PERCIVAL BROOKSBANK, Merlynston, North Coburg, Victoria, Australia, assignors to Sulphates Proprietary Limited, Melbourne, Victoria, Australia. Filed Dec. 11, 1929, Serial No. 413,417, and in Australia Dec. 22, 1928. 21 Claims. (Cl. 23—52.)

1. In the production of alkaline earth metal aluminates, the process of intimately mixing a substance of the bauxite alunite type with a suitable proportion of an alkaline sulphate with free sulphuric acid, forming said mixture into briquettes, subjecting the briquettes to the action of hot reducing gases, then subjecting the briquettes to an oxidizing atmosphere and lixiviating the crude alkaline aluminate; the materials used being crushed to such a size as to pass through a half inch mesh before being pulverized to a suitable degree of fineness.

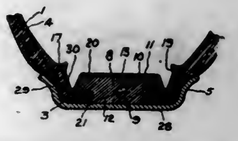
15. In the production of alkaline earth metal, or alkali metal aluminates, the process of preparing a mixture of an aluminous material, of the bauxite or alunite type, and a material selected from the group consisting of alkali metal acid sulphates, and alkali metal and alkaline earth metal sulphates with free sulphuric acid, subjecting the mixture to the action of hot reducing gases, and then subjecting the mixture to the action of an oxidizing gas, such as air.

1,895,581. TROLLEY SUPPORT. SAMUEL S. MATTHES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed May 11, 1932. Serial No. 610,605. 12 Claims. (Cl. 191—38.)



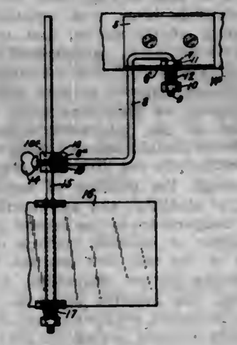
1. In a device of the class described, the combination of a body member having a wire-receiving channel, a clamping member eccentrically pivoted on the body member and adapted to rotate to clamp the wire firmly in said channel, an integrally formed elongated extension projecting from the clamping member and having lips forming a wire-receiving groove and adapted to be formed around the wire after the clamping member has been rotated to its clamping position, means on the body member and projecting means on the extension bendable in a longitudinal direction relative to the elongated extension to engage the said means on the body to prevent rotation of the clamping member.

1,895,582. TUBELESS PNEUMATIC TIRE. FRANK ALLEN MILLICAN, Vancouver, British Columbia, Canada. Filed Sept. 14, 1931. Serial No. 562,802. 2 Claims. (Cl. 152—13.)



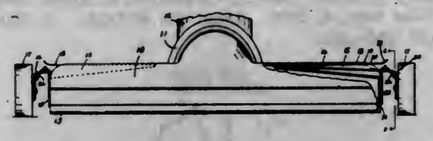
1. A tubeless tire adapted for mounting upon a one piece collapsible rim, said tire comprising a tread, side walls and an inner and an outer annular tongue extending transversely inwards from the side walls and being substantially triangular in cross section with the upper angle of one tongue adapted to lie in contact with the lower angle of the other tongue, an annular band surrounding and in contact with the inner tongue and having a diameter somewhat less than the upper face of the inner tongue whereby the rim coacts with the annular band to compress the tongues into sealing contact with each other, said annular band having a pair of inwardly directed marginal beads adapted to extend below the edges of the side portions of the rim to prevent the withdrawal of the tongues from the rim.

1,895,583. ADJUSTABLE GLARE SHIELD BRACKET. FRANK RABBIT, Baltimore, Md. Filed Apr. 11, 1932. Serial No. 604,610. 2 Claims. (Cl. 296—97.)



1. In an adjustable glare shield bracket, the combination of a solid body having a hole through one end portion, said body having a second hole through its opposite end portion and crossing the first said hole substantially at right angles, said body having a screw-hole in open communication with said second hole, a glare shield clamp including a rod which extends through said second hole and is rotatably and longitudinally adjustable therein for movement up and down, a set-screw operable in said screw-hole for holding said clamp in various adjustments relative to said body, and a supporting arm extending through the first said hole and provided with spring-pressed means to frictionally engage said body for yieldingly holding the latter in different adjustments while permitting such adjustments to be made by proper application of sufficient pressure, attaching means to be secured on a frame of a wind-shield, and spring-pressed means connecting said attaching means to said supporting arm for holding the latter in different adjustments while permitting it to be angularly adjusted for effecting movement of the glare shield from right to left and vice versa.

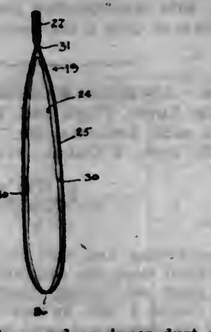
1,895,584. AIR-WAY CLEANING TOOL AND END CLOSURE THEREFOR. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, trustee, Toledo, Ohio. Filed May 13, 1931. Serial No. 537,198. 17 Claims. (Cl. 15—155.)



1. In a suction cleaner, a floor tool, end rollers supporting said floor tool, said floor tool having end openings, and means for automatically varying said openings according to the downward pressure applied to the floor tool.

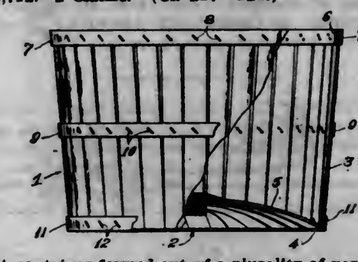
1,895,585. VACUUM CLEANER. FREDERICK RIEBEL, Jr., Toledo, Ohio, assignor to Air Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed July 27, 1929. Serial No. 381,419. 4 Claims. (Cl. 183—51.)

1. A suction cleaner bag assembly comprising an outer fabric bag having an opening in a longitudinal edge, an intermediate lining of relatively stiff strain resistant fabric secured to the region of said outer bag defining said opening, and in substantial contact with the inner



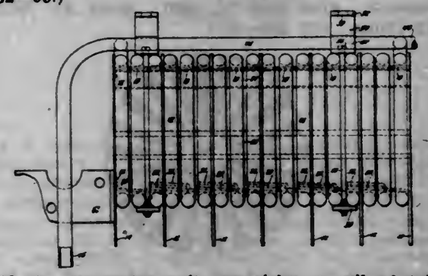
surface of said outer bag, and an inner dust collecting bag of porous paper supported and confined by said outer bag and lining.

1,895,586. BASKET. ALBERT H. SCHMIDTKE, St. Joseph, Mich., assignor to St. Joseph Iron Works, St. Joseph, Mich., a Corporation of Michigan. Original application filed Mar. 25, 1926, Serial No. 97,220. Divided and this application filed Feb. 20, 1928. Serial No. 255,712. 2 Claims. (Cl. 217—122.)



1. A container formed out of a plurality of veneer strips each comprising a bottom member and a pair of staves, the staves being bent up at angles relative to the bottom member, said bottom members crossing each other diametrically of the bottom of the basket and being bowed inwardly of the container and a hoop outside of and at the lower end of the staves to maintain the bowed condition of the bottom members said hoop being attached to the staves above their bends and extending below the staves to take the weight and wear off of the bends and deliver it to the staves above.

1,895,587. EVAPORATOR. CHARLES H. SMITH, Greenville, Mich., assignor to Gibson Refrigerator Company, Greenville, Mich., a Corporation of Michigan. Filed Mar. 2, 1931. Serial No. 519,377. 11 Claims. (Cl. 62—95.)



10. An evaporator unit comprising a coil of tubing having an inlet and an outlet, and a plurality of sheet

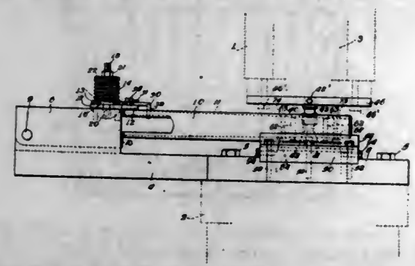
metal plates disposed between spaced loops of the coil; certain of the plates having rearwardly extending portions inside the coil, said portions extending to and coacting with corresponding portions on the next adjacent plate to form a functionally continuous wall.

1,895,588. LOCKING WASHER AND NUT. HENRY CHARLES SMITH, Forest Hill, London, England. Filed Sept. 6, 1929, Serial No. 390,777, and in Great Britain Mar. 20, 1929. 2 Claims. (Cl. 151—21.)



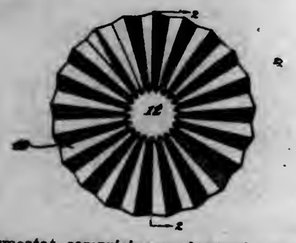
1. In a locking nut, two flat members spaced apart and connected along one edge and disposed in opposition to each other and, having coaxial screw-threaded apertures to receive a bolt, an inclined tongue on one edge of one of the members directed toward and adapted to be engaged by the corresponding edge of the other member when the members are moved toward each other, and means on said tongue for limiting the extent to which the members may approach each other.

1,895,589. METHOD AND MEANS FOR SLOTTING TUBES. GEORGE SPATTA, Buchanan, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed Dec. 30, 1929. Serial No. 417,581. 10 Claims. (Cl. 164—108.)



1. In a tube slotting machine, a horn punch comprising an arm pivoted at one of its ends for movement about an axis disposed transversely of its axis and having its free end disposed adjacent a bed plate, an external die fixed on said bed plate in registration with said punch, a pressure pin adjacent said die and means for moving said pin into engagement with the punch, said means exerting a pressure on the punch through the pin in a direction normal to the axis of the arm to thereby move the punch about said pivotal axis into said die.

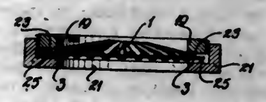
1,895,590. SNAP ACTING DEVICE. JOHN A. SPENCER, Newton, Mass., assignor to The Spencer Thermostat Company, Cambridge, Mass., a Corporation of Massachusetts. Filed June 26, 1930. Serial No. 463,961. 12 Claims. (Cl. 297—15.)



1. A thermostat comprising a sheet of composite thermostatic material having a large number of corrugations therein, each of said individual corrugations being small as compared to the size of the sheet, said sheet and said corrugations being so shaped that an imaginary surface determined by a series of lines on said corrugations, within the envelopes of said corrugations, has two separate positions of relatively large area, establishing two positions of stability of the device, and an intermediate position of minimum area, establishing a position of instability of the device, the said corrugations being so formed that they are disposed on both sides of said surface in substantially the same manner in both positions of stability and in the intermediate position of instability, said device thereby automatically snapping, upon change of temperature in one direction, from one position of stability through the position of instability to the second position of stability, and automatically snapping, upon change of temperature in the reverse direction, from said second position of stability through the position of instability back to the said first position of stability.

12. A snap-acting device comprising an annulus of resilient material, the annulus being so bent that its inner and outer developed peripheries are of substantially equal lengths, said annulus having the plane of its inner periphery displaced from the plane of its outer periphery.

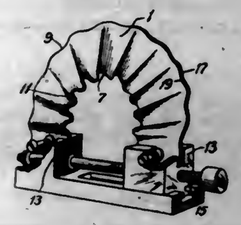
1,895,591. SNAP ACTING DEVICE. JOHN A. SPENCER, Newtonville, Mass., assignor to General Plate Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Feb. 16, 1931. Serial No. 516,042. 17 Claims. (Cl. 297—15.)



12. A thermostat comprising a concave disc of composite thermostatic material, radial corrugations therein and a peripheral portion free of said corrugations.

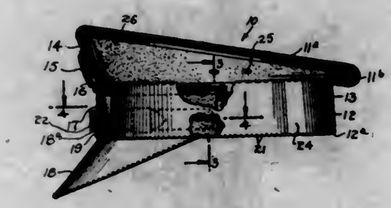
17. A snap-acting device comprising a disc of resilient material having radial corrugations therein, the plane of the central portion of said disc being displaced from the plane of the peripheral portion thereof, and an uncorrugated peripheral region on said disc, the said disc being suitably resilient, whereby upon suitable actuation thereof, it overcenters to assume a position of opposite configuration.

1,895,592. SNAP ACTING DEVICE. JOHN A. SPENCER, Newtonville, Mass., assignor to General Plate Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Sept. 8, 1930. Serial No. 480,451. 12 Claims. (Cl. 297—15.)



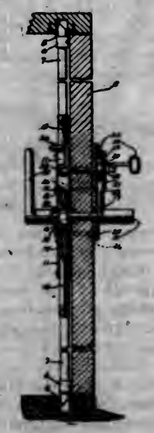
3. In a snap-acting device, a resilient strip initially convoluted laterally, means arching said strip so that the convolutions are strained in positions radial to the resulting arch, and means for adjusting the radius of curvature of the arch.

1,895,593. UNIFORM CAP. ALBERT B. STERN, New York, N. Y. Filed May 22, 1931. Serial No. 539,167. 1 Claim. (Cl. 5—195.)



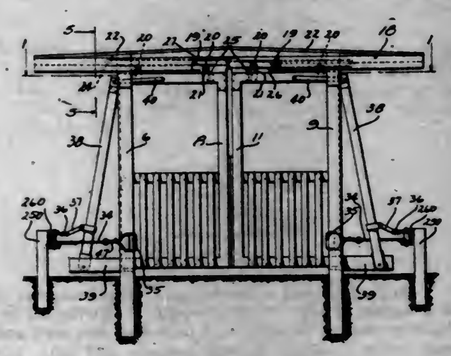
A uniform cap comprising a seamless outer structure fashioned with a substantially flat upper side, a looped peripheral portion and a head band portion having a head opening of relatively less area than said side, said structure being reinforced by stiffening means adhesively secured on the inner side of said band, a sweat band secured to the peripheral edge of said head band extending into the head opening, a cushioning layer interposed between said bands along a front region of the cap, and a visor secured to said structure between the head band and said layer at the front region.

1,895,594. LOCKING DEVICE FOR DOORS. GUSTAVE E. STRANDT, Milwaukee, Wis. Filed Jan. 22, 1931. Serial No. 510,408. 4 Claims. (Cl. 70—74.)



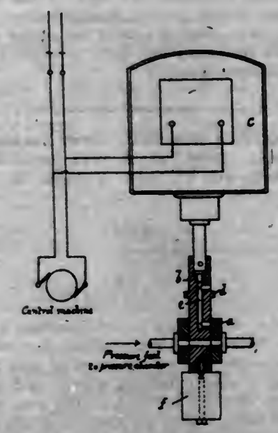
2. In a door lock, the combination with a locking bolt, of a rock shaft provided with crank and linking connections to said bolt and a handle exteriorly of the door, a toothed segment on said handle, a housing enclosing a portion of said segment, and key controlled means within said housing for locking said segment, said means comprising a pawl adapted for interlocking engagement with the enclosed portion of the segment, a spring pressing said pawl toward a position of engagement with the segment, a key engageable portion of said pawl, and means for actuating said pawl independently of a key, whereby said pawl may be manipulated to segment-releasing position, said rock shaft having a second handle interiorly of said door.

1,895,595. GATE STRUCTURE. GUSTAV E. STRANDT, Milwaukee, Wis. Filed May 9, 1931. Serial No. 536,096. 11 Claims. (Cl. 89—65.)



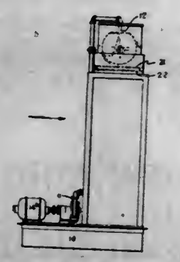
1. The combination with a pair of sliding gate members and means interconnecting said members for opposite movement, of gate posts supporting said members, operating levers at opposite sides of said members in corresponding positions with reference to the respective posts and positioned on opposite sides of the roadway, and means for directly connecting each operating lever to its adjacent gate member for actuating the latter.

1,895,596. AUTOMATIC DIE-CASTING APPARATUS. KARL FRIEDRICH WAGNER, Stuttgart, Germany, assignor, by mesne assignments, to Magnesium Development Corporation, Newark, N. J., a Corporation of Delaware. Filed Aug. 31, 1931, Serial No. 560,430, and in Germany Sept. 15, 1930. 4 Claims. (Cl. 22—69.)



4. A safety device in pressure die-casting machines comprising a valve in the pressure supply pipe leading to the pressure chamber, means for retaining said valve in working position whereby pressure is admitted to the pressure chamber, said valve retaining means being actuated by the forces operating the machine, and means for automatically shifting said valve into position to shut off the pressure to the interior of said pressure chamber when the machine operating forces cease to act.

1,895,597. AUTOMATIC FLUSHING DEVICE. CHARLES W. WILLIAMS, Louisville, Ky., assignor to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed June 18, 1928. Serial No. 286,276. 5 Claims. (Cl. 183—21.)



1. A filter comprising a filtering unit, a tank adapted to hold a supply of unit cleaning liquid, a distributing receptacle positioned between said tank and said unit and having outlet openings directed towards said unit, and means for actuating said tank to dump the liquid contents thereof into said receptacle.

1,895,598. HEEL PROTECTOR. CARL JOHN FRICKER, New York, N. Y., assignor of thirty per cent to George H. Callaghan, New York, N. Y., and ten per cent to David Pelton Moore, Avon Park, Fla. Filed June 15, 1928, Serial No. 285,570. Renewed Sept. 21, 1932. 6 Claims. (Cl. 36—70.)



1. An overshoe having a crescent shaped cavity in the rear wall thereof overlying the back of the shoe, and a crescent shaped shield portion integral along its shorter side with the corresponding side of the cavity and capable of being folded outwardly and back upon the rear wall to form an overhanging guard.

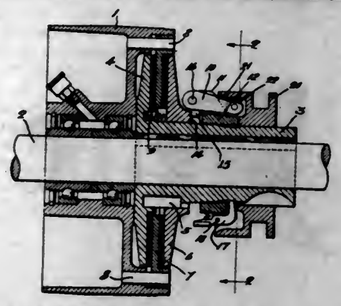
1,895,599. CORNER HOLDER. OTTO ZIMMER, M.-Gladbach, Germany. Filed Feb. 16, 1931, Serial No. 516,075, and in Germany Feb. 13, 1930. 1 Claim. (Cl. 40—156.)



Corner holder, comprising in combination, a trapezoid-shaped pocket formed of a rectangular piece of transparent and flexible material, two corners of said piece being bent over, and a sheet inserted within said pocket and attached to the interior surfaces of the bent portions of said piece, said sheet having the shape of a polygon having two sides coinciding with the lines along which said piece was bent.

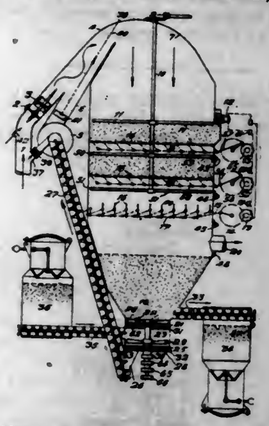
1,895,600. FRICTION CLUTCH. CARL M. ANGLEMYER, Dayton, Ohio, assignor to The Edgemont Machine Company, Dayton, Ohio, a Corporation of Ohio. Filed May 28, 1928. Serial No. 281,043. 3 Claims. (Cl. 192—68.)

1. In a friction clutch driving and driven members including an axially movable clamp disc, oscillatory actuating levers for shifting said axially movable disc, an axially adjustable mounting for said levers, the pivotal axes of the levers being located outwardly a greater distance from the axis of rotation of the clutch than the points of engagement of said levers with the disc, both the pivotal



points and the engagement points of the levers being approximately in a common plane perpendicular to the axis of rotation of the clutch.

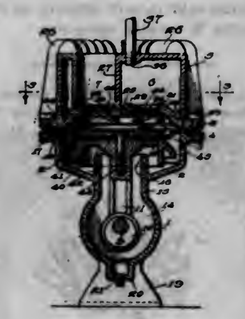
1,895,601. PURIFICATION OF GASES AND APPARATUS THEREFOR. KURT BEUTHNER, Krefeld, Germany. Filed July 23, 1931, Serial No. 552,697, and in Germany Oct. 27, 1930. 11 Claims. (Cl. 183—4.)



2. A purifying tower for gases in combination with means adapted to supply gas to be purified to the upper part of the tower, means adapted simultaneously to supply a purifying material in dust form to the upper part of the tower, a plurality of transverse grids in the tower, means adapted intermittently to open said grids and discharge the dust deposited thereon in a downward direction, means adapted for removing the purifying material discharged into the lower part of the tower by the lowermost grid, a material comminuting mill, means adapted to transfer partially saturated material from the lower part of the tower to the comminuting mill, means adapted for conveying the comminuted material from the mill to the top of the tower again, means adapted for supplying fresh purifying material at will to the comminuting mill in lieu of material from the purifying tower, and means adapted for removing saturated purifying material at will from the lower part of the tower.

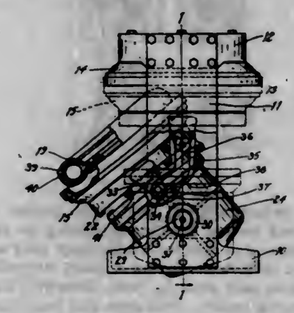
10. A process for purifying gases consisting in supplying the main part of the gases under normal pressure into the upper part of a purifying tower, employing a part of the gases under pressure to convey purifying material in dust form into the upper part of the tower, allowing the dust to settle in layer form, passing the gases through the settled dust, removing the partially saturated duct, passing it again through the tower with fresh gases until saturated, and finally removing the dust from the tower when saturated.

1,895,602. DIAPHRAGM COMPRESSOR. WILLIAM R. BROWN, Chicago, Ill. Filed May 12, 1932. Serial No. 610,903. 3 Claims. (Cl. 230—170.)



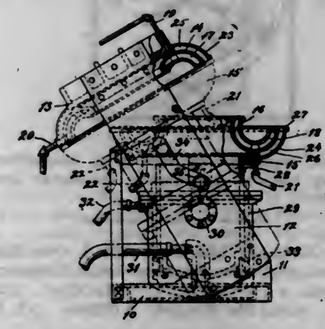
1. A diaphragm compressor comprising a crank case having an upwardly extending neck, flared outside walls integral on said neck and terminating in an annular flanged rim, a hollow compressor head having a substantially concave bottom wall and an annular flange coacting with said flanged rim, said compressor head comprising an enclosed plenum chamber and a walled intake port passing therethrough, said bottom wall having apertures leading to said intake port and said plenum chamber, a check valve in said intake port and in said plenum chamber aperture, a shaft extending into said crank case and journaled thereon, a connecting rod having one end eccentrically journaled on said shaft and an upwardly extending free end, a piston head integral on the free end of said connecting rod, an annular collar extending upwardly from the junction of said flared side walls and said neck, annular concentric depending flanges on said piston head, the innermost depending flange surrounding aid overlapping said collar and being spaced therefrom, a diaphragm clamped between said flanged crank case rim and said compressor head, and a plate clamping said diaphragm concentrically to said piston head.

1,895,603. MOLDING PRESS. JAMES WILLIAM BRUNDAGE, Akron, Ohio, assignor to The Summit Mold & Machine Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 24, 1930. Serial No. 497,637. 13 Claims. (Cl. 18—17.)



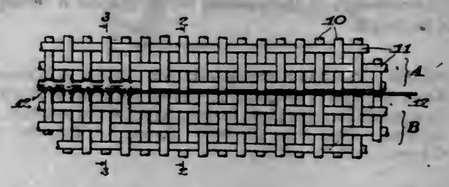
1. A molding press comprising a pair of press heads adapted to carry mating mold sections and having a relative rectilinear opening and closing movement, fixed and swinging structures supporting the respective heads and connected by pivoting means which sustains the molding pressure, a power ram included with one of said structures and having a member connected with the correesponding head for imparting said relative rectilinear movement, and position-controlling means connecting the heads for maintaining them substantially parallel during one part of said relative rectilinear movement and for relatively swinging them progressively into and out of line by means of said movement during another part thereof, from and to the loading and unloading position.

1,895,604. MOLDING PRESS. JAMES WILLIAM BRUNDAGE, Akron, Ohio, assignor to The Summit Mold & Machine Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 23, 1931. Serial No. 570,575. 5 Claims. (Cl. 18—19.)



5. A molding press comprising a mold composed of upper and lower steam-jacketed sections positioned to meet in a plane backwardly inclined from the horisontal, each of the jackets having a connection for supplying steam thereto at a relatively high level and another connection for discharging water of condensation from substantially its lowest point, a pivoted ram cylinder having a plunger carrying the lower mold section, and means whereby the movement of said plunger causes a rectilinear opening and closing movement of the lower mold section with reference to the upper one and a lateral tilting movement of the cylinder toward and from the vertical to carry the central axis of said lower section laterally into and out of line with that of the upper one.

1,895,605. METHOD OF PRODUCING SEAMS IN WIRE FABRICS. WILLIAM EUGENE BUCHANAN, Appleton, Wis., assignor to Appleton Wire Works, Inc., Appleton, Wis., a Corporation of Wisconsin. Filed May 28, 1931. Serial No. 540,615. 5 Claims. (Cl. 245—10.)

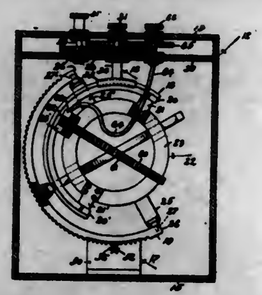


1. The method of producing a seam in a wire fabric, which consists in interposing a strand containing fusible metal between spaced edges of the fabric parts to be joined, pressing the edge faces of the fabric parts against the respective opposite sides of the strand, and melting the fusible metal of the strand to unite the edges of the fabric parts while the fabric edges are pressed toward each other.

1,895,606. DEVICE FOR COMPUTING SPHERICAL TRIANGLES. JOSEPH F. BURNS, Los Angeles, Calif. Filed Nov. 9, 1929. Serial No. 405,991. 19 Claims. (Cl. 33—1.)

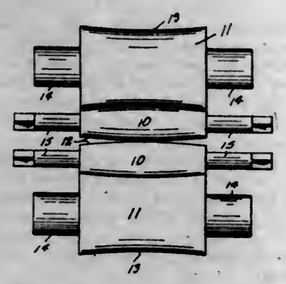
1. A device for measuring elements in spherical triangles embodying: a frame; oppositely disposed arc sup-

porting members mounted in said frame; arcs rotatably mounted in said arc supporting members respectively; a great circle ring member; pivots mounted on said ring



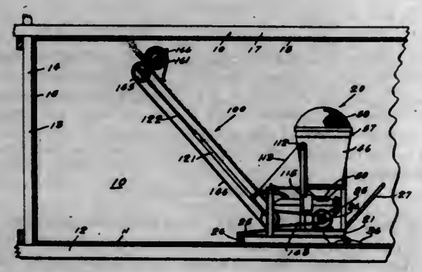
member and supported by said arcs, respectively, said pivots being adapted for relative movement about said ring member.

1,895,607. ROLLING MILL. JAMES R. COE, Waterbury, Conn., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Filed Mar. 22, 1930. Serial No. 438,136. 4 Claims. (Cl. 80—38.)



1. In a rolling mill, a small working roll convexed longitudinally so that it is of greater diameter at its center than at its ends, and a larger backing roll for the work roll engaging the surface thereof and on which the working roll rolls, the surface of the backing roll being concaved longitudinally so that it is of less diameter at its center than at its ends and substantially corresponds to the curvature of the working roll to support it throughout its length.

1,895,608. PLASTERING MACHINE. HUGH A. CONLEY, Lynwood, Calif., assignor to Conley Plastering Machine Company, Incorporated, Bisbee, Ariz., a Corporation of Arizona. Filed June 16, 1930. Serial No. 461,500. 11 Claims. (Cl. 72—130.)



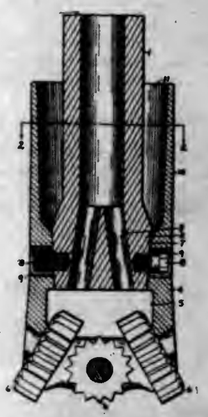
1. In an apparatus of the class described, the combination of: means for mixing dry ingredients with a liquid ingredient to continuously form a plastic mixture; an endless belt for conveying said plastic mixture as it is formed to a point adjacent to a surface upon which it is desired said plastic mixture be applied; and a rotary brush for receiving said palstic mixture as it reaches said point and applying it to said surface.

1,895,609. FLOWER HOLDER. GOODMAN RICHARD DAVIS, Jr., New York, N. Y. Filed July 30, 1932. Serial No. 627,022. 6 Claims. (Cl. 47—41.)



1. A holder for flowers and the like comprising a sheet of lead formed with a central body portion, integral tongues projecting from the opposite edges of said body portion, said tongues being twisted into spiral form to produce regulatable tubular holder portions, said tongues extending upwardly from the body portion and capable of being inclined relatively thereto.

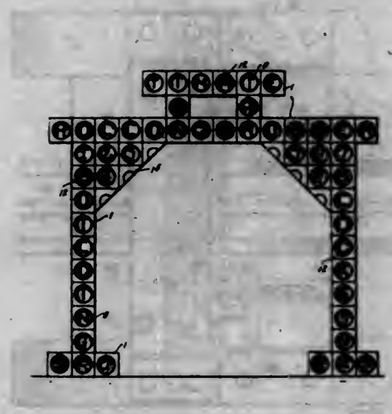
1,895,610. DRILL. DANIEL L. DEL'HOMME, Oklahoma City, Okla., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed Mar. 26, 1932. Serial No. 601,415. 3 Claims. (Cl. 255—71.)



1. A drill having a stem, said stem having a tapered end; a bit head having a tapered opening to receive the end of said stem; and means to removably hold said end in said opening; said head having a skirt extending about and spaced from said stem to form therewith an annular upwardly opening pocket; said stem and head having fluid passageways therethrough.

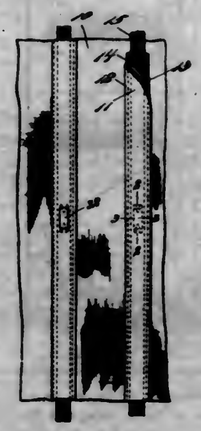
1,895,611. BUILDING BLOCKS. JOHN H. DOAK, Seaside, Oreg. Filed May 4, 1931. Serial No. 534,918. 5 Claims. (Cl. 35—1.)

1. In educational and amusement devices of the class described formed of a plurality of blocks, a resilient block having recesses formed within some of the faces of the block, said recesses being in corresponding positions in each block, a compressible engaging element whose uncompressed diameter is slightly greater than the diameter of the recesses adapted to be disposed within the recesses of



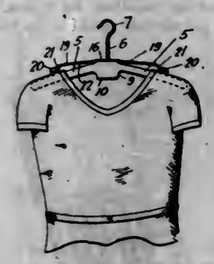
other blocks, and a recess disposed in one of the remaining faces of the block adapted to maintain the block fixedly disposed relative to a supporting surface.

1,895,612. GARMENT STAY FASTENING MEANS. JOSEPH F. DONAHUE, Providence, R. I. Filed Jan. 23, 1932. Serial No. 588,278. 14 Claims. (Cl. 2—257.)



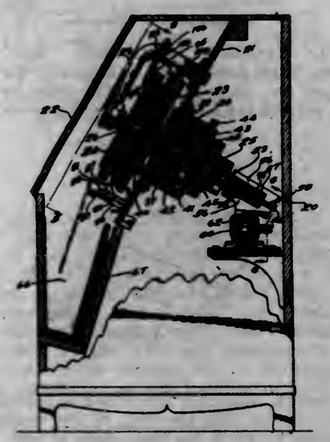
1. In combination a garment having a pocket extending therealong and of a shape and dimension to receive and substantially cover a dress stay, a lining for said pocket suitably held in position therein, a dress stay of stiffening material within said lining and a fastener having an extended plate surface positioned between said lining and pocket with portions extending through the lining and dress stay and folded over the opposite surface of the dress stay without passing through and over the opposite surface of the pocket.

1,895,613. HANGER. ARTHUR A. DUBBS, Denver, Colo. Filed July 5, 1932. Serial No. 620,887. 5 Claims. (Cl. 223—64.)



1. A garment hanger comprising a form having a saddle, a supporting hook member for the form, arms on the hook member, normally resting in the saddle, and means on the arms adapted to engage a garment and hold same on the hanger, when the arms are in the saddle.

1,895,614. AUTOMATIC PHONOGRAPH. HAROLD F. ELLIOTT, Palo Alto, Calif., assignor of one-fourth to John Flam, Los Angeles, Calif. Filed July 23, 1928. Serial No. 294,723. 10 Claims. (Cl. 274—10.)

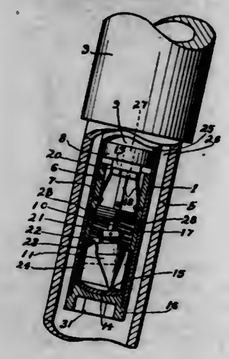


10. In a phonograph, a rotatable turntable, a stationary head, means yieldingly urging the table toward the head, a spindle extending through the table and arranged to be axially movable thereto but not relatively rotatable, said spindle being arranged to accommodate a stack of records, the axis of the table being inclined to the vertical and means for moving the table away from the head and also for axially moving the spindle with respect to the head, whereby the top record can fall from the stack by gravity.

1,895,615. CROOKED HOLE INDICATOR. WALTER ELLIOTT, Long Beach, Calif. Filed Oct. 1, 1929. Serial No. 396,552. 7 Claims. (Cl. 33—205.)

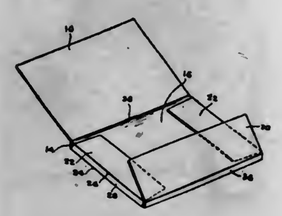
1. In a crooked-hole indicator for well drillers, to cooperate with liquid pressure means at the mouth of the

well, the combination of a casing having means for attaching the same to a drill string, and having a plumb-bob chamber, a plumb-bob with pivotal means for supporting the same in the plumb-bob chamber so that the plumb-bob is freely movable to maintain itself with its axis in a substantially vertical position, an indicating member carried within the plumb-bob chamber to cooperate with the



plumb-bob, means for conducting liquid under pressure from the drill string into the plumb-bob chamber to surround the plumb-bob and dampen its swinging movements, and a piston carrying the plumb-bob and operating upon a sudden increase to pressure, to move the plumb-bob into engagement with the indicating member while the casing is located at the crooked part in the hole.

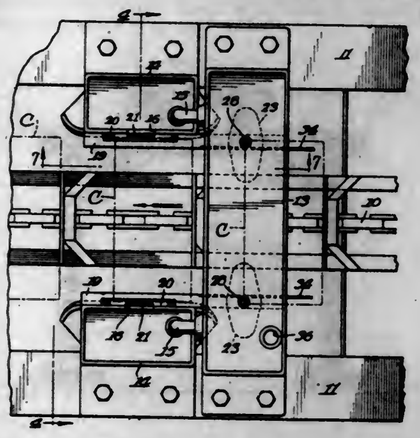
1,895,616. PACKAGE MAGAZINE. EARL WESTON FARMER, Minneapolis, Minn., assignor to Fawcett Publications, Inc., Minneapolis, Minn. Filed Nov. 2, 1931. Serial No. 572,519. 3 Claims. (Cl. 281—29.)



1. A package magazine comprising a plurality of imprinted sheets forming the body of the magazine, cardboard covers to which the rear edges of said sheets are secured, said covers being deeper in fold than said body portion whereby space is provided for enclosing articles of manufacture along with the body of the magazine, and flaps attached to said covers along scored lines, said flaps being adapted to be sealed to produce a complete enclosure for the body of the magazine and said articles, and to be torn off on said scored lines to release said articles, and to leave a bound magazine.

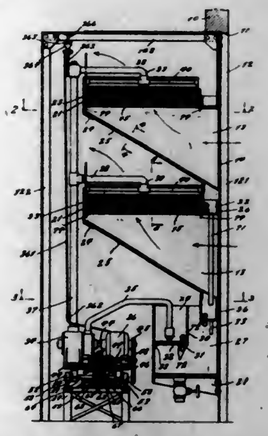
1,895,617. SEALING APPARATUS FOR CARTONS. JOSEPH W. FAY, Villa Park, Ill., assignor to The Cracker Jack Co., Chicago, Ill., a Corporation of Illinois. Filed July 6, 1931. Serial No. 548,893. 10 Claims. (Cl. 91—48.)

1. In a sealing apparatus of the character described, the combination of a conveyor for cartons, a tank for containing a liquid sealing medium, a wall disposed in laterally adjacent relation to said conveyor, said wall being formed in the side thereof adjacent to said conveyor with a shallow recess having bottom and end walls and an open side which open side is adapted to be passed



over and substantially closed by the end walls of cartons traveling on said conveyor, and means for directing a flow of the sealing medium from said tank to said recess.

1,895,618. AIR FILTER DEVICE. JOHN H. FEDELER, New York, N. Y., assignor to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed Oct. 12, 1927. Serial No. 225,659. 3 Claims. (Cl. 183—52.)



1. In a filter device, a filter, means for conducting air through said filter, a tank adapted to contain cleaning fluid, a filter member located in the bottom of said tank, means for passing the cleaning fluid upwardly through said filter member into said tank, and for conducting the cleaning fluid from said tank to the filter.

1,895,619. AIR CLEANER. CHARLES H. GAGEN, Montclair, N. J., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed Mar. 28, 1927, Serial No. 179,128. Renewed Jan. 16, 1931. 18 Claims. (Cl. 183—52.)

12. In an air filter, the combination of a plurality of filter units mounted to be moved into side-by-side relation

to each other, a receptacle positioned and adapted to receive said units when the latter are in said side-by-side



relation, and means for moving said units to extended position with one unit in edge-to-edge relation with another unit.

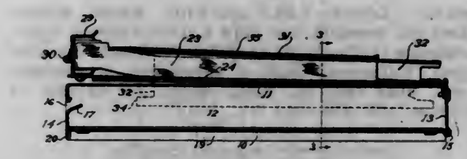
1,895,620. DOUBLE SALT AND METHOD OF PRODUCING SAME. WILLIAM A. GALE and CHARLES F. RITCHIE, Trona, Calif., assignors to American Potash & Chemical Corporation, Trona, Calif., a Corporation of Delaware. Continuation of application Serial No. 5,157, filed Jan. 27, 1925. This application filed July 3, 1929. Serial No. 375,876. 3 Claims. (Cl. 23—50.)

1. A new article of manufacture consisting of a double salt of trisodium phosphate and sodium metaborate with water of crystallization.

3. A new article of manufacture having essentially the composition.

$$Na_3PO_4.NaBO_2.18H_2O.$$

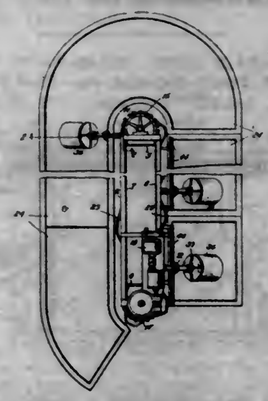
1,895,621. AUTOMATIC SALES BOOK REGISTER. JAMES A. GIBBS, Alliance, Ohio, assignor to The McCaskey Register Company, Alliance, Ohio, a Corporation of Ohio. Filed May 31, 1932. Serial No. 614,588. 12 Claims. (Cl. 282—8.)



1. A salesbook register including a support, means for supporting a salesbook for longitudinal sliding movement upon said support, and a writing bed associated with said support and adapted to normally rest upon said salesbook.

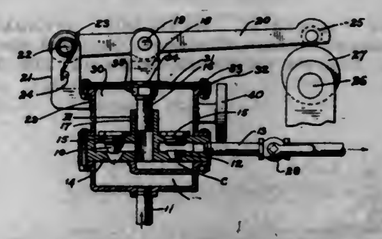
1,895,622. ELECTROPROCESSING MACHINE. ALBERT H. HANNON, Springfield, Ohio. Filed Mar. 16, 1931. Serial No. 523,007. 11 Claims. (Cl. 204—5.)

1. In an electroprocessing machine: a solution tank, a support bracket, means for moving the bracket horizontally along the tank, a shaft pivotally attached to the bracket to project over and into the tank, a perforated work receptacle insulatingly and rotatably mounted on the end of the shaft, means for supporting and for swinging the arm upwardly as the bracket moves past



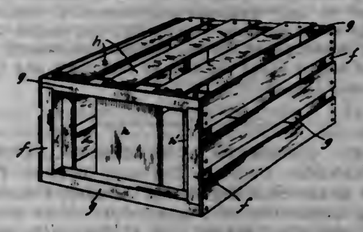
the end of the tank, means for rotating the receptacle on the shaft, and means for causing a flow of current between the solution and said shaft.

1,895,623. PUMP. WILLIAM R. HEWITT, New York, N. Y. Filed Mar. 10, 1930. Serial No. 434,527. 4 Claims. (Cl. 103—38.)



1. In a pump of the character described, a cylinder having a reciprocable piston therein, an oscillatory lever connected to said piston for imparting reciprocal movement to it, means for oscillating the lever, a discharge chamber communicating with the cylinder, an inclosed chamber surrounding said cylinder and communicating with said discharge chamber, and means whereby the oscillatory stroke of the lever and consequently the reciprocal stroke of the plunger will be increased or decreased in proportion to the pressure in said inclosed chamber.

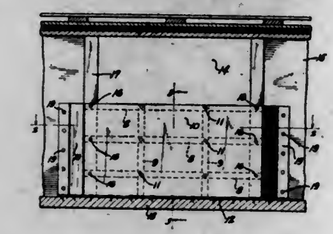
1,895,624. ASSEMBLED CRATE. PHILIP HINGSTON, Everett, Wash. Filed Sept. 8, 1930. Serial No. 480,466. 2 Claims. (Cl. 217—36.)



1. A wooden corner-construction comprising parallel rails having recessed ends forming shoulders, a post having its ends engaged in said recesses against said shoul-

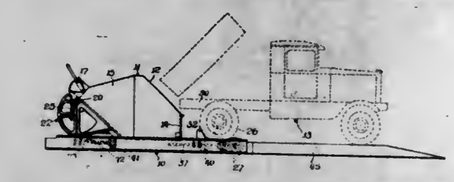
ders, thereby constituting an assembly, a tension slat engaging one side of the corner-construction and anchored to the two rails, and a side member nailed to the end of one rail and the assembled post.

1,895,625. GRAIN DOOR. FREDERICK E. HUMMEL and ANDREW W. FOLEY, Hopewell, Va. Filed June 18, 1931. Serial No. 545,232. 6 Claims. (Cl. 20—30.)



1. A grain door, comprising a frame, a single, rigid covering sheet mounted thereon, an integral sealing flange projecting from the lower edge of the sheet and extending at right angles from the plane of the sheet and frame inwardly for non-reenforced securement to the floor of a structure, and integral end securing flaps flexibly extending from the ends of the frame covering sheet portion for non-reenforced securement to side walls of a structure.

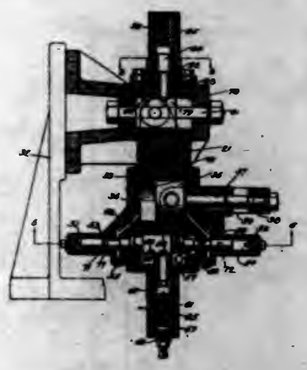
1,895,626. MATERIAL HANDLING APPARATUS. CHARLES S. JOHNSON, Champaign, Ill. Filed Apr. 29, 1931. Serial No. 533,665. 15 Claims. (Cl. 214—130.)



1. A device of the character described comprising a base, laterally spaced supports upstanding from one end of said base, a horizontal shaft journaled in and extending between said supports with its ends projecting beyond the supports, an elongated hopper having a restricted discharge opening at one end thereof, means supporting said hopper on said shaft adjacent to said discharge opening so that said hopper may extend from said shaft along said base toward the other end thereof, a pair of generally arcuate segments connected to said hopper adjacent to the projecting ends of said shaft and eccentrically related to said shaft so as to extend downwardly from the shaft when said hopper is in its substantially horizontal position, a pair of flexible members connected to said segments and extending downwardly about the same and then rearwardly, and means on said base for drawing said flexible members rearwardly to rotate said hopper about the axis of said shaft and thereby elevate said hopper.

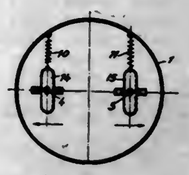
1,895,627. AUTOMATIC REVERSING CONTROL MECHANISM. OSCAR A. JOHNSON, Glenside, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 10, 1929. Serial No. 391,661. 12 Claims. (Cl. 60—52.)

12. The combination with a working cylinder and a piston reciprocatory therein, of a source of fluid pressure, ducts connecting said source with the opposite ends of said cylinder, means adapted to lock said piston at the respective ends of the stroke within the cylinder, and means operatively associated with the said source of pressure



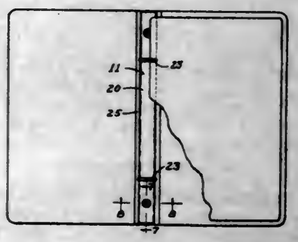
for releasing said locking means when the piston actuating pressure generated at said source reaches a predetermined maximum.

1,895,628. GYROSCOPIC INSTRUMENT. HERMANN ANSCHÜTZ-KAEMPFE, Munich, Germany, assignor to Nederlandsche Technische Handel Maatschappij "Giro," The Hague, Netherlands. Filed Apr. 15, 1929, Serial No. 355,160, and in Germany Apr. 17, 1928. 6 Claims. (Cl. 33—226.)



1. In a gyroscopic instrument, the combination of a plurality of gyroscopes, means mounting said gyroscopes to permit independent oscillation of their axles, and resilient means connected to said gyroscopes for normally urging their axles toward substantial alignment to automatically alter the relative position of said axles in dependence on the geographical latitude of the location of the instrument.

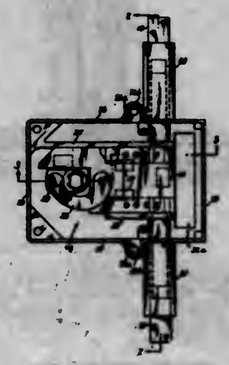
1,895,629. LOOSE LEAF BINDER. HENRY MORGAN KELLOGG, Stratford, and JOHN AHLBIN, Fairfield, Conn., assignors to The E. W. Carpenter Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Oct. 26, 1931. Serial No. 571,052. 4 Claims. (Cl. 129—24.)



1. In a loose leaf binder, a back member, a hollow metal member open at one side and having said side disposed against the back, the side of said metal remote

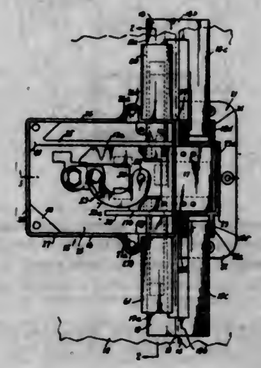
from the back having spaced openings intermediate its ends for the passage of means to secure the metal and back together, a portion of the metal about each of said openings being drawn down to dispose the perforated portions of the metal against the back whereby short securing means may be used for securing the back and metal together with portions of the metal about the openings directly engaging the back.

1,895,630. LOCK. IRVING KEMP, New York, N. Y., assignor to Kemp Lock Inc., New York, N. Y., a Corporation of New York. Filed Mar. 14, 1929. Serial No. 346,041. 17 Claims. (Cl. 70—74.)



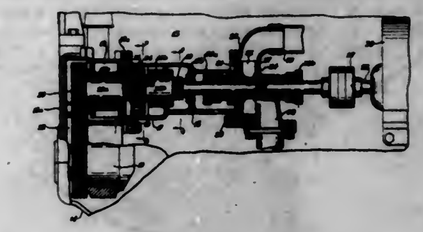
1. In combination, a door lock, comprising a casing, a bolt, a second bolt extending at right angles to said first named bolt, and means for simultaneously projecting said bolts, one of said bolts having a portion normally extending exteriorly of said casing and adapted to project beyond the vertical edge of the door and overlap the door jamb.

1,895,631. LOCK. IRVING KEMP, New York, N. Y., assignor, by mesne assignments, to Kemp Lock Inc., New York, N. Y., a Corporation of New York. Filed Sept. 28, 1929. Serial No. 395,783. 20 Claims. (Cl. 70—74.)



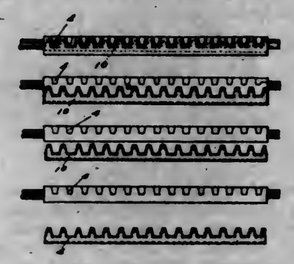
5. In a lock, in combination, a casing, a horizontal bolt, a pair of vertical, symmetrically disposed U-shaped bolts, strike means, each of said vertical bolts having a leg slidable in and out of said casing and a second leg adapted to engage with said strike means, and means for projecting said horizontal bolt and moving said vertical bolts inwardly into engagement with said strike means.

1,895,632. PUMP AND IGNITION DRIVE UNIT. GEORGE W. LA SALLE, Canton, Ohio, assignor to Hercules Motors Corporation, Canton, Ohio, a Corporation of Ohio. Filed May 21, 1931. Serial No. 538,999. 12 Claims. (Cl. 123—195.)



2. A unitary apparatus for use as an auxiliary drive for an internal combustion engine and the like, the apparatus including longitudinally extending mounting means adapted to be secured to and supported by a wall of an internal combustion engine, a pair of longitudinally extending shafts journalled in the mounting means, one of the shafts being adapted for operative connection with the engine, and the other shaft being adapted for operative connection with one or more auxiliaries for the engine, one end of each shaft being located adjacent the opposite end of the other, and internal gear means operatively connecting the adjacent shaft ends.

1,895,633. FUEL SUPPORTING DEVICE FOR FURNACES. FRANK X. LAUTERBUR and EDWARD J. LAUTERBUR, Sidney, Ohio. Filed Mar. 22, 1930. Serial No. 438,111. 3 Claims. (Cl. 126—163.)

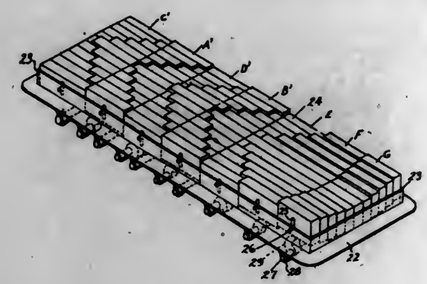


1. In a furnace grate bar construction the combination of an upper assembly of solid grate bars having ash openings therein and a lower assembly of grate bars mounted for movement into and away from the ash openings in the upper grate bar assembly and means for introducing an air blast through said lower grate bar assembly, the grate bars in the lower assembly being hollow and having openings therein through which the air blast may be directed upwardly into the openings in the upper assembly.

1,895,634. DOUGH MOLDING MACHINE. FRANK X. LAUTERBUR and EDWARD J. LAUTERBUR, Sidney, Ohio. Filed Feb. 12, 1931. Serial No. 515,272. 16 Claims. (Cl. 107—9.)

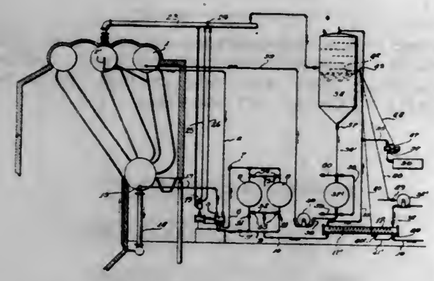
11. In a machine of the character described, comprising a flexible conveyor, a kneading board structure having undulations supporting said conveyor, said undulations being made up of a plurality of longitudinally succeeding transverse series of adjustable sections whereby the undulations are changeable as to shape, a support for said

sections comprising means guiding the sections, and adjusting devices for the respective series of sections each comprising a shaft journalled on said support along the



series of sections, and cams on said shaft, variously spaced therearound and engaging the respective sections of the transverse series.

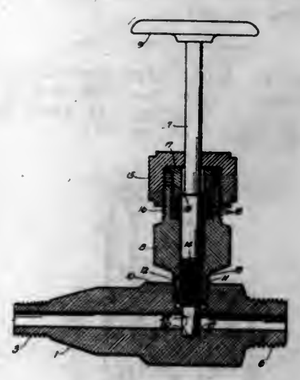
1,895,635. BOILER WATER TREATMENT. WILLIAM MCDONALD, River Forest, Ill. Filed Mar. 9, 1929. Serial No. 345,813. 31 Claims. (Cl. 122—398.)



1. The method of conditioning boiler water consisting of supplying chemically treated water to said boiler continuously withdrawing a measured quantity of water from a boiler, filtering the same to remove the salts in suspension, continuously discharging a sufficient quantity of the withdrawn boiler water after filtration so that there is removed from the system substantially as much soluble salts as are introduced by the fresh water and chemical treatment, and continuously returning the remaining withdrawn water to the boiler, thereby maintaining the soluble salt content of the boiler water at the desired amount.

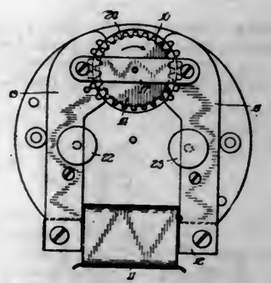
1,895,636. ADJUSTABLE CHOKE NIPPLE. JESSE F. MCKAIG, Oklahoma City, Okla. Filed Dec. 26, 1931. Serial No. 583,267. 2 Claims. (Cl. 251—77.)

1. In an adjustable choke nipple, a nipple having a central bore, an enlarged section on the said nipple having a threaded socket; a packing body housing having a central bore for threaded connection in said socket and having fine internal threads in the bottom of said bore; a control stem in the said housing, having an enlarged lower portion with fine external threads spaced from its lower extremity for co-acting with the internal threads of the said housing; a smooth cylindrical terminus on the said stem below the said external threads, the said terminus having a larger diameter than that of the central bore of the said nipple, the said enlarged section of the nipple having a seat for the said terminus below the bore of the said nipple and in the axis of the said stem; a reduced section on the said stem provided with a hand



wheel; a stuffing box on the said housing for the control stem, the shoulder formed between the small and large portions of the stem providing, stop means to limit the upward movement thereof.

1,895,637. SYNCHRONOUS MOTOR. WILLIAM O. MEISSNER, Hinsdale, Ill., assignor to Meissner Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 28, 1931. Serial No. 525,937. 10 Claims. (Cl. 172—275.)

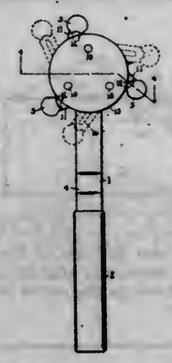


1. In a synchronous motor, means for producing a magnetic field, an armature in the field, and a free magnetically actuated fly wheel adjacent the armature.

1,895,638. WRENCH. JOSEPH MELLING, Jackson, Mich. Filed Nov. 6, 1931. Serial No. 573,397. 16 Claims. (Cl. 81—3.1.)

1. In a wrench, the combination with a handle, of a disk secured to the handle so that portions of the handle extend beyond diametrically opposite edges thereof, a plurality of pivot pins secured to said disk near the periphery thereof opposite said handle, an arm pivoted to each of said pins and having a longitudinal slot therein, inwardly facing jaws carried by the free ends of said arms, a second disk carried by said pivot pins on the

outside of said arms, a tension spring connected to one of said arms and to a fixed part, a ring rotatably embracing said first named disk and disposed between said

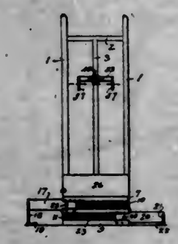


arms and the extended portions of said handle, and guide pins carried by said ring and coacting with said arm slots.

1,895,639. PROCESS OF PRODUCING CASTINGS OF MAGNESIUM AND HIGH GRADE MAGNESIUM ALLOYS. ALBERT LEVY MOND, London, England, assignor, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Original application filed Dec. 19, 1929, Serial No. 414,240. Divided and this application filed Feb. 16, 1931, Serial No. 516,219, and in Great Britain Dec. 19, 1928. 4 Claims. (Cl. 22—188.)

1. The method of casting magnesium and high grade magnesium alloys in sand moulds, comprising incorporating in the moulding material ammonium silco-fluoride, forming a mould of the mixture and casting the metal in the mould.

1,895,640. CLAMP TRUCK. OSCAR NORLING, Tacoma, Wash. Filed Mar. 25, 1932. Serial No. 601,143. 8 Claims. (Cl. 214—65.5.)

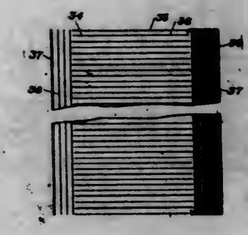


1. In a clamp truck, the combination of a carrying-plate having two parallel grooves extending across its face, one above the other; carrier slides mounted in said grooves; load arms extending forward and downward from the outer ends of said carrier slides, and adapted to engage the ends of the load to be lifted; and means for operating said carrier slides, said means being attached to each said carrier slide and adapted to permit the connections with the carrier slides to pass each other.

1,895,641. BRANDING MEAT PRODUCTS. LEVI SCOTT PADDOCK, Chicago, Ill., assignor to Swift & Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 20, 1929. Serial No. 348,673. 5 Claims. (Cl. 134—30.)

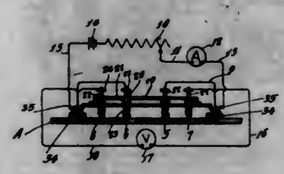
1. An ink adapted for use on greasy or moist surfaces which comprises 7 parts of nigrosine spirits soluble digested with 19 parts of substantially pure glycerine and six parts of glacial acetic acid and the resulting product dissolved in 68 parts of alcohol.

1,895,642. FILTER UNIT. JAMES JARVIS PREBLE, Newton, Mass.; Livingston Stebbins, administrator of said James Jarvis Preble, deceased, assignor, by mesne assignments, to American Air Filter Company, Louisville, Ky., a Corporation of Delaware. Filed Dec. 26, 1925. Serial No. 77,679. 3 Claims. (Cl. 183—69.)



1. A filter unit comprising, in combination, a cell having inlet and outlet openings, a laminated cover for the inlet opening, and a laminated cover for the outlet opening comprising a plurality of tubular copper mesh fabric screens and an expanded metal sheet the edges of which are crimped over the screens.

1,895,643. METHOD OF AND APPARATUS FOR MEASURING THE THICKNESS OF METAL. JOSEPH F. PUTNAM, Berkeley, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Mar. 5, 1929. Serial No. 344,233. 11 Claims. (Cl. 175—183.)

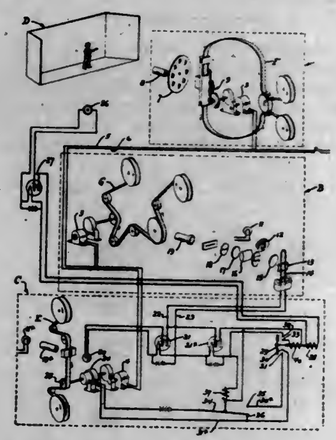


1. An apparatus of the character described comprising a source of electric current, current contact members connected with said source and spaced a predetermined distance apart, a means for measuring the flow of current from said source, potential contact members spaced apart a fixed distance from each other and from the current contact members, said potential contact members being positioned outside of the current contact members, and a means for measuring the potential between the potential contacts.

1,895,644. METHOD OF PRODUCING SOUND PICTURES. GEORGE P. REGAN and ALBERT R. DAY, Oakland, Calif. Filed May 26, 1930. Serial No. 455,735. 8 Claims. (Cl. 88—16.2.)

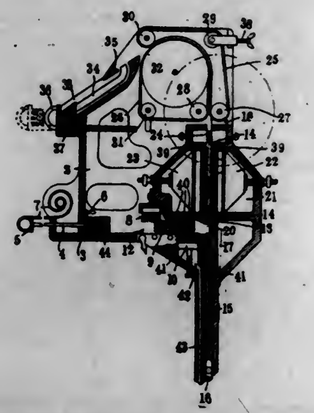
1. A method of translating sound films from one language to another which consists in translating the words, songs, etc., of one language into another language, recording on a sound film the translated words as spoken or sung by one person, making a second translation of

the words, songs, etc., in code words simulating the lip-movement of the successive translated words, photographing on the picture film the lip-movement and acting



of an actor while speaking or singing the coded language, and transferring the pictures on said picture film and the sound record on the sound film to a common film.

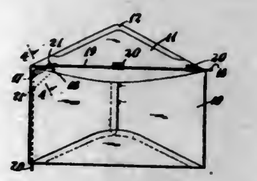
1,895,645. DEVICE FOR CLEANING MATRICES. OTTO ROSTOCK and JÜRGEN CLAUSSEN, Elmshorn, Germany. Filed Dec. 5, 1928, Serial No. 323,956, and in Germany Jan. 7, 1928. 3 Claims. (Cl. 15—77.)



1. A machine for cleaning matrices comprising a casing having a cleaning passage, a feed member in said casing movable transverse to said passage to feed matrices to one end thereof, brushes between which said matrices are passed as they are moved toward said passage, brushes in said passage, means to adjust the latter brushes toward and away from each other, a cleaning device at one end of said passage, said device comprising a plurality of rubber members brushing over the matrices passing through said device after engagement by said other brushes, drying means for the matrices, and a collector into which the dried matrices are discharged.

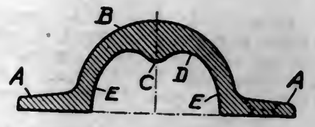
1,895,646. SELF-OPENING ENVELOPE. CARLO RUBINO, Flushing, N. Y. Filed Apr. 13, 1931. Serial No. 529,620. 5 Claims. (Cl. 229—86.)

1. A self-opening envelope, comprising sheet material in the form of an envelope and having a flap capable of being closed, and means for opening one of the longitudinal sides or a transverse end, comprising a small tubular member attached within one of the corners of the envelope, a string extending through the tubular member and extend-



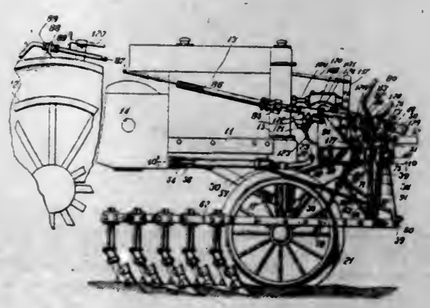
ing along the flap bend and one of the ends, both of the ends of the string projecting slightly from the envelope, and knots being formed in the string on opposite sides of the tubular member.

1,895,647. FENDER IRON. WILLIAM L. BROWN, Philadelphia, Pa. Filed Nov. 11, 1931. Serial No. 574,310. 6 Claims. (Cl. 114—219.)



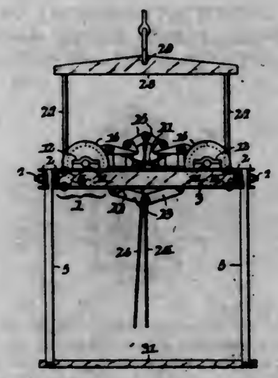
1. A fender iron of a bendable ferrous alloy having lateral flanges adapted to contact with the structure to be protected, and an intermediate arch-shaped portion extending from end to end of the fender iron and which in cross section is thicker at the top of the arch than at the lateral sides connecting the upper portion of the arch with the lateral flanges of the fender iron.

1,895,648. CULTIVATOR. THEOPHILUS BROWN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Aug. 13, 1926. Serial No. 128,929. 113 Claims. (Cl. 97—47.)



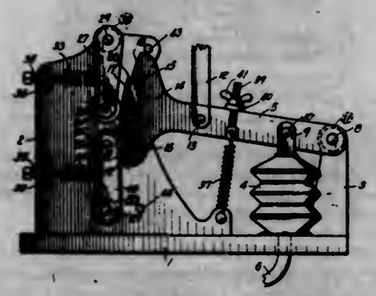
1. In an agricultural implement, the combination with a tractor, of an attachment comprising a member extending laterally from the tractor and connected to swing vertically about a longitudinal axis, ground engaging means supporting said member, and connected to swing therewith, a rig connected with said member to swing vertically about a transverse axis, and lifting means on said member connected with said rig and operable to lift the same, said lifting means being adapted to be actuated by means on the tractor.

1,895,649. LIFTING GRAB. GEORGE W. BUTTS, Wynnewood, Pa., assignor to Pennsylvania Railroad Company, a Corporation of Pennsylvania. Filed Aug. 12, 1932. Serial No. 628,490. 6 Claims. (Cl. 294—104.)



1. In a lifting device of the character described, a frame, gripping jaws mounted on said frame, one such jaw being pivotally mounted for movement toward and away from the other jaw, gravity actuated mechanism operable to close said movable jaws incident to suspension of the frame, spring actuated mechanism for opening said movable jaws, and means for controlling the operation of said gravity actuated and said spring actuated mechanisms.

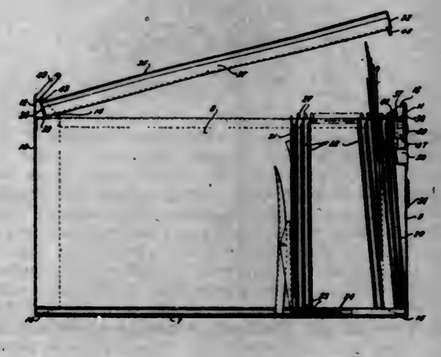
1,895,650. SNAP MECHANISM. JAMES H. CARMEAN and RALPH M. CURPHEY, Kansas City, Mo. Filed Oct. 20, 1930. Serial No. 489,902. 6 Claims. (Cl. 74—14.)



1. In apparatus of the character described, a pivoted lever having a cam face provided with spaced shoulders, loading means including a pair of latches engageable with said shoulders for respectively restraining the lever against movement in opposite directions, and independent means for adjusting said latches.

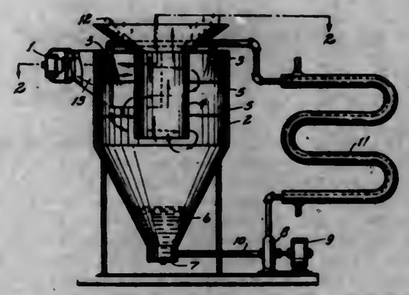
1,895,651. INDEX. GEORGE H. DAWSON, Cambridge, Mass., EDWARD A. DUNN, Plainfield, N. J., and ARCHER M. NICKERSON, Jr., Wollaston, Mass., assignors to Service Bureau, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 21, 1931. Serial No. 563,996. 15 Claims. (Cl. 129—16.)

3. An index comprising a tray, a plurality of upright parallel folders housed within the tray, relatively stiff backers removably inserted between the front and rear leaves of the folders, index sheets mounted on said backers, and means for compacting the folders within the tray, the front leaves of the respective folders having hinged



flaps adapted to swing forwardly over the tops of other folders when a selected folder is partially removed from the tray.

1,895,652. COOLING SYSTEM. ERNEST F. FISHER, St. Louis, Mo. Filed July 17, 1929. Serial No. 381,352. 4 Claims. (Cl. 261—79.)



1. A cooling apparatus comprising a conical chamber in the form of an inverted cone the sides of which terminate in a cylindrical chamber, a tube alined axially within said chamber, one end of said tube communicating with the interior of said chamber at a point near the junction between said inverted cone and said chamber and the opposite end of said tube being open to the atmosphere, a water-spraying device within said chamber but outside of said tube, a blower for blowing air tangentially to the tube, and a series of previous elements arranged in the path of the air and water passing through the apparatus but located outside of said tube.

1,895,653. HAIR WAVING AND CURLING ROD. SOL FISHER, Cleveland, Ohio. Filed Apr. 25, 1932. Serial No. 607,413. 10 Claims. (Cl. 132—33.)

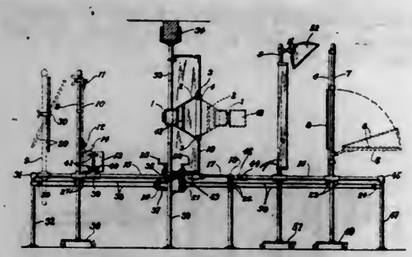
1. In a permanent marcelling and curling device, for strands of hair, a rod, an integral helix thereon, the blade

of said helix having wide sides that are inclined inwardly towards their lines of junction with said rod, and forming an intermediate spiral groove in which a strand of hair is



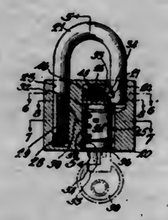
tightly wound, and positioned to produce a wide and full outer edge upon said strand, and clamping means for the scalp end of said strand.

1,895,654. PHOTOCOPYING APPARATUS. FREDERICK C. FORREST, Sacramento, Calif. Filed Mar. 12, 1932. Serial No. 598,441. 5 Claims. (Cl. 88—24.)



1. In a photo copying apparatus the combination with a stationary frame adapted to be mounted in a dark room having a doorway therein and with one of its ends disposed within the doorway, and a movable frame pivotally connected to the stationary frame outside of the dark room and adapted to be moved at right angles to the stationary frame, of a casing arranged to close the doorway and having its rear end open to the dark room and an aperture in its front wall, a lens hood pivotally mounted in said aperture and adapted to swing to a reversed position, and means for closing the aperture around the hood.

1,895,655. PADLOCK. SAMUEL R. FRAIM, Lancaster, Pa. Filed Aug. 7, 1930. Serial No. 473,562. 5 Claims. (Cl. 70—108.)



1. A padlock including a shackle, a body mounting the shackle at one end and having a straight cylindrical bore from the other end and an insert within the bore comprising a transverse bolt, an outer casing mounting and guiding the bolt and a disc tumbler key plug inside the casing adapted to be turned with respect to the casing when a suitable key has been inserted in the plug.

1,895,656. CLIP FOR ATTACHING ELECTRIC LIGHTS TO CHRISTMAS TREES. WILLIAM GADKE, Philadelphia, Pa. Filed Feb. 3, 1932. Serial No. 590,677. 3 Claims. (Cl. 24—81.)



3. A holder for securing electric lights to Christmas tree branches comprising a band engaging the base of the electric light and three parallel fingers, two parallel and in the same plane and a third generally parallel and spaced from the plane of the other two and having a concavity toward the plane of the other two and longitudinally ribbed for reinforcement purposes.

1,895,657. BUILDING AND BUILDING SECTION. ERNST GEIGER, Irvington, N. J. Filed Sept. 26, 1928, Serial No. 308,503. Renewed Sept. 28, 1931. 16 Claims. (Cl. 72—40.)

1. In a pre-fabricated building section of the slab type, a metal frame, wall material within the frame, said frame presenting inwardly directed portions embedded in the edges of and interlocked with the wall material presenting concave channels at the exterior of the slab adapted to coact with the similar channel of an abutting slab to receive and clamp packing material.

1,895,658. HINGE CONSTRUCTION. CARL GESKE, Grand Rapids, Mich., assignor to Winters & Crampton Company, Grandville, Mich., a Corporation of Michigan. Filed July 7, 1930. Serial No. 466,013. 5 Claims. (Cl. 16—128.)

1. In a device of the character described, a sheet metal member having portions cut away and forced outwardly to form hollow posts of substantially channel form, sheet

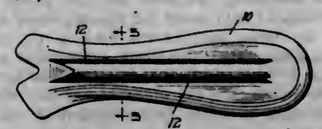
metal reinforcing members snugly fitting into the posts, a plate member having an integral section adapted to extend between the posts, and a hinge rod passing through the section and the posts whereby the plate member may pivot relative to the sheet metal member.

1,895,659. SHRINE. MORTON HAGUE, Chicago, Ill. Filed June 15, 1932. Serial No. 617,401. 7 Claims. (Cl. 206—19.)



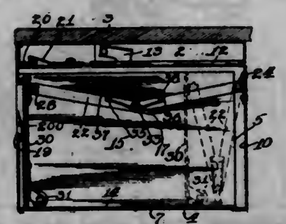
1. In a shrine of the class described, the combination of a base, and a pair of statuettes of angels in relatively spaced relation on said base, said statuettes each having diverging wings and each being provided with candle holder recesses intermediate its wings.

1,895,660. SHOE SHANK STIFFENER. CHARLES J. HAUCK, Portsmouth, Ohio, assignor to The Selby Shoe Company, Portsmouth, Ohio, a Corporation of Ohio. Filed Aug. 13, 1931. Serial No. 556,783. 4 Claims. (Cl. 36—76.)



1. A shank stiffener comprising a flexible insert, said insert being provided with grooves in the under side thereof extending lengthwise thereof, and a rigid member inserted within said grooves.

1,895,661. DISPENSER. PAUL H. HORWITT, Springfield, Mass., assignor to The Menasha Products Company, Chicago, Ill., a Corporation of Wisconsin. Filed May 26, 1930. Serial No. 455,577. 3 Claims. (Cl. 312—61.)



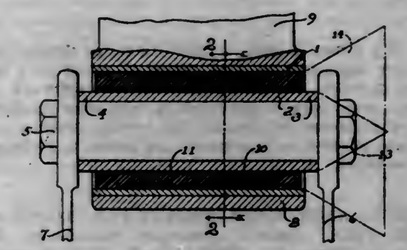
1. A dispenser for folded paper napkins comprising a casing, a drawer slidable in said casing, a follower plate, spring-pressed lever means pivoted on the rear wall of said casing and also pivoted on said plate near diagonally opposite corners thereof, and a roller centrally positioned on said plate extending below the lower edge thereof.

1,895,662. COMBINATION TABLE DISPENSER. PAUL H. HORWITT, Springfield, Mass., assignor to The Menasha Products Company, Chicago, Ill., a Corporation of Wisconsin. Filed May 26, 1930. Serial No. 455,578. 2 Claims. (Cl. 312—61.)



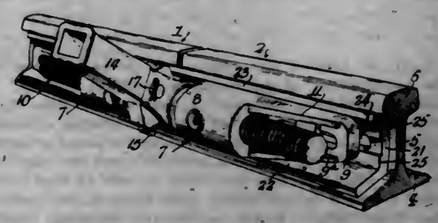
2. A dispenser, comprising a top closure member having opposed depending flanges provided with inturned lips, an elongated casing slidably guided in said closure member, said casing having opposed parallel upstanding walls provided with outturned terminal lips guided slidable on the terminal lips of said closure member, means to lock said casing in assembled relation with said closure member, said locking means comprising a slot formed in a lip of said casing and a gravity latch pivotally mounted on said closure member to enter the slot, and a dispensing drawer slidable longitudinally in said casing.

1,895,663. OSCILLATING JOINT. CARROLL L. HUMPHREY, Detroit, and ROGER K. LEE, Highland Park, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 17, 1930. Serial No. 429,004. 4 Claims. (Cl. 267—54.)



1. An oscillating joint comprising an inner member, a rigid support surrounding said member having an inner wall spaced from the surface thereof, a composition coating fixed on said inner member having a relatively high coefficient of friction, and yieldable means under compression between said support and member forming a connection therebetween and coacting frictionally with said coating to hold said yieldable means against both linear and rotary movement relative to said inner member.

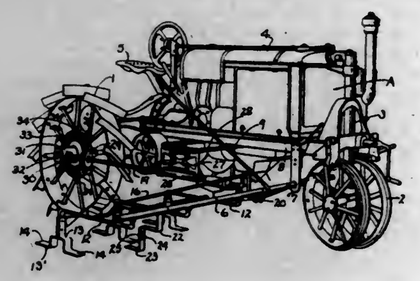
1,895,664. RAIL PULLER AND EXPANDER. FRANK J. JAKOUBEK, Elmwood Park, and EDMUND PACHOWICZ, Chicago, Ill., assignors to Templeton, Kenly & Co. Limited, Chicago, Ill., a Corporation of Illinois. Filed Nov. 21, 1931. Serial No. 576,474. 7 Claims. (Cl. 254—43.)



1. A device of the kind described comprising housing members adapted to be disposed in longitudinally spaced relation upon one side of abutting rail ends and each

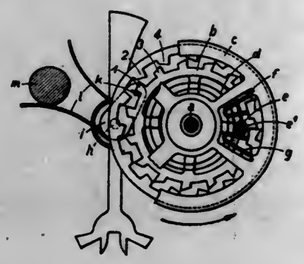
to be secured to an associated rail end, means including a screw operatively engaged with the housing members for moving them away from and toward each other and a member disposed upon the same side of and overlapping said rail ends and spanning the gap between them for guiding said housing members in their movement and for bracing the screw against bending under the action of the expanded rail ends.

1,895,665. COTTON CHOPPER. CHARLES J. JOHNSON, Corpus Christi, Tex., assignor of one-half to George Emmert, Corpus Christi, Tex. Filed Mar. 12, 1931. Serial No. 521,947. 8 Claims. (Cl. 97—19.)



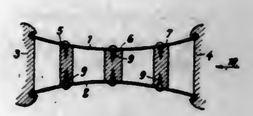
8. In a cotton chopper, a vehicle, a frame thereon, arms pivotally supported on said frame to swing in a horizontal direction, contact members on the rearward ends of said arms, means connected to said arms to contact with the ground to control the cutting depth of said members relative to the ground, and means to reciprocate said members.

1,895,666. ANCHOR ESCAPEMENT FOR CLOCKS AND THE LIKE. HELMUT JUNGHANS, Schramberg, Wurtemberg, Germany. Filed Mar. 5, 1932, Serial No. 596,997, and in Germany May 22, 1931. 5 Claims. (Cl. 58—117.)



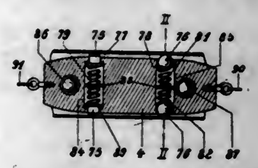
1. In an anchor escapement for clocks and the like, the combination of an escapement wheel spindle, two escapement wheels mounted on said spindle, one fixedly and the other loosely, one of said wheels being externally toothed and the other being larger and internally toothed, said wheels having the same pitch of tooth but oppositely directed lifting planes, the teeth of one of said wheels being opposite to the wider gaps between the teeth of the other wheel, means resiliently coupling together said wheels, an oscillating anchor, and a pin carried by said anchor and adapted to engage alternately with one or the other of said wheels.

1,895,667. STRUCTURAL MEMBER. HUGO JUNKERS, Dessau, Germany. Filed Mar. 1, 1929, Serial No. 343,626, and in Germany Mar. 7, 1928. 15 Claims. (Cl. 189—34.)



6. Structural member comprising two sheet metal plates bent to large radii and arranged with their convex faces facing each other, and abutment adjoining the convex parts of said plates and a longitudinal and a transversal tie member for holding said plate applied against said abutment.

1,895,668. RIVETING DEVICE. HUGO JUNKERS, Dessau, Germany. Original application filed July 27, 1926, Serial No. 125,204, and in Germany Aug. 21, 1925. Divided and this application filed Jan. 3, 1930. Serial No. 418,249. 2 Claims. (Cl. 78—103.)



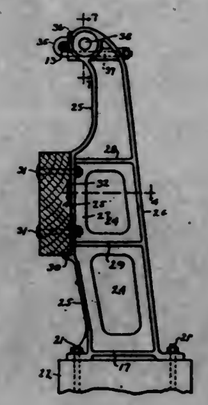
1. In apparatus for riveting tubes in combination, an anvil adapted to serve as an abutment for the rivet and members resiliently mounted in, and partly projecting from cavities of said anvil for spacing same on all sides against the inner wall of the tube to be riveted, said anvil consisting of a relatively substantial mass which by virtue of the resilient holding means is capable of delivering blows upon the inner end of the rivet, incident to its reaction following blows applied to the outer end of the rivet.

1,895,669. DIRECTION SIGNAL. JOHN KOLSTERS, Oakland, Calif. Filed Apr. 13, 1927. Serial No. 183,328. 2 Claims. (Cl. 177—327.)



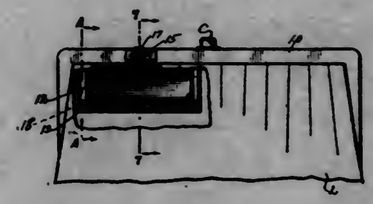
1. In combination with a signal casing, a conductive shaft rotatably mounted in said casing and in electrical circuit therewith, a signal arm secured on one end of said shaft, a disk of insulating material secured to said shaft, conductive shoes formed over the periphery of said disc and electrically connected to said shaft, said shoes being of substantially equal arcuate length, the gap between said shoes being greater on one side than on the other, diametrically disposed brushes adapted to cooperate with one or both shoes or with said insulating disk when said disk is moved to various positions, a solenoid having the core thereof connected to rotate said disc, a switch controlled circuit from each of said brushes to one terminal of said solenoid, the other terminal of said solenoid being connected to one terminal of a battery, the other terminal of said battery being connected to said casing, said spring fingers and shoes being so related as to selectively control the signal arm in two signalling positions to cause oscillation thereof in the selective position.

1,895,670. FENCE POST. ALBERT H. LANGENHEIM, Dayton, Ohio, assignor to The Dayton Malleable Iron Company, Dayton, Ohio, a Corporation of Ohio. Filed July 11, 1932. Serial No. 621,819. 4 Claims. (Cl. 256—48.)



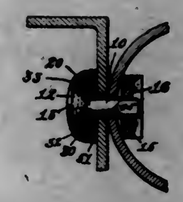
1. For use in a highway guard fence, a fence post comprising a cast metal member having cable supporting means at its upper end, a central portion of the front of the post having a flat plank positioning surface, the portion of the post just above the plank position being recessed back away from the plank position while the top of the post projects out to support the cable substantially above the plank position.

1,895,671. HAND BAG. MORRIS E. LESSIN, New York, N. Y., assignor to Maurice Levy, New York, N. Y. Filed Jan. 25, 1930. Serial No. 423,290. 6 Claims. (Cl. 150—29.)



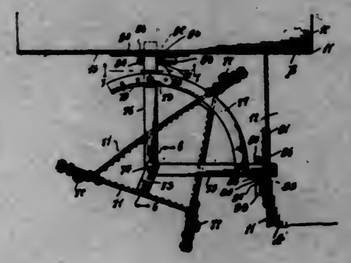
1. In combination, a handbag having an outer frame, a casing connected to the frame, a slide mounted in said casing, and a supplemental container hinged to said slide.

1,895,672. FASTENING DEVICE. WILLIAM F. LOUGHMAN, Barre, Mass., assignor to Katches Inc., Boston, Mass., a Corporation of Massachusetts. Filed Jan. 31, 1929. Serial No. 336,567. 3 Claims. (Cl. 85—5.)



1. A self-contained, permanently assembled fastening device adapted for ready and universal use in fastening together suitably apertured members comprising a blank having a head provided with a tapering inner face and a shank extending from said face, a washer having an aperture of a size to loosely receive said shank and shaped adjacent the aperture to conform to said tapered face of the head so as to permit relative rocking and rotating movement between said washer and blank, said washer also having a groove formed therein and opening away from said head, a spring positioned on the shank and adapted to be substantially entirely concealed within said groove when the device is in use, and an enlargement associated with the free end of the shank for retaining the parts assembled and for completing the fastening device.

1,895,673. SHAKER CONVEYER. THOMAS A. LUKE, McComas, W. Va., assignor of one-half to Hobert E. Luke, Bluefield, W. Va. Filed July 2, 1931. Serial No. 548,449. 6 Claims. (Cl. 198—220.)

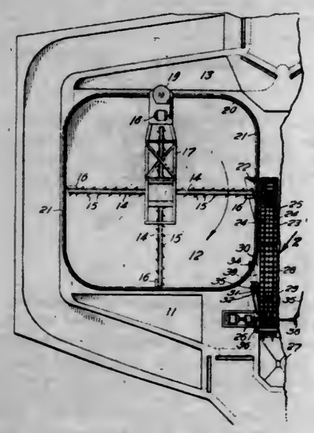


1. In a conveyer, a trough, means to impart a shaking movement to said trough, a trough disposed for emptying into the first trough, a bell crank lever having extended arms, and the sides of said troughs being provided with openings receiving said extended arms whereby the shaking movement of the first trough will be imparted to the second trough.

1,895,674. DETRITOR. NELS B. LUND, Seaford, N. Y., assignor to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed July 22, 1931. Serial No. 552,381. 3 Claims. (Cl. 209—18.)

1. A detriting apparatus comprising a sedimentation chamber, a classifying device, a partially submerged conveying mechanism therein for separating organic solids from gritty solids in the zone of liquid emergence thereof, a grit outlet at the upper end of said conveying

mechanism, mechanism for conveying solids settled in said chamber to be operated upon by said classifying device, and means for projecting organic solids into said

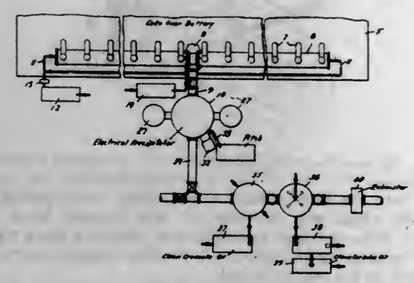


chamber laterally from the zone of emergence of said partially submerged conveying mechanism of said classifying device.

1,895,675. ELECTRODEPOSITION OF METALS. FRANK C. MATHERS, Bloomington, Ind., and LOUIS BATEMAN, East Lansing, Mich., assignors to United States Smelting, Refining & Mining Company, Portland, Me., a Corporation of Maine. Filed Jan. 9, 1931. Serial No. 507,754. 7 Claims. (Cl. 204—1.)

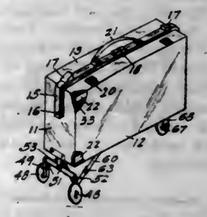
1. That improvement in the electrodeposition of lead from electrolytes containing dithionic acid which consists of the use of a hydroxy compound occurring in coal tar as an addition reagent in the acid electrolyte.

1,895,676. COAL DISTILLATION BY-PRODUCT RECOVERY SYSTEM. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed June 18, 1929. Serial No. 371,931. 4 Claims. (Cl. 183—7.)



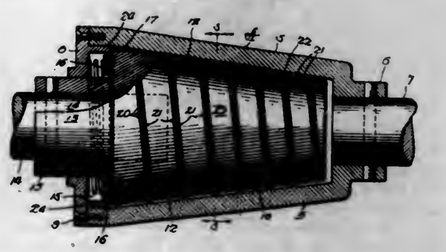
1. In combination with a coal distillation plant, an electrical precipitator, means for collecting coal distillation gases from the plant and subjecting them to partial cooling, means for passing the collected gases into the top of the precipitator, means within the precipitator for subjecting the gases passing therethrough to an electrical discharge, whereby the gases are cleaned, a condensing system for separating oils from the gases and means for withdrawing clean gases from the bottom of the precipitator and passing them to the condensing system.

1,895,677. VEHICULAR TRAVELING BAG. JOHN B. PINHEIRO, Oakland, Calif. Filed Sept. 8, 1930. Serial No. 480,522. 5 Claims. (Cl. 190—41.)



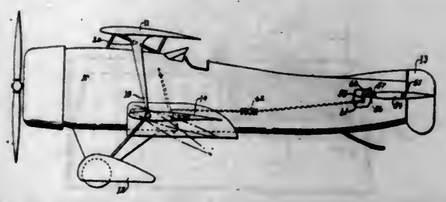
1. A vehicular traveling bag adapted to be formed into a roll comprising a bag of flexible material provided with end and edge reinforcements of rigid material, said reinforcements being hinged to fold into the bottom of said bag, an inverted box-like housing mounted in the bottom of said bag, folding wheeled trucks mounted to fold completely within said housing, and means for securing the bag in rolled form.

1,895,678. CLUTCH. WALTER CHARLES PITTER, Epping, England, assignor to The Pitter Trust, Chicago, Ill., a Common Law Trust. Filed Dec. 20, 1930. Serial No. 503,673. 9 Claims. (Cl. 192—41.)



1. A rotary clutch of the character described comprising a driving member, a driven member, one thereof including an element having a wall defining a conically-shaped recess on the axis of the device, a conically-shaped body carried by the other one of said members on the axis of the device and being in substantially close association with the wall defining said recess, one of said members having spirally-arranged seat elements, balls in said seat elements, and means for maintaining said balls and said wall in close-fitting relation to each other.

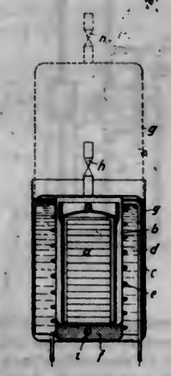
1,895,679. AIRCRAFT. JOHN B. MCPHERSON, 4th, Abington, Pa. Filed Mar. 4, 1932. Serial No. 596,683. 6 Claims. (Cl. 244—29.)



1. In aircraft, a fuselage, a horizontal stabilizing fin pivotally mounted relative to the fuselage, a pair of wings mounted on opposite sides of said fuselage on a transverse axis, means coupling said wings for oscillation as a unit, means for oscillating the wings, means operatively associated with said wings for oscillating the

stabilizing fin in synchronized relation to said wings, means for uncoupling the wings to permit differential oscillation of the respective wings and means responsive to the differential setting of the wings for setting said stabilizing fin in response to the mean resultant setting of said wings.

1,895,680. APPARATUS FOR AND THE COOLING OF ANNEALED GOODS IN COOLED VESSELS. HERMANN I'RUFERT, Hohenlimburg, Germany. Filed Oct. 25, 1929, Serial No. 402,445, and in Germany Mar. 22, 1928. 4 Claims. (Cl. 266—6.)



1. Process for cooling heat-treated material which consists in placing the material while in highly heated condition in a receptacle enclosed within a double-walled vessel, the space between the walls of which is filled with a liquid of high boiling point, inverting an open-ended vessel over said receptacle, the open end of said vessel being immersed in the liquid thereby to form a seal, adding to the heat-treated material, a combustible fuel thereby to neutralize any air within the inverted vessel and cause said vessel to move upward to permit escape of excess gas, allowing said inverted vessel to sink in said liquid in proportion to the gradual equalization of the temperature within and without the material-containing receptacle until the open end of the inverted vessel reaches the bottom of the cooling receptacle, and opening the inverted vessel to atmospheric communication.

1,895,681. NONACID SALT OF DIAMINO-DIHYDROXY-ARSENOBENZENE DIMETHYLENE-SULPHONIC ACID. GEORGE W. RAIZISS and ABRAHAM I. KREMENS, Philadelphia, Pa., assignors to Abbott Laboratories, North Chicago, Ill., a Corporation of Illinois. Filed Jan. 14, 1930. Serial No. 420,814. 9 Claims. (Cl. 260—15.)

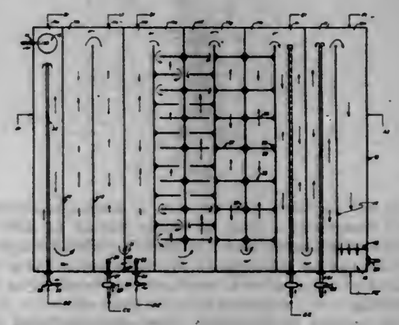
1. A non-acid salt of diamino-dihydroxy-arsenobenzene-dimenthylene-sulphonic acid.

1,895,682. TAIL WHEEL CONSTRUCTION. ARTHUR E. RAYMOND, Santa Monica, Calif., assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif., a Corporation of Delaware. Filed Mar. 21, 1932. Serial No. 600,113. 8 Claims. (Cl. 244—2.)



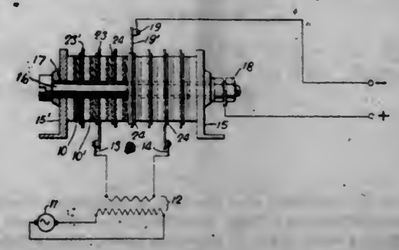
1. In an airplane, the combination of: a plane structure having a cavity formed therein; a tail wheel structure swingably supported by said plane structure and being located partly within said cavity and partly on the exterior of said plane structure; and a shield supported by said tail wheel structure and being movable therewith, said shield being positioned within said cavity to fill same.

1,895,683. APPARATUS FOR TREATING AN OILY LIQUID WITH AN AQUEOUS LIQUID. ERNEST W. ROTH and PAUL W. PRUTZMAN, Los Angeles, Calif. Filed Nov. 4, 1930. Serial No. 493,336. 13 Claims. (Cl. 196—46.)



2. Apparatus for treating an oily liquid with an aqueous liquid, comprising: a series of adjoining troughs communicating at alternate ends; means including inlet and exit pipes each directly communicating with one of said troughs for flowing a layer of aqueous liquid over the bottom of said series in one direction and means including inlet and exit pipes, each directly communicating with one of said troughs for flowing a layer of oily liquid over said aqueous layer in an opposite direction, whereby said liquids are continuously contacted at the substantially horizontal interface of said layers.

1,895,684. ELECTRIC CURRENT RECTIFIER. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Rectifier Corporation, Englewood, N. J., a Corporation of Delaware. Filed Dec. 1, 1928. Serial No. 323,084. 12 Claims. (Cl. 175—366.)

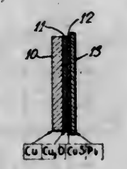


1. In dry rectifying devices and the like, an electrode element therefor comprising a metallic base, an intimately joined oxide layer thereon formed to have a rectifying junction at the contacting surface with said metallic base, and a layer of a second compound of another chemical element in the oxygen family of the Sixth Periodic group integrally formed upon said oxide layer and adapted to form a second rectifying junction in series with the first.

8. The method of forming electrode elements for dry rectifiers and the like, which comprises heating a metallic body in an atmosphere containing an element of the oxygen family in the Sixth Periodic group until a relatively thick compound thereof is formed thereon, quenching

said heated element, again heating said electrode element in an atmosphere containing a second chemical element of the Sixth Periodic group, and thereaffer cooling said element.

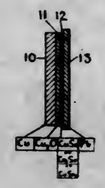
1,895,685. ELECTRIC CURRENT RECTIFIER. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Rectifier Corporation, Englewood, N. J., a Corporation of Delaware. Filed Nov. 16, 1929. Serial No. 407,777. 16 Claims. (Cl. 175—366.)



1. In dry rectifiers and the like, a composite electrode element comprising a body of copper having an adhering layer of cuprous oxide, and a layer of a metallic compound of an element of the sulphur family adapted for a substitutionary reaction with said cuprous oxide layer and the forming of a rectifying junction therewith.

11. A process of producing composite rectifying electrodes having a plurality of rectifying junctions which comprises coating a copper body with a layer of cuprous oxide of desired thickness, surfacing the latter with a layer of a reacting metallic compound of an element of the sulphur family adapted to form a rectifying junction therewith, and inducing an intimate union between said layer whereby the contact resistance thereat is substantially reduced.

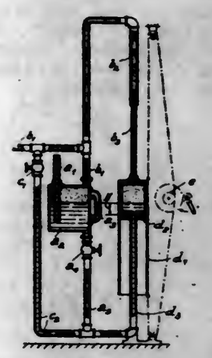
1,895,686. ELECTRIC CURRENT RECTIFIER. SAMUEL RUBEN, New Rochelle, N. Y., assignor to Ruben Rectifier Corporation, Englewood, N. J., a Corporation of Delaware. Filed June 4, 1931. Serial No. 542,001. 12 Claims. (Cl. 175—366.)



1. In dry rectifiers and the like, a composite electrode element comprising a body including a metallic base and an adhering oxide layer of the same metal from which the base is formed and adapted to provide a rectifying junction at the contacting surface with said metallic base, and a layer of metallic selenide superposed upon said body.

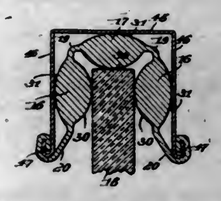
10. A process of producing a copper oxide rectifying electrode which comprises heating a body of clean copper in an oxidizing atmosphere at 1000° C. for a period sufficient to produce an oxide layer of desired thickness, quenching in a 25 per cent solution of hydrochloric acid, and thereafter removing the exterior coating of cupric oxide from the cuprous oxide, surfacing the latter with a layer of a reacting compound of an element of the sulphur family, said reacting compound having an affinity for the cuprous oxide less than that of a sulphide of copper, and inducing an intimate union between said layers whereby the contact resistance thereat is substantially reduced.

1,895,687. PROCESS OF AND DEVICE FOR MANUFACTURING HOLLOW BODIES BY MEANS OF FIBROUS MATERIALS. ARNOLD RUTISHAUSER, Zurich, Switzerland. Filed May 16, 1931, Serial No. 537,894, and in Germany May 27, 1930. 4 Claims. (Cl. 92—54.)



1. A process of manufacturing hollow bodies of fibrous materials, which consists in introducing liquid containing the fibrous material in suspension into a pervious mould, adjusting the height of the level of liquid within the mould from outside, for the purpose of influencing the height of the zone of deposit of the fibrous material, and simultaneously introducing compressed gaseous fluid above the liquid within the mould while the walls of the hollow body are being formed, substantially as described.

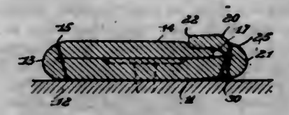
1,895,688. WINDOW CHANNEL. CHARLES P. SCHLEGEL, Rochester, N. Y., assignor to The Schlegel Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed May 6, 1932. Serial No. 609,632. 7 Claims. (Cl. 296—44.5.)



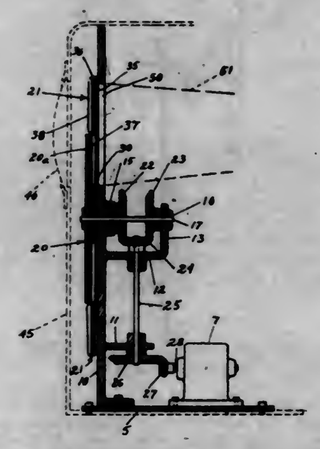
1. A window runway comprising a textile strip arranged in channel shape and woven to provide tubular portions, and filler means in said portions, for supporting and cushioning a sliding glass sash.

1,895,689. MOLDING. CHARLES P. SCHLEGEL, Rochester, N. Y., assignor to The Schlegel Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 18, 1932. Serial No. 638,343. 10 Claims. (Cl. 155—184.)

1. A self-contained, one-piece upholstery molding formed from a single strip of fabric woven with relatively stiff strands to afford inherent stiffness and permanency of form, said strip comprising an attaching base portion, a cover piece hinged to one side edge of said base portion and folding thereover, and a locking member hinged to the opposite side edge of said base portion and folded inwardly over and stitched to said base portion to overlap and releasably hold said cover piece in folded position, said fabric strip being woven to provide breaks adjacent said side edges to facilitate said folding of the cover piece and the locking member.



1,895,690. COLOR LIGHT PROJECTOR. ROBERT R. STOEFEN, Los Angeles, Calif. Filed Nov. 27, 1931. Serial No. 577,513. 2 Claims. (Cl. 240—3.1.)



1. In a color light projector, two discs each of which has a plurality of differently colored translucent segments, means to support said discs adjacent to each other on concentric axes, and means to simultaneously rotate said discs in opposite directions, one of said discs being of a greater diameter than the other, such disc having colored areas located radially beyond the periphery of the smaller disc and having clear spaces throughout its central portion opposite to the color areas of the smaller disc.

1,895,691. FIRE EXTINGUISHER. CHARLES A. THOMAS and CARROLL A. HOCHWALT, Dayton, Ohio, assignors to The Fyr-Fyter Company, Dayton, Ohio, a Corporation of Ohio. Original application filed Feb. 27, 1928, Serial No. 257,400. Divided and this application filed Jan. 27, 1930. Serial No. 423,889. 10 Claims. (Cl. 23—9.)

5. The method in the extinguishing of fire, which comprises projecting upon the fire a solution of a compound of caesium.

1,895,692. FIRE EXTINGUISHING COMPOSITION. CHARLES A. THOMAS and CARROLL A. HOCHWALT, Dayton, Ohio, assignors to The Fyr-Fyter Company, Dayton, Ohio, a Corporation of Ohio. Original application filed Feb. 27, 1928, Serial No. 257,400. Divided and this application filed Jan. 27, 1930. Serial No. 423,890. 10 Claims. (Cl. 23—9.)

5. The method in the extinguishing of fire, which comprises projecting upon the fire a solution of a compound of rubidium.

1,895,693. WEED KILLER. LOTT R. TRACY, Seattle, Wash. Filed Sept. 18, 1930. Serial No. 482,745. 5 Claims. (Cl. 47—49.)

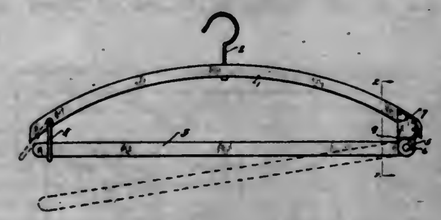


1. A weed killer, comprising a bottle, a valve member, fitted over the top of the bottle, provided with valve mechanism operative on the bottle and having a sharpened valve spindle normally disposed in extended position, said mechanism being adapted to distribute liquid from the bottle and along said spindle when said spindle is retracted, means for preventing an air-lock in the bottle, a jointed rod carrying at one end a handle and at its other end a right angular bifurcated portion for embracing said member, a threaded section on said rod, a clamping jaw slidably mounted on said section for engaging the bottom of said bottle, a winged nut bearing on said jaw, and said bottle and member clampingly secured to said rod between said jaw and said portion.

1,895,694. EDIBLE COMPOUND INCLUDING EGG PRODUCTS. SAMUEL TRANIN and JAMES C. IRWIN, Jr., Kansas City, Mo., assignors, by direct and mesne assignments, to Tranin Egg Products Co., a Corporation of Missouri. Filed Aug. 20, 1928. Serial No. 300,976. 8 Claims. (Cl. 99—11.)

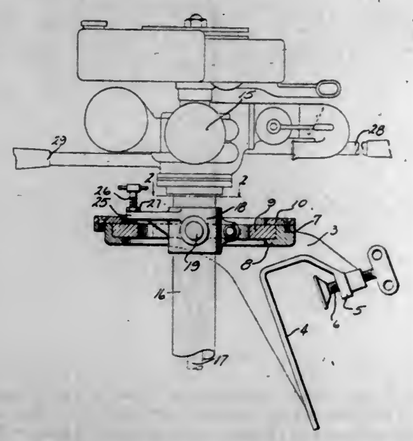
1. A compound for use in baking comprising an emulsion including peanut oil, casein, and water, and whites of eggs.

1,895,695. CLOTHES HANGER. OLIVER L. WHITE, St. Helens, Oreg. Filed May 4, 1931. Serial No. 534,896. 2 Claims. (Cl. 223—64.)



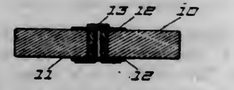
1. In a device of the class described, the combination with a body element comprising a segment of a circle, of a supporting hook central thereof, a metal supporting element attached to one end of the body element, a pivot therein, a second supporting element rotatably attached to said pivot, a pin supported within the second supporting element and having its axis at right angles to that of the pivot, a cross bar rotatably disposed at one end about the pin, and means disposed upon the other end of the body element to detachably secure the cross-bar.

1,895,696. OUTBOARD MOTOR MOUNTING. ELMER A. WITKE, Milwaukee, Wis., assignor to Outboard Motors Corporation, Milwaukee, Wis., a Corporation of Michigan. Filed Jan. 27, 1932. Serial No. 589,105. 10 Claims. (Cl. 115—18.)



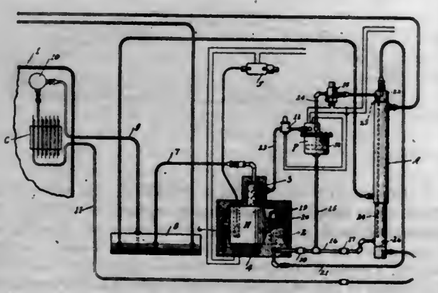
1. The combination with bracket means providing a bearing, of a bearing member dirigible with respect thereto, and an outboard motor tiltable with respect to said bearing member and extending through the bearing therefor.

1,895,697. SUPPORTING ELEMENT FOR CONFECTIONS. BERTRAND L. YORK, Piedmont, Calif. Filed Mar. 14, 1932. Serial No. 598,693. 3 Claims. (Cl. 99—16.)



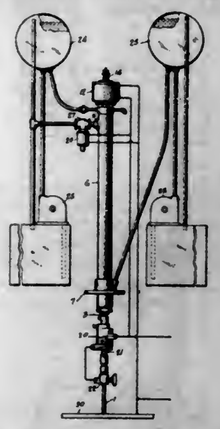
1. A confection comprising a disc-like element of edible material provided with an axial aperture, a resilient element having a head adapted to close one end of said aperture and a handle adapted to be inserted in said aperture and frictionally secured by said resilient element.

1,895,698. REGENERATIVE REFRIGERATING SYSTEM. GLENN F. ZELLHOEFER, Bloomington, Ill. Filed Aug. 6, 1930. Serial No. 473,486. 3 Claims (Cl. 62—5.)



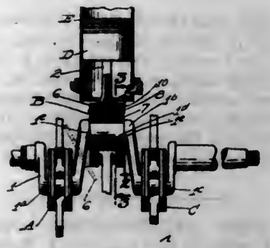
1. A refrigerating system including a gaseous refrigerant and a liquid solvent, an absorber, a still, a condenser, a cooling unit, means conducting the refrigerant from the cooling unit to the absorber, means conducting the solution from the absorber to the still including a chamber in communication with the solution in the absorber and the still, and in communication with the pressure side of the still and with the absorber, valves in said latter communications, a float in the chamber adapted to alternately close one valve and open the other in accordance with the level of the solution in the chamber to admit pressure from the still intermittently to convey the solution from the chamber to the still and alternately to admit the gaseous refrigerant under pressure from the chamber to the absorber below the surface of the solution.

1,895,699. ARC WELDING APPARATUS. ADAM ZISKA, Jr., Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Aug. 8, 1930. Serial No. 473,874. 13 Claims. (Cl. 219—8.)



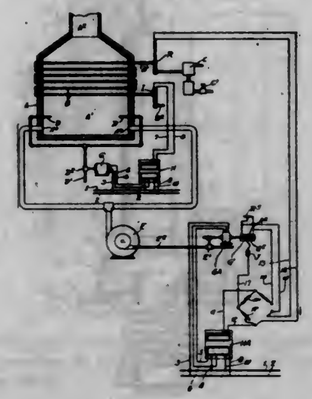
1. In an electric arc welding apparatus in combination a piston for moving the welding electrode, a cylinder in which said piston reciprocates, fluid under pressure supplied to the cylinder on each side of the piston, and means responsive to an abnormal characteristic of the arc for varying the pressure of the fluid to cause the piston to correctively alter the arc length.

1,895,700. CONNECTING ROD CONSTRUCTION FOR RADIAL ENGINES. LEE M. BOWMAN, Los Angeles, Calif., assignor to Dawn Motors, Ltd., a Corporation of Nevada. Filed Oct. 22, 1929. Serial No. 401,561. 1 Claim. (Cl. 74—17.)



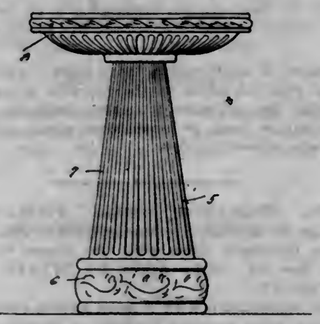
In a means of the class described, a longitudinally split hub having spaced apart annular flanges at its periphery, plates at the outer sides of the flanges for securing the separate members of the hub together, a master rod rigidly and removably secured to one member of the hub between the flanges thereof, and a plurality of secondary rods pivotally connected at one end to the hub between the flanges thereof.

1,895,701. OIL HEATER CONTROL. RICHARD P. BROWN, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 11, 1926. Serial No. 115,183. 16 Claims. (Cl. 196—132.)



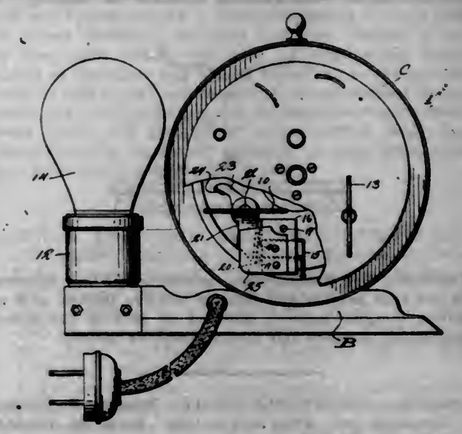
1. In heating oil to a refining temperature in a tube heater, the improved method of maintaining an approximately constant oil temperature at the heater outlet which comprises making a compensating adjustment in the ratio of heat supplied to heat required in automatic response to the occurrence of a change in a condition of heater operation which would be followed by a subsequent change in the exit oil temperature if no such adjustment were made.

1,895,702. BIRD BATH. EMMETT BURLEY, Zanesville, Ohio. Filed Feb. 11, 1932. Serial No. 592,405. 1 Claim. (Cl. 119—1.)



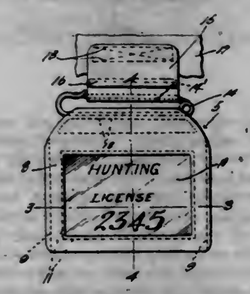
In a bird bath, in combination, a longitudinally tapered hollow stem provided with an exterior annular shoulder inwardly from the largest end of the stem, a removable bowl provided on the under side of its bottom with a circular socket of a smaller diameter than the bowl fitting the smallest end of said stem, said bowl being also provided adjacent the outer edge thereof with an external annular shoulder; the construction of the stem and bowl respectively being such as to permit a plurality of like stems and bowls being respectively nested one within the other, with the shoulder on one stem abutting the largest end of a second stem when said stems are nested, and the shoulder of an outer bowl abutting the edge of the rim of a second bowl when said bowls are nested together.

1,895,703. SILENT ALARM CLOCK. THOMAS J. CRANWILL, Olathe, Kans. Filed Mar. 29, 1932. Serial No. 601,848. 2 Claims. (Cl. 200—35.)



1. In a signal and time operating means therefor, a switch secured to said operating means and operable thereby, said switch comprising a base, a pair of spaced contacts mounted on the base, a resilient contact having an end portion secured to the base and overlying said pair of contacts and normally disposed out of contact therewith, a non-conducting member carried by said operating means and a lever engaging said non-conducting member and operable by said operating means to swing said non-conducting member into engagement with the resilient contact to move said latter contact into engagement with the pair of contacts.

1,895,704. LICENSE HOLDER. FRANK F. CROSBY, Hughesville, Pa. Filed Apr. 20, 1932. Serial No. 606,460. 3 Claims. (Cl. 40—10.)

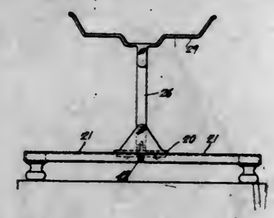


1. A holder of the character described, comprising a normally flat pocket open at one side, and formed with a rear wall and a front wall, the latter having an aperture and a transparent plate secured to said front wall and closing said aperture; said front wall having a portion extending beyond the open side of the pocket and folded rearwardly upon itself to provide two parallel portions stitched together remote from the free end of the extended portion of said front wall thereby presenting a flap arranged to overlap the rear wall and close the open side of the pocket.

1,895,705. SUPPORT FOR ACCORDIONS. PASQUALE DE LUCA, Pittston, Pa. Filed Dec. 9, 1931. Serial No. 579,963. 4 Claims. (Cl. 248—41.)

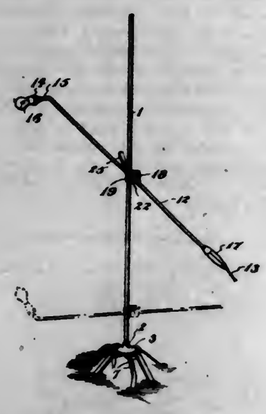
1. A support of the character described comprising a base member, supporting feet therefor removably at-

tached to said base member, clamping plates cooperating with said base member for securing the feet at fixed positions relative to the base member, means connecting said clamping plates with the base members for clamping the



supporting feet therebetween, article supporting members on the base member and foldable relative thereto, and an article carrying member mounted on each of the article supporting members and foldable relative thereto.

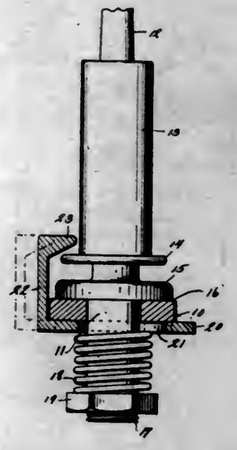
1,895,706. ADJUSTABLE LIGHT. HERBERT F. DORRIS, Vincennes, Ind. Filed July 9, 1930. Serial No. 466,861. 1 Claim. (Cl. 287—14.)



A clamp for adjustably connecting rod units comprising an elongated substantially U-shaped resilient primary clamp having jaws terminating in inwardly extending lips adapted to embrace one of the rod units, said jaws being provided with alined openings, a rigid secondary clamp having an opening therein to register with the openings in the jaws of the primary clamp and provided with spaced inwardly extending flanges of different lengths, one of which bears against the other of said rod units, a single clamping bolt extending through the openings in the primary and secondary clamps and bearing against both rod units, said bolt being provided at one end with an enlarged head bearing against the outer face of the secondary clamp and having its other end threaded, and a clamping nut engaging the threaded end of the bolt for clamping one of said rod units directly against the adjacent face of the primary clamp and the other rod unit between the terminal lips of said primary clamp.

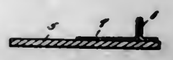
1,895,707. BOBBIN SPINDLE LOCK. ELLIS J. EDWARDS, Scranton, Pa. Filed Feb. 2, 1932. Serial No. 590,446. 1 Claim. (Cl. 118—65.)

In a flanged spindle and a support therefor, a lock for releasably locking the spindle on the support comprising a horizontally disposed plate having an elongated slot to loosely receive that portion of the spindle below the support, the upper face of the plate slidably engaging the support, a vertical extension integral with the plate and extending above the flanged portion of the spindle, and a lug integral with the extension and extending in the direction of the spindle, said lug having an upwardly and inwardly inclined lower face portion, engagement of the flange with the lower face of the lug upon upward movement of the spindle forcibly moving the lug and plate laterally into released position.



1,895,708. [WITHDRAWN.]

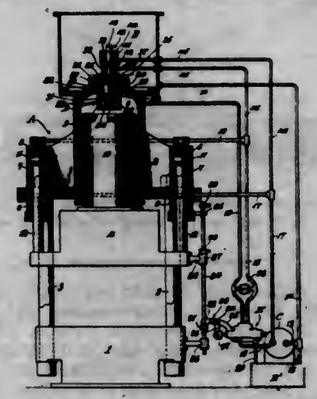
1,895,709. INNER SOLE. GEORGE Y. EMERSON, Rochester, N. H. Filed Oct. 6, 1931. Serial No. 567,267. 1 Claim. (Cl. 12—146.)



A method of constructing inner soles consisting in adhering a strip of fabric to the top side of an inner sole and while the adhesive is moist, gathering the strip transversely to form an upstanding strip, and then permitting the adhesive to dry.

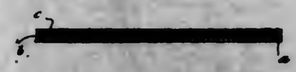
1,895,710. HYDRAULIC PRESS. WALTER ERNST and HOWARD F. MACMILLIN, Mount Gilead, Ohio, assignors to The Hydraulic Press Mfg. Co., Mount Gilead, Ohio. Filed Nov. 24, 1931. Serial No. 577,142. 5 Claims. (Cl. 138—17.)

1. The combination with a press having cylinder means including a main pressing chamber, a booster chamber, a ram-returning chamber, and cooperating ram means in said chambers; of a reservoir; a pump; means forming a hydraulic circuit with said chambers, said reservoir, and said pump comprising a pipe affording constant communication between said pump and said ram-returning chamber, a delivery pipe adapted to afford communication between said pump and said booster chamber, a branch pipe adapted to afford communication between said booster chamber and said main pressing chamber, valve means for controlling flow of fluid through said delivery pipe and said branch pipe and a surge valve independent of said control valve means interposed between said main pressing chamber and said reservoir and including a movable element and biasing means associated with said element for yieldably urging the latter to closed position, said element being movable to open position against the urge of said biasing means during the first part of a pressing stroke by suction in said main pressing chamber; and a differential plunger associated with said surge valve element



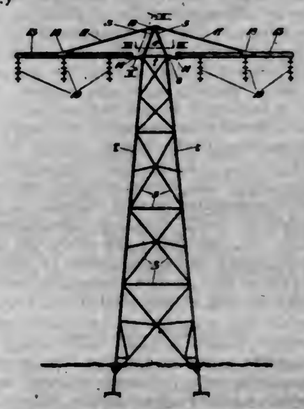
for operating the latter and having its opposite sides exposed to pressure in said ram returning and booster chembers respectively.

1,895,711. COATED SHEET MATERIAL. CHARLES E. FOLBY, Nashua, N. H., assignor to Nashua Gummed & Coated Paper Company, Nashua, N. H., a Corporation of Massachusetts. Filed July 17, 1931. Serial No. 551,435. 1 Claim. (Cl. 91—68.)



As a new article of manufacture, sheet material consisting of a thin sheet of highly transparent cellulosic material one surface of which is uncoated and having its other surface completely coated with a colored adherent and resilient vehicle carrying finely comminuted flock material, the said article of manufacture as a whole being characterized by the transmission of color of the comminuted material through the transparent sheet on one side and a suede-like face on the other side.

1,895,712. TRANSMISSION TOWER ARMS. CHAUNCEY MARSH GOODRICH, Windsor, Ontario, Canada. Filed Mar. 16, 1929. Serial No. 347,576. 2 Claims. (Cl. 189—33.)

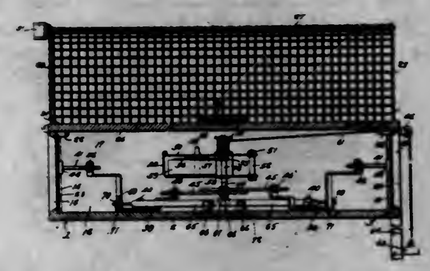


1. In a transmission tower, a transmission line supporting arm structure comprising a pair of horizontally disposed vertically spaced bracket plates secured to said tower at a point appreciably below the upper end thereof, a beam, a tongue rigidly secured to one end of said beam and projecting into the space between said bracket plates, a vertically disposed pivot pin passing through said plates and said tongue to form a pivotal mounting for said beam to permit horizontal swinging movement thereof, a pair of truss bars rigidly connected at transversely spaced points to the upper end of said tower and to the opposite sides of said beam, said truss bars being adapted to normally hold said beam against horizontal swinging movement about said pivotal pin under normal loads, and being yieldable to permit swinging of said beam about said pivot pin under abnormal loads.

1,895,713. β-NAPHTHYL-AMINOARYL-HYDROXY FATTY ACIDS. WINFRID HENTRICH, Leverkusen-on-the-Rhine, JOSEF HILGER, Cologne-Mulheim-on-the-Rhine, and RUDOLF KNOCHE, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 12, 1930, Serial No. 427,937, and in Germany Feb. 18, 1929. 8 Claims. (Cl. 260—109.)

4. The process which comprises boiling in aqueous solution sodium-2.5-dihydroxynaphthalene-7 sulfonate, and at least equimolecular quantity of sodium bisulfite and an about equimolecular quantity of sodium para-aminophenoxy acetate for several hours.

1,895,714. TRAP. OLIVER HENRY HOLLOWELL, Russellville, Ark. Filed Feb. 10, 1932. Serial No. 592,140. 5 Claims. (Cl. 43—73.)

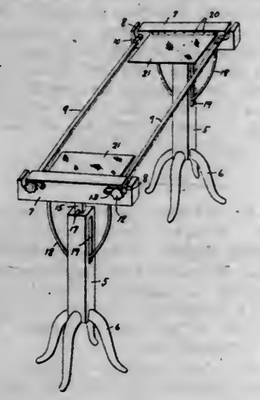


1. A trap comprising a body, runways at the sides of the body, the body having a doorway for each end of each runway, slidable doors of such length as to close both doorways of one runway and leave both doors of the other runway open, means for segregating animals trapped in either runway, a spring motor in the body, between the runways, and having a crank, first levers fulcrumed intermediate their ends on the body, the inner ends of the first levers being engaged with the crank, and the outer ends of the first levers being pivotally engaged with the doors, second levers fulcrumed intermediate their ends on the body, the second levers having their inner ends disposed in the path of the crank, thereby to stop the motor, tiltable platforms in the runways, and means for connecting the platforms with the second levers, to tilt the second levers, one at a time, and disengage them, alternately, from the crank.

1,895,715. QUILTING FRAME. ANNA N. JAMES, Protem, Mo. Filed May 7, 1932. Serial No. 609,863. 2 Claims. (Cl. 45—24.)

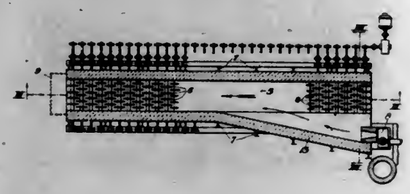
1. A quilting frame comprising a pair of uprights each provided with a socket elongated longitudinally, and also having oppositely disposed slots providing lateral openings for said socket, an adjusting bar for each upright and slidably engaging the socket of said upright, means

for securing each adjusting bar at the desired vertical adjustment relative to its upright, a frame member mounted on the upper end of each adjusting bar, rods bracing each



frame member relative to its adjusting bar and operating in said slots, and rollers rotatably mounted between said frame members.

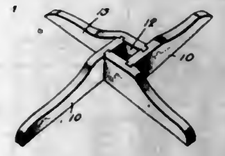
1,895,716. HEATING FURNACE. STEPHEN M. JENKS and HARRY H. SUTHERLAND, Gary, Ind., assignors to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed Jan. 22, 1931. Serial No. 510,544. 1 Claim. (Cl. 263—6.)



A continuous heating furnace for metal sheets and packs provided with a chamber having a relatively high roof at the charging end of the chamber, said roof sloping from the charging toward the discharge end of the chamber to a point approximately midway of the length of said chamber, the roof over the remainder of said chamber being of relatively constant height, at least one side of said chamber being offset at the charging end of said furnace and having a side wall along said offset portion sloping inwardly from the charging end of said furnace to a point approximately midway the length of said furnace, and a burner mounted at the charging end of said chamber and arranged to deliver products of combustion into the offset portion of said chamber and against the sloping roof and side wall along said offset portion of said chamber.

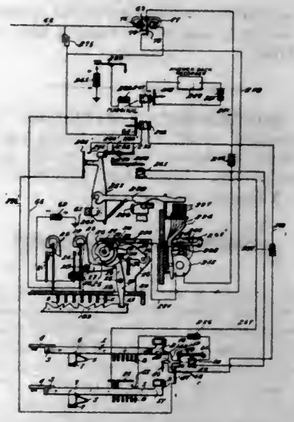
1,895,717. HOLDER. JOHN E. KELLEY, Bangor, Me. Filed May 28, 1930. Serial No. 456,411. 4 Claims. (Cl. 248—38.)

1. A device for holding an article in upright position comprising a plurality of duplicate members each having means at one end permitting and causing attachment with another of said members, and in one side attaching means complemental to said first-named means and located between a relatively short socket wall portion and a longer brace portion of said member, both of said means being vertically arranged when the device is in use and operatively related for slidable engagement with each other, the arrangement being such that any inclination of the article from a vertical position causes both said



means to assume a non-slipping relation with respect to each other, both said means being otherwise freely disengageable.

1,895,718. SELECTIVE SIGNALING AND CONTROL SYSTEM. EDWARD E. KLEINSCHMIDT, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 16, 1928. Serial No. 270,385. 18 Claims. (Cl. 177—353.)

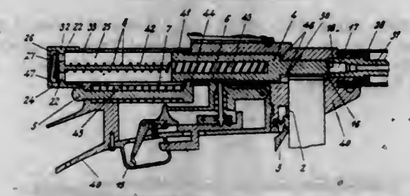


1. In a supervisory control system, a control station, a remote station, a plurality of devices at said remote station to be controlled from the control station over said line, a rotary start stop code transmitter and a rotary start stop code receiver at each of said stations normally in operative relation with said signaling line, means for operating said code transmitter at said control station for transmitting a code combination of impulses to said remote station over said line, means controlled by the transmitter at said control station for preventing the operation of said receiver thereat during the transmission of said code, means whereby said code receiver at said remote station is responsive to said code for conditioning one of said devices thereat for operation and means including the code transmitter at the remote station for transmitting a verifying code to said control station over said line in accordance with said device selected, means at said control station responsive to said code for operating the receiver thereat to verify said selection, means at said remote station for preventing the operation of said receiver thereat during the transmission of said verifying code and means at said control station for operating said selected device at said remote station.

1,895,719. AUTOMATIC FIREARM. AIMO JOHANNES LAHTI, Jyvaskyla, Finland. Filed Dec. 26, 1930, Serial No. 504,924, and in Finland July 5, 1930. 2 Claims. (Cl. 42—3.)

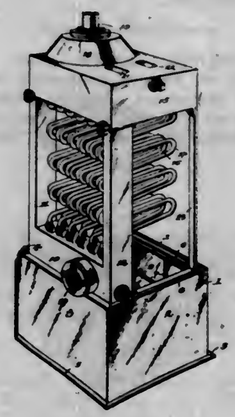
1. An automatic firearm operating by means of reaction pressure comprising a cartridge chamber, a cartridge

channel disposed adjacent said chamber, said channel being provided with a longitudinal guiding bar, the inner edge of which is substantially parallel to the axis of said



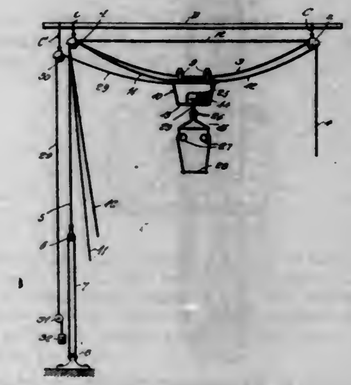
channel, said inner edge also being disposed at substantially the same distance from the axis of said channel as the radius of said cartridge chamber.

1,895,720. BOILER. WILLIS J. MA GIRL, Bloomington, Ill., assignor to P. H. Ma Girl Foundry and Furnace Works, Bloomington, Ill., a Firm composed of James D. Ma Girl, Ida Dalton, and Gertrude Johnston. Filed Nov. 26, 1930. Serial No. 498,482. 1 Claim. (Cl. 122—356.)



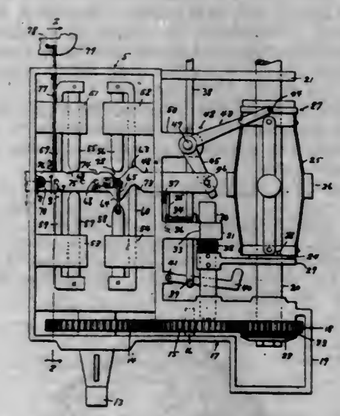
In a boiler, the combination of a base; a heating chamber mounted thereon; a header extending along one side only of the base within said chamber, said header having a water leg extending upwardly from each end of said header; an upper header connected to and in communication with the water legs, said upper header being of such dimensions as to substantially equal the transverse dimensions of the heating chamber and closing the upper portion thereof and said header being provided with at least one flue extending therethrough for the passage of combustion gases, there being a vented chamber formed above the upper header for the reception of the combustion gases; a pair of posts extending upwardly from the base to the side of the upper header opposite the water legs and forming with said legs the support for said upper header; and a series of coils within said heating chamber connecting the headers.

1,895,721. TRAPEZE AND FLYING RINGS. FLORENCE E. MAYO, Jamaica, N. Y. Filed Mar. 23, 1932. Serial No. 600,790. 19 Claims. (Cl. 272—61.)



1. In combination, a trapeze and flying rings set, means for supporting said set in a suspended position, means for moving said set laterally while supported by said first-mentioned means, and means for rotating said set while being moved by said second-mentioned means.

1,895,722. GEAR SELECTOR. HERBERT M. MCLEARN, Waukegan, Ill. Filed Mar. 22, 1932. Serial No. 600,544. 9 Claims. (Cl. 74—97.)



1. A gear selector for a change speed transmission comprising a gear shifting device, a governor mechanism means for operatively connecting the governor mechanism to the gear shifting device, said mechanism being operable for shifting gears according to a predetermined ratio of speed between the drive of the transmission and a rotatable element, and latch means to hold the governor mechanism before and after each selection movement thereof against movement in one direction only, said latch means comprising pawl means, and ratchet teeth on said governor mechanism with which said pawl means is engaged.

1,895,723. CONVERTIBLE AWNING AND SHUTTER. CHARLES F. MILLER and SETH W. BRUNDAGE, Miami, Fla. Filed Dec. 11, 1928. Serial No. 325,228. 6 Claims. (Cl. 20—59.)

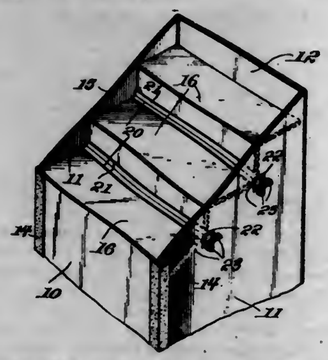


5. In a device of the character described, a protecting member formed of upper and lower sections adapted to be disposed in substantially vertical alinement to serve as a shutter for a window opening and in inclined overlapping relation to serve as an awning therefor, the upper section being pivotally mounted above the window opening for vertical swinging movement, arm members pivotally connecting the lower section to the upper section, and means for swinging said sections into inclined positions adjacent the top of the window opening, said arm members being adapted to cause the upper edge of the lower section to move upwardly relatively to the lower edge of the upper section when the sections are actuated to assume overlapping relation.

1,895,724. PROCESS OF REMOVING SULPHUR COMPOUNDS FROM GAS MIXTURES. ERNEST B. MILLER and GERALD C. CONNOLLY, Baltimore, Md., assignors to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Oct. 26, 1927. Serial No. 228,967. 48 Claims. (Cl. 23—3.)

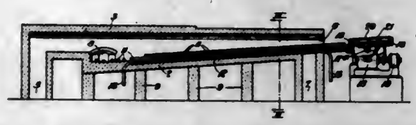
1. The process consisting in contacting a gas containing sulphur compound that can be oxidized to S or SO_2 and an oxidant with a catalyst comprising a highly porous gel and metal oxide.

1,895,725. COLLAPSIBLE DISPLAY STAND. CLAUDE C. NUCKOLS, Menands, N. Y., assignor to Albany Corrugated Container Corp., Albany, N. Y., a Corporation of New York. Filed Feb. 6, 1931. Serial No. 514,035. 9 Claims. (Cl. 211—156.)



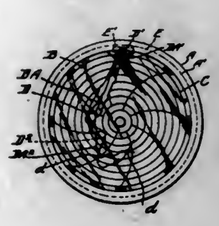
1. A collapsible display stand comprising spaced walls, a collapsible shelf arranged between said walls and including foldably connected sections to provide a plurality of stepped shelf-like portions, and companion angle-shaped elements arranged at the fold of each shelf-like portion to effectively brace the latter and connected with the adjacent walls to rigidly support the shelf-like portions relatively thereto.

1,895,726. HEATING FURNACE. JOHN W. OFFUTT, Ellwood City, Pa., assignor to National Tube Company, a Corporation of New Jersey. Filed Aug. 12, 1931. Serial No. 556,686. 2 Claims. (Cl. 263—6.)



2. The method of heating billets, the steps of which comprise placing a plurality of billets in axial alinement and in spaced relation on the furnace hearth, placing other billets on said first named billets with their axes disposed at right angles to the axes of the said first named billets, turning said first named billets at the discharge end of said furnace into parallelism with said second named billets, permitting all of said billets to come to the desired working heat and discharging all of said billets for processing, whereby all of said billets pass only once through the furnace and the heat adsorbed by all of said billets is utilized.

1,895,727. RECORDING INSTRUMENT FOUNTAIN PEN. WALTER H. PEARCE, Churchville, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 3, 1931. Serial No. 566,663. 15 Claims. (Cl. 120—43.)



1. A fountain pen for recording instruments comprising a shank portion adapted to be connected to a pen supporting arm, an ink reservoir arranged along one side of said shank portion, and a pen point extending transversely away from said shank portion at the opposite side of the latter from said ink reservoir and having an open capillary ink channel formed therein and in communication with said ink reservoir.

1,895,728. WELL PLUNGER AND PACKING. JOHN W. PIPPIN, Corpus Christi, Tex., assignor of one-half to H. R. Giles, Nueces County, Tex., and one-half to W. F. Hall and George Lowrey, Harris County, Tex. Filed Jan. 3, 1931. Serial No. 506,470. 2 Claims. (Cl. 74—109.)

1. In combination, a pump plunger provided with flexible cups intermediate its ends, a buffing element arranged at either side of the cups for polishing the interior of the working barrel in which the plunger is operating, and means for saturating said buffing elements with oil whereby to lubricate the interior of said working barrel.

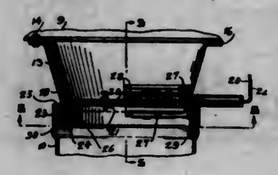


1,895,729. METHOD AND MEANS FOR MOUNTING FISH AND VARIOUS SPECIMENS HOLLOW. ALBERT PFLUEGER, Miami, Fla. Filed Dec. 30, 1931. Serial No. 583,965. 2 Claims. (Cl. 35—12.)



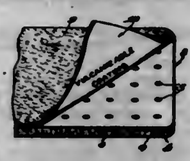
1. A method for mounting specimens hollow, consisting of applying a plastic substance to the inner side of the skin of the specimen, and subsequently stretching the skin over a filler, and finally removing the filler subsequent to the drying of the plastic material.

1,895,730. GREASE GUN FILLER. MILLER PRENTICE, Louisville, Ky. Filed July 15, 1929. Serial No. 378,512. 1 Claim. (Cl. 226—126.)



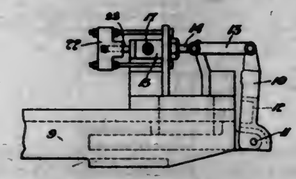
Grease dispensing apparatus comprising supporting framework, a container for slightly fluid material inverted on said framework, a dispensing funnel detachably connected to the lower end of said container and depending below the upper part of said framework, a collar depending from the lower end of said funnel and adapted to extend into the neck of a receptacle, a semi-circular supporting flange extending into the funnel at the intersection of said collar and funnel, said funnel being slotted on the side opposite to said flange and above said flange, and a valve plate slidable through said slot into and out of supporting contact with said flange.

1,895,731. IRONING BOARD PAD. ADAM HENRY PRENZEL, Halifax, Pa. Filed July 21, 1932. Serial No. 623,845. 3 Claims. (Cl. 68—10.)



1. An ironing pad comprising a base of sponge rubber, and a cover for said base, said cover comprising a woven fabric having a vulcanizable coating, said coating uniting the cover with the base and being separable as a unit from the base to enable a replacement cover to be vulcanized to the base.

1,895,732. PIPE WELDING APPARATUS. MAX ROSENKRANZ, Library, Pa., assignor to National Tube Company, a Corporation of New Jersey. Filed Nov. 18, 1930. Serial No. 496,402. 6 Claims. (Cl. 205—10.)



6. The combination with a draw bench of a pipe welding apparatus, of means for automatically spotting said draw bench at predetermined successive lateral positions in the welding end of a furnace, said means comprising power means for moving said draw bench, and fluid operated means actuated by the pipe being welded for controlling said power means.

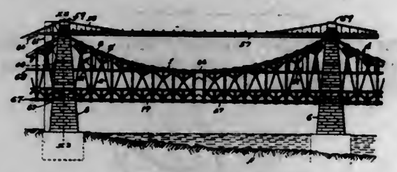
1,895,733. PREPARATION OF MIXED MANURES CONTAINING AMMONIUM NITRATE. SAMUEL RUOSCH, Visp, Switzerland, assignor to Firm: Lonza Elektrizitatswerke und Chemische Fabriken Aktiengesellschaft, Gampel and Basel, Switzerland. Filed Aug. 3, 1931, Serial No. 554,951, and in Switzerland Aug. 10, 1930. 1 Claim. (Cl. 71—7.)

A process for preparing mixed manures containing ammonium nitrate by mixing hot concentrated ammonium nitrate solutions having a water content of about 5 per cent with calcium carbonate from any source, in molten condition, consisting in subjecting the melt in one and the same operative phase to a slow cooling and to a dewatering and degasifying operation without supply of heat and while so restraining the delivery of heat that the crystallization heat may suffice for as great as possible evaporation of the water originally in the melt and formed by reaction as well as for driving off the free ammonia formed by the partial reaction.

1,895,734. TRIADIC, INTERLOCKING STRUT AND TRUSS, CATENARY, AND SUSPENSION BRIDGE. ALLAN C. RUSH, Los Angeles, Calif. Filed Apr. 27, 1927. Serial No. 187,096. 3 Claims. (Cl. 14—18.)

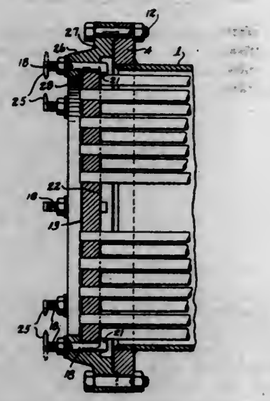
1. A bridge structure comprising a catenary and a suspension hung from the catenary; said suspension com-

prising individual load carriers, stirrups supporting said load carriers, hangers connecting the ends of the individual load carriers to the catenary, double cantilever trusses having articulating ends and pivotally connected



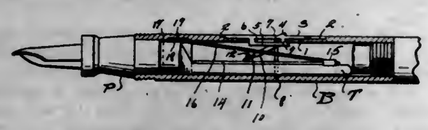
to the catenary, and spacing the hangers apart along the catenary, and stays connecting the intermediate portion of the cantalevers respectively, to the intermediate portions of the stirrups.

1,895,735. FLOATING HEAD AND TEST RING. MELVIN SACK, Louisville, Ky., assignor to Henry Vogt Machine Co., Louisville, Ky., a Corporation of Kentucky. Filed May 9, 1932. Serial No. 610,254. 11 Claims. (Cl. 257—239.)



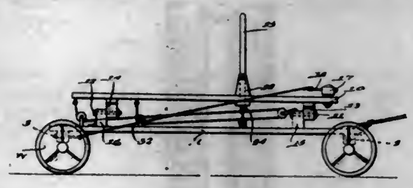
1. A heat exchanger comprising: a shell, a tube bundle, a tube sheet on the floating end of said bundle, and means for securing said tube sheet to the shell to form a test closure therefor.

1,895,736. FOUNTAIN PEN. JULIUS L. SCHNELL, Arlington, N. J. Filed May 27, 1932. Serial No. 613,979. 8 Claims. (Cl. 120—46.)



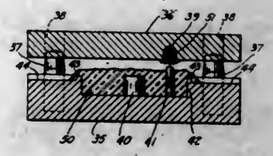
1. In combination with the barrel of a fountain pen having a slot in its wall, a presser bar within the barrel for coaction with a collapsible reservoir within the barrel, a shifter arranged exteriorly of the barrel and having a flange extending within the barrel through the slot, said flange also having a slot extending lengthwise thereof, means held within the barrel and freely inserted through the slot of the flange to hold the shifter in applied position, the slot in the flange allowing the shifter to have endwise movement in substantially a straight path of travel, and an operative connection between the shifter and the presser bar whereby upon movement of the shifter in one direction the presser bar will operate to collapse the reservoir within the barrel.

1,895,737. BALANCING COASTER WAGON WITH AIRPLANE CONTROLS. LLOYD SHAW, Colorado Springs, Colo. Filed Nov. 5, 1930. Serial No. 493,622. 3 Claims. (Cl. 35—12.)



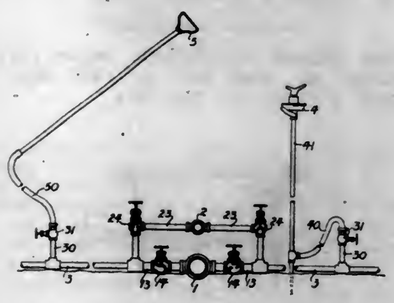
1. A wagon of the class described comprising a chassis, a bed mounted for sidewise tilting on said chassis, and a manually operable control stick connected thereto whereby said bed may intentionally be tilted.

1,895,738. COMBINED HARD AND SOFT RUBBER ARTICLE. CARLETON SHUGG and PRESTON ROBINSON, North Adams, Mass., assignors to Sprague Specialties Co., Quincy, Mass., a Corporation of Massachusetts. Filed May 9, 1930. Serial No. 451,029. 3 Claims. (Cl. 18—59.)



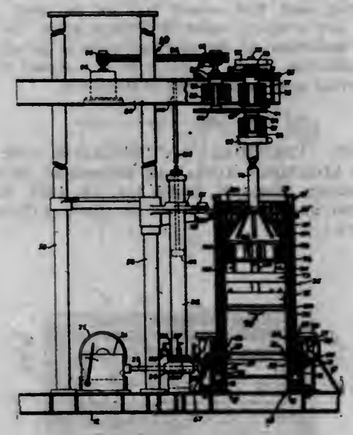
1. In the manufacture of rubber articles, a process which comprises the simultaneous curing of two mixes, one comprising a high percentage of sulphur, a rapid accelerator and no anti-oxidants, and the other comprising a low percentage of sulphur, a slow accelerator and anti-oxidants, joining together said mixes during the curing process by means of homogeneous joint of intermediate sulphur content, said joint being impermeable to leakage.

1,895,739. COMBINED ORCHARD SPRAYING AND SPRINKLING SYSTEM. ALVIN E. SPINDT, Chelan County, Wash. Filed Aug. 13, 1930. Serial No. 474,902. 3 Claims. (Cl. 137—78.)



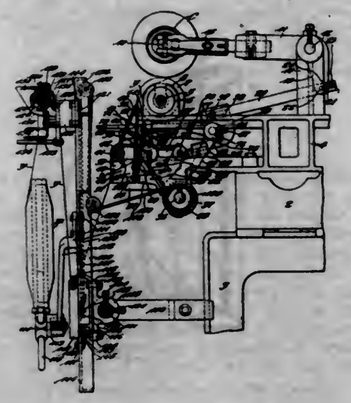
1. In a system for sprinkling and spraying orchards, a water supply main and a spray supply main, laterals extending at intervals from said mains, valve-controlled feeders connecting each lateral with each of said mains, take-off means distributed at intervals along the several laterals comprising valve-controlled branched risers, one branch of each riser being adapted to support and supply liquid to a sprinkler head, and another branch being adapted to have coupled thereto a spray hose.

1,895,740. METHOD OF MAKING CONCRETE PIPE. BOZIDAR J. URKOPINA, Los Angeles, Calif. Original application filed July 6, 1931, Serial No. 549,969. Divided and this application filed July 11, 1932. Serial No. 621,882. 8 Claims. (Cl. 25—155.)



6. The method of making a concrete pipe comprising projecting a mixture of concrete against the inner surface of a cylindrical mold, spinning said mold to cause the moisture to pass to the interior of the concrete, removing the moisture from the interior of the pipe, and thereafter removing a portion at one end of said molded pipe to form a bell mouth.

1,895,741. WINDING MACHINE. ERNEST R. SWANSON, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 26, 1930. Serial No. 447,588. 22 Claims. (Cl. 242—43.)



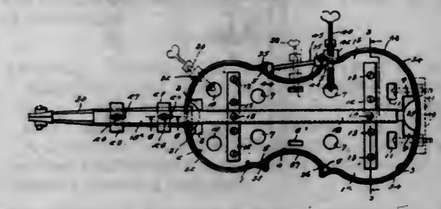
1. In a winding machine, the combination of means for rotating the package, means for traversing yarn on the package, a supply from which the yarn delivers to the package, means engaging the yarn between the supply and the package, and means to move the yarn-engaging means to a position remote from the package during the winding and return it to position adjacent the package when the winding operation is arrested.

1,895,742. RECEPTACLE FOR ICE MANUFACTURE. GEORGE F. WHITEHEAD, Sioux City, Iowa. Filed Jan. 13, 1932. Serial No. 586,432. 1 Claim. (Cl. 62—110.)



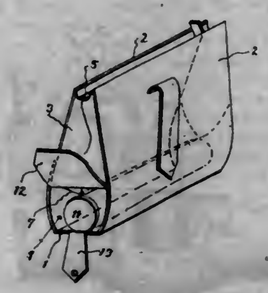
A receptacle for freezing water therein and facilitating the storing of resulting ice, said receptacle having an open top and the sides of the receptacle each being dished from adjacent corners and bottom edge of the receptacle with each corner edge of the receptacle constituting a common edge of the dish formations of adjacent sides to permit lateral expansion of the receptacle during the process of freezing its contents.

1,895,743. VIOLIN GLUING FORM. CHARLES J. AMUNDSON, Osseo, Wis. Filed Aug. 29, 1931. Serial No. 560,161. 8 Claims. (Cl. 144—259.)



1. A gluing form for the upper, lower and center sides, the upper, lower and corner blocks and the neck of a violin; comprising a body having convex upper and lower edge portions and concave side portions to which the sides are to be applied, the body being provided at its upper and lower ends with recesses for the reception of the upper and lower blocks, and the body being provided between its convex edge portions and concave side portions with shoulders, means for removably securing the corner blocks to the shoulders, clamps for holding the sides in place, and means carried by the body and extending outwardly therefrom for holding the neck.

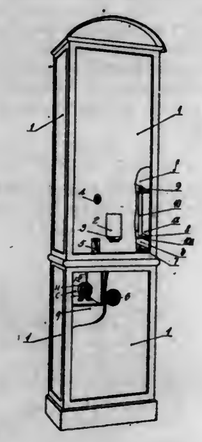
1,895,744. SATCHEL. MAX ARNOLD, New York, N. Y. Filed Dec. 1, 1930. Serial No. 499,857. 2 Claims. (Cl. 150—34.)



2. A satchel including in combination a flexible partition of substantially greater width than the width of the satchel, and extending between opposed walls of the satchel and secured thereto to extend downwardly therebetween when the satchel is in a closed condition, and a

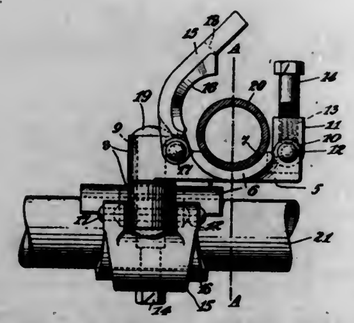
strip secured to the partition on one side thereof and adjacent each longitudinal edge of the partition, said strip being secured at its ends and one longitudinal edge to the partition whereby to provide with the partition a pocket.

1,895,745. AUTOMATIC SELLING MACHINE. ERNEST ASENBAUM, Vienna, Austria, assignor to "Frecaldo" Automaten-Handelsgesellschaft Richter & Co., Vienna, Austria, a Company. Filed Oct. 31, 1929, Serial No. 403,807, and in Austria Nov. 8, 1928. 4 Claims. (Cl. 226—19.)



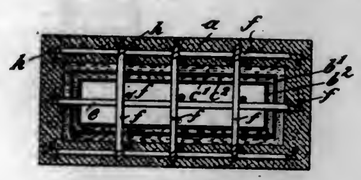
1. In a device of the class described, a rotary conveyor, an empty-cup conduit opening over the central portion of said conveyor, said conduit having means therein for stabilizing the empty cup on the conveyor, cup-filling means opening downwardly into the space between the end of the conduit and the front of the machine, a housing for the filled cups supported eccentrically curved over the conveyor and opening on the outside of the casing, a device for shutting off the cup-filling means from the outside, and means for intermittently operating said closure to allow the filled cups to be conveyed to the outside.

1,895,746. COUPLING DEVICE. SIDNEY E. BATES, Chicago, Ill., assignor to American Safety Device Company, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1929. Serial No. 417,809. 2 Claims. (Cl. 189—36.)



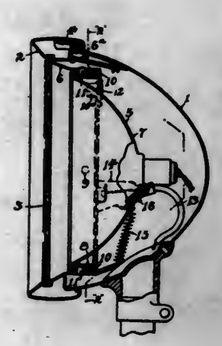
1. Coupling means comprising two coupling devices each adapted to be secured to one of two elements to be coupled together, each of said devices including a body member having an elongated seat for the element and provided intermediate of its ends with transversely projecting lugs extending from opposite sides thereof, a clamping member hinged at one of its ends to one of said lugs, means pivotally connected to the other lug adapted to cooperate with said clamping member to clamp said member against the opposite side of the element, and means directly connecting said first named lugs on the body members of the two coupling units with each other for relative pivotal movement of the coupling units in parallel planes for application to the elements to be coupled in various intersecting angular positions of the latter.

1,895,747. PRESSURE ACCUMULATOR FOR GASES AND LIQUIDS. ALEXANDER BELDIMANO, Berlin-Charlottenburg, Germany. Filed Jan. 16, 1931, Serial No. 509,209, and in Germany Oct. 22, 1930. 4 Claims. (Cl. 72—14.)



1. A pressure accumulator for gases or liquids consisting of a plurality of spacedly nested internal containers and an external pressure-resisting container, the spaces between these internal containers and between the largest thereof and the external container being filled with viscous pressure-transmitting tightening material of different viscosity.

1,895,748. MOTOR VEHICLE LAMP. WILLIAM BIRTWISLE, Hartford, Northwich, England. Filed Oct. 31, 1929, Serial No. 403,838, and in Great Britain Nov. 6, 1928. 3 Claims. (Cl. 240—41.6.)



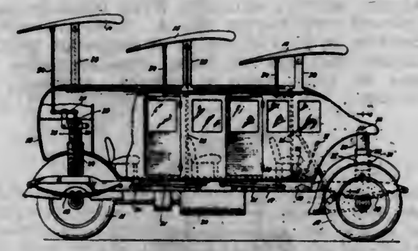
1. In a head lamp, a light projector, a foot-step bearing for such projector, further slot bearings therefor situate at each side of the vertical plane of the footstep bearing, a pin on the projector, a member engaging such pin, means for operating such member to impart by its engagement with the pin angular movement to the projector, and means for constraining the said projector to move bodily in one or the other of the bearing slots in accordance with the direction of angular movement imparted.

1,895,749. VIOLIN HOLDER. PETER STEVENS BISHOP Pasadena, Calif. Filed Jan. 14, 1932. Serial No. 586,613. 5 Claims. (Cl. 84—279.)



1. In a violin holder, a chin rest comprising a plate having a concave upper surface substantially conforming to a portion of a player's cheek and chin, and means for pivotally mounting said plate upon a violin.

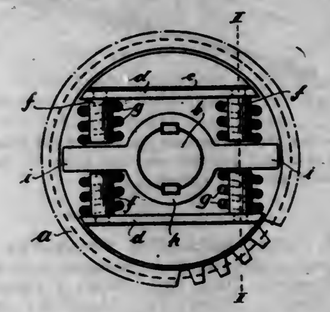
1,895,750. VEHICLE. WOLSTAN C. BROWN, New York, N. Y. Filed Apr. 22, 1929. Serial No. 356,946. 5 Claims. (Cl. 180—1.)



3. In a road vehicle, a traction wheel supported chassis, a body, means to connect the body with the chassis to have vertical movement relative to the chassis, comprising pairs of telescopical tubular members, one member of each pair being connected with the chassis and the other with the body, springs within said tubular members to normally yieldingly support the body from the chassis, an aerofoil tiltably mounted on the body to change the angle of incidence thereof, and means connected with the aerofoil, chassis and body automatically operative to change the angle of incidence of the aerofoil by the movement of the body relative to the chassis.

1,895,751. STEERING GEAR FOR MOTOR VEHICLES. AUGUST BÜLOW, Stettin, Germany. Filed Aug. 30, 1929, Serial No. 389,549, and in Germany July 17, 1928. 2 Claims. (Cl. 74—29.)

1. A steering gear for motor vehicles of the character described, comprising a worm wheel having diametrically opposed, lateral, segmental extensions, a shaft whereon said wheel is rotatably mounted, a collar secured to the shaft between said extensions, radial arms on said collar, studs on said extensions forming abutments for said arms and

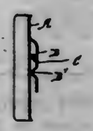


allowing a slight relative movement of wheel and shaft, and springs mounted on the studs and taking the thrust of the arms.

1,895,752. PRIMING MIXTURE. JAMES E. BURNS, Bridgeport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Mar. 23, 1927. Serial No. 177,848. 9 Claims. (Cl. 52—3.)

1. A priming mixture for ammunition, comprising normal lead trinitroresorcinate, mercury fulminate and a non-corrosive oxidizing ingredient.

1,895,753. MEANS FOR THE SUPPORT, PROTECTION, AND TRAINING OF FRUIT AND OTHER TREES. MASON DAVEY, Mapua, Nelson, New Zealand. Filed Aug. 20, 1931, Serial No. 558,246, and in New Zealand Jan. 20, 1931. 3 Claims. (Cl. 47—52.)

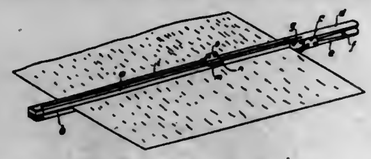


1. Means for use in supporting the branches of fruit and other trees, comprising the combination with a wire band encircling the tree, of a plate of rigid material shaped to curve about its major axis and having a tongue stamped out therefrom parallel to its greatest dimension to extend downwardly over its outer convex side so that the said band may pass beneath it, said tongue being shaped to extend parallel with the plate and having an inwardl ledge or bend across it at a point in its height such that it is adapted to spring over the band when the band is placed beneath the tongue.

1,895,754. MEASURING STICK. MAX FINKENWIRTH, Dahlen, Germany. Filed Feb. 3, 1932, Serial No. 590,653, and in Germany Apr. 29, 1930. 4 Claims. (Cl. 164—73.)

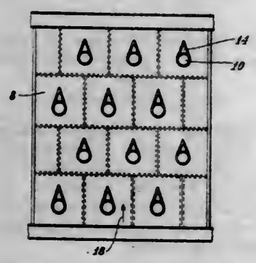
1. A measuring stick comprising two overlapping, hingedly connected members adapted to clamp the measured material between them and formed each with a central, longitudinal slit, a slide guided on the upper member, a

knife connected to said slide and guided in the slits of the two members for cutting the material, the members being formed with diverging tail ends extending beyond



the hinge for the convenient opening of the members, and a spring arranged between said tail ends for maintaining the members normally closed.

1,895,755. HEAT EXCHANGE APPARATUS. ERNEST B. FREEMAN, Newton, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed Mar. 24, 1932. Serial No. 600,896. 6 Claims. (Cl. 257—241.)

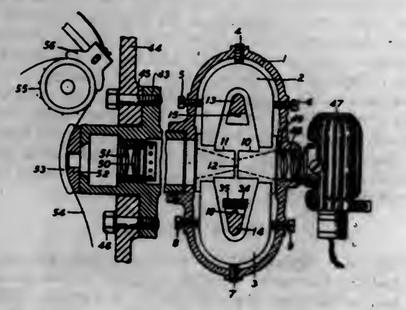


1. Heat exchange apparatus comprising water tubes, a hollow streamline fairing member attached to each tube, and means for passing air to be preheated through the fairing members.

1,895,756. COLLECTOR RING BRUSH. FREDERICK P. FULLER, Yonkers, N. Y. Filed Feb. 7, 1931. Serial No. 514,816. 6 Claims. (Cl. 171—325.)

5. An article of manufacture comprising a collector ring brush composed, at least in part, of hygroscopic salt.

1,895,757. TRANSLATING DEVICE. EDGAR W. GENT, Morristown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 27, 1931. Serial No. 518,741. 5 Claims. (Cl. 88—61.)



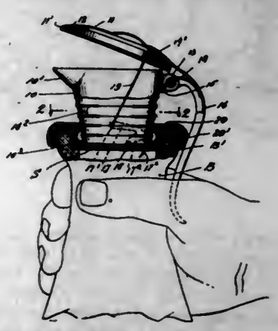
1. The combination in a translating device of a pair of pole pieces formed to define a light-transmitting slot, a mounting member to which said pole pieces are secured in operative relation to each other, a vibratory element for controlling the passage of light through said slot, a second mounting member to which said vibratory element is secured, and means for detachably securing said second mounting member to said first mounting member to locate said vibratory member in operative relation to said light-transmitting slot.

1,895,758. RIBBON PACKAGE. BERTRAM J. GOLDSMITH, Allentown, Pa. Original application filed Oct. 8, 1930, Serial No. 487,109. Divided and this application filed Sept. 9, 1932. Serial No. 632,312. 4 Claims. (Cl. 206—51.)



4. A coreless ribbon package made up of a flat continuous length of non-rigid ribbon wound upon itself a plurality of times so as to provide a series of superposed strands, a continuous rigidifying strip of inexpensive material interposed between the superposed strands, and means for holding the strands of ribbon and the strands of the material in such intimate association with each other as to create a stiffened condition of the whole.

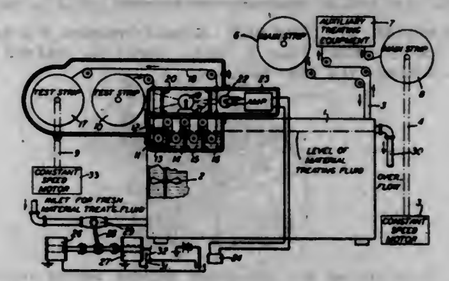
1,895,759. BOTTLE CLOSURE WITH MEANS FOR REMOVING THE PAPER SEALS. ROBERT HAGEBUSCH, Brooklyn, N. Y. Continuation of application Serial No. 529,200, filed Apr. 10, 1931. This application filed Sept. 28, 1931. Serial No. 565,462. 3 Claims. (Cl. 215—55.)



1. A removable bottle closure, comprising a hollow body having a movable lid, a piercing member pivotally mounted at the bottom of said body so as to swing in the arc of a circle and operatively connected to the lid, so that when said lid is opened while the device is in the neck of a bottle the paper seal thereof will be pierced and picked up when said device is removed.

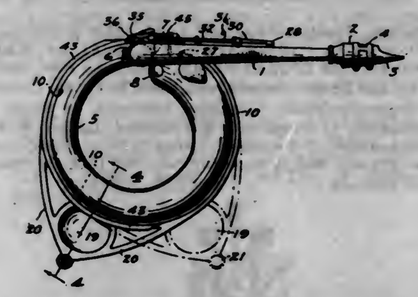
1,895,760. FLUID-TREATING APPARATUS. FRANKLIN L. HUNT, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 28, 1931. Serial No. 511,788. 10 Claims. (Cl. 95—89.)

1. In a photographic-treating apparatus, a tank containing a photographic-treating fluid, continuous motion means for passing a photographic film through said fluid, a test film bearing a predetermined uniform exposure, means for passing said test film through said fluid, means for maintaining the rate of the speed of said last means proportional to the speed of said continuous motion means,



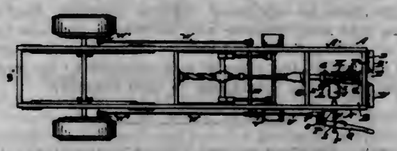
whereby said photographic film passing through said fluid and said test film passing through said fluid are correspondingly treated, means for testing the treatment of said test film and means responsive thereto for altering the rate of treatment of said photographic film passing through said fluid.

1,895,761. SLIDE SAXOPHONE. MARTIN JUHN, Lakewood, Ohio. Filed June 10, 1932. Serial No. 616,469. 6 Claims. (Cl. 84—385.)



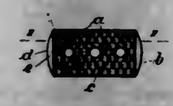
4. A wind instrument comprising a mouth pipe, a tubular horn body having the form of a circular loop, said body having an external circumferential slot, a tone controlling band covering said slot and rotatably mounted on the horn body, said band having an outlet opening registering with said slot, and valve controlled means for relieving pressure within the horn body adjacent the outlet opening of the band.

1,895,762. MEANS FOR COUPLING TRAILERS TO A TRACTOR. CHARLES H. LAND, Grosse Pointe, and WILLIAM H. WILSON, Detroit, Mich. Filed Mar. 3, 1932. Serial No. 596,519. 11 Claims. (Cl. 280—33.1.)



1. In an automatic coupling means for tractor-trailers, a king-pin carried by the tractor; means carried by the trailer to receive and guide the king-pin of the tractor into coupling relation with the trailer; a spring actuated latch carried by the trailer adapted to lock said king-pin in coupling relation with the tractor; means for retracting said latch; a spring actuated pawl projecting into the path of the king-pin adapted to overlap the end of the latch when retracted; a brake mechanism for the trailer; and means whereby the brake set may be increased and then partially released by the thrust of the king-pin upon the swinging pawl and latch in effecting an uncoupling engagement between the tractor and trailer.

1,895,763. SAFETY RAZOR BLADE. ADOLF LÜBBERTSMEIER, Barmen, Germany. Filed Dec. 21, 1931, Serial No. 582,335, and in Germany July 2, 1930. 3 Claims. (Cl. 30—12.)



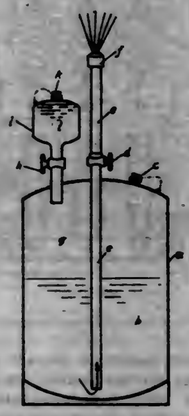
1. A safety razor blade having uniformly arranged small depression areas covering the surface adjacent the cutting edge, said depression areas forming separate and independent raised boundary edges extending inwardly from the cutting edge.

1,895,764. PROCESS FOR THE PRODUCTION OF CATALYSTS. ALWIN MITTASCH, Mannheim, and HERMANN ZORN, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed June 15, 1931, Serial No. 544,698, and in Germany June 28, 1930. 8 Claims. (Cl. 23—288.)

1. A process for the production of a catalyst which comprises subjecting a compound, in the vaporized form, of such an element from groups 3 to 5 of the periodic system as is capable of forming an acid stable and solid at room temperature, to thermal decomposition while excluding oxidizing agents and while contacting it with a carrier substance which is resistant to the temperature requisite for said decomposition.

6. A process for the production of a catalyst which comprises subjecting silicon hydride in admixture with hydrogen to a temperature of about 500° C., while excluding oxidising agents and while contacting the silicon hydride with aluminium oxide.

1,895,765. ARTIFICIAL PRODUCTION OF FOG. ULRICH MÜLLER, Kiel, Germany. Filed Sept. 28, 1928, Serial No. 309,133, and in Germany Oct. 18, 1927. 1 Claim. (Cl. 23—6.)



The method of creating a pressure in a fog-producing apparatus for the purpose of expelling a fog-producing solution of sulphur trioxide in chlorosulphonic acid which

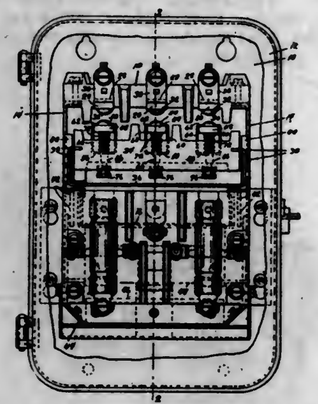
comprises introducing a carboxylic acid dissociable by dehydration into said solution to generate a gas without a solid residue.

1,895,766. METHOD OF AND MEANS FOR ATTACHING THE UPRIGHTS AND MEMBERS OF SCAFFOLDING AND OTHER STRUCTURES. GEORGE WILLIAM MURPHY, Wangaratta, Victoria, Australia. Filed June 13, 1929, Serial No. 370,590, and in Australia Aug. 22, 1928. 2 Claims. (Cl. 304—40.)



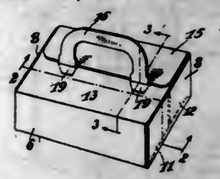
1. A scaffold clamp comprising a bracket including a shoe portion adapted to bear against one side of an upright scaffold member, a step portion spaced above the shoe portion and adapted to support a ledger member, and a clamping portion above the step portion adapted to exert clamping pressure on said ledge member; and a girt having means slidably engaged with said bracket, said girt including a jaw portion adapted to bear against the opposite side of the upright member and confine the bracket shoe portion thereagainst, the bracket shoe portion limiting the sliding movement of the girt on the bracket in one direction, the arrangement being such that the clamp may be applied to the upright member, temporarily adjusted to loosely support the ledger member without exerting clamping pressure thereon, and then adjusted to cause the step and clamping portions to support and clamp the ledger member, the step portion of the bracket being recessed to co-operate with the bracket engaging means of the girt in confining the clamping portion of the bracket against the ledger member when the latter is supported by the step portion.

1,895,767. ELECTRIC SWITCH AND CONTACT STRUCTURE THEREFOR. GEORGE W. O'KEEFFE, Milton, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Original application filed Jan. 24, 1929, Serial No. 334,783. Divided and this application filed Feb. 20, 1929. Serial No. 341,519. 12 Claims. (Cl. 200—166.)



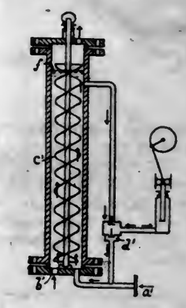
1. In an electric switch, a contact structure including an elongated bar having contact faces at its opposite ends and a flat surface betwen said contact faces, a contact holder having spaced upstanding arms between which said bar is loosely located and restrained from lateral displacement, said arms having inturned ends which overlie and engage said flat surface between said contact faces, and means yieldingly holding said contact member in the aforesaid relation including a pin which is received loosely within said contact member under said abutment member, and a spring urging said pin against said contact member.

1,895,768. FOLDING BOX. NATHAN OTTINGER, New York, N. Y. Filed June 1, 1932. Serial No. 614,693. 5 Claims. (Cl. 229—52.)



1. A folding box comprising a blank having relatively foldable parts to form a bottom, side and end walls of the box, said blank also including closure sections connected with the opposite side walls and foldable into superimposed relation with each other, one of said closure sections having a carrying handle struck therefrom and providing a slot in said section, and the other of said closure sections being provided along its free longitudinal edge with spaced tongues insertable through the ends of said slot closely adjacent to the handle ends and cooperating with said first named section to retain the closure sections in superimposed relation.

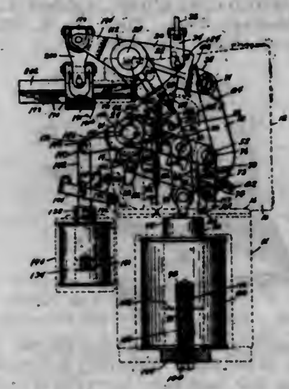
1,895,769. PRODUCTION OF VALUABLE HYDROCARBONS FROM CARBONACEOUS MATERIALS WHICH ARE IN THE LIQUID STATE. MATHIAS PIER, Heidelberg, and EUGEN ANTHES, and KARL WINKLER, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed Nov. 6, 1928, Serial No. 317,575, and in Germany Nov. 10, 1927. 4 Claims. (Cl. 196—53.)



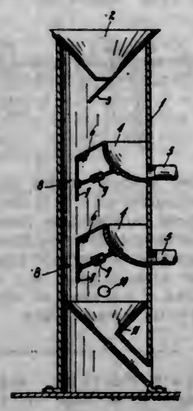
1. The process of producing valuable liquid hydrocarbons from carbonaceous materials by destructive hydrogenation in the presence of a solid catalyst which comprises effecting the destructive hydrogenation by passing the carbonaceous material in the liquid state and the catalyst into an elongated vertical chamber, forcing hydrogen into said chamber and causing a vigorous circulation of said material and catalyst in well defined streams from one end to the other of said chamber to prevent local thickening of the substances in said chamber.

1,895,770. SWITCH OPERATING MECHANISM. HENRY P. PINKHAM, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, Hyde Park, Mass., a Corporation of Massachusetts. Filed Aug. 25, 1931. Serial No. 559,287. 17 Claims. (Cl. 200—89.)

1. Operating mechanism for electric switches including an upper horizontal operating shaft having an operating crank arm, a lower horizontal actuating shaft having an actuating arm, a normally-set inverted tripping toggle releasably connecting said operating and actuating arms for conjoint operation in a switch closing direction, power actuated closing mechanism operatively connected with said actuating arm, means constantly biasing said actuating arm in a switch opening direction, and means releasably holding said actuating arm against the action of said biasing means including a holding toggle having one end thereof pivotally connected wtih said arm intermediate its ends and having its other end pivotally supported on said operating shaft.



1,895,771. CLASSIFYING AND SEPARATING MACHINE. GEORGE A. ROALFE, Long Beach, Calif., assignor to Isabel D. Roalfe, Los Angeles, Calif. Filed Oct. 23, 1929. Serial No. 401,710. 5 Claims. (Cl. 209—139.)



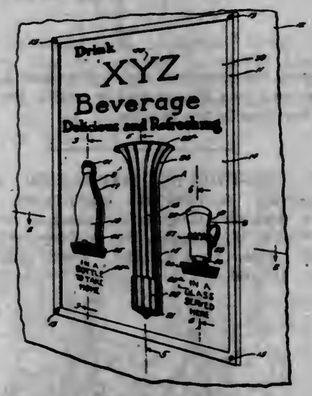
2. A tower, feed means at the top of the tower, a plurality of catch basins arranged in superposed relation in the tower, outlet pipes extending from each basin through which fractional air and products are discharged, a substantially vertically extending baffle adjacent each of the basins, said baffles forming an orifice with the walls of the tower, an air intake adjacent the lower end of the tower, the air from the intake passing through the orifices in decreasing volume, and collecting means at the bottom of the tower, and means to adjust said baffles whereby the size of the orifices is varied.

1,895,772. EQUALIZED DISK BRAKE. RALPH H. ROSENBERG, Syracuse, N. Y., assignor to American Cable Company, Inc., a Corporation of Delaware. Filed Aug. 25, 1927. Serial No. 215,374. 20 Claims. (Cl. 188—78.)



1. The combination with a rotor having a disk portion, of a member freely movable in a direction transverse to the plane of the disk, a pair of brake shoes carried by said member upon opposite sides of the disk, and means operatively connected to one only of the shoes for moving said shoe toward the other to apply both brake shoes.

1,895,773. ADVERTISING DISPLAY. LINDSLEY SCHERMORS, New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Nov. 6, 1931. Serial No. 573,329. 23 Claims. (Cl. 40—126.)

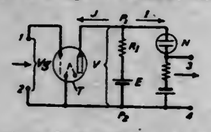


1. In advertising display apparatus, in combination, a panel member, a translucent luminaire extending from said panel member, a source of light associated with said panel member and adapted to light said luminaire, said luminaire adapted to light certain indicia upon said panel, transparent containers associated with said panel to the sides of said luminaire, and means for directing light through said containers.

1,895,774. SIGNAL SHAPING CIRCUIT. FLORENT E. A. SMETS and CARL F. HANSEN, Paris, France, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 12, 1932, Serial No. 586,164, and in France Mar. 21, 1931. 6 Claims. (Cl. 178—44.)

1. A system for modifying the form of electric signals, comprising a three-electrode space discharge device having

an input circuit on which said signals are impressed, and an output circuit, a source of space current and a resistance element in series in said output circuit, a circuit connected across said space current source and series

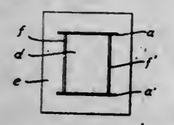


resistance element, and comprising a gaseous space discharge device and an impedance element in series, and means for taking off the voltages across said impedance element.

1,895,775. BITUMINOUS EMULSION. PRESTON R. SMITH, Rahway, N. J., assignor to The Barber Asphalt Company, Philadelphia, Pa., a Corporation of West Virginia. Filed Jan. 26, 1927. Serial No. 163,836. 7 Claims. (Cl. 134—1.)

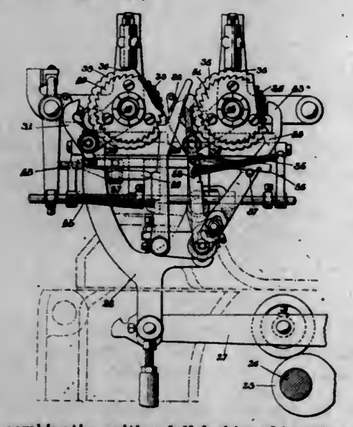
1. A water-external-phase bituminous emulsion produced by the addition of a salt of a metal of the third analytical group to an approximately equal amount of concentrated waste sulphite liquor followed by the emulsification of bitumen with the resulting product.

1,895,776. SPOOL FOR ELECTRICAL COILS. FRANZ STOLP, Berlin-Pankow, Germany, assignor to Siemens and Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany, a Company of Germany. Filed May 8, 1931, Serial No. 535,830, and in Germany June 7, 1930. 5 Claims. (Cl. 175—21.)



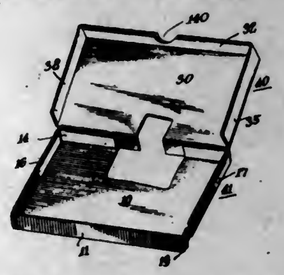
1. A spool for electrical coils comprising four separate flat plates and two flanges and in which the four plates are held together by the flanges.

1,895,777. FASHIONING MECHANISM FOR FULL FASHIONED KNITTING MACHINES. MELCHIOR ZWICKY, Berkshire Heights, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed June 4, 1931. Serial No. 542,055. 3 Claims. (Cl. 66—89.)



1. In combination with a full fashioned knitting machine having thread-carrier rods, reciprocative mechanism therefor, and spaced adjustably shiftable stops adapted to limit the reciprocative traverse of said rods, of means for intermittently shifting said stops, means controlled by the rod reciprocative mechanism for alternately preventing shift of each stop, and latch means to prevent shift of both steps at a predetermined position.

1,895,778. HINGED CONTAINER. CHAMPE S. ANDREWS, North Chattanooga, Tenn. Filed Jan. 8, 1931. Serial No. 507,308. 3 Claims. (Cl. 229—34.)



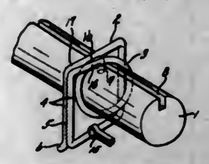
1. In a hinged box for stockings and the like, a body of relatively thin paper board comprising a bottom wall of single thickness, side, back and front walls of double thickness, a cover of relatively thin paper board comprising a top wall of single thickness, side and front walls of double thickness, a back wall of single thickness adhesively secured to said body back wall, whereby a box is provided which, when closed, has front and side walls of quadruple thickness and a back wall of triple thickness stiffened by adhesive, said front and side walls telescoping throughout their entire height to provide strength against crushing when the container is closed.

1,895,779. METHOD AND APPARATUS FOR CROSS CUTTING WIRE GLASS. GEORGE AUBIEN and PAUL F. GUTMANN, St. Louis, Mo., assignors to Mississippi Glass Company, New York, N. Y., a Corporation of New York. Filed July 10, 1929. Serial No. 377,090. 19 Claims. (Cl. 49—48.)



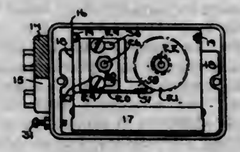
3. In the method of cross cutting sheet wire glass, the steps of cross scoring the surface of the sheet in a plurality of closely spaced parallel lines intermediate its ends, applying bending strains to fracture the glass at the scored lines whereby a plurality of strips of glass are formed, and then breaking the wires between said strips while maintaining the portions of the sheet on opposite sides of the lines in a substantially common plane.

1,895,780. CURTAIN FIXTURE. JOSEPH M. BARRETT, Cleveland, Ohio. Filed Sept. 3, 1931. Serial No. 560,976. 6 Claims. (Cl. 156—21.)



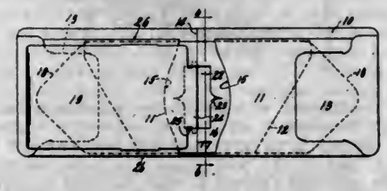
1. A drapery supporting device comprising, in combination, a supporting rod, and a member adapted to interfit with said rod, cooperating means on said rod and said member for preventing relative rotative movement therebetween, and spring-pressed jaws on said member at the level of said rod and adapted to engage and support a portion of a drapery in front of said rod to thereby conceal the rod.

1,895,781. THREAD HOLDER FOR WEFT REPLENISHING LOOMS. HARRY H. BUXTON, Webster, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 22, 1932. Serial No. 600,461. 4 Claims. (Cl. 139—247.)



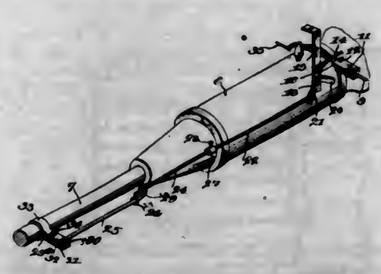
1. In a loom thread holder having a travelling thread engaging surface and a vibrating mass, a ratchet operatively connected to the traveling surface, a pawl carried by the vibrating mass to engage the ratchet and means to prevent the pawl from giving the ratchet a substantial retrograde movement.

1,895,782. PASS CASE. WARNER R. BUXTON, Longmeadow, Mass. Filed Mar. 10, 1931. Serial No. 521,412. 7 Claims. (Cl. 150—39.)



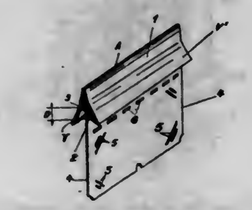
1. In combination, a flexible binder strap, a relatively stiff and not readily flexible leaf having opposed grooves near one end thereof in which grooves edges of said strap are engaged to permit swinging and limited sliding movement of the leaf relatively to the strap, and means slidably engaged with the strap on opposite sides of said leaf and movable into position to hold said edges against disengagement from said grooves.

1,895,783. BLEEDER VALVE LOCK AND RELEASE. LEZIME C. CHASSEY, New Bedford, Mass. Filed Apr. 16, 1931. Serial No. 530,621. 2 Claims. (Cl. 303—80.)



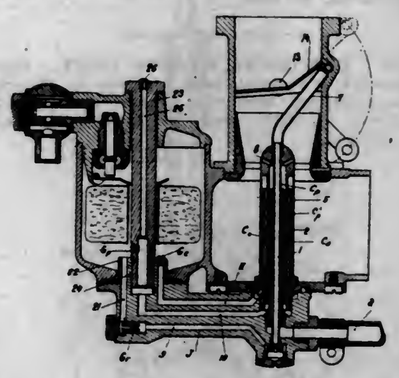
1. The combination with a brake cylinder having a piston rod and a bleeder valve; of a bleeder rod for operating said valve, a protuberance rigidly secured to said bleeder rod and forming a shoulder, a pivoted keeper element engageable with said shoulder to lock said bleeder rod in adjusted position, and located at right angles to the bleeder rod a rocking lever engageable with said keeper element and a connection between said lever and said piston rod whereby to rock said lever into engagement with said keeper to disengage the latter from the shoulder upon movement of said piston rod to brake releasing position, said connection including a bracket carried by said piston rod and an operating rod between said bracket and one end of said rocking lever, the keeper element normally resting on the protuberance.

1,895,784. INDEX CARD. ANDRÉ ANTOINE CHAUVIN, Paris, France. Filed June 18, 1931, Serial No. 545,251, and in France Dec. 17, 1930. 5 Claims. (Cl. 129—16.7.)



1. A card for card indexes of the type set forth, formed with two folded portions, the fold of one of which is spaced from the upper edge a desired distance and the fold of the other of which is spaced from the upper edge a different desired distance, each said folded portion forming a hook adapted to engage with the upper edge of the next succeeding card to determine the amount of overlap between the two cards, for the purposes set forth.

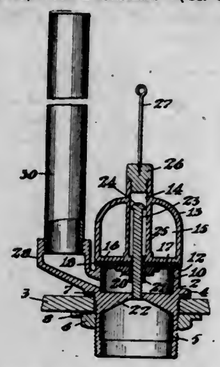
1,895,785. CARBURETOR. CHARLES HENRI CLAUDEL, Veuxhaulles, France, assignor to Societe Anonyme la Cooperation Agricole & Industrielle, Veuxhaulles, France. Filed Nov. 9, 1928, Serial No. 318,156, and in France Mar. 31, 1928. Renewed Nov. 3, 1932. 5 Claims. (Cl. 261—41.)



1. In a carburetor comprising in combination three calibrated plugs the first for reduced speed and running light, the second for normal speed on level and the third for slow-speed on up-grades, an emulsion forming chamber fed by said normal speed calibrated plug and provided with direct output orifices towards the engine, another emulsion forming chamber fed by said calibrated plug for up-grades, a narrow passage between said two chambers whereby the second emulsion chamber and consequently the calibrated plug for up-grades will be sub-

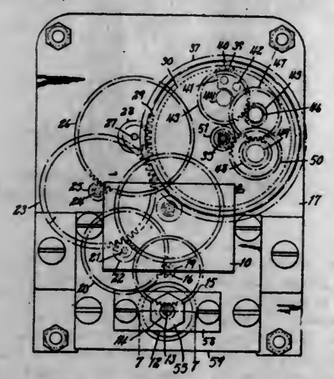
jected to a less suction than the first chamber and the calibrated plug on level, said two chambers supplying each emulsion towards the engine through the same output orifices.

1,895,786. FLUSH VALVE. ARTHUR T. COBB, Exeter, N. H., assignor to Exeter Brass Works, Exeter, N. H., a Corporation of New Hampshire. Filed Mar. 5, 1931. Serial No. 520,247. 2 Claims. (Cl. 4—57.)



1. A flush valve for water closets comprising a valve body having a straight outlet passage therethrough and provided with a hollow lateral threaded extension having a downwardly inclined channel leading from the threaded portion thereof into said outlet, a valve seat at the upper side of said body surrounding said outlet, a float forming the movable element of said valve and having a flat face on its lower side, a valve washer supported on said face, means for securing said washer in place, said float having a central bore therein and a closed annular air chamber surrounding said bore and separated from said bore, the bore being provided with an internal shoulder, a rod rigidly supported in said valve body and extending into said bore in the float, said rod serving to guide the float as the float is moved toward and from said seat and having a head positioned in said float to engage said shoulder and thereby limit the movement of said float away from said seat, and means fastened to the upper end of said float for lifting the float.

1,895,787. ELECTRICALLY-WOUND CLOCK. GEORGE P. COWLES, Waterbury, Conn., assignor to Waterbury Clock Company, Waterbury, Conn., a Corporation. Filed Mar. 10, 1930. Serial No. 434,564. 10 Claims. (Cl. 185—40.)

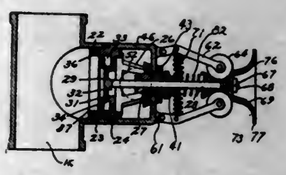


1. An electrically-wound clock having a motor, a mainspring, a winding-train for imparting the motion of the former to the latter, a pair of co-acting locking abutments, one of which is retirable out of the path of the other, and respectively driven at differential rates of speed but in the same direction by the said motor, the said retirable abutment moving at a much lower rate of speed than its complementary abutment, and connections between the said main-spring and the said retirable abutment for moving the same out of the path of its co-acting abutment upon the unwinding of the main-spring for unlocking the said winding-train to permit it to rewind the said main-spring.

1,895,788. PROCESS OF MAKING ANTHRAQUINONES. LLOYD C. DANIELS, Buffalo, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 21, 1923. Serial No. 676,163. 10 Claims. (Cl. 260—57.)

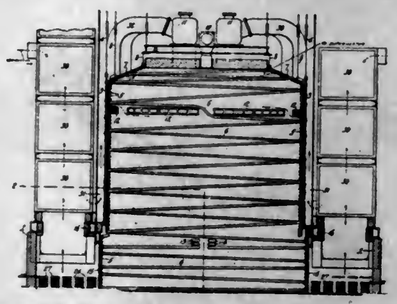
1. In the manufacture of an anthraquinone body from a reaction mixture containing an o-aroylbenzoic-aluminum chloride compound and a solvent with an amount of strong sulfuric acid sufficient to produce an anthraquinone body and recovering the anthraquinone body from the resulting mixture.

1,895,789. MANIFOLD ATTACHMENT FOR INTERNAL COMBUSTION ENGINES. FRANK F. W. DOERING, Los Angeles, Calif., assignor of one-half to Walter R. Hearn. Filed May 14, 1930. Serial No. 452,285. 21 Claims. (Cl. 123—124.)



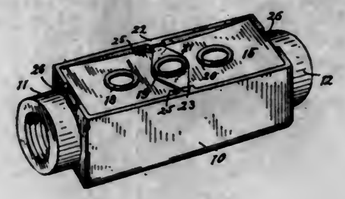
1. In combination with means for introducing fuel to the intake manifold of an internal combustion engine, a housing adapted to be interposed into said manifold and having a port in the wall thereof, a valve associated with said port and adapted to open the port by moving therefrom inwards with respect to the housing, spring means resisting inward movement of said valve, and means cooperative with said spring means for reducing the resistance offered thereby subsequent to initial inward movement of said valve.

1,895,790. TUBULAR STEAM BOILER. MARTIN EULE, Berlin-Spandau, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Nov. 14, 1929, Serial No. 407,137, and in Germany Mar. 14, 1929. 9 Claims. (Cl. 122—250.)



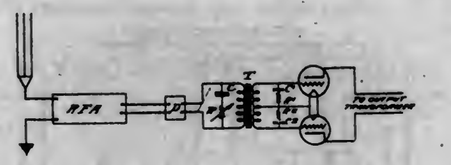
1. A vertical boiler having a polygonal outside contour and having a vertical combustion chamber, and means for supplying fuel from one of its ends, the portion of said chamber near the fuel supply having cylindrical form, and the remainder of the chamber having polygonal form, and steam generating tubes arranged in coils along the walls of both chamber portions to follow respectively the round and polygonal contour of said chambers, said combustion chamber being dome-shaped at its fuel supply end, said dome consisting in part of a pipe coil following the dome contour and uniformly surrounding the flame emanating from the fuel supply and forming part of the generating coil system, whereby the coil dome is heated by radiation from said flame.

1,895,791. CONDUIT FITTING. ARTHUR L. GARFORD, Elyria, Ohio. Filed Dec. 13, 1930. Serial No. 502,109. 6 Claims. (Cl. 247—15.)



1. An electrical conduit fitting consisting of a box having an open side and interior ledges on opposite walls and inwardly projecting lugs on some of said walls overlying and spaced from the ledges thereon, and a cover of resilient material for said open side having edge portions positioned between said ledges and said lugs engaging some of said ledges and having retaining means on its outer surface engaging said lugs.

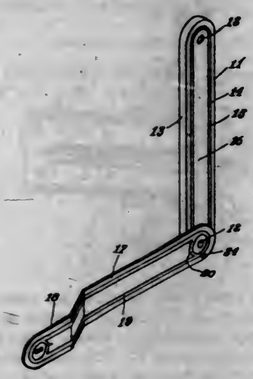
1,895,792. RADIO RECEIVING APPARATUS. ALFRED H. GREBE, Hollis, N. Y. Filed Dec. 24, 1930. Serial No. 504,566. 5 Claims. (Cl. 179—171.)



1. In a radio receiving set an audio frequency amplifier having a sensibly non-uniform response throughout the band of useful audio frequencies, an audio frequency transformer circuit in which there is the combination of a secondary circuit effectively resonant to a frequency near the upper end of the audio frequency range and a primary circuit resonant to a frequency near the lower end of the audio frequency range.

1,895,793. ADJUSTABLE WINDOW SHADE SUPPORT. HENRY C. HAGEDORN, Lynbrook, N. Y. Filed Jan. 15, 1932. Serial No. 586,776. 2 Claims. (Cl. 156—24.)

1. In a device adapted to mount a roller shade on a window, a bracket secured on the window, and an arm pivotally mounted on said bracket, said arm supporting said roller, a ridge on said bracket, said arm having a groove adapted to be engaged by said ridge to interlock said bracket and arm in normal position, said bracket having an arcuate slot therein, said arm having a lug riding in said slot for limiting the pivotal movement of said arm about said pivotal mounting.

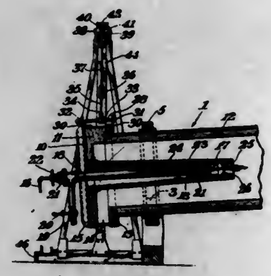


1,895,794. MOTION PICTURE PROJECTOR APPARATUS. ARTHUR C. HAYDEN, Brockton, Mass. Filed Jan. 15, 1930. Serial No. 420,984. 7 Claims. (Cl. 248—43.)



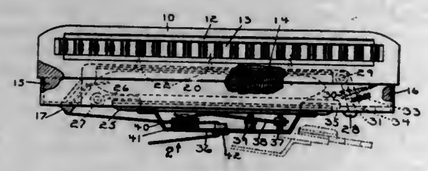
7. A tripod comprising the combination of a post, means having a set of upwardly-extending leg attaching means and another set of downwardly-extending leg attaching means secured to the lower end of the post, and cooperating legs detachable from either set of leg attaching means, the legs, when engaged with the upwardly-extending set of leg attaching means, being in collapsed relation adjacent to and extending upwardly along the post and, when engaged with the downwardly-extending set of leg attaching means, extending downwardly in diverging relation to support the post.

1,895,795. KILN. JAMES S. HOLLOWELL, Cranford, N. J., assignor to Natural Products Refining Co., Jersey City, N. J., a Corporation of Delaware. Filed July 3, 1930. Serial No. 465,681. 14 Claims. (Cl. 263—33.)



6. An inclined rotary kiln adapted for roasting chrome ore in the formation of chromates, inclined so as to feed the same forwardly, comprising a source of heat applied at a point therein intermediate the kiln ends, said ends providing, respectively, a roasting zone and a cooling zone and an air conveying housing located around said source of heat, the source of heat including a burner located between the roasting and cooling zones.

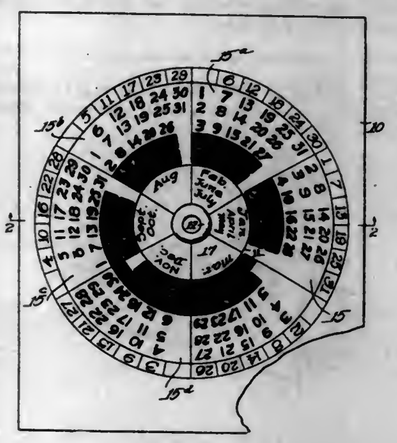
1,895,796. SHUTTLE FOR NARROW WARE LOOMS. ELBAIDGE R. HOLMES, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 2, 1929. Serial No. 383,034. 11 Claims. (Cl. 139—198.)



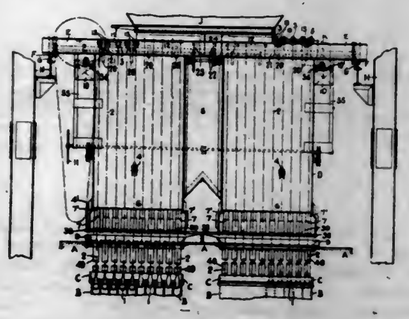
1. In a shuttle for narrow ware looms, a body having a cavity therein and having provision by which a shuttle may be moved, a metallic shell non-rotatably fixed to the shuttle at all times and having a portion lying within the cavity of the body, said shell being open on one side, and a cover pivoted to the shell and movable pivotally through said open side and positioned to close the open side thereof to form a substantially closed metallic compartment for weft.

1,895,797. SELECTIVE CALENDAR. JOSEPH H. ERNEST HOULE, Worcester, Mass. Filed Feb. 26, 1931. Serial No. 518,466. 1 Claim. (Cl. 41—13.)

A selective calendar for use in determining future dates under a fixed working cycle of six days having four different kinds of twenty-four hour periods each with distinguishing working characteristics, said calendar comprising a card and a dial pivoted thereon, the faces of said card and dial being each divided into a number of circular segments of equal angular extent and equal in number to the number of days in said working cycle and said parts constituting month and numeral members, the segments on the month member each bearing the name of one or more selected months and the segments on the numeral member each bearing consecutive numerals from one to thirty-one inclusive, said numerals being arranged in a plurality of concentric annular spaces on each segment of said numeral member and the number of said concentric annular spaces on each segment being equal in number to the number of days in the working cycle and to the number of segments in each of said members, said numerals being also arranged consecutively in substantially radial columns in said segments, with each different concentric space containing numerals indicating days having the same working characteristics, the numeral "one" in each numerical series being positioned in an annular space on its segment which is at a distance from the dial axis different from the space containing the numeral "one" in any other segment, and the name of each month being displayed in a segment on the month member which for any relative angular setting of said members contains the numeral "one" in that annular space which is next in consecutive order to the annular space occupied by the numeral indicating the last day of the preceding month, for all years except leap year.



1,895,798. APPARATUS FOR FEEDING COAL OR OTHER GRANULAR MATERIAL. STEWART ROY ILLINGWORTH, Radyr, Wales, assignor to The Illingworth Carbonization Company, Limited, Manchester, England. Filed Dec. 15, 1931, Serial No. 581,237, and in Great Britain Dec. 19, 1930. 14 Claims. (Cl. 214—18.)



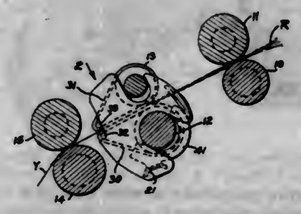
1. The combination of a container, means for feeding granular material into the container and tamping mechanism for imparting, in succession, blows to the head of the charge within the container, which comprises a flexible nonrigid member having attached at its lower end a weight forming the tamping head, means for imparting intermittent upward movement to said non-rigid member, and means for taking up slack in the said non-rigid member with the rise of the head of the charge within the container.

CARNEGIE LIBRARY OF ATLANTA

1,895,799. TREATING PARTIAL OXIDATION PRODUCTS. JOSEPH HIDY JAMES, Pittsburgh, Pa., assignor to Clarence P. Byrnes, trustee, Sewickley, Pa. Original application filed May 18, 1923, Serial No. 639,986. Divided and this application filed June 19, 1929. Serial No. 372,218. 7 Claims. (Cl. 260—116.)

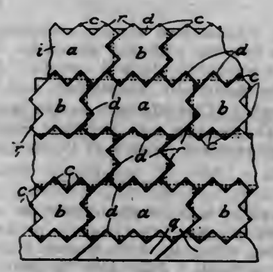
1. The method of treating a partial oxidation mixture containing hydrocarbon oxygen derivatives of different molecular weights, consisting in fractioning the same into fractions of different average molecular weight, each containing oxygen derivatives of different molecular weights, separating the fractions and then further oxidising a fraction or part thereof.

1,895,800. GUIDING DEVICE FOR LONG DRAFT APRONS. JOHN A. JESSEN, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed June 16, 1930. Serial No. 461,277. 1 Claim. (Cl. 19—131.)



In a spinning frame having upper and lower drawing rolls, upper and lower long draft aprons, and a separate supporting frame for each pair of said aprons with spaced side plates and with upper and lower cross bars connecting said side plates substantially at opposite sides of said lower drawing roll, in combination, an apron guiding device mounted in said supporting frame between the side plates thereof and between said cross bars and bridging the gap between adjacent portions of said side plates, said guiding devices having portions between and abutting said upper and lower cross bars and also partially embracing said lower cross bar, and said guiding device being securely held from displacement thereby but being detachable and readily removable manually from guiding position.

1,895,801. TILE. AUGUSTE VICTOR KELLER, Thundersley, England. Filed Jan. 15, 1929, Serial No. 332,654, and in Great Britain May 16, 1928. 3 Claims. (Cl. 189—85.)



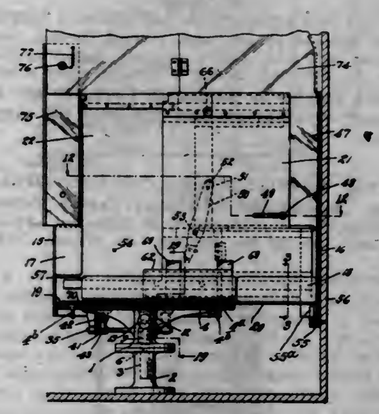
1. A tile adapted to be interengaged with any one of a series of tiles of varying dimensions, comprising an integrally-moulded, rectangular slab with projections and recesses alternating along its edges, each of said projections and recesses being of a depth approximately equal to half the thickness of said slab, of right-angled triangular shape and of equal size, and the bases of said triangular projections and recesses being each equal to the side of the smallest tile of the same series.

1,895,802. PRESSURE GAUGE. WINNIFORD W. KLYCE, Pontiac, Mich. Filed Aug. 3, 1928. Serial No. 297,157. 3 Claims. (Cl. 73—109.)



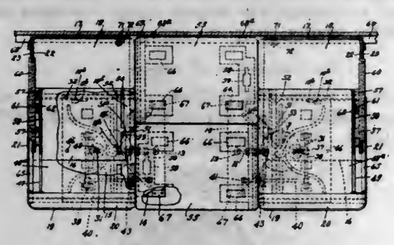
2. A pressure gauge comprising a circular casing, a nippled inlet opening inward of the peripheral wall of said casing, a Bourdon tube within said casing and supported from the inner end of said inlet, a pressure indicating mechanism operably connected to the free end of said Bourdon tube, a pressure equalizing chamber formed within said casing in the rear of said Bourdon tube and the indicating mechanism, and having communication with the supported end of said Bourdon tube, and a substantially spiral conduit within said casing and extending adjacent the peripheral wall thereof and between the said inlet and the chamber for conveying fluid under pressure to the latter and thence to said Bourdon tube, said conduit being arranged to prevent fluctuations in the pressure during its passage therethrough.

1,895,803. CHAIR CONSTRUCTION. FRANKLIN W. KOHLER, Chicago, Ill. Filed July 28, 1927. Serial No. 209,052. 15 Claims. (Cl. 155—6.)



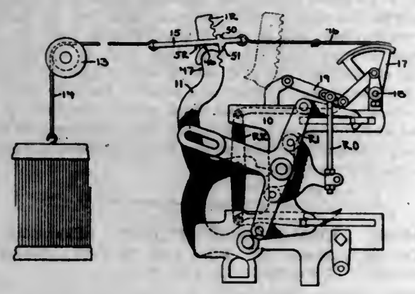
9. A chair construction comprising a base, a seat, a back having a plurality of overlapping sections movably connected together, a lever pivoted to one section and movably connected with another of said sections, and means for moving said lever to move the sections relatively, said latter means simultaneously extending the seat of the chair.

1,895,804. CHAIR CONSTRUCTION. FRANKLIN W. KOHLER, Chicago, Ill. Filed July 28, 1927. Serial No. 209,053. 11 Claims. (Cl. 155—6.)



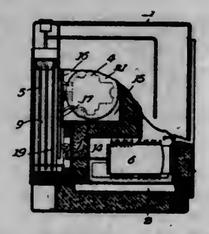
10. A chair construction comprising a base, a base plate fixed thereto, a bottom formed of sections slidably connected together, one of said sections adapted to be moved toward and away from the front of the device, a back formed of sections overlapping from front to rear and slidably connected together.

1,895,805. LENO JUMPER SADDLE. CARL J. LINDEGREN, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 22, 1931. Serial No. 558,770. 6 Claims. (Cl. 139—51.)



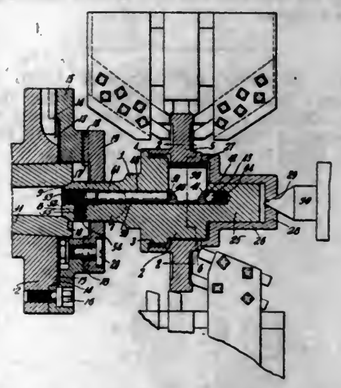
1. In a leno motion for a loom dobby, a harness jack having notches in one edge thereof, a leno loop surrounding the jack, and a support encircling the jack below the loop and having a part to enter a notch in the jack and having another part opposite the notches weighted to engage the jack and hold the support in position.

1,895,806. REFRIGERATOR. CARL E. L. LIPMAN, Chicago, Ill., assignor to Lipman Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 2, 1930. Serial No. 479,389. 21 Claims. (Cl. 62—115.)



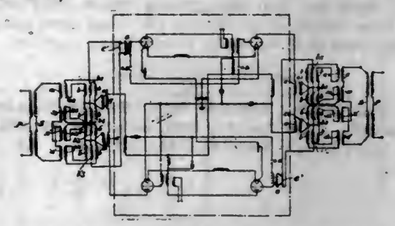
1. A refrigerator comprising a cabinet having a compartment in the upper portion thereof, a motor compressor unit disposed in said compartment, an air flue in communication with said compartment and extending to the lower portion of said cabinet and opening exteriorly of the cabinet at its lower end, and a fan arranged to induce a flow of air therethrough.

1,895,807. INTERNAL DRIVING FIXTURE. JOHN E. LOVELY, Springfield, Vt., assignor to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Apr. 8, 1930. Serial No. 442,561. 2 Claims. (Cl. 82—43.)



1. A fixture comprising a body having a portion over which work may be placed, said body having a recess, a work engaging jaw in said recess, a spring pressed fulcrum element releasably securing said jaw in said recess with capability of limited pivotal movement about an axis eccentric to said body portion into and out of engagement with work on said portion, a fulcrum member engageable with said jaw opposite to said element, and means for fixing said member in position.

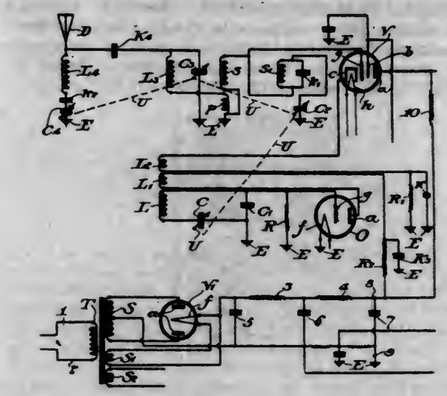
1,895,808. TELEPHONE REPEATER. JAMES P. LOWE, Lima, Peru. Filed Feb. 24, 1932, Serial No. 594,836. and in Great Britain Jan. 30, 1931. 8 Claims. (Cl. 179—170.)



5. A signal transmission system comprising two one-way paths, a two-way path and means for joining said one-way paths electrically to said two-way path and for rendering them electrically independent, said means comprising a plurality of transformers having their primaries connected to the two-way path and their secondaries connected through balanced circuits to the one-way paths.

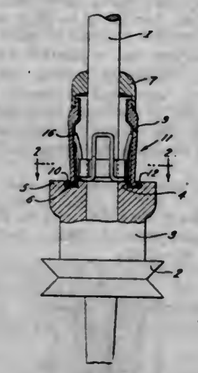
1,895,809. RADIO RECEIVING SYSTEM. VERNON C. MACNABB, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 23, 1930. Serial No. 470,014. 12 Claims. (Cl. 250—20.)

1. A superheterodyne receiving system, comprising a selector system, a first detector, an intermediate frequency amplifier, a second detector, and a local generator of oscillations, said selector system comprising an antenna path including an inductance in series with serially related capacities, one of which is variable and another larger than the maximum value of the variable capacity utilized in tuning, tunable to undesired signal frequencies differing from the desired signal frequencies by twice the intermediate frequency, another component of said selector system tunable to the desired signal frequencies comprising a loop including inductance and a



variable tuning capacity, means for impressing upon the first detector the voltage across a terminal of said loop and a point dividing the loop inductance into components one of which in series with the variable capacity of said loop constituting a series resonance combination tunable to said undesired signal frequency, and means for coupling said antenna path to said other component of said selector system.

1,895,810. BOBBIN CLUTCH. GEORGE H. MAGRATH, Whitinsville, Mass. Filed Aug. 26, 1930. Serial No. 477,811. 3 Claims. (Cl. 242—46.6.)

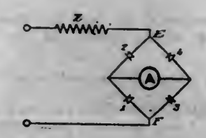


1. Apparatus of the character described comprising a blade, a whirl secured to the blade, the whirl having a hub provided with a neck fitting around the blade and an annular recess surrounding the neck, a case concentric the blade and secured at its upper end thereto and having a plurality of vertical slots, a plurality of clutching members seated at their lower ends in said recess with their contact segments disposed in the vertical slots of the case, a spring comprising a piece of resilient wire shaped to define an annular base and a plurality of upwardly extending resilient fingers, said spring being concentric the blade within the case and having its fingers engaging said contact segments, and means for securing said spring in a fixed relation to the clutching members.

1,895,811. PROCESS OF TREATING ORES. HARRY MORGAN, Walnut Park, Calif. Filed Feb. 5, 1930. Serial No. 426,194. 2 Claims. (Cl. 23—19.)

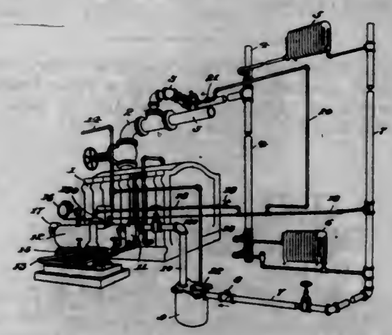
1. A process of treating molybdenum ores containing copper comprising adding concentrated sulphuric acid to said ore, heating the mixture thereby forming copper sulphate but leaving most of the molybdenum in insoluble form, adding water to the mixture to dissolve the copper sulphate, and separating the insoluble parts of the mixture from the solution.

1,895,812. ELECTRICAL MEASURING INSTRUMENT. JOHN H. MORECROFT, Palisade, N. J. Filed Dec. 24, 1930. Serial No. 504,607. 3 Claims. (Cl. 171—95.)



2. In an alternating current meter of the rectifier-direct current meter type employing a moving coil, an electrical network in parallel with the moving coil of the direct current meter, said network being so proportioned that the numerical ratio of the average current through said coil to the voltage impressed upon the alternating current meter is substantially independent of the frequency of the impressed voltage.

1,895,813. VACUUM STEAM HEATING SYSTEM. DOUGLAS E. NASH, South Norwalk, Conn., assignor to Nash Engineering Company, South Norwalk, Conn., a Corporation of Connecticut. Filed May 7, 1928. Serial No. 275,573. 10 Claims. (Cl. 237—9.)

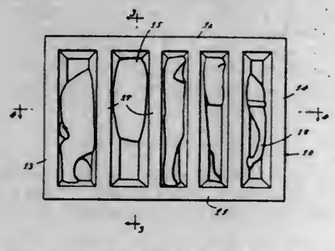


10. A vacuum steam heating system, comprising a boiler, radiators, steam supply and return lines, a receiving and separating tank for the condensate, a pumping apparatus for placing the return side of the system under a vacuum and returning the water of condensation to the boiler, said return line having a low point located below the level of said tank, and an automatically operating pumping mechanism interposed substantially at said low point in the return line for feeding fluid into said tank.

1,895,814. EDUCATIONAL DEVICE. VICTOR B. NELSON, Rockford, Ill. Filed Jan. 10, 1981. Serial No. 507,792. 6 Claims. (Cl. 35—12.)

1. An educational device comprising a block of plastic material formed at the outset to show one or more por-

tions of the block as though sculptured, said block having the rest thereof left blank and unsculptured whereby an object may be sculptured from the block by sculpturing the blank portions, so that the first mentioned portions form a part of the surface of the object when completed.

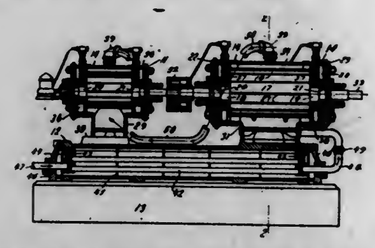


1,895,815. PERMANENT WAVE APPARATUS. GUST W. PETERSON, Long Beach, Calif. Filed Mar. 8, 1932. Serial No. 597,549. 14 Claims. (Cl. 132—36.)



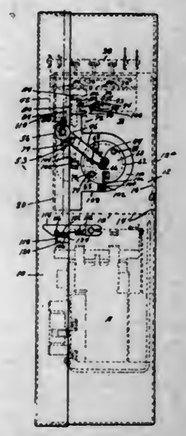
11. In a device of the class described, a spool around which a strand of hair is adapted to be wound, the spool having an axial bore and a plurality of passages communicating therewith and having portions leading onto an exterior surface of the spool, means forming an enclosure for the spool and comprising co-operable sections and adapted to contain moisture, the said bore opening to the exterior of said enclosure means, and means for heating the moisture container.

1,895,816. COMPRESSOR AND VACUUM PUMP. CÉSAR PFEIFFER, Asnieres, France, assignor to Fuller Company, a Corporation of Delaware. Filed Apr. 15, 1930. Serial No. 444,448. 1 Claim. (Cl. 230—210.)



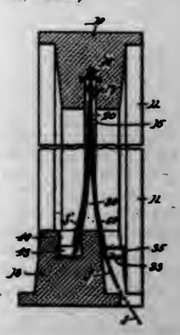
A multiple stage rotary compressor comprising the combination of a low pressure stage, a high pressure stage, an elongated hollow base upon which the stages are mounted, each stage comprising a stator casing having a central bore, a cylindrical rotor provided with a shaft mounted for rotation in the cylinder heads on each side of the casing, the stages being aligned on the base with adjacent shafts coupled for a common drive, the shaft of the low pressure stage extending through the cylinder head for coupling to a prime mover, the low pressure stage having an air outlet and a connection opening into the base at one side and near one end thereof, the high pressure stage having an air inlet and a connection opening from the base at the opposite side and near the other end thereof and water carrying tubes arranged within the base provided with transverse air baffles to cause the air to describe a sinuous course through the base in counter flow to the water in the tubes to cool the air between compressor stages, interconnected water jackets on the compressor stages, and connections between the discharge ends of the water tubes and the low pressure stage water jacket.

1,895,817. ELECTRIC SWITCH. HENRY P. PINKHAM, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, Hyde Park, Mass., a Corporation of Massachusetts. Filed Jan. 19, 1931. Serial No. 509,718. 22 Claims. (Cl. 200—50.)



1. In an enclosed electric switch, a switch casing provided with a movable cover, a switch in said casing having a movable switch member, switch operating mechanism for said movable switch member, a reciprocable locking member, means associated with said switch operating mechanism for reciprocating said locking member in response to opening and closing movement of said switch, said locking member having a locking shoulder, a fixed abutment adapted in one position of said locking member to engage said shoulder and in another position to be free therefrom, means constantly biasing said locking member into engagement with said abutment, and a cooperating abutment carried by the cover arranged to engage said locking member in the closed position of the cover and move said locking shoulder free from said abutment.

1,895,818. DISPLAY FRAME. PAUL H. REGAN, Fitchburg, Mass. Filed Nov. 9, 1931. Serial No. 573,848. 6 Claims. (Cl. 40—152.)



1. A display frame comprising a main frame and a movable frame member, said frame and member having normally aligned sign-receiving recesses in their inner faces,

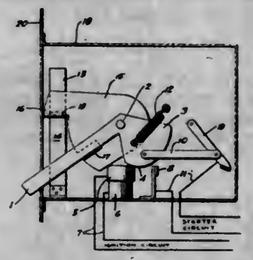
and means to permanently assemble and support said movable frame member on said main frame and to guide said movable frame member transversely relative to said main frame and perpendicular to the plane thereof to an assembled position therewith out of alignment with end portions of the recesses therein, whereby a sign may be removed therefrom.

1,895,819. CONVEX CUTTING METHOD AND APPARATUS. ALFRED M. REMINGTON, Fitchburg, Mass., assignor to Simonds Saw & Steel Co., Fitchburg, Mass., a Corporation of Massachusetts. Filed Nov. 28, 1927. Serial No. 236,315. 12 Claims. (Cl. 51—110.)



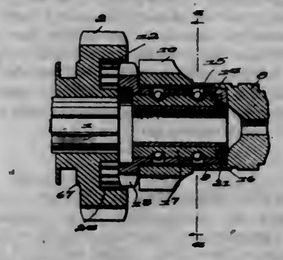
1. The method of treating a flexible strip of stock by a grinding wheel having an annular cutting face to form the lateral portions of one side of the strip convex in contour, consisting in flexing and feeding the strip into and out of the interior of said wheel and, during such feeding movement, bringing the corners of one side of said strip into contact with the concave inner edge of the cutting face at an acute angle thereto whereby the corners will be transversely removed.

1,895,820. INTERLOCKING SWITCH. CUTHBERT E. REEVES, Buffalo, N. Y. Filed Feb. 14, 1930. Serial No. 428,347. 11 Claims. (Cl. 123—179.)



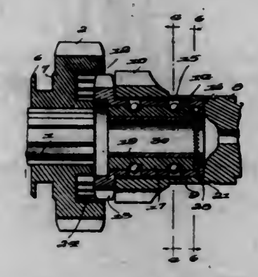
1. Control means for an internal combustion engine having an ignition circuit and a starter mechanism, comprising a switch for said circuit and a switch for said mechanism, and means enforcing opening of the ignition circuit after once the engine has been started and preliminary to again closing the starting switch.

1,895,821. CLUTCH MECHANISM FOR USE IN MOTOR VEHICLE TRANSMISSIONS. WALTER G. RUECKART and ELMER B. ANDERSON, Big Spring, Tex. Filed Sept. 22, 1930. Serial No. 483,654. 8 Claims. (Cl. 192—48.)



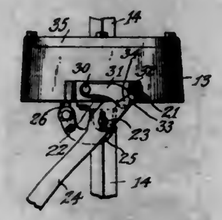
1. In a transmission mechanism, the combination of a driving shaft, an internally toothed gear slidable thereon, a driven shaft provided with a recess and an externally toothed clutch member, a toothed clutch member located intermediate said internally and externally toothed members provided with a sleeve rotatable in said recess, an overrunning clutch constructed and arranged for automatically clutching and unclutching said intermediate clutch member and driven shaft in accordance with variations in the relative speeds of said member and shaft, said intermediate and externally toothed clutch members being constructed for successive engagement by said internally toothed gear.

1,895,822. CLUTCH. WALTER G. RUECKART and ELMER B. ANDERSON, Big Spring, Tex. Filed Sept. 22, 1930. Serial No. 483,655. 5 Claims. (Cl. 192—45.)



1. In a clutch, the combination of a driving member having an apertured sleeve, a clutch member enclosed within said sleeve and provided with a plurality of grooves of progressively increasing depth, a clutch member surrounding said sleeve and provided with a plurality of longitudinal depressions, and clutch ball elements arranged in said grooves and movable into and out of said depressions.

1,895,823. FREIGHT CAR HAND BRAKE. ALBERT A. SMALLWOOD, Martinsburg, W. Va. Filed Nov. 26, 1929. Serial No. 409,843. 1 Claim. (Cl. 188—81.1.)

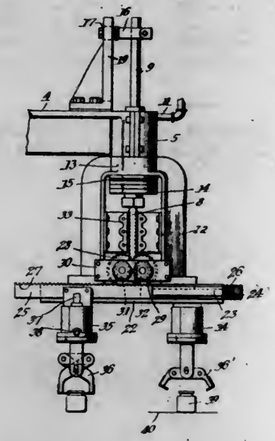


A car hand brake of the kind described, comprising a staff having a hand wheel, winding and unwinding means at the lower end of the staff for a brake chain, a casing about the staff at the proper point above a brake staff step, a knee operated lever pivoted to the casing, a rotary member secured to the staff and within the casing and having peripheral notches, a locking and releasing pin engaging the notches and actuated by the lever, and a latching element mounted to gravitate in frictional engagement with the lever when the latter has moved the pin to locking position to hold said lever.

1,895,824. TRANSFER APPARATUS FOR GLASSWARE. THOMAS STENHOUSE, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Dec. 1, 1928. Serial No. 328,016. 11 Claims. (Cl. 214—1.)

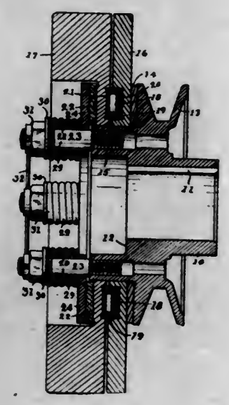
1. A device for transferring glassware, including two complete gripping units, means for simultaneously recip-

rocating the units in opposite directions in a horizontal plane, and means for oscillating the units in a horizontal



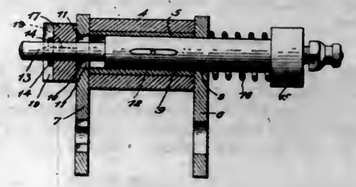
plane to alternately bring both units to the same point for delivery.

1,895,825. TORSIONAL VIBRATION DAMPER. STANLEY R. THOMAS, Cleveland, Ohio, assignor to Peerless Motor Car Corporation, Cleveland, Ohio, a Corporation of Virginia. Filed Apr. 29, 1930. Serial No. 448,406. 3 Claims. (Cl. 74—6.)



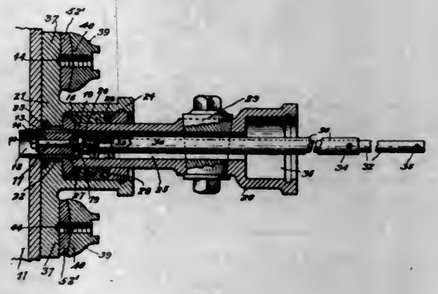
1. In a vibration damper for engine shafts, a hub adapted to be secured to the engine shaft, a fixed abutment at one end of said hub, a pair of fly-wheels supported upon and independently rotatable with respect to said hub, said fly-wheels being of unequal mass, a friction ring interposed between said abutment and the adjacent fly-wheel, a ring rotatable with and slidable axially upon the opposite end of said hub, and resilient means for causing said last named ring to exert pressure against the adjacent fly-wheel, whereby said pressure is transmitted to the second fly-wheel and through said friction ring to said abutment.

1,895,826. BOLT AND APPLICATION THEREOF. LEONEL J. A. TRUDEAU, Waltham, Mass. Filed Jan. 20, 1930, Serial No. 422,202. Renewed July 8, 1932. 2 Claims. (Cl. 267—54.)



1. An assemblage of the class described comprising a spring knuckle and two shackle links contacting with opposite ends thereof, said knuckle and one of said links having openings of uniform diameter, the other link being formed with a relatively small opening having a groove in its wall extending from one side of the link to the other, a bolt snugly received in said openings of uniform diameter and having a reduced end passing through said relatively small opening, the other end of said bolt having an integral head spaced outwardly from said one link, a projecting stud on said reduced bolt end and adapted for passage through said groove and through said openings of uniform diameter, said stud being outwardly spaced from said other link, a collar on said reduced bolt end abutting the outer side of said other link and having a radial groove in its outer side in which said stud is seated, said collar being formed also with an internal groove from its inner to its outer side through which said stud may pass, and a coiled compression spring interposed between said one link and said head.

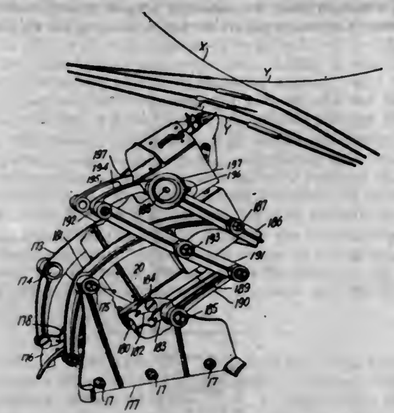
1,895,827. MAIN AND LATERAL CONNECTION AND METHOD OF FORMING SAME. CHARLES E. VAN HECKE, Stevens Point, Wis. Filed Jan. 25, 1930. Serial No. 423,496. 3 Claims. (Cl. 137—73.)



3. In a rigid connection between a main and a lateral fluid conductor, an externally threaded lateral nipple rigidly connected to the main, a saddle secured on the main and having a bell receiving and spaced around the outer end of said nipple, a spigot end on the conductor extending into said bell and threaded upon said outer end of said nipple, and a calked joint in said bell around said spigot end of said conductor.

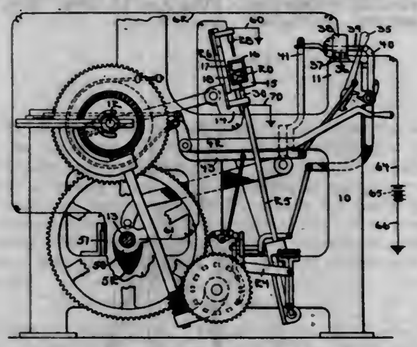
1,895,828. WIRE SPLICING MACHINE. CHARLES L. VAN INWAGEN, Jr., Rutherford, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 14, 1930. Serial No. 443,993. 20 Claims. (Cl. 140—113.)

1. In a wire splicing machine, the combination with means for twisting the wires together and means for operating said twisting means, of means for automatically bending the completed joint into alignment with the un-



twisted portion of the wires, and a device adapted to control said latter means to cause the same to bend the joint in either direction.

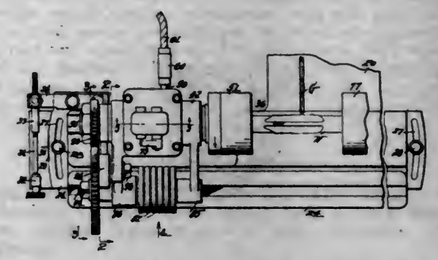
1,895,829. TIMER FOR WEFT DETECTORS OF BOX LOOMS. LEWIS S. VOSE, Needham, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 22, 1932. Serial No. 600,470. 10 Claims. (Cl. 139—232.)



1. In weft detecting mechanism for looms having shuttle boxes which shift every other pick of the loom, an electrical weft detector for each box rendered operative by box shifting to detect weft in the corresponding shuttle when the same moves to inactive position, an actuator having a regular working stroke every second pick of the loom, a member to be engaged by the actuator on a working stroke to stop the loom and initiate weft replenishment, a normally open switch, regularly acting means to close the switch after the actuator has passed the member on a working stroke, an electro-magnetic device to control the member and tend to move the same into operative relation with the actuator, and an electric circuit including the device, switch and a detector and dependent upon closure of the switch to energize the device.

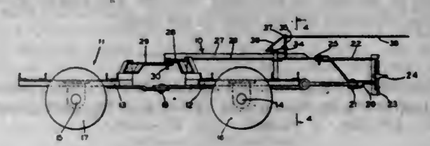
1,895,830. WORKTABLE AND RELIEVING MECHANISM FOR GRINDING MACHINES. ERNEST A. WALKER, Worcester, Mass., assignor to John Bath, Worcester, Mass. Filed Mar. 19, 1931. Serial No. 523,802. 9 Claims. (Cl. 51—94.)

1. In a grinding machine having a grinding wheel and a work slide mounted for reciprocation relative to said grinding wheel, in combination, a work table swiveled on said work slide and mounted to rock about an axis extending longitudinally of the work, means to support and rotate a piece of work on said work table, and means to



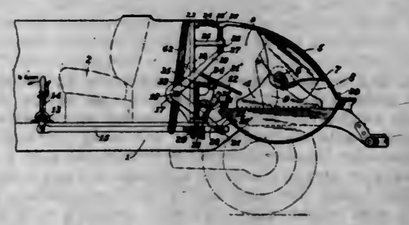
rock said work table on said work slide to swing the work toward and from the grinding wheel, said rocking means being operative in all swiveled relations of said table and slide.

1,895,831. HITCH FOR OFFSET TANDEM DISK HARROWS AND THE LIKE. RAYMOND L. WEST, Santa Ana, Calif. Filed Mar. 19, 1930. Serial No. 437,075. 4 Claims. (Cl. 55—88.)



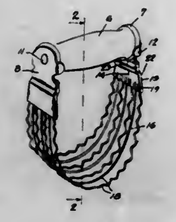
1. A tandem disk harrow construction comprising a front harrow, a rear harrow pivoted thereto, a draw bar pivotally mounted upon the front harrow having attaching means providing for attachment to towing means, and an actuating bar pivotally connected to the draw bar and operatively connected to the rear harrow so as to effect an opening and closing of the harrows, the attaching means, point of pivot for the draw bar, and pivotal connection between the draw bar and actuating bar being arranged substantially upon the same straight line.

1,895,832. RUMBLE SEAT AND MECHANISM FOR OPERATING THE SAME. JOSEPH ZUCCA, Kingston, N. Y. Filed Feb. 19, 1932. Serial No. 594,083. 4 Claims. (Cl. 296—63.)



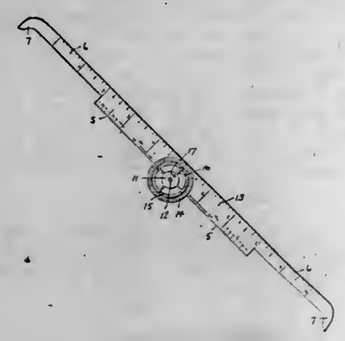
1. A rumble seat adapted to be pivotally mounted in the rear of an automobile, said seat including a deck, a latch for cooperating with the upper forward edge of the deck and a latch cooperating with the lower forward edge of the deck, manually-operated means for exerting an upward pressure on said deck, further means for exerting a pressure on the lower forward edge of said deck, and means for respectively releasing the latches while pressure is being exerted on the said deck for the opening and closing movements.

1,895,833. PASTRY MIXER. STEWART E. BAKER, South Pasadena, Calif. Filed Jan. 8, 1931. Serial No. 507,410. 4 Claims. (Cl. 259—144.)



1. In a mixing device of the character described, a handle, a plurality of mixing or cutting blades comprising pieces of wire bent to U-shaped design, and means for fastening said wires to said handle comprising a plate rigid with and extending laterally from each end of said handle, a socket portion formed in each of said plates, an end of each of said wires extending into the socket of each of said plates, and means securing said wires within said sockets, each of said plates being bent along a transverse line intersected by the associated ends of said wires to provide an abutment therefor and means providing an abutment for the ends of the wires.

1,895,834. COMBINATION IMPLEMENT. EARL ALBERT HAMILTON, St. Louis, Mo. Filed May 12, 1931. Serial No. 536,838. 2 Claims. (Cl. 33—106.)



2. In a device of the class described, a leg having one end portion thereof formed with a disc having a centrally located upstanding hub, a second leg having a disc overlying said first named disc and being provided with a centrally located aperture receiving said hub, a plate secured at spaced points to said hub and overlying the second named disc and having frictional contact therewith, said second-named disc being provided with an annular scale, said plate being provided with a plurality of radial pointers cooperating with said scale to indicate the positions of the legs with respect to each other.

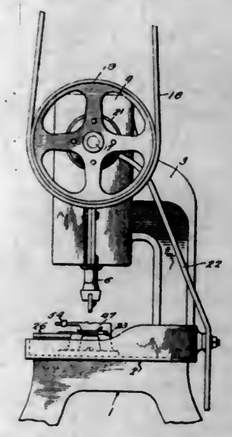
1,895,835. PHOTOGRAPHIC FLASH-LIGHT APPARATUS. FREDERICK GEORGE JOHNSON, London, England. Filed May 15, 1931, Serial No. 537,684, and in Great Britain Apr. 21, 1931. 3 Claims. (Cl. 240—52.)

8. A support for mounting a flash-lamp device upon a photographic camera, comprising in combination a plate mounted upon the upper side of said photographic camera, an element associated with said plate and rotatable thereupon, a second plate horizontally hinged to said element, a reflector of a photographic device, a housing for an electric



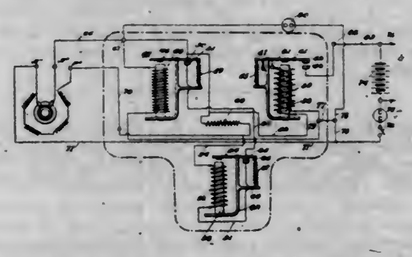
battery formed integrally with said reflector and mounted upon said second plate, a terminal on said housing, a terminal on said photographic camera and a current conductor between said terminals.

1,895,836. SUSPENDER ASSEMBLING TOOL. LYNDON W. JOYCE, Greensboro, N. C., assignor to Joyce-Venning Manufacturing Company, Inc., Greensboro, N. C., a Corporation of Delaware. Filed Apr. 16, 1932. Serial No. 605,753. 10 Claims. (Cl. 223—59.)



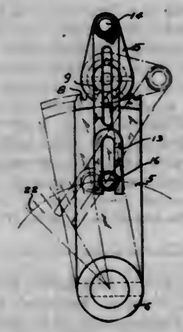
1. Assembling press for integrating in two stages, a suspender slide of that type having a substantially rectangular frame and a middle bar having a trough and end lugs adapted clampably to embrace the end bars of the frame, and assembling the frame with a suspender web, the latter being folded about the middle bar of the slide to form an adjustable loop, between the two stages of integration, said press including a detachable base having supports, fixed primary and secondary dies carried respectively by said supports, the fixed primary die including means having an elongated depression forming a seat for the middle bar of the slide and an anvil at one end of said depression provided with a groove in the top forming a seat for the lug at one end of said middle bar, a block mounted on said base forming a wall at the opposite end of said depression, and adjustably slidable to vary the length of said depression, front and rear guides carried by said block and each independently adjustable crosswise of said depression, said front guide being sufficiently elevated from said base to permit a piece of suspender web to be slipped thereunder and into the trough of the slide, an elongated guide disposed forwardly of said depression for engaging the selvage edge of said web, and adjustable lengthwise of the depression for alining said web with the opening in the trough of the middle bar, said base affording support for a frame laid to one side of said anvil and with an end bar thereof within said lug, a head carried by suitable plunger mechanism, and means mounted in said head constituting movable primary and secondary dies registering with the corresponding dies in said base, said movable primary die having a portion pressing said trough together on said web and another portion bending said lug over the said end bar of said frame, said secondary movable die cooperating with the secondary fixed die after the frame and web assembly has been transferred to the latter die for bending the other lug of said middle bar over the opposite end bar of said frame.

1,895,837. ELECTRICAL APPARATUS. RAYMOND P. LANSING, Montclair, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Original application filed Mar. 13, 1928, Serial No. 261,349. Divided and this application filed Feb. 12, 1929. Serial No. 339,334. 6 Claims. (Cl. 171—229.)



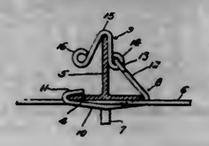
1. In combination with a generator, means for controlling the voltage output of the generator including a pair of contacts and a resistance unit adapted to be placed thereby in circuit with the field winding of the generator, and means including said resistance unit for controlling the current output of the generator, said last named means including a coil and a second pair of contacts in series relation with each other and with the first named pair of contacts.

1,895,838. INDICATOR. FREDERICK W. B. SCHORADT, New York, N. Y., assignor to Chas. Cory Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 7, 1931. Serial No. 514,294. 9 Claims. (Cl. 116—126.)



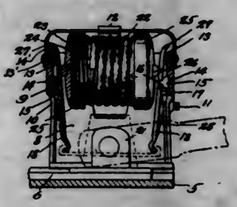
1. In combination with a rudder, a rudder indicating dial, a pointer associated with said dial, a shaft intermediate said rudder and pointer, a gear on said shaft, a member connected to said rudder and adapted to mesh with said gear during only a predetermined portion of movement of such rudder and means for maintaining an operative connection between said rudder and said intermediate shaft notwithstanding any movement of said last named member out of meshing engagement with said gear, said last named means comprising a link mechanism connecting said last named member with said intermediate shaft, said link mechanism being movable relatively to said rudder member, during meshing engagement with said gear, and adapted to form a rigid operative connection during the absence of said meshing engagement.

1,895,839. FENCE WIRE FASTENER. ELMER W. SHIVELY, Carleton, Nebr. Filed Sept. 8, 1931, Serial No. 561,805. Renewed June 13, 1932. 4 Claims. (Cl. 256—57.)



1. In a structure of the class described, in combination a T-shaped fence post, a fence wire, and a fastener for securing said fence wire to the post, said fastener comprising a pair of complemental hingedly connected sections, one section being releasably connected with the plate portion of the post and intersecting and securing wire to said post and the other section being yieldably and releasably engageable with the flange portion of the post.

1,895,840. RECOIL BUFFER FOR CUTTER BARS. NATHANIEL B. STONE, Washington, D. C. Filed Oct. 24, 1931. Serial No. 570,913. 11 Claims. (Cl. 56—306.)

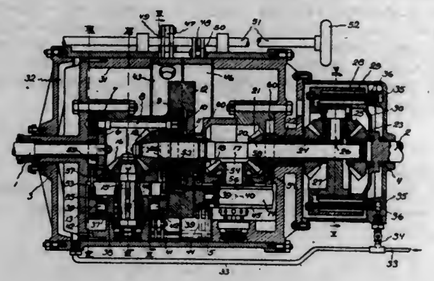


1. A buffer for reciprocating cutter bars, having heads comprising a frame to be mounted above the cutter bar head of a cutter bar, expansion springs mounted within the frame, and normally held under predetermined tension levers disposed between the ends of the springs and the frame, the lower ends of the levers extending below the frame and adapted to be disposed in the path of travel of the cutter bar head, and said levers adapted to take up momentum of the cutter bar head.

1,895,841. CONTINUALLY VARIABLE CHANGE SPEED GEAR. OTTO GOTTFRIED WELLTON, Saltsjobaden, Sweden. Filed Aug. 29, 1931, Serial No. 560,181, and in Sweden Sept. 6, 1930. 15 Claims. (Cl. 74—84.)

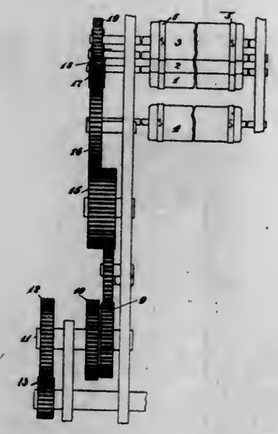
1. In a continually variable change speed gear, a driving shaft, at least one deformation gear consisting of hard but somewhat elastic gear members having smooth surfaces in contact with each other and adapted for variation of the gear ratio by displacement of said gear members in relation to each other, means for exerting a great contact pressure between said gear members, an intermediate shaft connected with the deformation gear and adapted to be rotated by the same at a variable speed when the driving

shaft is running at a constant speed, a differential gear the sun wheels of which are connected with the driving shaft and with the intermediate shaft, respectively, and adapted to rotate in opposite directions, whereas the



planet wheels of the differential gear are in mesh at opposite sides with the said sun wheels, a planet wheel support means, and a driven shaft connected with said planet wheel support.

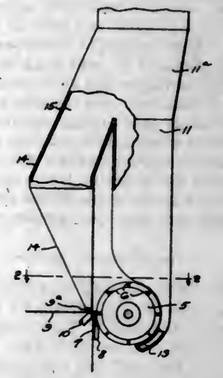
1,895,842. WEB FEEDING MECHANISM. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Apr. 12, 1930. Serial No. 443,748. 10 Claims. (Cl. 271—2.3.)



1. In a mechanism for feeding webs of heavy or light stock, a web feed roll, web margin engaging rings removably mounted thereon, and a change speed drive for said roll.

1,895,843. MACHINE FOR CUTTING AND SHEARING FLOAT OR BRIDGE THREADS. FRED S. BOYD, Laurens, S. C., assignor of one-third to H. J. Ward, Laurens, S. C., and one-third to C. C. Rush, Greenville, S. C. Filed Sept. 11, 1931. Serial No. 562,403. 1 Claim. (Cl. 26—11.)

The herein described method of shearing float threads from the face of a cloth web which consists of imparting a traveling movement to said cloth past a cutting blade and imparting a sharp bend to the cloth at the moment of its engagement by said cutting blade, imparting a suction action to the threads up to the moment of their passage about said sharp bend to cause the individual threads to stand out from the face of the web and releasing said threads from the influence of said suction action



at such moment as will cause them to spring over the cutting blade under their tendency to resume their normal position.

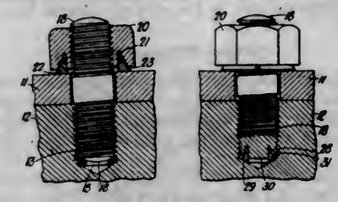
1,895,844. TRAILER. ELY J. CONTOIS, Battle Creek, Mich., assignor to Clark Tructractor Company, Buchanan, Mich., a Corporation of Michigan. Filed Jan. 5, 1931. Serial No. 506,700. 5 Claims. (Cl. 280—49.)

1. A trailer comprising a rectangular frame composed of T-bars disposed with their stems projecting inwardly, a longitudinal T-bar disposed with its flange registering with the stems of the end ones of said frame bars, equal angle bars disposed transversely of the frame with one of their sides registering with the stem of the side bars of the frame and with the flange of said longitudinal bar, a pair of caster wheels supported on said angle irons, a pair of unequal angle bars disposed with their long sides registering with the stem of said longitudinal T-bar and with the stems and flanges of said frame bars, and with their short sides in a plane parallel to the plane of the flange of said longitudinal T-bar, a second pair of unequal angles attached to the short sides of said first unequal angles, an axle extended through the long sides of said second unequal angles, a pair of wheels mounted on said axle and spaced thereupon by said unequal angles, and floor boards attached to said frame.

1,895,845. SCREW STUD LOCKING DEVICE. AUDOIN D'HALLOY, Paris, France, assignor to International Safety Lock Nut Corporation, New York, N. Y. Filed Nov. 3, 1930, Serial No. 493,198, and in Great Britain Feb. 6, 1930. 9 Claims. (Cl. 151—19.)

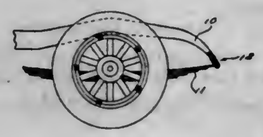
1. In an element of construction having a recess internally screw-threaded, a screw stud having one end

screwed into said recess, a projection of reduced diameter on the end of the stud, and a split spring washer dis-



posed around said projection between and cooperating with the end of the stud and the bottom of the screw-threaded recess to lock the stud within the recess.

1,895,846. SHACKLE. WILLIAM A. FLUMERFELT, Columbus, Ohio, assignor to The Columbus Auto Parts Company, a Corporation of Ohio. Filed Sept. 21, 1931. Serial No. 563,913. 12 Claims. (Cl. 267—54.)



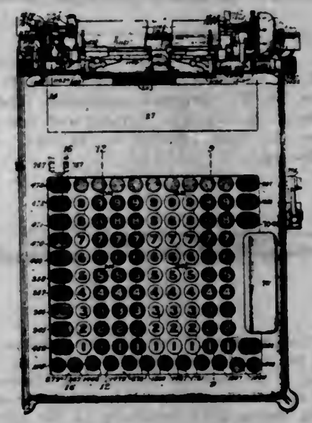
1. A shackle comprising a pair of spaced links having laterally directed openings in the end portions thereof, each opening being defined by converging surfaces, each of which has uniform transverse cross sectional contour to provide a uniform wedging surface, a plurality of bearings in each opening having outer surfaces respectively corresponding to the surfaces defining the opening, and having inner complementary bearing surfaces, a pin disposed in the openings at each end of the links and having surfaces cooperating with the inner bearing surfaces, and means for drawing the links towards each other.

1,895,847. METHOD OF HARDENING METAL ARTICLES BY NITRIDING. PIERRE FRANÇOIS MARIE AUBERT, Boulogne-sur-Seine, ADRIEN JULES PIERRE DUVAL, Paris, and HENRI AUGUSTE MARGUERITE DUVAL, Neuilly-sur-Seine, France, assignors to The Nitralloy Corporation, a Corporation of Delaware. Original application filed Oct. 18, 1927, Serial No. 227,047. Divided and this application filed May 5, 1931, Serial No. 535,290, and in Germany May 10, 1927. 4 Claims. (Cl. 148—16.)

1. In the hardening by nitriding of selected portions of a metal article, the steps which comprise applying on the portions to be protected a coating of a metallic composition incapable of substantial penetration by nitrogen at a nitriding temperature and fusible at such temperature, slightly oxidizing the uncoated portions of said article to render them unsusceptible of wetting by said metallic composition when the same is brought in a liquid state into contact therewith, and thereafter subjecting said article to a nitriding treatment.

1,895,848. CALCULATING MACHINE. WILLIAM S. GUBELMANN, Buffalo, N. Y. Filed Mar. 24, 1915. Serial No. 16,636. 279 Claims. (Cl. 235—60.)

5. In a calculating machine, the combination of a base, a pair of connected frames secured to said base for supporting the mechanism contained in the right hand section of said machine, a pair of connected frames for supporting the mechanism contained in the left hand section of said machine and a pair of connected frames hung on the inner frames of said pairs, and a pair of connected frames for supporting the mechanism contained in the intermediate portion of said machine.



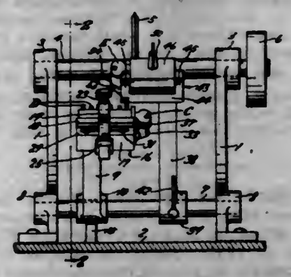
36. In a calculating machine, the combination of a plurality of sets of accumulating devices, a plurality of sets of subtracting devices, and a universal cam for moving any one of said sets into an operative position.

48. In a calculating machine, the combination of a set of main accumulators, a set of auxiliary accumulators, means for actuating either of said sets, a single controlling train of connections for normally moving said set of main accumulators into operative relation with its actuating-means, a shifting device for shifting said connections to a position for moving said set of auxiliary accumulators into operative relation with its actuating-means, and a cam for operating said connections.

112. In a calculating machine, the combination of a plurality of accumulating devices, means comprising an actuator and a minus-transfer key for clearing one of said accumulating devices of the amount thereby accumulated and subtracting said amount from the amount accumulated by other of said accumulating devices, a detent for engaging said actuator, and means co-operative with said minus-transfer key and said detent for effecting engagement and disengagement of said detent with said actuator.

133. A clear-sign mechanism comprising a plurality of triggers, means for setting said triggers, universal means for holding said triggers in set position, means for releasing said triggers from said universal means, and means for moving said triggers from their set to their unset positions.

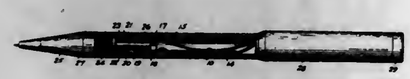
1,895,849. KEY CUTTING MACHINE. CHARLES A. HAUBERG, Baltimore, Md. Filed Aug. 29, 1932. Serial No. 630,851. 9 Claims. (Cl. 90—13.2.)



1. In a key cutting machine, a rotatable cutting wheel, a lock cylinder seat to receive a lock cylinder in which an uncut key blank is inserted, a blank clamp movable

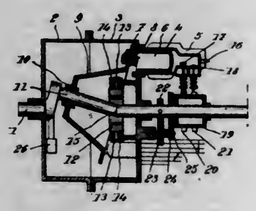
toward and away from the cutting wheel, a key blank in the clamp, and means for limiting the distance to which the clamp may be moved toward the cutting wheel by the protrusion of the tumbler pins from the lock cylinder.

1,895,850. FOUNTAIN PEN. JOHN HOLTZMAN, New York, N. Y., assignor of one-half to Max D. Ordmann, Brooklyn, N. Y. Original application filed June 26, 1924, Serial No. 722,493. Divided and this application filed Dec. 11, 1929. Serial No. 413,347. 14 Claims. (Cl. 120—46.)



1. A fountain pen having in combination, a hollow barrel, an ink sack in the barrel, a spring in said barrel at one side of the sack for compressing the sack, a cam, a straight end on the spring inserted into the cam, a bent end on the spring fixed relatively to the barrel in the recess provided between the sack and the barrel, a rotary member mounted at one end of said barrel, a second cam carried by said member and being in operative engagement with the first cam, and in direct engagement with the inner wall of the barrel, said member adapted to be manually rotated and arranged to compress or release said sack at a single turn of not more than 360° relatively to the barrel.

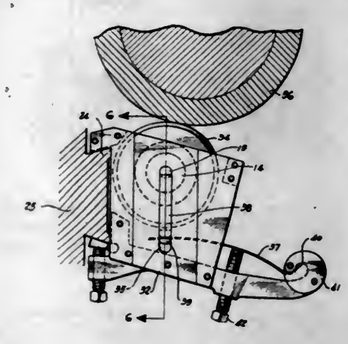
1,895,851. INTERNAL COMBUSTION ENGINE. MARCEL JANNIN, Meudon, France. Filed Oct. 30, 1930, Serial No. 492,160, and in France Nov. 5, 1929. 6 Claims. (Cl. 74—14.)



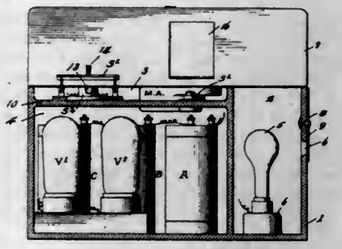
1. In combination, a crank-shaft including a pair of aligned portions coinciding with the axis of rotation thereof and an inclined extending portion positioned between said aligned portions, a fixed casing assembly including a plurality of cylinders mounted to present a transverse section to planes at right angles to the axis of rotation of the crank-shaft, pistons mounted to reciprocate in said cylinders, a shell having a bearing surface positioned to react on the inclined portion of the crank-shaft, said shell universally connected to said casing and including a flanged peripheral portion, and spherically shaped means positioned to coact with said flanged peripheral portion and with one end of said pistons.

1,895,852. SLITTING DEVICE. ROBERT MCC. JOHNSTONE, Short Hills, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed May 6, 1930. Serial No. 450,080. 4 Claims. (Cl. 164—70.)

2. The combination with a backing member; of a score-cut slitting unit, associated therewith, including: a rotatable score-cut wheel to engage the backing member; a spacer member movable toward and away from the backing member and acting to guide opposite faces of the score-cut wheel; and a spring-pressed and slidable element, carried by the spacer member, acting to urge the score-cut wheel toward the backing member under yielding pressure.

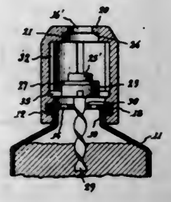


1,895,853. ACTINOMETER. WILLIAM THOMSON KENNEDY, New York, N. Y. Filed Jan. 24, 1931. Serial No. 510,970. 3 Claims. (Cl. 88—23.)



1. An actinometer comprising a container having a lid, a photo-electric cell, a thermionic amplifier and current indicating means in said container, switching means being provided alternatively to test the batteries of said amplifier or connect said cell and said means in circuit with said amplifier and adapted to prevent the closure of said lid whilst in the testing position.

1,895,854. DISPENSING DEVICE. GEORGE LIPSHITZ, New York, N. Y. Filed Jan. 6, 1931. Serial No. 507,025. 12 Claims. (Cl. 221—60.)

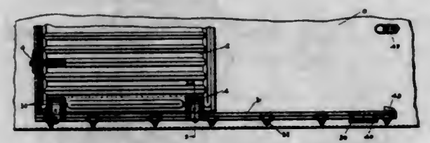


1. A dispensing device including, in combination with the neck or outlet of a container, a cylindrical hollow cap rotatably mounted on said neck, the upper part of said neck including outlet means, the upper end of said cap having a discharge orifice, a closure for said orifice, adapted to seal said cap against escape of the contents of said container, and means operated by rotation of said cap to move said closure away from and toward said discharge orifice.

1,895,855. METHOD OF LAMP MANUFACTURE. LLOYD D. LOCKWOOD, Madison, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Nov. 27, 1929. Serial No. 410,259. 18 Claims. (Cl. 176—2.)

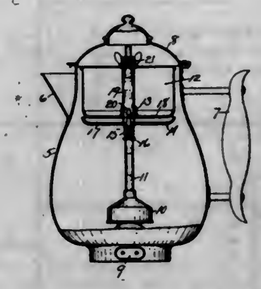
1. The method of cleaning up residual gases in an incandescent electric lamp which comprises thermally decomposing a rare refractory metal phosphide.

1,895,856. DOORCHECK MEANS. GABRIEL MADLAND, Chicago, Ill., assignor to Camel Company, a Corporation of Illinois. Filed Oct. 10, 1929. Serial No. 398,752. 11 Claims. (Cl. 16—87.)



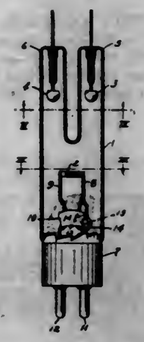
1. Check means for the horizontally sliding door of a box car, said door being supported on a track by means of hangers provided with rollers, comprising an auxiliary roller provided on said door and an inclined portion provided on said track, the inclined portion comprising an angular member secured to the track and embodying a horisontal flange the upper surface of which is inclined, said auxiliary roller having engagement with the inclined portion of the track during a part of the movement of the door.

1,895,857. PERCOLATOR. LOUIS R. MOCKBEE, Hartford, Conn. Filed Sept. 16, 1931. Serial No. 563,110. 7 Claims. (Cl. 53—3.)



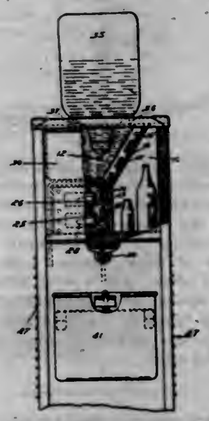
1. A percolator including a vessel, percolating means including a percolating tube located within the vessel, a perforated receptacle supported by said tube, a valve to close the perforations in the receptacle, and means accessible from without the pot when said receptacle is in place for operating said valve.

1,895,858. VAPOR ELECTRIC DEVICE. WILLIAM GARCOR MORAN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed May 31, 1930. Serial No. 458,845. 1 Claim. (Cl. 250—27.5.)



A vapor electric device comprising an enclosing glass envelope containing a thermionically active cathode, one cooperating electrode, a metal film deposited on a part only of said envelope remote from said cooperating electrode and amalgamated with mercury, said mercury amalgam being adjacent said cathode for readily vaporising the mercury therefrom upon initial cathode heating, said location of said mercury amalgam being at a relatively cool portion of the device, when said device has been in operation over a substantial period of time.

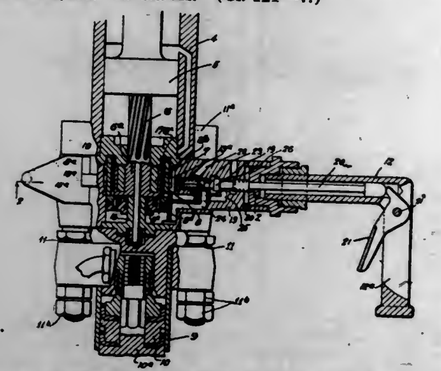
1,895,859. REFRIGERATING MECHANISM. GLENN MUFFLY, Detroit, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed Sept. 9, 1929. Serial No. 391,145. 9 Claims. (Cl. 62—116.)



1. In a mechanical refrigerator, in combination, a cabinet provided with a chamber, a heat conducting wall dividing said chamber into two compartments sealed against the circulation of air between them, a liquid container

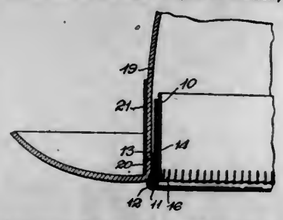
permanently supported in one of said compartments and having a wall thereof in spaced relation with respect to said dividing wall, a brine tank in said compartment in proximity to said water container, and cooling coils partially disposed in said brine tank and partially disposed between said walls.

1,895,860. ROTATION CONTROL MECHANISM FOR DRILLS. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed July 16, 1930. Serial No. 468,308. 19 Claims. (Cl. 121—7.)



1. A percussive drill having a rotating train for the working tool including a pawl member and a ratchet member, said ratchet member being movable axially and rotatably, and means for locking said member against rotation in one position of axial adjustment.

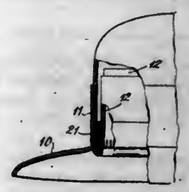
1,895,861. WATERPROOF SWEATBAND STRUCTURE. HANS ALBERT PHILIPS, Stratford, Conn., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Aug. 10, 1929. Serial No. 384,816. 5 Claims. (Cl. 2—181.)



1. A waterproof lining for sweatbands comprising a main strip of waterproof fabric, a second strip of waterproof fabric, the two being joined by a pair of waterproof seams adjacent the center line of the second strip, said second strip forming a loop between the seams and providing a pair of flaps disposed respectively on opposite sides of the seams, and a reed fitted into the loop, the seams being spaced apart sufficiently to permit of sewing a sweat band to one of the flaps close to the reed and over one of the seams without penetrating the main strip beyond the second seam.

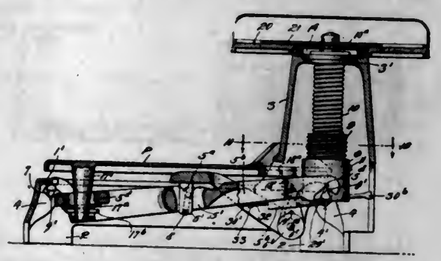
1,895,862. WATERPROOF SWEATBAND STRUCTURE. HANS ALBERT PHILIPS, Straford, Conn., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Aug. 10, 1929. Serial No. 384,817. 2 Claims. (Cl. 2—181.)

1. A waterproof sweatband structure, comprising a strip of waterproof material folded at its lower edge to form an upstanding attaching flap at one side of the strip, a leather at the other side of the strip and stitched thereto at its lower edge, the stitches passing through the main body of the strip and the flap, and waterproof material



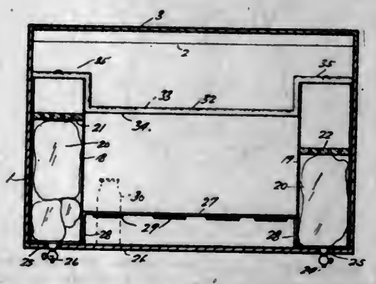
applied over the stitching on the outer face of the flap; and also between the flap and the main body of the strip above the stitching.

1,895,863. WEIGHING SCALE. ABRAHAM POLLAK, Far Rockaway, N. Y. Filed Aug. 30, 1930. Serial No. 478,822. 8 Claims. (Cl. 265—68.)



1. A weighing scale embodying, in combination, a load-receiving platform, a weighing-beam movable up and down in a vertical plane, weight-balancing means, a graduated dial, a weight-indicating element movable in a horizontal plane over said dial, and means for converting the vertical movement of said weighing beam into the horizontal movement of the indicating element comprising a helicoidal member disposed in a vertical plane and another member engageable with and movable vertically relatively to said helicoidal member, one of said members being connected with the said indicating element and the other with the weighing beam to convert the vertical movement of the weighing beam into horizontal movement for said indicating element.

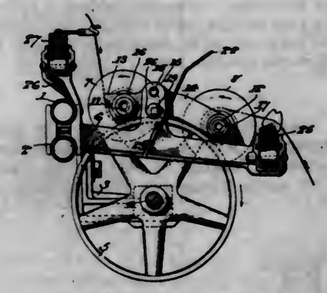
1,895,864. AUTOMOBILE TRUNK. ALVARO RICCI, Philadelphia, Pa. Filed Aug. 12, 1931. Serial No. 556,511. 2 Claims. (Cl. 62—31.)



1. In a device of the kind described, a trunk formed of heat insulating material, rectangular open topped ice containers mounted in the trunk at the ends thereof, ice holding top plates mounted in the ice containers, drain

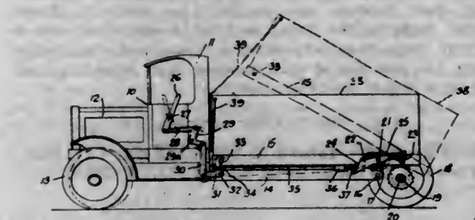
spigots in the bottom of the ice containers, and upper and lower food holding racks mounted in the trunk between the said ice containers, the upper rack being formed of screen material and including upwardly spaced laterally extended arms resting on the said ice containers, and the lower rack being formed of perforated sheet material having bottle holding sockets along one edge and legs formed on its ends to support the rack in the trunk.

1,895,865. WINDING MACHINE. IRVING R. ROWE, Stonington, Conn., assignor to The Atwood Machine Company, Stonington, Conn., a Corporation of New Jersey. Filed Apr. 25, 1931. Serial No. 532,777. 3 Claims. (Cl. 242—18.)



1. In a winding machine, inner and outer winding spools, brackets forming bearing supports for the spools, each of said brackets having oppositely projecting ears, and a thread guard plate located between the inner and outer winding spools and secured to its adjacent ears.

1,895,866. MOTOR TRUCK. CONRAD SCHNELL, Woodhaven, N. Y. Filed Nov. 12, 1931. Serial No. 574,528. 4 Claims. (Cl. 298—20.)



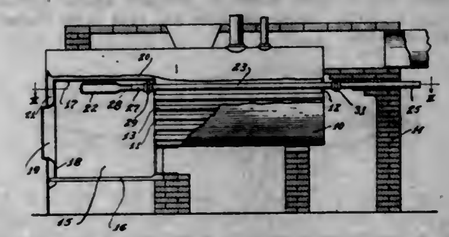
1. A motor truck comprising a power unit consisting of a supporting structure for an engine, front wheels and driver's seat having a rearward extension, a body frame, a body fastened thereto, rear wheels supporting the frame, the said frame being pivotally connected to the said extension, ratchet wheels rotating in unison with the said rear wheels and coaxially mounted therewith, means fastened to the said frame adapted to engage the ratchet wheels for purposes of tilting the said frame when the truck is driven rearwardly, and operating means at the power unit connected to the said means.

1,895,867. GETTER CAPSULE. ROGER HULL SINDEN, Caldwell, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Nov. 30, 1929. Serial No. 410,695. 3 Claims. (Cl. 250—27.5.)



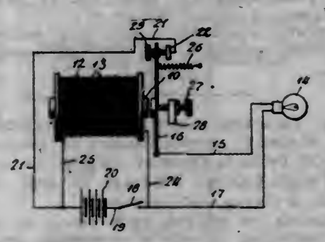
1. A getter capsule comprising metal pieces at least one of said pieces having a struck-out portion to provide a containing space for a getter material said containing space being disposed eccentrically with respect to the center of said pieces.

1,895,868. WATER HEATING ATTACHMENT FOR BOILERS. WILLIAM R. SMITH, Chicago, Ill. Filed June 30, 1931. Serial No. 547,024. 6 Claims. (Cl. 122—20.)



1. The combination with a boiler and a fire box for supplying heat therefor, of a water heating loop adapted for inclusion in a hot water supply circuit, said loop comprising pipes extending through the boiler for heating of the water therein by the boiler water and a header connecting the ends of the pipes and located entirely within the fire box and extending horizontally thereacross adjacent the top of the fire box, for direct heating of the water by the fire.

1,895,869. ELECTROMAGNETIC COIL. ROBERT H. STEVENS, Larchmont, N. Y. Filed Sept. 7, 1929. Serial No. 391,021. 5 Claims. (Cl. 250—41.5.)



1. An electro-magnetic coil comprising a core, a wire conductor arranged about said core, and a conductor element, the electrical conductivity of which varies in ac-

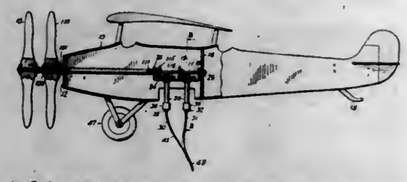
cordance with changes in light to which said coil is exposed, said conductor element being located externally about and in insulated convolute relation to said wire conductor and in series therewith.

1,895,870. ELECTRIC WATER HEATER. AUGUST C. VISEL, Bronson, Mich. Filed Nov. 14, 1930. Serial No. 495,669. 4 Claims. (Cl. 219—41.)



1. In an electric water heater of the class described comprising, a casing divided into centrally recessed half sections, an insulating plate, an electrical heating unit carried by said plate and arranged about the central portion thereof, and means for clamping said insulating plate between said casing sections, whereby the outer edge of said insulating plate is arranged between the outer edges of said casing sections but spaced therefrom.

1,895,871. AEROPLANE. GEORGE VLAHOV, New York, N. Y., assignor to John Holtzman, New York, N. Y. Filed July 2, 1928, Serial No. 289,998, and in Canada July 2, 1927. Renewed July 22, 1931. 14 Claims. (Cl. 46—50.)



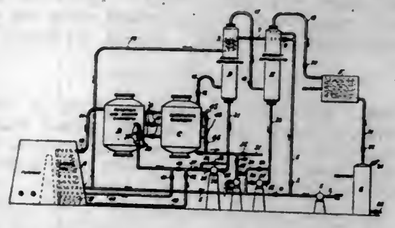
1. A flying device including a fuselage, a partition in the fuselage, two propellers of opposite pitch and rotatable in opposite directions simultaneously, an inner shaft for one of the propellers supported by the partition and by the fuselage, an outer shaft for the other propeller, a source of motive power outside of the device, a gear on each of said shafts, a pair of swingable gears each meshing with one of the gears of the propeller shafts, a swingable bracket carrying both of the swingable gears, a pair of flexible shafts, and means for connecting each of said swingable gears with the source of said motive power, comprising a shaft for the swingable gear, a cross pin therefor, and a slotted sleeve secured to the flexible shaft and adapted to have the cross pin removably inserted into the slot thereof.

1,895,872. POLISHING COMPOSITION. FRANK R. WILLIAMS, Philadelphia, Pa. Filed Sept. 27, 1930. Serial No. 484,942. 1 Claim. (Cl. 87—5.)

A polishing composition comprising mutton tallow three pounds, whiting one pound, and ferrous nitrate two ounces.

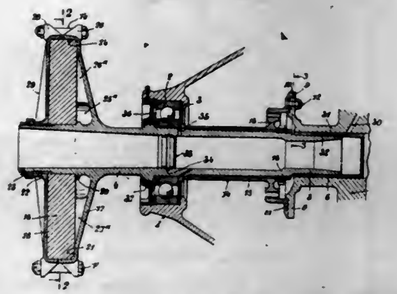
1,895,873. PROCESS FOR CRACKING HYDROCARBON OILS. JOSEPH G. ALTHER, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Aug. 23, 1926. Serial No. 131,025. 3 Claims. (Cl. 196—51.)

1. A process for cracking hydrocarbon oil comprising initially subjecting the oil to a cracking temperature, thence passing the oil through a reaction zone wherein a time period of reaction is allowed without increase in temperature of the oil, in passing the oil from the reaction zone to a separating chamber maintained under a lower pressure than the pressure in the reaction zone, taking off vapors from said separating chamber, subjecting such vapors to reflux condensation and in returning reflux condensate separated from the vapors to the oil passing through the reaction chamber without previously commingling with



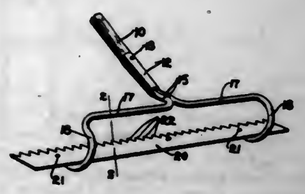
the oil being treated in the process, controlling the temperature of the reflux condensate returned to the oil in the reaction zone by separately heating predetermined portions of the returned reflux condensate prior to introduction thereof to the reaction zone.

1,895,874. DRIVING ARRANGEMENT FOR AIRCRAFT PROPELLERS. MARIUS JEAN-BAPTISTE BARBAROU, Neuilly-sur-Seine, France. Filed Jan. 29, 1931, Serial No. 512,040, and in France Feb. 7, 1930. 6 Claims. (Cl. 170—177.)



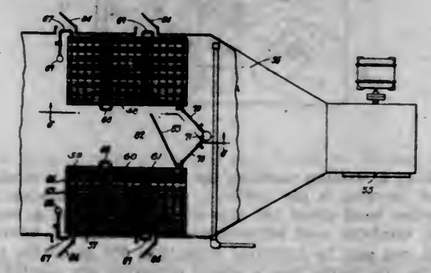
1. An arrangement for driving a propeller shaft from an engine shaft comprising a thrust bearing in the engine crankcase for supporting the front end of said propeller shaft, a bearing adjacent the rear end thereof, flutes on said shaft between said bearings, an internally fluted sleeve engaging the fluted portion of said shaft and a driving connection between said sleeve and the engine shaft, the rear end of said propeller shaft extending into the front end of said engine shaft.

1,895,875. HOE. ANDREW A. BEEMAN, Boyne City, Mich. Filed Oct. 3, 1932. Serial No. 635,953. 1 Claim. (Cl. 97—71.)



A weeding hoe consisting of a handle member, rod members extending in parallelism and alongside of said handle member for a short distance and then extending outwardly in opposite directions at right angles to the axis of the handle and then being bent at right angles in planes parallel to each other substantially in the form of a half-circle and terminating in a bevelled portion interiorly of said half-circle, a flexible steel blade fastened to said bevelled portions thereby locating said blade at an angle of substantialy 45° to the axis of the handle member, said rods being of light construction, and means slidable along the said parallel portions of the rod members for engagement with the said end portion of the handle member.

1,895,876. HEATING AND COOLING SYSTEM. IRVING T. BENNETT, Brooklyn, and FRANK C. REYNOLDS, New York, N. Y., assignors, by mesne assignments, to Metropolitan Engineering Company, a Corporation of New York. Filed May 17, 1929. Serial No. 363,873. 4 Claims. (Cl. 257—137.)



1. Apparatus of the type described which comprises a series of columns of flat coils of pipe piled flatwise one on another, connections between the coils of successive columns, an inlet header, an outlet header, and means for connecting said coils of columns adjacent said headers to said inlet and outlet headers.

1,895,877. MEANS FOR FORMING THE TOP LAYER OF PACKED FRUIT. ERICH BERNFUS, Vienna, Austria. Filed May 1, 1930, Serial No. 448,981, and in Austria May 4, 1929. 1 Claim. (Cl. 226—17.)

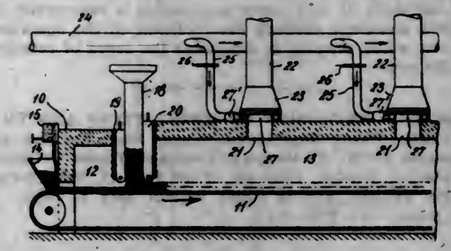


Device for forming the top layer of dried fruits in boxes, comprising in combination a plate, depressions on the upper side of the plate for receiving the dried fruits, each depression communicating with a corresponding bore, passing through the plate, ejecting stems sliding axially in the said bores, enlargements in the bores, collars on the stems guided in the enlargements, headed distancing members on the underside of the plate and an ejecting board sliding on said members for pushing the stems in the depressions and ejecting thereby the fruits.

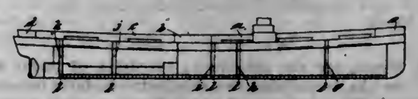
1,895,878. METALLURGICAL FURNACE. EARL H. BUNCE and HARRY M. HASLAM, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 15, 1927. Serial No. 233,352. 5 Claims. (Cl. 23—277.)

1. A metallurgical furnace comprising a zinc reduction chamber, a vapor conduit communicating with said reduction chamber, an air discharging device operatively associated with and surrounding the exit end of said conduit, said air discharging device comprising a hollow member having its wall perforated with a multiplicity of holes adapted to direct a multiplicity of streams of air towards zinc vapor issuing from said conduit.

2. A zinc metallurgical furnace comprising a reduction chamber, a vapor conduit communicating with said reduction chamber, an air discharging device operatively associated with said conduit, an air supply conduit communicating with said air discharging device, said air supply conduit being spaced away from the normally hot furnace walls so that air passed therethrough will not be materially preheated in transit, said air discharging device comprising a hollow member having its wall perforated with a multiplicity of holes adapted to direct a multiplicity of streams of air directly into zinc vapor issuing from said vapor conduit.

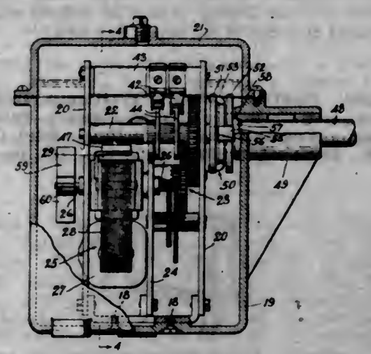


1,895,879. HULL STRUCTURE OF SHIPS AND THE LIKE. HAROLD EDWARD JOSCELYN CAMPS, London, England. Filed Aug. 21, 1929, Serial No. 387,323, and in Great Britain Aug. 28, 1928. 3 Claims. (Cl. 114—78.)



1. A ship's hull structure comprising a closed in accommodation alley way arranged on and above the upper deck of the structure, said alley way extending for the greater part of the length of said structure so as to enable access to be had from one end of the ship to the other including vertical trunk ways arranged to enable communication between the alley way and the bottom of the vessel under each hold to be effected without disturbance of the cargo in the holds, substantially as described.

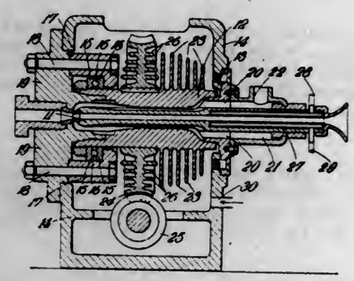
1,895,880. POWER OPERATOR. PRESTON W. CUMMINGS, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed May 28, 1930. Serial No. 456,784. 4 Claims. (Cl. 172—36.)



1. A power operator for imparting a slow and uniform motion to a part to be driven comprising, in combination, a casing constituting a receptacle for liquid lubricant, a

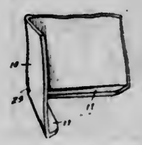
shaft projecting from said casing and having a driving connection with said part, a power unit for driving said shaft immersed in the lubricant in said casing and including an electric motor and a speed reduction gearing driven thereby, and means for governing the rate of motion of said part comprising an interchangeable paddle wheel carried by the shaft of said motor and having a vane which is moved broadwise through the lubricant in the operation of the motor whereby to determine the speed of rotation of the motor.

1,895,881. EXTRUSION OF METAL PIPES AND THE LIKE. PERCY DUNSHEATH, Sidcup, Kent, England, assignor to W. T. Henley's Telegraph Works Company Limited, London, England. Filed June 27, 1931, Serial No. 547,370, and in Great Britain July 1, 1930. 4 Claims. (Cl. 207—2.)



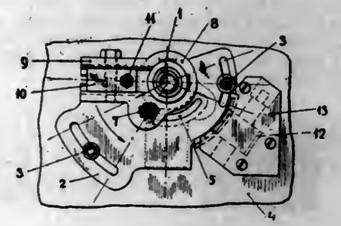
1. Means for the continuous extrusion of metal pipes and the like, comprising two relatively rotatable concentric members the inner one of which forms a point holder or core and the other one of which forms a casing, said outer member being formed with a screw thread and said inner member with longitudinal ribs and/or grooves, said inner grooved point holder being fixed in a horizontal position and surrounded by the internally threaded cylindrical casing mounted so as to rotate on a horizontal axis, while molten metal is fed into one end of the space between said point holder and said casing, said molten metal feeding means being provided for supplying molten lead or lead alloy to said screw thread by which it is extruded, after solidification, in the form of a tube or cable sheath, a suitable shaping die being secured to the adjacent end of said outer member or casing in such manner as to permit relative rotation therebetween and so that the tensible force generated in the apparatus and tending to separate the outer member or casing and the shaping die, as a result of the compressive forces in the metal under extrusion, are resisted in the locality of said die without change in the general direction of the flow of the metal.

1,895,882. CASTER. WALTER F. HEROLD, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Oct. 29, 1930. Serial No. 491,872. 5 Claims. (Cl. 16—21.)



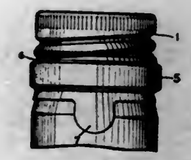
1. A caster for attachment to an angular sheet metal, or similar leg or corner structure having inturned base flanges forming a V, comprising attaching means adapted to engage said flanges above and below and to span the sides of said V, means adapted to cooperate with the leg to retain said attaching means against lateral movement, and a floor engaging element connected to said attaching means.

1,895,883. RIVETING MACHINE. ALOIS HLAVA, Pilsen, Czechoslovakia. Filed Mar. 19, 1931, Serial No. 523,741, and in Czechoslovakia June 4, 1930. 4 Claims. (Cl. 78—46.)



1. In a riveting machine, the combination of a riveting head carrying a die holder, a support rotatable on the riveting head about the axis of the die holder, a single arm rotatable and adjustable on said support whereby said arm may be oscillated more than 90° about the axis of the die holder and a single centering pin carried by said arm.

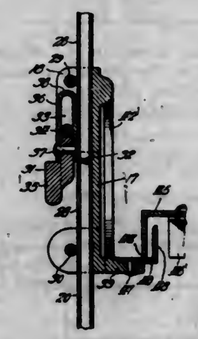
1,895,884. METHOD OF AND MEANS FOR SEALING CLOSURE CAPS ON BOTTLES AND OTHER CONTAINERS. GEORGE WALTER HORNER, Tonbridge, England, and JOHN EDWIN SHARP, New Kensington, Pa., assignors to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 22, 1929, Serial No. 379,895, and in Great Britain Sept. 11, 1928. 11 Claims. (Cl. 215—43.)



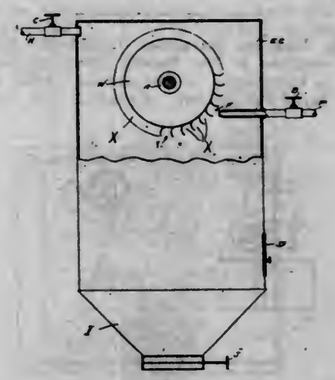
1. The method of sealing bottles or other containers which comprises applying about the opening of the container a closure cap having a depending skirt, and a sealing band, and simultaneously compressing both the said band and the said skirt radially inward by a pressing or rolling action exerted inwardly on both band and skirt, so as to force the said band and skirt into substantial conformity and intimate contact with the exterior surface of the container and with one another for the purpose specified.

1,895,885. CRIB. FRANK KUSTERER, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 9, 1928. Serial No. 268,518. 9 Claims. (Cl. 5—11.)

2. In a crib, the combination of an end frame, a bed bottom, and means for vertically adjustably supporting said bed bottom on said frame, said means comprising a bracket vertically slidably mounted on said frame, a member engageable with a portion of said frame for locking said bracket in positions of vertical adjustment, a pintle secured to said bracket and loosely pivoting said member, and means unitary with said member and engageable with another portion of said frame for locking said member against lateral displacement when said member is in locking position.



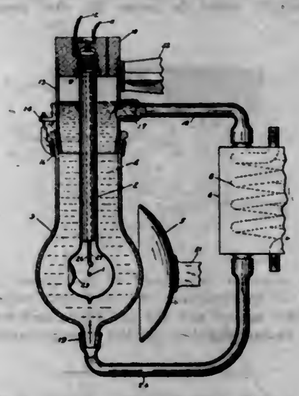
1,895,886. APPARATUS FOR MANUFACTURING SOLID CARBON DIOXIDE. EDWIN J. LOCKWOOD, Peekskill, N. Y., assignor to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 22, 1930. Serial No. 438,011. 2 Claims. (Cl. 62—121.)



1. An apparatus for use in converting carbon dioxide under pressure into the solid state comprising an expansion chamber, a pipe for conducting the carbon dioxide under pressure into the chamber at a point permitting the resulting solid carbon dioxide to fall to the bottom of the chamber, and a turbine engine in the chamber having its vanes arranged to be struck by the stream of carbon dioxide entering the chamber.

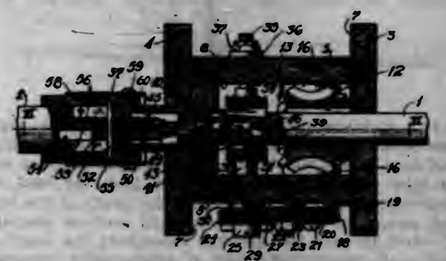
1,895,887. INCANDESCENT ELECTRIC LAMP. CHARLES F. LORENZ, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Dec. 20, 1929. Serial No. 415,406. 12 Claims. (Cl. 88—24.)

1. A projection lamp assembly comprising a bulb having a tubular heat conduit, a filament of the concentrated type in said bulb, a casing to provide a surrounding chamber for said bulb and heat conduit, a fluid in said



chamber surrounding said lamp, and means for circulating said fluid within said chamber and in contact with said bulb and heat conduit for the dissipation of heat.

1,895,888. TRANSMISSION. DELBERT L. LOTTS, Chicago, Ill., assignor, by direct and mesne assignments, to General Research Corporation, Chicago, Ill., a Corporation of Illinois. Filed Jan. 24, 1930. Serial No. 423,030. 19 Claims. (Cl. 74—34.)

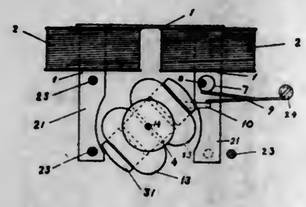


1. A transmission comprising a driving shaft, a driven shaft, a housing secured to said driven shaft and having the driving shaft journalled therein, a worm gear in said housing secured to said driving shaft, a worm rotatably supported in said housing and meshing with said worm gear, a main helical gear slidably mounted on said driving shaft, an auxiliary helical gear meshing therewith, means connecting the same with said worm, and a control for shifting said main helical gear with respect to said auxiliary helical gear for varying the speed of rotation of the worm with respect to the speed of rotation of the worm gear to permit a variable speed to be transmitted from the driving shaft to said driven shaft.

1,895,889. RECEIVING APPARATUS FOR ELECTRICAL IMPULSES. PAUL WILHELM LYTH, Lidingo, Sweden. Filed Oct. 2, 1930, Serial No. 485,948, and in Sweden Feb. 6, 1930. 7 Claims. (Cl. 175—336.)

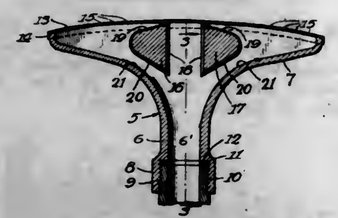
1. In a step-by-step mechanism for translating electrical impulses to mechanical impulses, an electromagnet adapted intermittently to be energized by said electrical impulses, an armature member tiltably mounted adjacent to said electromagnet and adapted to be attracted by the same at each energization thereof, means for tilting back the armature member upon de-energization of the electromagnet, a disc means capable of rotational and axial

movements mounted adjacent to the armature member and adapted to be attracted by and frictionally to engage with the same instantly upon each energization of the electromagnet in order to cause the disc means to par-



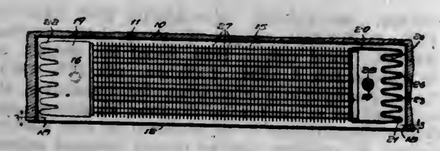
take of the angular movement of the armature member, and means for interrupting the frictional engagement between the disc means and the armature member instantly upon each de-energization of the electromagnet.

1,895,890. LAWN SPRINKLER. HARRY E. MENG, Oak Park, Ill., assignor to W. D. Allen Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1931. Serial No. 573,616. 5 Claims. (Cl. 299—141.)



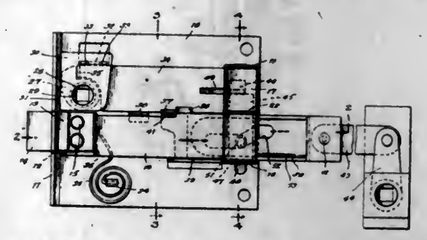
1. A sprinkler comprising an elongated, narrow, multi-apertured spray-head and a hollow body member to which said head is secured, the body member being provided with an inlet opening spaced rearwardly from the head and located approximately centrally of the length of the head, and means for effecting substantially uniform discharge of water through the openings throughout the length of said head, comprising a pair of substantially triangular lugs respectively located at opposite sides of the path of a stream of water entering said body through said inlet openings, said lugs being positioned so as to provide a passageway of substantially the same size as said inlet opening directly from the latter to the central portion of said head and so as to provide reduced-size passageways from said inlet opening to the opposite side portions of said body and head.

1,895,891. HEAT EXCHANGE DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Dec. 15, 1930. Serial No. 502,422. 4 Claims. (Cl. 257—136.)



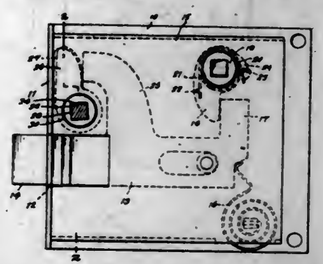
4. In a device of the kind described the combination of members each having an opening respectively providing a fluid inlet and a fluid outlet, and having a plurality of openings provided in one side of said members and tubes providing fluid passages connected with said openings and hollow fins arranged along said members and transversely of said members upon the side of said members, opposite to that side having said plurality of openings.

1,895,892. LATCH. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 25, 1930. Serial No. 438,764. 4 Claims. (Cl. 292—164.)



1. In a latch, a longitudinally slidable latch bolt, means for retracting said bolt including inside and outside manually operable means disposed in non-co-axial relation, a retracting member movable relatively to said bolt interposed between said outside retracting means and the bolt, a second retracting member having longitudinal movement only interposed between said inside retracting means and the bolt, said retracting members being disposed in the same plane in offset relation and adapted to have independent retracting movement, and means adapted upon movement of said second retracting member in non-bolt-retracting direction to render said first retracting member inoperative.

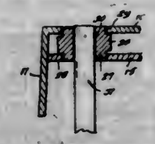
1,895,893. LATCH. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 27, 1930. Serial No. 484,837. 8 Claims. (Cl. 292—354.)



1. In a latch, a latch casing, a latch bolt, roll-back means having a non-circular opening therethrough, stationary abutment means for limiting movement of said roll-back means in non-bolt-retracting direction, a handle shaft of non-circular cross section adapted to be inserted in said opening and disposed in said opening to permit relative movement of said roll-back means transversely of the longitudinal axis of said handle shaft, said opening being so arranged that pressure of said bolt on said roll-back means causes the sides of said opening to bind on said shaft.

1,895,894. LATCH. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 27, 1930. Serial No. 484,838. 4 Claims. (Cl. 292—349.)

2. In a latch, a latch casing, a latch bolt, a one piece roll-back means mounted in said casing and having a non-circular opening therethrough, means for applying pressure to said roll-back, a handle shaft of non-circular cross-section adapted to be longitudinally inserted into said



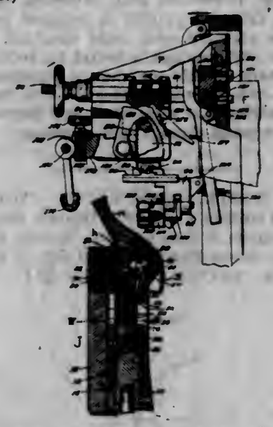
opening and engaged with the sides of said opening, said opening being so arranged that pressure of said means for applying pressure on said roll-back means causes the sides of said opening to bind on said shaft.

1,895,895. CONNECTION FOR DOORCHECKS. LEWIS C. NORTON, Los Angeles, Calif., assignor to Norton-Lasier Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 2, 1930. Serial No. 440,904. 1 Claim. (Cl. 16—49.)



In combination with a door closing and checking device having a shaft, an arm secured to the shaft, the other end of the arm being provided with a socket portion, a slide guide mounted in a recess in said door, means for adjustably locating said guide within the recess, a block adapted to slide within the guide, and means on the block for association with the socket portion of said arm.

1,895,896. MACHINE FOR OPERATING UPON THE HEEL-PORTIONS OF SHOES. ELMER R. POPE, Hamilton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 26, 1928. Serial No. 272,953. 68 Claims. (Cl. 1—32.)

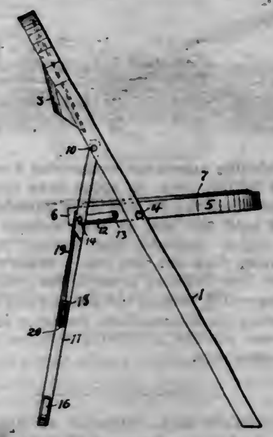


1. In a fastening-inserting machine, a work-support having a rectilinear fastening-receiving passage inclined with respect to the longitudinal axis of said support, a rigid driver movable in the passage, a driver-actuator supported upon the jack, the driver being offset outwardly from the actuator-support, and means for moving the actuator to reciprocate the driver.

1,895,897. FOLDING CHAIR. WILLIAM C. RASTETTER, Fort Wayne, Ind. Filed Sept. 29, 1930. Serial No. 485,009. 5 Claims. (Cl. 155—142.)

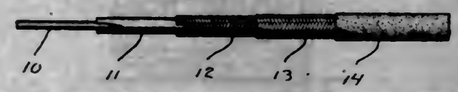
4. In a folding chair, a main frame constituting a back and forelegs; a folding seat member pivotedly supported in

connection with said forelegs; a folding rear leg structure pivotedly connected with said forelegs; linked connections between the rear leg structure and the seat mem-



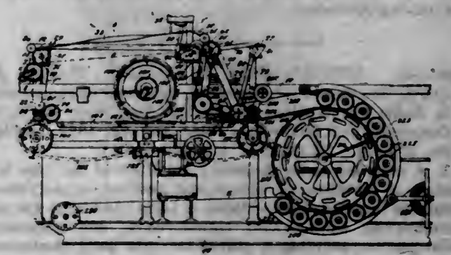
ber; and sliding connections between said seat member and lower portion of the rear leg structure provided with heads at their lower ends adapted to limit unfolding movement of said seat member and rear leg structure.

1,895,898. FLAMEPROOF CABLE. WILLIAM C. ROBINSON, Sewickley, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed July 5, 1929. Serial No. 375,974. 3 Claims. (Cl. 173—264.)



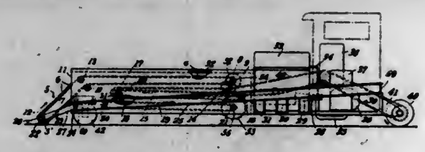
1. An insulated wire including a conductor exteriorly insulated with rubber and the rubber being covered over with a light colored braid, said braid being exteriorly covered with silicate of soda for fire proofing purposes and to provide a fire proofing material which is transparent so that the color of the braid can be seen through the transparent silicate of soda material, and a thin coating of transparent wax applied directly over the silicte of soda coating to maintain this coating in place and to provide a transparent slick outer finish which is of transparent nature so that the color of the braid is visible therethrough.

1,895,899. PACKAGING MACHINE. JACOB SCHAUB, Westfield, N. J., assignor to Best Foods, Inc., New York, N. Y., a Corporation of New Jersey. Filed Jan. 19, 1927. Serial No. 161,972. 31 Claims. (Cl. 93—2.)



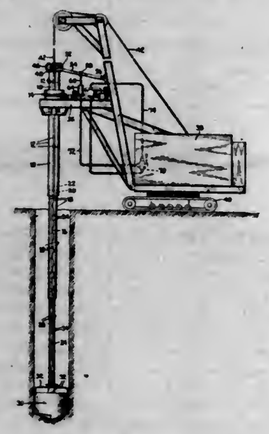
1. The process of packaging loose dry material which comprises filling said material into pockets in a pliable strip that is capable of being softened by heat, applying covers to said pockets and sealing the same thereto while applying heat.

1,895,900. SNOW REMOVAL. EDWARD A. SMITH, West Englewood, N. J. Filed Jan. 24, 1930. Serial No. 423,105. 5 Claims. (Cl. 37—12.)



1. Snow melting apparatus, comprising a communicating fire box and melting oven, an upper snow conveyor having an upper run operating in said oven chamber and travelling toward said fire box, an intermediate conveyor beneath the upper conveyor and having its upper run travelling away from the fire box, a lower conveyor having its upper run disposed beneath the intermediate conveyor and travelling toward the fire box and a single drive chain operating the intermediate conveyor and having upper and lower reaches in driving relation to the upper and lower conveyors.

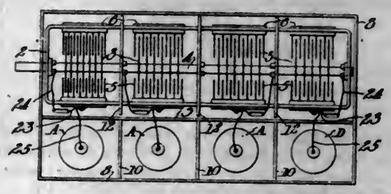
1,895,901. KELLY BAR. HERMAN R. SMITH, Douglaston, N. Y., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 9, 1932. Serial No. 604,284. 11 Claims. (Cl. 255—28.)



1. In apparatus of the class described, in combination, a rotatable bucket for digging a hole in the ground, a vertical telescopic drive kelly for rotating said bucket, and interconnecting means for the sections of said kelly whereby while said bucket is digging, the weight of all of said sections may rest upon said bucket at any stage of the digging operation.

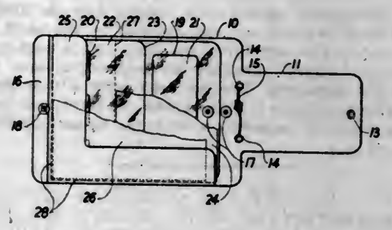
1,895,902. SCREEN-GRID AMPLIFIER. HAROLD A. SNOW, Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Aug. 29, 1929. Serial No. 389,277. 13 Claims. (Cl. 179—171.)

1. A cascaded radio frequency amplifier of the type including a plurality of screen-grid audions, transformer couplings between said audions, a gang condenser for simultaneously tuning said transformers, and grounded metal plates providing a shield for said gang condenser and individual shields for each audion and each transformer, characterized by additional metal plates grounded to said shielding plates and arranged between adjacent units of said gang condenser, leads directly connecting each unit of said condenser with the respective terminals of the transformer winding associated therewith to avoid the formation of paths common to more than one tuned circuit and means individual to each rotor section of said



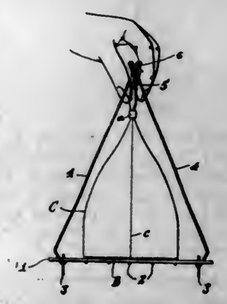
condenser for grounding the respective rotors to the additional grounded metal plates through the common operating shaft.

1,895,903. CERTIFICATE AND RECORD HOLDER. ERSKINE D. THOMPSON, Burlingame, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed July 29, 1932. Serial No. 625,955. 6 Claims. (Cl. 40—10.)



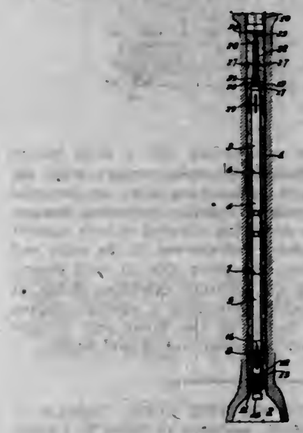
1. A certificate holder for motor vehicles, comprising a flexible sheet having an extended portion adapted to be wrapped about a steering post, fastening means for retaining said extended portion in wrapped position, said flexible sheet provided with sight openings, transparent material over said openings, a pocket for retaining records adjacent certain of said openings, a separate pocket for retaining records adjacent other of said openings and means for securing said sheet about said steering post with said records exposed through said openings.

1,895,904. WASTE RECEPTACLE. WILFORD EARL LUTTS and GEORGE ALEXANDER GRAVES, Newton Center, Mass., assignors to Sani-Fil, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Oct. 6, 1931. Serial No. 567,198. 13 Claims. (Cl. 220—63.)



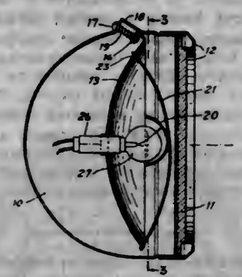
1. A holder frame for a removable refill container having a closed bottom and an open top, comprising a support for the container bottom, a plurality of uprights pivoted to and extending from said bottom support and provided with container retaining formations releasably engageable with the container whereby to maintain the mouth of the container open, and cross bars uniting said uprights and when the same are free from said container swingable inwardly therewith to provide handle members for said frame.

1,895,905. WELL PACKER. EDWARD E. YOUNG, Parkersburg, W. Va. Filed Sept. 21, 1932. Serial No. 634,184. 6 Claims. (Cl. 166—10.)



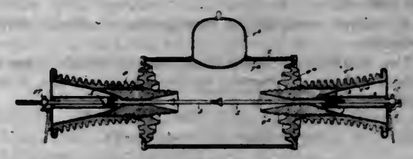
1. A well packer comprising a liner barrel, an inverted skirt formed of upwardly and outwardly projecting flexible staves attached at their lower end to the lower end of said barrel, a sleeve loosely mounted on said barrel above said staves, a skirt of fibrous strips mounted on said sleeve, and means coupled to the top of said barrel for lowering it into a well and for by-passing cement into the well above its upper end.

1,895,906. BEAM ADJUSTING MEANS. SAMUEL F. ARBUCKLE, Highland Park, Mich., assignor to Monogram Lens Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed May 7, 1927, Serial No. 189,483. Divided and this application filed Feb. 10, 1930. Serial No. 427,343. 1 Claim. (Cl. 240—41.6.)



In a headlight, a casing; a main reflector; a light source; a plurality of resilient arms attached to said reflector, said casing having a plurality of depressions to receive the ends of said arms, whereby said reflector is supported in said casing, a supplementary reflector positioned adjacent said light source; a plurality of resilient arms attached to said supplementary reflector, said main reflector having a plurality of grooves adapted to receive the ends of said arms, whereby said supplementary reflector is positioned with respect to said light source and said main reflector; and means to tilt said main reflector with respect to said casing.

1,895,907. HIGH VOLTAGE ELECTRICAL SWITCH. FRANK G. BAUM, San Francisco, Calif. Filed July 24, 1928. Serial No. 295,007. 20 Claims. (Cl. 200—150.)



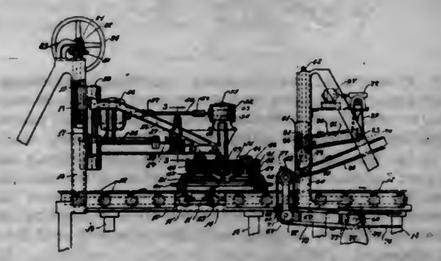
1. A switching mechanism comprising a pair of alined conductive rods connectable to opposite line terminals and arranged to slide longitudinally through fixed insulating bushings toward and from each other to make and break electrical contact, and actuating means for moving each conductive rod to a point of engagement.

1,895,908. PROCESS FOR SURFACING SHEET GLASS. JAMES C. BLAIR, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 10, 1929. Serial No. 331,553. 5 Claims. (Cl. 51—278.)



1. The process of grinding and polishing glass sheets or plates, which consists in passing the sheets in a definite, substantially horizontal path successively beneath a series of grinding and polishing units, dividing the polishing units into a plurality of spaced groups, each including a series of polishers with the space between adjacent groups being of a size to accommodate at least one polisher, and in imparting to the polishing units of one or more groups a movement in a substantially horizontal direction independently of the other groups and in a plane parallel to the surfaces of the sheets being treated.

1,895,909. METHOD OF AND APPARATUS FOR LOOSENING AND REMOVING ARTICLES FROM MOLDS. ERNEST BLAKER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 7, 1932. Serial No. 603,718. 11 Claims. (Cl. 18—2.)



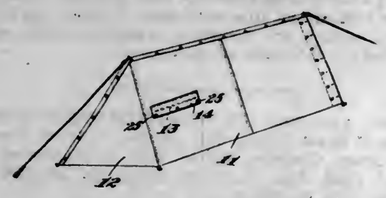
6. Apparatus for removing a molded article from a mold member, said apparatus comprising a conveyor for advancing the mold member, a pair of rotatable yoke members each having a plurality of rotatable article-contacting discs mounted thereon, means for positively driving said discs, and yielding pressure means for holding said discs in the path of the article for progressive rolling contact with the marginal portion thereof whereby the article is progressively deflected from mold contact.

1,895,910. RUBBER COMPOSITION. ARTHUR EVAN BOSS, Fairlawn, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 25, 1932. Serial No. 613,549. 7 Claims. (Cl. 106—23.)

1. A rubber composition comprising a finely divided lead silicate.

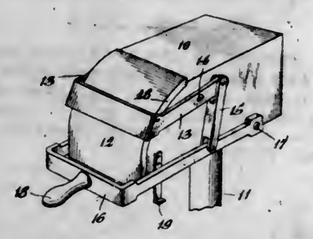
7. The method of vulcanizing rubber which comprises heating a mixture of rubber, sulphur and a finely divided precipitated lead silicate.

1,895,911. COMBINED TENT AND HOOD-GARMENT. GEORGE C. BOSSON, Jr., Cambridge, Mass. Filed Oct. 7, 1931. Serial No. 567,377. 2 Claims. (Cl. 2—89.)



1. A tent of the character described comprising a shelter half adapted to be used as a cloak or poncho, said shelter half having an elongated opening through which the head may pass when used as a poncho, and a permanently attached hood secured to the marginal portion about said opening, the hood having an opening in its front and a draw string associated therewith to vary the effective size of said latter opening, said hood being adapted to hang in a depending position on the inside of said shelter half when in erected position, and being adapted to be turned inside out to provide a covering about the head when said shelter half is used as a poncho.

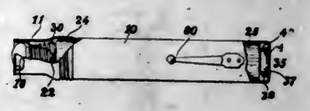
1,895,912. MAIL BOX. EDWARD W. BOWERS, Medina, N. Y. Filed May 8, 1931. Serial No. 535,917. 4 Claims. (Cl. 232—35.)



1. A device of the character described, comprising a box having an opening therein, a movable closure therefor, a combined swinging and longitudinally movable signaling element including means for normally urging it to a non-display position, means for latching said element against swinging movement in a display position, and means controlled by the movement of said closure in one direction for automatically shifting said signaling element longitudinally for releasing said latching means.

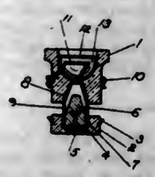
1,895,913. VEST POCKET TYPE FLASH LIGHT. MAX E. BUCHHOLZ, Hoboken, N. J., assignor to The Bright Star Battery Company, Hoboken, N. J., a Corporation of New York. Filed Mar. 9, 1929, Serial No. 345,752. Renewed July 20, 1932. 1 Claim. (Cl. 240—10.68.)

In a vest pocket flash-light of the type comprising a long tubular casing of relatively small diameter, a lamp-socket at one end adapted to hold a lamp in such position that the center terminal of the lamp is in line with the carbon terminal of a cell within the casing, and a spring in the top of the casing adapted to normally press the aforesaid terminals of the lamp and cell away from one another; means, at the end of the casing opposite the socket, for pushing on the bottom of a cell against the force of said spring to make contact between the aforesaid lamp and cell terminals, said means comprising a base-piece having an inwardly projecting tubular sleeve of substantially less diameter than



the inside diameter of said casing, and a push button within said sleeve adapted to make contact with the bottom of said cell, said push-button being an inverted cup having at both ends outwardly extending flanges, the flange at the inner end being adapted to bear against the inner end of said sleeve and the one at the outer end adapted to slide against the inner side of said sleeve, said sleeve also having an inwardly extending flange at its inner end, and further comprising a spring adapted to bear against said flange on the inner end of said sleeve and said flange on the outer end of said button.

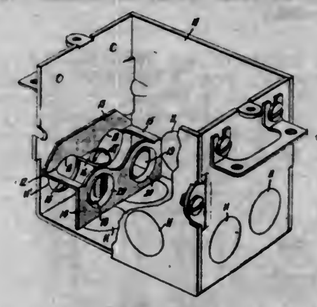
1,895,914. FUSE PLUG OR THE LIKE. EDWARD J. BURNS, Fall River, Mass., assignor to Sears B. Condit, Boston, Mass. Filed Jan. 25, 1929. Serial No. 335,046. Renewed Jan. 28, 1931. 14 Claims. (Cl. 200—119.)



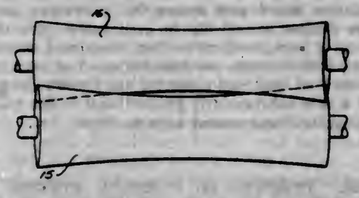
1. In combination with a cut-out, a fuse plug comprising two complementary members, one of said members being adapted to be permanently inserted within said cut-out and having a tapered portion thereon of insulating material, said member having a circular groove at the base of said tapered portion, a conductor within said groove which is adapted to make contact with the center contact of the cut-out, the other complementary member having a tapered recess therein and means in connection with said recess adapted to fit within said circular groove and electrically contact the conductor within said groove, said second member having a fusible element therein electrically connecting said conductor.

1,895,915. OUTLET BOX. GEORGE CARLSON, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed May 14, 1931. Serial No. 537,404. 3 Claims. (Cl. 247—25.)

1. An outlet box having openings in one of its walls to receive armored conductors and a threaded opening in the bottom adjacent to said wall, and means to clamp the armored conductors entering the box through said openings in the wall comprising a unitary structure with a plate slidably engaging said wall and having arcuate recesses to engage the tops of the armored conductors, another plate parallel to said first mentioned plate and having circular openings in line with the openings in said wall to form bushings for the conductors, straps connecting said plates, an apertured ear connected to the first mentioned plate, and a screw passing through said ear and threaded in the opening in the base of the outlet box to move the first mentioned plate along the wall and relative to the second plate to clamp the armored conductors in the openings in the wall.

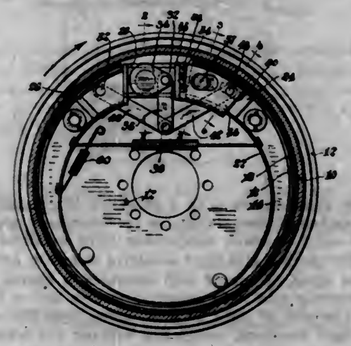


1,895,916. METHOD AND APPARATUS FOR FORMING SHEET GLASS. CARROLL CONE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 16, 1931. Serial No. 563,049. 6 Claims. (Cl. 49—33.)



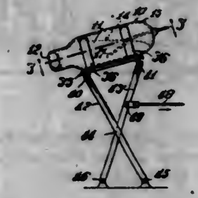
1. In apparatus for the manufacture of sheet glass, a pair of forming rolls adapted to receive a charge of molten glass therebetween and reduce it to sheet form, said rolls being normally relatively narrower at their centers than at their ends, and means for inclining the rolls relative to one another in a direction parallel to the travel of the sheet being rolled.

1,895,917. BRAKE. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Dec. 3, 1928. Serial No. 323,229. 10 Claims. (Cl. 188—79.5.)



1. A brake comprising, in combination, a rotatable drum, a fixed anchor abutment at one side of the drum, a floating friction device engageable with the drum and having one part which anchors against said abutment when the drum is turning in one direction and a different part which anchors when the drum is turning in the other direction, at least one of said parts being adjustable with respect to the body of the friction device, and means for securing said adjustment including a pin journaled in one end of the friction device and a screw having a threaded engagement with said pin.

1,895,918. ELECTRIC SWITCH. ADIEL Y. DODGE, South Bend, Ind. Filed Apr. 29, 1929. Serial No. 358,782. 9 Claims. (Cl. 200—152.)



1. In a liquid switch having a conducting liquid body and adapted for opening and closing movement, a curved tube for holding and sealing the liquid body, said tube having a circuit making and breaking connection, and a pair of liquid receiving and conducting legs angularly disposed relative thereto for receiving and permitting rescission of the liquid from said circuit making and breaking connection in opening the switch and toward said connection in closing the switch, said circuit making and breaking connection having a wall adapted for separating the liquid body into separate liquid bodies in the opening movement of the switch, and each of said separate liquid bodies being movable in opposite directions in said legs for movement away from each other in the opening movement of the switch and toward each other in closing movement of the switch, the walls of said circuit making and breaking connection at the point of break being brought closer together to form a reduced symmetrical section.

1,895,919. SAPONIFICATION OF CELLULOSE ESTERS. CAMILLE DREYFUS, New York, N. Y., and WILLIAM WHITEHEAD, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed June 20, 1928. Serial No. 287,034. 15 Claims. (Cl. 8—20.)

1. Process of saponifying cellulose esters which comprises subjecting materials containing the same to the action of a saponifying agent in vapor form under such conditions as to at least partially saponify the cellulose esters and in the presence of moisture.

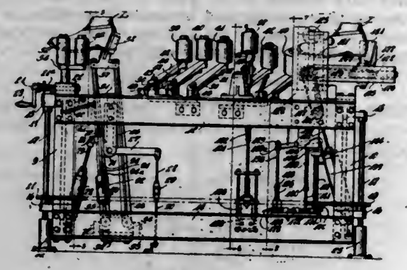
1,895,920. SAPONIFICATION OF CELLULOSE ESTERS. CAMILLE DREYFUS, New York, N. Y., and WILLIAM WHITEHEAD, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed June 20, 1928. Serial No. 287,035. 11 Claims. (Cl. 8—20.)

1. Process of saponifying inorganic esters of cellulose which comprises subjecting materials containing the same to the action of a saponifying agent in vapor form under such conditions as to at least partially saponify the cellulose esters and in the presence of moisture.

1,895,921. APPARATUS FOR ROLLING AND PRESSING RUBBER SHOES. HOWARD G. ELLIS, Waltham, Mass., assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 7, 1931. Serial No. 528,258. 15 Claims. (Cl. 12—1.)

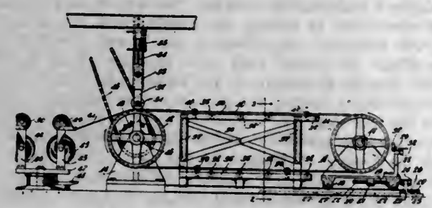
1. Apparatus for rolling and pressing shoe parts assembled on lasts, said apparatus comprising means for

supporting and conveying the lasts in a determinate path, yieldably mounted rollers for compacting the shoe parts along the sides of the last, and nonrotatable pressing



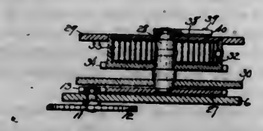
means automatically movable into the path of the lasts for pressing a portion of the shoe parts inaccessible to the rollers without rolling the same.

1,895,922. BELT-MAKING APPARATUS. BENJAMIN A. EVANS and WALTER B. FREEMAN, Cuyahoga Falls, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Jan. 8, 1930. Serial No. 419,363. 6 Claims. (Cl. 154—3.)



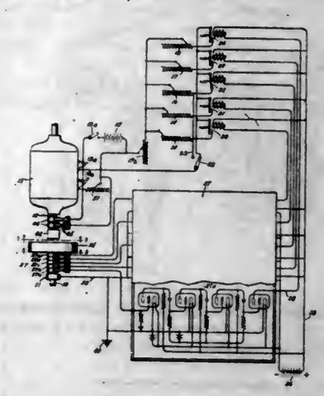
1. Belt-making apparatus comprising a pattern belt adapted to receive belt-building material fed thereonto in the direction of its movement, selective material supply means in alignment therewith, means for driving said pattern belt, means for laterally guiding said pattern belt and means for compacting the successive plies of material fed thereonto as such plies are applied.

1,895,923. ELECTRIC CLOCK. WILLIAM H. GREENLEAF, Chicago, Ill., assignor to Western Clock Company, Peru, Ill., a Corporation of Illinois. Filed June 7, 1928. Serial No. 283,693. 3 Claims. (Cl. 58—41.)



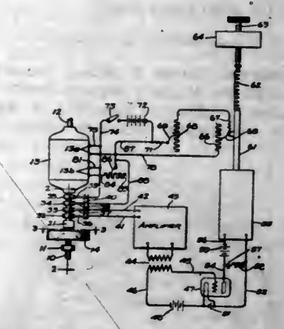
1. A clock including a time train comprising supporting plates arranged in spaced relation, one of the plates having an opening therein, an arbor journaled on one of the plates, an open ended spring barrel loosely mounted on the arbor, a plate closing said end of the barrel and positioned in the aforementioned opening of the supporting plate, a spring connecting the arbor and barrel, electric means located outside of said plates for tensioning the spring, and means for causing the electric means to rotate the barrel with its closure plate and the arbor simultaneously when the spring is fully tensioned.

1,895,924. ELECTRICAL CONTROL SYSTEM. JOHN HAYS HAMMOND, Jr., Gloucester, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 23, 1929. Serial No. 365,425. 13 Claims. (Cl. 172—298.)



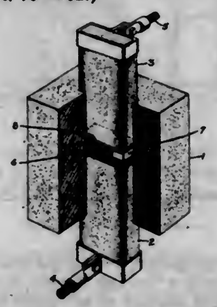
1. The combination with a plurality of members, means for maintaining said members in synchronism comprising means for regulating the relative speed of said members including a plurality of light sensitive devices arranged to effect respectively adjustments of varying magnitudes in said relative speed and means for activating said light sensitive devices selectively in accordance with the relative speed of said members so that when said members depart from synchronism the relative speed of said members is regulated so that said members are restored to synchronism at a rate substantially proportional to the magnitude of the angular displacement between them.

1,895,925. ELECTRICAL CONTROL SYSTEM. JOHN HAYS HAMMOND, Jr., Gloucester, Mass., assignor to General Electric Company, a Corporation of New York. Original application filed May 23, 1929, Serial No. 365,425. Divided and this application filed May 28, 1930. Serial No. 456,607. 13 Claims. (Cl. 172—293.)



1. The combination with a plurality of rotatable members of means for maintaining a predetermined speed ratio between said members comprising light sensitive means, means for moving said light sensitive means in accordance with the speed of one of said members, a source of light for activating said light sensitive means, means for moving said source of light in accordance with the speed of one of said members, means for varying the intensity of light transmitted from said source to said light sensitive means in accordance with a departure in the relative speed of said members from said predetermined speed ratio and means controlled responsively to the intensity of light transmitted to said light sensitive means controlling the speed of one of said members so as to restore said predetermined ratio at a rate substantially proportional to the magnitude of said departure.

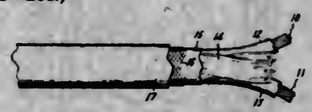
1,895,926. METHOD OF FORMING DIAMOND CHARGED CUTTING TOOL BITS. SAMUEL L. HOYT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Original application filed Sept. 5, 1929, Serial No. 390,621. Divided and this application filed Nov. 6, 1930. Serial No. 493,815. 4 Claims. (Cl. 76—101.)



1. The method of forming a cutting tool bit which comprises forming a powdered matrix under pressure into a bar, cutting away an end portion of said bar, inserting into said cut-away portion a powdered composition consisting of a matrix containing a substantial amount of a hard abrasive material and applying pressure and heat to said powdered composition and bar to form them into a cutting tool bit.

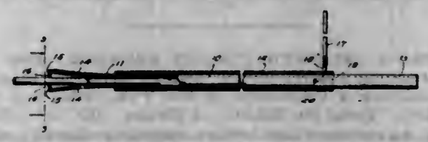
2. The method of forming a cutting tool which comprises mixing tungsten carbide and cobalt with diamond particles, applying a relatively thin protective layer of tungsten carbide and cobalt above said mixture, simultaneously heating said layer and mixture to the sintering temperature of said layer and thereafter removing at least that portion of said protective layer adjacent the cutting edge of the tool.

1,895,927. RUBBER INSULATED ELECTRICAL CABLE. CLIFFORD O. HULL, Stratford, Conn., assignor to General Electric Company, a Corporation of New York. Filed May 13, 1931. Serial No. 537,128. 4 Claims. (Cl. 173—264.)



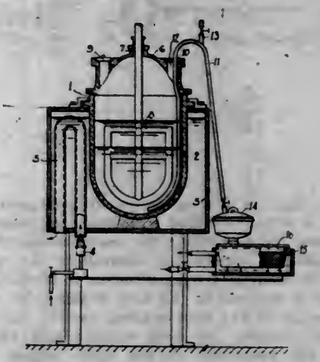
1. The method of manufacturing rubber covered multiconductor cable which comprises assembling the conductors and a filler, providing a paper separator thereon, applying a jacket of uncured rubber over said separator, and then vulcanising the rubber jacket.

1,895,928. BROKEN AXLE SHAFT REMOVER. HAROLD R. JARVIS, Rives Junction, Mich. Filed July 16, 1931. Serial No. 551,257. 5 Claims. (Cl. 294—100.)



1. A puller of the character described comprising divergent opposed clamping arms connected together at one end, threads formed on the outer surface of each of said arms, a threaded tubular element engaging the threaded portions of each of said arms whereby upon rotation of said tubular element the arms will be drawn one toward another for clamping an article therebetween, and means for rotating said tubular element.

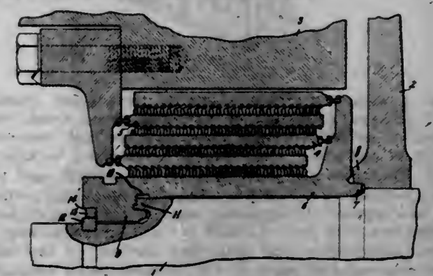
1,895,929. PURIFYING IODINE. COULTER W. JONES, Shreveport, La., assignor to Jones Chemical Company, Inc., McDade, La., a Corporation of Louisiana. Filed Nov. 6, 1931. Serial No. 573,370. 9 Claims. (Cl. 23—216.)



1. The method of purifying crude iodine which comprises agitating such iodine with a strong solution of one or more compounds selected from the group consisting of sulphuric acid, phosphoric acid, alkali metal hydrosulphates, and alkali metal monophosphates, heating the mixture to a temperature above the melting point of iodine and separating molten iodine from the solution.

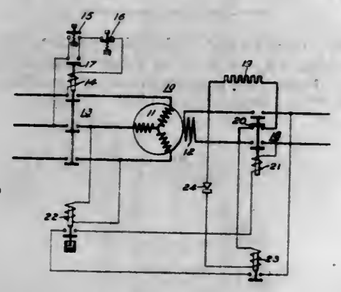
9. The method of purifying crude iodine which comprises agitating such iodine with an aqueous phosphoric acid solution, heating the mixture to a temperature above the melting point of iodine at a pressure sufficient to maintain the aqueous solution substantially in liquid phase, permitting the mixture to stratify into an iodine layer and an aqueous layer, and separating the two layers from each other.

1,895,930. SHAFT PACKING. OSCAR JUNGGREN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 27, 1931. Serial No. 559,756. 2 Claims. (Cl. 286—10.)



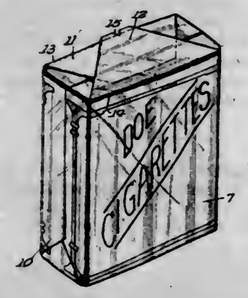
1. In combination, a rotating shaft having an undercut shoulder, a wheel disk having an undercut hub fastened to the shaft, a packing surrounding the shaft and including an inner packing member carried by the shaft, and means for preventing substantial relative radial expansion between the inner member and the shaft, said means comprising an undercut flanged portion integrally formed with one end of the inner member and engaging the underside of said shoulder, and an annular projection integrally formed with the other end of the inner member and engaging the undercut hub of the disk.

1,895,931. SYNCHRONOUS MOTOR CONTROL SYSTEM. REESE T. KINTZING, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 20, 1930. Serial No. 421,951. 8 Claims. (Cl. 171—118.)



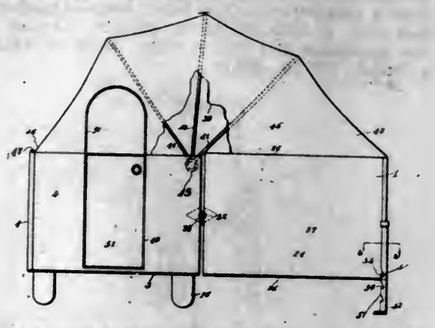
3. In a starting system for synchronous motors, in combination, a motor provided with field and armature windings, means for controlling the energization of the armature winding, a switch for controlling the energization of the field winding, a relay disposed to be energized when a voltage is induced in the field winding for controlling the actuation of the field-winding switch, and a rectifier interposed between the field winding and the relay to prevent the operation of the relay except when the torque produced by the armature winding and the torque produced by the field are in cumulative relation.

1,895,932. WRAPPER. WILLIAM A. KOCH, Chicago, Ill. Filed May 29, 1931. Serial No. 540,906. 5 Claims. (Cl. 229—51.)



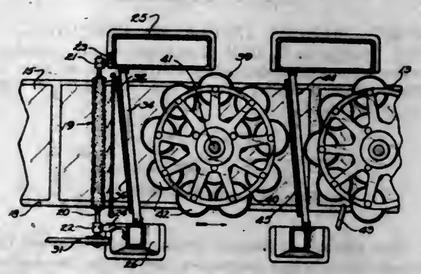
1. A wrapper for a substantially rectangular commercial package, consisting of a comparatively tough, thin sheet of material having the properties and characteristics of cellophane and wrapped around the package so that it encases the four sides of the package and projects beyond one end of the package, the projecting portions of two opposed side-encasing parts of the wrapper being folded inwardly over the said one end of the package to form infoldments, the projecting portions of the other two side-encasing parts of the wrapper being connected to the first mentioned projecting portions and forming oppositely facing flaps for closing the said one end of the package, one of the flaps being folded over and superimposed upon the two infoldments, the other flap being folded over and sealed to the said one flap and having an unsealed outer end edge and a preformed cut or notch in said edge for the purpose of starting a tear in the upper flap when one of the parts of the upper flap at opposite sides of the cut or notch is gripped by the fingers and pulled relatively to the other part, said wrapper sheet being arranged to encase the other end of the package and having no exposed cut or notch other than the aforesaid cut of notch in the upper flap and being sealed marginally so that the wrapper renders the package completely moisture-proof.

1,895,933. CAMPING TRAILER. RAY F. KUNS, Madisonville, Ohio. Filed May 7, 1932. Serial No. 609,919. 10 Claims. (Cl. 296—23.)



1. In a portable shelter, a body portion having a floor, a lid portion having a top and having hinged connection with said body and adapted to be opened and closed, said connection being substantially equal distance from said bottom and said top, whereby when said lid is in open position said top is adapted to be substantially in horizontal alignment with said bottom, the area of said top being slightly larger than the area of said bottom whereby when said lid is in open position the floor space of said shelter is more than twice the area of said body portion floor and said lid is adapted to telescope over said body portion when in closed position.

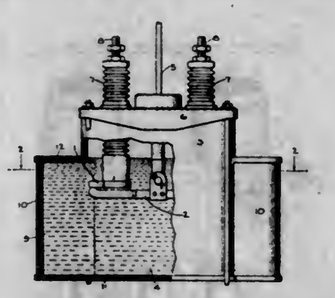
1,895,934. MEANS FOR WASHING AND CLEANING GLASS SHEETS. THOMAS J. LEYLAND, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 28, 1929. Serial No. 343,414. 11 Claims. (Cl. 15—77.)



1. In washing and cleaning apparatus of the character described, the combination with a plurality of movable tables adapted to carry a series of glass sheets in a definite substantially horizontal path, of rotatable means for washing the sheets, and rotatable means for subsequently dry wiping the same, said washing means and wiping means being mounted in a fixed position and adapted to engage said sheets as they are carried therebeneath.

1,895,935. ELECTRIC CIRCUIT BREAKER. EZRA B. MERRIAM, Swarthmore, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 26, 1931. Serial No. 559,511. 4 Claims. (Cl. 200—150.)

1. An electric circuit breaker comprising relatively movable coacting contacts, and a tank containing insulating liquid in which said contacts are immersed, said tank provided with an extension forming a narrow lateral pocket opposite and adjacent said coacting contacts, said pocket being restricted in cross sectional area as compared with said tank and arranged so that the arc formed upon separation of said contacts is drawn transversely of the opening of said pocket.

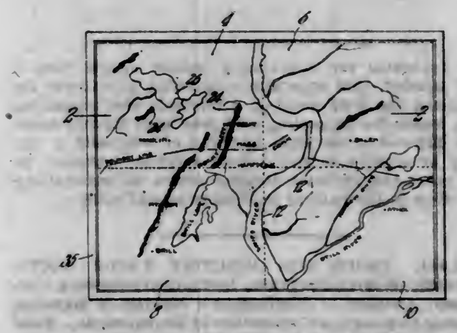


1,895,936. RUBBER SHAFT-BEARING. ALLAN B. MERRILL, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Oct. 31, 1928. Serial No. 316,271. 6 Claims. (Cl. 308—238.)



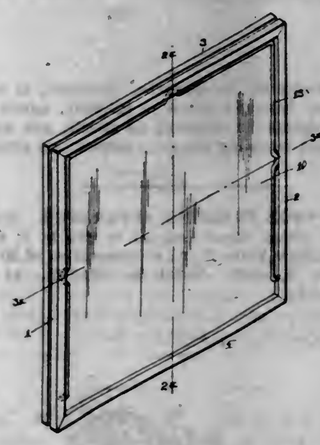
3. A shaft-bearing comprising a metal sleeve and mounted out of contact with each other on the inner face thereof a circumferential series of deformable individual detachable molded strips of hard rubber having shaft-contacting portions of soft rubber shaped to form acute angles with the surface of the shaft.

1,895,937. MAP. RALPH L. MORSE, Springfield, Mass. Filed Feb. 1, 1932. Serial No. 590,087. 1 Claim. (Cl. 35—6.)



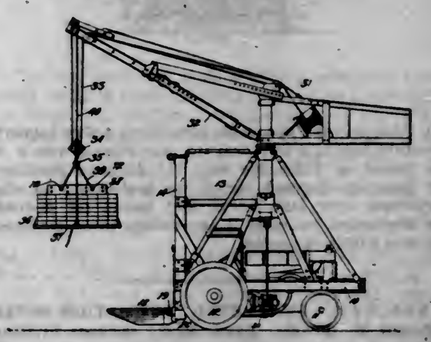
The method of making a map which consists in, forming separate relief map sections having flanges on their marginal edges by coating with plastic material separate molds having flanges on their marginal edges, the surfaces of said molds being curved to represent the curve of the earth's surface and provided with cavities and ridges to represent the contour of that section of the earth's surface which the mold represents, securing together the said marginal flanges of said separate map sections to form a unitary map, the curved surfaces of said sections uniting to form a unitary map and co-operating with each other to present a continuous surface having the curvature of the earth's surface, and then applying geographical designations to said curved surface.

1,895,938. FRAME. HENRY G. MUTSCHLER, Rochester, N. Y. Filed Nov. 16, 1931. Serial No. 575,291. 5 Claims. (Cl. 40—156.)



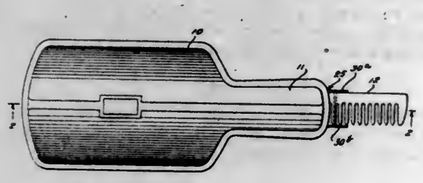
1. A frame for removable signs comprising top, bottom and side rails, a channel formed in said bottom rail, a locking member pivoted on the inside of said side rails and said top rail and yielding means carried by said locking member adapted to engage said side rails to lock a sign supported in said channel of said bottom rail into said frame.

1,895,939. ARTICLE HANDLING MACHINE. OTIS F. PRESBREY, Brooklyn, N. Y. Filed Sept. 11, 1928. Serial No. 305,225. 8 Claims. (Cl. 214—65.)



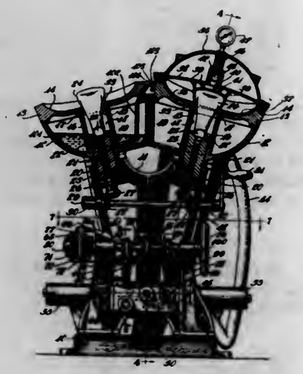
1. In an article handling machine, the combination of an upright frame, a carriage guided thereon, an arm including a blade having an axial swivel connection with the carriage, for engaging a support for carrying articles the thinner edge of the blade presented upwards and the swivel connection being below such edge, and means for moving the carriage to lift the articles.

1,895,940. COMBINED BRUSH AND COMB CONSTRUCTION. ALFRED F. REILLY, North Attleboro, Mass., assignor to Evans Case Company, North Attleboro, Mass., a Corporation of Massachusetts. Filed Aug. 20, 1931. Serial No. 558,256. 24 Claims. (Cl. 132—86.)



1. In a device of the character described, in combination, a brush having a recess in its body, means located within said recess for retaining an article, and means for actuating said retaining means to release said article from said brush.

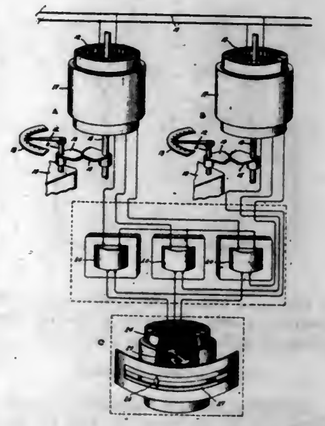
1,895,941. SHOE PRESSING APPARATUS. ROSCOE V. RITCHEY, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Nov. 5, 1929. Serial No. 404,960. 14 Claims. (Cl. 18—2.)



1. Shoe-pressing apparatus comprising a shoe-supporting structure having a spherical top face formed with a shallow recess in which the sole and adjacent portions of the shoe are disposed, means for positioning an elastic diaphragm over said recess, and means for distending the diaphragm to cause it to envelop those portions of the shoe within the recess.

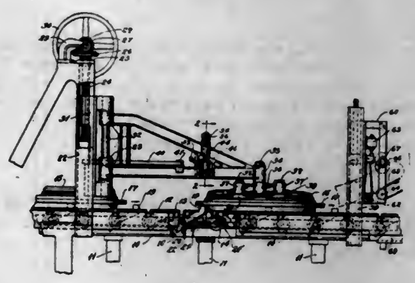
1,895,942. TELEMETRIC SUMMATION SYSTEM. RALPH M. ROWELL, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 23, 1927. Serial No. 177,699. 6 Claims. (Cl. 177—351.)

1. A telemetric summation system comprising a plurality of electrical position transmitting devices and an electrical position receiving device, said devices having relatively movable inductively related elements, including a winding on at least one element of each device, direct electrical connections between the windings of one of said transmitting devices and the receiving device, and electrical means included in said connections and energized from



the windings on the remaining transmitting device or devices for modifying the signalling current flowing to the receiving device.

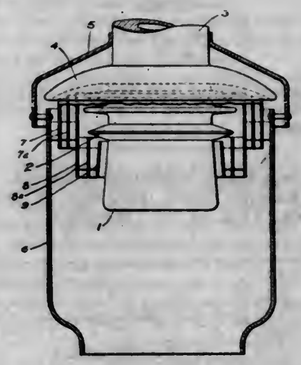
1,895,943. METHOD OF AND APPARATUS FOR REMOVING TIRES FROM MOLDS. JOHN P. SAPP, Kent, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 25, 1932. Serial No. 601,112. 9 Claims. (Cl. 18—2.)



3. Apparatus for loosening a molded article from a mold member, said apparatus comprising a conveyor for advancing the mold member, a rotatable disc supporting yoke, means for supporting said yoke with its axis angularly disposed to the plane of travel of said mold, a plurality of articles deflecting discs rotatably mounted on said yoke, and yieldable pressure means for maintaining said discs in the path of the article in said mold.

1,895,944. ANODE FOR MERCURY VAPOR RECTIFIERS. MORITZ SCHENKEL, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 1, 1929, Serial No. 375,005, and in Germany July 7, 1928. 5 Claims. (Cl. 250—27.5.)

1. A mercury-arc rectifier characterized by an anode, an anode-insulator above the same and having a lower portion adjacent to the lower end thereof, and a grid structure disposed in spaced relation in front of the lower portions of said insulator and in spaced relation over the joint between the same and the anode, the top of said

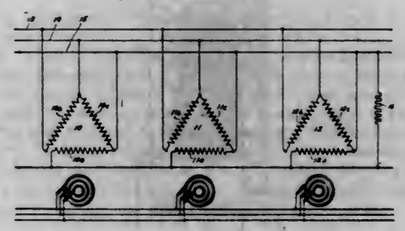


grid structure terminating at some considerable distance above said joint, and the bottom of said grid structure terminating at some considerable distance below said joint but above the extreme lower end of said anode.

1,895,945. METHOD OF MAKING ALDEHYDE-AMINES. WALDO L. SEMON, Cuyahoga Falls, Ohio, and ARTHUR W. SLOAN, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Dec. 20, 1928. Serial No. 327,809. 20 Claims. (Cl. 260—130.)

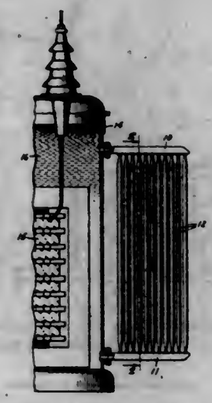
7. The method of manufacturing aldehydeamines which comprises continuously separately heating an aliphatic aldehyde and a primary aromatic amine, and mixing them in the presence of a small proportion of an acid catalyst in a reaction vessel heated to their reaction temperature, and continuously withdrawing the product.

1,895,946. CONTROL SYSTEM. HERBERT STEIN, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 30, 1931, Serial No. 512,424, and in Germany Feb. 4, 1930. 4 Claims. (Cl. 172—274.)



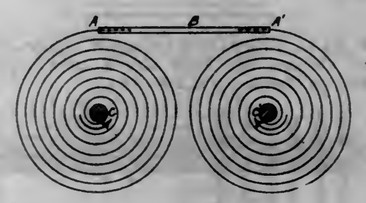
1. A sectional drive for carding sets and the like comprising a plurality of asynchronous alternating current motors, a resistance device, and means for disconnecting one stator phase of each of said motors from the source and connecting said disconnecting stator phases to said resistance device so that all of said motors are uniformly braked to rest.

1,895,947. HEAT RADIATOR. MAGNUS UNGER, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 11, 1931. Serial No. 574,869. 2 Claims. (Cl. 257—191.)



1. A heat radiator including top and bottom headers having openings surrounded by external flanges, and metal tubes connecting said headers, the tubes having ends of greater wall thickness than the intermediate portions of the tubes, and said tube ends extending into said flanges and being welded thereto.

1,895,948. SPIRAL SPRING. JOHN A. VAN DEN BROEK, Ann Arbor, Mich. Filed Feb. 13, 1931. Serial no. 515,580. 2 Claims. (Cl. 267—1.)

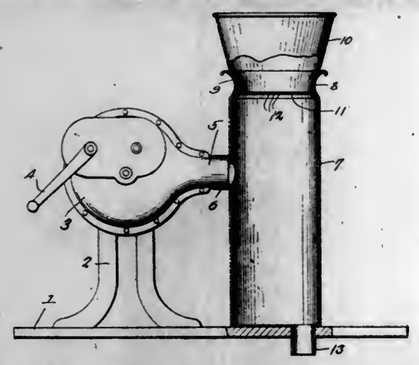


1. The combination of a spiral spring, means for stressing said spring to produce coiling or uncoiling of the spring while permitting the linear distance between the ends of the spring to change, and means for maintaining the tangent to the curve of the outer end of the spring in constant relation to the straight line between it and the inner end during such coiling or uncoiling operation.

1,895,949. MILK COOLER. WILLIAM J. VANSTORY, Booneville, Miss., assignor of one-half to William H. Miller, Booneville, Miss. Filed Jan. 8, 1930. Serial No. 419,392. 1 Claim. (Cl. 261—30.)

A milk cooler including a body open at the top and bottom, a receptacle removably mounted in the upper end of the body and having a flat bottom provided with a plurality of minute apertures for delivering milk in fine streams longitudinally of the body toward the bottom opening, there being an inlet between the open top and bottom constituting the sole opening in the wall of the body, a blower having an outlet nozzle opening through the inlet for directing a current of air transversely across

the body between the fine streams of milk and against the opposed wall, said air being adapted to escape solely along lines substantially parallel with the streams of

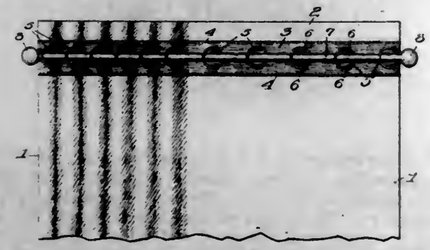


milk to the openings at the top and bottom, thereby prolonging contact of the fine streams of milk with the cooling air current.

1,895,950. SHAPED BODY HAVING A PREDOMINATING PERCENTAGE OF TUNGSTEN OR MOLYBDENUM AND PROCESS OF PRODUCING IT. HERMANN VOIGTLÄNDER and OTTO KAUFELS, Essen, Germany, assignors to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Apr. 4, 1929, Serial No. 352,602, and in Germany May 2, 1928. 7 Claims. (Cl. 207—10.)

1. Process of producing shaped bodies of a predominating percentage of carbide of tungsten or molybdenum, consisting in preparing a fused alloy composed of 80% or more of at least one carbide of tungsten or molybdenum and not over 20% of a strengthening metal or metalloid having a lower melting point than said carbide, cooling said alloy, and giving said alloy the desired finish shape by applying pressure to it at a temperature of about 2200 to 2400° C.

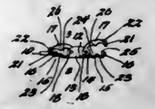
1,895,951. CURTAIN FASTENER. KATHARINE VON FICHT, Chicago, Ill. Filed May 7, 1932. Serial No. 609,895. 3 Claims. (Cl. 156—10.)



1. A curtain fastener comprising: a flexible tape, a plurality of rings, and stitching at spaced intervals on each of said rings serving to yieldingly hold said rings smoothly against said tape.

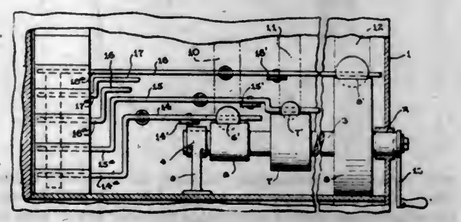
1,895,952. CLASP. HARRY WACHENHEIMER, Providence, R. I. Filed June 11, 1931. Serial No. 548,662. 3 Claims. (Cl. 24—81.)

3. A clasp comprising a channel member having a pair of spaced side walls and a bottom which projects beyond said side walls longitudinally thereof, said side walls having aligned apertures, and a closure member having lateral pivot pins mounted in said apertures for pivotally connecting said closure member in said channel member, and a lip on said closure member releasably engaging the projecting end of the bottom of said channel with a tight sliding fit, said projecting portion of said bottom having a transverse rib positioned between the end of said projection



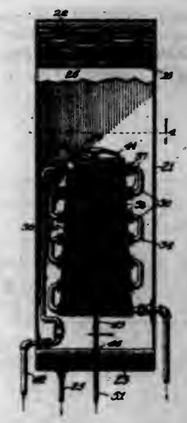
and the adjacent ends of said side walls, and said closure member having a transverse rib overlying the rib on said bottom member.

1,895,953. MULTIPLE VENDING MACHINE. CHARLES WALKER, Knoxville, Tenn. Filed Sept. 29, 1930. Serial No. 485,168. 7 Claims. (Cl. 194—88.)



1. In a vending machine, a rotary member, means on said member for receiving and firmly supporting a coin in projecting relation thereto, means for rotating said member, a fulcrumed lever arranged adjacent said rotary member with one arm in close proximity to said coin supporting means and lying in a plane parallel to the axis of said rotary member, said arm being adapted to be operatively engaged by a projecting coin upon the rotation of said rotary member, the other end of said lever forming an article delivery arm.

1,895,954. AIR CONDITIONING APPARATUS. FREDERICK H. WILDE, Chicago, Ill., assignor to Guy S. Faber. Filed Aug. 23, 1930. Serial No. 477,375. 18 Claims. (Cl. 261—12.)



1. Air conditioning apparatus comprising a conduit for the flow therethrough of the air to be conditioned, air conditioning means for subjecting air to water in said conduit, and an end-discharging water-receiving trough at the lower portion of said conduit crosswise along the underside of which the air to be conditioned flows, the apparatus having a lower air inlet and an upper air outlet.

1,895,955. SOLID FUEL AND PROCESS OF MAKING THE SAME. LEON WYGODSKY, Baltimore Md. Filed Sept. 20, 1928. Serial No. 307,337. 8 Claims. (Cl. 44—7.)

1. The method of making a solid fuel comprising mixing hexamethylentetramine to form a plastic mass, molding the mass and applying a coating thereto.

4. A solid fuel comprising a hardened cake of initially plastic hexametnylentetramine containing, in final form, no admixture of extraneous substances.

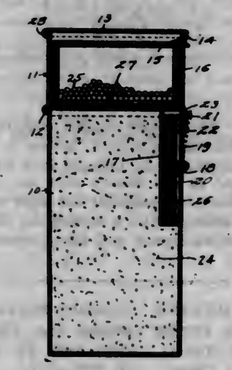
7. A solid fuel comprising a solidified mass of hexamethylenetetramine having a coating of metaldehyde thereon.

1,895,956. SOLID FUEL AND METHOD OF MAKING SAME. LEON WYGODSKY, Baltimore, Md. Filed Apr. 8, 1930. Serial No. 442,687. 5 Claims. (Cl. 44—7.)

1. The method of making a solid fuel cake comprising subjecting hexamethylentetramine crystals to pressure to effect partial crushing thereof into a coherent mass having a density ranging between 1.05 and 1.20.

5. A compressed cake of hexamethylentetramine having a density ranging between 1.05 and 1.20.

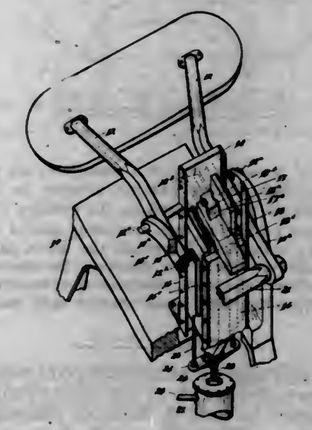
1,895,957. COMBINATION TOBACCO, MATCH, AND CIGARETTE PAPER CASE. GUY MERLE YOUNG, Memphis, Tenn., assignor of fifty-two and one-half per cent to N. Pirani, Memphis, Tenn. Filed June 12, 1930, Serial No. 460,674. Renewed July 5, 1932. 5 Claims. (Cl. 206—38.)



1. A combination case of the character described comprising a tobacco case having an open upper end, a match holder hingedly mounted on said tobacco case and adapted to close the open end of said tobacco case, a hinged lid for said match holder, a cigarette paper case mounted on one wall of said tobacco case and extending inwardly thereof, and a hinged plate carried by said tobacco case and adapted to hold said match holder in closed position on said tobacco case, said plate when in opened position providing an opening in said paper case to facilitate removal of papers through the open end of the paper case.

1,895,958. PRESS. JOHN ZIMARIK, Akron, Ohio, assignor, by mesne assignments, to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Nov. 15, 1928. Serial No. 319,470. 17 Claims. (Cl. 68—9.)

7. The combination with a press including relatively movable members, one of which is mounted on a lever to swing toward and from the other, of means for swinging the lever to move the press members adjacent each other and apart, wedge means associated therewith for engaging the lever when the members are adjacent each

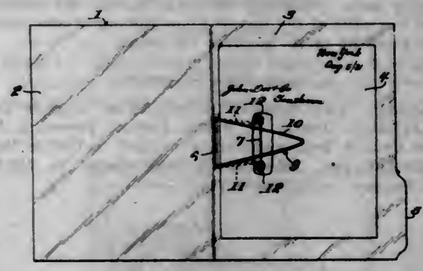


other to apply pressure to the press members, and means for actuating the lever swinging means and the wedge means.

1,895,959. HARD ALLOYS. CURT AOTE, Berlin-Lichterwelde-Ost, and KURT MOERS, Berlin-Charlottenburg, Germany, assignors to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Apr. 9, 1931, Serial No. 528,973, and in Germany June 16, 1930. 4 Claims. (Cl. 75—1.)

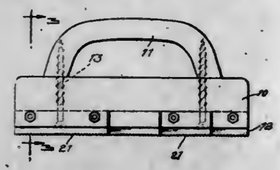
3. A hard alloy consisting of 99 to 75% of a fused mixture of titanium carbide and titanium nitride and 1 to 25% of at least one metal of the iron group.

1,895,960. FOLDER. IVAN ALLEN, Atlanta, Ga. Filed Oct. 21, 1931. Serial No. 570,191. 1 Claim. (Cl. 129—16.7.)



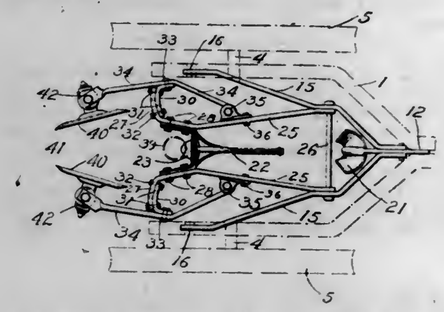
A folder comprising a sheet of material folded upon itself to provide a backing and a cover therefor having a hinging movement, said backing having slots with one of said slots located in close proximity to the cover where the latter hinges onto the backing, a resilient V-shaped clip overlying the backing with the apex thereof disposed towards the free side edge of the backing and consisting of diverging arms bent back upon themselves to provide parallel extensions with looped portions between themselves and the arms and with the looped portions arranged through the slot adjacent the cover to permit said extensions to overlie, the outer face of the backing with the ends of the extensions bent angularly and disposed through the other slot.

1,895,961. RESURFACING TOOL FOR BUTCHER'S BLOCKS. ORAZIO AMARU, Astoria, N. Y. Filed Aug. 8, 1931. Serial No. 556,015. 1 Claim. (Cl. 145—47.)



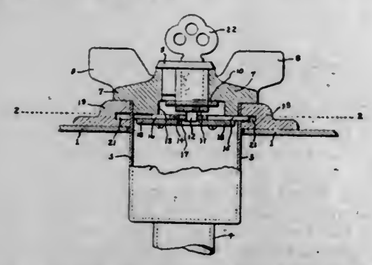
A device of the class described comprising an elongated rectangular block having parallel grooves in its lower surface, serrated plates placed in the grooves with their serrated edges projecting from the lower face of the block, bolts passing transversely through the lower part of the block through the plate for holding the plates in the grooves, a bowed handle, screws passing upwardly through the block from the lower face thereof into the ends of the handle.

1,895,962. METHOD OF PLANTING POTATOES. FRED H. BATEMAN, Grenloch, N. J., and ISAAC TROLLEY, York, Pa., assignors to Fred H. Bateman Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 29, 1929. Serial No. 381,880. 2 Claims. (Cl. 111—14.)



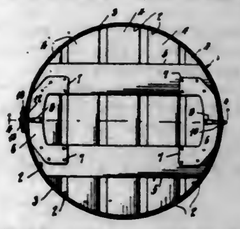
1. A method of planting seed potatoes consisting in forming a relatively deep furrow having downwardly converging walls, depositing the seeds therein and removing from the walls of the furrow below the upper ends thereof thin slices of earth to cover the seeds.

1,895,963. ANTITHEFT DEVICE FOR FLUID CONTAINERS. HENRY W. BATES, Jackson Township, Porter County, Ind., assignor of one-half to George Haga, Marshall, Ind. Filed May 3, 1930. Serial No. 449,502. 4 Claims. (Cl. 70—90.)



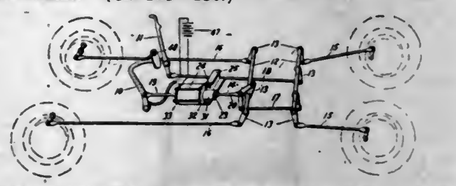
1. In anti-theft devices, a container having an inlet thereto and an outlet therefrom, a tube positioned in the inlet and outlet simultaneously, means for threading the the tube in the outlet, and means for locking the tube in the inlet.

1,895,964. SHIPPING BASKET COVER. WILLIAM BELLOWONS, Mays Landing, N. J. Filed Feb. 4, 1932. Serial No. 590,919. 1 Claim. (Cl. 217—124.)



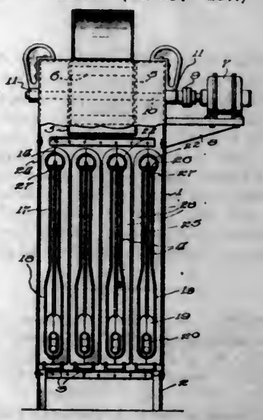
A shipping basket cover, comprising a plurality of fibrous strips arranged side by side, spaced cleats connecting said strips together, U-shaped cross pieces connecting the cleats adjacent to their ends, and securing means for said cover mounted on said cross pieces and adapted for connection with securing means on a basket, said cross pieces providing strengthening means for said cleats and also providing handles for moving the cover.

1,895,965. MAGNETIC AUTOMOTIVE BRAKE. VINCENT BENDIX, Chicago, Ill., and VINCENT G. APPLE, Dayton, Ohio, assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 11, 1928, Serial No. 291,838. Renewed July 23, 1930. 14 Claims. (Cl. 188—156.)



1. A magnetic automotive brake comprising, brakes, brake operating linkage, a manual means to operate said linkage, an electromagnet to operate said linkage having one element affixed to the chassis and the other element affixed to the linkage, a controller for said electro-magnet attached to said linkage, and a switch for said controller affixed to said manual means and simultaneously operable therewith.

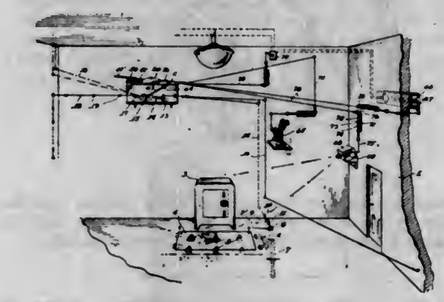
1,895,966. AIR HEATER. GUSTAVE BLUEMEL, Chicago, Ill., assignor to Drying Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed July 23, 1931. Serial No. 552,602. 1 Claim. (Cl. 257—137.)



In a heat interchanger, a heat transferring unit consisting of a walled structure having parallel side walls

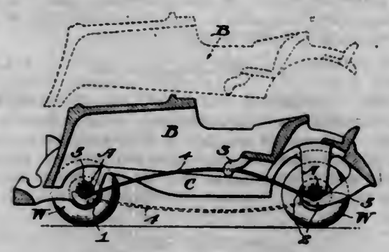
of large area with reference to marginal end connecting walls, a heat absorbing and radiating plate hung in said structure to extend between and parallel with said side walls but slightly spaced therefrom, said walled structure being formed to provide an inlet at one end and an outlet at the other end, and means for supplying heat to the inlet end of said structure.

1,895,967. BURGLAR AND FIRE ALARM. CHARLES WILLIAM BOWEN, Augusta, Ga. Filed Mar. 14, 1930. Serial No. 435,894. 1 Claim. (Cl. 116—5.)



A burglar alarm including a mechanically operated bell, a detent normally rendering said bell inoperative, a spring-pressed lever adapted to release said detent, a reciprocably-mounted rod having one end pivoted to said lever, a spring-pressed arm pivoted adjacent said bell, a display sign, means connecting a portion of said sign with the spring-pressed arm, a latch for said arm, a spring tending to withdraw the latch from the arm, said reciprocably-mounted rod adapted to normally engage said latch to counteract the action of said spring, and to release the latch when reciprocated by said spring-pressed lever.

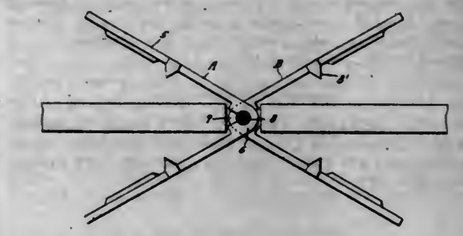
1,895,968. TOY VEHICLE. JACOB E. BRUBAKER, Lancaster, Pa., assignor to The Hubley Manufacturing Co., Lancaster, Pa., a Corporation of Pennsylvania. Filed Oct. 24, 1932. Serial No. 639,368. 7 Claims. (Cl. 46—48.)



1. A toy vehicle including a chassis unit having wheeled axles, a body removably mounted on the chassis unit, a keeper member on the body, a spring wire having its ends connected with the axles and its intermediate portion being engaged with said keeper member on the body.

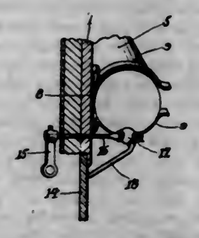
1,895,969. FLEXIBLE BELT FASTENER. WILLIS ALEXANDER CALHOUN, Mascot, Tenn. Filed May 4, 1932. Serial No. 609,215. 2 Claims. (Cl. 24—38.)

2. A flexible belt fastener of the class described comprising a pair of sections, a pin, each section comprising a pair of plates connected by a bight through which the pin extends, said bights each completely encircling said pin for preventing shifting movement of the plates with



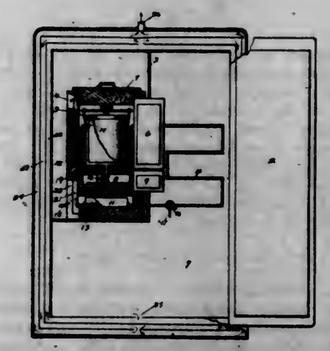
respect to said pins, said bights being bendable so that the plates may be clamped on to belt ends, said plates being provided with spikes to bight into the belt ends.

1,895,970. WINDSHIELD ATTACHMENT. CLYDE C. CAPSHAW, Dallas, Tex. Filed Dec. 12, 1930. Serial No. 501,986. 4 Claims. (Cl. 20—40.5.)



1. In an attachment for a windshield frame equipped with a wiper element, a liquid container, means for detachably securing the container to the outer face of the windshield frame, a valve coupling tapped into the container, a discharge pipe leading from the coupling to the windshield above the path of the wiper element, and a rearwardly extending shiftable valve stem projecting from the coupling and of a length to extend through and rearwardly from the windshield frame.

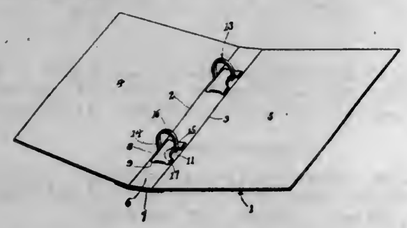
1,895,971. REFRIGERATING DEVICE. HOWARD H. CARPENTER, Pasadena, Calif. Filed Mar. 17, 1930. Serial No. 436,539. 5 Claims. (Cl. 62—91.5.)



1. In a refrigerator, in combination with a refrigerating compartment, a container adapted to contain a low temperature refrigerant, a conduit connected to the said

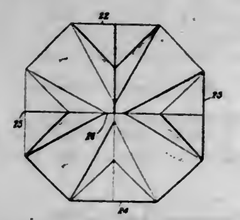
container and adapted to use the refrigerating effect of the gases from the low temperature refrigerant by their passage through the said conduit, means arranged to cause the gases from the low temperature refrigerant if above a predetermined temperature on passing through the said conduit to volatilize a liquid, the volatile product of said liquid in turn volatilizing a low temperature refrgerant in the said container.

1,895,972. BINDER. WESLEY M. CHILDS, Eldorado, Kans., assignor to Lorene W. Childs, Eldorado, Kans. Filed June 14, 1932. Serial No. 617,192. 12 Claims. (Cl. 129—23.)



1. A binder comprising, a body part formed of a hinged front cover portion, a hinged rear cover portion and a back edge portion, a plate anchored against the inner face of said back edge portion, an upstanding coupler for connecting sheets or leaves with said body part and including an upstanding inverted U-shaped strap-like part formed with an arcuate top extending across the plate and a pair of sides, one of said sides being integral at its lower end with one side edge of the plate and the other of said sides having its lower end spaced from the plate, and a flat lug spaced above the plate and integral with and extending inwardly at right angles to the lower end of the said other side of said strap-like part.

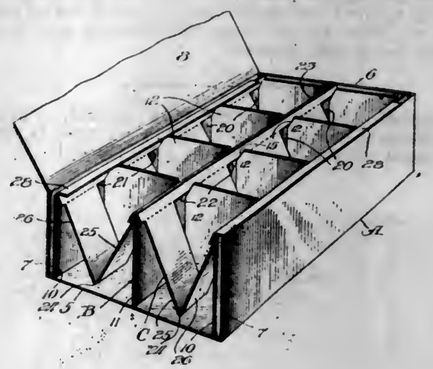
1,895,973. FOLDED NAPKIN. AUSTIN E. COFRIN, Green Bay, Wis. Filed May 5, 1930. Serial No. 449,933. 4 Claims. (Cl. 206—57.)



1. A napkin or the like folded to substantially triangular form comprising a base, an apex, a pair of relatively short margins extending from said apex at substantially a right angle to each other and a pair of long marginal edges connecting the ends of said base with the ends of said short sides, said fold formed with a pair of tabs superposed on the body of the fold the free edge of each of the tabs substantially parallel with and spaced from the adjacent margin of the fold to be readily grasped by a user.

1,895,974. EGG CARTON. JOSEPH L. COYLE, London, Ontario, Canada, assignor to Coyle Safety Carton Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 21, 1927. Serial No. 227,793. 2 Claims. (Cl. 229—28.)

1. A filler or article carrier adapted for reception in a carton, wrapper or other container, comprising upright members, upright cross-pieces interengaged with said members and forming therewith a plurality of cells in one or more rows, and cell side and bottom portions hung on said upright members and cross-pieces, the whole



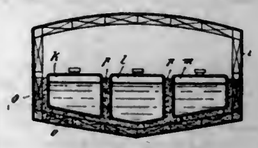
forming a collapsible but self-supporting cellular tray-like device to partition and hold articles for use, and for transportation or sale in a carton or other container.

1,895,975. COIN SORTING MACHINE. FOUNT F. DAUGHERTY, St. Louis, Mo., assignor of one-third to William H. Scheer, St. Louis, Mo. Filed Feb. 26, 1930. Serial No. 431,389. 10 Claims. (Cl. 133—3.)



1. In a coin sorting machine, in combination with a selector plate having a circular series of slots therein graduated in size to correspond to the various sizes of the coins to be sorted, a coin carrier rotatably mounted above said plate and provided with means movable over said slots for delivering coins thereto, and means for ejecting from any slot a coin delivered thereto of a size too large to pass through such slot.

1,895,976. STORAGE OF LIQUIDS IN AIRCRAFT. CLAUDE DORNIER, Friedrichshafen-on-the-Bodensee, Germany, assignor of one-half to Dornier-Metallbauten G. m. b. H., Friedrichshafen-on-the-Bodensee, Germany. Filed May 6, 1931, Serial No. 535,814, and in Germany July 26, 1930. 1 Claim. (Cl. 244—31.)

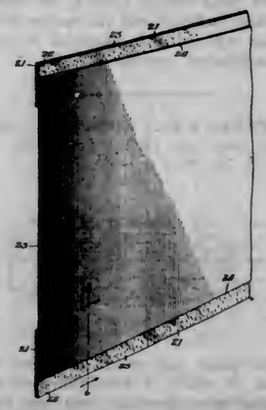


In air craft in combination, a float chamber, elastic material partly filling said chamber, said elastic material being formed with a cavity, a deformable liquid container accommodated in said cavity and a body of liquid in said container, said container under the weight of the liquid therein being deformed to apply itself to the bottom and walls of said cavity.

1,895,977. LIVER CONCENTRATE. JOHN W. DRESSEL, Goldendale, Wash. Filed July 8, 1930. Serial No. 466,581. 2 Claims. (Cl. 167—74.)

1. The herein described process of preparing a liver concentrate, which consists in adding salt to fresh whole liver, then allowing the salt treated liver to stand for approximately forty hours in a temperature of from fifty to fifty-five degrees Fahrenheit, and finally removing the resulting liquid from the treated liver and evaporating the same until a dry residue is obtained.

1,895,978. ADHESIVE SHEETING AND MASKING FOR PAINTING. RICHARD GURLEY DREW, St. Paul, Minn., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a Corporation of Minnesota. Filed Mar. 7, 1931. Serial No. 520,962. 14 Claims. (Cl. 91—68.)



1. As an article of manufacture a masking strip comprising a sheet of paper of substantial width and of a length substantially greater than the width provided along one lengthwise edge with a narrow strip of adhesive, said adhesive strip being of such character and width as to firmly adhere to the sheet, and to be successively adhesable to a substantial number of surfaces to be protected in such manner as to firmly retain the sheet against displacement in its own plane but to be readily withdrawn from such surface by a stripping force applied at an angle to said surface.

1,895,979. GLUE AND PROCESS OF MAKING SAME. HENRY V. DUNHAM, Bainbridge, N. Y. Filed Apr. 16, 1931. Serial No. 530,729. 4 Claims. (Cl. 87—17.)

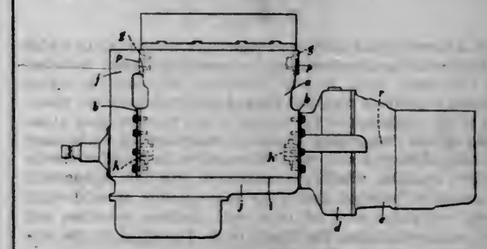
4. A new base for the manufacture of adhesive compositions comprising a proteinaceous substance largely insoluble in water but soluble in alkalis, powdered ivory nut, and an alkaline earth hydroxide together with an alkali metal salt which in the presence of water can react with the said alkaline earth hydroxide to produce a solvent for the protein.

1,895,980. SAFETY RAZOR. AUGUSTE DUPEYRON, Paris, France. Filed Apr. 1, 1931, Serial No. 526,903, and in France Apr. 7, 1930. 2 Claims. (Cl. 30—12.)



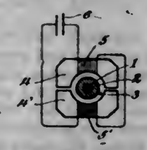
1. A safety razor having a narrow flexible blade with two cutting edges, comprising in combination a tubular handle adapted to form a magazine, a partition within said handle, a removable closure at one end of the handle, a solid part at the other end of the handle, a blade holder mounted in a removable manner on said solid part of the handle, teeth made in the two longitudinal edges of said blade holder for forming guards, means for ensuring the correct positioning of the flexible double edged blade on said blade holder, a blade-securing bar pivoted at one end on said blade holder, a spring at the pivoted end of said bar urging the same toward the blade holder, a spring lock at the end of the blade holder opposite the end to which said bar is pivoted, a notch in said bar and a countersunk part in said notch to facilitate the engaging of the lock when said bar is in blade-securing association with the blade holder.

1,895,981. INTERNAL COMBUSTION ENGINE. CHARLES KEARNS EDWARDS, Birmingham, England, assignor to Morris Commercial Cars Limited, Birmingham, England. Filed May 12, 1930, Serial No. 451,877, and in Great Britain May 23, 1929. 8 Claims. (Cl. 123—195.)



1. The combination of a crank case with a cylinder block mounted thereon and reversible end for end, one end of said casing having an end facing provided with attaching means symmetrically arranged about its vertical axis, and a cam shaft gear casing secured to the attaching means on one side of the vertical axis, the attaching means on the other side of said vertical axis serving for the attachment of a substitute gear casing when the controls are on the other side of the engine.

1,895,982. DEVICE FOR REDUCING THE CURRENT IN THE LEAD SHEATHS OF CABLES. LUIGI EMANUELI, Milan, Italy, assignor to Società Italiana Pirelli, Milan, Italy. Filed Feb. 14, 1930, Serial No. 428,469, and in Great Britain Sept. 5, 1929. 7 Claims. (Cl. 171—97.)

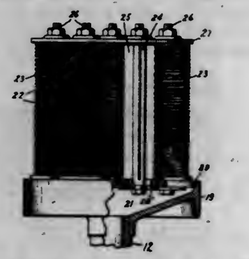


1. A device for reducing the current in the sheath of a sheathed electric cable, comprising a plurality of transformers disposed along the cable at intervals without cutting the cable sheath, each transformer comprising a magnetic core surrounding the cable, a secondary winding on said core, and a condenser connected in series with said secondary winding, the conductor of the cable serving as the primary winding of the transformer, so that the electromotive force induced in the sheath by the current flowing through the cable conductor is neutralized at least partially by the electromotive force induced in the sheath of the cable by the transformers, the current in said sheath being consequently reduced.

3. The combination with an electric cable having continuous metallic sheath, of means for reducing current

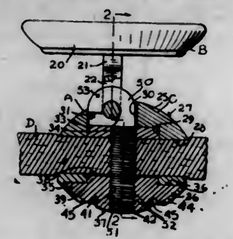
losses in said sheath comprising a transformer having a magnetic core associated with said cable, a secondary winding on said core, and a condenser connected across the terminals of said secondary winding.

1,895,983. APPARATUS FOR DEGASIFYING LIQUIDS. LUIGI EMANUELI, Milan, Italy, assignor to Società Italiana Pirelli, a Company of Italy. Filed Sept. 17, 1929, Serial No. 393,231, and in Great Britain Apr. 19, 1929. 6 Claims. (Cl. 183—2.5.)



6. Degasifying apparatus comprising a chamber in which a vacuum is maintained, and an atomizing device mounted in the upper part of said chamber, whereby the liquid issuing therefrom may fall toward the bottom of the chamber while subjected to the action of the vacuum, said atomizing device comprising a pair of flat surfaced rings horizontally disposed and secured together in parallel closely spaced relation, whereby a restricted annular passageway is provided between them, the space inside of said rings being otherwise shut off from said vacuum chamber, and means for supplying the liquid to be degasified to the said closed space inside of said rings.

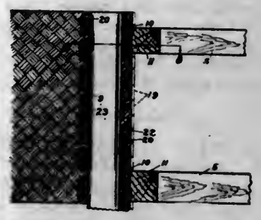
1,895,984. SEPARABLE BUTTON. HYMEN GOLDBERG and HARRY GOLDBERG, Schenectady, N. Y. Filed Feb. 18, 1932. Serial No. 593,901. 15 Claims. (Cl. 24—105.)



5. In a swivelled separable button, a button member provided with an eye portion; and outer base plate having a face facing said button member and provided with an axially extending opening and a slot communicating therewith and with grooves in said face extending from either side of said slot toward the periphery of the base plate; an inner base plate facing the outer base plate and provided with an axially extending opening; a J-shaped shank member having its shank portion disposed in said openings; its hook portion disposed through said eye portion and terminating in said slot with the free end of said eye portion lying in said grooves, means detachably securing said shank to one of said base plates and means detachably securing the shank to the other of said base plates.

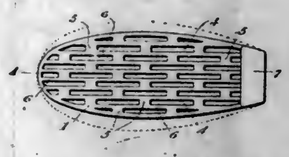
1,895,985. CONSTRUCTION OF RETAINING WALLS. JOHN B. GOLDSBOROUGH, Croton-on-Hudson, N. Y. Filed Nov. 16, 1928. Serial No. 319,876. 4 Claims. (Cl. 61—39.)

1. The method of constructing a retaining wall which consists in sinking substantially vertical members into the ground, excavating the earth at one side of the vertical members and between the same, placing successively below each other as the excavation proceeds horizontal, channel-shaped, sheeting members on the other side of the vertical



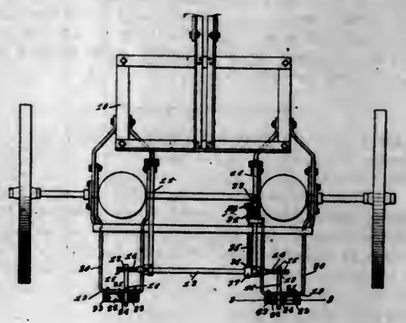
members with their flanges toward the members and filling the sheeting members and the spaces between the vertical members with suitable material to form with said members a permanent, reinforced wall.

1,895,986. PEDAL PAD. FREDERICK C. GRANT, Harvey, Ill. Filed Oct. 12, 1931. Serial No. 568,307. 10 Claims. (Cl. 74—81.)



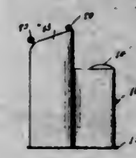
1. A rubber pedal pad of the character described, the tread portion of which is provided with a plurality of elongated lengthwise openings, said pad having integral pedal gripping members.

1,895,987. ADJUSTMENT LEVER. CHARLIE C. GREEN, Plano, Tex. Filed Nov. 3, 1930. Serial No. 493,119. 1 Claim. (Cl. 97—157.)



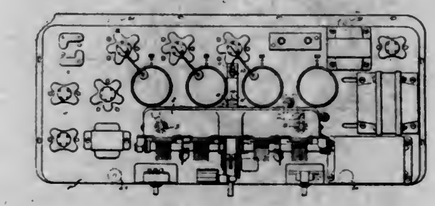
An attachment for planters comprising an operating lever, shovel coverer U-shaped supporting bars adapted to be swingably supported upon a planter, an apertured supporting member of angular formation mounted upon the connecting portion of the U-shaped bar, apertured attaching plates for said bars having certain of the apertures thereof aligning with the apertured supporting member, L-shaped attaching bolts passing through certain other apertures of said plates and contacting said connecting portion of the U-shaped bar for attaching a plate to each bar, a rock shaft mounted upon the planter having perforated end portions, crank arms adjustably mounted on the rock shaft, one of said crank arms being bifurcated at its depending end, the other crank arms being provided with a plurality of openings, a drag link having connection at one end with the operating lever, the opposite end of the drag link being connected within the bifurcated portion of the first-mentioned crank arm, a connecting rod protruding through the aligned apertures of each attaching plate and its supporting member and provided with an offset end for pivotally engaging the apertures of a latter-mentioned crank arm, a stop collar on each connecting rod, and a compression spring encircling each connecting rod and having one end bearing against said attaching plate and its opposite end against the stop collar of the connecting rod to provide a yieldable support.

1,895,988. INDIVIDUAL ASH RECEPTACLE. MATTHEW J. GREEN, Portsmouth, Va. Filed Sept. 24, 1931. Serial No. 564,922. 3 Claims. (Cl. 131—51.)



1. An ash receptacle of the class described having a cigarette-supporting portion, a closure plate for the receptacle, said closure plate being movable to expose an opening whereby access to the interior of the receptacle may be had to drop ashes, a rod extending across the casing, a flange on the plate adapted to abut the rod to limit opening movement, and said plate having the opening therethrough.

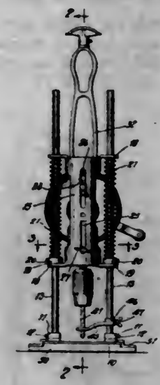
1,895,989. NONMICROPHONIC RADIO APPARATUS. WILLIAM H. GRIMDITCH, Glenside, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 26, 1931. Serial No. 547,147. 14 Claims. (Cl. 250—14.)



11. In the assembly and mounting of radio receiving apparatus on common supporting means, the step of avoiding microphonic tendency in a radio receiver which consists in resiliently isolating the tuning element of the receiver, the rest of the receiver, and the sound reproducer from each other.

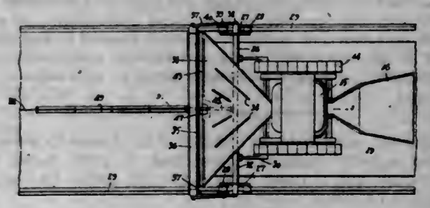
1,895,990. HAND DRILL. EMBO HARCHARICK, Wilkes-Barre, Pa. Filed July 17, 1930. Serial No. 468,667. 2 Claims. (Cl. 77—19.)

1. A drill support comprising a base, a pair of uprights having their lower ends connected with the base, a carriage comprising a plate of arcuate shape in cross section, and having a pair of outwardly extending ears at each end thereof, said ears being provided with openings through which the uprights pass, a collar adjustably connected to each upright and located above a lower ear, springs on the uprights having their lower ends engaging the collars and their upper ends contacting the upper ears, the arcuate-shaped part of the said plate having vertically arranged slots therein, drill holding members located in the space formed by the concavity of the plate and having threaded



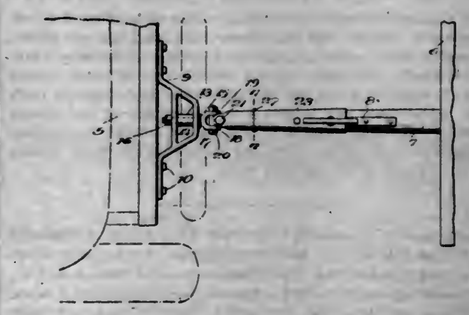
shanks extending through the slots, nut members on said shanks for clamping the holding members in adjusted position in the slots.

1,895,991. ROAD BUILDING MACHINE AND METHOD. JOHN N. HELTZEL, Warren, Ohio. Filed Nov. 26, 1927. Serial No. 235,977. 25 Claims. (Cl. 94—46.)



1. The method of rebuilding a road consisting in producing a cut in a hard road, placing a layer of concrete over said hard road, and producing a weakened portion in said layer above said cut.

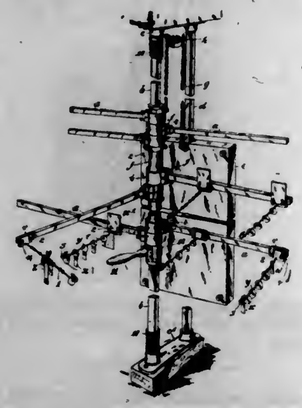
1,895,992. TRAILER HITCH. STUART M. HEPBURN, Pampa, Tex. Filed June 4, 1931. Serial No. 542,133. 3 Claims. (Cl. 280—33.15.)



2. In a trailer for attachment to a motor vehicle, a tongue, a socket detachably engaged with the tongue and provided with longitudinally extending guide slots, a

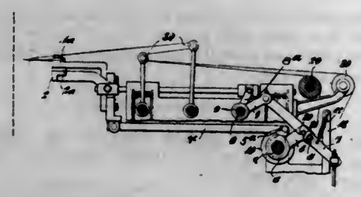
guide pin carried by said tongue and engageable in the slots of the socket, and a key extending through said pin and into the tongue for anchoring the pin.

1,895,993. INDEXING OR LIKE APPARATUS. ARTHUR HILL-TREVOR GLENNY, London, England. Filed Oct. 20, 1931, Serial No. 569,996, and in Great Britain Oct. 21, 1930. 5 Claims. (Cl. 40—19.5.)



1. Indexing or like apparatus, comprising a rod or standard, a plurality of horizontal support arms radiating from said standard, mountings adapted for permitting attachment and removal of said arms individually to and from said standard, adjustable devices secured to said arms and pivotal on a horizontal axis in said mountings, and index-carrying rods detachably secured to said arms.

1,895,994. EMBROIDERY MACHINE. JAMES HUNTBACH, Nottingham, England. Filed Mar. 7, 1930, Serial No. 434,078, and in Great Britain Nov. 23, 1929. 16 Claims. (Cl. 112—93.)



1. In an embroidery machine a plurality of needle carrier bars, needles carried thereon all lying in one plane, a main drive shaft, connecting elements between said drive shaft and each of the needle carrier bars, means for disconnecting any one of said connecting elements from the drive shaft for selective reciprocation of the needle carrier bars and means to couple all of the connecting elements to the drive shaft for simultaneous reciprocation of all of said needle carrier bars.

1,895,995. MACHINE FOR DRAWING THREADS FROM FABRICS. GEORGES JALBERT, Paris, France, assignor to Anciens Etablissements R. Cornely & Cie., Société Anonyme, Paris, France, a Company of France. Filed Apr. 14, 1931, Serial No. 530,095, and in France Apr. 19, 1930. 11 Claims. (Cl. 112—78.)

1. A machine for drawing threads from a fabric which comprises in combination, a work plate, means for holding the fabric against said plate, a thread drawing tool adapted to reciprocate in a direction at right angles to said plate for drawing the threads below said plate, a knife disposed below said plate with its edge parallel to said

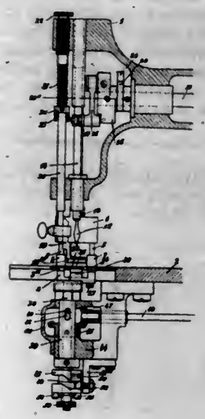
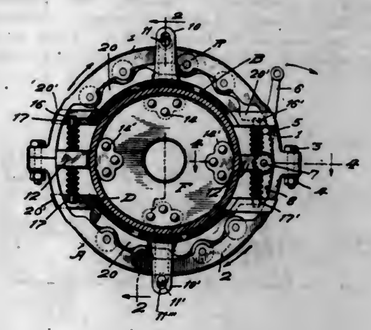


plate adapted to rotate about an axis at right angles to said plate and means for rotating said knife about said axis.

1,895,996. BRAKE DEVICE. STEPHEN JONES, Leonia, N. J. Filed Apr. 4, 1928. Serial No. 267,192. 5 Claims. (Cl. 188—75.)

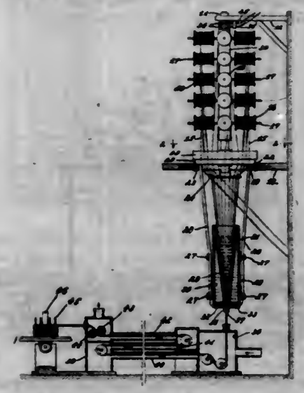


5. A braking device comprising a drum, a non-pivoted rigid brake shoe slidably mounted with respect to said drum and having a plurality of cam surfaces formed on its outer periphery, guide means adapted to guide said brake shoe so that it is slidably movable towards and away from said drum in a radial direction with respect to said drum, and an operating device movable in a direction parallel to the periphery of said drum and adapted to cooperate with said cam surface to actuate said brake shoe.

1,895,997. SILK REED MACHINE. EDWARD G. KENNEY, Willimantic, Conn. Filed Oct. 15, 1930. Serial No. 488,948. 1 Claim. (Cl. 117—2.)

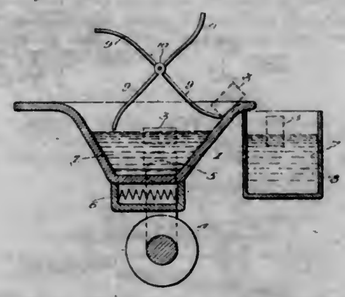
In a coating and drying apparatus for material in reed form, a receptacle adapted to hold a solution and provided at its bottom with a sleeve, a bushing carried within

the sleeve and having an opening adapted to snugly receive the reed, a heating element attached to the bottom of the receptacle and disposed at the sides of the sleeve,



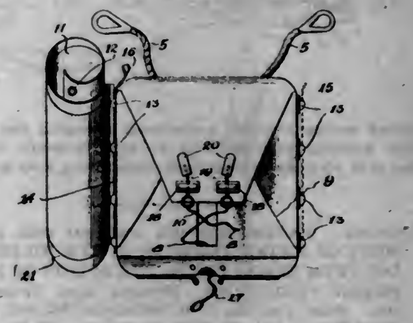
conduits adapted to receive the reed from the bushing and pulling rollers journaled within the conduits and adapted to receive the reed between them.

1,895,998. METHOD OF AND APPARATUS FOR HEAT-TREATING MAGNETIC MATERIALS. HORACE C. KNERR, Philadelphia, Pa. Original application filed Apr. 21, 1921, Serial No. 463,181. Divided and this application filed Oct. 27, 1930. Serial No. 491,601. 5 Claims. (Cl. 148—4.)



1. The method of heat-treating a steel piece, which comprises heating the piece while so disposed that it tends to move under the influence of a force greater than the weight of the piece to a position from whence it may be readily removed to a cooling zone, and opposing movement of the piece by magnetism acting directly thereon until its temperature has been raised to a point where its magnetism is substantially zero, whereby said loss of magnetism automatically releases the piece.

1,895,999. PARACHUTE DEVICE. STIG OVE CHRISTIAN KUHLEMANN, Stockholm, Sweden, assignor to Carl H. Lundholm Aktiebolag, Stockholm, Sweden. Filed Feb. 16, 1929, Serial No. 340,587, and in Sweden Sept. 17, 1928. Renewed May 10, 1932. 10 Claims. (Cl. 244—21.)



10. A parachute device comprising a container enclosing the parachute, manually operable means and automatically operable means to lock said container, said two locking means being unlockable independent of each other.

1,896,000. PARACHUTE DEVICE. STIG OVE CHRISTIAN KUHLEMANN, Stockholm, Sweden, assignor to Carl H. Lundholm Aktiebolag, Stockholm, Sweden. Filed Dec. 26, 1930, Serial No. 504,861, and in Finland Aug. 11 1930. Renewed May 10, 1932. 5 Claims. (Cl. 244—21.)

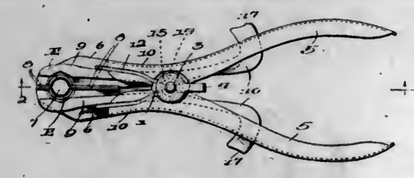


5. A parachute device, comprising a canopy, shroud lines, a pack enclosing said canopy and shroud lines, a flap to close said pack, a developing line for the automatic release of said flap, and tensioning means for maintaining said developing line in regular order on said flap.

1,896,001. VALVE KEEPER INSERTER. HARRY W. KULP and MARTIN C. DELLINGER, Lancaster, Pa. Filed May 4, 1932. Serial No. 609,307. 6 Claims. (Cl. 81—5.1.)

5. A valve-stem locking element inserting tool comprising a pair of lever members connected to each other and mounted for swinging movement toward and from each other in the same plane, said lever members having their opposed inner edges adjacent their front ends notched out in registry to cooperate in defining between them, in closed position, an opening to receive the valve-stem, and stop means carried by said lever members respectively adjacent the respective notches to be engaged by the respective radial faces of the respective locking ele-

ments, in combination with a pair of elements respectively swingably mounted on said members, each said element comprising a gripping arm and a lever arm, and a



spring having portions respectively engaging the respective gripping arm portions of said elements to force the said portions toward their cooperating stop means.

1,896,002. WATERPROOFING AND TO THE TREATMENT OF MATERIALS WITH A VIEW TO RENDERING THEM RESISTANT TO THE ACTION OF ATMOSPHERIC CONDITIONS. RICHARD LANT, Vienna, Austria. Filed Feb. 12, 1930, Serial No. 427,992, and in Great Britain Oct. 16, 1929. 4 Claims. (Cl. 91—68.)

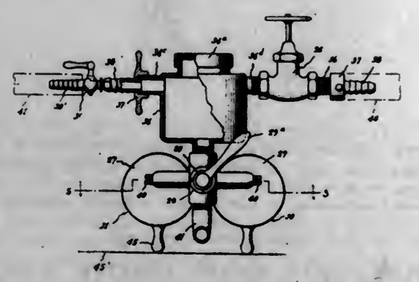
1. Gut treated with a higher fatty acid ester of cellulose.

1,896,003. GOLD ALLOY. LOUIS LENFANT, Paris, France, assignor to Cartier, Societe Anonyme, Paris, France, a Company of France. Filed July 19, 1930, Serial No. 469,285, and in France June 14, 1930. 1 Claim. (Cl. 75—1.)

A gold alloy intended for jewelry having the following composition:

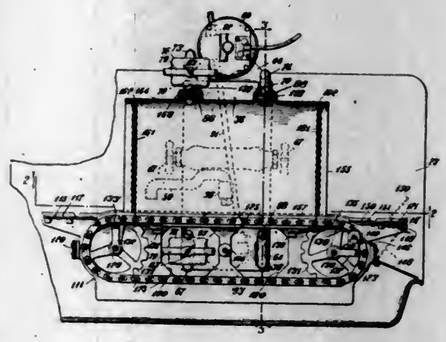
	Per cent
Gold	75
Copper	14
Silver	10
Chromium	1

1,896,004. PIPE CLEANER. BENJAMIN LEWIS, Woodside, and WALTER JOSEPH, Long Island City, N. Y. Filed Jan. 28, 1931. Serial No. 511,864. 1 Claim. (Cl. 225—12.)



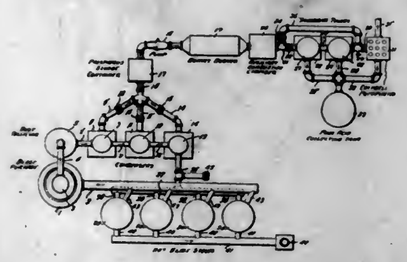
A device for the purpose indicated comprising a duality of transparent walled cylinders, a valve carrying head in communication with said cylinders, a two-way valve in said head, the latter having a discharge spout and the valve being movable to place either cylinder in communication with said discharge spout, and a cleaning fluid container surmounting said cylinders and in communication at its lower end with said head, said valve placing said container in communication with either cylinder when the opposite cylinder is in communication with the discharge spout, said container having air and fluid supply connections adjacent its upper end and said cylinders having nipples at the ends remote from said head for connection to circulating pipes to be cleaned.

1,896,005. DISHWASHING APPARATUS. WALDEMAR L. LINDGREN, Waukegan, Ill., assignor of one-half to John E. ERICSSON, Chicago, Ill. Filed Jan. 19, 1931. Serial No. 509,658. 2 Claims. (Cl. 198—229.)



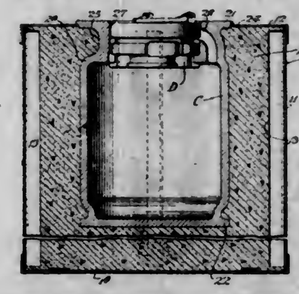
1. In a dish-washing machine, the combination with a frame, of a horizontally movable skeleton carrier mounted therein adapted to carry table cutlery thereon, means for moving said carrier, a member over which the cutlery may be discharged below the end of the conveyor pivoted to the frame, a discharge table carried by said frame above said member, and a spring catch secured to the discharge table to hold said member in its raised position.

1,896,006. PRODUCTION OF PHOSPHORIC ACID. CHRISTOPHER G. MEMMINGER, Asheville, N. C., and WILLIAM H. WAGGAMAN, Lakeland, STAPLETON D. GOOCH, Lake Wales, and FRIEDRICH P. KERSCHBAUM, Winter Haven, Fla. Filed Mar. 7, 1930. Serial No. 434,142. 1 Claim. (Cl. 23—165.)



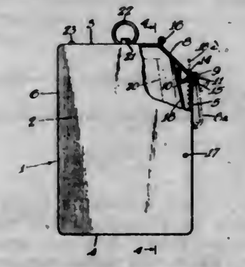
A continuous process of producing phosphoric acid comprising charging a sintered material produced from a mixture of phosphates, siliceous material and carbonaceous fuel into a furnace having a ratio of height to crucible diameter of at least seven and one-half to one, smelting material by subjecting it to a blast of air preheated by furnace gases, driving off the elemental phosphorus, condensing the phosphorus in a plurality of stages by subjecting it to the cooling action of aqueous liquid maintained at successively lower temperatures, continuously conveying the impure wet phosphorus sludge to a rotary burner, igniting the phosphorus in the presence of the aqueous liquid in the sludge and absorbing the phosphoric acid produced in a suitable absorbing system.

1,896,007. SAFE. WILLIAM C. MILLER, Canton, Ohio, assignor to Diebold Safe & Lock Company, a Corporation of Ohio. Filed June 6, 1932. Serial No. 615,701. 9 Claims. (Cl. 109—1.)



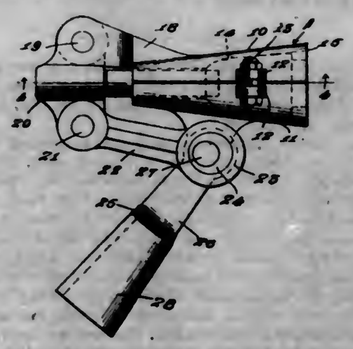
8. A deposit-safe comprising: a heavy-walled container having a door-opening and having a money-slot extending from said door-opening to the interior of the container; and a closure-member for said door-opening, said closure-member slidable back and forth in said door-opening to cover and uncover the outer end of said money-slot.

1,896,008. CIGARETTE CASE. ROLLA E. MUDD, Chicago, Ill. Filed Apr. 11, 1932. Serial No. 604,611. 6 Claims. (Cl. 206—41.)



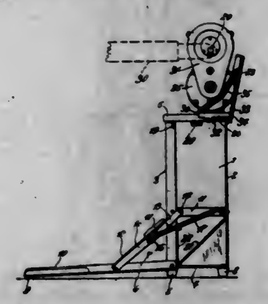
1. A cigarette container comprising a casing having an opening therein, a door movably connected with the casing and adapted for closing the opening, means operatively associated with the door for moving the same to its closed position, and means for moving the cigarettes in the container away from the opening when the door is moved to its closed position.

1,896,009. AUTOMOBILE WHEEL PULLER. OTTO OTTESEN, Los Angeles, Calif. Filed Mar. 7, 1932. Serial No. 597,340. 5 Claims. (Cl. 29—85.)



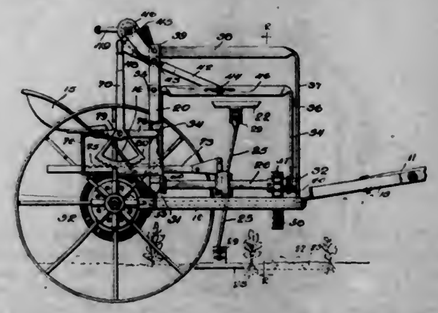
1. In a device of the character described, an expansible and contractible hub clamp, a ram slidably fitted in said clamp, a presser head pivotally supported on the clamp and against the ram, a movable eccentric supported by the clamp, and a connection between the eccentric and said head to impart movement thereto.

1,896,010. EXERCISING APPARATUS. LAWRENCE M. PERSONS, St. Louis, Mo., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed Nov. 6, 1929. Serial No. 405,074. 3 Claims. (Cl. 312—189.)



3. A cabinet for exercising apparatus having one vertical wall thereof arranged for downward and outward movement, a toggle brace between said wall and the cabinet, and a spring having one end connected to the toggle brace and the other end to the cabinet, arranged and adapted to operate said toggle brace to hold the same in locked adjustment when said wall is in open position and to move the wall to closed position when said toggle lock is manually broken.

1,896,011. AGRICULTURAL IMPLEMENT. EDWARD R. PERRY, Hartsville, S. C. Filed Nov. 3, 1930. Serial No. 493,081. 3 Claims. (Cl. 97—15.)

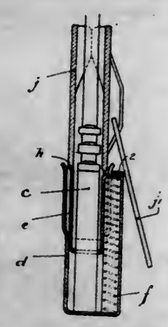


1. In an agricultural implement of the type which is designed to loosen the soil between spaced plants in a row, the combination with a frame adapted to be drawn along the row of plants, of a plurality of soil agitating elements, and a carrier for said elements rotatable about an axis extending longitudinally of the frame to pass said elements in succession through the soil, said elements being relatively displaced longitudinally of the frame to effect agitation of the soil by a plurality of series of strokes, the successive series of strokes being spaced to clear a plant and the strokes in each series overlapping.

1,896,012. SLIDER OPERATING CLOSURES. ALBERT VICTOR RAYMOND, Grenoble, France. Filed Aug. 25, 1931, Serial No. 559,307, and in France Aug. 28, 1930. 5 Claims. (Cl. 24—205.)

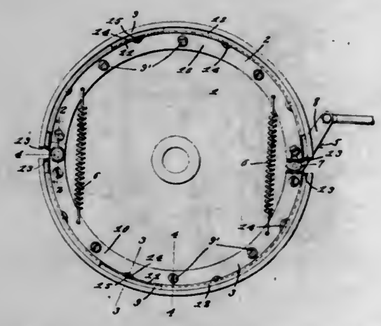
1. In a separable fastener including two flexible strips of flexible material each carrying a row of fastening elements

adapted to be interlocked and unlocked by means of a slider, an end closure comprising in combination, a guide member secured to the end of one of said strips and adapted to slidably receive the end of the edge of the other strip, and elastic stopping means adapted to cooperate with said guide member for normally preventing the slider from mov-



ing as far as the end of the two rows of fastening elements, so that the last elements of said rows normally remain interlocked, said elastic stopping means being adapted to yield to an increased effort exerted on the slider, so that said last elements of the two rows may then be disengaged from each other, and the strips fully separated.

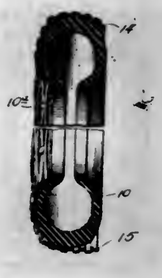
1,896,013. BRAKE SHOE. JAMES A. REASONER, Lancaster, Ohio. Filed Dec. 17, 1931. Serial No. 581,728. 3 Claims. (Cl. 188—250.)



1. A brake shoe comprising a body including companion sections, fasteners detachably connecting the sections, rim portions formed on said sections, side and end flanges formed on the rim portions and cooperating with each other and said rim portions in providing a channeled lining seat, and a lining positioned in said seat and having bevelled side and end edges overlied by the flanges to removably secure the lining to the body.

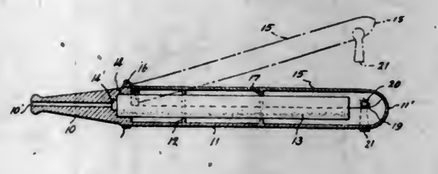
1,896,014. TIRE COVER. WILLIAM A. REUM, Niles, Mich., assignor to National-Standard Company, Niles, Mich., a Corporation of Michigan. Filed Jan. 11, 1932. Serial No. 586,023. 3 Claims. (Cl. 150—54.)

1. A tire cover having an opening at one side large enough to permit placement of the same on a tire, a portion of said cover being wide enough to extend beyond the center of the tread of a tire and curved to form a hook, said cover



being formed of radial curved stakes with a metal tape woven on the same to make a semi-rigid fabric.

1,896,015. CIGARETTE HOLDER. LUCIEN RIBERA, New York, N. Y. Filed July 14, 1930. Serial No. 467,884. 4 Claims. (Cl. 131—51.)

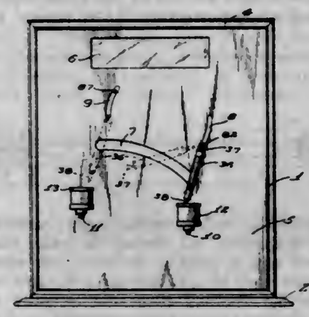


1. A cigarette holder including a mouth-piece, a semi-cylindrical casing for a cigarette, said casing being integral with said mouthpiece, and a cover structure hingedly mounted on the top of said casing, said mouthpiece having a central bore therein for the passage of smoke, said bore having an enlarged portion to receive the unlighted end of a cigarette and an intermediate reduced portion to enable the smoke to be more easily drawn, the casing and the cover structure having semi-annular spacers therein adapted to prevent the cigarette from resting against same, and a perforated member within said cover structure, said perforated member being hollow and having end openings adapted to allow air to be drawn from the outside through said perforations and into the casing, said perforated member having a yoke hingedly mounted thereon and adapted to pass over the end of said casing, thereby to hold said cover closed.

1,896,016. ELECTRIC ADVERTISING AND DEMONSTRATING MACHINE. SOLOMON M. SAGER, Glencoe, Ill. Filed June 29, 1931. Serial No. 547,548. 24 Claims. (Cl. 35—16.)

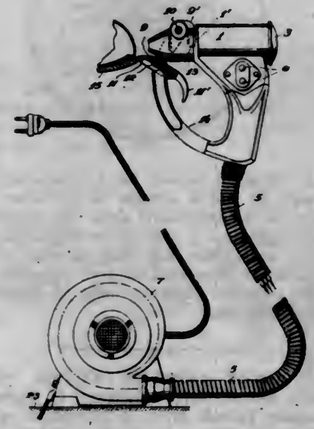
1. An electric advertising and demonstrating machine comprising a display cabinet, a slotted panel therein, a liquid supply cup and a liquid receiving cup mounted in front of said panel, a holder disposed in front of said panel and projecting through one of the slots thereof, a transparent barrel plunger type fountain pen supported by said holder, means in said cabinet for supporting said holder and carrying the same back and forth between said liquid supply cup and said liquid discharge cup, a control member in said cabinet, means for operating the same, and plunger operating mechanisms carried by said control member and projecting outwardly through slots of said panel and adapted to engage the fountain pen plunger

to actuate the same when the fountain pen is positioned above said supply cup to cause a charge of liquid to be drawn from the supply cup into the fountain pen barrel



and also cause the charge of liquid to be discharged from the fountain pen barrel into the discharge cup when the fountain pen is positioned over the discharge cup.

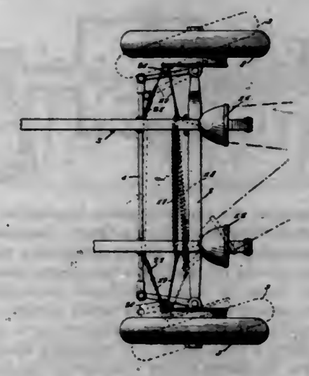
1,896,017. METHOD OF SMOOTHING SHOE PARTS. JULIUS SANDT, Pirmasens, Germany. Filed Jan. 6, 1930, Serial No. 418,943, and in Germany Jan. 19, 1929. 3 Claims. (Cl. 12—142.)



1. Method of smoothing folds or uneven parts of shoes, comprising the step of blowing a jet of hot air against the parts to be treated while keeping the latter in a visible position.

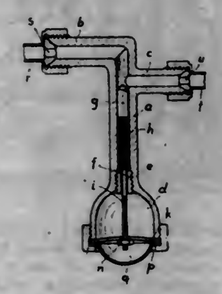
1,896,018. MOVABLE AUTOMOBILE HEADLIGHT. IRVA H. SARGENT, Lawrenceburg, Tenn. Filed Apr. 30, 1931. Serial No. 534,025. 1 Claim. (Cl. 240—62.7.)

In combination with a motor vehicle having pivotally mounted front steering wheels provided with brake drum shield plates movable with the wheels and a fender brace, journals carried by the brace, lamp standards carried by said journals, headlights secured to the standards, arms secured to the standards and extending rearwardly therefrom, a coiled spring connecting said arms, pulleys secured to the shield plates rearwardly of the pivots of the wheels, and flexible elements trained over the pulleys and secured to the arms and adjustably secured to the vehicle for turning one headlight in the same direction with the turn-



ing of the front wheels and permitting the other headlight to remain straight with respect to the front of the motor vehicle.

1,896,019. DEVICE FOR PREVENTING CARBURETOR FIRES. FRANZ SCHWEIZER, Hof, Germany, assignor to Karl Hintsches, Oberkotzau, Germany. Filed Aug. 6, 1930, Serial No. 473,498, and in Germany June 26, 1930. 2 Claims. (Cl. 137—162.)

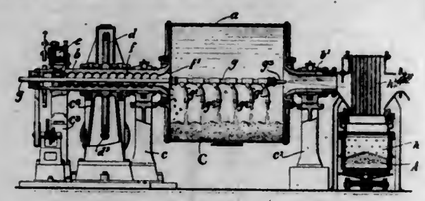


1. An apparatus for preventing carburetor fires, comprising in combination with the fuel supply pipe from the fuel tank and the pipe connected to the carburetor, a short tube connecting the adjacent ends of said pipes and having an enlarged lower end, said tube having an annular groove near the lower end of its inner surface, a guide bush in said tube, a valve spindle closely fitting and guided in said bush, a valve carried by said spindle and tending to move to a position to shut off the flow of fuel through said pipes, a screw threaded lower end of said valve spindle, a celluloid disc having a central hole pushed over the lower end of said valve spindle and engaging in said groove in the inner surface of said enlarged portion, and a nut screwed on the end of said screw threaded spindle below said celluloid disc.

1,896,020. APPARATUS FOR THE CONTINUOUS PRODUCTION OF LEAD OXIDES IN THE DRY STATE. GENZO SHIMADZU, Kioto, Japan. Filed Apr. 27, 1926, Serial No. 104,999. Renewed June 21, 1929. 11 Claims. (Cl. 23—286.)

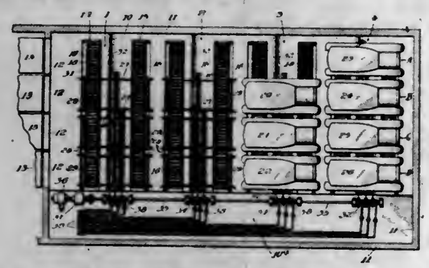
3. Apparatus for the continuous production of lead oxides in the dry state, comprising a vessel adapted to

be rotated, means for supplying oxidizing gas to the interior of the vessel, an outlet for said gas, and means comprising an injector for increasing the velocity of said gas as it passes through said outlet.



10. Apparatus for the continuous production of a product including litharge in a dry state comprising an apparatus including a vessel in the form of a drum, means for feeding pieces of lead into the drum, means for rotating the drum to cause frictional movement between said pieces, means for supplying under pressure an oxidizing gas to the interior of the drum so as to act on said pieces to form a coating of lead suboxide thereon and to remove from the pieces the powder formed by the abrading action of the pieces against one another, and means associated with said apparatus in which said lead suboxide may be converted into litharge while still in its dry state.

1,896,021. STORAGE APPARATUS. EUGENE S. TAYLOR, Chicago, Ill., assignor of one-half to Hugh E. Young, Chicago, Ill. Filed Dec. 2, 1931. Serial No. 578,606. 5 Claims. (Cl. 214—16.1.)



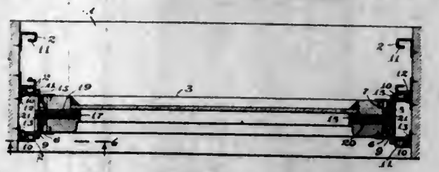
1. Storage apparatus including; a supporting surface adapted to accommodate vehicles stored in rank and file formation; two transverse rows of rollers countersunk in the supporting surface in each rank, said rows adapted to support the front and back wheels of a stored vehicle and permit lateral shifting of the stored vehicle thereon; a pusher adapted to engage the sides of a car to shift the same laterally, said pusher including a pair of bars sufficiently spaced apart to permit a vehicle to pass longitudinally therebetween; and means for laterally moving said pusher.

1,896,022. PLATED METAL BODY AND METHOD OF PRODUCING SAME. EMIL THEISZ, Budapest, Hungary, assignor to Egyesüit Izzólámpa és Villamossagi részvénytársaság, Uj-Pest, Hungary. Filed Sept. 5, 1930, Serial No. 479,923, and in Hungary Dec. 23, 1929. 9 Claims. (Cl. 204—1.)

1. As a new product a metal body electroplated with a compound having the formula $R_2OXO_3nXO_3$, wherein X is tungsten or molybdenum, while R is an alkali-forming or an alkaline earth or similar metal and n is an integer.

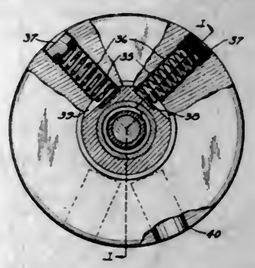
1,896,023. WINDOW. JOSEPH L. TRESOUTHICK, Jersey City, N. J. Filed May 12, 1931. Serial No. 536,857. 5 Claims. (Cl. 20—49.)

1. A window frame including a window sash, a metal strip on each edge of the window sash provided with a depressed cam portion extending longitudinally of the sash, a weather strip coacting with each edge of the window sash, each of said weather strips being substantially U-shaped in cross-section and having the bottom of the U formed with a groove acting as a cam coacting with the cam shaped portion on the metal strip adjacent thereto, each of said weather strips having a pair of



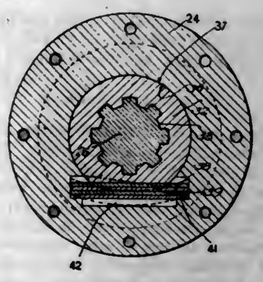
laterally extending flanges, spring means carried by each of the weather strips for urging the same toward the window sash and a guiding structure for each of the weather strips, each of said guiding structures having an inturned portion coacting with said laterally extending flanges for limiting the outward movement of the weather strip.

1,896,024. INTERNAL COMBUSTION ENGINE. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 3, 1926, Serial No. 146,056. Renewed Mar. 5, 1932. 15 Claims. (Cl. 74—6.)



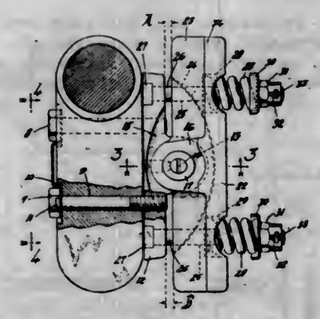
13. In a vibration damper for a crankshaft, the combination with an inertia member mounted for oscillation with respect to the crankshaft about the crankshaft axis, and means including a pair of yielding devices acting between the crankshaft and said inertia member and exerting thrust in directions inclined oppositely with respect to the radial to yieldingly urge the inertia member to a neutral position.

1,896,025. MOTOR VEHICLE CLUTCH. WALTER R GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 17, 1928. Serial No. 262,543. 8 Claims. (Cl. 192—69.)



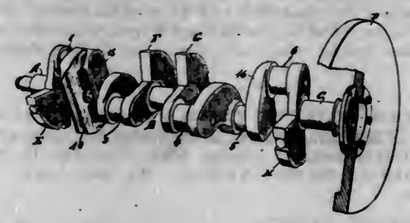
1. In a motor vehicle having transmission mechanism including driving and driven elements, means acting between said elements capable of developing friction to damp vibration in the mechanism, and a resilient driving connection between said elements adapted to increase the friction developed by said means.

1,896,026. HARMONIC BALANCER WITH COIL SPRINGS. FENN M. HOLDEN, Pontiac, Mich., assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 3, 1926. Serial No. 152,424. 20 Claims. (Cl. 74—88.)



13. In a crank shaft balancer, a weight pivotally connected to the shaft, a plurality of guide members projecting past the outer side of said weight, coil springs positioned on and guided by said members and contacting said weight, and means to hold said springs on said members.

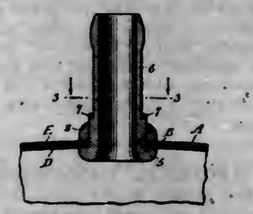
1,896,027. METHOD AND MEANS OF COUNTERACTING TORSIONAL VIBRATION. CALEB E. SUMMERS, Dayton, Ohio, assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 20, 1925. Serial No. 10,640. 28 Claims. (Cl. 74—6.)



23. The combination with a crank shaft having a crank arm, of means mounted on said crank arm for vibratory movement with respect thereto in response to and at substantially the frequency of vibration of the crank shaft.

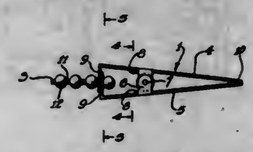
1,896,028. NIPPLE ATTACHING MEANS AND METHOD. BENJAMIN BURVENICK, Woodhaven, N. Y., assignor to Lalance & Grosjean Manufacturing Company, Woodhaven, N. Y., a Corporation of New York. Filed May 24, 1930. Serial No. 455,372. 5 Claims. (Cl. 29—148.2.)

3. A method of establishing a fluid tight connection between an apertured vessel and a headed nipple and for rigidly attaching the same together, consisting in fitting the nipple shank into the aperture in the vessel with the headed end in contact with one surface of the vessel, fitting a collar over the nipple shank which protrudes beyond the opposite surface of the vessel and then radially expanding the periphery of the nipple shank which protrudes beyond the collar against said collar to set up an



axial thrust on the nipple for causing the headed end to be tightly impinged against said first mentioned surface of the vessel around the aperture.

1,896,029. COLLAR HOLDER. HENRY GUNTHER, Chicago, Ill. Filed Oct. 15, 1930, Serial No. 488,942. Renewed July 30, 1932. 4 Claims. (Cl. 24—81.)



3. A collar holder comprising two spring-pressed members adapted to be removably attached to a collar, and a flexible elongated means adapted for connection at spaced intervals along its length to each of said members, each of said members comprising a pair of spring-pressed elements pivotally connected together and adapted to be attached to said collar and said elongated means, said elongated means having spaced-apart enlarged portions whereby said means may be more fixedly connected to said members.

1,896,030. ADVERTISING DISPLAY SIGN. ADOLPH A. HENKEL, Ravinia, Ill., assignor to Kent W. Wonnell, Ravinia, Ill. Filed Sept. 10, 1931. Serial No. 562,019. 9 Claims. (Cl. 40—77.)

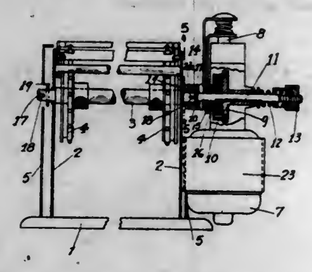


1. A rotatable ring sign member, a casing therefor having a segmental curved display opening therein, means to rotate the member, and means including a spring pressed stop and a cam for controlling it to intermittently connect the member and said rotating means.

1,896,031. METHOD OF INCREASING THE ACTIVITY OF OXIDATION CATALYSTS. BLYTHE M. REYNOLDS, Utica, N. Y. Filed Sept. 11, 1929. Serial No. 391,976. 4 Claims. (Cl. 23—238.)

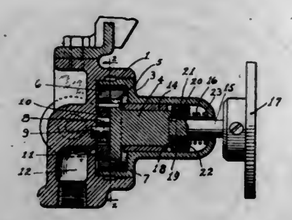
1. The method for restoring the power of a catalyzer, formed by acid metal oxides of various degrees of oxidation, for oxidizing organic substances, the said method consisting in periodically treating the catalyzer in the presence of ammonia with a reducing gas at a temperature from 100–600° C. alternately with the oxidizing reaction proper.

1,896,032. ELECTRICAL MANIFOLDER. JOHN Q. SHERMAN and ALBERT W. METZNER, Dayton, Ohio, assignors, by direct and mesne assignments, to The Standard Register Company. Filed Mar. 15, 1926. Serial No. 94,910. 1 Claim. (Cl. 64—101.)



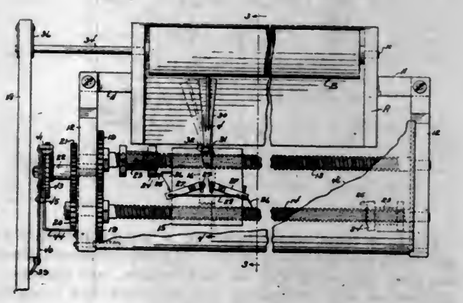
In an electrically driven manifolding machine having a feed shaft therein and a motor, a loose driving connection between the motor and the feed shaft, said connection comprising pin forming projections adjacent the end of the feed shaft and a socketed element driven by the motor and arranged with notches to loosely engage said projections, said socket loosely engaging over said shaft, and a second pin loosely mounted in one of the said parts and tightly engaging in the other for additionally securing the parts together against removal.

1,896,033. ROTARY PUMP. FRANK EARL SPERRY, Batavia, Ill., assignor to Mechanical Devices Company, Bloomington, Ill., a Corporation of Illinois. Original application filed Sept. 13, 1928, Serial No. 305,685. Divided and this application filed Jan. 17, 1930. Serial No. 421,352. 1 Claim. (Cl. 103—126.)



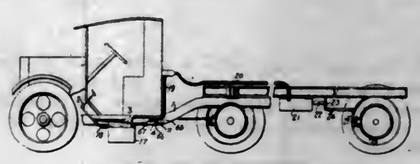
A rotary pump comprising a case having a bearing surface, a rotor having a bearing surface adapted to rotate over the bearing surface of the case, said rotor having a recess upon the bearing side, pumping mechanism contained within said recess and intake and discharge means leading from the pumping mechanism through the pump case, a chamber formed in said case about said rotor the walls of which are spaced apart from the sides and back of said rotor, a shouldered rotor shaft, a cap secured to the case closing the said chamber and providing a bearing for the reduced portion of the rotor shaft including a sleeve extending about the reduced portion of the rotor shaft between the shoulder of the said shaft and exterior of said cap and secured to said cap, a thrust bearing ring about said sleeve adapted to bear against the shoulder of the rotor shaft within the cap, a compressible packing about said sleeve and contained within the thrust bearing ring and a compression spring arranged between said packing and end of the cap, whereby a fluid seal is formed between the shaft and cap so that such leakage of fluid or pressure between the bearing surfaces of the case and rotor is held within the chamber and cap to assist the tension of the spring to more firmly seat the rotor upon the bearing surface of the case.

1,896,034. AUTOMATIC INK AGITATOR FOR PRINTING MACHINES. FRED E. WEED, Columbia, Mo., assignor of one-eighth to Francis J. Bruening, St. Louis, Mo. Filed May 21, 1931. Serial No. 539,031. 2 Claims. (Cl. 101—364.)



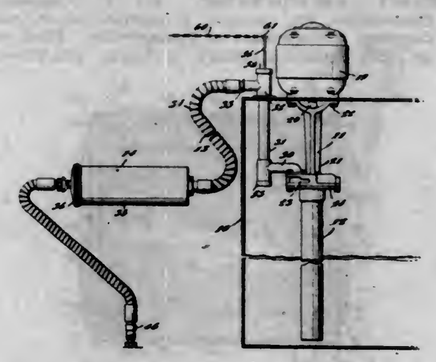
1. The combination with an ink fountain of a printing press, of spaced parallel reversely feeding screws supported relative to the fountain, a carriage slidably supported upon the said screws and adapted to be reciprocated, an agitator finger pivotally carried by the carriage and adapted for limited swinging movement within the fountain, means in the carriage for alternate engagement with the screws and automatically shiftable, means adjustably supported upon the screws and alternately operable upon the first named means for the automatic shifting thereof, means for imparting step by step movement to the feed screws, and an inking roller having connection with the last named means and located within the fountain.

1,896,035. ELECTRIC BRAKE MECHANISM. ANDREW C. WILLIAMS, Lansing, Mich., assignor of one-half to Alfred H. Doughty, Lansing, Mich. Filed Feb. 16, 1932. Serial No. 593,330. 6 Claims. (Cl. 188—162.)



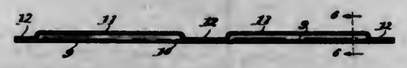
1. In an electric brake mechanism, a switch having a plurality of contacts, an operating lever and means actuated thereby for grounding said contacts individually, a reversible motor, a magnetic switch, conductors connecting said contacts and magnetic switch whereby said motor may be driven alternately in two directions, a source of electric current, a brake connection, means actuated by the motor for moving said brake connection in two directions alternately, switches separately operated by the said actuating means whereby the motor may be driven to apply or to release said connection, and means for cushioning said connection in its released position.

1,896,036. LUBRICANT DELIVERY APPARATUS. WILLIAM D. BELL, Columbus, Ohio, assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 18, 1930. Serial No. 489,631. 9 Claims. (Cl. 221—47.1.)



1. A lubricant delivery apparatus, comprising, a motor driven pump, a delivery conduit extending from said pump, a high pressure device located in said conduit noninterfering with normal pressure flow, means in said device, active when resistance occurs in the conduit beyond the high pressure device for closing the conduit against low pressure flow, whereby the grease becomes effective for actuating the high pressure device, a relief valve in the conduit between the high pressure device and the pump for permitting relief of the lubricant pressure on the high pressure device, and means for returning said high pressure device.

1,896,037. COMPOSITE CORRUGATED AND SOLID FIBER BOARD. PAUL F. BOEYE, St. Paul, Minn., assignor to Waldorf Paper Products Company, a Corporation of Minnesota. Original application filed Mar. 7, 1927, Serial No. 173,484. Divided and this application filed Jan. 5, 1931. Serial No. 506,601. 4 Claims. (Cl. 154—55.)



1. The combination in a board having substantially solid and corrugated portions, of a corrugated sheet and at least one plain sheet, a portion having said sheets secured together only along the adjacent convex tips of the corrugations and a relatively solid portion of substantial width extending continuously across a multiplicity of the corrugations and having said corrugated sheet compressed and secured in compressed relation to said plain sheet.

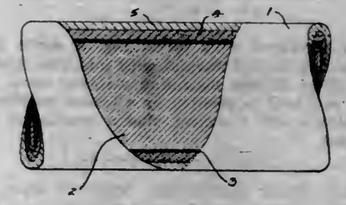
1,896,038. MANUFACTURE OF PULP, ETC. LINN BRADLEY, Montclair, N. J., and EDWARD P. MCKEEFE, Plattsburg, N. Y., assignors to Bradley-McKeefe Corporation, New York, N. Y., a Corporation of New Jersey. Filed Apr. 4, 1924. Serial No. 704,176. 42 Claims. (Cl. 92—11.)

1. The method of producing pulp from wood which comprises subjecting the same to a cooking operation under pressure and at an elevated temperature with a cooking liquor free from alkali hydroxide and containing substantial amounts of a sulfite of an alkali and a thiosulfate of an alkali, the cooking liquor being supplied with an adequate amount of alkaline reactive compound to maintain the liquor alkaline to litmus until the end of the cooking operation, at least one-half of the alkali content of the cooking liquor being supplied as sulfur-bearing compounds and the amount of alkali supplied as a sulfite being at least as large as the amount supplied as a thiosulfate.

1,896,039. PROCESS FOR THE MANUFACTURE OF CELLULOSE BUTYRIC ESTERS. HENRY GAULT and BERNARD MARIUS ROBERT ANGLA, Lyon, France, assignors to Societe des Usines Chimiques Rhone-Poulenc, Paris, France. Filed Nov. 12, 1929, Serial No. 406,716, and in Great Britain Nov. 20, 1928. 3 Claims. (Cl. 260—101.)

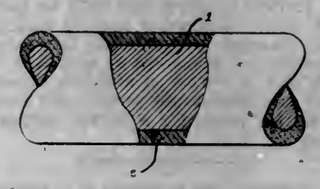
1. A process of manufacture of cellulose butyric esters which comprises preliminarily impregnating the cellulose with a quantity of butyric acid the weight of which is less than that of the cellulose and subsequently treating with butyric anhydride in presence of a lower paraffin alkyl sulphonic acid.

1,896,040. INSULATED WIRE AND PROCESS THEREFOR. SAMUEL RUBEN, New Rochelle, N. Y., assignor to Vega Manufacturing Corporation, Wilmington, Del., a Corporation of Delaware. Filed Sept. 17, 1932. Serial No. 633,608. 40 Claims. (Cl. 173—264.)



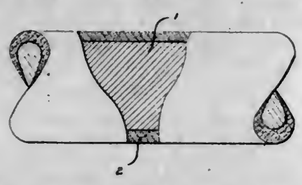
27. A wire having on its surface a closely adherent layer of flexible refractory insulation consisting substantially of finely divided titanium oxide held upon the wire by an organic binder, said insulation being of a thickness no greater than .00125 inches.

1,896,041. INSULATED WIRE. SAMUEL RUBEN, New Rochelle, N. Y., assignor to Vega Manufacturing Corporation, Wilmington, Del., a Corporation of Delaware. Filed May 2, 1931. Serial No. 534,711. 26 Claims. (Cl. 173—264.)



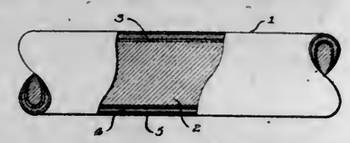
8. A wire having on its surface a closely adherent layer of flexible refractory insulation consisting substantially of the combination of finely divided insulating oxide and boric acid, held upon the wire by an oil-resinous binder.

1,896,042. INSULATED WIRE. SAMUEL RUBEN, New Rochelle, N. Y., assignor to Vega Manufacturing Corporation, Wilmington, Del., a Corporation of Delaware. Filed Aug. 15, 1931. Serial No. 557,383. 20 Claims. (Cl. 173—264.)



1. A wire having on its surface a closely adherent layer of flexible refractory insulation consisting substantially of finely divided insulating oxide held upon the wire by an oil phenol-resinous binder.

1,896,043. INSULATED WIRE AND PROCESS THEREFOR. SAMUEL RUBEN, New Rochelle, N. Y., assignor to Vega Manufacturing Corporation, Wilmington, Del., a Corporation of Delaware. Filed Dec. 3, 1930. Serial No. 499,845. 8 Claims. (Cl. 173—264.)



1. An insulated wire comprising a metal base, an oxide coating formed integral with said base, and a coating of finely divided insulating material upon the first coating and held in position by a binder effective at low temperatures and a second binder capable of standing a red heat.

1,896,044. SNAP FASTENER. MOSES F. CARR, Lexington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 18, 1930. Serial No. 421,756. 5 Claims. (Cl. 24—250.)

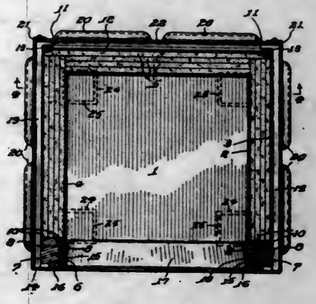


1. A snap fastener member formed entirely from a single piece of metal and comprising a base portion, a pair of annularly arranged connected walls extending at substantially right angles with relation to said base portion and at least one of which is secured thereto, means permitting yielding movement of said walls when engaged with and disengaged from a cooperating snap fastener member, means provided by one of said walls for maintaining engagement with a cooperating fastener member and a dome-shaped attaching portion formed as a part of said fastener member and surrounded by said walls and open at one side only to receive an attaching element to be upset within said dome-shaped portion, said dome-shaped attaching portion presenting a curved surface toward said opening.

1,896,045. METHOD OF CASTING MAGNESIUM AND ALLOYS THEREOF. JOHN A. GANN and JAMES B. REID, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 4, 1932. Serial No. 609,261. 13 Claims. (Cl. 22—188.)

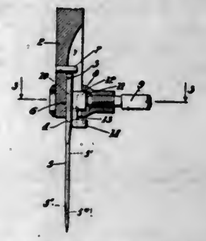
1. The method of making a casting of magnesium or an alloy thereof which comprises casting the metal in a water-bound temporary mold having on the surface thereof a relatively small amount of a compound selected from the group consisting of aluminum fluosilicate, lead fluosilicate, magnesium fluosilicate, sodium fluosilicate.

1,896,046. REFRIGERATOR. RAY P. FARRINGTON, Philadelphia, Pa., assignor to Heintz Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 19, 1927. Serial No. 213,991. 9 Claims. (Cl. 220—9.)



1. In a refrigerator, a double wall structure having an enclosed hermetically sealed insulation chamber, and insulating material within said chamber, said double wall structure embodying a flexible member exposed on its opposite sides, respectively, to the air confined within said insulation chamber and to the atmosphere, and freely movable with respect to said insulating material to substantially equalize at all times the pressures of said confined air and of the atmosphere under varying temperature conditions.

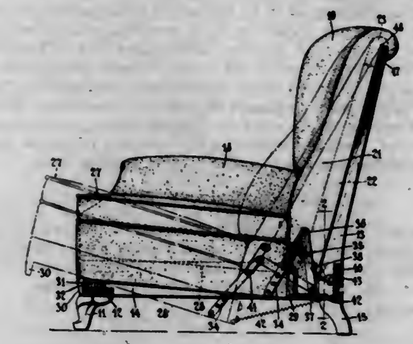
1,896,047. NEEDLE-CLAMP FOR SEWING MACHINES. ALFRED GRIEB, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Apr. 24, 1931. Serial No. 532,440. 6 Claims. (Cl. 112—226.)



1. A sewing machine needle-clamp comprising, a needle-bar formed in one end with a needle-shank-receiving recess, a clamping band embracing the recessed end of the needle-bar, said needle-bar and clamping band having in their proximate surfaces opposed gib-receiving apertures, means for locking said band against movement endwise of the needle-bar comprising a gib seated in said opposed apertures, and a clamp-screw carried by said band and adapted to engage said gib and force the latter into clamping engagement with the shank of a needle seated in said needle-shank-receiving recess, said gib being movable out of the gib-receiving aperture in the needle-bar to unlock said band for removal from the needle-bar.

1,896,048. RECLINING CHAIR. ALBERT A. GRINNELL, Medina, N. Y., assignor to Le Grand S. Whedon, Medina, N. Y. Filed Aug. 4, 1932. Serial No. 627,444. 7 Claims. (Cl. 155—116.)

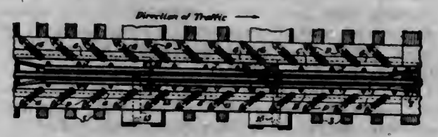
3. In a chair, the combination with a frame, of a seat movable forwardly and rearwardly thereon, a back having an articulated connection at its upper portion to the frame, and means connecting the seat and back and the frame for moving the bottom of the back forwardly and for lowering the rear of the seat as the seat moves forwardly, whereby the seat and back are inclined to a greater degree and the effective height of the back is increased as the seat moves forwardly, said means automatically moving the rear of the seat upwardly and the bottom of the back rearwardly when the seat is returned to its rearward position.



1,896,049. NEW GELATIN PRODUCT AND METHOD OF PREPARING THE SAME. CLARENCE C. ZEIGLER, Maplewood, N. J., assignor to Swift & Company, Chicago, Ill., a Corporation of Illinois. Filed May 28, 1930. Serial No. 456,827. 5 Claims. (Cl. 99—11.)

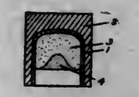
1. A new gelatin dessert in the form of compressed, coherent tablets containing granulated gelatin, granulated sugar, fruit acid, flavor and color, bound together in a compressed, coherent and substantially non-crumbling state by a bond made up mainly of sugar, said tablets disintegrating almost instantly in hot water and readily dissolving in hot water in a period of time not exceeding about 1½ to 2 minutes and each of said tablets containing the proper amounts of ingredients and in proper proportions for the preparation of an individual dessert.

1,896,050. RAILWAY BRAKING APPARATUS. HERBERT L. BONE, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Mar. 24, 1931, Serial No. 524,782. Divided and this application filed July 14, 1932. Serial No. 622,490. 3 Claims. (Cl. 188—62.)



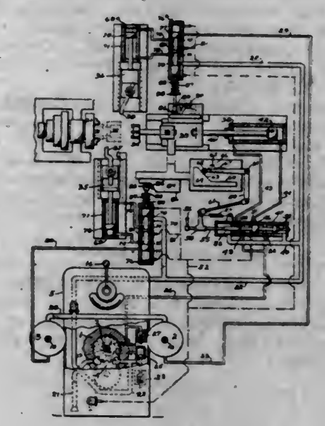
1. As a new article of manufacture, a beam section for a car retarder braking bar, said beam section being provided at one end with a vertically extending post and at the other end with a projection formed with a socket adapted to receive a post formed on the end of a similar beam section.

1,896,051. SHOTGUN CARTRIDGE. HENRY WINDER BROWNSDON, Moseley, Birmingham, WALTER RULE NIMMO, Bushey Heath, and GEORGE PATON POLLITT, Millbank, London, England, assignors to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Nov. 28, 1931, Serial No. 577,830, and in Great Britain Nov. 29, 1930. 10 Claims. (Cl. 102—15.)



10. A shot gun tracer pellet having a range approximating that of ordinary shot comprising a tracing composition adapted to burn during flight and a metallic portion formed of an alloy of low melting point which is disintegrated during flight by the heat liberated by the burning of said tracing composition.

1,896,052. HYDRAULIC TRANSMISSION. WALTER FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 19, 1930. Serial No. 453,623. 11 Claims. (Cl. 60—52.)

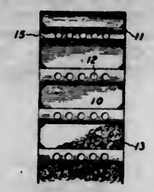


1. The combination, with a machine having a plurality of tool or work carriers, of a hydraulic feed for said machine comprising a hydraulic motor for operating each carrier, a feed pump for supplying liquid to each of said motors to advance the carrier controlled thereby at a predetermined feeding rate, a single auxiliary pump for supercharging all of said feed pumps and for supplying liquid to said motors to move said carriers faster than said feeding rate, and means for controlling the flow of liquid from the several pumps to said motors.

1,896,053. SOUND SUPPRESSING VENTILATOR. ERNEST THOMAS FISK, Sydney, New South Wales, Australia. Filed Mar. 19, 1930, Serial No. 437,177, and in Australia July 27, 1927. 2 Claims. (Cl. 98—1.)

1. As a new article of manufacture, a ventilator, comprising a sound reducing chamber having side walls, an

open-ended tube traversing the chamber and having its ends fixed in the side walls of the chamber and with its



ends flush with the outer faces of the side walls, said tube having openings formed therein affording communication between the chamber and tube.

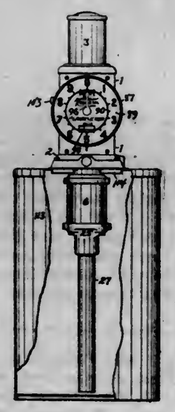
1,896,054. COAGULATION OF LATEX. STEPHEN B. NEILEY, Winchester, Mass., assignor to Dewey and Almy Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 14, 1931. Serial No. 562,824. 11 Claims. (Cl. 18—50.)

10. Method of controllably coagulating rubber latex, which comprises adding to the latex complex ammonium zinc ion substantially free from the cations of strong mineral acids at a temperature below the activating temperature thereof, to form a composition stable at such temperature, and thereafter raising the temperature of the composition to a point whereat the rubber coagulates.

1,896,055. PLURAL GELS AND METHOD OF PREPARING SAME. WALTER A. PATRICK, Baltimore, Md., and EARLE H. BARCLAY, Hamilton, Ohio, assignors to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Jan. 21, 1931. Serial No. 510,322. 3 Claims. (Cl. 252—2.)

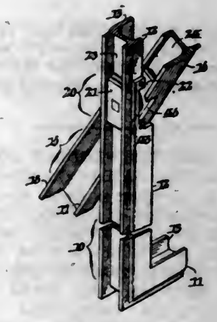
1. The process of preparing hard, stable, highly porous gels comprising two or more colloidal oxides consisting in mixing a sol capable of being converted into a highly porous gel containing a colloidal oxide with a sol capable of being converted into a highly porous gel containing a different colloidal oxide, and converting the jelly which forms into a hard, porous gel.

1,896,056. FLUID DISPENSING APPARATUS. BYRON J. PEPPER, Fort Wayne, Ind., assignor to Tokheim Oil Tank and Pump Company, a Corporation of Indiana. Filed Nov. 27, 1931. Serial No. 577,550. 16 Claims. (Cl. 221—103.)



1. In dispensing apparatus, a pump having an inlet, a surplus outlet and a dispensing outlet port, valves for said inlet, outlet and port respectively, actuating mechanism for the pump having reversing means therefor operable normally at the end of each stroke of the pump, a lock normally preventing reversal of said mechanism between the ends of the pump strokes, a surplus latch on said reversing means operatively related with the surplus outlet valve and disposed when the pump is at the commencement of its discharge stroke to engage said actuating mechanism or to be moved out of engaging position dependent upon closed or open position of the surplus outlet valve, a cam operated means driven by said actuating mechanism whereby the valve for said surplus outlet during the discharge stroke is successively restrained yieldingly from opening, released and then held positively closed, and a spring on the valve for the dispensing port adapted to resist opening thereof with greater restraint than the yielding restraint applied to said surplus valve.

1,896,057. PIVOT WINDOW. JOSEPH H. SHEARD, Philadelphia, Pa., assignor to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 29, 1930. Serial No. 498,979. 3 Claims. (Cl. 16—40.)



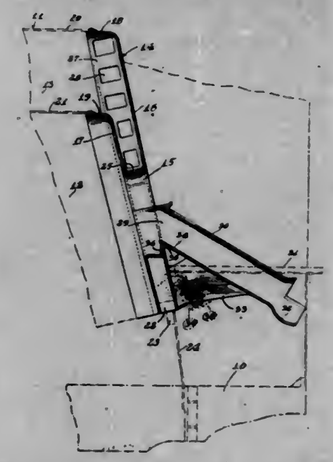
1. A pivot structure for fixed and relatively movable elements comprising a headed stud embodying cylindrical and screw-threaded shank portions with a polygonal-section extension, said cylindrical portion being adapted to engage a pivotal opening in the movable element, and the extension to engage in a correspondingly-configured aperture in the fixed element, friction washers on the cylindrical and screw-threaded shank portions, and a nut adjustable on the screw-threaded portion to oppose the stud head and friction washers in applying pressure to resist swinging of the movable element.

1,896,058. LOCOMOTIVE BOILER. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed May 26, 1930. Serial No. 455,548. 2 Claims. (Cl. 122—493.)

1. A locomotive boiler backhead constituted by an integral casting consisting of an outside wall and a shorter inside wall, the two walls being spaced apart and connected by an imperforate angularly disposed wall portion forming the boundary of a firing opening through the backhead, the end portions of the outside and inside walls being flanged or forwardly turned, an integral central vertical rib perforated at intervals extending between the outside and inside walls and also connecting their forwardly turned flanges, similar perforated ribs angularly disposed to the central rib and spaced therefrom extending diagonally outward from the firing opening, and the lower marginal

CARNEGIE LIBRARY OF ATLANTA

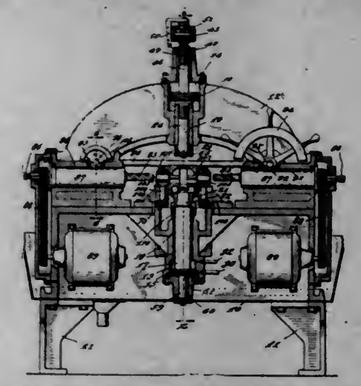
edges of the outside and inside walls being spaced to provide an opening for the insertion of a foundation ring, all of said perforated ribs at their outer portions extend-



ing to the marginal edge of the forwardly extending flange of the outer wall and terminating short of the similar edge of the flange of the inside wall.

1,896,059. DRILLING OR REAMING MACHINE. HARRY A. WAINWRIGHT, Connersville, Ind., assignor to McQuay-Norris Manufacturing Co. of Indiana, Inc., Connersville, Ind., a Corporation of Indiana. Filed Sept. 12, 1929. Serial No. 392,030. 7 Claims. (Cl. 77—63.)

1. A machine for drilling a transverse hole in an object provided with co-axial center holes, comprising axially movable centers co-operating respectively with said center holes, an axially movable stop adapted to engage a transverse surface on the article, co-operating abutments limiting movement of said stop toward the article, means for yieldingly forcing said stop and centers into engagement with the article, said means being arranged to exert on said stop a greater force than is exerted on the center which forces the article into engagement with the stop, and



means for driving and supporting a drill in predetermined location relative to the position occupied by said stop when said co-operating abutments engage each other.

1,896,060. TASSEL. ALLAN B. COLBY, Providence, R. I., assignor of one-half to Ernest E. Weller, Providence, R. I. Filed Feb. 23, 1932. Serial No. 594,593. 15 Claims. (Cl. 156—40.)



4. A tassel comprising a rigid cap, a tuft formed by spirally coiling a sheet of material slitted along one edge with the unslitted edge in said cap, and means for securing said tuft in said cap.

OFFICIAL GAZETTE

OF THE

UNITED STATES PATENT OFFICE

I

VOLUME 427

FEBRUARY

1933

R60.8
13

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1933

R608
13
V.427 Feb. 1933

G-1451-33

CONTENTS

	Page
DECISIONS OF THE COMMISSIONER OF PATENTS, February 7, 14, 21, 28	3, 261, 519, 779
TRADE-MARKS PUBLISHED AND REGISTERED, February 7, 14, 21, 28	7, 265, 523, 785
LABELS AND PRINTS REGISTERED, February 7, 14, 21, 28	37, 301, 554, 820
PLANT PATENTS, February 28	823
REISSUES, February 7, 14, 21, 28	39, 303, 557, 821
DESIGNS, February 7, 14, 21, 28	40, 304, 558, 823
PATENTS, February 7, 14, 21, 28	60, 313, 565, 834

ANNOUNCEMENTS

	Page
ADVERSE DECISIONS IN INTERFERENCE	6, 259, 522, 784
APPLICATIONS—Condition of pending	1, 260, 518, 778
ATTORNEYS—Disbarment William E. Baff	262
CLASSIFICATION BULLETIN NO. 64 ON SALE	1
CLASSIFICATION OF INVENTIONS—Changes in—*Order No. 3,252*	259
COUPONS—Suggestion for use	1
DISCLAIMERS—Krueger, Theodore E	264
McIntyre, Brouwer D	264
Roberts, Walter van B	522
Sundback, Gideon (two cases)	522
Whitlow, J. S	264
Woelm, Alfred (two cases)	6
INTERFERENCE NOTICES—Eggert, Harry	517, 777
Hill, Michel	1, 259, 517
INTERNATIONAL CONVENTION FOR THE PROTECTION OF INDUSTRIAL PROPERTY—Adhesion—Australia, Territory of Papua, and Territory of New Guinea	777
NOTICE—Photographs in lieu of India ink drawings acceptable in designs	1
PATENT SUITS	5, 263, 520, 782
PATENTS—List of adjudicated	6, 259, 522, 784
SUGGESTION FOR USE OF COUPONS	1
TRADE-MARKS—Canceled	6, 522, 784
Notice of cancellation	1, 259, 517, 777
Rules—Amendment—Rule 11—*Order No. 3,254*	777

TABLE OF CASES REPORTED

	Page
* Baff, Disbarment of William E. In re	262
* Chessin *v.* Robertson	261
* Copperweld Steel Company. In re	4
* Cramblet. In re	519
* Fink. In re	3
* Fischer. In re	261
* Langmuir. In re	780
* Thompson. In re	779
Wilcox. Ex parte	3

[Decisions of the Court of Appeals of the District of Columbia are indicated by the letter (*), of the United States Court of Customs and Patent Appeals by a star (*), of the Supreme Court of the United States by the letter (*).]

329139

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Advance Welding & Alloys, Ltd., Springfield Gardens, N. Y. Welding rods and hard faced castings. Serial No. 332,864; Feb. 7. Class 14.

Aero Battery Corporation, Birmingham, Ala. Storage batteries. Serial No. 329,733; Feb. 7. Class 21.

Air-Way Electric Appliance Corporation, Toledo, Ohio. Liquid preparation. Serial No. 333,376; Feb. 7. Class 5.

Alaska Distributing Co. (See O'Neill, John B.)

Alaska Sea Products, Inc. (See O'Neill, John B.)

Albers Bros., Milling Company, Portland, Oreg. Mixed calf food. Serial No. 331,846; Feb. 7. Class 46.

Algerian Date Importing Co., New York, N. Y. Fresh dates. Serial No. 332,506; Feb. 7. Class 46.

Apple Growers Association, Hood River, Oreg. Fresh deciduous fruits. Serial No. 331,883; Feb. 7. Class 46.

Ayrlawn Farms. (See Letts, John C.)

B. B. & R. Knight Corporation, Providence, R. I. Cloth. Serial No. 332,492; Feb. 7. Class 42.

Barber, Camillo, Vienna, Austria. Hair combs. Serial No. 325,676; Feb. 7. Class 40.

Barili, Arthur E., Los Angeles, Calif. Pastry and ravioli. Serial No. 318,891; Feb. 7. Class 46.

Baron Dress Company, Boston, Mass. Dresses. Serial No. 332,805; Feb. 7. Class 39.

Barteldes Seed Company, The, Lawrence, Kans. Pop corn. Serial No. 328,346; Feb. 7. Class 46.

Bloomingdale Bros., Inc., New York, N. Y. Radio receiving sets. Serial No. 332,980; Feb. 7. Class 21.

Brearley, Walter E., doing business as The Brearley Co., Rockford, Ill. Weighing scales. Serial No. 332,364; Feb. 7. Class 26.

Brock, John D., doing business as Specialty Optical Co., Kansas City, Mo. Ophthalmic mountings. Serial No. 333,113; Feb. 7. Class 26.

Bulletin Company, Philadelphia, Pa. Newspaper articles. Serial No. 329,885; Feb. 7. Class 38.

Cabot, Godfrey L., Inc., Boston, Mass. Carbon black. Serial No. 333,056; Feb. 7. Class 16.

California Retail Grocers and Merchants Association, Ltd., San Francisco, Calif. Weekly publication. Serial No. 333,057; Feb. 7. Class 38.

Canada's Pride Products Company, Inc., New York, N. Y. Compound for preparing chocolate for drinks and making malted milk beverages. Serial No. 315,727; Feb. 7. Class 46.

Capone, Arthur J., doing business as Elios, New York, N. Y. Olive oil. Serial No. 332,911; Feb. 7. Class 46.

Carpenter, J. M., Tap & Die Co., The, Pawtucket, R. I. Thread cutting tools. Serial No. 332,633; Feb. 7. Class 23.

Chanel, Inc., New York, N. Y. Soap. Serial No. 332,645; Feb. 7. Class 4.

Chappel Bros., Inc., Rockford, Ill. Bird food. Serial No. 333,114; Feb. 7. Class 46.

Chicago, Association of Commerce, The, Chicago, Ill. Periodical magazine. Serial No. 313,282; Feb. 7. Class 38.

Cloverdale Spring Co., Baltimore, Md. Malt beverages. Serial No. 333,184; Feb. 7. Class 48.

Coachella Grapefruit Orchards Inc., Los Angeles, Calif. Fresh citrus fruits. Serial No. 329,980; Feb. 7. Class 46.

Cohen, Goldman & Co., Inc., New York, N. Y. Coats, vests, pants, etc. Serial No. 332,686; Feb. 7. Class 39.

Colonial Mills, Inc., New York, N. Y. Rayon crepe in the piece. Serial No. 329,137; Feb. 7. Class 42.

Commercial Food Corporation, New York, N. Y. Prepared biscuit flour, jams, marmalades, etc. Serial No. 329,668; Feb. 7. Class 46.

Compagnie de Béthune, Bully-les-Mines, France. Chemical products. Serial Nos. 311,261–2; Feb. 7. Class 6.

Compagnie Franco Australienne de Laines Filees, Roubaix, France. Woolen thread and yarn. Serial Nos. 332,445–6; Feb. 7. Class 42.

Continental Steel Corporation, Kokomo and Indianapolis, Ind., and Canton, Ohio. Alloy steel. Serial No. 333,457; Feb. 7. Class 14.

Cook Medical Company. (See Sylvester, Wilber.)

Cook, Newton & Smith, Incorporated, New Haven, Conn. Artificial fishing flies. Serial No. 333,098; Feb. 7. Class 22.

Cooke, Dwight I., Washington, D. C. Phosphoric photo screens. Serial No. 333,150; Feb. 7. Class 26.

Cooper, Leo M., doing business as Leo M. Cooper Co., New York, N. Y. Uniforms and uniform dresses. Serial No. 332,747; Feb. 7. Class 39.

Crescent Publishing Co., Inc., New York, N. Y. Printed periodical. Serial Nos. 307,542–4; Feb. 7. Class 38.

Cresta Blanca Company, San Francisco, Calif. Brandy. Serial No. 333,383; Feb. 7. Class 49.

Crossett Shoe Co., Augusta, Me. Shoes and rubber heels. Serial No. 332,366; Feb. 7. Class 39.

Crowell, J. B., & Sons, Wallkill, N. Y. Brick molds. Serial No. 314,043; Feb. 7. Class 23.

De Mille, Julia C., Baltimore, Md. Solder or cement. Serial No. 333,028; Feb. 7. Class 5.

Dixi-Cola Co., The, Birmingham, Ala. Maltless cola flavored, carbonated beverage and syrups used in making same. Serial No. 330,246; Feb. 7. Class 45.

Dolph, John C., Company, Newark, N. J. Paints, varnishes and paint pigments in powdered and paste form. Serial No. 332,447; Feb. 7. Class 16.

Donahoo, Jesse L., doing business as The Jin Twin Company, Minneapolis, Minn. Maltless beverage. Serial No. 331,620; Feb. 7. Class 45.

Edy, Joseph O., Alameda, Calif. Candies, ice-cream. Serial No. 314,490; Feb. 7. Class 46.

Electric Storage Battery Company, The, Philadelphia, Pa. Electric storage battery separators and retainers. Serial Nos. 332,839–40; Feb. 7. Class 21.

Electrolux Servel Corporation, New York, N. Y. Refrigerators and parts thereof, and refrigerating systems. Serial Nos. 333,579–82; Feb. 7. Class 31.

Elios. (See Capone, Arthur J.)

Eskimo Pie Corporation, doing business as New York Eskimo Pie Corporation, New York and Brooklyn, N. Y. Frozen confections. Serial No. 328,664; Feb. 7. Class 46.

F-R Publishing Corporation, The, New York, N. Y. Magazine section. Serial No. 333,316; Feb. 7. Class 38.

F-R Publishing Corporation, The, New York, N. Y. Magazine section. Serial Nos. 333,318–21; Feb. 7. Class 38.

F-R Publishing Corporation, The, New York, N. Y. Magazine section. Serial No. 333,323; Feb. 7. Class 38.

Factor, Max, & Co. Inc., Los Angeles, Calif. Toupees, wigs, transformations, etc. Serial No. 332,560; Feb. 7. Class 40.

Farley & Loetscher Mfg. Co., Dubuque, Iowa. Doors, structural panels, moldings, etc. Serial No. 332,294; Feb. 7. Class 12.

Farm Tools, Inc., Mansfield, Ohio. Plow points. Serial No. 331,673; Feb. 7. Class 23.

Federal Mill, Inc., Lockport, N. Y. Wheat flour, live stock feeds and cereal products. Serial No. 327,683; Feb. 7. Class 46.

Fitzgerald Mfg. Company, The, doing business as Old Berkshire Coffee Company, Torrington, Conn. Coffee. Serial No. 332,370; Feb. 7. Class 46.

Foremost Dairies, Inc., Jacksonville, Fla. Chocolate covered frozen confections, ice cream, sherbet, etc. Serial No. 331,899; Feb. 7. Class 46.

Frankfort Distillery, Inc., The, Louisville, Ky. Whiskey. Serial No. 333,630; Feb. 7. Class 49.

Friedman Silver Co., Inc., Brooklyn, N. Y. Sterling silver hollow ware and hollow ware plated with precious metal. Serial No. 332,768; Feb. 7. Class 28.

Fusilli, Victoria, Company, Long Island City, N. Y. Spaghetti and alimentary products. Serial No. 332,960; Feb. 7. Class 46.

General Dyestuff Corporation, New York, N. Y. Dyestuffs. Serial No. 333,185; Feb. 7. Class 6.

Genter, Theodore L., doing business as Pix Products, New York, N. Y. Electrical condensers. Serial No. 333,100; Feb. 7. Class 21.

Giles, W. Ralph, doing business as Klik Co., Warberth, Pa. Baking powder. Serial No. 330,256; Feb. 7. Class 46.

Goldberg, Reuben L., New York, N. Y. Cartoons and comic strips. Serial No. 331,152; Feb. 7. Class 38.

Goodlass Wall & Company Limited, Liverpool, England. Dry and/or ready-mixed paints, paint enamels, paint oil, etc. Serial No. 331,106; Feb. 7. Class 16.

Gorham Manufacturing Company, Providence, R. I. Clocks, watches and parts thereof. Serial No. 333,064; Feb. 7. Class 27.

Great Atlantic & Pacific Tea Company, The, New York, N. Y. Coffee. Serial No. 332,828; Feb. 7. Class 46.

Hammermill Paper Company, Erie, Pa. Safety paper. Serial No. 332,654; Feb. 7. Class 37.

Harris, John D., New York, N. Y. Textile rugs. Serial No. 331,254; Feb. 7. Class 42.

Heller, Robert, Inc., New York, N. Y. Upholstery and drapery fabrics. Serial No. 332,409; Feb. 7. Class 42.

Hercules Mineral Springs, Inc., Detroit, Mich. Mineral water. Serial No. 333,479; Feb. 7. Class 45.

Horne, Frederick E., Malden, Mass. Shingles, clapboards, roofing materials, and imitation masonry building units. Serial No. 295,216; Feb. 7. Class 12.

Houghton, E. F., & Co., Philadelphia, Pa. Cutting oils. Serial No. 333,155; Feb. 7. Class 15.

Houghton, E. F., & Co., Philadelphia, Pa. Lubricating oils and greases. Serial No. 333,156; Feb. 7. Class 15.

Howlett & Hockmeyer Co. Inc., New York, N. Y. Textiles. Serial No. 332,845; Feb. 7. Class 42.

Hynes, Sylvanus, doing business as The Hynes Ice & Cold Storage Co., Canon City, Colo. Apples. Serial No. 322,535; Feb. 7. Class 46.

Imunal Manufacturing Company. (See Lassman, George A.)

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Indian Refining Company, Lawrenceville, Ill. Petroleum products. Serial Nos. 333,101–2; Feb. 7. Class 15.
Jaeger Watch Company, Inc., New York, N. Y. Clocks operated by electromotive power. Serial No. 332,883; Feb. 7. Class 27.
Jin Twin Company, The. (See Donahoo, Jesse L.)
Kansas City Wholesale Grocery Co., Kansas City, Mo. Coffee. Serial No. 332,649; Feb. 7. Class 46.
Kasko Products Co. Inc., Philadelphia, Pa. Malt beverage. Serial No. 332,257; Feb. 7. Class 48.
Keller, Robert, Ink Company, The, Detroit, Mich. Writing inks. Serial No. 332,706; Feb. 7. Class 11.
Kellom, Charles F. & Co., Inc., Holmesburg, Philadelphia, Pa. Polish, rubbing compound, liquid wax, etc. Serial No. 330,749; Feb. 7. Class 16.
Kennedy, A. H., Rockport, Ind. Whole wheat flour combined with flax seed meal and psyllium seed meal. Serial No. 332,721; Feb. 7. Class 46.
Kirby, Block & Fischer, Inc., New York, N. Y. Clothing, furnishings, and wearing apparel. Serial No. 331,897; Feb. 7. Class 39.
Klik Co. (See Giles, W. Ralph.)
Knapp-Monarch Company, Belleville, Ill. Insulated jugs and vacuum bottles. Serial No. 331,865; Feb. 7. Class 2.
Lamm, Berthold, Baltimore, Md. Jackets, coats, pants, etc. Serial No. 332,865; Feb. 7. Class 39.
Landau, Max, doing business as Max Landau & Co., New York, N. Y. Cheese. Serial No. 332,191; Feb. 7. Class 46.
Lanex Corporation, New York, N. Y. Furniture polishes and cleansers. Serial No. 332,923; Feb. 7. Class 16.
Lassman, George A., doing business as Imunal Manufacturing Company, Brooklyn, N. Y. Intra-vaginal prophylactic. Serial No. 331,559; Feb. 7. Class 6.
Leschen, A., & Sons Rope Company, St. Louis, Mo. Wire rope. Serial No. 333,394; Feb. 7. Class 7.
Letts, John C., doing business as Ayrlawn Farms, Bethesda, Md. Dairy products. Serial No. 332,621; Feb. 7. Class 46.
Life Savers, Inc., Port Chester, N. Y. Candy. Serial Nos. 332,303–4; Feb. 7. Class 46
Loeb, Herbert A., New York, N. Y. Uniforms. Serial No. 332,588; Feb. 7. Class 39.
Logan Laboratories, Ltd., New York, N. Y. Liquid and jelly preparations for nasal inhalation. Serial No. 332,156; Feb. 7. Class 6.
Lombardi Knitcraft, Inc., New York, N. Y. Woolen and/or silk knitted fabrics. Serial No. 331,276; Feb. 7. Class 42.
MacDonald, R. O., doing business as Native Son Orchards Co., Lindsay, Calif. Fresh citrus fruits. Serial No. 332,536; Feb. 7. Class 46.
Mangelsdorf, Ed. F., & Brother, St. Louis, Mo. Seeds. Serial No. 332,537; Feb. 7. Class 1.
Markwell Stamp Co., Greenfield, Mass. Steel stamps and metal marking devices. Serial No. 332,194; Feb. 7. Class 23.
Massillon Rubber Company, The, Massillon, Ohio. Rubber gloves. Serial No. 332,707; Feb. 7. Class 44.
May Department Stores Company, The, St. Louis, Mo. Blankets. Serial No. 330,793; Feb. 7. Class 42.
Menihan Company, The, Rochester, N. Y. Shoes. Serial No. 332,095; Feb. 7. Class 39.
Mezzetta, Guiseppe L., San Francisco, Calif. Olive oil. Serial No. 329,290; Feb. 7. Class 46.
Moltz, George, Inc., New York, N. Y. Hats and mufflers. Serial No. 332,308; Feb. 7. Class 39.
Native Son Orchards Co. (See MacDonald, R. O.)
Negri, Teresina M., Paris, France. Bathing suits. Serial No. 331,904; Feb. 7. Class 39.
Nestor Johnson Manufacturing Company, Chicago, Ill. Ice skates and skate outfits. Serial No. 333,103; Feb. 7. Class 22.
New York Eskimo Pie Corporation. (See Eskimo Pie Corporation.)
New York Evening Journal, Inc., New York, N. Y. Newspaper section. Serial No. 333,398; Feb. 7. Class 38.
Nexol Incorporated, New York, N. Y. Lubricating oils. Serial No. 332,851; Feb. 7. Class 15.
Noxon Broom Company, Ltd., Avoca, N. Y. Household brooms and brushes. Serial No. 332,233; Feb. 7. Class 29.
O'Hagan, Stephen B., New Scotland, N. Y. Ice cream. Serial No. 329,272; Feb. 7. Class 46.
Old Berkshire Coffee Company. (See Fitzgerald Mfg. Company, The.)
O'Neill, John B., doing business as Alaska Sea Products, Inc., and Alaska Distributing Co., Seattle, Wash. Canned crab meat, crab legs, and clams. Serial No. 333,008; Feb. 7. Class 46.
Onondaga Pottery Company, Syracuse, N. Y. China table ware. Serial No. 331,004; Feb. 7. Class 30.
Parke, Davis & Co., Detroit, Mich. Ethyl-hexyl barbituric acid hypnotic. Serial No. 331,961; Feb. 7. Class 6.
Pennsylvania Distilling Company, Inc., Logansport, Pa., and Brooklyn, N. Y. Whiskey. Serial No. 333,421; Feb. 7. Class 49.
Perfect Vichy Bottling Co., The, Cincinnati, Ohio. Artificial Vichy water. Serial No .330,520; Feb. 7. Class 6.
Perkins, Joel S., & Son, Philadelphia, Pa. Round leather belting. Serial No. 332,598; Feb. 7. Class 35.
Pix Products. (See Genter, Theodore L.)
Priddy, Chas. W., & Company, Inc., Norfolk, Va. Fish meal. Serial No. 332,661; Feb. 7. Class 46.
Priem, Wilhelm, & Company, G. m. b. H., Magdeburg, Germany. Fuller's earth, bleaching earth, and activated clays. Serial No. 332,961; Feb. 7; Class 1.
Quaker Oats Company, The, Chicago, Ill. Wheat flour. Serial No. 333,010; Feb. 7. Class 46.
Quality Soap Manufacturing Company, Milwaukee, Wis. Hand soaps. Serial No. 329,719; Feb. 7. Class 4.
RCA Victor Company, Inc., Camden, N. J. Photographic and electro-physical sound recording apparatus and equipment, etc. Serial No. 328,074; Feb. 7. Class 26.
Redlands Foothill Groves, Redlands, Calif. Fresh citrus fruits. Serial No. 332,550; Feb. 7. Class 46.
Reynolds Metals Company, New York, N. Y. Metallic foil for wrapping paper. Serial No. 333,108; Feb. 7. Class 37.
Rich, H. S., & Co., Chicago, Ill. Publication. Serial No. 333,080; Feb. 7. Class 38.
Riker Company, The, Newark, N. J. Buckles. Serial No. 332,074; Feb. 7. Class 40.
Riverside & Dan River Cotton Mills, Inc., Danville, Va. Broadcloth shirting in the piece. Serial No. 328,620; Feb. 7. Class 42.
Riverside Products Company, Cincinnati, Ohio. Malt syrup. Serial No. 333,532; Feb. 7. Class 46.
Robbins-Schulman Stationery Co. Inc., New York, N. Y. Bond paper. Serial No. 332,962; Feb. 7. Class 37.
Roundy, Peckham & Dexter Co., Milwaukee, Wis. Canned fruits, canned vegetables, canned fish, etc. Serial No. 318,681; Feb. 7. Class 46.
Rubel Baking Company, The, Cincinnati, Ohio. Rye bread. Serial No. 330,521; Feb. 7. Class 46.
San Fernando Heights Lemon Co., San Fernando, Calif. Fresh lemons. Serial No. 322,069; Feb. 7. Class 46.
Schoble, Frank, and Company, Philadelphia, Pa. Hats. Serial No. 332,162; Feb. 7. Class 39.
Sears, Roebuck and Co., Chicago, Ill. Dairy pails, milk cans and kettles. Serial No. 331,909; Feb. 7. Class 2.
Sears, Roebuck and Co., Chicago, Ill. Overnight bags, harness, brief cases, and pocketbooks. Serial No. 333,085; Feb. 7. Class 3.
Sears, Roebuck and Co., Chicago, Ill. Root beer extract. Serial No. 333,452; Feb. 7. Class 45.
Singer, Emelia E., Los Angeles, Calif. Prepared pie-crust mixture. Serial No. 332,000; Feb. 7. Class 46.
Six Star Lubricants Company, The, Denver, Colo. Lubricating greases. Serial No. 332,789; Feb. 7. Class 15.
Slamey, Joseph S., Boston, Mass. Cigarettes. Serial No. 331,996; Feb. 7. Class 17.
Snider Packing Corporation, Rochester, N. Y. Fruits, vegetables, berries, etc. Serial No. 332,127; Feb. 7. Class 46.
Società Regie Terme di Montecatini, Rome Italy. Mineral waters and salts made therefrom. Serial No. 325,924; Feb. 7. Class 45.
Specialty Optical Co. (See Brock, John D.)
Standard Oil Company of New Jersey, Wilmington, Del. Lubricating oils. Serial No. 332,665; Feb. 7. Class 15.
Sterkel, H. L., Ravensburg, Germany. Artist, painter, gilder, etc., brushes. Serial No. 322,122; Feb. 7. Class 29.
Strathmore Paper Company, Mittineague, Mass. Writing and printing paper. Serial No. 333,442; Feb. 7. Class 37.
Sylvester, Wilber, doing business as Cook Medical Company, Detroit, Mich. Medicinal preparation. Serial No. 330,985; Feb. 7. Class 6.
Technocracy Publishers, Los Angeles, Calif. Publication. Serial No. 333,417; Feb. 7. Class 38.
Universal Button Fastening Button Company, Detroit, Mich. Buttons. Serial No. 332,429; Feb. 7. Class 40.
Utility Products, Inc., Rockford, Ill. Utensils of base metals. Serial No. 322,192; Feb. 7. Class 13.
Vogt, F. G., & Sons, Incorporated, Philadelphia, Pa. Liver sausage. Serial No. 331,838; Feb. 7. Class 46.
Vortex Cup Company, Chicago, Ill. Paper cups. Serial No. 331,273; Feb. 7. Class 2.
Waid, C. F., Dallas, Tex. Maltless orange drink. Serial No. 323,425; Feb. 7. Class 45.
Wamsutta Mills, New Bedford, Mass. Cotton piece goods, pillow cases, and sheets. Serial No. 331,520; Feb. 7. Class 42.
Wohl Shoe Company, St. Louis, Mo. Shoes, boots, overshoes, and house slippers. Serial No. 330,219; Feb. 7. Class 39.
Wolverine-Empire Refining Co., New York, N. Y. Lubricating oils and greases. Serial No. 332,803; Feb. 7. Class 15.
Wright, John, (London) Limited, London, England. Dog biscuits. Serial No. 333,022; Feb. 7. Class 46.

LIST OF REGISTRANTS OF TRADE-MARKS

A. P. W. Paper Company, Inc. (See Albany Perforated Wrapping Paper Company.)
Albany Perforated Wrapping Paper Company, by change of name to A. P. W. Paper Company, Inc., Albany, N. Y. Toilet paper. 92,155; renewed June 24, 1933.
Albany Perforated Wrapping Paper Company, by change of name to A. P. W. Paper Company, Inc., Albany, N. Y. Toilet paper. 92,157; renewed June 24, 1933.
All-Metal Bottle Cooler Corporation, Atlanta, Ga. Toy of the bandalore type. 300,763; Feb. 7; Serial No. 330,881; published Nov. 22, 1932. Class 22.
Alto Mfg. Co. (See Brandstetter, Josef.)
American Cone & Pretzel Company, Philadelphia, Pa. Pretzels. 300,709; Feb. 7; Serial No. 297,508; published Apr. 29, 1930. Class 46.
American Optical Company, assignor to American Optical Company, Southbridge, Mass. Scientific appliances. 80,795; renewed Jan. 14, 1933.
Angostura Bitters (Dr. J. G. B. Siegert & Sons) Limited, assignor to Angostura Bitters (Dr. J. G. B. Siegert & Sons) Limited, Port of Spain, Trinidad, British West Indies. Tonic bitters. 90,152; renewed Feb. 11, 1933.
Animal Foods Company, San Jose, Calif. Dog food. 300,714; Feb. 7; Serial No. 331,135; published Nov. 15, 1932. Class 46.
Apex Hosiery Company, Philadelphia, Pa. Hosiery. 300,789; Feb. 7; Serial No. 331,392; published Nov. 22, 1932. Class 39.
Astrasan Manufacturing Co. (See Kummer, Frank.)
Atkins & Durbrow, Inc., New York, N. Y. Peat moss. 300,778; Feb. 7; Serial No. 330,917; published Nov. 29, 1932. Class 1.
Atkins, James S. (See Samuel Chemical Company, The, assignor.)
Basche, Victor, doing business as Squeelee & Piggee Sandwich Co., San Francisco, Calif. Sandwiches. 300,742; Feb. 7; Serial No. 329,039; published Nov. 22, 1932. Class 46.
Bastian-Blessing Company, The, Chicago, Ill. Welding metals. 300,787; Feb. 7; Serial No. 328,680; published Nov. 29, 1932. Class 14.
Behlen, H., & Bro., New York, N. Y. Dry cleaner preparation. 300,730; Feb. 7; Serial No. 330,416; published Nov. 22, 1932. Class 4.
Ben-Burk, Incorporated, Boston, Mass. Maltless beverages, syrups and extracts for making the same. 300,802; Feb. 7; Serial No. 331,297; published Nov. 22, 1932. Class 45.
Big Frosty Company. (See "Dry-Kold" Refrigerator Co., The.)
Birdsall Brothers Co., Seelyville and Honesdale, to Birdsall Brothers Company, Honesdale, Pa. Blankets, woolen piece goods, and flannels. 89,532; renewed Dec. 24, 1932.
Bireley, Frank W., doing business as Bireley's California Fruit Products, Los Angeles, Calif. Maltless fruit juices and syrups. 300,842; Feb. 7. Class 45.
Blankenship, Aurelia P., doing business as The Qu-I-Hi Sauce Co., Atlanta, Ga. Flavoring sauce. 300,740; Feb. 7; Serial No. 330,330; published Nov. 22, 1932. Class 46.
Bloomingdale Bros. Inc., New York, N. Y. Dolls and dolls' house. 300,764; Feb. 7; Serial No. 330,776; published Nov. 22, 1932. Class 22.
Boone County Coal Corporation, Sharples, W. Va., and Philadelphia, Pa. Bituminous coal. 300,782; Feb. 7; Serial No. 330,691; published Nov. 22, 1932. Class 1.
Box Golf Company. (See Knopf, Emil, jr.)
Brandstetter, Josef, doing business as Alto Mfg. Co., Chicago, Ill. Scouring pad. 300,721; Feb. 7; Serial No. 326,004; published Nov. 22, 1932. Class 4.
Bratton, Brown C., Marlin, Tex. Mineral crystals. 300,823; Feb. 7. Class 6.
Bratton, Brown C., Marlin, Tex. Powdered minerals. 300,824; Feb. 7. Class 6.
Bristol-Meyers Company, Brooklyn and New York, assignor, by mesne assignments, to Bristol-Meyers Co., New York, N. Y. Tonic laxative, laxative, cathartic, etc. 91,642; renewed May 20, 1933.
Brown & Williamson Tobacco Corporation, Louisville, Ky. Cigarettes. 300,817; Feb. 7. Class 17.
Burke, Edward and John, Ltd., Dublin, Ireland, and New York, N. Y., to Edward & John Burke, Limited, Dublin, Ireland. Whisky. 40,013; renewed Mar. 31, 1933.
Burke, Edward & John, Limited, Long Island City, N. Y. Maltless beverage. 300,767; Feb. 7; Serial No. 330,693; published Nov. 22, 1932. Class 45.
Cahill, Agnes Earle, doing business as Grace Manning Beauty Products, New York and Yonkers, N. Y. Cleansing cream, skin cream, muscle oil, etc. 300,825; Feb. 7. Class 6.
Chace, W. M., Valve Company, Detroit, Mich. Thermostatic metal. 300,830; Feb. 7. Class 14.
Champion Hardware Company, The, Geneva, Ohio. Water filters. 300,770; Feb. 7; Serial No. 330,451; published Nov. 22, 1932. Class 31.
Chilean Products Mfg. Company. (See Sigren, Manuel S.)
Clark's Dollar Stores, Inc., Los Angeles, Calif. Women's wearing apparel. 300,744; Feb. 7; Serial No. 324,342; published Nov. 15, 1932. Class 39.
Columbia Phonograph Company, Inc., Bridgeport, Conn. Dry cleaning and spot removing fluid. 300,748; Feb. 7; Serial No. 322,421; published Nov. 29, 1932. Class 4.
Commercial Milling Company, The, Detroit, Mich. Wheat flour. 300,753; Feb. 7; Serial No. 319,757; published Nov. 10, 1931. Class 46.
Cooper, William, & Nephews, Incorporated, Chicago, Ill. Dog soap. 300,734; Feb. 7; Serial No. 330,650; published Nov. 22, 1932. Class 4.
Crescent Box Corporation, Philadelphia, Pa. Boxes. 300,771; Feb. 7; Serial No. 330,864; published Nov. 29, 1932. Class 2.
Curtiss Candy Company, The, Chicago, Ill. Candy. 300,719; Feb. 7; Serial No. 331,248; published Nov. 22, 1932. Class 46.
Dacotah Cotton Mills, Inc., Lexington, N. C. Cotton piece goods. 300,791; Feb. 7; Serial No. 331,219; published Nov. 15, 1932. Class 42.
De Mott, Armand H., doing business as Safebreath Products Co., Brooklyn, N. Y. Candy. 300,720; Feb. 7; Serial No. 331,331; published Nov. 22, 1932. Class 46.
Dennis, Martin, Company, Newark, N. J. Leather dressing. 300,731; Feb. 7; Serial No. 330,516; published Nov. 29, 1932. Class 4.
Dewar, John, & Sons Limited, Perth, Scotland, and London, England. Whisky. 300,774; Feb. 7; Serial No. 329,629; published Nov. 29, 1932. Class 49.
Dey Brothers & Co., Syracuse, N. Y. Cleansing cream, skin tonic, hand lotion, etc. 300,818; Feb. 7. Class 6.
Dollfus-Mieg & Cie. Société Anonyme, Mülhausen, Germany, to Dollfus-Mieg & Cie. Société Anonyme, Mulhouse, France. Yarn and thread of cotton, wool, silk, etc. 90,519–20; renewed Mar. 4, 1933.
"Dry-Kold" Refrigerator Co., The, doing business as Big Frosty Company, Niles, Mich. Ice cream. 300,741; Feb. 7; Serial No. 330,247; published Nov. 22, 1932. Class 46.
Dry-Zero Corporation, Chicago, Ill. Ceiba fiber quilted bed comforters. 330,751; Feb. 7; Serial No. 320,187; published Nov. 15, 1932. Class 42.
Durande, Albert, Inc., New York, N. Y. Face powders, creams, rouges, mascara, etc. 300,835; Feb. 7. Class 6.
F. & M. Importing Co. Inc., doing business as Famico Company, Los Angeles, Calif. Canned fish, fruits, vegetables, etc. 300,713; Feb. 7; Serial No. 330,983; published Nov. 15, 1932. Class 46.
Famico Company. (See F. & M. Importing Co. Inc.)
Fanning Bread and Butter Pickle Company, Inc., New York, N. Y. Pickles. 300,737; Feb. 7; Serial No. 330,542; published Nov. 15, 1932. Class 46.
Felton Chemical Company, Inc., Brooklyn, N. Y. Food flavoring extracts. 300,715; Feb. 7; Serial No. 331,151; published Nov. 15, 1932. Class 46.
Fitwel Dress Co., Inc., Boston, Mass. Dresses. 300,834; Feb. 7. Class 39.
Fortune Tobacco Company, The, New York, N. Y. Cigarettes. 300,810–12; Feb. 7; Serial Nos. 331,281–3; published Nov. 29, 1932. Class 17.
Fry, J. S., and Sons, Limited, Bristol, England. Cocoa. 92,062; renewed June 17, 1933.
Gillon, John, & Co. Limited, Leith, assignor to John Gillon & Company, Limited, Glasgow, Scotland. Whisky. 90,429; renewed Feb. 25 1933.
Gold Dust Corporation, New York, N. Y. Towels and toweling. 300,794; Feb. 7; Serial No. 330,994; published Nov. 15, 1932. Class 42.
Goodyear Tire & Rubber Company, The, Akron, Ohio. Tires, tubes, and hose and tubing. 300,806; Feb. 7; Serial No. 331,258; published Nov. 22, 1932. Class 35.
Gordon-East Coast Company, Moundsville, W. Va. Shirts. 300,797; Feb. 7; Serial No. 330,624; published Nov. 15, 1932. Class 39.
Green Bonnet Stores. (See Tlapek, Raymond.)
Hardwick & Magee Company, Philadelphia, Pa. Textile carpets. 300,831–3; Feb. 7. Class 42.
Harvey, John, & Sons, Limited, Bristol, England. Sherry wine. 300,796; Feb. 7; Serial No. 331,551; published Nov. 29, 1932. Class 47.
Hawaiian Pineapple Company, Ltd., Honolulu, Hawaii, and San Francisco, Calif. Canned pineapple. 300,716; Feb. 7; Serial No. 331,152; published Nov. 15, 1932. Class 46.
Hayward Hosiery Company, Ipswich and Waltham, Mass. Woolen piece goods. 300,726; Feb. 7; Serial No. 330,014; published Nov. 8, 1932. Class 42.
Heddon's, James, Sons, Dowagiac, Mich. Artificial baits. 300,799; Feb. 7; Serial No. 331,461; published Nov. 29, 1932. Class 22.
Hillsdale Manufacturing Company, Hillsdale, Mich. Trousers. 300,829; Feb. 7. Class 39.
Hiteman Leather Company, Inc., West Winfield, N. Y. Leathers. 300,786; Feb. 7; Serial No. 328,788; published Nov. 22, 1932. Class 1.
Holyoke Card & Paper Company, Springfield, Mass. Cover and printing paper. 300,840; Feb. 7. Class 37.
Hudson, Joseph, Birmingham, to James C. Hudson, doing business as J. Hudson and Company, Hockley, Birmingham, England. Whistle calls. 88,184; renewed Sept. 3, 1932.

Hudson, Joseph, Birmingham, to James C. Hudson, doing business as J. Hudson and Company, Hockley, Birmingham, England. Whistle calls. 88,753; renewed Oct. 22, 1932.

Huston, Tom, Peanut Company, Columbus, Ga. Cigarettes. 300,814; Feb. 7; Serial No. 331,255; published Nov. 29, 1932. Class 17.

Immel, Henry J., doing business as No-Blur Polish Co., Chicago, Ill. Automobile and furniture polish. 300,826; Feb. 7. Class 16.

International Printing Ink Corporation, The, New York, N. Y. Printing ink. 300,813; Feb. 7; Serial No. 331,256; published Nov. 29, 1932. Class 11.

Jel Sert Co., The, Chicago, Ill. Maltless powder. 300,762; Feb. 7; Serial No. 331,050; published Nov. 29, 1932. Class 45.

Jenkins Bros., New York, N. Y. Jar rings. 300,805; Feb. 7; Serial No. 331,286; published Nov. 20, 1932. Class 35.

Katakura Seishi Boseki Kabushiki, Kwaisha, Tokyo, Japan. Raw silk, rayon (artificial silk), tussah silk, etc. 300,785; Feb. 7; Serial No. 329,289; published Nov. 29, 1932. Class 1.

Kaufmann Department Stores, Inc., Pittsburgh, Pa. Brushless shaving cream. 300,725; Feb. 7; Serial No. 329,993; published Nov. 22, 1932. Class 4.

Kaufmann Department Stores, Inc., Pittsburgh, Pa. Cleansing cream, skin tonic, liquid rouge, etc. 300,822; Feb. 7. Class 6.

Kayser, Julius, & Co., New York, N. Y. Hosiery. 300,827; Feb. 7. Class 39.

Keystone Varnish Company, Brooklyn, N. Y. Varnish. 91,774; renewed May 27, 1933.

Knopf, Emil, jr., doing business as Box Golf Company, West Brighton, Staten Island, N. Y. Miniature golf game. 300,750; Feb. 7; Serial No. 320,682; published Nov. 29, 1932. Class 22.

Koenig, Joseph, Philadelphia, Pa. Sticky fly paper. 300,749; Feb. 7; Serial No. 321,707; published Nov. 29, 1932. Class 50.

Kohn, Morris, doing business as J. T. Thorn Company, Philadelphia, Pa. Felt pieces to form designs used for educational purposes. 300,772; Feb. 7; Serial No. 330,355; published Nov. 22, 1932. Class 22.

Kummer, Frank, doing business as Astrasan Manufacturing Co., Hackensack, N. J. Cookies. 300,743; Feb. 7; Serial No. 327,879; published Nov. 22, 1932. Class 46.

Layton Pure Food Company, Providence, R. I., and East St. Louis, Ill. Baking powder. 300,736; Feb. 7; Serial No. 330,660; published Nov. 22, 1932. Class 46.

Levy Bros. & Adler Rochester, Inc., Rochester, N. Y. Suits, overcoats, and topcoats. 300,821; Feb. 7. Class 39.

Livermore, Kenneth C., Honeoye Falls, N. Y. Seed potatoes, oats, barley, etc. 300,756; Feb. 7; Serial No. 310,707; published Nov. 22, 1932. Class 1.

Ludford Fruit Products, Inc., Hollywood, Calif. Maltless beverages. 300,757; Feb. 7; Serial No. 331,157; published Nov. 29, 1932. Class 45.

Manning, Grace, Beauty Products. (See Cahill, Agnes Earle.)

Martin Bros., New Orleans, La. Mayonnaise. 300,717; Feb. 7; Serial No. 331,159; published Nov. 22, 1932. Class 46.

McClintock-Field Co., Inc., Ashland, Ky. Dresses, pyjamas, smocks, and wash frocks. 300,783; Feb. 7; Serial No. 330,046; published Nov. 15, 1932. Class 39.

McMahon, Thomas G., doing business as Thos. G. McMahon & Co., Utica, N. Y. Canned fruits, honey, jellies, etc. 300,755; Feb. 7; Serial No. 312,192; published Sept. 22, 1931. Class 46.

Mikesell, Harold S., Chicago, Ill. Brake lining and clutch facings. 300,765; Feb. 7; Serial No. 330,857; published Nov. 22, 1932. Class 85.

Mitchell Bakery, Independence, Kans. Cookies and cakes. 300,728; Feb. 7; Serial No. 330,407; published Nov. 15, 1932. Class 46.

Misrach Wine Company, New York, N. Y. Sacramental kosher wine. 300,775; Feb. 7; Serial No. 329,104; published Nov. 22, 1932. Class 47.

Moran, Jose, Jacksonville, Fla. Cigars. 300,841; Feb. 7. Class 17.

Morton, Philip. (See Samuel Chemical Company, The.)

Munsingwear Corporation, The, Minneapolis, Minn. Knitted outerwear. 300,754; Feb. 7; Serial No. 319,493; published Nov. 22, 1932. Class 39.

Murphy, Howard J., Novelty Co., Reading, Mass. Jig-saw cut out puzzles. 300,773; Feb. 7; Serial No. 330,205; published Nov. 29, 1932. Class 22.

No-Blur Polish Co. (See Immel, Henry J.)

Old King Kold Corporation, Nashville, Tenn. Frozen fruit bars. 300,718; Feb. 7; Serial No. 331,212; published Nov. 22, 1932. Class 46.

Olympia Canning Company, Olympia, Wash. Canned fruits. 300,739; Feb. 7; Serial No. 330,378; published Nov. 15, 1932. Class 46.

Oppleman, L., Inc., New York, N. Y. Adults' target air pistols. 300,761; Feb. 7; Serial No. 331,089; published Nov. 22, 1932. Class 9.

Paducah Cooperage Co., Inc., Paducah, Ky. Kegs and barrels of wood. 300,776; Feb. 7; Serial No. 328,072; published Nov. 22, 1932. Class 2.

Parchen, John F. W., doing business as The So-White Company, New York, N. Y. Bleaching fluid, hydro-chloride. 300,837; Feb. 7. Class 6.

Parke, Davis & Co., Detroit Mich. Remedy for rheumatic affections. 92,115; renewed June 17, 1933.

Parker Brothers, Inc., Portland, Me., and Salem, Mass. Game played with movable pieces. 300,768; Feb. 7; Serial No. 330,604; published Nov. 22, 1932. Class 22.

Parker Brothers, Inc., Portland, Me., and Salem, Mass. Picture puzzles. 300,801; Feb. 7; Serial No. 331,340; published Nov. 22, 1932. Class 22.

Parker Brothers, Inc., Portland, Me., and Salem, Mass. Picture puzzles. 300,804; Feb. 7; Serial No. 331,339; published Nov. 22, 1932. Class 22.

Penn-Jersey Auto Stores, Inc., Easton, Pa. Brake lining restorative preparation. 300,722; Feb. 7; Serial No. 327,285; published Nov. 22, 1932. Class 4.

Pfingsten, August F., Rock Rapids, Iowa. Bread and cake boxes. 300,760; Feb. 7; Serial No. 331,090; published Nov. 29, 1932. Class 2.

Pioneer Suspender Company. (See Royal Suspender Co., The, assignor.)

Pro-Phy-Lac-Tic Brush Company, Northampton, Mass. Tooth brushes. 300,781; Feb. 7; Serial No. 330,709; published Nov. 22, 1932. Class 29.

Psycograph Co., The, Minneapolis, Minn. Psychological test machines. 300,844; Feb. 7. Class 26.

Pura-Smoke Company, Inc., The, Burlington, N. C. Pipes, cigar and cigarette holders, and filter cartridges therefor. 300,777; Feb. 7; Serial No. 330,930; published Nov. 29, 1932. Class 8.

Qu-I-Hi Sauce Co., The. (See Blankenship, Aurelia P.)

Reliance Manufacturing Company, Chicago, Ill. Jackets. 300,793; Feb. 7; Serial No. 331,063; published Nov. 22, 1932. Class 39.

Rice-Stix Dry Goods Co., St. Louis, Mo. Infants' wear. 300,792; Feb. 7; Serial No. 331,091; published Nov. 15, 1932. Class 39.

Rodrigues, Salvador, Inc., Tampa, Fla., and Habana, Cuba. Cigars. 300,779; Feb. 7; Serial No. 330,758; published Nov. 22, 1932. Class 17.

Roessel, Louis & Co., Inc., Hazleton, Pa., and New York, N. Y. Silk goods in the piece. 300,735; Feb. 7; Serial No. 330,759; published Nov. 15, 1932. Class 42.

Roessel, Louis, & Co., Inc., Hazleton, Pa., and New York, N. Y. Silk goods. 300,798; Feb. 7; Serial No. 330,761; published Nov. 8, 1932. Class 42.

Royal Suspender Co., The, New York, N. Y., assignor, by mesne assignments, to Pioneer Suspender Company, Philadelphia, Pa. Suspenders. 39,631; renewed Jan. 13, 1933.

Russell-Miller Milling Company, Minneapolis, Minn. Flour. 91,380; renewed Apr. 29, 1933.

Safebreath Products Co. (See De Mott, Armand H.)

Samuel Chemical Company, The, as assignee of James S. Atkins, to Philip Morton, doing business as The Samuel Chemical Company, Cincinnati, Ohio, successor. Medicinal preparations. 89,733; renewed Jan. 7, 1933.

Sarno, Charles F., Philadelphia, Pa. Hair restorer solution. 300,820; Feb. 7. Class 6.

Seagram, Joseph E., & Sons Limited, Waterloo, Ontario, Canada. Whiskey and potable spirits. 300,769; Feb. 7; Serial No. 330,492; published Nov. 22, 1932. Class 49.

Sears, Roebuck and Co., Chicago, Ill. Poultry feeds. 300,809; Feb. 7; Serial No. 325,414; published July 19, 1932. Class 46.

Seminole Manufacturing Company, McAlester, Okla. Pants and suits. 300,790; Feb. 7; Serial No. 331,385; published Nov. 22, 1932. Class 39.

"Semperit" Oesterreichisch-Amerikanische Gummiwerke Aktiengesellschaft, Vienna, Austria. Soap dishes, tooth brush stands, egg cups, etc. 300,758; Feb. 7; Serial No. 331,125; published Nov. 29, 1932. Class 2.

Shamp-U-Tint, Inc., New York, N. Y. Combined hair dye and shampoo. 300,819; Feb. 7. Class 6.

Sigren, Manuel S., doing business as Chilean Products Mfg. Company, Boston, Mass. Washing fluids or compounds, preparations for removing stains. 300,727; Feb. 7; Serial No. 330,383; published Nov. 22, 1932. Class 4.

Silica Gel Corporation, The, Baltimore, Md. Hard, solid, vitreous adsorbent material. 300,828; Feb. 7. Class 6.

Sinclair Refining Company. (See Sunflower State Oil Company, The, assignor.)

Slamey, Joseph S., Boston, Mass. Cigarettes. 300,780; Feb. 7; Serial No. 330,782; published Nov. 22, 1932. Class 17.

Smokador Manufacturing Co., Inc., Bloomfield, N. J. Ash receivers. 300,816; Feb. 7; Serial No. 331,066; published Nov. 22, 1932. Class 8.

Sociedade dos Vinhos do Porto Constantino, Ltd.ª, Villa Nova, de Gaya, Portugal. Wines. 300,795; Feb. 7; Serial No. 331,566; published Nov. 29, 1932. Class 47.

Società Regie Terme di Montecatini, Rome, Italy. Natural mineral water and salts made therefrom. 300,836; Feb. 7. Class 45.

Socony-Vacuum Corporation. (See Standard Oil Company of New York.)

Sovereign Mineral Spring Co. (See Teller, John L.)

So-Wite Company, The. (See Parchen, John F. W.)

Sponge Rubber Products Co., The, Derby, Conn. Sponge rubber, medical sponge rubber, and rubber sponges. 300,788; Feb. 7; Serial No. 328,190; published Nov. 22, 1932. Class 1.

Squeelee & Piggee Sandwich Co. (See Basche, Victor.)

Standard Brands Incorporated, New York, N. Y. Malt syrup. 300,711; Feb. 7; Serial No. 330,714; published Nov. 22, 1932. Class 46.

Standard Oil Company of New York, by change of name to Socony-Vacuum Corporation, New York, N. Y. Refined petroleum for heating, lighting, and power purposes. 89,886; renewed Jan. 14, 1933.

Standard Oyster Company, The, South Norwalk, Conn. Oysters. 300,838; Feb. 7. Class 46.

Sterling Press, Los Angeles, Calif. Reproductions of photographs, drawings, and prints. 300,843; Feb. 7. Class 38.

Stern & Stern Textile Importers, Inc., New York, N. Y. Alençon lace in the piece. 300,732; Feb. 7; Serial No. 330,555; published Nov. 15, 1932. Class 42.

Stewart & Co., Baltimore, Md. Shirts, pajamas, dressing robes, etc. 300,729; Feb. 7; Serial No. 330,387; published Nov. 22, 1932. Class 39.

Sullivan, Henry J., Providence, R. I. Bowling handmolsteners. 300,803; Feb. 7; Serial No. 331,347; published Nov. 22, 1932. Class 22.

Sunflower State Oil Company, The, Coffeyville, Kans., assignor to Sinclair Refining Company, New York, N. Y. Oils and greases. 91,916; renewed June 8, 1933.

Talens & Son, Inc., Irvington, N. J. Drawing ink. 300,815; Feb. 7; Serial No. 331,130; published Nov. 29, 1932. Class 11.

Teller, John L., doing business as Sovereign Mineral Spring Co., Utica, N. Y. Gingerale and spring water. 300,800; Feb. 7; Serial No. 331,348; published Nov. 29, 1932. Class 45.

Thorn, J. T., Company. (See Kohn, Morris.)

Tlapek, Raymond, doing business as Green Bonnet Stores, Elvins, Mo. Canned tomatoes and peas. 300,738; Feb. 7; Serial No. 330,418; published Nov. 22, 1932. Class 46.

Troy, Wm. Wylie, New Rochelle, N. Y. Ornamental and other trees and shrubs. 300,845; Feb. 7. Class 1.

Tubize Chatillon Corporation, New York, N. Y. Artificial silk yarn and thread. 300,733; Feb. 7; Serial No. 330,608; published Nov. 8, 1932. Class 43.

United Distillers Limited, Vancouver, British Columbia, Canada. Maltless beverages. 300,745–7; Feb. 7; Serial Nos. 322,900–2; published Nov. 29, 1932. Class 45.

United States Radio & Television Corporation, Chicago, Ill. Radio receiving sets. 300,710; Feb. 7; Serial No. 288,578; published Oct. 21, 1930. Class 21.

Vadsco Sales Corporation, New York, and Long Island City, N. Y. Laundry soaps, metal polishes, shoe polishes, etc. 300,752; Feb. 7; Serial No. 319,838; published Nov. 22, 1932. Class 4.

Wanamaker, John, Philadelphia, Philadelphia, Pa. Playing card cases. 300,807; Feb. 7; Serial No. 331,207; published Nov. 29, 1932. Class 2.

Wanamaker, John, Philadelphia, Philadelphia, Pa. Bottle cases, cases for field glasses, opera glasses, etc. 300,808; Feb. 7; Serial No. 331,205; published Nov. 29, 1932. Class 2.

Wanskuck Company, Providence, R. I., and New York, N. Y. Woolen and worsted fabrics in the piece. 300,724; Feb. 7; Serial No. 329,005; published Nov. 15, 1932. Class 42.

Wells & Richardson Company, assignor to Wells & Richardson Co., Inc., Burlington, Vt. Preparations for coloring butter. 91,729; renewed May 20, 1933.

Wesco Foods Company, Cincinnati, Ohio. Canned salmon. 300,712; Feb. 7; Serial No. 330,717; published Nov. 15, 1932. Class 46.

Western States Mfg. Co., Sioux City, Iowa. Sheet rubber tire patching material and tire repair kits. 300,759; Feb. 7; Serial No. 331,095; published Nov. 29, 1932. Class 35.

Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Trays and dishes. 300,766; Feb. 7; Serial No. 330,839; published Nov. 29, 1932. Class 2.

Whittemore Brothers and Company, assignor to Whittemore Bros. Corp., Cambridge, Mass. Dressing to be used on leathers and articles made therefrom. 90,274; renewed Feb. 11, 1933.

Whittenberg Shimberg Corp., New York, N. Y. Coats. 300,784; Feb. 7; Serial No. 329,668; published Nov. 15, 1932. Class 39.

X-Otic Incorporated, New York, N. Y. Fillers for diaper holding garments. 300,723; Feb. 7; Serial No. 328,898; published Nov. 15, 1932. Class 42.

Yawman and Erbe Mfg. Co., Rochester, N. Y. Sectional bookcases and filing cabinets. 40,325; renewed May 12, 1933.

LIST OF REGISTRANTS OF LABELS

Ascher, Max F., Chicago, Ill. Garteron. For Garters for Hosiery. 41,716; Feb. 7.

Barron-Gray Packing Company, San Jose, Calif. Santavalley. For Canned Peaches. 41,717; Feb. 7.

Claff, M. B., & Sons, Inc., Randolph, Mass. Budd's. For Shoes. 41,718; Feb. 7.

Clark, Kenneth A., doing business as Clark & Co., Washington, D. C. Pork Sausage. For Pork Sausage. 41,719; Feb. 7.

Doral Food Products Co., Inc., New York, N. Y. Doral. For Food Product for Use in Making Beverages. 41,720; Feb. 7.

Doral Food Products Co., Inc., New York, N. Y. Doral. For Desserts. 41,721; Feb. 7.

Doral Food Products Co., Inc., New York, N. Y. Doral. For Malted Milk. 41,722; Feb. 7.

General Baking Company, New York, N. Y. Bond Bakers Sunshine Vitamin-D Bread Krums. For Bread-Crumbs. 41,723; Feb. 7.

Herzog, Moses, New York, N. Y. Jannetta. For Hairnets. 41,724; Feb. 7.

Hyo Products Company, Binghamton, N. Y. Hyo Cleaner. For Cleaning Compound. 41,725; Feb. 7.

Kotex Company, Chicago, Ill. The New Phantom Kotex With Patented Equalizer. For a Sanitary Pad. 41,726; Feb. 7.

Kotex Company, Chicago, Ill. The New Phantom Kotex With Patented Equalizer. (Imprinted West Disinfecting Company.) For Sanitary Pad. 41,727; Feb. 7.

Naylor, H. W., doing business as H. W. Naylor Company, Morris, N. Y. Dr. Naylor's Udder Liniment. For Liniment. 41,728; Feb. 7.

Orbit Gum Company, Chicago, Ill. Tatoo. For Chewing Gum. 41,729–30; Feb. 7.

Sadur, Hyman, doing business as H. Sadur & Co., Chicago, Ill. Sadur's Stay-Shine. For Polish. 41,731; Feb. 7.

Stader, Florence M., doing business as Sta-Wel Manufacturing Company, Plymouth, Mich. Sta-Wel. For Lingerie Clasps. 41,732; Feb. 7.

Standard Brands Incorporated, New York, N. Y. Chase and Sanborn's Seal Brand Tender Leaf. For Tea. 41,733; Feb. 7.

Sta-Wel Manufacturing Company. (See Stader, Florence M.)

Sutherland Paper Company, Kalamazoo, Mich. Pipestone Sweet Cream Butter. For Butter. 41,734; Feb. 7.

Trommer, John F., Incorporated, Brooklyn, N. Y. Trommer's White Label Special Dark. For Malt Brew. 41,735; Feb. 7.

Tropical Juice Corporation, Titusville, Fla. Giraffe Vacuum Packed Natural Grapefruit Juice. For Grapefruit Juice. 41,736–7; Feb. 7.

Tropical Juice Corporation, Titusville, Fla. Giraffe Vacuum Packed Natural Orange Juice. For Orange Juice. 41,738–9; Feb. 7.

LIST OF REGISTRANTS OF PRINTS

Eisenlohr, Webster, Inc., New York, N. Y. Eisenlohr's Cinco Cigars. For Cigars. 14,044; Feb. 7.

Freihofer, Chas., Baking Co. Inc., Troy, N. Y. Freihofer's 24 Hour Coffee. For Coffee. 14,045; Feb. 7.

General Mills, Inc., Minneapolis, Minn. Now! No Mother Need Force Her Child To Eat Hot Cereals! For Cereal Food. 14,046; Feb. 7.

Kolynos, Company, The, New Haven, Conn. No. 1124. For Dental Cream. 14,047; Feb. 7.

Orbit Gum Company, Chicago, Ill. Tattoo. For Chewing Gum. 14,048; Feb. 7.

Palmer Advertising Service Inc., New York, N. Y. Pyrex. For Ovenware. 14,049; Feb. 7.

Poloris Co., Inc., New York, N. Y. Meet The Toothache Twins. For Toothache Drops and Dental Poultices. 14,050; Feb. 7.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal, Bituminous. Boone County Coal Corporation. 300,782; Feb. 7; Serial No. 330,691; published Nov. 22, 1932.

Leathers. Hiteman Leather Company. 300,786; Feb. 7; Serial No. 328,788; published Nov. 22, 1932.

Peat moss. Atkins & Durbrow, Inc. 300,778; Feb. 7; Serial No. 330,917; published Nov. 29, 1932.

Seed potatoes, oats, barley, etc. K. C. Livermore. 300,756; Feb. 7; Serial No. 310,707; published Nov. 22, 1932.
Silk, rayon (artificial silk), tussah silk, etc., Raw. Katakura Seishi Boseki Kabushiki Kwaisha. 300,785; Feb. 7; Serial No. 329,289; published Nov. 29, 1932.
Sponge rubber, medical sponge rubber, and rubber sponges. Sponge Rubber Products Co. 300,788; Feb. 7; Serial No. 328,190; published Nov. 22, 1932.
Trees and shrubs, Ornamental and other. W. W. Troy. 300,845; Feb. 7.

CLASS 2

Boxes. Crescent Box Corporation. 300,771; Feb. 7; Serial No. 330,364; published Nov. 29, 1932.
Boxes, Bread and cake. A. F. Pfingsten. 300,760; Feb. 7; Serial No. 331,090; published Nov. 29, 1932.
Cases, cases for field glasses, opera glasses, etc., Bottle. John Wanamaker Philadelphia. 300,808; Feb. 7; Serial No. 331,205; published Nov. 29, 1932.
Cases, Playing card. John Wanamaker Philadelphia. 300,807; Feb. 7; Serial No. 331,207; published Nov. 29, 1932.
Dishes, tooth brush stands, egg cups, etc., Soap. "Semperit" Oesterreichisch-Amerikanische Gummiwerke Aktiengesellschaft. 300,758; Feb. 7; Serial No. 331,125; published Nov. 29, 1932.
Kegs and barrels. Paducah Cooperage Co. 300,776; Feb. 7; Serial No. 328,072; published Nov. 22, 1932.
Trays and dishes. Westinghouse Electric and Manufacturing Company. 300,766; Feb. 7; Serial No. 330,839; published Nov. 29, 1932.

CLASS 4

Brake lining restorative preparation. Penn-Jersey Auto Stores, Inc. 300,722; Feb. 7; Serial No. 327,285; published Nov. 22, 1932.
Cleaner preparation, Dry. H. Behlen & Bro. 300,730; Feb. 7; Serial No. 330,416 published Nov. 22, 1932.
Cleaning and spot removing fluid, Dry. Columbia Phonograph Company. 300,748; Feb. 7; Serial No. 322,421; published Nov. 29, 1932.
Dressing. Whittemore Brothers and Company. 90,274; renewed Feb. 11, 1933.
Dressing, Leather. Martin Dennis Company. 300,731; Feb. 7; Serial No. 330,516; published Nov. 29, 1932.
Scouring pad. J. Brandstetter. 300,721; Feb. 7; Serial No. 326,604; published Nov. 22, 1932.
Shaving cream, Brushless. Kaufmann Department Stores, Inc. 300,725; Feb. 7; Serial No. 329,993; published Nov. 22, 1932.
Soap, Dog. William Cooper & Nephews, Incorporated. 300,734; Feb. 7; Serial No. 330,650; published Nov. 22, 1932.
Soaps, polishes, etc. Vadsco Sales Corporation. 300,752; Feb. 7; Serial No. 319,838; published Nov. 22, 1932.
Washing fluids or compounds, preparation for removing stains. M. S. Sigren. 300,727; Feb. 7; Serial No. 330,383; published Nov. 22, 1932.

CLASS 6

Adsorbent material, Hard, solid, vitreous. Silica Gel Corporation. 300,828; Feb. 7.
Bitters, Tonic. Angostura Bitters (Dr. J. G. B. Siegert & Sons) Limited. 90,152; renewed Feb. 11, 1933.
Bleaching fluid, hydro-chloride. J. F. W. Parchen. 300,837; Feb. 7.
Cream, skin cream, muscle oil, etc., Cleansing. A. E. Cahill. 300,825; Feb. 7.
Cream, skin tonic, hand lotion, etc., Cleansing. Dey Brothers, & Co. 300,818; Feb. 7.
Cream, skin tonic, liquid rouge, etc., Cleansing. Kaufmann Department Stores, Inc. 300,822; Feb. 7.
Hair dye and shampoo, Combined. Shamp-U-Tint, Inc. 300,819; Feb. 7.
Hair restorer solution. C. F. Sarno. 300,820; Feb. 7.
Laxative, laxative, cathartic, etc., Tonic. Bristol-Meyers Company. 91,642; renewed May 20, 1933.
Medicinal preparations. Samuel Chemical Company. 89,733; renewed Jan. 7, 1933.
Mineral crystals. B. C. Bratton. 300,823; Feb. 7.
Minerals, Powdered. B. C. Bratton. 300,824; Feb. 7.
Powders, creams, rouges, mascara, etc., Face. Albert Durande, Inc. 300,835; Feb. 7.
Preparations for coloring butter. Wells & Richardson Company. 91,729; renewed May 20, 1933.
Remedy for rheumatic affections. Parke, Davis & Co. 92,115; renewed June 17, 1933.

CLASS 8

Ash receivers. Smokador Manufacturing Co. 300,816; Feb. 7; Serial No. 331,066; published Nov. 22, 1932.
Pipes, cigar and cigarette holders, and filter cartridges therefor. Pura-Smoke Co. 300,777; Feb. 7; Serial No. 330,930; published Nov. 29, 1932.

CLASS 9

Pistols, Adults' target air. L. Oppleman, Inc. 300,761; Feb. 7; Serial No. 331,089; published Nov. 22, 1932.

CLASS 11

Ink, Drawing. Talens & Son, Inc. 300,815; Feb. 7; Serial No. 331,130; published Nov. 29, 1932.
Ink, Printing. International Printing Ink Corporation. 300,813; Feb. 7; Serial No. 331,256; published Nov. 29, 1932.

CLASS 14

Metal, Thermostatic. W. M. Chace Valve Company. 300,830; Feb. 7.
Metals, Welding. Bastian-Blessing Company. 300,787; Feb. 7; Serial No. 328,680; published Nov. 29, 1932.

CLASS 15

Oils and greases. Sunflower State Oil Company. 91,916; renewed June 3, 1933.
Petroleum. Standard Oil Company of New York. 89,886; renewed Jan. 14, 1933.

CLASS 16

Polish, Automobile and furniture. H. J. Immel. 300,826; Feb. 7.
Varnish. Keystone Varnish Company. 91,774; renewed May 27, 1933.

CLASS 17

Cigarettes. Brown & Williamson Tobacco Corporation. 300,817; Feb. 7.
Cigarettes. Fortune Tobacco Company. 300,810–12; Feb. 7; Serial Nos. 331,281–3; published Nov. 29, 1932.
Cigarettes. Tom Huston Peanut Company. 300,814; Feb. 7; Serial No. 331,255; published Nov. 29, 1932.
Cigarettes. J. S. Slamey. 300,780; Feb. 7; Serial No. 330,732; published Nov. 22, 1932.
Cigars. J. Moran. 300,841; Feb. 7.
Cigars. Salvador Rodriguez, Inc. 300,779; Feb. 7; Serial No. 330,758; published Nov. 22, 1932.

CLASS 21

Radio receiving sets. United States Radio & Television Corporation. 300,710; Feb. 7; Serial No. 288,578; published Oct. 21, 1930.

CLASS 22

Baits, Artificial. James Heddon's Sons. 300,799; Feb. 7; Serial No. 331,461; published Nov. 29, 1932.
Bowling hand-moisteners. H. J. Sullivan. 300,803; Feb. 7; Serial No. 331,347; published Nov. 22, 1932.
Designs used for educational purposes, Felt pieces to form. M. Kohn. 300,772; Feb. 7; Serial No. 330,355; published Nov. 22, 1932.
Dolls and dolls' house. Bloomingdale Bros. Inc. 300,764; Feb. 7; Serial No. 330,776; published Nov. 22, 1932.
Game played with movable pieces. Parker Brothers, Inc. 300,768; Feb. 7; Serial No. 330,604; published Nov. 22, 1932.
Golf game, Miniature. Emil Knopf, jr. 300,750; Feb. 7; Serial No. 320,682; published Nov. 29, 1932.
Jig-saw cut out puzzles. Howard J. Murphy Novelty Co. 300,773; Feb. 7; Serial No. 330,205; published Nov. 29, 1932.
Puzzles, Picture. Parker Brothers, Inc. 300,801; Feb. 7; Serial No. 331,340; published Nov. 22, 1932.
Puzzles, Picture. Parker Brothers, Inc. 300,804; Feb. 7; Serial No. 331,339; published Nov. 22, 1932.
Toy of the bandalore type. All-Metal Bottle Cooler Corporation. 300,763; Feb. 7; Serial No. 330,881; published Nov. 22, 1932.
Whistle calls. J. Hudson. 88,184; renewed Sept. 3, 1932.
Whistle calls. J. Hudson. 88,753; renewed Oct. 22, 1932.

CLASS 26

Psychological test machines. Psycograph Co. 300,844; Feb. 7.
Scientific appliances. American Optical Company. 89,795; renewed Jan. 14, 1933.

CLASS 29

Tooth brushes. Pro-Phy-Lac-Tic Brush Company. 300,781; Feb. 7; Serial No. 330,709; published Nov. 22, 1932.

CLASS 31

Filters, Water. Champion Hardware Company. 300,770; Feb. 7; Serial No. 330,451; published Nov. 22, 1932.

CLASS 32

Bookcases and filing cabinets, Sectional. Yawman and Erbe Mfg. Co. 40,325; renewed May 12, 1933.

CLASS 35

Jar rings. Jenkins Bros. 300,805; Feb. 7; Serial No. 331,286; published Nov. 29, 1932.
Lining and clutch facings, Brake. H. S. Mikesell. 300,765; Feb. 7; Serial No. 330,857; published Nov. 22, 1932.
Rubber tire patching material and tire repair kits. Western States Mfg. Co. 300,759; Feb. 7; Serial No. 331,095; published Nov. 29, 1932.
Tires, tubes, hose and tubing. Goodyear Tire & Rubber Company. 300,806; Feb. 7; Serial No. 331,253; published Nov. 22, 1932.

CLASS 37

Paper, Cover and printing. Holyoke Card & Paper Company. 300,840; Feb. 7.
Paper, Toilet. Albany Perforated Wrapping Paper Company. 92,155; renewed June 24, 1933.
Paper, Toilet. Albany Perforated Wrapping Paper Company. 92,157; renewed June 24, 1933.

CLASS 38

Reproductions of photographs, drawings and prints. Sterling Press. 300,843; Feb. 7.

CLASS 39

Apparel, Women's wearing. Clark's Dollar Stores, Inc. 300,744; Feb. 7; Serial No. 324,342; published Nov. 15, 1932.
Coats. Wittenberg Shimberg Corp. 300,784; Feb. 7; Serial No. 329,663; published Nov. 15, 1932.
Dresses. Fitwel Dress Co. 300,834; Feb. 7.
Dresses, pyjamas, smocks, and wash frocks. McClintock-Field Co. 300,783; Feb. 7; Serial No. 330,046; published Nov. 15, 1932.
Hosiery. Apex Hosiery Company. 300,789; Feb. 7; Serial No. 331,392; published Nov. 22, 1932.
Hosiery. Julius Kayser & Co. 300,827; Feb. 7.
Infants' wear. Rice-Stix Dry Goods Co. 300,792; Feb. 7; Serial No. 331,091; published Nov. 15, 1932.
Jackets. Reliance Manufacturing Company. 300,793; Feb. 7; Serial No. 331,063; published Nov. 22, 1932.
Outerwear, Knitted. Munsingwear Corporation. 300,754; Feb. 7; Serial No. 319,498; published Nov. 22, 1932.
Pants and suits. Seminole Manufacturing Company. 300,790; Feb. 7; Serial No. 331,385; published Nov. 22, 1932.
Shirts. Gordon-East Coast Company. 300,797; Feb. 7; Serial No. 330,624; published Nov. 15, 1932.
Shirts, pajamas, dressing robes, etc. Stewart & Co. 300,729; Feb. 7; Serial No. 330,387; published Nov. 22, 1932.
Suits, overcoats, topcoats. Levy Bros. & Adler Rochester, Inc. 300,821; Feb. 7.
Suspenders. Royal Suspender Co. 39,631; renewed Jan. 13, 1933.
Trousers. Hillsdale Manufacturing Company. 300,829; Feb. 7.

CLASS 42

Blankets, woolen piece goods, flannels. Birdsall Brothers Co. 89,532; renewed Dec. 24, 1932.
Carpets, Textile. Hardwick & Magee Company. 300,831–3; Feb. 7.
Comforters, Celba fibre quilted bed. Dry-Zero Corporation. 300,751; Feb. 7; Serial No. 320,187; published Nov. 15, 1932.
Cotton piece goods. Dacotah Cotton Mills, Inc. 300,791; Feb. 7; Serial No. 331,219; published Nov. 15, 1932.
Fillers for diaper holding garments. X-Otic Incorporated. 300,723; Feb. 7; Serial No. 328,898; published Nov. 15, 1932.
Lace in the piece, Alençon. Stern & Stern Textile Importers, Inc. 300,732; Feb. 7; Serial No. 330,555; published Nov. 15, 1932.
Silk goods. Louis Roessel & Co. 300,735; Feb. 7; Serial No. 330,759; published Nov. 15, 1932.
Silk goods. Louis Roessel & Co. 300,798; Feb. 7; Serial No. 330,761; published Nov. 8, 1932.
Towels and toweling. Gold Dust Corporation. 300,794; Feb. 7; Serial No. 330,994; published Nov. 15, 1932.
Woolen and worsted fabrics in the piece. Wanskuck Company. 300,724; Feb. 7; Serial No. 329,005; published Nov. 15, 1932.
Woolen piece goods. Hayward Hosiery Company. 300,726; Feb. 7; Serial No. 330,014; published Nov. 8, 1932.

CLASS 43

Yarn and thread. Doolfus-Mieg & Cie. Société Anonyme. 90,519–20; renewed Mar. 4, 1933.
Yarn and thread, Artificial silk. Tubize Chatillon Corporation. 300,733; Feb. 7; Serial No. 330,608; published Nov. 8, 1932.

CLASS 45

Beverage, Maltless. Edward & John Burke, Limited. 300,767; Feb. 7; Serial No. 330,693; published Nov. 22, 1932.
Beverages, Maltless. Ludford Fruit Products, Inc. 300,757; Feb. 7; Serial No. 331,157; published Nov. 29, 1932.
Beverages, Maltless. United Distillers Limited. 300,745–7; Feb. 7; Serial Nos. 322,900–2; published Nov. 29, 1932.
Beverages, syrups, extracts for making the same, Maltless. Ben-Burk, Incorporated. 300,802; Feb. 7; Serial No. 331,297; published Nov. 22, 1932.
Gingerale and spring water. J. L. Teller. 300,800; Feb. 7; Serial No. 331,348; published Nov. 29, 1932.
Juices and syrups, Maltless fruit. F. W. Bireley. 300,842; Feb. 7.
Powder, Maltless. Jel Sert Co. 300,762; Feb. 7; Serial No. 331,050; published Nov. 29, 1932.
Water and salts made therefrom, Natural mineral. Società Regie Terme di Montecatini. 300,836; Feb. 7.

CLASS 46

Baking powder. Layton Pure Food Company. 300,786; Feb. 7; Serial No. 330,660; published Nov. 22, 1932.
Candy. Curtiss Candy Company. 300,719; Feb. 7; Serial No. 331,248; published Nov. 22, 1932.
Candy. A. H. De Mott. 300,720; Feb. 7; Serial No. 331,321; published Nov. 22, 1932.
Canned fish, fruits, and vegetables, etc. F. & M. Importing Co. Inc. 300,713; Feb. 7; Serial No. 330,693; published Nov. 15, 1932.
Canned fruits. Olympia Canning Company. 300,739; Feb. 7; Serial No. 330,378; published Nov. 15, 1932.
Canned fruits, honey, jellies, etc. T. G. McMahon. 300,755; Feb. 7; Serial No. 312,192; published Sept. 22, 1931.
Canned pineapple. Hawaiian Pineapple Company. 300,716; Feb. 7; Serial No. 331,152; published Nov. 15, 1932.
Canned salmon. Wesco Foods Company. 300,712; Feb. 7; Serial No. 330,717; published Nov. 15, 1932.
Canned tomatoes and peas. R. Tiapek. 300,738; Feb. 7; Serial No. 330,418; published Nov. 22, 1932.
Cocoa. J. S. Fry and Sons, Limited. 92,062; renewed June 17, 1933.
Cookies. F. Kummer. 300,743; Feb. 7; Serial No. 327,879; published Nov. 22, 1932.
Cookies and cakes. Mitchell Bakery. 300,728; Feb. 7; Serial No. 330,407; published Nov. 15, 1932.
Extracts, Food flavoring. Felton Chemical Company. 300,715; Feb. 7; Serial No. 331,151; published Nov. 15, 1932.
Feeds, Poultry. Sears, Roebuck and Co. 300,809; Feb. 7; Serial No. 325,414; published July 19, 1932.
Flour. Russell-Miller Milling Company. 91,380; renewed Apr. 29, 1933.
Flour, Wheat. Commercial Milling Company. 300,753; Feb. 7; Serial No. 319,757; published Nov. 10, 1931.
Food, Dog. Animal Foods Company. 300,714; Feb. 7; Serial No. 331,135; published Nov. 15, 1932.
Fruit bars, Frozen. Old King Kold Corporation. 300,718; Feb. 7; Serial No. 331,212; published Nov. 22, 1932.
Ice cream. "Dry-Kold" Refrigerator Co. 300,741; Feb. 7; Serial No. 330,247; published Nov. 22, 1932.
Mayonnaise. Martin Bros. 300,717; Feb. 7; Serial No. 331,159; published Nov. 22, 1932.
Oysters. Standard Oyster Company. 300,838; Feb. 7.
Pickles. Fanning Bread and Butter Pickle Company. 300,737; Feb. 7; Serial No. 330,542 published Nov. 15, 1932.
Pretzels. American Cone & Pretzel Company. 300,709; Feb. 7; Serial No. 297,508; published Apr. 29, 1930.
Sandwiches. V. Basche. 300,742; Feb. 7; Serial No. 329,039; published Nov. 22, 1932.
Sauce, Flavoring. A. P. Blankenship. 300,740; Feb. 7; Serial No. 330,330; published Nov. 22, 1932.
Syrup, Malt. Standard Brands Incorporated. 300,711; Feb. 7; Serial No. 330,714; published Nov. 22, 1932.

CLASS 47

Wine, Sacramental Kosher. Misrach Wine Company. 300,775; Feb. 7; Serial No. 329,104; published Nov. 22, 1932.
Wine, Sherry. John Harvey & Sons, Limited. 300,796; Feb. 7; Serial No. 331,551; published Nov. 29, 1932.
Wines. Sociedade dos Vinhos do Porto Constantino, Ltd.a. 300,795 Feb. 7; Serial No. 331,566; published Nov. 29, 1932.

CLASS 49

Whiskey and potable spirits. Joseph E. Seagram & Sons Limited. 300,769; Feb. 7; Serial No. 330,492; published Nov. 22, 1932.
Whisky. Edward and John Burke Ltd. 40,013; renewed Mar. 31, 1933.
Whisky. J. Dewar & Sons. 300,774; Feb. 7; Serial No. 329,629; published Nov. 29, 1932.
Whisky. John Gillon & Co. Limited. 90,429; renewed Feb. 25, 1933.

CLASS 50

Fly Paper, Sticky. J. Koenig. 300,749; Feb. 7; Serial No. 321,707; published Nov. 29, 1932.

LIST OF LABELS

Bond Bakers Sunshine Vitamin-D Bread Krums. For Bread-crumbs. General Baking Company. 41,723; Feb. 7.
Budd's. For Shoes. M. B. Claff & Sons, Inc. 41,718; Feb. 7.
Chase and Sanborn's Seal Brand Tender Leaf. For Tea. Standard Brands Incorporated. 41,733; Feb. 7.
Dr. Naylor's Udder Liniment. For Liniment. H. W. Naylor. 41,728; Feb. 7.
Doral. For Food Product for Use in Making Beverages. Doral Food Products Co. 41,720; Feb. 7.
Doral. For Desserts. Doral Food Products Co. 41,721; Feb. 7.
Doral. For Malted Milk. Doral Food Products Co. 41,722; Feb. 7.
Garteron. For Garters for Hosiery. M. F. Ascher. 41,716; Feb. 7.

Giraffe Vacuum Packed Natural Grapefruit Juice. For Grapefruit Juice. Tropical Juice Corporation. 41,736–7; Feb. 7.

Giraffe Vacuum Packed Natural Orange Juice. For Orange Juice. Tropical Juice Corporation. 41,738–9; Feb. 7.

Hyo Cleaner. For Cleaning Compound. Hyo Products Company. 41,725; Feb. 7.

Jannetta. For Hairnets. M. Herzog. 41,724; Feb. 7.

Pipestone Sweet Cream Butter. For Butter. Sutherland Paper Company. 41,734; Feb. 7.

Pork Sausage. For Pork Sausage. K. A. Clark. 41,719; Feb. 7.

Sadur's Stay-Shine. For Polish. H. Sadur. 41,731; Feb. 7.

Santavalley. For Canned Peaches. Barron-Gray Packing Company. 41,717; Feb. 7.

Sta-Wel. For Lingerie Clasps. F. M. Stader. 41,732; Feb. 7.

Tattoo. For Chewing Gum. Orbit Gum Company. 41,729–30; Feb. 7.

The New Phantom Kotex With Patented Equalizer. For a Sanitary Pad. Kotex Company. 41,726; Feb. 7.

The New Phantom Kotex With Patented Equalizer. (Imprinted West Disinfecting Company.) For Sanitary Pad. Kotex Company. 41,727; Feb. 7.

Trommer's White Label Special Dark. For Malt Brew. John F. Trommer, Incorporated. 41,735; Feb. 7.

LIST OF PRINTS

Eisenlohr's Cinco Cigars. For Cigars. Webster Eisenlohr, Inc. 14,044; Feb. 7.

Freihofer's 24 Hour Coffee. For Coffee. Chas. Freihofer Baking Co. Inc. 14,045; Feb. 7.

Meet The Toothache Twins. For Toothache Drops and Dental Poultices. Poloris Co., Inc. 14,050; Feb. 7.

No. 1124. For Dental Cream. Kolynos Company. 14,047; Feb. 7.

Now! No Mother Need Force Her Child To Eat Hot Cereals! For Cereal Foods. General Mills, Inc. 14,046; Feb. 7.

Pyrex. For Ovenware. Palmer Advertising Service Inc. 14,049; Feb. 7.

Tattoo. For Chewing Gum. Orbit Gum Company. 14,048; Feb. 7.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 7TH DAY OF FEBRUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abel, Frank J., Massapequa, assignor to H. Hyman, Brooklyn, N. Y. Box or similar receptacle. Des. 89,164; Feb. 7.

Accounting & Tabulating Corporation, The. (See Thomas, A., and English, assignors.)

Acker, Hans. (See Kircher, C., and Acker.)

Addis, Frank J., Ozone Park, N. Y. Thermometer. 1,896,503; Feb. 7.

Adjusta Company. (See Evans, Harry H., assignor.)

Adler, Morton L. (See White, William, assignor.)

Adler, Morton L. (See White, W., Petersen, and Lansmith, assignors.)

Adornetto, Carmelo, New York, N. Y. Sandpaper holder. 1,896,738; Feb. 7.

Agren, Ernst M., Stockholm, Sweden. Arrangement in striking-tools. 1,896,992; Feb. 7.

Aircraft Appliance Co., The. (See Huffman, William E., assignor.)

Akron Standard Mold Company, The. (See Bostwick, Henry C., assignor.)

Aktiengesellschaft Brown Boveri & Cie. (See Brown, Eric, assignor.)

Alemite Composition. (See Murphy, Howard J., assignor.)

Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to General Electric Company. Electrical system. 1,896,534; Feb. 7.

Allen, Andrew B., Lockland, Ohio. Pipe wrench. 1,896,437; Feb. 7.

Allen, Grosvenor N., and C. A. Bennett, assignors to Oneida Community, Limited, Oneida, N. Y. Pot or similar article. Des. 89,235; Feb. 7.

Allgrunn, Carl G. (See Knapp, E., and Allgrunn.)

Allis-Chalmers Manufacturing Company. (See Pfau, Arnold, assignor.)

Alton, William H., assignor to R. T. Vanderbilt Company, New York, N. Y. Plastic wall coating. 1,897,016; Feb. 7.

American Cable Company. (See Burd, Gorman C., assignor.)

American Cyanamid Company. (See Barsky, G., and Wohnsiedler, assignors.)

American Fabrics Company, The. (See Juestrich, Max U., assignor.)

American Fabrics Company. (See Philips, Hans A., assignor.)

American Furnace Company. (See Franke, Clarence S., assignor.)

American Glasstoff Corporation. (See Byron, T. H., and Carter, assignors.)

American Laundry Machinery Company, The. (See Brockett, Bluford W., assignor.)

American Laundry Machinery Company, The. (See Johnson, George W., assignor.)

American Laundry Machinery Company, The. (See Pauly, Robert C., assignor.)

American Lurgi Corporation. (See Sterner-Rainer, Roland, assignor.)

American Manganese Steel Company. (See Murtaugh, Joseph P., assignor.)

American Sales Book Company, Limited. (See Hagemann, Louis F., assignor.)

American Telephone and Telegraph Company. (See Green, Irving W., assignor.)

American Telephone and Telegraph Company. (See Green, I. W., and Bisbee, assignors.)

Ammons, Ralph W., Los Angeles, Calif. Earthworking implement. 1,896,568; Feb. 7.

Anastasi, Pasquale, Washington, D. C. Hair and scalp treating apparatus. 1,896,988; Feb. 7.

Anders, Lindahl. (See Luttropp, Conrad, assignor.)

Anderson Banking Company, executor. (See Norviel, Harry E.)

Anderson, Harry T., Butler, Pa. Car door. 1,896,474; Feb. 7.

Anderson, Samuel M., Sharon, assignor to B. F. Sturtevant Company, Boston, Mass. Assembly of metal surfaces. 1,896,656; Feb. 7.

Andrew, Edwin L., Rome, assignor to General Cable Corporation, New York, N. Y. Electric conductor. 1,896,475; Feb. 7.

Andrews, Oliver B., Chattanooga, Tenn. Bread band. 1,896,601; Feb. 7.

Andrews, Oliver B., Chattanooga, Tenn. Package for sliced bread. 1,896,602; Feb. 7.

Andrews, Oliver B., Chattanooga, Tenn. Bread band. 1,896,603; Feb. 7.

Andrie, Michael B., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Closure. 1,896,271; Feb. 7.

Andrie, Michael B., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Closure for filler necks and the like. 1,896,272; Feb. 7.

Anthony, Alfred W., jr., Belmont, assignor to Pease, Anthony Equipment Co., Cambridge, Mass. Atomising head. 1,896,359; Feb. 7.

Arland, Frederick L., White Plains, N. Y. Resonant circuit. 1,896,993; Feb. 7.

Armacost, Wilbur H., assignor to The Superheater Company, New York, N. Y. Reheater. 1,896,213; Feb. 7.

Armacost, Wilbur H., assignor to The Superheater Company, New York, N. Y. Water cooled furnace. 1,896,278; Feb. 7.

Armaflex Parent, Limited. (See Humphrey, Frederick J., assignor.)

Armour and Company of Delaware. (See Colt, Edwin W., assignor.)

Armour, James W., assignor to Riley Stoker Corporation, Worcester, Mass. Tuyère block. 1,896,569; Feb. 7.

Armstrong, Leonard J., Mariners Harbor, N. Y. Windshield wiper. 1,896,994; Feb. 7.

Arnold, John F. (See Larson, Edwin C., assignor.)

Arrowsmith, John D., et al. (See Thompson, H. J., and Sulak, assignors.)

Asbestos Wood & Shingle Co. (See MacIldowie, John C., assignor.)

Ashaway Line and Twine Manufacturing Company. (See Crandall, Julian T., assignor.)

Ashmore, Leon H., Collingswood, assignor to The Esterbrook Steel Pen Manufacturing Co., Camden, N. J. Fountain pen. 1,896,152; Feb. 7.

Associated Electric Laboratories, Inc. (See Kapp, William F., assignor.)

Associated Manufacturers Corporation of America. (See Edwards, J. M., and Dilger, assignors.)

Associated Merchandising Corporation. (See Simpson, Adele, S., assignor.)

Atwater Kent Manufacturing Company. (See Macnabb, Vernon C., assignor.)

Austin, Walter M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Arc extinguishing structure. 1,896,763; Feb. 7.

Automatic Transportation Company. (See Gfrorer, Albert H., assignor.)

Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)

Babcock & Wilcox Company, The. (See Lucke, Charles E., assignor.)

Bacheller, Raymond G., assignor to Hartford-Empire Company, Hartford, Conn. Conveying mechanism for glassware and the like. 1,896,657; Feb. 7.

Bagnall, Robert I., London, England. Voltage regulation in alternating current supplies. 1,896,995; Feb. 7.

Bales, James E., assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Folding display stand. 1,896,604; Feb. 7.

Ball, Harvey W., assignor to The Morgan Engineering Company, Alliance, Ohio. Crane trolley. 1,896,274; Feb. 7.

Barber, George H., New Rochelle, N. Y., and F. G. Stimson, Belleville, and G. B. Pratt, assignors to Bond Electric Corporation, Jersey City, N. J. Flashlight. 1,896,605; Feb. 7.

Barber, Martin A., Cleveland, Ohio, assignor to Consolidated Connector Patent Corporation, Wilmington, Del. Automatic train pipe connecter head. 1,896,340; Feb. 7.

Barnes, John A., Chappaqua, assignor to The Superheater Company, New York, N. Y. Superheater boiler. 1,896,275; Feb. 7.

Barrett, Harold J., Wilmington, and E. F. Izard, Elsmere, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Protective agent for meta styrene. 1,896,504; Feb. 7.

Barry, Cornelius J., Chicago, Ill. Bumper attachment. 1,896,277; Feb. 7.

Barsky, George, New York, N. Y., and H. P. Wohnsiedler, Elizabeth, N. J., assignors to American Cyanamid Company, New York, N. Y. Urea-acetaldehyde-formaldehyde resin and making same. 1,896,276; Feb. 7.

Bartholomew, Robert J., Germantown, assignor to Fletcher Works, Incorporated, Philadelphia, Pa. Spindle swing bracket. 1,896,505; Feb. 7.

Bartholomew, Robert J., Germantown, assignor to Fletcher Works, Incorporated, Philadelphia, Pa. Starting pulley. 1,896,506; Feb. 7.

Bateman, William H. (See Leach, R. W., and Bateman.)

Bates, Charles F. W., Cleveland Heights, assignor to The Ohio Instrument Manufacturing Company, Cleveland, Ohio. Purifying tungsten. 1,896,606; Feb. 7.

Battista, Donald A., assignor of one-half to W. De Cou, jr., Philadelphia, Pa. Refrigerated display device. 1,896,693; Feb. 7.

Battle, John R., Ardmore, Pa., assignor to Gun-Fil Corporation. Lubricant compressor. 1,896,507; Feb. 7.

Bauer, Georg, Hanau-on-the-Main, Germany. Recovery of platinum and its bymetals for mattes. 1,896,807; Feb. 7.

Bausch & Lomb Optical Company. (See Patterson, William L., assignor.)

Baxter, William C., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating upon the end portions of shoes. 1,896,153; Feb. 7.

Beach Laboratories, Inc. (See Tseng, Andrew T. K., assignor.)

Beacham, Thomas E. (See Hele-Shaw, H. S., Beacham, and Davies.)

Beattie Manufacturing Co., The. (See Beattie, Walter J., assignor.)

Beattie, Walter J., assignor to The Beattie Manufacturing Co., Cohoes, N. Y. Manufacturing soft collars and product thereof. Re18,732; Feb. 7.

Beattie, Walter J., assignor to The Beattie Manufacturing Co., Cohoes, N. Y. Collar point shaping machine. 1,896,934; Feb. 7.

Beaubien, Philippe de G., Outremont, and J. F. Schneider, Montreal, Quebec, Canada, and François M. Dupont, Chicago, Ill., assignor to The Canadian Research Corporation, Limited, Montreal, Quebec, Canada. Mashing malt and malt mixture. 1,896,658; Feb. 7.

Bechert, Fred J., Stamford, assignor to The Fafnir Bearing Company, New Britain, Conn. Spring end connection. 1,896,878; Feb. 7.

Btchert, Fred J., Stamford, assignor to The Fafnir Bearing Company, New Britain, Conn. Spring end connection. 1,896,879; Feb. 7.

Becket, Frederick M., New York, N. Y., assignor to Electro Metallurgical Company. Stain-resisting alloy. 1,896,154; Feb. 7.

Becket, Frederick M., New York, N. Y., assignor to Electro Metallurgical Company. Corrosion resistant articles of manufacture. 1,896,155; Feb. 7.

Becket, Frederick M., New York, N. Y., assignor to Electro Metallurgical Company. Making low-carbon chromium alloys. 1,897,017; Feb. 7.

Beglinger, Nelda M., Pittsburgh, Pa. Clothes hanging device. 1,896,996; Feb. 7.

Behrend, Oswald, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Vulcanization of rubber. 1,896,535; Feb. 6.

Bell & Howell Company, The. (See Howell, Albert S., assignor.)

Bell Telephone Laboratories, Incorporated. (See Buckley, Oliver E., assignor.)

Bell Telephone Laboratories, Incorporated. (See Budenbom, Horace T., assignor.)

Bell Telephone Laboratories, Incorporated. (See Burns, Robert M., assignor.)

Bell Telephone Laboratories, Incorporated. (See Christopher, Arthur J., assignor.)

Bell Telephone Laboratories, Incorporated. (See Gibson, Robert D., assignor.)

Bell Telephone Laboratories, Incorporated. (See Given, Frederick J., assignor.)

Bell Telephone Laboratories, Incorporated. (See Hovgaard, Ole M., assignor.)

Bell Telephone Laboratories, Incorporated. (See Llewellyn, Frederick B., assignor.)

Bell Telephone Laboratories, Incorporated. (See Obl, Russell S., assignor.)

Bell Telephone Laboratories, Incorporated. (See Ronci, Victor L., assignor.)

Bell Telephone Laboratories, Incorporated. (See Strickler, Walter B., assignor.)

Bell Telephone Laboratories, Incorporated. (See Townsend, John R., assignor.)

Bell Telephone Laboratories, Incorporated. (See Whittle, Horace, assignor.)

Bellamy, Harry T. (See Smith, J. C., and Bellamy.)

Beloit Iron Works. (See Berry, Earl E., assignor.)

Belshaw, Thomas, Seattle, Wash. Arrow feathering machine. 1,896,536; Feb. 7.

Beman, Ransom H., Detroit, Mich., assignor to Mullins Manufacturing Corporation, Salem, Ohio. Evaporator structure for refrigerating systems. 1,896,341; Feb. 7.

Beman, Ransom H., Detroit, Mich., and J. H. Benson, assignors to Mullins Manufacturing Corporation, Salem, Ohio. Apparatus for recovering and controlling the flow of oil in refrigerating systems. 1,896,061; Feb. 7.

Benger, Frederick, Montreal, Quebec, Canada. Gasket. 1,896,278; Feb. 7.

Bennett, Charles A. (See Allen, G. N., and Bennett.)

Bennett, Edwin B., Avalon, N. J. Compass course finder. 1,896,997; Feb. 7.

Bennett, Harry, Galveston, Tex. Ship's trim indicator. 1,896,998; Feb. 7.

Bennett, Harry T., and L. G. Story, assignors to Mid-Continent Petroleum Corporation, Tulsa, Okla. Making stable low pour point lubricating oils. 1,896,342; Feb. 7.

Bennett, Oliver E., Boston, Mass. Dispensing apparatus for stickers. 1,896,343; Feb. 7.

Benson, Henry K., Seattle, Wash. Manufacturing wood pulp in multiple stages. 1,896,344; Feb. 7.

Benson, John H. (See Beman, R. H., and Benson.)

Benson, Willis J., Douglas, Ariz. Copper treating furnace. 1,896,570; Feb. 7.

Bentley, Oliver D. H., Norfolk, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Elastic fluid turbine and operating the same. 1,896,808; Feb. 7.

Bentley, Oliver D. H., Norfolk, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Multistage turbine. 1,896,809; Feb. 7.

Berberich, Harry C., Elmwood Park, Ill. Artificial bait. 1,896,132; Feb. 7.

Berger, Ollie J., Chicago, Ill. Automatic forging machine. 1,896,692; Feb. 7.

Berlinger, Joseph, Company. (See Solomon, Sophia, assignor.)

Bernz, Otto, Co. Inc. (See Meyer, Philip, assignor.)

Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Self-balancing steam fitting. 1,896,062; Feb. 7.

Berry, Hiram N., assignor to Cotton Harvester Corporation of America, Greenville, Miss. Cotton picker. 1,896,694; Feb. 7.

Bertrán, Edward M., assignor to Chas. M. Stieff, Inc., Baltimore, Md. Aircraft control means. 1,896,999; Feb. 7.

Bethlehem Steel Company. (See Russell, Frederick B., assignor.)

Better Packages Inc. (See Krueger, Theodore H., and A. P., assignors.)

Bever, Sampson C., et al. (See Soll, Arthur, assignor.)

Beyer, Erich, Chicago, Ill. Controlling mechanism for animal watering troughs. 1,896,860; Feb. 7.

Biery, John E., Grantwood, N. J., assignor to Foster Wheeler Corporation, New York, N. Y. Closure operating mechanism. 1,897,000; Feb. 7.

Bigger, Andrew F., assignor to Rubber Process Corporation, New York, N. Y. Composition of matter. 1,896,659; Feb. 7.

Bigger, Andrew F., New York, N. Y., and A. C. Squires, Newark, N. J., assignors to Rubber Process Corporation, New York, N. Y. Treatment of rubber. 1,896,660; Feb. 7.

Binks Manufacturing Company. (See Bramsen, S., and Wahlin, assignors.)

Bisbee, Frederick C. (See Green, I. W., and Bisbee.)

Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Structural unit end assembly. 1,896,279; Feb. 7.

Black, John C., Destrehan, La., assignor to Gasoline Products Company, Inc., Wilmington, Del. Process and apparatus for cracking and separating gasoline stock from petroleum oils. 1,896,345; Feb. 7.

Blackhawk Manufacturing Company. (See Pfauser, Edward M., assignor.)

Blair, Arthur G., et al, administrators. (See Norton, Harry R.)

Blaisdell, Harry L. (See Burgess, A. F., Blaisdell, and Campbell.)

Blanchard, Raymond H. (See Martin, H. W., and Blanchard.)

Bloomfield, Arthur E. and K. G., West Webster, N. Y. Strip map holder. 1,896,935; Feb. 7.

Bloomfield, Kenneth G. (See Bloomfield, Arthur E. and K. G.)

Blydenburgh, Harold L. (See George, E. S., and Blydenburgh.)

Bodmer, Albert. (See Heberlein, G., and Bodmer.)

Boesel, Otto A., Ansonia, assignor to The H. A. Matthews Manufacturing Company, Seymour, Conn. Catch for suitcases, boxes, chests, etc. 1,896,476; Feb. 7.

Bolhuis, Frank, Holland, Mich. Drawer guide. 1,896,346; Feb. 7.

Boller, Alexander, New York, N. Y. Back seat for automobiles. 1,896,477; Feb. 7.

Bonnaccorsi, Joseph J., assignor, by mesne assignments, of one-half to Santo Salamone, New York, N. Y. Electric smokeless roaster. 1,896,537; Feb. 7.

Bonat, Harry, et al. (See Lippert, Walter E., assignor.)

Bonat, Samuel, et al. (See Lippert, Walter E., assignor.)

Bond Electric Corporation. (See Barber, G. H., Stimson, and Pratt, assignors.)

Bond, Richard A., Chagrin Falls, Ohio, assignor, by mesne assignments, to Multigraph Company, Wilmington, Del. Apparatus for making holding devices for printing members. 1,896,156; Feb. 7.

Bornkessel, Bruno, E. Breitling, W. Brauer, and K. A. Lehmann, Essen, assignors to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Bookkeeping machine. 1,896,936; Feb. 7.

Borovicka, John, Hubbard Woods, Ill. Plant marker. 1,896,695; Feb. 7.

Borowsky, Isadore, Atlantic City, N. J. Bath apparatus. 1,896,938; Feb. 7.

Bossie, Charles S., assignor to Perfection Appliances Inc., New York, N. Y. Washing machine. 1,896,347; Feb. 7.

Bostwick, Henry C., assignor to The Akron Standard Mold Company, Akron, Ohio. Adjustable tire core. 1,896,214; Feb. 7.

Bostwick, Henry C., assignor to The Akron Standard Mold Company, Akron, Ohio. Collapsible drum. 1,896,280; Feb. 7.

Bottini, Aldo, Buenos Aires, Argentina. Device for the transportation and transposition of vehicles and the like. 1,896,063; Feb. 7.

Bourquin, Edgar, Framingham, Mass., assignor to Warren Telechron Company. Casing for a wall clock. Des. 89,236; Feb. 7.

Bowers, George W., Somerville, Mass. Razor blade sharpener. 1,896,348; Feb. 7.

Boyar, Harry, assignor to Boyar-Schultz Corporation, Chicago, Ill. Washing machine. 1,896,064; Feb. 7.

Boyar-Schultz Corporation. (See Boyar, Harry, assignor.)

Bradley, Theodore F., Westfield, N. J. Grease resistant paper. 1,896,215; Feb. 7.

Brainard, Maurice W., Los Angeles, Calif., assignor to Westinghouse Electric & Manufacturing Company. Circuit breaker. 1,896,764; Feb. 7.

Bramley-Moore, Swinfen, White Plains, N. Y. Brake. 1,896,696; Feb. 7.

Bramsen, Svend, and F. Wahlin, assignors to Binks Manufacturing Company, Chicago, Ill. Oil and water extractor. 1,896,833; Feb. 7.

Brandt, Carl A., Great Neck, assignor to The Superheater Company, New York, N. Y. Flexible gas light joint. 1,896,216; Feb. 7.

Brauer, Wilhelm. (See Bornkessel, B., Breitling, Bauer, and Lehmann.)

Breaden, Carroll E., assignor to Dayton Scale Company, Dayton, Ohio. Even balance scale. 1,896,281; Feb. 7.

Breece, George E., Albuquerque, N. Mex. Wire feeding device for stapling machines. 1,896,661; Feb. 7.

Breitling, Ernst. (See Bornkessel, B., Breitling, Brauer, and Lehmann.)

Breslauer, Rudolf, Leipzig, Germany. Production of color plates. 1,896,739; Feb. 7.

Bridgeport Brass Company. (See Brown, Gregory, assignor.)

Brigham, Edmund D., jr. (See Kopsa, J., and Brigham.)

Brill, J. G., Company, The. (See Latshaw, Elmer, assignor.)

Brill, Joseph M., Cleveland, Ohio, assignor, by mesne assignments, to Consolidated Connector Patent Corporation, Wilmington, Del. Support for an automatic connecter. 1,896,349; Feb. 7.

Briney, Perry G., Torrance, Calif. Insulator. 1,896,937; Feb. 7.

Broche, Hans, and Helmuth Schmitz, Essen, Germany. Production of hydrogenated naphthalenes from technical naphthalene. 1,896,282; Feb. 7.

Brock, Edison, Cincinnati, Ohio, assignor to Railway Engineering Equipment Company, Chicago, Ill. Railway terminal of the direct steaming type. 1,896,765; Feb. 7.

Brockett, Bluford W., Cleveland Heights, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Pressing machine. 1,896,217; Feb. 7.

Brodeur, Donat A., Marlboro, Mass. Stain. 1,896,662; Feb. 7.

Brodsky, Michel, Paris, France, assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,165; Feb. 7.

Brolin, Edwin C., Antioch, Calif. Toothpick dispenser. 1,896,571; Feb. 7.

Brotz, Frank G. (See Kohler, W. J., jr., and Brotz.)

Brown, Eric, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Method and apparatus for the preheating and maintaining at operating temperature the cylinders of steam or gas turbines. 1,896,508; Feb. 7.

Brown, Gregory, assignor to Bridgeport Brass Company, Bridgeport, Conn. Hub cap or the like. 1,896,066; Feb. 7.

Brown, James, Youngstown, Ohio. Bottle handling device. 1,896,438; Feb. 7.

Brown, John S., deceased, Newton, N. H.; C. W. Spalding, administrator, Watertown, assignor to Everett E. Kent, Newton, Mass. Method of and apparatus for tool operation on a long line. 1,896,766; Feb. 7.

Brown, Robert R., Upper Montclair, N. J., assignor to Outserts, Inc., New York, N. Y. Device to be attached to containers. 1,896,834; Feb. 7.

Brown, Roy W., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Demonstrating device. 1,896,880; Feb. 7.

Browser, S. F., & Company. (See Renfrew, Paul B., assignor.)

Brunner, John, Chicago, Ill. Heat treatment of rails. 1,896,572; Feb. 7.

Brunner, Peter, Kenosha, Wis. Toy. 1,896,607; Feb. 7.

Bruno, Mariano, Brooklyn, N. Y. Signal indicating system. 1,896,218; Feb. 7.

Bruson, Herman A., Germantown, Pa., assignor to The Resinous Products & Chemical Co. Inc. Esters derived from petroleum hydrocarbons and producing same. 1,896,608; Feb. 7.

Bryce, James W., Bloomfield, N. J., assignor to Dayton Scale Company, Dayton, Ohio. Lock for weighing scales. 1,896,283; Feb. 7.

Bryce, James W., Bloomfield, N. J., assignor to Dayton Scale Company, Dayton, Ohio. Printing attachment for scales. 1,896,284; Feb. 7.

Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Tabulating machine. 1,896,538; Feb. 7.

Buchner, Max, Hanover-Kleefeld, Germany. Decomposition of complex hydrofluoric salts. 1,896,697; Feb. 7.

Buckley, Oliver E., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling system. 1,896,767; Feb. 7.

Buckley, William, Chicago, Ill. Adjustable centrifugal pump. 1,896,219; Feb. 7.

Budd, Edward G., Manufacturing Company. (See Ledwinka, Joseph, assignor.)

Budenbom, Horace T., Short Hills, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Selective circuit for superheterodyne radioreceivers. 1,896,065; Feb. 7.

Buffalo Electric Furnace Corporation. (See Scott, Donald M., assignor.)

Buhrle, Paul, Bronx, assignor to United Metal Goods Mfg. Co. Inc., Brooklyn, N. Y. Combined telephone support, clock case, and lamp. Des. 89,166; Feb. 7.

Bunce, Earl H., Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Reducing zinciferous materials. 1,896,221; Feb. 7.

Bundy, Harry W., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich. Apparatus for and method of making finned tubing. 1,896,350; Feb. 7.

Bundy Tubing Company. (See Bundy, Harry W., assignor.)

Bundy Tubing Company. (See Quarnstrom, Bert L., assignor.)

Bunker, Royce S., assignor to W. & J. Knox Net and Twine Company, Baltimore, Md. Tennis net. 1,896,835; Feb. 7.

Burd, Gorman C., Adrian, Mich., assignor to American Cable Company, Inc. Tubular casing. 1,896,285; Feb. 7.

Burgess, Albert F., H. L. Blaisdell, and W. H. Campbell, Melrose Highlands, Mass. Demountable power takeoff. 1,896,067; Feb. 7.

Burns, Bruce, and H. B. Lewis, Los Angeles, and R. M. Otis, Alhambra, Calif. Burner plate. 1,896,286; Feb. 7.

Burns, Robert M., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Treating wood and preventing corrosion of cables. 1,896,478; Feb. 7.

Bussey, Everett E., Brooklyn, N. Y., assignor to Bussey Fuel Gasifier Corp., Philadelphia, Pa. Oil gas generator. 1,896,220; Feb. 7.

Bussey Fuel Gasifier Corp. (See Bussey, Everett E., assignor.)

Butler, James M., Blaney, S. C. Poison spreader. 1,896,882; Feb. 7.

Butte, Paul C., assignor to J. B. Strauss, San Francisco, Calif. Braking mechanism for yielding highway barriers. 1,896,389; Feb. 7.

Butterfield, Vernon J., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Heating system for automotive vehicles. 1,896,068; Feb. 7.

Buxton, Warner R., Longmeadow, Mass. Loose leaf binder. 1,896,573; Feb. 7.

Byron, Hagar B., assignor of one-half to F. Kalmbach, New York, N. Y. Motion picture film. 1,896,886; Feb. 7.

Byron, Thomas H., Elizabethton, and R. H. Carter, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y. Apparatus for filament treatment. 1,896,609; Feb. 7.

Cain, Julius W., Dallas, Tex. Barbecue oven. 1,896,192; Feb. 7.

Calco Chemical Company, The. (See Merz, August, assignor.)

Calcott, William S., Penns Grove, N. J., and A. S. Carter, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Sulphur chloride reaction product. 1,896,157; Ftb. 7.

Calcott, William S., Penns Grove, N. J., A. S. Carter, Wilmington, Del., and F. B. Downing, Carneys Point, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Protecting articles from corrosion. 1,896,158; Feb. 7.

Calcott, William S., Penns Grove, N. J., and A. S. Carter, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Halogenating acetylene polymers. 1,896,159; Feb. 7.

Calcott, William S., Penns Grove, N. J., and A. S. Carter, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Halogenation process and products produced thereby. 1,896,160; Feb. 7.

Caldwell, Hugh M., et al. (See Thompson, H. J., and Sulak, assignors.)

Calkins, William G., and M. L. Carpentier, assignors to Chrysler Corporation, Detroit, Mich. Manufacturing bearings. 1,896,939; Feb. 7.

Callender's Cable and Construction Company, Limited. (See Hill, Harry, assignor.)

Callison, Abner F., New York, N. Y. Automatic leveling device for vehicles. 1,896,883; Feb. 7.

Camel Company. (See Madland, Gabriel, assignor.)

Cameron, William J., Chicago, Ill. Illuminated telescope for instruments. 1,896,861; Feb. 7.

Campbell, Sterling H., and F. K. Habenicht, assignors to Western Railway Equipment Company, St. Louis, Mo. Forming bolts. 1,896,937; Feb. 7.

Campbell, William H. (See Burgess, A. F., Blaisdell, and Campbell.)

Canadian Research Corporation, The. (See Beaubien, P. D., Schneider, and Dupont, assignors.)

Carboloy Company, Inc. (See Longwell, James R., assignor.)
Carley, Leonard R., Watertown, assignor to The Patent Button Company, Waterbury, Conn. Button. Des. 89,167; Feb. 7.
Carlson, Elof L., assignor to The E. Ingraham Company, Bristol, Conn. Clock case. Des. 89,168; Feb. 7.
Carmichael, William A., Hamden, and F. H. Hart, assignors to C. Cowles and Company, New Haven, Conn. Snap-in lock. 1,896,509; Feb. 7.
Carothers, Robert M., and L. W. Thompson, Schenectady, N. Y., assignors to General Electric Company. Regulating system. 1,896,862; Feb. 7.
Carpentier, Melbourne L. (See Calkins, W. G., and Carpentier.)
Carroll, Emil J., Cincinnati, Ohio. Continuous pressing machine. 1,896,479; Feb. 7.
Carroll, Monroe W., assignor to W. M. Carroll, Beaumont, Tex. Hydraulic operating mechanism. 1,897,002; Feb. 7.
Carroll, William M. (See Carroll, Monroe W., assignor.)
Carter, Albert S. (See Calcott, W. S., and Carter.)
Carter, Albert S. (See Calcott, W. S., Carter, and Downing.)
Carter, Albert S., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Hydrating vinyl acetylene. 1,896,161; Feb. 7.
Carter, Albert S., Wilmington, Del., and F. B. Downing, Carneys Point, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Polymer of vinyl acetylene and producing the same. 1,896,162; Feb. 7.
Carter, Ralph H. (See Byron, T. H., and Carter.)
Carter, Ralph H. (See Currie, J. N., and Carter.)
Carter, William C., Flint, Mich. Carburetor. 1,896,390; Feb. 7.
Case Research Laboratory, Incorporated. (See Case, Theodore W., assignor.)
Case, Theodore W., assignor to Case Research Laboratory, Incorporated, Auburn, N. Y. Sound picture apparatus. 1,896,682; Feb. 7.
Cash, Gentry, assignor to Standard Oil Company, Whiting, Ind. Converting high boiling hydrocarbon oils into lower boiling hydrocarbon oils. 1,896,728; Feb. 7.
Catalytic Process Corporation. (See Clark, Cyril B., assignor.)
Cefalu, Andrew. (See Cefalu, Salvator and A.)
Cefalu, Salvator and A., Brooklyn, N. Y. Permanent wave device. 1,896,940; Feb. 7.
Centrifix Corporation. (See Hawley, Charles G., assignor.)
Centrifugal Engineering and Patents Corporation. (See Lindberg, Sven C., assignor.)
Centrifugal Engineering and Patents Corporation. (See Lindequist, Charles J., assignor.)
Československa Zbrojovka Akciová Společnost V Brně. (See Marek, Anton, assignor.)
Chadeloid Chemical Company. (See Root, Frank B., assignor.)
Champion, Carleton C., jr., Washington, D. C. Internal combustion engine. 1,896,163; Feb. 7.
Chandeysson, Pierre I., St. Louis, Mo. Pneumatically operated contactor. 1,896,164; Feb. 7.
Chase Foundry & Mfg. Co., The. (See Chase, Sherwood M., assignor.)
Chase, Sherwood M., assignor to The Chase Foundry & Mfg. Co., Columbus, Ohio. Caster. 1,896,698; Feb. 7.
Cherry, Oscar A., assignor to Economy Fuse and Manufacturing Company, Chicago, Ill. Molded gear. 1,896,070; Feb. 7.
Cherry, Oscar A., and F. Kurath, assignors to Economy Fuse and Manufacturing Company, Chicago, Ill. Composition of matter and producing same. 1,896,069; Feb. 7.
Chicago Pneumatic Tool Company. (See Collins, Lester L., assignor.)
Chicago Pneumatic Tool Company. (See Davenport, Ransom W., assignor.)
Chilton, Roland, Keyport, N. J., assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y. Universal joint. 1,896,133; Feb. 7.
Chilton, Roland, Ridgewood, assignor to Wright Aeronautical Corporation, Paterson, N. J. Engine cowling. 1,896,222; Feb. 7.
Chong, Jue L. (See Chong, Look L., J. L., and S. L.)
Chong, Look L., J. L., and S. L., Isleton, Calif. Rotary cutter. 1,896,391; Feb. 7.
Chong, Sam L. (See Chong, Look L., J. L., and S. L.)
Christopher, Arthur J., Teaneck, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Balanced inductance device. 1,896,480; Feb. 7.
Chrysler Corporation. (See Calkins, W. G., and Carpentier, assignors.)
Chrysler Corporation. (See Lee, Roger K., assignor.)
Chrysler Corporation. (See Sailler, John W., assignor.)
Chrysler Corporation. (See Sanders, R. C., and Humphrey, assignors.)
Chrysler Corporation. (See Wallace, David A., assignor.)
Chubb, Lewis W., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Photographic sound recording. 1,896,768; Feb. 7.
Cincinnati Grinders Incorporated. (See Cole, Raymond A., assignor.)
Cincinnati Shaper Company. (See Haselton, Robert T., assignor.)
Clark, Cyril B., Scarsdale, assignor to Catalytic Process Corporation, New York, N. Y. Manufacture of sulphuric acid. 1,896,287; Feb. 7.
Clark, Dolph M., Portland, Oreg. Liquid dispensing apparatus. 1,896,134; Feb. 7.
Clark, George A., Elwood, Nebr. Pessary. 1,896,071; Feb. 7.
Clark Manufacturing Company, The. (See Strong, Leslie P., assignor.)
Clark, Melville, Syracuse, N. Y. Tone amplifier. 1,896,683; Feb. 7.
Clark, Sheldon. (See Vaile, Pembroke, A., assignor.)
Clark Tructractor Company. (See Williams, Alfred O., assignor.)
Claycraft Mining & Brick Company, The. (See Tefft, Charles F., assignor.)
Clemence, Norman, New York, N. Y., assignor to Scott Paper Company, Chester, Pa. Towel or similar article. Des. 89,169; Feb. 7.
Cleveland Fare Box et al. (See Main, Andrew, assignor.)
Cluett, Peabody & Co. (See Flannery, Vaughan, assignor.)
Cohen, Irwin H., et al. (See Thomson, George R., assignor.)
Cohen, Oscar, New York, N. Y. Applicator. 1,896,941; Feb. 7.
Cohen, William, assignor to L. & E. Stirn, Inc., New York, N. Y. Textile fabric or similar article. Des. 89,170; Feb. 7.
Cole, Dale S. (See Leece, B. M., and Cole.)
Cole, Raymond A., Worcester, Mass., assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Centerless grinding machine. 1,896,481; Feb. 7.
Collins, Lester L., Franklin, Pa., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Automatic regulator for compressors. 1,896,790; Feb. 7.
Collins, William O., Wellsville, Kans. Electrically heated toy. 1,896,663; Feb. 7.
Colf, Edwin W., Glen Ellyn, assignor to Armour and Company of Delaware, Chicago, Ill. Heat treatment of garnet abrasive. Re18,730; Feb. 7.
Compagnie pour la Fabrication des Compteurs et Matériel d'Usines à Gaz. (See Dubusc, R., and Illovici, assignors.)
Connersville Blower Company, Inc., The. (See Houghton, Carl R., assignor.)
Consolidated Connector Patent Corporation. (See Barber, Martin A., assignor.)
Consolidated Connector Patent Corporation. (See Brill, Joseph M., assignor.)
Continental Motors Corporation. (See Niven, Archie M., assignor.)
Cook, Frank L., South Bend, Ind. Chain pipe wrench. 1,896,699; Feb. 7.
Cooper, Clarence E., and H. S. Gilbertson, assignors to Lehigh Navigation Coal Company, Lansford, Pa. Producing light weight aggregates from breaker waste and the like. 1,896,884; Feb. 7.
Cooper, James, Solvay, assignor to Hall & McChesney, Inc., Syracuse, N. Y. Loose leaf binder. 1,896,881; Feb. 7.
Coopersmith, Rudolph, St. Louis, Mo. Folding closet bed. 1,896,288; Feb. 7.
Coopersmith, Rudolph, St. Louis, Mo. Bed davenport. 1,896,289; Feb. 7.
Corson, Michael G., Jackson Heights, N. Y., assignor to Weston Electrical Instrument Corporation, Newark, N. J. Constant resistivity alloy. 1,896,193; Feb. 7.
Cosseboom, Kenneth S., Bangor, Me., assignor to Line Material Company, South Milwaukee, Wis. Transformer hanger. 1,896,740; Feb. 7.
Cotton Harvester Corporation of America. (See Berry, Hiram N., assignor.)
Counce, Harlan R., New Rochelle, assignor to Socony-Vacuum Corporation, New York, N. Y. Crank case pit. 1,896,610; Feb. 7.
Covey, Earl W., Big Moose, N. Y. Making a nonskid tire for vehicle wheels. 1,896,574; Feb. 7.
Cowles, C., and Company. (See Carmichael, W. A., and Hart, assignors.)
Cox, Samuel F., Detroit, Mich., and J. H. Robertson, Lock No. 4, Pa., assignors to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,896,576; Feb. 7.
Coyne, André, Paris, France. Reenforced and anchored masonry structure. 1,896,810; Feb. 7.
Crandall, Julian T., Ashaway, R. I., assignor to Ashaway Line and Twine Manufacturing Company. Line carrying reel. 1,896,741; Feb. 7.
Crawford, Frederick C., assignor to Thompson Products, Incorporated, Cleveland, Ohio. Copper cooled valve. 1,896,072; Feb. 7.
Cross, Grosvenor M., Newton, Mass. Shock absorber. 1,896,539; Feb. 7.
Cross, Herman J., assignor to Tuttle Register Dust Catcher Company, Louisville, Ky. Dust collector. 1,896,700; Feb. 7.
Cross, Roy, assignor to Silica Products Company, Kansas City, Mo. Tire puncture preventive. 1,896,611; Feb. 7.
Crowell, Erd V., Los Angeles, Calif. Cement retainer. 1,896,482; Feb. 7.
Crystal Tissue Company, The. (See Wilson, Joseph C., assignor.)

Culver, Charles A., Northfield, Minn. Modulation system. 1,896,742; Feb. 7.
Currie, James N., and R. H. Carter, assignors to Charles Pfizer & Company, Brooklyn, N. Y. Production of gluconic acid. 1,896,811; Feb. 7.
Curtiss Aeroplane & Motor Company. (See Hathorn, Charles E., assignor.)
Curtiss Aeroplane & Motor Company, Inc. (See Wright, Theodore P., assignor.)
Custer, Fred, assignor to The De Vilbiss Company, Toledo, Ohio. Pump atomizer. 1,896,701; Feb. 7.
Cutting, Richard H., Cleveland, and E. F. Stukbauer, Cleveland Heights, Ohio; said Cutting assignor to said Stukbauer. Baseball game. 1,896,684; Feb. 7.
Daly, George F., Johnson City, and R. E. Page, Binghamton, assignors to The Tabulating Machine Company, Endicott, N. Y. Tabulating machine. 1,896,540; Feb. 7.
Dardelet Threadlock Corporation. (See Thomson, Alfred M., assignor.)
Darlington, Homer T., West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America. Apparatus for treating hydrocarbons. 1,896,165; Feb. 7.
Darlington, Homer T., West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America. Treating hydrocarbons. 1,896,166; Feb. 7.
Daussa, Carlos E., New York, N. Y. Insulator. 1,896,576; Feb. 7.
Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Refrigerating apparatus. 1,896,612; Feb. 7.
Davies, Norman A. (See Hele-Shaw, H. S., Beacham, and Davies.)
Davis, Chester L., Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y. Television system. 1,896,167; Feb. 7.
Davis, Clarke F., Westfield, and E. R. Saunders, Cranford, assignors to Structural Gypsum Corporation, Linden, N. J. Building construction and hanger used therein. 1,896,290; Feb. 7.
Davis, Delancey W., Wilkes-Barre, Pa. Rail and flange oiler. 1,896,702; Feb. 7.
Davis, Fred, Saugus, Mass., assignor to General Electric Company. Welded pressure vessel. 1,896,863; Feb. 7.
Davis, William C., and O. E. Gibson, assignors to United States Gypsum Company, Chicago, Ill. Wall or ceiling construction. 1,896,769; Feb. 7.
Dawson, Elma N. (See Dawson, James C., assignor.)
Dawson, James C., assignor to E. N. Dawson, Webster Groves, Mo. Loose leaf binder. 1,896,838; Feb. 7.
Dawson, James C., assignor to E. N. Dawson, Webster Groves, Mo. Loose leaf binder. 1,896,839; Feb. 7.
Dawson, James C., assignor to E. N. Dawson, Webster Groves, Mo. Loose leaf binder. 1,896,840; Feb. 7.
Dawson, James C., assignor to Elma N. Dawson, Webster Groves, Mo. Loose leaf binder. 1,897,001; Feb. 7.
Dayton Scale Company. (See Breaden, Carroll E., assignor.)
Dayton Scale Company. (See Bryce, James W., assignor.)
Dayton Scale Company. (See Gilbert, William N., assignor.)
Dayton Scale Company. (See Gumprich, W., and Good, assignors.)
Dayton Scale Company. (See Smithers, LeRoy S., assignor.)
Dayton Scale Company. (See Strachan, Thomas H., assignor.)
Dean, Charles A., Bakersfield, Calif. Core drill. 1,896,703; Feb. 7.
Dechenne, Albert, Seraing, Belgium. Manufacturing steel tires and the like by forging and pressing ingots. 1,896,704; Feb. 7.
De Coo, William, jr. (See Battista, Donald A., assignor.)
Dehydro Company, The. (See Fuchs, Fritz E., assignor.)
Dehydro Company, The. (See Kaplan, Philip, assignor.)
Deisch, Noel, Washington, D. C. Apparatus for correcting variable condensers. 1,896,885; Feb. 7.
Deisch, Noel, Washington, D. C. Condenser. 1,896,942; Feb. 7.
Deister Concentrator Company. (See Scott, Chester A., assignor.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
Demarest, William G., Plainfield, N. J. Building block and wall construction. 1,896,770; Feb. 7.
Dennis, Elmer A. (See Dennis, John W., and E. A.)
Dennis, John W. and E. A., Erick, Okla. Antifreeze mixture for motor vehicle radiators. 1,896,291; Feb. 7.
De Remer, J. G., Research Corporation. (See Warner, Lawrence E., assignor.)
De Ryss, Emil, Scarsdale, N. Y. Spurious coin detector and ejector. 1,896,892; Feb. 7.
De Vilbiss Company, The. (See Custer, Fred, assignor.)
Devine, James H., Champaign, Ill., assignor to Dev-Insular Company, St. Louis, Mo. Lunch box. 1,896,893; Feb. 7.
Dev-Insular Company. (See Devine, James H., assignor.)
De Wolfe, Harvey A., Santa Ana, Calif. Multiple drive for motor vehicles. 1,896,664; Feb. 7.
Diamond Power Specialty Corporation. (See Cox, S. F., and Robertson, assignors.)
Diamond Power Specialty Corporation. (See Purcell, Thomas E., assignor.)
Diamond Power Specialty Corporation. (See Snow, Norman L., assignor.)
Dick, Burns, and Steve Schnell, assignors to Wagner Electric Corporation, St. Louis, Mo. Hydraulic brake mechanism. 1,896,223; Feb. 7.
Diesel, William F., assignor to Sargent & Greenleaf, Inc., Rochester, N. Y. Locking mechanism. 1,896,685; Feb. 7.
Dieux, Jean, Paris, France. Amplifier. 1,896,743; Feb. 7.
Diliger, Herman R. (See Edwards, J. M., and Diliger.)
Dilks, Charles F., Long Island City, N. Y. Acoustic diaphragm. 1,896,073; Feb. 7.
Dixon, Howell N. (See Young, H. S., and Dixon.)
Dixie Manufacturing Company. (See Steere, Edward H., assignor.)
Doherty, Henry L. (See Loebell, Henry O.)
Doherty Research Company. (See Goldborough, W. E., and Lowe.)
Dohse, Hans, Heidelberg, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort - on - the - Main, Germany. Production of sulphur dioxide. 1,896,483; Feb. 7.
Domes, Edward A., assignor of one-half to O. P. Walker, San Gabriel, Calif. Barbecue broiler. Des. 89,171; Feb. 7.
Domes, Edward A., assignor of one-half to O. P. Walker, San Gabriel, Calif. Barbecue broiler. Des. 89,172; Feb. 7.
Donley, Harold B., Columbus, Ohio. Pillar lamp for motor vehicle bodies. Des. 89,173; Feb. 7.
Donnellan, Edward P., assignor to Standard-Johnson Company, Inc., Brooklyn, N. Y. Coin guiding and wrapper holding means for coin counting machines. 1,896,894; Feb. 7.
Dooley, Delmar D., assignor to Dooley Improvements, Inc., Rock Island, Ill. Filter. 1,896,395; Feb. 7.
Dooley Improvements, Inc. (See Dooley, Delmar D., assignor.)
Dopyera, Rudolph, Los Angeles, Calif. Musical instrument. 1,896,484; Feb. 7.
Doran, James F., deceased, assignor to Sara C. Doran, Danbury, Conn., by John C. Doran, executor of will. Vibrator. 1,896,351; Feb. 7.
Doran, John C., executor. (See Doran, James F.)
Doran, Sara C. (See Doran, James F., assignor.)
Dorn, Harry P., Cleveland, Ohio. Vehicle steering gear. 1,896,292; Feb. 7.
Dorrill, Robert A., Little Silver, N. J. Garment hanger. 1,896,771; Feb. 7.
Douglass, Arthur R., Chariton, Iowa. Safety-razor. 1,896,886; Feb. 7.
Dow Chemical Company, The. (See Crether, Ernest F., assignor.)
Dow Chemical Company, The. (See Heath, Sheldon B., assignor.)
Downie, Robert R., Beaver Falls, Pa. Excavating machine. 1,896,293; Feb. 7.
Downing, Frederick B. (See Calcott, W. S., Carter, and Downing.)
Downing, Frederick B. (See Carter, A. S., and Downing.)
Draheim, Paul E., assignor to P. Keuge and P. Kendsir, Los Angeles, Calif. Shopping bag. 1,897,018; Feb. 7.
Draper Corporation. (See Simpson, Jesse W.)
Draper Corporation. (See Wents, Earle J., assignor.)
Drespel, Harry, Brooklyn, N. Y. Dental slab. 1,896,772; Feb. 7.
Dresser, S. R., Manufacturing Company. (See Whitaker, Louis P., assignor.)
Drew, Jack J., McAlester, Okla. Box for shipping coal 1,896,812; Feb. 7.
Dreyfus, Henry, London, England. Manufacture of acetic acid. 1,896,224; Feb. 7.
Droth, Alfred, Kassel-Wilhelmshohe, and C. Volland, Kassel, Germany, assignors to The Superheater Company New York, N. Y. Superheater. 1,896,294; Feb. 7.
Dubusc, Roger, and A. D. Illovici, Paris, assignors to Compagnie pour la Fabrication des Compteurs et Matériel d'Usines à Gaz, Montrouge, Seine, France. Selective circuit protecting device. 1,896,943; Feb. 7.
Dunlap, Charles K., assignor to Sonoco Products Company, Hartsville, S. C. Thread core. 1,896,135; Feb. 7.
Dunlop, George H., Melbourne, Victoria, Australia. Method and apparatus for tunnel construction and the like 1,896,439; Feb. 7.
Dunn, Edward L., East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Electromechanical interlock. 1,896,541; Feb. 7.
DuPont, Alfred C., et al. (See Smith, Clarence A., 2d, assignor.)
Du Pont, E. I., de Nemours & Company. (See Barrett, H. J., and Izard, assignors.)
Du Pont, E. I., de Nemours & Company. (See Calcott, W. S., and Carter, assignors.)
Du Pont, E. I., de Nemours & Company. (See Calcott, W. S., Carter, and Downing, assignors.)
Du Pont, E. I., de Nemours & Company. (See Carter, Albert S., assignor.)
Du Pont, E. I., de Nemours & Company. (See Carter, A. S., and Downing, assignors.)
Du Pont, E. I., de Nemours and Company. (See Izsak, Alexander, assignor.)
Du Pont, E. I., de Nemours & Company. (See Wuertz, Alexander J., assignor.)
Dupont, François M. (See Beaubien, P. de G., Schneider, and Dupont.)
Durafer, Inc. (See Sargent, W. D., assignor, and Keller.)

Dürig, Alfred, assignor to the Firm Schweiz Lokomotiv- & Maschinenfabrik, Winterthur, Switzerland. Reversing gear comprising pressure oil operated control couplings particularly for ships' drives. 1,896,440; Feb. 7.

Dyer, William E. S., Noble, Pa. Expansion equalizing means for pipe junctures. 1,896,225; Feb. 7.

Earl, Alfred R., Toledo, Ohio. Method and apparatus for utilizing the potential energy of circulating condensing water. 1,896,136; Feb. 7.

Eastman Kodak Company. (See Staud, C. J., and Webber, assignors.)

Eby, Eugene D., Pittsfield, Mass., assignor to General Electric Company. Fluid stop joint for sheathed high tension cables. 1,896,841; Feb. 7.

Eckmann, Charles H., Detroit, Mich. Cigar vending machine. 1,896,137; Feb. 7.

Eclipse Machine Company. (See Chilton, Roland, assignor.)

Eclipse Machine Company. (See McNeil, Charles I., assignor.)

Eclipse Petrol Economiser System Company, The. (See Godward, Ernest R., assignor.)

Economy Fuse and Manufacturing Company. (See Cherry, Oscar A., assignor.)

Economy Fuse and Manufacturing Company. (See Cherry, O. A., and Kurath, assignors.)

Edwards, Jamea McC., Cedar Heights, and H. R. Dilger, assignors to Associated Manufacturers Corporation of America, Waterloo, Iowa. Bowl and spindle connection for centrifugal liquid separators. 1,896,665; Feb. 7.

Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Cracking hydrocarbons. 1,896,226; Feb. 7.

Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Producing resinous compounds and products therefrom. 1,896,227; Feb. 7.

Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Cracking hydrocarbons. 1,896,228; Feb. 7.

Electro Metallurgical Company. (See Becket, Frederick M., assignor.)

Electrolux Servel Corporation. (See Munters, Carl G., assignor.)

Ellen-Bradley Company. (See Wilms, Gustav O., assignor.)

Ellis-Foster Company. (See Nolan, Harold O., assignor.)

Ellis-Foster Company. (See Weber, Harry M., assignor.)

Ellis, Mae. (See Ross, Robert G., assignor.)

Ellis, Stuart, Fredericksburg, Va. Metal flowerpot. 1,896,229; Feb. 7.

Emeth Financial Corporation. (See Goodman, Abraham, assignor.)

Emsco Derrick & Equipment Company. (See Rawson, Leslie A., assignor.)

Emsco Derrick and Equipment Company. (See Trout, William A., assignor.)

Enderes, Ernst, Guttenberg, Iowa. Weeder hoe. 1,896,441; Feb. 7.

English, Francis G. S. (See Thomas, A., and English.)

Erickson, John E., East Grand Forks, Minn. Steering device. 1,896,396; Feb. 7.

Esnard, Miguel, Matanzas, Cuba. Faucet. 1,896,944; Feb. 7.

Espenschied, Virgil F., assignor, by mesne assignments, to The Schumacher Corporation, Hartville, Ohio. Adjustable ventilator. 1,896,075; Feb. 7.

Esterbrook Steel Pen Manufacturing Co., The. (See Ashmore, Leon H., assignor.)

Euclid Crane & Hoist Company. (See White, William, assignor.)

Evans, Harry H., assignor to Adjusta Company, New York, N. Y. Buckle setting device. 1,896,666; Feb. 7.

Evans, Kelley D., assignor of one-half to C. E. Hooven, Hamilton, Ohio. Perforated record sheet. 1,896,542; Feb. 7.

Evans, Robert D., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Protective system. 1,896,773; Feb. 7.

Evans, Seth, and John A. Herrington, assignors to Hughes Tool Company, Houston, Tex. Angle tooth cutter. 1,896,295; Feb. 7.

Everett, Edward A., Long Island City, N. Y. Electric device. 1,896,813; Feb. 7.

Ewing, Samuel C., Schenectady, N. Y., assignor to General Electric Company. Synchronous motor control system. 1,896,074; Feb. 7.

Fabbrica Italiana Magneti Marelli Società Anonima. (See Fossati, Giuseppe, assignor.)

Fafnir Bearing Company, The. (See Bechert, Fred J., assignor.)

Faith Mfg. Co. (See Klasstorner, Samuel, assignor.)

Falge, Robert N., and A. R. Lewellen, Detroit, Mich., and C. A. Michel, Anderson, Ind. Stop and tail lamp. 1,896,887; Feb. 7.

Farago, Guglielmo, New York, N. Y. Combined coffee roaster, grinder, and urn. 1,896,230; Feb. 7.

Farmer, John H., Richmond, Ind. Lawn mower. 1,896,442; Feb. 7.

Farnam, Julian P., assignor to Page & Hill Co., Minneapolis, Minn. Wire line post. Des. 89,174; Feb. 7.

Favalli, George, New York, N. Y. Brake shoe relining device. 1,896,296; Feb. 7.

Federal Electric Company. (See McClelland, James C., assignor.)

Feldmann, Wilhelm. (See Strigel, R., and Feldmann.)

Ferguson, Charles S., Troy, N. Y., assignor to General Electric Company. Phenol-aldehyde-drying oil resin composition and making same. 1,896,842; Feb. 7.

Fiat Società Anonima. (See Pirinoli, Guglielmo, assignor.)

Fiat Società Anonima. (See Rosatelli, Celestino, assignor.)

Fire Alarm Signal Company. (See Hixon, Alfred J., assignor.)

Firestone Tire and Rubber Company. (See Brown, Roy W., assignor.)

Fisher, J. M. Co. (See Giles, Charles W., assignor.)

Fiveash, Charles D., Portland, Oreg. Attachment for automatic telephone dials. 1,896,352; Feb. 7.

Flannery, Vaughan, New York, assignor to Cluett, Peabody & Co., Inc., Troy, N. Y. Handkerchief or similar article. Des. 89,175; Feb. 7.

Fletcher, Harold W., assignor to Hughes Tool Company, Houston, Tex. Drill head and lubricator. 1,896,231; Feb. 7.

Fletcher, Harold W., assignor to Hughes Tool Company, Houston, Tex. Plunger lift equipment. 1,896,232; Feb. 7.

Fletcher, Harold W., and F. L. Scott, assignors to Hughes Tool Company, Houston, Tex. Disk bit. 1,896,297; Feb. 7.

Fletcher Works, Incorporated. (See Bartholomew, Robert J., assignor.)

Fletcher Works, Incorporated. (See Schaum, Fletcher, assignor.)

Flint, James G., and D. G. McKie, Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Acoustic device. 1,896,485; Feb. 7.

Fossati, Giuseppe, Monza, assignor to Fabbrica Italiana Magneti Marelli Società Anonima, Milan, Italy. Electric connecter. 1,896,443; Feb. 7.

Fossati, Giuseppe, Monza, assignor to Fabbrica Italiana Magneti Marelli Società Anonima, Milan, Italy. Sparking plug. 1,896,444; Feb. 7.

Foster, Edwin E., Austin, Tex. Hydraulic change speed transmission for motor vehicles. 1,896,577; Feb. 7.

Foster Wheeler Corporation. (See Biery, John E., assignor.)

Foster Wheeler Corporation. (See Frisch, Martin, assignor.)

Foster Wheeler Corporation. (See Frisch, M., and Woolley, assignors.)

Four-Way Lock Co., et al. (See Main, Andrew, assignor.)

Fowle, Frank F., Winnetka, Ill., assignor to Indiana Steel & Wire Company, Muncie, Ind. Treating zinc-coated wire. 1,896,613; Feb. 7.

Fowler, Carl H. (See Wildman, Harry G., assignor.)

Fox Case Corporation. (See Sponable, Earl I., assignor.)

Franke, Clarence S., assignor to American Furnace Company, St. Louis, Mo. Furnace. 1,896,298; Feb. 7.

Franke, Frida. (See Pohl, Theodor, assignor.)

Frankenburger, Walter. (See Zimmermann, W., and Frankenburger.)

Franklin, Edward J., Salt Lake City, Utah. Self-adjusting seal for joints of furnaces. 1,896,486; Feb. 7.

Franz, Charles H., jr., Wauwatosa, Wis. Loose-leaf binder. 1,896,667; Feb. 7.

Free Wheeling Patents Corporation. (See Hartsock, Guy M., assignor.)

French, Herbert J., Elizabeth, N. J., assignor to The International Nickel Company, Inc., New York, N. Y. Nitrided article of ferrous character containing a case-toughening element combined with a balanced case-forming element. 1,896,888; Feb. 7.

French, Herbert J., Elizabeth, N. J., assignor to The International Nickel Company, Inc., New York, N. Y. Nitrided article of ferrous character containing a case-toughening element combined with a balanced case-forming element. 1,896,889; Feb. 7.

French, Herbert J., Elizabeth, N. J., assignor to The International Nickel Company, Inc., New York, N. Y. Nitrided article of ferrous character containing a case-toughening element combined with a balanced case-forming element. 1,896,890; Feb. 7.

French Oil Mill Machinery Company, The. (See Simon, Forest C., assignor.)

Frick, Carl S., Janesville, Wis. Liquid atomizer. 1,896,744; Feb. 7.

Fried. Krupp Aktiengesellschaft. (See Bornkessel, B., Breitling, Brauer, and Lehmann, assignors.)

Fried. Krupp Grusonwerk Aktiengesellschaft. (See Linke, Gerhard, assignor.)

Friedheim, Frank, Minneapolis, Minn. Bag adapted to be sealed by gummed tape. 1,896,668; Feb. 7.

Friedman, Charles S., Neuilly-sur-Seine, assignor to Societe Anciens Etablissements A. Combe & Fils & Cie., Paris, France. Washable printed leather. 1,896,353; Feb. 7.

Friedrich, Walter, Troisdorf, Germany. Manufacturing nitrous oxide. 1,896,945; Feb. 7.

Frisch, Martin, assignor to Foster Wheeler Corporation, New York, N. Y. Feeder. 1,896,354; Feb. 7.

Frisch, Martin, Bronx, N. Y., and H. O. Woolley, Maplewood, N. J., assignors to Foster Wheeler Corporation, New York, N. Y. Furnace floor structure. 1,896,669; Feb. 7.

Frostad, George O., assignor to National Paper Can Company, Milwaukee, Wis. Container and manufacture of same. 1,896,076; Feb. 7.

Frosted Foods Company. (See Tressler, D. K., and Norton, assignors.)

Fryer, Roy C. (See Schnell, D. S., and Fryer.)

Fuchs, Fritz E., Maplewood, N. J., assignor, by mesne assignments, to The Dehydro Company, Tulsa, Okla. Treatment of cut oils. 1,897,019; Feb. 7.

Fuerst, Edwin W. (See Straub, W. F., and Fuerst.)

Fuerst, Edwin W., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Bottle. Des. 89,287; Feb. 7.

Fuller, Frank W., St. Paul, Minn. Radiator hanger. 1,896,299; Feb. 7.

Furan, Lars L., assignor to W. J. Furan, Thief River Falls, Minn. Turning signal. 1,896,578; Feb. 7.

Furan, Willard J. (See Furan, Lars L., assignor.)

Gagnier, George E. (See Place, Bion C., assignor.)

Galion Metallic Vault Co., The. (See Smith, Ralph E., assignor.)

Garancher, Marcel. (See Rockwell, E. A., and Garancher.)

Gardner-Denver Company. (See Pearson, Gustav C., assignor.)

Garrott, John C., Houston, Tex. Cooling device for internal combustion engines. 1,896,355; Feb. 7.

Garst, Arthur H., Providence, R. I. Method and apparatus for forming wire coils. 1,896,670; Feb. 7.

Gaseltine, Herbert T., Wembley Park, assignor to Ilford Limited, Ilford, Essex, England. Opening devices for boxes or like containers. 1,896,400; Feb. 7.

Gasoline Products Company, Inc. (See Black, John C., assignor.)

Gassaway, Herschel A. (See Jones, Dolphus E., assignor.)

Gauss, Julius M., assignor to The Studebaker Corporation, South Bend, Ind. Rubbing block. 1,896,946; Feb. 7.

Gay, Fraser W., Newark, N. J. Electric power generating plant. 1,896,356; Feb. 7.

Gay, Fraser W., Newark, N. J. Series parallel transformer connection. 1,896,397; Feb. 7.

Gay, Fraser W., Newark, N. J. Transformer connection. 1,896,398; Feb. 7.

Gay, Fraser W., Newark, N. J. System of electric transmissions. 1,896,399; Feb. 7.

Gebhard, Louis A., and C. F. Rudolph, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y. Frequency changing system for radio transmitters. 1,896,168; Feb. 7.

Gebhardt, Henry J., Chicago, Ill. Heat exchange apparatus. 1,896,774; Feb. 7.

Gehrts, August, Berlin-Friedenau, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Gas content rectifier. 1,896,614; Feb. 7.

Geiler, Frederick C., assignor to Trupar Manufacturing Company, Dayton, Ohio. Refrigeration unit. 1,897,020; Feb. 7.

Geisenhoner, Henry, Schenectady, N. Y. Take-up device for ropes. 1,896,705; Feb. 7.

Gemeinhardt, Walter, New York, N. Y. Mouthpiece of wind musical instruments. 1,796,814; Feb. 7.

General Aniline Works, Inc. (See Lange, Werner, assignor.)

General Aniline Works, Inc. (See Morschel, H., and Luce, assignors.)

General Aniline Works, Inc. (See Muth, Friedrich, assignor.)

General Aniline Works, Inc. (See Wolff, H., Kunz, and Koeberle, assignors.)

General Cable Corporation. (See Andrew, Edwin L., assignor.)

General Electric Company. (See Alexanderson, Ernst F. W., assignor.)

General Electric Company. (See Carothers, R. M., and Thompson, assignors.)

General Electric Company. (See Davis, Fred, assignor.)

General Electric Company. (See Eby, Eugene D., assignor.)

General Electric Company. (See Ewing, Samuel C., assignor.)

General Electric Company. (See Ferguson, Charles S., assignor.)

General Electric Company. (See Knight, James L., assignor.)

General Electric Company. (See Lieberum, George W., assignor.)

General Electric Company. (See McLenegan, David W., assignor.)

General Electric Company. (See Morrill, Wayne J., assignor.)

General Electric Company. (See Newman, Delbert F., assignor.)

General Electric Company. (See Perry, Charles L., assignor.)

General Electric Company. (See Raynolds, D. W., and Schwarzbaupt, assignors.)

General Electric Company. (See Taylor, George F., assignor.)

General Electric Company. (See Thompson, Louis W., assignor.)

General Electric Company. (See Traver, Oliver C., assignor.)

General Electric Company. (See Van Amburg, Otto H., assignor.)

General Railway Signal Company. (See Howe, Winthrop K., assignor.)

George, Edwin S., and H. L. Blydenburgh, Detroit, Mich.; said Blydenburgh assignor to said George. Housing for air conditioning apparatus. Des. 89,176; Feb. 7.

German, Albert F. O., assignor to S. M. A. Corporation, Cleveland, Ohio. Soluble casein. 1,896,300; Feb. 7.

Germeyer, Charles F., Harrisburg, Pa. Thermostat. 1,896,579; Feb. 7.

Gfrorer, Albert H., assignor to The Automatic Transportation Company, Inc., Buffalo, N. Y. Industrial truck. 1,896,543; Feb. 7.

Giaccaglia, Attilius, Mare Island, Calif. Silver ware tray. Des. 89,177; Feb. 7.

Gibbs, Charles E., and A. B. Lawson, Baltimore, Md. Metal car roof. 1,896,891; Feb. 7.

Gibbs, James F., Gilroy, Calif. Poultry drinking fountain. 1,896,615; Feb. 7.

Gibson, Fred, Franklin, Minn. Pump. 1,896,445; Feb. 7.

Gibson, Oliver E. (See Davis, W. C., and Gibson.)

Gibson, Robert D., Rahway, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Calling circuit. 1,896,487; Feb. 7.

Gilbert, Harwood J., Saginaw, Mich., assignor to National Washboard Company, Chicago, Ill. Rubbing element for washboards. 1,896,077; Feb. 7.

Gilbert, William N., Hudson Heights, N. J., assignor to Dayton Scale Company, Dayton, Ohio. Even balance scales. 1,896,301; Feb. 7.

Gilbertson, Henry S. (See Cooper, C. E., and Gilbertson.)

Giles, Charles W., Norton, Mass., assignor to J. M. Fisher Co. Watch chain guide. 1,896,302; Feb. 7.

Giles, Florence M., administratrix. (See Giles, Pierre P.)

Giles, Pierre P., deceased, Springfield, Mass.; Florence M. Giles, Cortland, N. Y., administratrix. Oil burner. 1,896,791; Feb. 7.

Gillican, Charles C., assignor to Gillican-Chipley Company, Inc., Brunswick, Ga., and Hercules Powder Company, Inc., Wilmington, Del. Method of and apparatus for delivering crude pine gum. 1,896,616; Feb. 7.

Gillican-Chipley Company, Inc., et al. (See Gillican, Charles C., assignor.)

Gilmore, Chace D., West Chester, Pa. Scriber guard. 1,896,580; Feb. 7.

Given, Frederick J., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Adjustable inductance. 1,896,510; Feb. 7.

Glaenzer, Harry, Philadelphia, Pa. Throttle for locomotives. 1,896,947; Feb. 7.

Glen, John, Detroit, Mich. Sanding device for automobiles. 1,896,357; Feb. 7.

Globar Corporation, The. (See Heyroth, Albert H., assignor.)

Godsey, Frank W., jr., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. Vehicle driving apparatus and system. 1,896,169; Feb. 7.

Godsey, Frank W., jr., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. Vehicle driving apparatus and system. 1,896,170; Feb. 7.

Godward, Ernest R., New York, N. Y., assignor to The Eclipse Petrol Economiser System Company, Limited, Christchurch, New Zealand. Fuel delivery system for internal combustion engines. 1,896,401; Feb. 7.

Goeller, Lawrence E., Circleville, Ohio. Collapsible stool. 1,896,446; Feb. 7.

Goldberg, Leo J., Hewlett, assignor to Leonora Silk Underwear Company, Inc., New York, N. Y. Nightgown. Des. 89,178; Feb. 7.

Goldberg, Max, New York, N. Y. Fabric treating compound. 1,896,815; Feb. 7.

Goldman, Julius, and D. Liamin, Los Angeles, Calif.; said Liamin assignor to said Goldman. Fixing machine. 1,896,511; Feb. 7.

Goldsborough, Winder E., South Norwalk, Conn., and R. E. Lowe, assignors to Doherty Research Company, New York, N. Y. Coating articles with refractory. 1,897,003; Feb. 7.

Good, Charles H. (See Gumprich, W., and Good.)

Goodman, Abraham, Brooklyn, N. Y., assignor to Emeth Financial Corporation. Hair curler. 1,896,617; Feb. 7.

Goodrich, B. F., Company, The. (See Martin, H. W., and Blanchard, assignors.)

Gordon, Charles W., Munster, Ind., assignor to The Superheater Company, New York, N. Y. Boiler furnace. 1,896,238; Feb. 7.

Goss Printing Press Company. (See Richter, Charles J., assignor.)

Gott, Adrian E., and N. R. McIntosh, Roy, Mo. Wrench. 1,896,303; Feb. 7.

Gottlieb, Joseph, Jersey City, N. J. Combined clock case and lamp or similar article. Des. 89,179; Feb. 7.

Gottman, Edwin E., Tonganoxie, Kans. Milk strainer. 1,896,816; Feb. 7.

Gough, Cale, Albion, Ill. Electrical connecter. 1,896,948; Feb. 7.

Govers, Francis X., assignor to Indian Refining Company, Lawrenceville, Ill. Evaporating apparatus. 1,896,618; Feb. 7.

Graff, Emory L. (See Mulhollen, Scott W., assignor.)

Grau, Juan, Habana, Cuba. Vehicle headlight. 1,896,194; Feb. 7.

Green, Irving W., Cranford, and F. C. Bisbee, Elizabeth, N. J., assignors to American Telephone and Telegraph Company. Electromagnetic signaling device. 1,896,195; Feb. 7.

Green, Irving W., Cranford, N. J., assignor to American Telephone and Telegraph Company. Telephone substation apparatus. 1,896,196; Feb. 7.

Greenwald, Harold A. (See Whitehead, T. C., and Greenwald.)
Greenwich Inlaid Linoleum (Frederick Walton's New Patents) Company Limited. (See Montgomery, Harry, assignor.)
Greiner, John, Philadelphia, Pa. Socket wrench. 1,896,949; Feb. 7.
Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Obtaining antipyrine. 1,896,619; Feb. 7.
Griffith, Earl G., Los Angeles, Calif. Conveyer take-off. 1,896,402; Feb. 7.
Grimes, Thaddeus S., assignor to Lummus Cotton Gin Company, Columbus, Ga. Valve. 1,896,706; Feb. 7.
Groeniger, William C., Columbus, Ohio, assignor to Mueller Co., Decatur, Ill. Flush valve. 1,896,950; Feb. 7.
Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,180; Feb. 7.
Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,181; Feb. 7.
Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,182; Feb. 7.
Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,183; Feb. 7.
Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,184; Feb. 7.
Guhring, Eugen. (See Hagedorn, M., Reichert, and Guhring.)
Guinot, Henri M. (See Ricard, E., and Guinot.)
Gumprich, William, Dayton, Ohio, and C. H. Good, Hamilton, Ontario, Canada, assignors to Dayton Scale Company, Dayton, Ohio. Meat clamp. 1,896,304; Feb. 7.
Gumprich, William, Brooklyn, N. Y., assignor to International Scale Company, Dayton, Ohio. Scale attachment. 1,897,027; Feb. 7.
Gun-Fil Corporation. (See Battle, John R., assignor.)
Günzel, Arno, Altenburg, Germany. Vehicle wheel. 1,896,138; Feb. 7.
Gutman, Sylvester A., Flint, Mich. Pumping apparatus. 1,896,358; Feb. 7.
Habenicht, Frederick K. (See Campbell, S. H., and Habenicht.)
Haden, Cecil R., assignor to The Haden Lime Company, Houston, Tex. Making lime from oyster shells. 1,896,403; Feb. 7.
Haden Lime Company, The. (See Haden, Cecil R., assignor.)
Hagedorn, Max, Dessau in Anhalt, O. Reichert, Dessau-Ziebigk in Anhalt, and E. Guhring, Dessau in Anhalt, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Electric insulating material. 1,896,581; Feb. 7.
Hagemann, Louis F., Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada. Strip registering and tensioning device. 1,896 078; Feb. 7.
Hahn, Oskar, Markranstadt, near Leipzig, Germany, assignor, by mesne assignments, to Heyman Rosenberg, New York, N. Y. Exhaustion device. 1,896,951; Feb. 7.
Hale Pneumatic, Ltd. (See Hale, William B., assignor.)
Hale, William B., Huntington Park, Calif., assignor to Hale Pneumatic, Ltd., Lovelock, Nev. Air compressing apparatus. 1,896,404; Feb. 7.
Hall, Charles L., Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass. Snap fastener attached clip member. 1,896,864; Feb. 7.
Hall, Charles L., Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass. Detachable clip member. 1,896,865; Feb. 7.
Hall Edward B., jr., assignor to O-Cedar Corp'n., Chicago, Ill. Mop. 1,896,843; Feb. 7.
Hall, Jake C., Billings, Mont. Bottle sterilizer. 1,896,305; Feb. 7.
Hall & McChesney, Inc. (See Cooper, James, assignor.)
Hall, Nevin H., York, Pa. Grid wire for bottle crates. 1,896,306; Feb. 7.
Hall, Wesley F., assignor to Hanson-Van Winkle-Munning Company, Matawan, N. J. Automatic conveyer for chemical and electro-chemical operations. 1,896,079; Feb. 7.
Haller, Robert, Rieben, near Basel, and A. Heckendorn, Basel, assignors to Firm Society of Chemical Industry in Basle, Basel, Switzerland. Cellulose derivatives and making same. 1,896,892; Feb. 7.
Hamilton, James W., and J. W. Watts, Biloxi, Miss. Fishing reel. 1,896,582; Feb. 7.
Hamlin, Benjamin M. (See Wheary, G. H., and Hamlin.)
Hammer, Arthur, Tompkinsville, Ky. Clamp for wire fences. 1,896,447; Feb. 7.
Hammond, William P. (See Littell, N., and Hammond.)
Hampson, Edward A., Chicago, Ill., assignor to The Hoover Company. Refrigeration units. 1,896,080; Feb. 7.
Hampson, Edward A., Chicago, Ill., assignor to The Hoover Company. Condenser. 1,896,081; Feb. 7.
Hamre, Marion R., Brooklyn, N. Y. Pillow cover or the like. Des. 89,185; Feb. 7.
Hamre, Marion R., Brooklyn, N. Y. Textile fabric or the like. Des. 89,186; Feb. 7.
Hamre, Marion R., Brooklyn, N. Y. Pillow cover or the like. Des. 89,187; Feb. 7.
Handy & Harman. (See Leach, Robert H., assignor.)
Hanson, Clifford O., assignor to The Hanson Clutch & Machinery Co., Tiffin, Ohio. Clutch. 1,896,707; Feb. 7.
Hanson Clutch & Machinery Co. (See Hanson, Clifford O., assignor.)
Hanson, Oscar B., Long Island City, N. Y., assignor to Radio Corporation of America. Acoustics. 1,896,844; Feb. 7.
Hanson-Van Winkle-Munning Company. (See Hall, Wesley F., assignor.)
Harper, Philip S., Chicago, Ill. Burner. 1,896,082; Feb. 7.
Harrigan, Harold W., Melrose, assignor to Hersey Manufacturing Company, Boston, Mass. Starch conditioning mechanism and time lag control therefor. 1,896,359; Feb. 7.
Harris, Ora E., Kearney, Nebr. Ice cream dipper. 1,896,083; Feb. 7.
Harry, John C., El Paso, Tex. Iodine preparation and making the same. 1,896,171; Feb. 7.
Harshbarger, C. L. (See Pinson, William L., assignor.)
Hart, Franklin H. (See Carmichael, W. A., and Hart.)
Hartford-Empire Company. (See Bacheller, Raymond G., assignor.)
Hartford-Empire Company. (See Smith, Algy J., assignor.)
Hartford-Empire Company. (See Wadman, Harold A., assignor.)
Hartsock, Guy M., Detroit, Mich., assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind. Gear shifting device. 1,896,893; Feb. 7.
Hartsock, Guy M., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,896,952; Feb. 7.
Hassell, Cecil S., Miami, Fla. Electric ice cap. 1,896,953; Feb. 7.
Hatch, Charles T., assignor to Union Steel Products Company, Albion, Mich. Rack for refrigerators, ovens, and like compartments. 1,896,307; Feb. 7.
Hathorn, Charles E., Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Tail wheel. 1,896,234; Feb. 7.
Haubert, Leo, assignor of one-half to Lyman Le Roy Roller, Tulsa, Okla. Pulling implement. 1,896,488; Feb. 7.
Hauser, Bonner B., Denver, Colo. Ink bottle. 1,896,405; Feb. 7.
Hawley, Charles G., Chicago, Ill. Dust separator. 1,896,895; Feb. 7.
Hawley, Charles G., Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio. Centrifugal fixture. 1,896,894; Feb. 7.
Hawley, Charles G., Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio. Steam separator. 1,896,896; Feb. 7.
Hawley, Charles G., Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio. Centrifugal steam conditioner. 1,896,897; Feb. 7.
Hayford, Walter S., Morristown, and C. R. Moore, Maplewood, N. J., assignors, by mesne assignments, to Western Electric Company, Incorporated. Metal-rolling tool. 1,896,512; Feb. 7.
Hayn, Georg, Kassel, Germany. Coal dust furnace. 1,896,139; Feb. 7.
Hazel-Atlas Glass Co. (See Southwick, C. A., jr., assignor.)
Hazeltine Corporation. (See Wheeler, Harold A., assignor.)
Hazelton, Robert T., assignor to The Cincinnati Shaper Company, Cincinnati, Ohio. Clapper box. 1,896,300; Feb. 7.
Heap, John Hudson, Rochdale, England. Dyeing. 1,896,954; Feb. 7.
Heaps, Ross D., Lockport, Ill. Water heating apparatus. 1,896,671; Feb. 7.
Heath, Sheldon B., assignor to The Dow Chemical Company, Midland, Mich. Powdered anhydrous magnesium chloride and making same. 1,896,406; Feb. 7.
Heberlein & Co., A. G. (See Karrer, Paul, assignor.)
Heberlein, Georges, and A. Bodmer, Wattwil, Switzerland, assignors to Heberlein Patent Corporation, New York, N. Y. Treating vegetable fibrous material and resulting product. 1,896,620; Feb. 7.
Heberlein Patent Corporation. (See Heberlein, G., and Bodmer, assignors.)
Heckendorn, Alphonse. (See Haller, R., and Heckendorn.)
Hein, George, West Fort Lee, N. J. Window and attached window opener. 1,896,745; Feb. 7.
Heinke, Alfred J., Towaco, N. J., assignor to H. R. Mallinson & Co., New York, N. Y. Textile fabric or the like. Des. 89,188; Feb. 7.
Heinke, Alfred J., Towaco, N. J., assignor to H. R. Mallinson & Co., New York, N. Y. Textile fabric or the like. Des. 89,189; Feb. 7.
Heitzman, Richard J., assignor of one-fourth to Wm. E. Ressler, Shamokin, Pa. Safety blasting plug. 1,896,817; Feb. 7.
Hele-Shaw, Henry S., and T. E. Becham, Westminster, London, and N. A. Devies, Radlett, England. Caster. 1,896,978; Feb. 7.
Hellborg, Rune, Stockholm, Sweden, assignor to Ruthsaccumulator Aktiebolag, Berlin, Germany. Power plant. 1,896,308; Feb. 7.
Hendryx, Andrew B., Company, The. (See Palmer, Harry G., assignor.)

Henry, James N., Providence, R. I. Curtain support. 1,896,746; Feb. 7.
Henst, Abraham V., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Closure for radiators and the like. 1,896,309; Feb. 7.
Hentschel, Ernest R., deceased, Washington, D. C., John Olson, administrator, assignor to Wired Radio, Inc., New York, N. Y. Volume control system. 1,896,172; Feb. 7.
Hentschel, Ernest R., deceased, Washington, D. C.; J. Olson, administrator, assignor to Wired Radio, Inc., New York, N. Y. Automatic volume control system. 1,896,173; Feb. 7.
Hentzell, Alfred A., Littleton, Colo., assignor to Ingersoll-Rand Company, Jersey City, N. J. Forging mechanism. 1,896,621; Feb. 7.
Hercules Powder Company, Inc., et al. (See Gillican, Charles C., assignor.)
Hercules Powder Company. (See Johnston, Alan C., assignor.)
Herman, Frederick H. (See Johnston, Samuel, assignor.)
Herrington, John A. (See Evans, S., and Herrington.)
Hersey Manufacturing Company. (See Harrigan, Harold W., assignor.)
Heuck, Claus. (See Luther, M., and Heuck.)
Heyroth, Albert H., assignor to The Globar Corporation, Niagara Falls, N. Y. Electrical connection for non-metallic resistors. 1,897,004; Feb. 7.
Higley, Warren L., Shawnee, Okla. Switch. 1,896,955; Feb. 7.
Hildebrand, Carl E., Cleveland, Ohio. Supporting device. 1,896,898; Feb. 7.
Hildebrand, Henry W., jr., assignor to Inland Paper Box Company, Denver, Colo. Nonsifting, one-piece, powder box drum. 1,896,361; Feb. 7.
Hildebrand, William R., Chicago, Ill. Water filter. 1,896,310; Feb. 7.
Hill, Clarence R., Muskegon, Mich. Door operating device. 1,896,818; Feb. 7.
Hill, Harry, Belvedere, Kent, assignor to Callender's Cable and Construction Company, Limited, London, England. Stranding machine. 1,896,084; Feb. 7.
Hinds, Sydney G., Houston, Tex. Semiautomatic remote control for auto doors. 1,896,311; Feb. 7.
Hines, John, Astoria, assignor to Segal Lock & Hardware Co. Inc., New York, N. Y. Lock. 1,896,622; Feb. 7.
Hixon, Alfred J., Braintree, assignor to Fire Alarm Signal Company, South Boston, Mass. Screen or shade operating means. 1,896,623; Feb. 7.
Hoague-Sprague Corporation. (See Knowlton, Cutler D., assignor.)
Hochwalt, Carroll A. (See Thomas, C. A., and Hochwalt.)
Hoefleur, Arthur, Chicago, Ill. Conveyer. 1,896,407; Feb. 7.
Hollands, Harold W., River Forest, assignor to The Pullman Company, Chicago, Ill. Soap lather dispenser. 1,896,624; Feb. 7.
Holley, George M., Detroit, Mich. Hot spot manifold. 1,896,085; Feb. 7.
Holmes, George A., Newton, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Hair dressing appliance. 1,896,866; Feb. 7.
Holmes, Grant, assignor to Robt. Holmes & Bros. Inc., Danville, Ill. Landing for mine cages. 1,896,362; Feb. 7.
Holmes, Robt., & Bros. Inc. (See Holmes, Grant, assignor.)
Holstein, Sol, assignor to Sterling Button Co., Inc., New York, N. Y. Belt. Des. 89,190; Feb. 7.
Honn, Harlan V., San Francisco, Calif. Internal combustion engine. 1,896,174; Feb. 7.
Hooey, William C., Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Manufacture of pigments by wet-precipitation. 1,896,312; Feb. 7.
Hooven, C. E. (See Evans, Kelley D., assignor.)
Hoover, Charles O., San Antonio, Tex. Removing acid sludge from viscous hydrocarbon oil. 1,896,583; Feb. 7.
Hoover Company, The. (See Hampson, Edward A., assignor.)
Hornyák, Dessö, Cleveland, Ohio. Life saving suit. 1,896,956; Feb. 7.
Horton, Erwin C. (See Hueber, H., and Horton.)
Horvath, Alexander, Chicago, Ill. Forming crystals. 1,896,775; Feb. 7.
Hough, Clinton W., Boonville, N. Y., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Single carrier frequency multiplex telephony and telegraphy. 1,896,235; Feb. 7.
Houghton, Carl R., assignor to The Connersville Blower Company, Inc., Connersville, Ind. Tandem meter. 1,896,527; Feb. 7.
Hovgaard, Ole M., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Piezo-electric crystal. 1,896,513; Feb. 7.
Howard, James H., E. A. Johnson, and J. H. McEvoy, jr.; said Howard and said Johnson, assignors to J. H. McEvoy & Company, Houston, Tex. Retractable tubing head. 1,896,236; Feb. 7.
Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Interlocking system for railroads. 1,897,005; Feb. 7.
Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Car retarder for railroads. 1,897,006; Feb. 7.
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Tripod. 1,896,086; Feb. 7.
Hoyt, Leroy W., Stamford, Conn. Humidifier. 1,896,514; Feb. 7.
Hubbell, Cliff J., Deweese, and W. D. McCauley, Lawrence, assignors of one-third to A. W. Person, Crete, Nebr. Mold. 1,896,313; Feb. 7.
Hueber, Henry, Buffalo, and E. C. Horton, Hamburg, assignors to Trico Products Corporation, Buffalo, N. Y. Packing for windshield cleaners. 1,896,792; Feb. 7.
Hueber, Henry, Buffalo, and E. C. Horton, Hamburg, assignors to Trico Products Corporation, Buffalo, N. Y. Hanger for auxiliary wiper arms. 1,897,007; Feb. 7.
Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Pump valve. 1,896,237; Feb. 7.
Huffman, Otto V., Bedford Hills, N. Y. Ammunition. 1,896,515; Feb. 7.
Huffman, William E., Dayton, assignor to The Aircraft Appliance Co., Springfield, Ohio. Device for training pilots in handling airplanes. 1,896,175; Feb. 7.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Automobile. Des. 89,191; Feb. 7.
Hughes Tool Company. (See Evans, S., and Herrington, assignors.)
Hughes Tool Company. (See Fletcher, Harold W., assignor.)
Hughes Tool Company. (See Fletcher, H. W., and Scott, assignors.)
Hughes Tool Company. (See MacDonald, Archie A., assignor.)
Hughes Tool Company. (See Scott, Floyd L., assignor.)
Hughes Tool Company. (See Woods, Gorham W., assignor.)
Humphrey, Carroll L. (See Sanders, R. C., and Humphrey.)
Humphrey, Frederick J., Ilford, assignor to Armaflex Parent, Limited, London, England. Cable making and like machine. 1,896,087; Feb. 7.
Hund, August, Bethesda, Md., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Frequency control system. 1,896,238; Feb. 7.
Hund, August, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Phase multiplier. 1,896,747; Feb. 7.
Hund, Franz, Cleveland, Ohio. Valve spring compressing tool. 1,896,239; Feb. 7.
Hunter, Charles R. (See Smith, C. C., Hunter, and Pierce.)
Hunter, Charles R., and R. M. Pierce, Los Angeles, assignors to Universal Pictures Corporation, Universal City, Calif. Film processing machine and method. 1,896,525; Feb. 7.
Hutcheson, William J. F., Glasgow, Scotland. Reenforcement connected with reenforced concrete buildings, slabs, playgrounds and such like. 1,896,957; Feb. 7.
Hyde, Ernest N., Philadelphia, Pa. Reducing radio interference. 1,896,819; Feb. 7.
Hyde, Reed W., Summit, N. J. Heat treating apparatus. 1,896,625; Feb. 7.
Hydraulic Brake Company. (See Loughead, Malcolm, assignor.)
Hyland, John L., New York, N. Y. Folding davit. 1,896,845; Feb. 7.
Hyman, Henry. (See Abel, Frank J., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Dohse, Hans, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hagedorn, M., Reichert, and Guhring, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Kircher, C., and Acker, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Luther, M., and Heuck, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Meis, H., Klein, and Tschunkur, assignors.)
Ilford Limited. (See Gaseltine, Herbert T., assignor.)
Illovici, Avram D. (See Dubusc, R., and Illovici.)
Indian Refining Company. (See Govers, Francis X., assignor.)
Indiana Steel & Wire Company. (See Fowle, Frank F., assignor.)
Ingalls, Willis A., Syracuse, N. Y. Knitting machine. 1,896,686; Feb. 7.
Ingersoll-Rand Company. (See Hentzell, Alfred A., assignor.)
Ingersoll-Rand Company. (See Lemp, Hermann, assignor.)
Ingraham, E., Company, The. (See Carlson, Elof L., assignor.)
Ingram, Joseph R., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Antioxidant for vulcanized products. 1,896,544; Feb. 7.
Inland Paper Box Company. (See Hildebrand, Henry W., jr., assignor.)
Innes, George, Davenport, assignor to Innes Manufacturing Company, Bettendorf, Iowa. Grain pick up mechanism. 1,896,626; Feb. 7.
Innes Manufacturing Company. (See Innes, George, assignor.)
International Nickel Company, The. (See French, Herbert J., assignor.)
International Scale Company. (See Gumprich, William, assignor.)
Intertype Corporation. (See Severin, Walter F., assignor.)

Irons, Archie E., and D. S. Kepler, Sharon, Pa. Safety control for motion picture projection machine. 1,896,672; Feb. 7.
Isley, George H., assignor to Morgan Construction Company, Worcester, Mass. Regenerative heating furnace. 1,897,008; Feb. 7.
Iula, Roy T. (See Prudente, J. A., and Iula.)
Izard, Emmette F. (See Barrett, H. J., and Izard.)
Izsak, Alexander, Central Park, N. J., assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del. Producing butyl and isopropyl alcohols. Re18,729; Feb. 7.
Jacquet, Félicien, Paris, France. Trailer vehicle. 1,896,584; Feb. 7.
Jaeck, Wolfgang, and J. Lang, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Preparation suitable as wetting agent. 1,896,899; Feb. 7.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Catalytic molecular association of organic compounds. 1,896,240; Feb. 7.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Catalytic oxidation of ammonia. 1,896,627; Feb. 7.
Jakubec, Paul J., Charleroi, Pa. Self sealing tube. 1,896,729; Feb. 7.
James, Henry D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Multiple elevator systems. 1,896,776; Feb. 7.
James, Henry D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator safety system. 1,896,777; Feb. 7.
Jarvis, W. B., Company. (See Andrle, Michael B., assignor.)
Jarvis, W. B. Company. (See Henst, Abraham V., assignor.)
Jarvis, W. B., Company. (See Ruppel, Frederick C., assignor.)
Jenkins Petroleum Process Company. (See Schwartz, Stephen, assignor.)
Jepsen, Sophus, Racine, Wis. Luggage carrier for vehicles. 1,896,628; Feb. 7.
Jirka, Joseph F., R. N. McCurdy, Cleveland, E. Slager, Garfield Heights Village, Ohio, and R. D. Ernest, Dearborn, Mich., assignors to The Powerlite Switchboard Company, Cleveland, Ohio. Safety switch mechanism. 1,896,545; Feb. 7.
Johnson, Albert S., assignor to Johnson Connector Company, Ltd., Los Angeles, Calif. Automatic train pipe connecter. 1,896,687; Feb. 7.
Johnson Connector Company. (See Johnson, Albert S., assignor.)
Johnson, Edwin A. (See Howard, J. H., Johnson, and McEvoy.)
Johnson, Elvin H., Winnetka, Ill. Builder's hardware. 1,896,303; Feb. 7.
Johnson Fare Box Company. (See Thompson, Ernest H., assignor.)
Johnson, Frederick G., London, England. Photographic flash light apparatus. 1,896,585; Feb. 7.
Johnson, George W., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Pressing machine. 1,896,516; Feb. 7.
Johnson, George W., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Control mechanism for continuous pressing machines. 1,896,517; Feb. 7.
Johnson, George W., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Control mechanism for pressing machines. 1,896,518; Feb. 7.
Johnson, Gustav, West Roxbury, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Slide fastener. 1,896,867; Feb. 7.
Johnston, Alan C., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Separating terpene compounds from gasoline used for extracting rosin from wood. 1,896,793; Feb. 7.
Johnstone, Samuel, assignor of one-half to F. H. Herman, Alhambra, Calif. Arch supporting device for footwear. 1,896,586; Feb. 7.
Jolidon, Charles J., Hartford, Conn. Firearm. 1,896,820; Feb. 7.
Jones, Dolphus E., assignor of one-half to H. A. Gassaway, Seminole, Okla. Tire valve. 1,896,708; Feb. 7.
Jones, Edwin B., Elmira, N. Y. Signal. 1,896,314; Feb. 7.
Jordan, William H. (See White, Fred G., assignor.)
Jorgensen, Jacob C., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping shoe uppers. 1,896,121; Feb. 7.
Jose, Allan. (See Raden, L. A., and Jose.)
Juestrich, Max U., Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn. Textile fabric. Des. 89,192; Feb. 7.
Juestrich, Max U., Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn. Textile fabric. Des. 89,238; Feb. 7.
Juestrich, Max U., Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn. Textile fabric. Des. 89,239; Feb. 7.
Julian, Edgar C., Elwood, Ind. Holding clutch for wheels and the like. 1,896,629; Feb. 7.
Kagan, Jacob J., Los Angeles, Calif. Finger ring. Des. 89,240; Feb. 7.
Kaiser, Charles, Great Neck, assignor to Morimura Bros. Inc., New York, N. Y. Coffee pot or similar article. Des. 89,193; Feb. 7.
Kaiser, Charles, Great Neck, assignor to Morimura Bros. Inc., New York, N. Y. Coffee pot or similar article. Des. 89,194; Feb. 7.
Kaiser, Charles, Great Neck, assignor to Morimura Bros. Inc., New York, N. Y. Sugar bowl or similar article. Des. 89,195; Feb. 7.
Kaiser, Charles, Great Neck, assignor to Morimura Bros. Inc., New York, N. Y. Cream jug or similar article. Des. 89,196; Feb. 7.
Kalbach, Raymond B., Philadelphia, Pa. Manufacturing chenille. 1,896,408; Feb. 7.
Kalmbach, Frederick. (See Byron, Hagar B., assignor.)
Kammerdiner, James A. (See Pyles, Robert M., assignor.)
Kaplan, Philip, Brooklyn, N. Y., assignor to The Dehydro Company, Tulsa, Okla. Medium for dehydrating cut oils. 1,897,021; Feb. 7.
Kapp, William F., Elmhurst, assignor to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,896,315; Feb. 7.
Karrer, Paul, Zurich, assignor to Heberlein & Co., A. G., Wattwil, Switzerland. Treating cellulose and product therefrom. 1,897,026; Feb. 7.
Kaufmann, Alois, Vienna, Austria. Pocket lighter 1,896,140; Feb. 7.
Kavanagh, James F., Calumet City, Ill., assignor to The Superheater Company, New York, N. Y. Boiler. 1,896,241; Feb. 7.
Kay Machinery Company, The. (See Schmerheim, John F., assignor.)
Kehoe, William E., San Francisco, Calif. Combination base and column for display stand. Des. 89,197; Feb. 7.
Kehoe, William E., San Francisco, Calif. Combination base and column for display stand. Des. 89,198; Feb. 7.
Kehoe, William E., San Francisco, Calif. Combination base and column for display stand. Des. 89,241; Feb. 7.
Keller, Charles G. (See Sargent, W. D., and Keller.)
Keller, Charles G., Poughkeepsie, N. Y. Vehicle wheel. 1,896,794; Feb. 7.
Keller, Charles G., Hyde Park, N. Y. Vehicle wheel. 1,896,821; Feb. 7.
Kellogg, M. W., Company, The. (See Kendall, Harry B., assignor.)
Kelvinator Corporation. (See Mason, George W., assignor.)
Kelvinator Corporation. (See Whitehead, T. C., and Greenwald, assignors.)
Kendall, Genevieve A. (See Kendall, Ira H., assignor.)
Kendall, Harry B., Roselle, N. J., assignor to The M. W. Kellogg Company, New York, N. Y. Gasket. 1,896,795; Feb. 7.
Kendall, Ira H., assignor to G. A. Kendall, Potsdam, N. Y. Sanitary pipe coupling. 1,896,519; Feb. 7.
Kendzir, Paul, et al. (See Draheim, Paul E., assignor.)
Kent, Everett E. (See Brown, John S., assignor.)
Kepler, Darrell S. (See Irons, A. E., and Kepler.)
Kercher, Arthur J., Berkeley, Calif. Refrigerating apparatus. 1,896,448; Feb. 7.
Kern, Frederick E., St. Louis, Mo. Reducing ores. 1,896,088; Feb. 7.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Tube support. 1,896,176; Feb. 7.
Kibbe, James I. M., Muskegon, Mich. Locking device for scales. 1,896,409; Feb. 7.
Kiesling, Leroy H., Brooklyn, N. Y. Elevator guide means. 1,896,900; Feb. 7.
Kiewicz, John, assignor to The Reece Button Hole Machine Company, Boston, Mass. Buttonhole cutter for buttonhole sewing machines. 1,896,364; Feb. 7.
Kilgore Manufacturing Company, The. (See Peake, Edward S., assignor.)
Kimball, Richard E., Toledo, Ohio, assignor of one-half to Kenneth P. MacNaughton, Detroit, Mich. Advertising device. 1,896,709; Feb. 7.
Kimbell, Arthur W., Newton Center, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Wearing apparel and snap fastener therefor. 1,896,868; Feb. 7.
Kircher, Carl, and H. Acker, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of cyanamides of the alkaline earth metals. 1,896,489; Feb. 7.
Kirkpatrick, James M., London, England. Sliding door, gate, or partition. 1,896,748; Feb. 7.
Kitsée, Isidor, assignor to Mineralite Corporation, Philadelphia, Pa. Protecting metallic surfaces of refrigerators from sulphur compounds. 1,896,141; Feb. 7.
Klasstorner, Samuel, assignor to Faith Mfg. Co., Chicago, Ill. Radiator cap. Des. 89,199; Feb. 7.
Klein, Wilhelm. (See Meis, H., Klein, and Tschunkur.)
Kleinberg, Harry, Pittsburgh, Pa. Shirt. 1,896,242; Feb. 7.
Kluge, Paul, et al. (See Draheim, Paul E., assignor.)
Knapp, Edgar, and C. G. Allgrunn, assignors to Niagara Sprayer Company, Middleport, N. Y. Tractor power coupling mechanism. 1,896,901; Feb. 7.
Knight, James L., Schenectady, N. Y., assignor to General Electric Company. Refrigerator cabinet shelf. 1,896,846; Feb. 7.
Knowlton, Cutler D., Beverly, assignor to Hoague-Sprague Corporation, Lynn, Mass. Stacking apparatus. 1,896,177; Feb. 7.

Knox, W. & J., Net and Twine Company. (See Bunker, Royce S., assignor.)
Knutson, Carl L., Maywood, Ill., assignor to United-Carr Fastener Corporation, Cambridge, Mass. Snap fastener stud. 1,896,630; Feb. 7.
Koeberle, Karl. (See Wolff, H., Kunz, and Koeberle.)
Koehring Company. (See Lichtenberg, Erich H., assignor.)
Koehring Company. (See Tranaas, Emil, assignor.)
Kohl, Karl, Erlangen, Germany. System for producing high frequency waves. 1,896,958; Feb. 7.
Kohler, Walter J., jr., and F. G. Brotz, Kohler, Wis. Lavatory. Des. 89,200; Feb. 9.
Kohr, Robert F., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,896,902; Feb. 7.
Kohut, Alexander, assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,233; Feb. 7.
Holvoord, Albert, Augusta, Mich. Scaffolding. 1,896,688; Feb. 7.
Komm, Ernst, Dresden-Weisser Hirsch, Germany. Treatment of wheat-germs. 1,896,490; Feb. 7.
Komm, Ernst, Dresden-Weisser Hirsch, Germany. Manufacture of a disembittered product of wheat-germ. 1,896,520; Feb. 7.
Komm, Ernst, Dresden-Weisser, Hirsch, Germany. Obtaining high-valued nutrients from the products of cerealia and legumens. 1,896,521; Feb. 7.
Kopsa, Julius, Chicago, and E. D. Brigham, jr., Highland Park, assignors to North American Car Corporation, Chicago, Ill. Safety cut-off valve for refrigerator cars. 1,896,673; Feb. 7.
Kouyoumjian, Haroutiun K., Providence, R. I., assignor to Ward Leonard Electric Company. Electric controlling apparatus. 1,896,316; Feb. 7.
Kraeler Company, Inc. (See Kraeler, Joseph, assignor.)
Kraeler, Joseph, assignor to Kraeler Company, Inc., New York, N. Y. Woman's coat. 1,896,631; Feb. 7.
Kreidler, Anton, Stuttgart, Wurtemberg, Germany. Cam gear for internal combustion engines. 1,896,449; Feb. 7.
Krogh, Otto C., Odense, Denmark. Vacuum propeller plane. 1,896,089; Feb. 7.
Krueger, Alfred P. (See Krueger, Theodore H., and A. P.)
Krueger, Theodore H., and A. P., Derby, Conn., assignors to Better Packages Inc., New York, N. Y. Moistening device. 1,896,317; Feb. 7.
Kruse, Conrad, Brooklyn, N. Y. Fruit peeler. 1,896,818; Feb. 7.
Kucera, Frank A., assignor to Union Special Machine Company, Chicago, Ill. Fabric guiding means for sewing machines. 1,896,903; Feb. 7.
Kuhns, Charles A., Niagara Falls, N. Y. Reflector. 1,896,090; Feb. 7.
Kulik, Irving, Brooklyn, N. Y. Floating airport. 1,896,546; Feb. 7.
Kunz, Max A. (See Wolff, H. Kunz, and Koeberle.)
Kurath, Frans. (See Cherry, O. A., and Kurath.)
Kürtössy, László, Budapest, Hungary. Automatic coupling for railway vehicles. 1,896,959; Feb. 7.
Kuzell, Charles R., assignor to United Verde Copper Company, Clarkdale, Ariz. Reverberatory furnace. 1,896,178; Feb. 7.
Lafayette, Edward, Pittsburg, Kans. Breaking rock and other hard minerals. 1,896,960; Feb. 7.
Laffoon, Carthrae M., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Stationary blower intake for large turbine generators. 1,896,749; Feb. 7.
Lagneau, Victor, Tamines, Belgium. Stove. 1,896,197; Feb. 7.
Lahay, Dell J., Carney, assignor to Universal Playground Equipment Company, Menominee, Mich. Roundabout. 1,896,796; Feb. 7.
Lamb, Joseph F., assignor to Landers, Frary & Clark, New Britain, Conn. Coffee grinder. Des. 89,234; Feb. 7.
Lambert, Garrett, assignor of forty per cent to Tony Radalj, Rock Springs, Wyo. Loading mechanism. 1,896,587; Feb. 7.
Landers, Frary & Clark. (See Lamb, Joseph F., assignor.)
Lang, Joseph. (See Jaeck, W., and Lang.)
Lange Werner, Dessau-Ziebigk in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Disazo-dyes. 1,896,450; Feb. 7.
Lange, Werner, Dessau-Ziebigk in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Azo dyes. 1,896,710; Feb. 7.
Lansmith, William H. (See White, W., Petersen, and Lansmith.)
Lahzetta, Anthony, New York, N. Y. Tandem wing aeroplane. 1,896,922; Feb. 7.
Larsh, Everett P., Vandalia, assignor to The Master Electric Company, Dayton, Ohio. Electric fan. 1,896,869; Feb. 7.
Larson, Edwin C., assignor of one-half to J. F. Arnold, San Francisco, Calif. Airplane propeller mounting. 1,896,730; Feb. 7.
Larson, Lewis A., et al. (See Soll, Arthur, assignor.)
Latshaw, Elmer, assignor to The J. G. Brill Company, Philadelphia, Pa. Braking apparatus for car trucks. 1,896,961; Feb. 7.
Laun, Henri J., Brooklyn, assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,201; Feb. 7.
Launder, Ernie L. (See Segelhorst, A. L., and Launder.)
Laurie, Kenneth S., Glossop, assignor to Tootal Broadhurst Lee Company Limited, Manchester, England. Treatment of textile fabrics. 1,896,588; Feb. 7.
Laven, Harris L., Brooklyn, N. Y. Time lag device. 1,896,904; Feb. 7.
Lawson, Alden B. (See Gibbs, C. E., and Lawson.)
Leach, Robert H., Fairfield, Conn., assignor to Handy & Harman, New York, N. Y. Tarnish resistant alloy. 1,896,410; Feb. 7.
Leach, Robert W., and W. H. Bateman, Newport, England. Valve. 1,896,778; Feb. 7.
Leamy, Alan H., Auburn, Ind., assignor to Manning & Co., Chicago, Ill. Running board for automobiles. 1,896,797; Feb. 7.
Lécolle, Fernand H. A., Vincennes, France. Automatic signaling device for motor vehicles. 1,896,905; Feb. 7.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Automobile. Des. 89,202; Feb. 7.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Device for and method of securing windbreaks. 1,896,632; Feb. 7.
Lee, Roger K., Highland Park, assignor to Chrysler Corporation, Detroit, Mich. Vibration damper. 1,896,962; Feb. 7.
Leece, Bennett M., Cleveland, and D. S. Cole, Cleveland Heights, assignors to The Leece-Neville Company, Cleveland, Ohio. Regulating means. 1,896,547; Feb. 7.
Leece-Neville Company, The. (See Leece, B. M., and Cole, assignors.)
Lehigh Navigation Coal Company. (See Cooper, C. E., and Gilbertson, assignors.)
Lehmann, Karl A. (See Bornkessel, B., Breitling, Brauer, and Lehmann.)
Lemp, Hermann, Glen Rock, assignor to Ingersoll-Rand Company, Jersey City, N. J. Speed control apparatus for locomotives. 1,896,633; Feb. 7.
L'Enfant, Charles, New York, N. Y. Assembling device for card cases. 1,896,634; Feb. 7.
Leonora Silk Underwear Company, Inc. (See Goldberg, Leo J., assignor.)
Leslie, William H., Toronto, Ontario, Canada. Centrifugal switch. 1,896,798; Feb. 7.
Leventis, Peter P., Gastonia, N. C. Brake for motor vehicles. 1,896,963; Feb. 7.
Lewis, Howard B. (See Burns, B., Lewis, and Otis.)
Lewis, William A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Compensated relay system for ground faults. 1,897,022; Feb. 7.
Liamin, Dimitri. (See Goldman, J., and Liamin.)
Lichtenberg, Erich H., assignor to Koehring Company, Milwaukee, Wis. Rubber jointed chain for trench excavating devices. 1,896,711; Feb. 7.
Lichtenberg, Erich H., assignor to Koehring Company, Milwaukee, Wis. Aggregates weighing loading skip. 1,896,906; Feb. 7.
Lieberum, George W., Stratford, Conn., assignor to General Electric Company. Electric switch. 1,896,847; Feb. 7.
Lind, Carl A., Altona, Ill. Rail splice. 1,896,964; Feb. 7.
Lindberg, Sven C., assignor, by mesne assignments, to Centrifugal Engineering and Patents Corporation, New York, N. Y. Multiple centrifuge. 1,896,179; Feb. 7.
Lindequist, Charles J., Norwood, Mass., assignor, by mesne assignments, to Centrifugal Engineering and Patents Corporation, New York, N. Y. Multiple centrifugal separator. 1,896,180; Feb. 7.
Lindsay, Alexander R., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Doorlatch. 1,896,907; Feb. 7.
Line Material Company. (See Cosseboom, Kenneth S., assignor.)
Lingal, Harry J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit interrupter. 1,896,779; Feb. 7.
Linke, Gerhard, Magdeburg, assignor to the Firm Fried. Krupp Grusonwerk, Aktiengesellschaft, Magdeburg-Buckau, Germany. Oscillation generator for sieves, troughs, and like apparatus. 1,896,712; Feb. 7.
Linkman, Louis B., assignor to M. Linkman & Co., Chicago, Ill. Pipe. 1,896,600; Feb. 7.
Linkman, M., & Co. (See Linkman, Louis B., assignor.)
Lippert, Louis J., Albuquerque, N. Mex. Power operated toothbrush. 1,896,731; Feb. 7.
Lippert, Walter E., Hewlett, assignor to S. and H. Bonat, doing business as Samuel Bonat & Bro., New York, N. Y. Method and apparatus for waving hair. 1,896,091; Feb. 7.
Littell, Nelson, New Canaan, Conn., and W. P. Hammond, Scarsdale, N. Y. Pin tumbler lock. 1,896,319; Feb. 7.
Llewellen, Albert R. (See Falge, E. N., Lewellen, and Michel.)
Llewellyn, Frederick B., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Modulating device. 1,896,780; Feb. 7.
Llewellyn, Frederick B., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Constant frequency oscillator. 1,896,781; Feb. 7.
Loebell, Henry O., Whitestone, assignor to Henry L. Doherty, New York, N. Y. Apparatus for manufacturing combustible gas. 1,896,799; Feb. 7.
Lofton, Lyman L., Ardmore, Okla. Combined chair and stepladder. 1,896,451; Feb. 7.

Logue, Paul, Birmingham, Ala., and T. W. Schilb, St. Louis, Mo., assignors to Swann Research, Inc. Polishing composition and preparing same. 1,896,823; Feb. 7.
Lombardi, Vincent, Brooklyn, N. Y. Knitting machine. 1,896,635; Feb. 7.
Long Manufacturing Company. (See Zeidler, Reinhold C., assignor.)
Longwell, James R., Cleveland, Ohio, assignor to Carboloy Company, Inc., Detroit, Mich. Wire drawing apparatus. 1,896,674; Feb. 7.
Loock, Robert J., Baltimore, Md. Cushioning device. 1,896,908; Feb. 7.
Longhead, Malcolm, assignor to Hydraulic Brake Company, Detroit, Mich. Brake mechanism. 1,896,452; Feb. 7.
Longhead, Malcolm, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif. Brake mechanism. 1,896,453; Feb. 7.
Lowe, Russell E. (See Goldsborough, W. E., and Lowe.)
Luce, Wilhelm. (See Morschel, H., and Luce.)
Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam treatment. 1,896,181; Feb. 7.
Lummus Cotton Gin Company. (See Grimes, Thaddeus S., assignor.)
Lunden, Gus, Colville, Wash. Automatic lumber stamping device. 1,896,548; Feb. 7.
Lundin Electric & Machine Co. (See Palmer, Floyd L., assignor.)
Lupton's, David, Sons Company. (See Pollock, B. H., and Sheard, assignors.)
Luther, Martin, Mannheim, and C. Heuck, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Emulsifying diolefines and for the production of products similar to latex. 1,896,491; Feb. 7.
Luttropp, Conrad, assignor of one-half to A. Lindahl, Stockholm, Sweden. Calculating machine. 1,896,182; Feb. 7.

Lyon Metal Products, Incorporated. (See Bales, James E., assignor.)
Lyon Metal Products, Incorporated. (See Vance, Walter N., assignor.)
Lyon, William B., Lakewood, Ohio. Drawbar and coupling. 1,896,713; Feb. 7.
Maas, Julian, St. Louis, Mo. Dispenser. 1,896,750; Feb. 7.
MacCallum, James, jr., University City, Mo., assignor to James MacCallum, sr. Quantity indicating device for liquids. 1,896,637; Feb. 7.
MacCallum, James, sr. (See MacCallum, James, jr., assignor.)
MacDanold, Archie A., Los Angeles, Calif., assignor to Hughes Tool, Company, Houston, Tex. Cutter support for well drills. 1,896,243; Feb. 7.
MacIldowie, John C., assignor to Asbestos Wood & Shingle Co., Nashua, N. H. Apparatus for coating sheet material with granular material. 1,896,638; Feb. 7.
MacMillan, Murdoch A., Chicago, Ill. Refrigerator car divider. 1,896,198 Feb. 7.
Macnabb, Vernon C., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Radio receiving system. 1,896,825; Feb. 7.
MacNaughton, Kenneth P. (See Kimball, Richard E., assignor.)
Macready, George A., Los Angeles, Calif. Obtaining samples from drilled wells. 1,896,492; Feb. 7.
Macready, George A., Los Angeles, Calif. Apparatus for obtaining samples from drilled wells. 1,896,522; Feb. 7.
Madden, Leland S., Pleasantville, N. J. Portable desk top. 1,896,965; Feb. 7.
Madland, Gabriel, assignor to Camel Company, Chicago, Ill. Door elevating mechanisms. 1,896,636; Feb. 7.
Maes, Robert E., Beloit, Wis. Teat cup for milking machine. 1,896,321; Feb. 7.
Magnetic Analysis Corporation. (See Zuschlag, Theodor, assignor.)
Mahan, Joseph R., assignor to The National Supply Company, Toledo, Ohio. Pitman construction. 1,896,549; Feb. 7.
Mahieu, Paul, Paris, France. Apparatus for molding. 1,896,824; Feb. 7.
Main, Andrew, assignor, by mesne assignments, to Cleveland Fare Box, and Four-Way Lock Co., Cleveland, Ohio. Jail lock. 1,896,523; Feb. 7.
Maisch, Jacques, assignor to H. R. Mallinson & Co., Inc., New York, N. Y. Scarf or similar article. Des. 89,203; Feb. 7.

Mallinson, H. R., & Co. (See Heinke, Alfred J., assignor.)
Mallinson, H. R., & Co. (See Maisch, Jacques, assignor.)
Mallory, Marion, Toledo, Ohio, assignor to The Mallory Research Company. Ignition timer. 1,896,714; Feb. 7.
Mallory, P. R., & Co. (See Shoemaker, Harry, assignor.)
Mallory Research Company, The. (See Mallory, Marion, assignor.)
Mangiameli, Francesco, Düsseldorf, Germany. Apparatus for mixing gases. 1,896,092; Feb. 7.
Manning & Co. (See Leamy, Alan H., assignor.)
Manson, Frank G., Dayton, Ohio. Flying suit. 1,896,183; Feb. 7.
Manz, Edwin J., New York, N. Y. Remote control apparatus for radio circuits. 1,896,550; Feb. 7.

Marek, Anton, Vienna, Austria, assignor to the Firm Československa Zbrojovka Akciová Společnost V Brně, Brunn, Czechoslovakia. Braking device. 1,896,454; Feb. 7.
Marr, William P., Toronto, Ontario, Canada. Wire connecter. 1,896,322; Feb. 7.
Martin, Harry W., Belmont, and R. H. Blanchard, Malden, Mass., assignors to The B. F. Goodrich Company, New York, N. Y. Shoe sole. Des. 89,204; Feb. 7.
Martin, Vernon, assignor to Walker Press Limited, Paris, Ontario, Canada. Bridge tally. Des. 89,242; Feb. 7.
Martinetti, Carlo D., Orange, N. J. Automobile lifting jack. 1,896,715; Feb. 7.
Maskrey, Alfred E., Irvington, N. J., assignor, by mesne assignments, to The Plykrome Corporation, New York, N. Y. Corrosion resistant metal plate and making the same. 1,896,411 Feb. 7.
Mason, George W., assignor to Kelvinator Corporation, Detroit, Mich. Evaporator for refrigerator. 1,896,412; Feb. 7.
Massena, Gabriel, et al. (See Smith, Clarence A., 2d, assignor.)
Master Electric Company, The. (See Larsh, Everett P., assignor.)
Mate, Gus C., and C. Takács, Cleveland, Ohio, assignors of thirty-five per cent to said Gus C. Mate and sixty-five per cent to said Charles Takács. Sled brake. 1,896,966; Feb. 7.
Matthews, H. A., Manufacturing Company, The. (See Boesel, Otto A., assignor.)
Maul, Michael, Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y. Accounting machine for punching totals. 1,896,551; Feb. 7.
Maxson, Louis A., Claremont, N. H., assignor to Sullivan Machinery Company. Mining apparatus. 1,896,184; Feb. 7.
Maxwell, Perry T., Potosi, Mo. Gate latch. 1,896,909; Feb. 7.
Maywood Chemical Works. (See Weber, Friedrich W., assignor.)
Maywood Chemical Works. (See Weber, F. W., and Schaeffer, assignors.)
McCandless, Lyon, Rochester, Pa., assignor to The Wayne Pump Company, Baltimore, Md. Liquid dispensing apparatus. 1,896,751; Feb. 7.
McCauley, Wallace D. (See Hubbell, C. J., and McCauley.)
McClelland, James C., assignor to Federal Electric Company, Chicago, Ill. Receptacle for luminescent discharge tubes. 1,896,365; Feb. 7.
McCulloh, Irba E. (See McCulloh, John W., assignor.)
McCulloh, John W., Bellflower, assignor of one-half to Irba E. McCulloh, Long Beach, Calif. Folding chair. 1,896,455; Feb. 7.
McCurdy, Ralph N. (See Jirka, J. F., McCurdy, Slager, and Ernest.)
McEvoy, J. H., & Company. (See Howard, J. H., and Johnson, assignors.)
McEvoy, Joseph H., jr. (See Howard, J. H., Johnson, and McEvoy.)
McIntosh Electrical Corporation. (See Pullwitt, Herman P., assignor.)
McIntosh, Nim R. (See Gott, A. E., and McIntosh.)
McKesson, Elmer I., Toledo, Ohio. Gas handling apparatus. 1,896,716; Feb. 7.
McKie, David G. (See Flint, J. G., and McKie.)
McLenegan, David W., Schenectady, N. Y., assignor to General Electric Company. Control system. 1,896,093; Feb. 7.
McMillan Book Company. (See Unger, Paul O., assignor.)
McNeil, Charles I., Bloomfield, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y. Controlling generator. 1,896,142; Feb. 7.
Meis, Helmuth, Wiesdorf-on-the-Rhine, and W. Klein and E. Tschunkur, Cologne, Mulheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Artificial rubber. 1,896,493; Feb. 7.
Merkt, Gustav A., assignor to Morgan Construction Company, Worcester, Mass. Regulation of heating furnaces. 1,896,910; Feb. 7.
Merson, M. Hugh, et al. (See Thomson, George R., assignor.)
Merz, August, East Orange, assignor, by mesne assignments, to The Calco Chemical Company, Inc., Bound Brook, N. J., Dyes of the azine class and manufacture thereof. 1,896,244; Feb. 7.
Metalwash Machinery Company. (See Zademach, Erich R., assignor.)
Methlin, Nicolas E., assignor to Schneider & Cie., Paris, France. Wheeled gun carriage adapted to be transformed rapidly into a gun carriage for firing upon aircraft. 1,896,911; Feb. 7.
Metropolitan Edison Company. (See Spangler, Charles H., assignor.)
Meyer, George J., Manufacturing Company. (See Meyer, G. J., and Patitz, assignors.)
Meyer, George J., Milwaukee, Wis., and G. J. Patitz, Peekskill, N. Y., assignors to Geo. J. Meyer Manufacturing Company, Cudahy, Wis. Automatic box loader. 1,896,639; Feb. 7.
Meyer, Philip, assignor to Otto Bernz Co. Inc., Newark, N. J. Plumber's torch. 1,896,782; Feb. 7.
Meyer, Pierre H., New York, N. Y. Counter construction. 1,896,524; Feb. 7

Michel, Clarence A. (See Faige, R. N., Lewellen, and Michel.)
Mid-Continent Petroleum Corporation. (See Bennett, H. T., and Story, assignors.)
Millar, Russell W., Berkeley, assignor to Shell Development Company, San Francisco, Calif. Production of acetylene. 1,896,552; Feb. 7.
Miller, Walter E., Oakland, Calif. Ignition means. 1,896,675; Feb. 7.
Mineralite Corporation. (See Kitsée, Isidor, assignor.)
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heating device. 1,896,413; Feb. 7.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Mohme, Edward H. (See Wylie, E. L., and Mohme.)
Molter, Wm. H., Company. (See Wallis, Zella, assignor.)
Monk, Charles J., and E. F. Rendell, assignors to The Victoria Falls and Transvaal Power Company, Limited, Johannesburg, Transvaal, Union of South Africa. Automatic isolation of parallel three-phase electric power transmission lines. 1,897,009; Feb. 7.
Montgomery, Harry, assignor to The Greenwich Inlaid Linoleum (Frederick Walton's New Patents) Company Limited, London, England. Manufacture of inlaid linoleum and the like. 1,896,967; Feb. 7.
Moore, Charles R. (See Hayford, W. S., and Moore.)
Moore, George C., Company. (See Moore, Thomas F., assignor.)
Moore, Herald R., Fort Wayne, Ind. Piece placer and puller attachment for lathes. 1,896,366; Feb. 7.
Moore, John H., Detroit, Mich. Hanger clamp. 1,896,456; Feb. 7.
Moore, Thomas F., assignor to George C. Moore Company, Westerly, R. I. Elastic fabric. 1,896,783; Feb. 7.
Morgan Construction Company. (See Isley, George H., assignor.)
Morgan Construction Company. (See Merkt, Gustav A., assignor.)
Morgan Engineering Company, The. (See Ball, Harvey W., assignor.)
Morimura Bros. Inc. (See Kaiser, Charles, assignor.)
Morrill, Wayne J., Fort Wayne, Ind., assignor to General Electric Company. Two-speed single phase motor. 1,896,848; Feb. 7.
Morschel, Heinrich, Cologne-Deutz, and W. Luce, Hofheimon-the-Taunus, Germany, assignors to General Aniline Works, Inc., New York, N. Y. 2,7-dihydroxynaphthalene-3,6-dicarboxylic acid. 1,896,457; Feb. 7.
Morse, Albert L., Sanford, Me. Cable cutter. 1,896,912; Feb. 7.
Morton, Joseph R., Steubenville, Ohio. Tool. 1,896,458; Feb. 7.
Mott, Frederick R., Wyncote, assignor of one-third to L. A. Von Seldeneck, Elkins Park, Pa., and one-third to H. Weissinger. Automatic fluid control valve. 1,896,676; Feb. 7.
Mott, Stanley F., Leamington-Hastings, near Rugby, England. Trailer. 1,896,717; Feb. 7.
Mottu, Richard C. (See Wolfe, Oliver P., assignor.)
Moulding, Thomas G., assignor to United Air Cleaner Corporation, Chicago, Ill. Air cleaner. 1,896,640; Feb. 7.
Mueller Co. (See Groeniger, William C., assignor.)
Mulhollen, Scott W., Bellwood, Pa., assignor of one-third to Emory L. Groff, Washington, D. C. Shaving brush. 1,896,589; Feb. 7.
Mullin, Henry A., Westwood, Calif. Oil pressure safety appliance. 1,896,459; Feb. 7.
Mullins Manufacturing Corporation. (See Beman, Ransom H., assignor.)
Mullins Manufacturing Corporation. (See Beman, R. H., and Benson, assignors.)
Multigraph Company. (See Bond, Richard A., assignor.)
Munters, Carl G., Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,896,323; Feb. 7.
Munters, Carl G., Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,896,324; Feb. 7.
Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to Alemite Composition, Chicago, Ill. Lubricating apparatus. 1,896,460; Feb. 7.
Murtaugh, Joseph P., assignor to American Manganese Steel Company, Chicago Heights, Ill. Power actuated dipper. 1,896,414; Feb. 7.
Mushkin, Virginia C., Brooklyn, N. Y. Cap. Des. 89,243; Feb. 7.
Mussey, William H., Chicago, and J. R. Rudulph, Homewood, Ill., assignors, by mesne assignments, to Pullman Car & Manufacturing Corporation. Dump car door. 1,896,367; Feb. 7.
Muth, Friedrich, Elberfeld, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Indephenols and leucoindophenols of the azine series. 1,896,461; Feb. 7.
Myers, Harold L., Morristown, N. J. Display device. 1,896,677; Feb. 7.
Myers, Harold L., Morristown, N. J. Display device for merchandise. 1,896,678; Feb. 7.
Myers, John G., et al. (See Thompson, H. J., and Sulak, assignors.)
Myers, Latimer D., and L. A. Stegemeyer, assignors to The Twitchell Process Company, Cincinnati, Ohio. Degumming silk. 1,896,494; Feb. 7.

Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij. (See Tillmann, Richard, assignor.)
Nagel, Robert E., assignor to Universal Oil Products Company, Chicago, Ill. Dephlegmator. 1,896,245; Feb. 7.
Nasmith, John I., Eltham, assignor to Vickers-Armstrongs Limited, Westminster, England. Wire stitching machine. 1,896,826; Feb. 7.
National Chemical and Mfg. Co. (See Tanner, Wellington L., assignor.)
National Paper Can Company. (See Frostad, George O., assignor.)
National Supply Company, The. (See Mahan, Joseph R., assignor.)
National Washboard Company. (See Gilbert, Harwood J., assignor.)
Naugatuck Chemical Company. (See Watkins, Parke H., assignor.)
Neely, Albert E., assignor to W. C. Ritchie and Company, Chicago, Ill. Assortment dispensing container. 1,896,827; Feb. 7.
Nelson, Henry F., assignor to Clay Prosser, Muncie, Ind. Toy. 1,896,913; Feb. 7.
New Departure Manufacturing Company, The. (See Vuilleumier, Albert, assignor.)
New Jersey Zinc Company, The. (See Bunce, Earl H., assignor.)
New Jersey Zinc Company, The. (See Hooey, William C., assignors.)
Newkirk, John M., Mount Healthy, assignor to Willard Storage Battery Company, Cleveland, Ohio. Hydrometer syringe with lamp attachment. 1,896,553; Feb. 7.
Newman, Delbert F., Schenectady, N. Y., assignor to General Electric Company. Freezing tray. 1,896,849; Feb. 7.
Niagara Sprayer Company. (See Knapp, E., and Allgrunn, assignors.)
Nichterlein, Paul, assignor to the Firm Carl Zeiss, Jena, Germany. Device for gauging bolt threads. 1,896,828; Feb. 7.
Nietsche, Hans E., Detroit, Mich. Power transmission apparatus. 1,896,462; Feb. 7.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Sleeve valve engine. 1,896,094; Feb. 7.
Niven, Archie M., Detroit, Mich., assignor, by mesne assignments, to Continental Aircraft Engine Company, Internal combustion engine. 1,896,095; Feb. 7.
Noeggerath, Jacob E., Berlin, Germany. Electrode vessels for electrolytic apparatus. 1,896,718; Feb. 7.
Nolan, Harold O., New York, N. Y., assignor of one-third to Ellis-Foster Company, Montclair, N. J. Marine oil product and making same. 1,896,185; Feb. 7.
Noonan, Vincent W., La Salle, Ill. Building construction. 1,896,325; Feb. 7.
North American Car Corporation. (See Kopsa, J., and Brigham, assignor.)
Northway-Ley, John R., Bishopston, Bristol, assignor to E. S. & A. Robinson, Limited, Bristol, England. Container or box for fragile articles. 1,896,326; Feb. 7.
Norton, Harry R., deceased, New York, N. Y.; M. E. Norton and A. G. Blair, administrators, assignors, by mesne assignments, to Westinghouse Electric Elevator Company, Chicago, Ill. Position and direction indicator for elevators. 1,896,784; Feb. 7.
Norton, Karl B. (See Tressler, D. K., and Norton.)
Norton, Mary E., et al, administrators. (See Norton, Harry R.)
Norviel, Harry E., deceased, assignor to Delco-Remy Corporation, by Anderson Banking Company, Anderson, Ind. Coil-switch unit. 1,896,143; Feb. 7.
Nunn, Arthur L., Fullerton, Calif. Baseball game board. Des. 89,205; Feb. 7.
O'Brien, James R., Chicago, Ill., assignor, by mesne assignments, to Rubber Products Corporation, Dover, Del. Road marker. 1,896,641; Feb. 7.
O-Cedar Corp'n. (See Hall, Edward B., jr., assignor.)
O'Donnell, Elmer C., New York, N. Y. Signal device for vehicles. 1,896,495; Feb. 7.
Offerman, Louis, Brooklyn, N. Y. Cigarette holder. 1,896,463; Feb. 7.
Ohio Instrument Manufacturing Company, The. (See Bates, Charles F. W., assignor.)
Ohl, Russell S., Little Silver, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Modulating device. 1,896,785; Feb. 7.
Oil Corporation of America. (See Darlington, Homer T., assignors.)
Oil Field Appliance Company. (See Parkin, Henry W., assignor.)
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Locking device. 1,896,679; Feb. 7.
Olson, John, administrator. (See Hentschel, Ernest R.)
Oneida Community, Limited. (See Allen, G. N., and Bennett, assignors.)
O'Neil, Arthur S., Alton, assignor to Western Cartridge Company, East Alton, Ill. Making nitrocellulose powders. 1,896,642; Feb. 7.
O'Neill, Frank, Toledo, Ohio. Submerged stirrer. 1,896,327; Feb. 7.
Oppenheim, René, assignor to Société Anonyme le Carbone, Gennevilliers, France. Gasoline atomizer for internal combustion engines. 1,896,786; Feb. 7.
Otis Elevator Company. (See Dunn, Edward L., assignor.)
Otis, Russell M. (See Burns, B., Lewis, and Otis.)

Ottawa River Paper Company. (See Richards, Ralph N., assignor.)
Otto, Albert R., & Sons. (See Ter Meer, Gustav, assignor.)
Outserts, Inc. (See Brown, Robert R., assignor.)
Overmeyer, John, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,206; Feb. 7.
Overmeyer, John, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,244; Feb. 7.
Owens, Freeman H., New York, N. Y. Film printing apparatus. 1,896,246; Feb. 7.
Owens-Illinois Glass Company. (See Fuerst, Edwin W., assignor.)
P & M Company. (See Warr, Harold G., assignor.)
Packard Motor Company. (See Woolson, Lionel M., assignor.)
Page & Hill Co. (See Farnam, Julian P., assignor.)
Page, Ralph E. (See Daly, G. F., and Page.)
Page, Robert M., Washington, D. C. Frequency division circuit. 1,896,417; Feb. 7.
Palmer, Bruce, U. S. Army, Fort Riley, Kans. Gun mount. 1,896,186; Feb. 7.
Palmer, Floyd L., Waverly, assignor to The Lundin Electric & Machine Co., Boston, Mass. Incandescent lamp socket remover. 1,896,680; Feb. 7.
Palmer, Harry G., Hamden, assignor to The Andrew B. Hendryx Company, New Haven, Conn. Bird cage. 1,896,097; Feb. 7.
Palmer, Stephen L., Teaneck, N. J. Hollow rubber article and making the same. 1,897,025; Feb. 7.
Pantone Corporation. (See Trist, Arthur R., assignor.)
Paoli, Arthur, Ironwood, Mich. Banana protector. Re18,728; Feb. 7.
Parker, George H., Hiawatha, Kans. Telescoping feed trough. 1,896,096; Feb. 7.
Parkhill, Wilson, et al. (See Thomson, George H., assignor.)
Parkin, Henry W., Los Angeles, Calif., assignor to Oil Field Appliance Company, Ltd. Pump barrel and plunger. 1,896,719; Feb. 7.
Patent Button Company, The. (See Carley, Leonard R., ass gnor.)
Patitz, Gerhardt J. (See Meyer, G. J., and Patitz.)
Paton, Clyde R., assignor to The Studebaker Corporation, South Bend, Ind. Clutch. 1,896,914; Feb. 7.
Paton, Clyde R., assignor to The Studebaker Corporation, South Bend, Ind. Clutch. 1,896,968; Feb. 7.
Paton, Clyde R., Birmingham, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Vibration damping device. 1,896,969; Feb. 7.
Patterson, William L., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Otoscope. 1,896,720; Feb. 7.
Pauly, Robert C., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Pressing machine. 1,896,496; Feb. 7.
Peake, Edward S., East Columbus, assignor to The Kilgore Manufacturing Company, Westerville, Ohio. Toy pistol. Des. 89,207; Feb. 7.
Pearson, Gustav C., assignor to Gardner-Denver Company, Denver, Colo. Lubricator. 1,896,368; Feb. 7.
Pease, Anthony Equipment Co. (See Anthony, Alfred W., jr., assignor.)
Peckham, Charles E., Chicago, Ill. Retaining device. 1,896,681; Feb. 7.
Peirce, John R., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y. Accounting machine. 1,896,554; Feb. 7.
Peirce, John R., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y. Rotary printing machine. 1,896,555; Feb. 7.
Peiseler, Alfred, Remscheid-Haddenbach, Germany. Apparatus for the production of files and file casings. 1,896,199; Feb. 7.
Peo, Howard J., Rochester, N. J. Game of skill. 1,896,915; Feb. 7.
Perfection Appliances Inc. (See Bossie, Charles S., assignor.)
Perley, George A., Durham, N. H. Making commercial hydrogen. 1,896,916; Feb. 7.
Perrine, Emmett B., Los Angeles, Calif., assignor to Perrine Manufacturing Co., Minneapolis, Minn. Automatic fishing reel brake. 1,896,369; Feb. 7.
Perrine Manufacturing Co. (See Perrine, Emmett B., assignor.)
Perry, Charles L., Schenectady, N. Y., assignor to General Electric Company. Notching mechanism. 1,896,850; Feb. 7.
Person, Albert W. (See Hubbell, C. J., and McCauley, assignors.)
Peter, Leslie H., London, England, assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling apparatus. 1,896,370; Feb. 7.
Petersen, Henry C. (See White, W., Petersen, and Lansmith.)
Peterson, Edwin A., Maywood, Ill. Toy vehicle. Des. 89,245; Feb. 7.
Petersson Alloys Limited. (See Petersson, Harry, assignor.)
Petersson, Harry, assignor, by mesne assignments, to Petersson Alloys Limited, Montreal, Quebec, Canada. Making tungsten alloys. 1,896,643; Feb. 7.
Pfau, Arnold, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Hydraulic turbine. 1,896,644; Feb. 7.
Pfauser, Edward M., assignor to Blackhawk Manufacturing Company, Milwaukee, Wis. Couplings for socket wrenches. 1,896,645; Feb. 7.
Pfizer, Charles, & Company. (See Currie, J. N., and Carter, assignors.)
Phelps, Edward G. (See Phelps, Hugh G., assignor.)
Phelps, Hugh G., assignor of one-half to E. G. Phelps, Milwaukee, Wis. Remote control apparatus. 1,896,418; Feb. 7.
Phelps, John S., Whittier, Calif. Roller type stamping machine. 1,896,556; Feb. 7.
Philips, Hans A., Stratford, Conn., assignor to American Fabrics Company. Garter and making the same. 1,896,646; Feb. 7.
Phillips, Oron N., Reynolds, Ill. Gear pump. 1,896,970; Feb. 7.
Pieper, Alphonse F., Rochester, N. Y. Housing for lamp for surgical work and the like. Des. 89,208; Feb. 7.
Pierce-Arrow Motor Car Company, The. (See Hughes, James R., assignor.)
Pierce, Robert M. (See Hunter, C. R., and Pierce.)
Pierce, Robert M. (See Smith, C. C., Hunter, and Pierce.)
Pinson, William L., Barboursville, assignor to C. L. Harshbarger, Milton, W. Va. Self-propelled vehicle. 1,896,419; Feb. 7.
Pirinoli, Guglielmo, assignor to Fiat Società Anonima, Turin, Italy. Carburetor. 1,896,557; Feb. 7.
Place, Bion C., assignor of one-half to G. E. Gagnier Detroit, Mich. Trim panel and making same. 1,896,200; Feb. 7.
Place, Bion C., assignor of one-half to G. E. Gagnier, Detroit, Mich. Fastener. 1,896,590; Feb. 7.
Platt Brothers and Company Limited. (See Wilkinson, H., and Roe, assignors.)
Plunkett, John J., Boston, Mass. Target. 1,896,591; Feb. 7.
Plykrome Corporation, The. (See Maskrey, Alfred E., assignor.)
Pneumatic Conveyance & Extraction (1929) Limited. (See Smith, William A., assignor.)
Pohl, Theodor, Wriezen (Oder), assignor to Frida Franke, Berlin-Wilmersdorf, Germany. Electrical transformer for special purposes. 1,896,328; Feb. 7.
Pollock, Benjamin H., Jenkintown, and J. H. Sheard, assignors to David Lupton's Sons Company, Philadelphia, Pa. Window. 1,897,010; Feb. 7.
Potter, John, Elizabeth, Ill. Chain locking device. 1,896,592; Feb. 7.
Powerlite Switchboard Company, The. (See Jirka, J. F., McCurdy, Slager, and Ernest, assignors.)
Poyer, Guy R., Wichita, Kans. Adjustable compression chamber. 1,896,098; Feb. 7.
Pratt, Goodrich B. (See Barber, G. H., Stimson, and Pratt.)
Prosser, Clay. (See Nelson, Henry F., assignor.)
Prudente, John A., and R. T. Iula, Ardmore, Pa. Cooling apparatus. 1,896,787; Feb. 7.
Pullman Car & Manufacturing Corporation. (See Mussey, W. H., and Rudulph, assignors.)
Pullman Company, The. (See Hollands, Harold W., assignor.)
Pullwitt, Herman P., Oak Park, assignor to McIntosh Electrical Corporation, Chicago, Ill. Electrothereapeutic system and apparatus therefor. 1,896,647; Feb. 7.
Purcell, Thomas E., Pittsburgh, Pa., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,896,593; Feb. 7.
Putnam, Joseph F., Berkeley, assignor to Standard Oil Company of California, San Francisco, Calif. Separating emulsions. 1,897,011; Feb. 7.
Pyles, Robert M., Bakersfield, assignor of one-half to James A. Kammerdiner, Los Angeles, Calif. Line tightener. 1,896,415; Feb. 7.
Pyzel, Frederic M., Piedmont, assignor to Shell Development Company, San Francisco, Calif. Producing hydrogen. 1,896,420; Feb. 7.
Quarnstrom, Bert L., Grosse Pointe Park, assignor to Bundy Tubing Company, Detroit, Mich. Tube and coupling. 1,896,371; Feb. 7.
Quarnstrom, Bert L., Grosse Point Park, assignor to Bundy Tubing Company, Detroit, Mich. Apparatus for making tube. 1,896,416; Feb. 7.
Quick, Alfred A., Thornbury, Victoria, assignor to The X-Engine Company Limited, Melbourne, Victoria, Australia. Toothed transmission gearing. 1,896,099; Feb. 7.
Quivey, George W., Tacoma, Wash. Lubricator. 1,896,421; Feb. 7.
Radalj, Tony. (See Lambert, Garrett, assignor.)
Raden, Leon A., and A. Joze, Chicago, Ill. Game cabinet or similar article. Des. 89,246; Feb. 7.
Radio Corporation of America. (See Hanson, Oscar B., assignor.)
Railway Engineering Equipment Company. (See Brock, Edison, assignor.)
Raule, Clifford T., Brookline, Pa. Reversing mechanism for machine tools. 1,896,752; Feb. 7.
Ravlin, Frederick F., Miami, Fla. Removable service tray and support therefor. 1,896,971; Feb. 7.

Rawson, Leslie A., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Oil pumping apparatus. 1,896,558; Feb. 7.
Raynolds, David W., and P. J. Schwarzhaupt, Scotia, N. Y., assignors to General Electric Company. Sound recording apparatus. 1,896,851; Feb. 7.
Raytheon Production Corporation. (See Spencer, John A., assignor.)
Redmond, Albert G., Flint, Mich. Electric motor. 1,896,972; Feb. 7.
Reece Button Hole Machine Company, The. (See Kiewicz, John, assignor.)
Reichert, Otto. (See Hagedorn, M., Reichert, and Guhring.)
Reiman, Paul, assignor to Sunbury Converting Works, Inc., New York, N. Y. Textile fabric or similar article. Des. 89,209; Feb. 7.
Remington Rand Inc. (See Stuart, Nicholas H., assignor.)
Rendell, Edward F. (See Monk, C. J., and Rendell.)
Renfrew, Paul B., assignor to S. F. Browser & Company, Inc., Fort Wayne, Ind. Machine for manufacturing filter ribbon. 1,896,122; Feb. 7.
Renner, Eugene B. (See White, L. O., and Renner.)
Resinous Product & Chemical Co. Inc., The. (See Bruson, Herman A., assignor.)
Ressler, Wm. E. (See Heitzman, Richard J., assignor.)
Rettich, Kurt, Toledo, Ohio, assignor, by mesne assignments, to The Reynolds Spring Company, Jackson, Mich. Box. Des. 89,210; Feb. 7.
Rettich, Kurt, Toledo, Ohio, assignor, by mesne assignments, to The Reynolds Spring Company, Jackson, Mich. Cork. Des. 89,211; Feb. 7.
Reyes, Hermenegildo C., Manila, Philippine Islands. Root anchoring means. 1,896,422; Feb. 7.
Reynolds Spring Company, The. (See Rettich, Kurt, assignor.)
Ricard, Eiol, and H. M. Guinot, assignors to Societe Anonyme des Distilleries des Deux-Sèvres, Melle, France. Manufacture of anhydrous formic acid. 1,896,100; Feb. 7.
Ricard, Eiol, and H. M. Guinot, assignors to Societe Anonyme des Distilleries des Deux-Sevres, Melle, France. Saccarification of wood and other cellulosic materials. 1,896,753; Feb. 7.
Richards, Ralph N., assignor to Ottawa River Paper Company, Toledo, Ohio. Combination shipping case and display stand. 1,896,721; Feb. 7.
Richardson, Allan S., Butte, Mont. Water cooling apparatus. 1,896,202; Feb. 7.
Richardson Company, The. (See Rieser, Oliver O., assignor.)
Richter, Charles J., Berwyn, Ill., assignor to Goss Printing Press Company. Web controlling mechanism. 1,896,801; Feb. 7.
Richter, Charles J., Berwyn, Ill., assignor to Goss Printing Press Company. Web controlling mechanism. 1,896,802; Feb. 7.
Ridge Tool Company, The. (See Thewes, William O., assignor.)
Rieser, Oliver O., Oak Park, Ill., assignor to The Richardson Company, Lockland, Ohio. Battery box mold. 1,896,372; Feb. 7.
Riley Stoker Corporation. (See Armour, James W., assignor.)
Ritchie, W. C., and Company. (See Neely, Albert E., assignor.)
Roberts, Erwin J., Newark, N. J. Swimming pedal. 1,896,373; Feb. 7.
Robertson, John H. (See Cox, S. F., and Robertson.)
Robinson, E. S., & A., Limited. (See Northway-Ley, John R., assignor.)
Robinson, Joseph, New York, N. Y. Automatic train pipe connecter. 1,896,917; Feb. 7.
Robinson, Joseph, New York, N. Y. Automatic train pipe connecter. 1,896,918; Feb. 7.
Robinson, Joseph, New York, N. Y. Automatic train pipe connecter. 1,896,919; Feb. 7.
Rockwell, Edward A., Long Island City, N. Y. Fluid pressure brake. 1,896,374; Feb. 7.
Rockwell, Edward A., Chicago, Ill. Linkage control for power brakes. 1,896,376; Feb. 7.
Rockwell, Edward A., Chicago, Ill. Oil seal. 1,896,378; Feb. 7.
Rockwell, Edward A., and M. Garancher, Chicago, Ill. Power brake unit. 1,896,377; Feb. 7.
Roe, Arthur. (See Wilkinson, H., and Roe.)
Roesen, Oscar C., Brooklyn, assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Web registering means. 1,896,375; Feb. 7.
Roller, Lyman L. (See Haubert, Leo, assignor.)
Ronci, Victor L., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electron discharge device. 1,896,464; Feb. 7.
Ronning, Adolph, et al., executors. (See Ronning, Andrean G.)
Ronning, Andrean G., deceased; A. and J. A. Ronning, Minneapolis, Minn., joint executors. Engine. 1,896,754; Feb. 7.
Ronning, Jacob A., et al., executors. (See Ronning, Jacob A.)
Roos, Edward, River Forest, Ill. Cedar chest. 1,896,829; Feb. 7.
Root, Frank B., East Orange, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Wrinkle coating. 1,896,594; Feb. 7.
Rosatelli, Celestino, assignor to Fiat Società Anonima, Turin, Italy. Aircraft door. 1,896,208; Feb. 7.
Rosenberg, Heyman. (See Hahn, Oskar, assignor.)
Ross, Frederick N., Detroit, Mich. Air circulator. Des. 89,212; Feb. 7.
Ross, James C., Los Angeles, Calif. Sterilizing apparatus. 1,896,379; Feb. 7.
Ross, Robert G., assignor to Mae Ellis, Charlotte, N. C. Wardrobe. 1,896,428; Feb. 7.
Rubber Process Corporation. (See Bigger, Andrew F., assignor.)
Rubber Process Corporation. (See Bigger, A. F., and Squires, assignors.)
Rubber Products Corporation. (See O'Brien, James R., assignor.)
Rubber Service Laboratories Company. (See Behrend, Oswald, assignor.)
Rubber Service Laboratories Company. (See Ingram, Joseph R., assignor.)
Ruben Rectifier Corporation. (See Ruben, Samuel, assignor.)
Ruben, Samuel, New York, N. Y., assignor to Ruben Rectifier Corporation, Englewood, N. J. Electric current rectifier. 1,896,101; Feb. 7.
Rubidge, David W., Pittsfield, Mass., assignor, by mesne assignments, to Underwood Elliott Fisher Company. Typewriting machine. 1,896,465; Feb. 7.
Ruchin, Zan, Bay-Shore, N. Y. Revolving window-sash. 1,896,559; Feb. 7.
Rudolph, Corrie F. (See Gebhard, L. A., and Rudolph.)
Rudorff, Dagobert W., assignor to The Superheater Company, New York, N. Y. Desuperheating system. 1,896,247; Feb. 7.
Rudulph, Julian R. (See Mussey, W. H., and Rudulph, assignors.)
Ruppel, Frederick C., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Closure for radiators and the like. 1,896,329; Feb. 7.
Ruppel, Frederick C., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Closure for radiators and the like. 1,896,330; Feb. 7.
Ruskin, Henry, Chicago, Ill. Fuse plug. 1,896,248; Feb. 7.
Russell, Frederick B., Coatesville, Pa., assignor to Bethlehem Steel Company. Carrier. 1,896,249; Feb. 7.
Russell Manufacturing Co. (See Russell, Roslyn V. H., assignor.)
Russell, Roslyn V. H., Niagara Falls, assignor to Russell Manufacturing Co., New York, N. Y. Contact finger for electrical controllers and switches. 1,896,560; Feb. 7.
Rutenberg, Abraham, Haifa, Palestine. Molding of concrete and like pipes. 1,896,973; Feb. 7.
Ruth, William J., Toronto, Ontario, Canada. Knee pad. 1,896,561; Feb. 7.
Rutherford, Phillip M., Jacksonville, Tex. Machine for cleaning fabrics. 1,896,424; Feb. 7.
Ruthsaccumulator Aktiebolag. (See Hellborg, Rune, assignor.)
S. M. A. Corporation. (See Germann, Albert F. O., assignor.)
Safety Car Heating & Lighting Company, The. (See Godsey, Frank W., jr., assignor.)
Sailler, John W., assignor to Chrysler Corporation, Detroit, Mich. Wheel balancing. 1,896,974; Feb. 7.
Salamone, Santo. (See Bonaccorsi, Joseph J., assignor.)
Sanders, Rufus C., and C. L. Humphrey, assignors to Chrysler Corporation, Detroit, Mich. Pedal. 1,896,975; Feb. 7.
Sargent, Donald E., assignor to William & Matilda Sparks Foundation, Inc., Jackson, Mich. Artificial cascade stairway. Des. 89,213; Feb. 7.
Sargent & Greenleaf, Inc. (See Diesel, William F., assignor.)
Sargent, William D., West Orange, N. J., and C. G. Keller, Poughkeepsie, N. Y.; said Sargent assignor to Durafer (Inc.), Dover, Del. Vehicle wheel. 1,896,803; Feb. 7.
Saunders, Edward R. (See Davis, C. F., and Saunders.)
Saxton, Ellsworth E., Bremerton, Wash. Collapsible umbrella. 1,896,722; Feb. 7.
Scarfi, Anthony, Brooklyn, N. Y. Envelope. 1,896,425; Feb. 7.
Scarlett, Robert L., Musselburgh, Scotland. Seed-sowing implement. 1,896,562; Feb. 7.
Schacht, Clifford A., Huntington, Ind. Antisplasher. 1,896,204; Feb. 7.
Schaefer, Eugene. (See Weber, F. W., and Schaefer.)
Schaer, Charles, Langenthal, assignor to Sulzer Frères Société Anonyme, Winterthur, Switzerland. Internal combustion engine, more particularly for the propulsion of vehicles. 1,896,852; Feb. 7.
Scharff, Franz, assignor to the Firm Carl Zeiss, Jena, Germany. Device for influencing by means of a ray projector a cell sensitive to light. 1,896,830; Feb. 7.
Schaum, Fletcher, assignor to Fletcher Works, Incorporated, Philadelphia, Pa. Centrifugal. 1,896,466; Feb. 7.
Scheiber, Johannes, Leipsig, Germany. Treatment of fatty oils. 1,896,467; Feb. 7.
Schifferdecker, August, Brooklyn, N. Y. Container. 1,896,976; Feb. 7.
Schlib, Theodore W. (See Logue, P., and Schlib.)
Schirmer, Rens E., et al. (See Schirmer, Rens E., assignor.)

Schirmer, Rens E., assignor, by mesne assignments, to R. E. Schirmer, Newton Center, and L. L. Witter, Boston, Mass. Molding method and apparatus. 1,897,023; Feb. 7.

Schmerheim, John F., assignor to The Kay Machinery Company, Cleveland, Ohio. Machine for cutting ice cream blocks. 1,896,788; Feb. 7.

Schmidt, Carl, Baerl, Germany. Machine for manufacturing hollow rotary elements from circular blanks of sheet metal. 1,896,426; Feb. 7.

Schmitz, Helmuth. (See Broche, H., and Schmitz.)

Schneider & Cie. (See Methlin, Nicolas E., assignor.)

Schneider, John F. (See Beaubien, P. D., Schneider, and Dupont.)

Schnell, Douglas S., Fort Thomas, Ky., and R. C. Fryer, Mount Washington, Ohio, assignors to Westinghouse Electric and Manufacturing Company. Means for testing watthour meters. 1,896,735; Feb. 7.

Schnell, Steve. (See Dick, B., and Schnell.)

Schumacher Corporation, The. (See Espenschied, Virgil F., assignor.)

Schwab, Robert W., assignor to Southern Spring Bed Company, Atlanta, Ga. Display stand. Des. 89,214; Feb. 7.

Schwartz, Stephen, Calumet City, assignor to Jenkins Petroleum Process Company, Chicago, Ill. Producing motor fuel. 1,896,723; Feb. 7.

Schwarzhaupt, Paul J. (See Raynolds, D. W., and Schwarzhaupt.)

Schweitzer, Heinrich, New York, N. Y. Wax dental form and making same. 1,896,123; Feb. 7.

Schweiz Lokomotiv- & Maschinenfabrik. (See Dürig, Alfred, assignor.)

Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,215; Feb. 7.

Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,216; Feb. 7.

Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,248; Feb. 7.

Scott, Chester A., assignor to Deister Concentrator Company, Fort Wayne, Ind. Screen for granular materials. 1,896,595; Feb. 7.

Scott, Donald M., assignor to Buffalo Electric Furnace Corporation, Buffalo, N. Y. Apparatus for reducing chrome ores. 1,896,789; Feb. 7.

Scott, Floyd L. (See Fletcher, H. W., and Scott.)

Scott, Floyd L., Houston, Tex. Cutter for well drills. 1,896,251; Feb. 7.

Scott, Floyd L., assignor to Hughes Tool Company, Houston, Tex. Lubricator coupling. 1,896,250; Feb. 7.

Scott Paper Company. (See Clemence, Norman, assignor.)

Seddon, Robert S., White Plains, N. Y. Machine for producing bias weave fabric. 1,896,596; Feb. 7.

Seely, Thomas H., Melrose, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Splitting machine. 1,896,187; Feb. 7.

Segal Lock & Hardware Co. Inc. (See Hines, John, assignor.)

Segelhorst, August L., and E. L. Launder, Huntington Beach, Calif. Welding and cutting apparatus. 1,896,497; Feb. 7.

Selden Company, The. (See Jaeger, Alphons O., assignor.)

Selden Research & Engineering Corporation, The. (See v. d. Luft, Oscar, assignor.)

Selvester, Arnold E., Korvel, Calif. Hitch. 1,896,427; Feb. 7.

Sersté, Jacques E., Laeken-Brussels, Belgium. Internal combustion engine. 1,896,102; Feb. 7.

Sessions, Donald W., Finchley, London, England. Lifting jack for vehicles. 1,896,977; Feb. 7.

Severin, Walter F., Evanston, Ill., assignor to Intertype Corporation, Brooklyn, N. Y. Metal pot for typographical machines. 1,897,012; Feb. 7.

Shakeproof Lock Washer Company. (See Olson, Carl G., assignor.)

Shakeproof Lock Washer Company. (See Trotter, George C., assignor.)

Shanklin, Vern E., Dallas, Tex. Masonry facing construction. 1,896,188; Feb. 7.

Shantz, Allan B., Toronto, Ontario, Canada. Hydraulic brake. 1,896,103; Feb. 7.

Shapiro, Peter, New York, N. Y. Street marker. 1,896,920; Feb. 7.

Sheard, Joseph H. (See Pollock, B. H., and Sheard.)

Shell Development Company. (See Millar, Russell W., assignor.)

Shell Development Company. (See Pyzel, Frederic M., assignor.)

Sherman, John Q., Dayton, Ohio. Manifolding paper. 1,897,013; Feb. 7.

Sherman, William R., Newman, Calif. Irrigation gate. 1,896,331; Feb. 7.

Shizuoka Boeki Kabushiki Kaisha. (See Suzuki, Saburo, assignor.)

Shoemaker, Harry, Jersey City, N. J., assignor, by mesne assignments, to P. R. Mallory & Co., Incorporated, Indianapolis, Ind. Alternating current rectifying system. 1,896,468; Feb. 7.

Shuss, Cloyd A., assignor to The Oscar T. Smith & Son Company, Baltimore, Md. Construction of books. 1,897,024; Feb. 7.

Siemens & Halske Aktiengesellschaft. (See Gehrts, August, assignor.)

Silica Products Company. (See Cross, Roy, assignor.)

Sill, Mary U., Baltimore, Md. Clock. Des. 89,217; Feb. 7.

Silverman, Charles, Providence, R. I. Collar holder. Des. 89,218; Feb. 7.

Silverman, Charles, Providence, R. I. Collar holder. Des. 89,219; Feb. 7.

Silverman, Charles, Providence, R. I. Collar holder. Des. 89,220; Feb. 7.

Simmons, Richard P., New York, N. Y. Cement lining for oil wells. 1,896,104; Feb. 7.

Simmons, Richard P., New York, N. Y. Percussive well drilling apparatus. 1,896,105; Feb. 7.

Simmons, Richard P., New York, N. Y. Core barrel well drilling apparatus. 1,896,106; Feb. 7.

Simmons, Richard P., New York, N. Y. Underreamer well drilling apparatus. 1,896,107; Feb. 7.

Simmons, Richard P., New York, N. Y. Cutter head for well drills. 1,896,109; Feb. 7.

Simmons, Richard P., New York, N. Y. Making wells. 1,896,110; Feb. 7.

Simmons, Richard P., New York, N. Y. Maintaining oil wells in flowing condition and conserving the natural gas supply thereof. 1,896,111; Feb. 7.

Simmons, Richard P., New York, N. Y. Constructing and operating oil wells. 1,896,112; Feb. 7.

Simmons, Richard P., Laurelton, Long Island, N. Y. Well pumping apparatus. 1,896,108; Feb. 7.

Simon, Forest C., assignor to The French Oil Mill Machinery Company, Piqua, Ohio. Cake molding or forming machine. 1,896,563; Feb. 7.

Simon, Forest C., assignor to The French Oil Mill Machinery Company, Piqua, Ohio. Latch mechanism for cake formers and the like. 1,896,564; Feb. 7.

Simpson, Adele S., New York, N. Y., assignor to Associated Merchandising Corporation, New York, N. Y. Dress. Des. 89,247; Feb. 7.

Simpson, James R., Wisconsin Rapids, Wis. Spreader. 1,896,205; Feb. 7.

Simpson, Jesse W., Anderson, S. C., assignor to Draper Corporation, Hopedale, Mass. Filling detector for looms. 1,896,332; Feb. 7.

Singer Manufacturing Company, The. (See Vollman, Joseph, assignor.)

Slager, Ernest. (See Jirka, J. F., McCurdy, Slager, and Ernest.)

Sleeman, Harold P., assignor to The R. Thomas & Sons Company, East Liverpool, Ohio. Apparatus for protecting power-line insulators. 1,896,189; Feb. 7.

Sloan, Robert J., Elmhurst, N. Y. Furnace. 1,896,252; Feb. 7.

Smith, Algy J., assignor to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for the manufacture of blown glassware. 1,896,870; Feb. 7.

Smith, Chalmers C., C. R. Hunter, and R. M. Pierce, Los Angeles, Calif., assignors to Universal Pictures Corporation, Universal City, Calif. Film processing machine and method. 1,896,526; Feb. 7.

Smith, Clarence A., 2d, Westtown, assignor of one-half to G. Massena, Philadelphia, Pa., and A. V. Du Pont, Wilmington, Del. Pencil pointer. 1,896,253; Feb. 7.

Smith, Franklin S., Brooklyn, N. Y. X-ray apparatus. 1,896,206; Feb. 7.

Smith, H. B., Company, The. (See Smith, Stanley K., assignor.)

Smith, Hazor J., assignor to Superstat Company, Springfield, Mass. Condition control apparatus. 1,896,207; Feb. 7.

Smith, John L., Cohasset, Mass. Tree and wire protector. 1,896,921; Feb. 7.

Smith, Joseph J., Deep River, Conn. Tool. 1,896,979; Feb. 7.

Smith, Julian C., and H. T. Bellamy, Chicago, Ill.; said Smith assignor, by mesne assignments, to said Bellamy. Manufacture of porous structures. 1,896,190; Feb. 7.

Smith, Oscar T., & Sons Company, The. (See Shuss, Cloyd A., assignor.)

Smith, Ralph E., assignor to The Gallon Metallic Vault Co., Gallon, Ohio. Detachable body. 1,896,254; Feb. 7.

Smith, Stanley K., assignor to The H. B. Smith Company, Westfield, Mass. Closure. 1,896,804; Feb. 7.

Smith, William A., Manchester, assignor to Pneumatic Conveyance & Extraction (1929) Limited, London, England. Air-control valve for pneumatic conveyers. 1,896,597; Feb. 7.

Smithers, LeRoy S., Woodhaven, N. Y., assignor to Dayton Scale Company, Dayton, Ohio. Scales. 1,896,255; Feb. 7.

Snow, Norman L., New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,896,565; Feb. 7.

Societe Anciens Etablissements A. Combe & Fils & Cie. (See Friedman, Charles S., assignor.)

Societe Anonyme des Distilleries des Deux-Sevres. (See Ricard, E., and Guinot, assignors.)

Société Anonyme le Carbone. (See Oppenheim, René, assignor.)

Society of Chemical Industry in Basle. (See Haller, R., and Heckendorn.)

Society of Chemical Industry in Basle. (See Jaeck, W., and Lang, assignors.)

Socony-Vacuum Corporation. (See Counce, Harlan R., assignor.)

Sohn, John, Deadwood, S. Dak. Camera finder. 1,896,428; Feb. 7.

Soll, Arthur, Compton, Calif., assignor of thirty-seven and one-half percent to L. A. Larson and twenty-five per cent to S. C. Bever, Burley, Ohio. Telescoping core-drill. 1,896,469; Feb. 7.

Solomon, Sophia, Brooklyn, assignor to Joseph Berlinger Company, New York, N. Y. Textile fabric. Des. 89,221; Feb. 7.

Sonoco Products Company. (See Dunlap, Charles K., assignor.)

Southern Spring Bed Company. (See Schwab, Robert W., assignor.)

Southwick, Charles A., jr., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Receptacle and closure therefor. 1,896,144; Feb. 7.

Spalding, Charles W., administrator. (See Brown, John S.)

Spalding, James E., Collinsville, Ill. Apparatus for forming ice cubes. 1,896,756; Feb. 7.

Spangler, Charles H., assignor to Metropolitan Edison Company, Reading, Pa. Prong-type holder for safety testing devices. 1,896,598; Feb. 7.

Sparano, Gennaro, Philadelphia, Pa. Rumble seat top. 1,896,980; Feb. 7.

Sparklin, Charles H., Topeka, Kans. Condensation meter. 1,896,429; Feb. 7.

Sparks, William & Matilda, Foundation, Inc. (See Sargent, Donald E., assignor.)

Sparks-Withington Company, The. (See Winchell, Arthur B., assignor.)

Speer, James A., Wichita, Kans. Piston. 1,896,124; Feb. 7.

Spencer, Hugh M., assignor to The Upson Company, Lockport, N. Y. Building material and making the same. 1,896,689; Feb. 7.

Spencer, John A., assignor to Raytheon Production Corporation, Newton, Mass. Stem and making same. 1,896,599; Feb. 7.

Spencer, Owen H., Indianapolis, Ind. Engine charger. 1,896,256; Feb. 7.

Spencer, Owen H., Indianapolis, Ind. Cooling means for engine structure and cylinder heads therefor. 1,896,257; Feb. 7.

Sperry, Elmer A., jr., Brooklyn, N. Y., and B. A. Wittkuhns, Chatham, N. J., assignors to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Directional radio steering device. 1,896,805; Feb. 7.

Sperry Gyroscope Company, Inc. (See Sperry, E. A., jr., and Wittkuhns, assignors.)

Sponable, Earl I., assignor to Fox Case Corporation, New York, N. Y. Film splicing machine. 1,896,871; Feb. 7.

Square D Company. (See Van Valkenburg, Hermon L., assignor.)

Squires, Arthur C. (See Bigger, A. F., and Squires.)

Stanawitz, Alexander V., Perth Amboy, N. J. Clothespin box. 1,896,430; Feb. 7.

Standard-Johnson Company. (See Donnellan, Edward P., assignor.)

Standard Motor Products, Inc. (See Yoerger, Frank, assignor.)

Standard Oil Company. (See Cash, Gentry, assignor.)

Standard Oil Company of California. (See Putnam, Joseph F., assignor.)

Standard Oil Development Company. (See Steik, Karl T., assignor.)

Standish, John F., Winthrop, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel-attaching machine. 1,896,125; Feb. 7.

Staud, Cyril J., and C. S. Webber, assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose acetate composition. 1,896,145; Feb. 7.

Steere, Edward H., assignor to Dixie Manufacturing Company, Inc., Rockwood, Tenn. Knitting machine. 1,896,431; Feb. 7.

Stegemeyer, Lou A. (See Myers, L. D., and Stegemeyer.)

Steik, Karl T., Elizabeth, N. J., assignor to Standard Oil Development Company. Treatment of oil. 1,896,470; Feb. 7.

Stein, William, Evansville, Ind. Feeding apparatus for mill rolls. 1,896,724; Feb. 7.

Sterling Button Co. (See Holstein, Sol, assignor.)

Sterner-Rainer, Roland, Heilbronn-on-the-Neckar, Germany, assignor to American Lurgi Corporation, New York, N. Y. Separating oxides and gases from molten aluminium and aluminium alloys. 1,896,201; Feb. 7.

Steuernagel, Hugo V., East Hartford, Conn. Clamp carrying machine. 1,896,113; Feb. 7.

Stewart-Warner Corporation. (See Tice, Percival S., assignor.)

Stieff, Chas. M., Inc. (See Bertran, Edward M., assignor.)

Stimson, Frank G. (See Barber, G. H., Stimson, and Pratt.)

Stirn, L. & E., Inc. (See Cohen, William, assignor.)

Stone, Albert A., Deptford, London, England. Mechanical movement. 1,896,732; Feb. 7.

Story, LeRoy G. (See Bennett, H. T., and Story.)

Strachan, Thomas H., assignor to Dayton Scale Company, Dayton, Ohio. Counter scale. 1,896,258; Feb. 7.

Straub, W. F., Laboratories, Inc. (See Straub, W. F., and Fuerst, assignors.)

Straub, Walter F., Chicago, Ill., and E. W. Fuerst, Toledo, Ohio, assignors to W. F. Straub Laboratories, Inc., Chicago, Ill. Package. Des. 89,222; Feb. 7.

Straub, Walter F., Chicago, Ill., and E. W. Fuerst, Toledo, Ohio, assignors to W. F. Straub Laboratories, Inc., Chicago, Ill. Bottle or similar article. Des. 89,223; Feb. 7.

Strauss, Joseph B. (See Butte, Paul C., assignor.)

Strickler, Walter B., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,896,757; Feb. 7.

Strigel, Robert, Berlin-Charlottenburg, and W. Feldmann, Berlin-Spandau, Germany, assignors to Westinghouse Electric and Manufacturing Company. Purifying gases electrically. 1,896,758; Feb. 7.

Strong, Leslie P., Lakewood, assignor to The Clark Manufacturing Company, Cleveland, Ohio. Steam trap. 1,896,528; Feb. 7.

Structural Gypsum Corporation. (See Davis, C. F., and Saunders, assignors.)

Stuart, Nicholas H., assignor to Remington Rand Inc., Buffalo, N. Y. Loose leaf binder. 1,896,471; Feb. 7.

Studebaker Corporation, The. (See Gauss, Julius M., assignor.)

Studebaker Corporation, The. (See Hartsock, Guy M., assignor.)

Studebaker Corporation, The. (See Kohr, Robert F., assignor.)

Studebaker Corporation, The. (See Lindsay, Alexander R., assignor.)

Studebaker Corporation, The. (See Paton, Clyde R., assignor.)

Studebaker Corporation, The. (See Wisner, Andrew P., assignor.)

Stukbauer, Edward F. (See Cutting, R. H., and Stukbauer.)

Sturtevant, B. F., Company. (See Anderson, Samuel M., assignor.)

Sturtevant, B. F., Company. (See Bentley, Oliver D. H., assignor.)

Sulak, Anton F. (See Thompson, H. J., and Sulak.)

Sullivan Machinery Company. (See Maxson, Louis A., assignor.)

Sulzer Frères Société Anonyme. (See Schaer, Charles, assignor.)

Sunbury Converting Works, Inc. (See Reiman, Paul, assignor.)

Superheater Company, The. (See Armacost, Wilbur H., assignor.)

Superheater Company, The. (See Barnes, John A., assignor.)

Superheater Company, The. (See Brandt, Carl A., assignor.)

Superheater Company, The. (See Droth, A., and Volland, assignors.)

Superheater Company, The. (See Gordon, Charles W., assignor.)

Superheater Company, The. (See Kavanagh, James F., assignor.)

Superheater Company, The. (See Rudorff, Dagobert W., assignor.)

Superheater Company, The. (See True, Charles H., assignor.)

Superstat Company. (See Smith, Hazor J., assignor.)

Suzuki, Saburo, Shizuoka-Shi, assignor to Shizuoka Boeki Kabushiki Kaisha, Shizuoka-Ken, Japan. Tea container. 1,896,981; Feb. 7.

Swann Research, Inc. (See Logue, P., and Schilb, assignors.)

Sweeney, Raymond V., Brooklyn, N. Y. Apparatus for forming golf ball tees. 1,896,922; Feb. 7.

Szucs, Gergely, Astoria, N. Y. Steam trap. 1,896,733; Feb. 7.

Tabulating Machine Company, The. (See Bryce, James W., assignor.)

Tabulating Machine Company, The. (See Daly, G. F., and Page, assignors.)

Tabulating Machine Company, The. (See Maul, Michael, assignor.)

Tabulating Machine Company, The. (See Peirce, John R., assignor.)

Takács, Charles. (See Mate, G. S., and Takács.)

Talbot, Richard J., Springfield, Mass. Toothbrush. 1,896,982; Feb. 7.

Taniguchi, Kyusaburo, New York, N. Y. Egg separator. 1,896,498; Feb. 7.

Tanner, Wellington L., Panasoffkee, Fla., assignor to National Chemical and Mfg. Co., Inc. Production of cellulose phosphates. 1,896,725; Feb. 7.

Taylor, Albert L., Jacksonville, Fla. Treating green lumber. 1,896,984; Feb. 7.

Taylor, Dale, Elmira, N. Y. Radio tube comparator. 1,896,726; Feb. 7.

Taylor, George F., Niskayuna, N. Y., assignor to General Electric Company. Welding process. 1,896,853; Feb. 7.

Taylor, George F., Niskayuna, N. Y., assignor to General Electric Company. Apparatus for making hard metal compositions. 1,896,854; Feb. 7.

Tefft, Charles F., assignor to The Claycraft Mining & Brick Company, Columbus, Ohio. Process for surface treating brick and bricks made thereby. 1,896,126; Feb. 7.

Tegtmeyer, August C., Nebraska City, Nebr. Weed turner for plows. 1,896,566; Feb. 7.

Ter Meer, Gustav, Munich, Germany, assignor to Albert T. Otto & Sons, New York, N. Y. Centrifugal machine. 1,896,806; Feb. 7.
Tevonian, Hagop P., Brooklyn, N. Y. Drafting board. 1,896,923; Feb. 7.
Thackray, George E., Bethlehem, Pa. Sheet piling. 1,896,259; Feb. 7.
Thewes, William O., assignor to The Ridge Tool Company, North Ridgeville, Ohio. Frame or stock for pipe cutters and like tools. 1,896,127; Feb. 7.
Thirlwell, Thomas W., St. Albans, W. Va. Automatic switch. 1,896,985; Feb. 7.
Thomas, Arthur, Thornton Health, and F. G. S. English, West Croydon, assignors to The Accounting & Tabulating Corporation of Great Britain Limited, London, England. Paper feed mechanism for tabulating or other printing machines. 1,896,983; Feb. 7.
Thomas, Charles A., and C. A. Hochwalt, assignors to Thomas & Hochwalt Laboratories, Inc., Dayton, Ohio. Composition for removing carbon deposits. 1,896,759; Feb. 7.
Thomas & Hochwalt Laboratories, Inc. (See Thomas, C. A., and Hochwalt, assignors.)
Thomas, John, Milwaukee, Wis. Dish sterilizer. 1,896,648; Feb. 7.
Thomas, Norman M., Brooklyn, N. Y. Edible food container. Des. 89,224; Feb. 7.
Thomas, R., & Sons Company, The. (See Sleeman, Harold P., assignor.)
Thompson, Ernest H., Winnetka, assignor to Johnson Fare Box Company, Chicago, Ill. Fare box. 1,896,649; Feb. 7.
Thompson, Henry J., Seattle, and A. F. Sulak, King County, assignors of one-third to H. M. Caldwell, one-third to J. G. Myers, and one-third to J. D. Arrowsmith, Seattle, Wash. Feed for sugar cube dispensers. 1,896,208; Feb. 7.
Thompson, Ida M. (See Thompson, Theodore F., assignor.)
Thompson, Louis W. (See Carothers, R. M., and Thompson.)
Thompson, Louis W., Schenectady, N. Y., assignor to General Electric Company. Electrical regulator. 1,896,855; Feb. 7.
Thompson Products, Incorporated. (See Crawford, Frederick C., assignor.)
Thompson, Ralph C., Beaver, Pa. Clothes brushing and cleaning appliance. 1,896,128; Feb. 7.
Thompson, Theodore F., Fort Dodge, assignor to Ida M. Thompson, West Iowa Lake, Iowa. Semiautomatic free wheeling transmission. 1,896,472; Feb. 7.
Thomson, Alfred M., Newark, N. J., assignor to Dardelet Threadlock Corporation, New York, N. Y. Apparatus for testing sucker rods. 1,896,114; Feb. 7.
Thomson, George B., assignor of sixteen and two-thirds per cent to M. H. Merson, Macion, sixteen and two-thirds per cent to I. H. Cohen, New York, and sixteen and two-thirds per cent to W. Parkhill, Yonkers, N. Y. Container. 1,896,115; Feb. 7.
Thor, Waino A., Berkeley, Calif. Door fitting. 1,896,333; Feb. 7.
Thornton, John, Youngstown, Ohio. Furnace construction. 1,896,116; Feb. 7.
Tice, Percival S., assignor to Stewart-Warner Corporation, Chicago, Ill. Carburetor. 1,896,499; Feb. 7.
Tillmann, Richard, assignor to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Process and apparatus for cracking hydrocarbons. 1,896,986; Feb. 7.
Tipton, Edna S., New York, N. Y. Vanity case. 1,896,117; Feb. 7.
Tootal Broadhurst Lee Company Limited. (See Laurie, Kenneth S., assignor.)
Toth, John, Chicago, Ill. Beehive. 1,896,334; Feb. 7.
Townsend, John R., Bloomfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Article of metallic compositions or alloys of lead. 1,896,473; Feb. 7.
Trainor, Felix J., assignor to Trainor National Spring Company, Newcastle, Ind. Resilient structure for chairs and the like. 1,896,260; Feb. 7.
Trainor National Spring Company. (See Trainor, Felix J., assignor.)
Tranaas, Emil, assignor to Koehring Company, Milwaukee, Wis. Discharge chute actuating mechanism. 1,896,987; Feb. 7.
Traver, Oliver C., Penfield, Upper Darby, Pa., assignor to General Electric Company. Temperature relay. 1,896,856; Feb. 7.
Tressler, Donald K., Gloucester, and K. B. Norton, Manchester, Mass., assignors to Frosted Foods Company, Inc., Dover, Del. Liquid food product and packaging the same. 1,896,529; Feb. 7.
Trico Products Corporation. (See Hueber, H., and Horton, assignors.)
Trist, Arthur R., London, England, assignor, by mesne assignments, to Pantone Corporation, New York, N. Y. Screen for photographic purposes, photomechanical printing processes and the like. 1,896,567; Feb. 7.
Tropic-Aire, Incorporated. (See Butterfield, Vernon J., assignor.)
Trott, Rolland S., Denver, Colo. Engine mounting. 1,897,014; Feb. 7.
Trotter, George C., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Lock washer. 1,896,650; Feb. 7.
Trout, William A., assignor to Emsco Derrick and Equipment Company, Los Angeles, Calif. Derrick construction. 1,896,530; Feb. 7.
True, Charles H., Chicago, Ill., assignor to The Superheater Company, New York, N. Y. Conical joint. 1,896,261; Feb. 7.
Trupar Manufacturing Company. (See Geller, Frederick C., assignor.)
Tschunkur, Eduard. (See Meis, H., Klein, and Tschunkur.)
Tseng, Andred T. K., assignor to Beach Laboratories, Inc., Detroit, Mich. Molded brake lining. 1,896,335; Feb. 7.
Tullgren, Herbert W., Milwaukee, Wis. Apartment house. 1,896,734; Feb. 7.
Tuttle Register Dust Catcher Company. (See Cross, Herman J., assignor.)
Twitchell Process Company, The. (See Myers, L. D., and Stegemeyer, assignors.)
Ulrich, Charles A., Hartford, Conn. Table for saws or the like. 1,896,924; Feb. 7.
Underwood Elliott Fisher Company. (See Rubidge, David W., assignor.)
Unger, Paul U., assignor to McMillan Book Company, Syracuse, N. Y. Loose leaf binder. 1,896,872; Feb. 7.
Union Special Machine Company. (See Kucera, Frank A., assignor.)
Union Steel Products Company. (See Bitney, Dewey H., assignor.)
Union Steel Products Company. (See Hatch, Charles T., assignor.)
Union Switch & Signal Co. (See Peter, Leslie H., assignor.)
Union Switch & Signal Company, The. (See Young, H. S., and Dixon, assignors.)
Union Switch & Signal Company. (See Zierdt, Conrad H., assignor.)
United Air Cleaner Corporation. (See Moulding, Thomas G., assignor.)
United-Carr Fastener Corporation. (See Hall, Charles L., assignor.)
United-Carr Fastener Corporation. (See Holmes, George A., assignor.)
United-Carr Fastener Corporation. (See Johnson, Gustav, assignor.)
United-Carr Fastener Corporation. (See Kimbell, Arthur W., assignor.)
United-Carr Fastener Corporation. (See Knutson, Carl L., assignor.)
United-Carr Fastener Corporation. (See Upham, Preston, assignor.)
United Carr Fastener Corporation. (See Walters, Rollo F., assignor.)
United Metal Goods Mfg. Co. (See Buhrle, Paul, assignor.)
United Shoe Machinery Corporation. (See Baxter, William C., assignor.)
United Shoe Machinery Corporation. (See Jorgensen, Jacob C., assignor.)
United Shoe Machinery Corporation. (See Seely, Thomas H., assignor.)
United Shoe Machinery Corporation. (See Standish, John F., assignor.)
United Shoe Machinery Corporation. (See Woodcock, Reginald B., assignor.)
United States Gypsum Company. (See Davis, W. C., and Gibson, assignors.)
United Verde Copper Company. (See Kuzell, Charles R., assignor.)
Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Universal Oil Products Company. (See Huff, Lyman C., assignor.)
Universal Oil Products Company. (See Nagel, Robert E., assignor.)
Universal Pictures Corporation. (See Hunter, C. R., and Pierce, assignors.)
Universal Pictures Corporation. (See Smith, C. C., Hunter, and Pierce, assignors.)
Universal Playground Equipment Company. (See Lahay, Dell J., assignor.)
Upham, Preston, Brookline, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Separable snap fastener. 1,896,873; Feb. 7.
Upson Company, The. (See Spencer, Hugh M., assignor.)
V. d. Luft, Oscar, Mount Lebanan, assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa. Production of catalysts. 1,896,320; Feb. 7.
Vaile, Pembroke A., assignor of one-half to S. Clark, Chicago, Ill. Airplane wing construction. 1,896,336; Feb. 7.
Valentine, Percy W., Natick, Mass. Compound innersole for welt shoes. 1,896,531; Feb. 7.
Van Amburg, Otto H., Bridgeport, Conn., assignor to General Electric Company. Lamp socket. 1,896,857; Feb. 7.
Vance, Walter N., North Aurora, assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Rack. 1,896,600, Feb. 7.
Vanderbilt, R. T., Company. (See Alton, William H., assignor.)
Van Derhoof, John H., Warwick, N. Y. Terminal connector 1,896,988; Feb. 7.

Van Valkenburg, Hermon L., Wauwatosa, Wis., assignor to Square D Company, Detroit, Mich. Cut-out mechanism for electric switches. 1,896,735; Feb. 7.
Van Winkle, Arthur A., Owensboro, Ky. Protractor. 1,896,432; Feb. 7.
Vickers-Armstrongs Limited. (See Nasmith, John I., assignor.)
Victoria Falls and Transvaal Power Company. (See Monk, C. J., and Rendell, assignors.)
Vikla, Mathias R., Lonsdale, Minn. Trapper and retainer for bee swarms and separator for drones and queens. 1,896,925; Feb. 7.
Vitale, Samuel and E. M. Wilson, Charlotte, Mich. Brake mechanism. 1,896,209; Feb. 7.
Vitolo, Carmine, New York, N. Y. Stage for theaters and the like. 1,896,652; Feb. 7.
Viardi, Ciro J., Sacramento, Calif. Plow guiding means. 1,896,532; Feb. 7.
Vogt, Charles H., Philadelphia, Pa. Filling and measuring machine. 1,896,210; Feb. 7.
Volland, Carl. (See Droth, A., and Volland.)
Vollman, Joseph, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Embroidery. Des. 89,225; Feb. 7.
Von Alt, Joseph, Cleveland, Ohio. Illuminated house number casing or similar article. Des. 89,226; Feb. 7.
Von Frommer, Rudolf, Budapest, Hungary. Back sight for firearms. 1,896,926; Feb. 7.
Von Seldeneck, L. A., et al. (See Motti, Frederick R., assignor.)
V. Türkenburg, Felix R. K., Berlin-Mahlsdorf, Germany. Mercury vapor lamp. 1,896,651; Feb. 7.
Vuilleumier, Albert, assignor to The New Departure Manufacturing Company, Bristol, Conn. Shaping or dressing apparatus. 1,896,533; Feb. 7.
Wadman, Harold A., assignor to Hartford-Empire Company, Hartford, Conn. Glassware annealing leer and drift controlling apparatus therefor. 1,896,874; Feb. 7.
Wagner Electric Corporation. (See Dick, B., and Schnell, assignors.)
Wagner Electric Corporation. (See Weichsel, Hans, assignor.)
Wahlin, Fritz. (See Bramsen, S., and Wahlin.)
Walker, Lee, North Hornell, N. Y. Bank protector. 1,896,989; Feb. 7.
Walker, Oliver P. (See Domes, Edward A., assignor.)
Walker Press Limited. (See Martin, Vernon, assignor.)
Wallace, David A., assignor to Chrysler Corporation, Detroit, Mich. Making axle housings. 1,896,990; Feb. 7.
Wallach, George, Chapman Camp, British Columbia, Canada. Pump. 1,896,727; Feb. 7.
Wallis, Zella, assignor to Wm. H. Molter Company, Chicago, Ill. Sewing box. Des. 89,227; Feb. 7.
Walters, Rollo F., Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Upholstery installation and fastener element for use therewith. 1,896,875; Feb. 7.
Ward Leonard Electric Company. (See Kouyoumjian, Haroutiun K., assignor.)
Ward, Sena M., Brooklyn, N. Y. Separable fastener. 1,896,129; Feb. 7.
Warner, Lawrence E., Oakland, Calif., assignor, by mesne assignments, to J. G. De Remer Research Corporation Jersey City, N. J. Compressor. 1,896,760; Feb. 7.
Warr, Harold G., Park Ridge, assignor to The P & M Company, Chicago, Ill. Rail anchor and making the same. 1,896,653; Feb. 7.
Warren, Edgar W., assignor to J. L. Williams, Gettysburg, Pa. Aerial. 1,896,927; Feb. 7.
Warren Telechron Company. (See Bourquin, Edgar, assignor.)
Watkins, Parke H., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Rubber coated articles and process. 1,896,263; Feb. 7.
Watling, Albert J., assignor to Watling Manufacturing Company, Chicago, Ill. Game board. Des. 89,228; Feb. 7.
Watling Manufacturing Company. (See Watling, Albert J., assignor.)
Watts, Joel W. (See Hamilton, J. W., and Watts.)
Wayne Pump Company, The. (See McCandless, Lyon, assignor.)
Weatherhead, Albert J., jr., Cleveland, Ohio. Automobile controller and switch. Re18,731; Feb. 7.
Weaton, Percy E., Hamden, Conn. Clothes hanger. 1,896,654; Feb. 7.
Webber, Charles S. (See Staud, C. J., and Webber.)
Weber, Erhard N., New York, N. Y. Safety razor. 1,896,380; Feb. 7.
Weber, Friedrich W., Hackensack, assignor to Maywood Chemical Works, Maywood, N. J. Weighting textile fibers and product obtained thereby. 1,896,858; Feb. 7.
Weber, Friedrich W., Hackensack, and E. Schaeffer, Englewood, assignors to Maywood Chemical Works, Maywood, N. J. Treating natural and artificial silk and products obtained thereby. 1,896,381; Feb. 7.
Weber, Harry M., Boston, Mass., assignor to Ellis-Foster Company, Montclair, N. J. Cellulose ester composition. 1,897,015; Feb. 7.
Weber, Karl A., assignor to Weber Showcase & Fixture Company, Los Angeles, Calif. Sweat drain on windows. 1,896,262; Feb. 7.
Weber Showcase and Fixture Company. (See Weber, Karl A., assignor.)
Weichsel, Hans, assignor to Wagner Electric Corporation, St. Louis, Mo. Dynamo electric machine. 1,896,264; Feb. 7.
Weichsel, Hans, assignor to Wagner Electric Corporation, St. Louis, Mo. Dynamo electric machine construction. 1,896,265; Feb. 7.
Weissinger, Harry, et al. (See Mott, Frederick R., assignor.)
Wellensiek, Adolph H., Washington, D. C. Auxiliary jack lift and truck mechanism for motor vehicles. 1,896,118; Feb. 7.
Wende, Hermann A., Buffalo, N. Y. Mechanism for selectively actuating a plurality of movable members. 1,896,146; Feb. 7.
Wentz, Earle J., Schoolfield, Va., assignor to Draper Corporation, Hopedale, Mass. Loom. 1,896,337; Feb. 7.
Western Cartridge Company. (See O'Neil, Arthur S., assignor.)
Western Electric Company, Incorporated. (See Flint, J. G., and McKie, assignors.)
Western Electric Company. (See Hayford, W. S., and Moore, assignors.)
Western Railway Equipment Company. (See Campbell, S. H., and Habenicht, assignors.)
Westinghouse Electric Elevator Company. (See Norton, Harry R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Austin, Walter M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Brainard, Maurice W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Chubb, Lewis W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Evans, Robert D., assignor.)
Westinghouse Electric & Manufacturing Company. (See James, Henry D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Laffoon, Carthrae M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Lewis, William A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Lingal, Harry J., assignor.)
Westinghouse Electric and Manufacturing Company. (See Schnell, D. S., and Fryer, assignors.)
Westinghouse Electric and Manufacturing Company. (See Strigel, R., and Feldmann.)
Weston Electrical Instrument Corporation. (See Corson, Michael G., assignor.)
Wheary, George H., and B. M. Hamlin, assignors to Wheary Trunk Company, Racine, Wis. Hand luggage. 1,896,761; Feb. 7.
Wheary Trunk Company. (See Wheary, G. H., and Hamlin, assignors.)
Wheeler, Harold A., Washington, D. C., assignor to Hazeltine Corporation, Jersey City, N. J. Eliminating capacitive coupling. 1,896,500; Feb. 7.
Whitaker, Louis P., New York, N. Y., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa. Making heat exchangers. 1,896,501; Feb. 7.
Whitaker, Louis P., New York, N. Y., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa. Heat exchanger. 1,896,502; Feb. 7.
White, Edwin H., Baltimore, Md. Plane covering fastener. 1,896,130; Feb. 7.
White, Fred G., assignor to W. H. Jordan, Kansas City, Mo. Portable power vaporizer. 1,896,382; Feb. 7.
White, Leo O., and E. B. Renner, Coshocton, Ohio. Advertising projector. 1,896,928; Feb. 7.
White, Paul E., Lancaster, Ohio. Casting type faces, stereotype, etc. 1,896,690; Feb. 7.
White, William, East Cleveland, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio. Load block. 1,896,266; Feb. 7.
White, William, Newark, N. J., assignor to M. L. Adler, New Rochelle, N. Y. Pin setting machine. 1,896,383; Feb. 7.
White, William, and H. C. Peterson, Hillside, N. J., and W. H. Lansmith, Long Island, assignors to M. L. Adler, New Rochelle, N. Y. Pin-setting machine. 1,896,384; Feb. 7.
Whitehead, Thomas C., and H. A. Greenwald, assignors, by direct and mesne assignments, to Kelvinator Corporation, Detroit, Mich. Refrigerating apparatus. 1,896,385; Feb. 7.
Whittle, Horace, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Coil. 1,896,762; Feb. 7.
Wilbur, Lawrence S., Evanston, Ill. Cleaning lubricating waste or packing. 1,896,267; Feb. 7.
Wilde, George F., Keyport, N. J. Dry glazing process. 1,896,929; Feb. 7.
Wildman, Harry G., Westmount, Quebec, Canada, assignor of one-half to Carl H. Fowler, New York, N. Y. Recovering mercury. 1,896,876; Feb. 7.
Wiles, James A., Hamilton, Ohio. Storage battery terminal puller. 1,896,338; Feb. 7.
Wiley, Edward B., Somerville, Mass. Flag holder. 1,896,832; Feb. 7.
Wilkinson, Henry, and A. Roe, Barrowshaw, Oldham, assignors of one-third to Platt Brothers and Company Limited, Oldham, England. Weighting the slip rolls for laps in textile machines wherein the material acted on is formed into laps. 1,896,831; Feb. 7.

Willard Storage Battery Company. (See Newkirk, John M., assignor.)
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,229; Feb. 7.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,230; Feb. 7.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,231; Feb. 7.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,249; Feb. 7.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,250; Feb. 7.
Willheim, William, Co. (See Brodsky, Michel, assignor.)
Willheim, William, Co. (See Guhl, Maclyn, assignor.)
Willheim, William, Co. (See Kohut, Alexander, assignor.)
Willheim, William, Co. (See Laun, Henri J., assignor.)
Willheim, William, Co. (See Overmeyer, John, assignor.)
Willheim, William, Co. (See Schweizer, Jack, assignor.)
Williams, Alfred O., Battle Creek, assignor to Clark Tructractor Company, Buchanan, Mich. Conveyer. 1,896,386; Feb. 7.
Williams, J. L. (See Warren, Edgar W., assignor.)
Williams, John E., Chicago, Ill. Changeable letters. 1,896,131; Feb. 7.
Willoughby, John A., Cambridge, Mass. Modulator system. 1,896,268; Feb. 7.
Willoughby, John A., Cambridge, Mass. Variable inductance units. 1,896,269; Feb. 7.
Wilms, Gustav O., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis. Protective overload device or circuit breaker. 1,896,736; Feb. 7.
Wilson, Earl M. (See Vitale, S., and Wilson.)
Wilson, Joseph C., assignor to The Crystal Tissue Company, Middletown, Ohio. Tubular dispensing package for rolled webs of flexible material. 1,896,119; Feb. 7.
Winchell, Arthur B., assignor, by mesne assignments, to The Sparks-Withington Company, Jackson, Mich. Door. 1,896,691; Feb. 7.
Windeknecht, Carl A., Berlin, Germany. Arrangement for producing open spaces on buildings. 1,896,433; Feb. 7.
Wine, William E., Toledo, Ohio. Railway car. 1,896,434; Feb. 7.
Winkler, Charles, New York, N. Y. Four-in-hand necktie. 1,896,930; Feb. 7.
Winthrop Chemical Company. (See Zimmerman, W., and Frankenburger, assignors.)
Wired Radio, Inc. (See Davis, Chester L., assignor.)
Wired Radio, Inc. (See Gebhard, L. A., and Rudolph, assignors.)
Wired Radio, Inc. (See Hentschel, Ernest R., assignor.)
Wired Radio, Inc. (See Hough, Clinton W., assignor.)
Wired Radio, Inc. (See Hund, August, assignor.)
Wisner, Andrew P., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,896,991; Feb. 7.
Witter, Lawrie L., et al. (See Schirmer, Rens E., assignor.)
Wittkuhns, Bruno A. (See Sperry, E. A., jr., and Wittkuhns.)
Wohnsiedler, Henry P. (See Barsky, G., and Wohnsiedler.)
Wolfe, Oliver P., jr., Boston, Mass., assignor of one-half to Richard C. Mottu, Baltimore, Md. Stencil device. 1,896,877; Feb. 7.
Wolff, Hugo, M. A. Kunz, Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the anthraquinone series. 1,896,435; Feb. 7.
Wood Newspaper Machinery Corporation. (See Roesen, Oscar C., assignor.)
Woodcock, Reginald B., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,896,211; Feb. 7.
Woods, Gorham W., assignor to Hughes Tool Company, Houston, Tex. Cement well strainer. 1,896,212; Feb. 7.
Woolley, Harold O. (See Frisch, M., and Woolley.)
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,896,387; Feb. 7.
Workman, Thomas D., Geneseo, Kans. Road grading machine. 1,896,931; Feb. 7.
Wright Aeronautical Corporation. (See Chilton, Roland, assignor.)
Wright, Theodore P., Port Washington, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Airplane. 1,896,270; Feb. 7.
Wuertz, Alexander J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Production of benzanthrone. 1,896,147; Feb. 7.
Wylie, Ernest L., and E. H. Mohme, St. Louis County, Mo. Front motor mounting. 1,896,859; Feb. 7.
X-Engine Company, The. (See Quick, Alfred A., assignor.)
Yoerger, Frank, Rego Park, assignor to Standard Motor Products, Inc., Long Island City, N. Y. Ignition coil. 1,896,932; Feb. 7.
Young, Henry S., Wilkinsburg, and H. N. Dixon, assignors to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for the control of highway crossing signals. 1,896,120; Feb. 7.
Young, Serenus H. A., St. Paul, Minn. Fruit juicer. Des. 89,232; Feb. 7.
Yutts, Ralph, Miami, Fla. Duster and machine for making the same. 1,896,148; Feb. 7.
Zademach, Erich R., Elizabeth, N. J., assignor to Metalwash Machinery Company, New York, N. Y. Treating or washing machinery. 1,896,149; Feb. 7.
Zademach, Erich R., Elizabeth, N. J., assignor to Metalwash Machinery Company, New York, N. Y. Conveyer. 1,896,150; Feb. 7.
Zademach, Erich R., Elizabeth, N. J., assignor to Metalwash Machinery Company, New York, N. Y. Conveyer belt. 1,896,151; Feb. 7.
Zeidler, Reinhold C., assignor to Long Manufacturing Company, Detroit, Mich. Lock for screw threaded devices. 1,896,388; Feb. 7.
Zeiss, Carl, the Firm. (See Nichterlein, Paul, assignor.)
Zeiss, Carl, the Firm. (See Scharff, Franz, assignor.)
Zerzow, William G., Buffalo, N. Y. Filter. 1,896,655; Feb. 7.
Zierdt, Conrad H., Rosedale, assignor to The Union Switch & Signal Company, Swissvale, Pa. Reluctance controlling means. 1,896,436; Feb. 7.
Zimmermann, Wilhelm, Friedrichsfeld, and W. Frankenburger, Ludwigshafen-on-the-Rhine, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Production of vitamin D. 1,896,191; Feb. 7.
Zuschlag, Theodor, West Englewood, N. J., assignor to Magnetic Analysis Corporation, Long Island City, N. Y. Method and apparatus for testing rails or the like. 1,896,737; Feb. 7.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 7TH DAY OF FEBRUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accounting machine. J. R. Peirce. 1,896,554; Feb. 7.
Accounting machine for punching totals. M. Maul. 1,896,551; Feb. 7.
Acetylene polymers, Halogenating. W. S. Calcott and A. S. Carter. 1,896,159; Feb. 7.
Acetylene, Production of. R. W. Millar. 1,896,552; Feb. 7.
Acid: *See*—
2,7-dihydroxynaphthalene-3-6-dicarboxylic acid.
Acid, Manufacture of acetic. H. Dreyfus. 1,896,224; Feb. 7.
Acid, Manufacture of anhydrous formic. E. Ricard and H. M. Guinot. 1,896,100; Feb. 7.
Acid, Manufacture of sulphuric. C. B. Clark. 1,896,287; Feb. 7.
Acid, Production of gluconic. J. N. Currie and R. H. Carter. 1,896,811; Feb. 7.
Acid sludge from viscous hydrocarbon oil, Removing. C. O. Hoover. 1,896,583; Feb. 7.
Acoustic device. J. G. Flint and D. G. McKie. 1,896,485; Feb. 7.
Acoustic diaphragm. C. F. Dilks. 1,896,073; Feb. 7.
Acoustics. O. B. Hanson. 1,896,844; Feb. 7.
Adjustable ventilator. V. F. Espenschied. 1,896,075; Feb. 7.
Advertising device. R. E. Kimball. 1,896,709; Feb. 7.
Advertising projector. L. O. White and E. B. Renner. 1,896,928; Feb. 7.
Aerial. E. W. Warren. 1,896,927; Feb. 7.
Aeroplane, Tandem wing. A. Lanzetta. 1,896,922; Feb. 7.
Aggregates from breaker waste and the like, Producing light weight. C. E. Cooper and H. S. Gilbertson. 1,896,884; Feb. 7.
Aggregates weighing loading skip. E. H. Lichtenberg. 1,896,906; Feb. 7.
Air circulator. F. N. Ross. Des. 89,212; Feb. 7.
Air cleaner. T. G. Moulding. 1,896,640; Feb. 7.
Air compressing apparatus. W. B. Hale. 1,896,404; Feb. 7.
Aircraft control means. E. M. Bertran. 1,896,999; Feb. 7.
Airplane. T. P. Wright. 1,896,270; Feb. 7.
Airplane wing construction. P. A. Valle. 1,896,336; Feb. 7.
Airport, Floating. I. Kulik. 1,896,546; Feb. 7.
Alcohols, Producing butyl and isopropyl. A. Izsak. Re18,729; Feb. 7.
Alloy, Constant resistivity. M. G. Corson. 1,896,193; Feb. 7.
Alloy, Stain-resisting. F. M. Becket. 1,896,154; Feb. 7.
Alloy, Tarnish resistant. R. H. Leach. 1,896,410; Feb. 7.
Alloys, Making low-carbon chromium. F. M. Becket. 1,897,017; Feb. 7.
Ammonia, Catalytic oxidation of. A. O. Jaeger. 1,896,627; Feb. 7.
Ammunition. O. V. Huffman. 1,896,515; Feb. 7.
Amplifier. J. Dieux. 1,896,743; Feb. 7.
Amplifier, Tone. M. Clark 1,896,683; Feb. 7.
Angle tooth cutter. S. Evans and J. A. Herrington. 1,896,295; Feb. 7.
Antifreeze mixture for automobile radiators. J. W. and E. A. Dennis. 1,896,291; Feb. 7.
Antioxidant for vulcanized rubber products. J. R. Ingram. 1,896,544; Feb. 7.
Antipyrene, Obtaining. E. F. Grether. 1,896,619; Feb. 7.
Antisplasher. C. A. Schacht. 1,896,204; Feb. 7.
Apartment house. H. W. Tullgren. 1,896,734; Feb. 7.
Applicator. O. Cohen. 1,896,941; Feb. 7.
Arc extinguishing structure. W. M. Austin. 1,896,763; Feb. 7.
Arch supporting device for footwear. S. Johnstone. 1,896,586; Feb. 7.
Arrow feathering machine. T. Belshaw. 1,896,536; Feb. 7.
Article and making the same, Hollow rubber. S. L. Palmer. 1,897,025; Feb. 7.
Article of metallic compositions or alloys of lead. J. R. Townsend. 1,896,473; Feb. 7.
Articles from corrosion, Protecting. W. S. Calcott, A. S. Carter, and F. B. Downing. 1,896,158; Feb. 7.
Articles of manufacture, Corrosion resisting. F. M. Becket. 1,896,155; Feb. 7.
Articles with refractory coating. W. E. Goldsborough and R. E. Lowe. 1,897,003; Feb. 7.
Assembling device for card cases. C. L'Enfant. 1,896,634; Feb. 7.
Assortment dispensing container. A. E. Neely. 1,896,827; Feb. 7.
Atomizer for internal combustion engines, Gasoline. R. Oppenheim. 1,896,786; Feb. 7.
Atomizer, Liquid. C. S. Frick. 1,896,744; Feb. 7.
Atomizer, Pump. F. Custer. 1,896,701; Feb. 7.
Atomizing head. A. W. Anthony, jr. 1,896,339; Feb. 7.
Automatic-forging machine. O. J. Berger. 1,896,692; Feb. 7.
Automatic switch. T. W. Thirlwell. 1,896,985; Feb. 7.
Automobile. J. R. Hughes. Des. 89,191; Feb. 7.
Automobile. J. Ledwinka. Des. 89,202; Feb. 7.
Automobile controller and switch. A. J. Weatherhead, jr. Re18,731; Feb. 7.
Axle housings, Making. D. A. Wallace. 1,896,990; Feb. 7.
Bag adapted to be sealed by gummed tape. F. Friedheim. 1,896,668; Feb. 7.
Bait, Artificial. H. C. Berberich. 1,896,132; Feb. 7.
Banana protector. A. Paoli. Re18,728; Feb. 7.
Band, Bread. O. B. Andrews. 1,896,601; Feb. 7.
Band, Bread. O. B. Andrews. 1,896,603; Feb. 7.
Bank protector. L. Walker. 1,896,989; Feb. 7.
Barrel and plunger, Pump. H. W. Parkin. 1,896,719; Feb. 7.
Base and column for display stand, Combination. W. E. Kehoe. Des. 89,197–8; Feb. 7.
Base and column for display stand, Combination. W. E. Kehoe. Des. 89,241; Feb. 7.
Baseball game. R. H. Cutting and E. F. Stukbauer. 1,896,684; Feb. 7.
Baseball game board. A. L. Nunn. Des. 89,205; Feb. 7.
Bath apparatus. I. Borowsky. 1,896,938; Feb. 7.
Bearings, Manufacturing. W. G. Calkins and M. L. Carpentier. 1,896,939; Feb. 7.
Bed davenport. R. Coopersmith. 1,896,289; Feb. 7.
Bed, Folding closet. R. Coopersmith. 1,896,288; Feb. 7.
Beehive. J. Toth. 1,896,334; Feb. 7.
Belt. S. Holstein. Des. 89,190; Feb. 7.
Belt, Conveyer. E. R. Zademach. 1,896,151; Feb. 7.
Benzanthrone, Production of. A. J. Wuertz. 1,896,147; Feb. 7.
Binder, Loose leaf. W. R. Buxton. 1,896,573; Feb. 7.
Binder, Loose leaf. J. Cooper. 1,896,881; Feb. 7.
Binder, Loose leaf. J. C. Dawson. 1,896,838–40; Feb. 7.
Binder, Loose leaf. J. C. Dawson. 1,897,001; Feb. 7.
Binder, Loose-leaf. C. H. Franz, jr. 1,896,667; Feb. 7.
Binder, Loose leaf. N. H. Stuart. 1,896,471; Feb. 7.
Binder, Loose leaf. P. U. Unger. 1,896,872; Feb. 7.
Bird cage. H. G. Palmer. 1,896,097; Feb. 7.
Bit: *See*—
Disk bit.
Block: *See*—
Load block. Tuyère block.
Blower intake for large turbine generators, Stationary. C. M. Laffoon. 1,896,749; Feb. 7.
Board: *See*—
Drafting board.
Body, Detachable. R. E. Smith. 1,896,254; Feb. 7.
Boiler: *See*—
Superheater boiler.
Boiler. J. F. Kavanagh. 1,896,241; Feb. 7.
Boiler cleaner. S. F. Cox and J. H. Robertson. 1,896,575; Feb. 7.
Boiler cleaner. T. E. Purcell. 1,896,593; Feb. 7.
Boiler cleaner. N. L. Snow. 1,896,565; Feb. 7.
Boiler furnace. C. W. Gordon. 1,896,233; Feb. 7.
Bolt threads, Device for gauging. P. Nichterlein. 1,896,828; Feb. 7.
Bolts, Forming. S. H. Campbell and F. K. Habemicht. 1,896,837; Feb. 7.
Bookkeeping machine. B. Bornkessel, E. Breitling, W. Brauer, and K. A. Lehmann. 1,896,936; Feb. 7.
Books, Construction of. C. A. Shuss. 1,897,024; Feb. 7.
Bottle. E. W. Fuerst. Des. 89,237; Feb. 7.
Bottle handling device. J. Brown. 1,896,438; Feb. 7.
Bottle, Ink. B. B. Hauser. 1,896,405; Feb. 7.
Bottle or similar article. W. F. Straub and E. W. Fuerst. Des. 89,223; Feb. 7.
Bowl and spindle connections for centrifugal liquid separators. J. M. Edwards and H. R. Dilger. 1,896,665; Feb. 7.
Bowl or similar article, Sugar. C. Kaiser. Des. 89,195; Feb. 7.
Box: *See*—
Clapper box. Fare box.
Clothespin box. Lunch box.
Box. K. Rettich. Des. 89,210; Feb. 7.
Box drum, Nonsifting, one piece, powder. H. W. Hildebrand, jr. 1,896,361; Feb. 7.
Box for shipping coal. J. J. Drew. 1,896,812; Feb. 7.
Box loader, Automatic. G. J. Mayer and G. J. Patitz. 1,896,689; Feb. 7.
Box mold, Battery. O. O. Rieger. 1,896,372; Feb. 7.
Box or similar receptacle. F. J. Abel. Des. 89,164; Feb. 7.

Bracket: *See*—
Spindle swing bracket.
Brake: *See*—
Fluid pressure brake. Reel brake.
Hydraulic brake.
Brake. S. Bramley-Moore. 1,896,696; Feb. 7.
Brake. G. M. Hartsock. 1,896,952; Feb. 7.
Brake. R. F. Kobr. 1,896,902; Feb. 7.
Brake. A. P. Wisner. 1,896,991; Feb. 7.
Brake for motor vehicles. P. P. Leventis. 1,896,963; Feb. 7.
Brake lining, Molded. A. T. K. Tseng. 1,896,335; Feb. 7.
Brake mechanism. M. Loughead. 1,896,452–3; Feb. 7.
Brake mechanism. S. Vitale and E. M. Wilson. 1,896,209; Feb. 7.
Brake mechanism, Hydraulic. B. Dick and S. Schnell. 1,896,223; Feb. 7.
Brake shoe relining device. G. Favalli. 1,896,296; Feb. 7.
Brake unit, Power. E. A. Rockwell and M. Garancher. 1,896,377; Feb. 7.
Braking apparatus for car trucks. E. Latshaw. 1,896,961; Feb. 7.
Braking device. A. Marek. 1,896,454; Feb. 7.
Braking mechanism for yielding highway barriers. P. C. Butte. 1,896,389; Feb. 7.
Bricks and bricks made thereby, Surface treating. C. F. Tefft. 1,896,126; Feb. 7.
Bridge tally. V. Martin. Des. 89,242; Feb. 7.
Broiler, Barbecue. E. A. Domes. Des. 89,171–2; Feb. 7.
Brush, Shaving. S. W. Mulhollen. 1,896,589; Feb. 7.
Buckle setting device. H. H. Evans. 1,896,666; Feb. 7.
Building block and wall construction. W. G. Demarest. 1,896,770; Feb. 7.
Building construction. V. W. Noonan. 1,896,325; Feb. 7.
Building construction and hanger used therein. C. F. Davis and E. R. Saunders. 1,896,290; Feb. 7.
Building material and making same. H. M. Spencer. 1,896,689; Feb. 7.
Bumper attachment. C. J. Barry. 1,896,277; Feb. 7.
Burner. P. S. Harper. 1,896,082; Feb. 7.
Burner plate. B. Burns, H. B. Lewis and R. M. Otis. 1,896,286; Feb. 7.
Button. L. R. Carley. Des. 89,167; Feb. 7.
Cabinet or similar article, Game. L. A. Raden and A. Joze. Des. 89,246; Feb. 7.
Cable cutter. A. L. Morse. 1,896,912; Feb. 7.
Cable making and like machine. F. J. Humphrey. 1,896,087; Feb. 7.
Cake molding or forming machine. F. C. Simon. 1,896,563; Feb. 7.
Calculating machine. C. Luttropp. 1,896,182; Feb. 7.
Cam gear for internal combustion engines. A. Kreidler. 1,896,449; Feb. 7.
Camera finder. J. Sohn. 1,896,428; Feb. 7.
Cap. V. C. Mushkin. Des. 89,243; Feb. 7.
Capacitive coupling, Eliminating. H. A. Wheeler. 1,896,500; Feb. 7.
Car divider, Refrigerator. M. A. MacMillan. 1,896,198; Feb. 7.
Car, Railway. W. E. Wine. 1,896,434; Feb. 7.
Car retarder for railroads. W. K. Howe. 1,897,006; Feb. 7.
Carburetor. W. C. Carter. 1,896,390; Feb. 7.
Carburetor. G. Pirinoli. 1,896,557; Feb. 7.
Carburetor. P. S. Tice. 1,896,499; Feb. 7.
Carrier. F. B. Russell. 1,896,249; Feb. 7.
Case: *See*—
Vanity case.
Case and display stand, Combination shipping. R. N. Richards. 1,896,721; Feb. 7.
Casein, Soluble. A. F. O. Germann. 1,896,300; Feb. 7.
Casing: *See*—
Tubular casing.
Casing for wall clock. E. Bourquin. Des. 89,236; Feb. 7.
Caster. S. M. Chase. 1,896,698; Feb. 7.
Caster. H. S. Hele-Shaw, T. E. Beacham and N. A. Davies. 1,896,978; Feb. 7.
Catalysts, Production of. O. v. d. Luft. 1,896,320; Feb. 7.
Catch for suitcases, boxes, chests, etc. O. A. Boesel. 1,896,476; Feb. 7.
Cellulose acetate composition. C. J. Staud and C. S. Webber. 1,896,145; Feb. 7.
Cellulose and products therefrom, Treating. P. Karrer. 1,897,026; Feb. 7.
Cellulose derivatives and making same. R. Haller and A. Heckendorn. 1,896,892; Feb. 7.
Cellulose ester composition. H. M. Weber. 1,897,015; Feb. 7.
Cellulose phosphates, Production of. W. L. Tanner. 1,896,725; Feb. 7.
Cement retainer. E. V. Crowell. 1,896,482; Feb. 7.
Centerless grinding machine. R. A. Cole. 1,896,461; Feb. 7.
Centrifugal. F. Schaum. 1,896,466; Feb. 7.
Centrifugal machine. G. Ter Meer. 1,896,806; Feb. 7.
Centrifugal pump, Adjustable. W. Buckley. 1,896,219; Feb. 7.
Centrifugal separator, Multiple. C. J. Lindequist. 1,896,180; Feb. 7.
Centrifugal switch. W. H. Leslie. 1,896,798; Feb. 7.
Centrifuge, Multiple. S. C. Lindberg. 1,896,179; Feb. 7.
Chain for trench excavating devices, Rubber jointed. E. H. Lichtenberg. 1,896,711; Feb. 7.
Chain locking device. J. Potter. 1,896,592; Feb. 7.
Chain pipe wrench. F. L. Cook. 1,896,699; Feb. 7.
Chair: *See*—
Folding chair.
Chair and stepladder, Combined. L. L. Lofton. 1,896,451; Feb. 7.
Chenille, Manufacturing. R. B. Kalbach. 1,896,408; Feb. 7.
Chest, Cedar. E. Roos. 1,896,829; Feb. 7.
Chute actuating mechanism, Discharge. E. Tranaas. 1,896,987; Feb. 7.
Cigar vending machine. C. H. Eckmann. 1,896,137; Feb. 7.
Cigarette holder. L. Offerman. 1,896,463; Feb. 7.
Circuit breaker. M. W. Brainard. 1,896,764; Feb. 7.
Circuit, Calling. R. D. Gibson. 1,896,487; Feb. 7.
Circuit for superheterodyne radioreceivers, Selective. H. T. Budenbom. 1,896,065; Feb. 7.
Circuit, Frequency division. R. M. Page. 1,896,417; Feb. 7.
Circuit interrupter. H. J. Lingal. 1,896,779; Feb. 7.
Circuit protecting device, Selective. R. Dubusc and A. D. Iliovici. 1,896,943; Feb. 7.
Circuit, Resonant. F. L. Arland. 1,896,903; Feb. 7.
Clamp: *See*—
Hanger clamp. Meat clamp.
Clamp carrying machine. H. V. Steuernagel. 1,896,113; Feb. 7.
Clamp for wire fences. A. Hammer. 1,896,447; Feb. 7.
Clapper box. R. T. Hazelton. 1,896,360; Feb. 7.
Cleaner: *See*—
Air cleaner. Boiler cleaner.
Clip member, Detachable. C. L. Hall. 1,896,865; Feb. 7.
Clock. M. U. Sill. Des. 89,217; Feb. 7.
Clock case. E. L. Carlson. Des. 89,167; Feb. 7.
Clock case and lamp or similar article, Combined. J. Gottlieb. Des. 89,179; Feb. 7.
Closure. M. B. Andrie. 1,896,271; Feb. 7.
Closure. S. K. Smith. 1,896,804; Feb. 7.
Closure for filler necks and the like. M. B. Andrie. 1,896,272; Feb. 7.
Closure for radiators and the like. A. V. Henst. 1,896,309; Feb. 7.
Closure for radiators and the like. F. C. Ruppel. 1,896,329–30; Feb. 7.
Closure operating mechanism. J. E. Biery. 1,897,000; Feb. 7.
Clothes brushing and cleaning appliance. R. C. Thompson. 1,896,128; Feb. 7.
Clothes hanger. P. E. Weaton. 1,896,654; Feb. 7.
Clothes hanging device. N. M. Beglinger. 1,896,996; Feb. 7.
Clothespin box. A. V. Stanawitz. 1,896,430; Feb. 7.
Clutch. C. O. Hanson. 1,896,707; Feb. 7.
Clutch. C. R. Paton. 1,896,914; Feb. 7.
Clutch. C. R. Paton. 1,896,968; Feb. 7.
Clutch for wheels and the like, Holding. E. C. Julian. 1,896,629; Feb. 7.
Coal dust furnace. G. Hayn. 1,896,139; Feb. 7.
Coat, Woman's. J. Kraeler. 1,896,631; Feb. 7.
Coating, Plastic wall. W. H. Alton. 1,897,016; Feb. 7.
Coating, Wrinkle. F. B. Root. 1,896,594; Feb. 7.
Coffee pot or similar article. C. Kaiser. Des. 89,193–4; Feb. 7.
Coil. H. Whittle. 1,896,762; Feb. 7.
Coil-switch unit. H. E. Norviel. 1,896,143; Feb. 7.
Coils, Method and apparatus for forming wire. A. H. Garst. 1,896,670; Feb. 7.
Coin guiding machines, Coin guiding and wrapper holding means for. E. P. Donnellan. 1,896,394; Feb. 7.
Collar holder. C. Silverman. Des. 89,218–20; Feb. 7
Collar point shaping machine. W. J. Beattie. 1,896,934; Feb. 7.
Collars and product thereof, Manufacturing soft. W. J. Beattie. Re18,732; Feb. 7.
Color plates, Production of. R. Breslauer. 1,896,739; Feb. 7.
Compass course finder. E. B. Bennett. 1,896,997; Feb. 7.
Composition for removing carbon deposits. C. A. Thomas and C. A. Hochwalt. 1,896,759; Feb. 7.
Composition of matter. A. F. Bigger. 1,896,659; Feb. 7.
Composition of matter and producing same. O. A. Cherry and F. Kurath. 1,896,069; Feb. 7.
Compression chamber, Adjustable. G. R. Poyer. 1,896,098; Feb. 7.
Compressor. L. E. Warner. 1,896,760; Feb. 7.
Condensation meter. C. H. Sparklin. 1,896,429; Feb. 7.
Condenser. N. Deisch. 1,896,942; Feb. 7.
Condenser. E. A. Hampson. 1,896,081; Feb. 7.
Condensers, Apparatus for correcting variable. N. Deisch. 1,896,885; Feb. 7.
Condition control apparatus. H. J. Smith. 1,896,207; Feb. 7.
Conical joint. C. H. True. 1,896,261; Feb 7
Connecter: *See*—
Electric connecter. Wire connecter.
Pipe connecter.
Connection for nonmetallic resistors, Electrical. A. H. Heyroth. 1,897,004; Feb. 7.
Connection, Series parallel transformer. F. W. Gay. 1,896,397; Feb. 7.
Connection, Transformer. F. W. Gay. 1,896,398; Feb. 7.
Contact finger for electrical controllers and switches. R. V. H. Russell. 1,896,560; Feb. 7.

Contactor, Pneumatically operated. P. I. Chandeysson. 1,896,164; Feb 7.
Container: *See*—
Assortment dispensing container.
Container. A. Schifferdecker. 1,896,976; Feb. 7.
Container. G. R. Thomson. 1,896,115; Feb. 7.
Container and manufacture of same. G. O. Frostad. 1,896,076; Feb 7.
Container or box for fragile articles. J. R. Northway-Ley. 1,896,326; Feb. 7.
Continuous pressing machine. E. J. Carroll. 1,896,479; Feb. 7.
Control for auto doors, Semiautomatic remote. S. G. Hinds. 1,896,311; Feb. 7.
Control mechanism for pressing machines. G. W. Johnson. 1,896,517; Feb. 7.
Control system. D. W. McLenegan. 1,896,093; Feb. 7.
Control system, Frequency. A. Hund. 1,896,238; Feb. 7.
Controlling generator. C. I. McNeil. 1,896,142; Feb. 7.
Controlling mechanism for animal watering troughs. E. Beyer. 1,896,860; Feb. 7.
Conveyer. A. Hoefleur. 1,896,407; Feb. 7.
Conveyer. A. O. Williams. 1,896,886; Feb. 7.
Conveyer. E. R. Zadermach. 1,896,150; Feb. 7.
Conveyer for chemical and electrochemical operations, Automatic. W. F. Hall. 1,896,079; Feb. 7.
Conveyer take-off. E. G. Griffith. 1,896,402; Feb. 7.
Conveying mechanism for glassware and the like. R. G. Bachelier. 1,896,657; Feb. 7.
Cooling apparatus. J. A. Prudente and R. T. Iula. 1,896,787; Feb. 7.
Cooling device for internal combustion engines. J. C. Garrott. 1,896,855; Feb. 7.
Cooling means for engine structures and cylinder heads therefor. O. H. Spencer. 1,896,257; Feb. 7.
Copper cooled valve. F. C. Crawford. 1,896,072; Feb. 7.
Copper treating furnace. W. J. Benson. 1,896,570; Feb. 7.
Core drill. C. A. Dean. 1,896,703; Feb. 7.
Core-drill, Telescoping. A. Soll. 1,896,469; Feb. 7.
Cork. K. Rettich. Des. 89,211; Feb. 7.
Cotton picker. H. N. Berry. 1,896,694; Feb. 7.
Counter construction. P. H. Meyer. 1,896,524; Feb. 7.
Coupling: *See*—
Capacitive coupling. Sanitary pipe coupling.
Lubricator coupling.
Coupling for railway vehicles, Automatic. L. Kurtossy. 1,896,959; Feb. 7.
Coupling for socket wrenches. E. M. Pfauser. 1,896,645; Feb. 7.
Crane trolley. H. W. Ball. 1,896,274; Feb. 7.
Crank case pit. H. R. Counce. 1,896,610; Feb. 7.
Crystal. Piezo-electric. O. M. Hovgaard. 1,896,513; Feb. 7.
Crystals, Forming. A. Horvath. 1,896,775; Feb. 7.
Cup for milking machine, Teat. R. E. Maes. 1,896,321; Feb. 7.
Current rectifier, Electric. S. Ruben. 1,896,101; Feb. 7.
Current rectifying system, Alternating. H. Shoemaker. 1,896,468; Feb. 7.
Curtain support. J. N. Henry. 1,896,746; Feb. 7.
Cushioning device. R. J. Loock. 1,896,908; Feb. 7.
Cut-out mechanism for electric switches. H. L. Van Valkenburg. 1,896,735; Feb. 7.
Cutter: *See*—
Angle tooth cutter. Rotary cutter.
Cable cutter.
Cutter for buttonhole sewing machines, Buttonhole. J. Kiewicz. 1,896,364; Feb. 7.
Cutter for well drills. F. L. Scott. 1,896,251; Feb. 7.
Cutter head for well drills. R. P. Simmons. 1,896,109; Feb. 7.
Cutter support for well drills. A. A. MacDonald; 1,896,243; Feb. 7.
Cyanamides of the alkaline earth metals, Production of. C. Kircher and H. Acker. 1,896,489; Feb. 7.
Cylinders of steam or gas turbines, Method and apparatus for preheating and maintaining at operating temperature the. E. Brown. 1,896,508; Feb. 7.
Damper, Vibration. R. K. Lee. 1,896,962; Feb. 7.
Davit, Folding. J. L. Hyland. 1,896,845; Feb. 7.
Demonstrating device. R. W. Brown. 1,896,880; Feb. 7.
Dental form and making same, Wax. H. Schweitzer. 1,896,128; Feb. 7.
Dental slab. H. Drespel. 1,896,772; Feb. 7.
Dephlegmator. R. E. Nagel. 1,896,245; Feb. 7.
Derrick construction. W. A. Trout. 1,896,530; Feb. 7.
Desuperheating system. D. W. Rudorff. 1,896,247; Feb. 7.
Detector and ejector, Spurious coin. E. DeRyss. 1,896,392; Feb. 7.
Device to be attached to containers. R. R. Brown. 1,896,834; Feb. 7.
Diolefines and for the production of products similar to latex, Emulsifying. M. Luther and C. Heuck. 1,896,491; Feb. 7.
Dipper, Ice cream. O. E. Harris. 1,896,068; Feb. 7.
Dipper, Power actuated. J. P. Murtaugh. 1,896,414; Feb. 7.
Disazo dyes. W. Lange. 1,896,450; Feb. 7.
Disk bit. H. W. Fletcher and F. L. Scott. 1,896,297; Feb. 7.
Dispenser: *See*—
Soap lather dispenser. Toothpick dispenser.
Dispenser. J. Mass. 1,896,750; Feb. 7.
Dispensing apparatus for stickers. O. E. Bennett. 1,896,848; Feb. 7.
Display device. H. L. Myers. 1,896,677; Feb. 7.
Display device for merchandise. H. L. Myers. 1,896,678; Feb. 7.
Display device, Refrigerated. D. A. Battista. 1,896,693; Feb. 7.
Display stand. R. W. Schwab. Des. 89,214; Feb. 7.
Door. A. B. Winchell. 1,896,691; Feb. 7.
Door, Aircraft. C. Rosatelli. 1,896,203; Feb. 7.
Door, Car. H. T. Anderson. 1,896,474; Feb. 7.
Door, Dump car. W. H. Mussey and J. R. Rudulph. 1,896,367; Feb. 7.
Door elevating mechanism. G. Madland. 1,896,686; Feb. 7.
Door fitting. W. A. Thor. 1,896,333; Feb. 7.
Door, gate, or partition, Sliding. J. M. Kirkpatrick. 1,896,748; Feb. 7.
Doorlatch. A. R. Lindsay. 1,896,907; Feb. 7.
Door operating device. C. R. Hill. 1,896,816; Feb. 7.
Drafting board. H. P. Tevonian. 1,896,923; Feb. 7.
Drain on window, Sweat. K. A. Weber. 1,896,262; Feb. 7.
Drawbar and coupling. W. B. Lyon. 1,896,718; Feb. 7.
Drawer guide. F. Bolhuis. 1,896,346; Feb. 7.
Dress. A. S. Simpson. Des. 89,247; Feb. 7.
Drill: *See*—
Core-drill.
Drill head and lubricator. H. W. Fletcher. 1,896,231; Feb. 7.
Drive for motor vehicles, Multiple. H. A. De Wolfe. 1,896,664; Feb. 7.
Drum, Collapsible. H. C. Bostwick. 1,896,280; Feb. 7.
Dust collector. H. J. Cross. 1,896,700; Feb. 7.
Dust separator. C. G. Hawley. 1,896,895; Feb. 7.
Duster and machine for making the same. R. Yutts. 1,896,148; Feb. 7.
Dyeing. J. H. Heap. 1,896,954; Feb. 7.
Dyes, Azo. W. Lange. 1,896,710; Feb. 7.
Dyes of the azine class and manufacture thereof. A. Merz. 1,896,244; Feb. 7.
Dyestuffs of the anthraquinone series, Vat. H. Wolff, M. A. Kuns, and K. Koeberle. 1,896,435; Feb. 7.
Earthworking implement. R. W. Ammons. 1,896,568; Feb. 7.
Egg separator. K. Taniguchi. 1,896,498; Feb. 7.
Elastic fabric. T. F. Moore. 1,896,783; Feb. 7.
Electric conductor. E. L. Andrew. 1,896,475; Feb. 7.
Electric connecter. G. Fossati. 1,896,448; Feb. 7.
Electric controlling apparatus. H. K. Kouyoumjian. 1,896,816; Feb. 7.
Electric device. E. A. Everett. 1,896,813; Feb. 7.
Electric ice cap. C. S. Hassell. 1,896,953; Feb. 7.
Electric machine construction, Dynamo. H. Welchsel. 1,896,265; Feb. 7.
Electric machine, Dynamo. H. Welchsel. 1,896,264; Feb. 7.
Electric motor. A. G. Redmond. 1,896,972; Feb. 7.
Electric power transmission lines, Automatic isolation of parallel three-phase. C. J. Monk and E. F. Rendell. 1,897,009; Feb. 7.
Electric switch. G. W. Lieberum. 1,896,847; Feb. 7.
Electric transmissions, System of. F. W. Gay. 1,896,399; Feb. 7.
Electrical connecter. C. Gough. 1,896,948; Feb. 7.
Electrical regulator. L. W. Thompson. 1,896,855; Feb. 7.
Electrical system. E. F. W. Alexanderson. 1,896,534; Feb. 7.
Electron discharge device. V. L. Ronci. 1,896,464; Feb. 7.
Electrotherapeutic system and apparatus therefor. H. P. Pullwitt. 1,896,647; Feb. 7.
Elevator guide means. L. H. Kiesling. 1,896,900; Feb. 7.
Elevator safety system. H. D. James. 1,896,777; Feb. 7.
Elevator system, Multiple. H. D. James. 1,896,776; Feb. 7.
Elevators, Position and direction indicator for. H. R. Norton. 1,896,784; Feb. 7.
Embroidery. J. Bollman. Des. 89,225; Feb. 7.
Emulsions, Separating. J. F. Putnam. 1,897,011; Feb. 7.
Energy of circulating condensing water, Method and apparatus for utilizing the potential. A. R. Earl. 1,896,136; Feb. 7.
Engine: *See*—
Internal combustion engine. Sleeve valve engine.
Engine. A. G. Ronning. 1,896,754; Feb. 7.
Engine charger. O. H. Spencer. 1,896,256; Feb. 7.
Engine cowling. R. Chilton. 1,896,222; Feb. 7.
Engine, more particularly for the propulsion of vehicles, Internal combustion. C. Schaer. 1,896,852; Feb. 7.
Envelope. A. Scarfi. 1,896,425; Feb. 7.
Esters derived from petroleum hydrocarbons and producing same. H. A. Bruson. 1,896,608; Feb. 7.
Evaporating apparatus. F. X. Govers. 1,896,618; Feb. 7.
Evaporator for refrigerators. G. W. Mason. 1,896,412; Feb. 7.
Evaporator structure for refrigerating systems. R. H. Beman. 1,896,841; Feb. 7.
Excavating machine. R. R. Downie. 1,896,293; Feb. 7.
Exhaustion device. O. Hahn. 1,896,951; Feb. 7.
Extractor: *See*—
Oil and water extractor.
Fabric: *See*—
Elastic fabric.
Fabric treating compound. M. Goldberg. 1,896,815; Feb. 7.

Fan, Electric. E. P. Larsh. 1,896,869; Feb. 7.
Fare box. E. H. Thompson. 1,896,649; Feb. 7.
Fastener: *See*—
Plane covering fastener. Slide fastener.
Separable fastener. Snap fastener.
Fastener. B. C. Place. 1,896,590; Feb. 7.
Faucet. M. Esnard. 1,896,944; Feb. 7.
Feed for sugar cube dispensers. H. J. Thompson and A. F. Sulak. 1,896,208; Feb. 7.
Feeder. M. Frisch. 1,896,354; Feb. 7.
Feeding apparatus for mill rolls. W. Stein. 1,896,724; Feb. 7.
Fibers and product obtained thereby, Weighting textile. F. W. Weber. 1,896,858; Feb. 7.
Filament treatment, Apparatus for. T. H. Byron and R. H. Carter. 1,896,600; Feb. 7.
Files and file casings, Apparatus for the production of. A. Peiseler. 1,896,199; Feb. 7.
Filling and measuring machine. C. H. Vogt. 1,896,210; Feb. 7.
Film, Motion picture. H. B. Byron. 1,896,836; Feb. 7.
Film printing apparatus. F. H. Owens. 1,896,246; Feb. 7.
Film processing machine and method. C. R. Hunter and R. M. Pierce. 1,896,525; Feb. 7.
Film processing machine and method. C. C. Smith, C. R. Hunter, and R. M. Pierce. 1,896,526; Feb. 7.
Film splicing machine. E. I. Sponable. 1,896,871; Feb. 7.
Filter: *See*—
Water filter.
Filter. D. D. Dooley. 1,896,395; Feb. 7.
Filter. W. G. Zerzow. 1,896,655; Feb. 7.
Finger ring. J. J. Kagan. Des. 89,240; Feb. 7.
Firearm. C. J. Jolidon. 1,896,820; Feb. 7.
Firearms, Back sight for. R. von Frommer. 1,896,926; Feb. 7.
Fishing reel. J. W. Hamilton and J. W. Watts. 1,896,582; Feb. 7.
Fitting, Self-balancing steam. E. E. Berry. 1,896,062; Feb. 7.
Fixture, Centrifugal. C. G. Hawley. 1,896,894; Feb. 7.
Flag holder. E. B. Wiley. 1,896,832; Feb. 7.
Flash light. G. H. Barber, F. G. Stimson, and G. B. Pratt. 1,896,605; Feb. 7.
Flash light apparatus, Photographic. F. G. Johnson. 1,896,585; Feb. 7.
Flower pot, Metal. S. Ellis. 1,896,229; Feb. 7.
Fluid control valve, Automatic. F. R. Mott. 1,896,676; Feb. 7.
Fluid pressure brake. E. A. Rockwell. 1,896,374; Feb. 7.
Flush valve. W. C. Groeniger. 1,896,950; Feb. 7.
Flying machine. J. Goldman and D. Liamin. 1,896,511; Feb. 7.
Folding chair. J. W. McCulloh. 1,896,455; Feb. 7.
Folding display stand. J. E. Bales. 1,896,604; Feb. 7.
Food container, Edible. N. M. Thomas. Des. 89,224; Feb. 7.
Food product and packaging the same, Liquid. D. K. Tressler and K. B. Norton. 1,896,529; Feb. 7.
Forging mechanism. A. A. Hentzell. 1,896,621; Feb. 7.
Fountain: *See*—
Poultry drinking fountain.
Frame or stock for pipe cutters and like tools. W. O. Thewes. 1,896,127; Feb. 7.
Frequency changing system for radio transmitters. L. A. Gebhard and C. F. Rudolph. 1,896,168; Feb. 7.
Fruit juicer. S. H. A. Young. Des. 89,232; Feb. 7.
Fruit peeler. C. Kruse. 1,896,318; Feb. 7.
Fuel delivery system for internal combustion engines. E. R. Godward. 1,896,401; Feb. 7.
Fuel, Producing motor. S. Schwartz. 1,896,723; Feb. 7.
Furnace: *See*—
Boiler furnace. Heating furnace.
Coal dust furnace. Reverberatory furnace.
Copper treating furnace. Water cooled furnace.
Furnace. C. S. Franke. 1,896,298; Feb. 7.
Furnace. R. J. Sloan. 1,896,252; Feb. 7.
Furnace construction. J. Thornton. 1,896,116; Feb. 7.
Furnace floor structure. M. Frisch and H. O. Woolley. 1,896,669; Feb. 7.
Furnaces, Regulation of heating. G. A. Merkt. 1,896,910; Feb. 7.
Fuse plug. H. Ruskin. 1,896,248; Feb. 7.
Game board. A. J. Watling. Des. 89,228; Feb. 7.
Game of skill. H. J. Peo. 1,896,915; Feb. 7.
Garment hanger. R. A. Dorrill. 1,896,771; Feb. 7.
Garter and making the same. H. A. Philips. 1,896,646; Feb. 7.
Gas, Apparatus for manufacturing combustible. H. O. Loebell. 1,896,799; Feb. 7.
Gas handling apparatus. E. I. McKesson. 1,896,716; Feb. 7.
Gas tight joint, Flexible. C. A. Brandt. 1,896,216; Feb. 7.
Gases, Apparatus for mixing. F. Manglamell. 1,896,092; Feb. 7.
Gases electrically, Purifying. R. Strigel and W. Feldmann. 1,896,758; Feb. 7.
Gasket. F. Benger. 1,896,278; Feb. 7.
Gasket. H. B. Kendall. 1,896,795; Feb. 7.
Gasoline stock from petroleum oils, Process and apparatus for cracking and separating. J. C. Black. 1,896,345; Feb. 7.
Gate: *See*—
Irrigation gate.
Gate latch. P. T. Maxwell. 1,896,909; Feb. 7.
Gear: *See*—
Molded gear. Vehicle steering gear.
Gear pump. O. N. Phillips. 1,896,970; Feb. 7.
Gear shifting device. G. M. Hartsock. 1,896,893; Feb. 7.
Gears comprising oil pressure operated control couplings particularly for ships' drives, Reversing. A. Dürig. 1,896,440; Feb. 7.
Generator: *See*—
Controlling generator. Oil gas generator.
Generator for sieves, troughs, and like apparatus, Oscillation. G. Linke. 1,896,712; Feb. 7.
Germs, Treatment of wheat. E. Komm. 1,896,490; Feb. 7.
Glassware annealing leer and drift controlling apparatus therefor. H. A. Wadman. 1,896,874; Feb. 7.
Glassware, Method of and apparatus for the manufacture of blown. A. J. Smith. 1,896,870; Feb. 7.
Glazing process, Dry. G. F. Wilde. 1,896,029; Feb. 7.
Golf ball tees, Apparatus for forming. R. V. Sweeney. 1,896,922; Feb. 7.
Grain pickup mechanism. G. Innes. 1,896,626; Feb. 7.
Grinder, Coffee. J. F. Lamb. Des. 89,234; Feb. 7.
Guard, Scriber. C. D. Gilmore. 1,896,580; Feb. 7.
Gum, Method of and apparatus for delivering crude pine. C. C. Gillican. 1,896,616; Feb. 7.
Gun carriage adapted to be transformed rapidly into a gun carriage for firing upon aircraft, Wheeled. N. E. Methlin. 1,896,911; Feb. 7.
Gun mount. B. Palmer. 1,896,186; Feb. 7.
Hair and scalp treating apparatus. P. Anastasi. 1,896,933; Feb. 7.
Hair curler. A. Goodman. 1,896,617; Feb. 7.
Hair dressing appliance. G. A. Holmes. 1,896,866; Feb. 7.
Hair, Method and apparatus for waving. W. E. Lippert. 1,896,091; Feb. 7.
Halogenation process and products produced thereby. W. S. Calcott and A. S. Carter. 1,896,160; Feb. 7.
Handkerchief or similar article. V. Flannery. Des. 89,175; Feb. 7.
Hanger: *See*—
Clothes hanger. Radiator hanger.
Garment hanger. Transformer hanger.
Hanger clamp. J. H. Moore. 1,896,456; Feb. 7.
Hanger for auxiliary wiper arms. H. Hueber and E. C. Horton. 1,897,007; Feb. 7.
Hardware, Builder's. E. H. Johnson. 1,896,363; Feb. 7.
Headlight, Vehicle. J. Grau. 1,896,194; Feb. 7.
Heat exchange apparatus. H. J. Gebhardt. 1,896,774; Feb. 7.
Heat exchanger. L. P. Whitaker. 1,896,502; Feb. 7.
Heat exchangers, Making. L. P. Whitaker. 1,896,501; Feb. 7.
Heat treating apparatus. R. W. Hyde. 1,896,625; Feb. 7.
Heat treatment of garnet abrasive. E. W. Colt. Re18,730; Feb. 7.
Heat treatment of rails. J. Brunner. 1,896,572; Feb. 7.
Heating device. A. B. Modine. 1,896,413; Feb. 7.
Heating furnace, Regenerative. G. H. Isley. 1,897,008; Feb. 7.
Heating system for automotive vehicles. V. J. Butterfield. 1,896,068; Feb. 7.
Hitch. A. E. Selvester. 1,896,427; Feb. 7.
Hoe, Weeder. E. Enderes. 1,896,441; Feb. 7.
Holder: *See*—
Cigarette holder. Sandpaper holder.
Flag holder.
Holder for safety testing devices, Prong-type. C. H. Spangler. 1,896,598; Feb. 7.
Holding devices for printing members, Apparatus for making. R. A. Bond. 1,896,156; Feb. 7.
House number casing or similar article, Illuminated. J. von Alt. Des. 89,226; Feb. 7.
Housing for air conditioning apparatus. E. S. George and H. L. Blydenburgh. Des. 89,176; Feb. 7.
Housing for lamp for surgical work and the like. A. F. Pieper. Des. 89,208; Feb. 7.
Hub cap or the like. G. Brown. 1,896,066; Feb. 7.
Humidifier. L. W. Hoyt. 1,896,514; Feb. 7.
Hydraulic brake. A. B. Shantz. 1,896,103; Feb. 7.
Hydraulic operating mechanism. M. W. Carroll. 1,897,002; Feb 7.
Hydrocarbons, Apparatus for treating. H. T. Darlington. 1,896,165; Feb. 7.
Hydrocarbons, Cracking. G. Egloff. 1,896,226; Feb. 7.
Hydrocarbons, Cracking. G. Egloff. 1,896,228; Feb. 7.
Hydrocarbons, Process and apparatus for cracking. R. Tillmann. 1,896,986; Feb. 7.
Hydrocarbons, Treating. H. T. Darlington. 1,896,166; Feb. 7.
Hydrogen, Making commercial. G. A. Perley. 1,896,916; Feb. 7.
Hydrogen, Producing. F. M. Pyzel. 1,896,420; Feb. 7.
Ice cubes, Apparatus for forming. J. E. Spalding. 1,896,756; Feb. 7.
Ignition coil. F. Yoerger. 1,896,932; Feb. 7.
Ignition means. W. E. Miller. 1,896,675; Feb. 7.
Ignition timer. M. Mallory. 1,896,714; Feb. 7.
Indophenols and leucoindophenols of the azine series. F. Muth. 1,896,461; Feb. 7.
Inductance, Adjustable. F. J. Given. 1,896,510; Feb. 7.
Inductance device, Balanced. A. J. Christopher. 1,896,480; Feb. 7.
Inductance units, Variable. J. A. Willoughby. 1,896,269; Feb. 7.

Influencing by a ray projector a cell sensitive to light, Device for. F. Scharff. 1,896,830; Feb. 7.
Innersole for welt shoes, Compound. P. W. Valentine. 1,896,531; Feb. 7.
Insulating material, Electric. M. Hagedorn, O. Reichert, and E. Guhring. 1,896,581; Feb. 7.
Insulator. P. G. Briney. 1,896,937; Feb. 7.
Insulator. C. E. Daussa. 1,896,576; Feb. 7.
Insulators, Apparatus for protecting power-line. H. P. Sleeman. 1,896,189; Feb. 7.
Interlock, Electromechanical. E. L. Dunn. 1,896,541; Feb. 7.
Interlocking system for railroads. W. K. Howe. 1,897,605; Feb. 7.
Internal combustion engine. C. C. Champion, jr. 1,896,163; Feb. 7.
Internal combustion engine. H. V. Honn. 1,896,174; Feb. 7.
Internal combustion engine. A. M. Niven. 1,896,095; Feb. 7.
Internal combustion engine. J. E. Serstè. 1,896,102; Feb. 7.
Internal combustion engine. L. M. Woolson. 1,896,387; Feb. 7.
Iodine preparation and making the same. J. C. Harry. 1,896,171; Feb. 7.
Irrigation gate. W. R. Sherman. 1,896,331; Feb. 7.
Jack: *See*—
Lifting jack.
Jack for vehicles, Lifting. D. W. Sessions. 1,896,977; Feb. 7.
Jack lift and truck mechanism for motor vehicles, Auxiliary. A. H. Wellensiek. 1,896,118; Feb. 7.
Jail lock. A. Main. 1,896,523; Feb. 7.
Joint: *See*—
Conical joint. Universal joint.
Gas tight joint.
Joint for sheathed high tension cables, Fluid stop. E. D. Eby. 1,896,841; Feb. 7.
Jug or similar article, Cream. C. Kaiser. Des. 89,196; Feb. 7.
Knee pad. W. J. Ruth. 1,896,561; Feb. 7.
Knitting machine. W. A. Ingalls. 1,898,686; Feb. 7.
Knitting machine. V. Lombardi. 1,896,935; Feb. 7.
Knitting machine. E. H. Steere. 1,896,431; Feb. 7.
Lamp for motor vehicle bodies, Pillar. H. B. Donley. Des. 89,173; Feb. 7.
Lamp, Mercury vapor. F. R. K. V. Turkenburg. 1,896,651; Feb. 7.
Lamp socket remover, Incandescent. F. L. Palmer. 1,896,680; Feb. 7.
Lamp, Stop and tail. R. N. Faige, A. R. Lewellen, and C. A. Michel. 1,896,887; Feb. 7.
Landing for mine cages. G. Holmes. 1,896,362; Feb. 7.
Latch: *See*—
Gate latch.
Latch mechanism for cake formers and the like. F. C. Simon. 1,896,564; Feb. 7.
Lathes, Piece placer and puller attachment for. H. R. Moore. 1,896,366; Feb. 7.
Lavatory. W. J. Kohler, jr., and F. G. Brotz. Des. 89,200; Feb. 7.
Leather, Washable printed. C. S. Friedman. 1,896,353; Feb. 7.
Letters, Changeable. J. E. Williams. 1,896,131; Feb. 7.
Leveling device for vehicles, Automatic. A. F. Callison. 1,896,883; Feb. 7.
Lifting jack, Automobile. C. D. Martinetti. 1,896,715; Feb. 7.
Light: *See*—
Flash light.
Lighter, Pocket. A. Kaufmann. 1,896,140; Feb. 7.
Lime from oyster shells, Making. C. R. Haden. 1,896,403; Feb. 7.
Line carrying reel. J. T. Crandall. 1,896,741; Feb. 7.
Line tightener. R. McD. Pyles. 1,896,415; Feb. 7.
Lining for oil wells, Cement. R. P. Simmons. 1,896,104; Feb. 7.
Linkage control for power brake. E. A. Rockwell. 1,896,376; Feb. 7.
Linoleum and the like, Manufacture of inlaid. H. Montgomery. 1,896,967; Feb. 7.
Liquid dispensing apparatus. D. M. Clark. 1,896,134; Feb. 7.
Liquid dispensing apparatus. L. McCandless. 1,896,751; Feb. 7.
Load block. W. White. 1,896,266; Feb. 7.
Loading mechanism. G. Lambert. 1,896,587; Feb. 7.
Lock: *See*—
Jail lock. Snap-in lock.
Pin tumbler lock.
Lock. J. Hines. 1,896,622; Feb. 7.
Lock for screw threaded devices. R. C. Zeidler. 1,896,388; Feb. 7.
Lock for weighing scales. J. W. Bryce. 1,896,283; Feb. 7.
Lock washer. G. C. Trotter. 1,896,650; Feb. 7.
Locking device. C. G. Olson. 1,896,679; Feb. 7.
Locking device for scales. J. I. M. Kibbe. 1,896,400; Feb. 7.
Locking mechanism. W. F. Diesel. 1,896,685; Feb. 7.
Loom. E. J. Wentz. 1,896,337; Feb. 7.
Looms, Filling detector for. J. W. Simpson. 1,896,332; Feb. 7.
Lubricant compressor. J. R. Battle. 1,896,507; Feb. 7.
Lubricating apparatus. H. J. Murphy. 1,896,460; Feb. 7.
Lubricating waste or packing, Cleaning. L. S. Wilbur. 1,896,287; Feb. 7.
Lubricator. G. C. Pearson. 1,896,308; Feb. 7.
Lubricator. G. W. Quivey. 1,896,421; Feb. 7.
Lubricator coupling. F. L. Scott. 1,896,250; Feb. 7.
Luggage carrier for vehicles. S. Jepsen. 1,896,628; Feb. 7.
Luggage, Hand. G. H. Wheary and B. M. Hamlin. 1,896,761; Feb. 7.
Lumber stamping device, Automatic. G. Lunden. 1,896,548; Feb. 7.
Lumber, Treating green. A. L. Taylor. 1,896,984; Feb. 7.
Lunch box. J. B. Devine. 1,896,398; Feb. 7.
Machine for cleaning fabrics. P. M. Rutherford. 1,896,424; Feb. 7.
Machine for cutting ice cream blocks. J. F. Schmerheim. 1,896,788; Feb. 7.
Machine for manufacturing filter ribbon. P. B. Renfrew. 1,896,122; Feb. 7.
Machine for manufacturing hollow rotary elements from circular blanks of sheet metal. C. Schmidt. 1,896,426; Feb. 7.
Machine for operating upon the end portions of shoes. W. C. Baxter. 1,896,153; Feb. 7.
Machine for producing bias weave fabric. R. S. Seddon. 1,896,596; Feb. 7.
Machine for shaping shoe uppers. J. C. Jorgensen. 1,896,121; Feb. 7.
Magnesium chloride and making same, Powdered anhydrous. S. B. Heath. 1,896,406; Feb. 7.
Malt and malt mixture, Mashing. P. de G. Beaubien, J. F. Schneider, and F. M. Dupont. 1,896,658; Feb. 7.
Manifold, Hot spot. G. M. Holley. 1,896,085; Feb. 7.
Marker, Plant. J. Borovicka. 1,896,605; Feb. 7.
Marker, Road. J. R. O'Brien. 1,896,641; Feb. 7.
Marker, Street. P. Shapiro. 1,896,920; Feb. 7.
Masonry facing construction. V. E. Shanklin. 1,896,188; Feb. 7.
Masonry structure, Reenforced and anchored. A. Coyne. 1,896,810; Feb. 7.
Meat clamp. W. Gumprich and C. H. Good. 1,896,304; Feb. 7.
Mechanical movement. A. A. Stone. 1,896,732; Feb. 7.
Mechanism for selectively actuating a plurality of movable members. H. A. Wende. 1,896,146; Feb. 7.
Medium for dehydrating cut oils. P. Kaplan. 1,897,021; Feb. 7.
Mercury, Recovery. H. G. Wildman. 1,896,876; Feb. 7.
Metal compositions, Apparatus for making hard. G. F. Taylor. 1,896,854; Feb. 7.
Metal-rolling tool. W. S. Hayford and C. R. Moore. 1,896,512; Feb. 7.
Metal surfaces, Assembly of. S. M. Anderson. 1,896,656; Feb. 7.
Meter: *See*—
Condensation meter. Tandem meter.
Meters, Testing watthour. D. S. Schnell and R. C. Fryer. 1,896,755; Feb. 7.
Mining apparatus. L. A. Maxson. 1,896,184; Feb. 7.
Modulating device. F. B. Llewellyn. 1,896,780; Feb. 7.
Modulating device. R. S. Ohl. 1,896,785; Feb. 7.
Modulating system. C. A. Culver. 1,896,742; Feb. 7.
Modulator system. J. A. Willoughby. 1,896,268; Feb. 7.
Moistening device. T. H. and A. P. Krueger. 1,896,317; Feb. 7.
Mold: *See*—
Box mold.
Mold. C. J. Hubbell and W. D. McCauley. 1,896,318; Feb. 7.
Molded gear. O. A. Cherry. 1,896,070; Feb. 7.
Molding, Apparatus for. P. Mahieu. 1,896,824; Feb. 7.
Molding method and apparatus. R. E. Schirmer. 1,897,023; Feb. 7.
Mop. E. B. Hall, jr. 1,896,843; Feb. 7.
Motor: *See*—
Single phase motor.
Motor control system, Synchronous. S. C. Ewing. 1,896,074; Feb. 7.
Mounting, Engine. R. S. Trott. 1,897,014; Feb. 7.
Mounting, Front motor. E. L. Wylie and E. H. Mohme. 1,896,859; Feb. 7.
Mouthpiece of wind musical instruments. W. Gemeinhardt. 1,796,814; Feb. 7.
Mower, Lawn. J. H. Farmer. 1,896,442; Feb. 7.
Musical instrument. R. Dopyera. 1,896,484; Feb. 7.
Naphthalenes from technical naphthalene, Production of hydrogenated. H. Broche and H. Schmitz. 1,896,282; Feb. 7.
Necktie, Four-in-hand. C. Winkler. 1,896,930; Feb. 7.
Nightgown. L. J. Goldberg. Des. 89,178; Feb. 7.
Nitrided article of ferrous character containing a case-toughening element combined with a balanced case-forming element. H. J. French. 1,896,888-90; Feb. 7.
Nitrocellulose powders, Making. A. S. O'Neil. 1,896,642; Feb. 7.
Nitrous oxide, Manufacturing. W. Friederich. 1,896,945; Feb. 7.
Notching mechanism. C. L. Perry. 1,896,850; Feb. 7.
Nutrients from the products of cerealia and legumens, Obtaining high-valued. E. Komm. 1,896,521; Feb. 7.
Oil and water extractor. S. Bramsen and F. Wahlin. 1,896,833; Feb. 7.
Oil burner. P. P. Gilles. 1,896,791; Feb. 7.

Oil gas generator. E. E. Bussey. 1,896,220; Feb. 7.
Oil in refrigerating systems, Apparatus for recovering and controlling the flow of. R. H. Beman and J. H. Benson. 1,896,061; Feb. 7.
Oil pressure safety appliance. H. A. Mullin. 1,896,459; Feb. 7.
Oil product and making same, Marine. H. O. Nolan. 1,896,185; Feb. 7.
Oil pumping apparatus. L. A. Rawson. 1,896,558; Feb. 7.
Oil, Treatment of. K. T. Steik. 1,896,470; Feb. 7.
Oiler, Rail and flange. D. W. Davis. 1,896,702; Feb. 7.
Oils, Converting high boiling hydrocarbon oils into lower boiling hydrocarbon. G. Cash. 1,896,728; Feb. 7.
Oils, Making stable low pour point lubricating. H. T. Bennett and L. G. Story. 1,896,342; Feb. 7.
Oils, Treatment of cut. F. E. Fuchs. 1,897,019; Feb. 7.
Oils, Treatment of fatty. J. Scheiber. 1,896,467; Feb. 7.
Open spaces on buliding, Arrangement for producing. C. A. Windeknecht. 1,896,433; Feb. 7.
Opening devices for boxes or like containers. H. T. Gaseltine. 1,896,400; Feb. 7.
Ores, Apparatus for reducing chrome. D. M. Scott. 1,896,789; Feb. 7.
Ores, Reducing. F. E. Kern. 1,896,088; Feb. 7.
Organic compounds, Catalytic molecular association of. A. O. Jaeger. 1,896,240; Feb. 7.
Oscillator, Constancy frequency. F. B. Llewellyn. 1,896,781; Feb. 7.
Otoscope. W. L. Patterson. 1,896,720; Feb. 7.
Oven, Barbecue. J. W. Cain. 1,896,192; Feb. 7.
Overload device or circuit breaker, Protective. G. O. Wilms. 1,896,736; Feb. 7.
Oxides and gases from molten aluminum and aluminum alloys, Separating. R. Sterner-Rainer. 1,896,201; Feb. 7.
Package. W. F. Straub and E. W. Fuerst. Des. 89,222; Feb. 7.
Package for rolled webs of flexible material, Tubular dispensing. J. C. Wilson. 1,896,119; Feb. 7.
Package for sliced bread. O. B. Andrews. 1,896,602; Feb. 7.
Packing for windshield cleaners. H. Hueber and E. C. Horton. 1,896,792; Feb. 7.
Pad: *See*—
Knee pad.
Paper feed mechanism for tabulating or other printing machines. A. Thomas and F. G. S. English. 1,896,983; Feb. 7.
Paper, Grease resistant. T. F. Bradley. 1,896,215; Feb. 7.
Paper, Manifolding. J. Q. Sherman. 1,897,013; Feb. 7.
Pedal. R. C. Sanders and C. L. Humphrey. 1,896,975; Feb. 7.
Pedal, Swimming. E. J. Roberts. 1,896,373; Feb. 7.
Pen, Fountain. L. H. Ashmore. 1,896,152; Feb. 7.
Pencil pointer. C. A. Smith, 2d. 1,896,253; Feb. 7.
Permanent wave device. S. and A. Cefalu. 1,896,940; Feb. 7.
Pessary. G. A. Clark. 1,896,071; Feb. 7.
Phase multiplier. A. Hund. 1,896,747; Feb. 7.
Pigments by wet-precipitation, Manufacture of. W. C. Hooey. 1,896,312; Feb. 7.
Pillow cover or the like. M. R. Hamre. Des. 89,185; Feb. 7.
Pillow cover or the like. M. R. Hamre. Des. 89,187; Feb. 7.
Pilots in handling airplanes, Device for training. W. E. Huffman. 1,896,175; Feb. 7.
Pin setting machine. W. White. 1,896,383; Feb. 7.
Pin-setting machine. W. White, H. C. Petersen and W. H. Lansmith. 1,896,384; Feb. 7.
Pin tumbler lock. N. Littell. 1,896,319; Feb. 7.
Pipe. L. B. Linkman. 1,896,800; Feb. 7.
Pipe connecter, Automatic train. A. S. Johnson. 1,896,687; Feb. 7.
Pipe connecter, Automatic train. J. Robinson. 1,896,917–19; Feb. 7.
Pipe connector head, Automatic train. M. A. Barber. 1,896,340; Feb. 7.
Pipe junctures, Expansion equalizing means for. W. E. S. Dyer. 1,896,225; Feb. 7.
Pipe wrench. A. B. Allen. 1,896,437; Feb. 7.
Pipes, Molding of concrete and like. A. Rutenberg. 1,896,978; Feb. 7.
Piston. J. A. Speer. 1,896,124; Feb. 7.
Pitman construction. J. R. Mahan. 1,896,549; Feb. 7.
Plane covering fastener. E. H. White. 1,896,130; Feb. 7.
Plane, Vacuum propeller. O. C. Krogh. 1,896,089; Feb. 7.
Plate and making same, Corrosion resistant metal. A. E. Maskrey. 1,896,411; Feb. 7.
Platinum and its bymetals from mattes, Recovery of. G. Bauer. 1,896,807; Feb. 7.
Plow guiding means. C. J. Viardi. 1,896,532; Feb. 7.
Plows, Weed turner for. A. C. Tegtmeyer. 1,896,566; Feb. 7.
Plug: *See*—
Fuse plug. Sparking plug.
Safety blasting plug.
Plunger lift equipment. H. W. Fletcher. 1,896,232; Feb. 7.
Poison spreader. J. M. Butler. 1,896,882; Feb. 7.
Polishing composition and preparing same. P. Logue and T. W. Schlib. 1,896,823; Feb. 7.
Polymer of vinyl acetylene and producing same. A. S. Carter and F. B. Downing. 1,896,162; Feb. 7.
Porous structures, Manufacture of. J. C. Smith and H. T. Bellamy. 1,896,190; Feb. 7.
Pot for typographical machines, Metal. W. F. Severin. 1,897,012; Feb. 7.
Pot or similar article. G. N. Allen and C. A. Bennett. Des. 89,235; Feb. 7.
Poultry drinking fountain. J. F. Gibbs. 1,896,615; Feb. 7.
Power generating plant, Electric. F. W. Gay. 1,896,356; Feb. 7.
Power plant. R. Hellborg. 1,896,308; Feb. 7.
Power take-off, Demountable. A. F. Burgess, H. L. Blaisdell, and W. H. Campbell. 1,896,067; Feb. 7.
Power transmission apparatus. H. E. Nietsche. 1,896,462; Feb. 7.
Preparation suitable as wetting agent. W. Jaeck and J. Lang. 1,896,899; Feb. 7.
Pressing machine. B. W. Brockett. 1,896,217; Feb. 7.
Pressing machine. G. W. Johnson. 1,896,516; Feb. 7.
Pressing machine. R. C. Pauly. 1,896,496; Feb. 7.
Printing attachment for scales. J. W. Bryce. 1,896,284; Feb. 7.
Printing machine, Rotary. J. R. Peirce. 1,896,555; Feb. 7.
Propeller mounting, Airplane. E. C. Larson. 1,896,730; Feb. 7.
Protective agent for meta styrene. H. J. Barrett and E. F. Izard. 1,896,504; Feb. 7.
Protective system. R. D. Evans. 1,896,773; Feb. 7.
Protector: *See*—
Banana protector. Tree and wire protector.
Protractor. A. A. Van Winkle. 1,896,432; Feb. 7.
Puller: *See*—
Terminal puller.
Pulley, Starting. R. J. Bartholomew. 1,896,506; Feb. 7.
Pulling implement. L. Haubert. 1,896,488; Feb. 7.
Pump: *See*—
Centrifugal pump. Gear pump.
Pump. F. Gibson. 1,896,445; Feb. 7.
Pump. G. Wallach. 1,896,727; Feb. 7.
Pump valve. L. C. Huff. 1,896,237; Feb. 7.
Pumping apparatus. S. A. Gutman. 1,896,358; Feb. 7.
Quantity indicating devices for liquids. J. MacCallum, jr., 1,896,637; Feb. 7.
Rack. W. N. Vance. 1,896,600; Feb. 7.
Rack for refrigerators, ovens, and like compartments. C. T. Hatch. 1,896,307; Feb. 7.
Radiator cap. S. Klasstorner. Des. 89,199; Feb. 7.
Radiator hanger. F. W. Fuller. 1,896,299; Feb. 7.
Radio interference, Reducing. E. N. Hyde. 1,896,819; Feb. 7.
Radio receiving system. V. C. Macnabb. 1,896,825; Feb. 7.
Radio steering device, Directional. E. A. Sperry, jr., and B. A. Wittkuhns. 1,896,805; Feb. 7.
Radio tube comparator. D. Taylor. 1,896,726; Feb. 7.
Rail anchor and making the same. H. G. Warr. 1,896,653; Feb. 7.
Rail splice. C. A. Lind. 1,896,964; Feb. 7.
Rails or the like, Method and apparatus for testing. T. Zuschlag. 1,896,737; Feb. 7.
Railway terminal of the direct steaming type. E. Brock. 1,896,765; Feb. 7.
Razor, Safety. A. R. Douglass. 1,896,886; Feb. 7.
Razor, Safety. E. N. Weber. 1,896,880; Feb. 7.
Receptacle and closure therefor. C. A. Southwick, jr. 1,896,144; Feb. 7.
Receptacle for luminescent discharge tubes. J. C. McClelland. 1,896,365; Feb. 7.
Record sheet, Perforated. K. D. Evans. 1,896,542; Feb. 7.
Rectifier, Gas content. A. Gebrts. 1,896,614; Feb. 7.
Reel: *See*—
Fishing reel. Line carrying reel.
Reel-attaching machine. J. F. Standish. 1,896,125; Feb. 7.
Reel brake, Automatic fishing. E. B. Perrine. 1,896,369; Feb. 7.
Reenforcement connected with reenforced concrete buildings, slabs, playgrounds and such like. W. J. F. Hutcheson. 1,896,957; Feb. 7.
Reflector. C. A. Kuhns. 1,896,090; Feb. 7.
Refrigerating apparatus. R. W. Davenport. 1,896,612; Feb. 7.
Refrigerating apparatus. A. J. Kercher. 1,896,448; Feb. 7.
Refrigerating apparatus. T. C. Whitehead and H. A. Greenwald. 1,896,385; Feb. 7.
Refrigeration. C. G. Munters. 1,896,323; Feb. 7.
Refrigeration unit. F. C. Geller. 1,897,020; Feb. 7.
Refrigeration unit. E. A. Hampson. 1,896,080; Feb. 7.
Regulating means. B. M. Leece and D. S. Cole. 1,896,547; Feb. 7.
Regulating system. R. M. Carothers and L. W. Thompson. 1,896,862; Feb. 7.
Regulator: *See*—
Electrical regulator.
Regulator for compressors, Automatic. L. L. Collins. 1,896,790; Feb. 7.
Rehearer. W. H. Armacost. 1,896,213; Feb. 7.

Relay system for ground faults, Compensated. W. A. Lewis. 1,897,022; Feb. 7.
Reluctance controlling means. C. H. Zierdt. 1,896,436; Feb. 7.
Remote control apparatus. H. G. Phelps. 1,896,418; Feb. 7.
Remote control apparatus for radio circuits. E. J. Manz. 1,896,550; Feb. 7.
Resilient structure for chairs and the like. F. J. Trainor. 1,896,260; Feb. 7.
Resin and making same, Urea-acetaldehyde-formaldehyde. G. Barsky and H. P. Wohnsiedler. 1,896,276; Feb. 7.
Resin composition and making same, Phenol-aldehyde-drying oil. C. S. Ferguson. 1,896,842; Feb. 7.
Resinous compounds and products therefrom, Producing. G. Egloff. 1,896,227; Feb. 7.
Retaining device. C. E. Peckham. 1,896,681; Feb. 7.
Reverberatory furnace. C. R. Kuzell. 1,896,178; Feb. 7.
Reversing mechanism for machine tools. C. T. Raule. 1,896,752; Feb. 7.
Road grading machine. T. D. Workman. 1,896,931; Feb. 7.
Roaster, Electric smokeless. J. J. Bonaccorsi. 1,896,537; Feb. 7.
Roaster, grinder, and urn, Combined coffee. G. Farago. 1,896,230; Feb. 7.
Rock and other hard minerals, Breaking. E. Lafayette. 1,896,960; Feb. 7.
Roof anchoring means. H. C. Reyes. 1,896,422; Feb. 7.
Roof, Metal car. C. E. Gibbs and A. B. Lawson. 1,896,891; Feb. 7.
Rotary cutter. L. L., J. L., and S. L. Chong. 1,896,891; Feb. 7.
Roundabout. D. J. Lahay. 1,896,796; Feb. 7.
Rubber, Artificial. H. Meis, W. Klein, and E. Tschunkur. 1,896,493; Feb. 7.
Rubber coated articles and process. P. H. Watkins. 1,896,263; Feb. 7.
Rubber treatment. A. F. Bigger and A. C. Squires. 1,896,660; Feb. 7.
Rubber vulcanization. O. Behrend. 1,896,535; Feb. 7.
Rubbing block. J. M. Gauss. 1,896,946; Feb. 7.
Running-board for automobiles. A. H. Leamy. 1,896,797; Feb. 7.
Safety blasting plug. R. J. Heitzman. 1,896,817; Feb. 7.
Safety control for motion picture projection machines. A. E. Irons and D. S. Kepler. 1,896,672; Feb. 7.
Salts, Decomposition of complex hydrofluoric. M. Buchner. 1,896,697; Feb. 7.
Samples from drilled wells, Apparatus for obtaining. G. A. Macready. 1,896,522; Feb. 7.
Samples from drilled wells, Obtaining. G. A. Macready. 1,896,492; Feb. 7.
Sanding device for automobiles. J. Glen. 1,896,357; Feb. 7.
Sandpaper holder. C. Adornette. 1,896,738; Feb. 7.
Sanitary pipe coupling. I. H. Kendall. 1,896,519; Feb. 7.
Sash, Revolving window. Z. Ruchin. 1,896,559; Feb. 7.
Scaffolding. A. Kolyoord. 1,896,688; Feb. 7.
Scale attachment. W. Gumprich. 1,897,027; Feb. 7.
Scale, Counter. T. H. Strachan. 1,896,258; Feb. 7.
Scale, Even balance. C. E. Breaden. 1,896,281; Feb. 7.
Scales. L. S. Smithers. 1,896,255; Feb. 7.
Scales, Even balance. W. N. Gilbert. 1,896,301; Feb. 7.
Scarf or similar article. J. Malsch. Des. 89,203; Feb. 7.
Screen for granular materials. C. A. Scott. 1,896,595; Feb. 7.
Screen for photographic purposes, photo-mechanical printing processes and the like. A. R. Trist. 1,896,567; Feb. 7.
Screen or shade operating means. A. J. Hixon. 1,896,623; Feb. 7.
Seal for joints of furnaces, Self-adjusting. E. J. Franklin. 1,896,486; Feb. 7.
Seal, Oil. E. A. Rockwell. 1,896,378; Feb. 7.
Seat for automobiles, Back. A. Bolier. 1,896,477; Feb. 7.
Seed-sowing implement. R. L. Scarlett. 1,896,562; Feb. 7.
Self sealing tube. P. J. Jakubec. 1,896,729; Feb. 7.
Separable fastener. S. M. Ward. 1,896,129; Feb. 7.
Separator: *See*—
Centrifugal separator. Egg separator.
Dust separator. Steam separator.
Sewing box. Z. Wallis. Des. 89,227; Feb. 7.
Sewing machine. R. B. Woodcock. 1,896,211; Feb. 7.
Sewing machines, Fabric guiding means for. F. A. Kucera. 1,896,903; Feb. 7.
Shaping or dressing apparatus. A. Vuilleumier. 1,896,583; Feb. 7.
Sharpener, Razor blade. G. W. Bowers. 1,896,848; Feb. 7.
Sheet material with granular material, Apparatus for coating. J. G. Macildowie. 1,896,638; Feb. 7.
Sheet piling. G. E. Thackray. 1,896,259; Feb. 7.
Shelf, Refrigerator cabinet. J. L. Knight. 1,896,846; Feb. 7.
Ship's trim indicator. H. Bennett. 1,896,998; Feb. 7.
Shirt. H. Kleinberg. 1,896,242; Feb. 7.
Shock absorber. G. M. Cross. 1,896,539; Feb. 7.
Shoe sole. H. W. Martin and R. H. Blanchard. Des. 89,204; Feb. 7.
Shopping bag. P. E. Draheim. 1,897,018; Feb. 7.
Signal: *See*—
Turning signal.
Signal. E. B. Jones. 1,896,314; Feb. 7.
Signal device for vehicles. E. C. O'Donnell. 1,896,495; Feb. 7.
Signal indicating system. M. Bruno. 1,896,218; Feb. 7.
Signaling apparatus, Railway. L. H. Peter. 1,896,870; Feb. 7.
Signaling device, Electromagnetic. I. W. Green and F. C. Bisbee. 1,896,195; Feb. 7.
Signaling device for motor vehicles, Automatic. F. H. A. Lécolle. 1,896,905; Feb. 7.
Signaling system. O. E. Buckley. 1,896,767; Feb. 7.
Signals, Apparatus for the control of highway crossing. H. S. Young and H. N. Dixon. 1,896,120; Feb. 7.
Silk and products obtained thereby, Treating natural and artificial. F. W. Weber and E. Schaeffer. 1,896,881; Feb. 7.
Silk, Degumming. L. D. Myers and L. A. Stegemeyer. 1,896,494; Feb. 7.
Single phase motor, Two-speed. W. J. Morrill. 1,896,848; Feb. 7.
Sled brake. G. C. Mate and C. Takács. 1,896,966; Feb. 7.
Sleeve valve engine. A. M. Niven. 1,896,094; Feb. 7.
Slide fastener. G. Johnson. 1,896,867; Feb. 7.
Snap fastener attached clip member. C. L. Hall. 1,896,864; Feb. 7.
Snap fastener, Separable. P. Upham. 1,896,873; Feb. 7.
Snap-in lock. W. A. Carmichael and F. H. Hart. 1,896,509; Feb. 7.
Soap lather dispenser. H. W. Hollands. 1,896,624; Feb. 7.
Socket, Lamp. O. H. Van Amburg. 1,896,857; Feb. 7.
Socket wrench. J. Greiner. 1,896,949; Feb. 7.
Sound picture apparatus. T. W. Case. 1,896,682; Feb. 7.
Sound recording apparatus. D. W. Raynolds and P. J. Schwarzhaupt. 1,896,851; Feb. 7.
Sound recording, Photographic. L. W. Chubb. 1,896,768; Feb. 7.
Sparking plug. G. Fossati. 1,896,444; Feb. 7.
Speed control apparatus for locomotives. H. Lemp. 1,896,633; Feb. 7.
Speed transmission for motor vehicles, Hydraulic change. E. E. Foster. 1,896,577; Feb. 7.
Spindle swing bracket. R. J. Bartholomew. 1,896,505; Feb. 7.
Splitting machine. T. H. Seely. 1,896,187; Feb. 7.
Spreader. J. R. Simpson. 1,896,205; Feb. 7.
Spring end connection. F. J. Bechert. 1,896,878–9; Feb. 7.
Stacking apparatus. C. D. Knowlton. 1,896,177; Feb. 7.
Stage for theaters and the like. C. Vitolo. 1,896,652; Feb. 7.
Stain. D. A. Brodeur. 1,896,662; Feb. 7.
Stairway, Artificial cascade. D. E. Sargent. Des. 89,213; Feb. 7.
Stamping machine, Roller type. J. S. Phelps. 1,896,556; Feb. 7.
Stand: *See*—
Case and display stand. Folding display stand.
Stapling machines, Wire feeding device for. G. E. Breece. 1,896,661; Feb. 7.
Starch conditioning mechanism and time lag control therefor. H. W. Harrigan. 1,896,359; Feb. 7.
Steam conditioner, Centrifugal. C. G. Hawley. 1,896,897; Feb. 7.
Steam separator. C. G. Hawley. 1,896,896; Feb. 7.
Steam trap. L. P. Strong. 1,896,528; Feb. 7.
Steam trap. G. Szucs. 1,896,733; Feb. 7.
Steering device. J. E. Erickson. 1,896,396; Feb. 7.
Stem and making same. J. A. Spencer. 1,896,599; Feb. 7.
Stencil device. O. P. Wolfe, jr. 1,896,877; Feb. 7.
Sterilizer, Bottle. J. C. Hall. 1,896,805; Feb. 7.
Sterilizer, Dish. J. Thomas. 1,896,648; Feb. 7.
Sterilizing apparatus. J. C. Ross. 1,896,879; Feb. 7.
Stirrer, Submerged. F. O'Neill. 1,896,327; Feb. 7.
Stool, Collapsible. L. E. Goeller. 1,896,446; Feb. 7.
Stove. V. Lagneau. 1,896,197; Feb. 7.
Strainer, Cement well. G. W. Woods. 1,896,212; Feb. 7.
Strainer, Milk. E. E. Gottman. 1,896,816; Feb. 7.
Stranding machine. H. Hill. 1,896,084; Feb. 7.
Steam treatment. C. E. Lucke. 1,896,181; Feb. 7.
Strip map holder. A. E. and K. G. Bloomfield. 1,896,935; Feb. 7.
Strip registering and tensioning device. L. F. Hagemann. 1,896,078; Feb. 7.
Structural unit and assembly. D. H. Bitney. 1,896,279; Feb. 7.
Stud, Snap fastener. C. L. Knutson. 1,896,630; Feb. 7.
Sucker rods, Apparatus for testing. A. M. Thomson. 1,896,114; Feb. 7.
Suit, Flying. F. G. Manson. 1,896,183; Feb. 7.
Suit, Life saving. D. Hornyák. 1,896,956; Feb. 7.
Sulphur chloride reaction product. W. S. Calcott and A. S. Carter. 1,896,157; Feb. 7.
Sulphur dioxide, Production of. H. Dohse. 1,896,483; Feb. 7.
Superheater. A. Droth and C. Volland. 1,896,294; Feb. 7.
Superheater boiler. J. A. Barnes. 1,896,275; Feb. 7.
Support: *See*—
Curtain support. Tube support.
Support for an automatic connecter. J. M. Brill. 1,896,349; Feb. 7.
Supporting device. C. E. Hildebrand. 1,896,898; Feb. 7.
Surfaces of refrigerators from sulphur compounds, Protecting metallic. I. Kitaée. 1,896,141; Feb. 7.

Switch: *See*—
Automatic switch. Electric switch.
Centrifugal switch.
Switch. W. L. Higley. 1,896,955; Feb. 7.
Switch mechanism, Safety. J. F. Jirka, R. N. McCurdy, E. Singer, and R. D. Ernest. 1,896,545; Feb. 7.
Syringe with lamp attachment, Hydrometer. J. M. Newkirk. 1,896,553; Feb. 7.
Tables for saws or the like. C. A. Ulrich. 1,896,924; Feb. 7.
Tabulating machine. J. W. Bryce. 1,896,538; Feb. 7.
Tabulating machine. G. F. Daly and R. E. Page. 1,896,540; Feb. 7.
Tail wheel. C. E. Hathorn. 1,896,234; Feb. 7.
Take-up device for ropes. H. Geisenhoner. 1,896,705; Feb. 7.
Tandem meter. C. R. Houghton. 1,896,527; Feb. 7.
Target. J. J. Plunkett. 1,896,591; Feb. 7.
Tea container. S. Suzuki. 1,896,981; Feb. 7.
Telephone dials, Attachment for automatic. C. D. Fiveash. 1,896,352; Feb. 7.
Telephone exchange system. W. B. Strickler. 1,896,757; Feb. 7.
Telephone substution apparatus. I. W. Green. 1,896,196; Feb. 7.
Telephone support, clock case, and lamp, Combined. P. Buhrle. Des. 89,166; Feb. 7.
Telephone system. W. F. Kapp. 1,896,315; Feb. 7.
Telephony and telegraphy, Single carrier frequency multiplex. C. W. Hough. 1,896,235; Feb. 7.
Telescope for instruments, Illuminated. W. J. Cameron. 1,896,861; Feb. 7.
Television system. C. L. Davis. 1,896,167; Feb. 7.
Temperature relay. O. C. Traver. 1,896,856; Feb. 7.
Tennis net. R. S. Bunker. 1,896,835; Feb. 7.
Terminal connecter. J. H. Van Derhoof. 1,896,988; Feb. 7.
Terminal puller, Storage battery. J. A. Wiles. 1,896,338; Feb. 7.
Terpene compounds from gasoline used for extracting rosin from wood, Separating. A. C. Johnston. 1,896,793; Feb. 7.
Textile fabric. M. U. Juestrich. Des. 89,192; Feb. 7.
Textile fabric. M. U. Juestrich. Des. 89,238–9; Feb. 7.
Textile fabric. S. Solomon. Des. 89,221; Feb. 7.
Textile fabric or similar article. M. Brodsky. Des. 89,165; Feb. 7.
Textile fabric or similar article. W. Cohen. Des. 89,170; Feb. 7.
Textile fabric or similar article. M. Guhl. Des. 89,180–4; Feb. 7.
Textile fabric or similar article. A. Kohut. Des. 89,233; Feb. 7.
Textile fabric or similar article. H. J. Laun. Des. 89,201; Feb. 7.
Textile fabric or similar article. J. Overmeyer. Des. 89,206; Feb. 7.
Textile fabric or similar article. J. Overmeyer. Des. 89,244; Feb. 7.
Textile fabric or similar article. P. Reiman. Des. 89,209; Feb. 7.
Textile fabric or similar article. J. Schweizer. Des. 89,215–16; Feb. 7.
Textile fabric or similar article. J. Schweizer. Des. 89,248; Feb. 7.
Textile fabric or similar article. W. Willheim. Des. 89,229–31; Feb. 7.
Textile fabric or similar articles. W. Willheim. 89,249–50; Feb. 7.
Textile fabric or the like. M. R. Hamre. Des. 89,186; Feb. 7.
Textile fabric or the like. A. J. Heinke. Des. 89,188–9; Feb. 7.
Textile fabrics, Treatment of. K. S. Laurie. 1,896,588; Feb. 7.
Thermometer. F. J. Addis. 1,896,503; Feb. 7.
Thermostat. C. F. Germeyer. 1,896,579; Feb. 7.
Thread core. C. K. Dunlap. 1,896,135; Feb. 7.
Throttle for locomotives. H. Glaenzer. 1,896,947; Feb. 7.
Time lag device. H. L. Laven. 1,896,904; Feb. 7.
Tire core, Adjustable. H. C. Bostwick. 1,896,214; Feb. 7.
Tire for vehicle wheels, Making a nonskid. E. W. Covey. 1,896,574; Feb. 7.
Tire puncture preventive. R. Cross. 1,896,611; Feb. 7.
Tire valve. D. E. Jones. 1,896,708; Feb. 7.
Tires and the like, by forging and pressing ingots, Manufacturing steel. A. Dechenne. 1,896,704; Feb. 7.
Tool: *See*—
Metal-rolling tool.
Valve spring compressing tool.
Tool. J. R. Morton. 1,896,458; Feb. 7.
Tool. J. J. Smith. 1,896,979; Feb. 7.
Tool operation on a long line, Method of and apparatus for. J. S. Brown. 1,896,766; Feb. 7.
Tools, Arrangement in striking. E. M. Agren. 1,896,992; Feb. 7.
Toothbrush. R. J. Talbot. 1,896,982; Feb. 7.
Toothbrush, Power operated. L. J. Lippett. 1,896,731; Feb. 7.
Toothpick dispenser. E. C. Brolin. 1,896,571; Feb. 7.
Top, Portable desk. L. S. Madden. 1,896,965; Feb. 7.
Top, Rumble seat. G. Sparano. 1,896,980; Feb. 7.
Torch, Plumber's. P. Meyer. 1,896,782; Feb. 7.
Towel or similar article. N. Clemence. Des. 89,169; Feb. 7.
Toy. P. Brunner. 1,896,607; Feb. 7.
Toy. H. F. Nelson. 1,896,913; Feb. 7.
Toy, Electrically heated. W. O. Collins. 1,896,663; Feb. 7.
Toy pistol. E. S. Peake. Des. 89,207; Feb. 7.
Toy vehicle. E. A. Peterson. Des. 89,245; Feb. 7.
Tractor power coupling mechanism. E. Knapp and C. G. Allgrunn. 1,896,901; Feb. 7.
Trailer. S. F. Mott. 1,896,717; Feb. 7.
Transformer for special purposes, Electrical. T. Pohl. 1,896,328; Feb. 7.
Transformer hanger. K. S. Cosseboom. 1,896,740; Feb. 7.
Transmission gearing, Toothed. A. A. Quick. 1,896,099; Feb. 7.
Transmission, Semiautomatic free wheeling. T. F. Thompson. 1,896,472; Feb. 7.
Trap: *See*—
Steam trap.
Trapper and retainer for bee swarms and separator for drones and queens. M. R. Vikla. 1,896,925; Feb. 7.
Tray and support therefor, Removable service. F. F. Ravlin. 1,896,971; Feb. 7.
Tray, Freezing. D. F. Newman. 1,896,849; Feb. 7.
Tray, Silver ware. A. Giaccaglia. Re89,177; Feb. 7.
Treating or washing machinery. E. R. Zademach. 1,896,149; Feb. 7.
Tree and wire protector. J. L. Smith. 1,896,921; Feb. 7.
Trim panel and making same. B. C. Place. 1,896,200; Feb. 7.
Tripod. A. S. Howell. 1,896,086; Feb. 7.
Trough, Telescoping feed. G. H. Parker. 1,896,096; Feb. 7.
Truck, Industrial. A. H. Gfrorer. 1,896,543; Feb. 7.
Tube: *See*—
Self-sealing tube.
Tube and coupling. B. L. Quarnstrom. 1,896,371; Feb. 7.
Tube, Apparatus for making. B. L. Quarnstrom. 1,896,416; Feb. 7.
Tube support. H. J. Kerr. 1,896,176; Feb. 7.
Tubing, Apparatus for and method of making finned. H. W. Bundy. 1,896,350; Feb. 7.
Tubing head, Retractable. J. H. Howard, E. A. Johnson, and J. H. McEvoy, jr. 1,896,236; Feb. 7.
Tubular casing. G. C. Burd. 1,896,285; Feb. 7.
Tungsten alloys, Making. H. Petersson. 1,896,643; Feb. 7.
Tungsten, Purifying. C. F. W. Bates. 1,896,606; Feb. 7.
Tunnel construction and the like, Method and apparatus for. G. H. Dunlap. 1,896,439; Feb. 7.
Turbine and operating the same, Elastic fluid. O. D. H. Bentley. 1,896,808; Feb. 7.
Turbine, Hydraulic. A. Pfau. 1,896,644; Feb. 7.
Turbine, Multistage. O. D. H. Bentley. 1,896,809; Feb. 7.
Turning signal. L. L. Furan. 1,896,578; Feb. 7.
Tuyère block. J. W. Armour. 1,896,569; Feb. 7.
2.7-dihydroxynaphthalene-3.6-dicarboxylic acid. H. Morschel and W. Luce. 1,896,457; Feb. 7.
Type faces, stereotype, etc., Casting. P. E. White. 1,896,690; Feb. 7.
Typewriting machine. D. W. Rubidge. 1,896,465; Feb. 7.
Umbrella, Collapsible. E. E. Saxton. 1,896,722; Feb. 7.
Universal joint. R. Chilton. 1,896,133; Feb. 7.
Upholstery installation and fastener element for use therewith. R. F. Walters. 1,896,875; Feb. 7.
Valve: *See*—
Copper cooled valve. Pump valve.
Fluid control valve. Tire valve.
Valve. T. S. Grimes. 1,896,706; Feb. 7.
Valve. R. W. Leach and W. H. Bateman. 1,896,778; Feb. 7.
Valve for pneumatic conveyers, Air-control. W. A. Smith. 1,896,597; Feb. 7.
Valve for refrigerator cars, Safety cut-off. J. Kopsa and E. D. Brigham, jr. 1,896,673; Feb. 7.
Valve spring compressing tool. F. Hund. 1,896,239; Feb. 7.
Vanity case. E. S. Tipton. 1,896,117; Feb. 7.
Vaporizer, Portable power. F. G. White. 1,896,382; Feb. 7.
Vegetable, fibrous material and resulting product, Treating. G. Heberlein and A. Bodmer. 1,896,620; Feb. 7.
Vehicle driving apparatus and system. F. W. Godsey, jr. 1,896,169–70; Feb. 7.
Vehicle, Self-propelled. W. L. Pinson. 1,896,419; Feb. 7.
Vehicle steering gear. H. P. Dorn. 1,896,292; Feb. 7.
Vehicle, Trailer. F. Jacquet. 1,896,584; Feb. 7.
Vehicle wheel. A. Günsel. 1,896,138; Feb. 7.
Vehicle wheel. C. G. Keller. 1,896,794; Feb. 7.
Vehicle wheel. C. G. Keller. 1,896,821; Feb. 7.
Vehicle wheel. W. D. Sargent and C. G. Keller. 1,896,803; Feb. 7.
Vehicles and the like, Device for the transportation and transposition of. A. Bottini. 1,896,063; Feb. 7.
Ventilator: *See*—
Adjustable ventilator.
Vessel for electrolytic apparatus, Electrode. J. E. Noeggerath. 1,896,718; Feb. 7.
Vessel, Welded pressure. F. Davis. 1,896,863; Feb. 7.
Vibration damping device. C. R. Paton. 1,896,969; Feb. 7.
Vibrator. J. F. Doran. 1,896,351; Feb. 7.

Vinyl acetylene, Hydrating. A. S. Carter. 1,896,161; Feb. 7.
Vitamin D, Production of. W. Zimmermann and W. Frankenburger. 1,896,191; Feb. 7.
Voltage regulation in alternating current supplies. R. I. Bagnall. 1,896,995; Feb. 7.
Volume control system. E. R. Hentschel. 1,896,172; Feb. 7.
Volume control system, Automatic. E. R. Hentschel. 1,896,173; Feb. 7.
Wall or ceiling construction. W. C. Davis and O. E. Gibson. 1,896,709; Feb. 7.
Wardrobe. R. G. Ross. 1,896,423; Feb. 7.
Washboards, Rubbing element for. H. J. Gilbert. 1,896,077; Feb. 7.
Washer: *See*—
Lock washer.
Washing machine. C. S. Bossie. 1,896,347; Feb. 7.
Washing machine. H. Boyar. 1,896,064; Feb. 7.
Watch-chain guide. C. W. Giles. 1,896,302; Feb. 7.
Water cooled furnace. W. H. Armacost. 1,896,273; Feb. 7.
Water cooling apparatus. A. S. Richardson. 1,896,202; Feb. 7.
Water filter. W. R. Hildebrand. 1,896,310; Feb. 7.
Water heating apparatus. R. D. Heaps. 1,896,671; Feb. 7.
Waves, System for producing high frequency. K. Kohl. 1,896,958; Feb. 7.
Wearing apparel and snap fastener therefor. A. W. Kimbell. 1,896,868; Feb. 7.
Web controlling mechanism. C. J. Richter. 1,896,801; Feb. 7.
Web controlling mechanism. C. J. Richter. 1,896,802; Feb. 7.
Web registering means. O. C. Roesen. 1,896,375; Feb. 7.
Weighting the slip rolls for laps in textile machines wherein the material acted on is formed into laps. H. Wilkinson and A. Roe. 1,896,831; Feb. 7.
Welding and cutting apparatus. A. L. Segelhorst and E. L. Launder. 1,896,497; Feb. 7.
Welding process. G. F. Taylor. 1,896,853; Feb. 7.
Well drilling apparatus, Core barrel. R. P. Simmons. 1,896,106; Feb. 7.
Well drilling apparatus, Percussive. R. P. Simmons. 1,896,105; Feb. 7.
Well drilling apparatus, Underreamer. R. P. Simmons. 1,896,107; Feb. 7.
Well pumping apparatus. R. P. Simmons. 1,896,108; Feb. 7.
Wells, Constructing and operating oil. R. P. Simmons. 1,896,112; Feb. 7.
Wells in flowing condition and conserving the natural gas supply thereof. R. P. Simmons. 1,896,111; Feb. 7.
Wells, Making. R. P. Simmons. 1,896,110; Feb. 7.
Wheat germ, Manufacture of a disembittered product of. E. Komm. 1,896,520; Feb. 7.
Wheel: *See*—
Tail wheel. Vehicle wheel.
Wheel balancing. J. W. Sallier. 1,896,974; Feb. 7.
Windbreaks, Device for and method of securing. J. Ledwinka. 1,896,632; Feb. 7.
Window. B. H. Pollock and J. H. Sheard. 1,897,010; Feb. 7.
Window and attached window opener. G. Hein. 1,896,745; Feb. 7.
Wiper, Windshield. L. J. Armstrong. 1,896,994; Feb. 7.
Wire connecter. W. P. Marr. 1,896,322; Feb. 7.
Wire drawing apparatus. J. R. Longwell. 1,896,674; Feb. 7.
Wire for bottle crates, Grid. N. H. Hall. 1,896,306; Feb. 7.
Wire line post. J. P. Farnam. Des. 89,174; Feb. 7.
Wire stitching machine. J. I. Nasmith. 1,896,826; Feb. 7.
Wire, Treating zinc coated. F. F. Fowle. 1,896,613; Feb. 7.
Wood and other cellulosic materials, Saccharification of. E. Ricard and H. M. Guinot. 1,896,753; Feb. 7.
Wood and preventing corrosion of cables, Treating. R. M. Burns. 1,896,478; Feb. 7.
Wood pulp in multiple stages, Manufacturing. H. K. Benson. 1,896,344; Feb. 7.
Wrench: *See*—
Chain pipe wrench. Pipe wrench.
Wrench. A. E. Gott and N. R. McIntosh. 1,896,303; Feb. 7.
X-ray apparatus. F. S. Smith. 1,896,206; Feb. 7.
Zinciferous materials, Reducing. E. H. Bunce. 1,896,221; Feb. 7.

CLASSIFICATION OF PATENTS

ISSUED FEBRUARY 7, 1933

NOTE.—First number—class, second number—subclass, third number—patent number

1— 2: 1,896,826
4: 1,896,666
32: 1,896,125
46.1: 1,896,979
2— 24: 1,896,561
79: 1,896,183
93: 1,896,631
127: 1,896,242
146: 1,896,930
4— 180: 1,896,938
5— 22: 1,896,289
156: 1,896,288
6— 1: 1,896,334
7: 1,896,925
8— 2: 1,896,494
13: 1,896,381
17: 1,896,858
20: 1,896,954
1,897,026
9— 20: 1,896,956
21: 1,896,373
22: 1,896,845
10— 27: 1,896,837
12— 14: 1,896,153
123: 1,896,121
13— 9: 1,896,789
20: 1,897,004
23: 1,896,854
15— 2: 1,896,128
28: 1,896,731
137: 1,896,589
1,896,982
227: 1,896,941
255: 1,897,007
16— 21: 1,896,978
36: 1,896,908
85: 1,896,908
99: 1,896,636
147: 1,896,203
18— 35: 1,896,372
42: 1,897,023
50: 1,896,544
1,896,659
51: 1,896,775
52: 1,896,660
53: 1,896,535
56: 1,897,025
58: 1,896,123
59: 1,897,003
19— 162: 1,896,831
20— 1.1: 1,896,734
1.123: 1,896,632
2: 1,896,433
19: 1,896,748
22: 1,896,474
49: 1,896,559
70: 1,896,262
22— 69: 1,896,324
153: 1,896,278
200: 1,896,600
204: 1,896,501
23— 78: 1,896,489
88: 1,896,607
91: 1,896,406
158: 1,896,945
162: 1,896,627
167: 1,896,267
177: 1,896,483
196: 1,896,408
211: 1,896,916
212: 1,896,240
1,896,420
233: 1,896,320
24— 3: 1,896,302
17: 1,896,601
1,896,602
1,896,608
68: 1,896,502
73: 1,896,630
1,896,664
1,896,665
77: 1,896,987
115: 1,896,705
139: 1,896,466
208: 1,896,668
24— 215: 1,896,590
216: 1,896,873
230: 1,896,129
25— 155: 1,896,973
156: 1,896,126
1,896,190
1,896,884
26— 57: 1,896,588
29— 33: 1,896,350
57: 1,896,366
85: 1,896,338
1,896,458
86.3: 1,896,239
148.2: 1,896,371
149.5: 1,896,939
153.1: 1,896,990
160.4: 1,896,704
189: 1,896,553
189: 1,896,411
30— 12: 1,896,380
25: 1,896,896
31— 85: 1,896,321
32— 5: 1,896,772
33— 1: 1,896,452
68: 1,896,926
76: 1,896,997
214: 1,896,998
34— 5: 1,896,230
24: 1,896,984
26: 1,896,909
35— 12: 1,896,175
16: 1,896,980
36— 22: 1,896,531
76: 1,896,896
37— 141: 1,896,414
146: 1,896,981
191: 1,896,711
39— 1: 1,896,389
40— 2: 1,896,534
10: 1,896,576
10.5: 1,896,352
17: 1,896,695
86: 1,896,935
102: 1,896,709
142: 1,896,131
42— 4: 1,896,320
43— 39: 1,896,132
45— 31: 1,896,900
51: 1,896,971
71: R. 18,728
77: 1,896,346
82: 1,896,956
131: 1,896,923
133: 1,896,757
138: 1,896,200
1,896,875
46— 37: 1,896,907
47— 34: 1,896,220
48— 108: 1,896,220
180: 1,896,092
49— 2: 1,896,599
5: 1,896,327
1,896,870
1,896,874
51— 103: 1,896,481
124: 1,896,348
126: 1,896,946
194: 1,896,738
279: R. 18,730
280: 1,896,538
52— 20: 1,896,642
53— 5: 1,896,537
56— 44: 1,896,894
249: 1,896,442
264: 1,896,626
60— 1: 1,896,765
54.6: 1,897,002
94: 1,896,308
95: 1,896,136
61— 12: 1,896,331
30: 1,896,810
37: 1,896,589
62: 1,896,259
85: 1,896,430
62— 8: 1,896,061
1,896,413
62— 31: 1,896,756
89.5: 1,896,903
95: 1,897,020
108.5: 1,896,849
115: 1,896,080
1,896,448
1,896,612
1,896,673
116: 1,896,385
119.5: 1,896,323
1,896,324
141: 1,896,953
64— 91: 1,896,901
94: 1,896,133
99: 1,896,508
66— 24: 1,896,686
50: 1,896,535
133: 1,896,431
67— 7.1: 1,896,140
29: 1,896,585
68— 9: 1,896,217
1,896,479
1,896,516
1,896,517
1,896,518
18: 1,896,064
29: 1,896,077
69— 13: 1,896,187
70— 2: 1,896,476
26: 1,896,685
29: 1,896,622
46: 1,896,523
91: 1,896,907
93: 1,896,319
72— 19: 1,896,188
20: 1,896,325
41: 1,896,770
61: 1,896,279
118: 1,896,290
1,896,769
73— 28: 1,896,429
52: 1,896,503
54: 1,896,637
167: 1,896,527
74— 6: 1,896,962
1,896,969
7: 1,896,067
14: 1,896,449
1,896,558
1,896,712
1,896,752
1,896,850
28: 1,896,070
29: 1,896,009
31: 1,896,542
34: 1,896,440
1,896,462
1,896,472
39: R. 18,731
1,896,893
48: 1,896,987
54: 1,896,782
81: 1,896,975
75— 1: 1,896,154
1,896,155
1,896,198
1,896,410
1,896,643
14: 1,896,088
22: 1,896,876
45: 1,897,017
58: 1,896,201
64: 1,896,907
76— 5: 1,896,621
12: 1,896,199
78— 13: 1,896,692
46: 1,896,396
80— 22: 1,896,426
24: 1,896,122
81— 1: 1,896,580
64: 1,896,699
93: 1,896,303
130: 1,896,437
135: 1,896,949
192: 1,896,127
83— 44: 1,896,794
84— 294: 1,896,663
296: 1,896,484
353: 1,896,514
406: 1,896,146
87— 5: 1,896,759
9: 1,896,342
12: 1,896,467
88— 1.5: 1,896,428
14: 1,896,828
17: 1,896,672
19.5: 1,896,836
24: 1,896,246
28: 1,896,928
89— 40: 1,896,195
1,896,911
44: 1,896,454
90— 20: 1,896,885
54: 1,896,360
91— 14.5: 1,896,317
67.9: 1,896,638
68: 1,896,158
1,896,263
1,896,920
70: 1,896,215
1,896,594
92— 6: 1,896,344
71: 1,896,208
92— 1: 1,896,148
94— 1.5: 1,896,641
1,896,920
30: 1,896,957
95— 5.1: 1,896,730
81: 1,896,567
94: 1,896,525
1,896,526
97— 47: 1,896,532
62: 1,896,441
193: 1,896,566
212: 1,896,391
98— 90: 1,896,075
115: 1,896,961
99— 10: 1,896,490
1,896,520
1,896,521
11: 1,896,300
14: 1,896,529
15: 1,896,379
100— 51: 1,896,563
1,896,564
57: 1,896,634
101— 4: 1,896,548
35: 1,896,856
93: 1,896,538
1,896,554
1,896,555
128: 1,896,877
102— 11: 1,896,817
26: 1,896,515
103— 23: 1,896,358
52: 1,896,232
91: 1,896,727
97: 1,896,219
119: 1,896,108
126: 1,896,970
204: 1,896,719
205: 1,896,445
104— 50: 1,896,063
105— 62: 1,896,633
230: 1,896,434
280: 1,896,267
376: 1,896,198
106— 7.5: 1,896,325
22: 1,896,069
40: 1,896,145
1,896,581
107— 3: 1,896,350
19: 1,896,313
21: 1,896,788
48: 1,896,063
108— 5.4: 1,896,891
33: 1,896,422
110— 28: 1,896,130
44: 1,896,569
116: 1,896,252
173: 1,896,804
111— 52: 1,896,562
112— 51: 1,896,211
66: 1,896,364
136: 1,896,903
262: 1,896,408
113— 33: 1,896,416
35: 1,896,057
116: 1,896,056
114— 0.5: 1,896,546
116— 51: 1,896,314
173: 1,896,822
117— 20: 1,896,064
118— 63: 1,896,505
119— 61: 1,896,096
71: 1,896,097
74: 1,896,615
75: 1,896,960
120— 52: 1,896,152
59: 1,896,253
69: 1,896,405
121— 101: 1,896,904
122— 20: 1,896,671
235: 1,896,233
1,896,273
1,896,486
392: 1,896,565
1,896,575
1,896,593
459: 1,896,181
1,896,247
462: 1,896,294
478: 1,896,241
1,896,275
481: 1,896,176
499: 1,896,116
123— 12: 1,896,754
33: 1,896,174
48: 1,896,098
55: 1,896,095
75: 1,896,163
79: 1,896,102
117: 1,896,714
122: 1,896,085
1,896,401
1,896,521
171: 1,896,124
1,896,267
188: 1,896,072
196: 1,896,004
1,896,355
1,896,459
124— 14: 1,896,913
125— 11: 1,896,533
33: 1,896,992
126— 14: 1,896,192
73: 1,896,197
105: 1,896,208
127— 37: 1,896,753
128— 3: 1,896,981
9: 1,896,780
30: 1,896,351
130: 1,896,071
203: 1,896,716
260: 1,896,983
129— 17: 1,896,872
28: 1,896,881
1,897,024
24: 1,896,536
1,896,539
131— 12: 1,896,800
132— 31: 1,896,940
33: 1,896,091
38: 1,896,866
40: 1,896,617
86: 1,896,117
134— 17.5: 1,896,611
26: 1,896,804
1,897,015
46: 1,897,016
43: 1,896,662
73: 1,896,812
79: 1,896,815
135— 26: 1,896,723
137— 53: 1,896,706
68: 1,896,421
70: 1,896,519
93: 1,896,699
103: 1,896,698
1,896,723
104: 1,896,941
130: 1,897,000
139— 224: 1,896,337
282: 1,896,353
421: 1,896,783
140—102.5: 1,896,922
113: 1,896,512
129: 1,896,661
141— 1: 1,896,149
7: 1,896,306
143— 40: 1,896,706
132: 1,896,694
144— 286: 1,896,629
289: 1,896,113
145— 31: 1,896,912
146— 2: 1,896,498
43: 1,896,318
217: 1,896,304
148— 12: 1,896,572
31: 1,896,998
1,896,999
1,896,990
32: 1,896,473
149— 4: 1,896,353
150— 1.7: 1,897,018
151— 2: 1,896,679
3: 1,896,680
42: 1,896,338
152— 12: 1,896,708
153— 2: 1,896,146
65: 1,896,670
154— 2: 1,896,689
9: 1,896,214
1,896,280
14: 1,896,574
24: 1,896,997
42: 1,896,571
155— 42: 1,896,451
50: 1,896,209
126: 1,896,446
139: 1,896,455
158: 1,896,477
156— 22: 1,896,746
28: 1,896,698
158— 77: 1,896,791
105: 1,896,683
116: 1,896,998
120: 1,896,703
164— 65: 1,896,898
166— 1: 1,896,482
1,896,852
4: 1,896,104
15: 1,896,206
21: 1,896,212
1,896,498
167— 3: 1,896,646
70: 1,896,171
81: 1,896,195
1,896,191
170— 135: 1,896,080
171— 97: 1,896,898
1,896,899
118: 1,896,674
1,896,088
119: 1,896,516
1,896,997
131: 1,896,695
132: 1,896,143
242: 1,896,299
1,896,438
1,896,510
312: 1,896,547
324: 1,896,164
327: 1,896,513
179— 36: 1,896,204
1,896,205
1,896,972
230: 1,896,418

172— 246: 1,896,855
279: 1,896,848
281: 1,896,802
173— 28: 1,896,921
259: 1,896,968
263: 1,896,322
264: 1,896,475
268: 1,896,841
269: 1,896,443
1,896,444
280: 1,896,964
318: 1,896,189
328: 1,896,365
332: 1,896,948
358: 1,896,857
366: 1,896,937
174— 177: 1,896,647
175— 30: 1,896,813
41.5: 1,896,942
115: 1,896,675
183: 1,896,598
1,896,737
1,896,755
294: 1,896,773
1,896,856
1,896,943
1,897,009
1,897,022
356: 1,896,762
357: 1,896,143
1,896,932
359: 1,896,480
361: 1,896,328
363: 1,896,747
366: 1,896,101
176— 42: 1,896,651
132: 1,896,606
177— 7: 1,896,195
1,896,196
314: 1,896,333
327: 1,896,495
1,896,578
329: 1,896,887
336: 1,896,784
339: 1,896,905
352: 1,896,830
178— 6: 1,896,167
44: 1,896,468
1,896,819
1,896,993
46: 1,896,767
179— 2.5: 1,896,487
15: 1,896,235
27: 1,896,757
34: 1,896,315
171: 1,896,268
1,896,500
1,896,534
1,896,742
1,896,743
180: 1,896,485
180— 1: 1,896,118
9.2: 1,896,396
22: 1,896,664
181— 30: 1,896,844
32: 1,896,073
183— 7 1,896,758
48: 1,896,833
49: 1,896,640
1,896,700
89: 1,896,894
90: 1,896,895
92: 1,896,896
1,896,897
184— 1.5: 1,896,610
3: 1,896,702

184— 28: 1,896,507
45: 1,896,460
55: 1,896,368
187— 1: 1,896,362
16: 1,896,776
1,896,777
29: 1,896,541
95: 1,896,900
188— 3: 1,896,963
8: 1,896,906
56: 1,896,961
78: 1,896,453
1,896,696
1,896,902
1,896,991
80: 1,896,539
90: 1,896,103
94: 1,896,904
140: 1,896,376
1,896,377
152: 1,896,223
1,896,374
162: 1,896,209
250: 1,896,452
1,896,952
189— 19: 1,896,530
72: 1,897,010
190— 51: 1,896,761
192— 36: 1,896,707
61: 1,896,577
68: 1,896,914
69: 1,896,968
131: 1,896,496
194— 47: 1,896,409
100: 1,896,392
195— 20: R. 18,729
32: 1,896,658
196— 38: 1,896,583
40: 1,896,470
47: 1,896,345
48: 1,896,723
1,896,728
60: 1,896,226
62: 1,896,228
68: 1,896,165
1,896,166
70: 1,896,986
119: 1,896,618
133: 1,896,245
197— 126: 1,896,465
198— 7: 1,896,587
20: 1,896,402
1,896,657
127: 1,896,150
189: 1,896,407
203: 1,896,151
213: 1,896,386
199— 47: 1,897,012
200— 5: 1,896,955
11: 1,896,847
59: 1,896,985
80: 1,896,798
83: 1,896,735
114: 1,896,545
116: 1,896,736
117: 1,896,218
125: 1,896,248
138: 1,896,579
144: 1,896,763
1,896,764
1,896,779
166: 1,896,560
202— 42: 1,896,100
88: 1,896,799
204— 1: 1,897,011
5: 1,896,079
1,896,718

205— 21: 1,896,613
25: 1,896,674
206— 44: 1,896,721
58: 1,896,119
79: 1,896,678
209— 403: 1,896,595
210— 70: 1,896,655
71: 1,896,466
84: 1,896,204
112: 1,896,310
159: 1,896,816
164: 1,896,395
211— 73: 1,896,677
99: 1,896,654
113: 1,896,996
142: 1,896,604
143: 1,896,307
153: 1,896,846
213— 100: 1,896,959
197: 1,896,713
214— 7: 1,896,177
38: 1,896,883
82: 1,896,543
138: 1,896,293
215— 38: 1,896,144
217— 19: 1,896,306
32: 1,896,115
219— 10: 1,896,853
19: 1,896,663
220— 15: 1,896,393
24: 1,896,272
1,896,329
1,896,330
32: 1,896,981
33: 1,896,976
40: 1,896,271
1,896,309
64: 1,896,141
67: 1,896,863
221— 60: 1,896,729
78: 1,896,750
95: 1,896,751
222— 4: 1,896,625
223— 55: R. 18,732
1,896,934
65: 1,896,771
224— 29: 1,896,628
225— 26: 1,896,134
226— 14: 1,896,394
1,896,639
95: 1,896,210
229— 1.5: 1,896,076
6: 1,896,361
7: 1,896,812
51: 1,896,400
62: 1,896,668
86: 1,896,425
89: 1,896,326
230— 21: 1,896,790
75: 1,896,760
104: 1,896,404
127: 1,896,749
152: 1,896,256
275: 1,896,869
233— 17: 1,896,180
18: 1,896,179
45: 1,896,806
234— 1.5: 1,896,284
235— 32: 1,896,649
58: 1,896,983
60: 1,896,182
1,896,936
87: 1,896,255
92: 1,896,540
1,896,551
236— 15: 1,896,910

236— 76: 1,896,207
95: 1,896,676
237— 12.3: 1,896,068
78: 1,896,514
240— 2: 1,896,553
7.1: 1,896,194
10.66: 1,896,605
48.6: 1,896,090
241— 6: 1,896,646
7: 1,896,681
242— 75: 1,896,801
1,896,802
76: 1,896,375
84.1: 1,896,741
84.5: 1,896,369
84.7: 1,896,582
122: 1,896,135
244— 2: 1,896,234
12: 1,896,336
1,896,822
14: 1,896,270
19: 1,896,511
25: 1,896,387
1,896,730
29: 1,896,805
1,896,999
31: 1,896,130
1,896,222
246— 130: 1,896,120
135: 1,897,005
162: 1,896,370
247— 1: 1,896,478
248— 14.2: 1,896,859
1,897,014
17: 1,896,299
30: 1,896,740
31: 1,896,898
43: 1,896,086
250— 20: 1,896,065
1,896,172
1,896,173
1,896,780
1,896,785
1,896,825
27: 1,896,726
27.5: 1,896,464
1,896,614
33: 1,896,927
34: 1,896,206
36: 1,896,238
1,896,417
1,896,781
1,896,958
40: 1,896,168
1,896,550
251— 27: 1,896,944
83: 1,896,947
90: 1,896,778
252— 1: 1,896,899
1,897,019
1,897,021
5: 1,896,291
253— 39: 1,896,508
48: 1,896,809
54: 1,896,808
107: 1,896,644
254— 1: 1,896,715
83: 1,896,447
86: 1,896,977
135: 1,896,415
164: 1,896,488
168: 1,896,274
192: 1,896,266
255— 1: 1,896,110
1,896,111
1,896,112
4: 1,896,105

255— 71: 1,896,231
1,896,243
1,896,250
1,896,251
1,896,295
1,896,297
72: 1,896,106
1,896,469
1,896,703
76: 1,896,107
78: 1,896,109
257— 39: 1,896,081
85: 1,896,616
138: 1,896,413
220: 1,896,213
242: 1,896,774
263: 1,896,502
259— 99: 1,896,347
144: 1,896,424
260— 2: 1,896,157
3: 1,896,276
4: 1,896,842
6: 1,896,491
1,896,493
17: 1,896,227
29: 1,896,244
38: 1,896,461
45: 1,896,619
61: 1,896,147
1,896,435
72: 1,896,710
76: 1,896,450
99: 1,896,608
100: 1,896,725
1,896,892
110: 1,896,457
112: 1,896,224
120: 1,896,511
134: 1,896,161
153: 1,896,793
162: 1,896,159
1,896,160
168: 1,896,282
170: 1,896,162
1,896,552
261— 34: 1,896,499
41: 1,896,557
52: 1,896,390
95: 1,896,786
262— 12: 1,896,960
28: 1,896,184
263— 15: 1,897,008
46: 1,896,178
1,896,669
265— 13: 1,896,114
39: 1,896,258
59: 1,896,281
1,896,301
61: 1,897,027
62: 1,896,283
68: 1,896,906
266— 15: 1,896,221
23: 1,896,497
36: 1,896,570
267— 54: 1,896,878
1,896,879
268— 3: 1,896,311
26: 1,896,423
68: 1,896,818
272— 33: 1,896,796
273— 29: 1,896,835
43: 1,896,383
1,896,384
89: 1,896,684
102: 1,896,591
106.5: 1,896,536
112: 1,896,915

274— 1: 1,896,851
5: 1,896,708
43: 1,896,682
46: 1,896,257
280— 33.4: 1,896,717
33.44: 1,896,427
1,896,584
54: 1,896,249
89: 1,896,292
97: 1,896,419
169: 1,896,797
282— 12: 1,897,013
21: 1,896,078
285— 22: 1,896,062
24: 1,896,687
25: 1,896,261
31: 1,896,216
58: 1,896,340
1,896,349
1,896,917
1,896,918
1,896,919
72: 1,896,285
99: 1,896,225
286— 26: 1,896,792
287— 93: 1,896,549
119: 1,896,645
288— 1: 1,896,378
1,896,795
290— 2: 1,896,356
17: 1,896,169
1,896,170
38: 1,896,852
291— 15: 1,896,357
292— 99: 1,896,363
171: 1,896,745
340: 1,896,909
352: 1,896,509
293— 55: 1,896,277
294— 20: 1,896,680
33: 1,896,438
296— 28: 1,896,254
1,896,632
99: 1,896,980
299— 1: 1,896,382
63: 1,896,339
83: 1,896,624
88: 1,896,701
101: 1,896,882
104: 1,896,202
120: 1,896,744
301— 5: 1,896,974
6: 1,896,803
1,896,821
12: 1,896,794
39: 1,896,138
108: 1,896,066
302— 49: 1,896,354
58: 1,896,597
303— 20: 1,897,006
304— 19: 1,896,688
306— 6: 1,896,568
11: 1,896,843
308— 148: 1,896,665
243: 1,896,267
312— 1: 1,896,829
39: 1,896,343
48: 1,896,137
73: 1,896,430
78: 1,896,463
1,896,571
89: 1,896,208
140: 1,896,524
191: 1,896,691

U. S. GOVERNMENT PRINTING OFFICE: 1933

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A P Products Company, Greensboro, N. C. Headache powders. Serial No. 331,814; Feb. 14. Class 6.

Abbott Laboratories, Chicago, Ill. Compounds containing malt and vitamins. Serial No. 332,571; Feb. 14. Class 6.

Alpine Ice Cream Co. Inc., Corona, N. Y. Ice cream. Serial No. 329,665; Feb. 14. Class 46.

American Enka Corporation, Asheville, N. C. Rayon yarns. Serial No. 332,139; Feb. 14. Class 43.

American Yarn Co., Inc., Brooklyn, N. Y. Knitting yarn. Serial No. 332,572; Feb. 14. Class 43.

Amita Laboratories. (See Lemen, Paul H.)

Anheuser-Busch, Incorporated, St. Louis, Mo. Malt beverage. Serial No. 333,349; Feb. 14. Class 48.

Annabelle Manufacturing Company, The. (See Ratterman, George B.)

Anti-Hydro Waterproofing Company, Newark, N. J. Transparent dampproofing liquid for masonry. Serial No. 333,217; Feb. 14. Class 12.

Arden, Elizabeth, Inc., New York, N. Y. Perfumes and perfumery, cleansing cream, etc. Serial No. 333,139; Feb. 14. Class 6.

Ashland Refining Co., Ashland, Ky. Gasoline. Serial No. 333,495; Feb. 14. Class 15.

Ayer Company, The, Lowell, Mass. Medicinal preparation. Serial No. 332,479; Feb. 14. Class 6.

Ayer Company, The, Lowell, Mass. Medicinal ointment. Serial No. 333,572; Feb. 14. Class 6.

Balts & Koerper, Philadelphia, Pa. Soaps. Serial No. 329,725; Feb. 14. Class 4.

Beauty Maid Products Company. (See Blanchard, Harry G.)

Behr-Manning Corporation, Troy and Watervliet, N. Y. Flexible abrasive paper and cloth. Serial No. 326,076; Feb. 14. Class 4.

Biltrite Motor Equipment Co. Inc., New York, N. Y. Flushing compounds and preparations for motor vehicles, glycerine, etc. Serial No. 332,220; Feb. 14. Class 6.

Blanchard, Harry G., doing business as Beauty Maid Products Company, Buffalo, N. Y. Cosmetics. Serial No. 333,142; Feb. 14. Class 6.

Bluestone, Henry, doing business as Sody Products Co., Pittsburgh, Pa. Laxative drink. Serial No. 332,083; Feb. 14. Class 6.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 333,350; Feb. 14. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 333,547; Feb. 14. Class 42.

Bolloré, René Odet, France. Cigarette papers. Serial No. 332,570; Feb. 14. Class 8.

Bontabs Company. (See Hardin, S. A.)

Boyes, Byron H., Kenmore, N. Y. Gasoline, oils, greases, etc. Serial No. 332,396; Feb. 14. Class 15.

Breithaupt, Alton B. P., doing business as Breithaupt Drug Co., Sherrill, N. Y. Medicinal preparation. Serial No. 332,945; Feb. 14. Class 6

Buffalo Products Co. (See Lang, Gerhard, Brewery.)

Burndy Engineering Company, Inc., New York, N. Y. Electrical connectors. Serial No. 332,331; Feb. 14. Class 21.

Burnham & Morrill Company, doing business as Oxford Packing Co., Portland, Me. Canned vegetables. Serial No. 333,575; Feb. 14. Class 46.

Cabot Godfrey L. Inc., Boston, Mass. Carbon black. Serial No. 333,501; Feb. 14. Class 16.

Carnation Company, Wilmington, Del., Oconomowoc, Wis., and Seattle, Wash. Flaked wheat. Serial No. 301,829; Feb. 14. Class 46.

Carron, Hugh F., Cedarhurst, N. Y. Toilet paper. Serial No. 332,668; Feb. 14. Class 37.

Cates, Chas. F., & Sons, Inc., Faison, N. C. Sweet pickles, sour pickles, dill pickles, etc. Serial No. 329,823; Feb. 14. Class 46.

Champion Products Co., Worcester, Mass. Oil burners. Serial No. 311,648; Feb. 14. Class 34.

Chappel Bros., Inc., Rockford, Ill. Prepared food for cage birds. Serial No. 332,685; Feb. 14. Class 46.

Chappel Bros., Inc., Rockford, Ill. Gravel for caged birds. Serial No. 332,992; Feb. 14. Class 1.

Chryson's, Ltd., Los Angeles and Hollywood, Calif. Face powders, foundation creams, and cream rouge. Serial No. 332,141; Feb. 14. Class 6.

Claesen, Mrs. G. E., doing business as C. B. Gentry Chili Powder Co., Los Angeles, Calif. Chili powder. Serial No. 329,979; Feb. 14. Class 46.

Cliquot Club Company, Millis, Mass. Maltless beverages, syrups, extracts, etc., used in making the same. Serial No. 326,368; Feb. 14. Class 45.

Colgate-Palmolive-Peet Company, Chicago, Ill. Dental cream. Serial No. 332,688; Feb. 14. Class 6.

Columbia Drug Store. (See Greenstein, Joseph U.)

Crescent Supply Company, The, Marietta, Ohio. Petroleum lubricating oils and greases. Serial No. 333,426; Feb. 14. Class 15.

D. G. Manufacturing Company, The, Atlanta, Ga. Preparation to relieve headaches, colds, etc. Serial No. 332,651; Feb. 14. Class 6.

Daniels, Cady L., Inc., Colorado Springs, Colo. Antifreeze solution. Serial No. 331,298; Feb. 14. Class 6.

Decatur Milling Company, Inc., Decatur, Ill. Cornflour. Serial No. 332,995; Feb. 14. Class 46.

Detroit Vapor Stove Company, Detroit, Mich. Electric ranges. Serial No. 332,404: Feb. 14. Class 21.

Distillers Agency Limited, The, Edinburgh, Scotland. Rum, whisky, gin, and brandy. Serial Nos. 332,405–6; Feb. 14. Class 49.

Dunbar, Jas. V., Inc., New Orleans, La. Canned shrimp. Serial No. 331,426; Feb. 14. Class 46.

East Tennessee Packing Company, Knoxville, Tenn. Fresh and cured meats, lard, cheese, and butter. Serial No. 319,769; Feb. 14. Class 46.

Ecker, S. G., Co. Inc., New York, N. Y. Microscopes, microscope parts, and sets. Serial No. 333,386; Feb. 14. Class 26.

Edison, Sylvan M., doing business as Sanident Company, Chicago, Ill. Dental plate adhesive powder. Serial No. 323,436; Feb. 14. Class 6.

Electrolux Servel Corporation, New York, N. Y. Refrigerators and parts thereof and refrigerating systems. Serial Nos. 333,793–5; Feb. 14. Class 31.

Electrolux Servel Corporation, New York, N. Y. Refrigerators and parts thereof and refrigerating systems. Serial Nos. 333,797–800; Feb. 14. Class 31.

Ellis-Foster Company, Montclair, N. J. Dishes, dish-like containers, and closures therefor. Serial No. 308,845; Feb. 14. Class 2.

Escorza, Ciro, Downey, Calif. Pickled chiles. Serial No. 332,762; Feb. 14. Class 46.

Esmond Mills, The, Esmond, Smithfield, R. I. Textile blankets. Serial No. 333,061; Feb. 14. Class 42.

F-R Publishing Corporation, The, New York, N. Y. Cartoons. Serial No. 333,317; Feb. 14. Class 38.

F-R Publishing Corporation, The, New York, N. Y. Magazine section. Serial No. 333,322; Feb. 14. Class 38.

F-R Publishing Corporation, The, New York, N. Y. Nom de plume for a magazine section. Serial Nos. 333,325–7; Feb. 14. Class 38.

Family Shoe Corp., New York, N. Y. Shoes. Serial No. 330,925; Feb. 14. Class 39.

Feldman, David, doing business as Feldman & Sons, Baltimore, Md. Shirts. Serial No. 333,174; Feb. 14. Class 39.

Fenton, Catherine C., Inc., Waterbury, Conn. Lotion, hair tonic, shampoo, astringents, etc. Serial No. 332,842; Feb. 14. Class 6.

Fermax Products Co., Irvington, N. J. Washing compounds. Serial No. 333,285; Feb. 14. Class 4.

Fidalgo Island Packing Company, Seattle, Wash. Canned salmon. Serial Nos. 331,730–1; Feb. 14. Class 46.

Firestone Battery Company, Akron, Ohio. Spark plugs, storage batteries, battery cases, etc. Serial No. 333,428; Feb. 14. Class 21.

Fuel Development Corporation, New York, N. Y. Chemicals. Serial No. 333,031; Feb. 14. Class 6.

Gallas, Herman G., Chicago, Ill. Awnings and awning hardware. Serial Nos. 326,351–2; Feb. 14. Class 50.

Garofalo Bros. Shoe Co. Inc., Brooklyn, N. Y. Shoes. Serial No. 332,296; Feb. 14. Class 39.

General Mills, Inc., Minneapolis, Minn. Stock food. Serial No. 333,186; Feb. 14. Class 46.

Gentry, C. B., Chili Powder Co. (See Clausen, Mrs. G. E.)

Glenfyne Distillery Company Limited, The, Ardrishaig, Scotland. Whisky. Serial No. 331,783; Feb. 14. Class 49.

Greenstein, Joseph U., doing business as Columbia Drug Store, Washington, D. C. Cough syrup. Serial No. 331,824; Feb. 14. Class 6.

Guastavino, R., Company, Boston, Mass. Plaster. Serial No. 333,514; Feb. 14. Class 12.

Habicht, Braun & Co., New York, N. Y. Dates. Serial No. 317,277; Feb. 14. Class 46.

Hampden Sales Corporation, Springfield, Mass. Filling or sizing material for textiles. Serial No. 332,528; Feb. 14. Class 6.

Harbauer Company, The, Toledo, Ohio. Chili sauce, tomato catsup, tomato juice, etc. Serial No. 330 227; Feb. 14. Class 46.

Hardin, S. A., doing business as Bontabs Company, Winchester, Ky. Medicinal preparation. Serial No. 332,582; Feb. 14. Class 6.

Heidsieck, Charles, Reims Société à Responsabilité Limitée, Reims, France. Champagne wine. Serial No. 330,452; Feb. 14. Class 47.

Heppenstall Company, Pittsburgh, Pa. Razor blades. Serial No. 333,431; Feb. 14. Class 23.

Hinze, Ambrosia, Inc., New York, N. Y. Creams. Serial No. 332,814; Feb. 14. Class 6.

Holton & Adams, New York, N. Y. Tooth brushes. Serial No. 333,390; Feb. 14. Class 29.

Hughes-Curry Packing Co., Anderson, Ind. Hams. Serial No. 326,144; Feb. 14. Class 46.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Hump Hairpin Manufacturing Company, The, Chicago, Ill. Hairpins. Serial No. 322,612; Feb. 14. Class 40.
Hump Hairpin Manufacturing Company, The, Chicago, Ill. Hairpins. Serial No. 333,069; Feb. 14. Class 40.
Hump Hairpin Manufacturing Company, The, Chicago, Ill. Hairpins. Serial No. 333,071; Feb. 14. Class 40.
Hydrocarbon Company, The, State College, Pa. Motor fuel oils and gasoline. Serial No. 331,955; Feb. 14. Class 15.
Hygrade Sylvania Corporation, Salem, Mass. Electric incandescent lamps. Serial No. 332,999; Feb. 14. Class 21.
Hyman & Hyman, Inc., New York, N. Y. Applicator. Serial No. 333,124; Feb. 14. Class 44.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparation used in hormonal treatment. Serial No. 332,716; Feb. 14. Class 6.
Illinois Dyestuff Corporation, Chicago, Ill. Carpet cleaning compound. Serial No. 333,173; Feb. 14. Class 4.
Ingargiola, Antonio, Brooklyn, N. Y. Pharmaceutical preparation. Serial No. 282,000; Feb. 14. Class 6.
International Shoe Co., St. Louis, Mo. Boots and shoes. Serial No. 333,259; Feb. 14. Class 39.
Iodine Products Corporation, Fort Worth, Tex. Medical preparation. Serial No. 326,288; Feb. 14. Class 6.
Iowa Soap Company, Burlington, Iowa. Toilet soap. Serial No. 332,693; Feb. 14. Class 4.
Jarman Shoe Company, Nashville, Tenn. Shoes. Serial No. 333,260; Feb. 14. Class 39.
Jefferys & Co., Ltd., Burbank, Calif. Washed motion picture film scrap. Serial No. 332,017; Feb. 14. Class 1.
Jelnko, J. F., & Company, Inc., New York, N. Y. Dental golds. Serial No. 333,454; Feb. 14. Class 44.
Johns-Manville Corporation, New York, N. Y. Rod and piston packing. Serial No. 329,145; Feb. 14. Class 35.
Johnston, Elgin W., doing business as E. W. Johnston Co., Toledo, Ohio. Medicine. Serial No. 332,774; Feb. 14. Class 6.
Kali-Chemie Aktiengesellschaft, Berlin, Germany. Pharmaceutical preparations. Serial No. 328,791; Feb. 14. Class 6.
Kesselman, Ada, doing business as The Play Money Candy Co., Philadelphia, Pa. Candy. Serial No. 332,153; Feb. 14, 1933. Class 46.
Kester Solder Company, Chicago, Ill. Soldering fluxes. Serial No. 332,300; Feb. 14. Class 6.
Kester Solder Company, Chicago, Ill. Soldering fluxes. Serial No. 332,620; Feb. 14. Class 6.
King Features Syndicate, Inc., New York, N. Y. Series of cartoon strips. Serial No. 333,518; Feb. 14. Class 38.
King, Robert J., Company, Incorporated, The, Stamford, Conn. Chemical composition. Serial Nos. 331,190–1; Feb. 14. Class 6.
Kleen Chemical Company, Philadelphia, Pa. Floor cleaner and bleach. Serial No. 323,437; Feb. 14. Class 4.
Kleen Chemical Company, Philadelphia, Pa. Drain pipe solvent. Serial No. 330,986; Feb. 14. Class 6.
Koffman and Blumenau, Bay City, Mich. Malt beverages. Serial No. 329,747; Feb. 14. Class 48.
Kresge Department Store Corp., Newark, N. J. Soap. Serial No. 327,060; Feb. 14. Class 4.
Labes, John H., Grandville, Mich. Salves, lotions and herbs. Serial No. 331,113; Feb. 14. Class 6.
Lang, Gerhard, Brewery, doing business as Gerhard Lang Bottling Works, and Buffalo Products Co., Buffalo, N. Y. Malt extract. Serial No. 331,187; Feb. 14. Class 46.
Lawrenz, William F., Long Beach, Calif. Maltless beverage. Serial No. 332,326; Feb. 14. Class 45.
Lemen, Paul H., doing business as Amita Laboratories, Philadelphia, Pa. Preparation for the relief of painful menstruation. Serial No. 333,074; Feb. 14. Class 6.
Leonhard, Theodor, Wax Co. Inc., Haledon, N. J. Beeswax. Serial No. 332,069; Feb. 14. Class 6.
Lincoln, Janie, Laboratories, Tiffin, Ohio. Cosmetics. Serial No. 332,122; Feb. 14. Class 6.
Linen Thread Company, The, New York, N. Y. Fish nets. Serial No. 333,293; Feb. 14. Class 22.
Locke, Douglas R., Montreal, Quebec, Canada. Foot arch correctives. Serial No. 331,831; Feb. 14. Class 44.
Love, Joseph, Inc., New York, N. Y. Children's dresses and top coats. Serial No. 332,848; Feb. 14. Class 39.
MacMillan Petroleum Corporation, Los Angeles, Calif. Petroleum products. Serial Nos. 332,694–5; Feb. 14. Class 15.
Macolite Products Corporation, New York, N. Y. Paper or pasteboard cartons. Serial No. 332,778; Feb. 14. Class 2.
Mayers, Mollie. (See Zwiebelson, Abraham.)
Metal Textile Corporation, West Orange, N. J. Metallic abrasive scouring pads. Serial No. 330,517; Feb. 14. Class 4.
Middishade Company, Inc., The, Philadelphia, Pa. Men's clothing. Serial Nos. 333,297–8; Feb. 14. Class 39.
Money, Marion R., doing business as Vee-Dee Bar Corp., Spencer, Ind. Ice cream bars. Serial No. 325,337; Feb. 14. Class 46.
Morrison Company, The, Philadelphia, Pa. Prepared food for dogs. Serial No. 332,594; Feb. 14. Class 46.
National Specialties Co., Inc., Fort Wayne, Ind. Miter box or device. Serial No. 333,269; Feb. 14. Class 23.
Neuberger, Harry C., New York, N. Y. Asphalt. Serial No. 331,797; Feb. 14. Class 12.
New York World-Telegram Corporation, New York, N. Y. Periodical. Serial No. 333,770; Feb. 14. Class 38.
Noah's Ark Auto Accessories, Inc., Rochester, N. Y. Radio tubes. Serial No. 333,235; Feb. 14. Class 21.
Norwich Knitting Company, Norwick, N. Y. Shirts, sweaters, and knit underwear. Serial No. 332,729; Feb. 14. Class 39.
Nu-Sno Company. (See Williams, Amy F.)
Ollendorff, I., Co., Inc., New York, N. Y. Watch bracelets, pins, necklaces, etc. Serial No. 331,589; Feb. 14. Class 28.
Oxford Packing Co. (See Burnham & Morrill Company.)
P & M Tonagren Co., Kansas City, Mo. Fungicide. Serial No. 333,375; Feb. 14. Class 6.
Paris Laboratories, Inc., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. Serial No. 333,167; Feb. 14. Class 6.
Parke, Davis & Co., Detroit, Mich. Physiologically active aqueous solution prepared from ergot. Serial No. 331,960; Feb. 14. Class 6.
Peck & Peck, New York, N. Y. Piece goods of cotton, silk, etc. Serial No. 332,100; Feb. 14. Class 42.
Pelzer Manufacturing Company, Boston, Mass. Sheets, pillow cases, and cotton piece goods. Serial No. 333,236; Feb. 14. Class 42.
Phoenix Preparations. (See Wynn, Clarence P.)
Pilgrim Company, St. Louis, Mo. Liquid skin cleanser. Serial No. 333,105; Feb. 14. Class 6.
Pioneer Paper Company, Los Angeles, Calif. Bituminous emulsions. Serial No. 332,198; Feb. 14. Class 12.
Pitman-Moore Company, Indianapolis, Ind. Medicinal product. Serial No. 333,106; Feb. 14. Class 6.
Play Money Candy Co., The. (See Kesselman, Ada.)
Post Printing and Publishing Company, The, Denver, Colo. Section or column appearing in a newspaper. Serial No. 333,605; Feb. 14. Class 38.
Pro-Ker Laboratories, Inc., New York, N. Y. Appliances for measuring and recording the growth or production of human hair. Serial No. 333,607; Feb. 14. Class 26.
Pro-Phy-Lac-Tic Brush Company, Northampton, Mass. Tooth brushes. Serial No. 333,107; Feb. 14. Class 29.
Raffetto, G. B., Incorporated, New York, N. Y. Brandied fruit sauce. Serial No. 327,025; Feb. 14. Class 46.
Ratterman, George B., doing business as The Annabelle Manufacturing Company, New York, N. Y. Electric sad iron stand. Serial No. 322,072; Feb. 14. Class 21.
Reid, Murdoch & Co., Chicago, Ill. Confectionery. Serial No. 328,017; Feb. 14. Class 46.
Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. Serial No. 333,560; Feb. 14. Class 6.
Reynolds Electric Company, Chicago, Ill. Electrical flashers and flasher controls. Serial No. 333,407; Feb. 14. Class 21.
Rhutong Company, Wheeling, W. Va. Liquid preparation. Serial No. 332,421; Feb. 14. Class 6.
Riggs, F. M., Maywood, Ill. Cleansing compound. Serial No. 330,646; Feb. 14. Class 4.
Robeson Process Company, New York, N. Y. Material used as a tanning extract. Serial No. 332,733; Feb. 14. Class 6.
Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Pressure operated valves for operating alarms for sprinkler systems. Serial No. 331,412; Feb. 14. Class 18.
Roy Press, New York, N. Y. Periodical. Serial No. 333,688; Feb. 14. Class 38.
Sandeman Hermanos y Compania, Jerez de la Frontera, Cadiz, Spain. Wines. Serial No. 332,633; Feb. 14. Class 47.
Sanident Company. (See Edison, Sylvan M.)
Scat, Dr., Chemical Company, Chicago, Ill. Liquid used for refinishing, resurfacing rubber rollers etc. Serial No. 331,718; Feb. 14. Class 6.
Sears, Roebuck and Co., Chicago, Ill. Root beer steins of glass. Serial No. 332,965; Feb. 14. Class 33.
Sears, Roebuck and Co., Chicago, Ill. Manila rope. Serial No. 333,086; Feb. 14. Class 7.
Sears, Roebuck and Co., Chicago, Ill. Laundry wash boards and clothes wringers. Serial No. 333,411; Feb. 14. Class 24.
Signaco Company, New York, N. Y. Automatic electric flashing devices. Serial No. 333,536; Feb. 14. Class 21.
Sivade, Elis F. A., doing business as Sivade Good Foods Company, Atlantic City, N. J. Hollandaise sauce and au gratin cheese sauce. Serial No. 333,206; Feb. 14, Class 46.
Societe Anonyme des Anciens Etablissements Panhard & Levassor, Paris, France. Automobiles, motor boats, airplanes, etc. Serial No. 332,966; Feb. 14. Class 19.
Sody Products Co. (See Bluestone, Henry.)
Spletter, Albert, Washington, D. C. Lubricant. Serial No. 333,172; Feb. 14. Class 15.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Mineral oils and compounds, emulsions, and mixtures of mineral oils with other substances. Serial No. 333,043; Feb. 14. Class 6.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Kerosene. Serial No. 333,239; Feb. 14. Class 15.
Star-Chronicle Publishing Company, St. Louis, Mo. Newspaper. Serial No. 333,745; Feb. 14. Class 38.
Stillwall Grove Products, Inc., Winter Park, Fla. Canned fruit and canned fruit juices. Serial No. 331,294; Feb. 14. Class 46.
Stuhmer, Geo. F., & Company, Brooklyn, N. Y. Bread. Serial Nos. 330,971–8; Feb. 14. Class 46.
Sun Glow Industries, Inc., Mansfield, Ohio. Smoking stands and cabinets, telephone sets, book cases, etc. Serial No. 333,364; Feb. 14, 1933. Class 32.
Sussberg & Feinberg, Inc., New York, N. Y. Underwear. Serial No. 333,088; Feb. 14. Class 39.
Trippe, Barker & Co., New York, N. Y. Cotton piece goods. Serial No. 332,969; Feb. 14. Class 42.
Trommer, John F., Incorporated, Brooklyn, N. Y. Malt beverage. Serial No. 332,106; Feb. 14. Class 48.
Tupacau Mills, Tupacau, S. C. Towels. Serial No. 333,243; Feb. 14. Class 42.
Turney, J. G., & Son, Limited, London, England. Whiskey, rum, gin, and brandy. Serial No. 330,716; Feb. 14. Class 49.
Van Raalte Company, New York, N. Y. Hosiery and underwear. Serial No. 323,598; Feb. 14. Class 39.
Vee-Dee Bar Corp. (See Money, Marion R.)
Wanamaker, John, Philadelphia, Philadelphia, Pa. Smoking pipes, cigarette cases, tobacco pouches, etc. Serial No. 331,206; Feb. 14. Class 8.
Warren Woolen Company, The, Stafford Springs, Conn. Rugs. Serial No. 332,205; Feb. 14. Class 42.
Waterbury Paper Box Company, The, Waterbury, Conn. Metal covered boxes. Serial No. 333,692; Feb. 14. Class 2.
White & Bagley Company, The, Worcester, Mass. Lubricating oils and greases. Serial Nos. 333,210–11; Feb. 14. Class 15.
White, Wilbur, Chemical Company, Inc., The, Owego, N. Y. Wax emulsion. Serial No. 333,021; Feb. 14. Class 6.
Williams, Amy F., doing business as Nu Sno Company, Greeley, Colo. Frozen confections. Serial No. 332,242; Feb. 14. Class 46.
Wynne, Clarence P., doing business as Phoenix Preparations, Scranton, Pa. Vaginal antiseptic and deodorant. Serial No. 332,433; Feb. 14. Class 6.
Yory, Inc., New York, N. Y. Perfume. Serial No. 332,905; Feb. 14. Class 6.
Zwiebelson, Abraham, doing business as Mollie Mayers, New York, N. Y. Brassieres. Serial No. 331,526; Feb. 14. Class 39.

LIST OF REGISTRANTS OF TRADE-MARKS

Abelman, Max, doing business as M. Abelman Co. and Hartwell Paint Co., Boston, Mass. Ready mixed paint, paste colors in oil, shellac, and varnishes. 300,931; Feb. 14; Serial No. 330,683; published Nov. 22, 1932. Class 16.
Acme Chemical Company, Milwaukee, Wis. Floor dressing. 301,015; Feb. 14; Serial No. 327,930; published Nov. 22, 1932. Class 16.
Adams, Lewis M., Clinton, Mass. Blankbooks. 301,006; Feb. 14; Serial No. 331,237; published Nov. 22, 1932. Class 37.
Agar-lac, Inc., assignor to Arlo Chemical Laboratories, Inc., New York, N. Y. Constipation remedy. 90,083; renewed Feb. 4, 1933.
Aktiebolaget Imoindustri, Stockholm, Sweden. Liquid pumps and motors. 300,903; Feb. 14; Serial No. 323,929; Nov. 22, 1932. Class 23.
Aktiebolaget Sveriges Forenade Konservfabriker, Gottenborg, Sweden. Canned fish. 301,074; Feb. 14. Serial No. 329,126; published Nov. 22, 1932. Class 46.
Alden Mills, New Orleans, La. Woven and knitted goods, piece goods, shirtings, etc. 92,028; renewed June 17, 1933.
Alexander, R. F. & J., and Company, Limited, Neilston, Scotland. Sewing cotton thread in balls. 301,070–1; Feb. 14; Serial Nos. 329,848–4; published Nov. 15, 1932. Class 43.
American Diamalt Company, The, Cincinnati, Ohio. Malt syrup. 300,961; Feb. 14; Serial No. 330,647; published Nov. 29, 1932. Class 46.
American Grill Co., Milwaukee, Wis. Grills. 301,108; Feb. 14. Class 13.
American Porcelain Co., Chicago, Ill. Porcelain. 300,855; Feb. 14; Serial No. 330,391; published Nov. 29, 1932. Class 44.
American Steel and Wire Company of New Jersey, The, Cleveland, Ohio. Barb wire. 300,979; Feb. 14; Serial No. 330,220; published Nov. 22, 1932. Class 13.
Amstenal Laboratories, Inc., New York, N. Y., and Chicago, Ill. Dentures. 300,852; Feb. 14; Serial No. 330,648; published Nov. 29, 1932. Class 44.
Arlo Chemical Laboratories, Inc. (See Agar-lac, Inc., assignor.)
Atlanta Casket Company, Atlanta, Ga. Inner spring mattresses for burial caskets. 300,968; Feb. 14; Serial No. 331,173; published Nov. 29, 1932. Class 32.
Atlantic Insulated Wire & Cable Company, Jersey City, N. J., and New York, N. Y., assignor, by mesne assignments, to General Cable Corporation, New York, N. Y. Electric wire. 90,088; renewed Feb. 4, 1933.
Autorist S. A.-Autorist Ltd., Fribourg, Switzerland. Watches and chronometers. 300,939; Feb. 14; Serial No. 319,799; published Nov. 22, 1932. Class 27.
Bachmann Bros. Inc., Philadelphia, Pa. Sun glasses and goggles. 301,000; Feb. 14; Serial No. 330,442; published Nov. 29, 1932. Class 26.
Balzac Bros. & Company, Inc., New York, N. Y. Coffee. 300,952; Feb. 14; Serial No. 330,918; published Nov. 29, 1932. Class 46.
Barbasol Company, The, Indianapolis, Ind. Skin cleansing cream. 300,957; Feb. 14; Serial No. 331,365; published Nov. 29, 1932. Class 6.
Barnard Company. (See Peoples Drug Stores, Inc.)
Baron, S. J., Corporation, New York, N. Y. Flavorings. 300,959; Feb. 14; Serial No. 330,415; published Nov. 29, 1932. Class 46.
Baur, Mary A., Edmonston, Md. Eczema lotion. 301,054; Feb. 14; Serial No. 330,689; published Nov. 22, 1932. Class 6.
Bayliss, Louis J., doing business as Nature's Food Laboratory, Keene, Tex. Medicinal tonic. 301,097; Feb. 14; Serial No. 328,542; published Nov. 22, 1932. Class 6.
Beck, Koller & Company, Inc., Detroit, Mich. Plastic synthetic resins. 301,085; Feb. 14; Serial No. 329,925; published Nov. 22, 1932. Class 6.
Beck, Koller & Company, Inc., Detroit, Mich. Ester gums. 301,102; Feb. 14; Serial No. 329,929; published Nov. 15, 1932. Class 6.
Bendel, Henri, Inc., New York, N. Y. Cosmetics. 301,099; Feb. 14; Serial No. 330,360; published Nov. 15, 1932. Class 6.
Bid-Rite Playing Card Corporation, New York, N. Y. Playing cards. 300,998; Feb. 14; Serial No. 329,621; published Dec. 6, 1932. Class 22.
Biedermann Brothers, Inc., Chicago, Ill. Coffee. 301,011; Feb. 14; Serial No. 331,453; published Nov. 29, 1932. Class 46.
Bills, Charles B., Sacramento, Calif. Machines for the manufacture of artificial snow from ice. 300,980; Feb. 14; Serial No. 330,244; published Nov. 22, 1932. Class 23.
Bischoff, Ernst, Company, Incorporated, New York, N. Y. Preparations for fulling and finishing textile fabrics. 301,033; Feb. 14; Serial No. 330,690; published Nov. 22, 1932. Class 6.
Blair Milling Co., The, Atchison, Kans. Wheat flour. 301,112; Feb. 14. Class 46.
Boehringer, Albert, Nieder-Ingelheim, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Preparation of opium. 90,505; renewed Mar. 4, 1933.
Boggs, Samuel W., Chevy Chase, Md. Printed horological charts. 300,877; Feb. 14; Serial No. 328,236; published Nov. 15, 1932. Class 38.
Bohemia Keramische Werke, Aktiengesellschaft, Neuroblau, near Karlsbad, Czechoslovakia. Hotel china ware. 300,928; Feb. 14; Serial No. 330,888; published Dec. 6, 1932. Class 30.
Borden's Milk Products Company, Inc., assignor to Borden Quality Inc., New York, N. Y. Creamery products. 300,943; Feb. 14; Serial No. 316,693; published Dec. 6, 1932. Class 46.
Brown-Mayer Publishing Co. Inc., assignor to Colonel L. Brown, New York, N. Y. Periodical. 301,009; Feb. 14; Serial No. 330,393; published Nov. 22, 1932. Class 38.
Burchard, C. D., Inc., New York, N. Y. Antiseptics. 301,031; Feb. 14; Serial No. 330,738; published Nov. 29, 1932. Class 6.
Burnet Company, The, New York, N. Y. Billiard accessories. 300,861; Feb. 14; Serial No. 330,535; published Dec. 6, 1932. Class 22.
Butler Brothers, Chicago, Ill. Paper goods. 301,019; Feb. 14; Serial No. 331,037; published Nov. 22, 1932. Class 37.
Calco Chemical Company, Inc., The, Bound Brook, N. J. Sulphate. 301,027; Feb. 14; Serial No. 330,808; published Nov. 29, 1932. Class 6.

Camarillo Citrus Association, Camarillo, Calif. Fresh citrus fruits. 300,953–5; Feb. 14; Serial Nos. 331,138–40; published Nov. 29, 1932. Class 46.
Camarillo Citrus Association, Camarillo, Calif. Fresh citrus fruits. 301,064; Feb. 14; Serial No. 331,141; published Nov. 29, 1932. Class 46.
Cambridge Cement Stone Company, Brighton, Mass. Cast stone. 300,889; Feb. 14; Serial No. 330,304; published Nov. 15, 1932. Class 12.
Canfield Oil Company, The, Cleveland, Ohio. Lubricating oils and greases. 300,914; Feb. 14; Serial No. 330,333; published Nov. 29, 1932. Class 15.
Capital Chemical Drug Company, Inc., Montgomery, Ala. Preparation for improving and beautifying the hair and for relieving itching and dandruff. 301,101; Feb. 14; Serial No. 330,291; published Nov. 15, 1932. Class 6.
Celanese Corporation of America, New York, N. Y. Fabrics made wholly or partially of cellulose derivatives. 300,938; Feb. 14; Serial No. 319,764; published Nov. 22, 1932. Class 42.
Celanese, Inc. (See Petrocelli, Joseph, & Company, assignor.)
Central Foundry Company, The, New York, N. Y. Metal pipes. 301,110; Feb. 14. Class 13.
Century Lighting Equipment, Inc., New York, N. Y. Electric lighting equipment, fixtures therefor, lamps, etc. 300,921; Feb. 14; Serial No. 327,903; published Nov. 22, 1932. Class 21.
Chase & Sanborn, Boston, Mass., assignor, by mesne assignments, to Standard Brands Incorporated, New York, N. Y. Tea. 92,184; renewed June 24, 1933.
Chemical Foundation, Incorporated, The. (See Boehringer, Albert, assignor.)
Chemical Foundation, Incorporated, The. (See Chemische Fabrik Güstrow, Dr. Hillringhaus & Dr. Hellmann, assignor.)
Chemical Foundation, Incorporated, The. (See Chemische Fabrik Helfenberg A. G. vorm. Eugen Dieterich, assignor.)
Chemical Foundation, Incorporated, The. (See Feller, Eugene V., assignor.)
Chemical Foundation, Incorporated, The. (See Gewerkschaft Leuchtenburg, assignor.)
Chemical Foundation, Incorporated, The. (See Laubenheimer, August A., assignor.)
Chemische Fabrik Güstrow, Dr. Hillringhaus & Dr. Hellmann, Gustrow and Heideweg, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Remedy for skin affections and other skin diseases. 90,854; renewed Mar. 25, 1933.
Chemische Fabrik Helfenberg A. G. vorm. Eugen Dieterich, Helfenberg, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Chemicals for photographic baths. 40,027; renewed Mar. 31, 1933.
Chicago Mill and Lumber Corporation, Chicago, Ill. Boxes for shipping pianos. 301,107; Feb. 14. Class 2.
Chicago Rotoprint Company, Chicago, Ill. Publication in magazine form. 301,003; Feb. 14; Serial No. 331,246; published Nov. 22, 1932. Class 38.
Chichester Chemical Company, Philadelphia, Pa. Powdered deodorant. 301,038–9; Feb. 14; Serial Nos. 330,323–4; published Nov. 29, 1932. Class 6.
Chilton Paint Company, College Point, N. Y. Paints, varnishes, lacquers, etc. 300,927; Feb. 14; Serial No. 330,920; published Nov. 22, 1932. Class 16.
Christy Cosmetics, Inc., New York, N. Y. Lipsticks, face powders, rouges, etc. 300,905; Feb. 14; Serial No. 323,608; published Nov. 29, 1932. Class 6.
Ciccarelli, Mary, doing business as East Boston Sugar Cone Co., East Boston, Mass. Ice cream cones. 301,068; Feb. 14; Serial No. 330,781; published Nov. 29, 1932. Class 46.
Citro Chemical Co. of America, Maywood, N. J. Peroxid of hydrogen. 92,320; renewed July 1, 1933.
Cockburn & Company, Limited, Glasgow, Scotland. Medicated inhaler. 91,851; renewed June 3, 1933.
Coleman Lamp and Stove Company, The, Wichita, Kans. Gasoline fuel burning lamps and lanterns. 300,983; Feb. 14; Serial No. 325,845; published Nov. 22, 1932. Class 34.
Combustioneer, Inc., Springfield, Ohio. Fuel stokers. 300,966; Feb. 14; Serial No. 331,100; published Nov. 22, 1932. Class 34.
Container Corporation of America, Chicago, Ill. Thermal insulating board. 300,891; Feb. 14; Serial No. 330,120; published Nov. 29, 1932. Class 12.
Copy Papers Inc., Chicago, Ill. Paper. 300,942; Feb. 14; Serial No. 317,029; published Nov. 29, 1932. Class 37.
Coryell, L. L., & Son, Lincoln, Nebr. Wheat flour. 301,072; Feb. 14; Serial No. 329,741; published Nov. 22, 1932. Class 46.
Cramer Chemical Co., The, Gardner, Kans. Germicide. 301,023; Feb. 14; Serial No. 330,889; published Nov. 29, 1932. Class 6.
Crosse & Blackwell Company, The, Baltimore, Md. Marmalades, jellies, preserves, etc. 301,073; Feb. 14; Serial No. 329,346; published Dec. 6, 1932. Class 46.
Dan-Dee Pretzel & Potato Chip Company, The, Cleveland, Ohio. Noodles. 301,077; Feb. 14; Serial No. 325,644; published Nov. 29, 1932. Class 46.
Dan-Dee Pretzel & Potato Chip Company, The, Cleveland, Ohio. Pretzels. 301,078; Feb. 14; Serial No. 325,643; published Nov. 29, 1932. Class 46.
Davidson, Glee D., doing business as Etel-Ga Laboratories, Rifle, Colo. Skin lotions. 300,999; Feb. 14; Serial No. 330,122; published Nov. 29, 1932. Class 6.
De Guevara, Moisés L., doing business as Laboratories Ionine, Mexico, Mexico. Preparations for the treatment of diseases of the pulmonary and respiratory tracts. 301,055; Feb. 14; Serial No. 330,654; published Nov. 22, 1932. Class 6.
De Jesús, José, doing business as Laboratorios Farmaceuticos de Puerto Rico, New York, N. Y. Preparation used as a liniment. 301,094; Feb. 14; Serial No. 330,621; published Nov. 29, 1932. Class 6.
Delatone Company, The, Chicago, Ill. Depilatory. 300,899; Feb. 14; Serial No. 326,894; published Nov. 22, 1932. Class 6.
Dent-O-Frns Tooth Paste Co. (See Murray, Malcolm J.)
Detroit-Michigan Stove Company. (See Michigan Stove Company, assignor.)
Deutsche Gold- und Silber Scheideanstalt, Frankfort-on-the-Main, Germany. Astringents, astringent cerates, bleach and beauty creams, etc. 300,894; Feb. 14; Serial No. 329,181; published Nov. 22, 1932. Class 6.
Dick, James E., Somerville, Mass. Refractory cements, mortars, and concrete. 300,930; Feb. 14; Serial No. 330,696; published Nov. 22, 1932. Class 12.
Dole, Vincent P., assignor to Old Monk Olive Oil Co., Chicago, Ill. Olives and olive-oil. 90,518; renewed Mar. 4, 1933.
Dormer Brothers Co., Cincinnati, Ohio. Hosiery. 92,196; renewed June 24, 1933.
Doubleday, Doran & Company, Inc., Garden City, N. Y. Magazine. 301,008; Feb. 14; Serial No. 329,792; published Nov. 22, 1932. Class 38.
Dowd, J. C., & Co., assignor to J. C. Dowd & Co., Inc., New York, N. Y. Manicure sets. 89,633; renewed Dec. 31, 1932.
Duncan, Donald F., Inc., Chicago, Ill. Combined hot-water bottle and syringe. 300,848; Feb. 14; Serial No. 330,923; published Nov. 22, 1932. Class 44.
Durex Products Inc., New York, N. Y. Base for antiseptic jelly. 301,026; Feb. 14; Serial No. 330,840; published Nov. 29, 1932. Class 6.
E. & A. R., Binghamton, N. Y. Hair restorative. 301,037; Feb. 14; Serial No. 330,472; published Nov. 29, 1932. Class 6.
East Boston Sugar Cone Co. (See Ciccarelli, Mary.)
Eastern Chemical and Research Company, The, New Haven, Conn. Plant and flower preservative. 301,093; Feb. 14; Serial No. 326,809; published Nov. 22, 1932. Class 6.
Ellarm Co., Los Angeles, Calif. Eyelash dye and permanent wave solutions. 300,900; Feb. 14; Serial No. 325,092; published Nov. 22, 1932. Class 6.
Ellis & Co. (Birmingham) Limited, assignor to Ellis & Company (Birmingham) Limited, Birmingham, England. Articles of silver and electroplate. 90,691; renewed Mar. 18, 1933.
Etel-Ga Laboratories. (See Davidson, Glee D.)
Fahlberg-List Aktiengesellschaft, Chemische Fabriken, Magdeburg Sudost, Germany. Preparation for preserving victuals. 301,059; Feb. 14; Serial No. 330,816; published Nov. 29, 1932. Class 6.
Feller, Eugene V., Stubica, Austria-Hungary, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Medical compound. 40,016; renewed Mar. 31, 1933.
Flager, Charles E., Lima, Ohio. Lubricating oil. 300,908; Feb. 14; Serial No. 331,223; published Dec. 6, 1932. Class 15.
Foley & Co., Chicago, Ill. Medicinal salve. 301,086; Feb. 14; Serial No. 329,793; published Nov. 22, 1932. Class 6.
Fonderies de Bronze de Nanterra, Société Anonyme, Nanterre, France. Bronze articles. 300,974; Feb. 14; Serial No. 330,543; published Dec. 6, 1932. Class 14.
Foot-King Co., The. (See King, Robert M.)
Ford Hopkins Co., doing business as Vin-Kola Co., Chicago, Ill. Tonic. 301,050; Feb. 14; Serial No. 325,576; published Nov. 22, 1932. Class 6.
Fort Howard Paper Company, Green Bay, Wis. Toilet paper, paper towels, crepe paper, etc. 301,007; Feb. 14; Serial No. 331,678; published Dec. 6, 1932. Class 37.
Fort Howard Paper Company, Green Bay, Wis. Paper napkins. 301,018; Feb. 14; Serial No. 331,104; published Nov. 22. 1932. Class 37.
Frankl, Julia, New York, N. Y. Chocolates, caramels, peppermints, etc. 300,902; Feb. 14; Serial No. 324,052; published Nov. 29, 1932. Class 46.
French Lick Springs Hotel Co., French Lick, Ind. Laxative mineral water. 300,946; Feb. 14; Serial No. 311,830; published Dec. 6, 1932. Class 45.
Friedricks, Irving, doing business as Irving Friedricks Co., New York, N. Y. Ladies' sport coats. 301,113; Feb. 14. Class 39.

Fuger and Baker, Lincoln, Nebr. Cleaner for cleaning floors, carpets, etc. 300,897; Feb. 14; Serial No. 327,870; published Nov. 29, 1932. Class 4.
Fuhr, Robert W., New Orleans, La. Nut paste. 300,963; Feb. 14; Serial No. 327,975; published Nov. 29, 1932. Class 46.
Fulton Bag & Cotton Mills, The, Atlanta, Ga. Canvas ducking. 89,552; renewed Dec. 24, 1932.
Gebrüder, Neuss, to Neuss Gebrüder Gesellschaft mit beschränkter Haftung, Aix-la-Chapelle, Germany. Needles and pins. 39,557; renewed Dec. 30, 1932.
General Cable Corporation. (See Atlantic Insulated Wire & Cable Company.)
General Dyestuff Corporation, New York, N. Y. Auxiliary agent for dyeing. 301,025; Feb. 14; Serial No. 330,847; published Nov. 29, 1932. Class 6.
Georgia-Carolina Dairies, Augusta, Ga. Sherbets. 300,962; Feb. 14; Serial No. 327,976; published Nov. 22, 1932. Class 46.
Germanow-Simon Machine Co., Rochester, N. Y. Watch crystals. 300,879; Feb. 14; Serial No. 329,634; published Nov. 29, 1932. Class 33.
Gewerkschaft Leuchtenburg, Cologne, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, New York, N. Y. Leucite phonolite (mineral manure). 90,802; renewed Mar. 25, 1933.
Giaramita & Nugnes, Brooklyn, N. Y. Preparation for scalp treatment. 300,901; Feb. 14; Serial No. 324,314; published Nov. 29, 1932. Class 6.
Gibson Electric Refrigerator Corporation, Greenville, Mich. Refrigerators and refrigerating units. 300,862; Feb. 14; Serial No. 330,725; published Dec. 6, 1932. Class 31.
Glissenite Corporation, Duluth, Minn. Polish for cleaning, waxing and polishing automobiles. 300,890; Feb. 14; Serial No. 330,226; published Nov. 15, 1932. Class 16.
Goldberg, Bowen & Co., San Francisco, Calif. Coffee. 300,960; Feb. 14; Serial No. 330,512; published Nov. 29, 1932. Class 46.
Goldsmith, P., Sons Company, The, Cincinnati, Ohio. Golf clubs and balls. 301,114; Feb. 14. Class 22.
Gooderham & Worts, Ltd., Toronto, Ontario, Canada. Whiskey. 300 863; Feb. 14; Serial No. 330,813; published Dec. 6, 1932. Class 49.
Goodyear Tire & Rubber Company, The. (See Republic Rubber Company, The, assignor.)
Goodyear Tire & Rubber Company, The, Akron, Ohio. Ready mixed paint, varnish, and paint enamel. 300,926; Feb. 14; Serial No. 331,081; published Nov. 29, 1932. Class 16.
Gotham Laboratories, Inc., New York, N. Y. Antiseptic vaginal jellies for feminine hygiene. 301,079; Feb. 14; Serial No. 330,044; published Nov. 22, 1932. Class 6.
Gotham Silk Mfg. Co., assignor, by mesne assignments, to Gotham Silk Hosiery Company, Inc., New York, N. Y. Hosiery. 91,959; renewed June 10, 1933.
Goulds Pumps, Incorporated, Seneca Falls, N. Y. Piston pumps. 300,987; Feb. 14; Serial No. 326,711; published Nov. 22, 1932. Class 23.
Graitmore Company, New York, N. Y. Hair dye and hair rinse. 300,850; Feb. 14; Serial No. 330,848; published Nov. 22, 1932. Class 6.
Grimmer, Otto, doing business as Charles Grimmer & Son, New York, N. Y. Wall paper. 300,948; Feb. 14; Serial No. 309,643; published Nov. 15, 1932. Class 37.
Gum Tragasol Supply Company Limited, by change of name to Tragasol Products Limited, Hooton, England. Mucilaginous products of vegetable origin. 92,070; renewed June 17, 1933.
Gum Tragasol Supply Company Limited, The, by change of name to Tragasol Products Limited, Hooton, England. Leather dressings and polishes. 92,071–2; renewed June 17, 1933.
Gunite Foundries Corporation, Rockford, Ill. Ferrous metal castings. 300,982; Feb. 14; Serial No. 325,789; published Dec. 6, 1932. Class 14.
Halcomb Steel Company, Geddes, Syracuse, N. Y. Steel. 300,970; Feb. 14; Serial No. 331,498; published Dec. 6, 1932. Class 14.
Hall, Hartwell & Co., assignor to Hall, Hartwell & Co. Inc., Troy, N. Y. Shirts, collars, and cuffs. 91,087; renewed Apr. 15, 1933.
Hanna, Leonard B., Caldwell, Kans. Preparations for use in the treatment of mange. 301,030; Feb. 14; Serial No. 330,746; published Nov. 29, 1932. Class 6.
Hartwell Paint Co. (See Abelman, Max.)
Harwood Bros., Inc., Richmond, Va. Lubricating oils and greases. 300,917; Feb. 14; Serial No. 329,945; published Nov. 29, 1932. Class 15.
Health Developing Apparatus Co., Inc., New York, N. Y. Rowing machines. 300,867; Feb. 14; Serial No. 331,680; published Dec. 6, 1932. Class 22.
Health Developing Apparatus Co., Inc., New York, N. Y. Rowing machines. 300,868; Feb. 14; Serial No. 331,682; published Dec. 6, 1932. Class 22.
Health Developing Apparatus Co., Inc., New York, N. Y. Rowing machines. 300,869–70; Feb. 14; Serial Nos. 331,684–5; published Dec. 6, 1932. Class 22.
Hemafil Company, The. (See Van Sant, Robert H.)
Hitchins, Harry M., Minneapolis, Minn. Paper box liners and sheets. 301,017; Feb. 14; Serial No. 330,574; published Nov. 22, 1932. Class 37.
Hoberg Paper & Fibre Company, Green Bay, Wis. Paper towels, toilet tissues, and napkins. 301,014; Feb. 14; Serial No. 325,579; published Nov. 22, 1932. Class 37.
Hoffmann-La Roche Chemical Works, New York, N. Y., assignor to Hoffmann-La Roche, Inc., Nutley, N. J. Bromin compound for use as a sedative. 91,769; renewed May 27, 1933.
Holland Pharmacal Company, Philadelphia, Pa. Hemorrhoidal ointment. 301,029; Feb. 29; Serial No. 330,747; published Nov. 29, 1932. Class 6.
Holyoke Company, Inc., The, Holyoke, Mass. Aerial and lead-in wires. 300,951; Feb. 14; Serial No. 285,973; published Dec. 6, 1932. Class 21.
Horn, A. C., Company, Long Island City, N. Y. Varnish compound. 300,924; Feb. 14; Serial No. 331,464; published Nov. 29, 1932. Class 16.
Houbigant, Inc., New York, N. Y. Perfumes, toilet water, face powder, etc. 300,997; Feb. 14; Serial No. 328,813; published Nov. 29, 1932. Class 6.
Houghton, E. F., & Co., Philadelphia, Pa. Lubricating greases. 300,909; Feb. 14; Serial No. 331,184; published Dec. 6, 1932. Class 15.
Hudnut, Richard, New York, N. Y. After shaving lotion, face cream (cleansing), tooth paste, etc. 300,853; Feb. 14; Serial No. 330,625; published Nov. 22, 1932. Class 6.
Hunt, Daniel, Bremerton, Wash. Facial cleanser and cream. 301,043; Feb. 14; Serial No. 330,190; published Nov. 29, 1932. Class 6.
Hunt, John F., & Co. Inc., New York, N. Y. Malt syrups. 301,075; Feb. 14; Serial No. 329,114; published Nov. 22, 1932. Class 46.
Imbs, J. F., Milling Company, St. Louis, Mo., and Belleville, Ill., to J. F. Imbs Milling Company, Inc., St. Louis, Mo., successor. Wheat flour. 90,993; renewed Apr. 8, 1933.
Independent Milwaukee Brewery, Milwaukee, Wis. Malt beverage. 300,866; Feb. 14; Serial No. 331,376; published Dec. 6, 1932. Class 48.
Indian Lake Medicine Co., Fort Wayne, Ind. General tonic. 301,097; Feb. 14; Serial No. 330,425; published Nov. 15, 1932. Class 6.
Industrial Medicine, Inc., Chicago, Ill. Publication. 300,923; Feb. 14; Serial No. 331,465; published Nov. 29, 1932. Class 38.
Institut de Beaute, Inc., New York, N. Y. Face and body creams, hand lotions, etc. 300,994; Feb. 14; Serial No. 325,173; published Nov. 29, 1932. Class 6.
International Harvester Company of America, assignor to International Harvester Company, Chicago, Ill. Guards for mowing machines. 89,923; renewed Jan. 21, 1933.
Jarvis, Anna, Philadelphia, Pa. Prints and publications. 92,429; renewed July 8, 1933.
Jarvis, Anna, Philadelphia, Pa. Book-marks, hymns, magazines, and books. 92,430; renewed July 8, 1933.
Johnson, S. C., & Son, Racine, Wis. Wax and lacquer. 300,874; Feb. 14; Serial No. 325,830; published Dec. 6, 1932. Class 16.
Jones, Estella L., San Diego, Calif. Skin lotion and toilet preparation. 301,041; Feb. 14; Serial No. 330,301; published Nov. 29, 1932 Class 6.
Kaufmann Department Stores, Inc., Pittsburgh, Pa. Hosiery. 301,115; Feb. 14. Class 39.
Keating, Thomas E., New York, N. Y. Hair grower and tonic. 301,036; Feb. 14; Serial No. 330,630; published Nov. 22, 1932. Class 6.
Kerfoot, Thomas & Co., Limited, Bardsley, England. Medicinal preparation. 301,061; Feb. 14; Serial No. 330,852; published Nov. 29, 1932. Class 6.
Kerr Glass Manufacturing Corporation, Sand Springs, Okla., and Los Angeles, Calif. Glass jars and containers. 301,111; Feb. 14. Class 33.
King, Robert M., doing business as The Foot-King Co., Minneapolis, Minn. Medicinal ointment. 301,089; Feb. 14; Serial No. 329,697; published Nov. 15, 1932. Class 6.
Kitgen Laboratories. (See Sullivan, James F.)
Klein, Samuel S., doing business as Villon and Villon, Perfumer, Brooklyn, N. Y. Perfumes, toilet waters, bath salts, etc. 300,904; Feb. 14; Serial No. 323,807; published Nov. 15, 1932. Class 6.
Koret, Inc., New York, N. Y. Purses, pocketbooks, and hand bags. 301,022; Feb. 14; Serial No. 331 309; published Dec. 6, 1932. Class 3.
Kress, S. H., & Co., New York, N. Y. Gauze sanitary neckbands, absorbent cotton, eye bandages, etc. 300,860; Feb. 14; Serial No. 330,263; published Nov. 22, 1932. Class 44.
Laboratorios Farmaceuticos de Puerto Rico. (See de Jesús, José.)
Laboratorios Ionine. (See de Guevara, Moisés L.)
Laubenheimer, August A., Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, New York, N. Y. Salves. 90,712; renewed Mar. 18, 1933.
La Verne Orange Association, La Verne, Calif. Fresh citrus fruits. 301,063; Feb. 14; Serial No. 331,155; published Nov. 29, 1932. Class 46.
Lever Brothers Company, Portland, Me., and Cambridge, Mass., to Lever Brothers Company, Cambridge, Mass. Soap and scouring compound. 90,450; renewed Feb. 25, 1933.
Lever Brothers, Limited, Port Sunlight, England, assignor to Lever Brothers Company, Cambridge, Mass. Scouring and polishing soap. 89,620; renewed Jan. 6, 1933.

Lido Luggage Co., Inc., New York, N. Y. Luggage. 300,925; Feb. 14; Serial No. 331,262; published Nov. 29, 1932. Class 3.

Lincoln Laboratories, Incorporated, Brooklyn, N. Y. Anti-freeze solution. 301,040; Feb. 14; Serial No. 330,302; published Nov. 22, 1932. Class 6.

Lister Bros. Inc., New York, N. Y. Foods and ingredients of food for special diets. 300,941; Feb. 14; Serial No. 318,154; published Nov. 22, 1932. Class 46.

Long Island Macaroni Co. Inc., Long Island City, N. Y. Alimentary pastes. 300,958; Feb. 14; Serial No. 329,569; published Nov. 15, 1932. Class 46.

Marcy Company, The, Boston, Mass. Cholagogue. 92,088; renewed June 17, 1933.

Margarella, Pasquale, New York, N. Y. Candies, chocolates, and bonbons. 91,587; renewed May 18, 1933.

Martin, Herbert F., Great Neck, N. Y. Comic newspaper strips. 300,888; Feb. 14; Serial No. 330,428; published Nov. 15, 1932. Class 38.

Matragos, Nicholas J., doing business as Nicholas C. Vallos, New York, N. Y. Medicinal preparation. 300,859; Feb. 14; Serial No. 330,269; published Nov. 22, 1932. Class 6.

Maxwell Home Supply Corp., New York, N. Y. Malt syrup. 300,883; Feb. 14; Serial No. 331,380; published Dec. 6, 1932. Class 46.

McCoy's Laboratories, Inc., New York, N. Y. Anti-ferment and cholagogue. 301,091; Feb. 14; Serial No. 329,314; published Nov. 22, 1932. Class 6.

McCrory Stores Corporation, New York, N. Y. Nail polish and nail polish remover. 300,995–6; Feb. 14; Serial Nos. 328,066–7; published Nov. 29, 1932. Class 6.

McKay Company, The, Pittsburgh, Pa. Chairs, stools, tables, etc. 300,978; Feb. 14; Serial No. 329,967; published Nov. 15, 1932. Class 32.

Meier & Frank Company, Portland, Oreg. Shirts, waists and blouses. 301,109; Feb. 14. Class 39.

Merrell, Wm. S. Company, The, Cincinnati, Ohio. Medicinal preparation. 301,024; Feb. 14; Serial No. 330,855; published Nov. 29, 1932. Class 6.

Meyer, Wm., Co., The, Chicago, Ill. Massage machines. 300,847; Feb. 14; Serial No. 330,856; published Nov. 29, 1932. Class 44.

Michigan Stove Company, assignor to Detroit-Michigan Stove Company, Detroit, Mich. Heating stoves and ranges. 91,977; renewed June 10, 1933.

Modiano, Saul D., Trieste, Austria-Hungary, assignor to Saul D. Modiano "Societa in Accomandita" Trieste, Italy. Cigarette paper. 88,327; renewed Sept. 10, 1932.

Mo-jo Products Co. (See Neumann, Morton G.)

Monex Corporation, New York, N. Y. Coin dispensing change making machines. 300,984; Feb. 14; Serial No. 326,331; published Nov. 22, 1932. Class 26.

Monnier, Ernest, Inc., Boston, Mass. Rubber nursing nipples. 300,846; Feb. 14; Serial No. 330,897; published Nov. 29, 1932. Class 44.

Monroe Sander Corporation, The, Long Island City, N. Y. Liquid nail polish. 301,032; Feb. 14; Serial No. 330,707; published Nov. 22, 1932. Class 6.

Morey Mercantile Company, The, Denver, Colo. Coffee. 301,076; Feb. 14; Serial No. 325,990; published Nov. 29, 1932. Class 46.

Mor-Pak Preserving Corporation, Stockton, Calif. Canned fruits. 301,062; Feb. 14; Serial No. 331,161; published Nov. 29, 1932. Class 46.

Murray, Malcolm J., doing business as Dent-O-Fras Tooth Paste Co., San Bernardino, Calif. Tooth paste and an antiseptic preparation. 301,095; Feb. 14; Serial No. 330,448; published Nov. 29, 1932. Class 6.

Nachod & United States Signal Co., Inc., Louisville, Ky. Electric block signal light systems for railways, electric light signal systems for street traffic, etc. 300,920; Feb. 14; Serial No. 328,049; published Nov. 29, 1932. Class 21.

National Biscuit Company, Jersey City, N. J., and New York, N. Y. to National Biscuit Company, New York, N. Y. Biscuit. 89,868; renewed Jan. 14, 1933.

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 90,038; renewed Jan. 28, 1933.

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 90,040; renewed Jan. 28, 1933.

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 90,042; renewed Jan. 28, 1933.

National Biscuit Company, New York, N. Y. Publication. 301,010; Feb. 14; Serial No. 330,965; published Nov. 22, 1932. Class 38.

National Carbide Corporation, Wytheville, and Ivanhoe, Va., and New York, N. Y. Calcium carbide. 301,012; Feb. 14; Serial No. 326,335; published Nov. 22, 1932. Class 6.

National Industrial Products Corporation, Wilkinsburg, Pa. Lubricating devices. 300,973; Feb. 14; Serial No. 330,490; published Nov. 22, 1932. Class 23.

Nature's Food Laboratory. (See Bayliss, Louis J.)

Neumann, Morton G., doing business as Mo-Jo Products Co., Chicago, Ill. Perfume and incense. 301,045; Feb. 14; Serial No. 330,048; published Nov. 22, 1932. Class 6.

New York American, Inc., New York, N. Y. Newspaper section. 300,940; Feb. 14; Serial No. 319,624; published Nov. 29, 1932. Class 38.

Niles, Frank A., Lumber Co. Inc., New York, N. Y. Lumber. 300,875; Feb. 14; Serial No. 325,481; published Nov. 15, 1932. Class 12.

Nordmark-Werke G. m. b. H., Hamburg, Germany. Medicinal preparations. 300,935; Feb. 14; Serial No. 320,202; published Nov. 15, 1932. Class 6.

Nordmark-Werke G. m. b. H., Hamburg, Germany. Medicinal preparations. 301,052; Feb. 14; Serial No. 325,234; published Nov. 22, 1932. Class 6.

Nordmark-Werke G. m. b. H., Hamburg, Germany. Medicinal preparations. 301,053; Feb. 14; Serial No. 325,236; published Nov. 22, 1932. Class 6.

Obermeyer & Co. A. G., Hanau-on-the-Main, Germany. Medicinal ointment. 301,049; Feb. 14; Serial No. 329,264; published Nov. 29, 1932. Class 6.

Oil Jobbers Refining Company, Chicago, Ill. Insecticides. 301,035; Feb. 14; Serial No. 330,666; published Nov. 22, 1932. Class 6.

Old Monk Olive Oil Co. (See Dole, Vincent P., assignor.)

Oilxir Corporation, Buffalo, N. Y. Gasoline and other motor fuel oils. 300,915; Feb. 14; Serial No. 330,049; published Nov. 29, 1932. Class 15.

Ostermoor & Company, Inc., New York, N. Y. Mattresses, pillows, bolsters, etc. 300,976; Feb. 14; Serial No. 329,454; published Nov. 22, 1932. Class 32.

Parade, Inc., Cleveland, Ohio. Weekly magazines. 301,002; Feb. 14; Serial No. 331,193; published Nov. 22, 1932. Class 38.

Paraffine Companies, Inc., The, San Francisco, Calif. Prepared roofing and shingles. 300,887; Feb. 14; Serial No. 330,491; published Nov. 15, 1932. Class 12.

Paraffine Companies, Inc., The, San Francisco, Calif. Building paper, lining paper, waterproofing paper, etc. 300,944; Feb. 14; Serial No. 316,567; published Nov. 15, 1932. Class 12.

Parfumerie St. Denis, New York, N. Y. Astringents, bleach creams, beauty creams, etc. 300,964; Feb. 14; Serial No. 327,409; published Nov. 29, 1932. Class 6.

Patch, E. L., Company, The, Stoneham, Mass. Tablets, ointments, capsules, etc. 300,856; Feb. 14; Serial No. 330,380; published Nov. 22, 1932. Class 6.

Payne, Seay & Anderson, Lynchburg, Va. Pharmaceutical preparation of cod-liver oil. 91,895; renewed June 3, 1933.

Peoples Drug Stores, Inc., doing business as Barnard Company, Washington, D. C. Cold cream, vanishing cream, cocoanut oil shampoo, etc. 300,851; Feb. 14; Serial No. 330,754; published Nov. 22, 1932. Class 6.

Petrocelli, Joseph, & Company, assignor, by mesne assignments, to Cellas, Inc., New York, N. Y. Olive-oil. 91,599; renewed May 13, 1933.

Petrolagar Laboratories, Inc., Chicago, Ill. Preparation for the treatment of constipation. 301,051; Feb. 14; Serial No. 328,837; published Nov. 29, 1932. Class 6.

Phelps Dodge Copper Products Corporation, Dover, Del., and New York, N. Y. Copper wire and cable. 300,913; Feb. 14; Serial No. 330,564; published Nov. 29, 1932. Class 21.

Pillsbury Flour Mills Company, Minneapolis, Minn. Flour. 300,849; Feb. 14; Serial No. 330,829; published Nov. 15, 1932. Class 46.

Pinnacle Packing Company, Inc., Medford, Oreg. Fresh deciduous fruits. 300,881; Feb. 14; Serial No. 331,439; published Nov. 29, 1932. Class 46.

Pioneer Laboratory & Mfg. Corp., Chicago, Ill. Adhesive cement compound. 301,046; Feb. 14; Serial No. 329,867; published Dec. 6, 1932. Class 6.

Pittsburgh Plate Glass Company, Pittsburgh, Pa. Flat glass. 300,922; Feb. 14; Serial No. 331,562; published Dec. 6, 1932. Class 33.

Plen-T-Hot Products, Inc., New Rochelle, N. Y. Stand boiler. 300,989; Feb. 14; Serial No. 328,800; published Nov. 22, 1932. Class 34.

Polo Produce Company, Chicago, Ill. Dressed poultry. 300,882; Feb. 14; Serial No. 331,391; published Nov. 29, 1932. Class 46.

Popsicle Corporation of the United States, The, New York, N. Y. Frozen confections. 301,067; Feb. 14; Serial No. 330,832; published Nov. 22, 1932. Class 46.

Prest-O-Lite Storage Battery Corporation, Speedway, Ind. Storage batteries. 300,950; Feb. 14; Serial No. 305,369; published Nov. 22, 1932. Class 21.

Pure Oil Company, The, Chicago, Ill. Petroleum coke. 300,967; Feb. 14; Serial No. 331,117; published Dec. 6, 1932. Class 1.

Quaker Oats Company, The, Chicago, Ill. Pancake flour. 301,069; Feb. 14; Serial No. 330,100; published Dec. 6, 1932. Class 46.

Radolek Company, The, Chicago, Ill. Radio receiving sets, radio transmitting sets, and parts thereof. 300,918; Feb. 14; Serial No. 329,773; published Dec. 6, 1932. Class 21.

Raffetto, G. B., Inc., New York, N. Y. Diced pineapples. 301,056; Feb. 14; Serial No. 331,197; published Dec. 6, 1932. Class 46.

Ransom & Randolph Company, The, Toledo, Ohio. Dental burs, plaster compounds for dental molds, alloys, etc. 300,906; Feb. 14; Serial No. 323,311; published Nov. 29, 1932. Class 44.

Ransom & Randolph Company, The, Toledo, Ohio. Denture materials. 300,907; Feb. 14; Serial No. 323,310; published Nov. 29, 1932. Class 44.

Raybestos-Manhattan, Incorporated, Passaic, N. J., and Bridgeport, Conn. Automobile brakes. 300,919; Feb. 14; Serial No. 328,655; published Nov. 29, 1932. Class 19.

Reliance Manufacturing Company, assignor to Reliance Manufacturing Company, Chicago, Ill. Dresses, rompers, and overalls. 90,657; renewed Mar. 11, 1933.

Republic Rubber Company, The, Youngstown, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Pneumatic tires. 91,249–50; renewed Apr. 22, 1933.

Richards, Elmer, Company, Chicago, Ill. Dry cleaning apparatus. 301,016; Feb. 14; Serial No. 329,613; published Nov. 15, 1932. Class 24.

Rider, John F., Publications, New York, N. Y. Digest of radio and allied maintenance. 300,876; Feb. 14; Serial No. 326,692; published Nov. 15, 1932. Class 38.

Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Glassine paper. 301,001; Feb. 14; Serial No. 331,120; published Dec. 6, 1932. Class 37.

Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Glassine paper. 301,020; Feb. 14; Serial No. 331,119; published Nov. 22, 1932. Class 37.

Rising Paper Company, Housatonic, Mass. Writing and printing paper. 301,021; Feb. 14; Serial No. 331,121; published Nov. 22, 1932. Class 37.

Ritter Chemical Company, Inc., Amsterdam, N. Y. Sulphonated fats and oils for treating leather. 301,100; Feb. 14; Serial No. 330,808; published Nov. 15, 1932. Class 6.

Robertson & Company, Glasgow, Scotland. Port. 300,878; Feb. 14; Serial No. 331,799; published Dec. 6, 1932. Class 47.

Roll, Walter H., Kansas City, Mo. Boxes, cases, cartons, etc. 300,993; Feb. 14; Serial No. 325,117; published Dec. 6, 1932. Class 2.

Romano, Jacques, New York, N. Y. Iodine. 301,028; Feb. 14; Serial No. 330,799; published Nov. 29, 1932. Class 6.

Ruberoid Co., The. (See Standard Paint Company.)

Rubin, Bluma, Brooklyn, N. Y. Chocolate malt syrup. 300,991; Feb. 14; Serial No. 330,669; published Nov. 22, 1932. Class 46.

S-P Laboratories. (See Superior Products Company.)

Safety Nut Corporation, Philadelphia, Pa. Nuts. 300,945; Feb. 14; Serial No. 311,979; published Nov. 22, 1932. Class 18.

Sandeman, Geo. G., Sons & Co. Limited, London, England. Wines. 300,871; Feb. 14; Serial No. 331,704; published Dec. 6, 1932. Class 47.

Sandeman, Geo. G., Sons & Co., Limited, London, England. Wine. 300,872; Feb. 14; Serial No. 331,706; published Dec. 6, 1932. Class 47.

Sandura Company, Inc., Paulsboro, N. J., and Philadelphia, Pa. Rugs and yard goods by the roll. 301,105; Feb. 14. Class 20.

Sanford Manufacturing Co., Chicago, Ill. Writing inks. 301,106; Feb. 14. Class 11.

Saunders, Joseph E., doing business as Saunders Company, Kansas City, Mo. Prepared chili. 301,065; Feb. 14; Serial No. 331,124; published Dec. 6, 1932. Class 46.

Schering Corporation, New York, N. Y. Medicinal preparation. 300,854; Feb. 14; Serial No. 330,482; published Nov. 22, 1932. Class 6.

Schnitzer, Isadore, South Norwalk, Conn. Facial creams. 301,088; Feb. 14; Serial No. 329,721; published Nov. 22, 1932. Class 6.

Schwabe, S., & Söhne Leder-U. Treibriemenfabriken A.-G. Varel Oldenburg, Germany. Driving belts and fasteners. 300,934; Feb. 14; Serial No. 320,514; published Dec. 6, 1932. Class 35.

Scull, William S., Company, Camden, N. J. Teas, blended teas, and spices. 92,132; renewed June 17, 1933.

Segal Safety Razor Corporation, New York, N. Y. Razors and razor blades. 300,985–6; Feb. 14; Serial Nos. 326,557–8; published Nov. 22, 1932. Class 28.

Sentell, Douglas, Keyport, N. J. Maltless ginger cordial. 300,885; Feb. 14; Serial No. 331,357; published Dec. 6, 1932. Class 45.

Service Station Equipment Company, Conshohocken, Pa. Cabinets and parts thereof. 300,971; Feb. 14; Serial No. 330,433; published Nov. 29, 1932. Class 32.

Sexton, John, & Company, Chicago, Ill. Toilet paper. 89,879; renewed Jan. 14, 1933.

Sexton, John, & Company, Chicago, Ill. Foods. 90,591; renewed Mar. 4, 1933.

Sexton, John, & Company, Chicago, Ill. Baking powder. 90,749; renewed Mar. 18, 1933.

Sherman, G. H., M. D., Inc., Detroit, Mich. Creams, salves, or skin ointments. 301,046; Feb. 14; Serial No. 330,028; published Nov. 29, 1932. Class 6.

Sherwin-William Company, The, Cleveland, Ohio. Paints, varnishes, lacquers, etc. 300,878; Feb. 14; Serial No. 329,564; published Nov. 22, 1932. Class 16.

Sherwin-Williams Company, The, Cleveland, Ohio. Thinners, stains, varnishes, etc. 300,880; Feb. 14; Serial No. 330,073; published Nov. 22, 1932. Class 16.

Singer Manufacturing Company, The, Elizabeth, N. J., and New York, N. Y. Loop forming implements. 300,977; Feb. 14; Serial No. 329,482; published Nov. 22, 1932. Class 23.

Sleeper Products, Inc., Wilmington, Del., and Philadelphia, Pa. Box-springs and mattresses. 300,975; Feb. 14; Serial No. 330,679; published Nov. 22, 1932. Class 32.

"Société Française Hispano-Suiza," The, Bois-Colombes, France. Internal combustion engines and their parts. 300,981; Feb. 14; Serial No. 325,443; published Nov. 22, 1932. Class 23.

Sonneborn, L., Sons, Inc., New York, N. Y. Deodorized kerosene. 300,910; Feb. 14; Serial No. 331,126; published Dec. 6, 1932. Class 15.

Soya Products, Inc., Chicago, Ill. Feeds for livestock. 300,898; Feb. 14; Serial No. 327,112; published Nov. 29, 1932. Class 46.

Soya Products, Inc., Chicago, Ill. Feeds for livestock. 301,060; Feb. 14; Serial No. 325,020; published Nov. 29, 1932. Class 46.

Squibb, E. R., & Sons, New York, N. Y. Laxatives and intestinal lubricants. 301,103; Feb. 14; Serial No. 329,906; published Nov. 22, 1932. Class 6.

Stanco Incorporated, Wilmington, Del., and New York, N. Y. Automobile radiator anti-freeze solution or compound. 301,042; Feb. 14; Serial No. 330,233; published Nov. 22, 1932. Class 6.

Standard Brands Incorporated. (See Chase & Sanborn, assignor.)

Standard Paint Company, by change of name to The Ruberoid Co., Boundbrook, N. J., and New York, N. Y. Construction materials. 92,476; renewed July 5, 1933.

Stantest Lamp Corporation, New York, N. Y. Incandescent lamps. 300,916; Feb. 14; Serial No. 330,025; published Dec. 6, 1932. Class 21.

State Young Men's Christian Association of Pennsylvania, Harrisburg, Pa. Emblems and badges. 300,947; Feb. 14; Serial No. 314,586; published Dec. 6, 1932. Class 28.

Statton Furniture Mfg. Company, The, Hagerstown, Md. Furniture. 300,988; Feb. 14; Serial No. 327,665; published Nov. 22, 1932. Class 32.

Strathmore Paper Company, Mittineague, Mass. Writing and printing paper. 300,992; Feb. 14; Serial No. 331,596; published Dec. 6, 1932. Class 37.

Strathmore Paper Company, Mittineague, Mass. Paper. 301,004; Feb. 14; Serial No. 331,597; published Dec. 6, 1932. Class 37.

Sullivan, James F., doing business as Kitgen Laboratories, Camden, N. J. Cosmetic. 300,956; Feb. 14; Serial No. 331,204; published Nov. 29, 1932. Class 6.

Sun, Chin Y., New York, N. Y. Salve. 300,938; Feb. 14; Serial No. 322,866; published Nov. 15, 1932. Class 6.

Superior Floor Surfacing Machine Corporation, New York, N. Y. Floor surfacing machines. 301,104; Feb. 14. Class 23.

Superior Laboratories, Inc., Cleveland, Ohio. Powdered preparation for holding dental plates in position. 300,858; Feb. 14; Serial No. 330,316; published Nov. 22, 1932. Class 6.

Superior Products Company, doing business as S-P Laboratories, Dallas, Tex. Hair dressing and straightener, hair oil, cold cream, etc. 301,047; Feb. 14; Serial No. 330,001; published Nov. 29, 1932. Class 6.

Tragasol Products Limited. (See Gum Tragasol Supply Company Limited, The.)

Trix Perfumers, New York, N. Y. Astringents, astringent cerates, bleach, and beauty creams, etc. 301,087; Feb. 14; Serial No. 329,775; published Nov. 15, 1932. Class 6.

Tumbler, J. A., Laboratories, Baltimore, Md. Anti-freeze solution. 300,857; Feb. 14; Serial No. 330,856; published Nov. 22, 1932. Class 6.

Turner, Ross M., New York, N. Y. Portable self contained machines for dispensing drinks. 300,990; Feb. 14; Serial No. 329,169; published Nov. 22, 1932. Class 23.

United Grocers, Ltd., San Francisco, Calif. Dog and cat food. 301,057; Feb. 14; Serial No. 331,168; published Nov. 29, 1932. Class 46.

United States Rubber Company, New York, N. Y. Rubber flooring, vulcanizing and curing ingredients, and pigments. 300,949; Feb. 14; Serial No. 306,628; published Nov. 22, 1932. Class 12.

Uservo, Inc., South Bend, Ind. Glass milk bottles. 300,929; Feb. 14; Serial No. 330,876; published Nov. 22, 1932. Class 33.

Vadsco Sales Corporation, New York and Long Island City, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. 300,936–7; Feb. 14; Serial Nos. 319,839–40; published Nov. 29, 1932. Class 6.

Vallos, Nicholas C. (See Matragos, Nicholas J.)

Van Sant, Robert H., doing business as Hemafil Company, The, Chicago, Ill. Blood invigorator and tonic. 301,058; Feb. 14; Serial No. 330,916; published Nov. 29, 1932. Class 6.

Villon and Villon, Perfumer. (See Klein, Samuel S.)

Vin-Kola Co. (See Ford Hopkins Co.)

Wahl Company, The, Chicago, Ill. Ink. 300,965; Feb. 14; Serial No. 330,769; published Nov. 8, 1932. Class 11.

Wakefield, F. W., Brass Co., The, Vermilion, Ohio. Lighting fixtures. 300,912; Feb. 14; Serial No. 331,016; published Nov. 22, 1932. Class 21.

Wampole, Henry K., and Company, Incorporated, Philadelphia, Pa. Preparation for the treatment of diarrhoea and irritated conditions of the gastro-intestinal tract. 300,885; Feb. 14; Serial No. 331,069; published Nov. 22, 1932. Class 6.

Wanamaker, John, Philadelphia, Philadelphia, Pa. Fitted manicure cases. 300,884; Feb. 14; Serial No. 331,210; published Nov. 22, 1932. Class 44.
Wanamaker, John, Philadelphia, Philadelphia, Pa. Photograph frames. 300,969; Feb. 14; Serial No. 331,208; published Nov. 29, 1932. Class 32.
Wanamaker, John, Philadelphia, Philadelphia, Pa. Golf score pads and bridge score pads. 301,005; Feb. 14; Serial No. 331,209; published Nov. 22, 1932. Class 37.
Watkins, David R., Dormont, Pittsburgh, Pa. Shampoo preparation. 301,013; Feb. 14; Serial No. 326,565; published Nov. 22, 1932. Class 6.
Webster, William A., Co., The, Memphis, Tenn. Tooth paste. 301,093; Feb. 14; Serial No. 330,389; published Nov. 15, 1932. Class 6.
Whitall Tatum Company, Millville, N. J. Hot water bottles, syringes, ice bags, etc. 300,893; Feb. 14; Serial No. 329,876; published Nov. 22, 1932. Class 44.
White, S. S., Dental Manufacturing Company, The, Philadelphia, Pa. Dental supplies. 300,886; Feb. 14; Serial No. 330,942; published Nov. 29, 1932. Class 44.
Will & Baumer Candle Co., Inc., Syracuse, N. Y. Candles. 300,932; Feb. 14; Serial No. 323,152; published Nov. 29, 1932. Class 15.
Williamson Candy Company, Chicago, Ill. Candy. 301,066; Feb. 14; Serial No. 331,096; published Dec. 6, 1932. Class 46.
Willoughby Camera Stores, Inc., New York, N. Y. Cameras, sensitized photographic plates and films, etc. 300,972; Feb. 14; Serial No. 330,440; published Nov. 22, 1932. Class 26.
Winthrop Chemical Company, Inc., New York, N. Y. Thyroid extract preparation. 301,090; Feb. 14; Serial No. 329,486; published Nov. 15, 1932. Class 6.
Witte Engine Works, Kansas City, Mo. Electric light plants. 300,911; Feb. 14; Serial No. 331,073; published Nov. 22, 1932. Class 21.
Wood Conversion Company, Cloquet, Minn. Building paper. 300,892; Feb. 14; Serial No. 330,112; published Nov. 15, 1932. Class 12.
Wyeth, John, & Brother Incorporated, Wilmington, Del., and Philadelphia, Pa. Tonic, stimulant reconstructive. 301,096; Feb. 14; Serial No. 330,436; published Nov. 15, 1932. Class 6.
Young, E. F., jr., doing business as E. F. Young, Jr., Mfg. Co., Meridian, Miss. Bay rum, tooth powder, shaving powder, etc. 301,044; Feb. 14; Serial No. 330,189; published Nov. 22, 1932. Class 6.
Younger, Frederick, Papillion, Nebr. Lotion for sores and skin irritations. 301,034; Feb. 14; Serial No. 330,676; published Nov. 29, 1932. Class 6.
Youngs Rubber Corporation, Inc., New York, N. Y. Prophylactic rubber articles. 300,895–6; Feb. 14; Serial Nos. 328,824–5; published Nov. 22, 1932. Class 14.

LIST OF REGISTRANTS OF LABELS

American Chewing Products Corp., Newark, N. J. Sweet Clover Chewing Gum. For Chewing Gum. 41,740; Feb. 14.
American Chewing Products Corp., Newark, N. J. Bridge Chewing Gum. For Chewing Gum. 41,741; Feb. 14.
Antonucci, Vincent, doing business as Klear-Klean Company, Youngstown, Ohio. Klear-Klean. For Bleach. 41,742; Feb. 14.
B-Z-B Knitting Co., Rockford, Ill. Ovation—All the World's a Stage. For Hosiery. 41,743; Feb. 14.
Bird & Son, Inc., East Walpole, Mass. Burt's. For Shoes. 41,744; Feb. 14.
Blood, John, & Co., Incorporated, Philadelphia, Pa. True Shape. For Hosiery. 41,745; Feb. 14.
Brogirot, Incorporated, New York, N. Y. Affroid. For Pharmaceutical Preparation for Sexual Disorders. 41,746; Feb. 14.
Brown, W. S., doing business as Louisiana Yeast-Bran Products Company, New Orleans, La. Yeast-Brand, 2 Delicious Health Foods in 1. For Breakfast Cereal Consisting of a Combination of Yeast and Bran Flavored with Malt, Sugar, and Salt. 41,747; Feb. 14.
Capone, Arthur J., New York, N. Y. Umberto Berio. For Olive Oil. 41,748; Feb. 14.
Dairy Belt Milk Products Company, Spencer, Wis. Dairy Belt. For Evaporated Milk. 41,750; Feb. 14.
Dayton Spice Mills Co., The, Dayton, Ohio. Karagon Brand. For Coffee. 41,751; Feb. 14.
Fliehmann, L., Thermopolis, Wyo. Jemima's Delight Syrup. For Syrup. 41,752; Feb. 14.
Gray and White Company, The, Tiffin, Ohio. G-W Butter. 41,753; Feb. 14.
For Butter. 41,753; Feb. 14.
Griswold, R. W., Ashtabula, Ohio. Griswold's. For Tomatoes. 41,754; Feb. 14.
Klear-Klean Company. (See Antonucci, Vincent.)
Kleenex Company, Chicago, Ill. Pocket Packet of Full Size Sheets Kleenex. For Pocket Size Packets of Disposable Tissues. 41,755; Feb. 14.
Kleenex Company, Chicago, Ill. Kleenex Disposable Tissues in Assorted Colors. For Disposable Tissues. 41,756; Feb. 17.
Louisiana Yeast-Bran Products Company. (See Brown, W. S.)
M. & B. Cone Company, Brooklyn, N. Y. Manhattan Delights You'll Enjoy Their Flavor. For Waffles. 41,749; Feb. 14.
Manischewitz, B., Company, The, Cincinnati, Ohio. Manischewitz Matzos. For Matzos. 41,757; Feb. 14.
Midwest Products Company, The, Cleveland, Ohio. Leekproof. For Asbestos Liquid Roof Coating. 41,758; Feb. 14.
Phillips Sales Company, Inc., Cambridge, Md. Mapes Tomatoes. For Canned Tomatoes. 41,759; Feb. 14.
Sharfam Products, New York, N. Y. Funny Faces. For Color Books. 41,760; Feb. 14.
Somerset Rose Nursery, Inc., New Brunswick, N. J. The Newdawn. For Climbing Rose Plants. 41,761; Feb. 14.
Stuhmer, Geo. F., & Company, Brooklyn, N. Y. Stuhmer's (In Hebrew Characters, Spelled "Stihmer's"). For Bread. 41,762; Feb. 14.
Stuhmer, Geo. F., & Company, Brooklyn, N. Y. Stuhmer's. For Bread. 41,763–6; Feb. 14.
Sunclean Products Co., Brooklyn, N. Y. Doc Bull's New Miracle Cleaner. For Cleaning Preparation. 41,767; Feb. 14.
Young's Market Company, Los Angeles, Calif. Young's Best Butter. For Butter. 41,768; Feb. 14.

LIST OF REGISTRANTS OF PRINTS

Hewson, Dr., Dental Co. Inc., Boston, Mass. Hewdeco. For Dental Plates. 14,051; Feb. 14.
Johnson, Johnson & Johnson, Hartford, Conn. Cle-Tube Means a Clean Tube. For Collapsing Devices for Collapsible Tubes. 14,052; Feb. 14.
Katz, Charles, New York, N. Y. Be Musical—Play a "Calcura" Flute—Anyone Can Play It. For Flutes. 14,053; Feb. 14.
Nelson Knitting Company, Rockford, Ill. Nelson Original Detectip Rockford Socks. For Socks. 14,054; Feb. 14.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coke, Petroleum. Pure Oil Company. 300,967; Feb. 14; Serial No. 331,117; published Dec. 6, 1932.

CLASS 2

Boxes, cases, cartons, etc. W. H. Roll. 300,993; Feb. 14; Serial No. 325,117; published Dec. 6, 1932.
Boxes for shipping pianos. Chicago Mill and Lumber Corporation. 301,107; Feb. 14.

CLASS 3

Luggage. Lido Luggage Co. 300,925; Feb. 14; Serial No. 331,262; published Nov. 29, 1932.
Purses, pocketbooks, and hand bags. Koret, Inc. 301,022; Feb. 14; Serial No. 331,309; published Dec. 6, 1932.

CLASS 4

Cleaner for cleaning floors, carpets, etc. Fluger and Baker. 300,897; Feb. 14; Serial No. 327,870; published Nov. 29, 1932.
Dressings and polishes, Leather. Gum Tragasol Supply Company Limited. 92,071–2; renewed June 17, 1933.
Soap and scouring compound. Lever Brothers Company. 90,450; renewed Feb. 25, 1933.
Soap, Scouring and polishing. Lever Brothers, Limited. 39,620; renewed Jan. 6, 1933.

CLASS 5

Cement compound, Adhesive. Pioneer Laboratory & Mfg. Corp. 301,048; Feb 14; Serial No. 329,867; published Dec. 6, 1932.

CLASS 6

Agent for Dyeing, Auxiliary. General Dyestuff Corporation. 301,025; Feb. 14; Serial No. 330,847; published Nov. 29, 1932.
Anti-ferment and cholagogue. McCoy's Laboratories, Inc. 301,091; Feb. 14; Serial No. 329,314; published Nov. 22, 1932.
Anti-freeze solution. Lincoln Laboratories, Incorporated. 301,040; Feb. 14; Serial No. 330,302; published Nov. 22, 1932.
Anti-freeze solution. J. A. Tumbler Laboratories. 300,857; Feb. 14; Serial No. 330,356; published Nov. 22, 1932.
Anti-freeze solution or compound, Radiator. Stanco Incorporated. 301,042; Feb. 14; Serial No. 330,233; published Nov. 22, 1932.
Antiseptic vaginal jellies. Gotham Laboratories, Inc. 301,079; Feb. 14; Serial No. 330,044; published Nov. 22, 1932.
Antiseptics. C. D. Burchard, Inc. 301,031; Feb. 14; Serial No. 330,738; published Nov. 29, 1932.
Astringents, astringent cerates, bleach and beauty creams, etc. Deutsche Gold- und Silber-Scheideanstalt. 300,894; Feb. 14; Serial No. 329,181; published Nov. 22, 1932.
Astringents, astringent cerates, bleach and beauty creams, etc. Trix Perfumers. 301,087; Feb. 14; Serial No. 329,775; published Nov. 15, 1932.
Astringents, astringent cerates, bleach and beauty creams, etc. Vadsco Sales Corporation. 300,936–7; Feb. 14; Serial Nos. 319,839–40; published Nov. 29, 1932.
Astringents, bleach and beauty creams, etc. Parfumerie St. Denis. 300,964; Feb. 14; Serial No. 327,409; published Nov. 29, 1932.
Baking powder. John Sexton & Company. 90,749; renewed Mar. 18, 1933.
Base for antiseptic jelly. Durex Products Inc. 301,026; Feb. 14; Serial No. 330,840; published Nov. 29, 1932.
Bay rum, tooth powder, shaving powder, etc. E. F. Young jr. 301,044; Feb. 14; Serial No. 330,189; published Nov. 22, 1932.
Blood invigorator and tonic. R. H. Van Sant. 301,058; Feb. 14; Serial No. 330,916; published Nov. 29, 1932.
Bromin compound for use as a sedative. Hoffman-La Roche Chemical Works. 91,769; renewed May 27, 1933.
Calcium carbide. National Carbide Corporation. 301,012; Feb. 14; Serial No. 326,335; published Nov. 22, 1932.
Chemicals. Chemische Fabrik Helfenberg A. G. vorm. Eugen Dieterich. 40,027; renewed Mar. 31, 1933.
Cholagogue. Marcy Company. 92,088; renewed June 17, 1933.
Cleanser and cream, Facial. D. Hunt. 301,043; Feb. 14; Serial No. 330,190; published Nov. 29, 1932.
Constipation remedy. Agar-lac, Inc. 90,083; renewed Feb. 4, 1933.
Cosmetic. J. F. Sullivan. 300,956; Feb. 14; Serial No. 331,204; published Nov. 29, 1932.
Cosmetics. Henri Bendel, Inc. 300,099; Feb. 14; Serial No. 330,360; published Nov. 15, 1932.
Cream, Skin cleansing. Barbasol Company. 300,957; Feb. 14; Serial No. 331,305; published Nov. 29, 1932.
Cream, vanishing cream, cocoanut oil shampoo, etc., Cold. Peoples Drug Stores, Inc. 300,851; Feb. 14; Serial No. 330,754; published Nov. 22, 1932.
Creams, Facial. I. Schnitzer. 301,088; Feb. 14; Serial No. 329,721; published Nov. 22, 1932.
Creams, hand lotions, etc., Face and body. Institut de Beaute, Inc. 300,994; Feb. 14; Serial No. 325,173; published Nov. 29, 1932.
Creams, salves, or skin ointments. G. H. Sherman, M. D., Inc. 301,046; Feb. 14; Serial No. 300,023; published Nov. 29, 1932.
Deodorant, Powdered. Chichester Chemical Company. 301,038–9; Feb. 14; Serial Nos. 330,323–4; published Nov. 29, 1932.
Depilatory. Delatone Company. 300,899; Feb. 14; Serial No. 326,894; published Nov. 22, 1932.
Dye and permanent wave solutions, Eyelash. Ellarm Co. 300,900; Feb. 14; Serial No. 325,092; published Nov. 22, 1932.
Ester gums. Beck, Koller & Company. 301,102; Feb. 14; Serial No. 329,929; published Nov. 15, 1932.
Germicide. Cramer Chemical Co. 301,028; Feb. 14; Serial No. 330,889; published Nov. 29, 1932.
Hair dressing and straightener, hair oil, cold cream, etc. Superior Products Company. 301,047; Feb. 14; Serial No. 330,001; published Nov. 29, 1932.
Hair dye and hair rinse. Graitmore Company. 300,850; Feb. 14; Serial No. 330,848; published Nov. 22, 1932.
Hair grower and tonic. T. E. Keating. 301,036; Feb. 14; Serial No. 330,030; published Nov. 22, 1932.
Hair restorative. E. & A. R. 301,037; Feb. 14; Serial No. 330,472; published Nov. 29, 1932.
Insecticides. Oil Jobbers Refining Company. 301,035; Feb. 14; Serial No. 330,666; published Nov. 22, 1932.
Iodine. J. Romano. 301,028; Feb. 14; Serial No. 330,799; published Nov. 29, 1932.
Laxatives and intestinal lubricants. E. R. Squibbs & Sons. 301,103; Feb. 14; Serial No. 329,906; published Nov. 22, 1932.
Lipsticks, face powders, rouges, etc. Christy Cosmetics, Inc. 300,905; Feb. 14; Serial No. 323,608; published Nov. 29, 1932.
Liquid nail polish. Monroe Sander Corporation. 301,032; Feb. 14; Serial No. 330,707; published Nov. 22, 1932.
Lotion and toilet preparation, Skin. E. L. Jones. 301,041; Feb. 14; Serial No. 330,301; published Nov. 29, 1932.
Lotion, Eczema. M. A. Baur. 301,054; Feb. 14; Serial No. 330,689; published Nov. 22, 1932.
Lotion, face cream (cleansing), tooth paste, etc. Richard Hudnut. 300,853; Feb. 14; Serial No. 330,625; published Nov. 22, 1932.
Lotion for sores and skin irritations. F. Younger. 301,034; Feb. 14; Serial No. 330,676; published Nov. 29, 1932.
Lotions, Skin. G. D. Davidson. 300,999; Feb. 14; Serial No. 330,122; published Nov. 29, 1932.
Medical compound. E. V. Feller. 40,016; renewed Mar. 31, 1933.
Medicinal preparation. Thomas Kerfoot & Co. 301,061; Feb. 14; Serial No. 330,852; published Nov. 29, 1932.
Medicinal preparation. N. J. Matragos. 300,859; Feb. 14; Serial No. 330,269; published Nov. 22, 1932.
Medicinal preparation. Wm. S. Merrell Co. 301,024; Feb. 14; Serial No. 330,855; published Nov. 29, 1932.
Medicinal preparation. Nordmark-Werke G. m. b. H. 301,053; Feb. 14; Serial No. 325,236; published Nov. 22, 1932.
Medicinal preparation. Schering Corporation. 300,854; Feb. 14; Serial No. 330,432; published Nov. 22, 1932.
Medicinal preparations. Nordmark-Werke G. m. b. H. 300,935; Feb. 14; Serial No. 320,202; published Nov. 15, 1932.
Medicinal preparations. Nordmark-Werke G. m. b. H. 301,052; Feb. 14; Serial No. 325,234; published Nov. 22, 1932.
Medicinal tonic. L. J. Bayliss. 301,092; Feb. 14; Serial No. 328,542; published Nov. 22, 1932.
Mucilaginous products of vegetable origin. Gum Tragasol Supply Company Limited. 92,070; renewed June 17, 1933.
Nail polish and nail polish remover. McCrory Stores Corp. 300,995–6; Feb. 14; Serial Nos. 328,066–7; published Nov. 29, 1932.
Ointment. Holland Pharmacal Company. 301,029; Feb. 14; Serial No. 330,747; published Nov. 29, 1932.
Ointment. Obermeyer & Co. A. G. 301,049; Feb. 14; Serial No. 329,264; published Nov. 29, 1932.
Ointment, Medicinal. R. M. King. 301,089; Feb. 14; Serial No. 329,697; published Nov. 15, 1932.
Perfume and incense. M. G. Neumann. 301,045; Feb. 14; Serial No. 330,048; published Nov. 22, 1932.
Perfumes, toilet water, face powder, etc. Houbigant, Inc. 300,997; Feb. 14; Serial No. 328,813; published Nov. 29, 1932.
Perfumes, toilet waters, bath salts, etc. S. S. Klein. 300,904; Feb. 14; Serial No. 323,807; published Nov. 15, 1932.
Peroxid of hydrogen. Citro Chemical Co. of America. 92,320; renewed July 1, 1933.
Pharmaceutial preparation of cod-liver oil. Payne, Seay & Anderson. 91,895; renewed June 3, 1933.
Preparation for holding dental plates in position, Powdered. Superior Laboratories, Inc. 300,858; Feb. 14; Serial No. 330,316; published Nov. 22, 1932.
Preparation for improving and beautifying the hair. Capital Chemical Drug Company. 301,101; Feb. 14; Serial No. 330,291; published Nov. 15, 1932.
Preparation for preserving vituals. Fahlberg-List Aktiengesellschaft, Chemishe Fabriken. 301,059; Feb. 14; Serial No. 330,816; published Nov. 29, 1932.
Preparation for scalp treatment. Glaramita & Nugnes. 300,901; Feb. 14; Serial No. 324,314; published Nov. 29, 1932.
Preparation for the treatment of constipation. Petrolagar Laboratories, Inc. 301,051; Feb. 14; Serial No. 328,337; published Nov. 29, 1932.
Preparation for the treatment of diarrhoea and irritated conditions of the gastro-intestinal tract. Henry K. Wampole and Company. 300,885; Feb. 14; Serial No. 331,069; published Nov. 22, 1932.
Preparation of opium. A. Boehringer. 90,505; renewed Mar. 4, 1933.
Preparation used as a liniment. J. de Jesus. 301,094; Feb. 14; Serial No. 330,621; published Nov. 29, 1932.
Preparations for fulling and finishing textile fabrics. Ernst Bischoff Company. 301,033; Feb. 14; Serial No. 330,090; published Nov. 22, 1932.
Preparations for the treatment of diseases of the pulmonary tracts and respiratory tracts. M. L. de Guevara. 301,055; Feb. 14; Serial No. 330,654; published Nov. 22, 1932.
Preparations for use in the treatment of mange. L. B. Hanna. 301,030; Feb. 14; Serial No. 330,746; published Nov. 29, 1932.
Preservative, Plant and flower. Eastern Chemical and Research Company. 301,093; Feb. 14; Serial No. 326,809; published Nov. 22, 1932.
Remedy for skin affections and other skin diseases. Chemische Fabrik Güstrow, Dr. Hillringhaus & Dr. Hellmann. 90,854; renewed Mar. 25, 1933.
Resins, Synthetic. Beck, Koller & Company. 301,085; Feb. 14; Serial No. 329,925; published Nov. 22, 1932.

Salve. C. Y. Sun. 300,933; Feb. 14; Serial No. 322,866; published Nov. 15, 1932.
Salve, Medicinal. Foley & Co. 301,086; Feb. 14; Serial No. 329,793; published Nov. 22, 1932.
Salves. A. A. Laubenheimer. 90,712; renewed Mar. 18, 1933.
Shampoo preparation. D. R. Watkins. 301,013; Feb. 14; Serial No. 326,565; published Nov. 22, 1932.
Sulphate. Calco Chemical Company. 301,027; Feb. 14; Serial No. 330,808; published Nov. 29, 1932.
Sulphonated fats and oils. Ritter Chemical Company. 301,100; Feb. 14; Serial No. 330,308; published Nov. 15, 1932.
Tablets, ointments, capsules, etc. E. L. Patch Company. 300,856; Feb. 14; Serial No. 330,380; published Nov. 22, 1932.
Thyroid extract preparation. Winthrop Chemical Company. 301,090; Feb. 14; Serial No. 329,486; published Nov. 15, 1932.
Tonic. Ford Hopkins Co. 301,050; Feb. 14; Serial No. 325,576; published Nov. 22, 1932.
Tonic, General. Indian Lake Medicine Co. 301,097; Feb. 14; Serial No. 330,425; published Nov. 15, 1932.
Tonic, stimulant reconstructive. John Wyeth & Brother Incorporated. 301,096; Feb. 14; Serial No. 330,436; published Nov. 15, 1932.
Tooth paste. William A. Webster Co. 301,098; Feb. 14; Serial No. 330,389; published Nov. 15, 1932.
Tooth paste and an antiseptic preparation. M. J. Murray. 301,095; Feb. 14; Serial No. 330,448; published Nov 29, 1932.

CLASS 8

Cigarette paper. S. D. Modiano. 88,327; renewed Sept. 10, 1932.

CLASS 10

Leucite Phonolite (mineral manure). Gewerkschaft Leuchtenburg. 90,802; renewed Mar. 25, 1933.

CLASS 11

Ink. Wahl Company. 300,965; Feb. 14; Serial No. 330,769; published Nov. 8, 1932.
Inks. Writing. Sanford Manufacturing Co. 301,106; Feb. 14.

CLASS 12

Board, Thermal insulating. Container Corporation of America. 300,891; Feb. 14; Serial No. 330,120; published Nov. 29, 1932.
Building paper. Wood Conversion Company. 300,892; Feb. 14; Serial No. 330,112; published Nov. 15, 1932.
Building paper, lining paper, waterproofing paper, etc. Paraffine Companies. 300,944; Feb. 14; Serial No. 316,567; published Nov. 15, 1932.
Cements, mortars, and concrete, Refractory. J. M. Dick. 300,930; Feb. 14; Serial No. 330,696; published Nov. 22, 1932.
Construction materials. Standard Paint Company. 92,476; renewed July 8, 1933.
Lumber. Frank A. Niles Lumber Co. Inc. 300,875; Feb. 14; Serial No. 325,481; published Nov. 15, 1932.
Roofing and shingles, Prepared. Paraffine Companies. 300,887; Feb. 14; Serial No. 330,491; published Nov. 15, 1932.
Rubber flooring, vulcanizing and curing ingredients and pigments. United States Rubber Company. 300,949; Feb. 14; Serial No. 306,628; published Nov. 22, 1932.
Stone, Cast. Cambridge Cement Stone Company. 300,889; Feb. 14; Serial No. 330,394; published Nov. 15, 1932.

CLASS 13

Grills. American Grill Co. 301,108; Feb. 14.
Nuts. Safety Nut Corporation. 300,945; Feb. 14; Serial No. 311,979; published Nov. 22, 1932.
Pipes, Metal. Central Foundry Company. 301,110; Feb. 14.
Wire, Barb. American Steel and Wire Company of New Jersey. 300,979; Feb. 14; Serial No. 330,220; published Nov. 22, 1932.

CLASS 14

Bronze articles. Fondries de Bronze de Nanterre, Société Anonyme. 300,974; Feb. 14; Serial No. 330,543; published Dec. 6, 1932.
Castings, Ferrous metal. Gunite Foundries Corporation. 300,982; Feb. 14; Serial No. 325,789; published Dec. 6, 1932.
Steel. Halcomb Steel Company. 300,970; Feb. 14; Serial No. 331,498; published Dec. 6, 1932.

CLASS 15

Candles. Will & Baumer Candle Co. 300,932; Feb. 14; Serial No. 323,152; published Nov. 29, 1932.
Gasoline and other motor fuel oils. Olixir Corporation. 300,915; Feb. 14; Serial No. 330,049; published Nov. 29, 1932.
Greases, Lubricating. E. F. Houghton & Co. 300,909; Feb. 14; Serial No. 331,184; published Dec. 6, 1932.
Kerosene. L. Sonneborn Sons, Inc. 300,910; Feb. 14; Serial No. 331,126; published Dec. 6, 1932.
Oil, Lubricating. C. E. Flager. 300,908; Feb. 14; Serial No. 331,223; published Dec. 6, 1932.
Oils and greases, Lubricating. Canfield Oil Company. 300,914; Feb. 14; Serial No. 330,833; published Nov. 29, 1932.
Oils and greases, Lubricating. Harwood Bros., Inc. 300,917; Feb. 14; Serial No. 329,945; published Nov. 29, 1932.

CLASS 16

Dressing, Floor. Acme Chemical Company. 301,015; Feb. 14; Serial No. 327,930; published Nov. 22, 1932.
Paint, paste colors in oil, shellac and varnishes, Ready mixed. M. Abelman. 300,931; Feb. 14; Serial No. 330,683; published Nov. 22, 1932.
Paint, varnish and paint enamel, Ready mixed. Goodyear Tire & Rubber Company. 300,926; Feb. 14; Serial No. 331,081; published Nov. 29, 1932.
Paints, varnishes, lacquers, etc. Culiton Paint Company. 300,927; Feb. 14; Serial No. 330,920; published Nov. 22, 1932.
Paints, varnishes, lacquers, etc. Sherwin-Williams Company. 300,878; Feb. 14; Serial No. 329,564; published Nov. 22, 1932.
Polish for cleaning, waxing and polishing automobiles. Glissenite Corporation. 300,890; Feb. 14; Serial No. 330,226; published Nov. 15, 1932.
Thinners, stains, varnishes, etc. Sherwin-Williams Company. 300,880; Feb. 14; Serial No. 330,073; published Nov. 22, 1932.
Varnish compound. A. C. Horn Company. 300,924; Feb. 14; Serial No. 331,464; published Nov. 29, 1932.
Wax and lacquer. S. C. Johnson & Son. 300,874; Feb. 14; Serial No. 325,330; published Dec. 6, 1932.

CLASS 19

Brakes, Automobile. Raybestos-Manhattan, Incorporated. 300,919; Feb. 14; Serial No. 328,655; published Nov. 29, 1932.

CLASS 21

Batteries, Storage. Prest-O-Lite Storage Battery Corporation. 300,950; Feb. 14; Serial No. 305,369; published Nov. 22, 1932.
Copper wire and cable for electrical use. Phelps Dodge Copper Products Corporation. 300,913; Feb. 14; Serial No. 330,564; published Nov. 29, 1932.
Electric block signal light systems for railways, electric light signal systems for street traffic, etc. Nachod & United States Signal Co. 300,920; Feb. 14; Serial No. 328,049; published Nov. 29, 1932.
Electric light plants. Witte Engine Works. 300,911; Feb. 14; Serial No. 331,073; published Nov. 22, 1932.
Electric lighting equipment, fixtures therefor, lamps, etc. Century Lighting Equipment, Inc. 300,921; Feb. 14; Serial No. 327,903; published Nov. 22, 1932.
Lamps, Incandescent. Stantest Lamp Corporation. 300,916; Feb. 14; Serial No. 330,025; published Dec. 6, 1932.
Lighting fixtures. F. W. Wakefield Brass Co. 300,912; Feb. 14; Serial No. 331,018; published Nov. 22, 1932.
Radio receiving sets, radio transmitting sets, and parts thereof. Radiolek Company. 300,918; Feb. 14; Serial No. 329,773; published Dec. 6, 1932.
Wire, Electric. Atlantic Insulated Wire & Cable Company. 90,088; renewed Feb. 4, 1933.
Wires, Aerial and lead-in. Holyoke Company. 300,951; Feb. 14; Serial No. 285,973; published Dec. 6, 1932.

CLASS 22

Billiard accessories. Burnet Company. 300,861; Feb. 14; Serial No. 330,535; published Dec. 6, 1932.
Cards, Playing. Bid-Rite Playing Card Corporation. 300,998; Feb. 14; Serial No. 329,621; published Dec. 6, 1932.
Golf clubs and balls. P. Goldsmith Sons Company. 301,114; Feb. 14.
Rowing machines. Health Developing Apparatus Co. 300,867; Feb. 14; Serial No. 331,680; published Dec. 6, 1932.
Rowing machines. Health Developing Apparatus Co. 300,868; Feb. 14; Serial No. 331,682; published Dec. 6, 1932.
Rowing machines. Health Developing Apparatus Co. 300,869–70; Feb. 14; Serial Nos. 331,684–5; published Dec. 6, 1932.

CLASS 23

Engines and their parts, Internal combustion. "Société Française Hispano-Suiza." 300,981; Feb. 14; Serial No. 325,443; published Nov. 22, 1932.
Floor surfacing machines. Superior Floor Surfacing Machine Corporation. 301,104; Feb. 14.
Guards for mowing machines. International Harvester Company of America. 89,923; renewed Jan. 21, 1933.
Loop forming implements. Singer Manufacturing Company. 300,977; Feb. 14; Serial No. 329,482; published Nov. 22, 1932.
Lubricating devices. National Industrial Products Corporation. 300,973; Feb. 14; Serial No. 330,490; published Nov. 22, 1932.
Machines for dispensing drinks, Portable self contained. R. M. Turner. 300,990; Feb. 14; Serial No. 329,169; published Nov. 22, 1932.

Machines for the manufacture of artificial snow from ice. C. B. Bills. 300,980; Feb. 14; Serial No. 330,244; published Nov. 22, 1932.
Needles and pins. Neuss Gebrüder. 89,557; renewed Dec. 30, 1932.
Pump and motors, Liquid. Aktiebolaget Imoindustri. 300,903; Feb. 14; Serial No. 328,929; published Nov. 22, 1932.
Pumps, Piston. Goulds Pumps, Incorporated. 300,987; Feb. 14; Serial No. 326,711; published Nov. 22, 1932.
Razors and razor blades. Segal Safety Razor Corporation. 300,985–6; Feb. 14; Serial Nos. 326,557–8; published Nov. 22, 1932.

CLASS 24

Dry cleaning apparatus. Elmer Richards Company. 301,016; Feb. 14; Serial No. 329,613; published Nov. 15, 1932.

CLASS 26

Cameras, sensitized photographic plates and films, etc. Willoughby Camera Stores, Inc. 300,972; Feb. 14; Serial No. 330,440; published Nov. 22, 1932.
Coin dispensing change making machines. Monex Corporation. 300,984; Feb. 14; Serial No. 326,331; published Nov. 22, 1932.
Glasses and goggles, Sun. Bachmann Bros. Inc. 301,000; Feb. 14; Serial No. 330,442; published Nov. 29, 1932.

CLASS 27

Watches and chronometers. Autorist S. A.-Autorist Ltd. 300,939; Feb. 14; Serial No. 319,799; published Nov. 22, 1932.

CLASS 28

Articles of silver and electroplate. Ellis & Co. (Birmingham) Limited. 90,691; renewed Mar. 18, 1933.
Emblems and badges. State Young Men's Christian Association of Pennsylvania. 300,947; Feb. 14; Serial No. 314,586; published Dec. 6, 1932.

CLASS 30

China ware, Hotel. Bohemia Keramische Werke, Aktiengesellschaft. 300 928; Feb. 14; Serial No. 330,888; published Dec. 6, 1932.

CLASS 31

Refrigerators and refrigerating units. Gibson Electric Refrigerator Corporation. 300,862; Feb. 14; Serial No. 330,725; published Dec. 6, 1932.

CLASS 32

Box-springs and mattresses. Sleeper Products, Inc. 300,975; Feb. 14; Serial No. 330,679; published Nov. 22, 1932.
Cabinets and parts thereof. Service Station Equipment Company. 300,971; Feb. 14; Serial No. 330,433; published Nov. 29, 1932.
Chairs, stools, tables, etc. McKay Company. 300,978; Feb. 14; Serial No. 329,967; published Nov. 15, 1932.
Frames, Photograph. John Wanamaker Philadelphia. 300,969; Feb. 14; Serial No. 331,208; published Nov. 29, 1932.
Furniture. Statton Furniture Mfg. Company. 300,988; Feb. 14; Serial No. 327,665; published Nov. 22, 1932.
Mattresses for burial casket, Innerspring. Atlanta Casket Company. 300,968; Feb. 14; Serial No. 331,173; published Nov. 29, 1932.
Mattresses, pillows, bolsters, etc. Ostermoor & Company. 300,976; Feb. 14; Serial No. 329,454; published Nov. 22, 1932.

CLASS 33

Crystals, Watch. Germanow-Simon Machine Co. 300,879; Feb. 14; Serial No. 329,634; published Nov. 29, 1932.
Glass, Flat. Pittsburgh Plate Glass Company. 300,922; Feb. 14; Serial No. 331,562; published Dec. 6, 1932.
Glass jars and containers. Kerr Glass Manufacturing Corporation. 301,111; Feb. 14.
Glass milk bottles. Uservo, Inc. 300,929; Feb. 14; Serial No. 330,876; published Nov. 22, 1932.

CLASS 34

Boiler, Stand. Plen-T-Hot Products, Inc. 300,989; Feb. 14; Serial No. 328,800; published Nov. 22, 1932.
Lamps and lanterns. Coleman Lamp and Stove Company. 300,983; Feb. 14; Serial No. 325,845; published Nov. 22, 1932.
Stokers. Combustioneer, Inc. 300,966; Feb. 14; Serial No. 331,100; published Nov. 22, 1932.
Stoves and ranges, Heating. Michigan Stove Company. 91,977; renewed June 10, 1933.

CLASS 35

Belts and fasteners, Driving. S. Schwabe & Söhne Leder-U. Treibriemenfabriken A.-G. 300,934; Feb. 14; Serial No. 320,514; published Dec. 6, 1932.
Tires for vehicle-wheels, Pneumatic. Republic Rubber Company. 91,249–50; renewed Apr. 22, 1933.

CLASS 37

Blankbooks. L. M. Adams. 301,006; Feb. 14; Serial No. 331,287; published Nov. 22, 1932.
Pads, Golf and bridge score. John Wanamaker Philadelphia. 301,005; Feb. 14; Serial No. 331,209; published Nov. 22, 1932.
Paper. Copy Papers Inc. 300,942; Feb. 14; Serial No. 317,029; published Nov. 29, 1932.
Paper. Strathmore Paper Company. 300,992; Feb. 14; Serial No. 331,598; published Dec. 6, 1932.
Paper box liners and sheets. H. M. Hitchins. 301,017; Feb. 14; Serial No. 330,574; published Nov. 22, 1932.
Paper, Glassine. Riegel Paper Corporation. 301,001; Feb. 14; Serial No. 331,120; published Dec. 6, 1932.
Paper, Glassine. Riegel Paper Corporation. 301,020; Feb. 14; Serial No. 331,119; published Nov. 22, 1932.
Paper goods. Butler Brothers. 301,019; Feb. 14; Serial No. 331,037; published Nov. 22, 1932.
Paper napkins. Fort Howard Paper Company. 301,018; Feb. 14; Serial No. 331,104; published Nov. 22, 1932.
Paper, paper towels, crepe paper, etc., Toilet. Fort Howard Paper Company. 301,007; Feb. 14; Serial No. 331,678; published Dec. 6, 1932.
Paper, Toilet. John Sexton & Company. 89,879; renewed Jan. 14, 1933.
Paper towels, toilet tissues and napkins. Hoberg Paper & Fibre Company. 301,014; Feb. 14; Serial No. 325,579; published Nov. 22, 1932.
Paper, Wall. O. Grimmer. 300,948; Feb. 14; Serial No. 309,643; published Nov. 15, 1932.
Paper, Writing and printing. Rising Paper Company. 301,021; Feb. 14; Serial No. 331,121; published Nov. 22, 1932.
Paper, Writing and printing. Strathmore Paper Company. 301,004; Feb. 14; Serial No. 331,597; published Dec. 6, 1932.

CLASS 38

Book-marks, hymns, magazines, and books. A. Jarvis. 92,430; renewed July 8, 1933.
Charts, Printed horological. S. W. Boggs. 300,877; Feb. 14; Serial No. 328,236; published Nov. 15, 1932.
Digest of radio and allied maintenance. John F. Rider Publications. 300,876; Feb. 14; Serial No. 326,692; published Nov. 15, 1932.
Magazine. Doubleday, Doran & Company. 301,008; Feb. 14; Serial No. 329,792; published Nov. 22, 1932.
Magazines. Parade, Inc. 301,002; Feb. 14; Serial No. 331,193; published Nov. 22, 1932.
Newspaper section. New York American, Inc. 300,940; Feb. 14; Serial No. 319,624; published Nov. 29, 1932.
Newspaper strips, Comic. H. F. Martin. 300,888; Feb. 14; Serial No. 330,428; published Nov. 15, 1932.
Periodical. Brown-Meyer Publishing Co. Inc. 301,009; Feb. 14; Serial No. 330,395; published Nov. 22, 1932.
Prints and publications. A. Jarvis. 92,429; renewed July 8, 1933.
Publication. Chicago Rotoprint Company. 301,003; Feb. 14; Serial No. 331,246; published Nov. 22, 1932.
Publication. Industrial Medicine, Inc. 300,923; Feb. 14; Serial No. 331,465; published Nov. 29, 1932.
Publication. National Biscuit Company. 301,010; Feb. 14; Serial No. 330,965; published Nov. 22, 1932.

CLASS 39

Coats, Ladies' sport. I. Friedricks. 301,113; Feb. 14.
Dresses, rompers, and overalls. Reliance Manufacturing Company. 90,657; renewed Mar. 11, 1933.
Hosiery. Dormer Brothers Co. 92,196; renewed June 24, 1933.
Hosiery. Gotham Silk Mfg. Co. 91,959; renewed June 10, 1933.
Hosiery. Kaufmann Department Stores, Inc. 301,115; Feb. 14.
Shirts, collars, and cuffs. Hall, Hartwell & Co. 91,087; renewed Apr. 15, 1933.
Shirts, waists and blouses. Meier & Frank Company. 301,109; Feb. 14.

CLASS 42

Ducking, Canvas. Fulton Bag & Cotton Mills. 89,552; renewed Dec. 24, 1932.
Fabrics. Celanese Corporation of America. 300,988; Feb. 14; Serial No. 319 764; published Nov. 22, 1932.
Goods, piece goods, shirtings, sheetings, and blankets, Woven and knitted. Alden Mills. 92,028; renewed June 17, 1933.
Rugs and yard goods by the roll. Sandura Company. 301,105; Feb. 14.

CLASS 43

Thread in balls, Sewing cotton. R. F. & J. Alexander and Company. 301,070–1; Feb. 14; Serial Nos. 329,843–4; published Nov. 15, 1932.

CLASS 44

Dental burs, plaster compounds for dental molds, dental alloys, etc. Ransom & Randolph Company. 300,906; Feb. 14; Serial No. 323,311; published Nov. 29, 1932.
Dental supplies. S. S. White Dental Manufacturing Company. 300,886; Feb. 14; Serial No. 330,942; published Nov. 29, 1932.
Denture materials. Ransom & Randolph Company. 300,907; Feb. 14; Serial No. 323,310; published Nov. 29, 1932.
Dentures. Austenal Laboratories, Inc. 300,852; Feb. 14; Serial No. 330,648; published Nov. 29, 1932.

Gauze sanitary neckbands, absorbent cotton, eye bandages, etc. S. H. Kress & Co. 300,860; Feb. 14; Serial No. 330,263; published Nov. 22, 1932.
Hot water bottle and syringe, Combined. Donald F. Duncan, Inc. 300,848; Feb. 14; Serial No. 330,923; published Nov. 22, 1932.
Hot water bottles, syringes, ice bags, etc. Whitall Tatum Company. 300,893; Feb. 14; Serial No. 329,876; published Nov. 22, 1932.
Inhaler, Medicated. Coekburn & Company. 91,851; renewed June 3, 1933.
Manicure cases, Fitted. John Wanamaker Philadelphia. 300,884; Feb. 14; Serial No. 331,210; published Nov. 22, 1932.
Manicure sets. J. C. Dowd & Co. 89,633; renewed Dec. 31, 1932.
Massage machines. Wm. Meyer Co. 300,847; Feb. 14; Serial No. 330,856; published Nov. 29, 1932.
Nipples, Rubber nursing. Ernest Monnier, Inc. 300,846; Feb. 14; Serial No. 330,897; published Nov. 29, 1932.
Porcelain. American Porcelain Co. 300,855; Feb. 14; Serial No. 330,391; published Nov. 29, 1932.
Prophylactic rubber articles. Youngs Rubber Corporation. 300,895–6; Feb. 14; Serial Nos. 328,824–5; published Nov. 22, 1932.

CLASS 45

Ginger cordial, Maltless. D. Sentell. 300,865; Feb. 14; Serial No. 331,357; published Dec. 6, 1932.
Water, Laxative mineral. French Lick Springs Hotel Co. 300,946; Feb. 14; Serial No. 311,830; published Dec. 6, 1932.

CLASS 46

Biscuit. National Biscuit Company. 89,868; renewed Jan. 14, 1933.
Biscuit. National Biscuit Company. 90,038; renewed Jan. 28, 1933.
Biscuit. National Biscuit Company. 90,040; renewed Jan. 28, 1933.
Biscuit. National Biscuit Company. 90,042; renewed Jan. 28, 1933.
Candies, chocolates, and bonbons. P. Margarella. 91,587; renewed May 13, 1933.
Candy. Williamson Candy Company. 301,066; Feb. 14; Serial No. 331,096; published Dec. 6, 1932.
Canned fish. Aktiebolaget Sveriges Forenade Konservfabriker. 301,074; Feb. 14; Serial No. 329,126; published Nov. 22, 1932.
Canned fruits. Mor-Pak Preserving Corporation. 301,062; Feb. 14; Serial No. 331,161; published Nov. 29, 1932.
Chili, Prepared. J. E. Saunders. 301,065; Feb. 14; Serial No. 331,124; published Dec. 6, 1932.
Chocolates, caramels, peppermints, etc. J. Frankl. 300,902; Feb. 14; Serial No. 324,052; published Nov. 29, 1932.
Coffee. Balzac Bros. & Company. 300,952; Feb. 14; Serial No. 330,918; published Nov. 29, 1932.
Coffee. Biedermann Brothers. 301,011; Feb. 14; Serial No. 331,453; published Nov. 29, 1932.
Coffee. Goldberg, Bowen & Co. 300,960; Feb. 14; Serial No. 330,512; published Nov. 29, 1932.
Coffee. Morey Mercantile Company. 301,076; Feb. 14; Serial No. 325,990; published Nov. 29, 1932.
Confections, Frozen. Popsicle Corporation of the United States. 301,067; Feb. 14; Serial No. 330,832; published Nov. 22, 1932.
Creamery products. Borden's Milk Products Company. 300,943; Feb. 14; Serial No. 316,693; published Dec. 6, 1932.
Feeds for livestock. Soya Products, Inc. 300 898; Feb. 14; Serial No. 327,112; published Nov. 29, 1932.
Feeds for livestock. Soya Products, Inc. 301,060; Feb. 14; Serial No. 325,020; published Nov. 29, 1932.
Flavorings. S. J. Baron Corporation. 300,959; Feb. 14; Serial No. 330,415; published Nov. 29, 1932.
Flour. Pillsbury Flour Mills Company. 300,849; Feb. 14; Serial No. 330,829; published Nov. 15, 1932.
Flour, Pancake. Quaker Oats Company. 301,069; Feb. 14; Serial No. 330,100; published Dec. 6, 1932.
Flour, Wheat. Blair Milling Co. 301,112; Feb. 14.
Flour, Wheat. L. L. Coryell & Son. 301,072; Feb. 14; Serial No. 329,741; published Nov. 22, 1932.
Flour, Wheat. J. F. Imbs Milling Company. 90,993; renewed Apr. 8, 1933.
Food, Dog and cat. United Grovers, Ltd. 301,057; Feb. 14; Serial No. 331,168; published Nov. 29, 1932.
Foods. John Sexton & Company. 90,591; renewed Mar. 4, 1933.
Foods and ingredients of food. Lister Bros. Inc. 300,941; Feb. 14; Serial No. 318,154; published Nov. 22, 1932.
Fruits, Fresh citrus. Camarillo Citrus Association. 300,064; Feb. 14; Serial No. 331,141; published Nov. 29, 1932.
Fruits, Fresh citrus. Camarillo Citrus Ass'n. 300,953–5; Feb. 14; Serial Nos. 331,138–40; published Nov. 29, 1932.
Fruits, Fresh citrus. La Verne Orange Ass'n. 301,063; Feb. 14; Serial No. 331,155; published Nov. 29, 1932.
Fruits, Fresh deciduous. Pinnacle Packing Co. 300,881; Feb. 14; Serial No. 331,439; published Nov. 29, 1932.
Ice Cream Cones. M. Ciccarelli. 301,068; Feb. 14; Serial No. 330,781; published Nov. 29, 1932.
Marmalades, jellies, preserves, etc. Crosse & Blackwell Company. 301,073; Feb. 14; Serial No. 329,346; published Dec. 6, 1932.
Noodles. Dan-Dee Pretzel & Potato Chip Company. 301,077; Feb. 14; Serial No. 325,644; published Nov. 29, 1932.
Nut paste. R. W. Fuhr. 300,963; Feb. 14; Serial No. 327,975; published Nov. 29, 1932.
Olive-oil. Joseph Petrocelli & Company. 91,599; renewed May 13, 1933.
Olives and olive oil. V. P. Dole. 90,518; renewed Mar. 4, 1933.
Pastes, Alimentary. Lonn Island Macaroni Co. Inc. 300,958; Feb. 14; Serial No. 329,569; published Nov. 15, 1932.
Pineapples, Diced. G. B. Raffetto Inc. 301,056; Feb. 14; Serial No. 331,197; published Dec. 6, 1932.
Poultry, Dressed. Polo Produce Company. 300,882; Feb. 14; Serial No. 331,391; published Nov. 29, 1932.
Pretzels. Dan-Dee Pretzel & Potato Chip Company. 301,078; Feb. 14; Serial No. 325,643; published Nov. 29, 1932.
Sherbets. Georgia-Carolina Dairies. 300,962; Feb. 14; Serial No. 324,976; published Nov. 22, 1932.
Syrup, Chocolate malt. B. Rubin. 300,991; Feb. 14; Serial No. 330,669; published Nov. 22, 1932.
Syrup, Malt. American Diamalt Co. 300,961; Feb. 14; Serial No. 330,647; published Nov. 29, 1932.
Syrup, Malt. Maxwell Home Supply Corp. 300,883; Feb. 14; Serial No. 331,380; published Dec. 6, 1932.
Syrups, Malt. John F. Hunt & Co. Inc. 301,075; Feb. 14; Serial No. 329,114; published Nov. 22, 1932.
Tea. Chase & Sanborn. 92,184; renewed June 24, 1933.
Teas, blended teas, and spices. William S. Scull Company. 92,132; renewed June 17, 1933.

CLASS 47

Port. Robertson & Company. 300,873; Feb. 14; Serial No. 331,799; published Dec. 6, 1932.
Wine. Geo. G. Sandeman Sons & Co. Limited. 300,872; Feb. 14; Serial No. 331,706; published Dec. 6, 1932.
Wines. Geo. G. Sandeman Sons & Co. Limited. 300,871; Feb. 14; Serial No. 331,704; published Dec. 6, 1932.

CLASS 48

Malt beverage. Independent Milwaukee Brewery. 300,880; Feb. 14; Serial No. 331,376; published Dec. 6, 1932.

CLASS 49

Whiskey. Gooderham & Worts, Ltd. 300,863; Feb. 14; Serial No. 330,813; published Dec. 6, 1932.

LIST OF LABELS

Affroid. For Pharmaceutical Preparation for Sexual Disorders. Brogirot, Inc. 41,746; Feb. 14.
Bridge Chewing Gum. For Chewing Gum. American Chewing Products Corp. 41,741; Feb. 14.
Burt's. For Shoes. Bird & Son, Inc. 41,744; Feb. 14.
Dairy Belt. For Evaporated Milk. Dairy Belt Milk Products Company. 41,750; Feb. 14.
Doc Bull's New Miracle Cleaner. For Cleaning Preparation. Sunclean Products Co. 41,767; Feb. 14.
Funny Faces. For Color Books. Sharfam Products. 41,760; Feb. 14.
G-W Butter. For Butter. Gray and White Company. 41,753; Feb. 14.
Griswold's. For Tomatoes. R. W. Griswold. 41,754; Feb. 14.
Jemima's Delight Syrup. For Syrup. L. Fliehmann. 41,752; Feb. 14.
Karagon Brand. For Coffee. Dayton Spice Mills Co. 41,751; Feb. 14.
Klear-Klean. For Bleach. V. Antonucci. 41,742; Feb. 14.
Kleenex Disposable Tissues in Assorted Colors. For Disposable Tissues. Kleenex Company. 41,756; Feb. 14.
Leekproof. For Asbestos Liquid Roof Coating. Midwest Products Company. 41,758; Feb. 14.
Manhattan Delights You'll Enjoy Their Flavor. For Waffles. M. & B. Cone Co. 41,749; Feb. 14.
Manischewitz Matzos. For Matzos. B. Manischewitz Company. 41,757; Feb. 14.
Mapes Tomatoes. For Canned Tomatoes. Phillips Sales Company. 41,759; Feb. 14.
Ovation—All the World's a Stage. For Hosiery. B-Z-B Knitting Co. 41,748; Feb. 14.
Pocket Packet of Full Size Sheets Kleenex. For Pocket Size Packets of Disposable Tissues. Kleenex Company. 41,755; Feb. 14.
Stuhmer's. For Bread. Geo. F. Stuhmer & Company 41,763–6; Feb. 14.

Stuhmer's (In Hebrew Characters, Spelled "Stihmer's"). For Bread. Geo. F. Stuhmer & Company. 41,762; Feb. 14.
Sweet Clover Chewing Gum. For Chewing Gum. American Chewing Products Corp. 41,740; Feb. 14.
The Newdawn. For Climbing Rose Plants. Somerset Rose Nursery, Inc. 41,761; Feb. 14.
True Shape. For Hosiery. John Blood & Co. 41,745; Feb. 14.
Umberto Berio. For Olive Oil. A. J. Capone. 41,748; Feb. 14.
Yeast-Bran, 2 Delicious Health Foods in 1. For Breakfast Cereal Consisting of a Combination of Yeast and Bran Flavored with Malt, Sugar, and Salt. W. S. Brown. 41,747; Feb. 14.
Young's Best Butter. For Butter. Young's Market Company. 41,768; Feb. 14.

LIST OF PRINTS

Be Musical—Play a "Calura" Flute—Anyone Can Play It. For Flutes. C. Katz. 14,053; Feb. 14.
Cle-Tube Means A Clean Tube. For Collapsing Devices for Collapsible Tubes. Johnson, Johnson & Johnson. 14,052; Feb. 14.
Hewdeco. For Dental Plates. Dr. Hewson Dental Co., Inc. 14,051; Feb. 14.
Nelson Original Detectip Rockford Socks. For Socks. Nelson Knitting Co. 14,054; Feb. 14.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 14TH DAY OF FEBRUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Zubaty, Joseph, assignor.)
A C Spark Plug Company. (See Zubaty, J., and Keeney, assignors.)
Abbott, Edna I., Tiffin, Ohio. Garment protector. 1,897,100; Feb. 14.
Accounting & Tabulating Corporation of Gt. Britain Limited, The. (See Hunter, Charles E., assignor.)
Accounting & Tabulating Corporation of Gt. Britain Limited, The. (See Thomas, Arthur, assignor.)
Adams, Arthur H., La Grange, Ill., assignor to Troy Laundry Machinery Company, New York, N. Y. Spring. 1,897,411; Feb. 14.
Adams, Arthur H., Yonkers, assignor to Troy Laundry Machinery Company, Inc., New York, N. Y. Winding convoluted springs. 1,897,412; Feb. 14.
Adsit, Blanche W., executrix. (See Adsit, George A.)
Adsit, George A., deceased, by Blanche W. Adsit, East Paterson, N. J., executrix. Spindle. 1,897,716; Feb. 14.
Agfa Ansco Corporation. (See Hipke, Kurt, assignor.)
Agostini, Louis, Vineland, N. J. Electric wind for clocks. 1,897,830; Feb. 14.
Aktiebolaget Ljungströms Ångturbin. (See Lysholm, Alf, assignor.)
Aktiebolaget Spontan. (See Ljungström, Fredrik, assignor.)
Albrecht, Charles A., East Chicago, Ind. Hedge cutter. 1,897,543; Feb. 14.
Albrecht, Eduard. (See Herz, R., Albrecht, and Dereser.)
Albright, William F., Pittsburgh, Pa. Brush. 1,897,381; Feb. 14.
Alden, John L., La Grange, Ill., assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y. Gauging apparatus. 1,897,566; Feb. 14.
Allen, Charles E., assignor to Eastman Kodak Company, Rochester, N. Y. Reclaiming film scrap. 1,897,878; Feb. 14.
Allgemeine Elektricitats Gesellschaft, Friedrich Karl. (See Stablein, Wilhelm, assignor.)
Altenkirch, Edmund, Neuenhagen near Berlin, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin, Siemensstadt, Germany. Process and apparatus for operating continuous absorption machines. 1,897,223; Feb. 14.
Altgelt, Herman E., South Bend, Ind., assignor to Oliver Farm Equipment Company. Agricultural implement. 1,897,355; Feb. 14.
Alther, Joseph G., assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for the conversion of hydrocarbon oils. 1,897,567; Feb. 14.
Altman, Fred E. (See Tuttle, F. E., and Altman.)
Amazon Knitting Company. (See Powell, Myron H., assignor.)
Ambronn, Richard, Gottingen, Germany. Method of and apparatus for electric earth exploration. 1,897,683; Feb. 14.
American Air Filter Company. (See Birkholz, Hans E., assignor.)
American Bemberg Corporation. (See Hartmann, A., Höfingboff, and Fischer, assignors.)
American Chain Company. (See deForest, Alfred V., assignor.)
American Character Doll Co. (See Schaeffer, Edward G., assignor.)
American Forging and Socket Company. (See Saunders, Walter S., assignor.)
American Gas Machine Company. (See Jenson, Kenneth S., assignor.)
American Swiss Company, The. (See Grund, Fletcher D., assignor.)
American Telephone & Telegraph Company. (See Bailey, R. S., and Shoffstall, assignors.)
American Telephone and Telegraph Company. (See Bascom, Henry M., assignor.)
American Telephone and Telegraph Company. (See Richey, Charles V., assignor.)
Anderson, Carl J., assignor of fifty-one and two-thirds per cent to Erik Borg and fifteen per cent to Carl U. Johanson, Chicago, Ill. Grinding machine. 1,897,035; Feb. 14.
Anderson, Gust, Ashtabula, Ohio. Water heater. 1,897,413; Feb. 14.
Anderson, John P., Koppel, assignor, by mesne assignments, to Koppel Industrial Car and Equipment Company, McKees Rocks, Pa. Car construction. 1,897,831; Feb. 14.
Anderson, Victor, Passaic, and D. G. Trutner, North Arlington, assignors to Alfred Hofmann & Company, West New York, N. J. Grid making machine and method. 1,897,460; Feb. 14.
Anderson, William M., Minneapolis, Minn., assignor to Kex Company, Incorporated, St. Louis, Mo. Plug and inserting quill and connecting the same. 1,897,028; Feb. 14.
Andrews, Phillip R., Seattle, Wash. Preserving means for fish nets. 1,897,224; Feb. 14.
Andrews, Phillip R., assignor to Pacific Marine Supply Company, Seattle, Wash. Fishing line weight. 1,897,291; Feb. 14.
Angell, Charles H., assignor to Universal Oil Products Company, Chicago, Ill. Treatment of hydrocarbon oil. 1,897,628; Feb. 14.
Anibal, Benjamin H., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Internal combustion engine. 1,897,783; Feb. 14.
Anson, Edwin G., assignor of one-half to F. Clarke, Birmingham, Ala. Air pistol. 1,897,226; Feb. 14.
Anton, Frederick A. (See Bell, E. F., and Anton.)
Antrim, William D., Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa. Safety device for electric ovens. 1,897,879; Feb. 14.
Appel, William, Little Rock, Ark. Table attachment. 1,897,717; Feb. 14.
Appenheimer, Carl J., and C. Mueller, Regina Saskatchewan, Canada. Baby carriage. 1,897,036; Feb. 14.
Apple, Edward M., et al., executors. (See Apple, Vincent G.)
Apple, Herbert F., et al., executors. (See Apple, Vincent G.)
Apple, Vincent G., deceased, Dayton, Ohio; H. F. Apple, E. M. Apple, and G. Darroch, executors of said Vincent G. Apple. Armature. 1,897,544; Feb. 14.
Apple, Vincent G., deceased, Dayton, Ohio; H. F. Apple, E. M. Apple, and G. Darroch, executors. Motor-driven pump. 1,897,784; Feb. 14.
Applefore Paper Products Limited. (See Powell, William B., assignor.)
Appleton Wire Works, Inc. (See Buchanan, William E., assignor.)
Apthorp, Robert E., Salem, Mass. Device for indicating wind velocity. 1,897,658; Feb. 14.
Archer, Charles B., Homestead, Pa. Grip attachment for violin bows. 1,897,225; Feb. 14.
Archer Daniels Midland Company. (See Wilkins, Herbert L., assignor.)
Arcole Construction Co. (See Miller, Harvey J., assignor.)
Arnof, David B., New York, N. Y. Tongs. 1,897,991; Feb. 14.
Aseltine, Fred E., assignor to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,897,101; Feb. 14.
Aseltine, Fred E., assignor to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,897,102; Feb. 14.
Aseltine, Fred E., assignor to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,897,103; Feb. 14.
Associated Electric Laboratories, Inc. (See Bataille, Roger, assignor.)
Associated Electric Laboratories, Inc. (See Harbecke, Herman H., assignor.)
Associated Electrical Industries, Ltd. (See Bailey, Richard W., assignor.)
Astrawerke Aktiengesellschaft. (See Greve, John E. W., assignor.)
Atlas Scraper Company. (See Ricks, Hyrum, jr., assignor.)
Atwood, George D., Brooklyn, N. Y. Spool. 1,897,227; Feb. 14.
Autogiro Company of America. (See de la Cierva, Juan, assignor.)
Autogiro Company of America. (See Weir, James G., assignor.)
Avery, W. & T., Limited. (See Leeson, Archibald, assignor.)
Avery, W. & T., Limited. (See Timson, William, assignor.)
Babitch, Abraham M., Flint, Mich. Airdome type pulsator for fuel pumps. 1,897,292; Feb. 14.
Bacon, Raymond F., Bronxville, N. Y. Production of sulphur from sulphides. 1,897,921; Feb. 14.
Bailey, Rand S., Glen Ridge, and H. F. Shoffstall, Maplewood, N. J., assignors to American Telephone & Telegraph Company. Signaling system. 1,897,104; Feb. 14.
Bailey, Richard W., Altrincham, England, assignor, by mesne assignments, to Associated Electrical Industries, Ltd. Internal combustion engine. 1,897,293; Feb. 14.
Baker, Friend F. (See Mitchell, G. A., and Baker.)
Baker, Hubert E. (See McCann, H. P., and Baker.)

Baker Perkins Company. (See Macfarlane, Robert F., assignor.)
Baker-Raulang Company, The. (See Remde, Edward H., assignor.)
Baldner, George H., assignor to L. T. Bohn, Dayton, Ohio. Clothes washing machine. 1,897,414; Feb. 14.
Baldwin, Gerald L., San Diego, Calif. Portable ash tray and extinguisher. 1,897,356; Feb. 14.
Bales, James E., assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Merchandising table. 1,897,568; Feb. 14.
Ball, Frank C., and C. C. Salisbury, assignors to Salisbury Signal Corporation, Jamestown, N. Y. Switch mechanism. 1,897,943; Feb. 14.
Ballard, Milton H., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for pressing soles upon shoes and pad therefor. 1,897,105; Feb. 14.
Barbour, Ralph H., London, England. Induction controller. 1,897,415; Feb. 14.
Barkley, Howard F., Great Barrington, Mass. Electrical tube. 1,897,880; Feb. 14.
Barnsteiner, Alfons, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Electric range. Des. 89,251; Feb. 14.
Baron Cigarette Machinery Company Limited, The. (See Cole, William, assignor.)
Barrett-Cravens Company. (See Fernstrom, John O., assignor.)
Bascom, Calvin P. (See Ormsby, E., and Bascom.)
Bascom, Calvin P. (See Rassieur, B. F., and Bascom.)
Bascom, Calvin P., St. Louis, Mo., and H. A. Kluge, Collinsville, Ill., assignors to Central Mine Equipment Co., St. Louis, Mo. Drill for mining purposes. 1,897,785; Feb. 14.
Bascom, Henry M., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Telephone system. 1,897,106; Feb. 14.
Basset, Lucien P., Paris, France. Simultaneous manufacture of iron or its carbide compounds and of Portland cement or hydraulic limes. 1,897,881; Feb. 14.
Bastian, William B., Glendale, Calif. Gas burner control device. 1,897,000; Feb. 14.
Bataille, Roger, Paris, France, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Remote control system. 1,897,718; Feb. 14.
Bateman, Ralph C., Akron, Ohio, assignor to Wingfoot Corporation, Wilmington, Del. Air bag connection. 1,897,949; Feb. 14.
Bates, Arthur, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping shoe uppers. 1,897,037; Feb. 14.
Bates Manufacturing Company, The. (See Svensson, Victor A., assignor.)
Battin, William I., Philadelphia, and C. S. Chrisman, West Chester, assignors to The U. G. I. Contracting Company, Philadelphia, Pa. Gas generator. 1,897,950; Feb. 14.
Baum, Jesse J. (See Baum, Jesse M., assignor.)
Baum, Jesse M., Warren, assignor of one-fourth to J. J. Baum, Canton, Ohio. Automatic variable speed drive. 1,897,416; Feb. 14.
Bauman, Warren J., Lock Haven, assignor to The West Branch Corporation, Williamsport, Pa. Starter for internal combustion engines. 1,897,786; Feb. 14.
Baur, Hugo J., Chicago, Ill. Admission token depositary and accounting device. 1,897,601; Feb. 14.
Baus, Bernard P., Waco, Tex. Automobile table. 1,897,107; Feb. 14.
Bautz, Daniel, assignor to A. Mutsch, Milwaukee, Wis. Testing gauge. 1,897,832; Feb. 14.
Bayer, Andrew, Baltimore, Md. Envelope. 1,897,602; Feb. 14.
Bazeley, Arthur J., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Uncoupling mechanism for car couplers. 1,897,461; Feb. 14.
Beagan, James, Brooklyn, N. Y. Baby's safety strap and harness. 1,897,882; Feb. 14.
Beckett, Harry S., Pitman, N. J., assignor to The Hess-Bright Manufacturing Company, Philadelphia, Pa. Chuck and centering arbor. 1,897,228; Feb. 14.
Beede, Herbert G., Pawtucket, R. I. Actuating mechanism for garment pressing machines. 1,897,689; Feb. 14.
Behr-Manning Corporation. (See Schacht, Elmer C., assignor.)
Bekk, Dr., & Kaulen Chemische Fabrik G. m. b. H. (See Thimann, Max, assignor.)
Bell, Edwin F., and F. A. Anton, assignors to Topeka Tent & Awning Company, Topeka, Kans. Lateral arm awning construction. 1,897,029; Feb. 14.
Bell & Howell Company, The. (See Howell, Albert S., assignor.)
Bell Telephone Laboratories, Incorporated. (See Christopher, Arthur J., assignor.)
Bell Telephone Laboratories, Incorporated. (See Cole, I. E., May, and Weller, assignors.)
Bell Telephone Laboratories, Incorporated. (See Fry, Jacob R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Kreer, John G., jr., assignor.)
Bell Telephone Laboratories, Incorporated. (See Morton, Edmund R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Newsom, James B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Strickler, Walter B., assignor.)
Bellavance, Ambrose W., South Portland, and H. Levy, Portland, Me. Safety shoe heel clamp. 1,897,560; Feb. 14.
Beller, Hans. (See Luther, M., and Beller.)
Bellis, Joseph, St. Paul, Minn. Gas control mechanism for automobiles. 1,897,357; Feb. 14.
Bellis, Joseph, St. Paul, Minn. Carburetor control mechanism. 1,897,858; Feb. 14.
Benway, William G. G., Seattle, Wash. Audiphone. 1,897,833; Feb. 14.
Berkshire Knitting Mills. (See Hemmerich, Hugo, assignor.)
Berkman, Herbert A., Chicago, Ill., assignor to Zim Manufacturing Company. Valve spring lifter. 1,897,030; Feb. 14.
Bernard, Hanss. (See Ott, K., and Bernard.)
Bernard, Marcel, assignor to Societe Francaise Radio-Electrique, Paris, France. Loudspeaker and like apparatus. 1,897,294; Feb. 14.
Berry, George P., assignor to General Motors Research Corporation, Detroit, Mich. Brake actuating mechanism. 1,897,787; Feb. 14.
Bienenstock, David J., Brooklyn, N. Y. Electric heating furnace. 1,897,883; Feb. 14.
Biery, Lewis E., New Kensington, Pa. Table. 1,897,884; Feb. 14.
Bigelow-Sanford Carpet Co. (See Knowland, Richard G., assignor.)
Biggs, George A., assignor to The James Leffel & Company, Springfield, Ohio. Hydraulic turbine. 1,897,834; Feb. 14.
Binks Manufacturing Company. (See Long, R., and Gustafsson, assignors.)
Bird, Byron M., Columbus, Ohio. Separating coal and other minerals. 1,897,545; Feb. 14.
Birgbauer, Conrad F., Detroit, Mich., assignor to Cemented Tungsten Tool Company. Cutting device. 1,897,546; Feb. 14.
Birk, Marjorie A., New York, N. Y. Device for treating the eyelashes. 1,897,719; Feb. 14.
Birk, Marjorie A., New York, N. Y. Device for simulating natural eyelashes. 1,897,747; Feb. 14.
Black, Lee J., Beaumont, Tex. Pump operating mechanism. 1,897,108; Feb. 14.
Blackburn, Arthur, et al. (See Nagel, Hugo, assignor.)
Blair, John T., Tulsa, Okla. Weather shield. 1,897,382; Feb. 14.
Blatti, Albert L., Chicago, Ill., assignor to The Railways Ice Company. Crushed ice chute. 1,897,295; Feb. 14.
Blau, Henry H., assignor to Macbeth-Evans Glass Company, Charleroi, Pa. Globe. Des. 89,273; Feb. 14.
Blaw Knox Company. (See Gerten, N., and Jenner, assignors.)
Block, David A., et al. (See Block, Morris H., assignor.)
Block, Harry J., Ellensburg, Wash. Self adjusting suspender. 1,897,296; Feb. 14.
Block, Morris H., assignor to H. Kortz, D. A. Block and P. Kleiger, Denver, Colo. Nursing bottle. Des. 89,252; Feb. 14.
Blumenthal, B., & Co. (See Rosenthal, Sidney, assignor.)
Blumenthal, B., & Co. (See Shadlowsky, Joseph, assignor.)
Bobo, Edward H., Ranger, Tex. Fish lure. 1,897,109; Feb. 14.
Bock, Charles D., assignor of one-half to W. Shakespeare, jr., Kalamazoo, Mich. Loud speaker. 1,897,835; Feb. 14.
Bodine Electric Company. (See Thompson, Clifford F., assignor.)
Boehner, Georg. (See Neresheimer, H., and Boehner.)
Böhm, Otto, Berlin, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Indirectly heated cathode. 1,897,229; Feb. 14.
Bohmert, William C., Mamaroneck, N. Y. Binding paper sheets. 1,897,038; Feb. 14.
Bohn, L. T. (See Baldner, George H., assignor.)
Bole, George A. (See Husain, T., and Bole.)
Bonanno, Joseph L., Forest Hills, assignor to The Lionel Corporation, New York, N. Y. Remote control system. 1,897,748; Feb. 14.
Bonanno, Joseph L., Forest Hills, assignor to The Lionel Corporation, New York, N. Y. Remote control system. 1,897,749; Feb. 14.
Bonnatti, Anthony C., et al. (See Pirrone, Antonnio L. M., assignor.)
Borchers, William J. (See Richardson, Arthur J., assignor.)
Borg, Erik, et al. (See Anderson, Carl J., assignor.)
Borocki, Georg, Vienna, Austria. Universal hoeing and cultivating machine. 1,897,885; Feb. 14.
Boving, Henrik, assignor to Western Electric Company, Incorporated, New York, N. Y. Flameproof article. 1,897,629; Feb. 14.
Bowen, Myron W., Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif. Hydraulic braking system. 1,897,230; Feb. 14.
Bower, Ferdinand A., Flint, assignor to General Motors Corporation, Detroit, Mich. Oil pressure regulator. 1,897,788; Feb. 14.

Bowers, Paul C., Penns Grove, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Purifying phthalic anhydride. 1,897,110; Feb. 14.
Bowman, Harvey T., and W. L. Groh, Lebanon, Pa., assignor to The Guardian Trust Company, Cleveland, Ohio. Box and making the same. 1,897,570; Feb. 14.
Boyce, Fred F., et al. (See Rowe, Alton J., assignor.)
Braden, Rene A., Merchantville, N. J., assignor to Radio Corporation of America. Antenna coupling circuits. 1,897,231; Feb. 14.
Bradshaw, Austin A., Hickory, assignor of one-half to J. A. Bradshaw, Buncombe County, N. C. Lock. 1,897,922; Feb. 14.
Bradshaw, J. A. (See Bradshaw, Austin A., assignor.)
Brand, Frank and G., Philadelphia, Pa. Hosiery boarding form and hose clamp therefor. 1,897,886; Feb. 14.
Brand, George. (See Brand, Frank and G.)
Brassert, Herman A., assignor to H. A. Brassert & Company, Chicago, Ill. Blast furnace operation. 1,897,750; Feb. 14.
Brassert, H. A., & Company. (See Brassert, Herman A., assignor.)
Brassert, H. A., & Company. (See Kinney, Selwyne P., assignor.)
Brassert, H. A., & Company. (See Wille, F., and Grilli assignors.)
Brassert, Walter, Kalamazoo, Mich., and G. V. Gladville, assignors to Concrete Silo Company, Bloomfield, Ind. Forming silo tiles. 1,897,659; Feb. 14.
Braverman, Louis, Brooklyn, N. Y. Gladstone bag. 1,897,887; Feb. 14.
Brelsky, John V., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Protective system. Re18,740; Feb. 14.
Brennan, Charles T., Waterbury, Conn. Cut-off mechanism for ball machines. 1,897,359; Feb. 14.
Brey & Krause Manufacturing Company. (See Pudliner, John, assignor.)
Bridgewater, Hurlbert R., Detroit, Mich., assignor to Phillips Petroleum Company, Bartlesville, Okla. Weighing mechanism. 1,897,168; Feb. 14.
Bright, Keith C., and J. N. Sweeney, Champion, Nebr. Tire trunk. 1,897,888; Feb. 14.
Brikholz, Hans E., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky. Filtration medium. 1,897,976; Feb. 14.
Bristol, George W., Meriden, Conn. Flexible spring pad. 1,897,836; Feb. 14.
British Rema Manufacturing Co., Ltd. (See Howden, Peter, assignor.)
Brooke, Arthur O., assignor to General Motors Corporation, Detroit, Mich. Wheel structure. 1,897,789; Feb. 14.
Brown, Campbell. (See Wilson, J. E., McConnell, and Brown.)
Brown, Cicero C., Houston, Tex. Casing head equipment. 1,897,297; Feb. 14.
Brown, Joseph D., New York, N. Y., assignor to Hatfield Wire and Cable Co., Hillside, N. J. Electrical connection plug. Des. 89,253; Feb. 14.
Brown, Stanley. (See Price, J., and Brown.)
Brown, Theophilus, assignor to Deere & Company, Moline, Ill. Tractor. 1,897,751; Feb. 14.
Browne-Morse Company. (See Soper, Raymond H., assignor.)
Bruckner, Robert E., Hastings upon Hudson, assignor to Doherty Research Company, New York, N. Y. Fuel feeding system for Otto engines. 1,897,967; Feb. 14.
Brump, Herbert L. (See Gaubert, J. Q., Brump, and Forsythe.)
Bruning, William G., Omaha, Nebr. Lock for gasoline tanks. 1,897,185; Feb. 14.
Brunner, Lewis K., Hulmeville, Pa. Engine starter. 1,897,923; Feb. 14.
Brutsche, Earl J., Battle Creek, Mich. Burial vault mold. 1,897,603; Feb. 14.
Buchanan, Stephen N., assignor to The Thomas & Betts Co., Elizabeth, N. J. Grounding fitting. 1,897,186; Feb. 14.
Buchanan, William E., assignor to Appleton Wire Works, Inc., Appleton, Wis. Weaving Fourdrinier wires. 1,897,232; Feb. 14.
Bucyrus-Monighan Company. (See Tunison, John L., assignor.)
Buenger, Frederick L., Chicago, Ill. Vacuum pump. 1,897,547; Feb. 14.
Buffalo Brake Beam Company. (See Crone, Seth A., assignor.)
Buford, William J. (See Spampinato, Anthony M., assignor.)
Bullington Engine Heads. (See Bullington, Frank A., assignor.)
Bullington, Frank A., assignor to Bullington Engine Heads, Kansas City, Mo. Multiple ignition cylinder head. 1,897,233; Feb. 14.
Bullington, Frank A., assignor to Bullington Engine Heads, Kansas City, Mo. Antidetonation combustion chamber. 1,897,234; Feb. 14.
Bulman, E. O., Manufacturing Company. (See Bulman, Elvah O., assignor.)
Bulman, Elvah O., assignor to E. O. Bulman Manufacturing Company, Grand Rapids, Mich. Shelving appliance. 1,897,187; Feb. 14.
Burdett, Horace H., assignor to Draper Corporation, Hopedale, Mass. Rotary hopper for filling replenishing looms. 1,897,417; Feb. 14.
Burge, Zachariah B., Roanoke, Va. Combined fence and gate. Des. 89,254; Feb. 14.
Burgess Battery Company. (See Helfrecht, Aaron J., assignor.)
Burgess Battery Company. (See Zook, John S., assignor.)
Burgoyne, George W., Green Bay, Wis. Power operated hoist. 1,897,383; Feb. 14.
Burnstad Grading Machine Company Limited. (See Burnstad, Sigurd H., assignor.)
Burnstad, Sigurd H., Ohaton, assignor to Burnstad Grading Machine Company Limited, Edmonton, Alberta, Canada. Road grading and ditching machine. 1,897,235; Feb. 14.
Bush, Vannevar, Belmont, assignor to Raytheon, Inc., Cambridge, Mass. Signaling system. 1,897,236; Feb. 14.
Butler, Clyde G., assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio. Conduit coupling and lubricant flow control device. 1,897,660; Feb. 14.
Butterworth, Joseph M., et al. (See Butterworth, Samuel D., assignor.)
Butterworth, Samuel D., Detroit, Mich., assignor to J. M. Butterworth, Detroit, Mich., and C. P. Gable, Gable, S. C. Clamping and means therefor. 1,897,548; Feb. 14.
Buttfield, William J., North Plainfield, assignor to The Vulcan Retinning Company, Sewaren, N. J. Manufacture of stannic chloride. 1,897,360; Feb. 14.
Byboth, Carl J., Rushford, Minn. Humidifier. 1,897,298; Feb. 14.
California Chemical Corporation. (See Seaton, Max Y., assignor.)
Callvas, George J., Alabama City, Ala. Cigarette package. 1,897,549; Feb. 14.
Calkins, Claude C., Spokane, Wash. Seed treating machine. 1,897,361; Feb. 14.
Camel Company. (See Wasberg, Axel, assignor.)
Camerota, Louis A., Burlington, N. J., assignor to W. Wood, Philadelphia, Pa. Method and apparatus for blasting pipe. 1,897,951; Feb. 14.
Camporini, Enea, Chicago, Ill. Bait bucket. 1,897,571; Feb. 14.
Candor, Edward R., Montclair, N. J., assignor to The Texas Company, New York, N. Y. Dispensing apparatus. 1,897,299; Feb. 14.
Capstaff, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Color cinematography. 1,897,837; Feb. 14.
Cardwell Westinghouse Company. (See Sproul, Donald F., assignor.)
Cardwell Westinghouse Company. (See Wildin, George W., assignor.)
Carlson, Guy W., Van Dyke, Mich. Screen. 1,897,418; Feb. 14.
Carlson, Henry S. (See Edison, T. A., jr., and Carlson.)
Carr, Celeta L. (See Carr, Edward G., assignor.)
Carr, Edward G., assignor to Celeta L. Carr, Chicago, Ill. Subgrade scraping machine. 1,897,790; Feb. 14.
Carter, Arthur, assignor of one-half to J. Lees, Birmingham, England. Retarding or pressure controlling device. 1,897,462; Feb. 14.
Carter, Philip S., Stony Brook, and J. L. Finch, Rocky Point, N. Y., assignor to Radio Corporation of America. Measuring electrical energy. 1,897,237; Feb. 14.
Carter, S. C., Los Angeles, Calif. Vehicle drive. 1,897,944; Feb. 14.
Cash, A. W., Company. (See Terry, Charles M., assignor.)
Cave, Henry, assignor to The Fuller Brush Company, Hartford, Conn. Brush making machine. 1,897,968; Feb. 14.
Celanese Corporation of America. (See Dreyfus, C., and Platt, assignor.)
Celanese Corporation of America. (See Ellis, G. H., and Olpin, assignors.)
Celanese Corporation of America. (See Platt, H., and Croft, assignors.)
Cellular Clay Corporation. (See Husain, T., and Bole, assignors.)
Celluloid Corporation. (See Walsh, James F., assignor.)
Cement-Gun Company. (See Stewart, E. P., and Frost, assignors.)
Cemented Tungsten Tool Company. (See Birgbauer, Conrad F., assignor.)
Central Mine Equipment Co. (See Bascom, C. P., and Kluge, assignors.)
Central Mine Equipment Company. (See Ormsby, E., and Bascom, assignors.)
Central Mine Equipment Co. (See Rassieur, B. F., and Bascom, assignors.)
Central Radio Laboratories. (See Stoekle, Edwin R., assignor.)
Central Scientific Company. (See Klopsteg, Paul E., assignor.)
Chamberlain, George L., Chicago, Ill. Electrical connection. 1,897,630; Feb. 14.
Chamberlain, Leonard C., assignor to The Dow Chemical Company, Midland, Mich. Recovering iodine from natural waters and the like. 1,897,031; Feb. 14.
Chapman, Cloyd M., Douglaston, N. Y. Structural unit and making same. 1,897,238; Feb. 14.

Chapman, Paul F., Boston, Mass. Clothes washing machine. 1,897,239; Feb. 14.
Chase Companies, Inc. (See Corbell, Edward S., jr., assignor.)
Chemische Fabrik Joh. A. Benckiser G. m. b. H. (See Draisbach, Fritz, assignor.)
Chemische Werke vorm- H. & E. Albert, the Firm. (See Mändlen, H. and Huber, assignors.)
Cherniak, Meyer B., New York, N. Y. Lighting fixture globe. Des. 89,274; Feb. 14.
Chicago-Cleveland Car Roofing Company. (See Mattingley, Edward H., assignor.)
Chicago Pneumatic Tool Company. (See Reed, Clarence E., assignor.)
Chicago Pneumatic Tool Company. (See Wernberg, Nells E., assignor.)
Chiguracos, Pota. (See Lewnes, William, assignor.)
Chillingworth, Rudolph, Brooklyn, N. Y. Aircraft and screw propeller therefor. 1,897,463; Feb. 14.
Chretien, Georges, St-Cloud, assignor to Societe Technique d'Optique et de Photographie S. T. O. P., St-Ouen, Seine, France. Anamorphoser apparatus for cinematography in colors and in relief. 1,897,752; Feb. 14.
Chrisman, Charles S. (See Battin, W. I., and Chrisman.)
Christiansen, W. G., Bloomfield, N. J., W. S. Jones, Brooklyn, and E. Moness, New York, assignors to E. R. Squibb & Sons, New York, N. Y. Obtaining vitamin concentrates from fats. 1,897,039; Feb. 14.
Christiansen, Walter G., Glen Ridge, N. J., and S. E. Harris, Lynbrook, assignors to E. R. Squibb & Sons, New York, N. Y. Dialkyl resorcinols. 1,897,188; Feb. 14.
Christopher, Arthur J., Teaneck, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Inductive device. 1,897,040; Feb. 14.
Christy, Anker L. (See Harnsberger, A. E., and Christy.)
Cincinnati Ball Crank Company, The. (See Butler, Clyde G., assignor.)
Cincinnati Milling Machine Company, The. (See Ernst, Hans, assignor.)
Clark, Stuart B., Riverton, assignor to United States Pipe & Foundry Company, Burlington, N. J. Casting pipes. 1,897,631; Feb. 14.
Clarke, Charles J., Kingsburg, Calif. Fishing rod. 1,897,889; Feb. 14.
Clarke, Frank. (See Anson, Edwin G., assignor.)
Clary, Guy C. (See Malvern, E. N., Clary, and Jones.)
Clemons, Dale R., Riverside, Ill., assignor to Western Electric Company, Inc., New York, N. Y. Electromagnetic device. 1,897,604; Feb. 14.
Clifford, Dell G., Chicago, Ill. Concrete laying machine. 1,897,605; Feb. 14.
Clouse, William L., assignor to The National Machinery Company, Tiffin, Ohio. Lubricant pump. 1,897,300; Feb. 14.
Cole, Ira E., Montclair, N. J., D. T. May, Port Washington, and A. A. Weller, Ridgewood, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Hand welding machine. 1,897,606; Feb. 14.
Cole, William, Bristol, assignor to The Baron Cigarette Machinery Company Limited, London, England. Cutting-off mechanism in cigarette making and similar machines, wherein the rod or the like is moving continuously in a lengthwise direction. 1,897,301; Feb. 14.
Coleman, James E., Allensville, Ky. Harrow tooth. 1,897,550; Feb. 14.
Coleman, Sydney G., and F. B. Hicks, Streator, Ill. Hedge trimming device. 1,897,924; Feb. 14.
Colgate-Palmolive-Peet Company, et al. (See Lamont, Dallas R., assignor.)
Colquhoun, Peter M. (See Hult, J. A., and Colquhoun.)
Columbar Heat, Incorporated. (See Kimball, D. D., and Cucci, assignors.)
Compton, O. W. (See Murrow, William R., assignor.)
Concrete Silo Company. (See Brassert, W., and Gladville, assignors.)
Condello, Salvatore. (See Moorehouse, John H., assignor.)
Condit Electrical Manufacturing Corporation. (See Jansson, Gustav E., assignor.)
Connors, Frederick P., Detroit, Mich. Adjustable belt pulley. 1,897,720; Feb. 14.
Consolidated Expanded Metal Companies, The. (See Herbest, Thomas R., jr., assignor.)
Continental Diamond Fibre Company. (See Richards, B. H. F., and Haroldson, assignors.)
Continental Motors Corporation. (See Timian, Harold H., assignor.)
Cook, Ernest H., Edmonton, Alberta, Canada. Covering for container openings. 1,897,890; Feb. 14.
Coon, Chester C., Oakland, Calif. Wire tapping tool. 1,897,464; Feb. 14.
Coon, Chester C., Oakland, Calif. Vibration dampener removing tool. 1,897,465; Feb. 14.
Coon, Chester C., Oakland, Calif. Vibration dampener applicator. 1,897,466; Feb. 14.
Cooper Owen Thermometer Company. (See Nodine, Frederick A., assignor.)
Corbett, Sewell M., and L. H. Stanford, U. S. Army, Fort Sam Houston, Tex. Photographic dust count apparatus. 1,897,111; Feb. 14.
Corey, Elmer O., Norwood, assignor to The Edna Brass Manufacturing Company, Cincinnati, Ohio. Force feed lubricator. 1,897,791; Feb. 14.
Cornell, Edward S., jr., assignor to The Chase Companies, Inc., Waterbury, Conn. Combined check-valve and strainer. 1,897,572; Feb. 14.
Cornell, Fritz G., jr., Mountain Lakes, assignor to Jensen Creamery Machinery Company, Inc., Bloomfield, N. J. Liquid heater and cooler. 1,897,607; Feb. 14.
Couch, Henry R., assignor to Eastman Kodak Company, Rochester, N. Y. Tinted sound and picture film and making same. 1,897,838; Feb. 14.
Coupland, Richard C. (See Woody, G. A., and Coupland.)
Courtney, Thomas J., Orange, N. J. Stoker grate. 1,897,112; Feb. 14.
Cover, Harvey S., South Bend, Ind. Prism telescope. 1,897,608; Feb. 14.
Cowles, Irving, Detroit, Mich., assignor to Union Bank of Chicago, Chicago, Ill. Lubricant discharge valve for force feed lubricating systems. 1,897,609; Feb. 14.
Cramer-Van Deventer, Anna P., Chesieres, Switzerland. Preserving or protecting substances or objects. Re18,734; Feb. 14.
Crane Co. (See Flodin, Victor E., assignor.)
Cremer, Henry, Southgate, Calif. Rear axle steering with front wheel drive. 1,897,551; Feb. 14.
Crespinel, William T. (See Fairall, H. K., and Crespinel.)
Crimmel, Henry H., Hartford City, Ind. Fruit juice dispenser valve. 1,897,302; Feb. 14.
Crockett, James B., Malden, Mass. Preparation of vulcanizable latex. 1,897,189; Feb. 14.
Croft, Cyril M. (See Platt, H., and Croft.)
Crone, Seth A., East Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y. Brake-shoe key. 1,897,632; Feb. 14.
Crosley Radio Corporation, The. (See Israel, Dorman D., assignor.)
Crosley Radio Corporation, The. (See Langley, Ralph H., assignor.)
Crosley Radio Corporation, The. (See Rockwell, R. J., and Parkhurst, assignors.)
Crossley, Robert G., et al. (See Johnson, Austin C., assignor.)
Crowell, James B. & Son. (See Crowell, John A., assignor.)
Crowell, John A., assignor to James B. Crowell & Son, Wallkill, N. Y. Brick mold. 1,897,792; Feb. 14.
Cryer, Albert A., deceased. New York, N. Y.; M. H. Cryer, executrix. Steam trap. 1,897,753; Feb. 14.
Cryer, Mathilde H., executrix. (See Cryer, Albert A.)
Cucci, Victor J. (See Kimball, D. D., and Cucci.)
Cummings, Nephi W., La Jolla, Calif. Gasoline gauge. 1,897,419; Feb. 14.
Cunningham, Arthur B., assignor to Republic Flow Meters Company, Chicago, Ill. Mechanically operated gas analyser. 1,897,721; Feb. 14.
Curran, Francis J., Chicago, Ill. Disinfectant and deodorizer. 1,897,573; Feb. 14.
Cutler-Hammer, Inc. (See Kuhn, C. W., and Ryan, assignors.)
Dahlgren, Sven A. B., Alsten, Sweden, assignor to The De Laval Separator Company, New York, N. Y. Separating liquids of different specific gravities. 1,897,240; Feb. 14.
Dahmen, Karl, Dusseldorf, Germany. Sound recording and reproducing means. 1,897,722; Feb. 14.
Dalpayrat, Henri F., assignor to Radio Patents Corporation, New York, N. Y. Band-pass filter. 1,897,633; Feb. 14.
Daniel, John V. (See Mallory, J. L., and Daniel.)
Daniels, William G., Freeport, N. Y. Toy train draft coupling. 1,897,362; Feb. 14.
Darrouch, Gourley, et al., executors. (See Apple, Vincent G.)
Da Silva, Augusto A., Whitman, Mass. Safety protector for oil burners. 1,897,303; Feb. 14.
Davey, George W., Mahwah, N. J. Furnace construction. 1,897,041; Feb. 14.
Davis, Albert G., Newton Center, assignor to Gillette Safety Razor Company, Boston, Mass. Display device. 1,897,652; Feb. 14.
Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Pressing machine. 1,897,241; Feb. 14.
Davis, Harry A., assignor to Draper Corporation, Hopedale, Mass. Shuttle tension. 1,897,420; Feb. 14.
Davis, Leonard H., Washington, D. C. Ice shield. 1,897,304; Feb. 14.
Dayton Paper Novelty Company, The. (See Neumann, Theodore L., assignor.)
Deans, William, Ridgewood, assignor to Sundh Electric Company, Newark, N. J. Electric switch. 1,897,467; Feb. 14.
Deere & Company. (See Brown, Theophilus, assignor.)
De Forest, Alfred V., Southport, Conn., assignor to American Chain Company, Inc. Method of and apparatus for electromagnetic testing. 1,897,634; Feb. 14.
De Forest, Lee, assignor to DeForest Phonofilm Corporation, New York, N. Y. Luminous discharge device. 1,897,363; Feb. 14.
De Forest Phonofilm Corporation. (See de Forest, Lee, assignor.)
De Forest Radio Telephone & Telegraph Co. (See Hunter, Frederick L., jr., assignor.)
Defren, George, Newton, Mass. Preparing chocolate. 1,897,242; Feb. 14.
De Groote, Melvin, St. Louis, L. T. Monson, Maplewood, and A. F. Wirtel, assignors, by mesne assignments, to Tretolite Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,897,574; Feb. 14.

CARNEGIE LIBRARY OF ATLANTA

De Groote, Melvin, St. Louis, L. T. Monson, Maplewood, and A. F. Wirtel, assignors, by mesne assignments, to Tretolite Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,897,575; Feb. 14.
Dehle, Otto T., assignor to Multi-Hydro Washing Machine Company, Boston, Mass. Washing machine. 1,897,953; Feb. 14.
Deibel, Christopher W., Youngstown, Ohio. Game device. 1,897,384; Feb. 14.
De la Cierva, Juan, Madrid, Spain, assignor to Autogiro Company of America, Philadelphia, Pa. Sustaining rotor constructions for aircraft. 1,897,042; Feb. 14.
Delattre-Seguy, Jean, assignor to Universal Oil Products Company, Chicago, Ill. Treating oil. 1,897,593; Feb. 14.
De Laval Separator Company. (See Dahlgren, Sven A. B., assignor.)
Delco Products Corporation. (See Aseltine, Fred E., assignor.)
De Mattia, Barthold, Passaic, N. J., assignor to The Goodyear Tire & Rubber Company. Tire shaping and air bag inserting machine. 1,897,690; Feb. 14.
DeMoe Engineering Laboratories, Inc., The. (See McKnight, R. R., and Webber, assignors.)
Dempster, Charles B., and W. Elliott, assignors to Dempster Mill Manufacturing Company, Beatrice, Nebr. Furrow seeding machine. 1,897,421; Feb. 14.
Dempster Mill Manufacturing Company. (See Dempster, Charles B., and Elliott, assignors.)
Dempster Mill Manufacturing Company. (See Loeber, H. M., and Elliott, assignors.)
Deresser, Richard. (See Herz, R., Albrecht, and Deresser.)
De Vilbiss Company, The. (See Schmitt, Joy B., assignor.)
De Vilbiss Company, The. (See Tracy, Robert W., assignor.)
De Voe, John M., Greenwich, Conn., assignor to United States Tobacco Company, New York, N. Y. Commodity package. 1,897,692; Feb. 14.
Dickson, John G., San Diego, Calif. Grinding head and drive. 1,897,891; Feb. 14.
Dietz, Gustav, West Hollywood, Calif., assignor of one-half to Walter Dietz, Long Island City, N. Y. Spotlight. 1,897,364; Feb. 14.
Dietz, Walter. (See Dietz, Gustav, assignor.)
Dilg, Charles H. J., New York, N. Y. Awning. 1,897,636; Feb. 14.
Dixon, Alfred, et al. (See Pirrone, Antonnio L. M., assignor.)
Dixon, Robert, et al. (See Pirrone, Antonnio L. M., assignor.)
Dixon, Thomas, et al. (See Pirrone, Antonnio L. M., assignor.)
Dobson, William A., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,897,243; Feb. 14.
Dodson, Daniel B., Benton, Ark. Mail bag ejecting device. 1,897,552; Feb. 14.
Dodson, Grover C. (See McCann, Neal T., assignor.)
Doelman, Myron L., Toronto, Ontario, Canada, assignor, by mesne assignments, to United States Radiator Corporation, Detroit, Mich. Mold. 1,897,925; Feb. 14.
Doelman, Myron L., Toronto, Ontario, Canada, assignor, by mesne assignments, to United States Radiator Corporation, Detroit, Mich. Mold. 1,897,926; Feb. 14.
Doherty Research Company. (See Bruckner, Robert E., assignor.)
Doherty Research Company. (See Merley, Sylvan R., assignor.)
Doherty, Thomas A., Queens Village, N. Y. Book support. 1,897,305; Feb. 14.
D'Olier, Henry, jr., Bridgeport, Conn. Electrical fixture supporting device. 1,897,954; Feb. 14.
Domagall, John. (See Riedel, J., Domagall, and Maze.)
Domzalski, Casimir A., Detroit, Mich. Blow-out patch. 1,897,927; Feb. 14.
Dooley, George W., San Bernardino, Calif. Universal joint. 1,897,945; Feb. 14.
Doucet, Edmund G., Rheims, France. Radiator. 1,897,113; Feb. 14.
Doughnut Machine Corporation. (See Kaufmann, James J., assignor.)
Dow, Alexander, New York, N. Y., assignor to Dow Patents Holding Corporation. Power transmission mechanism. 1,897,244; Feb. 14.
Dow Chemical Company, The. (See Chamberlain, Leonard C., assignor.)
Dow Chemical Company, The. (See Hunter, Ralph M., assignor.)
Dow Patents Holding Corporation. (See Dow, Alexander, assignor.)
Draisbach, Fritz, assignor to Chemische Fabrik Joh. A. Benckiser G. m. b. H., Ludwigshafen-on-the-Rhine, Germany. Producing crustless cheese. 1,897,892; Feb. 14.
Drake, Harcourt C., Hempstead, assignor to Sperry Products, Inc., Brooklyn, N. Y. Flaw detector. 1,897,610; Feb. 14.
Draper Corporation. (See Burdett, Horace H., assignor.)
Draper Corporation. (See Davis, Harry A., assignor.)
Dreyfus, Camille, New York, N. Y., and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Partial saponification of material containing organic esters of cellulose. 1,897,691; Feb. 14.
Dreyfus, Camille, New York, N. Y., and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Textile material and method of preparing the same. 1,897,793; Feb. 14.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Cracking petroleum oil. 1,897,245; Feb. 14.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Converting hydrocarbon oils. 1,897,576; Feb. 14.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Hydrocarbon oil conversion. 1,897,577; Feb. 14.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Cracking oils. 1,897,635; Feb. 14.
Du Chrome Film System Ltd. (See Kelley, William V. D., assignor.)
Ducroux, René, St. Nazaire, France. Ship's scuttle. 1,897,693; Feb. 14.
Duey, Harold P., Los Angeles, Calif. Toothbrush. 1,897,365; Feb. 14.
Dullts, Adolf, Wiesbaden, and J. Stawitz, assignors to Kalle & Co. Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Capsule made of cellulose esters and preparing it. 1,897,422; Feb. 14.
Duncan Electric Manufacturing Company. (See Green, Stanley S., assignor.)
Dunne-Patterson Company. (See Patterson, Julius E., assignor.)
Du Pont, E. I., de Nemours & Company. (See Bowers, Paul C., assignor.)
Du Pont, E. I., de Nemours & Company. (See Gubelmann, I., and Goodrich, assignors.)
Du Pont, E. I., de Nemours & Company. (See Gubelmann, I., Weiland, and Henke, assignors.)
Du Pont, E. I., de Nemours & Company. (See Henke, C. O., and Orthmann, assignors.)
Dupont, Jean G., assignor of one-third to H. J. Lucke, New York, N. Y. Garment shield and making the same. 1,897,952; Feb. 14.
Durand, Arthur F., Ravinia, Ill., assignor, by mesne assignments, to Saranac Machine Company, Benton Harbor, Mich. Basket. 1,897,366; Feb. 14.
Durham, George W., et al. (See Johnson, Austin C., assignor.)
Durnan, Edgar F., San Francisco, Calif. Engine. 1,897,553; Feb. 14.
Dur-O-Lite Pencil Company. (See Lynn, John P., assignor.)
Eastman Kodak Company. (See Allen, Charles E., assignor.)
Eastman Kodak Company. (See Capstaff, John G., assignor.)
Eastman Kodak Company. (See Couch, Henry R., assignor.)
Eastman Kodak Company. (See Frederick, C. W., and Eichelberger, assignors.)
Eastman Kodak Company. (See Hickman, Kenneth C. D., assignor.)
Eastman Kodak Company. (See Hickman, K. C. D., and Staib, jr., assignors.)
Eastman Kodak Company. (See Hopkins, Roy S., assignor.)
Eastman Kodak Company. (See Kennedy, Dewey M., assignor.)
Eastman Kodak Company. (See Leavitt, Roger P., assignor.)
Eastman Kodak Company. (See Noller, Carl R., assignor.)
Eastman Kodak Company. (See Othmer, Donald F., assignor.)
Eastman Kodak Company. (See Staud, C. J., and Fuess, assignors.)
Eastman Kodak Company. (See Tuttle, F. E., and Altman, assignors.)
Eclipse Aviation Corporation. (See Waselge, Charles R., assignor.)
Eclipse Machine Company. (See Kearney, Daniel P., assignor.)
Eclipse Machine Company. (See Sekella, Youston, assignor.)
Eclipse Machine Company. (See Whitney, Maurice P., assignor.)
Eclipse Textile Devices, Inc. (See Fassett, George R., assignor.)
Eddins, Sextus A., Quincy, Mass., assignor, by mesne assignments, to O. A. Miller Treeing Machine Company, Portland, Oreg. Shoe tree. 1,897,114; Feb. 14.
Edison, Thomas A., Incorporated. (See Edison, T. A., jr., and Carlson, assignors.)
Edison, Thomas A., jr., East Orange, and H. S. Carlson, Orange, assignors to Thomas A. Edison, Incorporated, West Orange, N. J. Toaster or like article. Des. 89,255; Feb. 14.
Edna Brass Manufacturing Company, The. (See Corey, Elmer O., assignor.)
Edwards, Frank W., assignor to The Ohio Injector Company of Illinois, Chicago, Ill. Lubricating apparatus. 1,897,503; Feb. 14.
Egloff, Gustav. (See Morrell, J. C., and Egloff.)
Egry Register Company, The. (See Pfeiffer, Frank H. and W. C., assignors.)

Elchelberger, William S. (See Frederick, C. W., and Elchelberger.)
Eisler, Henry, New York, N. Y., assignor to Emeth Financial Corporation. Hair device. 1,897,246; Feb. 14.
Eldred, Byron E., New York, N. Y., assignor to Radio Corporation of America. Condensed photophonographic sound record. 1,897,247; Feb. 14.
Eldridge, George E., Sac City, Iowa. Corn sheller separator. 1,897,367; Feb. 14.
Electric Smelting & Aluminum Co., The. (See Simpson, William J., assignor.)
Electrolux Corporation. (See Lambert, Sven E., assignor.)
Ellerbeck, William L. (See Karrick, L. C., and Ellerbeck.)
Elliott, Andrew P. (See Loeber, H. M., and Elliott.)
Elliott Company. (See Good, Paul E., assignor.)
Elliott, William. (See Dempster, C. B., and Elliott.)
Ellis, Arthur L., New Rochelle, N. Y., assignor to The Waterbury Tool Company, Waterbury, Conn. Driving mechanism for reciprocating machines. 1,897,468; Feb. 14.
Ellis, Carleton, Montclair, N. J. Paper composition and making same. 1,897,694; Feb. 14.
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Artificial resin from glycerol and the like. 1,897,977; Feb. 14.
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Resinous condensation product. 1,897,978; Feb. 14.
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Ellis, George H., and H. C. Olpin, Spondon, near Derby, England, assignors to Celanese Corporation of America. Dyeing or otherwise coloring of materials made with or containing cellulose esters or ethers. 1,897,794; Feb. 14.
Ellis, Ralph N., Des Moines, Iowa. Collapsible tube closure. 1,897,043; Feb. 14.
Elwell, Lloyd E., Los Angeles, Calif. Fuel injection system for internal combustion engines. 1,897,044; Feb. 14.
Emerson Electric Manufacturing Co. (See Persons, Laurence M., assignor.)
Emeth Financial Corporation. (See Eisler, Henry, assignor.)
Endacott, Paul S., assignor to Phillips Petroleum Company, Bartlesville, Okla. Customer's apparatus for storing and dispensing liquid gas. 1,897,160; Feb. 14.
Endacott, Paul S., assignor to Phillips Petroleum Company, Bartlesville, Okla. Liquefied gas distributor's servicing truck. 1,897,161; Feb. 14.
Endacott, Paul S., assignor to Phillips Petroleum Company, Bartlesville, Okla. Weighing apparatus for tank contained liquefied gas. 1,897,162; Feb. 14.
Endacott, Paul S., assignor to Phillips Petroleum Company, Bartlesville, Okla. Liquefied gas distributor's servicing truck. 1,897,164; Feb. 14.
Endacott, Paul S., and R. W. Thomas, assignors to Phillips Petroleum Company, Bartlesville, Okla. Method and apparatus for transportation and distribution of liquefied gas. 1,897,165; Feb. 14.
Ernst, Hans, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Convertible type feed system. 1,897,032; Feb. 14.
Erskine, Roy A., Cleveland, Ohio. Boat construction. 1,897,661; Feb. 14.
Evans, Richard, Highland Park, Ill. Molding rubber stamps and the like. 1,897,893; Feb. 14.
Ewest, Hans. (See Pirani, M., Ewest, and Gaidies.)
Eyston, George E. T., assignor to Powerplus (1927) Limited, London, England. Rotary pump machine. 1,897,190; Feb. 14.
Fairall, Harry K., assignor, by mesne assignments, to Multicolor Ltd., Los Angeles, Calif. Motion picture camera. 1,897,368; Feb. 14.
Fairall, Harry K., and W. T. Crespinel, assignors, by mesne assignments, to Multicolor Ltd., Los Angeles, Calif. Producing a color positive for use in a colored motion picture. 1,897,369; Feb. 14.
Fankboner, Harland, Chicago, Ill., assignor to The Goss Printing Press Company. Web controlling mechanism. 1,897,504; Feb. 14.
Farina, Giovanni, Turin, Italy. Explosion engine. 1,897,191; Feb. 14.
Farrar, Walter C. B., Huntington, Ind. Combined shear sharpening and corrugating device. 1,897,662; Feb. 14.
Farrell, Michael J., and L. Staffaroni, Scranton, Pa. Air brake system. 1,897,894; Feb. 14.
Farris, Cynthia L., St. Louis, Mo. Nail file handle. 1,897,754; Feb. 14.
Fassett, George R., Atlanta, Ga., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y. Yarn cleaner. 1,897,895; Feb. 14.
Fassinger, Charles, assignor to Oliver Iron & Steel Corporation, Pittsburgh, Pa. Insulator bracket and making the same. 1,897,385; Feb. 14.
Fawthrop, William D., Seattle, Wash. Adhesive and making the same. 1,897,469; Feb. 14.
Fazekas, Anton, San Francisco, Calif. Wicket grille. Des. 89,275; Feb. 14.
Fazekas, Anton, San Francisco, Calif. Wicket grille. Des. 89,276; Feb. 14.
Federal Laboratories, Inc. (See Young, John W., assignor.)
Feldenheimer, Roy. (See Williams, Arthur H. T., assignor.)
Ferguson, William J., assignor of one-half to Benjamin Geller, Yonkers, N. Y. Hose hanger. 1,897,248; Feb. 14.
Fernstrom, John O., assignor to Barrett-Cravens Company, Chicago, Ill. Lift truck. 1,897,637; Feb. 14.
Ferri, Filiberto, Milan, Italy. Device for preventing gonorrhea infection. 1,897,423; Feb. 14.
Ferris, John P., assignor to The Oilgear Company, Milwaukee, Wis. Broaching machine. 1,897,386; Feb. 14.
Finch, James L. (See Carter, P. S., and Finch.)
Finn, Sidney J. (See Macleod, A. A., and Finn.)
Fischer, Fritz. (See Hartmann, A., Höfinghoff, and Fischer.)
Fisher Body Corporation. (See Johnston, David R., assignor.)
Fitzgerald, Thomas W., Boston, Mass. Socket for electric light bulbs. 1,897,115; Feb. 14.
Flack, A. C. (See Lutes, Arthur M., assignor.)
Fleck, Matthias, Torquay, Saskatchewan, Canada. Gate. 1,897,554; Feb. 14.
Fleming, Wilfred K., Cambridge, assignor to Raytheon Inc., Cambridge, Mass. Electrical system. 1,897,249; Feb. 14.
Flint, Frank C., Chicopee Falls, Mass. Fastener for shoe bags. 1,897,306; Feb. 14.
Flodin, Victor E., Oak Park, assignor to Crane Co., Chicago, Ill. Radiator reaming, facing, and tapping machine. 1,897,505; Feb. 14.
Földi, Zoltan, Budapest, Hungary, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of C-alkyl and C-aralkyl derivatives of aromatic compounds. 1,897,795; Feb. 14.
Food Machinery Corporation. (See Jones, Lloyd E., assignor.)
Ford, Andrew F., incompetent, by Iva Walls, guardian, Dayton, Wash. Gearless differential. 1,897,555; Feb. 14.
Forssell, Carl Abraham, Stockholm, Sweden. Suspension bridge. 1,897,470; Feb. 14.
Forsythe, James B. (See Gaubert, J. Q., Brump, and Forsythe.)
Foster, John P., Paia, Hawaii. Purifying sugar juices. 1,897,424; Feb. 14.
Foster Wheeler Corporation. (See Primrose, John, assignor.)
Foulke, Ted E., Nutley, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Regulator. 1,897,474; Feb. 14.
Foundry Equipment Company, The. (See McCann, H. P., and Baker, assignors.)
Fox Edge Co. Inc., The. (See Fox, Harry, assignor.)
Fox, Harry, assignor to The Fox Edge Co. Inc., Lowell, Mass. Upholstery edge. 1,897,928; Feb. 14.
Foxboro Company, The. (See Mason, Clesson E., assignor.)
Fraser, Earl, Rockland, Ill., assignor to McCarthy Improvement Company, Davenport, Iowa. Plow. 1,897,695; Feb. 14.
Frederick, Charles W., and W. S. Eichelberger, assignors to Eastman Kodak Company, Rochester, N. Y. Objective. 1,897,896; Feb. 14.
Free, Walter H., New Rochelle, N. Y. Refrigerating device. 1,897,723; Feb. 14.
Freiberg, Stanley B., assignor to International Visible Systems Corporation, Cincinnati, Ohio. Card filing device. 1,897,929; Feb. 14.
Freiberg, Stanley B., assignor to International Visible Systems Corporation, Cincinnati, Ohio. Card filing device. 1,897,930; Feb. 14.
Freiberg, Stanley B., assignor to International Visible Systems Corporation, Cincinnati, Ohio. Shifting mechanism for card filing devices. 1,897,931; Feb. 14.
French, George F., Stamford, Conn., assignor to Riegel Paper Corporation, Riegelsville, N. J. Apparatus for measuring differential speed. 1,897,472; Feb. 14.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 89,277; Feb. 14.
Frei, John, jr., Chicago, Ill. Yieldable barrier. 1,897,250; Feb. 14.
Frey, Charles N., New York, N. Y., assignor, by mesne assignments, to Standard Brands Incorporated, Dover, Del. Food product. 1,897,251; Feb. 14.
Fried. Krupp Aktiengesellschaft. (See Ingenkamp, Matthias, assignor.)
Friedman, John H., assignor to The National Machinery Company, Tiffin, Ohio. Nut blank sorter for tapping machines and the like. 1,897,116; Feb. 14.
Friedrichsen, Heinrich, Berlin-Treptow, Germany, assignor to General Electric Company. Electric glow lamp. 1,897,473; Feb. 14.
Fritts, Wilfred G., Lexington, N. C. Tire cutting machine. 1,897,425; Feb. 14.
Fritz, Frank, Toronto, Ontario, Canada. Internal combustion engine. 1,897,897; Feb. 14.
Fritze, Otto, Berlin, Germany, assignor to General Electric Company. Gaseous electric discharge device. 1,897,474; Feb. 14.
Frost, Louis H. (See Stewart, E. P., and Frost.)
Fry, Jacob R., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Relay. 1,897,045; Feb. 14.
Fuel Oil Carburetion Co. (See Garibaldi, Guiseppe, assignor.)

Fuess, James T. (See Staud, C. J., and Fuess.)
Fuhs, Francis P. (See Schlorring, H. W., and Fuhs.)
Fulle, Charles A., jr., Montclair, N. J. Bottle. Des. 89,257; Feb. 14.
Fuller Brush Company, The. (See Cave, Henry, assignor.)
Fulton, Otho, Sundridge Park, Bromley, England. Electrical transmission of pictures. 1,897,796; Feb. 14.
Furness, Alma B. (See Nigeradse, Vladimir, assignor.)
Gable, C. P., et al. (See Butterworth, Samuel D., assignor.)
Gabriel Karl-Keen Company, The. (See Wilson, William W., assignor.)
Gaidies, Georg. (See Pirani, M., Ewest, and Gaidies.)
Gaisman, Henry J., New York, and C. Schumacher, Lynnbrook, N. Y., assignors, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Sharpening machine. 1,897,724; Feb. 14.
Gale, Charles E., Quincy, Mass. Making books. 1,897,839; Feb. 14.
Gardner, John E., assignor to Grigsby-Grunow Company, Chicago, Ill. Radio receiving system. 1,897,252; Feb. 14.
Garibaldi, Giuseppe, Stamford, Conn., assignor to Fuel Oil Carburetion Co., Inc., New York, N. Y. Heavy oil carburetor and preheater. 1,897,033; Feb. 14.
Garner, Herman H., assignor to Vortox Manufacturing Company, Claremont, Calif. Deflector plate for air filters. 1,897,370; Feb. 14.
Garner, Herman H., and F. R. Nohavec, Claremont, and G. H. Hopkins, Pasadena, assignors to Vortox Manufacturing Company, Claremont, Calif. Cleanable inlet for air cleaners. 1,897,371; Feb. 14.
Garner, Herman H., and F. R. Nohavec, Claremont, and G. H. Hopkins, Pasadena, assignors to Vortox Manufacturing Company, Claremont, Calif. Air cleaner. 1,897,372; Feb. 14.
Garve, Treumund W., Columbus, Ohio. Tunnel drier. 1,897,387; Feb. 14.
Gathmann, Emil, Baltimore, Md. Apparatus for stripping ingots from ingot molds. 1,897,696; Feb. 14.
Gaubert, John Q., H. L. Brump, and J. B. Forsythe, assignors to General Motors Radio Corporation, Dayton, Ohio. Radio coil and shield mounting. 1,897,253; Feb. 14.
Gaus, Wilhelm, K. Hochschwender, and W. Schunck, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Extracting carbon dioxid from gaseous mixture and forming alkaline carbonates. 1,897,725; Feb. 14.
Gebhardt, Wilhelm. (See Paschen, P., Ritter, Stauber, Gebbardt, and Schmiedel.)
Geller, Benjamin. (See Ferguson, William J., assignor.)
General Aniline Works, Inc. (See Heidenreich, Rudolf M., assignor.)
General Aniline Works, Inc. (See Hentrich, W., Wieners, and Stroebel, assignors.)
General Aniline Works, Inc. (See Herz, R., Albrecht, and Dereser, assignors.)
General Aniline Works, Inc. (See Honold, Ernst, assignor.)
General Aniline Works, Inc. (See Krech, R., Scheurer, and Koch, assignors.)
General Aniline Works, Inc. (See Neresheimer, H., and Boehner, assignors.)
General Aniline Works, Inc. (See Zitscher, A., and Seidenfaden, assignors.)
General Aviation Corporation. (See Midboe, Gabriel, assignor.)
General Electric Company. (See Friedrichsen, Heinrich, assignor.)
General Electric Company. (See Fritze, Otto, assignor.)
General Electric Company. (See Hilgers, Nino, assignor.)
General Electric Company. (See Kienle, R. H., and Roblfs, assignors.)
General Electric Company. (See La Pierre, Cramer W., assignor.)
General Electric Company. (See Osenberg, Carl, assignor.)
General Electric Company. (See Pirani, Marcello, assignor.)
General Electric Company. (See Pirani, M., Ewest, and Gaidies, assignors.)
General Electric Company. (See Watts, Noble H., assignor.)
General Electric Company. (See Wiegand, K., and Habel, assignors.)
General Electric Vapor Lamp Company. (See Foulke, Ted E., assignor.)
General Electric Vapor Lamp Company. (See Kenty, Carl E., assignor.)
General Electric Vapor Lamp Company. (See Malley, Roy D., assignor.)
General Electric Vapor Lamp Company. (See Millar, George A., assignor.)
General Electric Vapor Lamp Company. (See Walker, Warren R., assignor.)
General Electric Vapor Lamp Company. (See Walker, W. R., and Moos.)
General Motors Corporation. (See Anibal, Benjamin H., assignor.)
General Motors Corporation. (See Bower, Ferdinand A., assignor.)
General Motors Corporation. (See Brooke, Arthur O., assignor.)
General Motors Corporation. (See Harris, Arthur W., assignor.)
General Motors Corporation. (See Jansson, Axel J., assignor.)
General Motors Corporation. (See Kessler, Williamson D., assignor.)
General Motors Corporation. (See Leach, Albert E., assignor.)
General Motors Radio Corporation. (See Gaubert, J. Q., Brump, and Forsythe, assignors.)
General Motors Research Corporation. (See Berry, George P., assignor.)
General Motors Research Corporation. (See Godley, Charles E., assignor.)
General Motors Research Corporation. (See Hallett, George E. A., assignor.)
General Motors Research Corporation. (See Martin, Edward J., assignor.)
General Motors Research Corporation. (See Mougey, Harry C., assignor.)
General Motors Research Corporation. (See Wittlinger, Leonard M., assignor.)
General Spring Bumper Corporation. (See Short, Bladen M., assignor.)
General Talking Pictures Corporation. (See Seaholm, Charles H., assignor.)
General Zeolite Company. (See Hughes, W. J., Green, and Hodges, assignors.)
Gerard, Léon, Sevres, assignor to P. Viet, Billancourt, Seine, France. Automatic pressure regulating device. 1,897,898; Feb. 14.
Gerten, Nicholas, Douglaston, N. Y., and R. L. Jenner, East Orange, N. J., assignors to Blaw Knox Company, Blawnox, Pa. Wave antenna. 1,897,378; Feb. 14.
Gillette Safety Razor Company. (See Davis, Albert G., assignor.)
Gillette Safety Razor Company. (See Gaisman, H. J., and Schumacher, assignors.)
Gillette Safety Razor Company. (See Jones, Archdale J., assignor.)
Gillette Safety Razor Company. (See Maas, Nathan R., assignor.)
Gillette Safety Razor Company. (See Muros, Joseph, assignor.)
Gillette Safety Razor Company. (See Thompson, Ralph E., assignor.)
Gilmond, Percival O., Hamden, Conn. Toy store. Re18,738; Feb. 14.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Railway refrigerator car. 1,897,426; Feb. 14.
Glass, Perley R., Wayland, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastener supplying mechanism. 1,897,046; Feb. 14.
Gleason, Stanley F., Philadelphia, Pa. Cooking utensil. 1,897,899; Feb. 14.
Gladville, Glenn V. (See Brassert, W., and Gladville.)
Godley, Charles E., Ypsilanti, assignor to General Motors Research Corporation, Detroit, Mich. Lamp socket. 1,897,797; Feb. 14.
Goebel, Max, Grand Rapids, Mich. Pipe cutter. 1,897,374; Feb. 14.
Good, Paul E., Riverton, N. J., assignor to Elliott Company, Jeannette, Pa. Method and apparatus for minimising sound. 1,897,649; Feb. 14.
Goodman Manufacturing Company. (See Lindgren, Frank A., assignor.)
Goodrich, Robert J. (See Gubelmann, I., and Goodrich.)
Goodyear Tire & Rubber Company, The. (See De Mattia, Barthold, assignor.)
Gordon, Frederick F., Sheffield, England. Compound body for the production of hollow drill steel. 1,897,663; Feb. 14.
Goss Printing Press Company, The. (See Fankboner, Harland, assignor.)
Gould Coupler Company, The. (See Richards, Willard F., assignor.)
Govers, Francis X., Vincennes, Ind., assignor to Indian Refining Company, Lawrenceville, Ill. Recovery of solvents from mixtures containing the same. 1,897,979; Feb. 14.
Grace, Bertram B., T. S. Skillman, A. H. Roche, and E. K. Sandeman, Aldwych, London, England, assignors to Western Electric Company Incorporated, New York, N. Y. Frequency discrimination signaling system. 1,897,047; Feb. 14.
Graham, Herbert R., Miller, S. Dak., assignor to Johnson & Johnson, New Brunswick, N. J. Storing and dispensing surgical adhesive plaster. 1,897,969; Feb. 14.
Graham, Joshua F., Maynard, Mass. Power operated hedge clippers. 1,897,117; Feb. 14.
Graham, Virgil M., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Combined radioreceiver and electrical phonograph. 1,897,557; Feb. 14.
Graham, Virgil M., and W. T. Powell, assignors to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Power supply system for vacuum tube amplifying devices. 1,897,558; Feb. 14.
Grahame, James H. (See Watson, C. W., and Grahame.)
Grasswick, Carl A., Valley City, N. Dak. Combine harvester for cutting and threshing grain. 1,897,611; Feb. 14.

Gray, Worth M., Elkin, N. C. Fly swatter. 1,897,697; Feb. 14.

Greear, Everett B., assignor of one-half to C. B. Stallard, Sharondale, Ky. Boat davit support. 1,897,307; Feb. 14.

Green, Stanley S., Indianapolis, assignor to Duncan Electric Manufacturing Company, Lafayette, Ind. Circuit controller. 1,897,118; Feb. 14.

Green, Walter H. (See Hughes, W. J., Green, and Hodges.)

Greene, Edward, Newark, N. J. Document record device. 1,897,755; Feb. 14.

Greene, Frederick E., assignor to The Greist Manufacturing Company, New Haven, Conn. Ash tray. Des. 89,256; Feb. 14.

Greene, George H., Kalamazoo, Mich. Ladder foot. 1,897,840; Feb. 14.

Greenwald, Harold A., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Front plate construction for tray compartments. 1,897,192; Feb. 14.

Greenwald, Harold A., assignor to Whitehead & Kales Company, River Rouge, Mich. Wheel. 1,897,875; Feb. 14.

Greist Manufacturing Company, The. (See Greene, Frederick E., assignor.)

Greve, John E. W., assignor to Astrawerke Aktiengeeellschaft, Chemnitz, Germany. Adding and calculating machine. 1,897,932; Feb. 14.

Grigsby-Grunow Company. (See Gardner, John E., assignor.)

Grigsby-Grunow Company. (See Kenney, Mahlon W., assignor.)

Grigsby-Grunow Company. (See Maccabee, David E., assignor.)

Grilli, John P. (See Wille, F., and Grilli.)

Griscom-Russell Company, The. (See Price, J., and Brown, assignors.)

Groh, Walter L. (See Bowman, H. T., and Groh.)

Grund, Fletcher D., deceased, by W. E. Singer, Weston, administrator; said Grund assignor to The American Swiss Company, Toledo, Ohio. Spindle securing means for door latches. 1,897,698; Feb. 14.

Guardian Trust Company, The. (See Bowman, H. T., and Groh, assignors.)

Guardian Trust Company, The. (See Van Wormer, John R., assignor.)

Gubelmann, Ivan, and R. J. Goodrich, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company. Vat dyestuff and making the same. 1,897,119; Feb. 14.

Gubelmann, Ivan, H. J. Weiland, and C. O. Henke, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company. Treating bath and treating textile fibers. 1,897,120; Feb. 14.

Gustafsson, Eric. (See Long, R., and Gustafsson.)

Guthke, Friedrich W., Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Desulphurization of crude aromatic hydrocarbons. 1,897,798; Feb. 14.

Guthrie, Robert G., and O. J. Wozasek, assignors to Peoples Gas By-Products Corporation, Chicago, Ill. Electrode for electron discharge tubes and forming the same. 1,897,933; Feb. 14.

Haabestad, Erling H., Springfield, assignor to Hydrol Chemical Company, Inc., Philadelphia, Pa. Composition of matter with process for treating artificial grass. 1,897,900; Feb. 14.

Haas, William F., Rockaway, N. Y. Clasp. Des. 89,278; Feb. 14.

Habel, Julius. (See Wiegand, K., and Habel.)

Hagopian, Albert D., Modesto, Calif. Fruit handling equipment. 1,897,901; Feb. 14.

Hahn, Henry, Cedarhurst, N. Y. Aeroplane. 1,897,756; Feb. 14.

Haight, John T., Rockford, Ill. Music holder. 1,897,799; Feb. 14.

Halford, James E., Sacramento, Calif. Valve oiling and gas diluting device. 1,897,388; Feb. 14.

Hall, Joseph M., Hamilton, Ontario, Canada, assignor to Universal Draft Gear Attachment Co. Shock absorber. 1,897,730; Feb. 14.

Hall, Louis M., Fort Thomas, Ky., and H. McCreary, Youngstown, assignors to The Monarch Tool & Manufacturing Company, Cincinnati, Ohio. Coin-controlled device. 1,897,193; Feb. 14.

Hall, Willis B., et al. (See Rowe, Alton J., assignor.)

Hallett, George E. A., assignor to General Motors Research Corporation, Detroit, Mich. Rear wheel arrangement for motor busses. 1,897,934; Feb. 14.

Hancock Manufacturing Co. (See Marple, Rollo, assignor.)

Handy, Clarence L. (See Handy, Floyd V. and C. L.)

Handy, Floyd V. and C. L., Lynden, Wash.; said Floyd V. Handy assignor to said C. L. Handy. Straw collector. 1,897,254; Feb. 14.

Hansen Canning Machine Corporation. (See Hansen, Oswald H., assignor.)

Hansen, Charles C., assignor, by direct and mesne assignments, to Specialty Sales Corporation, Limited, Los Angeles, Calif. Bolt cutter and punch. 1,897,514; Feb. 14.

Hansen, Oswald H., assignor to Hansen Canning Machinery Corporation, Cedarburg, Wis. Apparatus for treating beans. 1,897,664; Feb. 14.

Hansen, Oswald H., assignor to Hansen Canning Machinery Corporation, Cedarburg, Wis. Can filling machine. 1,897,665; Feb. 14.

Harbecke, Herman H., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Automatic charging and voltage regulating system. 1,897,800; Feb. 14.

Harnsberger, Audley E., and A. L. Christy, assignors to The Pure Oil Company, Chicago, Ill. Apparatus for refining hydrocarbon oil. 1,897,389; Feb. 14.

Haroldson, Arthur H. (See Richards, B. H. F., and Haroldson.)

Harris, Arthur W., Toledo, Ohio, assignor to General Motors Corporation, Detroit, Mich. Transmission shifting mechanism. 1,897,841; Feb. 14.

Harris, Irving C., Los Angeles, Calif. Drilling machine. 1,897,121; Feb. 14.

Harris, Sidney E. (See Christiansen, W. G., and Harris.)

Harrison, Laurence R., Tujunga, and S. E. Noyes, assignors, by mesne assignments, to Stanley E. Noyes, Los Angeles, Calif. Dental impression material. 1,897,034; Feb. 14.

Harry, James E., Augusta, Kans. Comb cleaner. 1,897,935; Feb. 14.

Harsanyi, Eugene, Budapest, Hungary. Coating radiant bodies. 1,897,902; Feb. 14.

Hart, Charles, Media, assignor, by mesne assignments, to W. S. Jackson, Philadelphia, Pa. Method and apparatus for mixing a furnace charge. 1,897,647; Feb. 14.

Hart, Henry J., West Hartford, Conn., assignor to Royal Typewriter Company, New York, N. Y. Typewriting machine. 1,897,699; Feb. 14.

Hartford-Empire Company. (See Wadman, Harold A., assignor.)

Hartmann, August, W. Höfinghoff, and F. Fischer, Barmen, Germany, assignors to American Bemberg Corporation, New York, N. Y. Apparatus for treating single threads with liquids. 1,897,122; Feb. 14.

Harvey, Leo M., Los Angeles, Calif. Strap tying machine. 1,897,650; Feb. 14.

Harvey, Samuel W., New Haven, Conn. Disappearing canopy top for the rumble seats of automobiles. 1,897,946; Feb. 14.

Hastings, Warren B., Norfolk, Va. Safety apparatus for highways. 1,897,123; Feb. 14.

Hatfield Wire and Cable Co. (See Brown, Joseph D., assignor.)

Hatton, William, Paris, France, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,897,048; Feb. 14.

Hausner, Ben Z., Yonkers, N. Y. Snap fastener. 1,897,936; Feb. 14.

Hawes, Charlie L., Ashtabula, Ohio. Polishing and grinding machine. 1,897,049; Feb. 14.

Hawkins, Rollyn, Indianapolis, Ind. Siphon cream remover. 1,897,194; Feb. 14.

Headon, Frank, Great Neck, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,279; Feb. 14.

Headon, Frank, Great Neck, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,280; Feb. 14.

Healy, Raymond, New York, N. Y. Court marking tape. 1,897,801; Feb. 14.

Heath, Leslie O., assignor to Leeds & Northrup Company, Philadelphia, Pa. Apparatus for speed control. 1,897,876; Feb. 14.

Hedstrom, Eric L., Buffalo, N. Y. Coupling for detachably connecting the handle and neck of tennis racket shafts and similar members. 1,897,515; Feb. 14.

Heidenreich, Rudolf M., Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the anthanthrone series and preparing the same. 1,897,427; Feb. 14.

Heinecke, William, Sabula, Iowa. Proof press. 1,897,757; Feb. 14.

Heising, Raymond A., Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric wave transmission. 1,897,050; Feb. 14.

Helfrecht, Aaron J., assignor to Burgess Battery Company, Madison, Wis. Tamping machine. 1,897,612; Feb. 14.

Helpling, Louis G., Wapakoneta, Ohio. Bench. 1,897,877; Feb. 14.

Hemmerich, Hugo, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Yarn and knitted wearing apparel produced therefrom. 1,897,051; Feb. 14.

Hemphill Company. (See Lawson, John and R. H., assignors.)

Hemphill Company. (See Lawson, Robert H. assignor.)

Henke, Clyde O. (See Gubelmann, I., Weiland, and Henke.)

Henke, Clyde O., South Milwaukee, and A. C. Orthmann, Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company. Tanning. 1,897,124; Feb. 14.

Henkel, Adolph A., Chicago, Ill., assignor, by mesne assignments, to Henkel Edge-Lite Corporation. Adjustable lamp support. 1,897,802; Feb. 14.

Henkel Edge-Lite Corporation. (See Henkel, Adolph A., assignor.)

Hentrich, Winfrid, Nuremberg, and F. Wiemers and R. Stroebel, Opladen, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the anthraquinone cyanuric series. 1,897,428; Feb. 14.

Herbest, Thomas R., jr., assignor to The Consolidated Expanded Metal Companies, Wheeling, W. Va. Method of and apparatus for manufacturing lath. 1,897,803; Feb. 14.

Herbest, Thomas R., jr., assignor to The Consolidated Expanded Metal Companies, Wheeling, W. Va. Metallic lathing. 1,897,842; Feb. 14.

Hercules Powder Company. (See Humphrey, Irvin W., assignor.)

Herz, Richard, Frankfort-on-the-Main, E. Albrecht, Hochenheim near Frankfort-on-the-Main, and R. Dereser, Hochst-on-the-Main, Germany, assignors to General Aniline Works Inc., New York, N. Y. Manufacturing phenylthioglycollic acids, containing halogen and alkyl groups in their molecule. 1,897,516; Feb. 14.

Hess-Bright Manufacturing Company, The. (See Beckett, Harry S., assignor.)

Hetherington, Robert, Sharon Hill, Pa. Clamping bracket. 1,897,578; Feb. 14.

Heuvelink, Dirk J., Eindhoven, Netherlands, assignor to Radio Corporation of America. Discharge tube. 1,897,255; Feb. 14.

Hickman, Kenneth C. D., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic printing method. 1,897,844; Feb. 14.

Hickman, Kenneth C. D., and L. A. Staib, jr., assignors to Eastman Kodak Company, Rochester, N. Y. Light sensitive tropochromic coating. 1,897,843; Feb. 14.

Hicks, Frank B. (See Coleman, S. G., and Hicks.)

Hildenbrand, Glenn. (See Parks, Robert D., and Hildenbrand.)

Hilgers, Nino, Berlin-Charlottenburg, Germany, assignor to General Electric Company. Control system. 1,897,845; Feb. 14.

Hiller, Nicolai H., Carbondale, Pa. Liquid heater. 1,897,758; Feb. 14.

Hillyard, Newton S., St. Joseph, Mo. Mop. 1,897,726; Feb. 14.

Himberger, Earl W., assignor to Pacific Marine Supply Company, Seattle, Wash. Portable power pump. 1,897,256; Feb. 14.

Himmel Brothers Company, The. (See Himmel, Fred and I., assignors.)

Himmel, Fred and I., assignors to The Himmel Brothers Company, New Haven, Conn. Store-front construction. 1,897,475; Feb. 14.

Himmel, Fred and I., assignors to The Himmel Brothers Company, New Haven, Conn. Cushioning for mounting sheets of glass. 1,897,476; Feb. 14.

Himmel, Isidore. (See Himmel, Fred, and I.)

Hinkle Company, Inc. (See Hinkle, Jonathan G. E., assignor.)

Hinkle, Jonathan G. E., Bethany, assignor to Hinkle Company, Inc., Kansas City, Mo. Anesthetic apparatus. 1,897,278; Feb. 14.

Hipke, Kurt, Dessau in Anhalt, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Protecting film roll from the entry of light. 1,897,429; Feb. 14.

Hoagland, Frank O., West Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Machine tool spindle. 1,897,666; Feb. 14.

Hochschwender, Karl. (See Gaus, W., Hochschwender, and Schunck.)

Hodges, Albert B. (See Hughes, W. J., Green, and Hodges.)

Hoffman, Benjamin P., assignor of one-half to C. S. Jones, Tulsa, Okla. Packing. 1,897,804; Feb. 14.

Hofinghoff, Walter. (See Hartmann, A., Höfinghoff, and Fischer.)

Hofmann, Alfred, Palisade, and O. Kanis, Lyndhurst, assignors to Alfred Hofmann Needle Works, Inc., Union City, N. J. Wire-feeding and cutting machine. 1,897,970; Feb. 14.

Hofmann, Alfred & Company. (See Anderson, V., and Trutner, assignors.)

Hofmann, Alfred, Needle Works, Inc. (See Hofmann, A., and Kanis, assignors.)

Hoke, Frank. (See Rossebo, G. H., and Hoke.)

Hoke, Frank, assignor to Holcomb & Hoke Manufacturing Company, Indianapolis, Ind. Coin controlled switch. 1,897,955; Feb. 14.

Holcomb & Hoke Manufacturing Company. (See Hoke, Frank, assignor.)

Holcomb & Hoke Manufacturing Company. (See Rossebo, G. H., and Hoke, assignors.)

Hollerith, Charles, Jackson, assignor, by mesne assignments, to Ternstedt Manufacturing Company, Detroit, Mich. Hood latch. 1,897,805; Feb. 14.

Holman, Leslie A., Waltham, Mass. Framing plate holder for motion picture projectors. 1,897,477; Feb. 14.

Holzwarth Gas Turbine Co. (See Holzwarth, Hans, assignor.)

Holzwarth, Hans, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Apparatus for operating explosion turbines with solid fuel. 1,897,478; Feb. 14.

Honold, Ernst, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New vat dyestuff of the anthraquinone series. 1,897,430; Feb. 14.

Hoover Company, The. (See Nelson, Rudolph S., assignor.)

Hopkins, George H. (See Garner, H. H., Nohavec, and Hopkins.)

Hopkins, Roy S., assignor to Eastman Kodak Company, Rochester, N. Y. Automatic control for photographic recording machines. 1,897,903; Feb. 14.

Hopkinson, Ernest, New York, N. Y., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Manufacture of fibrous sheet material. 1,897,479; Feb. 14.

Horton, Frank B., Los Angeles, Calif. Bottle washer. 1,897,052; Feb. 14.

Hose Stayput Tool Company. (See McKee, Glenn L., assignor.)

Houge, Severt O., Slater, Iowa. Grease rack. 1,897,053; Feb. 14.

Howard Hosiery Company. (See Stevenson, Frank, assignor.)

Howden, Peter, assignor to British Rema Manufacturing Co., Ltd., Halifax, England. Centrifugal apparatus for dust extraction. 1,897,195; Feb. 14.

Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Fan structure. 1,897,947; Feb. 14.

Hubbell, Irving D., assignor to Silica Company of California, Ltd., San Francisco, Calif. Purifying art. 1,897,638; Feb. 14.

Huber, Hans. (See Mändlen, H., and Huber.)

Hughes, Ralph C., assignor to Reynolds Gas Regulator Co., Anderson, Ind. Pressure regulator. 1,897,517; Feb. 14.

Hughes, Walter J., W. H. Green, and A. B. Hodges, assignors to General Zeolite Company, Chicago, Ill. Vapor purifier. 1,897,727; Feb. 14.

Hulse, George E., assignor, by mesne assignments, to the Safety Car Heating and Lighting Company, New Haven, Conn. Heater control system. 1,897,980; Feb. 14.

Hult, John A., Cleveland, and P. M. Colquhoun, Lakewood, Ohio, assignors, by mesne assignments, to Multigraph Company, Wilmington, Del. Stripping and truing address plates. 1,897,125; Feb. 14.

Humphrey, Irvin W., Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del. Refining rosin. 1,897,379; Feb. 14.

Humphrey, Otis L., Lowell, Mass. Slub catcher. 1,897,518; Feb. 14.

Hunt, Albert P. (See MacLachlan, John C., assignor.)

Hunt, Emma F., New York, N. Y. Combination machine and wood screw. 1,897,196; Feb. 14.

Hunter, Charles E., Wimbledon, assignor to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Counter-pressure member for sheet feeding and like machines. 1,897,054; Feb. 14.

Hunter, Frederick L., jr., Towaco, assignor to De Forest Radio Telephone & Telegraph Co., Jersey City, N. J. Making electron discharge device. 1,897,480; Feb. 14.

Hunter, Ralph M., assignor to The Dow Chemical Company, Midland, Mich. Apparatus for electrolysis of a fused bath. 1,897,309; Feb. 14.

Hunter, Robert F., et al. (See Nagel, Hugo, assignor.)

Hurxthal, Alpheus O., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Pasting mechanism for chemical driers. 1,897,904; Feb. 14.

Husain, Tajamul, Roseville, and G. A. Bole, Columbus, Ohio, assignors, by mesne assignments, to Cellular Clay Corporation, Pittsburgh, Pa. Producing a cellular clay body. 1,897,667; Feb. 14.

Hydraulic Brake Company. (See Bowen, Myron W., assignor.)

Hydrol Chemical Company. (See Haabestad, Erling H., assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Földi, Zoltan, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Gaus, W., Hochschwender, and Schunck, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Guthke, Friedrich W., assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Luther, M., and Beller, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Ott, K., and Bernard, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Teller, Fritz, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Ulrich, H., and Saurwein, assignors.)

Indian Refining Company. (See Govers, Francis X., assignor.)

Ingenkamp, Matthias, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Quadrangular tube. 1,897,126; Feb. 14.

Ingersoll-Rand Company. (See Terry, Edward F., assignor.)

International Air Brake Control Company. (See Selferle, Oliver, assignor.)

International Paper Box Machine Company, The. (See Labombarde, Harold S., assignor.)

International Resistance Company. (See Pender, Harold, assignor.)

International Visible Systems Corporation. (See Freiberg, Stanley B., assignor.)

Israel, Derman D., assignor to The Crosley Radio Corporation, Cincinnati, Ohio. Loud speaker operation and circuit. 1,897,390; Feb. 14.

Jackson, William S. (See Hart, Charles, assignor.)

Jansson, Axel J., Flint, assignor to General Motors Corporation, Detroit, Mich. Pivot joint. 1,897,806; Feb. 14.

Jansson, Gustav E., Atlantic, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Vacuum-type insulating bushing. 1,897,257; Feb. 14.
Jenkins, Charles F., assignor to Jenkins Laboratories, Washington, D. C. Electric transmission of visual representation. 1,897,481; Feb. 14.
Jenkins Laboratories. (See Jenkins, Charles F., assignor.)
Jenkins Television Corporation. (See Keogan, Charles J., assignor.)
Jenne, Carl F., Carnation, Wash. Bassinet. 1,897,258; Feb. 14.
Jenner, Ralph L. (See Gerten, N., and Jenner.)
Jensen, Aage, Los Angeles, Calif. Apparatus for treating liquids. 1,897,613; Feb. 14.
Jensen Creamery Machinery Company. (See Cornell, Fritz G., jr., assignor.)
Jenson, Kenneth S., assignor to American Gas Machine Company, Albert Lea, Minn. Chimney hanger for burners. 1,897,728; Feb. 14.
Johanson, Carl U., et al. (See Anderson, Carl J., assignor.)
Johns-Manville Corporation. (See Seigle, William R., assignor.)
Johnson, Allen S., Bethlehem, Pa. Flower stand. 1,897,905; Feb. 14.
Johnson, Austin C., Chicago, assignor of one-half to R. G. Crossley, Elmhurst, and one-half to G. W. Durham, Chicago, Ill. Polishing and cleaning device. 1,897,981; Feb. 14.
Johnson, Joel B., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Wrench. 1,897,614; Feb. 14.
Johnson & Johnson. (See Graham, Herbert R., assignor.)
Johnson, Oscar G., Bayside, N. Y. Weather-strip. 1,897,127; Feb. 14.
Johnson Service Company. (See Otto, Arthur J. and C. A., assignors.)
Johnston, David R., assignor to Fisher Body Corporation, Detroit, Mich. Polishing tool. 1,897,971; Feb. 14.
Jolas, Franz, Cologne, Germany. Heating plate. 1,897,197; Feb. 14.
Jones, Archdale J., New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,897,982; Feb. 14.
Jones, Arthur A., Chino, Calif. Signal switch for automobiles. 1,897,906; Feb. 14.
Jones, Charles S. (See Hoffman, Benjamin P., assignor.)
Jones, Clarence O., Norfolk, Va. Tool. 1,897,700; Feb. 14.
Jones, Lloyd E., Santa Monica, assignor to Food Machinery Corporation, San Jose, Calif. Conveyer. 1,897,431; Feb. 14.
Jones, William S. (See Christiansen, W. G., Jones, and Moness.)
Jones, William W. (See Malvern, E. N., Clary, and Jones.)
Joyce, Maurice E., Brentwood, assignor of one-half to E. L. Mahoney, Lanham, Md. Seal for compressors. 1,897,937; Feb. 14.
Kalle & Co. Aktiengesellschaft. (See Dulitz, A., and Stawitz, assignors.)
Kanis, Oswin. (See Hofmann, A., and Kanis.)
Karge, Maxwell R., Brockport, N. Y. Refrigerating unit. 1,897,907; Feb. 14.
Karmac Inc. (See Karnell, Robert D., assignor.)
Karnell, Robert D., assignor to Karmac Inc., Cleveland, Ohio. Signal chime. Des. 89,281; Feb. 14.
Karr, Charles, Company. (See Karr, Francis, assignor.)
Karr, Francis, assignor, by mesne assignments, to Charles Karr Company, Holland, Mich. Spring assembly. 1,897,309; Feb. 14.
Karrick, Lewis C., and W. L. Ellerbeck, Salt Lake City, Utah. Apparatus for calcining gypsum. 1,897,259; Feb. 14.
Kaufmann, James J., Bayside, assignor to Doughnut Machine Corporation, New York, N. Y. Display device. 1,897,558; Feb. 14.
Kearney, Daniel P., Royal Oak, Mich., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starting mechanism. 1,897,938; Feb. 14.
Keeney, Don E. (See Zubaty, J., and Keeney.)
Kellenberger, Leonhard, St. Gallen, Switzerland. Tool grinding machine. 1,897,055; Feb. 14.
Keller, Charles L., Chicago, Ill. Bridge. 1,897,056; Feb. 14.
Keller, Charles L., Glendale, assignor to Richardson Company, Lockland, Ohio. Paper board. 1,897,198; Feb. 14.
Keller-Dorian Colorfilm Corporation. (See Kitroser, Isaac, assignor.)
Keller-Dorian Colorfilm Corporation of America. (See Oswald, André, assignor.)
Kelley, William V. D., assignor to Du Chrome Film System Ltd., Los Angeles, Calif. Film, plate, and the like. 1,897,846; Feb. 14.
Kellogg, Herbert C., Detroit, Mich., assignor to The Russ Manufacturing Company, Cleveland, Ohio. Liquid cooling system. 1,897,559; Feb. 14.
Kelly, Harry G., Omaha, Nebr. Rolling door mechanism. 1,897,891; Feb. 14.
Kelvinator Corporation. (See Greenwald, Harold A., assignor.)
Kelvinator Corporation. (See Philipp, Lawrence A., assignor.)
Kennedy, Dewey M., assignor to Eastman Kodak Company, Rochester, N. Y. Locking coupon envelope. 1,897,847; Feb. 14.
Kenney, Mahlon W., Elmhurst, Ill., assignor, by mesne assignments, to Grigsby-Grunow Company. Compressor. 1,897,199; Feb. 14.
Kenty, Carl E., Jersey City, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Self-starting low voltage gaseous electric discharge device and operating same. 1,897,482; Feb. 14.
Keogan, Charles J., North Arlington, assignor to Jenkins Television Corporation, Jersey City, N. J. Scanning method and apparatus. 1,897,483; Feb. 14.
Kershaw, Henry, Irvington, N. J. Golf tee device. 1,897,519; Feb. 14.
Kessler, Williamson D., Flint, assignor to General Motors Corporation, Detroit, Mich. Spring mounting. 1,897,807; Feb. 14.
Kex Company. (See Anderson, William M., assignor.)
Keystone Lantern Company. (See Mets, Carl, assignor.)
Kiefer, William R., assignor to Sundstrand Engineering Company, Rockford, Ill. Oil burner. 1,897,310; Feb. 14.
Kienle, Roy H., and H. C. Rohlfs, Schenectady, N. Y., assignors to General Electric Company. Flexible alkyd resin and method of preparation. 1,897,260; Feb. 14.
Killory, Martin F., Brockton, Mass. Shirt for use with concealed suspenders. 1,897,261; Feb. 14.
Kimball, A., Company. (See Laencher, Frederick W., assignor.)
Kimball, Dwight D., New York, and V. J. Cucci, Brooklyn, assignors to Columnar Heat, Incorporated, New York, N. Y. Heating system. 1,897,759; Feb. 14.
Kimber, Herbert W., Oakland, Calif. Flower receptacle for graves. 1,897,520; Feb. 14.
Kinney, Selwyne P., assignor to H. A. Brassert & Company, Chicago, Ill. Combustion apparatus. 1,897,808; Feb. 14.
Kitroser, Isaac, Paris, France, assignor to Keller-Dorian Colorfilm Corporation, New York, N. Y. Cinematographic objective. 1,897,262; Feb. 14.
Kleiger, Phillip, et al. (See Block, Morris H., assignor.)
Klett, Henry G., New York, N. Y. Coin changing machine. 1,897,200; Feb. 14.
Kling, Einar, Chicago, Ill. Holder of paintbrushes for painting flagpoles. 1,897,058; Feb. 14.
Klopsteg, Paul E., assignor to Central Scientific Company, Chicago, Ill. Radio demonstration apparatus. 1,897,057; Feb. 14.
Klotzman, Aaron, assignor to May Oil Burner Corporation, Baltimore, Md. Liquid fuel feeding device. 1,897,432; Feb. 14.
Kluge, Harry A. (See Bascom, C. P., and Kluge.)
Knowland, Richard G., Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co., Thompsonville, Conn. Weaving mechanism. 1,897,392; Feb. 14.
Koca, James F., assignor to Woodstock Typewriter Company, Woodstock, Ill. Type-setting mechanism for typewriters. 1,897,983; Feb. 14.
Koch, Adolph. (See Krech, R., Scheurer and Koch.)
Kohout, George A., Chicago, Ill. Grate control mechanism. 1,897,579; Feb. 14.
Konoff, Alexander, assignor, by mesne assignments, to Margon Corporation, New York, N. Y. Eye set. 1,897,848; Feb. 14.
Koppel Industrial Car and Equipment Company. (See Anderson, John P., assignor.)
Korsmo, Torbjorn C., assignor to Madison-Kipp Corporation, Madison, Wis. Die-casting machine. 1,897,433; Feb. 14.
Kortz, Harry, et al. (See Block, Morris H., assignor.)
Kotzlin, Theodore, Los Angeles, Calif. Riding habit. 1,897,128; Feb. 14.
Krech, Rudolph, Mannheim, W. Scheurer, Ludwigshafen-on-the-Rhine, and A. Koch, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of colored rubber articles. 1,897,129; Feb. 14.
Kreer, John G., jr., Bloomfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmission network. 1,897,639; Feb. 14.
Kreuzer, Barton. (See Olson, H. F., and Kreuzer.)
Kubodera, Hisakichi. (See Yoshizawa, Denzo, assignor.)
Kugler, Frank, jr., Brement, Saskatchewan, Canada. Automatic door. 1,897,311; Feb. 14.
Kuhn, Clarence W., Milwaukee, Wis., and P. Ryan, New York, N. Y., assignors to Cutler-Hammer, Inc., Milwaukee, Wis. Controller for electric motors. 1,897,059; Feb. 14.
Kyllo, Olaf, Kettle Falls, Wash. Insect destroyer. 1,897,263; Feb. 14.
Labombarde, Harold S., assignor to The International Paper Box Machine Company, Nashua, N. H. Mechanism for feeding blanks. 1,897,484; Feb. 14.
Laencher, Frederick W., Elmhurst, assignor to A. Kimball Company, New York, N. Y. Machine for operating upon a ticket strip. 1,897,201; Feb. 14.
LaGarde, Eugenie F., New Orleans, La. Bed accessory. 1,897,521; Feb. 14.
La Hodny, William, assignor to Standard Mirror Company, Inc., Buffalo, N. Y. Combined mirror and instrument. 1,897,849; Feb. 14.

Lamb, Ralph, Liverpool, assignor of one-half to J. W. White, Birkdale, England. Golf club. 1,897,264; Feb. 14.
Lambert, Sven E., Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation. Vacuum cleaner. 1,897,060; Feb. 14.
Lamont, Dallas R., Brooklyn, N. Y., assignor to Colgate-Palmolive-Peet Company, Chicago, Ill., and The Procter and Gamble Company, Cincinnati, Ohio. Production of a soap product. 1,897,701; Feb. 14.
Landis Tool Company. (See Steiner, Amos, assignor.)
Langley, Ralph H., assignor to The Crosley Radio Corporation, Cincinnati, Ohio. Radio tuning method. 1,897,312; Feb. 14.
Langston, Samuel M., Co. (See Sieg, Karl, assignor.)
Lansing, Winton D. (See Van Schyndle, R. W., and Lansing.)
La Pierre, Cramer W., Schenectady, N. Y., assignor to General Electric Company. Measuring instrument. 1,897,850; Feb. 14.
Lapp, Edward, and A. Wolpert, Pittsburgh, and B. E. Shaw, Crafton, Pa. Gas valve mechanism. 1,897,061; Feb. 14.
Lava Crucible Company of Pittsburgh. (See White, Harold E., assignor.)
Lavery, Henry C., Minneapolis, Minn. Anatomical measuring and recording machine. 1,897,941; Feb. 14.
Lawser, Charles W., Bala, assignor to The Wicaco Machine Corporation, Philadelphia, Pa. Gear pump. 1,897,560; Feb. 14.
Lawson, John and R. H., Pawtucket, assignors to Hemphill Company, Central Falls, R. I. Effecting reverse plating. 1,897,130; Feb. 14.
Lawson, Robert H. (See Lawson, John and R. H.)
Lawson, Robert H., Pawtucket, assignor to Hemphill Company, Central Falls, R. I. Method and mechanism for knitting full-fashioned hosiery. 1,897,131; Feb. 14.
Lawton, Robert B., assignor to Weber Costello Co., Chicago Heights, Ill. Grooved supporting fork for globes. 1,897,580; Feb. 14.
Leach, Albert E., Royal Oak, assignor to General Motors Corporation, Detroit, Mich. Gear shift lock. 1,897,851; Feb. 14.
Leavitt, Roger P., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic edge printing apparatus. 1,897,908; Feb. 14.
Ledoux, John W., Swarthmore, assignor to Simplex Valve & Meter Co., Philadelphia, Pa. Flow controller. 1,897,492; Feb. 14.
Leeds & Northrup Company. (See Heath, Leslie O., assignor.)
Lees, John. (See Carter, A., assignor.)
Leeson, Archibald, assignor to W. & T. Avery Limited, Birmingham, England. Coin testing device for use more particularly with coin freed vending machines. 1,897,909; Feb. 14.
Leffel, James, & Company, The. (See Biggs, George A., assignor.)
Lehman, John L., Kansas City, Mo. Headlight or searchlight. 1,897,202; Feb. 14.
Leins, Oscar J., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis. Switch. 1,897,132; Feb. 14.
Lenarth, Clarence C., Gardena, Calif. Gasket cutting machine. 1,897,203; Feb. 14.
Leopold, Morton, Chicago, Ill. Display device. 1,897,940; Feb. 14.
Levy, Harry. (See Bellavance, A. W., and Levy.)
Lewis, Kenneth R., Orchard Lake, Mich., assignor to Phillips Petroleum Company, Bartlesville, Okla. Load lifting and weighing device. 1,897,171; Feb. 14.
Lewis, Lloyd V., Edgewood borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Lamp receptacle. 1,897,668; Feb. 14.
Lewis, Thomas J., New York, N. Y. Vanity case or compact. 1,897,522; Feb. 14.
Lewnes, William, assignor to Pota Chiguracos, Brooklyn, N. Y. Cigarette case. 1,897,702; Feb. 14.
Libbey-Owens-Ford Glass Company. (See Randall, James W. H., assignor.)
Liermann, Adolf, Philadelphia, Pa. Miniature hothouse. 1,897,062; Feb. 14.
Lilley, Edna R., Whitemarsh, Pa. Fiber spoon. 1,897,809; Feb. 14.
Lindgren, Frank A., Western Springs, assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,897,984; Feb. 14.
Lindquist, David L., Hartsdale, assignor to Otis Elevator Company, New York, N. Y. Elevator control apparatus. 1,897,493; Feb. 14.
Line Material Company. (See Steinmayer, Alwin G., assignor.)
Linnmann, Wilhelm, Essen, Germany. Separator. 1,897,313; Feb. 14.
Lionel Corporation, The. (See Bonanno, Joseph L., assignor.)
Little, Harry C., San Rafael, Calif. Oil burner. 1,897,314; Feb. 14.
Livingston Coffee Co. (See Livingston, William J., assignor.)
Livingston, William J., assignor to Livingston Coffee Co., Chicago, Ill. Coffee and its manufacture. 1,897,393; Feb. 14.
Ljungström, Fredrik, Brevik, assignor to Aktiebolaget Spontan, Stockholm, Sweden. Vane rim for turbines. 1,897,172; Feb. 14.
Ljungström, Fredrik, Stockholm, Sweden, assignor, by mesne assignments, to Ped, Incorporated. Engine-driven driving mechanism. 1,897,506; Feb. 14.
Loeber, Herman M., and A. P. Elliott, assignors to Dempster Mill Manufacturing Company, Beatrice, Nebr. Telescoping boring bar for earth boring machines. 1,897,434; Feb. 14.
Loedding, Alfred C., Baden, assignor of one-fourth to F. C. Schroeder, Sewickley, Pa. Airplane. 1,897,669; Feb. 14.
Loewe, Siegmund, Berlin, Friedenau, Germany, assignor to Radio Corporation of America. Means for the remote reading of instruments. 1,897,204; Feb. 14.
Loewy, Raymond G. F., New York, N. Y. Locomotive. Des. 89,282; Feb. 14.
Loewy, Raymond G. F., New York, N. Y. Locomotive. Des. 89,283; Feb. 14.
Logan, Robert L., Bayonne, N. J. Cylinder for washing machines. 1,897,615; Feb. 14.
Long, Robert, and E. Gustafson, assignor to Binks Manufacturing Company, Chicago, Ill. Air nozzle for spray appliances. 1,897,173; Feb. 14.
Lucke, Henry J. (See Dupont, Jean G., assignor.)
Lutes, Arthur M., Kansas City, assignor of one-half to A. C. Flack, Fredonia, Kans. Motor. 1,897,063; Feb. 14.
Luther, Martin, Mannheim, and H. Beller, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of masses resembling rubber oil substitute. 1,897,133; Feb. 14.
Luttrell, James G., assignor to McCormick & Co., Incorporated, Baltimore, Md. Counter service teapot. Des. 89,258; Feb. 14.
Lyman, Samuel, Brooklyn, N. Y. Vehicle lamp. Des. 89,259; Feb. 14.
Lynn, John P., Sycamore, assignor to Dur-O-Lite Pencil Company, Chicago, Ill. Pencil. 1,897,315; Feb. 14.
Lyon Metal Products, Incorporated. (See Bales, James E., assignor.)
Lyons, James E., Maywood, Calif. Combination table and Christmas tree holder. 1,897,616; Feb. 14.
Lysholm, Alf, assignor to Aktiebolaget Ljungströms Ångturbin, Stockholm, Sweden. Tightening device for radial flow steam turbines. 1,897,989; Feb. 14.
Maas, Nathan R., Woodmere, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company. Safety razor. 1,897,653; Feb. 14.
Macbeth-Evans Glass Company. (See Blau, Henry H., assignor.)
Maccabee, David E., Elmhurst, assignor to Grigsby-Grunow Company, Chicago, Ill. Refrigeration apparatus. 1,897,205; Feb. 14.
Macfarlane, Robert F., Fulham, London, England, assignor to Baker Perkins Company, Inc., Saginaw, Mich. Wafer icing machine. 1,897,207; Feb. 14.
MacLachlan, John C., assignor, by mesne assignments, to A. P. Hunt, Chicago, Ill. Molasses product and making the same 1,897,729; Feb 14
MacLean, Allen D., Wilkinsburg, and F. Niesemann, assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Orifice meter. 1,897,174; Feb. 14.
Macleod, Albert A., Swampscott, and S. J. Finn, Beverly, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping shoe uppers. 1,897,064; Feb. 14.
Madison-Kipp Corporation. (See Korsmo, Torbjorn C., assignor.)
Mahnk, John A., Beaumont, Calif. Identification tag holder. Des. 89,284; Feb. 14.
Mahoney, Edward L. (See Joyce, Maurice E., assignor.)
Malley, Roy D., East Orange, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Magnetically operated low resistance fluid flow switch. 1,897,485; Feb. 14.
Malatesta, Pasquale. (See Manucci, D., Malatesta, and Sawtelle.)
Mallory, Junius L., and J. V. Daniel, Boston, Mass. Window scaffold. 1,897,810; Feb. 14.
Mallory, Marion, Toledo, Ohio, assignor to The Mallory Research Company. Ignition timing device for low speeds. 1,897,703; Feb. 14.
Mallory, Marion, Toledo, Ohio, assignor to The Mallory Research Company. Spark retarding device. 1,897,704; Feb. 14.
Mallory Research Company, The. (See Mallory, Marion, assignor.)
Malvern, Edmund N., Quitman, G. C. Clary, Claremont, Mo., and W. W. Jones, Los Angeles, Calif. Handle for bags and sacks. 1,897,910; Feb. 14.
Mancib, Alvin S., Somerville, assignor to J. S. Smyser, Brighton, Mass. Electrical apparatus. 1,897,134; Feb. 14.
Mandlen, Hans, Gaisenheim, and H. Huber, assignors to the Firm Chemische Werke vorm. H. & E. Albert, Wiesbaden-Biebrich, Germany. Producing or regenerating alkali-carbonates from alkaline phosphate-solutions. 1,897,706; Feb. 14.
Manegold, Robert A., Milwaukee, Wis. Detecting metal particles in sheet material. 1,897,781; Feb. 14.
Manucci, Daniel, P. Malatesta and W. C. Sawtelle, Erie, Pa. Tube puller. 1,897,561; Feb. 14.
Margon Corporation. (See Konoff, Alexander, assignor.)

Marple, Rollo, assignor to Hancock Manufacturing Co., Jackson, Mich. Control handle. 1,897,523; Feb. 14.
Marshall, Laurence K., assignor to Spencer Thermostat Company, Cambridge, Mass. Thermostatic switch. 1,897,316; Feb. 14.
Marshall, Walter L., Merion, Pa. Sharpener for razor blades. 1,897,760; Feb. 14.
Martin, Edward J., assignor to General Motors Research Corporation, Detroit, Mich. Indicator. 1,897,811; Feb. 14.
Martin, Fred N., Portland, Oreg. Shipping liquids. 1,897,939; Feb. 14.
Martin, John P., Pittsburgh, Pa. Smoking pipe. 1,897,065; Feb. 14.
Martin, Rhetherford B., Roselle, N. J. Mineral treatment. 1,897,265; Feb. 14.
Martin, William W. (See Staaf, Werner I., sr., assignor.)
Mason, Clesson E., assignor to The Foxboro Company, Foxboro, Mass. Control mechanism. 1,897,135; Feb. 14.
Massy, George H., Bayonne, N. J. Measuring device. 1,897,208; Feb. 14.
Matassa, Thomas J., Los Angeles, Calif. Pastry crust. Des. 89,260; Feb. 14.
Mattingley, Edward H., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. Re18,735; Feb. 14.
May, David T. (See Cole, I. E., May, and Weller.)
May Oil Burner Corporation. (See Klotzman, Aaron, assignor.)
Mayenzet, Alfred, East Orange, N. J. Demountable rim for pneumatic tires. 1,897,136; Feb. 14.
Mayer, Arthur, Detroit, Mich. Casting straps for battery plates. 1,897,066; Feb. 14.
Maze, Hamilton. (See Riedel, J., Domagall, and Maze.)
Maze, W. H., Company. (See Riedel, J., Domagall, and Maze, assignors.)
McCann, Harry P., and H. E. Baker, assignors, by mesne assignments, to The Foundry Equipment Company, Cleveland, Ohio. Heat treating furnace. 1,897,911; Feb. 14.
McCann, Neal T., Huntington Beach, assignor of one-fourth to Grover C. Dodson, Long Beach, Calif. Casing cutter. 1,897,206; Feb. 14.
McCarthy Improvement Company. (See Fraser, Earl, assignor.)
McConnell, Samuel. (See Wilson, J. E., McConnell, and Brown.)
McCormick & Co. (See Luttrell, James G., assignor.)
McCreary, Harry. (See Hall, L. M., and McCreary.)
McCreery, Robert W., New York, N. Y. Collar and making the same. 1,897,486; Feb. 14.
McCullough, Frederick S., Edgewood, Pa. Seal for vitreous articles. 1,897,761; Feb. 14.
McEachern, Dougald, Duncans, British Columbia, Canada. Removing water from boats. 1,897,524; Feb. 14.
McEachern, Henry R., Spokane, Wash. Ball throwing apparatus. 1,897,317; Feb. 14.
McGee, Kay C., Laurel Hill, N. C. Doorlock. 1,897,706; Feb. 14.
McGeoch, Lauchlan A. M. and W. A., Glasgow, Scotland. Toilet roll holder. 1,897,266; Feb. 14.
McGeoch, William A. (See McGeoch, Lauchlan A. M. and W. A.)
McGill, Effie B., Columbus, Ohio. Shield for bassinets and the like. 1,897,525; Feb. 14.
McIlvaine, John H., Lake Forest, Ill. Apparatus for burning liquid fuel. 1,897,318; Feb. 14.
McKee, Glenn L., Jerome, Ariz., assignor to Hose Stayput Tool Company, Denver, Colo. Hose-coupling. 1,897,319; Feb. 14.
McKnight, Rufus R., and A. Webber, assignors to The De Moe Engineering Laboratories, Inc., Chicago, Ill. Forming tube connections. 1,897,320; Feb. 14.
McKnight, Samuel H., Jersey City, N. J., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y. Laundry apparatus. 1,897,435; Feb. 14.
McNab Absorbolift, Inc. (See McNab, Alexander, assignor.)
McNab, Alexander, Bridgeport, Conn., assignor to McNab Absorbolift, Inc., New York, N. Y. Combined shock absorber and jack for vehicles. 1,897,581; Feb. 14.
McNeil, William M., assignor to United States Gypsum Company, Chicago, Ill. Gypsum calciner. 1,897,394; Feb. 14.
Mecom, Harvey, Liberty, Tex. Rock drill. 1,897,267; Feb. 14.
Mekler, Lev A., assignor to Universal Oil Products Company, Chicago, Ill. Treatment of petroleum distillate. 1,897,617; Feb. 14.
Melville, Herbert J., Chicago, Ill. Mechanical toy. 1,897,670; Feb. 14.
Mentkow, Abraham, Brooklyn, N. Y. Button. Des. 89,261; Feb. 14.
Merle, André N., Vincennes, assignor to Pathe Cinema, Anciens Etablissements Pathe Freres, Paris, France. Finder for cameras provided with objectives of different foci. 1,897,268; Feb. 14.
Merley, Sylvan R., Dover, N. J., assignor to Doherty Research Company, New York, N. Y. Forming alkyl sulfates. 1,897,812; Feb. 14.
Metal Arts Co. Inc. (See Migney, Marc A., assignor.)
Metropolitan Engineering Company. (See Smith, Albert A., assignor.)
Metz, Carl, assignor to Keystone Lantern Company, Philadelphia, Pa. Ball ear. 1,897,852; Feb. 14.
Meyer, Arthur, Hamburg, Germany. Automatic flat-bottom unloading device. 1,897,176; Feb. 14.
Meynell, Henry, Accrington, England. Drafting and like roller employed in yarn-preparing and spinning frames. 1,897,137; Feb. 14.
Michell-Crankless Engines Corporation. (See Sherman, Thomas L., assignor.)
Midboe, Gabriel, assignor to General Aviation Corporation, Dundalk, Md. Beach landing gear. 1,897,269; Feb. 14.
Migney, Marc A., assignor to Metal Arts Co. Inc., Rochester, N. Y. Perpetual calendar. Des. 89,285; Feb. 14.
Millar, George A., Ridgefield Park, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Method and apparatus for working fused silica. 1,897,487; Feb. 14.
Millar, George A., Ridgefield Park, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Glass-working machinery. 1,897,488; Feb. 14.
Millar, George A., Ridgefield Park, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Method of and apparatus for producing vitreous articles. 1,897,489; Feb. 14.
Millar, George A., Ridgefield Park, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Apparatus for working fused silica. 1,897,640; Feb. 14.
Miller, George L. (See Morgan, William K., assignor.)
Miller, Harvey J., assignor to Arcole Construction Co., Niles Center, Ill. Side dump truck. 1,897,067; Feb. 14.
Miller, O. A., Treeing Machine Company. (See Eddins, Sextus A., assignor.)
Millett Corporation. (See Millett, John E., assignor.)
Millett, John E., assignor to Millett Corporation, Gardner, Mass. Artificial reed fabric. 1,897,671; Feb. 14.
Milwaukee Gas Specialty Company. (See Leins, Oscar J., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Mitchell Camera Corporation. (See Mitchell, G. A., and Baker.)
Mitchell, George A., Huntington Park, and Friend F. Baker, Sawtelle, Calif., assignors to Mitchell Camera Corporation. Making composite pictures. 1,897,494; Feb. 14.
Mitchell, Leonard O. (See Mitchell, Ossian K. and L. O.)
Mitchell, Ossian K. and L. O., Oak Park, Ill. Adjustable link-system tables. 1,897,321; Feb. 14.
Mitchell, William B., Glasgow, Scotland. Checker brickwork construction for regenerator furnaces. 1,897,270; Feb. 14.
Mohawk Carpet Mills, Inc. (See Shuttleworth, Edwin C., assignor.)
Monarch Tool & Manufacturing Company, The. (See Hall, L. M., and McCreary, assignors.)
Moness, Eugene. (See Christiansen, W. G., Jones, and Moness.)
Monson, Louis T. (See DeGrotte, M., Monson, and Wirtel.)
Montgomery Company, The. (See Wallace, Samuel, assignor.)
Montgomery, Gustavus A., Dallas, Tex. Torsion and coupling controlling device. 1,897,322; Feb. 14.
Moore, Alpheus M., Somerset, Pa. Displaying machine for show rooms, show windows, and the like. 1,897,271; Feb. 14.
Moorhouse, John H., assignor, by mesne assignments, to Salvatore Condello, Rochester, N. Y. Electrical plug. 1,897,323; Feb. 14.
Moos, Frank. (See Walker, W. R., and Moos.)
Morgan, William K., assignor of one-fourth to G. L. Miller, Sand Springs, Okla. Double cross center guide and paraffin scraper. 1,897,507; Feb. 14.
Morrell, Jacque C., assignor to Universal Oil Products Company, Chicago, Ill. Recovering condensable vapors from incondensable gas. 1,897,618; Feb. 14.
Morrell, Jacque C., and G. Egloff, assignors to Universal Oil Products Company, Chicago, Ill. Treatment of hydrocarbon oils. 1,897,582; Feb. 14.
Morrill, Alfred R., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Automatic edge trimmer. 1,897,509; Feb. 14.
Morrill, Alfred R., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Making shoes. 1,897,527; Feb. 14.
Morshach, Kurt, Berlin-Lichterfelde, assignor to Siemens & Halske, Aktiengesellschaft Siemensstadt, near Berlin, Germany. Motion picture camera. 1,897,762; Feb. 14.
Morton, Edmund R., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Constant speed motor. 1,897,068; Feb. 14.
Mostaza, Paulino, Newark, N. J. Vehicle brake. 1,897,853; Feb. 14.
Mougey, Harry C., assignor to General Motors Research Corporation, Detroit, Mich. Metal cleaning composition. 1,897,813; Feb. 14.
Mowe, Friederich, Melrose Park, Ill. Indicating the position of submarine craft. 1,897,395; Feb. 14.
Mueller, Charles. (See Appenheimer, Carl J., assignor.)
Mulder, Cornelis, A. H., assignor to N. V. Philips Gloeilampenfabrieken, Eindhoven, Netherlands. Transmission between two shafts with regulable gear ratio. 1,897,436; Feb. 14.
Multicolor Ltd. (See Fairall, Harry K., assignor.)

Multicolor Ltd. (See Fairall, H. K., and Crespinel, assignors.)
Multigraph Company. (See Hult, John A., and Colquhoun, assignors.)
Multigraph Company. (See Rowell, George S., assignor.)
Multi-Hydro Washing Machine Company. (See Dehle, Otto T., assignor.)
Munro, Thomas, Philadelphia, Pa. Spring cover. 1,897,272; Feb. 14.
Munro, Thomas, Philadelphia, Pa. Perforating device. 1,897,437; Feb. 14.
Muros, Joseph, New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,897,707; Feb. 14.
Murrow, William R., assignor of one-half to O. W. Compton, Independence, Kans. Speed control. 1,897,324; Feb. 14.
Mutsch, Anna. (See Bauts, Daniel, assignor.)
Myers, Carlin. (See Myers, Merl and C.)
Myers, Merl and C., Bremen, Ohio. Temper-screw handle bar. 1,897,854; Feb. 14.
Mykol, Joseph F., White Bluffs, Wash. Thermoresistant water bag. 1,897,438; Feb. 14.
N. V. Nederlandsche Instrumenten Compagnie "Nedinsco". (See Steinle, Adolf, assignor.)
N. V. Philips, Gloeilampenfabrieken. (See Mulder, Cornelis, A. H., assignor.)
Naamloose Vennootschap de Bataafsche Petroleum Maatschappij. (See Straatman, Alphons G. H., assignor.)
Nagel, Hugo, assignor to R. F. Hunter and A. Blackburn, London, England. Projection screen. 1,897,273; Feb. 14.
Nastrom, Bror, Holdrege, Nebr. Bank protecting device. 1,897,708; Feb. 14.
National Airline and Chemical Company, Inc. (See Penny, James P., assignor.)
National Garment Stretcher Corporation. (See Stripling, Luke S., assignor.)
National Machinery Company, The. (See Clouse, William L., assignor.)
National Machinery Company, The. (See Friedman, John H., assignor.)
National Malleable and Steel Castings Company. (See Baseley, Arthur J., assignor.)
National Malleable and Steel Castings Company. (See Shafer, James A., assignor.)
National Supply Company, The. (See Rice, Allen E., assignor.)
National Supply Company, The. (See Zerbe, Lewis E., assignor.)
National Tank Company. (See Williams, Elmer R., assignor.)
Naugatuck Chemical Company, The. (See Hopkinson, Ernest, assignor.)
Nelson, Charles E., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Blank handling apparatus. 1,897,583; Feb. 14.
Nelson, Rudolph S., Rockford, Ill., assignor to The Hoover Company, North Canton, Ohio. Absorption refrigerating apparatus. 1,897,209; Feb. 14.
Neresheimer, Heinrich, Ludwigshafen-on-the-Rhine, and G. Boehner, Edingen, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of vat dyestuffs of the quinoline-anthraquinone series and the products. 1,897,439; Feb. 14.
Neumann, Theodore L., Dayton, Ohio, assignor to The Dayton Paper Novelty Company. Paper box for articles having shafts and handles. 1,897,672; Feb. 14.
Newell, Floyd B., assignor to Taylor Instrument Companies, Rochester, N. Y. Aneroid barometer. 1,897,325; Feb. 14.
Newsom, James B., Great Neck, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,897,069; Feb. 14.
Nicolet, Constant E., assignor to A. O. Smith Corporation, Milwaukee, Wis. Magnetic separator. 1,897,768; Feb. 14.
Nielsen, Jens P. (See Richer, Joseph R., assignor.)
Niesemann, Frits. (See MacLean, A. D., and Niesemann.)
Nigeradse, Vladimir, Mexico, Mexico, assignor of one-fourth to Alma B. Furness, Chicago, Ill. Hand grenade. 1,897,709; Feb. 14.
Nigro, Michel, assignor to Sleeper & Hartley, Inc., Worcester, Mass. Spring coiling machine. 1,897,855; Feb. 14.
Noble, Bert and R. J., assignors to Roads Construction Company, Ltd., Los Angeles, Calif. Automatic concrete aggregate proportioning apparatus. 1,897,490; Feb. 14.
Noble, Robert J. (See Noble, Bert and R. J.)
Nodine, Frederick A., Terryville, assignor to The Cooper Oven Thermometer Company, Plymouth, Conn. Sidewall thermometer. 1,897,814; Feb. 14.
Nohavec, Fred R. (See Garner, H. H., Nohavec, and Hopkins.)
Nolan, John R., New York, N. Y. Mechanism for feeding clothespins. 1,897,070; Feb. 14.
Noller, Carl R., assignor to Eastman Kodak Company, Rochester, N. Y. Manufacture of polymerized vinyl alcohol. 1,897,856; Feb. 14.
North, Clayton O., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Manufacturing aldehydeamine reaction products. 1,897,210; Feb. 14.
North, William C., Sebring, Fla. Container guard. 1,897,138; Feb. 14.
Norton, Clifford, South Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Guide rail lubricator. 1,897,764; Feb. 14.
Norton Company. (See Ridgway, Raymond R., assignor.)
Norwood, Harry Y., West Rush, assignor to Taylor Instrument Companies, Rochester, N. Y. Thermometer. 1,897,326; Feb. 14.
Noyes, Stanley E. (See Harrison, L. E., and Noyes.)
Nunnimaker, Harry N., Groveton, Pa. Dog feeding table. Des. 89,262; Feb. 14.
O'Brien, Willis H., Los Angeles, Calif. Producing motion pictures. 1,897,673; Feb. 14.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,897,584; Feb. 14.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Antifriction bearing. 1,897,585; Feb. 14.
O'Donnell, Edward C. (See Templeton, Herbert J., assignor.)
Offutt, James S., assignor to United States Gypsum Company, Chicago, Ill. Plaster composition. 1,897,956; Feb. 14.
Ohio Injector Company of Illinois, The. (See Edwards, Frank W., assignor.)
Ohio Match Company, The. (See Parker, Lucian E., assignor.)
Oil City National Bank, The. (See Yates, Paul, assignor.)
Oilgear Company, The. (See Ferris, John P., assignor.)
Oldham, John M., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Spring structure. 1,897,396; Feb. 14.
Oliver Farm Equipment Company. (See Altgelt, Herman E., assignor.)
Oliver Iron & Steel Corporation. (See Fassinger, Charles, assignor.)
Olpin, Henry C. (See Ellis, G. H., and Olpin.)
Olson, Edward M., Detroit, Mich. Roof structure. 1,897,327; Feb. 14.
Olson, Harry F., New York, and B. Kreuzer, Rockaway Park, N. Y., assignors to Radio Corporation of America. System for the conversion and transfer of energy. 1,897,732; Feb. 14.
Ormsby, Erle, and C. P. Bascom, assignors to Central Mine Equipment Company, St. Louis, Mo. Drill for mining purposes. 1,897,735; Feb. 14.
Orthmann, August C. (See Henke, C. O., and Orthmann.)
Osenberg, Carl Berlin-Charlottenberg, Germany, assignor to General Electric Company. Power plant. 1,897,815; Feb. 14.
Osterstrom, Rudolph C., assignor to The Pure Oil Company, Chicago, Ill. Treating hydrocarbon distillates. 1,897,328; Feb. 14.
Ostrander, Edward, Chewelah, assignor of one-half to Royal N. Riblet, Spokane, Wash. Tramway carrying pulley. 1,897,329; Feb. 14.
Oswald, André, Paris, France, assignor to Keller-Dorian Colorfilm Corporation of America, New York, N. Y. Machine for reproducing cinematographic films. 1,897,274; Feb. 14.
Oswald, André, Paris, France, assignor, by mesne assignments, to Keller-Dorian Colorfilm Corporation, New York, N. Y. Cinematographic film. 1,897,275; Feb. 14.
Othmer, Donald F., assignor to Eastman Kodak Company, Rochester, N. Y. Dehydration of acetic acid. 1,897,816; Feb. 14.
Otis Elevator Company. (See Lindquist, David L., assignor.)
Otis Elevator Company. (See Norton, Clifford, assignor.)
Otis, Herbert C., Shreveport, La. Choke for oil wells. 1,897,985; Feb. 14.
Ott, Karl, and H. Bernard, Uerdingen, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Paint. 1,897,528; Feb. 14.
Ottley, George B., Arlington, Mass. Quick drying ink. 1,897,071; Feb. 14.
Otto, Arthur J. and C. A., assignors to Johnson Service Company, Milwaukee, Wis. Thermostat and similar device. 1,897,857; Feb. 14.
Otto, Carl A. (See Otto, Arthur J. and C. A.)
Overbury, Frederick C., Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Making roofing stock. 1,897,139; Feb. 14.
Pacific Marine Supply Company. (See Andrews, Phillip R., assignor.)
Pacific Marine Supply Company. (See Himberger, Earl W., assignor.)
Pagnozzi, Joseph A. (See Perriera, A. R., and Pagnozzi.)
Palmer, Lela G. (See Palmer, Ray M. and L. G.)
Palmer, Ray M. and L. G., Pasadena, Calif. Fishing lure. 1,897,529; Feb. 14.
Pandolfi, Paolo F., Buffalo, N. Y. Form for plastic materials. 1,897,530; Feb. 14.
Paquit, Vital, New York, N. Y. Mechanical combination for reversible pitch propellers. 1,897,817; Feb. 14.
Parker, Lucian E., assignor to The Ohio Match Company, Wadsworth, Ohio. Turning mechanism for book match machines. 1,897,508; Feb. 14.
Parkhurst, Austin F. (See Rockwell, R. J., and Parkhurst.)
Parks, Nelson D., Pendleton, Oreg. Pick-up feeder for harvesters. 1,897,491; Feb. 14.
Parks, Robert D., and G. Hildenbrand, Lohrville, assignors to Self-Serve Bottle Vendor Company, Fort Dodge, Iowa. Vending machine. 1,897,072; Feb. 14.

Paschen, Paul. H. Ritter, G. Stauber, W. Gebhardt, and K. Schmiedel, Nuremberg, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Insulating body. 1,897,818; Feb. 14.

Pasko, John P., Irvington, N. J. Tone modifier. 1,897,531; Feb. 14.

Patent and Licensing Corporation, The. (See Overbury, Frederick C., assignor.)

Patent Developers, Inc. (See Thornton, Ray, assignor.)

Pathe Cinema, Anciens Etablissements Pathe Freres. (See Merle, André N., assignor.)

Patten, Murray K. (See Stimpson, W. F., and Patten.)

Patterson, Julius E., Bucyrus, Ohio, assignor to Dunn-Patterson Company, Klamath Falls, Oreg. Wheeled scoop. 1,897,509; Feb. 14.

Pawlikowski, Rudolf, Goerlitz, Germany. Internal combustion engine for liquid and solid fuels. 1,897,819; Feb. 14.

Payne, Eugene I., Chicago, Ill. Type or similar article. Des. 89,268; Feb. 14.

Peck, Joseph A., Worcester, Mass. Hydraulic meter. 1,897,858; Feb. 14.

Pecker, Joseph S., Philadelphia, Pa. Jig. 1,897,495; Feb. 14.

Ped, Incorporated. (See Ljungström, Fredrik, assignor.)

Pehlke, John, assignor to Rhodes-Hochrlem Manufacturing Company, Chicago, Ill. Dashpot for weighing machines. 1,897,765; Feb. 14.

Pelo, Carl, Tavastehus, Finland. Light machine gun. 1,897,710; Feb. 14.

Pender, Harold, Merion, assignor to International Resistance Company, Philadelphia, Pa. Apparatus for testing resistance. 1,897,830; Feb. 14.

Penny, James P., Buffalo, assignor to National Aniline and Chemical Company, Inc., New York, N. Y. Producing azo dyes. 1,897,211; Feb. 14.

Penrose, William E., Clarksville, Iowa. Root cutter. 1,897,859; Feb. 14.

Peoples Gas By-Products Corporation. (See Guthrie, R. G., and Woxasek, assignors.)

Pepper, Charles W., Denver, Colo. Smoking pipe. 1,897,073; Feb. 14.

Perew, Frank C., assignor of one-half to E. T. Wallace, Los Angeles, Calif. Apparatus for pulverizing and classifying ore and the like. 1,897,176; Feb. 14.

Péres, Manuel H., San Pedro Sula, Honduras. Mechanical movement. 1,897,140; Feb. 14.

Perkins, Lester A., and A. C. Wilson, Centerville, Iowa. Milk can lid. Des. 89,264; Feb. 14.

Perriera, Anthony R., Brooklyn, and J. A. Pagnozzi, Flushing, N. Y. Tool or chuck for the finishing and grinding of work in prosthetics. 1,897,496; Feb. 14.

Persons, Laurence M., assignor to Emerson Electric Manufacturing Co., St. Louis, Mo. Fan. 1,897,860; Feb. 14.

Pescara, Raul P., Paris, France. Direct acting internal combustion air compressor. 1,897,674; Feb. 14.

Peters, Peter N., Brooklyn, N. Y. System for detecting faults in sharp edged tools. 1,897,141; Feb. 14.

Petersen, Thorvald, assignor to Reed Manufacturing Company, Erie, Pa. Die stock. 1,897,562; Feb. 14.

Petersen, Walter, Santa Maria, Calif. Self-sealing paste tube. 1,897,276; Feb. 14.

Peterson, Edward G., Seattle, Wash. Fender tool. 1,897,142; Feb. 14.

Pfeiffer, Frank E. and W. C., assignors to The Egry Register Company, Dayton, Ohio. Mechanism and method of feeding a plurality of paper sheets. 1,897,654; Feb. 14.

Pfeiffer, Frank E. and W. C., assignors to The Egry Register Company, Dayton, Ohio. Web roll supporting device. 1,897,675; Feb. 14.

Pfeiffer, William C. (See Pfeiffer, Frank E. and W. C.)

Pfanze, Charles F., Webster Groves, Mo. Adjustable feed table for envelope-making and like machines. 1,897,641; Feb. 14.

Philipp, Lawrence A., assignor to Kelvinator Corporation, Detroit, Mich. Refrigerant compressor cooling system. 1,897,178; Feb. 14.

Phillippe, George L., Harlowton, Mont. Fishing reel. 1,897,711; Feb. 14.

Phillips Petroleum Company. (See Bridgewater, Hurlbert R., assignor.)

Phillips Petroleum Company. (See Endacott, Paul S., assignor.)

Phillips Petroleum Company. (See Endacott, P. S., and Thomas, assignors.)

Phillips Petroleum Company. (See Lewis, Kenneth R., assignor.)

Phillips Petroleum Company. (See Thomas, Rosswell W., assignor.)

Pilcher, Delbert E., Mancos, Colo. Emasculator. 1,897,532; Feb. 14.

Pirani, Marcello, Berlin-Wilmersdorf, Germany, assignor to General Electric Company. Gaseous electric discharge device. 1,897,497; Feb. 14.

Pirani, Marcello, Berlin-Wilmersdorf, Germany, assignor to General Electric Company. Gaseous electric discharge device. 1,897,586; Feb. 14.

Pirani, Marcello, Berlin-Wilmersdorf, Germany, assignor to General Electric Company. Gaseous electric discharge device. 1,897,587; Feb. 14.

Pirani, Marcello, Berlin-Wilmersdorf, H. Ewest, Berlin, and G. Gaidies, Berlin-Pankow, Germany, assignors to General Electric Company. Gaseous electric discharge device. 1,897,642; Feb. 14.

Pirrone, Antonnio L. M., Arnold, assignor of forty per cent to A. C. Bonnatti, four per cent to A. Dixon, four per cent to T. Dixon, and four per cent to R. Dixon, New Kensington, Pa. Ornamental device. 1,897,942; Feb. 14.

Piston Ring Company, The. (See Porter, Jay E., assignor.)

Pitchford, Joseph L., Baudette, Minn. Growth clearing device. 1,897,820; Feb. 14.

Pittsburgh Equitable Meter Company. (See MacLean, A. D., and Niesemann, assignors.)

Placko, Steve F., jr., Chicago, Ill. Exhaust gas purifier. 1,897,912; Feb. 14.

Platt, Herbert. (See Dreyfus, C., and Platt.)

Platt, Herbert, and C. M. Croft, Cumberland, Md., assignors to Celanese Corporation of America. Fabric and producing the same. 1,897,712; Feb. 14.

Pohl, Ernst, Kiel, Germany. Supporting frame for Röntgen ray apparatus. 1,897,177; Feb. 14.

Poli, Glauco, New York, N. Y. Dishwashing device. 1,897,821; Feb. 14.

Porter, Jay E., assignor to The Piston Ring Company, Muskegon, Mich. Piston ring closing fixture. 1,897,897; Feb. 14.

Porter, William G., Chicago, Ill. Automatic golf instructor. 1,897,212; Feb. 14.

Powell, Myron H., assignor to Amazon Knitting Company, Muskegon, Mich. Bathing suit. 1,897,619; Feb. 14.

Powell, William B., assignor to Appleford Paper Products Limited, Hamilton, Ontario, Canada. Container for roll paper. 1,897,143; Feb. 14.

Powell, Winfred T. (See Graham, V. M., and Powell.)

Powerplus, (1927) Limited. (See Eyston, George E. T., assignor.)

Pratt & Whitney Company. (See Hoagland, Frank O., assignor.)

Pratt & Whitney Company. (See Shaw, John C. and R. D., assignors.)

Price, Joseph, West New Brighton, Staten Island, and S. Brown, Garden City, assignors to The Griscom-Russell Company, New York, N. Y. Heat exchanger. 1,897,213; Feb. 14.

Primrose, John, Richmond, assignor to Foster Wheeler Corporation, New York, N. Y. Separating liquid from vapors and gases. 1,897,766; Feb. 14.

Procter and Gamble Company, The, et al. (See Lamont, Dallas R., assignor.)

Proctor & Schwartz, Incorporated. (See Hurxthal, Alpheus O., assignor.)

Prosperity Company, The. (See Davis, Ernest, assignor.)

Protectu Corporation, The. (See Walker, Crawford J., assignor.)

Prouty, William B., Evanston, Ill. Dust separator and collector system. 1,897,144; Feb. 14.

Pudliner, John, assignor to Brey & Krause Manufacturing Company, Allentown, Pa. Bracket and applying same. 1,897,913; Feb. 14.

Purdy, George H. (See Robertson, J., and Purdy.)

Pure Oil Company, The. (See Harnsberger, A. E., and Christy, assignors.)

Pure Oil Company, The. (See Osterstrom, Rudolph C., assignor.)

Quay, Marion P., Rome, Italy. Casing for key-bows. 1,897,861; Feb. 14.

R. C. Can Company. (See Rutkowski, Walter L., assignor.)

Radio Corporation of America. (See Braden, Rene A., assignor.)

Radio Corporation of America. (See Carter, P. S., and Finch, assignors.)

Radio Corporation of America. (See Eldred, Byron E., assignor.)

Radio Corporation of America. (See Heuvelink, Dirk J.)

Radio Corporation of America. (See Loewe, Siegmund, assignor.)

Radio Corporation of America. (See Olson, H. F., and Kreuzer.)

Radio Corporation of America. (See Roberts, Walter V., assignor.)

Radio Corporation of America. (See Van Beusekom, Godefridus, assignor.)

Radio Corporation of America. (See Weinberger, Julius, assignor.)

Radio Patents Corporation. (See Dalpayrat, Henry F., assignor.)

Raffold Process Corporation. (See Rafton, Harold R., assignor.)

Rafton, Harold R., Andover, Mass., assignor to Raffold Process Corporation. Paper manufacture. 1,897,145; Feb. 14.

Railways Ice Company, The. (See Blatti, Albert L., assignor.)

Randall, James W. H., New York, N. Y., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for producing laminated glass. 1,897,862; Feb. 14.

Rassieur, Benjamin F., Webster Groves, and C. P. Bascom, Clayton, assignors to Central Mine Equipment Co., St. Louis, Mo. Mining machine bit and bit holder. 1,897,331; Feb. 14.

Raymond, Gwynne, Kansas City, Mo. Oil and gas separator. 1,897,832; Feb. 14.

Raymond, Gwynne, Kansas City, Mo. Inverse valve control for liquid and gas separators. 1,897,898; Feb. 14.

Raytheon, Inc. (See Bush, Vannevar, assignor.)

Raytheon Inc. (See Fleming, Wilfred K., assignor.)

Reed, Clarence E., Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Rotary drilling apparatus. 1,897,588; Feb. 14.

Reed Manufacturing Company. (See Petersen, Thorvald, assignor.)

Rees, Mackworth G., Detroit, Mich. Inertia relay. 1,897,074; Feb. 14.

Reese, Frank, assignor to Reese Metal Weather Strip Co., Minneapolis, Minn. Weather strip for metallic window frames and sashes. 1,897,643; Feb. 14.

Reese Metal Weather Strip Co. (See Reese, Frank, assignor.)

Reeve, Howard T., Millburn, N. J., assignor, by mesne assignments, to Western Electric Company, Inc., New York, N. Y. Melting and casting of metals. 1,897,589; Feb. 14.

Reinhart, Harry W. (See Reinhart, Howard A. and H. W., and Wadsworth.)

Reinhart, Howard A. and H. W., Oakland, and J. Wadsworth, Berkeley, Calif. Vehicle. 1,897,277; Feb. 14.

Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. Reis8,737; Feb. 14.

Republic Flow Meters Company. (See Cunningham, Arthur B., assignor.)

Respats, Inc. (See Respess, Roland B., assignor.)

Respess, Roland B., Wickford, assignor to Respats, Inc., Providence, R. I. Continuous process of reducing or reforming wood or other fibrous material. 1,897,620; Feb. 14.

Ressegule, Earl H., Flint, Mich. Necktie fastener. 1,897,333; Feb. 14.

Reuter, Frederic W., Towanda, Pa. Cassette. 1,897,621; Feb. 14.

Reynolds Gas Regulator Co. (See Hughes, Ralph C., assignor.)

Rheinische Metallwaaren- und Maschinenfabrik. (See Rühlemann, Herbert, assignor.)

Rhodes-Hochrien Manufacturing Company. (See Pehlke, John, assignor.)

Riblet, Royal N. (See Ostrander, Edward, assignor.)

Ricardo, Harry R., London, England. Valve operating mechanism for fluid pressure engines, pumps, or compressors. 1,897,179; Feb. 14.

Rice, Allen E., Hermosa Beach, Calif., assignor to The National Supply Company, Toledo, Ohio. Gravity spring locking pawl. 1,897,622; Feb. 14.

Richards, Baron H. F., and A. H. Haroldson, Valparaiso, Ind., assignors, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del. Flexible treated material and making the same. 1,897,651; Feb. 14.

Richards, Willard F., Depew, assignor to The Gould Coupler Company, New York, N. Y. Coupler. 1,897,278; Feb. 14.

Richards, Willard F., Depew, assignor to The Gould Coupler Company, New York, N. Y. Coupler. 1,897,279; Feb. 14.

Richardson, Arthur J., Catonsville, assignor of one-half to William J. Borchers, Baltimore, Md. Ventilator. 1,897,440; Feb. 14.

Richardson Company. (See Keller, Charles L., assignor.)

Richardson, William, Flushing, N. Y. Head band. 1,897,146; Feb. 14.

Richer, Joseph R., Oak Park, Ill., assignor to Jens P. Nielsen, Package holder. 1,897,334; Feb. 14.

Richey, Charles V., Jamaica, N. Y., assignor to American Telephone and Telegraph Company. Time control system for telephones. 1,897,533; Feb. 14.

Ricks, Hyrum, jr., assignor to Atlas Scraper Company, Bell, Calif. Leveling device. 1,897,498; Feb. 14.

Ridgway, Raymond R., Niagara Falls, N. Y., assignor to Norton Company, Worcester, Mass. Boron carbide and making the same. 1,897,214; Feb. 14.

Riedel, Joseph, J. Domagall, and H. Mase, assignors to W. H. Maze Company, Peru, Ill. Corrugated metal fastener. 1,897,335; Feb. 14.

Riegel Paper Corporation. (See French, George F., assignor.)

Ries, Earle R., Chicago, Ill. Stool. 1,897,676; Feb. 14.

Ritter, Hans. (See Paschen, P., Ritter, Stauber, Gebhardt, and Schmiedel.)

Riviere, Albert S., assignor to Union Special Machine Company, Chicago, Ill. Multiple needle sewing machine. 1,897,986; Feb. 14.

Riviere, Albert S., assignor to Union Special Machine Company, Chicago, Ill. Chain stitch sewing machine. 1,897,987; Feb. 14.

Riviere, Albert S., assignor to Union Special Machine Company, Chicago, Ill. Chain stitch sewing machine. 1,897,988; Feb. 14.

Roads Construction Company. (See Noble, Bert and R. J., assignors.)

Robbins & Staufert, Inc. (See Staufert, Rudolph, assignor.)

Roberts & Mander Stove Company. (See Antrim, William D., assignor.)

Roberts, Walter V., Princeton, N. J., assignor to Radio Corporation of America. Wireless signaling device. 1,897,767; Feb. 14.

Robertson, James, and G. H. Purdy, San Francisco, Calif. Milk cooler. 1,897,336; Feb. 14.

Robertson, Robert, Goldthwaite, Tex. Animal pen. 1,897,441; Feb. 14.

Roche, Alleman H., et al. (See Grace, B. B., Skillman, Roche, and Sandeman.)

Rockwell, Ronald J., and A. F. Parkhurst, assignors to The Crosley Radio Corporation, Cincinnati, Ohio. Construction of loud speaker motors. 1,897,399; Feb. 14.

Roesch, Frank P., Chicago, Ill., assignor to The Standard Stoker Company. Locomotive stoker. 1,897,510; Feb. 14.

Roescher, William F., Philadelphia, Pa. Scullery tank and table. 1,897,713; Feb. 14.

Rogers, Thomas J., Minneapolis, Minn. Lighting airports. 1,897,768; Feb. 14.

Rohaut, Albert, Alfred, Me. Article of furniture. 1,897,590; Feb. 14.

Rohlfs, Harry C. (See Kienle, R. H., and Rohlfs.)

Rohm & Haas Company. (See Somerville, Ian C., assignor.)

Rohrkaste, Charles W., Beaver Falls, Pa. Reflector for incandescent lamp bulbs. 1,897,822; Feb. 14.

Ronk, George T., Cedar Rapids, Iowa. Steering mechanism for tractors. 1,897,180; Feb. 14.

Roos, Carlisle K., Wheaton, Ill., assignor to United States Gypsum Company, Chicago, Ill. Acoustic plaster. Reis8,739; Feb. 14.

Roosenstein, Hans O., assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Multiple range radio receiving system. 1,897,735; Feb. 14.

Rosenbaum, Lester F., Kalamazoo, Mich. Trousers. 1,897,623; Feb. 14.

Rosenthal, Sidney, Cedarhurst, assignor to B. Blumenthal & Co. Inc., New York, N. Y. Buckle. Des. 89,286; Feb. 14.

Rossebo, George H. and F. Hoke, assignors to Holcomb & Hoke Manufacturing Company, Indianapolis, Ind. Refrigerator element and producing same. 1,897,957; Feb. 14.

Rossner, Arthur, New York, N. Y. Necktie retainer. 1,897,734; Feb. 14.

Rothamel, Gustav A., Oakland, Calif. Meat rolling machine. 1,897,644; Feb. 14.

Rowe, Alton J., Wells Beach, assignor of one-fourth to F. F. Boyce, Portland, and one-fourth to W. B. Hall, Cape Elizabeth, Me. Net for trawlers. 1,897,147; Feb. 14.

Rowell, George S., Cleveland, Ohio, assignor to Multigraph Company, Wilmington, Del. Transfer blanket for offset printing. 1,897,148; Feb. 14.

Royal Typewriter Company. (See Hart, Henry J., assignor.)

Royer, Jesse R., Janesville, Iowa. Tractor drawn road maintainer. 1,897,677; Feb. 14.

Rubber Service Laboratories Co., The. (See North Clayton, O., assignor.)

Rubber Service Laboratories Co. (See ter Horst, William P., assignor.)

Rühlemann, Herbert, Sommerda, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf, Germany. Contact device for transferring electrical energy into projectile igniters. 1,897,863; Feb. 14.

Rupp, John L., Edgewood, assignor to Wubco Battery Corporation, Swissvale, Pa. Storage battery construction. 1,897,565; Feb. 14.

Russ Manufacturing Company, The. (See Kellogg, Herbert C., assignor.)

Russell, Edward A., assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Vapor regulator and supporting same. 1,897,215; Feb. 14.

Rutkowski, Walter L., assignor to R. C. Can Company, St. Louis, Mo. Pouring spout for containers. 1,897,958; Feb. 14.

Rutkowski, Walter L., assignor to R. C. Can Company, St. Louis, Mo. Pouring spout container. 1,897,959; Feb. 14.

Rutkowski, Walter L., assignor to R. C. Can Company, St. Louis, Mo. Dispensing container. 1,897,960; Feb. 14.

Ryan, Philip. (See Kuhn, C. W., and Ryan.)

Ryder, Ely M. T., Yonkers, N. Y. Bowling ball. 1,897,714; Feb. 14.

Saeger, Charles M., jr., Bowmanstown, Pa. Process of and product for attaching portions of molds or cores. 1,897,149; Feb. 14.

Safety Car Heating and Lighting Company, The. (See Hulse, George E., assignor.)

Salisbury, Claud C. (See Ball, F. C., and Salisbury.)

Salisbury, Howard D., Birmingham, Ala. Power operated switch mechanism. 1,897,181; Feb. 14.

Salisbury Signal Corporation. (See Ball, F. C., and Salisbury, assignors.)

Samson, Sam, Stevenson, Wash. Fluid pressure system. 1,897,075; Feb. 14.

Sandeman, Edward K., et al. (See Grace, B. B., Skillman, Roche, and Sandeman.)

Saranac Machine Company. (See Durand, Arthur F., assignor.)

Saunders, Walter S., assignor to The American Forging and Socket Company, Pontiac, Mich. Top prop joint. 1,897,442; Feb. 14.

Saurwein, Karl. (See Ulrich, H., and Saurwein.)

Sawtelle, C., William. (See Manucci, D., Malatesta, and Sawtelle.)

Schacht, Elmer C., assignor to Behr-Manning Corporation, Troy, N. Y. Printer's blanket. 1,897,864; Feb. 14.

Schacht, William F., Huntington, Ind. Label. Des. 89,265; Feb. 14.

Schaeffer, Edward G., Brooklyn, assignor to American Character Doll Co., Inc., New York, N. Y. Joint. 1,897,914; Feb. 14.

Schäflein, Karl, Bern, Switzerland. Casting apparatus for stereotype plates having a mold adapted to be pressed immediately against the melting pot. 1,897,823; Feb. 14.

Scheurer, Wilhelm. (See Krech, R., Scheurer, and Koch.)

Schiorring, Harold W., Lexington, and F. P. Fuhs, Boston, Mass. Valve. 1,897,678; Feb. 14.

Schmidt, Arthur W., Spring Valley, N. Y. Rubber stamp. 1,897,915; Feb. 14.

Schmidt, Benjamin F., Los Angeles, Calif. Single-cable cowl mounted gear shift. 1,897,216; Feb. 14.

Schmiedel, Karl. (See Paschen, P., Ritter, Stauber, Gebhardt, and Schmiedel.)

Schmitt, Joy B., assignor to The De Vilbiss Company, Toledo, Ohio. Atomizer control. 1,897,679; Feb. 14.

Schneiderwirth, Herman J., Yonkers, N. Y. Purification apparatus. 1,897,217; Feb. 14.

Scholz, Burton P., Webster Groves, Mo. Gear shifting apparatus. 1,897,591; Feb. 14.

Scholz, William, Altoona-Flottbek, Germany. Rudder for ships. 1,897,824; Feb. 14.

Scholz, William P., Morristown, N. J. Switch heater for railroads. 1,897,218; Feb. 14.

Schroeder, Frank C. (See Loedding, Alfred C., assignor.)

Schröter, Fritz, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Apparatus for photoelectric exploration by reflection method in copying and picture telegraphy. 1,897,219; Feb. 14.

Schumacher, Conrad. (See Gaisman, H. J., and Schumacher.)

Schunck, Walter. (See Gaus, W., Hochschwender, and Schunck.)

Schutte and Koerting Company. (See von Brockdorff, Rudolf, assignor.)

Schwartzman, Solomon, Brooklyn, N. Y. Power circuit control means for vertical printing presses. 1,897,592; Feb. 14.

Schweizer, Jack, Rye, N. Y. Textile fabric or the like. Des. 89,267; Feb. 14.

Schweizer, Jack, New York, N. Y. Combined radiator and headlights or the like article. Des. 89,287; Feb. 14.

Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,266; Feb. 14.

Schwitzer-Cummins Company. (See Schweitzer, L., and Winkler, assignors.)

Schwitzer, Louis, and C. J. Winkler, assignors to Schwitzer-Cummins Company, Indianapolis, Ind. Shaft seal. 1,897,280; Feb. 14.

Scofield, Theodore J., Jackson, Mich., assignor to The Sparks-Withington Company. Tuning element. 1,897,337; Feb. 14.

Scofield, Theodore J., Jackson, Mich., assignor to The Sparks-Withington Co. Bracket for automotive radio sets. 1,897,400; Feb. 14.

Seaholm, Charles H., assignor to General Talking Pictures Corporation, New York, N. Y. Talking motion picture apparatus. 1,897,655; Feb. 14.

Seaton, Max Y., Porterville, Calif., assignor to California Chemical Corporation, Chicago, Ill. Building construction. 1,897,338; Feb. 14.

Segal Founders Corporation. (See Segal, Hyman R., assignor.)

Segal, Hyman R., New York, N. Y., assignor to Segal Founders Corporation. Razor. 1,897,150; Feb. 14.

Seghers, Emiel P., Chicago, Ill. Trap. 1,897,151; Feb. 14.

Seidenfaden, Wilhelm. (See Zitscher, A., and Seidenfaden.)

Seifert, Charles H., Hempstead, N. Y. Gear. 1,897,865; Feb. 14.

Seifferle, Oliver, assignor to International Air Brake Control Company, Portland, Oreg. Pressure control valve for automatic air brakes. 1,897,339; Feb. 14.

Seigle, William R., Mamaroneck, assignor to Johns-Manville Corporation, New York, N. Y. Centrifugal molding device. 1,897,401; Feb. 14.

Seiser, Joseph P., White Plains, N. Y. Seeder. 1,897,769; Feb. 14.

Seits, Henry C., Niles, Ohio. Machine for washing and screening materials. 1,897,624; Feb. 14.

Sekella, Youston, Elmira Heights, assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,897,916; Feb. 14.

Self-Serve Bottle Vendor Company. (See Parks, R. D., and Hildenbrand, assignors.)

Serrté, Jacques E., Laeken-Brussels, Belgium. Internal combustion engine. 1,897,825; Feb. 14.

Severin, José, Mulheim-on-the-Ruhr, Germany. Apparatus for rolling seamless tubes. 1,897,770; Feb. 14.

Seymour, Merrill W., assignor to Eastman Kodak Company, Rochester, N. Y. Color photographic process. 1,897,866; Feb. 14.

Shadlowsky, Joseph, Passaic Park, N. J., assignor to B. Blumenthal & Co. Inc., New York, N. Y. Button. Des. 89,268; Feb. 14.

Shadlowsky, Joseph, Passaic Park, N. J., assignor to B. Blumenthal & Co. Inc., New York, N. Y. Button. Des. 89,288; Feb. 14.

Shafer, James A., East Cleveland, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Lock. 1,897,594; Feb. 14.

Shakespeare, William, jr. (See Bock, Charles D., assignor.)

Shand, Reginald C., Berkeley, Calif. Valve. 1,897,076; Feb. 14.

Shaw, Burton E. (See Lapp, Edward, Wolpert, and Shaw.)

Shaw, John C. and R. D., Hartford, Conn., assignors, by mesne assignments, to Pratt & Whitney Company. Cam grinding machine. Re18,733; Feb. 14.

Shaw, John P., Portsmouth, Va. Free-reeling fishing reel. 1,897,499; Feb. 14.

Shaw, Robert D. (See Shaw, John C. and R. D.)

Shaw, Wesley J., Haverhill, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Wood-heel machine. 1,897,880; Feb. 14.

Sherman, Thomas L., assignor to Michell-Crankless Engines Corporation, New York, N. Y. Crankless engine. 1,897,771; Feb. 14.

Shives, Alexander C., Toledo, Wash. Metallic railroad tie. 1,897,500; Feb. 14.

Shoffstall, Hugh F. (See Bailey, R. S., and Shoffstall.)

Short, Bladen M., assignor to General Spring Bumper Corporation, Detroit, Mich. Impact bar for automobile bumpers. Des. 89,269; Feb. 14.

Shults, Anthony K., Saranac Lake, N. Y. Bottle. 1,897,786; Feb. 14.

Shuttleworth, Edwin C., assignor to Mohawk Carpet Mills, Inc., Amsterdam, N. Y. Tuft yarn carrier for looms. 1,897,077; Feb. 14.

Sieg, Karl, Philadelphia, Pa., assignor to Samuel M. Langston Co., Camden, N. J. Cut-off mechanism. 1,897,867; Feb. 14.

Sielaff, Herbert F., Chicago, Ill. Knockdown garbage receptacle mold. 1,897,340; Feb. 14.

Siemens & Halske, Aktiengesellschaft. (See Morsbach, Kurt, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Altenkirch, Edmund, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Paschen, P., Ritter, Stauber, Gebhardt, and Schmiedel, assignors.)

Signode Steel Strapping Company. (See Taylor, Milton C., assignor.)

Silberstein, Israel, Baltimore, Md. Portable carbon arc lamp. Des. 89,270; Feb. 14.

Silica Company of California, Ltd. (See Hubbell, Irving D., assignor.)

Simjian, Luther G., New Haven, Conn. Pose-reflecting photographic apparatus. 1,897,772; Feb. 14.

Simplex Valve & Meter Co. (See Ledoux, John W., assignor.)

Simpson, William J., Everett, Mass., assignor, by mesne assignments, to The Electric Smelting & Aluminum Co., Cleveland, Ohio. Cutting apparatus. 1,897,534; Feb. 14.

Singer, William E., administrator. (See Grund, Fletcher D.)

Singletary, Benjamin H., Baton Rouge, La. Tobacco pipe. 1,897,535; Feb. 14.

Sjowall, Hugo, Chicago, Ill. Trousers hanger. 1,897,078; Feb. 14.

Skillman, Thomas S., et al. (See Grace, B. B., Skillman, Roche, and Sandeman.)

Sleeper & Hartley, Inc. (See Nigro, Michel, assignor.)

Sloane-Blabon Corporation. (See Whitney, William E., assignor.)

Smith, A. O., Corporation. (See Nicolet, Constant E., assignor.)

Smith, Albert A., Riverdale, N. J., assignor to Metropolitan Engineering Company, Brooklyn, N. Y. Electric butt welding. 1,897,079; Feb. 14.

Smith, Stuyvesant C., Chicago, Ill. Shock absorber. 1,897,443; Feb. 14.

Smoyer, Henry, North Tonawanda, N. Y. Circuit controller. 1,897,681; Feb. 14.

Smyser, James S. (See Mancib, Alvin S., assignor.)

Smyser, James S., Boston, Mass. Electrical apparatus. 1,897,990; Feb. 14.

Snarr, Geo. W., & Co. (See Snarr, George W., assignor.)

Snarr, George W., Webster Groves, assignor to Geo. W. Snarr & Co., St. Louis, Mo. Bearing extracting and installing device. 1,897,737; Feb. 14.

Snyder, George H., Philadelphia, Pa. Cigar box. 1,897,868; Feb. 14.

Snyder, Robert W., Akron, Ohio, assignor to Wingfoot Corporation, Wilmington, Del. Method of and machine for treating rubber compound. 1,897,961; Feb. 14.

Societe Francaise Radio-Electrique. (See Bernard, Marcel, assignor.)

Societe Generale des Carburateurs Zenith. (See Viel, Louis L., assignor.)

Societe Technique d'Optique et de Photographie S. T. O. P. (See Chretien, Georges, assignor.)

Somerville, Ian C., Fox Chase, assignor to Rohm & Haas Company, Philadelphia, Pa. Colloidal suspension and method of use. 1,897,773; Feb. 14.

Sommers Bros. Appliance Co. (See Sustins, Walter O., assignor.)

Soper, Raymond H., assignor to Browne-Morse Company, Muskegon, Mich. Drawer pull. 1,897,080; Feb. 14.

Sorensen, Lillian, Detroit, Mich. Ironing board. 1,897,081; Feb. 14.

Souders, Benjamin S., Decatur, Ill. Foundation gauge. 1,897,682; Feb. 14.

Spampinato, Anthony M., assignor of one-half to W. J. Buford, Houston, Tex. Illuminated reflector. 1,897,281; Feb. 14.

Sparks-Withington Co., The. (See Scofield, Theodore J., assignor.)

Specialty Sales Corporation, Limited. (See Hansen, Charles C., assignor.)

Spencer Thermostat Company. (See Marshall, Laurence K., assignor.)

Sperry Products, Inc. (See Drake, Harcourt C., assignor.)

Spiral-Rolled Products Company. (See Williams, Frank H. assignor.)

Sproul, Donald F., Chicago, Ill., assignor to Cardwell Westinghouse Company. Cushioning device. 1,897,738; Feb. 14.

Squibb, E. R. & Sons. (See Christiansen, W. G., and Harris, assignors.)

Squibb, E. R., & Sons. (See Christiansen, W. G., Jones, and Moness, assignors.)

Squires, John, Hagerstown, Md. Propeller. 1,897,536; Feb. 14.

Staaf, Hannah, administratrix. (See Staaf, Werner I., sr.)

Staaf, Werner I., sr., deceased, assignor of fifty-one one-hundredths to W. W. Martin, Pittsburgh, Pa.; H. Staaf, administratrix. Rotary internal combustion engine. 1,897,962; Feb. 14.

Stäblein, Wilhelm, assignor to Allgemeine Elektricitats Gesellschaft, Friedrich Karl, Berlin, Germany. Control means. 1,897,739; Feb. 14.

Stackhouse, George A., Oakland, Calif., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Spring structures. 1,897,402; Feb. 14.

Staffaroni, Lally. (See Farrell, M. J., and Staffaroni.)

Stalb, Ludwig A., jr. (See Hickman, K. C. D., and Stalb.)

Stallard, Calvin B. (See Greear, Everett B., assignor.)

Standard Brands Incorporated. (See Frey, Charles N., assignor.)

Standard Forgings Company. (See Swanson, Clarence S., assignor.)

Standard Mirror Company. (See La Hodny, William, assignor.)

Standard Stoker Company, The. (See Roesch, Frank P., assignor.)

Standard Stoker Company. (See Turner, E. A., and Surdykowski, assignors.)

Stanford, Leland H. (See Corbett, S. M., and Stanford.)

Stark, Karl G., Skynnerstad, Lofta, Sweden. Plow for wetting the plowshare. 1,897,444; Feb. 14.

Stauber, Georg. (See Paschen, P., Ritter, Stauber, Gebhardt, and Schmiedel.)

Staud, Cyril J., and J. T. Fuess, assignors to Eastman Kodak Company, Rochester, N. Y. Making cellulose nitro-acetate. 1,897,869; Feb. 14.

Staufert, Rudolph, assignor to Robbins & Staufert, Inc., Chicago, Ill. Initial or ornament holder for women's hand-bags and other articles. 1,897,341; Feb. 14.

Stawitz, Julius. (See Dulits, A., and Stawitz.)

Stehr, Leo N., assignor to Stehr Piston Ring Company, San Diego, Calif. Piston ring. 1,897,648; Feb. 14.

Stehr Piston Ring Company. (See Stehr, Leo N., assignor.)

Steiner, Amos P., assignor to Landis Tool Company, Waynesboro, Pa. Work clamping fixture for crank grinding machines. Re18,736; Feb. 14.

Steinle, Adolf, Jena, Germany, assignor to N. V. Nederlandsche Instrumenten Compagnie "Nedinsco", Venlo, Netherlands. Turret rotatably mounted on board ship. 1,897,282; Feb. 14.

Steinmayer, Alwin G., Milwaukee, assignor to Line Material Company, South Milwaukee, Wis. Fuse link. 1,897,342; Feb. 14.

Stephenson Manufacturing Company. (See Stephenson, Thomas B., assignor.)

Stephenson, Thomas B., Springfield, Mass. Aspirator. 1,897,343; Feb. 14.

Stephenson, Thomas B., Springfield, Mass. Inhaling bottle. 1,897,404; Feb. 14.

Stephenson, Thomas B., assignor to Stephenson Manufacturing Company, Inc., Springfield, Mass. Aspirator. 1,897,404; Feb. 14.

Stevenson, Frank, West Lawn, assignor to Howard Hosiery Company, Inc., Sinking Springs, Pa. Knitting. 1,897,917; Feb. 14.

Stewart, Elon P., and L. H. Frost, Syracuse, N. Y., assignors to Cement-Gun Company, Inc. Control for nozzle velocity. 1,897,870; Feb. 14.

Stewart-Warner Corporation. (See Wheeler, Leonard H., assignor.)

Stimets, Carl, Cincinnati, Ohio. Vaporizing device for internal combustion engines. 1,897,344; Feb. 14.

Stimpson, Walter F., Detroit, Mich., and M. K. Patten, Dayton, Ohio; said Patten assignor to said Stimpson. Controllable pitch propeller. 1,897,445; Feb. 14.

Stimpson, Walter F., Detroit, Mich. Weighing scale. 1,897,446; Feb. 14.

Stoekle, Erwin R., assignor to Central Radio Laboratories, Milwaukee, Wis. Broad band frequency responsive means. 1,897,082; Feb. 14.

Stokes and Smith Company. (See Stokes, John S., assignor.)

Stokes, John S., Huntingdon Valley, assignor to Stokes and Smith Company, Philadelphia, Pa. Composite box. 1,897,626; Feb. 14.

Stone, Enoch G., Yukon, Okla. Cotton and sorghum head gathering device. 1,897,447; Feb. 14.

Stott, Frederick R. L. (See Todd, W. E. A., and Stott.)

Straatman, Alphons G. H., assignor to Naamloose Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Apparatus for the orientation of drill cores. 1,897,871; Feb. 14.

Straatman, Alphons G. H., assignor to Naamloose Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Obtaining orientated drill cores. 1,897,872; Feb. 14.

Strickler, Walter B., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,897,083; Feb. 14.

Stripling, Luke S., assignor, by mesne assignments, to National Garment Stretcher Corporation, Amarillo, Tex. Garment stretcher. 1,897,972; Feb. 14.

Stroebel, Richard. (See Hentrich, W., Wieners, and Stroebel.)

Stromberg-Carlson Telephone Manufacturing Company, The. (See Graham, Virgil M., assignor.)

Stromberg-Carlson Telephone Manufacturing Company, The. (See Graham, V. M., and Powell, assignors.)

Sullivan, Edward F., South Portland, Me. Oiling apparatus for locomotive driving wheel flanges. 1,897,827; Feb. 14.

Sullivan, Edward J. and W. M., Los Angeles, Calif. Vehicle control mechanism. 1,897,537; Feb. 14.

Sullivan, William M. (See Sullivan, Edward J. and W. M.)

Sundh Electric Company. (See Deans, William, assignor.)

Sundstrand Engineering Company. (See Kiefer, William B., assignor.)

Sunnen, Joseph, St. Louis, Mo. Wrist pin gauge. 1,897,774; Feb. 14.

Surdykowski, Charles J. (See Turner, E. A., and Surdykowski.)

Sustins, Walter O., assignor to Sommers Bros. Appliance Co., Saginaw, Mich. Worktable. 1,897,152; Feb. 14.

Svensson, Victor A., Montclair, assignor to The Bates Manufacturing Company, West Orange, N. J. Fastening machine. 1,897,626; Feb. 14.

Swanson, Clarence S., assignor to Standard Forgings Company, Chicago, Ill. Apparatus for making forged steel wheels. 1,897,645; Feb. 14.

Swanson, Clarence S., assignor to Standard Forgings Company, Chicago, Ill. Making forged steel wheels. 1,897,646; Feb. 14.

Sweeney, John N. (See Bright, K. C., and Sweeney.)

Swiss Locomotive and Machine Works. (See Wüterich, Eugen, assignor.)

Synchrome Corporation. (See Wright, Walter L., assignor.)

Taber, George H., Binghamton, N. Y. Vehicle spring controlling means. 1,897,538; Feb. 14.

Tamarin, Bernard J., Philadelphia, Pa. Vacuum cleaner cord control device. 1,897,087; Feb. 14.

Taylor, Harvey B., Philadelphia, Pa. Draft tube structure. 1,897,501; Feb. 14.

Taylor, Harvey B., Philadelphia, Pa. Draft tube. 1,897,502; Feb. 14.

Taylor Instrument Companies. (See Newell, Floyd B., assignor.)

Taylor Instrument Companies. (See Norwood, Harry Y., assignor.)

Taylor, Milton C., Chicago, Ill., assignor, by mesne assignments, to Signode Steel Strapping Company. Sealing tool. 1,897,511; Feb. 14.

Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Böhm, Otto, assignor.)

Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Roosenstein, Hans O., assignor.)

Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Schröter, Fritz, assignor.)

Teller, Frits, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Purification of aluminum sulphate solutions. 1,897,740; Feb. 14.

Templeton, Herbert J., Brooklyn, assignor of one-tenth to E. C. O'Donnell, New York, N. Y. Moving picture projector. 1,897,288; Feb. 14.

Terhaar, Aloysius S., San Diego, Calif. Internal combustion engine. 1,897,182; Feb. 14.

Ter Horst, William P., Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Continuous preparation of a di-substituted guanidine. 1,897,220; Feb. 14.

Ternstedt Manufacturing Company. (See Hollerith, Charles, assignor.)

Terry, Charles M., assignor to A. W. Cash Company, Decatur, Ill. Control apparatus. 1,897,448; Feb. 14.

Terry, Edward F., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for rock drills. 1,897,595; Feb. 14.

Texas Company, The. (See Candor, Edward R., assignor.)

Texas Company, The. (See Watson, C. W., and Grahame, assignors.)

Thieme, Otto, Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,897,284; Feb. 14.
Thimann, Max, Berlin-Wilmersdorf, assignor to the Firm Dr. Bekk & Kaulen Chemische Fabrik G. m. b. H., Berlin-Lichterfelde, Germany. Photochemical production of aluminum printing forms. 1,897,828; Feb. 14.
Thomas, Arthur, Wallington, assignor to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Machine for comparing statistical record cards. 1,897,085; Feb. 14.
Thomas, Arthur Thornton Heath, assignor to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Ink ribbon feed mechanism. 1,897,084; Feb. 14.
Thomas & Betts Co., The. (See Buchanan, Stephen N., assignor.)
Thomas, Rosswell W. (See Endacott, P. S., and Thomas.)
Thomas, Rosswell W., assignor to Phillips Petroleum Company, Bartlesville, Okla. Liquid gas container. 1,897,163; Feb. 14.
Thomas, Rosswell W., Detroit, Mich., assignor to Phillips Petroleum Company, Bartlesville, Okla. Customer's equipment for storing, protecting, and dispensing liquefied gas. 1,897,166; Feb. 14.
Thomas, Rosswell W., Detroit, Mich., assignor to Phillips Petroleum Company, Bartlesville, Okla. Apparatus for transportation and distribution of liquefied gas. 1,897,167; Feb. 14.
Thomas, Rosswell W., Detroit, Mich., assignor to Phillips Petroleum Company, Bartlesville, Okla. Weighing mechanism. 1,897,169; Feb. 14.
Thomas, Rosswell W., Detroit, Mich., assignor to Phillips Petroleum Company, Bartlesville, Okla. Weighing mechanism. 1,897,170; Feb. 14.
Thomas, William D., Lynnfield, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping shoes. 1,897,086; Feb. 14.
Thompson, Clifford F., assignor to Bodine Electric Company, Chicago, Ill. Speed responsive electric switch. 1,897,405; Feb. 14.
Thompson, Ralph E., Brookline, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,897,656; Feb. 14.
Thornton, Ray, Detroit, Mich., assignor to Patent Developers, Inc. Tandem drive for motor vehicles. 1,897,153; Feb. 14.
Thorpe, Richard, Mays Landing, N. J. Landing gear for dirigibles. 1,897,539; Feb. 14.
Tietz, William J., Chicago, Ill., assignor to Western Electric Company, Inc., New York, N. Y. Instruments for varying electrical potential. 1,897,596; Feb. 14.
Timian, Harold H., assignor to Continental Motors Corporation, Detroit, Mich. Engine. 1,897,512; Feb. 14.
Timian, Harold H., assignor to Continental Motors Corporation, Detroit, Mich. Engine. 1,897,540; Feb. 14.
Timm, Paul C. and W. P., Lincoln, Nebr. Furnace heat regulator. 1,897,406; Feb. 14.
Timm, Paul C., Lincoln, Nebr. Projecting scribe. 1,897,407; Feb. 14.
Timm, Paul C. and W. P., Lincoln, Nebr. Furnace heat regulator. 1,897,408; Feb. 14.
Timm, William P. (See Timm, Paul C. and W. P.)
Timson, William, Soho Foundry, Birmingham, assignor to W. & T. Avery Limited, Birmingham, England. Dashpot. 1,897,873; Feb. 14.
Todd, William E. A., and F. R. L. Stott, Hamilton, Ontario, Canada. Vehicle bumper. 1,897,345; Feb. 14.
Topeka Tent and Awning Company. (See Bell, E. F., and Anton, assignors.)
Townsend, Russell J. (See Williams, J. T. C., and Townsend.)
Tracy, Robert W., assignor to The De Vilbiss Company, Toledo, Ohio. Spray gun nozzle. 1,897,683; Feb. 14.
Tranin Egg Products Co. (See Tranin, Samuel, assignor.)
Tranin, Samuel, Kansas City, Mo., assignor to Tranin Egg Products Co. Egg product. 1,897,775; Feb. 14.
Treolite Company. (See De Groote, M., Monson, and Wirtel, assignors.)
Trowbridge, Frederick A., Sacramento, Calif. Portable and adjustable vise-stand. 1,897,449; Feb. 14.
Troy Laundry Machinery Company. (See Adams, Arthur H., assignor.)
Troy Laundry Machinery Company. (See McKnight, Samuel H., assignor.)
Trutner, Donald G. (See Anderson, V., and Trutner.)
Tunison, John L., assignor to Bucyrus-Monigham Company, Chicago, Ill. Excavating bucket shackle. 1,897,346; Feb. 14.
Turner, Edwin A., New York, and C. J. Surdykowski, Tuckahoe, N. Y., assignors to Standard Stoker Company, Incorporated. Locomotive tender construction. 1,897,513; Feb. 14.
Tuttle, Fordyce E., and F. E. Altman, assignors to Eastman Kodak Company, Rochester, N. Y. Optical system. 1,897,874; Feb. 14.
U. G. I. Contracting Company, The. (See Battin, W. I., and Chrisman, assignors.)
Ulrich, Heinrich, and K. Saurwein, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Sulphuric esters of glycol ethers. 1,897,741; Feb. 14.
Underwood Elliott Fisher Company. (See Dobson, William A., assignor.)
Underwood Elliott Fisher Company. (See Thieme, Otto, assignor.)
Union Bank of Chicago. (See Cowles, Irving, assignor.)
Union Metal Products Company. (See Gilpin, Garth G., assignor.)
Union Special Machine Company. (See Riviere, Albert S., assignor.)
Union Switch & Signal Company, The. (See Lewis, Lloyd V., assignor.)
United Shoe Machinery Corporation. (See Ballard, Milton H., assignor.)
United Shoe Machinery Corporation. (See Bates, Arthur, assignor.)
United Shoe Machinery Corporation. (See Glass, Perley R., assignor.)
United Shoe Machinery Corporation. (See Macleod, A. A., and Finn, assignors.)
United Shoe Machinery Corporation. (See Morrill, Alfred R., assignor.)
United Shoe Machinery Corporation. (See Shaw, Wesley J., assignor.)
United Shoe Machinery Corporation. (See Thomas, William D., assignor.)
United States Gypsum Company. (See McNeil, William M., assignor.)
United States Gypsum Company. (See Offutt, James S., assignor.)
United States Gypsum Company. (See Roos, Carlisle K., assignor.)
United States Pipe and Foundry Company. (See Clark, Stuart B., assignor.)
United States Radiator Corporation. (See Doelman, Myron L., assignor.)
United States Tobacco Company. (See DeVoe, John M., assignor.)
U. S. Slicing Machine Company. (See Van Berkel, Cornelius F. M., assignor.)
Universal Draft Gear Attachment Co. (See Hall, Joseph M., assignor.)
Universal Oil Products Company. (See Alther, Joseph G., assignor.)
Universal Oil Products Company. (See Angell, Charles H., assignor.)
Universal Oil Products Company. (See Delattre-Seguy, Jean, assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company. (See Morrell, Jacque C., assignor.)
Universal Oil Products Company. (See Morrell, J. C., and Egloff, assignors.)
Universal Oil Products Company. (See Nekler, Lev A., assignor.)
Van Berkel, Cornelis F. M., Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind. Slicing machine. 1,897,541; Feb. 14.
Van Beusekom, Godefridus, Eindhoven, Netherlands, assignor to Radio Corporation of America. Apparatus for testing discharge tubes. 1,897,450; Feb. 14.
Van-Lansing Novelty Co. (See Van Schyndle, R. W., and Lansing, assignors.)
Van Schyndle, Raymond W., and W. D. Lansing, assignors to Van-Lansing Novelty Co., Green Bay, Wis. Liquid dispensing device. 1,897,154; Feb. 14.
Van Wormer, John R., Toledo, assignor, by mesne assignments, to The Guardian Trust Company, Cleveland, Ohio. Knock-down box manufacture. 1,897,715; Feb. 14.
Vapor Car Heating Company, Inc. (See Russell, Edward A., assignor.)
Varju, Vincent, Hunta, Ontario, Canada. Rotary machine gun fort. 1,897,451; Feb. 14.
Vaughn, Sidney P., U. S. Navy, Ackerman, Miss. Thermostatic valve. 1,897,155; Feb. 14.
Veit, Anton L., assignor of one-half to W. Wagner, San Francisco, Calif. Airplane control apparatus. 1,897,285; Feb. 14.
Vensle, Frederick M. (See Vensle, Walter H., assignor.)
Vensle, Walter H., assignor to F. M. Vensle, Philadelphia, Pa. Building construction. 1,897,776; Feb. 14.
Victor, Benjamin J., Oak Park, assignor to Victor Manufacturing & Gasket Company, Chicago, Ill. Gasket. 1,897,088; Feb. 14.
Victor Manufacturing & Gasket Company. (See Victor, Benjamin J., assignor.)
Viel, Louis L., Ville D'Avray, assignor to Societe Generale des Carburateurs Zenith, Levallois-Perret, France. Regulator for the fuel pressure in internal combustion engines. 1,897,742; Feb. 14.
Viet, Paul. (See Gerard, Leon, assignor.)
Vitoux, Marcel, Troyes, Aube, France. Machine for operating relooping tools. 1,897,452; Feb. 14.
Volckening, Henry G., assignor to Volckening, Inc., Brooklyn, N. Y. Bottle brush and mounting therefor. 1,897,777; Feb. 14.
Volckening, Inc. (See Volckening, Henry G., assignor.)
Von Brockdorff, Rudolf, Munich, Germany, assignor to Schutte and Koerting Company, Philadelphia, Pa. Electric heating element. 1,897,089; Feb. 14.
Vortox Manufacturing Company. (See Garner, Herman H., assignor.)
Vortox Manufacturing Company. (See Garner, H. H., Nohavec, and Hopkins, assignors.)

Voss, Arley H., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Producing rubber articles. 1,897,626; Feb. 14.
Vulcan Detinning Company, The. (See Butterfield, William J., assignor.)
Wadman, Harold A., assignor to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for melting glass. 1,897,978; Feb. 14.
Wadsworth, James. (See Reinhart, Howard A. and H. W., and Wadsworth.)
Wagenhals, William G., Detroit, Mich. Operating device for animated display signs. 1,897,918; Feb. 14.
Wagner, William. (See Veit, Anton L., assignor.)
Walding, Samuel O., Los Angeles, Calif. Shirt retaining device. 1,897,090; Feb. 14.
Walker, Crawford J., assignor to The Protectu Corporation, Indianapolis, Ind. Operating bookkeeping machines. 1,897,247; Feb. 14.
Walker, Warren R., Short Hills, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Low resistance fluid flow switch. 1,897,453; Feb. 14.
Walker, Warren R., Short Hills, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Low resistance fluid flow switch. 1,897,455; Feb. 14.
Walker, Warren R., Short Hills, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Low resistance fluid flow switch. 1,897,456; Feb. 14.
Walker, Warren R., Short Hills, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Electric switch and the production thereof. 1,897,963; Feb. 14.
Walker, Warren R., Short Hills, and F. Moos, assignors to General Electric Vapor Lamp Company, Hoboken, N. J. Low resistance fluid flow switch. 1,897,454; Feb. 14.
Wallace, Curtis C., Philadelphia, Pa. Seal for storage battery containers. 1,897,597; Feb. 14.
Wallace, Edgar T. (See Perew, Frank C., assignor.)
Wallace, Samuel, assignor to The Montgomery Company, Windsor Locks, Conn. Scouring pad. 1,897,778; Feb. 14.
Walls, Iva (guardian). (See Ford, Andrew F.)
Walsh, James F., East Orange, N. J., assignor to Celluloid Corporation. Dental plate base. 1,897,206; Feb. 14.
Wansor, William B., Locust Valley, N. Y. Cigarette holder. 1,897,409; Feb. 14.
Warner, Arthur, Haverford, Pa. Dead-end attachment. 1,897,221; Feb. 14.
Warner, Frederick W., Denver, Colo. Fire hose clamp. 1,897,743; Feb. 14.
Wasberg, Axel, assignor to Camel Company, Chicago, Ill. Door elevating construction. 1,897,563; Feb. 14.
Waseige, Charles E., Rueil, France, assignor, by mesne assignments, to Eclipse Aviation Corporation, East Orange, N. J. Driving rotary compressors for the supply of internal combustion engines. 1,897,684; Feb. 14.
Waterbury Tool Company. (See Ellis, Arthur L., assignor.)
Watson, Claude W., and J. H. Grahame, Port Arthur, Tex., assignors to The Texas Company, New York, N. Y. Cracking process. 1,897,348; Feb. 14.
Watts, Noble H., Alameda, Calif., assignor, by mesne assignments, to General Electric Company, Schenectady, N. Y. Electrical terminals. 1,897,829; Feb. 14.
Webber, Arthur. (See McKnight, E. R., and Webber.)
Weber Costello Co. (See Lawton, Robert B., assignor.)
Weiland, Henry J. (See Gubelmann, L., Weiland, and Henke.)
Weinberger, Julius, New York, N. Y., assignor to Radio Corporation of America. Sound recording. 1,897,222; Feb. 14.
Weinland, Joseph W., Philadelphia, Pa. Anchor device for air brake retainer valves. 1,897,091; Feb. 14.
Weir, James G., Aldwych, London, England, assignors, by mesne assignments, to Autogiro Company of America, Philadelphia, Pa. Aircraft with rotative wings. 1,897,092; Feb. 14.
Weller, Anthony A. (See Cole, I. E., May, and Weller.)
Wells, Harold D., Glens Falls, N. Y. Pulp and dirt separator. 1,897,156; Feb. 14.
Wells, Harold D., Glens Falls, N. Y. Paper stuff hydrator. 1,897,157; Feb. 14.
Wernberg, Niels E., Franklin, Pa., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Engine starter. 1,897,457; Feb. 14.
Werner, Dick G., Kansas City, Mo. Mail separating and facing apparatus. 1,897,093; Feb. 14.
Werner, John, Swinemuende, Germany. Transferring prints on to surfaces. 1,897,875; Feb. 14.
West Branch Corporation, The. (See Bauman, Warren J., assignor.)
West, Maxwell A., Oakland, Calif. Transmission shaft for vehicles. 1,897,542; Feb. 14.
Western Electric Company. (See Alden, John L., assignor.)
Western Electric Company. (See Boving, Henrik, assignor.)
Western Electric Company. (See Clemons, Dale R., assignor.)
Western Electric Company. (See Grace, B. B., Skillman, Roche, and Sandeman, assignors.)
Western Electric Company. (See Hatton, William, assignor.)
Western Electric Company. (See Heising, Raymond A., assignor.)
Western Electric Company. (See Johnson, Joel R., assignor.)
Western Electric Company. (See Nelson, Charles E., assignor.)
Western Electric Company. (See Reeve, Howard T., assignor.)
Western Electric Company. (See Tietz, William J., assignor.)
Western Electric Company. (See Voss, Arley H., assignor.)
Western Electric Company. (See Wyman, Thomas P., jr.)
Westinghouse Electric & Manufacturing Company. (See Barnsteiner, Alfons, assignor.)
Westinghouse Electric & Manufacturing Company. (See Breisky, John V., assignor.)
Wheeler, Leonard H., assignor to Stewart-Warner Corporation, Chicago, Ill. Depth gauge and pump. 1,897,876; Feb. 14.
White, Harold E., Zelienople, assignor to Lava Crucible Company of Pittsburgh, Pa. Method of and material employed in the manufacture of refractory articles. 1,897,183; Feb. 14.
White, Joseph W. (See Lamb, Ralph, assignor.)
White, William S., Palmer, Tenn. Curved boot top, shoe top, and shoe tongue top. 1,897,849; Feb. 14.
Whitehead & Kales Company. (See Greenwald, Harold A., assignor.)
Whitmore, Reginald L., London, England. Central buffing and drawgear. 1,897,287; Feb. 14.
Whitmore, Reginald L., London, England. Central buffing and drawgear for railway vehicles. 1,897,288; Feb. 14.
Whitney, Maurice P., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,897,919; Feb. 14.
Whitney, William E., Philadelphia, Pa., assignor, by mesne assignments, to Sloane-Blabon Corporation, New York, N. Y. Manufacture of linoleum. 1,897,458; Feb. 14.
Wicaco Machine Corporation, The. (See Lawser, Charles W., assignor.)
Wieden, Louis, Livermore, Calif. Golf game. 1,897,289; Feb. 14.
Wiegand, Kurt, Berlin, and J. Habel, Berlin-Tempelhof, Germany, assignor to General Electric Company. Terminals for electric devices. 1,897,459; Feb. 14.
Wiegner, Simon P., Los Angeles, Calif. Door control mechanism. 1,897,350; Feb. 14.
Wieners, Frans. (See Heutrich, W., Wieners, and Stroebel.)
Wiggins, John H., Tulsa, Okla. Floating roof drain. 1,897,779; Feb. 14.
Wilcox Company, The. (See Wilcox, Joseph S., assignor.)
Wilcox, Joseph S., assignor to The Wilcox Company, Athol, Mass. Reenforcing frame member for toilet articles. 1,897,354; Feb. 14.
Wildin, George W., Pittsburgh, Pa., assignor, by mesne assignments, to Cardwell Westinghouse Company, Chicago, Ill. Friction shock absorbing mechanism. 1,897,780; Feb. 14.
Wilkins, Herbert L., assignor to Archer Daniels Midland Company, Minneapolis, Minn. Pulveriser. 1,897,744; Feb. 14.
Wille, Fred, and J. P. Grilli, assignors to H. A. Brassert & Company, Chicago, Ill. Chimney valve. 1,897,781; Feb. 14.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,271; Feb. 14.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,272; Feb. 14.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,289; Feb. 14.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,290; Feb. 14.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,291; Feb. 14.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,292; Feb. 14.
Willheim, William, Co. (See Headon, Frank, assignor.)
Willheim, William, Co. (See Schweiser, Jack, assignor.)
Williams, Annie M., guardian. (See Williams, Frank H.)
Williams, Arthur H. T., assignor of one-half to Roy Feldenheimer, Portland, Oreg. Concealed doorcheck. 1,897,351; Feb. 14.
Williams, Donald G., Broken Bow, Nebr. Cultivator fender. 1,897,158; Feb. 14.
Williams, Elmer R., assignor to National Tank Company, Tulsa, Okla. Valve controlling means. 1,897,745; Feb. 14.
Williams, Frank H., incompetent, by A. M. Williams, guardian, Buffalo, assignor to Spiral-Rolled Products Company, Inc., New York, N. Y. Making spikes. 1,897,159; Feb. 14.
Williams, Joseph T. C., and R. J. Townsend, Arcadia, Pa. Detonator safety device. 1,897,685; Feb. 14.
Wilson, Albert C. (See Perkins, L. A., and Wilson.)
Wilson, Ivor R. (See Wilson, John E. and I. R.)
Wilson, James E., S. McConnell, and C. Brown, Belfast, Ireland. Dough proving apparatus. 1,897,352; Feb. 14
Wilson, John A., Elizabeth, N. J. Liquid coating composition and preparing the same. 1,897,686; Feb. 14.
Wilson, John E. and I. R., McEwen, Oreg. Swivel hook 1,897,920; Feb. 14.
Wilson, William W., Sioux City, Iowa, assignor, by mesne assignments, to The Gabriel Kari-Keen Company. Trunk rack. 1,897,094; Feb. 14.
Wilt, Elmer E., Chicago, Ill. Wardrobe suitcase. 1,897,353; Feb. 14.

Wingfoot Corporation. (See Bateman, Ralph C., assignor.)
Wingfoot Corporation. (See Snyder, Robert W., assignor.)
Winkler, Carl J. (See Schwitzer, L., and Winkler, assignors.)
Winslow, Charles A., Vallejo, Calif. Exhausting system for hydrocarbon engines and the like. 1,897,746; Feb. 14.
Wirtel, Arthur F. (See DeGroote, M., Monson, and Wirtel.)
Wittlinger, Leonard M., Flint, assignor to General Motors Research Corporation, Detroit, Mich. Carburetor. 1,897,782; Feb. 14.
Wolf, Gabiel, Bratislava, Czechoslovakia. Interchangeable rubber tire. 1,897,974; Feb. 14.
Wolpert, Albert. (See Lapp, E., Wolpert, and Shaw.)
Wood, Walter. (See Camerota, Louis A., assignor.)
Woodstock Typewriter Company. (See Koca, James F., assignor.)
Woody, George A., Tilden, Tex., and R. C. Coupland, Norfolk, Va. Operating mechanism for machine guns. 1,897,099; Feb. 14.
Wooll, John H., San Francisco, Calif. Refrigerator box and system of refrigeration. 1,897,095; Feb. 14.
Wozasek, Oscar J. (See Guthrie, R. G., and Wozasek.)
Wright, Clair G., Kansas City, Mo. Garment. 1,897,096; Feb. 14.
Wright, Walter L., Santa Monica, assignor to Synchrome Corporation, Los Angeles County, Calif. Film handling mechanism. 1,897,097; Feb. 14.
Wright, Walter L., Santa Monica, assignor to Synchrome Corporation, Los Angeles County, Calif. Motion picture projector. 1,897,098; Feb. 14.
Wubco Battery Corporation. (See Rupp, John L., assignor.)
Wüterich, Eugen, assignor to Swiss Locomotive and Machine Works, Winterthur, Switzerland. Fuel pump for Diesel engines. 1,897,290; Feb. 14.
Wyman, Thomas P., jr., Oak Park, Ill., assignor to Western Electric Company, Inc., New York, N. Y. Transporting platform. 1,897,598; Feb. 14.
Yates, Paul, Pittsburgh, assignor, by mesne assignments, to The Oil City National Bank, Oil City, Pa. Metering system. 1,897,657; Feb. 14.
Yoshisawa, Denzo, Nakano Machi, Toyotama Gun, Tokyo Fu, assignor to Hisakichi Kubodera, Tokyo, Japan. Valve. 1,897,687; Feb. 14.
Young, John W., assignor to Federal Laboratories, Inc., Pittsburgh, Pa. Hand grenade or aerial bomb. 1,897,948; Feb. 14.
Young, L. A., Spring & Wire Corporation. (See Oldham, John M., assignor.)
Young, L. A., Spring & Wire Corporation. (See Stackhouse, George A., assignor.)
Young, Peter M., Los Angeles, Calif. Coffee bin and hopper. 1,897,599; Feb. 14.
Younger, Julius G., Hamilton, Ontario, Canada. Radiedial. 1,897,380; Feb. 14.
Zerbe, Lewis E., Moneta, Calif., assignor to The National Supply Company, Toledo, Ohio. Gripping mechanism for rotary drilling machines. 1,897,564; Feb. 14.
Zim Manufacturing Company. (See Berkman, Herbert A., assignor.)
Zitscher, Arthur, and W. Seidenfaden, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Diazo sulfonates of the diarylamine series. 1,897,410; Feb. 14.
Zook, John S., assignor to Burgess Battery Company, Madison, Wis. Battery hand lamp. 1,897,627; Feb. 14.
Zopp, August, Modling near Vienna, Austria. Induction motor. 1,897,184; Feb. 14.
Zotos, Georg, Berlin, Germany. Distillation retort. 1,897,877; Feb. 14.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Speedometer. 1,897,964; Feb. 14.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Temperature compensated speedometer. 1,897,965; Feb. 14.
Zubaty, Joseph, and D. E. Keeney, assignors to A C Spark Plug Company, Flint, Mich. Mounting plate and face assembly. 1,897,966; Feb. 14.
Zubaty, Joseph, and D. E. Keeney, assignors to A C Spark Plug Company, Flint, Mich. Instrument panel face assembly. 1,897,975; Feb. 14.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 14TH DAY OF FEBRUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Absorption machines, Process and apparatus for operating continuous. E. Altenkirch. 1,897,223; Feb. 14.
Acid, Dehydration of acetic. D. F. Othmer. 1,897,816; Feb. 14.
Acids containing halogen and alkyl groups in their molecule, Manufacturing phenylthioglycollic. R. Hers, E. Albrecht, and R. Dereser. 1,897,516; Feb. 14.
Adding and calculating machine. J. E. W. Greve. 1,897,982; Feb. 14.
Address plates, Stripping and truing. J. A. Hult and P. M. Colquhoun. 1,897,125; Feb. 14.
Adhesive and making the same. W. D. Fawthrop. 1,897,469; Feb. 14.
Adhesive plaster, Storing and dispensing surgical. H. R. Graham. 1,897,909; Feb. 14.
Aeroplane. H. Hahn. 1,897,756; Feb. 14.
Agricultural implement. H. E. Altgelt. 1,897,355; Feb. 14.
Air cleaner. H. H. Garner, F. R. Nohavec, and G. H. Hopkins. 1,897,372; Feb. 14.
Air cleaners, Cleanable inlet for. H. H. Garner, F. R. Nohavec, and G. H. Hopkins. 1,897,371; Feb. 14.
Air compressor, Direct acting internal combustion. R. P. Pescara. 1,897,674; Feb. 14.
Aircraft and screw propeller therefor. R. Chillingworth. 1,897,463; Feb. 14.
Aircraft with rotative wings. J. G. Weir. 1,897,092; Feb. 14.
Airplane. A. C. Loedding. 1,897,669; Feb. 14.
Airplane control apparatus. A. L. Veit. 1,897,285; Feb. 14.
Airports, Lighting. T. J. Rogers. 1,897,768; Feb. 14.
Alcohol, Manufacture of polymerisedvinyl. C. R. Fuller. 1,897,856; Feb. 14.
Aldehyde-amine reaction products, Manufacturing. C. O. North. 1,897,210; Feb. 14.
Alkali-carbonates from alkaline phosphate-solutions, Producing or regenerating. H. Mändlen and H. Huber. 1,897,705; Feb. 14.
Alkyl sulphates, Forming. S. R. Merley. 1,897,812; Feb. 14.
Aluminum sulphate solutions, Purification of. F. Teller. 1,897,740; Feb. 14.
Anamorphoser apparatus for cinematography in colors and in relief. G. Chretien. 1,897,752; Feb. 14.
Anchor device for air brake retainer valves. Joseph W. Weinland. 1,897,091; Feb. 14.
Anesthetic apparatus. J. G. E. Hinkle. 1,897,878; Feb. 14.
Antifriction bearing. J. F. O'Connor. 1,897,585; Feb. 14.
Arbor, Chuck and centering. H. S. Beckett. 1,897,228; Feb. 14.
Armature. V. G. Apple. 1,897,544; Feb. 14.
Articles, Method of and material employed in the manufacture of refractory. H. E. White. 1,897,183; Feb. 14.
Artificial reed fabric. J. E. Millett. 1,897,671; Feb. 14.
Aspirator. T. B. Stephenson. 1,897,343; Feb. 14.
Aspirator. T. B. Stephenson. 1,897,404; Feb. 14.
Atomizer control. J. B. Schmitt. 1,897,679; Feb. 14.
Audiphone. W. G. G. Benway. 1,897,833; Feb. 14.
Automobile table. B. P. Baue. 1,897,107; Feb. 14.
Awning. C. H. J. Dilg. 1,897,636; Feb. 14.
Awning construction, Lateral arm. E. F. Bell and F. A. Anton. 1,897,029; Feb. 14.
Axle steering with front wheel drive, Rear. H. Cremer. 1,897,551; Feb. 14.
Bag: *See*—
Gladstone bag. Water bag.
Shopping bag.
Ball ear. C. Metz. 1,897,852; Feb. 14.
Ball throwing apparatus. H. R. McEachern. 1,897,317; Feb. 14.
Band frequency responsive means, Broad. E. E. Stoekle. 1,897,062; Feb. 14.
Band, Head. W. Richardson. 1,897,146; Feb. 14.
Band-pass filter. H. F. Dalpayrat. 1,897,633; Feb. 14.
Bank protecting device. B. Nastrom. 1,897,708; Feb. 14.
Bar: *See*—
Handle bar.
Bar for automobile bumpers, Impact. B. M. Short. Des. 89,269; Feb. 14.
Barometer, Aneroid. F. B. Newell. 1,897,325; Feb. 14.
Barrier, Yieldable. J. Frei, jr. 1,897,250; Feb. 14.
Basket. A. F. Durand. 1,897,366; Feb. 14.
Bassinet. C. F. Jenne. 1,897,258; Feb. 14.
Battery construction, Storage. J. L. Rupp. 1,897,565; Feb. 14.
Beach landing gear. G. Midboe. 1,897,269; Feb. 14.
Beans, Apparatus for treating. O. H. Hansen. 1,897,664; Feb. 14.
Bearing: *See*—
Antifriction bearing.
Bearing extracting and installing device. G. W. Snarr. 1,897,737; Feb. 14.
Bed accessory. E. F. Lagarde. 1,897,521; Feb. 14.
Bench. L. G. Helpling. 1,897,377; Feb. 14.
Bin and bopper, Coffee. P. M. Young. 1,897,599; Feb. 14.
Bit and bit holder, Mining machine. B. F. Rassieur and C. P. Bascom. 1,897,331; Feb. 14.
Blank handling apparatus. C. E. Nelson. 1,897,583; Feb. 14.
Blanks, Mechanism for feeding. H. S. Labombarde. 1,897,484; Feb. 14.
Blanket, Printer's. E. C. Schacht. 1,897,864; Feb. 14.
Board: *See*—
Ironing board. Paper board.
Boat construction. R. A. Erskine. 1,897,661; Feb. 14.
Boat davit support. E. B. Greear. 1,897,307; Feb. 14.
Bolt cutter and punch. C. C. Hansen. 1,897,514; Feb. 14.
Book match machines, Turning mechanism for. L. E. Parker. 1,897,508; Feb. 14.
Book support. T. A. Doherty. 1,897,305; Feb. 14.
Books, Making. C. E. Gale. 1,897,889; Feb. 14.
Bookkeeping machines, Operating. C. J. Walker. 1,897,347; Feb. 14.
Boot top, shoe top, and shoe tongue top, Curved. W. S. White. 1,897,349; Feb. 14.
Boron carbide and making the same. R. R. Ridgway. 1,897,214; Feb. 14.
Bottle. C. A. Fulle, jr. Des. 89,257; Feb. 14.
Bottle. A. K. Shults. 1,897,736; Feb. 14.
Bottle, Inhaling. T. B. Stephenson. 1,897,403; Feb. 14.
Bottle, Nursing. M. H. Block. 89,252; Feb. 14.
Bottle washer. F. B. Horton. 1,897,052; Feb. 14.
Box for articles having shafts and handles, Paper. T. L. Neumann. 1,897,672; Feb. 14.
Box manufacture, Knock-down. J. R. Van Wormer. 1,897,715; Feb. 14.
Bowling ball. E. M. T. Ryder. 1,897,714; Feb. 14.
Box: *See*—
Cigar box. Composite box.
Box and making the same. H. T. Bowman and W. L. Grob. 1,897,670; Feb. 14.
Bracket: *See*—
Clamping bracket.
Bracket and applying same. J. Pudliner. 1,897,913; Feb. 14.
Bracket for automotive radio sets. T. J. Scofield. 1,897,400; Feb. 14.
Brake: *See*—
Vehicle brake.
Brake actuating mechanism. G. P. Berry. 1,897,787; Feb. 14.
Brake system, Air. M. J. Farrell and L. Staffaroni. 1,897,894; Feb. 14.
Braking system, Hydraulic. M. W. Bowen. 1,897,230; Feb. 14.
Brick mold. J. A. Crowell. 1,897,792; Feb. 14.
Brickwork construction for regenerator furnaces, Checker. W. B. Mitchell. 1,897,270; Feb. 14.
Bridge. C. L. Keller. 1,897,056; Feb. 14.
Bridge, Suspension. C. A. Forsell. 1,897,470; Feb. 14.
Broaching machine. J. P. Ferris. 1,897,836; Feb. 14.
Brush. W. F. Albright. 1,897,381; Feb. 14.
Brush and mounting therefor, Bottle. H. G. Volckening. 1,897,777; Feb. 14.
Brush making machine. H. Cave. 1,897,968; Feb. 14.
Bucket, Bait. E. Camporini. 1,897,571; Feb. 14.
Buckle. S. Rosenthal. Des. 89,286; Feb. 14.
Building construction. M. Y. Seaton. 1,897,238; Feb. 14.
Building construction. W. H. Vennie. 1,897,776; Feb. 14.
Bumper, Vehicle. W. R. A. Todd and F. R. L. Stott. 1,897,345; Feb. 14.
Burner: *See*—
Oil burner.
Bushing, Vacuum-type insulating. G. E. Jansson. 1,897,257; Feb. 14.
Button. A. Mentkow. Des. 89,261; Feb. 14.
Button. J. Shadlowsky. Des. 89,268; Feb. 14.
Button. J. Shadlowsky. Des. 89,288; Feb. 14.
C-alkyl and C-aralkyl derivatives of aromatic compounds, Production of. Z. Földi. 1,897,795; Feb. 14.
Calendar, Perpetual. M. A. Migney. Des. 89,285; Feb. 14.
Cam grinding machine. J. C. and R. D. Shaw. Re18,738; Feb. 14.
Camera, Motion picture. H. K. Fairall. 1,897,368; Feb. 14.

Camera, Motion-picture. K. Morsbach. 1,897,762; Feb. 14.
Can filling machine. O. H. Hansen. 1,897,665; Feb. 14.
Capsule made of cellulose esters and preparing it. A. Dulits and J. Stawits. 1,897,422; Feb. 14.
Car construction. J. P. Anderson. 1,897,851; Feb. 14.
Car, Railway. E. H. Mattingley. Re18,735; Feb. 14.
Car, Railway refrigerator. G. G. Gilpin. 1,897,426; Feb. 14.
Carbon dioxid from gaseous mixtures and forming alkaline carbonates, Extracting. W. Gaus, K. Hochschwender, and W. Schunck. 1,897,725; Feb. 14.
Carburetor. L. M. Wittlinger. 1,897,782; Feb. 14.
Carburetor and preheater, Heavy oil. G. Garibaldi. 1,897,033; Feb. 14.
Carburetor control mechanism. J. Bellis. 1,897,358; Feb. 14.
Card filing device. S. B. Freiberg. 1,897,929–30; Feb. 14.
Carriage, Baby. C. J. Appenheimer and C. Mueller. 1,897,036; Feb. 14.
Case: *See*—
Cigarette case.
Casing cutter. N. T. McCann. 1,897,206; Feb. 14.
Casing for key-bows. M. P. Quay. 1,897,861; Feb. 14.
Casing head equipment. C. C. Brown. 1,897,297; Feb. 14.
Cassette. F. W. Reuter. 1,897,621; Feb. 14.
Casting apparatus for stereotype plates having a mold adapted to be pressed immediately against the melting pot. K. Schädlein. 1,897,823; Feb. 14.
Cathode, Indirectly heated. O. Böhm. 1,897,229; Feb. 14.
Cellulose nitro-acetate, Making. C. J. Staud and J. T. Fuess. 1,897,869; Feb. 14.
Charge forming device. F. E. Aseltine. 1,897,101–3; Feb. 14.
Cheese, Producing crustless. F. Draisbach. 1,897,892; Feb. 14.
Chimney hanger for burners. K. S. Jenson. 1,897,728; Feb. 14.
Chimney valve. F. Wille and J. P. Grilli. 1,897,781; Feb. 14.
Chocolate, Preparing. G. Defren. 1,897,242; Feb. 14.
Choke for oil wells. H. C. Otis. 1,897,985; Feb. 14.
Chute, Crushed ice. A. L. Blatti. 1,897,295; Feb. 14.
Cigar box. G. H. Snyder. 1,897,868; Feb. 14.
Cigarette case. W. Lewnes. 1,897,702; Feb. 14.
Cigarette holder. W. B. Wansor. 1,897,409; Feb. 14.
Cigarette package. G. J. Calivas. 1,897,549; Feb. 14.
Cinematographic objective. I. Kitroser. 1,897,262; Feb. 14.
Circuits, Antenna coupling. R. A. Braden. 1,897,231; Feb. 14.
Circuit control means for vertical printing presses, Power. S. Schwartzman. 1,897,592; Feb. 14.
Circuit controller. S. S. Green. 1,897,118; Feb. 14.
Circuit controller. H. Smoyer. 1,897,681; Feb. 14.
Charging and voltage regulating system, Automatic. H. H. Harbecke. 1,897,800; Feb. 14.
Clamp: *See*—
Fire hose clamp.
Clamping and means therefor. S. D. Butterworth. 1,897,548; Feb. 14.
Clamping bracket. R. Hetherington. 1,897,578; Feb. 14.
Clasp. W. F. Haas. Des. 89,278; Feb. 14.
Clay body, Producing a cellular. T. Husain and G. A. Bole. 1,897,667; Feb. 14.
Cleaner: *See*—
Air cleaner. Vacuum cleaner.
Comb cleaner. Yarn cleaner.
Clippers, Power operated hedge. J. F. Graham. 1,897,117; Feb. 14.
Clocks, Electric wind for. L. Agostini. 1,897,830; Feb. 14.
Closure, Collapsible tube. R. N. Ellis. 1,897,043; Feb. 14.
Clothespins, Mechanism for feeding. J. B. Nolan. 1,897,070; Feb. 14.
Clothes washing machine. G. H. Baldner. 1,897,414; Feb. 14.
Clothes washing machine. P. F. Chapman. 1,897,239; Feb. 14.
Coal and other minerals, Separating. B. M. Bird. 1,897,545; Feb. 14.
Coating, Light sensitive tropochromic. K. C. D. Hickman and L. A. Staib, jr. 1,897,843; Feb. 14.
Coating radiant bodies. E. Harsanyi. 1,897,902; Feb. 14.
Coffee and its manufacture. W. J. Livingston. 1,897,393; Feb. 14.
Coil and shield mounting, Radio. J. Q. Gaubert, H. L. Brump, and J. B. Forsythe. 1,897,253; Feb. 14.
Coin changing machine. H. G. Klett. 1,897,200; Feb. 14.
Coin-controlled device. L. M. Hall and H. McCreary. 1,897,193; Feb. 14.
Coin controlled switch. F. Hoke. 1,897,955; Feb. 14.
Coin testing device for use more particularly with coin freed vending machines. A. Leeson. 1,897,909; Feb. 14.
Collar and making the same. R. W. McCreery. 1,897,486; Feb. 14.
Colloidal suspension and method of use. I. C. Somerville. 1,897,773; Feb. 14.
Color cinematography. J. G. Capstaff. 1,897,837; Feb. 14.
Color photographic process. M. W. Seymour. 1,897,866; Feb. 14.
Color positive for use in a colored motion picture, Producing a. H. K. Fairall and W. T. Crespinel. 1,897,369; Feb. 14.
Comb cleaner. J. E. Harry. 1,897,935; Feb. 14.
Combustion apparatus. S. P. Kinney. 1,897,808; Feb. 14.
Combustion chamber, Antidetonation. F. A. Bullington. 1,897,234; Feb. 14.
Composite box. J. S. Stokes. 1,897,826; Feb. 14.
Composition of matter with process for treating artificial grass. E. H. Haabestad. 1,897,900; Feb. 14.
Compound body for the production of hollow drill steel. F. F. Gordon. 1,897,663; Feb. 14.
Compressor. M. W. Kenney. 1,897,199; Feb. 14.
Compressors for the supply of internal combustion engines, Driving rotary. C. R. Waselge. 1,897,684; Feb. 14.
Concrete aggregate proportioning apparatus, Automatic. B. and R. J. Noble. 1,897,490; Feb. 14.
Concrete laying machine. D. G. Clifford. 1,897,605; Feb. 14.
Conduit coupling and lubricant flow control device. C. G. Butler. 1,897,660; Feb. 14.
Connection, Air bag. R. C. Bateman. 1,897,949; Feb. 14.
Connection, Electrical. G. L. Chamberlain. 1,897,630; Feb. 14.
Connection plug, Electrical. J. D. Brown. Des. 89,253; Feb. 14.
Constant speed motor. E. R. Morton. 1,897,068; Feb. 14.
Contact device for transferring electrical energy into projectile igniters. H. Ruhlemann. 1,897,863; Feb. 14.
Container: *See*—
Dispensing container. Spout container.
Gas container.
Container for roll paper. W. B. Powell. 1,897,143; Feb. 14.
Control apparatus. C. M. Terry. 1,897,448; Feb. 14.
Control for nozzle velocity. E. P. Stewart and L. H. Frost. 1,897,870; Feb. 14.
Control for photographic recording machines, Automatic. R. S. Hopkins. 1,897,903; Feb. 14.
Control handle. R. Marple. 1,897,523; Feb. 14.
Control means. W. Stäblein. 1,897,739; Feb. 14.
Control mechanism. C. E. Mason. 1,897,135; Feb. 14.
Control system. N. Hilgers. 1,897,845; Feb. 14.
Controller for electric motors. C. W. Kuhn and P. Ryan. 1,897,059; Feb. 14.
Conveyer. L. E. Jones. 1,897,431; Feb. 14.
Cooler: *See*—
Milk cooler.
Cores, Apparatus for the orientation of drill. A. G. H. Straatman. 1,897,871; Feb. 14.
Cores, Obtaining orientated drill. A. G. H. Straatman. 1,897,872; Feb. 14.
Corn sheller separator. G. E. Eldridge. 1,897,367; Feb. 14.
Cotton and sorghum head gathering device. E. G. Stone. 1,897,447; Feb. 14.
Counter-pressure member for sheet feeding and like machines. C. E. Hunter. 1,897,054; Feb. 14.
Coupler. W. F. Richards. 1,897,278–9; Feb. 14.
Coupling: *See*—
Hose coupling. Toy train draft coupling.
Coupling for detachably connecting the handle and neck of tennis racket shafts and similar members. E. L. Hedstrom. 1,897,515; Feb. 14.
Cover: *See*—
Spring cover.
Covering for container openings. E. H. Cook. 1,897,890; Feb. 14.
Cracking process. C. W. Watson and J. H. Grahame. 1,897,348; Feb. 14.
Crankless engine. T. L. Sherman. 1,897,771; Feb. 14.
Cream remover, Siphon. R. Hawkins. 1,897,194; Feb. 14.
Cushion for mounting sheets of glass. F. and I. Himmel. 1,897,476; Feb. 14.
Cushioning device. D. E. Sproul. 1,897,738; Feb. 14.
Cut-off mechanism. K. Sieg. 1,897,867; Feb. 14.
Cut-off mechanism for ball machines. C. T. Brennan. 1,897,359; Feb. 14.
Cutter: *See*—
Casing cutter. Pipe cutter.
Hedge cutter. Root cutter.
Cutting apparatus. W. J. Simpson. 1,897,534; Feb. 14.
Cutting device. C. F. Birgbauer. 1,897,546; Feb. 14.
Cutting-off mechanism in cigarette making and similar machines, wherein the rod or the like is moving continuously in a lengthwise direction. W. Cole. 1,897,301; Feb. 14.
Cylinder for washing machines. B. L. Logan. 1,897,615; Feb. 14.
Cylinder head, Multiple ignition. F. A. Bullington. 1,897,233; Feb. 14.
Dashpot. W. Timson. 1,897,873; Feb. 14.
Dashpot for weighing machines. J. Peblke. 1,897,765; Feb. 14.
Dead-end attachment. A. Warner. 1,897,221; Feb. 14.
Deflector plate for air filters. H. H. Garner. 1,897,370; Feb. 14.
Dental impression material. L. E. Harrison and S. E. Noyes. 1,897,034; Feb. 14.
Dental plate base. J. F. Walsh. 1,897,286; Feb. 14.
Detonator safety device. J. T. C. Williams and R. J. Townsend. 1,897,685; Feb. 14.
Dialkyl resorcinols. W. G. Christiansen and S. E. Harris. 1,897,188; Feb. 14.
Diazo sulphonates of the diarylamine series. A. Zitscher and W. Seidenfaden. 1,897,410; Feb. 14.
Die-casting machine. T. C. Koramo. 1,897,433; Feb. 14.
Die stock. T. Petersen. 1,897,562; Feb. 14.

Differential, Gearless. A. F. Ford. 1,897,555; Feb. 14.
Differential speed, Apparatus for measuring. G. F. French. 1,897,472; Feb. 14.
Discharge device, Gaseous electric. M. Pirani. 1,897,497; Feb. 14.
Discharge device, Luminous. L. De Forest. 1,897,363; Feb. 14.
Discharge tube. D. J. Heuveline. 1,897,255; Feb. 14.
Dishwashing device. G. Poli. 1,897,821; Feb. 14.
Disinfectant and deodoriser. F. J. Curran. 1,897,573; Feb. 14.
Dispenser valve, Fruit juice. H. H. Crimmel. 1,897,302; Feb. 14.
Dispensing apparatus. E. R. Candor. 1,897,299; Feb. 14.
Dispensing container. W. L. Rutkowski. 1,897,960; Feb. 14.
Display device. A. G. Davis. 1,897,652; Feb. 14.
Display device. J. J. Kaufmann. 1,897,558; Feb. 14.
Display device. M. Leopold. 1,897,940; Feb. 14.
Displaying machine for showroom, show windows, and the like. A. M. Moore. 1,897,271; Feb. 14.
Document record device. E. Greene. 1,897,755; Feb. 14.
Dog feeding table. H. N. Nunimaker. Des. 89,262; Feb. 14.
Door, Automatic. F. Kugler, jr. 1,897,311; Feb. 14.
Doorcheck, Concealed. A. H. T. Williams. 1,897,351; Feb. 14.
Door control mechanism. S. P. Wiegner. 1,897,350; Feb. 14.
Door elevating construction. A. Wasberg. 1,897,563; Feb. 14.
Doorlock. K. C. McGee. 1,897,706; Feb. 14.
Door mechanism, Rolling. H. G. Kelly. 1,897,391; Feb. 14.
Dough proving apparatus. J. E. Wilson, S. McConnell, and C. Brown. 1,897,352; Feb. 14.
Draft tube. H. B. Taylor. 1,897,502; Feb. 14.
Drain, Floating roof. J. H. Wiggins. 1,897,779; Feb. 14.
Drawgear, Central buffing and. R. L. Whitmore. 1,897,287; Feb. 14.
Draw gear for railway vehicles, Central buffing and. R. L. Whitmore. 1,897,288; Feb. 14.
Drawer pull. R. H. Soper. 1,897,080; Feb. 14.
Drier: *See*—
Tunnel drier.
Drill: *See*—
Rock drill.
Drill for mining purposes. C. P. Bascom and H. A. Kluge. 1,897,785; Feb. 14.
Drill for mining purposes. E. Ormsby and C. P. Bascom. 1,897,733; Feb. 14.
Drilling apparatus, Rotary. C. E. Reed. 1,897,588; Feb. 14.
Drilling machine. I. C. Harris. 1,897,121; Feb. 14.
Drive, Automatic variable speed. J. M. Baum. 1,897,416; Feb. 14.
Drive, Vehicle. S. C. Carter. 1,897,944; Feb. 14.
Driving mechanism. Engine-driven. F. Ljungström. 1,897,506; Feb. 14.
Driving mechanism for reciprocating machines. A. L. Ellis. 1,897,468; Feb. 14.
Dust extraction, Centrifugal apparatus for. P. Howden. 1,897,195; Feb. 14.
Dust separator and collector system. W. B. Prouty. 1,897,144; Feb. 14.
Dyes, Producing azo. J. P. Penny. 1,897,211; Feb. 14.
Dyestuffs and making the same, Vat. I. Gubelmann and R. J. Goodrich. 1,897,119; Feb. 14.
Dyestuffs of the anthanthrone series and preparing the same, Vat. R. M. Heidenreich. 1,897,427; Feb. 14.
Dyestuffs of the anthraquinone series, New vat. E. Honold. 1,897,430; Feb. 14.
Dyestuffs of the anthraquinone cyanuric series, Vat. W. Hentrich, F. Wieners, and R. Stroebel. 1,897,426; Feb. 14.
Dyestuffs of the quinoline-anthraquinone series and the products, Production of vat. H. Neresheimer and G. Boehner. 1,897,439; Feb. 14.
Earth boring machines, Telescoping boring bar for. H. M. Loeber and A. P. Elliott. 1,897,434; Feb. 14.
Earth exploration, Method of and apparatus for electric. R. Ambronn. 1,897,688; Feb. 14.
Edge trimmer, Automatic. A. R. Morrill. 1,897,526; Feb. 14.
Egg product. S. Tranin. 1,897,775; Feb. 14.
Electric butt welding. A. A. Smith. 1,897,079; Feb. 14.
Electric discharge device and operating same, Self-starting low gaseous. C. E. Kenty. 1,897,482; Feb. 14.
Electric discharge device, Gaseous. O. Fritze. 1,897,474; Feb. 14.
Electric discharge device, Gaseous. M. Pirani. 1,897,580–7; Feb. 14.
Electric discharge device, Gaseous. M. Pirani, H. Ewest, and G. Gaidies. 1,897,642; Feb. 14.
Electric heating element. R. Von Brockdorff. 1,897,089; Feb. 14.
Electric heating furnace. D. J. Bienenstock. 1,897,888; Feb. 14.
Electric switch. W. Deans. 1,897,467; Feb. 14.
Electric switch, Speed responsive. C. F. Thompson. 1,897,405; Feb. 14.
Electric transmission of visual representation. C. F. Jenkins. 1,897,481; Feb. 14.
Electric wave transmission. R. A. Heising. 1,897,060; Feb. 14.
Electrical apparatus. A. S. Mancib. 1,897,134; Feb. 14.
Electrical apparatus. J. S. Smyser. 1,897,990; Feb. 14.
Electrical plug. J. H. Moorhouse. 1,897,823; Feb. 14.
Electrical system. W. K. Fleming. 1,897,249; Feb. 14.
Electrical terminal. N. H. Watts. 1,897,829; Feb. 14.
Electrical tube. H. F. Barkley. 1,897,880; Feb. 14.
Electrode for electron discharge tubes and forming the same. R. G. Guthrie and O. J. Woxsack. 1,897,933; Feb. 14.
Electrolysis of a fused bath, Apparatus for. R. M. Hunter. 1,897,808; Feb. 14.
Electromagnetic device. D. R. Clemons. 1,897,604; Feb. 14.
Electromagnetic testing, Method of and apparatus for. A. V. de Forest. 1,897,634; Feb. 14.
Electron discharge device, Making. F. L. Hunter, jr. 1,897,480; Feb. 14.
Elevator control apparatus. D. L. Lindquist. 1,897,493; Feb. 14.
Emasculator. D. E. Pilcher. 1,897,532; Feb. 14.
Energy, System for the conversion and transfer of. H. F. Olson and B. Kreuser. 1,897,732; Feb. 14.
Engine: *See*—
Explosion engine. Internal combustion engine
Engine. E. F. Durnan. 1,897,553; Feb. 14.
Engine. H. H. Timian. 1,897,512; Feb. 14.
Engine. H. H. Timian. 1,897,540; Feb. 14.
Engine for liquid and solid fuels, Internal combustion. R. Pawlikowski. 1,897,819; Feb. 14.
Engine starting mechanism. D. P. Kearney. 1,897,938; Feb. 14.
Engines and the like, Exhausting system for hydrocarbon. C. A. Winslow. 1,897,746; Feb. 14.
Envelope. A. Bayer. 1,897,602; Feb. 14.
Envelope, Locking coupon. D. M. Kennedy. 1,897,847; Feb. 14.
Explosion engine. G. Farina. 1,897,191; Feb. 14.
Eye set. A. Konoff. 1,897,848; Feb. 14.
Eyelashes, Device for simulating natural. M. A. Birk. 1,897,747; Feb. 14.
Eyelashes, Device for treating the. M. A. Birk. 1,897,719; Feb. 14.
Fabric and producing the same. H. Platt and C. M. Croft. 1,897,712; Feb. 14.
Fan. L. M. Persons. 1,897,860; Feb. 14.
Fan structure. A. S. Howell. 1,897,947; Feb. 14.
Fastener: *See*—
Metal fastener. Snap fastener.
Necktie fastener.
Fastener for shoe bags. F. C. Flint. 1,897,306; Feb. 14.
Fastener supplying mechanism. P. R. Glass. 1,897,046; Feb. 14.
Fastening machine. V. A. Svensson. 1,897,625; Feb. 14.
Feeder for harvesters, Pick-up. N. D. Parks. 1,897,491; Feb. 14.
Feed system, Convertible type. H. Ernest. 1,897,032; Feb. 14.
Fence and gate. Z. B. Burge. Des. 89,254; Feb. 14.
Fender, Cultivator. D. G. Williams. 1,897,158; Feb. 14.
Fender tool. E. G. Peterson. 1,897,142; Feb. 14.
Filing devices, Shifting mechanism for card. S. B. Freiberg. 1,897,931; Feb. 14.
Film and making same, Tinted sound and picture. H. R. Couch. 1,897,838; Feb. 14.
Film, Cinematographic. A. Oswald. 1,897,275; Feb. 14.
Film handling mechanism. W. L. Wright. 1,897,097; Feb. 14.
Film, plate, and the like. W. V. D. Kelley. 1,897,846; Feb. 14.
Film rolls from the entry of light, Protecting. K. Hipke. 1,897,429; Feb. 14.
Film scrap, Reclaiming. C. E. Allen. 1,897,878; Feb. 14.
Filter: *See*—
Band-pass filter.
Filtration medium. H. E. Birkhols. 1,897,976; Feb. 14.
Finder for cameras provided with objectives of different foci. A. N. Merle. 1,897,268; Feb. 14.
Fire hose clamp. F. W. Warner. 1,897,743; Feb. 14.
Fish lure. E. H. Bobo. 1,897,100; Feb. 14.
Fish nets, Preserving. P. E. Andrews. 1,897,224; Feb. 14.
Fishing lure. R. M. and L. G. Palmer. 1,897,529; Feb. 14.
Fishing reel. G. L. Phillippe. 1,897,711; Feb. 14.
Fishing reel, Free-reeling. J. P. Shaw. 1,897,499; Feb. 14.
Fishing rod. C. J. Clarke. 1,897,889; Feb. 14.
Fitting, Grounding. S. N. Buchanan. 1,897,186; Feb. 14.
Fixture for crank grinding machines, Work clamping. A. P. Steiner. Re18,736; Feb. 14.
Fixture supporting device, Electrical. H. D'Oller, jr. 1,897,954; Feb. 14.
Flameproof article. H. Boving. 1,897,629; Feb. 14.
Flaw detector. H. C. Drake. 1,897,610; Feb. 14.
Flow controller. J. W. Ledoux. 1,897,492; Feb. 14.
Flower stand. A. S. Johnson. 1,897,905; Feb. 14.
Fluid flow switch, Low resistance. W. R. Walker. 1,897,453; Feb. 14.
Fluid flow switch, Low resistance. W. R. Walker. 1,897,455–6; Feb. 14.
Fluid flow switch, Low resistance. W. R. Walker and F. Moos. 1,897,454; Feb. 14.

Fluid flow switch, Magnetically operated low resistance. R. D. Malley. 1,897,485; Feb. 14.
Fluid pressure system. S. Samson. 1,897,075; Feb. 14.
Fly swatter. W. M. Gray. 1,897,697; Feb. 14.
Food product. C. N. Frey. 1,897,251; Feb. 14.
Force feed lubricator. E. O. Corey. 1,897,791; Feb. 14.
Fork for globes, Grooved supporting. R. B. Lawton. 1,897,580; Feb. 14.
Form and hose clamp therefor, Hosiery boarding. F. and G. Brand. 1,897,886; Feb. 14.
Form for plastic materials. P. F. Pandolfi. 1,897,530; Feb. 14.
Foundation gauge. B. S. Souders. 1,897,682; Feb. 14.
Frame for Röntgen ray apparatus, Supporting. E. Pohl. 1,897,177; Feb. 14.
Frame member for toilet articles, Reenforcing. J. S. Wilcox. 1,897,554; Feb. 14.
Framing plate holder for motion picture projectors. L. A. Holman. 1,897,477; Feb. 14.
Fruit handling equipment. A. D. Hagopian. 1,897,901; Feb. 14.
Fuel, Apparatus for burning liquid. J. H. McIlvaine. 1,897,518; Feb. 14.
Fuel feeding device, Liquid. A. Klotsman. 1,897,432; Feb. 14.
Fuel feeding system for Otto engines. R. E. Bruckner. 1,897,967; Feb. 14.
Fuel injection system for internal combustion engines. L. E. Elwell. 1,897,044; Feb. 14.
Furnace: *See*—
Electric heating furnace. Heat treating furnace.
Furnace charge, Method and apparatus for mixing a. C. Hart. 1,897,647; Feb. 14.
Furnace construction. G. W. Davey. 1,897,041; Feb. 14.
Furnace heat regulator. P. C. and W. P. Timm. 1,897,406; Feb. 14.
Furnace heat regulator. P. C. and W. P. Timm. 1,897,408; Feb. 14.
Furnace operation, Blast. H. A. Brassert. 1,897,750; Feb. 14.
Furniture, Article of. A. Rohaut. 1,897,590; Feb. 14.
Furrow seeding machine. C. B. Dempster and W. Elliott. 1,897,421; Feb. 14.
Fuse link. A. G. Steinmayer. 1,897,342; Feb. 14.
Game device. C. W. Deibel. 1,897,384; Feb. 14.
Garment. C. G. Wright. 1,897,096; Feb. 14.
Garment pressing machines, Actuating mechanism for. H. G. Beede. 1,897,689; Feb. 14.
Garment protector. E. I. Abbott. 1,897,100; Feb. 14.
Gas analyzer, Mechanically operated. A. B. Cunningham. 1,897,721; Feb. 14.
Gas, Apparatus for transportation and distribution of liquefied. R. W. Thomas. 1,897,167; Feb. 14.
Gas burner control device. W. B. Bastian. 1,897,600; Feb. 14.
Gas container, Liquid. R. W. Thomas. 1,897,163; Feb. 14.
Gas control mechanism for automobiles. J. Bellis. 1,897,357; Feb. 14.
Gas, Customer's apparatus for storing and dispensing liquid. P. S. Endacott. 1,897,160; Feb. 14.
Gas, Customer's equipment for storing, protecting, and dispensing liquefied. R. W. Thomas. 1,897,166; Feb. 14.
Gas generator. W. I. Battin. 1,897,950; Feb. 14.
Gas, Method and apparatus for transportation and distribution of liquefied. P. S. Endacott and R. W. Thomas. 1,897,185; Feb. 14.
Gas purifier, Exhaust. S. F. Placko, jr. 1,897,912; Feb. 14.
Gasket. B. J. Victor. 1,897,088; Feb. 14.
Gasket cutting machine. C. C. Lenarth. 1,897,203; Feb. 14.
Gasoline gauge. N. W. Cummings. 1,897,419; Feb. 14.
Gate. M. Fleck. 1,897,554; Feb. 14.
Gauge: *See*—
Foundation gauge. Testing gauge.
Gasoline gauge. Wrist pin gauge.
Gauge and pump, Depth. L. H. Wheeler. 1,897,876; Feb. 14.
Gauging apparatus. J. L. Alden. 1,897,566; Feb. 14.
Gear: *See*—
Beach landing gear.
Gear. C. H. Seifert. 1,897,865; Feb. 14.
Gear for dirigibles, Landing. R. Thorpe. 1,897,539; Feb. 14.
Gear pump. C. W. Lawser. 1,897,560; Feb. 14.
Gear shift lock. A. E. Leach. 1,897,851; Feb. 14.
Gear shift, Single-cable cowl mounted. B. F. Schmidt. 1,897,216; Feb. 14.
Gear shifting apparatus. B. P. Scholz. 1,897,591; Feb. 14.
Generator: *See*—
Gas generator.
Gladstone bag. L. Braverman. 1,897,887; Feb. 14.
Glass, Apparatus for producing laminated. J. W. H. Randall. 1,897,862; Feb. 14.
Glass, Method of and apparatus for melting. H. A. Wadman. 1,897,973; Feb. 14.
Glass-working machinery. G. A. Millar. 1,897,488; Feb. 14.
Globe. H. H. Blau. Des. 89,273; Feb. 14.
Globe, Lighting fixture. M. B. Cherniak. Des. 89,274; Feb. 14.
Golf club. R. Lamb. 1,897,264; Feb. 14.
Golf game. L. Wieden. 1,897,289; Feb. 14.
Golf instructor, Automatic. W. G. Porter. 1,897,212; Feb. 14.
Golf tee device. H. Kershaw. 1,897,519; Feb. 14.
Gonorrhea infection, Device for preventing. F. Ferri. 1,897,428; Feb. 14.
Grate control mechanism. G. A. Kohout. 1,897,579; Feb. 14.
Grate, Stoker. T. J. Courtney. 1,897,112; Feb. 14.
Grease rack. S. O. Houge. 1,897,053; Feb. 14.
Grenade, Hand. V. Nigeradse. 1,897,709; Feb. 14.
Grid making machine and method. V. Anderson and D. G. Trutner. 1,897,460; Feb. 14.
Grille, Wicket. A. Fazekas. Des. 89,275–6; Feb. 14.
Grinding head and drive. J. G. Dickson. 1,897,891; Feb. 14.
Grinding machine. C. J. Anderson. 1,897,035; Feb. 14.
Grip attachment for violin bows. C. B. Archer. 1,897,225; Feb. 14.
Gripping mechanism for rotary drilling machines. L. E. Zerbe. 1,897,564; Feb. 14.
Growth clearing device. J. L. Pitchford. 1,897,820; Feb. 14.
Guanidine, Continuous preparation of a di-substituted. W. P. ter Horst. 1,897,220; Feb. 14.
Guard, Container. W. C. North. 1,897,138; Feb. 14.
Guide and paraffin scraper, Double cross center. W. K. Morgan. 1,897,507; Feb. 14.
Guide rail lubricator. C. Norton. 1,897,764; Feb. 14.
Gun fort, Rotary machine. V. Varju. 1,897,451; Feb. 14.
Gun, Light machine. C. Pelo. 1,897,710; Feb. 14.
Guns, Operating mechanism for machine. G. A. Woody and R. C. Coupland. 1,897,099; Feb. 14.
Gypsum, Apparatus for calcining. L. C. Karrick and W. L. Ellerbeck. 1,897,259; Feb. 14.
Gypsum calciner. W. M. McNeil. 1,897,894; Feb. 14.
Habit, Riding. T. Kotulin. 1,897,128; Feb. 14.
Hair device. H. Eisler. 1,897,246; Feb. 14.
Hand grenade or aerial bomb. J. W. Young. 1,897,948; Feb. 14.
Handle: *See*—
Nail file handle.
Handle bar, Temper-screw. M. and C. Myers. 1,897,854; Feb. 14.
Handle for bags and sacks. E. N. Malvern, G. C. Clary, and W. W. Jones. 1,897,910; Feb. 14.
Hanger: *See*—
Hose hanger. Trouser hanger.
Harrow tooth. J. E. Coleman. 1,897,550; Feb. 14.
Harvester for cutting and thrashing grain, Combined. C. A. Grasswick. 1,897,611; Feb. 14.
Headlight or searchlight. J. L. Lehman. 1,897,202; Feb. 14.
Heat exchanger. J. Price and S. Brown. 1,897,218; Feb. 14.
Heat treating furnace. H. P. McCann and H. E. Baker. 1,897,911; Feb. 14.
Heater: *See*—
Liquid heater. Water heater.
Heater and cooler, Liquid. F. G. Cornell, jr. 1,897,607; Feb. 14.
Heater control system. G. E. Hulse. 1,897,980; Feb. 14.
Heating system. D. D. Kimball and V. J. Cucci. 1,897,759; Feb. 14.
Hedge cutter. C. A. Albrecht. 1,897,543; Feb. 14.
Hedge trimming device. S. G. Coleman and F. B. Hicks. 1,897,924; Feb. 14.
Heel clamp, Safety shoe. A. W. Bellavance and H. Levy. 1,897,569; Feb. 14.
Hoeing and cultivating machine, Universal. G. Borocki. 1,897,885; Feb. 14.
Holst, Power operated. G. W. Burgoyne. 1,897,383; Feb. 14.
Holder: *See*—
Cigarette holder. Package holder.
Music holder. Roll holder.
Holder for women's handbags and other articles, Initial or ornament. R. Staufert. 1,897,341; Feb. 14.
Holder of paintbrushes for painting flagpoles. E. Kling. 1,897,058; Feb. 14.
Hood latch. C. Hollerith. 1,897,305; Feb. 14.
Hook: *See*—
Swivel hook.
Hopper for filling replenishing looms, Rotary. H. H. Burdett. 1,897,417; Feb. 14.
Hose coupling. G. L. McKee. 1,897,319; Feb. 14.
Hose hanger. W. J. Ferguson. 1,897,248; Feb. 14.
Hosiery, Method and mechanism for knitting full-fashioned. R. H. Lawson. 1,897,131; Feb. 14.
Hot-house, Miniature. A. Liermann. 1,897,062; Feb. 14.
Humidifier. C. J. Byboth. 1,897,298; Feb. 14.
Hydraulic meter. J. A. Peck. 1,897,858; Feb. 14.
Hydrocarbon distillates, Treating. R. C. Osterstrom. 1,897,328; Feb. 14.
Hydrocarbons, Desulphurization of crude aromatic. F. W. Guthke. 1,897,798; Feb. 14.
Ice shield. L. H. Davis. 1,897,304; Feb. 14.
Ignition timing device for low speeds. M. Mallory. 1,897,703; Feb. 14.
Indicator. E. J. Martin. 1,897,811; Feb. 14.
Induction controller. R. H. Barbour. 1,897,415; Feb. 14.
Induction motor. A. Zopp. 1,897,184; Feb. 14.
Inductive device. A. J. Christopher. 1,897,040; Feb. 14.
Inertia relay. M. G. Rees. 1,897,074; Feb. 14.
Ingots from ingot molds, Apparatus for stripping. E. Gathmann. 1,897,696; Feb. 14.

Ink, Quick drying. G. B. Ottley. 1,897,071; Feb. 14.
Ink ribbon feed mechanism. A. Thomas. 1,897,084; Feb. 14.
Insect destroyer. O. Kyllo. 1,897,263; Feb. 14.
Instrument for varying electrical potential. W. J. Tietz. 1,897,596; Feb. 14.
Instrument panel face assembly. J. Zubaty and D. E. Keeney. 1,897,975; Feb. 14.
Instruments, Means for remote reading of. S. Loewe. 1,897,204; Feb. 14.
Insulating body. P. Paschen, H. Ritter, G. Stauber, W. Gebhardt, and K. Schmiedel. 1,897,818; Feb. 14.
Insulator bracket and making the same. C. Fassinger. 1,897,385; Feb. 14.
Internal combustion engine. B. H. Anibal. 1,897,783; Feb. 14.
Internal combustion engine. R. W. Bailey. 1,897,298; Feb. 14.
Internal combustion engine. F. Frits. 1,897,897; Feb. 14.
Internal combustion engine. J. E. Sersté. 1,897,825; Feb. 14.
Internal combustion engine. A. S. Terhaar. 1,897,182; Feb. 14.
Internal combustion engine, Rotary. W. I. Staaf, sr. 1,897,962; Feb. 14.
Iodine from natural waters and the like, Recovering. L. C. Chamberlain. 1,897,031; Feb. 14.
Iron or its carbide compounds and of portland cement or hydraulic limes, Simultaneous manufacture of. L. P. Basset. 1,897,881; Feb. 14.
Ironing board. L. Sorensen. 1,897,081; Feb. 14.
Jig. J. S. Pecker. 1,897,495; Feb. 14.
Joint: *See*—
Rivet joint. Universal joint.
Top prop joint.
Joint. E. G. Schaeffer. 1,897,914; Feb. 14.
Key, Brake-shoe. S. A. Crone. 1,897,632; Feb. 14.
Knitting. F. Stevenson. 1,897,917; Feb. 14.
Label. W. F. Schacht. Des. 89,265; Feb. 14.
Ladder foot. G. H. Greene. 1,897,840; Feb. 14.
Lamp, Battery hand. J. S. Zook. 1,897,627; Feb. 14.
Lamp, Electric glow. H. Friedrichsen. 1,897,473; Feb. 14.
Lamp, Portable carbon arc. I. Silberstein. Des. 89,270; Feb. 14.
Lamp receptacle. L. V. Lewis. 1,897,668; Feb. 14.
Lamp support, Adjustable. A. A. Henkel. 1,897,802; Feb. 14.
Lamp, Vehicle. S. Lyman. Des. 89,259; Feb. 14.
Latch: *See*—
Hood latch.
Latex, Preparation of vulcanizable. J. B. Crockett. 1,897,189; Feb. 14.
Lath, Method of and apparatus for manufacturing. T. R. Herbest, jr. 1,897,803; Feb. 14.
Lathing, Metallic. T. R. Herbest, jr. 1,897,842; Feb. 14.
Laundry apparatus. S. H. McKnight. 1,897,435; Feb. 14.
Leveling device. H. Ricks, jr. 1,897,498; Feb. 14.
Lid, Milk can. L. A. Perkins and A. C. Wilson. Des. 89,264; Feb. 14.
Lifter: *See*—
Valve spring lifter.
Link-system table, Adjustable. O. K. and L. O. Mitchell. 1,897,321; Feb. 14.
Linoleum, Manufacture of. W. E. Whitney. 1,897,458; Feb. 14.
Liquid coating composition and preparing the same. J. A. Wilson. 1,897,656; Feb. 14.
Liquid cooling system. H. C. Kellogg. 1,897,559; Feb. 14.
Liquid dispensing device. R. W. Van Schyndle and W. D. Lansing. 1,897,154; Feb. 14.
Liquid from vapors and gases, Separating. J. Primrose. 1,897,766; Feb. 14.
Liquid heater. N. H. Hiller. 1,897,758; Feb. 14.
Liquids, Apparatus for treating. A. Jensen. 1,897,618; Feb. 14.
Liquids of different specific gravities, Separating. S. A. B. Dahlgren. 1,897,240; Feb. 14.
Liquids, Shipping. F. N. Martin. 1,897,939; Feb. 14.
Load lifting and weighing device. K. B. Lewis. 1,897,171; Feb. 14.
Lock: *See*—
Gear shift lock.
Lock. A. A. Bradshaw. 1,897,922; Feb. 14.
Lock. J. A. Shafer. 1,897,594; Feb. 14.
Lock for gasoline tanks. W. G. Bruning. 1,897,185; Feb. 14.
Locomotive. R. C. F. Loewy. Des. 89,282–8; Feb. 14.
Locomotive tender construction. E. A. Turner and C. J. Surdykowski. 1,897,513; Feb. 14.
Looms, Tuft yarn carrier for. E. C. Shuttleworth. 1,897,077; Feb. 14.
Loud speaker. C. D. Bock. 1,897,835; Feb. 14.
Loudspeaker and like apparatus. M. Bernard. 1,897,294; Feb. 14.
Loud speaker operation and circuit. D. D. Israel. 1,897,290; Feb. 14.
Lubricant pump. W. L. Clouse. 1,897,300; Feb. 14.
Lubricating apparatus. F. W. Edwards. 1,897,503; Feb. 14.
Lubricator: *See*—
Force feed lubricator. Guide rail lubricator.
Machine for comparing statistical record cards. A. Thomas. 1,897,085; Feb. 14.
Machine for operating relooping tools. M. Vitoux. 1,897,452; Feb. 14.
Machine for operating upon a ticket strip. F. W. Laencher. 1,897,201; Feb. 14.
Machine for pressing soles upon shoes and pad therefor. M. H. Ballard. 1,897,105; Feb. 14.
Machine for reproducing cinematographic films. A. Oswald. 1,897,274; Feb. 14.
Machine for shaping shoe uppers. A. Bates. 1,897,037; Feb. 14.
Machine for shaping shoe uppers. A. A. Macleod and S. J. Finn. 1,897,064; Feb. 14.
Machine for shaping shoes. W. D. Thomas. 1,897,086; Feb. 14.
Machine for washing and screening materials. H. C. Seitz. 1,897,624; Feb. 14.
Magnetic separator. C. E. Nicolet. 1,897,763; Feb. 14.
Mail bag ejecting device. D. B. Dodson. 1,897,552; Feb. 14.
Mail separating and facing apparatus. D. G. Werner. 1,897,093; Feb. 14.
Masses resembling rubber oil substitute, Production of. M. Luther and H. Beller. 1,897,133; Feb. 14.
Material and making the same, Flexible treated. B. H. F. Richards and A. H. Haroldson. 1,897,651; Feb. 14.
Material containing organic esters of cellulose, Partial saponification of. C. Dreyfus and H. Platt. 1,897,691; Feb. 14.
Materials made with or containing cellulose esters or ethers, Dyeing or otherwise coloring of. G. H. Ellis and H. C. Olpin. 1,897,794; Feb. 14.
Measuring and recording machine, Anatomical. H. C. Lavery. 1,897,941; Feb. 14.
Measuring device. G. H. Massy. 1,897,208; Feb. 14.
Measuring electric energy. P. S. Carter and J. L. Finch. 1,897,287; Feb. 14.
Measuring instrument. C. W. La Pierre. 1,897,850; Feb. 14.
Meat rolling machine. G. A. Rothamel. 1,897,644; Feb. 14.
Mechanical movement. M. H. Pérez. 1,897,140; Feb. 14.
Merchandising table. J. E. Bales. 1,897,568; Feb. 14.
Metal cleaning composition. H. C. Mougey. 1,897,313; Feb. 14.
Metal fastener, Corrugated. J. Riedel, J. Domagall, and H. Maze. 1,897,335; Feb. 14.
Metal particles in sheet material, Detecting. R. A. Manegold. 1,897,731; Feb. 14.
Metals, Melting and casting of. H. T. Reeve. 1,897,589; Feb. 14.
Meter: *See*—
Hydraulic meter. Orifice meter.
Metering system. P. Yates. 1,897,657; Feb. 14.
Milk cooler. J. Robertson and G. H. Purdy. 1,897,336; Feb. 14.
Mineral treatment. R. B. Martin. 1,897,265; Feb. 14.
Mining machine. F. A. Lindgren. 1,897,984; Feb. 14.
Mirror and instrument, Combined. W. La Hodny. 1,897,849; Feb. 14.
Molasses product and making the same. J. C. MacLachlan. 1,897,729; Feb. 14.
Mold: *See*—
Brick mold. Vault mold.
Receptacle mold.
Mold. M. L. Doelman. 1,897,925–6; Feb. 14.
Molding device, Centrifugal. W. R. Seigle. 1,897,401; Feb. 14.
Molds or cores, Process and product for attaching portions of. C. M. Saeger, sr. 1,897,149; Feb. 14.
Mop. N. S. Hillyard. 1,897,726; Feb. 14.
Motor: *See*—
Constant speed motor. Induction motor.
Motor. A. M. Lutes. 1,897,063; Feb. 14.
Motor-driven pump. V. G. Apple. 1,897,784; Feb. 14.
Motors, Construction of loud speaker. R. J. Rockwell and A. F. Parkhurst. 1,897,899; Feb. 14.
Mounting plate and face assembly. J. Zubaty and D. E. Keeney. 1,897,966; Feb. 14.
Mounting, Spring. W. D. Kessler. 1,897,807; Feb. 14.
Music holder. J. T. Haight. 1,897,799; Feb. 14.
Nail file handle. C. L. Farris. 1,897,754; Feb. 14.
Necktie fastener. E. H. Reseguie. 1,897,333; Feb. 14.
Necktie retainer. A. Rossner. 1,897,734; Feb. 14.
Net for trawlers. A. J. Rowe. 1,897,147; Feb. 14.
Nozzle for spray appliances, Air. R. Long and E. Gustafsson. 1,897,178; Feb. 14.
Nozzle, Spray gun. R. W. Tracy. 1,897,683; Feb. 14.
Nut blank sorter for tapping machines and the like. J. H. Friedman. 1,897,116; Feb. 14.
Objective. C. W. Frederick and W. S. Eichelberger. 1,897,896; Feb. 14.
Oil and gas separator. G. Raymond. 1,897,332; Feb. 14.
Oil, Apparatus for refining hydrocarbon. A. E. Harnsberger and A. L. Christy. 1,897,389; Feb. 14.
Oil burner. W. R. Kiefer. 1,897,310; Feb. 14.
Oil burner. H. C. Little. 1,897,314; Feb. 14.
Oil conversion, Hydrocarbon. C. P. Dubbs. 1,897,577; Feb. 14.
Oil pressure regulator. F. A. Bower. 1,897,788; Feb. 14.
Oil, Treating. J. Delattre-Seguy. 1,897,593; Feb. 14.
Oil, Treatment of hydrocarbon. C. H. Angell. 1,897,628; Feb. 14.
Oiling apparatus for locomotive driving wheel flanges. E. F. Sullivan. 1,897,827; Feb. 14.

Oils, Converting hydrocarbon. C. P. Dubbs. 1,897,576; Feb. 14.
Oils, Cracking. C. P. Dubbs. 1,897,635; Feb. 14.
Oils, Cracking petroleum. C. P. Dubbs. 1,897,245; Feb. 14.
Oils, Process and apparatus for the conversion of hydrocarbon. J. G. Alther. 1,897,567; Feb. 14.
Oils, Treatment of cut. F. E. Fuchs. 1,897,019; Feb. 14.
Oils, Treatment of hydrocarbon. J. C. Morrell and G. Egloff. 1,897,582; Feb. 14.
Optical system. F. E. Tuttle and F. E. Altman. 1,897,874; Feb. 14.
Ore and the like, Apparatus for pulverizing and classifying. F. C. Perew. 1,897,176; Feb. 14.
Orifice meter. A. D. MacLean and F. Niesemann. 1,897,174; Feb. 14.
Ornamental device. A. L. M. Pirrone. 1,897,942; Feb. 14.
Package, Commodity. J. M. DeVoe. 1,897,692; Feb. 14.
Package holder. J. R. Richer. 1,897,834; Feb. 14.
Packing. B. P. Hoffman. 1,897,804; Feb. 14.
Pad: *See*—
Scouring pad. Spring pad.
Paint. K. Ott and H. Bernard. 1,897,528; Feb. 14.
Paper board. C. L. Keller. 1,897,198; Feb. 14.
Paper composition and making same. C. Ellis. 1,897,694; Feb. 14.
Paper manufacture. H. R. Rafton. 1,897,145; Feb. 14.
Paper sheets, Mechanism and method of feeding a plurality of. F. E. and W. C. Pfeiffer. 1,897,654; Feb. 14.
Paper sheets, Binding. W. C. Bohmert. 1,897,038; Feb. 14.
Paper stuff hydrator. H. D. Wells. 1,897,157; Feb. 14.
Paste tube, Self-sealing. W. Petersen. 1,897,276; Feb. 14.
Pasting mechanism for chemical driers. A. O. Hurxthal. 1,897,904; Feb. 14.
Pastry crust. T. J. Matassa. Des. 89,260; Feb. 14.
Patch, Blow-out. C. A. Domzalski. 1,897,927; Feb. 14.
Pawl, Gravity spring locking. A. E. Rice. 1,897,622; Feb. 14.
Pen, Animal. R. Robertson. 1,897,441; Feb. 14.
Pencil. J. P. Lynn. 1,897,315; Feb. 14.
Perforating device. T. Munro. 1,897,437; Feb. 14.
Petroleum distillates, Treatment of. L. A. Mekler. 1,897,617; Feb. 14.
Petroleum emulsions, Breaking. M. DeGroote, L. T. Monson, and A. F. Wirtel. 1,897,574–5; Feb. 14.
Photographic apparatus, Pose-reflecting. L. G. Simjian. 1,897,772; Feb. 14.
Photographic dust count apparatus. S. M. Corbett and L. H. Stanford. 1,897,111; Feb. 14.
Photographic edge printing apparatus. R. P. Leavitt. 1,897,908; Feb. 14.
Photographic printing method. K. C. D. Hickman. 1,897,844; Feb. 14.
Phthalic anhydride, Purifying. P. C. Bowers. 1,897,110; Feb. 14.
Picture apparatus, Talking motion. C. H. Seabolm. 1,897,655; Feb. 14.
Picture projector, Motion. W. L. Wright. 1,897,098; Feb. 14.
Picture projector, Moving. H. J. Templeton. 1,897,283; Feb. 14.
Picture telegraphy, Apparatus for photoelectric exploration by reflection method in copying and. F. Schröter. 1,897,219; Feb. 14.
Pictures, Electrical transmission of. O. Fulton. 1,897,796; Feb. 14.
Pictures, Making composite. G. A. Mitchell and F. F. Baker. 1,897,494; Feb. 14.
Pictures, Producing motion. W. H. O'Brien. 1,897,673; Feb. 14.
Pipe: *See*—
Smoking pipe. Tobacco pipe.
Pipe cutter. M. Goebel. 1,897,374; Feb. 14.
Pipe, Method and apparatus for blasting. L. A. Camerota. 1,897,951; Feb. 14.
Pipes, Casting. S. B. Clark. 1,897,631; Feb. 14.
Pistol, Air. E. G. Anson. 1,897,226; Feb. 14.
Piston ring. L. N. Stehr. 1,897,648; Feb. 14.
Piston ring closing fixture. J. E. Porter. 1,897,397; Feb. 14.
Pitch propeller, Controllable. W. F. Stimpson and M. K. Patten. 1,897,445; Feb. 14.
Pitch propellers, Mechanical combination for reversible. V. Paquit. 1,897,817; Feb. 14.
Pivot joint. A. J. Jansson. 1,897,806; Feb. 14.
Plaster, Acoustic. C. K. Roos. Re18,739; Feb. 14.
Plaster composition. J. S. Offutt. 1,897,956; Feb. 14.
Plate construction for tray compartments, Front. H. A. Greenwald. 1,897,192; Feb. 14.
Plate, Heating. F. Jolas. 1,897,197; Feb. 14.
Platform, Transporting. T. P. Wyman, jr. 1,897,598; Feb. 14.
Plating, Effecting reverse. J. and R. H. Lawson. 1,897,130; Feb. 14.
Plow. E. Fraser. 1,897,695; Feb. 14.
Plow for wetting the plowshare. K. G. Stark. 1,897,444; Feb. 14.
Plug: *See*—
Electrical plug.
Plug and inserting quill and connecting the same. W. M. Anderson. 1,897,028; Feb. 14.
Polishing and cleaning device. A. C. Johnson. 1,897,981; Feb. 14.
Polishing and grinding machine. C. L. Hawes. 1,897,049; Feb. 14.
Polishing tool. D. R. Johnston. 1,897,971; Feb. 14.
Power plant. C. Osenberg. 1,897,815; Feb. 14.
Power pump, Portable. E. W. Himberger. 1,897,256; Feb. 14.
Power supply system for vacuum tube amplifying devices. V. M. Graham and W. T. Powell. 1,897,556; Feb. 14.
Power transmission mechanism. A. Dow. 1,897,244; Feb. 14.
Preserving or protecting substances or objects. A. P. Cramer-Van Deventer. Re18,734; Feb. 14.
Press: *See*—
Proof press.
Pressing machine. E. Davis. 1,897,241; Feb. 14.
Pressure regulating device, Automatic. L. Gerard. 1,897,898; Feb. 14.
Pressure regulator. R. C. Hughes. 1,897,517; Feb. 14.
Printing forms, Photochemical production of aluminum. M. Thimann. 1,897,828; Feb. 14.
Prints on to surfaces, Transferring. J. Werner. 1,897,875; Feb. 14.
Projection screen. H. Nagel. 1,897,273; Feb. 14.
Protector: *See*—
Garment protector.
Proof press. W. Heinecke. 1,897,757; Feb. 14.
Propeller. J. Squires. 1,897,536; Feb. 14.
Protective system. J. V. Breisky. Re18,740; Feb. 14.
Protector for oil burners, Safety. A. A. Da Silva. 1,897,303; Feb. 14.
Puller: *See*—
Tube puller.
Pulley, Adjustable belt. F. P. Connors. 1,897,720; Feb. 14.
Pulley, Tramway carrying. E. Ostrander. 1,897,329; Feb. 14.
Pulp and dirt separator. H. D. Wells. 1,897,156; Feb. 14.
Pulsator for fuel pumps, Airdrome type. A. M. Babitch. 1,897,292; Feb. 14.
Pulverizer. H. L. Wilkins. 1,897,744; Feb. 14.
Pump: *See*—
Gear pump. Motor-driven pump.
Lubricant pump. Power pump.
Pump for Diesel engines, Fuel. E. Wünterich. 1,897,290; Feb. 14.
Pump machine, Rotary. G. E. T. Eyston. 1,897,190; Feb. 14.
Pump operating mechanism. L. J. Black. 1,897,108; Feb. 14.
Purification apparatus. H. J. Schneiderwirth. 1,897,217; Feb. 14.
Purifying art. I. D. Hubbell. 1,897,638; Feb. 14.
Quadrangular tube. M. Ingenkamp. 1,897,126; Feb. 14.
Rack: *See*—
Grease rack. Trunk rack.
Radiator. E. G. Doucet. 1,897,113; Feb. 14.
Radiator and headlights or the like article, Combined. J. Schweizer. Des. 89,287; Feb. 14.
Radiator reaming, facing, and tapping machine. V. E. Flodin. 1,897,505; Feb. 14.
Radio demonstration apparatus. P. E. Klopsteg. 1,897,057; Feb. 14.
Radio dial. J. G. Younger. 1,897,380; Feb. 14.
Radioreceiver and electrical phonograph, Combined. V. M. Graham. 1,897,557; Feb. 14.
Radio receiving system. J. E. Gardner. 1,897,252; Feb. 14.
Radioreceiving system, Multiple range. H. O. Roosenstein. 1,897,735; Feb. 14.
Radio tuning method. R. H. Langley. 1,897,312; Feb. 14.
Range, Electric. A. Barnsteiner. Des. 89,251; Feb. 14.
Razor. H. R. Segal. 1,897,150; Feb. 14.
Razor, Safety. A. J. Jones. 1,897,982; Feb. 14.
Razor, Safety. N. R. Maas. 1,897,653; Feb. 14.
Razor, Safety. J. Muros. 1,897,707; Feb. 14.
Razor, Safety. R. E. Thompson. 1,897,656; Feb. 14.
Receptacle: *See*—
Lamp receptacle.
Receptacle for graves, Flower. H. W. Kimber. 1,897,520; Feb. 14.
Receptacle mold, Knockdown garbage. H. F. Sielaff. 1,897,340; Feb. 14.
Reel: *See*—
Fishing reel.
Reflector for incandescent lamp bulbs. C. W. Rohrkaste. 1,897,822; Feb. 14.
Reflector, Illuminated. A. M. Spampinato. 1,897,281; Feb. 14.
Refrigerant compressor cooling system. L. A. Philipp. 1,897,178; Feb. 14.
Refrigerating apparatus, Absorption. R. S. Nelson. 1,897,209; Feb. 14.
Refrigerating device. W. H. Free. 1,897,723; Feb. 14.
Refrigerating unit. M. R. Karge. 1,897,907; Feb. 14.
Refrigeration apparatus. D. E. Maccabee. 1,897,205; Feb. 14.
Refrigerator box and system of refrigeration. J. H. Wooll. 1,897,095; Feb. 14.
Refrigerator element and producing same. G. H. Rossebo and F. Hoke. 1,897,957; Feb. 14.

Regulator: *See*—
Furnace heat regulator. Pressure regulator.
Oil pressure regulator.
Regulator. T. E. Foulke. 1,897,471; Feb. 14.
Regulator for the fuel pressure in internal combustion engines. L. L. Viel. 1,897,742; Feb. 14.
Relay. J. R. Fry. 1,897,045; Feb. 14.
Remote control system. R. Bataille. 1,897,718; Feb. 14.
Remote control system. J. L. Bonanno. 1,897,748–9; Feb. 14.
Resin and preparation, Flexible alkyd. R. H. Kienle and H. C. Rohlfs. 1,897,260; Feb. 14.
Resin from glycerol and the like, Artificial. C. Ellis. 1,897,977; Feb. 14.
Resinous condensation product. C. Ellis. 1,897,978; Feb. 14.
Resistance, Apparatus for testing. H. Pender. 1,897,330; Feb. 14.
Retarding or pressure controlling device. A. Carter. 1,897,462; Feb. 14.
Retort, Distillation. G. Zotos. 1,897,677; Feb. 14.
Rim for pneumatic tires, Demountable. A. Mayenset. 1,897,136; Feb. 14.
Road grading and ditching machine. S. H. Burnstad. 1,897,285; Feb. 14.
Road maintainer, Tractor drawn. J. R. Royer. 1,897,677; Feb. 14.
Rock drill. H. Mecom. 1,897,267; Feb. 14.
Rod: *See*—
Fishing rod.
Roll holder, Toilet. L. A. M. and W. A. McGeoch. 1,897,266; Feb. 14.
Roll supporting device, Web. F. E. and W. C. Pfeiffer. 1,897,675; Feb. 14.
Roller employed in yarn-preparing and spinning frames, Drafting and like. H. Meynell. 1,897,137; Feb. 14.
Roof structure. E. M. Olson. 1,897,327; Feb. 14.
Roofing stock, Making. F. C. Overbury. 1,897,139; Feb. 14.
Root cutter. W. E. Penrose. 1,897,859; Feb. 14.
Rosin, Refining. I. W. Humphrey. 1,897,379; Feb. 14.
Rotor construction for aircraft, Sustaining. J. de la Cierva. 1,897,042; Feb. 14.
Rubber articles, Producing. A. H. Voss. 1,897,626; Feb. 14.
Rubber articles, Production of colored. R. Krech, W. Scheurer, and A. Koch. 1,897,129; Feb. 14.
Rubber compound, Method of and machine for treating. R. W. Snyder. 1,897,961; Feb. 14.
Rudder for ships. W. Scholz. 1,897,824; Feb. 14.
Safety apparatus for highways. W. B. Hastings. 1,897,123; Feb. 14.
Safety device for electric ovens. W. D. Antrim. 1,897,879; Feb. 14.
Scaffold, Window. J. L. Mallory and J. V. Daniel. 1,897,810; Feb. 14.
Scale, Weighing. W. F. Stimpson. 1,897,446; Feb. 14.
Scanning method and apparatus. C. J. Keogan. 1,897,483; Feb. 14.
Scoop, Wheeled. J. E. Patterson. 1,897,509; Feb. 14.
Scouring pad. S. Wallace. 1,897,778; Feb. 14.
Scraping machine, Subgrade. E. G. Carr. 1,897,790; Feb. 14.
Screen: *See*—
Projection screen.
Screen. G. W. Carlson. 1,897,418; Feb. 14.
Screw, Combination machine and wood. E. F. Hunt. 1,897,196; Feb. 14.
Scribe, Projecting. P. C. Timm. 1,897,407; Feb. 14.
Scuttle, Ship's. R. Duchoux. 1,897,698; Feb. 14.
Seal for compressors. M. E. Joyce. 1,897,937; Feb. 14.
Seal for storage battery containers. C. C. Wallace. 1,897,597; Feb. 14.
Seal for vitreous articles. F. S. McCullough. 1,897,761; Feb. 14.
Sealing tool. M. C. Taylor. 1,897,511; Feb. 14.
Seed treating machine. C. C. Calkins. 1,897,361; Feb. 14.
Seeder. J. P. Seiser. 1,897,769; Feb. 14.
Separator: *See*—
Corn sheller separator. Oil and gas separator.
Magnetic separator. Pulp and dirt separator.
Seperator. W. Linnmann. 1,897,313; Feb. 14.
Sewing machine, Chain stitch. A. S. Riviere. 1,897,987–8; Feb. 14.
Sewing machine, Multiple needle. A. S. Riviere. 1,897,986; Feb. 14.
Shackle, Excavating bucket. J. L. Tunison. 1,897,846; Feb. 14.
Shaft seal. L. Schwitzer and C. J. Winkler. 1,897,280; Feb. 14.
Sharpener for razor blades. W. L. Marshall. 1,897,760; Feb. 14.
Sharpening machine. H. J. Gaisman and C. Schumacher. 1,897,724; Feb. 14.
Shear sharpening and corrugating device, Combined. W. C. B. Farrar. 1,897,662; Feb. 14.
Sheet material, Manufacture of fibrous. E. Hopkinson. 1,897,479; Feb. 14.
Shelving appliance. E. O. Bulman. 1,897,187; Feb. 14.
Shield and making same, Garment. J. G. Dupont. 1,897,952; Feb. 14.
Shield for bassinets and the like. E. B. McGill. 1,897,525; Feb. 14.
Shield, Weather. J. T. Blair. 1,897,382; Feb. 14.
Shirt for use with concealed suspenders. M. F. Killory. 1,897,261; Feb. 14.
Shirt retaining device. S. O. Walding. 1,897,090; Feb. 14.
Shock absorber. J. M. Hall. 1,897,720; Feb. 14.
Shock absorber. S. C. Smith. 1,897,443; Feb. 14.
Shock absorber and jack for vehicles, Combined. A. McNab. 1,897,581; Feb. 14.
Shock absorbing mechanism, Friction. J. F. O'Connor. 1,897,584; Feb. 14.
Shock absorbing mechanism, Friction. G. W. Wildin. 1,897,780; Feb. 14.
Shoe tree. B. A. Eddins. 1,897,114; Feb. 14.
Shoes, Making. A. R. Morrill. 1,897,527; Feb. 14.
Shuttle tension. H. A. Davis. 1,897,420; Feb. 14.
Signal chime. R. D. Karnell. Des. 89,281; Feb. 14.
Signaling device, Wireless. W. V. Roberts. 1,897,767; Feb. 14.
Signaling system. R. S. Bailey and H. F. Shoffstall. 1,897,104; Feb. 14.
Signaling system. V. Bush. 1,897,236; Feb. 14.
Signaling system, Frequency discrimination. B. B. Grace, T. S. Skillman, A. H. Roche, and E. K. Sandeman. 1,897,047; Feb. 14.
Signs, Operating device for animated display. W. G. Wagenhals. 1,897,918; Feb. 14.
Silica, Apparatus for working fused. G. A. Millar. 1,897,640; Feb. 14.
Silica, Method and apparatus for working fused. G. A. Millar. 1,897,487; Feb. 14.
Slicing machine. C. F. M. van Berkel. 1,897,541; Feb. 14.
Slub catcher. O. L. Humphrey. 1,897,518; Feb. 14.
Smoking pipe. J. P. Martin. 1,897,065; Feb. 14.
Smoking pipe. C. W. Pepper. 1,897,078; Feb. 14.
Snap fastener. B. Z. Hausner. 1,897,936; Feb. 14.
Soap product, Production of a. D. R. Lamont. 1,897,701; Feb. 14.
Socket for electric light bulbs. T. W. Fitzgerald. 1,897,115; Feb. 14.
Socket, Lamp. C. E. Godley. 1,897,797; Feb. 14.
Solvents from mixtures containing the same, Recovery of. F. X. Govers. 1,897,979; Feb. 14.
Sound, Method and apparatus for minimising. P. E. Good. 1,897,649; Feb. 14.
Sound record, Condensed photophonographic. B. E. Eldred. 1,897,247; Feb. 14.
Sound recording. J. Weinberger. 1,897,222; Feb. 14.
Sound recording and reproducing means. K. Dahmen. 1,897,722; Feb. 14.
Spark retarding device. M. Mallory. 1,897,704; Feb. 14.
Speed control. W. R. Murrow. 1,897,324; Feb. 14.
Speed control, Apparatus for. L. O. Heath. 1,897,376; Feb. 14.
Speedometer. J. Zubaty. 1,879,964; Feb. 14.
Speedometer, Temperature compensated. J. Zubaty. 1,897,965; Feb. 14.
Spikes, Making. F. H. Williams. 1,897,159; Feb. 14.
Spindle. G. A. Adsit. 1,897,716; Feb. 14.
Spindle, Machine tool. F. O. Hoagland. 1,897,666; Feb. 14.
Spindle securing means for doorlatches. F. D. Grund. 1,897,698; Feb. 14.
Spool. G. D. Atwood. 1,897,227; Feb. 14.
Spoon, Fiber. E. R. Lilley. 1,897,809; Feb. 14.
Spotlight. G. Dietz. 1,897,864; Feb. 14.
Spout container, Pouring. W. L. Rutkowski. 1,897,959; Feb. 14.
Spout for containers, Pouring. W. L. Rutkowski. 1,897,958; Feb. 14.
Spring. A. H. Adams. 1,897,411; Feb. 14.
Spring assembly. F. Karr. 1,897,309; Feb. 14.
Spring coiling machine. M. Nigro. 1,897,855; Feb. 14.
Spring cover. T. Munro. 1,897,272; Feb. 14.
Spring pad, Flexible. G. W. Bristol. 1,897,836; Feb. 14.
Spring structure. J. M. Oldham. 1,897,396; Feb. 14.
Spring structure. G. A. Stackhouse. 1,897,402; Feb. 14.
Springs, Winding convoluted. A. H. Adams. 1,897,412; Feb. 14.
Stamp, Rubber. A. W. Schmidt. 1,897,915; Feb. 14.
Stamps and the like, Molding rubber. R. Evans. 1,897,893; Feb. 14.
Stand: *See*—
Flower stand. Vise-stand.
Stannic chloride, Manufacture of. W. J. Buttfield. 1,897,360; Feb. 14.
Starter, Engine. L. K. Brunner. 1,897,923; Feb. 14.
Starter, Engine. Y. Sekella. 1,897,916; Feb. 14.
Starter, Engine. N. E. Wernberg. 1,897,457; Feb. 14.
Starter, Engine. M. P. Whitney. 1,897,919; Feb. 14.
Starter for internal combustion engines. W. J. Bauman. 1,897,786; Feb. 14.
Steam trap. A. A. Cryer. 1,897,753; Feb. 14.
Steering mechanism for tractors. G. T. Ronk. 1,897,180; Feb. 14.
Stoker, Locomotive. F. P. Roesch. 1,897,510; Feb. 14.
Stool. E. R. Ries. 1,897,676; Feb. 14.
Store-front construction. F. and I. Himmel. 1,897,475; Feb. 14.
Strap and harness, Baby's safety. J. Beagan. 1,897,882; Feb. 14.
Strap tying machine. L. M. Harvey. 1,897,650; Feb. 14.
Straps for battery plates, Casting. A. Mayer. 1,897,066; Feb. 14.

Straw collector. F. V. and C. L. Handy. 1,897,254; Feb. 14.
Stretcher, Garment. L. S. Stripling. 1,897,972; Feb. 14.
Structural unit and making same. C. M. Chapman. 1,897,238; Feb. 14.
Submarine craft, Indicating the position of. F. Mowe. 1,897,395; Feb. 14.
Sugar juices, Purifying. J. P. Foster. 1,897,424; Feb. 14.
Suit, Bathing. M. H. Powell. 1,897,619; Feb. 14.
Suitcase, Wardrobe. E. E. Wilt. 1,897,353; Feb. 14.
Sulphur from sulphides, Production of. R. F. Bacon. 1,897,921; Feb. 14.
Sulphuric ester of glycol ethers. H. Ulrich and K. Saurwein. 1,897,741; Feb. 14.
Support: *See*—
Boat davit support. Lamp support.
Book support.
Suspender, Self adjusting. H. J. Block. 1,897,296; Feb. 14.
Switch: *See*—
Coin controlled switch. Fluid flow switch.
Electric switch. Thermostatic switch.
Switch. O. J. Leins. 1,897,132; Feb. 14.
Switch and the production thereof, Electric. W. R. Walker. 1,897,963; Feb. 14.
Switch for automobiles, Signal. A. A. Jones. 1,897,906; Feb. 14.
Switch heater for railroads. W. D. Scholz. 1,897,218; Feb. 14.
Switch mechanism. F. C. Ball and C. C. Salisbury. 1,897,943; Feb. 14.
Switch mechanism, Power operated. H. D. Salisbury. 1,897,181; Feb. 14.
Swivel hook. J. E. and I. R. Wilson. 1,897,920; Feb. 14.
Table: *See*—
Automobile table. Merchandising table.
Sink-system table.
Table. L. E. Biery. 1,897,884; Feb. 14.
Table and Christmas tree holder, Combination. J. E. Lyons. 1,897,616; Feb. 14.
Table attachment. W. Appel. 1,897,717; Feb. 14.
Table for envelope-making and like machines, Adjustable feed. C. F. Pdanse. 1,897,641; Feb. 14.
Tag holder, identification. J. A. Mahnk. Des. 89,284; Feb. 14.
Tamping machine. A. J. Helfrecht. 1,897,612; Feb. 14.
Tandem drive for motor vehicles. R. Thornton. 1,897,153; Feb. 14.
Tank and table, Scullery. W. F. Roescher. 1,897,718; Feb. 14.
Tanning process. C. O. Henke and A. C. Orthmann. 1,897,124; Feb. 14.
Tape, Court marking. R. Healy. 1,897,801; Feb. 14.
Teapot, Counter service. J. G. Luttrell. Des. 89,258; Feb. 14.
Telephone exchange system. J. B. Newsom. 1,897,069; Feb. 14.
Telephone exchange system. W. B. Strickler. 1,897,083; Feb. 14.
Telephone system. H. M. Bascom. 1,897,106; Feb. 14.
Telephone system. W. Hatton. 1,897,048; Feb. 14.
Telescope, Prism. H. S. Cover. 1,897,608; Feb. 14.
Terminal for electric devices. K. Wiegand and J. Habel. 1,897,459; Feb. 14.
Testing gauge. D. Bantz. 1,897,832; Feb. 14.
Textile fabric or a similar article, Embroidered. E. W. Freudenberg. Des. 89,277; Feb. 14.
Textile fabric or similar article. F. Headon. Des. 89,279–80; Feb. 14.
Textile fabric or similar article. J. Schweizer. Des. 89,266; Feb. 14.
Textile fabric or similar article. W. Willheim. Des. 89,271–2; Feb. 14.
Textile fabric or similar article. W. Willheim. Des. 89,289–92; Feb. 14.
Textile fabric or the like. J. Schweizer. Des. 89,267; Feb. 14.
Textile material and preparing the same. C. Dreyfus and H. Platt. 1,897,793; Feb. 14.
Thermometer. H. Y. Norwood. 1,897,826; Feb. 14.
Thermometer, Side-wall. F. A. Nodine. 1,897,814; Feb. 14.
Thermostat and similar device. A. J. and C. A. Otto. 1,897,857; Feb. 14.
Thermostatic switch. L. K. Marshall. 1,897,816; Feb. 14.
Thermostatic valve. S. P. Vaughn. 1,897,155; Feb. 14.
Threads with liquids, Apparatus for treating single. A. Hartmann, W. Höfinghoff and F. Fischer. 1,897,122; Feb. 14.
Tie, Metallic railroad. A. C. Shives. 1,897,500; Feb. 14.
Tiles, Forming silo. W. Brassert and G. V. Gladville. 1,897,659; Feb. 14.
Time control system for telephones. C. V. Richey. 1,897,533; Feb. 14.
Tire cutting machine. W. G. Fritts. 1,897,425; Feb. 14.
Tire, Interchangeable rubber. G. Wolf. 1,897,974; Feb. 14.
Tire shaping and air bag inserting machine. B. De Mattia. 1,897,690; Feb. 14.
Tire trunk. K. C. Bright and J. N. Sweeney. 1,897,888; Feb. 14.
Toaster or like article. T. A. Edison, jr., and H. S. Carlson. Des. 89,255; Feb. 14.
Tobacco pipe. B. H. Singletary. 1,897,535; Feb. 14.
Token depositary and accounting device, Admission. H. J. Baur. 1,897,601; Feb. 14.
Tone modifier. J. P. Pasko. 1,897,531; Feb. 14.
Tongs. D. B. Arnof. 1,897,991; Feb. 14.
Tool: *See*—
Fender tool. Vibration dampener removing tool.
Polishing tool. Sealing tool. Wire tapping tool.
Tool. C. O. Jones. 1,897,700; Feb. 14.
Tool grinding machine. L. Kellenberger. 1,897,055; Feb. 14.
Tool or chuck for the finishing and grinding of work in prosthetics. A. B. Perriera and J. A. Pagnossi. 1,897,496; Feb. 14.
Tools, System for detecting faults in sharp edged. P. N. Peters. 1,897,141; Feb. 14.
Toothbrush. H. P. Duey. 1,897,365; Feb. 14.
Top for the rumble seats of automobiles, Disappearing canopy. S. W. Harvey. 1,897,946; Feb. 14.
Top prop joint. W. S. Saunders. 1,897,442; Feb. 14.
Torsion and coupling controlling device. G. A. Montgomery. 1,897,322; Feb. 14.
Toy, Mechanical. H. J. Melville. 1,897,670; Feb. 14.
Toy store. P. O. Gilmond. Re18,738; Feb. 14.
Toy train draft coupling. W. G. Daniels. 1,897,362; Feb. 14.
Tractor. T. Brown. 1,897,751; Feb. 14.
Transfer blanket for offset printing. G. S. Rowell. 1,897,148; Feb. 14.
Transmission between two shafts with regulable gear ratio. C. A. H. Mulder. 1,897,436; Feb. 14.
Transmission network. J. G. Kreer, jr. 1,897,639; Feb. 14.
Transmission shaft for vehicles. M. A. West. 1,897,542; Feb. 14.
Transmission shifting mechanism. A. W. Harris. 1,897,841; Feb. 14.
Trap: *See*—
Steam trap.
Trap. E. P. Seghers. 1,897,151; Feb. 14.
Tray, Ash. F. E. Greene. Des. 89,256; Feb. 14.
Tray and extinguisher, Portable ash. G. L. Baldwin. 1,897,356; Feb. 14.
Treating bath and treating textile fibers. I. Gubelmann, H. J. Weiland, and C. O. Henke. 1,897,120; Feb. 14.
Trousers. L. F. Rosenbaum. 1,897,623; Feb. 14.
Trousers hanger. H. Sjowall. 1,897,078; Feb. 14.
Truck, Industrial. E. H. Remde. Re18,737; Feb. 14.
Truck, Lift. J. O. Fernstrom. 1,897,637; Feb. 14.
Truck, Liquefied gas distributor's servicing. P. S. Endacott. 1,897,161; Feb. 14.
Truck, Liquefied gas distributor's servicing. P. S. Endacott. 1,897,164; Feb. 14.
Truck, Side dump. H. J. Miller. 1,897,067; Feb. 14.
Trunk rack. W. W. Wilson. 1,897,094; Feb. 14.
Tube: *See*—
Discharge tube. Paste tube.
Draft tube. Quadrangular tube.
Electrical tube.
Tube connections, Forming. R. R. McKnight and A. Webber. 1,897,320; Feb. 14.
Tube puller. D. Manucci, P. Malatesta, and W. C. Sawtelle. 1,897,561; Feb. 14.
Tube structure, Draft. H. B. Taylor. 1,897,501; Feb. 14.
Tubes, Apparatus for rolling seamless. J. Severin. 1,897,770; Feb. 14.
Tubes, Apparatus for testing discharge. G. van Beusekom. 1,897,450; Feb. 14.
Tuning element. T. J. Scofield. 1,897,837; Feb. 14.
Tunnel drier. T. W. Garve. 1,897,387; Feb. 14.
Turbine, Hydraulic. G. A. Biggs. 1,897,834; Feb. 14.
Turbines, Tightening device for radial flow steam. A. Lysholm. 1,897,989; Feb. 14.
Turbines with solid fuel, Apparatus for operating explosion. H. Holzwarth. 1,897,478; Feb. 14.
Turret rotatably mounted on board ship. A. Steinle. 1,897,282; Feb. 14.
Type or similar article. E. I. Payne. Des. 89,263; Feb. 14.
Typesetting mechanism for typewriters. J. F. Koca. 1,897,983; Feb. 14.
Typewriting machine. W. A. Dobson. 1,897,243; Feb. 14.
Typewriting machine. H. J. Hart. 1,897,699; Feb. 14.
Typewriting machine. O. Thieme. 1,897,284; Feb. 14.
Uncoupling mechanism for car couplers. A. J. Bazeley. 1,897,461; Feb. 14.
Universal joint. G. W. Dooley. 1,897,945; Feb. 14.
Unloading device, Automatic flat-bottom. A. Meyer. 1,897,175; Feb. 14.
Upholstery edge. H. Fox. 1,897,928; Feb. 14.
Utensil, Cooking. S. F. Gleason. 1,897,899; Feb. 14.
Vacuum cleaner. S. E. Lambert. 1,897,060; Feb. 14.
Vacuum cleaner cord control device. B. J. Tamarin. 1,897,087; Feb. 14.
Vacuum pump. F. L. Buenger. 1,897,547; Feb. 14.
Valve: *See*—
Chimney valve. Thermostatic valve.
Dispenser valve.
Valve. H. W. Schiorring and F. P. Fuhs. 1,897,678; Feb. 14.
Valve. R. C. Shand. 1,897,076; Feb. 14.
Valve. D. Yoshizawa. 1,897,687; Feb. 14.
Valve and strainer, Combined check. E. S. Cornell, jr. 1,897,572; Feb. 14.

Valve control for liquid and gas separators, Inverse. G. Raymond. 1,897,898; Feb. 14.
Valve controlling means. E. R. Williams. 1,897,745; Feb. 14.
Valve for automatic air brakes, Pressure control. O. Seifferle. 1,897,839; Feb. 14.
Valve for force feed lubricating systems, Lubricant discharge. I. Cowles. 1,897,609; Feb. 14.
Valve for rock drills. E. F. Terry. 1,897,595; Feb. 14.
Valve mechanism, Gas. E. Lapp, A. Wolpert, and B. E. Shaw. 1,897,061; Feb. 14.
Valve oiling and gas diluting device. J. E. Halford. 1,897,388; Feb. 14.
Valve operating mechanism for fluid pressure engines, pumps, or compressors. H. R. Ricardo. 1,897,179; Feb. 14.
Valve spring lifter. H. A. Berkman. 1,897,030; Feb. 14.
Vane rim for turbines. F. Ljungström. 1,897,172; Feb. 14.
Vanity case or compact. T. J. Lewis. 1,897,522; Feb. 14.
Vapor purifier. W. J. Hughes, W. H. Green, and A. B. Hodges. 1,897,727; Feb. 14.
Vapor regulator and supporting same. E. A. Russell. 1,897,215; Feb. 14.
Vaporizing device for internal combustion engines. C. Stimetz. 1,897,344; Feb. 14.
Vapors from incondensable gas, Recovering condensable. J. C. Morrell. 1,897,618; Feb. 14.
Vault mold, Burial. E. J. Brutsche. 1,897,603; Feb. 14.
Vehicle. H. A. and H. W. Reinhart, and J. Wadsworth. 1,897,277; Feb. 14.
Vehicle brake. P. Mostaza. 1,897,853; Feb. 14.
Vehicle control mechanism. E. J. and W. M. Sullivan. 1,897,537; Feb. 14.
Vehicle spring controlling means. G. H. Taber. 1,897,538; Feb. 14.
Vending machine. R. D. Parks and G. Hildenbrand. 1,897,072; Feb. 14.
Ventilator. A. J. Richardson. 1,897,440; Feb. 14.
Vibration dampener applicator. C. C. Coon. 1,897,466; Feb. 14.
Vibration dampener removing tool. C. C. Coon. 1,897,465; Feb. 14.
Vise-stand, Portable and adjustable. F. A. Trowbridge. 1,897,449; Feb. 14.
Vitamin concentrates from fats, Obtaining. W. G. Christiansen, W. S. Jones, and E. Moness. 1,897,039; Feb. 14.
Vitreous articles, Method of and apparatus for producing. G. A. Millar. 1,897,489; Feb. 14.
Wafer icing machine. R. F. Macfarlane. 1,897,207; Feb. 14.
Washer: *See*—
Bottle washer.
Washing machine. O. T. Dehle. 1,897,953; Feb. 14.
Water bag, Thermoresistant. J. F. Mykol. 1,897,488; Feb. 14.
Water from boats, Removing. D. McEachern. 1,897,524; Feb. 14.
Water heater. G. Anderson. 1,897,413; Feb. 14.
Wave antenna. N. Gerten and R. L. Jenner. 1,897,373; Feb. 14.
Weather-strip. O. G. Johnson. 1,897,127; Feb. 14.
Weatherstrip for metallic window frames and sashes. F. Reese. 1,897,643; Feb. 14.
Weaving mechanism. R. G. Knowland. 1,897,392; Feb. 14.
Web controlling mechanism. H. Fankboner. 1,897,504; Feb. 14.
Weighing apparatus for tank contained liquefied gas. P. S. Endacott. 1,897,162; Feb. 14.
Weighing mechanism. H. E. Bridgewater. 1,897,168; Feb. 14.
Weighing mechanism. R. W. Thomas. 1,897,169–70; Feb. 14.
Weight, Fishing line. P. R. Andrews. 1,897,201; Feb. 14.
Welding machine, Hand. I. E. Cole, D. T. May, and A. A. Weller. 1,897,606; Feb. 14.
Wheel. H. A. Greenwald. 1,897,375; Feb. 14.
Wheel arrangement for motor busses, Rear. H. E. A. Hallett. 1,897,934; Feb. 14.
Wheel structure. A. O. Brooke. 1,897,789; Feb. 14.
Wheels, Apparatus for making forged steel. C. S. Swanson. 1,897,645; Feb. 14.
Wheels, Making forged steel. C. S. Swanson. 1,897,646; Feb. 14.
Wind velocity, Device for indicating. R. E. Apthorp. 1,897,658; Feb. 14.
Wire-feeding and cutting machine. A. Hofmann and O. Kanis. 1,897,070; Feb. 14.
Wire tapping tool. C. C. Coon. 1,897,464; Feb. 14.
Wires, Weaving Fourdrinier. W. E. Buchanan. 1,897,232; Feb. 14.
Wood-heel machine. W. J. Shaw. 1,897,680; Feb. 14.
Wood or other fibrous material, Continuous process of reducing or reforming. R. B. Respess. 1,897,620; Feb. 14.
Worktable. W. O. Sustins. 1,897,152; Feb. 14.
Wrench. J. E. Johnson. 1,897,614; Feb. 14.
Wrist pin gauge. J. Sunnen. 1,897,774; Feb. 14.
Yarn and knitted wearing apparel produced therefrom. H. Hemmerich. 1,897,051; Feb. 14.
Yarn cleaner. G. R. Fassett. 1,897,895; Feb. 14.

CLASSIFICATION OF PATENTS

ISSUED FEBRUARY 14, 1933

NOTE.—First number—class, second number—subclass, third number—patent number

1— 2.2: 1,907,625
2— 58: 1,907,952
67: 1,907,619
80: 1,907,098
117: 1,907,261
131: 1,907,486
145: 1,907,734
171: 1,907,146
174: 1,907,100
227: 1,907,623
228: 1,907,128
4— 187: 1,907,713
5— 93: 1,907,258
1,907,535
252: 1,907,402
260: 1,907,308
280: 1,907,309
354: 1,907,521
7— 3: 1,907,991
8— 5: 1,907,119
1,907,120
1,907,704
6: 1,907,900
20: 1,907,991
1,907,708
9— 6: 1,907,981
23: 1,907,307
10— 63: 1,907,159
127: 1,907,562
162: 1,907,116
12— 1: 1,907,098
14: 1,907,037
1,907,084
17: 1,907,526
33: 1,907,105
47.1: 1,907,080
103: 1,907,599
128.4: 1,907,114
142: 1,907,527
13— 6: 1,907,973
14— 22: 1,907,470
26: 1,907,056
15— 50: 1,907,022
104.20: 1,907,361
104.30: 1,907,359
121: 1,907,726
128: 1,907,777
159: 1,907,354
176: 1,907,365
209: 1,907,778
1,907,981
267: 1,907,087
16— 58: 1,907,351
99: 1,907,593
18— 2: 1,907,990
1,907,991
5: 1,907,612
44: 1,907,993
47: 1,907,034
50: 1,907,129
1,907,139
52: 1,907,626
19— 143: 1,907,137
20— 1.01: 1,907,708
20: 1,907,991
56.4: 1,907,475
1,907,476
56.5: 1,907,957
22— 2: 1,907,523
57: 1,907,599
60: 1,907,433
95: 1,907,096
131: 1,907,925
1,907,926
188: 1,907,149
203: 1,907,096
1,907,663
209: 1,907,631
23— 61: 1,907,726
98: 1,907,260
107: 1,907,705
123: 1,907,740
200: 1,907,921
217: 1,907,081
256: 1,907,721
24— 20.5: 1,907,208
50: 1,907,333
73: 1,907,000
123: 1,907,221
1,907,920
208: 1,907,036
248: 1,907,554
25— 118: 1,907,530
119: 1,907,792
130: 1,907,340
1,907,603
156: 1,907,183
1,907,659
26— 64: 1,907,518
66: 1,907,595
29— 34: 1,907,350
35: 1,907,605
84: 1,907,464
1,907,465
1,907,466
86.3: 1,907,030
86.2: 1,907,737
90: 1,907,397
155.52: 1,907,355
157.4: 1,907,320
159.01: 1,907,646
30— 11: 1,907,117
1,907,924
12: 1,907,150
1,907,653
1,907,656
1,907,707
1,907,983
22: 1,907,809
23: 1,907,754
26: 1,907,407
33— 85: 1,907,662
172: 1,907,506
178: 1,907,774
206: 1,907,571
34— 12: 1,907,904
46: 1,907,387
35— 5: 1,907,580
36— 45: 1,907,349
37— 108: 1,907,606
1,907,790
110: 1,907,235
122: 1,907,509
135: 1,907,346
155: 1,907,677
165: 1,907,498
39— 27: 1,907,554
40— 2: 1,907,951
16: 1,907,915
22: 1,907,786
52: 1,907,918
189: 1,907,341
41— 14: 1,907,942
33: 1,907,875
41.5: 1,907,844
42— 4: 1,907,710
43— 9: 1,907,147
22: 1,907,869
42: 1,907,109
45: 1,907,520
52: 1,907,391
56: 1,907,571
81: 1,907,151
112: 1,907,263
137: 1,907,697
45— 31: 1,907,616
46: 1,907,321
51: 1,907,107
67: 1,907,305
68: 1,907,799
75: 1,907,717
97: 1,907,849
110: 1,907,864
120: 1,907,187
46— 37: R. 18,738
40: 1,907,670
1,907,848
1,907,914
47— 17: 1,907,062
21: 1,907,382
41: 1,907,520
48— 67: 1,907,950
49— 1: 1,907,488
49— 1: 1,907,489
7: 1,907,640
78.1: 1,907,457
81: 1,907,962
50— 23: 1,907,517
51— 14: 1,907,961
38: 1,907,049
60: 1,907,662
95: 1,907,035
101: R. 18,723
112: 1,907,724
168: 1,907,991
190: 1,907,971
194: 1,907,498
209: 1,907,548
211: 1,907,760
232: 1,907,055
237: R. 18,726
55— 60: 1,907,820
95: 1,907,550
56— 20: 1,907,611
23: 1,907,447
232: 1,907,843
364: 1,907,491
60— 16: 1,907,457
30: 1,907,746
41: 1,907,478
52: 1,907,075
1,907,396
1,907,468
54.5: 1,907,220
73: 1,907,815
62— 5: 1,907,980
7: 1,907,559
19: 1,907,426
91.5: 1,907,096
1,907,937
1,907,989
93: 1,907,723
115: 1,907,178
1,907,907
116: 1,907,192
1,907,205
119.5: 1,907,209
1,907,223
64— 8: 1,907,720
29: 1,907,542
30: 1,907,964
102: 1,907,845
106: 1,907,322
65— 13: 1,907,304
66— 1.5: 1,907,452
46: 1,907,131
98: 1,907,917
107: 1,907,120
178: 1,907,051
68— 9: 1,907,152
1,907,241
1,907,899
10: 1,907,051
15: 1,907,414
18: 1,907,435
1,907,615
70— 26: 1,907,706
90: 1,907,195
91: 1,907,523
113: 1,907,922
72— 66: 1,907,327
1,907,328
69: 1,907,228
101: 1,907,041
117: 1,907,842
118: 1,907,776
73— 2: 1,907,658
4: 1,907,325
37: 1,907,208
52: 1,907,326
54: 1,907,419
1,907,876
118: 1,907,814
165: 1,907,822
167: 1,907,174
1,907,858
1,907,870
74— 7: 1,907,244
1,907,555
1,907,622
74— 7: 1,907,786
1,907,905
1,907,918
1,907,919
1,907,928
1,907,938
14: 1,907,108
1,907,140
1,907,182
1,907,506
1,907,553
34: 1,907,426
1,907,664
39: 1,907,216
1,907,841
1,907,851
54: 1,907,416
55: 1,907,991
107: 1,907,537
109: 1,907,648
75— 17: 1,907,750
76: 1,907,881
77— 62: 1,907,406
80— 13: 1,907,770
16: 1,907,645
81— 9.1: 1,907,511
1,907,650
15: 1,907,142
41: 1,907,449
53: 1,907,514
192: 1,907,374
193: 1,907,208
204: 1,907,514
82— 20: 1,907,909
40: 1,907,220
83— 10: 1,907,176
11: 1,907,744
38: 1,907,261
73: 1,907,499
84— 277: 1,907,531
282: 1,907,225
85— 28: 1,907,135
42: 1,907,198
87— 16: 1,907,701
17: 1,907,449
86— 1: 1,907,264
1,907,732
1,907,772
1,907,874
1.5: 1,907,288
16: 1,907,494
1,907,670
1,907,782
16.2: 1,907,528
16.4: 1,907,096
1,907,262
1,907,275
1,907,905
17: 1,907,077
1,907,477
1,907,908
18.7: 1,907,253
24: 1,907,373
1,907,374
33: 1,907,608
57: 1,907,990
87— 27: 1,907,009
36: 1,907,451
41: 1,907,262
90— 21: 1,907,022
91— 2: 1,907,207
37: 1,907,098
45: 1,907,173
46: 1,907,122
63: 1,907,712
70: 1,907,051
92— 20: 1,907,520
21: 1,907,143
1,907,994
28: 1,907,157
35: 1,907,155
39: 1,907,479
58: 1,907,401
93— 33: 1,907,198
40: 1,907,715
44: 1,907,606
95— 1.1: 1,907,908
2: 1,907,209
1,907,846
1,907,908
5.7: 1,907,838
7: 1,907,843
9: 1,907,420
11: 1,907,111
97— 40: 1,907,985
116: 1,907,444
188: 1,907,188
98— 32: 1,907,440
99— 1: 1,907,992
8: R. 18,734
10: 1,907,251
11: 1,907,242
1,907,303
1,907,720
1,907,775
100— 57: 1,907,644
1,907,989
101— 1: 1,907,125
217: 1,907,148
230: 1,907,502
257: 1,907,757
292: 1,907,201
102— 10: 1,907,985
20: 1,907,709
1,907,948
28: 1,907,853
103— 37: 1,907,170
1,907,200
42: 1,907,432
57: 1,907,734
126: 1,907,560
160: 1,907,190
215: 1,907,256
224: 1,907,202
104— 151: 1,907,748
1,907,749
105— 150: 1,907,377
224: 1,907,518
271: 1,907,531
308: 1,907,894
106— 94: R. 18,739
1,907,956
1,907,958
107— 57: 1,907,352
108— 5: R. 18,735
110— 30: 1,907,579
40: 1,907,112
113: 1,907,510
111— 83: 1,907,355
1,907,421
74: 1,907,709
112— 186: 1,907,998
1,907,997
202: 1,907,998
113— 80: 1,907,993
114— 16.5: 1,907,305
162: 1,907,534
178: 1,907,698
185: 1,907,534
116—124.1: 1,907,380
125: 1,907,308
120: 1,907,446
117— 82: 1,907,224
119— 98: 1,907,441
120— 18: 1,907,315
60: 1,907,736
121— 19: 1,907,895
44: 1,907,350
122— 356: 1,907,758
360: 1,907,126
479: 1,907,845
491: 1,907,727
123— 23: 1,907,819
25: 1,907,344
32: 1,907,298
43: 1,907,982
52: 1,907,512
55: 1,907,191
1,907,783
128— 117: 1,907,704
122: 1,907,083
1,907,540
123: 1,907,967
130: 1,907,044
191: 1,907,288
1,907,294
196: 1,907,388
124— 10: 1,907,226
127— 61: 1,907,434
128— 12: 1,907,261
186: 1,907,376
200: 1,907,343
1,907,402
1,907,404
270: 1,907,433
306: 1,907,532
129— 16: 1,907,920
1,907,980
1,907,981
131— 12: 1,907,985
1,907,073
1,907,535
37: 1,907,301
51: 1,907,356
1,907,409
132— 28: 1,907,985
31: 1,907,719
36: 1,907,946
53: 1,907,747
82: 1,907,532
133— 20: 1,907,696
37: 1,907,071
39: 1,907,538
136— 170: 1,907,897
177: 1,907,985
137— 20: 1,907,194
160: 1,907,649
162: 1,907,678
139— 9: 1,907,077
1,907,982
228: 1,907,439
261: 1,907,417
291: 1,907,223
420: 1,907,671
140— 93: 1,907,070
113: 1,907,998
118: 1,907,709
130: 1,907,970
141— 9: 1,907,531
144— 209: 1,907,948
146— 80: 1,907,664
102: 1,907,841
148— 8: 1,907,813
149— 4: 1,907,194
5: 1,907,773
150— 1: 1,907,436
12: 1,907,910
152— 17: 1,907,774
26: 1,907,927
27: 1,907,088
153— 28: 1,907,863
64: 1,907,412
65: 1,907,855
154— 2: 1,907,068
1,907,139
20: 1,907,448
54.5: 1,907,894
155— 26: 1,907,377
95: 1,907,676
184: 1,907,998
189: 1,907,823
156— 14: 1,907,418
18: 1,907,698
44: 1,907,699
158— 7: 1,907,908
26: 1,907,310
1,907,315
91: 1,907,314
94: 1,907,728
117.1: 1,907,600
164— 42: 1,907,897
47: 1,907,208
61: 1,907,426
73: 1,907,534
110: 1,907,427

166— 2: 1,897,985
15: 1,897,297
18: 1,897,507
167— 13: 1,897,573
81: 1,897,039
170— 160: 1,897,536
163: 1,897,445
1,897,817
171— 119: 1,897,415
206: 1,897,544
314: 1,897,800
172— 36: 1,897,063
1,897,068
280: 1,897,184
289: 1,897,050
173— 264: 1,897,629
318: 1,897,257
330: 1,897,954
339: 1,897,797
361: 1,897,323
1,897,829
362: 1,897,115
175— 182: 1,897,688
183: 1,897,141
1,897,330
1,897,610
1,897,634
1,897,731
294: R. 18,740
335: 1,897,045
356: 1,897,040
1,897,253
1,897,604
361: 1,897,818
363: 1,897,556
176— 122: 1,897,363
1,897,474
1,897,586
1,897,587
124: 1,897,482
1,897,642
125: 1,897,497
126: 1,897,459
177— 311: 1,897,472
329: 1,897,668
351: 1,897,204
1,897,657
1,897,811
353: 1,897,718
178— 2: 1,897,739
5: 1,897,796
6: 1,897,219
1,897,236
1,897,483
13: 1,897,481
44: 1,897,062
1,897,249
1,897,633
1,897,639
52: 1,897,047
179— 1: 1,897,390
1,897,732
6.31: 1,897,533
27: 1,897,048
1,897,069
1,897,083
200— 27: 1,897,943
1,897,960
81: 1,897,106
100.2: 1,897,722
100.3: 1,897,655
100.4: 1,897,222
100.11: 1,897,557
107: 1,897,833
115: 1,897,399
115.5: 1,897,835
175.3: 1,897,104

180— 22: 1,897,153
1,897,934
1,897,944
90: 1,897,966
1,897,975
181— 31: 1,897,294
183— 2.7: 1,897,332
1,897,368
1,897,745
10: 1,897,370
1,897,371
1,897,372
27: 1,897,912
37: 1,897,060
60: 1,897,976
83: 1,897,254
184— 3: 1,897,827
6: 1,897,788
7: 1,897,503
1,897,609
22: 1,897,764
27: 1,897,300
1,897,791
185— 40: 1,897,530
187— 29: 1,897,408
188— 4: 1,897,853
96: 1,897,765
1,897,873
152: 1,897,787
243: 1,897,632
189— 65: 1,897,127
1,897,643
190— 41: 1,897,353
53: 1,897,887
192— .01: 1,897,357
1,897,358
17: 1,897,180
43.2: 1,897,854
193— 3: 1,897,295
194— 1: 1,897,601
62: 1,897,193
75: 1,897,200
103: 1,897,909
196— 4: 1,897,574
1,897,575
8: 1,897,618
36: 1,897,582
46: 1,897,389
47: 1,897,577
49: 1,897,628
58: 1,897,245
1,897,576
1,897,593
59: 1,897,567
1,897,635
79: 1,897,328
94: 1,897,348
139: 1,897,766
144: 1,897,617
197— 60: 1,897,699
132: 1,897,284
160: 1,897,084
165: 1,897,243
198— 19: 1,897,901
183: 1,897,431
200— 27: 1,897,943
52: 1,897,074
1,897,906
59: 1,897,681
80: 1,897,405
92: 1,897,181
105: 1,897,955
106: 1,897,467
112: 1,897,132
1,897,485

200— 113: 1,897,118
127: 1,897,342
138: 1,897,316
140: 1,897,883
152: 1,897,453
1,897,454
1,897,455
1,897,456
1,897,963
201— 48: 1,897,596
202— 39: 1,897,979
60: 1,897,379
90: 1,897,877
204— 1: 1,897,902
19: 1,897,308
25: 1,897,217
62: 1,897,214
206— 41: 1,897,702
46: 1,897,602
48: 1,897,549
58: 1,897,143
59: 1,897,334
65: 1,897,672
80: 1,897,652
209— 18: 1,897,545
110: 1,897,085
143: 1,897,367
144: 1,897,144
1,897,195
166: 1,897,265
218: 1,897,763
289: 1,897,624
210— 38: 1,897,402
56: 1,897,313
170: 1,897,572
211— 72: 1,897,558
156: 1,897,940
212— 59: 1,897,383
213— 30: 1,897,584
33: 1,897,780
36: 1,897,730
47: 1,897,287
48: 1,897,288
126: 1,897,278
1,897,279
211: 1,897,362
219: 1,897,461
214— 11: 1,897,093
17: 1,897,599
65: R. 18,737
215— 38: 1,897,422
218— 17.1: 1,897,046
219— 4: 1,897,460
1,897,606
8: 1,897,134
1,897,990
10: 1,897,079
19: 1,897,089
1,897,218
220— 3: 1,897,163
26: 1,897,779
35: 1,897,160
221— 11: 1,897,968
1,897,969
1,897,960
47.1: 1,897,299
60: 1,897,043
1,897,276
1,897,890
67: 1,897,165
1,897,167
73.5: 1,897,166
80: 1,897,154

222— 6: 1,897,259
1,897,394
223— 17: 1,897,886
18.2: 1,897,972
67: 1,897,078
224— 29: 1,897,888
226— 4: 1,897,506
100: 1,897,665
228— 61: 1,897,840
229— 6: 1,897,868
23: 1,897,826
30: 1,897,570
68: 1,897,602
70: 1,897,847
230— 1: 1,897,906
56: 1,897,674
134: 1,897,947
152: 1,897,547
232: 1,897,199
274: 1,897,860
233— 14: 1,897,240
234— 1.5: 1,897,941
5.5: 1,897,850
235— 60: 1,897,347
1,897,932
236— 1: 1,897,448
16: 1,897,406
1,897,408
48: 1,897,156
53: 1,897,753
82: 1,897,135
1,897,857
237— 67: 1,897,759
238— 61: 1,897,500
240— 1.2: 1,897,768
2: 1,897,271
4.1: 1,897,802
10.67: 1,897,627
41.4: 1,897,202
52.3: 1,897,852
104: 1,897,822
241— 23: 1,897,296
242— 46.6: 1,897,716
55.2: 1,897,266
1,897,675
1,897,960
68: 1,897,227
78: 1,897,504
84.5: 1,897,499
1,897,711
244— 2: 1,897,269
1,897,539
12: 1,897,669
14: 1,897,756
18: 1,897,092
19: 1,897,042
25: 1,897,463
29: 1,897,285
245— 127: 1,897,123
247— 1: 1,897,186
27: 1,897,630
248— 20: 1,897,400
1,897,578
1,897,913
28: 1,897,248
41: 1,897,598
1,897,905
250— 8: 1,897,050
13: 1,897,057
16: 1,897,337
17: 1,897,237
1,897,757
20: 1,897,231
1,897,252
1,897,735

250— 27: 1,897,450
1,897,880
27.5: 1,897,229
1,897,255
1,897,471
1,897,473
1,897,490
1,897,761
1,897,933
33: 1,897,372
34: 1,897,177
1,897,621
40: 1,897,312
251— 4: 1,897,202
5: 1,897,743
46: 1,897,687
126: 1,897,781
252— 1: 1,897,878
8: 1,897,638
253— 16.5: 1,897,172
1,897,969
117: 1,897,501
1,897,502
148: 1,897,534
254— 2: 1,897,537
88: 1,897,053
93: 1,897,581
255— 1: 1,897,872
4: 1,897,121
28: 1,897,267
1,897,434
69: 1,897,733
1,897,785
71: 1,897,588
256— 1: 1,897,250
257— 88: 1,897,613
104: 1,897,607
139: 1,897,113
187: 1,897,336
227: 1,897,413
239: 1,897,213
258— 5: 1,897,552
259— 95: 1,897,953
101: 1,897,239
260— 3: 1,897,978
8: 1,897,260
1,897,977
17: 1,897,133
27: 1,897,428
40: 1,897,439
53: 1,897,430
61: 1,897,427
64: 1,897,795
69: 1,897,410
84: 1,897,211
98: 1,897,741
101: 1,897,869
108: 1,897,516
122: 1,897,815
123: 1,897,110
125: 1,897,220
130: 1,897,210
154: 1,897,188
156: 1,897,812
1,897,856
168: 1,897,798
261— 14: 1,897,298
46: 1,897,782
47: 1,897,102
55: 1,897,103
61: 1,897,101
69: 1,897,742
263— 28: 1,897,984
33: 1,897,331
6: 1,897,911

263— 23: 1,897,647
51: 1,897,270
264— 13: 1,897,965
265— 52: 1,897,162
1,897,166
1,897,169
1,897,170
1,897,171
267— 1: 1,897,411
1,897,462
1,897,536
8: 1,897,538
9: 1,897,443
1,897,728
30: 1,897,806
37: 1,897,272
54: 1,897,807
268— 41: 1,897,311
271— 2.6: 1,897,454
39: 1,897,454
51: 1,897,054
61: 1,897,641
273— 26: 1,897,317
31: 1,897,901
32: 1,897,289
33: 1,897,519
35: 1,897,212
63: 1,897,714
77: 1,897,264
123: 1,897,384
274— 43: 1,897,247
277— 44: 1,897,061
61: 1,897,076
280— 5: 1,897,161
1,897,164
29: 1,897,036
93: 1,897,551
179: 1,897,138
281— 21: 1,897,038
40: 1,897,830
284— 18: 1,897,660
285— 2: 1,897,215
77: 1,897,319
176: 1,897,949
286— 11: 1,897,280
287— 101: 1,897,442
103: 1,897,515
288— 1: 1,897,804
290— 40: 1,897,376
292— 129: 1,897,805
165: 1,897,080
352: 1,897,606
293— 26: 1,897,345
55: 1,897,004
294— 94: 1,897,561
295— 31: 1,897,329
296— 138: 1,897,946
298— 18: 1,897,067
26: 1,897,175
299— 88: 1,897,679
153: 1,897,683
300— 2: 1,897,968
301— 6: 1,897,789
35: 1,897,126
44: 1,897,751
64: 1,897,375
303— 1: 1,897,091
65: 1,897,339
76: 1,897,594
304— 27: 1,897,810
308— 4: 1,897,771
223: 1,897,585
312— 36: 1,897,072
141: 1,897,663
146: 1,897,560

U. S. GOVERNMENT PRINTING OFFICE: 1933

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Acme Backing Corporation, Brooklyn, N. Y. Processed fabric backing material. Serial No. 333,877; Feb. 21. Class 50.

Albers Bros. Milling Company, Portland, Oreg. Oatmeal. Serial No. 333,250; Feb. 21. Class 46.

American Electric Company, Chicago, Ill. Attachment plug caps and receptacles. Serial No. 329,667; Feb. 21. Class 21.

American Glanzstoff Corporation, New York, N. Y. Fabrics. Serial No. 333,137; Feb. 21. Class 42.

American Sailplane Company, Boston, Mass. Toy airplanes. Serial No. 308,678; Feb. 21. Class 22.

Apfel, M., & Bro., Inc., New York, N. Y. Hats. Serial No. 333,112; Feb. 21. Class 39.

Baker, Blanche A., Wichita, Kans. Cleansing cream, cold cream, astringents, etc. Serial No. 332,329; Feb. 21. Class 6.

Baker Perkins Company, Inc., Saginaw, Mich. Machines for dissolving cellulose xanthaten dilute sodium hydroxide solution. Serial No. 332,610; Feb. 21. Class 23.

Bassler, Harriette M., New York, N. Y. Bacteriocidal bowel preparation. Serial No. 332,021; Feb. 21. Class 6.

Beacon Press, Inc., The, Boston, Mass. Educational sheets or posters. Serial No. 333,573; Feb. 21. Class 38.

Becker, Frederick J., Cincinnati, Ohio. Imitation tapers. Serial No. 331,768; Feb. 21. Class 34.

Belsey, George, Co., Ltd., The, Los Angeles, Calif. Pamphlet containing recipes. Serial No. 333,914; Feb. 21. Class 38.

Berkley, Frederick M., New York, N. Y. Bowling alleys. Serial Nos. 221,266–7; Feb. 21. Class 22.

Bireley, Frank W., doing business as Bireley's, Los Angeles, Calif. Maltless orange juice. Serial No. 333,628; Feb. 21. Class 45.

Boericke & Tafel, Inc., Philadelphia, Pa. Antiseptic cleaning and deodorizing tablets, vaginal suppositories, and bacteriostatic dusting powders. Serial No. 323,187; Feb. 21. Class 6.

Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Preparations of soap. Serial No. 333,789; Feb. 21. Class 4.

Brady, C., Vienna, Austria. Suppositories for the treatment of constipation. Serial No. 331,328; Feb. 21. Class 6.

Braun's Almabra Preparations, Inc., Wilmington, Del., and New York, N. Y. Nail polish, cuticle remover, hand lotion, etc. Serial No. 331,770; Feb. 21. Class 6.

Brook-Maid Food Co., Inc., Brooklyn, N. Y. Canned and bottled fruits, vegetables, etc. Serial No. 331,817; Feb. 21. Class 46.

Brown, Betty, New York, N. Y. Monogram bracelets. Serial No. 332,962; Feb. 21. Class 28.

Brown Company, Portland, Me., and Berlin, N. H. Twine. Serial No. 333,881; Feb. 21. Class 7.

Burket, Wilfred F., Tarentum, Pa. Hobby horses. Serial No. 333,423; Feb. 21. Class 22.

Carson Pirie Scott & Co., Chicago, Ill. Cotton piece goods. Serial No. 330,036; Feb. 21. Class 42.

Carson Pirie Scott and Company, Chicago, Ill. Dresses. Serial No. 333,379; Feb. 21. Class 39.

Carter & Parker Limited, Guiseley, England. Yarns. Serial No. 333,503; Feb. 21. Class 43.

Cereal Meal Corporation, The, Providence, R. I. Breakfast foods. Serial No. 333,145; Feb. 21. Class 46.

Christie, John P., doing business as Tidee Products and Tidee White Products, Dayton, Ohio. White shoe cleaner and a latherless shaving cream. Serial No. 332,435; Feb. 21. Class 4.

City Stores Mercantile Company, doing business as Maison Blanche Company, New York, N. Y., and New Orleans, La. Sanitary napkins. Serial No. 331,772; Feb. 21. Class 44.

City Stores Mercantile Company, doing business as Maison Blanche, New York, N. Y., and New Orleans, La. Cleansing cream. Serial No. 331,773; Feb. 21. Class 6.

Cleaver, Sarah P., St. Paul, Minn. Hand jelly, astringents, bleach creams, etc. Serial No. 331,887; Feb. 21. Class 6.

Columbus Dental Manufacturing Co., The, Columbus, Ohio. Tooth backings. Serial No. 333,471; Feb. 21. Class 44.

Commercial Display Company, Chicago, Ill. Coin controlled apparatus and equipment for dispensing cans, containers, etc., filled with gasoline. Serial No. 331,671; Feb. 21. Class 23.

Compañía Ron Bacardí, S. A., Santiago de Cuba City, Cuba. Rum. Serial No. 331,492; Feb. 21. Class 49.

Creo-Dipt Company Inc., North Tonawanda, N. Y. Shingles. Serial No. 323,481; Feb. 21. Class 12.

Cromar Company, The, Williamsport, Pa. Wood flooring. Serial No. 330,652; Feb. 21. Class 12.

Danziger, Ethel, Los Angeles, Calif. Cleansing cream, face powder, shampoo, etc. Serial No. 332,522; Feb. 21. Class 6.

Davega-City Radio Stores, Inc., New York, N. Y. Roller skates, tennis rackets, and handball gloves. Serial No. 332,252; Feb. 21. Class 22.

Davis Bros. Fisheries, Inc., Gloucester, Mass. Cured or dried fish. Serial No. 331,845; Feb. 21. Class 46.

Delfs, Julius A., doing business as Delfs Candy Company, Long Beach, Calif. Candy. Serial No. 332,914; Feb. 21. Class 46.

Deming, Wm. L., Salem, Ohio. Table game board. Serial No. 333,548; Feb. 21. Class 22.

Dickerson, Walker T., Company, The, Columbus, Ohio. Shoes. Serial No. 332,058; Feb. 21. Class 39.

Dickerson, Walker T., Company, The, Columbus, Ohio. Shoes. Serial No. 332,060; Feb. 21. Class 39.

Dickerson, Walker T., Company, The, Columbus, Ohio. Shoes. Serial No. 332,576; Feb. 21. Class 39.

Dingfelder & Ballish, Inc., Kimmell, Ind. Onions. Serial No. 331,456; Feb. 21. Class 46.

Dipton Laboratories, Detroit, Mich. Organic compound. Serial No. 333,283; Feb. 21. Class 6.

Door Company, Inc., The, New York, N. Y. Apparatus for the treatment of solids suspended in liquids and sedimentation apparatus. Serial Nos. 333,118–19; Feb. 21. Class 28.

Drackett Chemical Company, The, Cincinnati, Ohio. Caustic soda, chlorinated lime, Epsom salt, etc. Serial No. 332,759; Feb. 21. Class 6.

Drackett Chemical Company, The, Cincinnati, Ohio. Chemical preparation. Serial Nos. 332,760–1; Feb. 21. Class 6.

Dudman, George, doing business as George Dudman Company, New York, N. Y. Pancake flour, corn meal, hominy, etc. Serial No. 333,060; Feb. 21. Class 46.

Eagle-Picher Lead Company, The, Cincinnati, Ohio. Insulation cement, asbestos cement, pipe coverings, etc. Serial Nos. 329,006–8; Feb. 21. Class 12.

Edison, Thomas A., Incorporated, West Orange, N. J. Sound recording and reproducing apparatus and equipment and sound record tablets. Serial No. 333,314; Feb. 21. Class 36.

Electric Tooth Brush Company, The. (See Jensen, Hans E. T.)

Enza-Vita Laboratories, Inc., The, Toledo, Ohio. Ration for poultry and live stock. Serial No. 331,458; Feb. 21. Class 46.

F-B Publishing Corporation, The, New York, N. Y. Magazine section. Serial No. 333,324; Feb. 21. Class 38.

Franc, Strohmenger & Cowan, Inc., Poughkeepsie, N. Y. Neckties, cravats, and scarfs. Serial No. 333,220; Feb. 21. Class 39.

Francke, Elizabeth A., New York, N. Y. Salad dressing. Serial No. 333,429; Feb. 21. Class 46.

Frankfort Distillery, Inc., The, Louisville, Ky. Whiskey. Serial No. 333,430; Feb. 21. Class 49.

Frederick Iron & Steel Company, The, Frederick, Md. Automatic stokers. Serial No. 331,401; Feb. 21. Class 34.

Freedom Oil Works Company, The, Freedom, Pa. Lubricating oils. Serial No. 332,998; Feb. 21. Class 15.

Fritzsche Brothers, Inc., New York, N. Y. Combination of natural and synthetic aromatic substances which develops the general aroma of citronella oil. Serial No. 333,329; Feb. 21. Class 6.

Fuchs, Charles, Philadelphia, Pa. Bed springs and mattresses. Serial Nos. 323,087–8; Feb. 21. Class 32.

Galang, Valentin S., Honolulu, Hawaii. Medicinal preparation. Serial No. 333,151; Feb. 21. Class 6.

Garfield Manufacturing Company, Wallington, N. J. Electrical apparatus. Serial No. 331,679; Feb. 21. Class 21.

Gernsback Publications, Inc., New York, N. Y. Publication. Serial No. 333,827; Feb. 21. Class 38.

Goldsmith Bros., New York, N. Y. Paper. Serial No. 333,188; Feb. 21. Class 37.

Green Lantern Beverage Co., The, doing business as The Lomax Co., Chicago, Ill. Ginger ale. Serial No. 331,615; Feb. 21. Class 45.

Grinnell Washing Machine Corp., Grinnell, Iowa. Refrigerators. Serial No. 333,934; Feb. 21. Class 31.

Hammel Oil Burning Equipment Company, Incorporated, Providence, R. I. Oil burners and parts thereof. Serial No. 331,501; Feb. 21. Class 34.

Haniel, Franz, & Cie, G. m. b. H. Zweigniederlassung Mannheim, Mannheim, Germany. Fertilisers. Serial No. 332,118; Feb. 21. Class 10.

Haythornthwaite & Sons, Limited, Brierfield, England. Piece goods. Serial No. 333,033; Feb. 21. Class 42.

Health Products Corporation, Newark, N. J. Laxative chewing tablets. Serial No. 333,765; Feb. 21. Class 6.

Hilger, Adam, Limited, London, England. Polarimeters, spectroscopes, and colorimeters. Serial No. 332,843; Feb. 21. Class 26.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Hygora Laboratories. (See Sweeney, John A.)
International Radio Corporation, Ann Arbor, Mich. Radio apparatus and parts therefor. Serial No. 332,298; Feb. 21. Class 21.
Interstate Folding Box Company, The, Middletown, Ohio. Paper and pasteboard cartons. Serial No. 333,357; Feb. 21. Class 2.
Jaburg Brothers, Inc., New York, N. Y. Acetic acid, citric acid, sal soda, etc. Serial No. 332,884; Feb. 21. Class 6.
Jensen, Hans E. T., doing business as The Electric Tooth Brush Company, Los Angeles, Calif. Electrically operated tooth brushes. Serial No. 332,618; Feb. 21. Class 29.
Johnson & Johnson, New Brunswick, N. J. Adhesive denture powder. Serial No. 333,157; Feb. 21. Class 6.
Kaufman, Florence, doing business as Stemcraft Company, New York, N. Y. Toy figures. Serial No. 330,283; Feb. 21. Class 22.
Kester Solder Company, Chicago, Ill. Solder. Serial No. 332,301; Feb. 21. Class 14.
Kirkman & Son, Inc., Brooklyn, N. Y. Toilet soap. Serial No. 333,768; Feb. 21. Class 4.
Kuhlmann, George, New York, N. Y. Surgical bandages. Serial No. 333,104; Feb. 21. Class 44.
Lake Wales Citrus Growers Association, Lake Wales, Fla. Citrus fruits. Serial No. 333,333; Feb. 21. Class 46.
Lans Publishing Co., Chicago, Ill. Periodical. Serial No. 333,805; Feb. 21. Class 38.
La Salle Girl Coat Corporation, New York, N. Y. Coats. Serial No. 333,856; Feb. 21. Class 39.
La Salle Girl Coat Corporation, New York, N. Y. Coats. Serial No. 333,858; Feb. 21. Class 39.
Latimer, Florence H., Oakland, Calif. Dresses. Serial No. 332,956; Feb. 21. Class 39.
Leadway Stores Corporation, The, Wilmington, Del. Salad dressing, canned vegetables and fish, fruit flavorings, preserves, etc. Serial No. 332,260; Feb. 21. Class 46.
Lenasons Shoe Company, Inc., Farmington, N. H. Shoes. Serial No. 332,121; Feb. 21. Class 39.
Le Soliditit Francais, Paris, France. Preparations for filling up the joints of concrete construction work. Serial No. 332,847; Feb. 21. Class 12.
Lewis, Henry, 3d, doing business as Participating Sales Company, New York, N. Y. Maltless beverages, ginger ale, and natural mineral waters. Serial No. 333,835; Feb. 21. Class 45.
Lewy Chemical Company, The, New York, N. Y. Insecticides. Serial No. 276,793; Feb. 21. Class 6.
Lomax Co., The. (See Green Lantern Beverage Co., The.)
Lyon Cover Company, Detroit, Mich. Metal tire covers. Serial No. 329,862; Feb. 21. Class 35.
M V C Laboratories. (See Mountain Varnish & Color Works, Inc.)
Madison, Mary, New York, N. Y. (See Stier, Oswald N.)
Maggi Co., Inc., New York, N. Y. Soup tablets. Serial No. 328,871; Feb. 21. Class 46.
Maidwell Brassiere Company, New York, N. Y. Brassières, corsets, corselets, and girdles. Serial No. 333,194; Feb. 21. Class 39.
Maison Blanche. (See City Stores Mercantile Company.)
Maney Milling Company, Omaha, Nebr. Wheat flour, biscuit flour, cake flour, etc. Serial No. 333,163; Feb. 21. Class 46.
McAdoo & Allen Welting Company, Quakertown, Pa. Welting for shoes. Serial No. 327,982; Feb. 21. Class 39.
McCurrach Organization Incorporated, New York, N. Y. Neckties. Serial No. 333,265; Feb. 21. Class 39.
McLaren, L. M., Yuma, Ariz. Fresh vegetables. Serial No. 325,525; Feb. 21. Class 46.
Mead Johnson & Company, Evansville, Ind. Viosterol. Serial No. 333,195; Feb. 21. Class 6.
Meschter, Chas. D., Inc., Long Island City, N. Y. Mushroom sauces and combination spaghetti dinner. Serial No. 332,461; Feb. 21. Class 46.
Milton Boat Yards, Inc., Rye, N. Y. Sail boats. Serial No. 333,267; Feb. 21. Class 19.
Mission Laboratories, Brooklyn, N. Y. Preparation used in the treatment of stomach disorders. Serial No. 333,268; Feb. 21. Class 6.
Monark Battery Company, Inc., Chicago, Ill. Storage batteries. Serial No. 322,057; Feb. 21. Class 21.
Monark Battery Company, Inc., Chicago, Ill. Storage batteries. Serial Nos. 322,180–5; Feb. 21. Class 21.
Monica, Joseph D., Brooklyn, N. Y. Canned peeled tomatoes, tomato paste, or sauce and cheese. Serial No. 329,238; Feb. 21. Class 46.
Moscicki, Mary, Maspeth, N. Y. Preparation for the treatment of epilepsy or falling sickness and nervous disorders. Serial No. 330,795; Feb. 21. Class 6.
Mountain Varnish & Color Works, Inc., doing business as M. V. C. Laboratories, Toledo, Ohio. Paints, paint enamel, and polishing materials. Serial No. 328,069; Feb. 21. Class 16.
Movie Cut-Ups, Peabody, Mass. Jig-saw picture, and cut-out puzzles. Serial No. 333,736; Feb. 21. Class 22.
Musco, Santa, doing business as Santa Musco Laboratory, Port Chester, N. Y. Pharmaceutical preparations. Serial No. 332,380; Feb. 21. Class 6.
N. V. Organon, Oss, Netherlands. Liver extract. Serial No. 333,399; Feb. 21. Class 6.
New York Export Co., New York, N. Y. Ribbons. Serial No. 281,368; Feb. 21. Class 40.
Northern Field Seed Company, Winona, Minn. Alfalfa seed. Serial No. 333,372; Feb. 21. Class 1.
Nueva Fabrica de Hielo, S. A., Habana, Cuba. Malt beverages. Serial No. 331,512; Feb. 21. Class 48.
Nulomoline Company, The, New York, N. Y. Sugar. Serial No. 333,436; Feb. 21. Class 46.
Page Milling Company, The, Luray, Va. Poultry, turkey, and stock feeds. Serial No. 333,346; Feb. 21. Class 46.
Pan-American Wall Paper & Paint Co., Chicago, Ill. House paint, shingle stains, floor paint, etc. Serial No. 328,564; Feb. 21. Class 16.
Panco Rubber Company, Chelsea, Mass. Whole soles, heels, and taps. Serial No. 325,238; Feb. 21. Class 39.
Participating Sales Company. (See Lewis, Henry, 3d.)
Peters, Otto H., Buffalo, N. Y. Artificial bait. Serial No. 333,082; Feb. 21. Class 22.
Pioneer Health Products. (See Steiner, John C.)
Pittsburgh Equitable Meter Company, Pittsburgh and Homewood, Pittsburgh, Pa. Plug valves, safety seals, vacuum, regulators, etc. Serial No. 332,547; Feb. 21. Class 13.
Pond, George R., New York, N. Y. Shaving cream. Serial No. 333,604; Feb. 21. Class 4.
Porges, Oscar F., Long Island City, N. Y. Frozen confections. Serial No. 333,530; Feb. 21. Class 46.
Potosi Brewing Company, Potosi, Wis. Malt beverage. Serial Nos. 333,482–3; Feb. 21. Class 48.
Protective Foods, Inc., Los Angeles, Calif. Vegetable food concentrate. Serial No. 332,548; Feb. 21. Class 46.
Prybands, Inc., Long Island City, N. Y. Razors and razor blades. Serial No. 333,681; Feb. 21. Class 23.
Prybands, Inc., Long Island City, N. Y. Razors and razor blades. Serial Nos. 333,683–4; Feb. 21. Class 23.
Prybands, Inc., Long Island City, N. Y. Razors and razor blades. Serial No. 333,686; Feb. 21. Class 23.
Reliance Manufacturing Company, Chicago, Ill. Underwear. Serial No. 333,299; Feb. 21. Class 39.
Republic Stamping & Enameling Co., Canton, Ohio. Enameled steel table and cooking hollow-ware. Serial No. 297,541; Feb. 21. Class 13.
Rite-Wa Manufacturing Company, Pittsburgh, Pa. Electric broilers. Serial No. 332,784; Feb. 21. Class 21.
Roark, Robert H., Waco, Tex. Chemical compound. Serial No. 333,438; Feb. 21. Class 6.
Saks and Company, New York, N. Y. Trunks, handbags, suitcases, etc. Serial No. 333,302; Feb. 21. Class 3.
Sears, Roebuck and Co., Chicago, Ill. Tobacco. Serial No. 333,200; Feb. 21. Class 17.
Sears, Roebuck and Co., Chicago, Ill. Finger rings and sterling silver bracelets. Serial No. 333,410; Feb. 21. Class 28.
Sears, Roebuck and Co., Chicago, Ill. Acetylene welding outfits. Serial No. 333,896; Feb. 21. Class 34.
Service Station Equipment Company, Conshohocken, Pa. Air compressors and parts thereof. Serial No. 332,929; Feb. 21. Class 23.
Shaft-Pierce Shoe Company, Faribault, Minn. Shoes, boots, and sandals. Serial No. 332,138; Feb. 21. Class 39.
Sheaffer, W. A., Pen Company, Fort Madison, Iowa. Pens. Serial No. 333,899; Feb. 21. Class 37.
Sitroux Importing Co., Inc., Brooklyn, N. Y. Deodorants. Serial No. 333,205; Feb. 21. Class 6.
Smith, Frank R., Incorporated, Queens Village, Long Island, N. Y. Anthracite coal. Serial No. 333,207; Feb. 21. Class 1.
Solvents Products Company, Inc., Medford, Mass. Mixture of solvents for use in the textile industry. Serial No. 333,363; Feb. 21. Class 6.
Spooner, Inc., New York, N. Y. Rouge, talcum, perfume, etc. Serial No. 332,664; Feb. 21. Class 6.
Steiner, John C., doing business as Pioneer Health Products, Milwaukee, Wis. Vegetalized table salt. Serial No. 334,485; Feb. 21. Class 46.
Stemcraft Company. (See Kaufman, Florence.)
Stier, Oswald N., doing business as Stier Drug Company and Mary Madison, New York, N. Y. and Oakland, Calif. Face powder, perfumery. Serial No. 333,208; Feb. 21. Class 6.
Sunderland, Katherine B., Danbury, Conn. Cushions for shoe vamps. Serial No. 321,449; Feb. 21. Class 40.
Sussberg & Feinberg, Inc., New York, N. Y. Slips. Serial No. 326,918; Feb. 21. Class 39.
Sweeney, John A., doing business as Hygora Laboratories, Cleveland, Ohio. Cleansing mouth wash and tissue stimulant. Serial No. 332,862; Feb. 21. Class 6.
Technical Brick Co., The, Philadelphia, Pa. Toy building bricks. Serial No. 333,443; Feb. 21. Class 22.
Threads-Incorporated, Gastonia and Arkray Village, N. C. Sewing thread. Serial No. 333,418; Feb. 21. Class 43.
Tidee Products. (See Christie, John P.)
Trimm, James, doing business as Veltore Products Co., Brooklyn, N. Y. Hair pomade. Serial No. 332,739; Feb. 21. Class 6.
Triptalk, Inc., Washington, D. C. Correspondence sheets. Serial No. 333,868; Feb. 21. Class 37.
Truslow Poultry Farm, Incorporated, Chestertown, Md. Liquid parasiticide. Serial No. 329,693; Feb. 21. Class 6.
United States Equipment Corporation, New Brighton, Pa. Automobile oil filters. Serial No. 333,089; Feb. 21. Class 23.
Universal Sanitary Manufacturing Co., Taylor Township, Lawrence County, Pa. Water closets. Serial Nos. 333,244–5; Feb. 21. Class 13.
Veltore Products Co. (See Trimm, James.)
Veolay, Inc., New York, N. Y. Perfumes. Serial No. 333,304; Feb. 21. Class 6.
Vitab Products Co., San Francisco, Calif. Bread, brown rice, crisp bread, soya bean flour, and rice polishings. Serial No. 330,801; Feb. 21. Class 46.
Vlo Distributors, Mount Vernon, N. Y. Preparation for treatment of diseases of the skin. Serial No. 333,342; Feb. 21. Class 6.
Wanamaker, John, Philadelphia, Philadelphia, Pa. Ladies' handbags, suit cases, traveling bags, etc. Serial No. 329,911; Feb. 21. Class 3.
Wands, Incorporated, New York, N. Y. Cigarette menthol mint flavoring sticks. Serial No. 327,720; Feb. 21. Class 8.
Warren Soap Manufacturing Company, Inc., The, Cambridge, Mass. Emulsion used in laundering. Serial No. 333,365; Feb. 21. Class 4.
Wedge Nursery, Incorporated, Albert Lea, Minn. Plants, shrubs, and vines. Serial No. 333,489; Feb. 21. Class 1.
Western Electric Company, Incorporated, New York, N. Y. Light responsive electric relay and co-operating light projecting element. Serial No. 331,169; Feb. 21. Class 21.
Western Paper Converting Company, Salem, Oreg., and San Francisco, Calif. School papers, composition books, newsprint, etc. Serial No. 333,091; Feb. 21. Class 37.
Wile, M., & Company, Inc., Buffalo, N. Y. Suits and overcoats. Serial No. 333,134; Feb. 21. Class 39.
Wohl Shoe Company, St. Louis, Mo. Shoes. Serial No. 332,942; Feb. 21. Class 39.
Wolverine-Empire Refining Co., New York, N. Y. Lubricating oils and greases. Serial No. 332,804; Feb. 21. Class 15.
Zylocase Company, The, Irvington, N. J. Eyeglass cases. Serial No. 333,780; Feb. 21. Class 2.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

LIST OF REGISTRANTS OF TRADE-MARKS

Abrams, Charles, Astoria, to Charles Abrams, Long Island City, N. Y. Butter and eggs. 92,308; renewed July 1, 1933.
Alaska-Portland Packers Association, Portland, Oreg., to Alaska-Portland Packers Association, South Bellingham, Wash. Canned salmon. 91,058–60; renewed Apr. 15, 1933.
Alger, Edwin, Publishing Company, The, Washington, D. C. Monthly newspaper. 301,265; Feb. 21; Serial No. 330,947; published Nov. 29, 1932. Class 38.
Altman, B., & Co., New York, N. Y. Woolen suits comprising gloves, caps, coats and leggings. 301,195; Feb. 21; Serial No. 331,097; published Nov. 29, 1932. Class 39.
Alvarez y Rivas, Rafael, New York, N. Y., assignor, by mesne assignments, to Fernandez, Cuba. Palicio y Compania, S. en C., Habana, Cuba. Cigars. 40,063; renewed Apr. 7, 1933.
American Brass Company, The, Waterbury, Conn. Seamless copper and brass tubes. 301,255; Feb. 21; Serial No. 330,879; published Dec. 6, 1932. Class 13.
American Writing Paper Co., assignor to American Writing Paper Company, Inc., Holyoke, Mass. Book-paper. 92,388; renewed July 8, 1933.
Associated Apparel Industries, Inc., Chicago, Ill. Girdles, corsets, combination corset and brassière. 301,213; Feb. 21; Serial No. 329,517; published Nov. 29, 1932. Class 39.
Automatic Drive & Transmission Company. (See Twin Coach Company, assignor.)
Band-Tex Company, The, Chicago, Ill. Surgical bandages. 301,197; Feb. 21; Serial No. 331,132; published Dec. 6, 1932. Class 44.
Barnstead Still and Sterilizer Co. Inc., Boston, Mass. Water stills. 301,192; Feb. 21; Serial No. 331,035; published Dec. 13, 1932. Class 23.
Bauer's, August, Sons, Inc., New York, N. Y. Prepared mustard and horseradish mustard. 301,252; Feb. 21; Serial No. 330,807; published Dec. 6, 1932. Class 46.
Bear Brand Hosiery Co., Kankakee and Chicago, Ill. Hosiery. 301,284; Feb. 21; Serial No. 319,131; published Nov. 29, 1932. Class 39.
Bell, Wm. M., Company, Chicago, Ill. Ice cream confection. 301,250; Feb. 21; Serial No. 330,773; published Dec. 6, 1932. Class 46.
Best & Co., Inc., New York, N. Y. Undershirts, under drawers, etc. 301,240; Feb. 21; Serial No. 330,534; published Nov. 29, 1932. Class 39.
Best Foods, Inc., The. (See Loders & Nucoline, Limited.)
Birdsall & Wilcox, New Haven, Conn. Salad dressing. 301,203; Feb. 21; Serial No. 328,154; published Dec. 6, 1932. Class 46.
Black, Walter J., Inc., New York, N. Y. Book or series of books. 301,207; Feb. 21; Serial No. 328,751; published Nov. 29, 1932. Class 38.
Blaisdell Pencil Company, Philadelphia, Pa. Rubber erasers. 301,179; Feb. 21; Serial No. 331,279; published Nov. 29, 1932. Class 37.
Bloch Bros., Glasgow, Scotland. Whiskey. 301,286; Feb. 21; Serial No. 332,029; published Dec. 13, 1932. Class 49.
Bloch Bros., Glasgow, Scotland. Whiskey. 301,287–8; Feb. 21; Serial Nos. 332,026–7; published Dec. 13, 1932. Class 49.
Bloch Bros., Glasgow, Scotland. Port wine. 301,289; Feb. 21; Serial No. 332,024; published Dec. 13, 1932. Class 47.
Bloch Bros., Glasgow, Scotland. Whiskey. 301,290; Feb. 21; Serial No. 332,023; published Dec. 13, 1932. Class 49.
Blue Line Chemical Co., The, St. Louis, Mo. Medicinal and pharmaceutical preparations and proprietary medicines. 301,157; Feb. 21; Serial No. 322,875; published Nov. 29, 1932. Class 6.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 301,184–5; Feb. 21; Serial Nos. 330,886–7; published Nov. 29, 1932. Class 42.
Bobrow Bros., assignor to Bobrow Bros. Inc., Philadelphia, Pa. Cigars, cigarettes, and manufactured tobacco. 92,393; renewed July 8, 1933.
Bodega, assignor to Societe Anonyme des Vins d'Origine Etrangers et Français, Paris, France. Port and sherry wine. 91,753; renewed May 27, 1933.
Bonkura Products Co., Inc., assignor to Ben Sontag Co., Battle Creek, Mich. Toilet cream. 301,159; Feb. 21; Serial No. 324,337; published Nov. 29, 1932. Class 6.
Boron Alloy Tool Corporation, New York, N. Y. Machinist's tools, and wire dies. 301,196; Feb. 21; Serial No. 331,099; published Dec. 13, 1932. Class 28.
Bourneuf, Augustin D., Haverhill, Mass. Boots, shoes, and slippers. 301,176; Feb. 21; Serial No. 321,326; published Nov. 29, 1932. Class 39.
Bowers, Edward C., and C. L. Feldman, receivers for Wickwire Spencer Steel Company, New York, N. Y. Steel and wire fences. 301,242; Feb. 21; Serial No. 330,592; published Dec. 6, 1932. Class 13.
Brady Conveyors Corporation, The, Chicago, Ill. Steam jet ash conveyors. 301,221–2; Feb. 21; Serial Nos. 329,933–4; published Dec. 13, 1932. Class 23.
British Ropes Limited, London, England. Rope or jute and hemp. 301,291; Feb. 21; Serial No. 331,917; published Dec. 13, 1932. Class 7.
Burt, Edwin C., Company, New York and Brooklyn, N. Y., assignor, by mesne assignments, to Orthopedic Shoes Inc., Wilmington, Del. Leather boots, shoes, and slippers. 87,160; renewed July 2, 1932.
California Fruit Growers Exchange, Los Angeles, Calif. Maltless beverages and concentrates for making the same. 301,262; Feb. 21; Serial No. 296,687; published Sept. 2, 1930. Class 45.
California Fruit Growers Exchange, Los Angeles, Calif. Maltless beverages and concentrates for making the same. 301,281; Feb. 21; Serial No. 303,156; published Nov. 4, 1930. Class 45.
California Packing Corporation, San Francisco, Calif. Canned and dried fruit, prunes, raisins, canned vegetables, etc. 301,278; Feb. 21; Serial No. 307,264; published Dec. 6, 1932. Class 46.
California Vineyards Company, Inc., Chicago, Ill. Grape juice and grape concentrate. 301,166; Feb. 21; Serial No. 326,669; published Dec. 13, 1932. Class 45.
Central Men's Stores, Inc. (See Irving Hat Co., assignor.)
Chamberlain, F. B., Company, East St. Louis, Ill., and St. Louis, Mo. Powder compound in various fruit flavors. 301,256; Feb. 21; Serial No. 318,643; published Oct. 13, 1931. Class 45.
Columbus Dental Manufacturing Co., The, Columbus, Ohio. Artificial teeth. 301,218; Feb. 21; Serial No. 329,330; published Dec. 13, 1932. Class 44.
Combier & Co. Inc., New York, N. Y. Piece goods. 301,246; Feb. 21; Serial No. 330,695; published Nov. 29, 1932. Class 42.

Cones, C. B., & Son Manufacturing Company, The, Indianapolis, Ind. Overalls, work-coats, and work-shirts. 92,189; renewed June 24, 1933.
Crescent Shoe Company, New York, N. Y. Leather shoes. 301,230; Feb. 21; Serial No. 330,199; published Nov. 22, 1932. Class 39.
Crossley, Henry, Bolton, England. Fiber packing. 301,243; Feb. 21; Serial No. 330,620; published Dec. 13, 1932. Class 35.
Dac-otah Cotton Mills, Inc., Lexington, N. C. Cotton piece goods. 301,177; Feb. 21; Serial No. 331,218; published Nov. 29, 1932. Class 42.
Davis & Hatch Spice Co. Inc. (See Fowler, F. E., assignor.)
Davis Welding & Manufacturing Company, The, Cincinnati, Ohio. Metal buckets and bulk delivery cans. 301,169; Feb. 21; Serial No. 326,806; published Dec. 13, 1932. Class 2.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Bristles, sponges, crude minerals, etc. 301,116; Feb. 21; Serial No. 318,194; published Aug. 30, 1932. Class 1.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Coffins. 301,117; Feb. 21; Serial No. 318,195; published Oct. 13, 1931. Class 2.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Soaps, steel wool, washing compounds, etc. 301,118; Feb. 21; Serial No. 318,197; published Nov. 15, 1932. Class 4.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Adhesives. 301,119; Feb. 21; Serial No. 318,198; published Sept. 6, 1932. Class 5.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Absorbents, alternatives, antacids, etc. 301,120; Feb. 21; Serial No. 318,199; published Nov. 29, 1932. Class 6.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Wire ropes and cables. 301,121; Feb. 21; Serial No. 318,200; published Sept. 29, 1931. Class 7.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Dynamite and blasting powders and the like, matches, etc. 301,122; Feb. 21; Serial No. 318,201; published July 19, 1932. Class 9.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Fertilizers. 301,123; Feb. 21; Serial No. 318,202; published Oct. 20, 1931. Class 10.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Ink and colors. 301,124; Feb. 21; Serial No. 318,203; published July 26, 1932. Class 11.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Caulking and packing materials, lime, plaster, etc. 301,125; Feb. 21; Serial No. 318,204; published Oct. 11, 1932. Class 12.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Nails for horse shoes, chains, etc. 301,126; Feb. 21; Serial No. 318,205; published Nov. 15, 1932. Class 13.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Paper, Bristol boards, rubber stamps, etc. 301,127; Feb. 21; Serial No. 318,206; published Aug. 23, 1932. Class 37.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Printed sign boards, printed advertising signs, and reproductions. 301,128; Feb. 21; Serial No. 318,207; published Oct. 11, 1932. Class 38.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Combs, hooks and eyes, trimmings, etc. 301,129; Feb. 21; Serial No. 318,209; published Nov. 22, 1932. Class 40.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Umbrellas and canes. 301,130; Feb. 21; Serial No. 318,210; published Oct. 20, 1931. Class 41.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Embroideries, draperies, ribbons, etc. 301,131; Feb. 21; Serial No. 318,211; published July 19, 1932. Class 42.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Spun yarn fibres. 301,132; Feb. 21; Serial No. 318,212; published Sept. 29, 1931. Class 43.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Surgical plasters, adhesive tape, bandages, etc. 301,133; Feb. 21; Serial No. 318,213; published Nov. 15, 1932. Class 44.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Mineral waters, maltless beverages, and concentrates for making the same. 301,134; Feb. 21; Serial No. 318,214; published July 26, 1932. Class 45.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Rubber bath mats, blankets, and bottle stoppers, etc. 301,135; Feb. 21; Serial No. 318,215; published Aug. 30, 1932. Class 50.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Spices, dietetical patent foods, malt, etc. 301,136; Feb. 21; Serial No. 318,216; published Aug. 16, 1932. Class 46.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Fish hooks, skates, nets, etc. 301,137; Feb. 21; Serial No. 318,217; published July 19, 1932. Class 22.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Apparatus for extinguishing fire, printing machines, crushers, etc. 301,138; Feb. 21; Serial No. 318,218; published Nov. 15, 1932. Class 23.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Laundry driers. 301,139; Feb. 21; Serial No. 318,219; published Aug. 9, 1932. Class 24.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Drawing instruments, laboratory fittings, etc. 301,140; Feb. 21; Serial No. 318,220; published Nov. 15, 1932. Class 26.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Jewelry, tableware, toilet articles, etc. 301,141; Feb. 21; Serial No. 318,221; published July 19, 1932. Class 28.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Watches, clocks, and parts thereof. 301,142; Feb. 21; Serial No. 318,222; published Oct. 20, 1931. Class 27.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Brushes, brooms and mops. 301,143; Feb. 21; Serial No. 318,223; published July 26, 1932. Class 29.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Porcelain or real china. 301,144; Feb. 21; Serial No. 318,224; published Sept. 29, 1931. Class 30.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Furniture. 301,145; Feb. 21; Serial No. 318,225; published Oct. 18, 1932. Class 32.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Glass in all forms, table and flat glassware, plate glass, etc. 301,146; Feb. 21; Serial No. 318,226; published Aug. 9, 1932. Class 33.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Dampers, fans, blowers, etc. 301,147; Feb. 21; Serial No. 318,227; published Nov. 15, 1932. Class 34.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Driving belts, leather and rubber hose and packing materials. 301,148; Feb. 21; Serial No. 318,228; published Nov. 22, 1932. Class 35.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Strings for violins and similar instruments. 301,149; Feb. 21; Serial No. 318,229; published July 19, 1932. Class 36.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Precious metals. 301,150; Feb. 21; Serial No. 318,230; published Oct. 25, 1932. Class 14.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Fuel, lubricating oils, lubricating gasoline etc. 301,151; Feb. 21; Serial No. 318,231; published July 19, 1932. Class 15.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Paints and pigments, lacquers, etc. 301,152; Feb. 21; Serial No. 318,232; published Aug. 9, 1932. Class 16.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Airplanes, motor boats, canoes, etc. 301,153; Feb. 21; Serial No. 318,233; published Oct. 11, 1932. Class 19.
Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Armatures, outfits and apparatus for domestic and industrial purposes, electric cooking apparatus, etc. 301,154; Feb. 21; Serial No. 318,234; published Nov. 29, 1932. Class 21.
Dexter Brothers Boat Company, South Manchester, Conn. Boats and canoes. 301,181; Feb. 21; Serial No. 331,367; published Dec. 13, 1932. Class 19.
Diamond Rubber Company, The. (See Goodrich, B. F., Company, The, assignee.)
Durst Manufacturinhg Company, Inc., The, New York, N. Y. Radiator siphon valves. 301,155; Feb. 21; Serial No. 322,282; published Dec. 6, 1932. Class 13.
Eagle Knitting Mills, Inc., Philadelphia, Pa. Sport suits, dresses, skirts, blouses. 30,187; Feb. 21; Serial No. 319 885; published Nov. 29, 1932. Class 39.
Eichenberg, Jennie S., doing business as Mme. Jenné, New York, N. Y. Cosmetic preparations. 301,204; Feb. 21; Serial No. 328,301; published Dec. 6, 1932. Class 6.
Eisenman, Charles, Company, assignor to The Kaynee Company, Cleveland, Ohio. Shirts, rompers and children's frocks. 89,832; renewed Jan. 14, 1933.
Eisenman, Charles, Company, assignor to The Kaynee Company, Cleveland, Ohio. Blouses. 90,003; renewed Jan. 28, 1933.
Eisenman, Charles, Company, assignor to The Kaynee Company, Cleveland, Ohio. Shirts, waists, pajamas, etc. 90,312; renewed Feb. 18, 1933.
Ellsworth, Kathryn, New York, N. Y. Medicines. 301,214; Feb. 21; Serial No. 329,598; published Dec. 6, 1932. Class 6.
Elmwood Mills, to International Braid Company, Providence, R. I., successor. Shoe-lacings, corset-lacings, etc. 91,954; renewed June 10, 1933.
Emerol Manufacturing Co., New York, N. Y. Lubricator. 301,261; Feb. 21; Serial No. 314,326; published Dec. 6, 1932. Class 23.
Empire Twine and Yarn Co., Inc., New York, N. Y. Twine and cordage. 301,215; Feb. 21; Serial No. 329,599; published Dec. 13, 1932. Class 7.
Englander Spring Bed Co., Brooklyn, N. Y. Springs, mattresses, beds, etc. 301,220; Feb. 21; Serial No. 329,913; published Dec. 6, 1932. Class 32.

English, John, doing business as United Wholesale Grocery, Schenectady, N. Y. Coffee. 301,282; Feb. 21; Serial No. 307,982; published May 24, 1932. Class 46.
English Needle & Fishing Tackle Co., Limited, The. (See Milward, Henry, & Son Limited, assignor.)
Esmond Mills, The, Esmond, R. I. Textile blankets. 301,210; Feb. 21; Serial No. 329,111; published Dec. 6, 1932. Class 42.
Every Month Publishing Co., Inc., New York, N. Y. Magazine. 301,180; Feb. 21; Serial No. 331,803; published Nov. 29, 1932. Class 38.
Exelento Medicine Co., assignor to Exelento Medicine Co., Atlanta, Ga. Quinin pomade, liniment, and skin-lotion. 92,058; renewed June 17, 1933.
Fernandez, Palicio y Compania, S. en C. (See Alvares y Rivas, Rafael, assignor.)
Filoon, V. & F. W., Company, Brockton, Mass. Leather innersoles and counters for shoes and other footwear. 301,156; Feb. 21; Serial No. 322,844; published Dec. 13, 1932. Class 39.
Florsheim Shoe Company, The, Chicago, Ill. Shoes. 301,228; Feb. 21; Serial No. 330,177; published Nov. 29, 1932. Class 39.
Fowler, F. E., assignor to Davis & Hatch Spice Co. Inc., New Bedford, Mass. Spices and flavoring extracts. 99,426; renewed Feb. 25, 1933.
Franklin Baker Company, New York, N. Y. Prepared coconut. 301,296; Feb. 21; Serial No. 295,992; published July 8, 1930. Class 46.
Franklin Pottery, Incorporated, Lansdale, Pa. Wall and floor tiles. 301,186; Feb. 21; Serial No. 319,816; published Dec. 6, 1932. Class 12.
Freeman, William B., doing business as Haltiwanger-Taylor Drug Company, Atlanta, Ga. Medicinal compound. 301,201; Feb. 21; Serial No. 327,587; published Dec. 6, 1932. Class 6.
Fucini, E., & Co. Inc., New York, N. Y. Tonic for digestion. 301,283; Feb. 21; Serial No. 309,518; published Apr. 21, 1931. Class 6.
Gallaher Drug Company, The, Dayton, Ohio. Shaving cream. 301,276; Feb. 21; Serial No. 331,429; published Dec. 6, 1932. Class 4.
General Mills, Inc. (See Portland Flouring Mills Company, assignor.)
Gilbert, A. C., Company, The, New Haven, Conn. Humidifiers. 301,295; Feb. 21; Serial No. 331,579; published Dec. 13, 1932. Class 34.
Gladding's Inc., Providence, R. I. Gauze curtains and curtaining. 301,223; Feb. 21; Serial No. 330,314; published Dec. 6, 1932. Class 42.
Globe Knitting Mills. (See Rambo & Regar, Incorporated.)
Goldsmith, William M., Wichita, Kans. Books. 301,293; Feb. 21; Serial No. 331,640; published Dec. 6, 1932 Class 38.
Good Humor Corporation of America, Cleveland, Ohio. Periodicals. 301,205; Feb. 21; Serial No. 328,897; published Nov. 29, 1932. Class 38.
Goodrich, B. F., Company, The, as assignee of The Diamond Rubber Company, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber belting, valves, woven and cotton rubber hose. 89,824; renewed Jan. 14, 1933.
Goodrich, B. F., Company, The, as assignee of The Diamond Rubber Company, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber belting, valves, woven and cotton rubber hose. 89,829–30; renewed Jan. 14, 1933.
Goody-Goody Manufacturing Company. (See Grigsby, Harry E.)
Greenhill & Daniel, Inc., Brooklyn, N. Y. Knitted bathing suits, sweaters, etc. 301,206; Feb. 21; Serial No. 328,580; published Nov. 15, 1932. Class 39.
Grigsby, Harry E., doing business as Goody-Goody Manufacturing Company, Oklahoma City, Okla. Maltless fruit juices and syrups. 301,163; Feb. 21; Serial No. 325,909; published Aug. 2. 1932. Class 45.
Grist Mill, The, Los Angeles, Calif. Seasoning and flavoring vegetable compound. 301,162; Feb. 21; Serial No. 326,788; published Dec. 6, 1932. Class 46.
Hallock, Arthur J., assignor to Lewis A. Hallock, Speonk, N. Y. Ducks. 90,016; renewed Jan. 28, 1933.
Haltiwanger-Taylor Drug Company. (See Freeman, William B.)
Hammond, G. H., Company. (See Stetson & Ellison Co., assignor.)
Hance Brothers & White, Inc., Philadelphia, Pa. Medicinal preparation, cod liver oil, etc. 301,280; Feb. 21; Serial No. 297,597; published Dec. 6, 1932. Class 6.
Highway Trailer Company, Edgerton, Wis. Trailers. 301,285; Feb. 21; Serial No. 318,783; published Dec. 15, 1931. Class 19.
Holden-Leonard Company Inc., New York, N. Y. Worsted and woolens in the piece. 301,275; Feb. 21; Serial No. 331,463; published Dec. 6, 1932. Class 42.
Holdredge Bottling Works. (See Porter, C. C.)
Hoonah Packing Company, Port Townsend, Wash., and Hoonah, Alaska, to Hoonah Packing Company, South Bellingham, Wash. Canned salmon. 90,206–11; renewed Feb. 11, 1933.
Horder's Inc., Chicago, Ill. Pencils. 301,182; Feb. 21; Serial No. 331,374; published Nov. 29, 1932. Class 37.
Hrynkiewicz, Anthony, doing business as Polonia Coffee Co., Jersey City, N. J. Canned vegetables. 301,160; Feb. 21; Serial No. 324,560; published Aug. 30, 1932. Class 46.
Hudson Motor Car Company, Detroit, Mich. Gasoline passenger automobiles. 301,263; Feb. 21; Serial No. 330,996; published Dec. 13, 1932. Class 19.
Huff, W. G. (See Porter, C. C., assignor.)
Huston, Tom, Frosted Foods, Inc., Columbus, Ga. Maltless orange juice. 301,257; Feb. 21; Serial No. 316,560; published Feb. 2, 1932. Class 45.
Illinois Steel Company, assignor to Universal Atlas Cement Company, Chicago, Ill. Portland cement. 40,321; renewed May 12, 1933.
International Braid Company. (See Elmwood Mills.)
International Shoe Co., St. Louis, Mo. Boots and shoes. 301,249; Feb. 21; Serial No. 330,748; published Dec. 13, 1932. Class 39.
Irving Hat Co., assignor to Central Men's Stores, Inc., New York, N. Y. Hats and caps. 86,711; renewed May 28, 1932.
Jacobs, John, Company, Canon City, Colo. Melons. 301,198; Feb. 21; Serial No. 331,154; published Dec. 6, 1932. Class 46.
Jarman Shoe Company, Nashville, Tenn. Boots, shoes, and slippers. 301,247; Feb. 21; Serial No. 330,705; published Nov. 29, 1932. Class 39.
Jenaer Glaswerk Schott & Gen. (See Schott & Gen.)
Joltcrete Inc. (See Nepperhan Concrete Products Corporation, assignor.)
Jonas, Joseph A., doing business as J. A. Jonas Shoe Co., Haverhill, Mass., and Manchester, N. H. Leather shoes. 301,232; Feb. 21; Serial No. 330,300; published Nov. 22, 1932. Class 39.
Katagiri Corporation, New York, N. Y. Cameras. 301,294; Feb. 21; Serial No. 331,585; published Dec. 13, 1932. Class 26.
Katz, Jack, Los Angeles, Calif. Frozen chocolate-covered fruits. 301,235; Feb. 21; Serial No. 330,326; published Dec. 6, 1932. Class 46.
Kaynee Company, The. (See Eisenman, Charles, Company, assignor.)
Kluger, M. J., Inc., New York, N. Y. Seed laxatives. 301,219; Feb. 21; Serial No. 329,899; published Nov. 29, 1932. Class 6.
Koch, F. A., & Co., Inc., New York, N. Y. Razors and barber shears. 301,274; Feb. 21; Serial No. 331,469; published Dec. 13, 1932. Class 28.
Laganas, George, Boston, Mass. Shoes. 301,238; Feb. 21; Serial No. 330,481; published Dec. 6, 1932. Class 39.
Lanman & Kemp, assignor to Lanman & Kemp-Barclay & Co., Incorporated, New York, N. Y. Pharmaceutical preparations and remedies. 90,718–14; renewed Mar. 18, 1933.
Lavoptik Company. (See Peavey, George W., assignor.)
Lodera & Nucoline, Limited, Silvertown, near London, England, to The Best Foods, Inc., New York, N. Y., successor. Fats and mixtures thereof used as food or as ingredients in food. 40,705; renewed June 30, 1933.
Los Angeles Knitting Company, Hollydale, Calif. Knitted skirts. 301,260; Feb. 21; Serial No. 315,886; published Nov. 29, 1932. Class 39.
Ludlow Valve Manufacturing Company, The, Troy, N. Y. Gate valves, fire hydrants air valves etc. 301,172–3; Feb. 21; Serial Nos. 320,236–7; published Dec. 13, 1932. Class 13.
Mac-Dell's, Superior, Wis. Tooth picks. 301,217; Feb. 21; Serial No. 329,749; published Dec. 6, 1932. Class 44.
Malmstead, Lilyan, Worcester, Mass. Corsets, girdles, brassières, and underwear. 301,167; Feb. 21; Serial No. 326,728; published Dec. 13, 1932. Class 39.
Mantia, John, & Sons, Boston, Mass. Fish fillets. 301,175; Feb. 21; Serial No. 321,210; published Dec. 6, 1932. Class 46.
Martin Cantine Company, The, Saugerties, N. Y. Clay coated paper. 301,233; Feb. 21; Serial No. 330,304; published Nov. 29, 1932. Class 37.
Maurer, F. W., & Sons Co., Philadelphia, Pa. Fancy goods, furnishings, and notions. 92,003; renewed June 17, 1933.
Master Laboratories, Inc., Omaha, Nebr. Dentrifice. 301,164; Feb. 21; Serial No. 326,058; published Dec. 6, 1932. Class 6.
McManus, Leo P., doing business as Sky-Top Company, Philadelphia, Pa. Tops. 301,165; Feb. 21; Serial No. 326,884; published Dec. 13, 1932. Class 22.
Merchants Coffee Co. of New Orleans, Ltd., New Orleans, La. Coffee and chicory compound. 90,228; renewed Feb. 11, 1933.
Midvale Mining & Manufacturing Company, St. Louis, Mo. Ferromanganese. 39,850; renewed Feb. 24, 1933.
Milward, Henry, & Sons Limited, Redditch, assignor to The English Needle & Fishing Tackle Co., Limited, Birmingham, England. Needles. 39,852; renewed Feb. 24, 1933.
Minot, Hooper & Co., New York, N. Y. Sheets and pillow cases. 301,224; Feb. 21; Serial No. 330,861; published Dec. 6, 1932. Class 42.
Missouri State Chickeries, Jefferson City, Mo. Dressed chickens. 301,171; Feb. 21; Serial No. 320,129; published Dec. 6, 1932. Class 46.
Mistletoe Creameries, Inc. (See Nissley Creamery Company, The, assignor.)
Mme. Jenné. (See Eichenberg, Jennie S.)

Modern Tissues Corporation, New York, N. Y. Toilet and facial tissue. 301,251; Feb. 21; Serial No. 330,794; published Nov. 29, 1932. Class 37.
Morley Brothers, Saginaw, Mich. Cutlery and tools. 90,725; renewed Mar. 18, 1933.
Nashua Package Sealing Co. Inc., Nashua, N. H. Machines and tools for moistening, serving, etc., adhesive or gummed tape, etc. 301,244–5; Feb. 21; Serial Nos. 330,664–5; published Dec. 6, 1932. Class 23.
National Dairy Products Company, Inc., Baltimore, Md. Malted milk powder. 301,225–6; Feb. 21; Serial Nos. 330,069–70; published Dec. 6, 1932. Class 46.
Nelson Knitting Company, Rockford, Ill. Hosiery. 301,212; Feb. 21; Serial No. 329,404; published Nov. 29, 1932. Class 39.
Nepperhan Concrete Products Corporation, assignor to Joltcrete Inc., Yonkers, N. Y. Building block machines. 301,188; Feb. 21; Serial No. 331,002; published Dec. 13, 1932. Class 23.
Nissley Creamery Company, The, Fort Worth, assignor, by mesne assignments, to Mistletoe Creameries, Inc., Houston, Tex. Creamery butter. 90,468; renewed Feb. 25, 1933.
Orthopedic Shoes Inc. (See Burt, Edwin C., Company, assignor.)
Overbecker Coffee Co., The, Louisville, Ky. Coffee. 90,372; renewed Feb. 18, 1933.
Pacific Fisheries & Packing Company, Aberdeen, Wash., assignor to Pioneer Packing Company, Seattle, Wash. Canned salmon. 91,894; renewed June 3, 1933.
Page Steel and Wire Company, Adrian, Mich., and Bridgeport, Conn. Wire fabric for fencing. 301,174; Feb. 21; Serial No. 320,507; published Dec. 13, 1932. Class 13.
Palmer, Solon, New York, N. Y. Perfume, toilet water, sachet and complexion powder. 92,573; renewed July 15, 1933.
Paris Laboratories, Inc., New York, N. Y. Astringents, astringent cerates, bleach creams, etc. 301,279; Feb. 21; Serial No. 303,654; published Dec. 6, 1932. Class 6.
Parker, Stearns & Company, New York, and Brooklyn, to Parker, Stearns & Company, Brooklyn, N. Y. Syringes, water bottles, nasal douches, and catheters. 90,653; renewed Mar. 11, 1933.
Parker, Stearns & Company, New York and Brooklyn, to Parker, Stearns & Company, Brooklyn, N. Y. Rubber bathing caps. 90,833; renewed Mar. 25, 1933.
Parker, Stearns & Company, New York and Brooklyn, to Parker, Searns & Company, Brooklyn, N. Y. Dental, medical, and surgical appliances. 91,241; renewed Apr. 22, 1933.
Peavey, George W., Minneapolis, Minn., assignor, by mesne assignments, to Lavoptik Company, St. Paul, Minn. Eye-wash. 91,688; renewed May 20, 1933.
Penney, J. C., Company, Wilmington, Del., and New York, N. Y. Shoes. 301,236; Feb. 21; Serial No. 330,409; published Nov. 22, 1932. Class 39.
Pioneer Packing Company. (See Pacific Fisheries & Packing Company, assignor.)
Pollak, Henry, Inc., New York, N. Y. Hats, untrimmed. 301,178; Feb. 21; Serial No. 331,265; published Dec. 13, 1932. Class 39.
Pollak, Henry, Inc., New York, N. Y. Hats. 301,200; Feb. 21; Serial No. 331,194; published Nov. 29, 1932. Class 39.
Pollak, Henry, Inc., New York, N. Y. Caps and hats. 301,237; Feb. 21; Serial No. 330,430; published Nov. 29, 1932. Class 39.
Polonia Coffee Co. (See Hrynkiewicz, Anthony.)
Popular Fiction Publishing Company, Indianapolis, Ind. Periodical. 301,191; Feb. 21; Serial No. 331,062; published Nov. 29, 1932. Class 38.
Porter, C. C., assignor, by mesne assignments, to W. C. Huff, doing business as Holdredge Bottling Works, Holdredge, Nebr. Carbonated beverages. 92,121; renewed June 17, 1933.
Portland Flouring Mills Company, The, Portland, Oreg., assignor, by mesne assignments, to General Mills, Inc., Minneapolis, Minn. Wheat flour. 91,601; renewed May 13, 1933.
Quaker City Chocolate & Confectionery Co., Inc., Philadelphia, Pa. Candy. 301,231; Feb. 21; Serial No. 330,218; published Dec. 6, 1932. Class 46.
Queen Stove Works Incorporated, Albert Lea, Minn. Oil burners. 301,272; Feb. 21; Serial No. 331,514; published Dec. 13, 1932. Class 34.
Rambo & Regar, Incorporated, doing business as Globe Knitting Mills, Norristown, Pa. Anklets. 301,269; Feb. 21; Serial No. 330,931; published Nov. 29, 1932. Class 39.
Regal Gasoline Engine Company, by change of name to Regal Marine Engine Co., Coldwater, Mich. Gasolene internal combustion engines. 89,579; renewed Dec. 24, 1932.
Repeal Company, The. (See Sibley, Erwin, assignor.)
Ricker, Hiram, & Sons, Poland Springs, South Poland, Me. Mineral spring water. 301,277; Feb. 21; Serial No. 331,419; published Dec. 13, 1932. Class 45.
Riegel Textile Corporation, New York, N. Y. Cotton piece goods, diapers, sheets, and pillow cases. 301,161; Feb. 21; Serial No. 325,599; published Nov. 29, 1932. Class 42.
Robinson-Bynon Shoe Company, Incorporated, Auburn, N. Y. Shoes. 301,253; Feb. 21; Serial No. 314,074; published Nov. 29, 1932. Class 39.
Roessel, Louis, & Co., Inc., Hazleton, Pa., and New York, N. Y. Silk goods in the piece. 301,183; Feb. 21; Serial No. 331,383; published Nov. 29, 1932. Class 42.
Rohrsen, George F., Chicago, Ill. Card game. 301,270; Feb. 21; Serial No. 331,564; published Dec. 13, 1932. Class 22.
Ross, Sydney, Co., The, to The Sydney Ross Co., Newark, N. J. Tonic medicinal preparation. 92,376; renewed July 1, 1933.
Rundle, George H., Company, The, Piqua, Ohio. Remedy for constipation. 91,802; renewed May 27, 1933.
Ryff & Co. Ltd., doing business as Ryff & Co. Ltd., A. G. Strickwarenfabrik Bern and as Ryff & Co. S. A. Fabrique de Tricotages Berne, Bern, Switzerland. Underwear and bathing suits. 301,268; Feb. 21; Serial No. 330,933; published Nov. 29, 1932. Class 39.
S. & S. Cone Corporation, New York, N. Y. Ice cream cones. 301,170; Feb. 21; Serial No. 327,261; published Dec. 6, 1932. Class 46.
Sadwin Manufacturing Company, Inc., Woonsocket, R. I. Crib sheets, pillow cases, blankets, etc. 301,227; Feb. 21; Serial No. 330,105; published Nov. 29, 1932. Class 42.
Sanitary Mop Cabinet Co. (See Weiswasser, Peter.)
Schott & Gen., by change of name to Jenaer Glaswerk Schott & Gen., Jena, Germany. Glass tubes. 39,209; renewed Nov. 4, 1932.
Scovill Manufacturing Company, Waterbury, Conn. Metal stand lamps. 89,878; renewed Jan. 14, 1933.
Selby Shoe Company, The, Portsmouth, Ohio. Shoes. 301,199; Feb. 21; Serial No. 331,166; published Nov. 29, 1932. Class 39.
Shaner, Edgar M., Lynchburg, Va. Tires and casings. 301,211; Feb. 21; Serial No. 329,274; published Nov. 22, 1932. Class 35.
Shultz, Floyd P., Des Moines, Iowa. Oil burners. 301,248; Feb. 21; Serial No. 330,726; published Dec. 13, 1932. Class 34.
Sibley, Erwin, Milledgeville, Ga. Malt beverage. 301,273; Feb. 21; Serial No. 331,478; published Dec. 13, 1932. Class 48.
Sibley, Erwin, assignor to The Repeal Company, Milledgeville, Ga. Maltless beverages and syrups therefor. 301,267; Feb. 21; Serial No. 330,934; published Dec. 13, 1932. Class 45.
Simmons Tours, Inc., New York, N. Y. Publication. 301,254; Feb. 21; Serial No. 330,901; published Nov. 29, 1932. Class 38.
Sky-Top Company. (See McManus, Leo P.)
Slade, Charles F. Co., Inc., Buffalo, N. Y. Bleaching solution. 301,266; Feb. 21; Serial No. 330,936; published Nov. 29, 1932. Class 6.
Societe Anonyme des Vins d'Origine Etrangers et Francais. (See Bodega, assignor.)
Sontag, Ben, Co. (See Bonkura Products Co., Inc.)
Standard Oil Company, Whiting, Ind., and Chicago, Ill. Engine oil, turbine oil, transformer oil, and gas-engine oil. 91,522; renewed May 6, 1933.
Standard Oil Company, Whiting, Ind., and Chicago, Ill. Cylinder oil, engine oil, machine oil, dynamo oil, etc. 91,616; renewed May 13, 1933.
Stetson & Ellison Co., Camden, Del., and New York, N. Y., assignor, by mesne assignments, to G. H. Hammond Company, Chicago, Ill. Canned vegetables. 92,139; renewed June 17, 1933.
Stifel, J. L., & Sons, assignor to J. L. Stifel & Sons, Inc., Wheeling, W. Va. Cotton piece goods. 92,596; renewed July 15, 1933.
Stone Mill Fabrics Corp., New York, N. Y. Cotton piece goods. 301,193; Feb. 21; Serial No. 331,093; published Nov. 29, 1932. Class 42.
Strohbeck, Charles W., Brooklyn, N. Y. Boots, shoes and slippers. 40,236; renewed May 5, 1933.
Strong Hewat & Co., Inc., New York, N. Y. Woolen piece goods. 301,194; Feb. 21; Serial No. 331,094; published Nov. 29, 1932. Class 42.
Sutton's Mills, Incorporated, North Andover and Boston, Mass. Woolen piece goods. 301,209; Feb. 21; Serial No. 328,999; published Dec. 6, 1932. Class 42.
Sweet Mfg. & Sales Co., The, Phoenix, N. Y. Toilet tissues, paper napkins, wax paper, etc. 301,292; Feb. 21; Serial No. 331,716; published Dec. 6, 1932. Class 37.
Tanqueray, Gordon & Co., Limited, London, England. Alcoholic cocktails. 301,216; Feb. 21; Serial No. 329,658; published Dec. 13, 1932. Class 49.
Twin Coach Company, Kent, Ohio, assignor to Automatic Drive & Transmission Company, New York, N. Y. Automatic clutches. 301,189; Feb. 21; Serial No. 331,015; published Dec. 6, 1932. Class 23.
United Cork Companies of Delaware, Lyndhurst, N. J. Corkboard, cork bricks, cork seam fillers, etc. 301,229; Feb. 21; Serial No. 330,185; published Dec. 6, 1932. Class 12.
United Wholesale Grocery. (See English, John.)
Universal Atlas Cement Company. (See Illinois Steel Company, assignor.)
Val-Ray Food Products Company, Spokane, Wash. Catsup, pickles, peanut butter, etc. 301,158; Feb. 21; Serial No. 323,768; published Nov. 15, 1932. Class 46.

Waffled Steak Machines, Inc., Buffalo, N. Y. Meat tenderling machines. 301,190; Feb. 21; Serial No. 331,017; published Dec. 13, 1932. Class 23.
Weisbaum Bros. Brower Co., The, Cincinnati, Ohio. Neckties. 301,264; Feb. 21; Serial No. 330,981; published Nov. 29, 1932. Class 39.
Weiswasser, Peter, doing business as Sanitary Mop Cabinet Co., Detroit, Mich. Mop cabinet. 301,202; Feb. 21; Serial No. 327,956; published Dec. 6, 1932. Class 32.
West Virginia Pulp & Paper Company, New York, N. Y. Coated papers. 301,234; Feb. 21; Serial No. 330,822; published Nov. 29, 1932. Class 37.
Whitcomb Locomotive Co., The, Rochelle, Ill. Gasoline, oil, Diesel and mechanical locomotives and parts therefor, Road building machinery and parts therefor. 301,258–9; Feb. 21; Serial Nos. 316,396–7; published Dec. 6, 1932. Class 23.
Wickwire Spencer Steel Company. (See Bowers, Edward C., and Feldman.)
Wilson, Thomas, & Co., Inc., New York, N. Y. Laces. 301,208; Feb. 21; Serial No. 328,897; published Dec. 6, 1932. Class 42.
Wolf, August, Eisenwarenfabrik Ges. m. beschr. Haftung, Betzdorf (Sieg), Germany. Garden and agricultural tools. 301,271; Feb. 21; Serial No. 331,523; published Dec. 13, 1932. Class 28.
Wood Hydraulic Hoist and Body Company, Detroit, Mich. Heating boilers and oil burners. 301,239; Feb. 21; Serial No. 330,503; published Dec. 6, 1932. Class 34.
Woodmen of the World, Denver, Colo. Magazine. 301,241; Feb. 21; Serial No. 330,590; published Nov. 29, 1932. Class 38.
Woman's Wear Service, Inc., Huntington, Ind. Foundation garments, girdles, and abdominal uplift belts. 301,168; Feb. 21; Serial No. 326,796; published Nov. 29, 1932. Class 39.

LIST OF REGISTRANTS OF LABELS

Acme Metal Goods Mfg. Co., Newark, N. J. The Acme Rotary Mincer. For Rotary Mincing Implement for Kitchen Use. 41,769; Feb. 21.
Dairy Corporation of America, Wilmington, Del., Milwaukee, Wis., and Chicago, Ill. Super Whole Milk Bread. For Bread. 41,770; Feb. 21.
Erie Meter Systems, Incorporated, Erie, Pa. Buyers League For Automobile Accessories. 41,771; Feb. 21.
Ermert, Carl, doing business as C. Ermert Company, Cincinnati, Ohio. Castor Oil In Powder Compound of Magnesia. For Castor Oil in Powder. 41,772; Feb. 21.
First National Laboratories Inc., Leighton, Pa. Dr. White's God Liver Oil Concentrate. For Cod Liver Oil Concentrate Tablets. 41,773; Feb. 21.
Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Blue Ribbon 4 Point Turkey. For Turkeys. 41,774; Feb. 21.
Kuhmarker Waxed Paper Co. Inc., New York, N. Y. Kuhmarker's Sanitary "Shreddowax" Easter Grass. For Easter Grass (Being a Shredded Waxed Paper.) 41,775; Feb. 21.
Martin, Sarah E., Kansas City, Mo. Martin's Best Yet Shampoo. For Shampoo. 41,776; Feb. 21.
Martin, Sarah E., Kansas City, Mo. Martin's Best Yet Dandruff Remover. For Dandruff Remover. 41,777; Feb. 21.
Martin, Sarah E., Kansas City, Mo. Martin's Best Yet Hair Oil. For Hair Oil. 41,778; Feb. 21.
Matkovitch, J. G., Hammond, Ind. Reel. For Cigars. 41,779; Feb. 21.
Nineteen Hundred Corporation, Binghamton, N. Y. 1900 Redi-To-Iron Dryer. For Dryers. 41,780; Feb. 21.
Penton Products Company, Detroit, Mich. Penton Perfect. For Bottled Beverages. 41,781; Feb. 21.
"Pride of Ridgeway" Growers Association, The, Ridgeway, N. C. Pride of Ridgeway. For Cantaloupes. 41,782; Feb. 21.
Republic Chemical Co. Inc., New York, N. Y. Bestorait. For Product for Imparting Color to Gray Hair and Invigorating the scalp. 41,783; Feb. 21.
Sterling Products Company, Evansville, Ind. Mug. For Malt Extract. 41,784; Feb. 21.

LIST OF REGISTRANTS OF PRINTS

California Prune & Apricot Growers Association, San Jose, Calif. This Breakfast Puts "Sparkle" In All The Day. For Prunes. 14,055; Feb. 21.
California Prune & Apricot Growers Association, San Jose, Calif. Nature's Way To Good Health. For Prunes. 14,056; Feb. 21.
California Prune & Apricot Growers Association, San Jose, Calif. Here's Energy Here's Health. For Prunes. 14,057; Feb. 21.
General Mills, Inc., Minneapolis, Minn. Malted Milk Chocolate Cake. For Flour. 14,058; Feb. 21.
Ideal Oil Burner Company, The, Hartford, Conn., Ideal Range Oil Burners. For Oil Burners. 14,059; Feb. 21.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Bristles, sponges, crude minerals, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,116; Feb. 21; Serial No. 318,194; published Aug. 30, 1932.

CLASS 2

Buckets and bulk delivery cans, Metal. Davis Welding & Manufacturing Company. 301,169; Feb. 21; Serial No. 326,806; published Dec. 13, 1932.
Coffins. Deutsche Gold- & Silber-Scheideanstalt. 301,117; Feb. 21; Serial No. 318,195; published Oct. 13, 1931.

CLASS 4

Shaving cream. Gallaher Drug Company. 301,276; Feb. 21; Serial No. 331,429; published Dec. 6, 1932.
Soaps, steel wool, washing compounds, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,118; Feb. 21; Serial No. 318,197; published Nov. 15, 1932.

CLASS 5

Adhesives. Deutsche Gold- & Silber-Scheideanstalt. 301,119; Feb. 21; Serial No. 318,198; published Sept. 6, 1932.

CLASS 6

Absorbents, alteratives, antacids, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,120; Feb. 21; Serial No. 318,199; published Nov. 29, 1932.
Astringents, astringent cerates, bleach creams, etc. Paris Laboratories, Inc. 301,279; Feb. 21; Serial No. 303,654; published Dec. 6, 1932.
Bleaching solution. Charles F. Slade Co. 301,266; Feb. 21; Serial No. 330,936; published Nov. 29, 1932.
Cosmetic preparations. J. S. Eichenberg. 301,204; Feb. 21; Serial No. 328,301; published Dec. 6, 1932.
Dentifrice. Master Laboratories, Inc. 301,164; Feb. 21; Serial No. 326,058; published Dec. 6, 1932.
Eye-wash. G. W. Peavey. 91,688; renewed May 20, 1933.
Laxatives, Seed. M. J. Kluger, Inc. 301,219; Feb. 21; Serial No. 329,899; published Nov. 29, 1932.
Medicinal and pharmaceutical preparations, and proprietary medicine. Blue Line Chemical Co. 301,157; Feb. 21; Serial No. 322,875; published Nov. 29, 1932.
Medicinal compound. W. B. Freeman. 301,201; Feb. 21; Serial No. 327,587; published Dec. 6, 1932.
Medicinal preparation, cod liver oil, etc. Hance Brothers & White, Inc. 301,280; Feb. 21; Serial No. 297,597; published Dec. 6, 1932.
Medicines. K. Ellsworth. 301,214; Feb. 21; Serial No. 329,598; published Dec. 6, 1932.
Perfume, toilet water, sachet, and complexion powder. S. Palmer. 92,573; renewed July 15, 1933.
Pharmaceutical preparations and remedies. Lanman & Kemp. 90,718–14; renewed Mar. 18, 1933.
Quinin pomade, liniment, and skin-lotion. Exelento Medicine Co. 92,058; renewed June 17, 1933.
Remedy for constipation. George H. Rundle Company. 91,802; renewed May 27, 1933.
Toilet cream. Bonkura Products Co. 301,150; Feb. 21; Serial No. 324,337; published Nov. 29, 1932.
Tonic for digestion. B. Fucini & Co. Inc. 301,283; Feb. 21; Serial No. 309,518; published Apr. 21, 1931.
Tonic medicinal preparation. Sydney Ross Co. 92,376; renewed July 1, 1933.

CLASS 7

Rope of jute and hemp. British Ropes Limited. 301,291; Feb. 21; Serial No. 331,917; published Dec. 13, 1932.
Ropes and cables, Wire. Deutsche Gold- & Silber-Scheideanstalt. 301,121; Feb. 21; Serial No. 318,200; published Sept. 29, 1931.
Twine and cordage. Empire Twine and Yarn Co. 301,215; Feb. 21; Serial No. 329,599; published Dec. 13, 1932.

CLASS 9

Dynamite and blasting powders and the like, matches, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,122; Feb. 21; Serial No. 318,201; published July 19, 1932.

CLASS 10

Fertilizers. Deutsche Gold- & Silber-Scheideanstalt. 301,123; Feb. 21; Serial No. 318,202; published Oct. 20, 1931.

CLASS 11

Ink and colors. Deutsche Gold- & Silber-Scheideanstalt. 301,124; Feb. 21; Serial No. 318,203; published July 26, 1932.

CLASS 12

Caulking and packing materials, lime, plaster, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,125; Feb. 21; Serial No. 318,204; published Oct. 11, 1932.
Cement, Portland. Illinois Steel Company. 40,321; renewed May 12, 1933.
Corkboard, cork bricks, cork seam fillers, etc. United Cork Companies of Delaware. 301,229; Feb. 21; Serial No. 330,185; published Dec. 6, 1932.
Tiles, Wall and floor. Franklin Pottery, Incorporated. 301,186; Feb. 21; Serial No. 319,816; published Dec. 6, 1932.

CLASS 13

Fences, Steel and wire. Edward C. Bowers and Charles L. Feldman. 301,242; Feb. 21; Serial No. 330,592; published Dec. 6, 1932.
Nails for horse shoes, chains, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,126; Feb. 21; Serial No. 318,205; published Nov. 15, 1932.
Tubes, Copper and brass. American Brass Company. 301,255; Feb. 21; Serial No. 330,879; published Dec. 6, 1932.
Valves, fire hydrants, air valves, etc., Gate. Ludlow Valve Manufacturing Company. 301,172–3; Feb. 21; Serial Nos. 320,236–7; published Dec. 13, 1932.
Valves, Radiator siphon. Durst Manufacturing Company. 301,155; Feb. 21; Serial No. 322,282; published Dec. 6, 1932.
Wire fabric for fencing. Page Steel and Wire Company. 301,174; Feb. 21; Serial No. 320,507; published Dec. 13, 1932.

CLASS 14

Ferromanganese. Midvale Mining & Manufacturing Company. 39,850; renewed Feb. 24, 1933.
Metals, Precious. Deutsche Gold- & Silber-Scheideanstalt. 301,150; Feb. 21; Serial No. 318,230; published Oct. 25, 1932.

CLASS 15

Oil, Cylinder, engine, machine, dynamo, etc. Standard Oil Company. 91,616; renewed May 13, 1933.
Oil, Engine, turbine, transformer, and gas-engine. Standard Oil Company. 91,522; renewed May 6, 1933.
Oils, lubricating gasoline, etc., Fuel and lubricating. Deutsche Gold- & Silber-Scheideanstalt. 301,151; Feb. 21; Serial No. 318,231; published July 19, 1932.

CLASS 16

Paints and pigments, lacquers, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,152; Feb. 21; Serial No. 318,232; published Aug. 9, 1932.

CLASS 17

Cigars. R. Alvarez y Rivas. 40,063; renewed Apr. 7, 1933.
Cigars, cigarettes, and manufactured tobacco. Bobrow Bros. 92,393; renewed July 8, 1933.

CLASS 19

Airplanes, motor boats, canoes, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,153; Feb. 21; Serial No. 318,233; published Oct. 11, 1932.
Automobiles, Gasoline passenger. Hudson Motor Car Company. 301,263; Feb. 21; Serial No. 330,996; published Dec. 13, 1932.
Boats and canoes. Dexter Brothers Boat Company. 301,181; Feb. 21; Serial No. 331,367; published Dec. 13, 1932.
Trailers. Highway Trailer Company. 301,285; Feb. 21; Serial No. 318,783; published Dec. 15, 1931.

CLASS 21

Armatures, outfits and apparatus for domestic and industrial purposes, electric cooking apparatus, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,154; Feb. 21; Serial No. 318,234; published Nov. 29, 1932.

CLASS 22

Fish hooks, skates, nets, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,137; Feb. 21; Serial No. 318,217; published July 19, 1932.
Game, Card. G. F. Rohrsen. 301,270; Feb. 21; Serial No. 331,564; published Dec. 13, 1932.
Tops. L. P. McManus. 301,165; Feb. 21; Serial No. 326,384; published Dec. 13, 1932.

CLASS 23

Apparatus for extinguishing fire, printing machines, crushers, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,138; Feb. 21; Serial No. 318,218; published Nov. 15, 1932.
Building block machines. Nepperhan Concrete Products Corporation. 301,188; Feb. 21; Serial No. 331,002; published Dec. 13, 1932.
Clutches, Automatic. Twin Coach Company. 301,189; Feb. 21; Serial No. 331,015; published Dec. 6, 1932.
Conveyors, Ash. Brady Conveyors Corporation. 301,221–2; Feb. 21; Serial Nos. 329,933–4; published Dec. 13, 1932.
Cutlery and tools. Morley Brothers. 90,725; renewed Mar. 18, 1933.
Engines, Gasolene internal-combustion. Regal Gasoline Engine Company. 89,579; renewed Dec. 24, 1932.
Locomotives and parts therefor, road building machinery and parts therefor. Whitcomb Locomotive Co. 301,258–9; Feb. 21; Serial Nos. 316,396–7; published Dec. 6, 1932.
Lubricator. Emerol Manufacturing Co. 301,261; Feb. 21; Serial No. 314,326; published Dec. 6, 1932.
Machines and tools for moistening, serving, etc., adhesive or gummed tape, etc. Nashua Package Sealing Co. Inc. 301,244–5; Feb. 21; Serial Nos. 330,664–5; published Dec. 6, 1932.
Meat tendering machines. Waffled Steak Machines, Inc. 301,190; Feb. 21; Serial No. 331,017; published Dec. 13, 1932.
Razors and barber shears. F. A. Koch & Co. 301,274; Feb. 21; Serial No. 331,469; published Dec. 13, 1932.
Stills, Water. Barnstead Still and Sterilizer Co. Inc. 301,192; Feb. 21; Serial No. 331,035; published Dec. 13, 1932.
Tools, and wire dies, machinist's. Boron Alloy Tool Corporation. 301,196 Feb. 21; Serial No. 331,099; published Dec. 13, 1932.
Tools, Garden and agricultural. August Wolf, Eisenwarenfabrik Ges. m. beschr. Haftung. 301,271; Feb. 21; Serial No. 331,523; published Dec. 13, 1932.

CLASS 24

Driers, Laundry. Deutsche Gold- & Silber-Scheideanstalt. 301,139; Feb. 21; Serial No. 318,219; published Aug. 9, 1932.

CLASS 26

Cameras. Katagiri Corporation. 301,294; Feb. 21; Serial No. 331,585; published Dec. 13, 1932.
Drawing instruments, laboratory fittings, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,140; Feb. 21; Serial No. 318,220; published Nov. 15, 1932.

CLASS 27

Watches, clocks, and parts thereof. Deutsche Gold- & Silber-Scheideanstalt. 301,142; Feb. 21; Serial No. 318,222; published Oct. 20, 1931.

CLASS 28

Jewelry, tableware, toilet articles, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,141; Feb. 21; Serial No. 318,221; published July 19, 1932.

CLASS 29

Brushes, brooms and mops. Deutsche Gold- & Silber-Scheideanstalt. 301,143; Feb. 21; Serial No. 318,223; published July 26, 1932.

CLASS 30

Porcelain or real china. Deutsche Gold- & Silber-Scheideanstalt. 301,144; Feb. 21; Serial No. 318,224; published Sept. 29. 1931.

CLASS 32

Cabinet, Mop. P. Weisswasser. 301,202; Feb. 21; Serial No. 327,956; published Dec. 6, 1932.
Furniture. Deutsche Gold- & Silber-Scheideanstalt. 301,145; Feb. 21; Serial No. 318,225; published Oct. 18, 1932.
Springs, mattresses, beds, etc. Englander Spring Bed Co. 301,220; Feb. 21; Serial No. 329,913; published Dec. 6, 1932.

CLASS 33

Glass in all forms, table and flat glassware, plate glass, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,146; Feb. 21; Serial No. 318,226; published Aug. 9, 1932.
Glass tubes. Schott & Gen. 39,209; renewed Nov. 4, 1932.

CLASS 34

Boilers and oil burners, Heating. Wood Hydraulic Hoist and Body Company. 301,239; Feb. 21; Serial No. 330,503; published Dec. 6, 1932.
Burners, Oil. Queen Stove Works Incorporated. 301,272; Feb. 21; Serial No. 331,514; published Dec. 13, 1932.
Burners, Oil. F. P. Shults. 301,248; Feb. 21; Serial No. 330,726; published Dec. 13, 1932.

Dampers, fans, blowers, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,147; Feb. 21; Serial No. 318,227; published Nov. 15, 1932.
Humidifiers. A. C. Gilbert Company. 301,295; Feb. 21; Serial No. 331,579; published Dec. 13, 1932.
Lamps, Metal stand. Scovill Manufacturing Company. 89,878; renewed Jan. 14, 1933.

CLASS 35

Belting, valves, woven and cotton rubber hose, Rubber. B. F. Goodrich Company. 89,824; renewed Jan. 14, 1933.
Belting, valves, woven and cotton rubber hose, Rubber. B. F. Goodrich Company. 89,829–30; renewed Jan. 14, 1933.
Belts, leather and rubber hose and packing materials. Deutsche Gold- & Silber-Scheideanstalt. 301,148; Feb. 21; Serial No. 318,228; published Nov. 22, 1932.
Packing, Fiber. H. Crossley. 301,243; Feb. 21; Serial No. 330,620; published Dec. 13, 1932.
Tires and casings. E. M. Shaner. 301,211; Feb. 21; Serial No. 329,274; published Nov. 22, 1932.

CLASS 36

Strings for violins and similar instruments. Deutsche Gold- & Silber-Scheideanstalt. 301,149; Feb. 21; Serial No. 318,229; published July 19, 1932.

CLASS 37

Erasers, Rubber. Blaisdell Pencil Company. 301,179; Feb. 21; Serial No. 331,279; published Nov. 29, 1932.
Paper, Book. American Writing Paper Co. 92,388; renewed July 8, 1933.
Paper, Bristol boards, rubber stamps, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,127; Feb. 21; Serial No. 318,206; published Aug. 23, 1932.
Paper, Clay coated. Martin Cantine Company. 301,233; Feb. 21; Serial No. 330,804; published Nov. 29, 1932.
Papers, Coated. West Virginia Pulp & Paper Company. 301,234; Feb. 21; Serial No. 330,822; published Nov. 29, 1932.
Pencils. Horder's Inc. 301,182; Feb. 21; Serial No. 331,374; published Nov. 29, 1932.
Tissue, Toilet and facial. Modern Tissues Corporation. 301,251; Feb. 21; Serial No. 330,794; published Nov. 29, 1932.
Tissues, paper napkins, wax paper, etc., Toilet. Sweet Mfg. & Sales Co. 301,292; Feb. 21; Serial No. 331,716; published Dec. 6, 1932.

CLASS 38

Book or series of books. Walter J. Black, Inc. 301,207; Feb. 21; Serial No. 326,751; published Nov. 29, 1932.
Books. W. M. Goldsmith. 301,293; Feb. 21; Serial No. 331,640; published Dec. 6, 1932.
Magazine. Every Month Publishing Co. 301,180; Feb. 21; Serial No. 331,303; published Nov. 29, 1932.
Magazine. Woodmen of the World. 301,241; Feb. 21; Serial No. 330,590; published Nov. 29, 1932.
Newspaper, Monthly. Edwin Alger Publishing Company. 301,265; Feb. 21; Serial No. 330,947; published Nov. 29, 1932.
Periodical. Popular Fiction Publishing Company. 301,191; Feb. 21; Serial No. 331,062; published Nov. 29, 1932.
Periodicals. Good Humor Corporation of America. 301,205; Feb. 21; Serial No. 328,897; published Nov. 29, 1932.
Publication. Simmons Tours, Inc. 301,254; Feb. 21; Serial No. 330,901; published Nov. 29, 1932.
Sign boards, printed advertising signs, and reproductions, Printed. Deutsche Gold- & Silber Scheideanstalt. 301,128; Feb. 21; Serial No. 318,207; published Oct. 11, 1932.

CLASS 39

Anklets. Rambo & Regar, Incorporated. 301,269; Feb. 21; Serial No. 330,931; published Nov. 29, 1932.
Blouses. Charles Eisenman Company. 90,003; renewed Jan. 28, 1933.
Boots and shoes. International Shoe Co. 301,249; Feb. 21; Serial No. 330,748; published Dec. 13, 1932.
Boots, shoes, and slippers. A. D. Bourneuf. 301,176; Feb. 21; Serial No. 321,826; published Nov. 29, 1932.
Boots, shoes, and slippers. Edwin C. Burt Company. 87,160; renewed July 2, 1932.
Boots, shoes and slippers. Jarman Shoe Company. 301,247; Feb. 21; Serial No. 330,705; published Nov. 29, 1932.
Boots, shoes and slippers. C. W. Strohbeck. 40,286; renewed May 5, 1933.
Caps and hats. Henry Pollak, Inc. 301,237; Feb. 21; Serial No. 330,430; published Nov. 29, 1932.
Caps, Rubber bathing. Parker, Stearns & Company. 90,833; renewed Mar. 25, 1933.
Corsets, girdles, brassières, and underwear. L. Malmstead. 301,167; Feb. 21; Serial No. 326,728; published Dec. 13, 1932.
Dresses, skirts, blouses, sport suits. Eagle Knitting Mills, Inc. 301,187; Feb. 21; Serial No. 319,885; published Nov. 29, 1932.
Garments, girdles and abdominal uplift belts, Foundation. Woman's Wear Service, Inc. 301,168; Feb. 21; Serial No. 326,796; published Nov. 29, 1932.
Girdles, corsets, combination corset and brassière. Associated Apparel Industries, Inc. 301,213; Feb. 21; Serial No. 329,517; published Nov. 29, 1932.
Hats, Henry Pollak, Inc. 301,200; Feb. 21; Serial No. 331,194; published Nov. 29, 1932.
Hats and caps. Irving Hat Co. 86,711; renewed May 28, 1932.
Hats, untrimmed. Henry Pollak, Inc. 301,178; Feb. 21; Serial No. 331,265; published Dec. 13, 1932.
Hosiery. Bear Brand Hosiery Co. 301,284; Feb. 21; Serial No. 319,131; published Nov. 29, 1932.
Hosiery. Nelson Knitting Company. 301,212; Feb. 21; Serial No. 329,404; published Nov. 29, 1932.
Innersoles and counters for shoes and other footwear. V. & F. W. Filoon Company. 301,156; Feb. 21; Serial No. 322,844; published Dec. 13, 1932.
Neckties. Weisbaum Bros. Brower Co. 301,264; Feb. 21; Serial No. 330,981; published Nov. 29, 1932.
Overalls, work-coats, and work-shirts. C. B. Cones & Son Manufacturing Company. 92,189; renewed June 24, 1933.
Shirts, rompers, and children's frocks. Charles Eisenman Company. 89,832; renewed Jan. 14, 1933.
Shirts, waists, pajamas, etc. Charles Eisenman Company. 90,312; renewed Feb. 18, 1933.
Shoes. Crescent Shoe Company. 301,230; Feb. 21; Serial No. 330,199; published Nov. 22, 1932.
Shoes. Florsheim Shoe Company. 301,228; Feb. 21; Serial No. 330,177; published Nov. 29, 1932.
Shoes. J. A. Jonas. 301,232; Feb. 21; Serial No. 330,300; published Nov. 22, 1932.
Shoes. G. Laganas. 301,238; Feb. 21; Serial No. 330,481; published Dec. 6, 1932.
Shoes. J. C. Penney Company. 301,236; Feb. 21; Serial No. 330,409; published Nov. 22, 1932.
Shoes. Robinson-Bynon Shoe Company. 301,253; Feb. 21; Serial No. 314,074; published Nov. 29, 1932.
Shoes. Selby Shoe Company. 301,199; Feb. 21; Serial No. 331,166; published Nov. 29, 1932.
Skirts, Knitted. Los Angeles Knitting Company. 301,260; Feb. 21; Serial No. 315,886; published Nov. 29, 1932.
Suits, sweaters, etc., Knitted bathing. Greenhill & Daniel, Inc. 301,206; Feb. 21; Serial No. 328,580; published Nov. 15, 1932.
Suits, Woolen. B. Altman & Co. 301,195; Feb. 21; Serial No. 331,097; published Nov. 29, 1932.
Undershirts, under drawers, etc. Best & Co. 301,240; Feb. 21; Serial No. 330,534; published Nov. 29, 1932.
Underwear and bathing suits. Ryff & Co. Ltd. 301,268; Feb. 21; Serial No. 330,933; published Nov. 29, 1932.

CLASS 40

Combs, hooks and eyes, trimmings, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,129; Feb. 21; Serial No. 318,209; published Nov. 22, 1932.
Fancy goods, furnishings, and notions. F. W. Maurer & Sons Co. 92,093; renewed June 17, 1933.
Needles. Henry Milward & Sons Limited. 89,852; renewed Feb. 24, 1933.
Shoe-lacings, corset-lacings, etc. Elmwood Mills. 91,954; renewed June 10, 1933.

CLASS 41

Umbrellas and canes. Deutsche Gold- & Silber-Scheideanstalt. 301,130; Feb. 21; Serial No. 318,210; published Oct. 20, 1931.

CLASS 42

Blankets, Textile. Esmond Mills. 301,210; Feb. 21; Serial No. 329,111; published Dec. 6, 1932.
Cotton piece goods. Dacotah Cotton Mills. 301,177; Feb. 21; Serial No. 331,218; published Nov. 29, 1932.
Cotton piece goods. J. L. Stifel & Sons. 92,596; renewed July 15, 1933.
Cotton piece goods. Stone Mill Fabrics Corp. 301,193; Feb. 21; Serial No. 331,093; published Nov. 29, 1932.
Cotton piece goods, diapers, sheets, and pillow cases. Riegel Textile Corporation. 301,161; Feb. 21; Serial No. 325,599; published Nov. 29, 1932.
Embroideries, draperies, ribbons, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,131; Feb. 21; Serial No. 318,211; published July 19, 1932.
Gauze curtains and curtaining. Gladding's Inc. 301,223; Feb. 21; Serial No. 330,514; published Dec. 6, 1932.
Laces in the piece. Thomas Wilson & Co. 301,208; Feb. 21; Serial No. 328,897; published Dec. 6, 1932.
Piece goods. Combier & Co. Inc., 301,246; Feb. 21; Serial No. 330,695; published Nov. 29, 1932.
Pile fabrics. Sidney Blumenthal & Co. Inc. 301,134–5; Feb. 21; Serial Nos. 330,886–7; published Nov. 29, 1932.
Sheets and pillow cases. Minot, Hooper & Co. 301,224; Feb. 21; Serial No. 330,661; published Dec. 6, 1932.
Sheets, pillow cases, blankets, etc., Crib. Sedwin Manufacturing Company. 301,227; Feb. 21; Serial No. 330,105; published Nov. 29, 1932.
Silk goods in the piece. Louis Roessel & Co. 301,133; Feb. 21; Serial No. 331,333; published Nov. 29, 1932.
Woolen piece goods. Streng Hewat & Co. 301,194; Feb. 21; Serial No. 331,094; published Nov. 29, 1932.
Woolen piece goods. Sutton's Mills, Incorporated. 301,209; Feb. 21; Serial No. 328,909; published Dec. 6, 1932.
Worsted and woolens in the piece. Holden-Leonard Company Inc. 301,275; Feb. 21; Serial No. 331,463; published Dec. 6, 1932.

CLASS 43

Yarn fibres, Spun. Deutsche Gold- & Silber-Scheideanstalt. 301,132; Feb. 21; Serial No. 318,212; published Sept. 29, 1931.

CLASS 44

Dental, medical, and surgical appliances. Parker, Stearns & Company. 91,241; renewed Apr. 22, 1933.
Surgical bandages. Band-Tex Company. 301,197; Feb. 21; Serial No. 331,182; published Dec. 6, 1932.
Surgical plasters, adhesive tapes, bandages, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,133; Feb. 21; Serial No. 318,218; published Nov. 15, 1932.
Syringes, water bottles, nasal douches, catheters. Parker, Stearns & Company. 90,653; renewed Mar. 11, 1933.
Teeth, Artificial. Columbus Dental Manufacturing Co. 301,218; Feb. 21; Serial No. 329,830; published Dec. 13, 1932.
Tooth picks. Mac-Dell's. 301,217; Feb. 21; Serial No. 329,749; published Dec. 6, 1932.

CLASS 45

Beverages and concentrates for making the same, Maltless. California Fruit Growers Exchange. 301,262; Feb. 21; Serial No. 296,687; published Sept. 2, 1930.
Beverages and concentrates for making the same, Maltless. California Fruit Growers Exchange. 301,281; Feb. 21; Serial No. 303,156; published Nov. 4, 1930.
Beverages and syrups therefor, Maltless. E. Sibley. 301,267; Feb. 21; Serial No. 330,934; published Dec. 13, 1932.
Beverages, Carbonated. C. C. Porter. 92,121; renewed June 17, 1933.
Compound in various fruit flavors, Powder. F. B. Chamberlain Company. 301,256; Feb. 21; Serial No. 318,643; published Oct. 18, 1931.
Fruit juices and syrups. H. E. Grigsby. 301,163; Feb. 21; Serial No. 325,909; published Aug. 2, 1932.
Grape juice and grape concentrate. California Vineyards Company. 301,166; Feb. 21; Serial No. 326,669; published Dec. 13, 1932.
Orange juice, Maltless. Tom Huston Frosted Foods, Inc. 301,257; Feb. 21; Serial No. 316,560; published Feb. 2, 1932.
Water, Mineral spring. Hiram Ricker & Sons. 301,277; Feb. 21; Serial No. 331,419; published Dec. 13, 1932.
Waters, maltless beverages, and concentrates for making the same. Deutsche Gold- & Silber-Scheideanstalt. 301,134; Feb. 21; Serial No. 318,214; published July 26, 1932.

CLASS 46

Butter and eggs. C. Abrams. 92,308; renewed July 1, 1933.
Butter, Creamery. Nissley Creamery Company. 90,468; renewed Feb. 25, 1933.
Candy. Quaker City Chocolate & Confectionery Co. 301,231; Feb. 21; Serial No. 330,218; published Dec. 6, 1932.
Canned and dried fruit, prunes, raisins, canned vegetables, etc. California Packing Corporation. 301,278; Feb. 21; Serial No. 307,264; published Dec. 6, 1932.
Canned salmon. Alaska-Portland Packers Association. 91,058–60; renewed Apr. 15, 1933.
Canned salmon. Hoonah Packing Company. 90,206–11; renewed Feb. 11, 1933.
Canned salmon. Pacific Fisheries & Packing Company. 91,894; renewed June 3, 1933.
Canned vegetables. A. Hrynkiewicz. 301,160; Feb. 21; Serial No. 324,560; published Aug. 30, 1932.
Canned vegetables. Stetson & Ellison Co. 92,139; renewed June 17, 1933.
Catsup, pickles, peanut butter, etc. Val-Ray Food Products Company. 301,158; Feb. 21; Serial No. 323,758; published Nov. 15, 1932.
Chickens, Dressed. Missouri State Chickeries. 301,171; Feb. 21; Serial No. 320,129; published Dec. 6, 1932.
Coconut, Prepared. Franklin Baker Company. 301,296; Feb. 21; Serial No. 295,992; published July 8, 1930.
Coffee, J. English. 301,282; Feb. 21; Serial No. 307,932; published May 24, 1932.
Coffee. Querbacker Coffee Co. 90,372; renewed Feb. 18, 1933.
Coffee and chicory compound. Merchants Coffee Co. of New Orleans, Ltd. 90,228; renewed Feb. 11, 1933.
Confection, Ice cream. Wm. M. Bell Company. 301,250; Feb. 21; Serial No. 330,773; published Dec. 6, 1932.
Ducks. A. J. Hallock. 90,016; renewed Jan. 28, 1933.
Fats and mixtures thereof. Loders & Nucoline, Limited. 40,705; renewed June 30, 1933.
Fish fillets. John Mantia & Sons. 301,175; Feb. 21; Serial No. 321,210; published Dec. 6, 1932.
Flour, Wheat. Portland Flouring Mills Company. 91,601; renewed May 13, 1933.
Fruits, Frozen chocolate-covered. J. Katz. 301,235; Feb. 21; Serial No. 330,326; published Dec. 6, 1932.
Ice cream cones. S. & S. Cone Corporation. 301,170; Feb. 21; Serial No. 327,261; published Dec. 6, 1932.
Melons, Fresh. John Jacobs Company. 301,198; Feb. 21; Serial No. 331,154; published Dec. 6, 1932.
Milk powder, Malted. National Dairy Products Company. 301,225–6; Feb. 21; Serial Nos. 330,069–70; published Dec. 6, 1932.
Mustard and horseradish mustard, Prepared. August Bauer's Sons, Inc. 301,252; Feb. 21; Serial No. 330,807; published Dec. 6, 1932.
Salad dressing. Birdsall & Wilcox. 301,203; Feb. 21; Serial No. 328,154; published Dec. 6, 1932.
Spices and flavoring extracts. F. E. Fowler. 90,426; renewed Feb. 25, 1933.
Spices, dietetical patent foods, malt, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,136; Feb. 21; Serial No. 318,216; published Aug. 16, 1932.
Vegetable compound, Seasoning and flavoring. Grist Mill. 301,162; Feb. 21; Serial No. 325,788; published Dec. 6, 1932.

CLASS 47

Port and sherry wine. Bodega. 91,753; renewed May 27, 1933.
Wine, Port. Bloch Bros. 301,289; Feb. 21; Serial No. 332,024; published Dec. 13, 1932.

CLASS 48

Malt beverage. E. Sibley. 301,273; Feb. 21; Serial No. 331,478; published Dec. 13, 1932.

CLASS 49

Cocktails, Alcoholic. Tanqueray, Gordon & Co. 301,216; Feb. 21; Serial No. 329,658; published Dec. 13, 1932.
Whiskey. Bloch Bros. 301,286; Feb. 21; Serial No. 332,029; published Dec. 13, 1932.
Whiskey. Bloch Bros. 301,287–8; Feb. 21; Serial Nos. 332,026–7; published Dec. 13, 1932.
Whiskey. Bloch Bros. 301,290; Feb. 21; Serial No. 332,023; published Dec. 13, 1932.

CLASS 50

Rubber bath mats, blankets, and bottle stoppers, etc. Deutsche Gold- & Silber-Scheideanstalt. 301,135; Feb. 21; Serial No. 318,215; published Aug. 30, 1932.

LIST OF LABELS

Blue Ribbon 4 Point Turkey. For Turkeys. Kroger Grocery & Baking Company. 41,774; Feb. 21.
Buyers League. For Automobile Accessories. Erie Meter Systems, Incorporated. 41,771; Feb. 21.
Castor Oil in Powder Compound of Magnesia. For Castor Oil in Powder. C. Ermert. 41,772; Feb. 21.
Dr. White's Cod Liver Oil Concentrate. For Cod Liver Oil Concentrate Tablets. First National Laboratories Inc. 41,773; Feb. 21.
Kuhmarker's Sanitary "Shreddowax" Easter Grass. For Easter Grass (Being a Shredded Waxed Paper). Kuhmarker Waxed Paper Co. Inc. 41,775; Feb. 21.
Martin's Best Yet Shampoo. For Shampoo. S. E. Martin. 41,776; Feb. 21.
Martin's Best Yet Dandruff Remover. For Dandruff Remover. S. E. Martin. 41,777; Feb. 21.
Martin's Best Yet Hair Oil. For Hair Oil. S. E. Martin. 41,778; Feb. 21.
Mug. For Malt Extract. Sterling Products Company. 41,784; Feb. 21.
1900 Redi-To-Iron Dryer. For Dryers. Nineteen Hundred Corporation. 41,780; Feb. 21.
Penton Perfect. For Bottled Beverages. Penton Products Company. 41,781; Feb. 21.
Pride of Ridgeway. For Cantaloupes. "Pride of Ridgeway" Growers Association. 41,782; Feb. 21.
Resl. For Cigars. J. G. Matkovitch. 41,779; Feb. 21.
Restorzit. For Product for Imparting Color to Gray Hair and Invigorating the Scalp. Republic Chemical Co. Inc. 41,783; Feb. 21.
Super Whole Milk Bread. For Bread. Dairy Corporation of America. 41,770; Feb. 21.
The Acme Rotary Mincer. For Rotary Mincing Implement for Kitchen Use. Acme Metal Goods Mfg. Co. 41,769; Feb. 21.

LIST OF PRINTS

Here's Energy Here's Health. For Prunes. California Prune & Apricot Growers Association. 14,057; Feb. 21.
Ideal Range Oil Burners. For Oil Burners. Ideal Oil Burner Company. 14,059; Feb. 21.
Malted Milk Chocolate Cake. For Flour. General Mills, Inc. 14,058; Feb. 21.
Nature's Way To Good Health. For Prunes. California Prune & Apricot Growers Association. 14,056; Feb. 21.
This Breakfast Puts "Sparkle" In All The Day. For Prunes. California Prune & Apricot Growers Association. 14,055; Feb. 21.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 21st DAY OF FEBRUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A. P. W. Paper Co. (See Wheeler, Seth, jr., assignor.)
Aarts, Christianus J. G., Voorburg, and J. A. A. Mekel, Delft; said Aarts assignor to Walter F. C. Baars, Rotterdam, Netherlands. Making bore holes. 1,898,926; Feb. 21.
Abbott Ball Company, The. (See Matteson, George F., assignor.)
Addressograph Company. (See Gollwitzer, Walter T., assignor.)
Aeschbach, Friedrich, Aarau, Switzerland. Cutting machine. 1,898,160; Feb. 21.
Agfa Ansco Corporation. (See Lowkrantz, Gunne, assignor.)
Agfa Ansco Corporation. (See Wendt, Bruno, assignor.)
Ahrens-Fox Fire Engine Company, The. (See Fox, Charles H., assignor.)
Ailes, Adrian S., assignor to The Lake Erie Chemical Company, Cleveland, Ohio. Disabling gas firing weapon. 1,897,992; Feb. 21.
Ajam, Mustafa J., Waltham, assignor to Devon Manufacturing Company, Boston, Mass. Refrigerating apparatus. 1,898,804; Feb. 21.
Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.)
Aktiebolaget Ljungstroms Angturbin. (See Lysholm, Alf, assignor.)
Aktiebolaget Stille Werner. (See Nordin, Josef A., assignor.)
Albany Hardware Specialty Manufacturing Company. (See Whitcomb, Harris M., assignor.)
Albright, Andrew, 3d, Maplewood, assignor to Rubber & Celluloid Products Co., Newark, N. J. Colored plastic material and producing the same. 1,898,515; Feb. 21.
Aldrich, William O., assignor to Whitin Machine Works, Whitinsville, Mass. Retaining device for twister spindles. 1,898,115; Feb. 21.
Alemite Corporation. (See Davis, Ernest W., assignor.)
Alessi, Anthony, assignor to Selecto Light, Inc., Paterson, N. J. Vehicle lamp. Des. 89,293; Feb. 21.
Alexander, William, Glasgow, Scotland. Centrifugal separator. 1,898,608; Feb. 21.
Allbright-Nell Company. (See Allbright, Norman J., assignor.)
Allbright, Norman J., Chicago, Ill., assignor to The Allbright-Nell Company. Hydraulic curb press. 1,898,116; Feb. 21.
Allegheny Steel Company. (See Musheno, Fred G., assignor.)
Allegheny Steel Company. (See Otte, Otho M., assignor.)
Allen, Russell G., Alton, Ill., assignor to Owens-Illinois Glass Company. Charge severing mechanism. 1,897,993; Feb. 21.
Allen, Wallace T. (See Jackson, J. G., and Allen.)
Allis, Louis, Company, The. (See Smith, Harold L., assignor.)
Allyne, Edmund E., Cleveland Heights, Ohio. Refrigerating apparatus. 1,898,706; Feb. 21.
Almcrants, Oscar G., assignor of one-half to E. L. Kappelman, Evanston, Ill. Outlet box. 1,898,282; Feb. 21.
Althoff, George A., Glendale, Calif. Light dividing device. 1,897,994; Feb. 21.
Alvey Manufacturing Company. (See Dietz, Frank J., assignor.)
American Ball Mill Company. (See Jugel, Rudolf P., assignor.)
American Can Company. (See Peters, John F., assignor.)
American Roll Gold Leaf Company. (See Littlefield, George E., assignor.)
American Safety Device Co. (See Davidson, Frederic A., assignor.)
American Smelting and Refining Company. (See Forbes, Gordon B., assignor.)
American Telephone and Telegraph Company. (See Demarest, Charles S., assignor.)
American Telephone and Telegraph Company. (See Leibe, Frank A., assignor.)
American Telephone and Telegraph Company. (See Watson, Edward F., assignor.)
American Thermos Bottle Company, The. (See Schlumbohm, Peter, assignor.)
Anderson, Ernest D., Passaic, N. J., assignor to Continental Can Company, Inc., New York, N. Y. Forming easy opening containers. 1,898,925; Feb. 21.
Anderson, Gustav H., assignor to The Hart & Hutchinson Company, New Britain, Conn. Concealed door closer and check. 1,898,609; Feb. 21.
Anderson, Maurice, Negaunee, Mich. Snow shovel. 1,898,284; Feb. 21.
Anderson, Raymond M. (See Linkert, H. W., and Anderson.)
Anderson, Ted A., Battle Creek, Mich. Adjustable tie-rod for concrete wall forms. 1,898,332; Feb. 21.
Andrake, Andrew A., Cleveland, Ohio, assignor to The Glenn L. Martin Company, Baltimore, Md. Valve. 1,898,805; Feb. 21.
Andrews, Isaac, Spartanburg, S. C. Loom reed construction. 1,898,927; Feb. 21.
Andrews, Isaac, Spartanburg, S. C. Attachment for heddle bars. 1,898,928; Feb. 21.
Andrus, Waddel P. (See Sturgis, Charles E., assignor.)
Apple, Edward M., et al., executor. (See Apple, Vincent G.)
Apple, Herbert F., et al., executor. (See Apple, Vincent G.)
Apple, Vincent G., deceased, Dayton, Ohio; H. F. Apple, E. M. Apple, and Gourley Darroch, executors. Commutator and making it. 1,898,929; Feb. 21.
Appleton Rubber Company. (See Cowen, R., and Jordan, assignors.)
Armstrong, Albert D., and G. C. G. Dobbie, Rangoon, India, assignors to The Indo-Burma Petroleum Company Limited, Rangoon, Burma. Apparatus for sweating or treating paraffin wax or the like. 1,898,930; Feb. 21.
Armstrong Cork Company. (See McCarthy, J Clarence, assignor.)
Arnold, Henry B., and L. B. Cooke, assignors to Western Electric Company, Incorporated, New York, N. Y. Calling circuit. 1,898,516; Feb. 21.
Arnold, Joseph M., Ganshoren, Belgium. Hinge. 1,898,161; Feb. 21.
Asche, Walter, St. George, N. Y. Clay working and conditioning. 1,898,333; Feb. 21.
Ashby, John T. (See Welch, S. A., Guyler, Ashby, and Boaler.)
Ashley, James. (See Lorence, Roy, assignor.)
Associated Electric Laboratories, Inc. (See Richardson, Rodney G., assignor.)
Aston, Frederick C., Pittsburgh, Pa. Automobile headlight bulb cap. 1,898,517; Feb. 21.
Atkins, Thomas R., Cliftondale, Mass. Shoe. Des. 89,294; Feb. 21.
Atkins, Thomas R., Cliftondale, Mass. Shoe. Des. 89,295; Feb. 21.
Atlas Bolt & Screw Company. (See Schellentrager, Eugene W., assignor.)
Atwood, Francis C., Newton, Mass. Coating material. 1,898,518; Feb. 21.
Aull, Jerome J., assignor to The Lunkenheimer Company, Cincinnati, Ohio. Detachable valve member. 1,898,519; Feb. 21.
Auto and Plane Engineering Company. (See O'Brien, John J., assignor.)
Autogas Corporation. (See Wetherbee, Asbur U., assignor.)
Autogiro Company of America. (See Pecker, Joseph S., assignor.)
Automotive Fan & Bearing Company. (See Gardner, Archibald D., assignor.)
Automotive Fan & Bearing Co. (See Hollerith, Charles, assignor.)
Babcock, Earl, Chicago, Ill., assignor to The Hoover Company, North Canton, Ohio. Absorber for refrigerating systems. 1,897,997; Feb. 21.
Babcock & Wilcox Co. (See Cross, Walter M., assignor.)
Babcock & Wilcox Company, The. (See Lucke, Charles E., assignor.)
Bagno, Samuel M. (See Schweitzer, L. P., and Bagno.)
Bahrmann, Karl, assignor to Koch & Sterzel Aktiengesellschaft, Dresden, Germany. High tension transformer. 1,898,931; Feb. 21.
Bailey, Clarence R., assignor to Carol Supplies, Inc., Los Angeles, Calif. Antifriction bearing. 1,898,074; Feb. 21.
Bair, Joseph H., Camp Hill, Pa. Gradometer. 1,898,162; Feb. 21.
Bakelite Building Products Company. (See Harshberger, Norman P., assignor.)
Baker, Chester L., assignor to Philadelphia Quartz Company of California, Ltd., Berkeley, Calif. Crystalline hydrates of alkali metal silicates and producing them. 1,898,707; Feb. 21.
Baker, Cloice B. (See Bawden, William, assignor.)
Baker, Erle K., Chicago, Ill. Automobile arm and rod connection. 1,898,334; Feb. 21.
Baker, James N., assignor to The Black & Decker Manufacturing Company, Towson, Md. Centrifugal flexible coupling. 1,898,806; Feb. 21.
Balch, Harry, Baltimore, Md. Support. 1,898,865; Feb. 21.

Balfour, L. G., Company. (See Patt, Winfield C., assignor.)
Ball, Charles E., Chicago, Ill., assignor to Ball Wagon Grader Co., Stockton, Calif. Control mechanism for scraper bowls. 1,898,163; Feb. 21.
Ball Wagon Grader Co. (See Ball, Charles E., assignor.)
Ballantine, Stuart, Mountain Lakes, N. J., assignor to Radio Corporation of America. Method of and apparatus for forming grid electrodes. 1,898,475; Feb. 21.
Baltimore Paper Company. (See Winkler, A., and Dünnebier, assignor.)
Banes, Walter D., Chestnut Hill, assignor to Isaac L. Schwartz, Philadelphia, Pa. Fire extinguisher. 1,898,476; Feb. 21.
Barber-Colman Company. (See Whitman, George F., assignor.)
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Web perfecting rotary printing press. 1,898,610; Feb. 21.
Barbier, Henri, Geneva, Switzerland, assignor to Givaudan-Delawanna, Inc., New York, N. Y. Allyl citrylidene acetone and preparation. 1,898,075; Feb. 21.
Barbulesco, Constantin D. (See Edwards, P. S., and Barbulesco.)
Baritone Radio Corporation. (See Macy, Alfred J.)
Barnes, John S., White Plains, assignor, by mesne assignments, to The Borden Company, New York, N. Y. Air cleaning. 1,898,807; Feb. 21.
Barnes, Samuel W., Jackson, Mich. Tobacco-pipe cleaner. 1,898,708; Feb. 21.
Barnhart, George, Salem, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Sulphur black and preparation of the same. 1,898,076; Feb. 21.
Barraclough, George H., Shipley, near Bradford, England. Collapsible stairway or the like. 1,898,520; Feb. 21.
Barrett Company, The. (See Miller, Stuart P., assignor.)
Barrett, James H., and J. Keenan, Kingston, Ontario, Canada. Crank case heater. 1,897,995; Feb. 21.
Barry-Wehmiller Machinery Company. (See Herold, J. L., and Dawson, assignors.)
Barstow, Edwin O., assignor to Dow Chemical Company, Midland, Mich. Protecting magnesium and its alloys at elevated temperatures. 1,898,969; Feb. 21.
Barstow, Edwin O., and S. B. Heath, assignors to The Dow Chemical Company, Midland, Mich. Preparation of strong hydrogen halide gas. 1,897,996; Feb. 21.
Bates, Arthur, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe sewing machine. 1,898,521; Feb. 21.
Bates, Ralph I., assignor to Delco Products Corporation, Dayton, Ohio. Relief valve for shock absorbers. 1,898,335; Feb. 21.
Bauer, John W., Naperville, Ill. Plant support. 1,898,164; Feb. 21.
Bauer, Wilhelm. (See Nawiasky, P., Bauer, and Krauch.)
Baum, Erich. (See Herrmann, W. O., and Baum.)
Bawden, William, assignor of one-half to C. B. Baker, St. Louis, Mo. Hose coupling. 1,898,283; Feb. 21.
Baylis, Walter S., and D. S. Belden, assignors to Filtrol Company of California, Los Angeles, Calif. Decolorizing oils with acid-activated earth and water. 1,898,165; Feb. 21.
Bean, Ivan L. (See Bean, Louis A., assignor.)
Bean, Louis A., assignor to I. L. Bean, Denver, Colo. Reflector. 1,898,166; Feb. 21.
Bean, Louis A., assignor to I. L. Bean, Denver, Colo. Reflector. 1,898,167; Feb. 21.
Beaumont, R. H., Company. (See Hale, William E., assignor.)
Becker, Joseph, Pittsburgh, Pa., assignor to The Koppers Company of Delaware. Heating coke ovens and the like. 1,898,970; Feb. 21.
Bedford, Burnice D., Schenectady, N. Y., assignor to General Electric Company. Alternating current generator. 1,898,932; Feb. 21.
Belcher, Daniel, assignor to Bemis Bro. Bag Co., Minneapolis, Minn. Apparatus for settling material in containers. 1,898,284; Feb. 21.
Belden, Daniel S. (See Baylis, W. S., and Belden.)
Belden, Daniel S., assignor to Filtrol Company of California, Los Angeles, Calif. Safely distilling and decolorizing mineral oils. 1,898,168; Feb. 21.
Belfit, Robert W., Watertown, assignor to Scovill Manufacturing Company, Waterbury, Conn. Aldehyde amino resinous compounds and processes. 1,898,709; Feb. 21.
Belfit, Robert W., Watertown, assignor to Scovill Manufacturing Company, Waterbury, Conn. Condensation product and process. 1,898,754; Feb. 21.
Belfit, Robert W., Watertown, assignor to Scovill Manufacturing Company, Waterbury, Conn. Urea condensation product and process. 1,898,755; Feb. 21.
Bell & Howell Company, The. (See Howell, Albert S., assignor.)
Bell, William E., Charlotte, N. C. Aeroplane with V-shaped wings. 1,898,710; Feb. 21.
Beloit Iron Works. (See Berry, E. E., and Roberts, assignors.)
Belt, Joseph S. (See Sullivan, Edward G., assignor.)
Bemis Bro. Bag Co. (See Belcher, Daniel, assignor.)
Bemis Bro. Bag Company. (See Brady, C. V., and Case, assignors.)
Bemmers, Adolphe G. (See Simcox, Milan B., assignor.)
Bendix Aviation Corporation. (See Robbins, Azor D., assignor.)
Bendix Brake Company. (See Dodge, Adiel Y., assignor.)
Bendix Brake Company. (See Frank, Frederick C., assignor.)
Bendix Brake Company. (See McConkey, Montgomery W., assignor.)
Bendix Brake Company. (See Peterson, John W., assignor.)
Bendix Brake Company. (See Sanford, Roy S., assignor.)
Bendix Brake Company. (See Van Buskirk, Robert N., assignor.)
Bendix Brake Company. (See Whitworth, Stanley, assignor.)
Bendix-Cowdrey Brake Tester Inc. (See Donavan, Paul J., assignor.)
Benjamin Electric Manufacturing Company. (See Benjamin, Reuben B., assignor.)
Benjamin Electric Manufacturing Company. (See Phillips, Paul D., assignor.)
Benjamin, Reuben B., Chicago, assignor to Benjamin Electric Manufacturing Company, Des Plaines, Ill. Flash light. 1,898,756; Feb. 21.
Benjamin, Reuben B., Chicago, assignor to Benjamin Electric Manufacturing Company, Des Plaines, Ill. Condenser. 1,898,808; Feb. 21.
Bennett, Irving T., assignor, by mesne assignments, to Metropolitan Engineering Company, Brooklyn, N. Y. Sheet metal radiator. 1,898,028; Feb. 21.
Berg, Robert B., Aurora, assignor to National Rail Joint Corporation, Chicago, Ill. Cleaning metal objects. 1,898,809; Feb. 21.
Bergmann, Reinhard, West Allis, assignor to Harnischfeger Corporation, Milwaukee, Wis. Excavator. 1,898,810; Feb. 21.
Berliner, Robert. (See Schmidt, R. E., and Berliner.)
Berry, Earl E., and T. C. Roberts, assignors to Beloit Iron Works, Beloit, Wis. Method of and apparatus for making paper. 1,898,611; Feb. 21.
Berthold, Erich. (See Kuns, M. A., Koberle, and Berthold.)
Biers, Howard W. R., Forest Hills, N. Y., assignor to Oxweld Acetylene Company. Welding rod. 1,898,933; Feb. 21.
Bigelow, George E., et al. (See Weis, Arthur R., assignor.)
Bigelow-Sanford Carpet Co. (See Holland, Thomas J., assignor.)
Binay, Robert H. M. L., Paris, assignor to Office General des Specialites Automobiles, la Garenne-Colombes, Seine, France. Repairing element for vulcanisers. 1,898,235; Feb. 21.
Birdsboro Steel Foundry and Machine Company. (See Pfeil, Walter H., assignor.)
Birkenstein, George. (See Svendsen, Svend S., assignor.)
Birtch, Fred W., Lexington, Mich., assignor of one-half to Harry A. Shaw. Thermostatically controlled heater. 1,898,419; Feb. 21.
Black & Decker Manufacturing Company, The. (See Baker, James N., assignor.)
Black & Decker Manufacturing Company, The. (See Tschudi, Erwin W., assignor.)
Blair Strip Steel Company. (See Lewis, Lester L., assignor.)
Blank, Ernst, Eitorf-on-the-Sieg, Germany. Sterile packing for dressings. 1,898,236; Feb. 21.
Blauvelt, George R., San Diego, Calif. Machine tool. 1,898,285; Feb. 21.
Bleier, William D., assignor to Continental Baking Company, New York, N. Y. Tin cleaning and greasing machine. 1,898,653; Feb. 21.
Bliss, Sherwood C. (See Howe, S. B., and Bliss.)
Blumenthal, B., & Co. (See Daniel, Louis, assignor.)
Boaler, William H. (See Welch, S. A., Guyler, Ashby, and Boaler.)
Boeco, John, Camden, N. J. Revolver rifle. 1,898,237; Feb. 21.
Bock, Walter, and E. Tschunkur, Cologne-Mulheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Polymerization product of butadiene-1.3 hydrocarbons and making same. 1,898,522; Feb. 21.
Bockmann, John E., St. Edward, assignor of fifty-two per cent to W. C. Foster, York, Nebr. Vacuum corn picker. 1,898,757; Feb. 21.
Böger, Otto, Dessau in Anhalt, and W. Müller, Leipzig, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Triarylmethane dyes. 1,898,523; Feb. 21.
Böhm, Otto, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Fading elimination. 1,898,477; Feb. 21.
Bohman, George I., New York, N. Y. Lid clamp for containers. 1,898,934; Feb. 21.
Bolton, Joseph, Windsor, Ontario, Canada. Wrench. 1,898,420; Feb. 21.
Bond Foundry and Machine Company. (See Noros, George G., assignor.)
Bonnar-Vawter Fanform Company, Inc. (See Steenrod, William J., assignor.)
Bodsey, Edward W. N., Detroit, Mich. Fire extinguisher hand hole and cover. 1,898,117; Feb. 21.
Booth, Earl C. (See Noblitt, Q. G., and Booth.)
Borden Company, The. (See Barnes, John S., assignor.)
Borden, Stephen W. (See Roe, Ralph C., assignor.)
Borgen, Olai, Renner, S. Dak. Elevating device. 1,898,711; Feb. 21.

Bosshardt, Karl, assignor to Hermann Uteg, Metallwaren G. m. b. H., Berlin, Germany. Apparatus for supplying fuel to floatless carburetors. 1,898,811; Feb. 21.
Boston Blacking & Chemical Co. (See Nash, Russell K., assignor.)
Boston Wire Stitcher Company. (See Maynard, Arthur H., assignor.)
Bottoms, Robert R., assignor, by mesne assignments, to Vogt Instant Freezers Incorporated, Louisville, Ky. Refrigerating apparatus for packaged goods. 1,898,758; Feb. 21.
Bovard, Charles M., Grove City, Pa., assignor to Cooper-Bessemer Corporation, Mount Vernon, Ohio. Piston pin 1,898,169; Feb. 21.
Bowman, Glenn W., Haymarket, assignor to Evoly L. Gough, Nokesville, Va. Combination cigarette holder, ash receiver and igniter. 1,898,077; Feb. 21.
Bowser, Percy L. (See Flammang, J., and Bowser, assignors.)
Boyles, Frank M., Brooklyn, N. Y. Food jelly. 1,898,336; Feb. 21.
Brackenbury, Aloysius G. (See Le Clair, L. J., and Brackenbury.)
Bradley, Albert, assignor to Northwestern Barb Wire Company, Sterling, Ill. Nail wire guide. 1,898,286; Feb 21.
Bradley, Linn, Montclair, N. J., and E. P. McKeefe, assignors to Bradley-McKeefe Corporation, New York, N. Y. Manufacture of pulp and paper. 1,898,612; Feb. 21.
Bradley, Linn, Montclair, N. J., and E. P. McKeefe, Plattsburg, assignors to Bradley-McKeefe Corporation, New York, N. Y. Manufacture of pulp, etc. 1,898,613; Feb. 21.
Bradley-McKeefe Corporation. (See Bradley, L., and McKeefe, assignors.)
Brady, Charles V., and W. Case, assignors to Bemis Bro. Bag Company, St. Louis, Mo. Fastener. 1,897,998; Feb. 21.
Brady, Edmund W., assignor to The Brady Electric & Manufacturing Company, New Britain, Conn. Lamp lead bracket. 1,898,614; Feb. 21.
Brady Electric & Manufacturing Company, The. (See Brady, Edmund W., assignor.)
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation. Long Island City, N. Y. Brake system for automotive vehicles. 1,898,287; Feb. 21.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Bragger, William J., assignor of one-half to Olde Homesteade Products Co., Los Angeles, Calif. Dispensing apparatus. 1,898,866; Feb. 21.
Brakhage, George F., Watertown, S. Dak. Pump equalizer. 1,898,238; Feb. 21.
Brand, Harry E. (See Brokvist, E. R., and Fausel, assignors.)
Brandriff, Alfred, Millville, N. J., assignor to Mueller Co., Decatur, Ill. Pipe cutter and valve inserting machine. 1,898,035; Feb. 21.
Brashear, Douglas W., Richmond, Va. Auction warehouse. 1,898,421; Feb. 21.
Brauer, Arthur J., and F. P. Wagner, St. Louis, Mo. Device for attaching wooden heels. 1,898,288; Feb. 21.
Braun, Karl, Vienna, Austria. Device for cleaning pipe bowls. 1,898,239; Feb. 21.
Brawley, David A., Flint, Mich. Lubricated hinge. 1,898,936; Feb. 21.
Breslauer, Milton K., New York, N. Y.. Box. 1,898,654; Feb. 21.
Bressler, Robert E., Hammond, and D. V. Moses, assignors to Graver Corporation, East Chicago, Ind. Salt container for zeolite regeneration. 1,898,812; Feb. 21.
Brewer-Titchener Corporation, The. (See Card, Charles S., assignor.)
Brewster, Harry C., assignor to Oil City Iron Works, Shreveport, La. Drilling apparatus. 1,898,937; Feb. 21.
Bridges, Edward G., Anderson, Ind., assignor to Lynch Corporation. Glass gathering tank. 1,898,289; Feb. 21.
British Radiostat Corporation, Limited. (See Robinson, James, assignor.)
Broadbent, John H., Ridley Park, Pa. Method and apparatus for preventing improper cut-in of cab signals. 1,898,478; Feb. 21.
Brodersen, Karl. (See Marx, K., and Brodersen.)
Brokvist, Eric R., Brooklyn, N. Y., and C. A. Fausel, Glenridge, N. J., assignors to H. R. Brand, New York, N. Y. Automatic cooking machinery. 1,897,999; Feb. 21.
Bronson Reel Company. (See Schafer, John V., assignor.)
Brooks, Robert A., Chicago, Ill. Water compression system. 1,898,337; Feb. 21.
Brown, Carl D., assignor to Draper Corporation, Hopedale, Mass. Loom control. 1,898,712; Feb. 21.
Brown, Douglas R., assignor to The Oil County Specialties Mfg. Co., Coffeyville, Kans. Power unit for oil wells. 1,898,290; Feb. 21.
Brown, Dycka S., Madison, Wis. Utility cabinet for beauty parlors. 1,898,867; Feb. 21.
Brown, Edele J., Chicago, Ill. Cleaning and oiling device for oil stones. 1,898,170; Feb. 21.
Brown Instrument Company, The. (See Harrison, Thomas R., assignor.)
Browning, J. M. & M. S., Company. (See Browning, Marriner A., assignor.)
Browning, Marriner A., assignor to J. M. & M. S. Browning Company, Ogden, Utah. Trigger mechanism. 1,898,291; Feb. 21.
Browning, Val A., Ogden, Utah. Trigger mechanism. 1,898,000; Feb. 21.
Bucyrus-Erie Company. (See Lehman, W., and Fyke, assignors.)
Budd Wheel Company. (See Wiles, Charles L., assignor.)
Buetefisch, Heinrich. (See Schneider, C., and Buetefisch.)
Bulaich, John M., Watsonville, Calif. Slicing mechanism. 1,898,338; Feb. 21.
Bullard Company, The. (See Dunn, Thomas E., assignor.)
Bullard, W. R., et al. (See Malone, Adolph W., assignor.)
Bunnell, Earl C., Stratford, Conn. Pouch. 1,898,171; Feb. 21.
Burgess, C. F., Laboratories, Inc. (See Shoemaker, Milton J., assignor.)
Burnett, Richard W., Chicago, Ill. Slack adjuster for railway car brakes. 1,898,029; Feb. 21.
Burt, Henry J., jr., Wheaton, assignor to The Wallfill Company, Chicago, Ill. Apparatus for handling comminuted material. 1,898,750; Feb. 21.
Burton, Henry E., assignor to M. P. Moller, Inc., Hagerstown, Md. Organ valve. 1,898,240; Feb. 21.
Byrnes, James H., assignor to Electron Lights, Inc., San Francisco, Calif. Luminous tube. 1,898,615; Feb. 21.
California Cap Company. (See Hammond, John A., assignor.)
Camel Company. (See Madland, Thorvald, assignor.)
Campbell, Murry M. (See Hohmann, Anna F. and P. F., and Campbell.)
Carborundum Company, The. (See Forse, E. B., and Geiger, assignors.)
Carborundum Company, The. (See Hutchins, Otis, assignor.)
Card, Charles S., assignor to The Brewer-Titchener Corporation, Cortland, N. Y. Forging insulator caps. 1,898,574; Feb. 21.
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Carlson, John I. W., Scottdale, Pa. Lock. 1,898,241; Feb. 21.
Carlson, John W., assignor to Hedmen Manufacturing Company, Chicago, Ill. Check writer. 1,898,030; Feb. 21.
Carlson, Oscar, Brooklyn, N. Y. Skylight. 1,898,813; Feb. 21.
Carmer, Dana M., Philadelphia, Pa. Stocking. 1,898,001; Feb. 21.
Carol Supplies, Inc. (See Bailey, Clarence R., assignor.)
Carpenter, L. E., & Co., Inc. (See Hutchman, James E., assignor.)
Carrier Engineering Corporation. (See Le Grand, Joseph M., assignor.)
Carrier Research Corporation. (See Carrier, W. H., and Lea, assignors.)
Carrier, Willis H., Essex Fells, N. J., and E. S. Lea, Morrisville, Pa., assignors, by mesne assignments, to Carrier Research Corporation, Newark, N. J. Heat exchange device and making the same. 1,898,713; Feb. 21.
Carter, Andrew G., assignor to The Carter Products Company, Inc., Grand Rapids, Mich. Apparatus for manufacturing band saw wheel tires and the like. 1,898,031; Feb. 21.
Carter Products Company, The. (See Carter, Andrew S., assignor.)
Caruso, Santi T., Ardmore, Pa. Cord attaching device for curtain and portière traversers. 1,898,938; Feb. 21.
Case, William. (See Brady, C. V., and Case.)
Celanese Corporation of America. (See Dreyfus, H., Dickie, and Taylor, assignors.)
Celanese Corporation of America. (See Welch, S. A., Guyler, Ashby, and Boaler, assignors.)
Chadwick, Lee S., Shaker Heights Village, and M. Resek, Cleveland Heights, assignors to perfection Stove Company, Cleveland, Ohio. Generator-absorber for intermittent absorption refrigerators. 1,898,616; Feb. 21.
Champlin, Tint, Little Valley, N. Y. Fishing knife. 1,898,422; Feb. 21.
Chandler, Edward F., Brooklyn, N. Y. Remote control system. 1,898,242; Feb. 21.
Chapman, Verni J. (See Thompson, L. B., and Chapman.)
Charlton, George, assignor to Rich Tool Company, Detroit, Mich. Making tappets. 1,898,814; Feb. 21.
Charnaux Patent Corset Company Limited, The. (See Greig, Jeanne F., assignor.)
Chauvet, Oliver D., North Bergen, N. J. Direction indicating safety light. 1,898,655; Feb. 21.
Chemical Construction Corporation. (See Hechenbleikner, I., and Titlestad, assignors.)
"Chemical Works Formerly Sandoz." (See von Allmen, Samuel, assignor.)
Chicago Carton Company. (See Johnson, Edward W., assignor.)
Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)
Chrisman, Charles S., West Chester, assignor to The U. G. I. Contracting Company, Philadelphia, Pa. Apparatus for making carbureted water gas. 1,898,575; Feb. 21.
Christian, Frank T., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,898,423; Feb. 21.

Christiansen, Walter G., Bloomfield, N. J., and A. E. Jurist, Brooklyn, assignors to E. R. Squibb & Sons, New York, N. Y. Antipyretic compositions containing amidopyrin. 1,898,002; Feb. 21.
Chrysler Corporation. (See Redford, Carlyle, assignor.)
Chryst, William A., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Double acting shock absorber. 1,898,339; Feb. 21.
Church, Lewis H., Westfield, assignor to The Thomas & Betts Co., Elizabeth, N. J. Union. 1,898,617; Feb. 21.
Clapp, Kenneth S., and T. H. Kickhoff, Cleveland, Ohio. Lubricator pump. 1,898,815; Feb. 21.
Clary, Jan P. (See Gustafson, Edwin P., assignor.)
Cleveland Rock Drill Company, The. (See Curtis, John C., assignor.)
Cleveland Rock Drill Company, The. (See Greve, Louis W., assignor.)
Clevenger, Galen H., Brookline, Mass., assignor to United States Smelting, Refining & Mining Company, Portland, Me. Pipe closure. 1,898,714; Feb. 21.
Clinton Corn Syrup Refining Company. (See Pattillo, D. K., Corson, and Thompson, assignors.)
Clipper Belt Lacer Company. (See Diamond, James K., assignor.)
Clokey, Allison A., Rutherford, N. J., assignor to International Communications Laboratories, Inc., New York, N. Y. Increasing visibility of stock quotation boards. 1,898,760; Feb. 21.
Clokey, Allison A., Rutherford, assignor to International Communications Laboratories, Inc., Newark, N. J. Step-by-step transmitter. 1,898,761; Feb. 21.
Clokey, Allison A., Rutherford, assignor to International Communications Laboratories, Inc., Newark, N. J. Selecting system using a single magnet. 1,898,762; Feb. 21.
Cloud, Raymond T., Chicago, Ill., assignor, by mesne assignments, to General Theatres Equipment, Inc., New York, N. Y. Ionic bombardment light source. 1,898,032; Feb. 21.
Coble, Ernest L. and S. L., Alliance, Ohio. Disposing of garbage. 1,898,243; Feb. 21.
Coble, Sallie L. (See Coble, Ernest and S. L.)
Coghlan, Thomas G., Elizabeth, and E. A. Johnsen, deceased, Mountain Lakes, N. J.; S. A. Johnsen, executrix. Furnace. 1,898,479; Feb. 21.
Cohen, Ralph, assignor to Perfection Steel Body Company, Galion, Ohio. Burial vault. 1,898,939; Feb. 21.
Cohn, Abraham, St. Louis, Mo. Shoe and making same. 1,898,033; Feb. 21.
Cole, Elmer K., assignor to Wej-Lock Manufacturing Company, Winterset, Iowa. Earth anchor. 1,898,340; Feb. 21.
Collins, Howard W., Toledo, Ohio, assignor to Owens-Illinois Glass Company. Framework for air filters. 1,898,424; Feb. 21.
Collins, John G. (See Kaw, H., and Collins.)
Columbia Axle Company, The. (See Ragan, Frederick H., assignor.)
Columbus McKinnon Chain Corporation. (See Cotesworth, A., and Robins, assignors.)
Commercial Solvents Corporation. (See Wilson, Perry W., assignor.)
Comstock, Daniel F., Boston, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc. Vacuum insulation. 1,898,172; Feb. 21.
Comstock, Daniel F., Boston, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc. Vacuum insulation. 1,898,977; Feb. 21.
Conlin, Frederick, New York, N. Y. Process and apparatus for electroplating. 1,898,618; Feb. 21.
Conlon, Thomas A. (See Goebert, E. C., and Conlon.)
Conrath, George A., Chicago, Ill., assignor of one-half to C. S. Denman. Pulverized fuel system. 1,898,341; Feb. 21.
Consortium für Elektrochemische Industrie. (See Herrmann, W. O., and Baum, assignors.)
Continental Baking Company. (See Bleier, William D. assignor.)
Continental Can Company. (See Anderson, Ernst D., assignor.)
Cooke, Leighton B. (See Arnold, H. B., and Cooke.)
Cooper-Bessemer Corporation. (See Bovard, Charles M., assignor.)
Cooper-Bessemer Corporation. (See Stamsvik, Alfred L. assignor.)
Cooper, Jesse E., assignor to Western Venetian Blind Co., Los Angeles, Calif. Venetial blind bottom rail construction and hanging. 1,898,940; Feb. 21.
Cooper, William, & Nephews, Incorporated. (See Timson, Charles E., assignor.)
Corkill, Frederick W., Los Angeles, Calif., assignor to Pacific Coast Borax Company. Rotary kiln. 1,898,480; Feb. 21.
Cornell Contracting Corporation. (See Kent, Samuel, assignor.)
Corson, George E. (See Pattillo, D. K., Corson, and Thompson.)
Cotesworth, Alfred, Kenmore, and E. E. Robins, assignors to Columbus McKinnon Chain Corporation, Tonawanda, N. Y. Hook block for hoists. 1,898,524; Feb. 21.
Cottrell, C. B., & Sons Company. (See Barber, Howard M., assignor.)
Cottrell, C. B., & Sons Company. (See Greenway, Richard J., assignor.)
Cowardin, Harry A. (See Cowardin, Samuel P. and H. A.)
Cowardin, Samuel P. and H. A., Richmond, Va. Atomizer. 1,898,763; Feb. 21.
Cowen, Robert, and A. D. Jordan, assignors to Appleton Rubber Company, Franklin, Mass. Surfacing material. 1,898,425; Feb. 21.
Cowle, Alexander, Salt Lake City, Utah, assignor of one-half to George R. Roberts, Redondo Beach, Calif. Amusement device. 1,898,868; Feb. 21.
Cox, Albert F., Warsaw, Ill. Igniter. 1,898,991; Feb. 21.
Crafts, Curtis S., Oak Park, assignor to The Goss Printing Press Co., Chicago, Ill. Printing press. 1,898,034; Feb. 21.
Crane Co. (See Olson, C. A., and Magos, assignors.)
Cremac Marketing Company, Limited. (See Richards, Laurence S. and E. M., assignors.)
Crickmerk, Charles S., assignor to The Guiberson Corporation, Dallas, Tex. Flexible swab body. 1,898,292; Feb. 21.
Cross, Walter M., Kansas City, Mo., assignor to Babcock & Wilcox Co., New York, N. Y. Steam generator. 1,898,078; Feb. 21.
Cross, Walter M., Kansas City, Mo., assignor to Babcock & Wilcox Co., New York, N. Y. Steam generator. 1,898,079; Feb. 21.
Crossen, George M., Minneapolis, Minn. Valve. 1,898,816; Feb. 21.
Crossley, Norman, Huddersfield, England. Manufacture of yarns or threads. 1,898,941; Feb. 21.
Crowell, James B., & Son. (See Crowell, John A., assignor.)
Crowell, John A., assignor to James B. Crowell & Son, Walkill, N. Y. Brick mold. 1,898,715; Feb. 21.
Culver, Charles A., Northfield, Minn., assignor to Wired Radio, Inc., New York, N. Y. Picture transmission. 1,898,080; Feb. 21.
Curtis, John C., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Sheathing driver. 1,898,984; Feb. 21.
Cuthbert, William R., assignor to W. A. Sheaffer Pen Co., Fort Madison, Iowa. Container. 1,898,342; Feb. 21.
Cutler, Denzil A. (See Franklin, C. S., and Cutler.)
Cutler-Hammer, Inc. (See Meuer, George J., assignor.)
Dabrasky, August, Washington, D. C. Fuse setting machine. 1,898,081; Feb. 21.
Dadd, Frank E., Bedford, assignor of one-half to J. T. Shevlin, London, England. Brake mechanism. 1,898,869; Feb. 21.
Daimler-Benz Aktiengesellschaft. (See Köhler, Otto, assignor.)
D'Amico, Angelo, M. W. Hild, and W. H. Wilcox, Stockton, Calif. Portable electric metal melter. 1,898,481; Feb. 21.
Daniel, Louis, Brooklyn, assignor to B. Blumenthal & Co. Inc., New York, N. Y. Button. Des. 80,296; Feb. 21.
Dannell, Arthur G., New York, N. Y., assignor, by mesne assignments, to Wilcox-Rich Corporation, Detroit, Mich. Fabricating composite metal articles. 1,898,426; Feb 21.
Dare, Samuel T., assignor of one-fourth to M. J. Phillips, one-fourth to J. H. Edwards, and one-fourth to J. C. Popham, New Westminster, British Columbia, Canada. Drink dispensing machine. 1,898,619; Feb. 21.
Darroch, Gourley, executor, et al. (See Apple, Vincent G.)
Daub, Edward, assignor to Edna A. Sander, Los Angeles, Calif. True running table slide. 1,898,620; Feb. 21.
Davenport, Talmon A. (See Eksergian, C. L., and Davenport.)
Davidson, Frederic A., Bayside, assignor to American Safety Device Co., New York, N. Y. Dirt chute. 1,898,343; Feb. 21.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Press with pinion leverage. 1,898,293; Feb. 21.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating system. 1,898,003; Feb. 21.
Davis, Walter W., et al. (See Joiner, Sylvester L., assignor.)
Dawson, Joseph W. (See Herold, J. L., and Dawson.)
Day, Robert M., assignor to Dewey and Almy Chemical Company, Cambridge, Mass. Rubber bonded asbestos and making. 1,898,985; Feb. 21.
Deatherage, George E., Boston, Mass. Window box frame. 1,898,082; Feb. 21.
DeForest Radio Company. (See Du Mont, Allen B., assignor.)
Deibel, Cyril P., Lakewood, Ohio. Dry cell. 1,898,344; Feb. 21.
Delco Products Corporation. (See Bates, Ralph L., assignor.)
Delco Products Corporation. (See Chryst, William A., assignor.)
Delco Products Corporation. (See Teeter, Wilford H., assignor.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
Delco-Remy Corporation. (See Riedel, Walter W., assignor.)
Delray Corporation. (See Pieretti, George, assignor.)

Delta Star Electric Company. (See Rab, Joseph C., assignor.)
Demarest, Charles S., Ridgewood, N. J., assignor to American Telephone and Telegraph Company. Signaling system. 1,898,118; Feb. 21.
Demka, Robert, and R. Knapp, Buffalo, N. Y. Pressure filling machine. 1,898,004; Feb. 21.
Denman, Charles S. (See Conrath, George A., assignor.)
Denning, Paul S., assignor to F. E. Schundler, Joliet, Ill. Coloring granular and other material. 1,898,345; Feb. 21.
De Pape, Ferdinand, Uccle, assignor to La Soudure Electrique Autogène Societe Anonyme, Brussels, Belgium. Saline coatings and making the same. 1,898,427; Feb. 21.
Devon Manufacturing Company. (See Ajam, Mustafa J., assignor.)
Dewey and Almy Chemical Company. (See Day, Robert M., assignor.)
Diamond, James K., assignor to Clipper Belt Lacer Company, Grand Rapids, Mich. Link belt. 1,898,035; Feb. 21.
Diamond Match Company, The. (See Donnelly, Joseph C., assignor.)
Dick, Burns, Ferguson, assignor to Wagner Electric Corporation, St. Louis, Mo. Braking apparatus. 1,898,036; Feb. 21.
Dickie, William A. (See Dreyfus, H., Dickie, and Taylor.)
Diebold Safe & Lock Company, The. (See Roos, Adolph J., assignor.)
Diescher, S. & Sons. (See Diescher, Samuel E., assignor.)
Diescher, Samuel E., assignor to S. Diescher & Sons, Pittsburgh, Pa. Tinplate feeding mechanism. 1,898,005; Feb. 21.
Dieserud, Helge C., Montclair, N. J., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,898,346; Feb. 21.
Dietz, Frank J., Baltimore, Md., assignor to Alvey Manufacturing Company, St. Louis, Mo. Conveying and loading device. 1,898,037; Feb. 21.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Aperture plate for power's projection machines. 1,898,173; Feb. 21.
Dinger, Henry C., Annapolis, Md. Water tube steam boiler. 1,898,428; Feb. 21.
Distillers Company Limited, The. (See Hutchinson, Henry B., assignor.)
Ditchfield, Frank, assignor to The Youngstown Steel Door Company, Cleveland, Ohio. Hasp fastener. 1,898,347; Feb. 21.
Dobbie, Gavin C. G. (See Armstrong, A. D., and Dobbie.)
Doble Steam Motors Corporation. (See Doble, Warren, assignor.)
Doble, Warren, Oakland, Calif., assignor to Doble Steam Motors Corporation, Wilmington, Del. Normalizer. 1,898,083; Feb. 21.
Dodge, Adiel Y., South Bend, Ind. Electric switch. 1,898,006; Feb. 21.
Dodge, Adiel Y., assignor to Bendix Brake Company, South Bend, Ind. Operating connection. 1,898,294; Feb. 21.
Dodrill, Delbert C., Booth, W. Va., assignor to Jay F. Hoover, Buffalo, N. Y. Automatic flow regulator. 1,898,244; Feb. 21.
Doheny-Stone Drill Co. (See Stone, Frederick, assignor.)
Doherty, Henry L., assignor, by mesne assignments, to Heat Treating Company, New York, N. Y. Distilling oil. 1,898,245; Feb. 21.
Doherty, Henry L., assignor, by mesne assignments, to Heat Treating Company, New York, N. Y. Apparatus for distilling oils. 1,898,246; Feb. 21.
Doherty Research Company. (See Merley, Sylvan R., assignor.)
Doichinoff, Steve. (See Evanoff, N. S., and Doichinoff.)
Dole, Raymond C., Ashley, Ind. Toy. 1,898,817; Feb. 21.
Domenego, Moriz, Vienna, Austria. Bookmark. 1,898,429; Feb. 21.
Domrics, Otto, Santa Ana, and O. Piepenbrink, Garden Grove, Calif.; said Piepenbrink assignor to said Domrics. Disk furrowing and blocking machine. 1,898,870; Feb. 21.
Donahue, John F., and J. A. McMahon, assignors to John E. Mitchell Company, St. Louis, Mo. Heel-building plate. 1,898,942; Feb. 21.
Donavan, Paul J., Pomona, Calif., assignor to Bendix-Cowdrey Brake Tester Inc., Fitchburg, Mass. Brake testing machine. Re18,745; Feb. 21.
Donnelly, Joseph C., Barberton, Ohio, assignor, by mesne assignments, to The Diamond Match Company. Match machine. 1,898,716; Feb. 21.
Donnelly, Joseph C., Barberton, Ohio, assignor, by mesne assignments, to The Diamond Match Company. Machine for packing matches. 1,898,717; Feb. 21.
Dorer, Primus O., assignor of one-half to A. G. Smith, London, England. Pump. 1,898,348; Feb. 21.
Dorsett, James D. (See Koontz, David R., assignor.)
Dorsey, Dana A., Miami, Fla. Aeroplane. 1,898,430; Feb. 21.
Dorsey, Howard E. (See Enzor, Ora K., assignor.)
Doughty, Howard W., Amherst, Mass. Fire extinguisher. 1,898,482; Feb. 21.
Douglas, Harry A., Bronson, Mich. Lamp assembly means. 1,898,295; Feb. 21.
Dove, Leonard P., assignor, by mesne assignments, to R. M. Stee, Minot, N. Dak., trustee. Dyes and making same from carbonaceous material. 1,898,247; Feb. 21.
Dow Chemical Company. (See Barstow, Edwin O., assignor.)
Dow Chemical Company, The. (See Barstow, E. O., and Heath, assignors.)
Dow Chemical Company, The. (See Gann, J. A., Reid, and Reimers, assignors.)
Down, Sidney G., Edgewood, and C. C. Farmer, Pittsburgh, assignors to The Westinghouse Air Brake Company, Wilmerding, Pa. Spring mechanism for fluid pressure brakes. 1,898,525; Feb. 21.
Drader, Joseph C., Detroit, Mich., assignor to Michigan Tool Company. Lead testing machine. 1,898,084; Feb. 21.
Draper Corporation. (See Brown, Carl D., assignor.)
Dray, Clarence H., et al. (See Wert, Charles M., assignor.)
Dressel, Oskar, Anton Ossenbeck, Cologne-Mulheim, and E. Tietze, Cologne-on-the-Rhine, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Watersoluble urea compounds containing heterocyclic nuclei in the molecule. 1,898,431; Feb. 21.
Dreyfus, Henry, London, and W. A. Dickie, and W. I. Taylor, Spondon, near Derby, England, assignors to Celanese Corporation of America. Production of artificial filaments, yarns or threads. 1,898,085; Feb. 21.
Dring, Thomas A., Ringwood, England. Flying machine. 1,898,764; Feb. 21.
Drury, Albert D., Dorchester, Mass. Holding device. 1,898,349; Feb. 21.
Dubilier, William, New Rochelle, N. Y. Flasher device. 1,898,174; Feb. 21.
Du Mont, Allen B., Bloomfield, assignor to De Forest Radio Company, Jersey City, N. J. Radiotube. 1,898,351; Feb. 21.
Du Mont, William B. (See Koehler, O. E., and Du Mont.)
Duner, Sven, Wheaton, Ill. Water closet. 1,898,656; Feb. 21.
Duner, Sven, Wheaton, Ill. Water closet. 1,898,657; Feb. 21.
Dunham C. A., Company. (See Dwyer, Lawrence P., assignor.)
Dunham, George W., Utica, N. Y., assignor, by mesne assignments, to The Whirldry Corporation, New Haven, Conn. Washing machine. 1,898,038; Feb. 21.
Dunlop Rubber Company. (See Twiss, D. F., and Murphy, assignors.)
Dunn, Thomas E., Bridgeport, Conn., assignor to The Bullard Company. Electrocleaning process. 1,898,765; Feb. 21.
Dünnebier, Max. (See Winkler, A., and Dünnebier.)
Dunzweiler, Carl J., assignor to Willard Storage Battery Company, Cleveland, Ohio. Vent plug for storage batteries. 1,898,718; Feb. 21.
Du Pont, E. I., de Nemours & Company. (See Barnhart, George, assignor.)
Du Pont, E. I., de Nemours & Company. (See Gauerke, Chester G., assignor.)
Du Pont, E. I., de Nemours & Company. (See Miller, Frederick W., jr., assignor.)
Du Pont, E. I., de Nemours and Company. (See Prince, Edmond, assignor.)
Du Pont Rayon Company. (See Niogret, Henri F., assignor.)
Du Pont Rayon Company. (See Penche, Jean G., assignor.)
Dwyer, Lawrence P., Winnetka, Ill., assignor to C. A. Dunham, Company, Marshalltown, Iowa. Removable baseboard for concealed radiators. 1,898,526; Feb. 21.
Dyer, Tom G., assignor to Standard Products Company, Des Moines, Iowa. Preparing supplemental food product. 1,898,350; Feb. 21.
Earnheart, Paul, De Soto, Kans., and C. W. Smith, Hammond, Ind., assignors to Standard Oil Company, Chicago, Ill. Tank wagon construction. 1,898,483; Feb. 21.
Eastern Tool & Manufacturing Co. (See Peterson, Carl E., assignor.)
Eaton Manufacturing Company. (See Monteith, John C., assignor.)
Eaton Manufacturing Company. (See Veale, George W., assignor.)
Eaton, Paul B. (See McGee, Kay C., assignor.)
Eckert, Fritz, Berlin, Germany, assignor of one-fourth to W. A. Morton and one-fourth to P. L. Geer, Pittsburgh, Pa. Producing homogeneous glass in tanks. 1,898,039; Feb. 21.
Eclipse Aviation Corporation. (See Lansing, Raymond P., assignor.)
Eclipse Machine Company. (See Christian, Frank T., assignor.)
Eclipse Machine Company. (See McNeil, Charles I., assignor.)
Eclipse Machine Company. (See Slayton, Robert E., assignor.)
Edison, Thomas A., Incorporated. (See Johnson, Claude T., assignor.)
Edward, James H., et al. (See Dare, Samuel T., assignor.)
Edwards, Herbert C., assignor to Packard Motor Car Company, Detroit, Mich. Diesel engine. 1,898,119; Feb. 21.

Edwards, Paul S., Fort Meade, Md., and Constantin D. Barbulesco, Dayton, Ohio. Reactance controlled relay. 1,898,432; Feb. 21.

Eggleston, Smith, St. Paul, assignor to Standard Conveyor Company, North St. Paul, Minn. Conveyer system with diverters. 1,898,818; Feb. 21.

Egry Register Company, The. (See Stern, Milton C., assignor.)

Eichner, Joseph, West Orange, N. J. Direction signal. 1,898,719; Feb. 21.

Eickhoff, Theodore H. (See Clapp, K. S., and Eickhoff, assignors.)

Eisenhut, Otto, Heidelberg, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of hydrogen and gas mixtures containing the same. 1,898,527; Feb. 21.

Eksergian, Carolus L., and T. A. Davenport, Detroit, Mich. Vehicle wheel. Des. 89,297; Feb. 21.

Eksergian, Carolus L., and T. A. Davenport, Detroit, Mich. Vehicle wheel. Des. 89,298; Feb. 21.

Elder, Reuben D., Macon, Ga. Valve holder. 1,898,720; Feb. 21.

Eldred, Byron E., New York, N. Y., assignor to Radio Corporation of America. Production of sound and sound picture record. 1,898,040; Feb. 21.

Electro-Mechanical Brake Company Limited. (See Smithson, John G., assignor.)

Electron Lights, Inc. (See Byrnes, James H., assignor.)

Elle, Conrad F., Chicago, Ill. Motor pulley. 1,898,433; Feb. 21.

Ellis, Henry C., assignor to Wm. C. Ellis & Sons Iron Works, Memphis, Tenn. Manhole cover. 1,898,871; Feb. 21.

Ellis, Wm. C., & Sons Iron Works. (See Ellis, Henry C., assignor.)

Enders, Hugo E., Belleville, assignor to Monroe Calculating Machine Company, Orange, N. J. Attachment for calculating machines. 1,898,819; Feb. 21.

Engels, Robert, and J. Rihosek, Vienna, Austria. Apparatus for varying the leverage of the link and lever gearing of vehicle brakes. 1,898,528; Feb. 21.

Enterprise Tool and Gear Corp. (See Proefke, Otto, assignor.)

Enzor, Ora K., assignor of one-fourth to H. E. Dorsey, Indianapolis, Ind. Electrolytic production of gases. 1,898,352; Feb. 21.

Ernecke, Albert. (See Seidel, W., and Ernecke.)

Evanoff, Nestor S., and Steve Doichinoff, Chicago, Ill. Piston and means for connecting the connecting rod thereto. 1,898,872; Feb. 21.

Evans, Amos J., Minneapolis, Minn. Brake mechanism. 1,898,820; Feb. 21.

Evans, Edwin R., Chicago, Ill. Vehicle brake mechanism. 1,898,434; Feb. 21.

Everett, Charles E., and R. E. Smith, assignors to The Massey-Harris Company, Racine, Wis. Cultivator attachment for tractors. 1,898,353; Feb. 21.

Ewald, Warren, Ardsley, assignor, by mesne assignments, to John J. Nesbitt, Inc., Holmesburg, Philadelphia, Pa. Fire protection mechanism for heating and ventilating units. 1,898,821; Feb. 21.

Ewart, Hubert E., Mount Lebanon, assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Working roll balance for a backed-up rolling mill. 1,898,007; Feb. 21.

Faiz, Paul, assignor of one-half to M. Helwig, St. Paul, Minn. Oil burner. 1,898,822; Feb. 21.

Farkas, Eugene J., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Vehicle shock absorber mounting. 1,898,721; Feb. 21.

Farmer, Clyde C. (See Down, S. G., and Farmer.)

Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Spring tester. 1,898,529; Feb. 21.

Farmer, Thomas E., Kansas City, Mo. Tie loading device. 1,898,120; Feb. 21.

Farrant, Henry J. (See Hess, E. E., and Farrant.)

Farrell, Frederick W., Brookfield, Mass., assignor, by mesne assignments, to Minnesota Mining & Manufacturing Company, St. Paul, Minn. Coated paper. Re18,742; Feb. 21.

Fassler, Peter W., assignor to General Motors Corporation, Detroit, Mich. Portable welder. 1,898,873; Feb. 21.

Faultless Caster Company. (See Noelting, William H., assignor.)

Fausel, Charles A. (See Brokvist, E. R., and Fausel.)

Fay, Edward J., New York, N. Y. Toilet brush with finger guide groove. Des. 89,299; Feb. 21.

Federal Telegraph Company. (See Shermund, Ralph C., assignor.)

Federle, Joseph C., Dayton, Ohio. Liquid level indicator. 1,898,766; Feb. 21.

Feeney, William P., Manistee, Mich. Felt drier. 1,898,041; Feb. 21.

Ferguson, Herman B., Philadelphia, Pa. Moth repellent. 1,898,621; Feb. 21.

Ferris, John P., assignor to The Oilgear Company, Milwaukee, Wis. Broaching machine. 1,898,576; Feb. 21.

Fickey, Ward L., Sioux City, Iowa. Transporting and delivering powdered material. 1,898,354; Feb. 21.

Fickey, Ward L., Sioux City, Iowa. Powdered material receiving, storage, and delivery container. 1,898,355; Feb. 21.

Fickey, Ward L., Sioux City, Iowa. Apparatus for transporting and delivering powdered material. 1,898,356; Feb. 21.

Fillauer, George W., Chattanooga, Tenn. Medicine dispenser. 1,898,435; Feb. 21.

Filtrol Company. (See Belden, Daniel S., assignor.)

Filtrol Company of California. (See Baylis, W. S., and Belden, assignors.)

Finnell, Walter S., Elkhart, Ind. Floor waxing machine. 1,898,357; Feb. 21.

Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Expansion and contraction joint. 1,898,943; Feb. 21.

Fischer, Franz J., and K. A. Sterzel, assignors to Koch & Sterzel Aktiengesellschaft, Dresden, Germany. High tension transformer. 1,898,944; Feb. 21.

Fitterer, Otto, Milwaukee, Wis. Stopper plug. 1,898,658; Feb. 21.

Fitzgerald Manufacturing Company, The. (See Fitzgerald, Patrick J., assignor.)

Fitzgerald Manufacturing Company, The. (See Reichold, Ludwig, assignor.)

Fitzgerald, Patrick J., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Electric utility device and motor assembly. 1,898,945; Feb. 21.

Fitzgerald, Patrick J., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Stand adjustment for electrical utility devices. 1,898,946; Feb. 21.

Fitzgerald, Patrick J., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Driving attachment for mixing bowls. 1,898,986; Feb. 21.

Flammang, John, University City, and P. L. Bowser, St. Louis, Mo., assignors to The Sterling Corporation, Wilmington, Del. Trunk piston. 1,898,296; Feb. 21.

Flattum, Clarence, et al. (See Stubkjare, Joseph A., assignor.)

Flockhart Co., The. (See Flockhart, James, assignor.)

Flockhart, James, assignor to The Flockhart Co., San Francisco, Calif. Sheet gauge. 1,898,530; Feb. 21.

Forbes, Gordon B., Garfield, Utah, assignor to American Smelting and Refining Company, New York, N. Y. Pulverizing mill. 1,898,823; Feb. 21.

Ford, Edwin H., assignor to Ford Meter Box Company, Wabash, Ind. Valve. 1,898,577; Feb. 21.

Ford, Henry, assignor to Ford Motor Company, Dearborn, Mich. Casting machine. 1,898,722; Feb. 21.

Ford Meter Box Company. (See Ford, Edwin H., assignor.)

Ford Motor Company. (See Farkas, Eugene J., assignor.)

Ford Motor Company. (See Ford, Henry, assignor.)

Ford Motor Company. (See Hess, Claude I., assignor.)

Ford Motor Company. (See Huff, Edward S., assignor.)

Ford Motor Company. (See Sorensen, Charles E., assignor.)

Ford Motor Company. (See Wellman, Charles E., assignor.)

Forse, Edwin B., and C. F. Geiger, Metuchen, N. J., assignors to Carborundum Company, Niagara Falls, N. Y. Sand seal for tunnel kilns. 1,898,042; Feb. 21.

Forstall, Armand W., Denver, Colo. Method and apparatus for turning tubular fabric. 1,898,824; Feb. 21.

Foster, Bontwell H., Maplewood, N. J., assignor to Morgan & Wright, Detroit, Mich. Form for manufacture of rubber articles and making same. 1,898,043; Feb. 21.

Foster, W. C. (See Bockmann, John E., assignor.)

Foster Wheeler Corporation. (See Frisch, Martin, assignor.)

Fowler, Thomas J., Chicago, Ill. Manifold. 1,898,825; Feb. 21.

Fox, Charles H., assignor to The Ahrens-Fox Fire Engine Company, Cincinnati, Ohio. Fire engine. 1,898,826; Feb. 21.

Fox, Fred G., Cortland, Ohio. Arms support for auto rumble seats. 1,898,008; Feb. 21.

Fox, Martin, assignor to The Seng Company, Chicago, Ill. Recess bed. 1,898,578; Feb. 21.

Fox, Merritt L., assignor to Houde Engineering Corporation, Buffalo, N. Y. Shock absorber. 1,898,622; Feb. 21.

Fox, Ned B., Norway, Mich. Building blocks. 1,898,297; Feb. 21.

Frank, Frederick C., assignor to Bendix Brake Company, South Bend, Ind. Brake adjusting means. 1,898,298; Feb. 21.

Frankart, Inc. (See Underberg, Henry, assignor.)

Franklin, Charles S., Los Angeles, and D. A. Cutler, Hollywood, Calif., assignors to General Electric Company. Alternating current generators. 1,898,827; Feb. 21.

Franklin Railway Supply Company. (See Vincent, Harry S., assignor.)

Frantz, Peter. (See Mohler, P., and Frantz.)

Frescott, Nicholas, sr., Inwood, assignor of one-fourth to C. J. Schwartz, Brooklyn, N. Y. Trunk supporting attachment. 1,898,436; Feb. 21.

Frey, John E., Pittsburgh, Pa. Combination lock. 1,898,947; Feb. 21.

Fricke, Arthur, Dortmund, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Welded lock joint for sheet piling. 1,898,767; Feb. 21.

Frigidaire Corporation. (See King, Jesse G., assignor.)

Frisch, Martin, Bronx, assignor to Foster Wheeler Corporation, New York, N. Y. Pulverizing apparatus. 1,898,086; Feb. 21.

Froussard, Albert F., St. Louis, Mo. Shoe heel machine. 1,898,044; Feb. 21.

Fruehauf Trailer Company. (See Reid, Frederick M., assignor.)

Fuel Oil Carburetion Co., Inc. (See Garibaldi, Giuseppe, assignor.)

Fuerst, Edwin W., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Bottle. Des. 89,300; Feb. 21.

Fuerst, Edwin W., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Jug. Des. 89,301; Feb. 21.

Fuller, Frederic B., assignor to Package Machinery Company, Springfield, Mass. Method and apparatus for registering printed webs of paper. 1,898,723; Feb. 21.

Fuller, Frederick L., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,898,045; Feb. 21.

Fullman, James M. G., Sewickley, Pa., assignor to National Electric Products Corporation, New York, N. Y. Plug for underfloor conduit systems. 1,898,087; Feb. 21.

Furrer, Emery C., Chicago, Ill., assignor, by mesne assignments, to The Teleregister Corporation, New York, N. Y. Device for indicating market. Re18,746; Feb. 21.

Fykse, Mitchell L. (See Lehman, W., and Fykse.)

Gaeke, Harry F. (See Sburlino, P., and Gaeke.)

Gaines, Ernest L., Seattle, Wash. Valve regulator. 1,898,248; Feb. 21.

Gaines, Walter S., jr., East Cleveland, assignor to The Reid Products Company, Cleveland, Ohio. Channel. 1,898,948; Feb. 21.

Galber, Harry, Lockport, N. Y., assignor, by mesne assignments, to Laminating Patents Corporation, Seattle, Wash. Art of gluing. 1,898,484; Feb. 21.

Gammeter, John R., Akron, Ohio. Pipe coupling. 1,898,623; Feb. 21.

Gann, John A., J. B. Reid, and H. A. Reimers, assignors to The Dow Chemical Company, Midland, Mich. Method for casting readily oxidizable metals such as magnesium and alloys thereof. 1,898,437; Feb. 21.

Gard, Clare D., assignor to Union Oil Company of California, Los Angeles, Calif. Method and apparatus for absorption of constituents from gases and vaporous mixtures. 1,898,579; Feb. 21.

Gardner Archibald D., assignor to Automotive Fan & Bearing Company, Jackson, Mich. Pump. 1,898,659; Feb. 21.

Garibaldi, Giuseppe, Stamford, Conn., assignor to Fuel Oil Carburetion Co., Inc., New York, N. Y. Fuel preheater. 1,898,580; Feb. 21.

Garr, Joseph M., Calumet City, Ill., assignor to Peoples Voting Machine Corporation, Knox, Ind. Voting machine. 1,898,874; Feb. 21.

Garvey, James, Los Angeles, Calif. Apparatus for dividing dough. 1,898,175; Feb. 21.

Gatesy, John J., Torrington, Conn. Clock. 1,898,660; Feb. 21.

Gauerke, Chester G., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Coating composition containing beta-eleostearin. 1,898,088; Feb. 21.

Gaylord Company. (See Gaylord, John F., assignor.)

Gaylord, John F., Muncie, Ind., assignor to The Gaylord Company, Inc., Homer, La. Clutch mechanism. 1,898,949; Feb. 21.

Gayne, Gideon R., assignor to Snap-On Tools, Inc., Kenosha, Wis. Vehicle spring spreader. 1,898,121; Feb. 21.

Gebhard, Louis A., and R. B. Meyer, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y. Temperature control system. 1,898,531; Feb. 21.

Gedris, William A., Grand Rapids, Mich. Ball bearing seat hanger. 1,898,176; Feb. 21.

Geer, Paul L., et al. (See Eckert, Fritz, assignor.)

Geffcken, Rudolf H. H., and R. H. Richter, Leipsig, Germany, assignors to Radio Patents Corporation, New York, N. Y. Electric relay device for indicating weak currents. 1,898,046; Feb. 21.

Geiger, Charles F. (See Forse, E. B., and Geiger.)

Gelder, Royal W., Greeley, Colo. Hardening lime mortar. 1,898,358; Feb. 21.

General Aniline Works, Inc. (See Böger, O., and Müller, assignors.)

General Aniline Works, Inc. (See Haynn, Richard, assignor.)

General Aniline Works, Inc. (See Herz, R., and Schubert, assignors.)

General Aniline Works, Inc. (See Herz, R., Schubert, and Hechtenberg, assignors.)

General Aniline Works, Inc. (See Kunz, M. A., Koberle, and Berthold, assignors.)

General Aniline Works, Inc. (See Muth, Friedrich, assignor.)

General Aniline Works, Inc. (See Nawiasky, P., Bauer, and Krauch, assignors.)

General Aniline Works, Inc. (See Neumann, Josef, assignor.)

General Aniline Works, Inc. (See Pfeffer, Ernst, assignor.)

General Aniline Works, Inc. (See Schmidt, R. E., and Berliner, assignors.)

General Electric Company. (See Bedford, Burnice D., assignor.)

General Electric Company. (See Franklin, C. S., and Cutler, assignors.)

General Electric Company. (See Klenle, Roy H., assignor.)

General Electric Company. (See Mey, Karl, assignor.)

General Electric Company. (See Noble, Paul O., assignor.)

General Electric Company. (See Schlingman, Paul F., assignor.)

General Electric Company. (See Thompson, L. B., and Chapman, assignors.)

General Electric Company. (See Wellings, J. G., Mayo, and Mathews, assignors.)

General Motors Corporation. (See Fassler, Peter W., assignor.)

General Spring Bumper Corporation. (See Moss, H. P., assignor.)

General Theatres Equipment, Inc. (See Cloud, Raymond T., assignor.)

Gentilini, Augusto. (See Papò, A., and Gentilini.)

Gesellschaft fur Teerverwertung, m. b. H. (See Spilker, A., and Zerbe, assignors.)

Gibbs, Frank B., Providence, R. I., assignor to Rhode Island Warp Stop Equipment Company, Portland, Me. Stopping device for looms or the like. 1,898,768; Feb. 21.

Giesecke, Julius. (See Haupt, A., Gümbel, and Giesecke.)

Gifford, Albert R., Los Angeles, Calif. Making ice cream in an electric refrigerator. 1,898,724; Feb. 21.

Gilbert, A. C., Company, The. (See Gilbert, Alfred C., assignor.)

Gilbert, Alfred C., North Haven, assignor to The A. C. Gilbert Company, New Haven, Conn. Toy locomotive. 1,898,009; Feb. 21.

Gilbert, Charles E., New York, N. Y., assignor to Gilbert & Hertz, Inc. Safety plug. 1,898,359; Feb. 21.

Gilbert & Hertz, Inc. (See Gilbert, Charles E., assignor.)

Gillen, George A., Jersey City, N. J., assignor, by mesne assignments, to Oakes Product Corporation, North Chicago, Ill. Steering wheel lock. 1,898,122; Feb. 21.

Gillette Sweeper Corporation. (See Smith, Earle R., assignor.)

Gillham, Willard C. (See Hutchinson, O. C. K., and Gillham.)

Gioiosa, Joseph, Milton, Mass. Machine for forming tubing around firework fuse material. 1,898,360; Feb. 21.

Girvaudan-Delawanna, Inc. (See Barbier, Henri, assignor.)

Glanzstoff-Courtaulds G. m. b. H. (See Paschke, Fritz, assignor.)

Glass, Perley R., Wayland, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Book cover folding machine. 1,898,128; Feb. 21.

Glaubits, Max, Berlin, and H. Haehn, Berlin-Finkenkrug, assignors to Versuchs- und Lehranstalt für Brauerei in Berlin, Berlin, Germany. Beer manufacture. 1,898,047; Feb. 21.

Gleason, John P., Los Angeles, Calif. Display device. 1,898,769; Feb. 21.

Gleason, Joseph W. (See Murphy, James F., assignor.)

Gleason Works. (See Head, Ernest C., assignor.)

Globe Automatic Sprinkler Company. (See Rowley, Arthur C., assignor.)

Gobeille, Alfred A., et al. (See Kenyon, Charles F., assignor.)

Goebert, Elmer C., U. S. Army, Philadelphia, Pa., and T. A. Conlon, Silver Spring, Md. Variable recoil mechanism for guns. 1,898,089; Feb. 21.

Goldberg, Maximilian M., assignor to The National Cash Register Company, Dayton, Ohio. Auditing machine. 1,898,048; Feb. 21.

Goldberger, Hugo, New York, N. Y., assignor to Noveltex, Inc. Printed textile for making one-piece cut-out aprons. 1,898,950; Feb. 21.

Gollwitzer, Walter T., Chicago, Ill., assignor to Addressograph Company, Wilmington, Del. Printing machine. 1,898,361; Feb. 21.

Gollwitzer, Walter, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del. Printing machine. 1,898,362; Feb. 21.

Gomery, Joseph, Los Angeles, Calif. Static eliminator. 1,898,770; Feb. 21.

Gooding, Donald R., assignor to Wisconsin Box Company, Wausau, Wis. Box. 1,898,177; Feb. 21.

Gooding, Donald R., assignor to Wisconsin Box Company, Wausau, Wis. Box. 1,898,178; Feb. 21.

Goodwin, George R., Melrose, Mass. Fluid metering system. 1,898,951; Feb. 21.

Gosa Printing Press Co., The. (See Crafts, Curtis S., assignor.)

Gough, Evoly L. (See Bowman, Glenn W., assignor.)

Gould, Joseph C., Farmer City, Ill. Mail box support. 1,898,875; Feb. 21.

Graham, Stuart, Ottawa, Ontario, Canada. Aerial photography. 1,898,179; Feb. 21.

Graver Corporation. (See Bressler, R. E., and Moses.)

Graves, Walter S. (See Steiner, F. M., and Graves.)

Gray, Franklin A., West New Brighton, N. Y. Valve. 1,898,952; Feb. 21.

Green, Charles W., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,898,049; Feb. 21.

Green, Stanley S., La Fayette, Ind. Phase control. 1,898,828; Feb. 21.

Greenbank, George R., Washington, D. C., dedicated to the free use of the Government and the people of the United States. Inhibiting oxidation of unsaturated fats, oils, fatty acids, and substances containing fatty material having a tendency to become rancid. 1,898,363; Feb. 21

Greenebaum, Walter J., Chicago, Ill. Convertible service cabinet. 1,898,299; Feb. 21.

Greenfield Tap & Die Corporation. (See Koehler, O. E., and du Mont, assignors.)

Greenwald, Harold A., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Refrigerating apparatus and cabinet therefor. 1,898,438; Feb. 21.

Greenwald, Harold A., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Refrigerator cabinet construction. 1,898,439; Feb. 21.

Greenwald, Harold A., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Refrigerating apparatus. 1,898,440; Feb. 21.

Greenway, Richard J., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Stereotype plate casting machine. 1,898,624; Feb. 21.

Greer, Frederick W., Cambridge, Mass. Apparatus for tempering chocolate. 1,898,771; Feb. 21.

Greer, Frederick W., Cambridge, Mass. Tempering device. 1,898,829; Feb. 21.

Greig, Jeanne F., assignor to The Charnaux Patent Corset Company Limited, London, England. Brassière. Des. 89,302; Feb. 21.

Greig, Jeanne F., assignor to The Charnaux Patent Corset Company, Limited, London, England. Brassière. Des. 89,303; Feb. 21.

Greve, Louis W., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Rock drill. 1,898,772; Feb. 21.

Grigsby-Grunow Company. (See Grunow, William C., assignor.)

Gross, Andrew, New York, N. Y. Lens for automobile lamps. Des. 89,304; Feb. 21

Grossmann, Paul, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Making useful condensation products of the anthracene series and new anthraquinone derivatives. 1 898,953; Feb. 21.

Grubman, Leo J., Belle Harbor, N. Y., assignor to Voices, Incorporated, Newark, N. J. Sound producing device. 1,898,010; Feb. 21.

Grubman, Leo J., Belle Harbor, N. Y., assignor to Voices, Incorporated, Newark, N. J. Sound producing device. 1,898,773; Feb. 21.

Grunow, William C., assignor to Grigsby-Grunow Company, Chicago, Ill. Reproducer. 1,898,441; Feb. 21.

Grutsch, Carl V., Saginaw, Mich. Fishhook. 1,898,442; Feb. 21.

Guest, Miriam I., deceased; Ward E. Guest, administrator, assignor to W. Bartlett Jones, trustee, Chicago, Ill. Cheese and manufacture of holes therein. 1,898,992; Feb. 21.

Guest, Ward E., administrator. (See Guest, Miriam I.)

Guiberson Corporation, The. (See Crickmer, Charles S., assignor.)

Guiberson Corporation, The. (See Pettitt, Frank C., assignor.)

Gümbel, Heinrich. (See Haupt, A., Gümbel, and Giesecke.)

Gustafson, Edwin P., Forestville, assignor of one-fourth to Jan P. Clary, Hartford, Conn. Bathing cap. 1,898,954; Feb. 21.

Gustafson, Folke J. and H. C., Chicago, Ill. Christmas tree support. 1,898,300; Feb. 21.

Gustafson, Holger C. (See Gustafson, Folke J. and H. C.)

Guthrie, Robert G., and O. J. Wilbor, assignors to W. J. Mohr, Chicago, Ill. Treatment of vermiculite and the like. 1,898,774; Feb. 21.

Guthrie, Robert G., and O. J. Wilbor, assignors to W. J. Mohr, Chicago, Ill. Treatment of liquor resulting from recovery of lamisilite from vermiculite ore. 1,898,830; Feb. 21.

Guyler, Albert F. (See Welch, S. A., Guyler, Ashby, and Boaler.)

Gynn, George S., Cleveland, Ohio. Flooring construction. 1,898,364; Feb. 21.

Haehn, Hugo. (See Glaubitz, M., and Haehn.)

Hagen, Gerhard B., assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Antenna system. 1,898,061; Feb. 21.

Hahnemann, Walter, Berlin-Marienfelde, assignor to C. Lorenz, Aktiengesellschaft, Berlin-Tempelhof, Germany. Arrangement for indicating the position of vessels. 1,898,831; Feb. 21.

Haines, Stacey A., assignor of one-half to H. F. Spencer, Kansas City, Mo. Fluid delivery for cooking and brewing utensils. 1,898,832; Feb. 21.

Hale, Reuben B., San Francisco, Calif. Lighting fixture. Des. 89,305; Feb. 21.

Hale, William E., Fort Washington, assignor to R. H. Beaumont Company, Philadelphia, Pa. Winding machine. 1,898,987; Feb. 21.

Hall, Horace W., Newton, Mass. Tennis racket and manufacturing. 1,898,485; Feb. 21.

Hamilton, George W., Evanston, Ill. Cross arm clamp. 1,898,725; Feb. 21.

Hammerly, Herman J., Wallingford, assignor to Trumbull Electric Manufacturing Company, Plainville, Conn Electric switch. 1,898,443; Feb. 21.

Hammond, John A., Albany, assignor to California Cap Company, Oakland, Calif. Blasting cap. 1,898,011; Feb. 21.

Hancock, Leslie J., Sutton, England. Flame cutting burner apparatus. 1,898,955; Feb. 21.

Hansell, Clarence W., Rocky Point, N. Y., assignor to Radio Corporation of America. Coupling arrangement. 1,898,180; Feb. 21.

Hansell, Clarence W., Rocky Point, N. Y., assignor to Radio Corporation of America. Oscillation generation. 1,898,181; Feb. 21.

Harding, Glen F., Ogden, Utah. Drink mixer with ultra-violet ray attachments. 1,898,365; Feb. 21.

Hardtmann, Max, Wiesdorf-on-the-Rhine, W. Schepss, Leverkusen-on-the-Rhine, and E. Tietze, Cologne-on-the-Rhine, assignors to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing boron trifluoride. 1,898,532; Feb. 21.

Harper, Arthur L., Altadena, Calif. Brake control means. 1,898,625; Feb. 21.

Harriman, Stanley R., Salem, Mass. Paper file. 1,898,533; Feb. 21.

Harrischfeger Corporation. (See Bergmann, Reinhard, assignor.)

Harrison, Thomas R., Wyncote, assignor to The Brown Instrument Company, Philadelphia, Pa. Measuring and control apparatus. 1,898,124; Feb. 21.

Harrison, Thomas R., assignor to Brown Instrument Company, Philadelphia, Pa. Automatic control system and apparatus therefor. 1,898,182; Feb. 21.

Harrison, Thomas R., Wyncote, assignor to The Brown Instrument Company, Philadelphia, Pa. Recording and control system and apparatus therefor. 1,898,183; Feb. 21.

Harsh, Russell K., Dallas, Tex. Game board or analogous article. Des. 89,306; Feb. 21.

Harshberger, Norman P., Chicago, Ill., assignor to Bakelite Building Products Company, Inc., New York, N. Y. Shingle. 1,898,989; Feb. 21.

Harshberger, Norman P., Chicago, Ill., assignor to Bakelite Building Products Company, Inc., New York, N. Y. Strip or roofing material. 1,898,990; Feb. 21.

Hart & Hutchinson Company, The. (See Anderson, Gustav H., assignor.)

Hartley, Kenneth, Houston, Tex. Measuring instrument. 1,898,534; Feb. 21.

Harvey, Corbon L., Cleveland, Ohio. Rack for loose leaf ledgers. 1,898,833; Feb. 21.

Harvie, Walter E., Portland, Me. Saw attachment for electric drills. 1,898,956; Feb. 21.

Hass, Joseph, New York, N. Y. Lubricating system. 1,898,184; Feb. 21.

Haupt, Arno, H. Gümbel, and J. Giesecke, Leipzig, Germany. Feeding paper sheets. 1,898,535; Feb. 21.

Hawarth, Richard, & Company. (See Hayes, Levi, assignor.)

Hawkins, Charles A., San Francisco, Calif. Seat. 1,898,444; Feb. 21.

Hayes, Levi, Pendleton, assignor of one-half to Richard Hawarth & Company Limited, Manchester, England. Weft-pile velvet. 1,898,050; Feb. 21.

Hayes, Thomas R., Monrovia, Calif. Chair. 1,898,834; Feb. 21.

Haynn, Richard, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Manufacturing piece-dyed woolen fabrics containing effects of silk. 1,898,125; Feb. 21.

Hazel-Atlas Glass Co. (See Stenhouse, Thomas, assignor.)

Head, Ernest C., assignor to Gleason Works, Rochester, N. Y. Gear cutter. 1,898,051; Feb. 21.

Healy-Davidson Corporation. (See Healy, Wesley P., assignor.)

Healy, Wesley P., Waukegan, assignor, by mesne assignments, to Healy-Davidson Corporation, Chicago, Ill. Electrical switch. 1,898,626; Feb. 21.

Heat Treating Company. (See Doherty, Henry L., assignor.)

Heath, Sheldon B. (See Barstown, E. O., and Heath.)

Hechenbleikner, Ingenuin, and N. Titlestad, assignors, by mesne assignments, to Chemical Construction Corporation, Charlotte, N. C. Ammonia oxidizing apparatus. 1,898,775; Feb. 21.

Hechtenberg, Wilhelm. (See Herz, R., Schubert, and Hechtenberg.)

Hedglon, Mead, assignor to M. L. Oberdorfer Brass Company, Syracuse, N. Y. Fire trap for internal combustion engines. 1,898,126; Feb. 21.

Hedmen Manufacturing Company. (See Carlson, John W., assignor.)

Heinitz, Woldemar, assignor to Schubert & Salzer Maschinenfabrik, Aktiengesellschaft, Chemnitz, Germany. Stocking and knitting same on flat knitting machines. 1,898,957; Feb. 21.

Heinze, Oscar H., New Britain, Conn. Multiindicating level. 1,898,367; Feb. 21.

Heitger, Frank H., deceased; Mattie G. Heitger, administratrix, Flint, Mich. Carburetor. 1,898,958; Feb. 21.

Heitger, Mattie G., administratrix. (See Heitger, Frank H.)

Heljesson, Andrew E., Brooklyn, N. Y. Boat. 1,898,876; Feb. 21.

Helwig, Minnie. (See Falz, Paul, assignor.)

Henderson, Ken L., assignor to United American Bosch Corporation, Springfield, Mass. Supporting device for radio apparatus. 1,898,835; Feb. 21.

Hercules Glue Company. (See Littooy, John F., assignor.)

Herold, James L., and J. W. Dawson, assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo. Distributing feeder. 1,898,662; Feb. 21.

Herrmann, Willy O., and E. Baum, assignors to Consortium fur Elektrochemische Industrie, Munich, Bavaria, Germany. Preparation of unsaturated hydrocarbons. 1,898,301; Feb. 21.

Hershey, Orville S., assignor, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill. Automobile lock. 1,898,127; Feb. 21.

Herz, Richard, Frankfort-on-the-Main, and M. Schubert, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Indophenols of the benzocarbazole series and making same. 1,898,445; Feb. 21.

Herz, Richard, Frankfort-on-the-Main, M. Schubert, and W. Hechtenberg, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New dyestuffs containing sulphur. 1,898,446; Feb. 21.

Hess, Claude I., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Stud driver. 1,898,726; Feb. 21.

Hess, Emil E., and H. J. Farrant, Los Angeles, Calif. Handgrip for firearms. 1,898,368; Feb. 21.

Hetzel, Frank L., Hermosa Beach, Calif. Pneumatic loud speaker. 1,898,302; Feb. 21.

Hewitt, Ellis E., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Sounding horn. 1,898,536; Feb. 21.

Hicks, William W. (See Kercher A. J., and Hicks.)

Hild, Mark W. (See D'Amico, A., Hild, and Wilcox.)

Hill, Netter J. (See Hunt, C. L., and Hill.)

Hilliard, Clarence, Port Henry, N. Y. Pin removing tool 1,898,959; Feb. 21.

Hinsch, Walter H., assignor to Locomotive Firebox Company, Chicago, Ill. Thermic siphon and making the same. 1,898,052; Feb. 21.

Hitchcock, Halbert K., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Glass grinding machine. 1,898,012; Feb. 21.

Hodgkinson, Francis P., New York, assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Welded casing. 1,898,663; Feb. 21.

Hoefling Bros. Inc. (See Hoefling, John W., assignor.)

Hoefling, John W., assignor to Hoefling Bros. Inc., Chico, Calif. Grain or fine particle grader. 1,898,249; Feb. 21.

Hofmann, Fritz, Breslau, and C. Wulff, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Alkylation of organic hydroxy-compounds. 1,898,627; Feb. 21.

Hohmann, Anna F. and P. F., Los Angeles, and Murry M. Campbell, Long Beach, Calif. Vehicle for pneumatic tools. 1,898,369; Feb. 21.

Hohmann, Philip F. (See Hohmann, Anna F. and P. F., and Campbell.)

Holland, Thomas J., Amsterdam, N. Y., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Tuft pile fabric loom. 1,898,988; Feb. 21.

Hollerith, Charles, Jackson, Mich., assignor to Automotive Fan & Bearing Co. Positioning and securing fan blades. 1,898,628; Feb. 21.

Hollerith, Charles, Jackson, Mich., assignor to Automotive Fan & Bearing Co. Positioning fan blades with accurate balance. 1,898,629; Feb. 21.

Holloway, Mynard L., La Porte, Ind. Front wheel drive housing. 1,898,447; Feb. 21.

Hook, Augustus O., Boston, Mass. Inkwell. 1,898,053; Feb. 21.

Hoover Company, The. (See Babcock, Earl, assignor.)

Hoover, Jay F. (See Dodrill, Delbert C., assignor.)

Hoppes, John J., Springfield, Ohio. Tube cleaner. 1,898,727; Feb. 21.

Horn, Robert W. P., Allentown, and J. H. Nissley, Manheim, Pa. Method and apparatus for burning cement. 1,898,776; Feb. 21.

Hott, Ion Von Kert, assignor to The Joyce-Cridland Company, Dayton, Ohio. Journal box jack. 1,898,630; Feb. 21.

Houde Engineering Corporation. (See Fox, Merritt L., assignor.)

Houts, John R., McLean, Va. Log sawing machine. 1,898,960; Feb. 21.

Howard, Clifton P., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Restricted orifice device. 1,898,537; Feb. 21.

Howard, Stanley R., East Milton, assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass. Packaging machine. 1,898,538; Feb. 21.

Howard, Stanley R., Milton, assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass. Weighing machine. 1,898,539; Feb. 21.

Howe, Smith B., Buffalo, and S. C. Bliss, Kenmore, assignors to Weatherbest Stained Shingle Company, North Tonawanda, N. Y. Shingle handling machine 1,898,664; Feb. 21.

Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Operating means for the tripods of photographic cameras and the like. 1,898,185; Feb. 21.

Huff, Edward S., assignor to Ford Motor Company, Dearborn, Mich. Tachometer generator. 1,898,728; Feb. 21. 21.

Hughes, John T., Chicago, Ill. Triple control means for landing gear wheel brakes of airplanes. 1,898,836; Feb. 21.

Hughes, Thomas B., Granite City, Ill., and W. Zellweger, St. Louis, Mo. Electric ignition and starting apparatus for internal combustion engines. 1,898,370; Feb. 21.

Huguenin, Albert, Paris, France. Device for cooling of compressors with pistons. 1,898,729; Feb. 21.

Hulshizer, George W., Stewartsville, assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for rock drills. 1,898,665; Feb. 21.

Hultgren, Charles R., assignor to S. Karpen & Bros., Chicago, Ill. Chair or seat. 1,898,448; Feb. 21.

Hund, August, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Modulation system. 1,898,486; Feb. 21.

Hunt, Charles L., and N. J. Hill, assignors to Non-Refillable Container, Inc., St. Louis, Mo. Valve for liquid containers. 1,898,303; Feb. 21.

Hurley, Roy T., Dobbs Ferry, N. Y. Uniting metal parts and article produced thereby. 1,898,487; Feb. 21.

Hutchins Car Roofing Company. (See Wilson, Alfred R., assignor.)

Hutchins, Otis, assignor to The Carborundum Company, Niagara Falls, N. Y. Separation of grain particles from a bonded mass. 1,898,371; Feb. 21.

Hutchinson, Henry B., Harpenden, England, assignor to The Distillers Company Limited, Edinburg, Scotland. Production of butyl alcohol and acetone by fermentation. 1,898,961; Feb. 21.

Hutchinson, Oliver C. K., and W. C. Gilham, Alton, Ill., assignors to Owens-Illinois Glass Company, Toledo, Ohio. Article-transfer mechanism. 1,898,449; Feb. 21.

Hutchman, James E., Newburg, N. Y., assignor to L. E. Carpenter & Co., Inc., Newark, N. J. Coating composition. 1,898,540; Feb. 21.

Hutton, William A., Seattle, Wash. Elevator doorlatch. 1,898,450; Feb. 21.

Hvistendahl, Georg, Tonsberg, Norway. Dividing card for cigarette boxes. 1,898,962; Feb. 21.

Hyde, William J., assignor to The Northwest Paper Company, Cloquet, Minn. Forming sheets from pulp. 1,898,372; Feb. 21.

I. G. Farbenindustrie Aktiengesellschaft. (See Bock, W. and Tschunkur, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Eisenhut, Otto, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Hardtmann, M., Schepss, and Tietze, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Hofmann, F., and Wulff, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Jaenecke, E., and Mueller, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Köhler, Ludwig, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Muench, E., and Nicolai, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Nicodemus, O., and Schmidt, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Schneider, C., and Buetefisch, assignors.)

I. G. Farbenindustrie, Aktiengesellschaft. (See Seidel, W., and Ernecke, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Specketer, H., and Soll, assignors.)

Illig, John W., Wilmington, Del., and W. J. Lindsay, Norwood, Pa., assignors, by mesne assignments, to National Lead Company, New York, N. Y. Production of white lead. 1,898,054; Feb. 21.

Imperial Chemical Industries Limited. (See Shepherdson, A., and Tatum, assignors.)

Imperial Chemical Industries, Limited. (See Thomson, R. F., and Tatum, assignors.)

Indo-Burma Petroleum Company Limited, The. (See Armstrong, A. D., and Dobbie, assignors.)

Ingersoll-Rand Company. (See Hulshizer, George W., assignor.)

Ingersoll-Rand Company. (See Mosher, William H., assignor.)

Ingersoll-Rand Company. (See Slater, Fred M., assignor.)

International Communications Laboratories, Inc. (See Clokey, Allison A., assignor.)

International Projector Corporation. (See Dina, Augusto, assignor.)

Irgens, Finn T., Jackson, assignor, by mesne assignments, to Outboard Motors Corporation, Detroit, Mich. Crank shaft oiling system. 1,898,631; Feb. 21.

Irvine, James, jr. (See Key, James F., assignor.)

Isaacson, Morris, Brooklyn, N. Y. Combination book rest and stand. 1,898,666; Feb. 21.

Jackson, John G., and W. T. Allen, assignors to Square D Company, Detroit, Mich. Arc suppressor. 1,898,128; Feb. 21.

Jackson, Lucian C., Buffalo, N. Y. Internal combustion engine. 1,898,963; Feb. 21.

Jaenecke, Ernst, Heidelberg, and F. Mueller, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie, Frankfort-on-the-Main, Germany. Production of fertilizer salts. 1,898,971; Feb. 21.

Jarvis, Lewis A., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Cap for radiator necks and the like. 1,898,055; Feb. 21.
Jarvis, W. B., Company. (See Jarvis, Lewis A., assignor.)
Jay, Webb, Miami Beach, Fla. Closure cap. 1,898,373; Feb. 21.
Jeffrey Manufacturing Company. (See Jeffrey, Robert K., assignor.)
Jeffrey Manufacturing Company, The. (See Linder, Paul C., assignor.)
Jeffrey, Robert K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Fuse receptacle for coal drills. 1,898,129; Feb. 21.
Jeffrey, Robert K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Self-propelling apparatus. 1,898,130; Feb. 21.
Jenkins, D. C., Glass Company. (See Jenkins, David A., assignor.)
Jenkins, David A., assignor to D. C. Jenkins Glass Company, Kokomo, Ind. Bowl. Des. 89,307; Feb. 21.
Jenssen, G. D., Company. (See Jenssen, Jacob D., assignor.)
Jenssen, Jacob D., assignor to G. D. Jensson Company, New York, N. Y. Producing acid liquor. 1,898,541; Feb. 21.
Jenssen, Jacob D., assignor to G. D. Jenssen Company, New York, N. Y. Manufacture of sulphite acid liquor. 1,898,542; Feb. 21.
Jinnett, Francis E., Ventura, Calif. Pipe cleaning machine. 1,898,964; Feb. 21.
Johnsen, Einar A. (See Coghlan, T. G., and Johnsen.)
Johnsen, Sigrid A., executrix. (See Coghlan, T. G., and Johnsen.)
Johnson Bronze Company. (See Leis, Carl H., assignor.)
Johnson, Claude T., East Orange, assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Time setting and time control mechanism for automatic toasters and the like. 1,898,972; Feb. 21.
Johnson, Edward W., assignor to Chicago Carton Company, Chicago, Ill. Dispensing carton. 1,898,056; Feb. 21.
Johnson, Frank A. (See Knudson, John L., assignor.)
Johnson, Frank L., Akron, Ohio. Collapsible form for tire building. 1,898,667; Feb. 21.
Johnson, Frederick H., Summitville, Ohio. Pyrometer gauge. 1,898,013; Feb. 21.
Johnson, Gustaf A., New Bedford, Mass. Electric switch. 1,898,186; Feb. 21.
Johnson, John A., assignor to National Supply & Service Corporation, Crawfordsville, Ind. Adjustable spark screen. 1,898,837; Feb. 21.
Johnson Metal Products Co. (See Johnson, Theodore, assignor.)
Johnson, Reginald S. (See McEachron, E. J., and Johnson.)
Johnson, Theodore, assignor to Johnson Metal Products Co., Erie, Pa. Casement window. 1,898,543; Feb. 21.
Johnston, Sterling. (See Jones, J., and Johnston.)
Joiner, Sylvester L., Sweetwater, Tex., assignor of one-third, to Alexander S. Kendrick and one-third to Walter W. Davis, Sweetwater, Tex. Attachment to air brake pressure retaining valves. 1,898,250; Feb. 21.
Jones, Jonathan, and S. Johnston, Bethlehem, Pa., assignor to McClintic-Marshall Corporation. Floor construction or the like. 1,898,668; Feb. 21.
Jones, W. Bartlett, trustee. (See Guest, Miriam I., assignor.)
Jordan, Arthur D. (See Cowen, R., and Jordan.)
Jordan, Lavern J., Cleveland, Ohio, assignor, by mesne assignments, to Whitin Machine Works, Whitinsville, Mass. Locking device for bobbin caps. 1,898,131; Feb. 21.
Joyce-Cridland Company, The. (See Hott, Ion V. K., assignor.)
Jugel, Rudolf P., Denver, Colo., assignor to American Ball Mill Company. Grinding mill. 1,898,187; Feb. 21.
Jurist, Alfred E. (See Christiansen, W. G., and Jurist.)
Kaess, Louis L., New York, N. Y. Radio direction finder. 1,898,488; Feb. 21.
Keppelman, Edward L. (See Almcrantz, Oscar G., assignor.)
Kleppler, Felix, Dresden, Germany. Device for manufacturing cardboard strip matches in book-form. 1,898,544; Feb. 21.
Kleppler, Paul, Dresden, Germany. Carriage shift typewriter. 1,898,777; Feb. 21.
Karpen, S., & Bros. (See Hultgren, Charles R., assignor.)
Karpen, S., & Bros. (See Lofman, Charles, assignor.)
Kaster, Joseph D., assignor to Oregon Pulp and Paper Company, Salem, Oreg. Automatic felt washer for paper machines. 1,898,545; Feb. 21.
Katz, Morris, New York, N. Y. Shopping bag. 1,898,838; Feb. 21.
Kew, Harry, and J. G. Collins, Detroit, Mich., assignors to National Alloy Co. Piston. 1,898,730; Feb. 21.
Keenan, John. (See Barrett, J. H., and Keenan.)
Kell, George. (See Van Kirk, Bradley, assignor.)
Keller, Jules R. (See Stein, Michael, assignor.)
Kelley, Cecil S., East McKeesport, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Signal controlling device. 1,898,546; Feb. 21.
Kelly, Dennis, assignor to Russel Sebring, Marshall, Mich. Fishing reel. 1,898,451; Feb. 21.
Kelvinator Corporation. (See Greenwald, Harold A., assignor.)
Kemp, C. M., Manufacturing Company, The. (See Kemp, W. W., and Van Horn, assignors.)
Kemp, William W., and W. H. Van Horn, assignors to The C. M. Kemp Manufacturing Company, Baltimore, Md. Air and gas mixing apparatus. 1,898,778; Feb. 21.
Kendall, Robert C., Chicago, Ill. Lubricating device. 1,898,188; Feb. 21.
Kendrick, Alexander S., et al. (See Joiner, Sylvester L., assignor.)
Kennedy Car Liner & Bag Co., The. (See Lorenz, Gus O., assignor.)
Kent, Samuel, Brooklyn, N. Y., assignor to Cornell Contracting Corporation. Reenforced concrete construction and method of building same. 1,898,304; Feb. 21.
Kenyon, Charles F., Shannock, assignor to A. A. Gobeille, Shannock, and P. W. Noble, jr., Rumford, R. I., and himself. Treating ramie and allied fibers. 1,898,877; Feb. 21.
Kercher, Arthur J., Berkeley, and W. W. Hicks, assignors to Wesix National Company, San Francisco, Calif. Electrical heating element. 1,898,632; Feb. 21.
Kern, Ludwig, Webster Groves, Mo. Manufacturing porous silica ware. 1,898,839; Feb. 21.
Key, James F., Pasadena, Calif., assignor of sixty-eight per cent to James Irvine, jr. Toy vehicle apparatus. 1,898,633; Feb. 21.
Kieffer, Emil O., Berlin-Schlachtensee, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Electrical apparatus. 1,898,489; Feb. 21.
Kienle, Roy H., Schenectady, N. Y., assignor to General Electric Company. Resinous compositions and preparing the same. 1,898,840; Feb. 21.
Kiessling, Max, and A. J. Krieger, Waterbury, assignors to G. E. Prentice Manufacturing Company, New Britain, Conn. Slider for fasteners. 1,898,547; Feb. 21.
Kilbourn, William D., Denver, Colo., assignor to The White Iron Ores and Products Company. Poison and producing same. 1,898,189; Feb. 21.
King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,898,548; Feb. 21.
King, John L., New York, N. Y. Safety razor blade. Des. 89,326; Feb. 21.
Kish, Zoltan J., Pittsburgh, Pa., assignor to Northwestern Yeast Company, Chicago, Ill. Yeast composition for use in candy making. 1,898,057; Feb. 21.
Klauer, William H., Dubuque, Iowa. Making pipe hangers. 1,898,878; Feb. 21.
Klein, Ludwig, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Rolling tubes with internally thickened ends. 1,898,779; Feb. 21.
Klenk, George, Santa Ana, Calif. Cigar and cigarette holder and ash receiver. 1,898,841; Feb. 21.
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Knapp, Ray. (See Demka, R., and Knapp.)
Knudson, John L., assignor of one-third to Frank A. Johnson, Cleveland, Ohio. Adjustable holder. 1,898,669; Feb. 21.
Koberle, Karl. (See Kunz, N. A., Koberle, and Berthold.)
Koch & Sterzel Aktiengesellschaft. (See Bahrmann, Karl, assignor.)
Koch & Sterzel Aktiengesellschaft. (See Fischer, F. J., and Sterzel, assignors.)
Koehler, Oscar E., and W. B. du Mont, assignors to Greenfield Tap & Die Corporation, Greenfield, Mass. Thread cutting die and holding clip therefor. 1,898,132; Feb. 21.
Köhler, Ludwig, Cologne-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of models of jaws. 1,898,731; Feb. 21.
Köhler, Otto, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany. Clutch mechanism. 1,898,190; Feb. 21.
Koontz, David R., Salisbury, assignor of one-half to J. D. Dorsett, Spencer, N. C. Low water actuated means for steam generators. 1,898,490; Feb. 21.
Kopp, Nicholas, Pittsburgh, Pa. Mold for making pressed glass articles. 1,898,251; Feb. 21.
Koppers Company of Delaware, The. (See Becker, Joseph, assignor.)
Kranch, Emil. (See Nawiasky, P., Bauer, and Krauch.)
Krieger, Adolph J. (See Kiessling, M., and Krieger.)
Krier, LeRoy A. (See Metavallas, George W., assignor.)
Kröhne, Gustav, Rosenberg, Oberfalz, Germany. Milling cutter. 1,898,732; Feb. 21.
Krumholz, Alfred F., Chicago, Ill. Feeding device for electric weld rods or wire. 1,898,014; Feb. 21.
Krummenacher, Eduard, Riehen, near Basel, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Manufacture of chloro-sulphonic acid. 1,898,879; Feb. 21.
Kuester, August F., Clintonville, Wis. Spring mounting for motor vehicles and trailers. 1,898,191; Feb. 21.
Kunz, Max A., and K. Köberle, Mannheim, and E. Berthold, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of vat dyestuffs of the dibenzanthrone series. 1,898,452; Feb. 21.
Kvarnstrom, Alfred T., Detroit, Mich. Manufacturing flare end tubes. 1,898,374; Feb. 21.

Kwartz, Michael J., Detroit, Mich. Fountain pen. 1,898,780; Feb. 21.
Kyle, William T., Southport, Conn., assignor to The Owens Automatic Spring and Machinery Company. Spring structure. 1,898,491; Feb. 21.
Lake Erie Chemical Company. (See Ailes, Adrian S., assignor.)
Laminating Patents Corporation. (See Galber, Harry, assignor.)
Lane, George S., San Anselmo, Calif. Grooved plate for clutches and brakes. 1,898,978; Feb. 21.
Lansing, Raymond P., Montclair, assignor to Eclipse Aviation Corporation, East Orange, N. J. Generator equipment. 1,898,973; Feb. 21.
Lantinberg, David, and F. Stefandel, assignors to Wigly Candy Company, Inc., Brooklyn, N. Y. Method and apparatus for the formation of hollow articles. 1,898,252; Feb. 21.
Larsen, Louis H., Union City, N. J., assignor to Nixon Vending and Change Making Machines, Inc., New York, N. Y. Goods holding and dispensing unit. 1,898,192; Feb. 21.
La Soudure Electrique Autogène Societe Anonyme. (See de Pape, Ferdinand, assignor.)
Laudensack, Albert F., assignor to Winchester Repeating Arms Company, New Haven, Conn. Manually-operated bolt-action firearm. 1,898,670; Feb. 21.
Lea, Edward S. (See Carrier, W. H., and Lea.)
Leavitt, Robert K., Greenburgh, N. Y. Raincoat. 1,898,015; Feb. 21.
Le Clair, Louis J., and A. G. Brackenbury, King's Cross, London, England, assignors to The Westinghouse Air Brake Company, Wilmerding, Pa. Slack adjuster. 1,898,549; Feb. 21.
Leeds & Northrup Company. (See Parker, Henry C., assignor.)
Legal, Robert C., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn. Locking means. 1,898,974; Feb. 21.
Le Grand, Joseph M., assignor to Carrier Engineering Corporation, Newark, N. J. Separating system. 1,898,733; Feb. 21.
Lehman, Werner, and M. L. Fykse, assignors to Bucyrus-Erie Company, South Milwaukee, Wis. Boom feet for excavators. 1,898,453; Feb. 21.
Leibe, Frank A., Dunellen, N. J., assignor to American Telephone and Telegraph Company. Gauge for testing eccentricity of insulators. 1,898,133; Feb. 21.
Leis, Carl H., assignor to Johnson Bronze Company, New Castle, Pa. Bearing device. 1,898,880; Feb. 21.
Leiter, Harry H., Warsaw, Ind. Surgical extension attachment. 1,898,781; Feb. 21.
Le May, Arthur J., Brooklyn, N. Y. Alternating current circuit. 1,898,016; Feb. 21.
Lennstrom, Walter M., Douglaston, N. Y. Combined card-case and score recorder. 1,898,193; Feb. 21.
Lester, William M., Shaker Heights, Ohio. Die casting machine. 1,898,671; Feb. 21.
Lethern, Albert A., assignor to The Mills Equipment Company Limited, London, England. Safety harness for aeronauts and the like. 1,898,090; Feb. 21.
Lewis, Harold M., Douglaston, assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Frequency transformation system. 1,898,366; Feb. 21.
Lewis, Joseph R. (See Ott, C. S., and Lewis.)
Lewis, Lester L., assignor of two-thirds to Blair Strip Steel Company, New Castle, Pa. Annealing art. 1,898,674; Feb. 21.
Lewis, M. J., Products Company, The. (See Lewis, Morgan J., assignor.)
Lewis, Manuel E. (See Ott, C. S., and Lewis, assignors.)
Lewis, Morgan J., Massillon, Ohio, assignor to The M. J. Lewis Products Company, Philadelphia, Pa. Service box. 1,898,634; Feb. 21.
Lhomme, Roger. (See Ottinger, N., and Lhomme.)
Lidsky, Louis, assignor to Wigly Candy Company, Brooklyn, N. Y. Apparatus for the formation of hollow articles. 1,898,194; Feb. 21.
Lindberg, John F., Chicago, Ill. Tuning electric circuits. 1,898,635; Feb. 21.
Lindenblad, Nils E., Shoreham, N. Y., assignor to Radio Corporation of America. Corkscrew radiation. 1,898,058; Feb. 21.
Linder, Paul C., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Drag chain cleaner. 1,898,134; Feb. 21.
Lindley, D. R. (See West, Charles L., assignor.)
Lindsay, William J. (See Iliff, J. W., and Lindsay.)
Lingo, Archibald E., Collingswood, assignor to John E. Lingo & Son, Inc., Camden, N. J. Apparatus for forming tapered columns and the like. 1,898,581; Feb. 21.
Lingo, John E., & Son, Inc. (See Lingo, Archibald E., assignor.)
Linkert, Howard W., and R. M. Anderson, Indianapolis, Ind., assignors, by mesne assignments, to Marvel Carbureter Company, Flint, Mich. Carburetor. 1,898,672; Feb. 21.
Linton, Earl B., Rio de Janeiro, Brazil. Calibrating apparatus for liquid tanks. 1,898,734; Feb. 21.
Linsell, Harry K., La Grange, assignor to United States Gypsum Company, Chicago, Ill. Anhydrite plastic material. 1,898,636; Feb. 21.
Littlefield, George E., assignor to American Roll Gold Leaf Company, Providence, R. I. Machine for applying metallic leaf. 1,898,782; Feb. 21.
Littooy, John F., assignor to Hercules Glue Company, San Francisco, Calif. Spreader for spray compositions. 1,898,673; Feb. 21.
Locomotive Firebox Company. (See Hinsch, Walter H., assignor.)
Lofman, Charles, Riverside, assignor to S. Karpen & Bros., Chicago, Ill. Mattress and mattress manufacture. 1,898,454; Feb. 21.
Lofman, Charles, assignor to S. Karpen & Bros., Chicago, Ill. Spring-structure. 1,898,455; Feb. 21.
Lorence, Roy. (See McCulloch, William E. and K. M., and Lorence.)
Lorenz, C., Aktiengesellschaft. (See Hahnemann, Walter, assignor.)
Lorenz, Gus O., assignor to The Kennedy Car Liner & Bag Co., Shelbyville, Ind. Car liner. 1,898,195; Feb. 21.
Lorraine Corporation. (See Lorraine, David G., assignor.)
Lorraine, David G., assignor to Lorraine Corporation, Los Angeles, Calif. Separating and delivering casing head gas. 1,898,637; Feb. 21.
Loth, William A., assignor to Société Industrielle des Procédés W. A. Loth, Paris, France. System of acoustic signaling. 1,898,091; Feb. 21.
Lowe, Sahn K., Honolulu, Hawaii. Lighting device. 1,898,842; Feb. 21.
Lowkrantz, Gunne, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Speed control for motion picture cameras. 1,898,675; Feb. 21.
Lowndes, Arthur, Toronto, Ontario, Canada. Centrifugal clutch. Re18,741; Feb. 21.
Lucas, William B., East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Position indicator. 1,898,550; Feb. 21.
Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Double circuit forced circulation water tube boiler. 1,898,196; Feb. 21.
Ludenia, Werner, Berlin, Germany, assignor to Radio Corporation of America. Reflector for very short waves. 1,898,197; Feb. 21.
Ludowici-Celadon Company. (See Mooney, Thomas F., assignor.)
Lunkenheimer Company, The. (See Aull, Jerome J., assignor.)
Lynch Corporation. (See Bridges, Edward G., assignor.)
Lysholm, Alf, assignor to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden. Gearing. 1,898,198; Feb. 21.
MacCutcheon, Alexander M., Shaker Heights, assignor to The Reliance Electric & Engineering Company, Cleveland, Ohio. Electric motor-driven roll. 1,898,551; Feb. 21.
Machesney, Arthur R. (See Wood, W. A., and Machesney.)
MacLaren, John, Hillside, N. J. Indicating gauge. 1,898,552; Feb. 21.
MacLean, Allen D., and H. G. Weymouth, assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Gas meter. 1,898,253; Feb. 21.
Macy, Alfred J., Evanston, assignor to Baritone Radio Corporation, Chicago, Ill. Selective switching system. 1,898,305; Feb. 21.
Madland, Thorvald, assignor to Camel Company, Chicago, Ill. Door elevating construction. 1,898,582; Feb. 21.
Madland, Thorvald, assignor to Camel Company, Chicago, Ill. Car door elevating mechanism. 1,898,583; Feb. 21.
Mafera, Guy, Revere, Mass. Bending machine. 1,898,254; Feb. 21.
Magnani, Alessandro, Casale, Monferrato, Italy. Manufacture of tubes from fibrous pulps. 1,898,881; Feb. 21.
Magnus, Henry C., Jamaica Plain, Mass. Washing machine. 1,898,676; Feb. 21.
Magos, John P. (See Olson, C. A., and Magos, assignor.)
Magrath, George H., Whitinsville, Mass. Bobbin clutch. 1,898,553; Feb. 21.
Malcolm, Joseph R., New York, N. Y. Process and apparatus for developing moving picture film. 1,898,783; Feb. 21.
Malone, Adolph W., Fillmore, Utah, assignor of one-half to A. H. Vestal, Anderson, Ind. Supporting and securing electric cables. 1,898,677; Feb. 21.
Malone, Adolph W., Fillmore, Utah, assignor of one-third to A. H. Vestal, Anderson, Ind., and one-third to W. B. Bullard, New York, N. Y. Lightning arrester. 1,898,882; Feb. 21.
Mannich, Carl U. F., Berlin-Steglitz, Germany. Crystallized digitalis glucoside and producing the same. 1,898,199; Feb. 21.
Mantle Lamp Company of America, The. (See Schwarz, Eugene, assignor.)
Mantz, Aloysius F., Los Angeles, Calif. Spring sash balance. 1,898,584; Feb. 21.
Marathon Battery Company. (See McEachron, E. J., and Johnson, assignors.)
Marks, Alexander A., Philadelphia, Pa. Gas boiler. 1,898,585; Feb. 21.
Martin, Clifford, Interlachen, Fla. Refrigerator car. 1,898,843; Feb. 21.

Martin, Glenn L., Company, The. (See Andrake, Andrew A., assignor.)
Martin, William C., Waynesburg, Ohio. Aircraft. 1,898,638; Feb. 21.
Marvel Carbureter Company. (See Linkert, H. W., and Anderson, assignors.)
Marx, Karl, and K. Brodersen, Dessau in Anhalt, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Agent for exterminating animal or vegetable pests. 1,898,554; Feb. 21.
Massey-Harris Company, The. (See Everett, C. E., and Smith, assignors.)
Massey, Hemsley B., assignor to Railway and Industrial Engineering Company, Greensburg, Pa. Operating mechanism for switches. 1,898,135; Feb. 21.
Mathews, Paul. (See Wellings, J. G., Mayo, and Mathews.)
Mathieson, Martin H., deceased, Detroit, Mich., Union Guardian Trust Company, executor. Stamping front one-piece automobile fenders. 1,898,883; Feb. 21.
Matteson, George F., Rockyhill, assignor to The Abbott Ball Company, Elmwood, Conn. Feeding mechanism. 1,898,979; Feb. 21.
Maynard, Arthur H., Warwick, R. I., assignor to Boston Wire Stitcher Company, Portland, Me. Clincher-device for stapling machines. 1,898,678; Feb. 21.
Mayo, Charles G. (See Wellings, J. G., Mayo, and Mathews.)
Maytag Company, The. (See Schroeder, Simon E., assignor.)
Maytag Company, The. (See Snyder, Howard F., assignor.)
Maywood Chemical Works. (See Weber, F. W., and Schaefer, assignors.)
Mazer, Joseph, New York, N. Y. Ring contractor. 1,898,586; Feb. 21.
McCarthy, J. Clarence, Lancaster, assignor to Armstrong Cork Company, Pittsburgh, Pa. Ornamented hard surface floor covering. 1,898,375; Feb. 21.
McCarty, Edward W. (See Milligan, Archibald, assignor.)
McClintic-Marshall Corporation. (See Jones, J., and Johnston, assignors.)
McConkey, Montgomery W., assignor to Bendix Brake Company, South Bend, Ind. Brake-operating mechanism. 1,898,306; Feb. 21.
McCormick, Lewis M., Palo Alto, Calif. Arch support retainer. 1,898,092; Feb. 21.
McCulloch, Karl M. (See McCulloch, William E., K. M., and Lorence.)
McCulloch, William E. and K. M., and R. Lorence; said Lorence assignor to James Ashley, Des Moines, Iowa. Brake pedal depressor mechanism. 1,898,376; Feb. 21.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Traction increasing device. 1,898,555; Feb. 21.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Electropneumatic brake. 1,898,556; Feb. 21.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Control pedal. 1,898,557; Feb. 21.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car equipment. 1,898,558; Feb. 21.
McDonald, Leland J., Pawhuska, Okla. Securing means for spectacles. 1,898,059; Feb. 21.
McEachron, Edgar J., and R. S. Johnson, assignors to Marathon Battery Company, Wausau, Wis. Battery construction. 1,898,377; Feb. 21.
McGaughy, Franklin C., Tuperlo, Miss. Fountain pen. 1,898,844; Feb. 21.
McGee, Kay C., Laurel Hill, assignor of one-fourth to P. B. Eaton, Charlotte, N. C. Dancing toy. 1,898,735; Feb. 21.
McIntyre, Francis R., Ogden, Iowa. Cover for fuel tank openings. 1,898,378; Feb. 21.
McKeefe, Edward P. (See Bradley, L., and McKeefe.)
McLaughlin, John E. (See Treece, J. H., and McLaughlin.)
McMahon, John F. (See Donahue, J. F., and McMahon.)
McNeil, Charles I., Bloomfield, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y. Electrical apparatus. 1,898,559; Feb. 21.
Mechanical Improvements Corporation. (See Murray, Henry H., assignor.)
Mechanical Transfer Car Corporation. (See Wheeler, Holman K., assignor.)
Medlin, Wenzel A., Cleveland, Ohio. Fish lure. 1,898,200; Feb. 21.
Meehan, John P., Los Angeles, Calif. Automobile license plate or sign. 1,898,379; Feb. 21.
Meier, Frederick H., Sheffield, Ill. Sectional block clay tile. 1,898,380; Feb. 21.
Mekel, Johannes A. A. (See Aarts, Christianus J. G., assignor.)
Melvin, John A., St. Louis, Mo. Building construction. 1,898,736; Feb. 21.
Merley, Sylvan R., Dover, N. J., assignor to Doherty Research Company, New York, N. Y. Ester purification. 1,898,737; Feb. 21.
Mesamore, George H., New York, N. Y. Head movement for a device simulating a dinosaur or other animal. 1,898,587; Feb. 21.
Metavalias, George W., assignor of one-half to L. A. Krier, Muskegon Heights, Mich. Universal keyless combination lock. 1,898,017; Feb. 21.
Metropolitan Engineering Company. (See Bennett, Irving T., assignor.)
Metzger, Fritz, Chicago, Ill. Device for extracting fruit juices. 1,898,588; Feb. 21.
Meuer, George J., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electrical connecter. 1,898,589; Feb. 21.
Meutsch, Charles C., Buffalo, N. Y. Device for spraying upholstery. 1,898,738; Feb. 21.
Mey, Karl, Charlottenburg, Germany, assignor to General Electric Company. Stem making machine. 1,898,784; Feb. 21.
Meyer, George J., Milwaukee, Wis. Strip metal processing. 1,898,739; Feb. 21.
Meyer Mineral Separation Company. (See Meyer, Ralph F., assignor.)
Meyer, Ralph F., Freeport, assignor to Meyer Mineral Separation Company, Pittsburgh, Pa. Preparing ore. 1,898,018; Feb. 21.
Meyer, Raymond B. (See Gebhard, L. A., and Meyer.)
Meyer, Stephen E., Hayden, Ariz. Piston construction. 1,898,845; Feb. 21.
Meyercord Co., The. (See Meyercord, George R., assignor.)
Meyercord, George R., Chicago, Ill., assignor to The Meyercord Co. Nonreusable decalcomania. 1,898,993; Feb. 21.
Mezzapesa, Stephen, Brooklyn, N. Y. Soda water fountain. 1,898,560; Feb. 21.
Michigan Tool Company. (See Drader, Joseph C., assignor.)
Middleton, Richard O., Palm Beach, Fla. Self-contained charcoal heater. 1,898,846; Feb. 21.
Millee, Edwin, Fort Smith, Ark. Loading ramp for vehicles. 1,898,679; Feb. 21.
Miller, Alvin L. and R. H., Detroit, Mich. Brake adjusting tool. 1,898,136; Feb. 21.
Miller, Charles J., Minneapolis, Minn. Table. 1,898,307; Feb. 21.
Miller, Elmer E. and H. L., Millersburg, Pa. Single trigger mechanism for double barrel guns. 1,898,255; Feb. 21.
Miller, Frederick W., jr., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Urea manufacture. 1,898,093; Feb. 21.
Miller, Howard L. (See Miller, Elmer E. and H. L.)
Miller, Max V., New York, N. Y. Advertising device. 1,898,308; Feb. 21.
Miller, Russell H. (See Miller, Alvin I. and R. H.)
Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Distillation of tar. 1,898,980; Feb. 21.
Miller, William J., Swissvale, Pa. Producing pottery ware and molds for use therewith. 1,898,561; Feb. 21.
Milligan, Archibald, Fredonia, N. Y., assignor of one-half to E. W. McCarty. Shovel. 1,898,590; Feb. 21.
Mills Equipment Company Limited, The. (See Lethern, Albert A., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Minnesota Mining & Manufacturing Company. (See Farrell, Frederick W., assignor.)
Minor, Burt S. (See Wheeler, F. J., and Minor.)
Mitchell, Colin C., Corstorphine, Edinburgh, Scotland. Retarding gear for catapults. 1,898,884; Feb. 21.
Mitchell, John E., Company. (See Donahue, J. F., and McMahon, assignors.)
Mohler, Paul, Chicago, and P. Frantz, Sterling, Ill., assignors to Watt Manufacturing Company. Air conditioning apparatus. 1,898,591; Feb. 21.
Mohr, William J. (See Guthrie, R. G., and Wilbor, assignors.)
Moller, M. P., Inc. (See Burton, Henry E., assignor.)
Monroe Calculating Machine Company. (See Enders, Hugo F., assignor.)
Monteith, John C., assignor, by mesne assignments, to Eaton Manufacturing Company, Cleveland, Ohio. Vehicle bumper. 1,898,256; Feb. 21.
Mooney, Thomas F., New Lexington, Ohio, assignor to Ludowici-Celadon Company, Chicago, Ill. Method and machine for extruding plastics. 1,898,381; Feb. 21.
Moore Company, The. (See Wunderlich, William E., assignor.)
Moran, John A., New York, N. Y. Food. 1,898,885; Feb. 21.
More, Albert E., Portland, Oreg. Door holding device. 1,898,562; Feb. 21.
Morgan, Allie F., Newport News, Va. Top-spinning device. 1,898,680; Feb. 21.
Morgan & Wright. (See Foster, Boutwell H., assignor.)
Morral, Samuel E. (See Morral, William W., assignor.)
Morral, William W., assignor of one-half to S. E. Morral, Morral, Ohio. Corn cutting machine. 1,898,592; Feb. 21.
Morrison, John A., Warren, Ohio, assignor, by mesne assignments, to Walker Manufacturing Company, Racine, Wis. Lifting jack. 1,898,563; Feb. 21.
Morrow, Clyde B., Seattle, Wash. Concrete stirring device. 1,898,201; Feb. 21.
Morse Chain Company. (See Perry, David B., assignor.)
Morse, Frank L., Ithaca, N. Y. Device for preventing undesired backward motion of automobiles. 1,898,492; Feb. 21.
Morton, William A., et al. (See Eckert, Fritz, assignor.)

Moses, Douglas V. (See Bressler, R. E., and Moses.)
Mosher, William H., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Rock drill. 1,898,639; Feb. 21.
Moss, H. P., assignor to General Spring Bumper Corporation, Detroit, Mich. Foot rest. 1,898,640; Feb. 21.
Motor Wheel Corporation. (See Platt, Howard L., assignor.)
Mueller Co. (See Brandriff, Alfred, assignor.)
Mueller, Fritz. (See Jaenecke, E., and Mueller.)
Muench, Eduard, and F. Nicolai, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Hydraulic brake fluid. 1,898,564; Feb. 21.
Mugnani, Italo, Pehuajo, Argentina. Display device for motor vehicles. 1,898,041; Feb. 21.
Muir, John, Beith, Scotland. Shock shifter hub. 1,898,593; Feb. 21.
Mullaney, John F., Colorado Springs, Colo. Strainer or filter for fluids, as for milk or water. 1,898,382; Feb. 21.
Müller, Werner. (See Böger, O., and Müller.)
Munschauer, Frederick E., assignor to Niagara Machine & Tool Works, Buffalo, N. Y. Holddown for punch presses, shears or the like. 1,898,565; Feb. 21.
Murdoch, Alexander, and A. Murdoch, jr., Philadelphia, Pa. Humidifier. 1,898,785; Feb. 21.
Murdoch, Alexander, jr. (See Murdoch, Alexander, assignor.)
Murphy, Edward A. (See Twiss, D. F., and Murphy.)
Murphy, James F., assignors of one-half to Joseph W. Gleason, Lansing, Mich. Tubular frame extension ladder. 1,898,456; Feb. 21.
Murphy, Roy C., Grand Rapids, Mich. Pneumatic tire and fabricating same. 1,898,886; Feb. 21.
Murray, Henry H., Riverton, assignor to Mechanical Improvements Corporation, Camden, N. J. Key holder. 1,898,202; Feb. 21.
Musheno, Fred G., Schuylkill Haven, Pa., assignor to Allegheny Steel Company. Grinding apparatus. 1,898,786; Feb. 21.
Muth, Friedrich, Elberfeld, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Indophenol sulphur dyestuffs. 1,898,457; Feb. 21.
Nash, Russell K., Brookline, assignor to Boston Blacking & Chemical Co., Boston, Mass. Dispensing apparatus. 1,898,383; Feb. 21.
National Alloy Co. (See Kaw, H., and Collins, assignors.)
National Blank Book Company. (See Schade, John and F. S., assignors.)
National Cash Register Company, The. (See Dieserud, Helge C., assignor.)
National Cash Register Company, The. (See Fuller, Frederick L., assignor.)
National Cash Register Company. (See Goldbert, Maximilian M., assignor.)
National Cash Register Company, The. (See Green, Charles W., assignor.)
National Cash Register Company, The. (See Sburlino, P., and Gaeke, assignors.)
National Electric Products Corporation. (See Fullman, James M. G., assignor.)
National Lead Company. (See Iliff, J. W., and Lindsay, assignors.)
National Pneumatic Company. (See Paul, Abram F., assignor.)
National Rail Joint Corporation. (See Berg, Robert B., assignor.)
National Supply & Service Corporation. (See Johnson, John A., assignor.)
National Supply Company, The. (See Picard, John B., assignor.)
Naugle, John J., Rye, N. Y. Refining sugar and the like. 1,898,203; Feb. 21.
Naul, Arthur P. S., Bronxville, N. Y. Mop cleaner and dust pan. 1,898,887; Feb. 21.
Nawiasky, Paul, Ludwigshafen-on-the-Rhine, W. Bauer, Leverkusen, and E. Krauch, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the acridone and thioxanthone series and making them. 1,898,458; Feb. 21.
Neely, Guy Y., Lima, Ohio. Calendar. 1,898,137; Feb. 21.
Neiterman, Samuel, Roxbury, Mass. Attachment for telephones. 1,898,681; Feb. 21.
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Fluid pressure tool. 1,898,493; Feb. 21.
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Fluid pressure tool. 1,898,494; Feb. 21.
Nelson, Ralph M., Cleveland Heights, Ohio. Gauge. 1,898,257; Feb. 21.
Nepstad, Oscar A., et al. (See Stubkjare, Joseph A., assignor.)
Nesbitt, John J., Inc. (See Ewald, Warren, assignor.)
Nettenstrom, David, Chicago, Ill. Vehicle spring perch. 1,898,204; Feb. 21.
Neumann, Josef, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc. Production of colored resisting effects. 1,898,138; Feb. 21.
Newcomb, Edward C., North Scituate, Mass. Crank shaft balancing. 1,898,459; Feb. 21.
Newcomb, Edward C., North Scituate, Mass. Two-cycle engine. 1,898,460; Feb. 21.
Newcomb, Edward C., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,898,888; Feb. 21.
Newcomer, Harry S., New York, N. Y. Prism anamorphoser. 1,898,787; Feb. 21.
Newell, Ralph O., Brunswick, Nebr. Corn planter. 1,898,847; Feb. 21.
Newhouse, Walter F., Benton Harbor, Mich. Basket handle machine. 1,898,205; Feb. 21.
Niagara Machine & Tool Works. (See Munschauer, Frederick E., assignor.)
Nichols, Charles R. (See Williston, S. H., and Nichols.)
Nicodemus, Otto, and W. Schmidt, Frankfort-on-the-Main-Hochst, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Separating primary from secondary aliphatic amines. 1,898,461; Feb. 21.
Nicolai, Fritz. (See Muench, E., and Nicolai.)
Niedringhaus, Inc. (See Woehler, Henry G., assignor.)
Niogret, Henri F., Lyon, France, assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y. Ring spinning device for spinning continuously-fed textile fibres. 1,898,206; Feb. 21.
Nissley, Jacob H. (See Horn, R. W. P., and Nissley.)
Nixon Vending and Change Making Machines, Inc. (See Larsen, Louis H., assignor.)
Noble, Paul O., Schenectady, N. Y., assignor to General Electric Company. Method and apparatus for electric arc welding. 1,898,060; Feb. 21.
Noble, Percy W., jr., et al. (See Kenyon, Charles F., assignor.)
Noblitt, Quintin G., Indianapolis, and E. C. Booth, Columbus, assignors to Noblitt-Sparks Industries, Inc., Indianapolis, Ind. Heater. 1,898,462; Feb. 21.
Noblitt-Sparks Industries, Inc. (See Noblitt, Q. G., and Booth, assignors.)
Noel, Albert, Barcelona, Spain. Device for applying sub-caliber barrels to revolvers of the solid-frame swing-out cylinder type. 1,898,566; Feb. 21.
Noelting, William H., assignor to Faultless Caster Company, Evansville, Ind. Cushion rocking slide. 1,898,309; Feb. 21.
Noetzlie, Fred A., Los Angeles County, Calif. Dam. 1,898,095; Feb. 21.
Non-Refillable Container, Inc. (See Hunt, C. L. and Hill, assignors.)
Nordin, Josef A., assignor to Aktiebolaget Stille Warner, Stockholm, Sweden. Driving aggregate for motor power and hand power. 1,898,139; Feb. 21.
Norman Confections Inc. (See Snodgrass, Edward N., assignor.)
Noros, George C., assignor to Bond Foundry and Machine Company, Manheim, Pa. Adjustable leg for workbenches and the like. 1,898,384; Feb. 21.
Northrup, Edwin F., Princeton, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Device for electric induction furnaces. 1,898,207; Feb. 21.
Northwest Paper Company. (See Hyde, William J., assignor.)
Northwestern Barb Wire Company. (See Bradley, Albert, assignor.)
Northwestern Yeast Company. (See Kish, Zoltan J., assignor.)
Norton, James H., Denver, Colo. Building insulation conveyer nozzle. 1,898,385; Feb. 21.
Norviel, Harry E., assignor to Delco-Remy Corporation. Anderson, Ind. Switch and mounting therefor. 1,898,495; Feb. 21.
Noveltex, Inc. (See Goldberger, Hugo, assignor.)
Novitsky, Emil, Detroit, Mich. Fish lure. 1,898,740; Feb. 21.
Nulsen, Richard E., Seattle, Wash. Illuminated house number. 1,898,463; Feb. 21.
O. & S. Bearing Company. (See Skillman, Newton, assignor.)
Oakes Products Corporation. (See Gillen, George A., assignor.)
Oakes Products Corporation. (See Hershey, Orville S., assignor.)
Oberdorfer, M. I. Brass Company. (See Hedgion, Mead, assignor.)
Oberlin, Max, Darmstadt, Germany. Production of phenylamino-alkyl-carbinols, which are substituted in the phenyl-nucleus. 1,898,258; Feb. 21.
O'Brien, John J., assignor to Auto and Plane Engineering Company, Detroit, Mich. Liquid gauge. 1,898,848; Feb. 21.
O'Connor, Clara B., San Francisco, Calif. Vehicle. 1,898,567; Feb. 21.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,898,594; Feb. 21.
Odom, Burrell F., Hazelhurst, Ga. Turpentine tin and nail puller. 1,898,849; Feb. 21.
Office General des Specialites Automobiles. (See Binay, Robert H. M. L., assignor.)
Ogle, Charles R., Belleville, Ill., assignor to Trav-Ler Manufacturing Corp., St. Louis, Mo. Indicating tones by color. 1,898,642; Feb. 21.
Oil City Iron Works. (See Brewster, Harry C., assignor.)

Oil County Specialties Mfg. Co., The. (See Brown, Douglas R., assignor.)
Oilgear Company, The. (See Ferris, John P., assignor.)
Olde Homesteade Products Co. (See Bragger, William J., assignor.)
Olsen, Andrew, jr., and R. W. Robinson, San Francisco, Calif. Candy box. 1,898,208; Feb. 21.
Olsen, Ewald B., Brooklyn, N. Y. Clothesline supporting device. 1,898,788; Feb. 21.
Olson, Charles A., Geneva, and J. P. Magos, assignors to Crane Co., Chicago, Ill. Sectional boiler. 1,898,096; Feb. 21.
Oregon Pulp and Paper Company. (See Kaster, Joseph D., assignor.)
Orem, Frederick S., Baltimore, Md. Air cleaner. 1,898,259; Feb. 21.
Osterbrock, William C. (See Wood, Edmund P., assignor.)
Ostroff, Sidney, Lowell, Mass. Rumble seat top. 1,898,260; Feb. 21.
Oswego Falls Corporation. (See Wright, Wilbur L., assignor.)
Otis Elevator Company. (See Lucas, William B., assignor.)
Otis, Herbert C., Shreveport, La. Safety pulling tool for well equipment. 1,898,261; Feb. 21.
Ott, Charles S., and J. R. Lewis, San Francisco, Calif.; said J. R. Lewis assignor, by mesne assignments, to M. E. Lewis, San Francisco, Calif. Rotary brush. 1,898,464; Feb. 21.
Otte, Otho M., Tarentum, Pa., assignor to Allegheny Steel Company. Treatment of electrical sheet steels. 1,898,061; Feb. 21.
Ottinger, Nathan, New York, N. Y., and R. Lhomme, Paris, France; said Lhomme assignor to said Ottinger. Vanity case, cigarette case, and analogous articles. 1,898,386; Feb. 21.
Outboard Motors Corporation. (See Irgens, Finn T., assignor.)
Overland, Elnor O., et al. (See Stubkjare, Joseph A., assignor.)
Owen Automatic Spring and Machinery Company, The. (See Kyle, William T., assignor.)
Owens-Illinois Glass Company. (See Allen, Russell G., assignor.)
Owens-Illinois Glass Company. (See Collins, Howard W., assignor.)
Owens-Illinois Glass Company. (See Fuerst, Edwin W., assignor.)
Owens-Illinois Glass Company. (See Hutchinson, O. C. K., and Gillham, assignors.)
Owens-Illinois Glass Company. (See Soubier, Leonard D., assignor.)
Owens-Illinois Glass Company. (See Treece, Jesse H., assignor.)
Owens-Illinois Glass Company. (See Treece, J. H., and McLaughlin, assignors.)
Oxweld Acetylene Company. (See Biers, Howard W. R., assignor.)
Pacific Coast Borax Company. (See Corkill, Frederick W., assignor.)
Pacific Pump Works, et al. (See Weis, Arthur R., assignor.)
Package Machinery Company. (See Fuller, Frederic B., assignor.)
Packard Motor Car Company. (See Edwards, Herbert C. assignor.)
Packer, Hartley G., Reno, Nev. Device for securing milk can covers. 1,898,262; Feb. 21.
Pahl, August J., Berkeley, Calif. High tension line switch. 1,898,387; Feb. 21.
Papó, Armando, and A. Gentilini, Rome, Italy. Moving picture machine. 1,898,850; Feb. 21.
Parker, Burton H., Detroit, Mich. Wrench. 1,898,388; Feb. 21.
Parker, Henry C., assignor to Leeds & Northrup Company, Philadelphia, Pa. Control system and apparatus. 1,898,209; Feb. 21.
Parks, Dennis, St. Louis, Mo. Heel building machine. 1,898,889; Feb. 21.
Paschke, Fritz, Cologne, assignor to Firm: Glanzstoff-Courtaulds G. m. b. H., Cologne-Merheim, Germany. Apparatus for treating spun cakes of artificial silk or the like. 1,898,595; Feb. 21.
Patrick, Joshua, Detroit, Mich. Fuse. 1,898,062; Feb. 21.
Patt, Winfield C., Cranston, R. I., assignor to L. G. Balfour Company, Attleboro, Mass. Finger ring. 1,898,263; Feb. 21.
Pattillo, Donald K., Dover-Foxcroft, Me., G. E. Corson, Clinton, Iowa, and H. L. Thompson, Norwood, Mass., assignors to Clinton Corn Syrup Refining Company, Clinton, Iowa. Paper-making process. 1,898,682; Feb. 21.
Pattison, Joseph N. (See Wanamaker, H. F., and Pattison.)
Paul, Abram F., Llanerch, Pa., assignor to National Pneumatic Company, New York, N. Y. Shock absorber. 1,898,210; Feb. 21.
Payne, Thomas A., Los Angeles, Calif. Tabulating device for type composing machines. 1,898,683; Feb. 21.
Pazzano, Frederick F., Waltham, Mass. Tool. 1,898,568; Feb. 21.
Pearsall, Harold, Keating Summit, Pa. Hydraulic spudder. 1,898,684; Feb. 21.
Pearson, Carl A., Denver, Colo. Interlocking valve construction. 1,898,569; Feb. 21.
Pecker, Joseph S., assignors to Autogiro Company of America, Philadelphia, Pa. Rotary winger aircraft. 1,898,097; Feb. 21.
Penche, Jean G., Roussillon, France, assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y. Process of discharging. 1,898,211; Feb. 21.
Pendleton, Clerman H., Essex, Iowa. Float valve. 1,898,389; Feb. 21.
Penn, Albert, assignor to Penn Electric Switch Co., Des Moines, Iowa. Float operated switch. Re18,744; Feb. 21.
Penn Electric Switch Co. (See Penn, Albert, assignor.)
Peoples Natural Gas Company, The. (See Williamson, Donald B., assignor.)
Peoples Voting Machine Corporation. (See Garr, Joseph M., assignor.)
Perfection Steel Body Company. (See Cohen, Ralph, assignor.)
Perfection Stove Company. (See Chadwick, L. S., and Resek, assignors.)
Perry, David B., assignor to Morse Chain Company, Ithaca, N. Y. Internal-external flexible coupling. 1,898,496; Feb. 21.
Perry, Lewis A., Seattle, Wash. Concrete mixometer. 1,898,890; Feb. 21.
Peters, John F., Leonia, N. J., assignor to American Can Company, New York, N. Y. Interior collar can. 1,898,643; Feb. 21.
Peters, John J., New York, N. Y. Adjuster for supporting legs. 1,898,465; Feb. 21.
Peterson, Carl D., assignor to Spicer Manufacturing Corporation, Toledo, Ohio. Main and auxiliary gear shifting mechanism. 1,898,140; Feb. 21.
Peterson, Carl E., Upper Montclair, assignor to Eastern Tool & Manufacturing Co., Bloomfield, N. J. Slide. 1,898,741; Feb. 21.
Peterson, John W., assignor to Bendix Brake Company, South Bend, Ind. Brake shoe. 1,898,310; Feb. 21.
Pettitt, Frank C., assignor to The Guiberson Corporation, Dallas, Tex. Oil saver. 1,898,311; Feb. 21.
Petsnick, Frank F., et al. (See Wert, Charles M., assignor.)
Pfeffer, Ernest, Frankfort-on-the-Main-Schwanheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Preparing reserves under dyestuffs obtainable by oxidation on the fiber. 1,898,570; Feb. 21.
Pfeil, Walter H., Reading, assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa. Chilled iron roll. 1,898,390; Feb. 21.
Philadelphia Quartz Company of California. (See Baker, Chester L., assignor.)
Phillips, Matthew J., et al. (See Dare, Samuel T., assignor.)
Phillips, Paul D., assignor to Benjamin Electric Manufacturing Company, Des Plaines, Ill. Toggle latch. 1,898,742; Feb. 21.
Platt, Howard I., assignor to Motor Wheel Corporation, Lansing, Mich. Flue cleaning device. 1,898,596; Feb. 21.
Picard, John B., assignor to The National Supply Company, Toledo, Ohio. Lubricating mechanism. 1,898,981; Feb. 21.
Pickup, George E., assignor to The Wehrle Company, Newark, Ohio. Generator device for liquid fuel stoves. 1,898,597; Feb. 21.
Pieretti, George, assignor to Delray Corporation, San Francisco, Calif. Continuous feeding mechanism. 1,898,851; Feb. 21.
Pierson, Hallie P., A. & M. College, Miss. Amusement device. 1,898,466; Feb. 21.
Pipenbrink, Otis. (See Domries, O., and Piepenbrink.)
Piper, Howard E., Wichita, Kans. Motion picture film printing device. 1,898,141; Feb. 21.
Pipes, Walter L., Elizabeth, N. J., assignor to The Shoe Hardware Company, New Haven, Conn. Separable fastener. 1,898,743; Feb. 21.
Pittsburgh Equitable Meter Company. (See MacLean, A. D., and Weymouth, assignors.)
Pittsburgh Plate Glass Company. (See Hitchcock, Halbert K., assignor.)
Pneumatic Scale Corporation. (See Howard, Stanley R., assignor.)
Pokorney, Joseph, Baltimore, Md. Quick detachable lamp. 1,898,498; Feb. 21.
Policini, Ralph, New York, N. Y. Carrier terminal. 1,898,212; Feb. 21.
Pongiluppi, Mario, Serravalle Po, Mantua, Italy. Resilient wheel. 1,898,142; Feb. 21.
Popham, John C., et al. (See Dare, Samuel T., assignor.)
Porte, René, assignor to Société Hardoll (Etablissements Hariveau & Dolimier, et René Porte & Cie Reunis), Levallois-Perret, France. Liquid measuring device. 1,898,891; Feb. 21.
Porter, Ralph B., Johnstown, Pa. Shipping container. 1,898,892; Feb. 21.
Powell, Leslie H., Bluejacket, Okla. Combined cotton cultivator. 1,898,852; Feb. 21.
Prentice, G. E., Manufacturing Company. (See Kiessling, M., and Krieger, assignors.)
Prentice, G. E., Manufacturing Company. (See Legat, Robert C., assignor.)

Pressentin, Walter H., Seattle, Wash. Hasp retainer. 1,898,391; Feb. 21.
Prince, Clarence K., deceased, by R. K. Prince, administrator, assignor to The H. B. Smith Company, Westfield, Mass. Air heating apparatus. 1,898,571; Feb. 21.
Prince, Edmond, Cassin-la Demi-Lune, France, assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del. Recovering acetic acid from solutions obtained in cellulose derivative manufacture. 1,898,213; Feb. 21.
Prince, Robert K., administrator. (See Prince, Clarence K., deceased.)
Proctor & Schwartz, Inc. (See Wanamaker, H. F., and Pattison, assignors.)
Proefke, Otto, assignor to Enterprise Tool and Gear Corp., Detroit, Mich. Collet. 1,898,264; Feb. 21.
Prosperity Company Inc., The. (See Davis, Ernest, assignor.)
Quarnstrom, Ivan T., assignor to Wayne Manufacturing Co., Detroit, Mich. Doorlatch. 1,898,975; Feb. 21.
Raaen, Ole E., Fargo, N. Dak. Wrecking bar. 1,898,853; Feb. 21.
Radio Corporation of America. (See Ballantine, Stuart, assignor.)
Radio Corporation of America. (See Eldred, Byron E., assignor.)
Radio Corporation of America. (See Hansell, Clarence W., assignor.)
Radio Corporation of America. (See Lindenblad, Nils E., assignor.)
Radio Corporation of America. (See Ludenia, Werner, assignor.)
Radio Patents Corporation. (See Geffcken, R. H. H., and Richter, assignors.)
Raffold Process Corporation. (See Rafton, Harold R., assignor.)
Rafton, Harold R., Andover, Mass., assignor to Raffold Process Corporation. Paper manufacture. 1,898,098; Feb. 21.
Ragan, Frederick H., Shaker Heights, assignor to The Columbia Axle Company, Cleveland, Ohio. Universal joint. 1,898,265; Feb. 21.
Ragatz, Edward G., Berkeley, assignor to Union Oil Company of California, Los Angeles, Calif. Method and apparatus for controlling temperatures. 1,898,572; Feb. 21.
Rah, Joseph C., assignor to Delta Star Electric Company, Chicago, Ill. Oil switch. 1,898,744; Feb. 21.
Railway and Industrial Engineering Company. (See Massey, Hemsley B., assignor.)
Rawlings Manufacturing Company. (See Scudder, Mason, assignor.)
Rawlings Manufacturing Company. (See Whitley, William P., assignor.)
Redford, Carlyle, assignor to Chrysler Corporation, Detroit, Mich. Spring mounting. 1,898,217; Feb. 21.
Reichold, Ludwig, assignor to The Fitzgerald Manufacturing Company, Winsted, Conn. Electric time clock. 1,898,893; Feb. 21.
Reid, Frederick M., assignor to Fruehauf Trailer Company, Detroit, Mich. Semitrailer frame construction. 1,898,854; Feb. 21.
Reid, James B. (See Gann, J. A., Reid, and Reimers.)
Reid Products Company, The. (See Gaines, Walter S., jr., assignor.)
Reimers, Hans A. (See Gann, J. A., Reid, and Reimers.)
Reineman, Howard H., Brighton, assignor to Rochester Envelope Company, Inc., Rochester, N. Y. Envelope. 1,898,685; Feb. 21.
Reinhold, Edward D., Closter, N. J. Applying decoration to glass and the resulting product. 1,898,745; Feb. 21.
Reiter, Daniel I., New York, N. Y. Fastener setting machine. 1,898,019; Feb. 21.
Reliance Electric & Engineering Company, The. (See MacCutcheon, Alexander M., assignor.)
Resek, Marc. (See Chadwick, L. S., and Resek.)
Rettich, Kurt, Toledo, Ohio, assignor, by mesne assignments, to The Reynolds Spring Company, Jackson, Mich. Combined corkscrew and guard. Des. 89,308; Feb. 21.
Reynolds Spring Company, The. (See Rettich, Kurt, assignor.)
Reynolds Spring Company. (See Rossiter, John G., assignor.)
Rhode Island Warp Stop Equipment Company. (See Gibbs, Frank B., assignor.)
Rice, Alexander, Brooklyn, N. Y. Display device. 1,898,746; Feb. 21.
Rice, Charles W., Union City, Ind. Roller for shades and the like. 1,898,686; Feb. 21.
Rice, Francis O., Baltimore, Md., assignor to Rohm & Haas Company, Philadelphia, Pa. Acetylation process. 1,898,687; Feb. 21.
Rich Tool Company. (See Charlton, George, assignor.)
Richards, Donald L., Portland, Oreg. Lawn aerator. 1,898,214; Feb. 21.
Richards, Evan H. (See Richards, Laurence S. and E. M.)
Richards, Laurence S., London, and E. M. Richards, Birmingham, assignors to Cremac Marketing Company, Limited, London, England. Apparatus for emulsification. 1,898,894; Feb. 21.
Richardson, Henry, Chicago, Ill. Corner lock for wooden bedsteads. 1,898,392; Feb. 21.
Richardson, Rodney G., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,898,063; Feb. 21.
Richardson Taylor-Globe Corporation, The. (See Taylor, Robert A., assignor.)
Richter, Rudolf H. (See Geffcken, R. H. H., and Richter.)
Rickers, Frank W., assignor to The F. & M. Schaefer Brewing Co., Brooklyn, N. Y. Bottle handling apparatus. 1,898,393; Feb. 21.
Ridge, William F., Akron, Ohio. Insulator for spark plugs. 1,898,064; Feb. 21.
Riebeck'sche, A., Montanwerke Aktiengesellschaft. (See Roeckner, E., and Zschoch, assignors.)
Riedel, Walter W., assignor to Delco-Remy Corporation, Dayton, Ohio. Sound signal. 1,898,394; Feb. 21.
Rihosek, Johann. (See Engels, R., and Rihosek.)
Ringwald, Clarence, North Hampton, Ohio, assignor, by mesne assignments, to Schweitzer & Conrad, Inc., Chicago, Ill. Fuse. Re18,743; Feb. 21.
Ringwald, Clarence, South Bend, Ind. Condenser. 1,898,789; Feb. 21.
Ritchie, John R., Minneapolis, Minn. Tractor scraper. 1,898,312; Feb. 21.
Robbins, Asor D., New York, N. Y., assignor, by mesne assignments, to Bendix Aviation Corporation, South Bend, Ind. Wheel and brake for motor vehicles. 1,898,313; Feb. 21.
Robert Gair Company, Inc. (See Weiss, Arthur J., assignor.)
Roberti Bros. (See Roberti, Edward, assignor.)
Roberti, Edward, Los Angeles, Calif., assignor to Roberti Bros. Making reenforced mattresses. 1,898,497; Feb. 21.
Roberts, George R. (See Cowie, Alexander, assignor.)
Roberts, Theodore C. (See Berry, E. E., and Roberts.)
Robins, Erford E. (See Cotesworth, A., and Robins.)
Robinson, James, London, England, assignor, by mesne assignments, to British Radiostat Corporation, Limited. Electrical apparatus employing piezo-electric devices. 1,898,895; Feb. 21.
Robison, Reed W. (See Olsen, A., jr., and Robinson.)
Rochat, Henri, Geneva, Switzerland. Electric hair waving iron. 1,898,467; Feb. 21.
Rochester Envelope Company. (See Reineman, Howard H., assignor.)
Rockwood Sprinkler Company of Massachusetts. (See Howard, Clifton P., assignor.)
Roden, John C. (See Spivey, Claud E., assignor.)
Roe, Ralph C., Englewood, assignor of one-half to S. W. Borden, Summit, N. J. Regulation. 1,898,020; Feb. 21.
Roeckner, Erich, Halle-on-the-Saale, and F. Zschoch, Unterroblingen, assignors to A. Riebeck'sche Montanwerke Aktiengesellschaft, Halle-on-the-Saale, Germany. Extraction of Montan wax. 1,898,976; Feb. 21.
Rohm & Haas Company. (See Rice, Francis O., assignor.)
Rothan, Henry A., Greensburg, Pa. Vehicle wheel chock or block. 1,898,896; Feb. 21.
Ronk, George T., Cedar Rapids, Iowa. Excavator mechanism. 1,898,395; Feb. 21.
Roos, Adolph J., assignor to The Diebold Safe & Lock Company, Canton, Ohio. Protective structure. 1,898,396; Feb. 21.
Rose, Clarence C., assignor to Willard Storage Battery Company, Cleveland, Ohio. Purification of battery acid. 1,898,688; Feb. 21.
Rosenthal, Jack, Brooklyn, N. Y. Magazine pencil. 1,898,598; Feb. 21.
Rossiter, John G., assignor to Reynolds Spring Company, Jackson, Mich. Goblet. Des. 89,309; Feb. 21.
Rotinoff, Alexander G., Kingsway, London, England. Pile and pile driving. 1,898,397; Feb. 21.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Fusible fixed temperature release unit. 1,898,897; Feb. 21.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Pipe hanger. 1,898,898; Feb. 21.
Rowley, Arthur C., Drexel Hill, assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Valve for carbon dioxide fire extinguishing apparatus. 1,898,899; Feb. 21.
Rubber & Celluloid Products Co. (See Albright, Andrew, 3d., assignor.)
Rubber Service Laboratories Company, The. (See Sibley, Robert L., assignor.)
Ruemelin, Richard, Milwaukee, Wis. Sand regulator and shut-off. 1,898,689; Feb. 21.
Ruff, George O., Paris, Ill. Fire extinguishing grenade holder. 1,898,266; Feb. 21.
Ruppel, Sigwart, Frankfort-on-the-Main, Germany. Method and apparatus for interrupting high tension circuits. 1,898,900; Feb. 21.
Ruppel, Sigwart, Frankfort-on-the-Main, Germany. High tension circuit interrupter. 1,898,901; Feb. 21.
Sabatini, Washington, Genoa, Italy. Machine for the calculation of reenforced concrete. 1,898,398; Feb. 21.
Sander, Edna A. (See Daub, Edward, assignor.)
Sandhagen, Carl J., Cedar Rapids, Iowa. Lavatory. 1,898,314; Feb. 21.
Sandin, Jerome, Wilkins Township, Allegheny County, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fuse. 1,898,099; Feb. 21.
Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,898,315; Feb. 21.

Sburlino, Pascal, and H. F. Gaeke, assignors to The National Cash Register Company, Dayton, Ohio. Cash register. 1,898,065; Feb. 21.
Schacht, Clifford A., Huntington, Ind. Dish scraper. 1,898,690; Feb. 21.
Schacht, Clifford A., Huntington, Ind. Scraper. 1,898,747; Feb. 21.
Schade, Frank S. (See Schade, John and F. S.)
Schade, John and F. S., assignors to National Blank Book Company, Holyoke, Mass. Loose leaf binder. 1,898,215; Feb. 21.
Schade, John and F. S., assignors to National Blank Book Company, Holyoke, Mass. Slide fastener construction. 1,898,216; Feb. 21.
Schaefer, Eugene. (See Weber, F. W., and Schaefer.)
Schaefer, F. & M., Brewing Co., The. (See Riekers, Frank W., assignor.)
Schaefer, Josef, Dortmund, Germany. Utilization of the perceptible heat of finished coke. 1,898,267; Feb. 21.
Schaerer, Otto, Basel, Switzerland. Automatic lathe. 1,898,902; Feb. 21.
Schäfer, Gustav, Stuttgart, Germany. Electric switch. 1,898,691; Feb. 21.
Schafer, John V., assignor to Bronson Reel Company, Bronson, Mich. Fisherman's reel. 1,898,316; Feb. 21.
Schellentrager, Eugene W., Shaker Heights, assignor to Atlas Bolt & Screw Company, Cleveland, Ohio. Discharge control protecting means. 1,898,021; Feb. 21.
Schensted, Roy E., Bessemer, Mich. Head lamp. 1,898,143; Feb. 21.
Schepss, Wilhelm. (See Hardtmann, M., Schepss, and Tietze.)
Schlenk, Rudolf, Vienna, Austria. Refrigerator. 1,898,317; Feb. 21.
Schlingman, Paul F., Schenectady, N. Y., assignor to General Electric Company. Preparing resinous compositions. 1,898,790; Feb. 21.
Schlumbohm, Peter, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn. Mirror. 1,898,791; Feb. 21.
Schmidt, Edkard F., Milwaukee, Wis., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating on shoe parts. 1,898,144; Feb. 21.
Schmidt, Robert E., Elberfeld, and R. Berliner, Vohwinkel, near Cologne, Germany, assignors to General Aniline Works, Inc. New condensation products of formaldehyde and 1-amino-anthraquinone compounds being substituted in the 4-position. 1,898,399; Feb. 21.
Schmidt, Walter. (See Nicodemus, O., and Schmidt.)
Schmiege, Frank F., Kalamazoo, Mich. Apparatus for producing woven wire cloth. 1,898,692; Feb. 21.
Schnecko, Otto, and W. Schwalbe, Wiesbaden, Germany, assignors to The Visking Corporation, Chicago, Ill. Manufacturing tubing from cellulose. 1,898,400; Feb. 21.
Schneider, Christian, and H. Buetefisch, Neuroessen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of mixtures of nitrogen and hydrogen from bituminous fuels. 1,898,967; Feb. 21.
Schnell, Steve, assignor to Wagner Electric Corporation, St. Louis, Mo. Brake mechanism. 1,898,022; Feb. 21.
Schröder, Richard, Berlin, Germany. Hydrometer. 1,898,903; Feb. 21.
Schroeder Simon E., assignor to The Maytag Company, Newton, Iowa. Washing machine. 1,898,218; Feb. 21.
Schröter, Fritz, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Piezo-electric oscillating crystal in a vacuum vessel. 1,898,599; Feb. 21.
Schubert, Julius, Lyndburst, N. J. Composite cylinder for internal combustion engines. 1,898,145; Feb. 21.
Schubert, Max. (See Herz, R., and Schubert.)
Schubert, Max. (See Herz, R., Schubert, and Hechtenberg.)
Schubert & Salzer Maschinenfabrik, Aktiengesellschaft. (See Heinitz, Woldemar, assignor.)
Schubert, Wilfred G., assignor to The Stearns & Foster Company, Cincinnati, Ohio. Mattress. 1,898,573; Feb. 21.
Schuett, John H., Hull, Iowa. Post. 1,898,499; Feb. 21.
Schulz, Arthur P., Chicago, Ill., assignor, by mesne assignments, to Teller Stove Designing Corporation. Enamel decorating process. 1,898,500; Feb. 21.
Schundler, Frederic E. (See Denning, Paul S., assignor.)
Schwalbe, Waldemar. (See Schnecko, O., and Schwalbe.)
Schwartz, Charles J. (See Frescott, Nicholas, sr., assignor.)
Schwartz, Isaac L. (See Banes, Walter D., assignor.)
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 89,310; Feb. 21.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 89,311; Feb. 21.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 89,312; Feb. 21.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 89,313; Feb. 21.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 89,314; Feb. 21.
Schweitzer & Conrad, Inc. (See Ringwald, Clarence, assignor.)
Schweitzer, Louis P., and S. M. Bagno, assignors to Peter J. Schweitzer, Inc., New York, N. Y. Measuring web characteristics. 1,898,066; Feb. 21.
Schweitzer, Peter J., Inc. (See Schweitzer, L. P., and Bagno, assignors.)
Schweizer, Ernst, Zurich, Switzerland. Automatic bobbin-winding machine in combination with spinning frames. 1,898,501; Feb. 21.
Schweizerische Lokomotiv- und Maschinenfabrik. (See Vonrüti, Hans, assignor.)
Scoville Manufacturing Company. (See Belfit, Robert W., assignor.)
Scudder, Mason, Clayton, assignor to Rawlings Manufacturing Company, St. Louis, Mo. Football, basket ball, and the like. 1,898,600; Feb. 21.
Sebring, Russel. (See Kelly, Dennis, assignor.)
Secretary of War of The United States of America. (See Woodberry, David L., assignor.)
Segal, Samuel. New York, N. Y. Tweezer. Des. 89,315; Feb. 21.
Seidel, Walter, and A. Ernecke, Dormagen, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Artificial thread. 1,898,502; Feb. 21.
Seitz, John F., Hollywood, Calif. Making sets for moving pictures. 1,898,904; Feb. 21.
Seitz, John F., Los Angeles, Calif. Method and apparatus for making motion pictures. 1,898,905; Feb. 21.
Selecto Light, Inc. (See Alessi, Anthony, assignor.)
Seng Company, The. (See Fox, Martin, assignor.)
Sentry Company, The. (See Winter, Murray, assignor.)
Sharp, Clayton H., White Plains, N. Y. Apparatus for the matching of colors. 1,898,219; Feb. 21.
Shaw, Harry A. (See Birtch, Fred W., assignor.)
Sheaffer, W. A., Pen Co. (See Cuthbert, William R., assignor.)
Sheindelman, Samuel, Lawrence, N. Y. Sweater or similar article. Des. 89,316; Feb. 21.
Sheindelman, Samuel, Lawrence, N. Y. Sweater or similar article. Des. 89,317; Feb. 21.
Sheindelman, Samuel, Lawrence, N. Y. Sweater or similar article. Des. 89,318; Feb. 21.
Shepherdson, Arnold, and W. W. Tatum, Blackley, Manchester, assignor to Imperial Chemical Industries Limited, London, England. Dyes of the anthraquinone series. 1,898,693; Feb. 21
Shepherdson, Arnold, and W. W. Tatum, Blackley, Manchester, assignor to Imperial Chemical Industries, Limited, London, England. Dyes of the anthraquinone series. 1,898,748; Feb. 21.
Shermund, Ralph C., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radioreceiver. 1,898,792; Feb. 21.
Shevlin, Joseph T. (See Dadd, Frank E., assignor.)
Shoe Hardware Company, The. (See Pipes, Walter L., assignor.)
Shoemaker, Milton J., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis. Clothlike fabric. 1,898,601; Feb. 21.
Sibley, Robert L., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Vulcanization of rubber. 1,898,268; Feb. 21.
Siemens-Schuckertwerke Aktiengesellschaft. (See Kiefer, Emil O., assignor.)
Sikorsky, Aviation Corporation. (See Sikorsky, Igor, assignor.)
Sikorsky, Igor, College Point, N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del. Aerial vehicle. 1,898,644; Feb. 21.
Sikorsky, Igor, College Point, N. Y., assignor to Sikorsky Aviation Corporation. Shock absorber. 1,898,694; Feb. 21.
Sikorsky, Igor, Stratford, Conn., assignor to Sikorsky Aviation Corporation, Wilmington, Del. Aircraft, especially aircraft of the amphibian type and body boat structure for same. 1,898,695; Feb. 21.
Silberger, Julius, Cleveland, Ohio. Sewer cleaning device. 1,898,503; Feb. 21.
Silvernail, Howard A., Cleveland, Ohio. Detachable platform. 1,898,504; Feb. 21.
Simcox, Milan B., assignor to A. G. Bemmels, Minneapolis, Minn. Cigarette holder. 1,898,220; Feb. 21.
Sithens, Edward J., Cynwyd, Pa. Bookholder. 1,898,906; Feb. 21.
Skillman, Newton, assignor to O. & S. Bearing Company, Detroit, Mich. Permanent connecting unit and forming same. 1,898,100; Feb. 21.
Slater, Fred M., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Air feed mounting for rock drills. 1,898,645; Feb. 21.
Slayton, Robert E., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,898,401; Feb. 21.
Slezak, Vincent F., Jamaica, N. Y. Weighing scale. 1,898,146; Feb. 21.
Smith, Allan G. (See Dorer, Primus O., assignor.)
Smith, Clyde W. (See Earnheart, P., and Smith.)
Smith, Earle R., Alhambra, assignor to Gillette Sweeper Corporation, Ltd., Los Angeles, Calif. Comb attachment for carpet sweepers. 1,898,318; Feb. 21.
Smith, Elmer G., College Station, Tex. Gate valve. 1,898,147; Feb. 21.
Smith, Frederick C., Sandusky, Ohio. Wrist watch strap. 1,898,402; Feb. 21.

Smith, H. B., Company, The. (See Prince, Clarence K., assignor.)
Smith, Harold L., assignor to The Louis Allis Company, Milwaukee, Wis. Dynamo-electric machine. 1,898,982; Feb. 21.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,898,793; Feb. 21.
Smith, Roy E. (See Everett, C. E., and Smith.)
Smith, S. Morgan, Company. (See Smyser, Harry E., assignor.)
Smith, William P., Baker, Oreg. Self locking bolt and nut. 1,898,907; Feb. 21.
Smithson, John G., Oakdale, Alvechurch, assignor of one-half to The Electro-Mechanical Brake Company Limited, West Bromwich, England. Control of electric motors. 1,898,403; Feb. 21.
Smyser, Harry E., assignor to S. Morgan Smith Company, York, Pa. Hydraulic turbine. 1,898,023; Feb. 21.
Snap-On Tools, Inc. (See Gayne, Gideon R., assignor.)
Snodgrass, Edward N., assignor to Norman Confections Inc., Denver, Colo. Ice cream confection. 1,898,148; Feb. 21.
Snyder, Howard F., assignor, by mesne assignments, to The Maytag Company, Newton, Iowa. Washing apparatus. 1,898,221; Feb. 21.
Société Hardoll (Etablissements Harlveau & Dollmier, et René Forte & Cie Rennis). (See Porte, René, assignor.)
Société Industrielle des Procédés W. A. Loth. (See Loth, William A., assignor.)
Society of Chemical Industry in Basle. (See Grossmann, Paul, assignor.)
Society of Chemical Industry in Basle. (See Krummenacher, Eduard, assignor.)
Society of Chemical Industry in Basle. (See Straub, F., and Widmer, assignors.)
Soderstrom, John M., Turlock, Calif. Automatic feed hopper. 1,898,269; Feb. 21.
Soemer, John O., assignor to The Steffens-Amberg Co., Newark, N. J. Lock push plate device. 1,898,505; Feb. 21.
Soll, Julius. (See Specketer, H., and Soll.)
Soper, Roy M., Kansas City, Mo. Oil burner. 1,898,270; Feb. 21.
Sorensen, Charles E., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Manufacturing commutator segments. 1,898,696; Feb. 21.
Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass blowing machine. 1,898,222; Feb. 21.
Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Machine for forming hollow glassware. 1,898,404; Feb. 21.
Soulé, Edward I., Berkeley, Calif. Concrete form. 1,898,319; Feb. 21.
Southcott, Richard J., Toronto, Ontario, Canada. Combination lock. 1,898,149; Feb. 21.
Southgate, George T., Forest Hills, N. Y., assignor to Union Carbide & Carbon Research Labs. Inc. Welding rod. 1,898,908; Feb. 21.
Southgate, George T., Forest Hills, N. Y., assignor to Union Carbide & Carbon Research Laboratories, Inc. Welding electrode. 1,898,909; Feb. 21.
Specketer, Heinrich, Frankfort-on-the-Main-Griesheim, and J. Söll, Frankfort-on-the-Main-Schwanheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing double compounds of aluminum fluoride-alkali-fluoride. 1,898,506; Feb. 21.
Speidel, Albert E. R., Edgewood, R. I., assignor to Speidel Corporation. Aviator's emblem or similar article. Des. 89,319; Feb. 21.
Speidel Corporation. (See Speidel, Albert E. R., assignor.)
Spencer, Harold F. (See Haines, Stacey A., assignor.)
Sperry Gyroscope Company. (See Hodgkinson, Francis P., assignor.)
Sperry, Herbert B., Batavia, Ill. Filing cabinet. 1,898,223; Feb. 21.
Sperry-Sun Well Surveying Company. (See Williston, S. H., and Nichols, assignors.)
Spicer Manufacturing Corporation. (See Peterson, Carl D., assignor.)
Spiess, Georg, Leipzig, Germany. Cross folding machine. 1,898,794; Feb. 21.
Spilker, Adolf, Duisburg-Meiderich, Germany. Hydrogenation of hydrocarbons. 1,898,966; Feb. 21.
Spilker, Adolf, and C. Zerbe, assignors to Gesellschaft fur Teerverwertung, m. b. H., Duisburg-Meiderich, Germany. Hydrogenating organic substances. 1,898,965; Feb. 21.
Spivey, Claud E., and J. C. Roden, Scottsboro, Ala. Sewing machine. 1,898,855; Feb. 21.
Sprague, Charles H., Des Moines, Iowa. Syringe. 1,898,856; Feb. 21.
Square D Company. (See Jackson, J. G., and Allen, assignors.)
Squibb, E. R. & Sons. (See Christiansen, W. G., and Jurist, assignors.)
Stamsvik, Alfred L., Grove City, Pa., assignor to Cooper-Bessemer Corporation. Mount Vernon, Ohio. Fuel controlling mechanism for internal combustion engines. 1,898,602; Feb. 21.
Standard Conveyor Company. (See Eggleston, Smith, assignor.)
Standard Oil Company. (See Earnheart, P., and Smith, assignors.)
Standard Oil Company. (See Wilson, Robert E., assignor.)
Standard Products Company. (See Dyer, Tom G., assignor.)
Stator Refrigeration, Inc. (See Comstock, Daniel F., assignor.)
Stearns & Foster Company, The. (See Schubert, Wilfred G., assignor.)
Stee, R. M., trustee. (See Dove, Leonard P., assignor.)
Steenrod, William J., Kalamazoo, assignor to Bonnar-Vawter Fanform Company, Inc., Benton Harbor, Mich. Mechanism for interleaving carbon strips in connected manifold forms. 1,898,795; Feb. 21.
Stefandel, Frank. (See Landinberg, D., and Stefandel.)
Steffens-Amberg Co., The. (See Soemer, John O., assignor.)
Stein, Michael, Munchendorf, Austria, assignor of one-half to J. R. Keller, Lausanne, Switzerland. Manufacturing gelatine capsules. 1,898,507; Feb. 21.
Stein, William P., Rochester, N. Y. Paper box opening machine. 1,898,910; Feb. 21.
Steiner, Frank M., Minneapolis, Minn., and W. S. Graves, Kansas City, Mo., assignors to Steiner Sales Company, Salt Lake City, Utah. Towel cabinet. 1,898,796; Feb. 21.
Steiner Sales Company. (See Steiner, F. M., and Graves, assignors.)
Stennouse, Thomas, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Pneumatic glass feeder. 1,898,101; Feb. 21.
Sterling Corporation. (See Flamniang, J., and Bowser, assignors.)
Stern, David, Dorchester, Mass. Ice pack receptacle. 1,898,320; Feb. 21.
Stern, Milton C., assignor to The Egry Register Company, Dayton, Ohio. Paper supplies. 1,898,271; Feb. 21.
Stern, Mitchel, Philadelphia, Pa. Bathtub back rest. 1,898,272; Feb. 21.
Stersel, Kurt A. (See Fischer, F. J., and Stersel.)
Stevens, Henry V., Topeka, Kans. Furnace bearer. 1,898,273; Feb. 21.
Stone, Cecil F. (See Underwood, W. L., and Stone.)
Stone, Frederick, assignor to Doheny-Stone Drill Co., Los Angeles, Calif. Sand reel. 1,898,067; Feb. 21.
Stover, Carl M., and J. W. Wright, Oakland, Calif. Outboard motor steering device. 1,898,150; Feb. 21.
Stover, Russell, Denver, Colo. Packing table for candy makers. 1,898,151; Feb. 21.
Straub, Fritz, and W. Widmer, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Metalliferous azo-dyestuffs and making same. 1,898,911; Feb. 21.
Strobel, Charles K., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical rectifier. 1,898,321; Feb. 21.
Strode, Victor W., Portland, Oreg. Hull. 1,898,322; Feb. 21.
Struve, Frederick E., Philadelphia, Pa. Stocking. Des. 89,320; Feb. 21.
Stubbs, Luther G., Hamlet, N. C. Radiocabinet. 1,898,224; Feb. 21.
Stubkjare, Joseph A., assignor of one-half to E. O. Overland, C. Flattum, and O. A. Nepstad, Bigtimber, Mont. Cooling apparatus. 1,898,603; Feb. 12.
Studebaker Corporation, The. (See Newcomb, Edward C., assignor.)
Sturgis, Charles E., assignor of one-half to W. P. Andrus, Rochester, N. Y. Method and machine for coiling small wire. 1,898,102; Feb. 21.
Sugarman, Miriam. (See Trompeter, David, assignor.)
Sullivan, Edward G., assignor to J. S. Belt, Amarillo, Tex. Bath apparatus. 1,898,508; Feb. 21.
Sulphide Corporation. (See Wescott, Ernest W., assignor.)
Svendsen, Svend S., Chicago, Ill., assignor of one-half to George Birkenstein. Preparing a lead carbonate product. 1,898,405; Feb. 21.
Swendsen, Johan W., Oslo, Norway. Induction motor with short circuited secondary. 1,898,749; Feb. 21.
Swiss Locomotive and Machine Works. (See Vonrüti, Hans, assignor.)
Szabo, Lewis G., Franklin, N. J. Shoe lace. 1,898,225; Feb. 21.
Taft, Arthur E. (See Taft, Henry M. and A. E.)
Taft, Henry M., Worcester, and A. E. Taft, Grafton, Mass Salt and pepper shaker. 1,898,152; Feb. 21.
Tamura, Gentaro, Higashiyodokawa-ku, Osaka, Japan. Sucking and compressing machine. 1,898,153; Feb. 21.
Tapman, Samuel F., Jamaica, N. Y. Riveting machine. 1,898,468; Feb. 21.
Tate, Harold L. (See Tate, Lionel C. and H. L.)
Tate, Lionel C., Louisville, Ky., and H. L. Tate, Chicago, Ill. Silk screen printing machine. 1,898,406; Feb. 21.
Tatum, William W. (See Shepherdson, A., and Tatum.)
Tatum, William W. (See Thomson, R. F., and Tatum.)
Taylor, Albert H., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Frequency multiplication and keying system. 1,898,103; Feb. 21.
Taylor, Halsey W., Warren, Ohio. Valve structure. 1,898,226; Feb. 21.
Taylor, Robert A., assignor, by mesne assignments, to The Richardson Taylor-Globe Corporation, Cincinnati, Ohio. Display box. 1,898,646; Feb. 21.

Taylor, Sigel, Little Rock, Ark. Spacing device for containers. 1,898,509; Feb. 21.
Taylor, William I. (See Dreyfus, H., Dickie, and Taylor.)
Teeter, Wilford H., assignor to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,898,324; Feb. 21.
Teetor, Ralph R., Hagerstown, Ind. Handle for fishing rods. 1,898,323; Feb. 21.
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Böhm, Otto, assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Hagen, Gerhard B., assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Schröter, Fritz, assignor.)
Teleregister Corporation, The. (See Furrer, Emery C., assignor.)
Teller Stove Designing Corporation. (See Schulz, Arthur P., assignor.)
Teuscher, Edward C., Webster Groves, assignor to Teuscher Pulley & Belting Company, St. Louis, Mo. Cutting macaine. 1,898,647; Feb. 21.
Teuscher Pulley- & Belting Company. (See Teuscher, Edward C., assignor.)
Theiss, John H., Metuchen, N. J. Protecting photographic elements. 1,898,857; Feb. 21.
Theiss, John H., Metuchen, N. J. Wrapping apparatus. 1,898,858; Feb. 21.
Thomas & Betts Co., The. (See Church, Lewis H., assignor.)
Thomas, Lucy C., New York, N. Y. Container for matches. 1,898,227; Feb. 21.
Thomas, Thomas H., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Quick service device. 1,898,519; Feb. 21.
Thompson, Beriah M., U. S. Navy. Body waste remover. 1,898,104; Feb. 21.
Thompson, H. L. (See Pattillo, D. K., Corson, and Thompson.)
Thompson, Lucian B., Scotia, and V. J. Chapman, Schenectady, N. Y., assignors to General Electric Company. Welding electrode. 1,898,068; Feb. 21.
Thompson, Milton D., Fairhaven, Mass. Apparatus for changing the pitch angle of reversible-blade screw propellers. 1,898,607; Feb. 21.
Thompson, Ralph F., deceased, East Liverpool, Ohio; S. M. Thompson, administratrix, assignor to Sarah MacGregor Thompson, Sewickley, Pa. Electromagnetic release valve. 1,898,228; Feb. 21.
Thompson, Sarah M., administratrix. (See Thompson, Ralph F., assignor.)
Thomson, Robert F., and W. W. Tatum, Grangemouth, Scotland, assignors to Imperial Chemical Industries, Limited. Manufacture of anthraquinone derivatives. 1,898,750; Feb. 21.
Thorp, William T., Hillsboro, Ill. Ventilating system for inclosed cars. 1,898,859; Feb. 21.
Thorsen, Peter, North Bergen, N. J., and G. W. von Hofe, Forest Hills, N. Y., said von Hofe assignor to said Thorsen. Automatic grinding machine. 1,898,648; Feb. 21.
Tietze, Ernst. (See Dressel, O., and Tietze.)
Tietze, Ernst. (See Hardtmann, M., Schepss, and Tietze.)
Timson, Charles E., Deerfield, assignor to William Cooper & Nephews, Incorporated, Chicago, Ill. Marker or tag. 1,898,274; Feb. 21.
Titlestad, Nicolay. (See Hechenbleikner, I., and Titlestad.)
Tonsor, Louis F., Los Angeles, Calif. Camera mounting. 1,898,469; Feb. 21.
Trav-Ler Manufacturing Corp. (See Ogle, Charles R., assignor.)
Trbojevich, Nikola, Detroit, Mich. Gear cutting. 1,898,154; Feb. 21.
Treece, Jesse H., Toledo, Ohio, assignor to Owens-Illinois Glass Company. Shear mechanism for glassware forming machines. 1,898,407; Feb. 21.
Treece, Jesse H., Toledo, Ohio, and J. E. McLaughlin, Alton, Ill., assignors to Owens-Illinois Glass Company. Machine for forming hollow glassware. 1,898,408; Feb. 21.
Tripp, Edward J., Hanham, near Bristol, England. Detachable fastener. 1,898,155; Feb. 21.
Trompeter, David, Amityville, assignor to Miriam Sugarman, Baldwin, N. Y. Steel wool holder. 1,898,698; Feb. 21.
Trumbull Electric Manufacturing Company. (See Hammerly, Herman J., assignor.)
Tschudi, Erwin W., Baltimore, assignor to The Black & Decker Manufacturing Company, Towson, Md. Hammer. 1,898,069; Feb. 21.
Tschunkur, Eduard. (See Bock, W., and Tschunkur.)
Turk, Peter, Chicago, Ill. Convertible vehicle seat. 1,898,912; Feb. 21.
Turnquist, Magnus, Chicago, Ill. Hinge device. 1,898,511; Feb. 21.
Twiss, Douglas F., and E. A. Murphy, Fort Dunlop, Erdington, Birmingham, assignors to Dunlop Rubber Company, Limited, Birmingham, England. Method and apparatus for concentrating liquids. 1,898,604; Feb. 21.
Tyden, Emil, Hastings, Mich. Piston ring. 1,898,797; Feb. 21.
U. G. I. Contracting Company, The. (See Chrisman, Charles S., assignor.)
Ulrich, Max, Stuttgart, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Apparatus for making water drums of water-tube boilers. 1,898,070; Feb. 21.
Underberg, Henry, assignor to Frankart, Inc., New York, N. Y. Ash tray or similar article. Des. 89,321; Feb. 21.
Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)
Underwood, Leo H., Walhonding, Ohio. Can and jar wrench. 1,898,409; Feb. 21.
Underwood, Walter L., and C. F. Stone, Glendale, Calif. Clear vision tube for pneumatic systems. 1,898,860; Feb. 21.
Union Asbestos & Rubber Company. (See Wild, Rudolf L. R., assignor.)
Union Carbide & Carbon Research Laboratories, Inc. (See Southgate, George T., assignor.)
Union Guardian Trust Company, executor. (See Matheson, Martin H.)
Union Oil Company of California. (See Gard, Clare D., assignor.)
Union Oil Company of California. (See Ragatz, Edward G., assignor.)
Union Switch & Signal Company, The. (See Strobel, Charles K., assignor.)
Union Switch & Signal Company, The. (See Wood, W. A., and Machesney, assignors.)
United American Bosch Corporation. (See Henderson, Ken L., assignor.)
United Engineering & Foundry Company. (See Ewart, Hubert E., assignor.)
United Shoe Machinery Corporation. (See Bates, Arthur, assignor.)
United Shoe Machinery Corporation. (See Glass, Perley R., assignor.)
United Shoe Machinery Corporation. (See Schmidt, Eckard F., assignor.)
United States Government and the People of. (See Greenbank, George R., assignor.)
United States Gypsum Company. (See Linzell, Harry K., assignor.)
United States Smelting, Refining & Mining Company. (See Clevenger, Galen H., assignor.)
Universal Draft Gear Attachment Co. (See Wilson, Jack, assignor.)
Uteg, Hermann, Metallwaren G. m. b. H. (See Bosshardt, Karl, assignor.)
Van Buskirk, Robert N., Detroit, Mich., assignor to Bendix Brake Company, South Bend, Ind. Brake operating means. 1,898,275; Feb. 21.
Vandercook, David D. (See Vandercook, Robert O., E. O., F. R., and D. D.)
Vandercook, Edward O. (See Vandercook, Robert O., E. O., F. R., and D. D.)
Vandercook, Frederick R. (See Vandercook, Robert O., E. O., F. R., and D. D.)
Vandercook, Robert O., E. O., F. R., and D. D., Chicago, Ill. Proof press and inking mechanism therefor. 1,898,605; Feb. 21.
Van der Lande, Petrus L. M., Deventer, Netherlands. Controlled plural batch weighing machine. 1,898,156; Feb. 21.
Van Dresser Specialty Corporation. (See Van Dresser, William C., assignor.)
Van Dresser, William C., assignor to Van Dresser Specialty Corporation, Detroit, Mich. Visor. 1,898,276; Feb. 21.
Van Horn, William H. (See Kemp, W. W., and Van Horn.)
Van Kirk, Bradley, assignor of one-half to G. Kell, Louisville, Ohio. Bake pan. 1,898,913; Feb. 21.
Van Ness, Willard L., Toledo, Ohio. Sheet glass manufacture. 1,898,157; Feb. 21.
Veale, George W., Cleveland Heights, assignor to Eaton Manufacturing Company, Cleveland, Ohio. Bumper. 1,898,229; Feb. 21.
Venn, Theodore H., Chicago, Ill. Atomizer. 1,898,325; Feb. 21.
Vereinigte Stahlwerke Aktiengesellschaft. (See Fricke, Arthur, assignor.)
Vereinigte Stahlwerke Aktiengesellschaft. (See Klein, Ludwig, assignor.)
Vereinigte Stahlwerke Aktiengesellschaft. (See Ulrich, Max, assignor.)
Vereinigte Silberhammerwerke Hetzel & Co. (See Wachwitz, Heinrich, assignor.)
Versuchs- und Lehronstalt für Beauérei in Berlin. (See Glaubits, M., and Haehn, assignors.)
Vestal, Albert H. (See Malone, Adolph W., assignor.)
Vestal, Albert H., et al. (See Malone, Adolph W., assignor.)
Vickers, Harry F., Los Angeles, Calif. Vane pump or motor. 1,898,914; Feb. 21.
Vincent, Harry S., Ridgewood, N. J., assignor to Franklin Railway Supply Company, New York, N. Y. Axle box. 1,898,470; Feb. 21.
Visking Corporation, The. (See Schnecko, O., and Schwalbe, assignors.)
Vogt Instant Freezers Incorporated. (See Bottoms, Robert R., assignor.)
Voices, Incorporated. (See Grubman, Leo J., assignor.)
Volpin, Alexander S., Houston, Tex. Razor blade sharpener. 1,898,915; Feb. 21.

Von Allmen, Samuel, assignor to the Firm "Chemical Works Formerly Sandoz", Basel, Switzerland. Manufacture of dyestuffs of the anthraquinone series. 1,898,861; Feb. 21.
Von Bacht, William H., San Francisco, Calif. License plate holder. 1,898,024; Feb. 21.
Von Hofe, George W. (See Thorsen, Peter, and von Hofe.)
Vonrüti, Hans, assignor to Swiss Locomotive and Machine Works, Winterthur, Switzerland. Fuel-injection valve for internal-combustion engines. 1,898,751; Feb. 21.
Vonrüti, Hans, assignor to Firm Schweizerische Lokomotiv- und Maschinenfabrik, Winterthur, Switzerland. Fuel pump for internal combustion engines. 1,898,916; Feb. 21.
Von Seggern, Ernest A., Los Angeles, and H. E. von Seggern, Escondido, Calif. Liquid refrigerant control means for refrigerating systems. 1,898,277; Feb. 21.
Von Seggern, Henry E. (See von Seggern, Ernest A. and H. E.)
Waaser, John E., sr., East Mauch Chunk, Pa. Direction indicator. 1,898,919; Feb. 21.
Wachwitz, Heinrich, Nuremburg, Germany, assignor to Vereinigte Silberhammerwerke Hetzel & Co., Nuremberg, Germany. Welding aluminum, or alloys thereof to other metals. 1,898,917; Feb. 21.
Wagner Electric Corporation. (See Dick, Burns, assignor.)
Wagner Electric Corporation. (See Schnell, Steve, assignor.)
Wagner, Frederick P. (See Brauer, A. J., and Wagner.)
Wahlstrom, Oscar W., Dallas, Tex. Destructive distillation and carbonisation of waste matter. 1,898,326; Feb. 21.
Wales, Nathaniel B., Paris, France. Vacuum cleaner. 1,898,410; Feb. 21.
Walker, John S., Pittsburgh, Pa. Bid indicator for card games. 1,898,862; Feb. 21.
Walker, Joseph B., Los Angeles, Calif. Camera. 1,898,471; Feb. 21.
Walker Manufacturing Company. (See Morrison, John A., assignor.)
Wallfill Company, The. (See Burt, Henry J., jr., assignor.)
Wanamaker, Harry F., and J. N. Pattison, assignors to Proctor & Schwartz, Inc., Philadelphia, Pa. Stripping mechanism for hosiery driers. 1,898,918; Feb. 21.
Waterman, Fred, Winnebago, Nebr. Steering device for planters. 1,898,920; Feb. 21.
Watson, Edward F., Larchmont, N. Y., assignor to American Telephone and Telegraph Company. Remote control system. 1,898,921; Feb. 21.
Watt Manufacturing Company. (See Mohler, P., and Frantz, assignors.)
Watts, Richard E., Stamford, England. Driving gear for engines, compressors, pumps and the like. 1,898,411; Feb. 21.
Wayles, Edgar E., East Hartford, Conn. Radiator. 1,898,327; Feb. 21.
Wayne, Manufacturing Co. (See Quarnstrom, Ivan T., assignor.)
Weatherbest Stained Shingle Company. (See Howe, S. B., and Bliss, assignors.)
Weber, Friedrich W., Hackensac, and E. Schaefer, Englewood, assignors to Maywood Chemical Works, Maywood, N. J. Weighting regenerated cellulose. 1,898,105; Feb. 21.
Wehrle Company, The. (See Pickup, George E., assignor.)
Weimar, Andrew, assignor to Weimar Brothers, Philadelphia, Pa. Tape loom. 1,898,230; Feb. 21.
Weimar Brothers. (See Weimar, Andrew, assignor.)
Weis, Arthur E., Huntington Park, assignor of one-half to Pacific Pump Works, Los Angeles, Calif., and one-half to G. E. Bigelow, Huntington Park, Calif. Sealing device. 1,898,278; Feb. 21.
Weiss, Arthur J., St. Albans, N. Y., assignor, by mesne assignments, to Robert Gair Company, Inc., Wilmington, Del. Carton. 1,898,231; Feb. 21.
Weitz, Irene A., Brooklyn, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,324; Feb. 21.
Wej-Lock Manufacturing Company. (See Cole, Elmer K., assignor.)
Welch, Sidney A., A. F. Guyler, J. T. Ashby, and W. H. Boaler, Spondon, near Derby, England, assignors to Celanese Corporation of America. Knitting machine. 1,898,106; Feb. 21.
Wellings, John G., C. G. Mayo, and P. Mathews, Rugby, England, assignors to General Electric Company. Protective arrangement. 1,898,752; Feb. 21.
Wellman, Charles E., assignor to Ford Motor Company, Dearborn, Mich. Brake rod supporting means. 1,898,699; Feb. 21.
Wellton, Otto G., Stockholm, Sweden. Continually variable change speed gear. 1,898,412; Feb. 21.
Wendt, Bruno, Dessau in Anhalt, Germany, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y. Manufacturing photographic silver salt emulsions and light-sensitive material. 1,898,512; Feb. 21.
Wente, Leslie H., Hamilton, Ohio. Speed changing gearing. 1,898,753; Feb. 21.
Wenzel, Max, Neidhardtstal, Germany. Winding band to be wound on rolls used in the paper making and allied trades. 1,898,413; Feb. 21.

Werner, Paul H. W., Wellesley, Mass. Photo-engraving. 1,898,798; Feb. 21.
Wert, Charles M., Cleveland, assignor of one-third to F. F. Petznick, Cleveland Heights, and one-third to C. H. Dray, Lakewood, Ohio. Two-speed mechanism. 1,898,700; Feb. 21.
Wescott, Ernest W., Niagara Falls, N. Y., assignor, by mesne assignments, to Sulphide Corporation. Treating sulphide ores. 1,898,701; Feb. 21.
Wescott, Ernest W., Niagara Falls, N. Y., assignor, by mesne assignments, to Sulphide Corporation. Treating iron ores. 1,898,702; Feb. 21.
Wesix National Company. (See Kercher, A. J., and Hicks, assignors.)
West, Charles L., Tiffin, Ohio, assignor of forty per cent to D. R. Lindley, Indianapolis, Ind. Blank feeder for forging machines. 1,898,279; Feb. 21.
West, Constance L., assignor to F. R. West, Detroit, Mich. Refrigerating unit. 1,898,922; Feb. 21.
West, Frank R. (See West, Constance L., assignor.)
Western Electric Company. (See Arnold, H. B., and Cooke, assignors.)
Western Venetian Blind Co. (See Cooper, Jesse E., assignor.)
Westinghouse Air Brake Company. (See Down, S. G., and Farmer, assignors.)
Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)
Westinghouse Air Brake Company. (See Hewitt, Ellis E., assignor.)
Westinghouse Air Brake Company. (See Kelley, Cecil S., assignor.)
Westinghouse Air Brake Company, The. (See Le Clair, L. J., and Brackenbury, assignors.)
Westinghouse Air Brake Company, The. (See McCune, Joseph C., assignor.)
Westinghouse Air Brake Company, The. (See Thomas, Thomas H., assignor.)
Westinghouse Air Brake Company, The. (See Whitaker, Uncas A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Sandin, Jerome, assignor.)
Wetherbee, Ashur U., Evanston, assignor to Autogas Corporation, Chicago, Ill. Gas burner. 1,898,799; Feb. 21.
Weymouth, Harry G. (See MacLean, A. D., and Weymouth.)
Wheeler, Floyd J., Long Beach, and B. S. Minor, San Pedro, Calif. Landing oil well casings. 1,898,649; Feb. 21.
Wheeler, Holman K., Newton Center, Mass., assignor to Mechanical Transfer Car Corporation, St. Johnsbury, Vt. Parking cars in garages. 1,898,107; Feb. 21.
Wheeler, Seth, jr., Albany, N. Y., assignor to A. P. W. Paper Co. Towel cabinet. 1,898,983; Feb. 21.
Whirldry Corporation, The. (See Dunham, George W., assignor.)
Whitaker, Uncas A., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Quick service brake device. 1,898,518; Feb. 21.
Whitcomb, Harris M., assignor to Albany Hardware Specialty Manufacturing Company, Albany, Wis. Doorstop. 1,898,472; Feb. 21.
White Iron Ores and Products Company, The. (See Kilbourn, William D., assignor.)
White, John W., Buffalo, N. Y. Brake mechanism. 1,898,108; Feb. 21.
Whiteker, Bosque M., Haskell, Tex. Buckle or fastener. 1,898,650; Feb. 21.
Whitin Machine Works. (See Aldrich, William O., assignor.)
Whitin Machine Works. (See Jordan, Lavern J., assignor.)
Whitley, William P., Clayton, assignor to Rawlings Manufacturing Company, St. Louis, Mo. Athletic shield or guard. 1,898,606; Feb. 21.
Whitman, George F., assignor to Barber-Colman Company, Rockford, Ill. Rotary cutter. 1,898,800; Feb. 21.
Whitworth, Stanley, assignor to Bendix Brake Company, South Bend, Ind. Welding. 1,898,923; Feb. 21.
Wickstrum, Cecil M., Omaha, Nebr. Casket carriage. 1,898,109; Feb. 21.
Widmann, Wilhelm, Freudenstadt, Germany. Backpiece for film cameras. 1,898,282; Feb. 21.
Widmer, Willi. (See Straub, F., and Widmer.)
Wigly Candy Company. (See Lantinberg, D., and Stefandel, assignors.)
Wigly Candy Company. (See Lidsky, Louis, assignor.)
Wilbor, Oscar J. (See Guthrie, R. G., and Wilbor.)
Wilcox-Rich Corporation. (See Dannell, Arthur G., assignor.)
Wilcox, William H. (See D'Amico, A., Hild, and Wilcox.)
Wild, Rudolf L. R., assignor to Union Asbestos & Rubber Company, Chicago, Ill. Friction material. 1,898,025; Feb. 21.
Wildin, George W., Pittsburgh, Pa. Pin lock. 1,898,071; Feb. 21.
Wiles, Charles L., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Ring forming machine. 1,898,072; Feb. 21.
Wiley, Glen M., Dayton, Ohio. Dumping receptacle. 1,898,328; Feb. 21.
Wilhelm, Franz W., Chicago, Ill. Drawing board. 1,898,514; Feb. 21.
Wilk, Otto, Newark, N. J. Firearm. 1,898,651; Feb. 21.

Wilkins, Arthur H., Pittsburgh, Pa. Panel wall. 1,898,026; Feb. 21.
Wilkinson, Irvine, Philadelphia, Pa. Nut lock. 1,898,801; Feb. 21.
Willard Storage Battery Company. (See Dunzweiler, Carl J., assignor.)
Willard Storage Battery Company. (See Rose, Clarence C., assignor.)
Willens, George, Chicago, Ill. Drum for advertising clocks. 1,898,924; Feb. 21.
Wilhelm, William, New York, N. Y. Textile fabric or similar article. Des. 89,322; Feb. 21.
Wilhelm, William, New York, N. Y. Textile fabric or similar article. Des. 89,328; Feb. 21.
Wilhelm, William, Co. (See Weitz, Irene A., assignor.)
Williams, George A., Los Angeles, Calif. Direct air pulsator. 1,898,652; Feb. 21.
Williams, James B., Minden, La. Automatic lighter. 1,898,863; Feb. 21.
Williamson, Donald B., Pittsburgh, Pa., assignor to The Peoples Natural Gas Company. Water heater. 1,898,703; Feb. 21.
Williston, Samuel H., and C. R. Nichols, Dallas, Tex., assignors to Sperry-Sun Well Surveying Company, Philadelphia, Pa. Well surveying device. 1,898,473; Feb. 21.
Willoughby, John A., Cambridge, Mass. Aircraft landing system. 1,898,474; Feb. 21.
Wilson, Alfred R., assignor, by mesne assignments, to Hutchins Car Roofing Company, Detroit, Mich. Hoisting anchorage for car roofs. 1,898,110; Feb. 21.
Wilson, Jack, assignor to Universal Draft Gear Attachment Co., Chicago, Ill. Brake chain attaching device. 1,898,607; Feb. 21.
Wilson, Perry W., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Propionic acid fermentation. 1,898,329; Feb. 21.
Wilson, Robert E., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Pressure distillation of hydrocarbon oils. 1,898,414; Feb. 21.
Winchester Repeating Arms Company. (See Laudensack, Albert F., assignor.)
Winger, Hans, Murray, Utah. Furnace unit. 1,898,111; Feb. 21.
Winkelmann, Lester W., Milford, Iowa. Automatic deck support. 1,898,280; Feb. 21.
Winkler, Alfred, and M. Dünnebier, Neuwied, Germany, assignors to Baltimore Paper Company, Kansas City, Mo. Method and apparatus for stacking flat articles. 1,898,704; Feb. 21.
Winkler, Kaspar, Zurich, Switzerland. Mechanical pavior. 1,898,158; Feb. 21.
Winslow, Charles A., Vallejo, Calif. Air filter. 1,898,027; Feb. 21.
Winter, Murray, Wrentham, assignor, by mesne assignments, to The Sentry Company, Taunton, Mass. Heating steel for hardening. 1,898,415; Feb. 21.
Winthrop Chemical Company. (See Dressel and Tietze, assignors.)
Winthrop Chemical Company. (See Marx, K., and Brodersen, assignors.)
Wired Radio, Inc. (See Culver, Charles A., assignor.)
Wired Radio, Inc. (See Gebhard, L. A., and Meyer, assignors.)
Wired Radio, Inc. (See Hund, August, assignor.)
Wired Radio, Inc. (See Lewis, Harold M., assignor.)
Wired Radio, Inc. (See Taylor, Albert H., assignor.)
Wisconsin Box Company. (See Gooding, Donald R., assignor.)
Wiseman, Thomas A., Tullahoma, Tenn. Bin. 1,898,416; Feb. 21.
Wishard, Samuel E., Ludlow, Calif. Track recorder. 1,898,159; Feb. 21.
Witherly, William C., Vancouver, British Columbia, Canada. Differential. 1,898,330; Feb. 21.
Woehler, Henry G., assignor to Niedringhaus, Inc., St. Louis, Mo. Manufacturing metallic doors. 1,898,417; Feb. 21.
Wolfman, Martin, Brooklyn, N. Y. Door peep hole frame. Des. 89,325; Feb. 21.
Wood, Edmund P., and W. C. Osterbrock, Cincinnati, Ohio. Apparatus for feeding molten glass. 1,898,705; Feb. 21.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Plate clamp for printing presses. 1,898,331; Feb. 21.
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Wood, Willard A., Swissvale, and A. R. Machesney, Pittsburgh, assignors to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for the control of railway car retarders. 1,898,802; Feb. 21.
Woodberry, David L., Baltimore, Md., assignor to Secretary of War of the United States of America. Delay fuse for drop bombs. 1,898,073; Feb. 21.
Woods, Hugh J., Jackson Heights, N. Y. Shower bath curtain. 1,898,233; Feb. 21.
Wright, Jack W. (See Stover, C. M., and Wright.)
Wright, Wilbur L., assignor to Oswego Falls Corporation, Fulton, N. Y. Paper bottle and other containers. 1,898,112; Feb. 21.
Wulff, Carl. (See Hofmann, F., and Wulff.)
Wunderlich, William E., assignor to The Moore Company, Muncie, Ind. Conveying mechanism. 1,898,281; Feb. 21.
Wyland, Frank E., Newport, Ky. Combined cooker and stirrer for popcorn and the like. 1,899,968; Feb. 21.
Young, Harry B., Buena, N. J. Dispensing device. 1,898,803; Feb. 21.
Young, Horace G., assignor, by mesne assignments, to Katinka W. Young, Ocean City, N. J. Metallic faced building unit. 1,898,864; Feb. 21.
Young, Katinka W. (See Young, Horace G., assignor.)
Youngstown Steel Door Company, The. (See Ditchfield, Frank, assignor.)
Zellweger, Walter. (See Hughes, T. B., and Zellweger.)
Zerbe, Carl. (See Spilker, A., and Zerbe.)
Zink, William L., Aurora, Ill. Safety device for power-take-off shafts. 1,898,113; Feb. 21.
Zink, William L., Aurora, Ill. Power-take-off safety device. 1,898,114; Feb. 21.
Zschoch, Fritz. (See Boeckner, E., and Zschoch.)
Zwilling, Ludwig, Walldorf in Hessen, Germany. Electric gas lighter. 1,898,418; Feb. 21.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 21ST DAY OF FEBRUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Absorber for refrigerating systems. E. Babcock. 1,897,997; Feb. 21.
Acetylation process. F. O. Rice. 1,898,687; Feb. 21.
Acid fermentation, Propionic. P. W. Wilson. 1,898,329; Feb. 21.
Acid from solutions obtained in cellulose derivative manufacture, Recovering acetic. E. Prince. 1,898,213; Feb. 21.
Acid liquor, Manufacture of sulphite. J. D. Janssen. 1,898,542; Feb. 21.
Acid liquor, Producing. J. D. Janssen. 1,898,541; Feb. 21.
Acid, Manufacture of chlorosulphonic. E. Krummenacher. 1,898,879; Feb. 21.
Acid, Purification of battery. C. C. Rose. 1,898,688; Feb. 21.
Adjustable holder. J. L. Knudson. 1,898,669; Feb. 21.
Adjuster for supporting legs. J. J. Peters. 1,898,465; Feb. 21.
Advertising device. M. V. Miller 1,898,308; Feb. 21.
Aerator, Lawn. D. L. Richards. 1,898,214; Feb. 21.
Aerial photography. S. Graham. 1,898,179; Feb. 21.
Aeroplane. D. A. Dorsey. 1,898,430; Feb. 21.
Aeroplane with V-shaped wings. W. E. Bell. 1,898,710; Feb. 21.
Agent for exterminating animal or vegetable pests. K. Marx and K. Brodersen. 1,898,554; Feb. 21.
Air and gas mixing apparatus. W. W. Kemp and W. H. Van Horn. 1,898,778; Feb. 21.
Air cleaner. F. S. Orem. 1,898,259; Feb. 21.
Air cleaning. J. S. Barnes. 1,898,807; Feb. 21.
Air conditioning apparatus. P. Mohler and P. Frantz. 1,898,591; Feb. 21.
Aircraft. W. C. Martin. 1,898,638; Feb. 21.
Aircraft, especially aircraft of the amphibian type and body boat structure for same. I. Sikorsky. 1,898,695; Feb. 21.
Aircraft landing system. J. A. Willoughby. 1,898,474; Feb. 21.
Aircraft, Rotary winged. J. S. Pecker. 1,898,097; Feb. 21.
Air filter. C. A. Winslow. 1,898,027; Feb. 21.
Air heating apparatus. C. K. Prince. 1,898,571; Feb. 21.
Air pulsator, Direct. G. A. Williams. 1,898,652; Feb. 21.
Alcohol and acetone by fermentation, Production of butyl. H. B. Hutchinson. 1,898,961; Feb. 21.
Aliphatic amines, Separating primary from secondary. O. Nicodemus and W. Schmidt. 1,898,461; Feb. 21.
Allyl citrylidene acetone and preparation of same. H. Barbier. 1,898,075; Feb. 21.
Aluminium, or alloys thereof to other metals, Welding. H. Wachwitz. 1,898,917; Feb. 21.
Amalgam mixers or the like. F. H. Nies. 1,898,094; Feb. 21.
Ammonia oxidising apparatus. I. Hechenbleikner and N. Titlestad. 1,898,775; Feb. 21.
Amusement device. A. Cowie. 1,898,868; Feb. 21.
Amusement device. H. P. Pierson. 1,898,466; Feb. 21.
Anchor, Earth. E. K. Cole. 1,898,840; Feb. 21.
Anchorage for car roofs, Hoisting. A. R. Wilson. 1,898,110; Feb. 21.
Annealing art. L. L. Lewis. 1,898,674; Feb. 21.
Antenna system. G. B. Hagen. 1,898,661; Feb. 21.
Anthraquinone derivatives, Manufacture of. R. F. Thomson and W. W. Tatum. 1,898,750; Feb. 21.
Antifriction bearing. C. R. Bailey. 1,898,074; Feb. 21.
Antipyretic compositions containing amidopyrin. W. G. Christiansen. 1,898,002; Feb. 21.
Arc suppressor. J. G. Jackson and W. T. Allen. 1,898,128; Feb. 21.
Arch support retainer. L. M. McCormick. 1,898,092; Feb. 21.
Arm support for auto rumble seats. F. G. Fox. 1,898,008; Feb. 21.
Article transfer mechanism. O. C. K. Hutchinson and W. C. Gillham. 1,898,449; Feb. 21.
Articles, Apparatus for the formation of hollow. L. Lidsky. 1,898,194; Feb. 21.
Articles, Method and apparatus for stacking flat. A. Winkler and M. Dünnebier. 1,898,704; Feb. 21.
Asbestos and making, Rubber bonded. R. M. Day. 1,898,985; Feb. 21.
Atomizer. S. P. and H. A. Cowardin. 1,898,763; Feb. 21.
Atomizer. T. H. Venn. 1,898,825; Feb. 21.
Attachment for calculating machines. H. E. Enders. 1,898,819; Feb. 21.
Auditing machine. M. M. Goldberg. 1,898,048; Feb. 21.
Automatic control system and apparatus therefor. T. R. Harrison. 1,898,182; Feb. 21.
Automobile lock. O. S. Hershey. 1,898,127; Feb. 21.
Automobiles, Device for preventing undesired backward motion of. F. L. Morse. 1,898,492; Feb. 21.
Axle box. H. S. Vincent. 1,898,470; Feb. 21.
Azo-dyestuffs and making same, Metalliferous. F. Straub and W. Widmer. 1,898,911; Feb. 21.
Back rest, Bathtub. M. Stern. 1,898,272; Feb. 21.
Bag: *See*—
Shopping bag.
Bake pan. B. Van Kirk. 1,898,913; Feb. 21.
Band to be bound on rolls used in the paper making and allied trades, Winding. M. Wenzel. 1,898,413; Feb. 21.
Bar: *See*—
Wrecking bar.
Baseboard for concealed radiators, Removable. L. P. Dwyer. 1,898,526; Feb. 21.
Basket handle machine. W. F. Newhouse. 1,898,205; Feb. 21.
Bath apparatus. E. G. Sullivan. 1,898,508; Feb. 21.
Battery construction. E. J. McEachron and R. S. Johnson. 1,898,377; Feb. 21.
Bearing: *See*—
Antifriction bearing.
Bearing device. C. H. Leis. 1,898,880; Feb. 21.
Bed, Recess. M. Fox. 1,898,578; Feb. 21.
Beer manufacture. M. Glaubits and H. Haehn. 1,898,047; Feb. 21.
Belt, Link. J. K. Diamond. 1,898,035; Feb. 21.
Bending machine. G. Mafera. 1,898,254; Feb. 21.
Bid indicator for card games. J. S. Walker. 1,898,862; Feb. 21.
Bin. T. A. Wiseman. 1,898,416; Feb. 16.
Binder, Loose leaf. J. and F. S. Schade. 1,898,215; Feb. 21.
Blind bottom rail construction and hanging, Venetian. J. E. Cooper. 1,898,940; Feb. 21.
Board: *See*—
Drawing board.
Boat. A. E. Heljesson. 1,898,876; Feb. 21.
Bobbin clutch. G. H. Magrath. 1,898,553; Feb. 21.
Bobbin-winding machine in combination with spinning frames, Automatic. E. Schweiser. 1,898,501; Feb. 21.
Body waste remover. B. M. Thompson. 1,898,104; Feb. 21.
Boiler: *See*—
Gas boiler. Steam boiler.
Sectional boiler. Water tube boiler.
Bolt and nut, Self locking. W. P. Smith. 1,898,907; Feb. 21.
Book cover folding machine. P. R. Glass. 1,898,128; Feb. 21.
Bookholder. E. J. Sithens. 1,898,906; Feb. 21.
Bookmark. M. Domenego. 1,898,429; Feb. 21.
Book rest and stand, Combination. M. Isaacson. 1,898,666; Feb. 21.
Bore holds, Making. C. J. G. Aarts and J. A. A. Mekel. 1,898,926; Feb. 21.
Borton trifluoride, Preparing. M. Hardtmann, W. Schepss, and E. Tietze. 1,898,532; Feb. 21.
Bottle. E. W. Fuerst. Des. 89,300; Feb. 21.
Bottle and other containers, Paper. W. L. Wright. 1,898,112; Feb. 21.
Bottle handling apparatus. F. W. Bickers. 1,898,393; Feb. 21.
Bowl. D. A. Jenkins. Des. 89,307; Feb. 21.
Box: *See*—
Axle box. Outlet box.
Candy box. Service box.
Display box.
Box. M. K. Breslauer. 1,898,654; Feb. 21.
Box. D. R. Gooding. 1,898,177–8; Feb. 21.
Box opening machine, Paper. W. P. Stein. 1,898,910; Feb. 21.
Box support, Mail. J. C. Gould. 1,898,875; Feb. 21.
Bracket: *See*—
Lamp lead bracket.
Brake: *See*—
Electropneumatic brake.
Brake. E. C. Newcomb. 1,898,888; Feb. 21.
Brake. R. S. Sanford. 1,898,815; Feb. 21.
Brake adjusting. F. C. Frank. 1,898,298; Feb. 21.
Brake adjusting tool. A. L. and R. H. Miller. 1,898,186; Feb. 21.
Brake chain attaching device. J. Wilson. 1,898,607; Feb. 21.
Brake control means. A. L. Harper. 1,898,625; Feb. 21.
Brake device, Quick service. U. A. Whitaker. 1,898,518; Feb. 21.
Brake mechanism. F. E. Dadd. 1,898,869; Feb. 21.

Brake mechanism. A. J. Evans. 1,898,820; Feb. 21.
Brake mechanism. S. Schnell. 1,898,022; Feb. 21.
Brake mechanism. J. W. White. 1,898,108; Feb. 21.
Brake mechanism, Vehicle. E. R. Evans. 1,898,434; Feb. 21.
Brake operating means. R. N. Van Buskirk. 1,898,275; Feb. 21.
Brake-operating mechanism. M. W. McConkey. 1,898,306; Feb. 21.
Brake pedal depressor mechanism. W. E. and K. M. McCulloch and R. Lorence. 1,898,376; Feb. 21.
Brake rod supporting means. C. E. Wellman. 1,898,699; Feb. 21.
Brake shoe. J. W. Peterson. 1,898,310; Feb. 21.
Brake system for automotive vehicles. C. S. Bragg and V. W. Kliesrath. 1,898,287; Feb. 21.
Brake testing machine. P. J. Donavan. Re18,745; Feb. 21.
Braking apparatus. B. Dick. 1,898,036; Feb. 21.
Brassière. J. F. Greig. Des. 89,302–3; Feb. 21.
Brick mold. J. A. Crowell. 1,898,715; Feb. 21.
Broaching machine. J. P. Ferris. 1,898,576; Feb. 21.
Brush, Rotary. C. S. Ott and J. R. Lewis. 1,898,464; Feb. 21.
Brush with finger guide groove, Toilet. E. J. Fay. Des. 89,299; Feb. 21.
Buckle or fastener. B. M. Whiteker. 1,898,650; Feb. 21.
Building blocks. N. B. Fox. 1,898,297; Feb. 21.
Building construction. J. A. Melvin. 1,898,736; Feb. 21.
Building unit, Metallic faced. H. G. Young. 1,898,864; Feb. 21.
Bumper. G. W. Veale. 1,898,229; Feb. 21.
Bumper, Vehicle. J. C. Monteith. 1,898,256; Feb. 21.
Burner: *See*—
Gas burner. Oil burner.
Burner apparatus. Flame cutting. L. J. Hancock. 1,898,955; Feb. 21.
Button. L. Daniel. Des. 89,296; Feb. 21.
Cab signals, Method and apparatus for preventing improper cut-in of. J. H. Broadbent. 1,898,478; Feb. 21.
Cabinet, Convertible service. W. J. Greenebaum. 1,898,299; Feb. 21.
Cabinet, Filing. H. B. Sperry. 1,898,223; Feb. 21.
Cabinet for beauty parlors, Utility. D. S. Brown. 1,898,867; Feb. 21.
Cabinet, Towel. F. M. Steiner and W. S. Graves. 1,898,796; Feb. 21.
Cabinet, Towel. S. Wheeler, jr. 1,898,983; Feb. 21.
Cables, Supporting and securing means for electric. A. W. Malone. 1,898,677; Feb. 21.
Calendar. G. Y. Neely. 1,898,137; Feb. 21.
Calibrating apparatus for liquid tanks. E. B. Linton. 1,898,734; Feb. 21.
Camera. J. B. Walker. 1,898,471; Feb. 21.
Camera mounting. L. F. Tonsor. 1,898,469; Feb. 21.
Cameras, Backpiece for film. W. Widmann. 1,898,232; Feb. 21.
Can: *See*—
Collar can.
Can and jar wrench. L. H. Underwood. 1,898,409; Feb. 21.
Can covers, Device for securing milk. H. G. Packer. 1,898,262; Feb. 21.
Candy box. A. Olsen, jr., and R. W. Robinson. 1,898,208; Feb. 21.
Cap, Bathing. E. P. Gustafson. 1,898,954; Feb. 21.
Cap, Blasting. J. A. Hammond. 1,898,011; Feb. 21.
Cap for radiator necks and the like. L. A. Jarvis. 1,898,055; Feb. 21.
Car equipment, Safety. J. C. McCune. 1,898,558; Feb. 21.
Car liner. G. O. Lorens. 1,898,195; Feb. 21.
Car, Refrigerator. C. Martin. 1,898,843; Feb. 21.
Car retarders, Apparatus for the control of railway. W. A. Wood and A. B. Machesney. 1,898,802; Feb. 21.
Cars in garages, Parking. H. K. Wheeler. 1,898,107; Feb. 21.
Carbon strips in connected manifold forms, Mechanism for interleaving. W. J. Steenrod. 1,898,795; Feb. 21.
Carburetor. F. H. Heitger. 1,898,958; Feb. 21.
Carburetor. H. W. Linkert and R. M. Anderson. 1,898,672; Feb. 21.
Card for cigarette boxes, Dividing. G. Hvistendahl. 1,898,962; Feb. 21.
Cardcase and score recorder, Combined. W. M. Lennstrom. 1,898,193; Feb. 21.
Carriage, Casket. C. M. Wickstrum. 1,898,109; Feb. 21.
Carrier terminal. R. Polcini. 1,898,212; Feb. 21.
Carton. A. J. Weiss. 1,898,231; Feb. 21.
Carton, Dispensing. E. W. Johnson. 1,898,056; Feb. 21.
Cash register. H. C. Dieserud. 1,898,846; Feb. 21.
Cash register. F. L. Fuller. 1,898,045; Feb. 21.
Cash register. C. W. Green. 1,898,049; Feb. 21.
Cash register. P. Sburlino and H. F. Gaeke. 1,898,065; Feb. 21.
Casing: *See*—
Welded casing.
Casting machine. H. Ford. 1,898,722; Feb. 21.
Cellulose, Weighting regenerated. F. W. Weber and E. Schaefer. 1,898,105; Feb. 21.
Cement, Method and apparatus for burning. R. W. P. Horn and J. H. Nissley. 1,898,776; Feb. 21.
Centrifugal clutch. A. Lowndes. Re18,741; Feb. 21.
Centrifugal separator. W. Alexander. 1,898,608; Feb. 21.
Chain cleaner, Drag. P. C. Linder. 1,898,134; Feb. 21.
Chair. T. R. Hayes. 1,898,834; Feb. 21.
Chair or seat. C. R. Hultgren. 1,898,448; Feb. 21.
Change speed gear, Continually variable. O. G. Wellton. 1,898,412; Feb. 21.
Channel. W. S. Gaines, jr. 1,898,948; Feb. 21.
Charcoal heater, Self-contained. R. O. Middleton. 1,898,846; Feb. 21.
Charge forming device. W. H. Teeter. 1,898,324; Feb. 21.
Charge severing mechanism. R. G. Allen. 1,897,993; Feb. 21.
Check writer. J. W. Carlson. 1,898,030; Feb. 21.
Cheese and manufacture of holes therein. M. I. Guest. 1,898,992; Feb. 21.
Chock or block, Vehicle wheel. H. A. Rolhan. 1,898,896; Feb. 21.
Chocolate, Apparatus for tempering. F. W. Greer. 1,898,771; Feb. 21.
Christmas tree support. F. J. and H. C. Gustafson. 1,898,300; Feb. 21.
Chute, Dirt. F. A. Davidson. 1,898,343; Feb. 21.
Cigarette holder. M. B. Simcox. 1,898,220; Feb. 21.
Circuit, Alternating current. A. J. Le May. 1,898,016; Feb. 21.
Circuit, Calling. H. B. Arnold and L. B. Cooke. 1,898,516; Feb. 21.
Circuit interrupter, High tension. S. Ruppel. 1,898,901; Feb. 21.
Circuits, Method and apparatus for interrupting high tension. S. Ruppel. 1,898,900; Feb. 21.
Circuits, Tuning electric. J. F. Lindberg. 1,898,635; Feb. 21.
Clamp: *See*—
Cross arm clamp.
Clamp for containers, Lid. G. I. Bohman. 1,898,934; Feb. 21.
Clamp for printing presses, Plate. H. A. W. Wood. 1,898,331; Feb. 21.
Clay working and conditioning. W. Asche. 1,898,333; Feb. 21.
Cleaner: *See*—
Air cleaner. Tube cleaner.
Chain cleaner. Vacuum cleaner.
Pipe cleaner.
Cleaner and dust pan, Mop. A. P. S. Naul. 1,898,887; Feb. 21.
Cleaning and oiling device for oil stones. E. J. Brown. 1,898,170; Feb. 21.
Clincher-device for stapling machines. A. H. Maynard. 1,898,678; Feb. 21.
Clock. J. J. Gatesy. 1,898,660; Feb. 21.
Clock, Electric time. L. Reichold. 1,898,893; Feb. 21.
Closet, Water. S. Duner. 1,898,656–7; Feb. 21.
Closure cap. W. Jay. 1,898,378; Feb. 21.
Cloth, Apparatus for producing woven wire. F. F. Schmiege. 1,898,692; Feb. 21.
Clothesline supporting device. E. B. Olsen. 1,898,788; Feb. 21.
Clothlike fabric. M. J. Shoemaker. 1,898,601; Feb. 21.
Clutch: *See*—
Bobbin clutch. Centrifugal clutch.
Clutch mechanism. J. F. Gaylord. 1,898,949; Feb. 21.
Clutch mechanism. O. Köhler. 1,898,190; Feb. 21.
Clutches and brakes, Grooved plate for. G. S. Lane. 1,898,978; Feb. 21.
Coating composition. J. E. Hutchman. 1,898,540; Feb. 21.
Coating compositions containing beta-eleostearin. C. G. Gauerke. 1,898,088; Feb. 21.
Coating material. F. C. Atwood. 1,898,518; Feb. 21.
Collar can, Interior. J. F. Peters. 1,898,643; Feb. 21.
Collet. O. Proefke. 1,898,264; Feb. 21.
Colored resisting effects, Production of. J. Neumann. 1,898,138; Feb. 21.
Colors, Apparatus for the matching of. C. H. Sharp. 1,898,219; Feb. 21.
Columns and the like, Apparatus for forming tapered. A. E. Lingo. 1,898,581; Feb. 21.
Comb attachment for carpet sweepers. E. R. Smith. 1,898,318; Feb. 21.
Combination lock. J. E. Frey. 1,898,947; Feb. 21.
Combination lock. R. J. Southcott. 1,898,149; Feb. 21.
Combination lock, Universal keyless. G. W. Metavallas. 1,898,017; Feb. 21.
Commutator and making it. V. G. Apple. 1,898,929; Feb. 21.
Commutator segments, Manufacturing. C. E. Sorensen. 1,898,696; Feb. 21.
Compounds of aluminum fluoride-alkali-fluoride, Producing double. H. Specketer and J. Söll. 1,898,506; Feb. 21.
Concrete construction and building same, Reenforced. S. Kent. 1,898,304; Feb. 21.
Concrete stirring device. C. B. Morrow. 1,898,201; Feb. 21.
Condensation product and process. R. W. Belfit. 1,898,754; Feb. 21.
Condenser. R. B. Benjamin. 1,898,808; Feb. 21.
Condenser. C. Ringwald. 1,898,789; Feb. 21.
Connecter: *See*—
Electrical connecter.
Connecting unit and forming same, Permanent. N. Skillman. 1,898,100; Feb. 21.

Connection, Automobile arm and rod. E. K. Baker. 1,898,334; Feb. 21.
Connection, Operating. A. Y. Dodge. 1,898,294; Feb. 21.
Container: *See*—
Receiving, storage, and delivering container. Shipping container.
Container. W. R. Cuthbert. 1,898,342; Feb. 21.
Container for matches. L. C. Thomas. 1,898,227; Feb. 21.
Container for zeolite regeneration, Salt. R. E. Bressler and D. V. Moses. 1,898,812; Feb. 21.
Containers, Forming easy opening. E. D. Anderson. 1,898,925; Feb. 21.
Containers, Spacing device for. S. Taylor. 1,898,500; Feb. 21.
Control means for landing gear wheel brakes of airplanes, Triple. J. T. Hughes. 1,898,836; Feb. 21.
Control means for refrigerating systems, Liquid refrigerant. E. A. and H. E. Von Seggern. 1,898,277; Feb. 21.
Control mechanism for scraper bowls. C. E. Ball. 1,898,163; Feb. 21.
Control of electric motors. J. G. Smithson. 1,898,403; Feb. 21.
Control system and apparatus. H. C. Parker. 1,898,209; Feb. 21.
Conveyer system with diverters. S. Eggleston. 1,898,818; Feb. 21.
Conveying and loading device. F. J. Dietz. 1,898,037; Feb. 21.
Conveying mechanism. W. E. Wunderlich. 1,898,281; Feb. 21.
Cooker and stirrer for popcorn and the like, Combined. F. E. Wyland. 1,899,968; Feb. 21.
Cooking machinery, Automatic. E. R. Brokvist and C. A. Fausel. 1,897,999; Feb. 21.
Cooling apparatus. J. A. Stubkjare. 1,898,603; Feb. 21.
Cooling of compressors with pistons, Device for. A. Huguenin. 1,898,729; Feb. 21.
Cord attaching device for curtain and portière traversers. S. T. Caruso. 1,898,938; Feb. 21.
Corkscrew and guard, Combined. K. Rettich. Des. 89,308; Feb. 21.
Corkscrew radiation. N. E. Lindenblad. 1,898,058; Feb. 21.
Corn cutting machine. W. W. Morral. 1,898,592; Feb. 21.
Corn picker, Vacuum. J. E. Bockmann. 1,898,757; Feb. 21.
Coupling: *See*—
Flexible coupling. Pipe coupling.
Hose coupling.
Coupling arrangement. C. W. Hansell. 1,898,180; Feb. 21.
Cover: *See*—
Manhole cover.
Cover for fuel tank openings. F. R. McIntyre. 1,898,378; Feb. 21.
Crank case heater. J. H. Barrett and J. Keenan. 1,897,995; Feb. 21.
Crank shaft balancing. E. C. Newcomb. 1,898,459; Feb. 21.
Cross arm clamp. G. W. Hamilton. 1,898,725; Feb. 21.
Cross folding machine. G. Spiess. 1,898,794; Feb. 21.
Crystal in a vacuum vessel, Piezo-electric oscillating. F. Schröter. 1,898,599; Feb. 21.
Cultivator attachment for tractors. C. E. Everett and R. E. Smith. 1,898,358; Feb. 21.
Cultivator, Combined cotton. L. H. Powell. 1,898,852; Feb. 21.
Current generator, Alternating. B. D. Bedford. 1,898,932; Feb. 21.
Current generator, Alternating. C. S. Franklin and D. A. Cutler. 1,898,827; Feb. 21.
Curtain, Shower bath. H. J. Woods. 1,898,233; Feb. 21.
Cutter: *See*—
Gear cutter. Rotary cutter.
Milling cutter.
Cutting machine. F. Aeschbach. 1,898,160; Feb. 21.
Cutting machine. E. C. Teuscher. 1,898,647; Feb. 21.
Cylinder for internal combustion chambers, Composite. J. Schubert. 1,898,145; Feb. 21.
Dam. F. A. Noetzli. 1,898,095; Feb. 21.
Decalcomania, Nonreusable. G. R. Meyercord. 1,898,998; Feb. 21.
Deck support, Automatic. L. W. Winkelmann. 1,898,280; Feb. 21.
Decoration to glass and the resulting product, Applying. E. D. Reinbold. 1,898,745; Feb. 21.
Detachable fastener. E. J. Tripp. 1,898,155; Feb. 21.
Die and holding clip therefor, Thread cutting. O. E. Koehler and W. B. Du Mont. 1,898,182; Feb. 21.
Die casting machine. W. M. Lester. 1,898,671; Feb. 21.
Diesel engine. H. C. Edwards. 1,898,119; Feb. 21.
Differential. W. C. Witherly. 1,898,830; Feb. 21.
Direction indicator. J. E. Waaser, sr. 1,898,919; Feb. 21.
Direction signal. J. Eichner. 1,898,719; Feb. 21.
Discharge control protecting means. E. W. Schellentrager. 1,898,021; Feb. 21.
Discharging, Process of. J. G. Penche. 1,898,211; Feb. 21.
Disk furrowing and blocking machine. O. Domries and O. Piepenbrink. 1,898,870; Feb. 21.
Dispenser: *See*—
Medicine dispenser.
Dispensing apparatus. W. J. Bragger. 1,898,866; Feb. 21.
Dispensing apparatus. R. K. Nash. 1,898,383; Feb. 21.
Dispensing device. H. B. Young. 1,898,803; Feb. 21.
Display box. R. A. Taylor. 1,898,646; Feb. 21.
Display device. J. P. Gleason. 1,898,769; Feb. 21.
Display device. A. Rice. 1,898,746; Feb. 21.
Display device for motor vehicles. I. Mugnani. 1,898,641; Feb. 21.
Distillation and carbonization of waste matter, Destructive. O. W. Wahlstrom. 1,898,326; Feb. 21.
Distributing feeder. J. L. Herold and J. W. Dawson. 1,898,662; Feb. 21.
Door closer and check, Concealed. G. H. Anderson. 1,898,609; Feb. 21.
Door elevating construction. T. Madland. 1,898,582; Feb. 21.
Door elevating mechanism, Car. T. Madland. 1,898,583; Feb. 21.
Door holding device. A. E. More. 1,898,562; Feb. 21.
Doorlatch. I. T. Quarnstrom. 1,898,975; Feb. 21.
Doorlatch, Elevator. W. A. Hutton. 1,898,450; Feb. 21.
Doorstop. H. M. Whitcomb. 1,898,472; Feb. 21.
Doors, Manufacturing metallic. H. G. Woehler. 1,898,417; Feb. 21.
Dough, Apparatus for dividing. J. Garvey. 1,898,175; Feb. 21.
Drawing board. F. W. Wilhelm. 1,898,514; Feb. 21.
Drier: *See*—
Felt drier.
Driers, Stripping mechanism for hosiery. H. F. Wannamaker and J. N. Pattison. 1,898,918; Feb. 21.
Drill: *See*—
Rock drill.
Drilling apparatus. H. C. Brewster. 1,898,937; Feb. 21.
Drink dispensing machine. S. T. Dare. 1,898,619; Feb. 21.
Driver, Sheathing. J. C. Curtis. 1,898,984; Feb. 21.
Driving aggregate for motor power and hand power. J. A. Nordin. 1,898,139; Feb. 21.
Driving attachment for mixing bowls. P. J. Fitzgerald. 1,898,986; Feb. 21.
Drum for advertising clocks. G. Illens. 1,898,924; Feb. 21.
Drums of water-tube boilers, Apparatus for making water. M. Ulrich. 1,898,070; Feb. 21.
Dry cell. C. P. Deibel. 1,898,344; Feb. 21.
Dumping receptacle. G. M. Wiley. 1,898,328; Feb. 21.
Dyes and making the same from carbonaceous material. L. P. Dove. 1,898,247; Feb. 21.
Dyes of the anthraquinone series. A. Shepherdson and W. W. Tatum. 1,898,748; Feb. 21.
Dyes, Triarylmethane. O. Böger and W. Müller. 1,898,523; Feb. 21.
Dyestuffs containing sulphur, New. R. Herz, M. Schubert, and W. Hechtenberg. 1,898,446; Feb. 21.
Dyestuffs, Indophenol sulphur. F. Muth. 1,898,457; Feb. 21.
Dyestuffs obtainable by oxidation on the fiber, Preparing reserves under. E. Pfeffer. 1,898,570; Feb. 21.
Dyestuffs of the acridone and thioxanthone series and making them, Vat. P. Nawiasky, W. Bauer, and E. Krauch. 1,898,458; Feb. 21.
Dyestuffs of the anthraquinone series, Manufacture of. S. von Allmen. 1,898,861; Feb. 21.
Dyestuffs of the benzanthrone series, Production of vat. M. A. Kuns, K. Köberle, and E. Berthold. 1,898,452; Feb. 21.
Electric ignition and starting apparatus for internal combustion engines. T. B. Hughes and W. Zellweger. 1,898,370; Feb. 21.
Electric machine, Dynamo. H. L. Smith. 1,898,982; Feb. 21.
Electric motor-driven roll. A. M. MacCutcheon. 1,898,551; Feb. 21.
Electric relay device for indicating weak currents. R. H. H. Geffcken and R. H. Richter. 1,898,046; Feb. 21.
Electric switch. A. Y. Dodge. 1,898,006; Feb. 21.
Electric switch. H. J. Hammerly. 1,898,448; Feb. 21.
Electric switch. G. A. Johnson. 1,898,186; Feb. 21.
Electric switch. G. Schäfer. 1,898,691; Feb. 21.
Electric utility device and motor assembly. P. J. Fitzgerald. 1,898,945; Feb. 21.
Electrical apparatus. E. O. Kieffer. 1,898,489; Feb. 21.
Electrical apparatus. C. I. McNeil. 1,898,559; Feb. 21.
Electrical apparatus employing piezo-electric devices. J. Robinson. 1,898,895; Feb. 21.
Electrical connecter. G. J. Meuer. 1,898,589; Feb. 21.
Electrical switch. W. P. Healy. 1,898,528; Feb. 21.
Electrocleaning process. T. E. Dunn. 1,898,765; Feb. 21.
Electrode, Welding. G. T. Southgate. 1,898,909; Feb. 21.
Electrode, Welding. L. B. Thompson and V. J. Chapman. 1,898,068; Feb. 21.
Electrodes, Method of and apparatus for forming grid. S. Ballantine. 1,898,475; Feb. 21.
Electromagnetic release valve. R. F. Thompson. 1,898,228; Feb. 21.
Electroplating, Process and apparatus for. F. Conlin. 1,898,618; Feb. 21.
Electropneumatic brake. J. C. McCune. 1,898,556; Feb. 21.
Elevating device. O. Borgen. 1,898,711; Feb. 21.
Emblem or similar article, Aviator's. A. E. R. Speidel. Des. 89,319; Feb. 21.

Emulsification, Apparatus for. L. S. and E. M. Richards. 1,898,894; Feb. 21.
Enamel decorating process. A. P. Schulz. 1,898,500; Feb. 21.
Engine: *See*—
Diesel engine. Internal combustion engine.
Fire engine. Two-cycle engine.
Envelope. H. H. Reineman. 1,898,685; Feb. 21.
Ester purification. S. R. Merley. 1,898,737; Feb. 21.
Excavator. R. Bergmann. 1,898,810; Feb. 21.
Excavator mechanism. G. T. Ronk. 1,898,395; Feb. 21.
Excavators, Boom feet for. W. Lehman and M. L. Fykse. 1,898,453; Feb. 21.
Expansion and contraction joint. A. C. Fischer. 1,898,943; Feb. 21.
Fabric: *See*—
Clothlike fabric.
Fabric, Method and apparatus for turning tubular. A. W. Forstall. 1,898,824; Feb. 21.
Fading elimination. O. Böhm. 1,898,477; Feb. 21.
Fan blades, Positioning and securing. C. Hollerith. 1,898,628; Feb. 21.
Fan blades with accurate balance, Positioning. C. Hollerith. 1,898,629; Feb. 21.
Fastener: *See*—
Detachable fastener. Separable fastener.
Hasp fastener.
Fastener. C. V. Brady and W. Case. 1,897,998; Feb. 21.
Fastener construction, Slide. J. and F. S. Schade. 1,898,216; Feb. 21.
Fastener setting machine. D. I. Reiter. 1,898,019; Feb. 21.
Fats, oils, and fatty acids, and substances containing fatty material having a tendency to become rancid, Inhibiting oxidation of unsaturated. G. R. Greenbank. 1,898,368; Feb. 21.
Feeder: *See*—
Distributing feeder.
Feeder for forging machines, Blank. C. L. West. 1,898,279; Feb. 21.
Feeding device for electric weld rods or wire. A. F. Krumholz. 1,898,014; Feb. 21.
Feeding mechanism. G. F. Matteson. 1,898,979; Feb. 21.
Feeding mechanism, Continuous. G. Pieretti. 1,898,851; Feb. 21.
Felt drier. W. P. Feeney. 1,898,041; Feb. 21.
Felt washer for paper machines, Automatic. J. D. Kaster. 1,898,545; Feb. 21.
Fenders, Stamping front one-piece automobile. M. H. Matheson. 1,898,883; Feb. 21.
Fertilizer salts, Production of. E. Jaenecke and F. Mueller. 1,898,971; Feb. 21.
Fibers, Treating ramie and allied. C. F. Kenyon. 1,898,877; Feb. 21.
Filaments, yarns, or threads, Production of artificial. H. Dreyfus, W. A. Dickie, and W. I. Taylor. 1,898,085; Feb. 21.
File, Paper. S. R. Harriman. 1,898,533; Feb. 21.
Film, Process and apparatus for developing moving picture. J. R. Malcolm. 1,898,783; Feb. 21.
Filter: *See*—
Air filter.
Finger ring. W. C. Patt. 1,898,263; Feb. 21.
Firearm. O. Wilk. 1,898,651; Feb. 21.
Firearm, Manually-operated bolt-action. A. F. Laudensack. 1,898,670; Feb. 21.
Fire engine. C. H. Fox. 1,898,826; Feb. 21.
Fire extinguisher. W. D. Banes. 1,898,476; Feb. 21.
Fire extinguisher. H. W. Doughty. 1,898,482; Feb. 21.
Fire extinguisher hand hole and cover. E. W. M. Boosey. 1,898,117; Feb. 21.
Fisherman's reel. J. V. Schafer. 1,898,316; Feb. 21.
Fishbook. C. V. Grutsch. 1,898,442; Feb. 21.
Fish lure. W. A. Medlin. 1,898,200; Feb. 21.
Fish lure. E. Novitzky. 1,898,740; Feb. 21.
Fishing reel. D. Kelly. 1,898,451; Feb. 21.
Flash light. R. B. Benjamin. 1,898,756; Feb. 21.
Flasher device. W. Dubilier. 1,898,174; Feb. 21.
Flexible coupling, Centrifugal. J. N. Baker. 1,898,806; Feb. 21.
Flexible coupling, Internal-external. D. B. Perry. 1,898,496; Feb. 21.
Float operated switch. A. Penn. Re18,744; Feb. 21.
Float valve. C. H. Pendleton. 1,898,389; Feb. 21.
Floor construction or the like. J. Jones and S. Johnston. 1,898,668; Feb. 21.
Floor covering, Ornamented hard surface. J. C. McCarthy. 1,898,375; Feb. 21.
Floor waxing machine. W. S. Finnell. 1,898,357; Feb. 21.
Flooring construction. G. S. Gynn. 1,898,364; Feb. 21.
Flow regulator, Automatic. D. C. Dodrill. 1,898,244; Feb. 21.
Flue cleaning device. H. I. Platt. 1,898,596; Feb. 21.
Fluid delivery for cooking and brewing utensils. S. A. Haines. 1,898,832; Feb. 21.
Fluid, Hydraulic brake. E. Muench and F. Nicolai. 1,898,564; Feb. 21.
Fluid metering system. G. R. Goodwin. 1,898,951; Feb. 21.
Fluid pressure tool. G. M. Nell. 1,898,493–4; Feb. 21.
Flying machine. T. A. Dring. 1,898,764; Feb. 21.
Food. J. A. Moran. 1,898,885; Feb. 21.
Food jelly. F. M. Boyles. 1,898,336; Feb. 21.
Food product, Preparing supplemental. T. G. Dyer. 1,898,350; Feb. 21.
Football, basket ball, and the like. M. Scudder. 1,898,600; Feb. 21.
Foot rest. H. P. Moss. 1,898,640; Feb. 21.
Form, Concrete. E. L. Soulé. 1,898,319; Feb. 21.
Form for manufacture of rubber articles and making same. B. H. Foster. 1,898,043; Feb. 21.
Form for tire building, Collapsible. F. L. Johnson. 1,898,667; Feb. 21.
Fountain: *See*—
Soda water fountain.
Frame: *See*—
Window box frame.
Framework for air filters. H. W. Collins. 1,898,424; Feb. 21.
Frequency transformation system. H. M. Lewis. 1,898,366; Feb. 21.
Friction material. R. L. R. Wild. 1,898,025; Feb. 21.
Fruit juices, Device for extracting. F. Metzger. 1,898,588; Feb. 21.
Fuel controlling mechanism for internal combustion engines. A. L. Stamsvik. 1,898,602; Feb. 21.
Fuel system, Pulverized. G. A. Conrath. 1,898,341; Feb. 21.
Fuel to floatless carburetors, Apparatus for supplying. K. Bosshardt. 1,898,811; Feb. 21.
Furnace. T. G. Coghlan and E. A. Johnsen. 1,898,479; Feb. 21.
Furnace bearer. H. V. Stevens. 1,898,273; Feb. 21.
Furnace unit. H. Winger. 1,898,111; Feb. 21.
Furnaces, Device for electric induction. E. F. Northrup. 1,898,207; Feb. 21.
Fuse. J. Patrick. 1,898,062; Feb. 21.
Fuse. J. Sandin. 1,898,099; Feb. 21.
Fuse. C. Ringwald. Re18,743; Feb. 21.
Fuse for drop bombs, Delay. D. L. Woodberry. 1,898,073; Feb. 21.
Fuse setting machine. A. Dabrasky. 1,898,081; Feb. 21.
Game board or analogous article. R. K. Harsh. Des. 89,306; Feb. 21.
Garbage, Disposing of. E. L. and S. L. Coble. 1,898,243; Feb. 21.
Gas, Apparatus for making carbureted water. C. S. Chrisman. 1,898,575; Feb. 21.
Gas boiler. A. A. Marks. 1,898,585; Feb. 21.
Gas burner. A. U. Wetherbee. 1,898,799; Feb. 21.
Gas meter. A. D. MacLean and H. G. Weymouth. 1,898,253; Feb. 21.
Gas, Preparation of strong hydrogen halide. E. O. Barstow and S. B. Heath. 1,897,996; Feb. 21.
Gas, Separating and delivering casing head. D. G. Lorraine. 1,898,637; Feb. 21.
Gases and vaporous mixtures, Method and apparatus for absorption of constituents from. C. D. Gard. 1,898,579; Feb. 21.
Gases, Electrolytic production of. O. K. Ensor. 1,898,352; Feb. 21.
Gate valve. E. G. Smith. 1,898,147; Feb. 21.
Gauge: *See*—
Indicating gauge. Pyrometer gauge.
Liquid gauge. Sheet gauge.
Gauge. R. M. Nelson. 1,898,257; Feb. 21.
Gauge for testing eccentricity of insulators. F. A. Leibe. 1,898,133; Feb. 21.
Gear: *See*—
Change speed gear.
Gear cutter. E. C. Head. 1,898,051; Feb. 21.
Gear cutting. N. Trbojevich. 1,898,154; Feb. 21.
Gear for catapults, Retarding. C. C. Mitchell. 1,898,884; Feb. 21.
Gear for engines, compressors, pumps, and the like, Driving. R. E. Watts. 1,898,411; Feb. 21.
Gear shifting mechanism, Main and auxiliary. C. D. Peterson. 1,898,140; Feb. 21.
Gearing. A. Lysholm. 1,898,198; Feb. 21.
Gearing of vehicle brakes, Apparatus for varying the leverage of the link and lever. R. Engels and J Rihosek. 1,898,528; Feb. 21.
Gearing, Speed changing. L. H. Wente. 1,898,753; Feb. 21.
Gelatine capsules, Manufacturing. M. Stein. 1,898,507; Feb. 21.
Generator: *See*—
Current generator. Tachometer generator.
Steam generator.
Generator-absorber for intermittent absorption refrigerators. L. S. Chadwick and M. Resek. 1,898,616; Feb. 21.
Generator device for liquid fuel stoves. G. E. Pickup. 1,898,597; Feb. 21.
Generator equipment. R. P. Lansing. 1,898,973; Feb. 21.
Generators, Low water actuated means for steam. D. R. Koontz. 1,898,490; Feb. 21.
Glass, Apparatus for feeding molten. E. P. Wood and W. C. Osterbrock. 1,898,705; Feb. 21.
Glass blowing machine. L. D. Souibier. 1,898,222; Feb. 21.
Glass feeder, Pneumatic. T. Stenhouse. 1,898,101; Feb. 21.
Glass gathering tank. E. G. Bridges. 1,898,289; Feb. 21.
Glass grinding machine. H. K. Hitchcock. 1,898,012; Feb. 21.
Glass in tanks, Producing homogeneous. F. Eckert. 1,898,039; Feb. 21.

Glass manufacture, Sheet. W. L. Van Ness. 1,898,157; Feb. 21.
Gluing. H. Galber. 1,898,484; Feb. 21.
Glycoside and producing the same, Crystallized digitalis. C. U. F. Mannich. 1,898,199; Feb. 21.
Goblet. J. G. Rossiter. Des. 89,309; Feb. 21.
Goods holding and dispensing unit. L. H. Larsen. 1,898,192; Feb. 21.
Grader, Grain or fine particle. J. W. Hoefling. 1,898,249; Feb. 21.
Gradometer. J. H. Bair. 1,898,162; Feb. 21.
Grain particles from a bonded mass, Separation of. O. Hutchins. 1,898,371; Feb. 21.
Grenade holder, Fire extinguishing. G. O. Ruff. 1,898,266; Feb. 21.
Grinding apparatus. F. G. Musheno. 1,898,786; Feb. 21.
Grinding machine, Automatic. P. Thorsen and G. W. von Hofe. 1,898,648; Feb. 21.
Grinding mill. R. P. Jugel. 1,898,187; Feb. 21.
Guide, Nail wire. A. Bradley. 1,898,286; Feb. 21.
Guns, Variable recoil mechanism for. E. C. Goebert and T. A. Conlon. 1,898,089; Feb. 21.
Hair waving iron, Electric. H. Rochat. 1,898,467; Feb. 21.
Hammer. E. W. Tschudi. 1,898,069; Feb. 21.
Hand-grip for firearms. E. E. Hess and H. J. Farrant. 1,898,368; Feb. 21.
Handle for fishing rods. R. R. Teetor. 1,898,323; Feb. 21.
Hanger: *See*—
Pipe hanger. Seat hanger.
Harness for aeronauts and the like, Safety. A. A. Lethern. 1,898,090; Feb. 21.
Hasp fastener. F. Ditchfield. 1,898,347; Feb. 21.
Hasp retainer. W. H. Pressentin. 1,898,391; Feb. 21.
Head lamp. R. E. Schensted. 1,898,143; Feb. 21.
Headlight bulb cap, Automobile. F. C. Aston. 1,898,517; Feb. 21.
Head movement for a device simulating a dinosaur or other animal. G. H. Messmore. 1,898,587; Feb. 21.
Heat exchange device and making the same. W. H. Carrier and E. S. Lea. 1,898,718; Feb. 21.
Heat of finished coke, Utilization of the perceptible. J. Schaefer. 1,898,267; Feb. 21.
Heater: *See*—
Charcoal heater. Water heater.
Crank case heater.
Thermostatically controlled heater.
Heater. Q. G. Noblitt and E. C. Booth. 1,898,462; Feb. 21.
Heating and ventilating units, Fire protection mechanism for. W. Ewald. 1,898,821; Feb. 21.
Heating element, Electrical. A. J. Kercher and W. W. Hicks. 1,898,632; Feb. 21.
Heddle bars, Attachment for. I. Andrews. 1,898,928; Feb. 21.
Heel building machine. D. Parks. 1,898,889; Feb. 21.
Heel-building plate. J. F. Donahue and J. A. McMahon. 1,898,942; Feb. 21.
Heels, Device for attaching wooden. A. J. Brauer and F. P. Wagner. 1,898,288; Feb. 21.
High tension line switch. A. J. Pahl. 1,898,387; Feb. 21.
Hinge: *See*—
Lubricated hinge.
Hinge. J. M. Arnold. 1,898,161; Feb. 21.
Hinge device. M. Turnquist. 1,898,511; Feb. 21.
Holddown for punch presses, shears, or the like. F. E. Munschauer. 1,898,565; Feb. 21.
Holder: *See*—
Adjustable holder. License plate holder.
Cigarette holder. Steel wool holder.
Grenade holder. Valve holder.
Key holder.
Holder and ash receiver, Cigar and cigarette. G. Klenk. 1,898,841; Feb. 21.
Holder, ash receiver and igniter, Combination cigarette. G. W. Bowman. 1,898,077; Feb. 21.
Holding device. A. D. Drury. 1,898,349; Feb. 21.
Hollow articles, Method and apparatus for the formation of. D. Lantinberg and F. Stefandel. 1,898,252; Feb. 21.
Hook block for hoists. A. Cotesworth and E. E. Robins. 1,898,524; Feb. 21.
Hopper, Automatic feed. J. M. Soderstrom. 1,898,269; Feb. 21.
Horn, Sounding. E. E. Hewitt. 1,898,536; Feb. 21.
Hose coupling. W. Bawden. 1,898,283; Feb. 21.
House number, Illuminated. R. E. Nulsen. 1,898,463; Feb. 21.
Housing, Front wheel drive. M. L. Holloway. 1,898,447; Feb. 21.
Hub, Shock shifter. J. Muir. 1,898,593; Feb. 21.
Hull. V. W. Strode. 1,898,322; Feb. 21.
Humidifier. A. and A. Murdoch, jr. 1,898,785; Feb. 21.
Hydraulic curb press. N. J. Allbright. 1,898,116; Feb. 21.
Hydrocarbons, Hydrogenation of. A. Spilker. 1,898,966; Feb. 21.
Hydrocarbons, Preparation of unsaturated. W. O. Herrmann and E. Banm. 1,898,301; Feb. 21.
Hydrogen and gas mixtures containing the same, Production of. O. Eisenhut. 1,898,527; Feb. 21.
Hydrometer. R. Schroder. 1,898,903; Feb. 21.
Hydroxy-compounds, Alkylation of organic. F. Hofmann and C. Wulff. 1,898,627; Feb. 21.
Ice cream confection. E. N. Snodgrass. 1,898,148; Feb. 21.
Ice cream in an electric refrigerator, Making. A. R. Gifford. 1,898,724; Feb. 21.
Ice pack receptable. D. Stern. 1,898,320; Feb. 21.
Igniter. A. F. Cox. 1,898,991; Feb. 21.
Indicating gauge. J. MacLaren. 1,898,552; Feb. 21.
Indicating market quotations, Device for. E. C. Farrer. Re18,746; Feb. 21.
Indicator: *See*—
Direction indicator. Position indicator.
Liquid level indicator.
Indophenols of the benzocarbazole series and making same. R. Herz and M. Schubert. 1,898,445; Feb. 21.
Inkwell. A. O. Hook. 1,898,053; Feb. 21.
Insulator caps, Forging. C. S. Card. 1,898,574; Feb. 21.
Insulator for spark plugs. W. F. Ridge. 1,898,064; Feb. 21.
Internal combustion engine. L. C. Jackson. 1,898,963; Feb. 21.
Iron roll, Chilled. W. H. Pfeil. 1,898,390; Feb. 21.
Jack: *See*—
Journal box jack. Lifting jack.
Joint: *See*—
Expansion and contraction joint. Universal joint.
Joint for sheet piling, Welded lock. A. Fricke. 1,898,767; Feb. 21.
Journal box jack. I. V. Hott. 1,898,630; Feb. 21.
Jug. E. W. Fuerst. Des. 89,301; Feb. 21.
Key holder. H. H. Murray. 1,898,202; Feb. 21.
Kiln, Rotary. F. W. Corkill. 1,898,480; Feb. 21.
Knife, Fishing. T. Champlin. 1,898,422; Feb. 21.
Knitting machine. S. A. Welch, A. F. Guyler, J. T. Ashby, and W. H. Boaler. 1,898,106; Feb. 21.
Ladder, Tubular frame extension. J. F. Murphy. 1,898,456; Feb. 21.
Lamp assembly. H. A. Douglas. 1,898,295; Feb. 21.
Lamp lead bracket. E. W. Brady. 1,898,614; Feb. 21.
Lamp, Quick detachable. J. Pokorney. 1,898,498; Feb. 21.
Lamp, Vehicle. A. Alessi. Des. 89,293; Feb. 21.
Latch: *See*—
Toggle latch.
Lathe, Automatic. O. Schaerer. 1,898,902; Feb. 21.
Lavatory. C. J. Sandhagen. 1,898,314; Feb. 21.
Lead carbonate product, Preparing a. S. S. Svendsen. 1,898,405; Feb. 21.
Lead, Production of white. J. W. Iliff and W. J. Lindsay. 1,898,054; Feb. 21.
Lead testing machine. J. C. Drader. 1,898,084; Feb. 21.
Leg for workbenches and the like, Adjustable. G. C. Noros. 1,898,884; Feb. 21.
Lens for automobile lamps. A. Gross. Des. 89,304; Feb. 21.
Level, Multiindicating. O. H. Heinze. 1,898,367; Feb. 21.
License plate holder. W. H. Von Hacht. 1,898,024; Feb. 21.
License plate or sign, Automobile. J. P. Meehan. 1,898,379; Feb. 21.
Lifting jack. J. A. Morrison. 1,898,563; Feb. 21.
Light: *See*—
Flash light. Safety light.
Light dividing device. G. A. Althoff. 1,897,994; Feb. 21.
Light source, Ionic bombardment. R. T. Cloud. 1,898,032; Feb. 21.
Lighter, Automatic. J. B. Williams. 1,898,863; Feb. 21.
Lighter, Electric gas. L. Zwilling. 1,898,418; Feb. 21.
Lighting device. S. K. Lowe. 1,898,842; Feb. 21.
Lighting fixture. R. B. Hale. Des. 89,305; Feb. 21.
Lightning arrester. A. W. Malone. 1,898,882; Feb. 21.
Liquid gauge. J. J. O'Brien. 1,898,848; Feb. 21.
Liquid level indicator. J. C. Federle. 1,898,766; Feb. 21.
Liquid measuring device. R. Porte. 1,898,891; Feb. 21.
Liquids, Method and apparatus for concentrating. D. F. Twiss and E. A. Murphy. 1,898,604; Feb. 21.
Liquor resulting from recovery of lamisilite from vermiculite ore, Treatment of. R. G. Guthrie and O. J. Wilbor. 1,898,880; Feb. 21.
Loading ramp for vehicles. E. Millee. 1,898,679; Feb. 21.
Lock: *See*—
Automobile lock. Pin lock.
Combination lock. Wheel lock.
Nut lock.
Lock. J. I. W. Carlson. 1,898,241; Feb. 21.
Lock for wooden bedsteads, Corner. H. Richardson. 1,898,892; Feb. 21.
Lock push plate device. J. O. Soemer. 1,898,505; Feb. 21.
Locking device for bobbin caps. L. J. Jordan. 1,898,131; Feb. 21.
Locking means. R. C. Legat. 1,898,974; Feb. 21.
Log sawing machine. J. R. Houts. 1,898,960; Feb. 21.
Loom: *See*—
Pile fabric loom.
Loom control. C. D. Brown. 1,898,712; Feb. 21.
Loom reed construction. I. Andrews. 1,898,927; Feb. 21.
Loom, Tape. A. Weimar. 1,898,230; Feb. 21.
Looms or the like, Stopping device for. F. B. Gibbs. 1,898,768; Feb. 21.

Loud speaker, Pneumatic. F. L. Hetzel. 1,898,302; Feb. 21.
Lubricated hinge. D. A. Brawley. 1,898,936; Feb. 21.
Lubricating device. R. C. Kendall. 1,898,188; Feb. 21.
Lubricating mechanism. J. B. Picard. 1,898,981; Feb. 21.
Lubricating system. E. W. Davis. 1,898,003; Feb. 21.
Lubricating system. J. Hass. 1,898,184; Feb. 21.
Lubricator pump. K. S. Clapp and T. H. Eickhoff. 1,898,815; Feb. 21.
Luminous tube. J. H. Byrnes. 1,898,615; Feb. 21.
Machine for applying metallic leaf. G. E. Littlefield. 1,898,782; Feb. 21.
Machine for forming hollow glassware. L. D. Soubier. 1,898,404; Feb. 21.
Machine for forming hollow glassware. J. H. Treece and J. E. McLaughlin. 1,898,408; Feb. 21.
Machine for forming tubing around firework fuse material. J. Gioiosa. 1,898,360; Feb. 21.
Machine for operating on shoe parts. E. F. Schmidt. 1,898,144; Feb. 21.
Machine for packing matches. J. C. Donnelly. 1,898,717; Feb. 21.
Machine for the calculation of reenforced concrete. W. Sabatini. 1,898,398; Feb. 21.
Machine tool. G. R. Blauvelt. 1,898,285; Feb. 21.
Magnesium and its alloys at elevated temperatures, Protecting. E. O. Barstow. 1,898,969; Feb. 21.
Manhole cover. H. C. Ellis. 1,898,871; Feb. 21.
Manifold. T. J. Fowler. 1,898,825; Feb. 21.
Marker or tag. C. E. Timson. 1,898,274; Feb. 21.
Match machine. J. C. Donnelly. 1,898,716; Feb. 21.
Matches in book-form, Manufacturing cardboard strip. F. Käppler. 1,898,544; Feb. 21.
Material, Apparatus for handling comminuted. H. J. Burt, jr. 1,898,759; Feb. 21.
Material, Coloring granular and other. P. S. Denning. 1,898,345; Feb. 21.
Material in containers, Apparatus for settling. D. Belcher. 1,898,284; Feb. 21.
Material, Surfacing. R. Cowen and A. D. Jordan. 1,898,425; Feb. 21.
Mattress. W. G. Schubert. 1,898,573; Feb. 21.
Mattress and mattress manufacture. C. Lofman. 1,898,454; Feb. 21.
Mattresses, Making reenforced. E. Roberti. 1,898,497; Feb. 21.
Measuring and control apparatus. T. R. Harrison. 1,898,124; Feb. 21.
Measuring instrument. K. Hartley. 1,898,534; Feb. 21.
Medicine dispenser. G. W. Fillauer. 1,898,435; Feb. 21.
Melter, Portable electric metal. A. D'Amico, M. W. Hild, and W. H. Wilcox. 1,898,481; Feb. 21.
Metal articles, Fabricating composite. A. G. Dannell. 1,898,426; Feb. 21.
Metal objects, Cleaning. R. B. Berg. 1,898,809; Feb. 21.
Metal parts and an article produced thereby, Uniting. R. T. Hurley. 1,898,487; Feb. 21.
Metal processing, Strip. G. J. Meyer. 1,898,739; Feb. 21.
Metals such as magnesium and alloys thereof, Casting readily oxidizable. J. A. Gann, J. B. Reid, and H. A. Reimers. 1,898,487; Feb. 21.
Meter: *See*—
Gas meter.
Mill: *See*—
Grinding mill. Pulverizing mill.
Milling cutter. G. Kröhne. 1,898,732; Feb. 21.
Mirror. P. Schlumbohm. 1,898,791; Feb. 21.
Mixer with ultra-violet ray attachments, Drink. G. F. Harding. 1,898,365; Feb. 21.
Mixometer, Concrete. L. A. Perry. 1,898,890; Feb. 21.
Models of jaws, Manufacture of. L. Köhler. 1,898,731; Feb. 21.
Modulation system. A. Hund. 1,898,486; Feb. 21.
Mold: *See*—
Brick mold.
Mold for making pressed glass articles. N. Kopp. 1,898,251; Feb. 21.
Mortar, Hardening lime. R. W. Gelder. 1,898,358; Feb. 21.
Moth repellent. H. B. Ferguson. 1,898,621; Feb. 21.
Motor steering device, Outboard. C. M. Stover and J. W. Wright. 1,898,150; Feb. 21.
Motor with short circuited secondary, Induction. J. W. Swendsen. 1,898,749; Feb. 21.
Mounting for motor vehicles and trailers, Spring. A. F. Kuester. 1,898,191; Feb. 21.
Mounting for rock drills, Air feed. F. M. Slater. 1,898,645; Feb. 21.
Mounting, Spring. C. Redford. 1,898,217; Feb. 21.
Mounting, Vehicle shock absorber. E. J. Farkas. 1,898,721; Feb. 21.
Multiplication and keying system, Frequency. A. H. Taylor. 1,898,108; Feb. 21.
Nitrogen and hydrogen from bituminous fuels, Production of mixtures of. C. Schneider and H. Buetefisch. 1,898,967; Feb. 21.
Normalizer. W. Doble. 1,898,083; Feb. 21.
Nozzle, Building insulation conveyer. J. H. Norton. 1,898,885; Feb. 21.
Nut lock. I. Wilkinson. 1,898,801; Feb. 21.
Oil burner. P. Falk. 1,898,822; Feb. 21.
Oil burner. R. M. Soper. 1,898,270; Feb. 21.
Oil, Distilling. H. L. Doherty. 1,898,245; Feb. 21.
Oil saver. F. C. Pettitt. 1,898,311; Feb. 21.
Oil switch. J. C. Rab. 1,898,744; Feb. 21.
Oil well casings, Landing. F. J. Wheeler and B. S. Minor. 1,898,649; Feb. 21.
Oiling system, Crank shaft. F. T. Irgens. 1,898,631; Feb. 21.
Oils, Apparatus for distilling. H. L. Doherty. 1,898,246; Feb. 21.
Oils, Pressure distillation of hydrocarbon. R. E. Wilson. 1,898,414; Feb. 21.
Oils, Process for safety distilling and decolorizing mineral. D. S. Belden. 1,898,168; Feb. 21.
Oils with acid-activated earth and water, Decolorizing. W. S. Baylis and D. S. Belden. 1,898,165; Feb. 21.
Ore, Preparing. R. F. Meyer. 1,898,018; Feb. 21.
Ores, Treating iron. E. W. Wescott. 1,898,702; Feb. 21.
Ores, Treating sulphide. E. W. Wescott. 1,898,701; Feb. 21.
Organ valve. H. E. Burton. 1,898,240; Feb. 21.
Organic substances, Hydrogenating. A. Spilker and C. Zerbe. 1,898,965; Feb. 21.
Orifice device, Restricted. C. P. Howard. 1,898,537; Feb. 21.
Oscillation generation. C. W. Hansell. 1,898,181; Feb. 21.
Outlet box. O. G. Almcrantz. 1,898,282; Feb. 21.
Ovens and the like, Heating coke. J. Becker. 1,898,970; Feb. 21.
Packaging machine. S. R. Howard. 1,898,538; Feb. 21.
Packing for dressings, Sterile. E. Blank. 1,898,236; Feb. 21.
Pan: *See*—
Bake pan.
Panel wall. A. H. Wilkins. 1,898,026; Feb. 21.
Paper, Coated. F. W. Farrell. Re18,742; Feb. 21.
Paper-making process. D. K. Pattillo, G. E. Corson, and H. L. Thompson. 1,898,682; Feb. 21.
Paper manufacture. H. R. Rafton. 1,898,098; Feb. 21.
Paper, Method of and apparatus for making. E. E. Berry and T. C. Roberts. 1,898,611; Feb. 21.
Paper sheets, Feeding. A. Haupt, H. Gümbel, and J. Giesecke. 1,898,535; Feb. 21.
Paper supplies. M. C. Stern. 1,898,271; Feb. 21.
Paraffin wax or the like, Apparatus for sweating or treating. A. D. Armstrong and G. C. G. Dobbie. 1,898,930; Feb. 21.
Pavior, Mechanical. K. Winkler. 1,898,158; Feb. 21.
Pedal, Control. J. C. McCune. 1,898,557; Feb. 21.
Peep hole frame, Door. M. Wolfman. Des. 89,325; Feb. 21.
Pen, Fountain. M. J. Kwarta. 1,898,780; Feb. 21.
Pen, Fountain. F. C. McGaughy. 1,898,844; Feb. 21.
Pencil, Magazine. J. Rosenthal. 1,898,598; Feb. 21.
Phase control. S. S. Green. 1,898,828; Feb. 21.
Phenyl-aminoalkyl-carbinols, which are substituted in the phenyl nucleus, Production of. M. Oberlin. 1,898,258; Feb. 21.
Photo-engraving. P. H. W. Werner. 1,898,798; Feb. 21.
Photographic elements, Protecting. J. H. Theiss. 1,898,857; Feb. 21.
Picture film printing device, Motion. H. E. Piper. 1,898,141; Feb. 21.
Picture machine, Moving. A. Papò and A. Gentilini. 1,898,850; Feb. 21.
Picture transmission. C. A. Culver. 1,898,080; Feb. 21.
Pictures, Making sets for moving. J. F. Seits. 1,898,904; Feb. 21.
Pictures, Method and apparatus for making motion. J. F. Seits. 1,898,905; Feb. 21.
Pile and pile driving. A. G. Rotinoff. 1,898,397; Feb. 21.
Pile fabric loom, Tuft. T. J. Holland. 1,898,988; Feb. 21.
Pin: *See*—
Piston pin.
Pin lock. G. W. Wildin. 1,898,071; Feb. 21.
Pin removing tool. C. Hilliard. 1,898,959; Feb. 21.
Pipe bowls, Device for cleaning. K. Braun. 1,898,239; Feb. 21.
Pipe cleaner, Tobacco. S. W. Barnes. 1,898,708; Feb. 21.
Pipe cleaning machine. F. E. Jinnett. 1,898,964; Feb. 21.
Pipe closure. G. H. Clevenger. 1,898,714; Feb. 21.
Pipe coupling. J. R. Gammeter. 1,898,623; Feb. 21.
Pipe cutter and valve inserting machine. A. Brandriff. 1,898,035; Feb. 21.
Pipe hanger. A. C. Rowley. 1,898,898; Feb. 21.
Pipe hangers, Making. W. H. Klauer. 1,898,878; Feb. 21.
Piston. H. Kaw and J. G. Collins. 1,898,730; Feb. 21.
Piston and connecting the connecting rod thereto. N. S. Evanoff and S. Dolchinoff. 1,898,872; Feb. 21.
Piston construction. S. E. Meyer. 1,898,845; Feb. 21.
Piston pin. C. M. Bovard. 1,898,169; Feb. 21.
Piston ring. E. Tyden. 1,898,797; Feb. 21.
Piston, Trunk. J. Flammang and P. L. Bowser. 1,898,206; Feb. 21.
Plant support. J. W. Bauer. 1,898,164; Feb. 21.
Planter, Corn. R. O. Newell. 1,898,847; Feb. 21.
Plastic material and producing the same, Colored. A. Albright, 3d. 1,898,515; Feb. 21.
Plastic material, Anhydrite. H. K. Linzell. 1,898,636; Feb. 21.
Plastics, Method and machine for extruding. T. F. Mooney. 1,898,881; Feb. 21.
Plate for power's projection machine, Aperture. A. Dina. 1,898,173; Feb. 21.
Platform, Detachable. H. A. Silvernail. 1,898,504; Feb. 21.

Plug: *See*—
Safety plug. Stopper plug.
Plug for storage batteries, Vent. C. J. Dunsweiler. 1,898,718; Feb. 21.
Plugs for under floor conduit systems. J. M. G. Fullman. 1,898,087; Feb. 21.
Poison and producing same. W. D. Kilbourn. 1,898,189; Feb. 21.
Polymerization product of butadiene-1.3 hydrocarbons and making same. W. Bock and E. Tschunkur. 1,898,522; Feb. 21.
Position indicator. W. B. Lucas. 1,898,550; Feb. 21.
Position of vessels, Arrangement for indicating the. W. Hahnemann. 1,898,881; Feb. 21.
Post. J. H. Schuett. 1,898,499; Feb. 21.
Pottery ware and molds for use therewith, Producing. W. J. Miller. 1,898,561; Feb. 21.
Pouch. E. C. Bunnell. 1,898,171; Feb. 21.
Powdered material, Apparatus for transporting and delivering. W. L. Fickey. 1,898,356; Feb. 21.
Powdered material, Transporting and delivering. W. L. Fickey. 1,898,354; Feb. 21.
Power unit for oil wells. D. R. Brown. 1,898,290; Feb. 21.
Preheater, Fuel. G. Garibaldi. 1,898,580; Feb. 21.
Press: *See*—
Hydraulic curb press. Printing press.
Press with pinion leverage. E. Davis. 1,898,293; Feb. 21.
Pressure filling machine. R. Demka and R. Knapp. 1,898,004; Feb. 21.
Printing machine. W. T. Gollwitzer. 1,898,361; Feb. 21.
Printing press. C. S. Crafts. 1,898,034; Feb. 21.
Printing press, Web perfecting rotary. H. M. Barber. 1,898,610; Feb. 21.
Prism anamorphoser. H. S. Newcomer. 1,898,787; Feb. 21.
Products of formaldehyde and 1-amino-anthraquinone compounds being substituted in the 4-position, New condensation. E. E. Schmidt and R. Berliner. 1,898,399; Feb. 21.
Products of the anthracene series and new anthraquinone derivatives, Making useful condensation. P. Grossmann. 1,898,953; Feb. 21.
Proof press and inking mechanism therefor. R. O., E. O., F. R., and D. D. Vandercook. 1,898,605; Feb. 21.
Protective arrangement. J. G. Wellings, C. G. Mayo, and P. Mathews. 1,898,752; Feb. 21.
Protective structure. A. J. Roos. 1,898,396; Feb. 21.
Pulley, Motor. C. F. Elle. 1,898,433; Feb. 21.
Pulp and paper, Manufacture of. L. Bradley and E. P. McKeefe. 1,898,612; Feb. 21.
Pulp, etc., Manufacture of. L. Bradley and E. P. McKeefe. 1,898,613; Feb. 21.
Pulverizing apparatus. M. Frisch. 1,898,086; Feb. 21.
Pulverizing mill. G. B. Forbes. 1,898,823; Feb. 21.
Pump: *See*—
Lubricator pump.
Pump. P. O. Dorer. 1,898,848; Feb. 21.
Pump. A. D. Gardner. 1,898,659; Feb. 21.
Pump equalizer. G. F. Brakhage. 1,898,238; Feb. 21.
Pump for internal combustion engines, Fuel. H. Vonrüti. 1,898,916; Feb. 21.
Pump or motor, Vane. H. F. Vickers. 1,898,914; Feb. 21.
Pyrometer gauge. F. H. Johnson. 1,898,013; Feb. 21.
Quick service device. T. H. Thomas. 1,898,510; Feb. 21.
Rack for loose leaf ledgers. C. L. Harvey. 1,898,833; Feb. 21.
Racket and manufacturing, Tennis. H. W. Hall. 1,898,485; Feb. 21.
Radiator. E. E. Wayles. 1,898,327; Feb. 21.
Radiator, Sheet metal. I. T. Bennett. 1,898,028; Feb. 21.
Radiocabinet. L. G. Stubbs. 1,898,224; Feb. 21.
Radio direction finder. L. L. Kaess. 1,898,488; Feb. 21.
Radioreceiver. R. C. Shermund. 1,898,792; Feb. 21.
Radiotube. A. B. Du Mont. 1,898,351; Feb. 21.
Raincoat. R. K. Leavitt. 1,898,015; Feb. 21.
Razor blade, Safety. J. L. King. Des. 89,826; Feb. 21.
Receiving, storage, and delivery container, Powdered material. W. L. Fickey. 1,898,355; Feb. 21.
Receptacle: *See*—
Dumping receptacle. Ice pack receptacle.
Receptacle for coal drills, Fuse. R. K. Jeffrey. 1,898,129; Feb. 21.
Recorder: *See*—
Track recorder.
Recording and control system and apparatus therefor. T. R. Harrison. 1,898,188; Feb. 21.
Rectifier, Electrical. C. K. Strobel. 1,898,821; Feb. 21.
Reel: *See*—
Fisherman's reel. Sand reel.
Fishing reel.
Reflector. L. A. Bean. 1,898,166–7; Feb. 21.
Reflector for very short waves. W. Ludenia. 1,898,197; Feb. 21.
Refrigerating apparatus. M. J. Ajam. 1,898,804; Feb. 21.
Refrigerating apparatus. E. E. Allyne. 1,898,706; Feb. 21.
Refrigerating apparatus. H. A. Greenwald. 1,898,440; Feb. 21.
Refrigerating apparatus. J. G. King. 1,898,548; Feb. 21.
Refrigerating apparatus and cabinet therefor. H. A. Greenwald. 1,898,438; Feb. 21.
Refrigerating apparatus for packaged goods. R. R. Bottoms. 1,898,758; Feb. 21.
Refrigerating unit. C. L. West. 1,898,022; Feb. 21.
Refrigerator. R. Schlenk. 1,898,317; Feb. 21.
Refrigerator cabinet construction. H. A. Greenwald. 1,898,439; Feb. 21.
Register: *See*—
Cash register.
Regulation. R. C. Roe. 1,898,020; Feb. 21.
Regulator: *See*—
Flow regulator. Valve regulator.
Relay, Reactance controlled. P. S. Edwards and C. D. Barbulesco. 1,898,432; Feb. 21.
Remote control system. E. F. Chandler. 1,898,242; Feb. 21.
Remote control system. E. F. Watson. 1,898,921; Feb. 21.
Reproducer. W. C. Grunow. 1,898,441; Feb. 21.
Resilient wheel. M. Pongiluppi. 1,898,142; Feb. 21.
Resinous compositions and preparing the same. R. H. Kienle. 1,898,840; Feb. 21.
Resinous compositions, Preparing. P. F. Schlingman. 1,898,790; Feb. 21.
Resinous compounds and processes, Aldehyde amino. R. W. Belfit. 1,898,709; Feb. 21.
Revolver rifle. J. Bocco. 1,898,237; Feb. 21.
Revolvers of the solid-frame swing-out cylinder type, Device for applying sub-calibre barrels to. A. Noel. 1,898,566; Feb. 21.
Ring: *See*—
Finger ring. Piston ring.
Ring contractor. J. Mazer. 1,898,586; Feb. 21.
Ring forming machine. C. L. Wiles. 1,898,072; Feb. 21.
Ring spinning device for spinning continuously-fed textile fibres. H. F. Niogret. 1,898,206; Feb. 21.
Riveting machine. S. F. Tapman. 1,898,468; Feb. 21.
Rock drill. L. W. Greve. 1,898,772; Feb. 21.
Rock drill. W. H. Mosher. 1,898,639; Feb. 21.
Rod: *See*—
Welding rod.
Roll balance for backed-up rolling mill, Working. H. E. Ewart. 1,898,007; Feb. 21.
Roller for shades and the like. C. W. Rice. 1,898,686; Feb. 21.
Roofing material, Strip of. N. P. Harshberger. 1,898,990; Feb. 21.
Rotary cutter. G. F. Whitman. 1,898,800; Feb. 21.
Rubber vulcanization. R. L. Sibley. 1,898,268; Feb. 21.
Safety device for power-take-off shafts. W. L. Zink. 1,898,113; Feb. 21.
Safety device, Power-take-off. W. L. Zink. 1,898,114; Feb. 21.
Safety light, Direction indicating. O. D. Chauvet. 1,898,655; Feb. 21.
Safety plug. C. E. Gilbert. 1,898,359; Feb. 21.
Saline coatings and making the same. F. De Pape. 1,898,427; Feb. 21.
Salt and pepper shaker. H. M. and A. E. Taft. 1,898,152; Feb. 21.
Sand reel. F. Stone. 1,898,067; Feb. 21.
Sand regulator and shut-off. R. Ruemelin. 1,898,689; Feb. 21.
Sash balance, Spring. A. F. Mantz. 1,898,584; Feb. 21.
Saw attachment for electric drills. W. E. Harvie. 1,898,956; Feb. 21.
Scale, Weighing. V. F. Slezak. 1,898,146; Feb. 21.
Scraper. C. A. Schacht. 1,898,747; Feb. 21.
Scraper, Dish. C. A. Schacht. 1,898,690; Feb. 21.
Scraper, Tractor. J. R. Ritchie. 1,898,812; Feb. 21.
Screen: *See*—
Spark screen.
Screw-propellers, Apparatus for changing the pitch-angle of reversible-blade. M. D. Thompson. 1,898,697; Feb. 21.
Seal for tunnel kilns, Sand. E. B. Forse and C. F. Geiger. 1,898,042; Feb. 21.
Sealing device. A. R. Weis. 1,898,278; Feb. 21.
Seat: *See*—
Vehicle seat.
Seat. C. A. Hawkins. 1,898,444; Feb. 21.
Seat hanger, Ball bearing. W. A. Gedris. 1,898,176; Feb. 21.
Sectional boiler. C. A. Olson and J. P. Magos. 1,898,096; Feb. 21.
Selecting system using a single magnet. A. A. Clokey. 1,898,762; Feb. 21.
Self-propelling apparatus. R. K. Jeffrey. 1,898,130; Feb. 21.
Semitrailer frame construction. F. M. Reid. 1,898,854; Feb. 21.
Separable fastener. W. L. Pipes. 1,898,743; Feb. 21.
Separating system. J. M. Le Grand. 1,898,783; Feb. 21.
Separator: *See*—
Centrifugal separator.
Service box. M. J. Lewis. 1,898,634; Feb. 21.
Sewer cleaning device. J. Silberger. 1,898,503; Feb. 21.
Sewing machine. C. E. Spivey and J. C. Roden. 1,898,855; Feb. 21.
Shade, Lamp. E. Schwarz. Des. 89,810–14; Feb. 21.
Sharpener, Razor blade. A. S. Volpin. 1,898,915; Feb. 21.
Shear mechanism for glassware forming machines. J. H. Treece. 1,898,407; Feb. 21.
Sheet gauge. J. Flockhart. 1,898,530; Feb. 21.
Sheets from pulp, Forming. W. J. Hyde. 1,898,372; Feb. 21.

Shield or guard, Athletic. W. P. Whitley. 1,898,606; Feb. 21.
Shingle. N. P. Harshberger. 1,898,989; Feb. 21.
Shingle handling machine. S. B. Howe and S. C. Bliss. 1,898,664; Feb. 21.
Shipping container. R. B. Porter. 1,898,892; Feb. 21.
Shock absorber. M. L. Fox. 1,898,622; Feb. 21.
Shock absorber. A. F. Paul. 1,898,210; Feb. 21.
Shock absorber. I. Sikorsky. 1,898,694; Feb. 21.
Shock absorber, Double-acting. W. A. Chryst. 1,898,339; Feb. 21.
Shock absorbing mechanism, Friction. J. F. O'Connor. 1,898,594; Feb. 21.
Shoe. T. R. Atkins. Des. 89,294–5; Feb. 21.
Shoe and making same. A. Cohn. 1,898,083; Feb. 21.
Shoe heel machine. A. F. Froussard. 1,898,044; Feb. 21.
Shoe lace. L. G. Szabo. 1,898,225; Feb. 21.
Shoe sewing machine. A. Bates. 1,898,521; Feb. 21.
Shopping bag. M. Katz. 1,898,838; Feb. 21.
Shovel. A. Milligan. 1,898,590; Feb. 21.
Shovel, Snow. M. Anderson. 1,898,234; Feb. 21.
Signal: *See*—
  Direction signal. Sound signal.
Signal controlling device. C. S. Kelley. 1,898,546; Feb. 21.
Signaling system. C. S. Demarest. 1,898,118; Feb. 21.
Signaling, System of acoustic. W. A. Loth. 1,898,091; Feb. 21.
Silicates and producing them, Crystalline hydrates of alkali metal. C. L. Baker. 1,898,707; Feb. 21.
Silk or the like, Apparatus for treating spun cakes of artificial. F. Paschke. 1,898,595; Feb. 21.
Silk screen printing machine. L. C. and H. L. Tate. 1,898,406; Feb. 21.
Silver salt emulsions and light-sensitive material, Manufacturing photographic. B. Wendt. 1,898,512; Feb. 21.
Siphon and making the same, Thermic. W. H. Hinsch. 1,898,052; Feb. 21.
Skylight. O. Carlson. 1,898,813; Feb. 21.
Slack adjuster. L. J. Le Clair and A. G. Brackenbury. 1,898,549; Feb. 21.
Slack adjuster for railway car brakes. B. W. Burnett. 1,898,029; Feb. 21.
Slicing mechanism. J. M. Bulaich. 1,898,338; Feb. 21.
Slide. C. E. Peterson. 1,898,741; Feb. 21.
Slide, Cushion rocking. W. H. Noelting. 1,898,309; Feb. 21.
Slider for fasteners. M. Kiessling and A. J. Krieger. 1,898,547; Feb. 21.
Soda water fountain. S. Mezzapesa. 1,898,560; Feb. 21.
Sound and sound picture record, Production of. B. E. Eldred. 1,898,040; Feb. 21.
Sound producing device. L. J. Grubman. 1,898,010; Feb. 21.
Sound producing device. L. J. Grubman. 1,898,773; Feb. 21.
Sound signal. W. W. Riedel. 1,898,394; Feb. 21.
Spark screen, Adjustable. J. A. Johnson. 1,898,837; Feb. 21.
Spectacles, Securing means for. L. J. McDonald. 1,898,059; Feb. 21.
Speed control for motion picture cameras. G. Lowkrantz. 1,898,675; Feb. 21.
Spindles, Retaining device for twister. W. O. Aldrich. 1,898,115; Feb. 21.
Spreader for spray compositions. J. F. Littooy. 1,898,673; Feb. 21.
Spring mechanism for fluid pressure brakes. S. G. Down and C. C. Farmer. 1,898,525; Feb. 21.
Spring perch, Vehicle. D. Nettenstrom. 1,898,204; Feb. 21.
Spring spreader, Vehicle. G. R. Gayne. 1,898,121; Feb. 21.
Spring structure. W. T. Kyle. 1,898,491; Feb. 21.
Spring structure. C. Lofman. 1,898,455; Feb. 21.
Spring tester. C. C. Farmer. 1,898,529; Feb. 21.
Spudder, Hydraulic. H. Pearsall. 1,898,684; Feb. 21.
Stairway or the like, Collapsible. G. H. Barraclough. 1,898,520; Feb. 21.
Stand adjustment for electrical utility devices. P. J. Fitzgerald. 1,898,946; Feb. 21.
Starter, Engine. F. T. Christian. 1,898,423; Feb. 21.
Starter, Engine. R. E. Slayton. 1,898,401; Feb. 21.
Static eliminator. J. Gomery. 1,898,770; Feb. 21.
Steam boiler, Water tube. H. C. Dinger. 1,898,428; Feb. 21.
Steam generator. W. M. Cross. 1,898,078–9; Feb. 21.
Steel for hardening, Heating. M. Winter. 1,898,415; Feb. 21.
Steel wool holder. D. Trompeter. 1,898,698; Feb. 21.
Steels, Treatment of electrical sheet. O. M. Otte. 1,898,061; Feb. 21.
Steering device for planters. F. Waterman. 1,898,920; Feb. 21.
Stem making machine. K. Mey. 1,898,784; Feb. 21.
Stereotype plate casting machine. R. J. Greenway. 1,898,624; Feb. 21.
Stock quotation boards, Increasing visibility of. A. A. Clokey. 1,898,760; Feb. 21.
Stocking. D. M. Carmer. 1,898,001; Feb. 21.
Stocking. F. E. Struve. Des. 89,320; Feb. 21.
Stocking and knitting same on flat knitting machines. W. Heinitz. 1,898,957; Feb. 21.
Stopper plug. O. Fitterer. 1,898,658; Feb. 21.
Strainer or filter for fluids, as for milk or water. J. F. Mullaney. 1,898,482; Feb. 21.
Strap: *See*—
  Wrist watch strap.
Stud driver. C. I. Hess. 1,898,726; Feb. 21.
Sucking and compressing machine. G. Tamura. 1,898,153; Feb. 21.
Sugar and the like, Refining. J. J. Naugle. 1,898,208; Feb. 21.
Sulphur black and preparation of the same. G. Barnhart. 1,898,076; Feb. 21.
Support: *See*—
  Box support.
  Christmas tree support. Deck support.
Support. H. Balch. 1,898,865; Feb. 21.
Supporting device for radio apparatus. K. L. Henderson. 1,898,835; Feb. 21.
Surgical extension attachment. H. H. Leiter. 1,898,781; Feb. 21.
Swab body, Flexible. C. S. Crickmerk. 1,898,292; Feb. 21.
Sweater or similar article. S. Sheindelman. Des. 89,316–18; Feb. 21.
Switch: *See*—
  Electric switch. High tension line switch.
  Electrical switch. Oil switch.
  Float operated switch.
Switch and mounting therefor. H. E. Norviel. 1,898,495; Feb. 21.
Switches, Operating mechanism for. H. B. Massey. 1,898,135; Feb. 21.
Switching system, Selective. A. J. Macy. 1,898,805; Feb. 21.
Syringe. C. H. Sprague. 1,898,856; Feb. 21.
Table. C. J. Miller. 1,898,307; Feb. 21.
Table for candy makers, Packing. R. Stover. 1,898,151; Feb. 21.
Table slide, True running. E. Daub. 1,898,620; Feb. 21.
Tabulating device for type composing machines. T. A. Payne. 1,898,683; Feb. 21.
Tachometer generator. E. S. Huff. 1,898,728; Feb. 21.
Tank: *See*—
  Glass gathering tank.
Tappets, Making. G. Charlton. 1,898,814; Feb. 21.
Tar, distillation. S. P. Miller. 1,898,980; Feb. 21.
Telephone system. R. G. Richardson. 1,898,063; Feb. 21.
Telephones, Attachment for. S. Neiterman. 1,898,681; Feb. 21.
Temperature control system. L. A. Gebhard and R. B. Meyer. 1,898,531; Feb. 21.
Temperature release unit, Fusible fixed. A. C. Rowley. 1,898,897; Feb. 21.
Temperatures, Method and apparatus for controlling. E. G. Ragatz. 1,898,572; Feb. 21.
Tempering device. F. W. Greer. 1,898,829; Feb. 21.
Textile fabric or similar article. I. A. Weitz. Des. 89,324; Feb. 21.
Textile fabric or similar article. W. Willheim. Des. 89,322–3; Feb. 21.
Textile for making one-piece cut-out aprons, Printed. H. Goldberger. 1,898,950; Feb. 21.
Thermostatically controlled heater. F. W. Birtch. 1,898,419; Feb. 21.
Thread, Artificial. W. Seidel and A. Ernecke. 1,898,502; Feb. 21.
Tie loading device. T. E. Farmer. 1,898,120; Feb. 21.
Tie-rod for concrete wall forms, Adjustable. T. A. Anderson. 1,898,332; Feb. 21.
Tile, Sectional block clay. F. H. Meier. 1,898,880; Feb. 21.
Time setting and time control mechanism for automatic toasters and the like. C. T. Johnson. 1,898,972; Feb. 21.
Tin and nail puller, Turpentine. B. F. Odom. 1,898,849; Feb. 21.
Tin cleaning and greasing machine. W. D. Bleier. 1,898,653; Feb. 21.
Tinplate feeding mechanism. S. E. Diescher. 1,898,005; Feb. 21.
Tire and fabricating same, Pneumatic. R. C. Murphy. 1,898,886; Feb. 21.
Tires and the like, Apparatus for manufacturing band saw wheel. A. G. Carter. 1,898,031; Feb. 21.
Toggle latch. C. D. Phillips. 1,898,742; Feb. 21.
Tones by color, Indicating. C. R. Ogle. 1,898,642; Feb. 21.
Tool: *See*—
  Brake adjusting tool. Machine tool.
  Fluid pressure tool. Pin removing tool.
Tool. F. F. Passano. 1,898,568; Feb. 21.
Tool for well equipment, Safety pulling. H. C. Otis. 1,898,261; Feb. 21.
Top, Rumble seat. S. Ostroff. 1,898,260; Feb. 21.
Top-spinning device. A. F. Morgan. 1,898,680; Feb. 21.
Toy. R. C. Dole. 1,898,817; Feb. 21.
Toy, Dancing. K. C. McGee. 1,898,735; Feb. 21.
Toy locomotive. A. C. Gilbert. 1,898,009; Feb. 21.
Toy vehicle apparatus. J. F. Key. 1,898,633; Feb. 21.
Track recorder. S. E. Wishard. 1,898,159; Feb. 21.
Traction increasing device. J. C. McCune. 1,898,555; Feb. 21.
Transformer, High tension. K. Bahrmann. 1,898,931; Feb. 21.
Transformer, High tension. F. J. Fischer and K. A. Sterzel. 1,898,944; Feb. 21.

Transmitter, Step-by-step. A. A. Clokey. 1,898,761; Feb. 21.
Trap for internal combustion engines, Fire. M. Hedglon. 1,898,126; Feb. 21.
Tray or similar article, Ash. H. Underberg. Des. 89,321; Feb. 21.
Trigger mechanism. M. A. Browning. 1,898,291; Feb. 21.
Trigger mechanism. V. A. Browning. 1,898,000; Feb. 21.
Trigger mechanism for double barrel guns, Single. E. E. and H. L. Miller. 1,898,255; Feb. 21.
Tripods of photographic cameras and the like, Operating means for the. A. S. Howell. 1,898,185; Feb. 21.
Trunk supporting attachment. N. Frescott, sr. 1,898,436; Feb. 21.
Tube: *See*—
  Luminous tube.
Tube cleaner. J. J. Hoppes. 1,898,727; Feb. 21.
Tube for pneumatic systems, Clear vision. W. L. Underwood and C. F. Stone. 1,898,860; Feb. 21.
Tubes from fibrous pulps, Manufacture of. A. Magnani. 1,898,881; Feb. 21.
Tubes, Manufacturing flare end. A. T. Kvarnstrom. 1,898,374; Feb. 21.
Tubes with internally thickened ends, Rolling. L. Klein. 1,898,779; Feb. 21.
Tubing from cellulose, Manufacturing. O. Schnecko and W. Schwalbe. 1,898,400; Feb. 21.
Turbine, Hydraulic. H. E. Symser. 1,898,023; Feb. 21.
Tweezer. S. Segal. Des. 89,315; Feb. 21.
Two-cycle engine. E. C. Newcomb. 1,898,460; Feb. 21.
Two-speed mechanism. C. M. Wert. 1,898,700; Feb. 21.
Typewriter, Carriage shift. P. Kappler. 1,898,777; Feb. 21.
Typewriting machine. J. A. B. Smith. 1,898,793; Feb. 21.
Union. L. H. Church. 1,898,617; Feb. 21.
Universal joint. F. H. Ragan. 1,898,265; Feb. 21.
Upholstery, Device for spraying. C. C. Meutsch. 1,898,738; Feb. 21.
Urea compounds containing heterocyclic nuclei in the molecule, Water soluble. O. Dressel, A. Ossenbeck and E. Tietze. 1,898,431; Feb. 21.
Urea condensation product and process. R. W. Belfit. 1,898,755; Feb. 21.
Urea manufacture. F. W. Miller, jr. 1,898,098; Feb. 21.
Vacuum cleaner. N. B. Wales. 1,898,410; Feb. 21.
Vacuum insulation. D. F. Comstock. 1,898,172; Feb. 21.
Vacuum insulation. D. F. Comstock. 1,898,977; Feb. 21.
Valve: *See*—
  Float valve. Organ valve.
  Gate valve.
Valve. A. A. Andrake. 1,898,805; Feb. 21.
Valve. G. M. Crossen. 1,898,816; Feb. 21.
Valve. E. H. Ford. 1,898,577; Feb. 21.
Valve. F. A. Gray. 1,898,952; Feb. 21.
Valve construction, Interlocking. C. A. Pearson. 1,898,569; Feb. 21.
Valve for carbon dioxide fire extinguishing apparatus. A. C. Rowley. 1,898,899; Feb. 21.
Valve for internal combustion engines, Fuel injection. H. Vonfitti. 1,898,751; Feb. 21.
Valve for liquid containers. C. L. Hunt and N. J. Hill. 1,898,303; Feb. 21.
Valve for rock drills. G. W. Hulshizer. 1,898,665; Feb. 21.
Valve for shock absorbers, Relief. R. I. Bates. 1,898,335; Feb. 21.
Valve holder. R. D. Elder. 1,898,720; Feb. 21.
Valve member, Detachable. J. J. Aull. 1,898,519; Feb. 21.
Valve regulator. E. L. Gaines. 1,898,248; Feb. 21.
Valve structure. H. W. Taylor. 1,898,226; Feb. 21.
Valves, Attachment to air brake pressure retaining. S. L. Joiner. 1,898,250; Feb. 21.
Vanity case, cigarette case, and analogous article. N. Ottinger and R. Lhomme. 1,898,386; Feb. 21.
Vault, Burial. R. Cohen. 1,898,939; Feb. 21.
Vehicle. C. B. O'Connor. 1,898,567; Feb. 21.
Vehicle, Aerial. I. Sikorsky. 1,898,644; Feb. 21.
Vehicle for pneumatic tools. A. F. and P. F. Hohmann and M. M. Campbell. 1,898,369; Feb. 21.
Vehicle seat, Convertible. P. Turk. 1,898,912; Feb. 21.
Vehicle wheel. C. L. Eksergian and T. A. Davenport. Des. 89,297–8; Feb. 21.
Velvet, Weft-pile. L. Hayes. 1,898,050; Feb. 21.
Ventilating system for enclosed cars. W. T. Thorp. 1,898,859; Feb. 21.
Vermiculite and the like, Treatment of. R. G. Guthrie and O. J. Wilbor. 1,898,774; Feb. 21.
Visor. W. C. Van Dresser. 1,898,276; Feb. 21.
Voting machine. J. M. Garr. 1,898,874; Feb. 21.
Vulcanizers, Repairing element for. R. H. M. Binay. 1,898,235; Feb. 21.
Wagon construction, Tank. P. Earnheart and C. W. Smith. 1,898,483; Feb. 21.
Ware, Manufacturing porous silica. L. Kern. 1,898,889; Feb. 21.
Warehouse, Auction. D. W. Brashear. 1,898,421; Feb. 21.
Washing apparatus. H. F. Snyder. 1,898,221; Feb. 21.
Washing machine. G. W. Dunham. 1,898,038; Feb. 21.
Washing machine. H. C. Magnus. 1,898,676; Feb. 21.
Washing machine. S. E. Schroeder. 1,898,218; Feb. 21.
Water compression system. R. A. Brooks. 1,898,837; Feb. 21.
Water heater. D. B. Williamson. 1,898,703; Feb. 21.
Water tube boiler, Double circuit forced circulation. C. E. Lucke. 1,898,196; Feb. 21.
Wax, Extraction of montan. E. Roeckner and F. Zschoch. 1,898,976; Feb. 21.
Weapon, Disabling gas firing. A. S. Alles. 1,897,992; Feb. 21.
Web characteristics, Measuring. L. P. Schweitzer and S. M. Bagno. 1,898,066; Feb. 21.
Webs of paper, Method and apparatus for registering printed. F. B. Fuller. 1,898,723; Feb. 21.
Weighing machine. S. R. Howard. 1,898,539; Feb. 21.
Weighing machine, Controlled plural batch. P. L. M. van der Lande. 1,898,156; Feb. 21.
Welded casing. F. P. Hodgkinson. 1,898,663; Feb. 21.
Welder, Portable. P. W. Fassler. 1,898,873; Feb. 21.
Welding. S. Whitworth. 1,898,923; Feb. 21.
Welding, Method and apparatus for electric arc. P. O. Noble. 1,898,060; Feb. 21.
Welding rod. H. W. R. Biers. 1,898,933; Feb. 21.
Welding rod. G. T. Southgate. 1,898,908; Feb. 21.
Well surveying device. S. H. Williston and C. R. Nichols. 1,898,473; Feb. 21.
Wheel: *See*—
  Resilient wheel.
Wheel and brake for motor vehicles. A. D. Robbins. 1,898,313; Feb. 21.
Wheel lock, Steering. G. A. Gillen. 1,898,122; Feb. 21.
Winding machine. W. E. Hale. 1,898,987; Feb. 21.
Window box frame. G. E. Deatherage. 1,898,082; Feb. 21.
Window, Casement. T. Johnson. 1,898,543; Feb. 21.
Wire, Method and machine for coiling small. C. E. Sturgis. 1,898,102; Feb. 21.
Woolen fabrics containing effects of silk, Manufacturing piece-dyed. R. Haynn. 1,898,125; Feb. 21.
Wrapping apparatus. J. H. Theiss. 1,898,858; Feb. 21.
Wrecking bar. O. Raaen. 1,898,853; Feb. 21.
Wrench: *See*—
  Car and jar wrench.
Wrench. J. Bolton. 1,898,420; Feb. 21.
Wrench. B. H. Parker. 1,898,888; Feb. 21.
Wrist watch strap. F. C. Smith. 1,898,402; Feb. 21.
Yarns or threads, Manufacture of. N. Crossley. 1,898,941; Feb. 21.
Yeast composition for use in candy making. Z. J. Kish. 1,898,057; Feb. 21.

CLASSIFICATION OF PATENTS

ISSUED FEBRUARY 21, 1933

NOTE.—First number—class, second number—subclass, third number—patent number

1— 3: 1,898,678
3.1: 1,898,019
2— 2: 1,898,008
63: 1,898,954
87: 1,898,015
4— 85: 1,898,656
1,898,657
149: 1,898,253
159: 1,898,314
185: 1,898,372
5— 156: 1,898,578
269: 1,898,455
270: 1,898,491
294: 1,898,392
351: 1,898,573
356: 1,898,454
360: 1,898,497
7— 3: 1,898,568
11: 1,898,422
8— 5: 1,898,125
1,898,188
1,898,211
1,898,570
6: 1,898,247
13: 1,898,105
20: 1,898,502
10— 123: 1,898,132
12— 31.5: 1,898,044
50: 1,898,880
1,898,942
53: 1,898,144
141: 1,898,288
142: 1,898,053
13— 26: 1,898,207
15— 43: 1,898,318
56: 1,898,653
104.04: 1,898,727
1,898,964
104.30: 1,898,503
142: 1,898,857
154: 1,898,698
198: 1,898,464
236: 1,898,747
245: 1,898,690
16— 42: 1,898,309
61: 1,898,609
99: 1,898,582
1,898,583
128: 1,898,161
140: 1,898,511
161: 1,898,936
198: 1,898,584
18— 2: 1,898,604
8: 1,898,085
1,898,595
15: 1,898,400
18: 1,898,235
41: 1,898,043
42: 1,898,031
47: 1,898,731
48.8: 1,898,515
53: 1,898,268
58: 1,898,507
20— 1.6: 1,898,421
8: 1,898,364
74: 1,898,526
22— 5: 1,898,624
62: 1,898,722
68: 1,898,671
188: 1,898,437
23— 7: 1,898,537
1,898,967
71: 1,898,405
73: 1,898,054
87: 1,898,701
88: 1,898,806
1,898,532
110: 1,898,707
117: 1,898,830
139: 1,898,579
172: 1,898,688
200: 1,898,702
201: 1,898,542
202: 1,898,541
268: 1,898,776
24— 3: 1,898,089
24— 73: 1,898,225
125: 1,898,524
126: 1,898,212
197: 1,898,650
200: 1,898,741
205: 1,898,210
1,898,547
1,898,743
211: 1,898,155
25— 1: 1,898,333
11: 1,898,331
119: 1,898,716
129: 1,898,561
131: 1,898,332
131.5: 1,898,319
142: 1,898,042
154: 1,898,304
155: 1,898,636
156: 1,898,339
27— 35: 1,898,939
28— 87.1: 1,898,121
29— 7: 1,898,578
8: 1,898,586
37: 1,898,902
73: 1,898,956
86.1: 1,898,959
87.1: 1,898,720
104: 1,898,732
105: 1,898,051
1,898,800
148: 1,898,417
149.5: 1,898,100
155.5: 1,898,574
155.54: 1,898,696
156: 1,898,374
156.7: 1,898,426
1,898,814
157.3: 1,898,026
1,898,713
157.4: 1,898,052
180: 1,898,917
30— 3: 1,898,910
33— 172: 1,898,552
174: 1,898,013
180: 1,898,136
212: 1,898,162
1,898,367
34— 48: 1,898,041
37— 118: 1,898,163
144: 1,898,312
40— 3: 1,898,274
10.5: 1,898,681
65: 1,898,308
68: 1,898,780
1,898,924
107: 1,898,137
125: 1,898,024
126: 1,898,746
1,898,769
132: 1,898,462
136: 1,898,379
41— 7: 1,898,782
17: 1,898,950
24: 1,898,375
26: 1,898,500
1,898,745
29: 1,898,798
33: 1,898,998
42— 1: 1,897,992
18: 1,898,670
41: 1,898,651
42: 1,898,000
1,898,255
1,898,291
59: 1,898,237
71: 1,898,366
77: 1,898,566
43— 23: 1,898,323
36: 1,898,442
46: 1,898,200
1,898,740
45— 2: 1,898,223
57: 1,898,533
82: 1,898,606
85: 1,898,906
111: 1,898,884
45— 115: 1,898,620
116: 1,898,307
131: 1,898,514
139: 1,898,465
140: 1,898,239
46— 32: 1,898,680
35: 1,898,207
40: 1,898,735
46: 1,898,010
1,898,773
48: 1,898,009
1,898,633
47— 47: 1,898,164
48— 80: 1,898,575
180: 1,898,778
49— 5: 1,897,993
1,898,222
1,898,404
1,898,408
14: 1,898,407
1,898,449
54: 1,898,039
55: 1,898,101
1,898,157
1,898,705
56: 1,898,269
72: 1,898,251
51— 12: 1,898,689
108: 1,898,648
110: 1,898,012
130: 1,898,979
161: 1,898,915
184.2: 1,898,786
213: 1,898,170
53— 3: 1,898,532
4: 1,898,908
6: 1,898,913
55— 125: 1,898,660
59— 80: 1,898,402
98: 1,898,202
60— 59: 1,898,772
108: 1,898,020
61— 32: 1,898,095
57: 1,898,307
60: 1,898,767
77: 1,898,984
62— 1: 1,898,172
1,898,977
71: 1,898,317
89: 1,898,922
89.5: 1,898,560
90: 1,898,008
104: 1,898,758
114: 1,898,724
115: 1,898,277
1,898,825
116: 1,898,438
1,898,439
1,898,440
1,898,804
117: 1,898,843
118: 1,898,616
1,898,709
126: 1,898,648
63— 15: 1,898,263
64— 17: 1,898,433
91: 1,898,265
97: 1,898,498
1,898,808
65— 45: 1,898,152
66— 125: 1,898,106
172: 1,898,001
187: 1,898,957
67— 7.1: 1,898,991
31: 1,898,756
68— 3: 1,898,788
9: 1,898,293
1,898,504
19: 1,898,038
37: 1,898,676
70— 2: 1,898,974
53: 1,898,149
1,898,241
1,898,947
90: 1,898,373
70— 127: 1,898,017
1,898,122
1,898,127
71— 9: 1,898,971
72— 7: 1,898,026
35: 1,898,864
51: 1,898,380
71: 1,898,668
1,898,736
73— 1: 1,898,258
28: 1,898,801
31: 1,898,257
51: 1,898,066
1,898,084
1,898,529
54: 1,898,766
1,898,848
167: 1,898,951
74— 7: 1,898,139
1,898,198
1,898,330
1,898,401
1,898,423
14: 1,898,411
28: 1,898,290
34: 1,898,087
1,898,412
1,898,753
38: 1,898,459
39: 1,898,140
55: 1,898,663
59: 1,898,205
64: 1,898,035
71: 1,898,238
81: 1,898,557
99: 1,898,700
101: 1,898,447
108: 1,898,169
1,898,206
1,898,720
1,898,845
1,898,872
109: 1,898,202
1,898,797
75— 17: 1,898,969
18: 1,898,018
77— 3: 1,898,285
78— 13: 1,898,279
15: 1,898,072
38: 1,898,069
80— 38: 1,898,007
58: 1,898,390
62: 1,898,779
81— 3.1: 1,898,409
53: 1,898,725
126: 1,898,420
179: 1,898,288
83— 9: 1,898,086
1,898,187
11: 1,898,341
45: 1,898,823
73: 1,898,201
84— 339: 1,898,240
85— 7: 1,898,071
86— 23: 1,898,081
87— 12: 1,898,263
28: 1,898,199
88— 1: 1,897,994
1,898,787
1,898,791
14: 1,898,219
16: 1,898,179
1,898,904
1,898,906
17: 1,898,173
1,898,676
18: 1,898,850
18.5: 1,898,141
90— 43: 1,898,089
90— 9: 1,898,154
33: 1,898,576
91— 3: 1,898,771
12.6: 1,898,005
25: 1,898,357
43: 1,898,283
68: R. 18,742
91— 70: 1,898,345
92— 9: 1,898,613
10: 1,898,877
11: 1,898,612
21: 1,898,098
1,898,682
38: 1,898,611
44: 1,898,372
47: 1,898,413
80: 1,898,845
84: 1,898,881
93— 2: 1,898,898
94— 7: 1,898,426
18: 1,898,948
48: 1,898,188
85: 1,898,871
95— 7: 1,898,512
31: 1,898,232
45: 1,898,471
100: 1,898,783
97— 15: 1,898,852
47: 1,898,358
83: 1,898,214
85: 1,898,870
98— 2: 1,898,859
33: 1,898,521
99— 2: 1,898,894
8: 1,898,925
11: 1,898,326
1,898,350
1,898,355
1,898,902
16: 1,898,057
1,898,148
100— 50: 1,898,116
101— 20: 1,898,080
67: 1,898,055
98: 1,898,043
123: 1,898,408
220: 1,898,034
251: 1,898,361
255: 1,898,606
276: 1,898,362
278: 1,898,331
415: 1,898,530
417: 1,898,610
102— 10: 1,898,011
36: 1,898,073
103— 38: 1,898,245
41: 1,898,916
132: 1,898,153
136: 1,898,914
105— 77: 1,898,555
100: 1,898,130
423: 1,898,195
106— 22: 1,898,709
37: 1,898,358
107— 1: 1,898,004
7: 1,897,990
8: 1,898,194
1,898,252
15: 1,898,175
108— 5: 1,898,110
7: 1,898,989
1,898,990
16: 1,898,813
109— 1: 1,898,906
110— 40: 1,898,479
111— 28: 1,898,847
52: 1,898,920
112— 47: 1,898,521
79: 1,898,555
113— 51: 1,898,883
80: 1,898,739
114— 66.5: 1,898,322
1,898,576
115— 18: 1,898,180
34: 1,898,973
116— 51: 1,898,919
119: 1,898,429
124.4: 1,898,642
137: 1,898,546
142: 1,898,536
117— 34: 1,898,041
118— 69: 1,898,206
119— 55: 1,898,209
120— 17: 1,898,868
43: 1,898,780
46: 1,898,344
56: 1,898,053
121— 9: 1,898,645
15: 1,898,639
19: 1,898,498
1,898,494
1,898,695
122— 1: 1,898,975
218: 1,898,696
224: 1,898,895
235: 1,898,079
1,898,198
1,898,428
370: 1,898,896
382: 1,898,209
451.1: 1,898,693
1,898,460
123— 50: 1,898,460
71: 1,898,145
101: 1,898,602
122: 1,898,880
142: 1,898,126
177: 1,898,119
196: 1,898,963
126— 63: 1,898,846
116: 1,898,111
127— 62: 1,898,208
128— 38: 1,898,653
84: 1,898,731
166.5: 1,898,092
234: 1,898,436
241: 1,898,856
263: 1,898,104
129— 31: 1,898,823
130— 5: 1,898,757
9: 1,898,809
131— 13: 1,898,299
1,898,708
51: 1,898,230
1,898,941
134— 26: 1,898,088
1,898,754
1,898,755
45: 1,898,518
79: 1,898,640
136— 183: 1,898,344
175: 1,898,377
177: 1,898,718
137— 21: 1,898,895
60: 1,898,308
76: 1,898,714
79: 1,898,337
104: 1,898,898
130: 1,898,238
145: 1,898,248
152: 1,898,244
161: 1,898,897
139— 8: 1,898,988
22: 1,898,280
92: 1,898,928
102: 1,898,927
201: 1,898,892
336: 1,898,712
302: 1,898,050
425: 1,898,026
140— 71: 1,898,475
93: 1,898,205
130: 1,898,286
141— 1: 1,898,899
143— 64: 1,898,980
144— 51: 1,898,544
55: 1,898,716
309: 1,898,484
146— 3: 1,898,886
98: 1,898,338
123: 1,898,243
124: 1,898,180
148— 4: 1,898,487
12: 1,898,051
16: 1,898,415
1,898,674
150— 1: 1,897,998
3: 1,898,171

151— 3: 1,898,801
48: 1,898,907
152— 33: 1,898,142
45: 1,898,593
153— 32: 1,898,581
44: 1,898,254
65: 1,898,102
69: 1,898,070
154— 1: 1,898,360
9: 1,898,667
14: 1,898,886
41: 1,898,123
46: 1,898,601
155— 1: 1,898,738
7: 1,898,912
33: 1,898,448
55: 1,898,444
87: 1,898,176
140: 1,898,834
172: 1,898,640
198: 1,898,008
156— 17: 1,898,940
21: 1,898,938
25: 1,898,686
158— 42.4: 1,898,597
53: 1,898,270
77: 1,898,822
99: 1,898,799
161— 1: 1,898,972
164— 38: 1,898,647
51: 1,898,565
112: 1,898,683
166— 21: 1,898,640
167— 15: 1,898,180
22: 1,898,554
42: 1,898,673
65: 1,898,002
169— 1: 1,898,117
17: 1,898,537
26: 1,898,266
1,898,476
1,898,482
170— 163: 1,898,697
173: 1,898,628
1,898,629
171— 252: 1,898,489
1,898,728
312: 1,898,124
313: 1,898,559
321: 1,898,929
327: 1,898,509
172— 36: 1,898,982
179: 1,898,403
239: 1,898,242
246: 1,898,528
280: 1,898,749
173— 259: 1,898,064
314: 1,898,614
321: 1,898,725
332: 1,898,589
361: 1,898,359
175— 30: 1,898,882
41: 1,898,789
41.5: 1,898,808
115: 1,898,863
294: 1,898,752
320: 1,898,046
1,898,422
356: 1,898,931
1,898,944
366: 1,898,121
373: 1,898,327
176— 32: 1,898,498
123: 1,898,032
126: 1,898,615
177— 7: 1,898,394
311: 1,898,133
327: 1,898,655
329: 1,898,719
336: 1,898,550
346: 1,898,626
361: 1,898,182
178— 4.1: 1,898,921
17: 1,898,761
24: R. 18,746
44: 1,898,180
52: 1,898,762
179— 2: 1,898,305
2.5: 1,898,516
16: 1,898,063
87: 1,898,118
108: 1,898,302
115.5: 1,898,441
171: 1,898,080
1,898,486
1,898,792
180— 14: 1,898,113
1,898,114
181— 26: 1,898,091
183— 2.7: 1,898,637
27: 1,898,807
45: 1,898,027
49: 1,898,424
51: 1,898,410
73: 1,898,259
81: 1,898,608
97: 1,898,837
184— 6: 1,898,631
1,898,981
7: 1,898,003
104: 1,897,995
105: 1,898,184
187— 17: 1,898,711
31: 1,898,450
188— 4: 1,898,806
55: 1,898,869
72: 1,898,313
78: 1,898,022
1,898,036
1,898,886
88: 1,898,210
89: 1,898,622
1,898,721
106: 1,898,306
107: 1,898,558
140: 1,898,820
182: 1,898,108
1,898,287
194: 1,898,276
1,898,424
196: 1,898,528
198: 1,898,204
1,898,208
1,898,315
197: 1,898,020
202: 1,898,549
205: 1,898,699
250: 1,898,310
199— 23: 1,898,499
92: 1,898,340
4: 1,898,462
53: 1,898,949
67: 1,898,190
105: R. 18,741
107: 1,898,978
125: 1,898,538
1,898,768
193— 41: 1,898,679
194— 1: 1,898,146
195— 1: 1,898,047
20: 1,898,961
196— 8: 1,898,579
14: 1,898,976
20: 1,898,930
53: 1,898,985
54: 1,898,965
59: 1,898,414
66: 1,898,245
70: 1,898,168
106: 1,898,246
147: 1,898,165
197— 73: 1,898,777
126: 1,898,793
198— 21: 1,898,037
31: 1,898,662
35: 1,898,664
38: 1,898,818
127: 1,898,120
1,898,551
230: 1,898,134
200— 6: 1,898,744
38: 1,898,893
48: 1,898,387
63: 1,898,186
67: 1,898,495
84: R. 18,744
117: 1,898,099
120: R. 18,743
122: 1,898,174
126: 1,898,062
133: 1,898,129
137: 1,898,419
144: 1,898,128
1,898,443
146: 1,898,691
148: 1,898,900
1,898,901
153: 1,898,006
162: 1,898,135
202— 2: 1,898,970
26: 1,898,326
31: 1,898,267
49: 1,897,996
64: 1,898,980
204— 5: 1,898,352
1,898,618
7: 1,898,765
206— 38: 1,898,227
41: 1,898,386
1,898,962
44: 1,898,208
1,898,646
46: 1,898,857
63.2: 1,898,236
209— 6: 1,898,371
104: 1,898,249
143: 1,898,733
210— 24: 1,898,812
159: 1,898,382
166: 1,898,816
211— 1.6: 1,898,641
9: 1,898,349
98: 1,898,855
212— 144: 1,898,453
213— 33: 1,898,594
214— 6: 1,898,281
16.1: 1,898,107
17: 1,898,354
41: 1,898,021
77: 1,898,483
215— 43: 1,898,342
217— 12: 1,898,177
1,898,178
60: 1,898,280
219— 2: 1,898,468
4: 1,898,873
1,898,923
8: 1,898,014
1,898,060
1,898,068
1,898,427
1,898,908
1,898,909
1,898,933
14: 1,898,481
19: 1,898,632
20: 1,898,531
24: 1,898,467
32: 1,898,418
220— 24: 1,898,055
1,898,658
53: 1,898,643
55: 1,898,202
1,898,892
1,898,934
58: 1,898,220
221— 47.1: 1,898,815
78: 1,898,808
100: 1,898,378
221— 118: 1,898,851
120: 1,898,355
146: 1,898,416
222— 7: 1,898,480
1,898,776
223— 20: 1,898,524
20.3: 1,898,918
225— 21: 1,898,619
226— 10: 1,898,717
129: 1,898,151
228— 18: 1,898,456
50: 1,898,520
229— 4.5: 1,898,112
6: 1,898,809
17: 1,898,086
24: 1,898,621
27: 1,898,231
43: 1,898,654
54: 1,898,538
84: 1,898,685
230— 222: 1,898,729
232— 30: 1,898,575
234— 1: 1,898,159
1,898,473
1,898,734
5.5: 1,898,183
235— 6: 1,898,346
54: 1,898,574
63: 1,898,519
66: 1,898,398
130: 1,898,045
1,898,049
236— 33: 1,898,703
86: 1,898,572
240— 8.2: 1,898,842
41: 1,898,295
41.1: 1,898,143
41.37: 1,898,166
1,898,167
43.6: 1,898,517
242— 18: 1,898,501
43.8: 1,898,553
84.1: 1,898,316
1,898,451
130: 1,898,115
1,898,131
243— 34: 1,898,860
244— 1: 1,898,090
2: 1,898,694
1,898,695
1,898,884
12: 1,898,710
15: 1,898,430
16: 1,898,638
19: 1,898,097
25: 1,898,764
30: 1,898,644
63: 1,898,478
2: 1,898,634
15: 1,898,282
28: 1,898,087
15: 1,898,946
20: 1,898,866
30: 1,898,343
1,898,835
31: 1,898,677
1,898,898
38: 1,898,300
1,898,669
47: 1,898,185
1,898,469
249— 4: 1,898,539
22: 1,898,156
250— 8: 1,898,477
11: 1,898,058
1,898,197
1,898,474
1,898,488
1,898,831
19: 1,898,103
20: 1,898,770
1,898,895
27: 1,898,016
250— 27.5: 1,898,251
1,898,784
33: 1,898,661
36: 1,898,181
1,898,366
1,898,932
40: 1,898,635
251— 27: 1,898,899
46: 1,898,519
51: 1,898,147
59: 1,898,935
95: 1,898,577
252— 2: 1,898,774
4: 1,898,564
253— 117: 1,898,023
254— 22: 1,898,849
34: 1,898,630
98: 1,898,563
131: 1,898,853
149: 1,898,607
185: 1,898,987
187: 1,898,625
188: 1,898,810
255— 1: 1,898,926
10: 1,898,684
72: 1,898,937
257— 85: 1,898,529
133: 1,898,327
136: 1,898,082
137: 1,898,571
241: 1,898,462
259— 72: 1,898,284
75: 1,898,218
1,898,221
84: 1,898,986
108: 1,898,365
134: 1,898,094
260— 6: 1,898,522
8: 1,898,790
1,898,840
12: 1,898,911
19: 1,898,446
1,898,457
21: 1,898,076
32: 1,898,431
37: 1,898,458
55: 1,898,445
59: 1,898,399
1,898,953
60: 1,898,693
1,898,748
1,898,750
1,898,861
61: 1,898,452
67: 1,898,523
106: 1,898,737
120: 1,898,329
122: 1,898,213
123: 1,898,687
125: 1,898,093
127: 1,898,461
128.5: 1,898,258
132: 1,898,075
150: 1,898,627
170: 1,898,367
261— 20: 1,898,508
34: 1,898,324
51: 1,898,672
1,898,958
69: 1,898,511
103: 1,898,501
119: 1,897,997
262— 13: 1,898,369
265— 1: 1,898,534
11: 1,898,890
25: R. 18,745
45: 1,898,908
47: 1,898,376
266— 23: 1,898,955
267— 5: 1,898,335
1,898,339
52: 1,898,204
270— 62: 1,898,794
271— 2.1: 1,898,795
2.6: 1,898,723
12: 1,898,535
87: 1,898,704
272— 25: 1,898,587
51: 1,898,868
54: 1,898,466
273— 65: 1,898,600
73: 1,898,485
148: 1,898,862
274— 5: 1,898,040
277— 1: 1,898,589
32: 1,898,982
71: 1,898,226
279— 22: 1,898,945
46: 1,898,264
280— 4: 1,898,826
33.1: 1,898,854
38: 1,898,436
49: 1,898,109
106.5: 1,898,191
124: 1,898,217
1,898,567
281— 6: 1,898,193
29: 1,898,215
282— 12: 1,898,271
285— 120: 1,898,617
161: 1,898,283
193: 1,898,623
286— 9: 1,898,278
16: 1,898,311
287— 90: 1,898,334
290— 37: 1,898,370
292— 66: 1,898,742
92: 1,898,505
170: 1,898,975
241: 1,898,543
263: 1,898,472
272: 1,898,562
281: 1,898,347
285: 1,898,391
293— 55: 1,898,229
1,898,256
294— 49: 1,898,590
54: 1,898,234
69: 1,898,328
87: 1,898,393
99: 1,898,261
296— 44.5: 1,898,948
97: 1,898,276
98: 1,898,280
299— 20: 1,898,785
107.1: 1,898,761
107.7: 1,898,763
125: 1,898,325
302— 26: 1,898,759
53: 1,898,356
63: 1,898,385
303— 1: 1,898,250
6: 1,898,836
6.1: 1,898,556
21: 1,898,802
38: 1,898,525
39: 1,898,510
1,898,513
308— 6: 1,898,074
1,898,273
43: 1,898,470
88: 1,898,188
122: 1,898,659
132: 1,898,880
312— 38: 1,898,796
60: 1,898,983
67: 1,898,192
86: 1,898,077
146: 1,898,867
186: 1,898,224

U. S. GOVERNMENT PRINTING OFFICE: 1933

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Advance Blank Book Co. (See Silber, Joseph A.)

Advance Machine Co., Chicago, Ill. Vending machines. Serial No. 333,175; Feb. 28. Class 23.

Aktieselskapet Norse Crown Company Ltd., Oslo, Norway. Puffed oats and rolled oats. Serial No. 330,567; Feb. 28. Class 46.

Alhadate, E. & N., Trinidad, Colo. Preparation for the relief of cancer. Serial No. 333,816; Feb. 28. Class 6.

Alhambra Cigar & Cigarette Mfg. Co., Manila, P. I. Cigars and cigarettes. Serial No. 329,076; Feb. 28. Class 17.

Allen Industries, Inc., Detroit, Mich. Floor coverings and rug cushions. Serial No. 325,390; Feb. 28. Class 50.

Allen Industries, Inc., Detroit, Mich. Floor coverings and rug cushions. Serial Nos. 325,392–3; Feb. 28. Class 50.

Allen, R. J. & Sons, Fort Worth, Tex. Cigars. Serial No. 333,492; Feb. 28. Class 17.

Allgäuer Käseschmelzwerk G. m. b. H., Kempten/Allgäu, Germany. Milk, cream, butter, and cheese. Serial No. 321,582; Feb. 28. Class 46.

American Gyro Company, Denver, Colo. Spark plugs. Serial No. 333,749; Feb. 28. Class 21.

American Rubber Products Company, Detroit, Mich. Durable composition toilet seat. Serial No. 332,749; Feb. 28. Class 13.

Anheuser-Busch, Incorporated, St. Louis, Mo. Malt beverage. Serial No. 333,571; Feb. 28. Class 48.

Apex Hosiery Company, Philadelphia, Pa. Hosiery. Serial No. 333,277; Feb. 28. Class 39.

Aquino, John, Sons, Inc., New York, N. Y. Maltless beverages and syrups therefor, and natural mineral water. Serial No. 333,751; Feb. 28. Class 45.

Armstrong Cork & Insulation Company, Lancaster, Pa. Heat insulating material. Serial No. 332,216; Feb. 28. Class 12.

Arnold Brewing Corporation, Canajoharie, N. Y. Malt beverage. Serial No. 333,658; Feb. 28. Class 48.

Baer, Clyde K., doing business as Baer's Pharmacy, Philadelphia, Pa. Gout and rheumatic tablets, iron tablets, eczema ointment, etc. Serial No. 333,699; Feb. 28. Class 6.

Baldwin, Ada, Philadelphia, Pa. Silver polish. Serial No. 333,999; Feb. 28. Class 4.

Banerji, Pareshnath, Mihijam, British India. Substance for treating snakebite, opium poisoning, etc. Serial No. 331,539; Feb. 28. Class 6.

Barnett and Schulman Co. Inc., New York, N. Y. Paper, envelopes, parchment, etc. Serial No. 333,663; Feb. 28. Class 37.

Barrell, William L., Co. Inc., New York, N. Y. Cotton fabrics. Serial No. 333,664; Feb. 28. Class 42.

Beuttell, Alfred W., London, England. Display cases and display cabinets. Serial No. 329,520; Feb. 28. Class 32.

Blesant Laboratories, Inc., New York, N. Y. Cleaning compounds. Serial No. 332,833; Feb. 28. Class 4.

Bleuk Corporation, The, New York, N. Y. Abrasive soap, powder, and steel wool. Serial No. 333,574; Feb. 28. Class 4.

Bloomingdale Bros., Inc., New York, N. Y. Peanut butter, mayonnaise, and tomato juice. Serial No. 331,488; Feb. 28. Class 46.

Bloomingdale Bros., Inc., New York, N. Y. Lumberjackets. Serial No. 333,755; Feb. 28. Class 39.

Bonnet-Brown Corporation, The, Chicago, Ill. Series of cartoons. Serial No. 334,207; Feb. 28. Class 38.

Bronson Reel Company, Bronson, Mich. Fishing reels. Serial No. 334,082; Feb. 28. Class 22.

Bruce, E. L., Company, Memphis, Tenn. Oak flooring. Serial No. 305,211; Feb. 28. Class 12.

Burg, Henry P., doing business as Daily Racing Program Publishing Company, Chicago, Ill. Program. Serial No. 326,455; Feb. 28. Class 38.

Burgess Battery Company, Madison, Wis. Dry cell batteries. Serial No. 334,043; Feb. 28. Class 21.

Cadman Packing Company, Phoenix, Ariz. Fresh deciduous fruits and vegetables, etc. Serial No. 332,751; Feb. 28. Class 46.

California Prune & Apricot Growers Association, San Jose, Calif. Dried fruit. Serial No. 332,753; Feb. 28. Class 46.

California Spray-Chemical Corporation, Wilmington, Del., and Berkeley, Calif. Insecticides, germicides, and fungicides. Serial No. 334,044; Feb. 28. Class 6.

Camille, Inc., Chicago, Ill. Semi-liquid material for mending wool, etc. Serial No. 333,183; Feb. 28. Class 6.

Carpenter, J. M., Tap & Die Co., The, Pawtucket, R. I. Thread cutting tools. Serial No. 332,684; Feb. 28. Class 23.

Carson Pirie Scott and Company, Chicago, Ill. Hosiery. Serial No. 332,516; Feb. 28. Class 39.

Cleyden, Lang, Limited, London, England. Printing machinery. Serial No. 333,039; Feb. 28. Class 23.

Cluff, William R., New York, N. Y. Game. Serial No. 333,635; Feb. 28. Class 22.

Cohen, Goldman & Co. Inc., New York, N. Y. Piece goods. Serial No. 332,687; Feb. 28. Class 42.

Cohen, Goldman & Co., Inc., New York, N. Y. Full dress suits and dress overcoats. Serial No. 333,626; Feb. 28. Class 39.

Cohen, Louis H., New York, N. Y. Piece goods. Serial No. 327,427; Feb. 28. Class 42.

Color Craft Enamels, Inc., Chicago, Ill. Paint enamel, varnish remover, etc. Serial No. 331,491; Feb. 28. Class 16.

Commandav-Roth Co. Inc., New York, N. Y. Boxed puzzle sets. Serial No. 334,248; Feb. 28. Class 22.

Cone, M. & B., Company, Brooklyn, N. Y. Ice cream waffles or wafers. Serial No. 324,779; Feb. 28. Class 46.

Continental Mills, Inc., Philadelphia, Pa. Woolen and worsted fabric. Serial No. 334,142; Feb. 28. Class 42.

Dad's Salve Company, Atchison, Kans. Preparation in the form of a salve. Serial No. 315,831; Feb. 28. Class 6.

Daily Racing Program Publishing Company. (See Burg, Henry P.)

Defiance Soap Co., Los Angeles, Calif. Soap flakes. Serial No. 334,145; Feb. 28. Class 4.

Disston, Henry, & Sons, Incorporated, Philadelphia, Pa. Saws. Serial No. 333,284; Feb. 28. Class 23.

Ditbro Research Laboratories, Inc., New York, N. Y. Cream hand soap. Serial No. 333,728; Feb. 28. Class 4.

Doral Food Products Co., Inc., New York, N. Y. Canned, bottled and boxed gelatine desserts, puddings, flavoring compounds, etc. Serial No. 333,911; Feb. 28. Class 46.

Drambuie Liqueur Coy (1927) Limited, The, Edinburgh, Scotland. Liqueur. Serial No. 331,978; Feb. 28. Class 49.

Dremsene Laboratories. (See Wilkey Laboratories, Inc.)

Eagle-Picher Lead Company, The, Cincinnati, Ohio. Slag wool. Serial No. 333,996; Feb. 28. Class 1.

Eagle-Picher Lead Company, The, Cincinnati, Ohio. Slag wool. Serial No. 333,998; Feb. 28. Class 1.

Earl Fruit Company, San Francisco, Calif. Pears and grapes. Serial No. 322,954; Feb. 28. Class 46.

Ellis, A. D., Mills Incorporated, Monson, Mass. Blue woolen piece goods. Serial No. 332,878; Feb. 28. Class 39.

Empire Bottling Works, Newark, N. J. Bluing, ammonia, and javelle water. Serial No. 333,247; Feb. 28. Class 6.

Empresa Mate Larangeira Sociedad Anonima, Buenos Aires, Argentina. Yerba mate. Serial No. 328,419; Feb. 28. Class 46.

Ero Manufacturing Company, Chicago, Ill. Golf bags. Serial No. 333,826; Feb. 28. Class 22.

Eugene, Ltd., New York, N. Y. Hair-waving solution. Serial No. 323,574; Feb. 28. Class 6.

Everlastik, Inc., Chelsea, Mass. Sanitary belts. Serial No. 333,583; Feb. 28. Class 44.

Fay, Loyola J., Spokane, Wash. Cleansing and massage cream, skin astringent, tissue cream, etc. Serial No. 329,528; Feb. 28. Class 6.

Field, J. W., Manufacturing Corporation, Peoria, Ill. Coin-controlled vending machines. Serial No. 323,086; Feb. 28. Class 23.

Filtrol Company of California, Los Angeles, Calif. Chemically treated colloidal clay. Serial No. 332,339; Feb. 28. Class 6.

Finch, Jos. S., & Company, New York, N. Y. Whiskey and other potable spirits. Serial No. 334,213; Feb. 28. Class 49.

Finger Lakes Canning Co., Inc., Penn Yan, N. Y. Canned fruits, canned jellies, canned vegetables, etc. Serial No. 332,653; Feb. 28. Class 46.

First Prize Brewers, Inc., New York, N. Y. Malt beverage. Serial No. 333,512; Feb. 28. Class 48.

Forhan Company, Inc., New York, N. Y. Antiseptic solution, pyorrhea preparation and dentifrice. Serial No. 333,462; Feb. 28. Class 6.

Friedman, Kenneth A., Jacksonville, Fla. Series of newspaper articles and illustrations. Serial No. 333,651; Feb. 28. Class 38.

General Electric Company, Schenectady, N. Y. Electric heating pads. Serial No. 333,513; Feb. 28. Class 44.

Glenfyne Distillery Company Limited, The, Ardrishaig, Scotland. Whisky. Serial No. 331,787; Feb. 28. Class 49.

Grand Rapids Furniture Makers Guild, Grand Rapids, Mich. Furniture. Serial Nos. 328,398–9; Feb. 28. Class 32.

Grimwood, Adolfo, Mexico, Mexico. Preparation for the prevention and treatment of influensa, etc. Serial No. 333,473; Feb. 28. Class 6.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Grossman, Julius, Inc., Brooklyn, N. Y. Insoles for shoes. Serial No. 332,148; Feb. 28. Class 39.
Guide X-Ray Film Company. (See Herman, Samuel A.)
Hacker, Louis P., Los Angeles, Calif. Stomach tablets. Serial No. 332,919; Feb. 28. Class 6.
Hardwick & Magee Company, Philadelphia, Pa. Textile rugs. Serial No. 333,478; Feb. 28. Class 42.
Harlic Bag Company, The, South Norwalk, Conn. Ladies' hand bags. Serial No. 333,590; Feb. 28. Class 3.
Hart, Cooley, Highton Company, New Britain, Conn. Convection heaters, heating grilles, humidifier, etc. Serial No. 333,553; Feb. 28. Class 34.
Hercules Powder Company, Wilmington, Del. Resin. Serial No. 332,007; Feb. 28. Class 1.
Herman, Samuel A., doing business as Guide X-Ray Film Company, New York, N. Y. X-ray films. Serial No. 332,452; Feb. 28. Class 26.
Herslinger, Sam W., Inc., New York, N. Y. Coats. Serial No. 332,453; Feb. 28. Class 39.
Heumann, L., & Company, Inc., New York, N. Y. Herbs and mixtures of herbs, extracts, compounds, etc. Serial No. 322,794; Feb. 28. Class 6.
Hillcoat, R. W., Company, New Orleans, La. Lumber. Serial No. 333,554; Feb. 28. Class 12.
Hi-Vi Sales Corporation. (See Iorns, Clifford L.)
Hooper, Wm. E., & Sons Co., Baltimore, Md. Waterproofing agent for textile fabrics. Serial No. 333,035; Feb. 28. Class 6.
Huber, J. M., Inc., New York, N. Y. Carbon black. Serial No. 327,398; Feb. 28. Class 6.
Hudson Paint Co. (See Salzman, Martin.)
Independent Druggists' Alliance Distributing Co., Chicago, Ill. Cosmetics. Serial No. 330,259; Feb. 28. Class 6.
Inkpak Manufacturing Company, Inc., assignor to Inkpak Pen Corporation, New York, N. Y. Pens, pen points, and fountain pens. Serial No. 332,617; Feb. 28. Class 37.
International Printing Ink Corporation, The, New York, N. Y. Printing ink. Serial No. 325,001; Feb. 28. Class 11.
International Shoe Co., St. Louis, Mo. Boots and shoes. Serial No. 333,331; Feb. 28. Class 39.
Iorns, Clifford L., doing business as Hi-Vi Sales Corporation, St. Louis, Mo. Soy bean oil. Serial No. 333,961; Feb. 28. Class 46.
Iorns, Clifford L., doing business as The Thorocide Co., St. Louis, Mo. Insecticide and disinfectant. Serial No. 334,061; Feb. 28. Class 6.
Kalle & Co. Aktiengesellschaft, Wiesbadeb-Biebrich, Germany. Light-sensitive copying and photographic paper. Serial No. 333,125; Feb. 28. Class 26.
Keasbey & Mattison Company, Ambler, Pa. Insulation products. Serial Nos. 333,832–3; Feb. 28. Class 12.
La Fontaine, Ltd. (See La Fountain, Edward A.)
La Fountain, Edward A., doing business as La Fontaine, Ltd., Glendale, Calif. Shampoos. Serial No. 333,246; Feb. 28. Class 4.
La Salle Girl Coat Corporation, New York, N. Y. Girls' coats. Serial No. 333,857; Feb. 28. Class 39.
Lee, John D., Denver, Colo. Washing powders. Serial No. 332,232; Feb. 28. Class 4.
Liberman, Joseph, New York, N. Y. Ladies' and children's underwear. Serial No. 334,149; Feb. 28. Class 39.
Lilly, Eli, and Company, Indianapolis, Ind. Local anesthetic. Serial No. 332,924; Feb. 28. Class 6.
Louangel Corporation, New York, N. Y. Ointment. Serial No. 334,222; Feb. 28. Class 6.
Marietta Paint & Color Co., The, Marietta, Ohio. Interior wall paint. Serial No. 333,522; Feb. 28. Class 16.
Marshall-Wells Company, Duluth, Minn. Lubricating oil. Serial No. 333,974; Feb. 28. Class 15.
Marx, Louis, & Company, New York, N. Y. Painting pencils. Serial No. 332,044; Feb. 28. Class 37.
Matheus, Karl, Chicago, Ill. Belt buckles. Serial No. 333,214; Feb. 28. Class 40.
Maynard, Inc., Chicago, Ill. Cold cream, vanishing cream, and nourishing cream. Serial No. 333,449; Feb. 28. Class 6.
McCord-Stewart Company, Inc., Atlanta, Ga. Coffee. Serial No. 332,413; Feb. 28. Class 46.
Milford Shoe Company, Milford, Mass. Boots and shoes. Serial No. 333,041; Feb. 28. Class 39.
Minnehaha Water Company, Cleveland, Ohio. Maltless beverages. Serial No. 314,767; Feb. 28. Class 45.
Mittag & Volger, Incorporated, Park Ridge, N. J. Typewriter ribbons. Serial No. 334,022; Feb. 28. Class 11.
Moedl, Karl, Salt Lake City, Utah. Skin lotions, after shaving lotions, and hand lotions. Serial No. 332,320; Feb. 28. Class 6.
Mooney, Richard A., doing business as Stork Chemical Company, Pittsburgh, Pa. Bleaching and water softening compound. Serial No. 332,078; Feb. 28. Class 6.
Morgan's, Enoch, Sons, Company, New York, N. Y. Cleansing, scouring, and polishing compound. Serial No. 332,850; Feb. 28. Class 4.
Mount Vernon Milling Company, Mount Vernon, Ind. Flake hominy. Serial No. 331,390; Feb. 28. Class 46.
Movie Cut-Ups, Peabody, Mass. Jig-saw puzzles, cut-out puzzles, etc. Serial No. 333,165; Feb. 28. Class 22.
National Refining Company, Seattle, Wash. Motor lubricating oils and greases. Serial No. 324,184; Feb. 28. Class 15.
Nocona Leather Goods Co., Nocona, Tex. Leather goods. Serial No. 321,607; Feb. 28. Class 3.
North American Mercantile Company, San Francisco, Calif. Canned fish. Serial No. 333,942; Feb. 28. Class 46.
Okonite-Callender Cable Company, Incorporated, The, Paterson, N. J. Electric cables, electric cable systems and other accessories. Serial No. 333,007; Feb. 28. Class 21.
Orbit Gum Company, Chicago, Ill. Chewing gum. Serial No. 333,737; Feb. 28. Class 46.
Penny, J. C., Company, Wilmington, Del., and New York, N. Y. Work shirts, pants, and suits, and play suits. Serial No. 332,821; Feb. 28. Class 39.
Peron, Anthony, New York, N. Y. Gas broilers. Serial No. 333,657; Feb. 28. Class 34.
Persoll, William A., Irvington, N. J. Eye lotions. Serial No. 333,874; Feb. 28. Class 6.
Polefsky, Jacob S., New York, N. Y. Maltless beverages and syrups and extracts for making the same. Serial No. 333,169; Feb. 28. Class 45.
Porges, Oscar F., Long Island City, N. Y. Frozen confections. Serial No. 333,529; Feb. 28. Class 46.
Poster Products, Inc., Chicago, Ill. Novelty games. Serial No. 333,463; Feb. 28. Class 22.
Pro-Ker Laboratories, Inc., New York, N. Y. Preparations and substances for treating the hair and scalp. Serial No. 333,782; Feb. 28. Class 6.
Quigg's Diabetic Remedy Company, Detroit, Mich. Preparation used in the treatment of diabetes, a mouthwash and throat gargle. Serial No. 333,885; Feb. 28. Class 6.
Quigley Company, Inc., New York, N. Y. Refractory cement. Serial No. 313,508; Feb. 28. Class 12.
Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, bleach creams, etc. Serial No. 333,561; Feb. 28. Class 6.
Reliance Products Co. Inc., Chicago, Ill. Mayonnaise, French dressing, salad oils, etc. Serial No. 321,257; Feb. 28. Class 46.
Reynolds Spring Co., Jackson, Mich. Cookie, doughnut, etc., cutters. Serial No. 327,451; Feb. 28. Class 23.
Richardson Company, The, Lockland, Ohio. Storage battery cases. Serial No. 334,160; Feb. 28. Class 21.
Riverside Products Company, Cincinnati, Ohio. Malt syrup. Serial No. 333,531; Feb. 28. Class 46.
Robertson & Baxter Limited, Glasgow, Scotland. Whisky. Serial No. 331,800; Feb. 28. Class 49.
Robertson & Baxter Limited, Glasgow, Scotland. Whisky. Serial No. 331,802; Feb. 28. Class 49.
Robertson & Baxter Limited, Glasgow, Scotland. Whisky. Serial Nos. 331,804–5; Feb. 28. Class 49.
Russell-Miller Milling Co., Minneapolis, Minn. Wheat flour. Serial No. 333,567; Feb. 28. Class 46.
S. A. Pastificia Nicola Delfino & Figli, Pescara-Riviera di Castellamare, Italy. Alimentary pastes. Serial No. 329,409; Feb. 28. Class 46.
Salzman, Martin, doing business as Hudson Paint Co., Brooklyn, N. Y. Ready mixed paints and enamels. Serial No. 330,867; Feb. 28. Class 16.
Salzman, Martin, doing business as Hudson Paint Co., Brooklyn, N. Y. Ready mixed paints and enamels. Serial No. 330,869; Feb. 28. Class 16.
Sandeman, Geo. G., Sons & Co. Limited, London, England. Spirits, comprising whisky, gin, brandy, etc. Serial No. 334,386; Feb. 28. Class 49.
Sands Manufacturing Company, The, Cleveland, Ohio. Thermostatic automatic cut-off valves for heaters. Serial No. 329,154; Feb. 28. Class 26.
Saxony Mills, St. Louis, Mo. Wheat flour. Serial No. 333,199; Feb. 28. Class 46.
Schratter, Alfred, New York, N. Y. Cheese. Serial No. 330,310; Feb. 28. Class 46.
Schroeder Bros. Mfg. Co., The, Torrington, Conn. Oil burners for stoves. Serial No. 333,981; Feb. 28. Class 34.
Sears, Roebuck and Co., Chicago, Ill. Canvas belting. Serial No. 333,204; Feb. 28. Class 35.
Sears, Roebuck and Co., Chicago, Ill. Alcohol anti-freeze. Serial No. 333,564; Feb. 28. Class 6.
Sears, Roebuck and Co., Chicago, Ill. Umbrellas and canes. Serial No. 333,740; Feb. 28. Class 41.
Sears, Roebuck & Co., Chicago, Ill. Electric storage batteries and spark plugs. Serial No. 333,898; Feb. 28. Class 21.
Selby Shoe Company, The, Portsmouth, Ohio. Shoes. Serial No. 333,170; Feb. 28. Class 39.
Service Station Equipment Company, Conshohocken, Pa. Pressure gages and parts thereof. Serial No. 332,930; Feb. 28. Class 26.
Service Station Equipment Company, Conshohocken, Pa. Metering pumps and parts thereof. Serial No. 332,931; Feb. 28. Class 26.
Service Station Equipment Company, Conshohocken, Pa. Cabinets and parts thereof. Serial No. 332,932; Feb. 28. Class 32.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Shellmar Products Company, Chicago, Ill. Labels. Serial No. 324,540; Feb. 28. Class 37.
Sherwin-Williams Company, The, Cleveland, Ohio. Paints, paint enamels, stains, etc. Serial No. 334,073; Feb. 28. Class 16.
Shine-Sac Corporation, Chicago, Ill. Chemically treated polishing cloths and bags. Serial No. 333,338; Feb. 28. Class 4.
Silber, Joseph A., doing business as Advance Blank Book Co., New York, N. Y. Blank books. Serial No. 332,662; Feb. 28. Class 37.
Silten, Dr. Ernst, Berlin, Germany. Medicinal preparations. Serial No. 327,837; Feb. 28. Class 6.
Silver King Hydraulic Jack Company, The, Cleveland, Ohio. Hydraulic jacks. Serial No. 320,556; Feb. 28. Class 23.
Smidth, F. L., & Co., New York, N. Y. Machines for packing pulverous material in containers. Serial No. 332,425; Feb. 28. Class 23.
Smith, Luther C., doing business as L. C. Smith Laboratory, Canton, Ohio. Antiseptic. Serial No. 333,614; Feb. 28. Class 6.
Societe Anonyme des Anciens Etablissements Panhard & Levassor, Paris, France. Tractors and internal combustion engines. Serial No. 332,967; Feb. 28. Class 28.
Societe Generale Commerciale d'Eaux Minerales du Bassin de Vichy, Societe Anonyme, Paris, France. Mineral waters. Serial No. 334,077; Feb. 28. Class 45.
Societe Worth, Paris, France. Perfume. Serial No. 320,609; Feb. 28. Class 6.
Spear, James, Stove and Heating Company, Philadelphia, Pa. Cooking and heating stoves, air conditioning and ventilating apparatus. Serial No. 327,210; Feb. 28. Class 34.
Standard Flavors, Inc., Kansas City, Mo. Food flavors and food flavoring extracts. Serial No. 331,569; Feb. 28. Class 46.
Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Automobile polish and wax. Serial No. 334,234; Feb. 28. Class 16.
Standard Oil Company of New Jersey, Wilmington, Del. Lubricating oils. Serial No. 333,743; Feb. 28. Class 15.
Star-Chronicle Publishing Company, St. Louis, Mo. Daily newspaper. Serial No. 333,744; Feb. 28. Class 38.
Stickney & Poor Spice Co., Boston, Mass. Stuffing for meat, fish, and peppers. Serial No. 331,756; Feb. 28. Class 46.
Stork, Chemical Company. (See Mooney, Richard A.)
Story, Charles F., doing business as Story & Robinson, Brooklyn, N. Y. Sterilising, cleansing, and deodorising chemical agent. Serial No. 333,018; Feb. 28. Class 6.
Stuebe, William J., New York, N. Y. Cotton and rayon piece goods. Serial No. 332,105; Feb. 28. Class 42.
Thorocide Co., The. (See Iorns, Clifford L.)
University Distributing Company, Cambridge, Mass. Puzzles. Serial No. 334,293; Feb. 28. Class 22.
Upland Mutual Groves, Inc., Upland, Calif. Fresh citrus fruits. Serial No. 332,708; Feb. 28. Class 46.
Velogen, Incorporated, New York, N. Y. Cosmetics. Serial No. 333,944; Feb. 28. Class 6.
Waffenfabrik Solothurn Aktiengesellschaft, Zuchwil, Switzerland. Siege guns, revolvers, explosive shells, etc. Serial No. 327,740; Feb. 28. Class 9.
Waffenfabrik Solothurn Aktiengesellschaft, Zuchwil, Switzerland. Siege guns, revolvers, explosive shells, etc. Serial No. 327,742; Feb. 28. Class 9.
Waffenfabrik Solothurn Aktiengesellschaft, Zuchwil, Switzerland. Siege guns, revolvers, explosive shells, etc. Serial No. 327,744; Feb. 28. Class 9.
Wagner, John, & Sons, Philadelphia, Pa. Cigars, smoking tobacco, and cigarettes. Serial No. 333,955; Feb. 28. Class 17.
Wapler, Nicholas, Company, New York, N. Y. Feed for fish. Serial No. 331,880; Feb. 28. Class 46.
Warner Brothers Company, The, Bridgeport, Conn. Brassières. Serial No. 333,643; Feb. 28. Class 39.
Webster Eisenlohr, Inc., New York, N. Y. Cigars. Serial Nos. 333,903–4; Feb. 28. Class 17.
Wells-Lamont-Smith Corporation, Minneapolis, Minn. Work gloves. Serial No. 330,531; Feb. 28. Class 39.
Wilbur White Chemical Company, Inc., The, Owego, N. Y. Polishing wax. Serial No. 333,621; Feb. 28. Class 16.
Wilkey Laboratories, Inc., doing business as Dressene Laboratories, Chicago, Ill. Shoe cleaner, fabric cleaning compound, shoe polish, etc. Serial No. 333,094; Feb. 28. Class 4.
Wilson, Norman M., Philadelphia, Pa. Hosiery. Serial No. 319,920; Feb. 28. Class 39.
Wood, Thomas, & Sons, Inc., Montclair, N. J. Fertilizers. Serial No. 332,669; Feb. 28. Class 50.

LIST OF REGISTRANTS OF TRADE-MARKS

Aktiebolaget Skånska Spisbrödsfabriken, Kristianstad, Sweden. Hard bread. 301,833; Feb. 28; Serial No. 330,786; published Dec. 13, 1932. Class 46.
Alasco Oil Burner Co. Inc., The, Winchendon, Mass. Oil burners for stoves and ranges and parts thereof. 301,303; Feb. 28; Serial No. 331,486; published Dec. 20, 1932. Class 34.
Albers Bros. Milling Co., Portland, Oreg. Breakfast food made of wheat. 301,441; Feb. 28; Serial No. 327,622; published Dec. 13, 1932. Class 46.
American Air Filter Company, Inc., Louisville, Ky. Automatic endless-chain impingement or open baffle type of ventilating units. 301,843; Feb. 28; Serial No. 327,460; published Dec. 20, 1932. Class 34.
American Kitchens, Inc., Chicago, Ill. Chop suey. 301,320; Feb. 28; Serial No. 319,713; published Dec. 13, 1932. Class 46.
American Noxpain Laboratories. (See Kern, Robert.)
American Oak Leather Company, The, Cincinnati, Ohio. Sole leather. 301,871; Feb. 28; Serial No. 331,570; published Dec. 20, 1932. Class 1.
American Sponge & Chamois Co. Inc., New York, N. Y. Sponges and chamois. 301,399; Feb. 28; Serial No. 331,342; published Dec. 13, 1932. Class 1.
Aroesty, Hyman J., doing business as Aroesty Products, Rochester, N. Y. Mayonnaise, sandwich spread, Russian dressing, etc. 301,336; Feb. 28; Serial No. 331,215; published Dec. 13, 1932. Class 46.
Atlantic Seed Company, Inc., The, Philadelphia, Pa. Seeds. 301,405; Feb. 28; Serial No. 330,735; published Dec. 13, 1932. Class 1.
Bayuk Cigars Incorporated, Philadelphia, Pa. Cigars. 301,341; Feb. 28; Serial No. 298,023; published Feb. 4, 1930. Class 17.
Beier, Mrs. William F., Kenmore, N. Y. Candy. 301,440; Feb. 28; Serial No. 328,287; published Dec. 13, 1932. Class 46.
Blake, Moffitt & Towne, San Francisco, Calif. Paper towels and toilet paper. 301,327; Feb. 28; Serial No. 328,984; published Mar. 15, 1932. Class 37.
Bloch Bros., Glasgow, Scotland. Whiskey. 301,298; Feb. 28; Serial No. 332,028; published Dec. 20, 1932. Class 49.
Bloomingdale Bros., Inc., New York, N. Y. Men's wearing apparel. 301,465; Feb. 28. Class 39.
Braun Baking Company, Pittsburgh, Pa. Cakes. 301,377; Feb. 28; Serial No. 330,692; published Dec. 13, 1932. Class 46.
Brillo Manufacturing Company, Brooklyn, N. Y. Bluing. 301,409; Feb. 28; Serial No. 330,568; published Dec. 13, 1932. Class 6.
Champion Fibre Company, The, Canton, N. C. Paper for tag and/or folder stocks. 301,434; Feb. 28; Serial No. 330,809; published Dec. 13, 1932. Class 37.
Chantilly Kookys Inc., The, New York, N. Y. Crackers. 301,454; Feb. 28. Class 46.
Christie & Hoover, Houston, Tex. Malt beverages and extracts therefor. 301,290; Feb. 28; Serial No. 331,723; published Dec. 20, 1932. Class 45.
Cincinnati Shoe Co., The, Cincinnati, Ohio. Women's shoes. 301,469; Feb. 28. Class 39.
Cincinnati Varnish Company, The, Cincinnati, Ohio. Ready mixed paints, stains, varnishes, etc. 301,379; Feb. 28; Serial No. 330,991; published Dec. 20, 1932. Class 16.
Cinett, Peabody & Co., Inc., Troy, N. Y. Underwear. 301,424; Feb. 28; Serial No. 331,544; published Dec. 6, 1932. Class 39.
Cohen, Goldman & Co., Inc., New York, N. Y. Coats, vests, pants, etc. 301,422; Feb. 28; Serial No. 331,386; published Dec. 13, 1932. Class 39.
Columbian Enameling & Stamping Co., Terre Haute, Ind. Rectangular enameled dish pans. 301,394; Feb. 28; Serial No. 328,383; published Dec. 20, 1932. Class 13.
Concrete Treatment Materials, Inc., Philadelphia, Pa. Material for dust proofing, hardening, etc., concrete floors, etc. 301,310–12; Feb. 12; Serial Nos. 330,537–9; published Dec. 13, 1932. Class 12.
Conserveries Emile Chemin, Societe a Responsabilite Limitee, Paris, France. Canned fish and canned fish roe. 301,375; Feb. 28; Serial No. 331,101; published Dec. 13, 1932. Class 46.
Continental Stove Corporation, Ironton, Ohio. Radiant gas heaters. 301,308; Feb. 28; Serial No. 330,948; published Dec. 20, 1932. Class 34.
Crown Overall Mfg. Co., The, Cincinnati, Ohio. Coats, vest coats, sleeveless vest coats, etc. 301,347; Feb. 28; Serial No. 330,365; published Dec. 6, 1932. Class 39.
Danville Brick Company, Danville, Ill. Building block, building brick, etc. 301,895; Feb. 28; Serial No. 326,127; published Dec. 13, 1932. Class 12.
Dennis, Martin, Company, Newark, N. J. Mild adhesive preparation. 301,366; Feb. 28; Serial No. 331,727; published Dec. 20, 1932. Class 5.
Detroit Stoker Company, Monroe and Detroit, Mich. Stokers. 301,305; Feb. 28; Serial No. 331,290; published Dec. 20, 1932. Class 34.

Dey Brothers & Co., Syracuse, N. Y. Hosiery, shoes, coats, etc. 301,472; Feb. 28. Class 39.

Dieterle, Paul, doing business as Museums Supplies Company, Binghamton, N. Y. Framed prints and pictures. 301,324; Feb. 28; Serial No. 320,160; published Dec. 13, 1932. Class 38.

Dominion Stucco Co. Limited, St. Boniface, Manitoba, Canada. Thermal insulating material. 301,317; Feb. 28; Serial No. 317,912; published Dec. 13, 1932. Class 12.

D'Orsay Perfumeries Corporation, New York, N. Y. Perfumes, toilet waters, rouge compacts, etc. 301,402; Feb. 28; Serial No. 331,043; published Dec. 13, 1932. Class 6.

Draper, William R., doing business as Ozalts Company, Sulphur Springs, Ark. Medical preparation for making mineral water. 301,412; Feb. 28; Serial No. 329,831; published Dec. 13, 1932. Class 6.

Dunwoody, Ezl., Co., Philadelphia, Pa. Poultry and dairy feeds, fish meal, cod liver oil, etc. 301,439; Feb. 28; Serial No. 328,887; published Dec. 13, 1932. Class 46.

Emery Industries, Inc., Cincinnati, Ohio. Dry cleaning absorbefacient. 301,342; Feb. 28; Serial No. 329,853; published Dec. 13, 1932. Class 6.

Engel, Albert W., doing business as Engel Art Corners Mfg. Co., Chicago, Ill. Picture or sheet mounting corners. 301,435; Feb. 28; Serial No. 330,123; published Dec. 13, 1932. Class 37.

Enro Shirt Company, Inc., The, Louisville, Ky. Pajamas. 301,431; Feb. 28; Serial No. 330,784; published Dec. 13, 1932. Class 39.

Equitable Service Corporation, Providence, R. I., now by change of name to Esco Service Corporation. Letter heads and blank forms. 301,443; Feb. 28; Serial No. 325,966; published Dec. 20, 1932. Class 37.

Equitable Service Corporation, Providence, R. I., now by change of name to Esco Service Corporation. Brochures, circulars, and newspaper advertising. 301,444; Feb. 28; Serial No. 325,965; published Dec. 20, 1932. Class 38.

Equitable Service Corporation, Providence, R. I., now by change of name to Esco Service Corporation. Letter heads and blank forms. 301,445; Feb. 28; Serial No. 325,964; published Dec. 20, 1932. Class 37.

Escalante, Jose, & Co., Chicago, Ill. Cigars. 301,345; Feb. 28; Serial No. 330,572; published Dec. 20, 1932. Class 17.

Esco Service Corporation. (See Equitable Service Corporation.)

Europa Sales Corporation, New York, N. Y. Candies, chocolates, and cocoa. 301,376; Feb. 28; Serial No. 331,044; published Dec. 13, 1932. Class 46.

Federal Star Dyers Corp., New York, N. Y. Dyed fox furs, wolf furs, and lynx furs. 301,403; Feb. 28; Serial No. 331,079; published Dec. 13, 1932. Class 1.

Firestone Tire & Rubber Company, The, Akron, Ohio. Mica, talc, and soapstone. 301,397-8; Feb. 28; Serial Nos. 331,675-6; published Dec. 13, 1932. Class 1.

Florentine Packers, Inc., Vineland, N. J. Spaghetti sauce. 301,471; Feb. 28. Class 46.

Foremost Dairy Products Incorporated, Jacksonville, Fla. Ice cream. 301,356; Feb. 28; Serial No. 300,714; published Dec. 13, 1932. Class 46.

Fort Howard Paper Company, Green Bay, Wis. Paper napkins, toilet paper, and paper towels. 301,314; Feb. 28; Serial No. 329,745; published Sept. 27, 1932. Class 37.

Foss Schneider Company, Cincinnati, Ohio. Malt beverage. 301,467; Feb. 28. Class 48.

French, R. T., Company, The, Rochester, N. Y. Bird gravel. 301,401; Feb. 28; Serial No. 331,105; published Dec. 13, 1932. Class 1.

Fresh Frut Products Company. (See Miller, Willard D.)

Funk & Klein, Inc., New York, N. Y. Coats. 301,417; Feb. 28; Serial No. 331,638; published Dec. 13, 1932. Class 39.

Furniture City Polish Company, Grand Rapids, Mich. Polishing material and preparation. 301,380; Feb. 28; Serial No. 331,306; published Dec. 20, 1932. Class 16.

Futter, C. A., Chicago, Ill. Eye-lash curlers. 301,351; Feb. 38; Serial No. 329,017; published Nov. 22, 1932. Class 40.

Globe Bottling Co., The. (See Kanner, Abe.)

Goldberg, Bowen & Co., San Francisco, Calif. Canned fruits and vegetables. 301,374; Feb. 28; Serial No. 331,307; published Dec. 20, 1932. Class 46.

Goldner, David, New York, N. Y. Furs and pelts. 301,408; Feb. 28; Serial No. 330,596; published Dec. 13, 1932. Class 1.

Goodall Worsted Co., Sanford, Me. Coats, pants, vests, etc. 301,416; Feb. 28; Serial No. 331,738; published Dec. 13, 1932. Class 39.

Goodall Worsted Co., Sanford, Me. Coats, pants, knickerbockers, and vests. 301,448; Feb. 28; Serial No. 331,739; published Dec. 13, 1932. Class 39.

Grand Rapids Furniture Polish Co. (See Russo, Paul P.)

Gray Company Incorporated, Minneapolis, Minn. Lubricating equipment, apparatus, and machinery. 301,321; Feb. 28. Class 23.

Greenberger, Bernard, New York, N. Y. Electric table lamps, microphones, and cigarette and cigar lighters. 301,464; Feb. 28. Class 21.

Greenhill & Daniel, Inc., Brooklyn, N. Y. Bathing suits. 301,352; Feb. 28; Serial No. 328,579; published Dec. 6, 1932. Class 39.

Gretz & Schwartz, Philadelphia, Pa. Rompers, dresses, play suits, etc. 301,348; Feb. 28; Serial No. 329,918; published Dec. 6, 1932. Class 39.

Hampshire Paper Company, South Hadley Falls, Mass. Writing and printing paper. 301,385; Feb. 28; Serial No. 331,895; published Dec. 13, 1932. Class 37.

Hampshire Paper Company, South Hadley Falls, Mass. Writing and printing paper. 301,387; Feb. 28; Serial No. 331,896; published Dec. 13, 1932. Class 37.

Harrington & Waring, New York, N. Y. Hosiery. 301,349; Feb. 28; Serial No. 329,832; published Dec. 13, 1932. Class 39.

Hickok Oil Corporation, doing business as Hi-Speed Tire and Accessory Co., Toledo, Ohio. Batteries, bulbs, spark plugs, etc. 301,316; Feb. 28; Serial No. 331,403; published Dec. 13, 1932. Class 21.

Hi-Speed Tire and Accessory Co. (See Hickok Oil Corporation.)

Hoff, John L., Chicago, Ill. Periodical or newspaper column. 301,381; Feb. 28; Serial No. 331,359; published Dec. 13, 1932. Class 38.

Holeproof Hosiery Co., Milwaukee, Wis. Hosiery. 301,419; Feb. 28; Serial No. 331,617; published Dec. 13, 1932. Class 39.

Hollander, A., & Son, Inc., Newark, N. J. Fur skins. 301,400; Feb. 28; Serial No. 331,108; published Dec. 13, 1932. Class 1.

Hollander, A., & Son, Inc., Newark, N. J. Fur skins. 301,404; Feb. 28; Serial No. 330,954; published Dec. 13, 1932. Class 1.

Hollins, William, and Company, Limited, Nottingham, England. Clothing. 301,350; Feb. 28; Serial No. 329,637; published Dec. 6, 1932. Class 39.

Houghton, E. F., & Co., Philadelphia, Pa. Soaps. 301,389; Feb. 28; Serial No. 324,257; published Apr. 12, 1932. Class 4.

Howard, James A., jr., Dallas, Tex. Condensed brick chili. 301,378; Feb. 28; Serial No. 330,575; published Dec. 20, 1932. Class 46.

Ice Cream Cake Company, Philadelphia, Pa. Ice cream cake. 301,367; Feb. 28; Serial No. 330,997; published Dec. 20, 1932. Class 46.

Ingram-Richardson Manufacturing Company, Beaver Falls, Pa., and Frankfort, Ind. Frit. 301,407; Feb. 28; Serial No. 330,704; published Dec. 13, 1932. Class 1.

Jelke, John F., Company, Chicago, Ill. Chocolate flavored evaporated milk. 301,369; Feb. 28; Serial No. 331,688; published Dec. 13, 1932. Class 46.

Johnson, S. C., & Son, Racine, Wis. Polishing wax. 301,319; Feb. 28; Serial No. 319,449; published Dec. 13, 1932. Class 16.

Joseph & Andersch, Auburn, Calif. Packets of cleansing tissue. 301,388; Feb. 28; Serial No. 331,975; published Dec. 13, 1932. Class 37.

Kahn's Pickery, New Orleans, La. Cotton batting. 301,393; Feb. 28; Serial No. 329,165; published Dec. 13, 1932. Class 1.

Kahn's Pickery, New Orleans, La. Cotton batting. 301,414; Feb. 28; Serial No. 329,166; published Dec. 13, 1932. Class 1.

Kanner, Abe, doing business as The Globe Bottling Co., Los Angeles, Calif. Maltless beverages, syrups, and extracts used in making the same. 301,307; Feb. 28; Serial No. 331,112; published Dec. 20, 1932. Class 45.

Kern, Robert, doing business as American Noxpain Laboratories, Baltimore, Md. Pharmaceutical preparations. 301,410; Feb. 28; Serial No. 330,479; published Dec. 13, 1932. Class 6.

Kirk, Samuel B., Philadelphia, Pa. Preparation for coagulating or congealing milk. 301,370; Feb. 28; Serial No. 331,643; published Dec. 13, 1932. Class 46.

Koenigsberg, M., New York, N. Y. Periodical. 301,386; Feb. 28; Serial No. 331,794; published Dec. 13, 1932. Class 38.

Kresge Department Store Corp., Newark, N. J. Shoes. 301,428; Feb. 28; Serial No. 330,956; published Dec. 20, 1932. Class 39.

Kresge Department Store Corp., Newark, N. J. Soap. 301,449; Feb. 28. Class 4.

Larkwood Silk Hosiery Mills, Inc., Charlotte, N. C. Hosiery. 301,446; Feb. 28; Serial No. 331,899; published Dec. 13, 1932. Class 39.

Larus & Brother Company, Incorporated, Richmond, Va. Tobacco and cigarettes. 301,418; Feb. 28; Serial No. 331,558; published Dec. 13, 1932. Class 17.

Lasek, Alfred L., doing business as Peter Schneider's Sons & Co., New York, N. Y. Upholstery and draper fabrics. 301,463; Feb. 28. Class 42.

Leadway Stores Corporation, The, Wilmington, Del. Canned fruits. 301,329; Feb. 28; Serial No. 330,095; published Dec. 13, 1932. Class 46.

Lewis, G. B., Company, Watertown, Wis. Pull toys. 301,450; Feb. 28. Class 22.

Liberty Mills, San Antonio, Tex. Wheat flour. 301,368; Feb. 28; Serial No. 331,958; published Dec. 20, 1932. Class 46.

Light Grain & Milling Co., The, Liberal, Kans. Self-rising pancake flour. 301,337; Feb. 28; Serial No. 331,310; published Dec. 13, 1932. Class 46.

Lilienfield Bros. & Co., Chicago, Ill. Cigars. 301,344; Feb. 28; Serial No. 330,576; published Dec. 20, 1932. Class 17.

Luckey's, The, Azusa, Calif. Fresh fruits, jams, jellies, etc. 301,456; Feb. 28. Class 46.

Magnani, Thos. S., Bakersfield, Calif. Beverages. 301,318; Feb. 28; Serial No. 319,384; published Mar. 29, 1932. Class 45.

Marathon Rubber Products, Inc., Wausau, Wis. Sport goods. 301,323; Feb. 28; Serial No. 320,096; published Dec. 6, 1932. Class 39.

May Department Stores Company, The, St. Louis, Mo. Ties. 301,322; Feb. 28; Serial No. 320,003; published Dec. 6, 1932. Class 39.

Menke, Wilber J., jr., doing business as Natural Tone Co., Paris, Ill. Hair color restorer. 301,452; Feb. 28. Class 6.

Miles, H. G., Limited, London, England. Device in the form of a flexible strap or band. 301,438; Feb. 28; Serial No. 329,335; published Dec. 20, 1932. Class 8.

Miller, Willard D., doing business as Frsh Frut Products Company, El Paso, Tex. Maltless beverages. 301,451; Dec. 28. Class 45.

Millers Products Corp., New York, N. Y. Wheat flour. 301,373; Feb. 28; Serial No. 331,436; published Dec. 13, 1932. Class 46.

Molsberger, Valentine J., doing business as Molsberger Battery Company, Antigo, Wis. Storage batteries. 301,315; Feb. 28; Serial No. 331,381; published Dec. 13, 1932. Class 21.

Montgomerie & Co. Ltd., Glasgow, Scotland. Bread, cakes, biscuits, etc. 301,364; Feb. 28; Serial No. 326,334; published Dec. 13, 1932. Class 46.

Morris, Philip, & Co. Ltd., Incorporated, New York, N. Y. Cigarettes. 301,470; Feb. 28. Class 17.

Moyer Manufacturing Company, The, Youngstown, Ohio. Coats, vests, trousers, outer wear, sport coats, etc. 301,433; Feb. 28; Serial No. 330,579; published Dec. 6, 1932. Class 39.

Museums Supplies Company. (See Dieterle, Paul.)

Naamloose Vennootschap Droste's Cacao-En Chocoladefabrieken, Haarlem, Netherlands. Cocoa. 301,330; Feb. 28; Serial No. 330,307; published Dec. 13, 1932. Class 46.

Natural Tone Co. (See Menke, Wilber J., jr.)

Needles, Miriam, Atlantic City, N. J. Ladies' undergarments. 301,447; Feb. 28; Serial No. 330,796; published Dec. 13, 1932. Class 39.

Neher-Whitehead & Company, St. Louis, Mo. Printed labels. 301,383; Feb. 28; Serial No. 331,748; published Dec. 20, 1932. Class 37.

Nelson Associates, Ltd., Los Angeles, Calif. Canned fruit juices with pulp for food purposes. 301,363; Feb. 28; Serial No. 327,735; published Dec. 13, 1932. Class 46.

Newman, I., & Sons, Inc., New Haven, Conn., and New York, N. Y. Corsets and brassières. 301,421; Feb. 28; Serial No. 331,163; published Dec. 20, 1932. Class 39.

Northern Field Seed Company, Winona, Minn. Alfalfa seed. 301,473; Feb. 28.

Northern Indiana Brass Company, Elkhart, Ind. Water pipes, valves, controls, etc. 301,306; Feb. 28; Serial No. 331,116; published Dec. 20, 1932. Class 13.

Otis Elevator Company, Jersey City, N. J., and New York, N. Y. Door closers and hangers. 301,300; Feb. 28; Serial No. 331,698; published Dec. 20, 1932. Class 13.

Otis Elevator Company, Jersey City, N. J., and New York, N. Y. Door closers. 301,301; Feb. 28; Serial No. 331,695; published Dec. 20, 1932. Class 13.

Ozalts Company. (See Draper, William R.)

Pac-Kups Incorporated, Easton, Pa. Containers of paper or cardboard-like material for frozen confections. 301,390; Feb. 28; Serial No. 324,853; published Dec. 20, 1932. Class 2.

Parker-Young Company, The, Boston, Mass. Bond paper. 301,382; Feb. 28; Serial No. 331,513; published Dec. 20, 1932. Class 37.

Penn Surgical Mfg. Co. Inc., Philadelphia, Pa. Blood lancets, inhalers, and masks, curettes, etc. 301,411; Feb. 28; Serial No. 330,439; published Dec. 20, 1932. Class 44.

Pfeiff Brothers, Brooklyn, N. Y. Solid round belt. 301,468; Feb. 28. Class 35.

Pillsbury Flour Mills Company, Minneapolis, Minn. Wheat flour. 301,396; Feb. 28; Serial No. 331,903; published Dec. 13, 1932. Class 46.

Pioneer Paper Stock Company, Chicago, Ill. Excelsior packing pads. 301,427; Feb. 28; Serial No. 330,830; published Dec. 13, 1932. Class 50.

Plee-Zing, Inc., Chicago, Ill. Dog food. 301,360; Feb. 28; Serial No. 329,384; published Dec. 13, 1932. Class 46.

Popsicle Corporation of the United States, The, New York, N. Y. Frozen confections. 301,334-5; Feb. 28; Serial Nos. 330,833-4; published Nov. 22, 1932. Class 46.

Raybestos-Manhattan, Incorporated, Passaic, N. J., and Bridgeport, Conn. Automobile fan belts. 301,459; Feb. 28. Class 35.

Reading Poultry Food Company, Reading, Pa. Peat moss. 301,413; Feb. 28; Serial No. 329,464; published Dec. 13, 1932. Class 1.

Ressegule, Earl H., Flint, Mich. Necktie fasteners. 301,425; Feb. 28; Serial No. 331,118; published Dec. 20, 1932. Class 40.

Rhodes, James H., & Company, Chicago, Ill. Steel wool. 301,392; Feb. 28; Serial No. 328,704; published Dec. 13, 1932. Class 4.

Roberts, A. C., Kimberton, Pa. Plant foods. 301,423; Feb. 28; Serial No. 331,530; published Dec. 13, 1932. Class 10.

Roberts, Harry, & Co. Inc., New York, N. Y. Hats. 301,429; Feb. 28; Serial No. 330,637; published Dec. 20, 1932. Class 39.

Roethlisberger & Co. Inc., New York, N. Y. Canned sardines. 301,437; Feb. 28; Serial No. 330,282; published Dec. 20, 1932. Class 46.

Rotella, Frank, doing business as Rotella's Beverages, Newark, N. J. Maltless beverages. 301,461; Feb. 28. Class 45.

Royal Novelty Co., The, New York, N. Y. Skirts and pants. 301,426; Feb. 28; Serial No. 331,123; published Dec. 13, 1932. Class 39.

Ruberoid Co., The, Bound Brook, N. J., and New York, N. Y. Asbestos-cement shingles. 301,304; Feb. 28; Serial No. 331,346; published Dec. 13, 1932. Class 12.

Russo, Paul P., doing business as Grand Rapids Furniture Polish Co., New York, N. Y. Furniture polish. 301,462; Feb. 28. Class 16.

Saul's Seed Store, Inc., Syracuse, N. Y. Seeds. 301,391; Feb. 28; Serial No. 326,509; published Dec. 13, 1932. Class 1.

Schlesser Brothers, Portland, Oreg. Foods for dogs, cats, etc., and for human consumption. 301,372; Feb. 28; Serial No. 331,565; published Dec. 20, 1932. Class 46.

Schneider's, Peter, Sons & Co. (See Lasek, Alfred L.)

Schoeneman, J., Incorporated, Baltimore, Md. Coats, vests, trousers, etc. 301,455; Feb. 28. Class 39.

Scruggs-Vandercoort-Barney Dry Goods Company, St. Louis, Mo. Shoes and clothing. 301,353; Feb. 28; Serial No. 328,310; published Dec. 20, 1932. Class 39.

Seagram, Joseph E., & Sons Limited, Waterloo, Ontario, Canada. Whiskey and potable spirits. 301,297; Feb. 28; Serial No. 332,104; published Dec. 20, 1932. Class 49.

Sears, Roebuck and Co., Chicago, Ill. Butter churns. 301,458; Feb. 28. Class 23.

Smith, Allen V., Inc., Marcellus Falls, N. Y. Pearl barley, whole and split dried peas, dried beans, etc. 301,362; Feb. 28; Serial No. 328,565; published Dec. 13, 1932. Class 46.

Smith, C. C., doing business as C. C. Smith Fruit Company, Yakima, Wash. Fresh deciduous fruits. 301,457; Feb. 28. Class 46.

Soebbing, Edward G., Kansas City, Mo. Tablets, composition and note books, loose leaf note book fillers, etc. 301,436; Feb. 28; Serial No. 329,755; published Dec. 13, 1932. Class 37.

Solo Products Co., Chicago, Ill. Malt syrup. 301,326; Feb. 28; Serial No. 323,964; published Dec. 13, 1932. Class 46.

Sopkin, Louis, Company, Chicago, Ill. Frocks and aprons. 301,420; Feb. 28; Serial No. 331,127; published Dec. 6, 1932. Class 39.

Standard Brands Incorporated, New York, N. Y. Invertase preparation suitable for use in the conversion of sucrose. 301,305; Feb. 28; Serial No. 331,877; published Dec. 13, 1932. Class 46.

Standard Nut Margarine Co., Indianapolis, Ind. Oleomargarine. 301,331; Feb. 28; Serial No. 330,525; published Dec. 13, 1932. Class 46.

Standard Nut Margarine Co., Indianapolis, Ind. Oleomargarine. 301,332; Feb. 28; Serial No. 330,527; published Dec. 13, 1932. Class 46.

Standard Oil Company, Whiting, Ind., and Chicago, Ill. Lubricating oils. 301,361; Feb. 28; Serial No. 329,065; published Dec. 13, 1932. Class 15.

Supreme Council of Scarab, Lawrence, Kans. Pins, keys, and medals. 301,325; Feb. 28; Serial No. 321,176; published Dec. 13, 1932. Class 28.

Talens & Son, Inc., Irvington, N. J. Picture varnish and painting medium. 301,384; Feb. 28; Serial No. 331,760; published Dec. 13, 1932. Class 16.

Tennessee Corporation, New York, N. Y. Fertilizers and soil conditioners. 301,415; Feb. 28; Serial No. 331,711; published Dec. 13, 1932. Class 10.

Thermax Corporation, Chewelah, Wash. Insulating building board. 301,302; Feb. 28; Serial No. 331,656; published Dec. 13, 1932. Class 12.

Tung-Sol Lamp Works, Inc., Newark, N. J. Incandescent electric bulbs. 301,328; Feb. 28; Serial No. 329,541; published Dec. 13, 1932. Class 21.

Unión Española de Explosivos, Sociedad Anónima, Bilbao, Spain. Fertilizers. 301,354; Feb. 28; Serial No. 328,146; published Dec. 13, 1932. Class 10.

Union Selling Company, The, Cincinnati, Ohio. Papers. 301,453; Feb. 28. Class 37.

Universal Button Fastening & Button Company, Detroit, Mich. Buttons. 301,433; Feb. 28; Serial No. 330,585; published Dec. 6, 1932. Class 40.

Veldown Company, Inc., New York, N. Y. Cleansing tissue. 301,313; Feb. 28; Serial No. 329,910; published Oct. 25, 1932. Class 37.

Veldown Company, Inc., New York, N. Y. Cleansing tissue. 301,442; Feb. 28; Serial No. 329,163; published Sept. 6, 1932. Class 37.

Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Anchors, rails, metal ties, etc. 301,338; Feb. 28; Serial No. 302,976; published Dec. 13, 1932. Class 14.

Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Wire goods, kettles of sheet metal, etc. 301,339; Feb. 28; Serial No. 302,975; published Dec. 20, 1932. Class 13.

Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Fabricated structural shapes. 301,340; Feb. 28; Serial No. 302,974; published Dec. 13, 1932. Class 12.

Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Frames for electric switches, wire lightning conductors, etc. 301,359; Feb. 28; Serial No. 315,219; published Dec. 13, 1932. Class 21.

Weill & Hartmann, New York, N. Y. Gloves, corsets, brassières, etc. 301,346; Feb. 28; Serial No. 330,559; published Nov. 29, 1932. Class 39.

Whitney, W. F., Company, South Ashburnham, Mass. Wooden furniture. 301,466; Feb. 28. Class 32.

Wilbert Products Co. Inc., The, New York, N. Y. Floor wax. 301,460; Feb. 28. Class 16.

Williams, Theodore, Syracuse, N. Y. Exercising machines. 301,309; Feb. 28; Serial No. 330,718; published Dec. 20, 1932. Class 22.

Wilson Brothers, Chicago, Ill. Shirts, pajamas, underwear, and neckties. 301,355; Feb. 28; Serial No. 326,766; published Dec. 13, 1932. Class 39.

Zeeman, Isidor I., New York, N. Y. Cigarettes. 301,430; Feb. 28; Serial No. 330,675; published Dec. 20, 1932. Class 17.

Zenith Radio Corporation, Chicago, Ill. Radio and television receiving sets and parts thereof. 301,357–8; Feb. 28; Serial Nos. 314,186–7; published Sept. 1, 1931. Class 21.

LIST OF REGISTRANTS OF LABELS

Acqua Lina Manufacturing Co. (See Quartararo, Vincent.)

Allen, Harry K., Miami, Fla. Miami Delight. For Beverages and Food Products. 41,785; Feb. 28.

Apple Growers Association, Hood River, Oreg. Flawless Brand. For Apples. 41,786; Feb. 28.

Barbasol Company, The, Indianapolis, Ind. Barbasol Razor and Blades for Modern Shaving. For Safety Razors and Blades. 41,787; Feb. 28.

Berry, Albert L. Leather Company, Boston, Mass. Insoles. For Innersole Made for Shoes. 41,788; Feb. 28.

California Medicinal Wine Co., Los Angeles, Calif. California Padres. For Medicinal Wines. 41,789; Feb. 28.

Cook, M. B., Company, The, Chicago, Ill. Bulldog. For Carbon Papers. 41,790; Feb. 28.

Ferguson, N. C., & Co., Amarillo, Tex. Alligator Permanent-Grip. For Bevel-Cut Patches. 41,791; Feb. 28.

Gibson, Thos. H., Newark, N. J. Emmet. For Paints. 41,792; Feb. 28.

Jannings, Martha, Candy Specialties Co. (See Lake, Wesley G.)

Lake, Wesley G., doing business as Martha Jannings Candy Specialties Co., Los Angeles, Calif. Hollywood Honeys. For Confection. 41,793; Feb. 28.

Lief, M. Jess, doing business as Lion Drug Company, Brooklyn, N. Y. Foot Joy. A Powder for Stopping Excessive Perspiration of the Feet and Armpits and for Use as an Instant Perspiration Deodorizer. 41,794; Feb. 28.

Lion Drug Company. (See Lief, M. Jess.)

Lyons-Magnus, Inc., San Francisco, Calif. Lyons' California Spring Blossom Fruits. For Fruits. 41,795; Feb. 28.

Mama Cookie Bakeries, Inc., Chicago, Ill. Mama's Malted Milk Dessert. For Malted Milk Desserts. 41,796; Feb. 28.

Morris Bakery Products. (See Shumofsky, Morris.)

Pearson, C. F., jr., Montgomery, Ala. Livlax. For Laxative and Cathartic. 41,797; Feb. 28.

Protective Diet League of California, Los Angeles, Calif. Kelfood. For Kelp Tablets. 41,798; Feb. 28.

Quartararo, Vincent, doing business as Acqua Lina Manufacturing Co., Brooklyn, N. Y. Acqua Line Washing Liquid. For Washing Liquid. 41,799; Feb. 28.

Rex-Ton Laboratories. (See Rix, Harold C.)

Ripley C & E Grape Growers Cooperative Association, Inc., Ripley, N. Y. Chatauqua—New York State—Concords. For Concord Grapes. 41,800; Feb. 28.

Rix, Harold C., doing business as Rex-Ton Laboratories, Dallas, Tex. Rex-Ton False Teeth Cleanser. For Preparation to Clean, Deodorize, and Remove Smoke Stains on False Teeth. 41,801; Feb. 28.

Ryan, B. P., Riverton, Wyo. Campfire Incense. For Incense. 41,802; Feb. 28.

Shumofsky, Morris, doing business as Morris Bakery Products, Bridgeport, Conn. Vim. For Cereal Bread. 41,803; Feb. 28.

V-M Company, Baltimore, Md. V-M Cereal. For Cereal. 41,804; Feb. 28.

LIST OF REGISTRANTS OF PRINTS

Anestex Laboratories (De-Ce Products Co. of N. Y. (See Curtis, David.)

Calumet Refining Company, Chicago, Ill. This Oil Brings Customers In – – – Then Brings Them Back. For Motor Oil. 14,060; Feb. 28.

Curtis, David, doing business as Anestex Laboratories (De-Ce Products Co. of N. Y.), New York, N. Y. Anestozal Surface Anesthetic. For Surface Anesthetic. 14,061; Feb. 28.

Dixon-Prosser Inc., Seattle, Wash. The Wonder Cookie Cutters. For Cookie Cutters. 14,062; Feb. 28.

Hills Bros., San Francisco, Calif. Uniform Always – – – Adform 132A. For Coffee. 14,063; Feb. 28.

Hills Bros., San Francisco, Calif. Fresh Always – – – Adform 133A. For Coffee. 14,064; Feb. 28.

Lubricating Gasoline Company. (See Thaison, F. W.)

Thaison, F. W., doing business as Lubricating Gasoline Company, Houston, Tex. Proof. For Lubricating Gasoline. 14,065; Feb. 28.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Cotton batting. Kahn's Pickery. 301,393; Feb. 28; Serial No. 329,165; published Dec. 13, 1932.

Cotton batting. Kahn's Pickery. 301,414; Feb. 28; Serial No. 329,166; published Dec. 13, 1932.

Frit. Ingram-Richardson Manufacturing Company. 301,407; Feb. 28; Serial No. 330,704; published Dec. 13, 1932.

Fur skins. A. Hollander & Son, Inc. 301,400; Feb. 28; Serial No. 331,108; published Dec. 13, 1932.

Fur skins. A. Hollander & Son, Inc. 301,404; Feb. 28; Serial No. 330,954; published Dec. 13, 1932.

Furs and pelts. D. Goldner. 301,408; Feb. 28; Serial No. 330,596; published Dec. 13, 1932.

Furs, Dyed. Federal Star Dyers Corp. 301,403; Feb. 28; Serial No. 331,079; published Dec. 13, 1932.

Gravel, Bird. R. T. French Company. 301,401; Feb. 28; Serial No. 331,105; published Dec. 13, 1932.

Leather. American Oak Leather Company. 301,371; Feb. 28; Serial No. 331,570; published Dec. 20, 1932.

Mica, talc, and soapstone. Firestone Tire & Rubber Company. 301,397–8; Feb. 28; Serial Nos. 331,675–6; published Dec. 13, 1932.

Peat moss. Reading Poultry Food Company. 301,413; Feb. 28; Serial No. 329,464; published Dec. 13, 1932.

Seed. Alfalfa. Northern Field Seed Company. 301,473; Feb. 28.

Seeds. Atlantic Seed Company. 301,405; Feb. 28; Serial No. 330,735; published Dec. 13, 1932.

Seeds. Saul's Seed Store, Inc. 301,391; Feb. 28; Serial No. 326,509; published Dec. 13, 1932.

Sponges and chamois. American Sponge & Chamois Co. Inc. 301,399; Feb. 28; Serial No. 331,172; published Dec. 13, 1932.

CLASS 2

Containers of paper or cardboard. Pac-Kups Incorporated. 301,390; Feb. 28; Serial No. 324,353; published Dec. 20. 1932.

CLASS 3

Strap or band, Flexible. H. G. Miles Limited. 301,438; Feb. 28; Serial No. 329,335; published Dec. 20, 1932.

CLASS 4

Soap. Kresge Department Store Corp. 301,449; Feb. 28.

Soaps. E. F. Houghton & Co. 301,389; Feb. 28; Serial No. 324,257; published Apr. 12, 1932.

Steel wool. James H. Rhodes & Company. 301,392; Feb. 28; Serial No. 328,704; published Dec. 13, 1932.

CLASS 5

Adhesive preparation, Mild. Martin Dennis Company. 301,366; Feb. 28; Serial No. 331,727; published Dec. 20, 1932.

CLASS 6

Bluing. Brillo Manufacturing Company. 301,409; Feb. 28; Serial No. 330,568; published Dec. 13, 1932.

Dry cleaning absorbefacient. Emery Industries, Inc. 301,342; Feb. 28; Serial No. 329,853; published Dec. 13, 1932.

Hair color restorer. W. J. Menke. 301,452; Feb. 28.

Medical preparation for making mineral water. W. R. Draper. 301,412; Feb. 28; Serial No. 329,831; published Dec. 13, 1932.

Perfumes, toilet waters, rouge compacts, etc. D'Orsay Perfumeries Corporation. 301,402; Feb. 28; Serial No. 331,043; published Dec. 13, 1932.

Pharmaceutical preparations. R. Kern. 301,410; Feb. 28; Serial No. 330,479; published Dec. 13, 1932.

CLASS 10

Fertilizers. Unión Española de Explosivos, Sociedad Anónima. 301,354; Feb. 28; Serial No. 328,146; published Dec. 13, 1932.

Fertilizers and soil conditioners. Tennessee Corporation. 301,415; Feb. 28; Serial No. 331,711; published Dec. 13, 1932.

Plant foods. A. C. Roberts. 301,423; Feb. 28; Serial No. 331,530; published Dec. 13, 1932.

CLASS 12

Board, Insulating building. Thermax Corporation. 301,302; Feb. 28; Serial No. 331,656; published Dec. 13, 1932.

Building block and brick, etc. Danville Brick Company. 301,395; Feb. 28; Serial No. 326,127; published Dec. 13, 1932.

Insulating material, Thermal. Dominion Stucco Co. Limited. 301,317; Feb. 28; Serial No. 317,912; published Dec. 13, 1932.

Material for dust proofing, hardening etc., concrete floors, etc. Concrete Treatment Materials, Inc. 301,310–12; Feb. 28; Serial Nos. 330,537–9; published Dec. 13, 1932.

Shingles, Asbestos-cement. Ruberoid Co. 301,304; Feb. 28; Serial No. 331,346; published Dec. 13, 1932.

Structural shapes, Fabricated. Vereinigte Stahlwerke Aktiengesellschaft. 301,340; Feb. 28; Serial No. 302,974; published Dec. 13, 1932.

CLASS 13

Door closers. Otis Elevator Company. 301,301; Feb. 28; Serial No. 331,695; published Dec. 20, 1932.

Door closers and hangers. Otis Elevator Company. 301,300; Feb. 28; Serial No. 331,698; published Dec. 20, 1932.

Pans, Dish. Columbian Enameling & Stamping Co. 301,394; Feb. 28; Serial No. 328,383; published Dec. 20, 1932.

Pipes, valves, controls, etc., Water. Northern Indiana Brass Company. 301,306; Feb. 28; Serial No. 331,116; published Dec. 20, 1932.

Wire goods, kettles of sheet metal, etc. Vereinigte Stahlwerke Aktiengesellschaft. 301,339; Feb. 28; Serial No. 302,975; published Dec. 20, 1932.

CLASS 14

Anchors, rails, metal ties, etc. Vereinigte Stahlwerke Aktiengesellschaft. 301,338; Feb. 28; Serial No. 302,976; published Dec. 13, 1932.

CLASS 15

Oils, Lubricating. Standard Oil Company. 301,361; Feb. 28; Serial No. 329,065; published Dec. 13, 1932.

CLASS 16

Paints, stains, varnishes, etc. Cincinnati Varnish Company. 301,379; Feb. 28; Serial No. 330,991; published Dec. 20, 1932.

Polish, Furniture. P. P. Russo. 301,462; Feb. 28.

Polishing material and preparation. Furniture City Polish Company. 301,350; Feb. 28; Serial No. 331,306; published Dec. 20, 1932.

Varnish and painting medium, Picture. Talens & Son, Inc. 301,384; Feb. 28; Serial No. 331,760; published Dec. 13, 1932.

Wax, Floor. Wilbert Products Co. Inc. 301,460; Feb. 28.

Wax, Polishing. S. C. Johnson & Son. 301,319; Feb. 28; Serial No. 319,449; published Dec. 13, 1932.

CLASS 17

Cigarettes. Philip Morris & Co. Ltd. 301,470; Feb. 28.

Cigarettes. I. I. Zeeman. 301,430; Feb. 28; Serial No. 330,675; published Dec. 20, 1932.

Cigars. Bayuk Cigars Incorporated. 301,341; Feb. 28; Serial No. 293,023; published Feb. 4, 1930.

Cigars. Jose Escalante & Co. 301,345; Feb. 28; Serial No. 330,572; published Dec. 20, 1932.

Cigars. Lilienfeld Bros. & Co. 301,344; Feb. 28; Serial No. 330,576; published Dec. 20, 1932.

Tobacco and cigarettes. Larus & Brother Company. 301,418; Feb. 28; Serial No. 331,558; published Dec. 13, 1932.

CLASS 21

Batteries, bulbs, spark plugs, etc. Hickok Oil Corporation. 301,316; Feb. 28; Serial No. 331,403; published Dec. 13, 1932.

Batteries, Storage. V. J. Moisberger. 301,315; Feb. 28; Serial No. 331,381; published Dec. 13, 1932.

Electric bulbs, Incandescent. Tung-Sol Lamp Works, Inc. 301,328; Feb. 28; Serial No. 329,541; published Dec. 13, 1932.

Electric table lamps, microphones, and cigarette and cigar lighters. B. Greenberger. 301,464; Feb. 28.

Frames for electric switches, wire, lightning conductors. Vereinigte Stahlwerke Aktiengesellschaft. 301,359; Feb. 28; Serial No. 315,219; published Dec. 13, 1932.

Radio and television receiving sets and parts thereof. Zenith Radio Corporation. 301,357–8; Feb. 28; Serial Nos. 314,186–7; published Sept. 1, 1931.

CLASS 22

Exercising machines. T. Williams. 301,309; Feb. 28; Serial No. 330,718; published Dec. 20, 1932.

Toys, Pull. G. B. Lewis Company. 301,450; Feb. 28.

CLASS 23

Churns, Butter. Sears, Roebuck and Co. 301,458; Feb. 28.

Lubricating equipment, apparatus, and machinery. Gray Company Incorporated. 301,321; Feb. 28.

CLASS 28

Pins, keys, and medals. Supreme Council of Scarab. 301,325; Feb. 28; Serial No. 321,176; published Dec. 13, 1932.

CLASS 32

Furniture, Wooden. W. F. Whitney Company. 301,466; Feb. 28.

CLASS 34

Burners for stoves and ranges and parts thereof, Oil. Alasco Oil Burner Co. Inc. 301,303; Feb. 28; Serial No. 331,486; published Dec. 20, 1932.

Heaters, Radiant gas. Continental Stove Corporation. 301,308; Feb. 28; Serial No. 330,948; published Dec. 20, 1932.

Stokers. Detroit Stoker Company. 301,305; Feb. 28; Serial No. 331,299; published Dec. 20, 1932.

Ventilating units, Automatic endless-chain impingement or open baffle type of. American Air Filter Company. 301,343; Feb. 28; Serial No. 327,460; published Dec. 20, 1932.

CLASS 35

Belt, Solid round. Pfeiff Brothers. 301,468; Feb. 28.

Belts, Automobile fan. Raybestos-Manhattan, Incorporated. 301,459; Feb. 28.

CLASS 37

Labels. Beher-Whitehead & Company. 301,383; Feb. 28; Serial No. 331,748; published Dec. 20, 1932.

Letter heads and blank forms. Equitable Service Corporation. 301,443; Feb. 28; Serial No. 325,966; published Dec. 20, 1932.

Letter heads and blank forms. Equitable Service Corporation. 301,445; Feb. 28; Serial No. 325,964; published Dec. 20, 1932.

Mounting corners. Picture or sheet. A. W. Engel. 301,435; Feb. 28; Serial No. 330,123; published Dec. 13, 1932.

Paper, Bond. Parker-Young Company. 301,382; Feb. 28; Serial No. 331,513; published Dec. 20, 1932.

Paper for tag and/or folder stocks. Champion Fibre Company. 301,434; Feb. 28; Serial No. 330,809; published Dec. 13, 1932.

Paper napkins, toilet paper, and paper towels. Fort Howard Paper Company. 301,314; Feb. 28; Serial No. 329,745; published Sept. 27, 1932.

Paper towels and toilet paper. Blake, Moffitt & Towne. 301,327; Feb. 28; Serial No. 323,964; published Mar. 16, 1932.

Paper, Writing and printing. Hampshire Paper Company. 301,385; Feb. 28; Serial No. 331,895; published Dec. 13, 1932.

Paper, Writing and printing. Hampshire Paper Company. 301,387; Feb. 28; Serial No. 331,896; published Dec. 13, 1932.

Papers. Union Selling Company. 301,453; Feb. 28.

Tablets, composition and note books, loose leaf note book fillers, etc. E. G. Soebbing. 301,436; Feb. 28; Serial No. 329,755; published Dec. 13, 1932.

Tissue, Cleansing. Veldown Company. 301,313; Feb. 28; Serial No. 329,910; published Oct. 25, 1932.

Tissue, Cleansing. Veldown Company. 301,442; Feb. 28; Serial No. 329,163; published Sept. 6, 1932.

Tissue, Packets of cleansing. Joseph & Anderschs. 301,388; Feb. 28; Serial No. 331,975; published Dec. 13, 1932.

CLASS 38

Brochures, circulars, and newspaper advertising. Equitable Service Corporation. 301,444; Feb. 28; Serial No. 325,965; published Dec. 20, 1932.
Periodical. M. Koenigsberg. 301,386; Feb. 28; Serial No. 331,794; published Dec. 13, 1932.
Periodical or newspaper column. J. L. Hoff. 301,381; Feb. 28; Serial No. 331,359; published Dec. 13, 1932.
Prints and pictures, Framed. P. Dieterle. 301,324; Feb. 28; Serial No. 320,160; published Dec. 13, 1932.

CLASS 39

Apparel, Men's wearing. Bloomingdale Bros., Inc. 301,465; Feb. 28.
Clothing. William Hollins and Company. 301,350; Feb. 28; Serial No. 329,637; published Dec. 6, 1932.
Coats. Funk & Klein, Inc. 301,417; Feb. 28; Serial No. 331,638; published Dec. 13, 1932. Class 39.
Coats, pants, knickerbockers, and vests. Goodall Worsted Co. 301,416; Feb. 28; Serial No. 331,738; published Dec. 13, 1932.
Coats, pants, knickerbockers, vests. Goodall Worsted Co. 301,448; Feb. 28; Serial No. 331,739; published Dec. 13, 1932.
Coats, vest coats, sleeveless vest coats, etc. Crown Overall Mfg. Co. 301,347; Feb. 28; Serial No. 330,365; published Dec. 6, 1932.
Coats, vests, pants, etc. Cohen, Goldman & Co. 301,422; Feb. 28; Serial No. 331,388; published Dec. 13, 1932.
Coats, vests, trousers, etc. J. Schoeneman, Incorporated. 301,455; Feb. 28.
Coats, vests, trousers, outer wear, sport coats, etc. Moyer Manufacturing Company. 301,433; Feb. 28; Serial No. 330,579; published Dec. 6, 1932.
Corsets and brassières. I. Newman & Sons, Inc. 301,421; Feb. 28; Serial No. 331,163; published Dec. 20, 1932.
Frocks and Aprons. Louis Sopkin Company. 301,420; Feb. 28; Serial No. 331,127; published Dec. 6, 1932.
Gloves, corsets, brassières, etc. Weill & Hartmann. 301,346; Feb. 28; Serial No. 330,559; published Nov. 29, 1932.
Hats. Harry Roberts & Co. Inc. 301,529; Feb. 28; Serial No. 330,637; published Dec. 20, 1932.
Hosiery. Harrington & Waring. 301,349; Feb. 28; Serial No. 329,832; published Dec. 13, 1932.
Hosiery. Holeproof Hosiery Co. 301,419; Feb. 28; Serial No. 331,617; published Dec. 13, 1932.
Hosiery. Larkwood Silk Hosiery Mills, Inc. 301,446; Feb. 28; Serial No. 331,899; published Dec. 13, 1932.
Hosiery, shoes, coats, etc. Dey Brothers & Co. 301,472; Feb. 28.
Pajamas. Enro Shirt Company. 301,431; Feb. 28; Serial No. 330,784; published Dec. 13, 1932.
Rompers, dresses, play suits, etc. Gretz & Schwartz. 301,348; Feb. 28; Serial No. 329,918; published Dec. 6, 1932.
Shirts, pajamas, underwear, and necktties. Wilson Brothers. 301,355; Feb. 28; Serial No. 326,766; published Dec. 13, 1932.
Shoes. Kresge Department Store Corp. 301,428; Feb. 28; Serial No. 330,956; published Dec. 20, 1932.
Shoes and clothing. Scruggs-Vanderwoort-Barney Dry Goods Company. 301,353; Feb. 28; Serial No. 328,810; published Dec. 20, 1932.
Shoes, Women's. Cincinnati Shoe Co. 301,469; Feb. 28.
Skirts and pants. Royal Novelty Co. 301,426; Feb. 28; Serial No. 331,123; published Dec. 13, 1932.
Sport Goods. Marathon Rubber Products, Inc. 301,323; Feb. 28; Serial No. 320,096; published Dec. 6, 1932.
Suits, Bathing. Greenhill & Daniel, Inc. 301,352; Feb. 28; Serial No. 328,579; published Dec. 6, 1932.
Ties. May Department Stores Company. 301,322; Feb. 28; Serial No. 320,003; published Dec. 6, 1932.
Undergarments, Ladies'. M. Needles. 301,447; Feb. 28; Serial No. 330,796; published Dec. 13, 1932.
Underwear. Cluett, Peabody & Co. 301,424; Feb. 28; Serial No. 331,544; published Dec. 6, 1932.

CLASS 40

Buttons. Universal Button Fastening & Button Company. 301,432; Feb. 28; Serial No. 330,585; published Dec. 6, 1932.
Curlers, Eye-lash. C. A. Futter. 301,351; Feb. 28; Serial No. 329,017; published Nov. 22, 1932.
Necktie fasteners. E. H. Resseguie. 301,425; Feb. 28; Serial No. 331,118; published Dec. 20, 1932.

CLASS 42

Fabrics, upholstery and drapery. A. L. Lasek. 301,463; Feb. 28.

CLASS 44

Lancets, inhalers, and masks, curettes, etc., Blood. Penn Surgical Mfg. Co. Inc. 301,411; Feb. 28; Serial No. 330,439; published Dec. 20, 1932.

CLASS 45

Beverages. T. S. Magnani. 301,318; Feb. 28; Serial No. 319,384; published Mar. 29, 1932.
Beverages, Maltless. W. D. Miller. 301,451; Feb. 28.
Beverages, Maltless. F. Rotella. 301,461; Feb. 28.
Beverages, syrups, and extracts, Maltless. A. Kanner. 301,307; Feb. 28; Serial No. 331,112; published Dec. 20, 1932.

CLASS 46

Barley, dried peas, beans, etc., Pearl. Allen V. Smith, Inc. 301,362; Feb. 28; Serial No. 328,565; published Dec. 13, 1932.
Bread, cakes, biscuits, etc. Montgomerie & Co. Ltd. 301,364; Feb. 28; Serial No. 326,334; published Dec. 13, 1932.
Bread, Hard. Aktiebolaget Skånska Spisbrodsfabriken. 301,333; Feb. 28; Serial No. 330,736; published Dec. 13, 1932.
Cake, Ice cream. Ice Cream Cake Company. 301,367; Feb. 28; Serial No. 330,997; published Dec. 20, 1932.
Cakes. Braun Baking Company. 301,377; Feb. 28; Serial No. 330,692; published Dec. 13, 1932.
Candies, chocolate, and cocoa. Europa Sales Corporation. 301,376; Feb. 28; Serial No. 331,044; published Dec. 13, 1932.
Candy. Mrs. W. F. Beier. 301,440; Feb. 28; Serial No. 328,287; published Dec. 13, 1932.
Canned fish and fish roe. Conserveries Emile Chemin, Societe a Responsabilite Limitee. 301,375; Feb. 28; Serial No. 331,101; published Dec. 13, 1932.
Canned fruit juices. Nelson Associates, Ltd. 301,363; Feb. 28; Serial No. 327,735; published Dec. 13, 1932.
Canned fruits. Leadway Stores Corporation. 301,329; Feb. 28; Serial No. 330,095; published Dec. 13, 1932.
Canned fruits and vegetables. Goldberg, Bowen & Co. 301,374; Feb. 28; Serial No. 331,307; published Dec. 20, 1932.
Canned sardines. Roethlisberger & Co. Inc. 301,437; Feb. 28; Serial No. 330,232; published Dec. 20, 1932.
Chili, Condensed brick. J. A. Howard, jr. 301,378; Feb. 28; Serial No. 330,575; published Dec. 20, 1932.
Chop suey. American Kitchens, Inc. 301,320; Feb. 28; Serial No. 319,713; published Dec. 13, 1932.
Cocoa. Naamlooze Vennootscrap Droste's Cacoa- en Chocoladefabrieken. 301,330; Feb. 28; Serial No. 330,307; published Dec. 13, 1932.
Confections, Frozen. Popsicle Corporation of the United States. 301,334–5; Feb. 28; Serial Nos. 330,833–4; published Nov. 22, 1932.
Crackers. Chantilly Kookys Inc. 301,454; Feb. 28.
Feeds, fish meal, cod liver oil, etc., Poultry and dairy. Ezl. Dunwoody Co. 301,439; Feb. 28; Serial No. 328,887; published Dec. 13, 1932.
Flour, Pancake. Light Grain & Milling Co. 301,337; Feb. 28; Serial No. 331,310; published Dec. 13, 1932.
Flour, Wheat. Liberty Mills. 301,368; Feb. 28; Serial No. 331,958; published Dec. 20, 1932.
Flour, Wheat. Millers Products Corp. 301,373; Feb. 28; Serial No. 331,436; published Dec. 13, 1932.
Flour, Wheat. Pillsbury Flour Mills Company. 301,396; Feb. 28; Serial No. 331,903; published Dec. 13, 1932.
Food, Dog. Plee-Zing, Inc. 301,360; Feb. 28; Serial No. 329,384; published Dec. 13, 1932.
Food made of wheat, Breakfast. Albers Bros. Milling Co. 301,441; Feb. 28; Serial No. 327,622; published Dec. 13, 1932.
Foods for dogs, cats, foxes, etc., and for human consumption. Schlesser Brothers. 301,372; Feb. 28; Serial No. 331,565; published Dec. 20, 1932.
Fruits, Fresh deciduous. C. C. Smith. 301,457; Feb. 28.
Fruits, jams, jellies, etc., Fresh. Luckey's. 301,456; Feb. 28.
Ice cream. Foremost Dairy Products Incorporated. 301,356; Feb. 28; Serial No. 300,714; published Dec. 13, 1932.
Mayonnaise, sandwich spread, Russian dressing, etc. H. J. Aroesty. 301,336; Feb. 28; Serial No. 331,215; published Dec. 13, 1932.
Milk, Evaporated. John F. Jelke Company. 301,369; Feb. 28; Serial No. 331,688; published Dec. 13, 1932.
Oleomargarine. Standard Nut Margarine Co. 301,331; Feb. 28; Serial No. 330,525; published Dec. 13, 1932.
Oleomargarine. Standard Nut Margarine Co. 301,332; Feb. 28; Serial No. 330,527; published Dec. 13, 1932.
Preparation for coagulating or congealing milk. S. B. Kirk. 301,370; Feb. 28; Serial No. 331,643; published Dec. 13, 1932.
Preparation suitable for use in the conversion of sucrose, Invertase. Standard Brands Incorporated. 301,365; Feb. 28; Serial No. 331,877; published Dec. 13, 1932.
Spaghetti sauce. Florentine Packers, Inc. 301,471; Feb. 28.
Syrup, Malt. Solo Products Co. 301,326; Feb. 28; Serial No. 323,964; published Dec. 13, 1932.

CLASS 48

Malt beverage. Foss Schneider Company. 301,467; Feb. 28.
Malt beverages and extracts therefor. Christie & Hoover. 301,299; Feb. 28; Serial No. 331,723; published Dec. 20, 1932.

CLASS 49

Whiskey. Bloch Bros. 301,298; Feb. 28; Serial No. 332,028; published Dec. 20, 1932.
Whiskey and potable spirits. Joseph E. Seagram & Sons Limited. 301,297; Feb. 28; Serial No. 332,104; published Dec. 20, 1932.

CLASS 50

Excelsior packing pads. Pioneer Paper Stock Company. 301,427; Feb. 28; Serial No. 330,830; published Dec. 13, 1932.

CARNEGIE LIBRARY OF ATLANTA

LIST OF LABELS

Acqua Lina Washing Liquid. For Washing Liquid. V. Quartararo. 41,797; Feb. 28.
Alligator Permanent-Grip. For Bevel-Cut Patches. N. C. Ferguson & Co. 41,791; Feb. 28.
Barbasol Razor and Blades for Modern Shaving. For Safety Razors and Blades. Barbasol Company. 41,787; Feb. 28.
Bulldog. For Carbon Papers. M. B. Cook Co. 41,790; Feb. 28.
California Padres. For Medicinal Wines. California Medicinal Wine Co. 41,789; Feb. 28.
Campfire Incense. For Incense. B. P. Ryan. 41,802; Feb. 28.
Chautauqua—New York State—Concords. For Concord Grapes. Ripley C & B Grape Growers Cooperative Association. 41,800; Feb. 28.
Emmet. For Paints. T. H. Gibson. 41,792; Feb. 28.
Flawless Brand. For Apples. Apple Growers Association. 41,786; Feb. 28.
Foot Joy. For a Powder for Stopping Excessive Perspiration of the Feet and Armpits and for Use as an Instant Perspiration Deodorizer. M. J. Lief. 41,794; Feb. 28.
Hollywood Honeys. For Confection. W. G. Lake. 41,793; Feb. 28.
Insoles. For Innersole Made for Shoes. A. L. Berry Leather Co. 41,788; Feb. 28.
Kelfood. For Kelp Tablets. Protective Diet League of California. 41,799; Feb. 28.
Livlax. For Laxative and Cathartic. C. F. Pearson, jr. 41,798; Feb. 28.
Lyons' California Spring Blossom Fruits. For Fruits. Lyons-Magnus, Inc. 41,795; Feb. 28.
Mama's Malted Milk Dessert. For Malted Milk Desserts. Mama Cookie Bakeries, Inc. 41,796; Feb. 28.
Miami Delight. For Beverages and Food Products. H. K. Allen. 41,785; Feb. 28.
Rex-Ton False Teeth Cleanser. For Preparation to Clean, Deodorize, and Remove Smoke Stains on False Teeth. H. C. Rix. 41,801; Feb. 28.
V-M Cereal. For Cereal. V-M Company. 41,804; Feb. 28.
Vim. For Cereal Bread. M. Shumofsky. 41,803; Feb. 28.

LIST OF PRINTS

Anestosal Surface Anesthetic. For Surface Anesthetic. D. Curtis. 14,061; Feb. 28.
Fresh Always — — — Adform 133A. For Coffee. Hills Bros. 14,064; Feb. 28.
Proof. For Lubricating Gasoline. F. W. Thaison. 14,065; Feb. 28.
The Wonder Cookie Cutters. For Cookie Cutters. Dixon-Prosser Inc. 14,062; Feb. 28.
This Oil Brings Customers In — — — Then Brings Them Back. For Motor Oil. Calumet Refining Company. 14,060; Feb. 28.
Uniform Always — — — Adform 132A. For Coffee. Hills Bros. 14,063; Feb. 28.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 28TH DAY OF FEBRUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Kamrath, Herbert G., assignor.)
Abbott Machine Company. (See Abbott, William G., jr., assignor.)
Abbott, William G., jr., assignor, by mesne assignments, to Abbott Machine Company, Wilton, N. H. Dyeing textiles. 1,899,004; Feb. 28.
Abbott, William J., Toorak, assignor to International Products Proprietary, Limited, Melbourne, Victoria, Australia. Manufacture of dried food products from raw meat. 1,899,224; Feb. 28.
Abbotts Dairies, Inc. (See Matt, Morris C., assignor.)
Abercrombie, James S., Houston, assignor to Stephens Pump Company, Round Rock, Tex. Pump. 1,899,297; Feb. 28.
Abercrombie, James S., J. A. Tennant, and H. Allen, Houston, assignors to Stephens Pump Company, Round Rock, Tex. Pump. 1,899,298; Feb. 28.
Abercrombie, James S., J. A. Tennant, and H. Allen, Houston, assignors to Stephen Pump Company, Round Rock, Tex. Pump. 1,899,299; Feb. 28.
Acken, Raymond V., Pittsburgh, Pa. Safety razor. 1,899,841; Feb. 28.
Ackerman, Frank, St. Louis, assignor to Curtis Manufacturing Company, Wellston, Mo. Reciprocating pump. 1,898,994; Feb. 28.
Ackerman, Frank, St. Louis, assignor to Curtis Manufacturing Company, Wellston, Mo. Automobile lift. 1,899,491; Feb. 28.
Acme Steel Cmopany. (See MacChesney, Chester M., assignor.)
Acushnet Process Company. (See Young, Philip E., assignor.)
Adams, Ernest H., Los Angeles, Calif. Pipe cleaning machine. 1,899,379; Feb. 28.
Adams, Walter L., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Fishing reel. 1,899,908; Feb. 28.
Addis, Frank J. and P. P., Brooklyn, N. Y. Packing and display box. 1,899,547; Feb. 28.
Addis, Paul P. (See Addis, Frank J. and P. P.)
Adler, Max, San Diego, Calif. Combination bed and chair. 1,899,432; Feb. 28.
Agfa Ansco Corporation. (See Lessler, Lew W., assignor.)
Ainsworth, Chester D., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Outdoor electrical apparatus. 1,899,658; Feb. 28.
Ainsworth, George, New Hyde Park, N. Y. Glass bowl for semi-indirect illumination. Des. 89,327; Feb. 28.
Air-Way Electric Appliance Corporation. (See Mack, Walter L., assignor.)
Air-Way Electric Appliance Corporation. (See Riebel, Frederick, jr., assignor.)
Albee, William H., assignor to Koehler Manufacturing Company, Marlboro, Mass. Detachable cleat. 1,899,800; Feb. 28.
Aldeborgh, Erik H., assignor to Standard Gage Company, Poughkeepsie, N. Y. Snap gauge. 1,899,253; Feb. 28.
Alemite Corporation. (See Davis, Ernest W., assignor.)
Alemite Corporation. (See Zerk, Oscar U., assignor.)
Alexander, Paul E., Tacoma Park, Md. Collar support. 1,899,602; Feb. 28.
Allen, Herbert. (See Abercrombie, J. S., Tennant, and Allen.)
Alimänna Svenska Elektriska Aktiebolaget. (See Ytterberg, Arle, assignor.)
Aluminum Industrie Aktiengesellschaft. (See Bosshard, Max, assignor.)
American Air Filter Company, Inc. (See Birkholz, Hans E., assignor.)
American Air Filter Co., Inc. (See Dauphineé, George S., assignor.)
American Air Filter Company, Inc. (See Gagen, Charles H., assignor.)
American Anode, Incorporated. (See Darby, Edward H., assignor.)
American Bank Note Company. (See Webster, Albert S., assignor.)
American Blower Corporation. (See Morse, Clark T., assignor.)
American Brass Company, The. (See Damon, John C., assignor.)
American Chain Company, Inc. (See de Forest, Alfred V., assignor.)
American Conduit Corporation. (See Gackenbach, Edward N., assignor.)
American Fork & Hoe Company. (See Bergmann, William H., assignor.)
American Lace Paper Company. (See Huff, Ernest, and Kelding.)
American Machine & Foundry Company. (See Di Ianni, Frank, assignor.)
American Machine & Foundry Company. (See Hawkins, Wilford J., assignor.)
American Optical Company. (See Baker, Nelson M., assignor.)
American Optical Company. (See Goddu, Lloyd W., assignor.)
American Propeller Company. (See Stelzer, William, assignor.)
American Sheet and Tin Plate Company. (See Stockton, Franklin, assignor.)
American Steel and Wire Company, The. (See Phelps, Fred S., assignor.)
American Steel and Wire Company of New Jersey, The. (See Wallsten, Walfred A., assignor.)
American Steel Foundries. (See Floyd, George G., assignor.)
Ames Pump Company. (See Gruman, Lloyd B., assignor.)
Andersen, Björn. (See Walsh, J. F., and Andersen.)
Andersen, Gunnar E., Elmhurst, assignor of two-thirds to J. D. Milne and A. H. Tax, Chicago, Ill. Cylinder boring machine. 1,899,128; Feb. 28.
Anderson, Bernard O., East McKeesport, Pa. Hot air deflector. 1,899,603; Feb. 28.
Anderson, John, Lawrence, Mass. Circuit closing device. 1,899,604; Feb. 28.
Anger, Albert E. (See Einwaechter, F. H., and Anger.)
Anthony, Stanley, Boston, Mass. Customer's token. 1,899,072; Feb. 28.
Arnold, Carl, Nuremberg, Germany. Siren toy with spark producing device. 1,899,073; Feb. 28.
Aro Equipment Corporation, The. (See Eastman, Ivan L., assignor.)
Arste, Henry L., Alhambra, Calif. Doorknob lock. 1,899,380; Feb. 28.
Art Metal Construction Company. (See Ulrich, Charles B., assignor.)
Asbeck, Gustav, Dusseldorf-Rath, Germany. Rolling mill. 1,899,659; Feb. 28.
Associated Apparel Industries, Inc. (See Cunningham, Katherine E., assignor.)
Associated Electric Laboratories, Inc. (See Bellamy, John I., assignor.)
Associated Electric Laboratories, Inc. (See Phebus, William C., assignor.)
Associated Electric Laboratories, Inc. (See Saunders, N. H., Lomax, and Crocker, assignors.)
Associated Electric Laboratories, Inc. (See Tharp, Victor S., assignor.)
Atlantic Refining Company, The. (See Malisoff, William M., assignor.)
Austen, Frederick H., Leicester, assignor to The Veneeray Invisible Heating Company, Limited, London, England. Radiator and the like. 1,899,787; Feb. 28.
Austin, Basil G., West Hartford, assignor to The Austin Organ Company, Hartford, Conn. Organ stop operating mechanism. 1,899,381; Feb. 28.
Austin Organ Company, The. (See Austin, Basil G., assignor.)
Austing, Leonard F. (See Wigley, F. S., and Austing.)
Autogiro Company of America. (See Larsen, Agnew E., assignor.)
Babasin, Yervant H., Vernon, Tex. Pressure spray attachment for toothbrushes. 1,899,301; Feb. 28.
Bähner, Josef, Attendorn in Westfalia, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Apparatus for rolling sheet metal. 1,899,225; Feb. 28.
Bailey, Allen E., jr., Schenectady, N. Y., assignor to General Electric Company. Illumination control system. 1,899,548; Feb. 28.
Bailey, Allen E., jr., Schenectady, N. Y., assignor to General Electric Company. Illumination control system. 1,899,549; Feb. 28.
Bailey, William M., Lynn, Mass., assignor, by mesne assignments, to General Electric Company. High frequency condenser. 1,899,176; Feb. 28.
Baker, Arthur J., assignor to The Willys-Overland Company, Toledo, Ohio. Vehicle bumper. Des. 89,330; Feb. 28.
Baker, Benjamin P., Turtle Creek, and E. G. Kees, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Circuit interrupter. 1,899,605; Feb. 28.
Baker & Company. (See Nudell, Usa, assignor.)
Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Lens strap. Des. 89,328; Feb. 28.
Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Lens strap. Des. 89,329; Feb. 28.

Bakeries Service Corporation. (See Marr, William S., assignor.)
Baldwin, James A., Lawrence, Mass. Animated wind toy. 1,899,788; Feb. 28.
Baldwin, Luther C., deceased, by Rhode Island Hospital Trust Company, administrator, assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I. Shuttle. 1,899,129; Feb. 28.
Ball, John and P. Kotur, Gary, Ind. Building construction. 1,899,450; Feb. 28.
Ball, Guy M. (See Bird, W., and Ball.)
Ball, Harry V., Concord, Mass., assignor to R. Hoe & Co., Inc., New York, N. Y. Web lead for printing machines. 1,899,226; Feb. 28.
Balton, James, assignor to J. Shapiro, Baltimore, Md. Wafer baking machine. 1,899,302; Feb. 28.
Banner Rock Corporation. (See Powell, Edward R., assignor.)
Barbetti, James C., Vineland, N. J. Neckwear. 1,899,789; Feb. 28.
Barclay, McClelland, New York, N. Y. Pedestal. Des. 89,331; Feb. 28.
Barco Manufacturing Co. (See Bard, Francis N., assignor.)
Bard, Francis N., Highland Park, assignor to Barco Manufacturing Co., Chicago, Ill. Hose coupler. 1,899,842; Feb. 28.
Barkeij, Jean A. H., Altadena, Calif. Internal combustion engine. 1,899,130; Feb. 28.
Barker, Percy E., Shaker Heights, assignor to The Cinderella Washing Machine Company, Cleveland, Ohio. Combination washing machine and extractor. 1,899,005; Feb. 28.
Bartach, Frank R., assignor to J. L. McManus, Chicago, Ill., trustee. Golf club head. Des. 89,332; Feb. 28.
Bascom, Henry, assignor of thirty per cent to Roy F. Toelke, St. Louis, Mo. Display apparatus. 1,899,074; Feb. 28.
Bascom, Thomas D., assignor to The Standard Tool Company, Cleveland, Ohio. Tool holder. 1,899,843; Feb. 28.
Basso, Fiorindo, Baltimore, Md. Needle holder for sewing machines. 1,899,303; Feb. 28.
Bastian-Blessing Company, The. (See Stein, Edward P., assignor.)
Batchelder, Charles A., St. Albans, Me. Shoe tree. 1,899,844; Feb. 28.
Bates, Harry C., assignor to Corning Glass Works, Corning, N. Y. Glass coffee pot. 1,899,451; Feb. 28.
Battle Creek Bread Wrapping Machine Co. (See Littlefield, Carl, assignor.)
Bauer, Friedrich, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Dynamo-electric machine. 1,899,741; Feb. 28.
Baxter-Lane Paper Corporation. (See Heath, Tarlton F., assignor.)
Bay, Charles A., Morristown, N. J. Extension ladder. 1,899,742; Feb. 28.
Bayer, Otto, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Dichloromethyl-anthraquinones and making same. 1,899,304; assignor.)
Bayle, Edmond, H. George, and Au Maché, Paris, France. Protection and authentification of articles. 1,899,452; Feb. 28.
Bayne, Charles D., Baytown, Tex., assignor to Standard Oil Development Company. Eliminating water hazard in treating oils. 1,899,389; Feb. 28.
Bear, Paul S., Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Electrical connection. 1,899,254; Feb. 28.
Becker, Adam, assignor of one-fourth to H. Hollingsworth, Kane, Pa. Reel for measuring lines. 1,899,660; Feb. 28.
Bedard, Wilfrid, and J. F. Lockhart, Selkirk, Manitoba, Canada. Automobile jack. 1,899,131; Feb. 28.
Bedell, Cornelia F., Nyack, N. Y. Game or puzzle board. 1,899,177; Feb. 28.
Beebe, Ward L., St. Paul, Minn. Teat dilator. 1,899,492; Feb. 28.
Beekman, Royce A., Schenectady, N. Y., assignor to General Electric Company. Power system. 1,899,550; Feb. 28.
Beers, McWhorter, Laurel, Miss. Ledger sheet. 1,899,453; Feb. 28.
Bell, Edward, jr., and I. K. Dixon, Johnstown, Pa. Tongue switch holding device. 1,899,408; Feb. 28.
Bell, Joseph D., San Francisco, Calif. Exercising machine. 1,899,255; Feb. 28.
Bell Telephone Laboratories, Incorporated. (See Bruce, Edmond, assignor.)
Bell Telephone Laboratories, Incorporated. (See Marrison, Warren A., assignor.)
Bellamy, John I., Brookfield, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Automatic telephone system. 1,899,551; Feb. 28.
Bemis, Albert F., Newton, assignor to Bemis Industries, Incorporated, Boston, Mass. Building construction. 1,899,454; Feb. 28.
Bemis Industries, Incorporated. (See Bemis, Albert F., assignor.)
Bendix Aviation Corporation. (See Norton, Raymond J., assignor.)
Bendix Brake Company. (See Cautley, J. R., and Frank, assignors.)
Bendix Brake Company. (See Thomas, George J., assignor.)
Bendix Brake Company. (See Yost, Karl M., assignor.)
Bendix Research Corporation. (See Houston, George H., assignor.)
Benedict, Charles E., Denver, Colo. Mop holder. 1,899,845; Feb. 28.
Benn, Alonzo N., Chicago, Ill. Apparatus for shaping meat for smoking. 1,899,178; Feb. 28.
Berg, John, Cecil, Wis. Bucket. 1,899,606; Feb. 28.
Berger, Emil J., Hatfield, Pa. Hosiery. Des. 89,333; Feb. 28.
Bergmann, William H., assignor to The American Fork & Hoe Company, Cleveland, Ohio. D-handle. 1,899,662; Feb. 28.
Berry, George P., assignor to General Motors Research Corporation, Detroit, Mich. Slide valve engine. 1,899,743; Feb. 28.
Berry, Louin, Fort Worth, Tex. Article and quantity designator for menus and the like. 1,899,382; Feb. 28.
Berthold, Richard E., Richmond Hill, assignor to Cardinal Products, Inc., New York, N. Y. Lighter. 1,899,008; Feb. 28.
Bettien, Richard. (See Nichols, K., and Bettien.)
Beutel, Robert J., Brooklyn, and P. Peterson, Richmond Hill, N. Y., assignors to International Cigar Machinery Company. Cigar transferring device. 1,899,179; Feb. 28.
Billig, Fred W. (See Scofield, T. J., Johnson, and Billig.)
Bird, William, Buffalo, N. Y., and G. M. Ball, Los Angeles, Calif., assignors to Irving Air Chute Company, Inc., Buffalo, N. Y. Form-fitting parachute pack. 1,899,661; Feb. 28.
Birkenmaier, Theodore. (See Matthews, C. L., and Birkenmaier.)
Birkholz, Hans E., Chicago, Ill., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky. Renewable filter. 1,899,007; Feb. 28.
Bishop, Reginald, London, England. Gearing for steering mechanically propelled vehicles and for other purposes. 1,899,663; Feb. 28.
Björkman, Per O., Tainionkoski, and L. Ivanoff, Abo, assignors to Finska Elektrokemiska Aktiebolaget, Helsingfors, Finland. Treating chlorates for blasting purposes. 1,899,076; Feb. 28.
Black, Lee J. (See Mecom, H., and Black.)
Blair, Paul A., Washington, D. C. Regulator for brake rigging. 1,899,075; Feb. 28.
Blanchard, Loring W., jr. (See Eberlin, L. W., and Blanchard, assignors.)
Bleasdale, Harry. (See Silberrad, O., and Bleasdale.)
Bley, William M., Round Grove, Ill. Lawn-mower attachment. 1,899,305; Feb. 28.
Blocker, Walter A., Mount Vernon, assignor to Lugene Inc., New York, N. Y. Lorgnette. 1,899,664; Feb. 28.
Blom, Axel V., Grosshoechstetten, Switzerland. Pigmentary base product and making the same. 1,899,132; Feb. 28.
Blum, Robert J., Marengo, Ill. Fishing apparatus. 1,899,790; Feb. 28.
Boggs Manufacturing Corporation. (See Ghent, William E., assignor.)
Böhm, Otto, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Receiving system. 1,899,493; Feb. 28.
Bonhôte, Gérald. (See de Montmollin G., Danuser, Bonhôte, and Johner.)
Bookman, Sidney M., New York, N. Y. Scouring device. 1,899,552; Feb. 28.
Booth, James M. (See Davis, P. W., and Booth.)
Boore, Ernst, Copenhagen, Denmark, assignor to General Electric Company. Circuit breaker control system. 1,899,553; Feb. 28.
Bosshard, Max, assignor to Aluminum Industrie Aktiengesellschaft, Neuhausen, Switzerland. Light aluminum alloy. 1,899,133; Feb. 28.
Boston Machine Works Company. (See Osgood, Walter P., assignor.)
Botnen, Glenn R., Gilman, Iowa. Earth conditioning implement. 1,899,306; Feb. 28.
Bottoms, Robert R., assignor to The Girdler Corporation, Louisville, Ky. Bubble tower. 1,899,409; Feb. 28.
Bowman, Delmer Q., Newhall, Calif. Thermostatic controlled mixing head. 1,899,494; Feb. 28.
Boyd, Claud A., Frisco, Tex. Rod joint. 1,899,846; Feb. 28.
Boynton, Arthur J., and P. Zimmermann, assignors to H. A. Brassert & Company, Chicago, Ill. Distributing large bell for blast furnaces. 1,899,307; Feb. 28.
Bradbury, Clifford C., Glencoe, Ill., assignor to Hydraulic Brake Company, Los Angeles, Calif. Slack remover for hydraulic brake systems. 1,899,009; Feb. 28.
Bradley, Milton, Company. (See Klar, Walter H., assignor.)
Brannen, Thomas L., assignor to Brown Company, Berlin, N. H. Drier roll. 1,899,256; Feb. 28.
Brassert, H. A., & Company. (See Boynton, A. J., and Zimmermann, assignors.)
Braun, Philip N., assignor to The Prosperity Company Inc., Syracuse, N. Y. Pressing machine. 1,899,847; Feb. 28.

Breisky, John V., Pittsburgh, and T. Draper, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company. Oil burner control system. 1,899,744; Feb. 28.
Breisky, John V., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Protective apparatus. 1,899,745; Feb. 28.
Breitling, Ernst, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Total taking mechanisms. 1,899,455; Feb. 28.
Brennan, John B., Atlanta, Ga. Return type rake distributor and electric control. 1,899,791; Feb. 28.
Brensinger, Julius, Fairfield, assignor to The Max Ams Chemical Engineering Corporation, Bridgeport, Conn. Winding mechanism. 1,899,227; Feb. 28.
Bridier, Fernand, Paris, France. Textile fabric or similar article. Des. 89,367; Feb. 28.
Briggs & Stratton Corporation. (See Jacobi, Edward N., assignor.)
Brill, J. G., Company, The. (See Rosebrook, Guy L., assignor.)
Bristol Company, The. (See Mabey, Arthur R., assignor.)
British India Corporation Limited, The. (See Peace, Gordon, assignor.)
Brittain, Richard J., jr., Bloomfield, and O. W. Young, East Orange, N. J., assignors to General Motors Corporation, Detroit, Mich. Journal box. 1,899,010; Feb. 28.
Britton, Edgar C., and W. R. Reed, assignors to The Dow Chemical Company, Midland, Mich. Purification of diphenyloxide. 1,899,257; Feb. 28.
Brodsky, Michel, Paris, France. Textile fabric or the like. Des. 89,368; Feb. 28.
Brodsky, Michel, Paris, France. Textile fabric or the like. Des. 89,369; Feb. 28.
Brodsky, Michel, Paris, France. Textile fabric or the like. Des. 89,370; Feb. 28.
Brodsky, Michel, Paris, France. Textile fabric or the like. Des. 89,371; Feb. 28.
Brodsky, Michel, Paris, France. Textile fabric or the like. Des. 89,372; Feb. 28.
Brogden, Ernest M., Santa Monica, and M. L. Trowbridge, Palms, Calif., assignors to Brogdex Company, Winter Haven, Fla. Preparation of fresh fruit for market. 1,899,606; Feb. 28.
Brogdex Company. (See Brogden, E. M., and Trowbridge, assignors.)
Brookman, Richard S., Loughborough, England. Woodworking machine. 1,899,665; Feb. 28.
Brown, Catherine W., Pasadena, Calif. Toy machine gun. Des. 89,378; Feb. 28.
Brown Company. (See Brannen, Thomas L., assignor.)
Brown Company. (See Parker, Howard, assignor.)
Brown Company. (See Richter, G. A., and Ebie, assignors.)
Brown Company. (See Richter, George A., assignor.)
Brown, Herbert L. (See Brown, Herbert S. and H. L.)
Brown, Herbert S. and H. L., Oceanside, Calif. Minnow tackle bucket. 1,899,308; Feb. 28.
Brown, Roy L., Sharpsville, Pa., assignor to Westinghouse Electric & Manufacturing Company. Protective system for transformers. 1,899,746; Feb. 28.
Browne, Lyle W., assignor to The Fisher Governor Company, Marshalltown, Iowa. Stuffing box and bearing unit. 1,899,848; Feb. 28.
Bruce, Edmond, Red Bank, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Directive antenna system. 1,899,410; Feb. 28.
Buchanan, Stephen N., assignor to The Thomas & Betts Co., Elizabeth, N. J. Grounding fitting. 1,899,309; Feb. 28.
Buchner, Max, Hannover-Kleefield, Germany. Producing salts of hydrofluosilicic acid. 1,899,607; Feb. 28.
Budd, Edward G., Manufacturing Co. (See Tarbox, John P., assignor.)
Buehler, Leon, jr., assignor to Frick Company, Waynesboro, Pa. Can filler. 1,899,134; Feb. 28.
Bulvid, Michel D., Stratford, Conn. Advertising device. 1,899,792; Feb. 28.
Bullard Company, The. (See Bullard, Edward C., assignor.)
Bullard, Edward C., Southport, Conn., assignor to The Bullard Company. Metal working. 1,899,608; Feb. 28.
Bullows, Richard J., assignor to The Gear Grinding Company Limited, Handsworth, Birmingham, England. Gear wheel grinding machine. 1,899,793; Feb. 28.
Bunker, Royce S., assignor to W. & J. Knox Net and Twine Company, Baltimore, Md. Tennis net. 1,899,011; Feb. 28.
Burck, Carl F., Buffalo, N. Y. Transfer safety device. 1,899,849; Feb. 28.
Burgess, C. F., Laboratories, Inc. (See Storey, O. W., and Silver, assignors.)
Burnham Chemical Company. (See Burnham, George B., assignor.)
Burnham, George B., Berkeley, assignor to Burnham Chemical Company, Westend, Calif. Obtaining a double salt from a single salt. 1,899,310; Feb. 28.
Burns, Fred J., assignor to The Columbia Mills, Inc., Saginaw, Mich. Blind tilting mechanism. 1,899,180; Feb. 28.
Burton, Kellis H., and H. Kramer, Tulsa, Okla., assignors, by mesne assignments, to The Philip Carey Manufacturing Company. Pipe wrapping machine. 1,899,850; Feb. 28.
Buschman, Abraham L., New York, N. Y. Christmas tree lighting set package. 1,899,666; Feb. 28.
Bush, Albert A., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Interchangeable matrix mold. 1,899,258; Feb. 28.
Bush, Thomas G., jr., Chattanooga, Tenn. Arbor for pipe casting molds. 1,899,228; Feb. 28.
Bustamante, Cesar, New York, assignor to D. Stern, Brooklyn, N. Y. Vending machine. 1,899,667; Feb. 28.
Buttrick, William M., New York, N. Y., assignor to Celluloid Corporation. Convertible display case. 1,899,012; Feb. 28.
Byrne, Lilian. (See De Lukacsevica, Charles, assignor.)
Byron, Jerome P., Lynn, and A. R. Ridderstrom, Nahant, Mass., assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Folding machine and method. 1,899,077; Feb. 28.
Calcott, William S., and W. A. Douglass, Penns Grove, N. J., and O. M. Hayden, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Compounding rubber. 1,899,554; Feb. 28.
Callender's Cable and Construction Company Limited. (See Hill, Harry, assignor.)
Cameron, Alexander S., assignor to W. J. Cameron, Chicago, Ill. Optical instrument. 1,899,135; Feb. 28.
Cameron, William J. (See Cameron, Alexander S., assignor.)
Campbell, Alvin R., San Francisco, Calif. Heel pulley block holding device. 1,899,555; Feb. 28.
Campbell, Louis J., New York, and L. H. Ford and H. G. Rogers, assignors to Irving Air Chute Company, Inc., Buffalo, N. Y. Parachute apparatus. 1,899,668; Feb. 28.
Candor, Robert R., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,899,013; Feb. 28.
Cane, Gordon F., assignor, by mesne assignments, to Thorn Thompson, San Francisco, Calif. Mounting means for foldable roll-about beds. 1,899,851; Feb. 28.
Carbide & Carbon Chemicals Corporation. (See Clapsadle, Leo J., assignor.)
Cardinal Products, Inc. (See Berthold, Richard E., assignor.)
Carey, Philip, Manufacturing Company, The. (See Burton, K. H., and Kramer, assignors.)
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Caro, Nikodem, Berlin-Dahlem, A. R. Frank, Berlin-Halensee, R. Wendlandt, and T. Fischer, Piesterits, near Wittenberg, Germany. Refrigeration. 1,899,259; Feb. 28.
Carolus, Peter J., St. Joseph, Mo. Lawn mower. 1,899,181; Feb. 28.
Carroll, Stewart J. (See Smith, H. B., and Caroll.)
Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing paraldehyde. 1,899,078; Feb. 28.
Carson, Benjamin R., Collingswood, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Turntable drive. 1,899,669; Feb. 28.
Case, J. I. Company. (See Rutter, Alvah E., assignor.)
Case, John L., Garden City, and B. Kreuzer, Rockaway Park, N. Y., assignors to Radio Corporation of America. Moving picture screen. 1,898,995; Feb. 28.
Cassell, John A., assignor to The Sunterbach Company, Adrian, Mich. Article case. 1,899,311; Feb. 28.
Cate, Malcolm S., Waltham, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Heel trimming machine. 1,899,747; Feb. 28.
Caughey, Reed J., Schenectady, N. Y., assignor to General Electric Company. Elastic fluid turbine. 1,899,556; Feb. 28.
Cautley, John R., and F. C. Frank, assignors to Bendix Brake Company, South Bend, Ind. Brake. 1,899,609; Feb. 28.
Cavin, Helen A. S. (See Session, Willet A., assignor.)
Celaya, Genaro, Los Angeles, Calif. Dish washing machine. 1,899,495; Feb. 28.
Celluloid Corporation. (See Buttrick, William M., assignor.)
Celluloid Corporation. (See Petersen, Arthur E., assignor.)
Celluloid Corporation. (See Walsh, James F., and Andersen, assignors.)
Celluloid Corporation. (See Walsh, J. F., and Ximenes, assignors.)
Chadwick, Lee S., Shaker Heights, assignor to Perfection Stove Company, Cleveland, Ohio. Temperature control means for refrigeration compartments. 1,899,852; Feb. 28.
Chain Belt Company. (See Shafer, Samuel, jr., assignor.)
Chalupa, Joseph C., Berwyn, Ill. Safety window air adjuster. 1,899,853; Feb. 28.
Chambers, Dudley E. (See Snyder, W. B., and Chambers.)
Champion Fibre Company, The. (See Miller, Clarence E., assignor.)
Chariot, René J. G., assignor to Thibaud Gibbs & Cie., Paris, France. Shaving soap case. 1,899,557; Feb. 28.
Charnin, Hyman, New York, N. Y. Booth for restaurants. Des. 89,384; Feb. 28.

Chase, George C., South Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Calculating machine. 1,898,996; Feb. 28.
Chater, William, Denver, Colo. Stabilizing device. 1,899,079; Feb. 28.
Chemical Holding Corporation. (See Richter, William F., assignor.)
Chemical Treatment Company. (See Fink, C. G., and Eash, assignors.)
Cheney Brothers. (See George, Robert, assignor.)
Cheney Brothers. (See Schey, Robert, assignor.)
Chicago Carton Company. (See Richardson, Ralph R., assignor.)
Chicago Pneumatic Tool Company. (See Reed, Clarence E., assignor.)
Christian, David A., and E. W. Palmer, assignors to Siemens Brothers & Company, Limited, London, England. Telephone system. 1,899,014; Feb. 28.
Chromy, Ben J., Hopkins, Minn., assignor to Wired Radio, Inc., New York, N. Y. Electrical transformer. 1,899,670; Feb. 28.
Cincinnati Bickford Tool Company. (See Klausmeyer, David C., assignor.)
Cincinnati Time Recorder Company, The. (See Streckfuss, Elmer G., assignor.)
Cinderella Washing Machine Company, The. (See Barker, Percy E., assignor.)
Clapsadle, Leo J., Buffalo, N. Y., assignor to Carbide & Carbon Chemicals Corporation. Foam prevention agent. 1,899,610; Feb. 28.
Clark, Earl K., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Thermostatic switch. 1,899,671; Feb. 28.
Clark Equipment Company. (See Mogford, E. C., and Spatta, assignors.)
Clark, Ernest E., Kansas City, Mo. Inkstand. 1,899,182; Feb. 28.
Clark, George D., Sharpsville, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fluid-flow indicator. 1,899,672; Feb. 28.
Clark, Stuart B., Riverton, assignor to United States Pipe & Foundry Company, Burlington, N. J. Centrifugal pipe casting apparatus. 1,899,383; Feb. 28.
Claus, Philip S., Detroit, Mich. Engine starting device. 1,899,229; Feb. 28.
Clements, Arthur L., Chicago, Ill., assignor to Dry-Zero Corporation, Wilmington, Del. Material-handling apparatus. 1,899,260; Feb. 28.
Cochran, Lee, Anderson, S. C. Burial vault. 1,899,312; Feb. 28.
Cohn, Alfred, Berlin-Charlottenburg, and F. Dausinger, Berlin-Treptow, Germany, assignors to General Electric Company. Thermal responsive device. 1,899,558; Feb. 28.
Coil, Grover C. (See Wheelbarger, A. S., and Coil.)
Collins, Neil R., Redwood City, assignor to Federal Telegraph Company, San Francisco, Calif. Radio device. 1,899,136; Feb. 28.
Columbia Mills, Inc., The. (See Burns, Fred J., assignor.)
Condit Electrical Manufacturing Corporation. (See Ainsworth, Chester D., assignor.)
Condit Electrical Manufacturing Corporation. (See Jansson, Gustav, assignor.)
Condit Electrical Manufacturing Corporation. (See Jansson, Gustav E., assignor.)
Condor Company. (See Foster, Walter F., assignor.)
Conlon, Thomas A. (See Goebert, E. C., and Conlon.)
Continental-Diyco Company. (See Mauer, E. R., and Ferguson, assignors.)
Continental Motors Corporation. (See Fink, James O., assignor.)
Continental Motors Corporation. (See Meyer, Andre J., assignor.)
Continental Motors Corporation. (See Taylor, Edward S. and C. F., assignors.)
Cooley, Leslie W., and D. R. Ward, Denver, Colo. Hair drier. 1,899,261; Feb. 28.
Cooper, Albert N., Santa Ana, assignor to Jesse A. Mackey, Placentia, Calif. Two pedal coaster. 1,899,854; Feb. 28.
Coquette, André, Essonnes, France. Button fastening. 1,899,313; Feb. 28.
Corbishley, Charles H., Glen Rock, N. J., assignor to Foster Wheeler Corporation, New York, N. Y. Pulverizing apparatus and the like. 1,899,015; Feb. 28.
Cornell, Edward S., jr., Watertown, Conn. Receptacle for lip sticks. 1,899,748; Feb. 28.
Corning Glass Works. (See Bates, Harry C., assignor.)
Corning Glass Works. (See Smith, Rowland D., assignor.)
Corning Glass Works. (See Teague, Walter D., assignor.)
Coulter, John H. (See Smith, D. R. C., and Coulter.)
Coupard, Christian, Paris, France. Dust separator. 1,899,794; Feb. 28.
Crabbs, Herbert J., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Disconnecting switch mechanism. 1,899,384; Feb. 28.
Crawford McGregor and Canby Company. (See Hampton, William C., assignor.)
Crawford, Thomas, Bristol, England. Container and shipping package. 1,899,673; Feb. 28.
Crichton, Leslie N. (See Evans, R. D., Forescue, Crichton, MacNeill, Griscom, and Wagner.)
Crocker, Thomas F. (See Saunders, N. H., Lomax, and Crocker.)
Crompton & Knowles Loom Works. (See Kerr, Thomas, assignor.)
Crompton & Knowles Loom Works. (See Payne, Oscar V., assignor.)
Crompton & Knowles Loom Works. (See Wakefield, Walter H., assignor.)
Crowell, Clarence W., Beverly Hills, Calif. Glass mix for opaque containers and making the same. 1,899,230; Feb. 28.
Crown Cork & Seal Company. (See Parker, Cecil J., assignor.)
Crown Cork & Seal Company, Inc. (See Warth, Albin H., assignor.)
Crume, William H., Dayton, Ohio, assignor to The William MacGlashan Corporation, Tecumseh, Mich. Making faced concrete products. 1,899,187; Feb. 28.
Cruz, Edward M., Alpine, Calif. Road pavement joint cleaning and finishing tool. 1,899,183; Feb. 28.
Cube Steak Machine Company. (See Deckert, Oscar R., assignor.)
Culmer, Thaddeus W., assignor to Lincoln Oil Refining Company, Robinson, Ill. Purification of petroleum and hydrocarbon compounds. 1,899,314; Feb. 28.
Cunningham, Katherine E., assignor to Associated Apparel Industries, Inc., Chicago, Ill. Foundation garment. 1,899,890; Feb. 28.
Curnen, Bernard V. (See Gray, John W., assignor.)
Curtin, Leo P., Cranbury, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Production of ferric oxalate. 1,899,674; Feb. 28.
Curtis Manufacturing Company. (See Ackerman, Frank, assignor.)
Curtis Manufacturing Company. (See Steedman, Edwin H., assignor.)
Daimler-Benz Aktiengesellschaft. (See Steinecke, Fritz, assignor.)
Daisy Manufacturing Company. (See Lefever, Charles F., assignor.)
Dalgliesh, Herbert V., assignor to Research & Development Corporation, Atlanta, Ga. Heat exchange device. 1,899,080; Feb. 28.
Damon, John C., Boston, Mass., assignor to The American Brass Company, Waterbury, Conn. Machine for making wire cable. 1,899,559; Feb. 28.
D'Angelo, Louis. (See Master, Thomas A.)
Danuser, Jacob. (See de Montmollin, G., Danuser, Bonhôte, and Johner.)
Darby, Cornelia L., executrix. (See Darby, Edward H.)
Darby, Edward H., deceased, by C. L. Darby, executrix, Rome, assignor to American Anode, Incorporated, New York, N. Y. Dehydrating rubber deposited from aqueous dispersions. 1,899,016; Feb. 28.
Dashner, William W., assignor to R-B-M Manufacturing Co., Logansport, Ind. Circuit breaker. 1,899,675; Feb. 28.
Dauphinee, George S., Brooklyn, N. Y., assignor to American Air Filter Co. Inc., Louisville, Ky. Apparatus for filtering air. 1,899,017; Feb. 28.
Dauphinee, George S., Brooklyn, N. Y., assignor to American Air Filter Company, Louisville, Ky. Filter. 1,899,018; Feb. 28.
Dausinger, F. (See Cohn, A., and Dausinger.)
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Ironing press and workholder. 1,899,891; Feb. 28.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricant spraying apparatus. 1,899,262; Feb. 28.
Davis Paul W., and J. M. Booth, Kansas City, Mo. Package holder. 1,899,795; Feb. 28.
Davis, Robert H., London, England. Submarine escape apparatus. 1,899,355; Feb. 28.
Davis, William H. H. (See D'Orleans, Robert, assignor.)
Day, Charles T., Bradley Beach, N. J. Automatic railway crossing gate. 1,899,496; Feb. 28.
Day, Fred J., Los Angeles, Calif. Air conditioning means. Re18,755; Feb. 28.
Day, J. H., Company, The. (See Kirchhoff, William G., assignor.)
Day, J. H., Company, The. (See Schiff, Sigmund, assignor.)
Deane, George A., Catskill, N. Y. Joint clearer. 1,899,231; Feb. 28.
Deane, Gerard C., Yonkers, N. Y. Combined spool and container. 1,899,796; Feb. 28.
De Baufre, William L. (See Zouck, G. H., De Baufre.)
Deckert, Oscar R., Brookline, assignor to Cube Steak Machine Company, Boston, Mass. Implement for cleaning disk knives. 1,899,433; Feb. 28.
De Forest, Alfred V., Southport, Conn., assignor to American Chain Company, Inc. Eliminating internal stresses in wire. 1,899,138; Feb. 28.
Dehart, Everett E., Omaha, Nebr. Oil burner retort. 1,899,315; Feb. 28.
Dehuff, Walter F., Glen Rock, Pa. Greasing brush. 1,899,316; Feb. 28.
Delco Products Corporation. (See Teeter, Wilford H., assignor.)
Delco-Remy Corporation. (See Hardman, F. J., and Spruegel, assignors.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)

Delco-Remy Corporation. (See Phelps, A. W., and Kaegi, assignors.)
De Lukacsevics, Charles, assignor to Lilian Byrne, Detroit, Mich. Friction element. 1,899,239; Feb. 28.
De Montmollin, Guillaume, J. Danuser, G. Bonhôte, and H. Johner, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Unsulphonated diacylated diamines and making same. 1,899,856; Feb. 28.
Denney, Courtlandt F., assignor to Foster Wheeler Corporation, New York, N. Y. Oil fractionating. 1,899,081; Feb. 28.
Dennis, John W. (See Sibson, W. W., and Dennis.)
Den Outer, Marius, The Hague, Netherlands. Shorthand typewriting or stenographic machine. 1,899,232; Feb. 28.
Derby, Ira H., assignor to P. C. Reilly, Indianapolis, Ind. Electrothermic process of treating high resistance material. 1,899,233; Feb. 28.
De Saussure Equipment Company. (See De Saussure, William P., jr., assignor.)
De Saussure, William P., jr., Englewood, N. J., assignor to De Saussure Equipment Company, West New York, N. J. Table. 1,899,082; Feb. 28.
De Simo, Martin, Berkeley, assignor to Shell Development Company, San Francisco, Calif. Producing hydrogen and carbon monoxide. 1,899,184; Feb. 28.
D'Este, John N., Milo, M., and W. R. Tower, Newton, assignors to Jiffy Pad & Excelsior, Inc., Boston, Mass. Heat-insulated paper bag and making the same. 1,899,892; Feb. 28.
Detroit Harvester Company. (See Horste, Joseph E., assignor.)
Dettling, Joseph J., assignor to The General Tire & Rubber Company, Akron, Ohio. Repairing tire casings. 1,899,676; Feb. 28.
Deutsch, Leo, Beaver, Pa. Apparatus for cleaning containers. 1,899,019; Feb. 28.
Deutsch, Simon, assignor to The Electric Sprayit Company, South Bend, Ind. Spraying device. 1,899,749; Feb. 28.
Devereaux, William C., Detroit, Mich. Doorlatch construction. 1,899,317; Feb. 28.
De Vou, James L., Pittsburgh, Pa. Erection apparatus. 1,899,456; Feb. 28.
De Werth, Charles H., Bronx, N. Y. Closure fastener operator. 1,899,234; Feb. 28.
Diamond Machine Co. (See Stratton, Frank E., assignor.)
Diamond Power Specialty Corporation. (See Snow, Norman L., assignor.)
Dieterich Corporation, The. (See Dieterich, Ludwig M., assignor.)
Dieterich, Ludwig M., Newark, N. J., assignor to The Dieterich Corporation, New York, N. Y. Photographic production. 1,899,139; Feb. 28.
Di Ianni, Frank, Brooklyn, N. Y., assignor to American Machine & Foundry Company. Paper uniting device for continuous rod cigarette machines. 1,899,185; Feb. 28.
Dixon, Arnold M. (See Mason, C. E., and Dixon.)
Dixon, Edna L., assignor to Speed-Up Geometry Ruler Co., Inc., Baltimore, Md. Educational drawing instrument. 1,899,318; Feb. 28.
Dixon, Israel K. (See Bell, Edward, jr., assignor.)
Dobeckmun Company, The. (See Munson, John M., assignor.)
Doherty, Henry L., New York, N. Y. Developing oil fields. 1,899,497; Feb. 28.
Dominion Forge & Stamping Company Limited. (See Waldron, Russell E., assignor.)
Donaldson, William. (See Mackey, T. O., and Donaldson.)
Donnellan, Edward P., assignor of one-third to J. J. Donnellan and one-third to J. L. Donnellan, Brooklyn, N. Y. Spurious coin separator. 1,899,560; Feb. 28.
Donnellan, James L., et al. (See Donnellan, Edward P.)
Donnellan, John J., et al. (See Donnellan, Edward P., assignor.)
D'Onofrio, Torino S., Watertown, Mass. Unit conveyer for concrete product machines. 1,899,611; Feb. 28.
D'Orleans, Robert, assignor to William H. H. Davis, San Francisco, Calif. Hair waving device. Re18,749; Feb. 28.
Dorman, Joseph W. O., Houston, Tex. Grapple. 1,899,750; Feb. 28.
Dorsey, Herbert G., Washington, D. C., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Telephone receiver. 1,899,561; Feb. 28.
Dorsey, John J., Ecoole, British Columbia, Canada. Auxiliary propulsive device for fishing boats. 1,899,319; Feb. 28.
Douglass, William A. (See Calcott, W. S., Douglass, and Hayden.)
Dow Chemical Company, The. (See Britton, E. C., and Reed, assignors.)
Dow Chemical Company, The. (See Winston, Arthur W., assignor.)
Draper, Thomas. (See Breisky, J. V., and Draper.)
Dravo Contracting Company, The. (See Miller James S., assignor.)
Drexl, Martin, Kaldenkirchen, Germany. Propeller arrangement. 1,899,434; Feb. 28.
Drueding, Bernhard J., Philadelphia, Pa. Hat. 1,899,020; Feb. 28.
Druyvesteyn, Marl J., Eindhoven, Netherlands, assignor to Radio Corporation of America. Glow lamp circuit. 1,899,021; Feb. 28.
Dry-Zero Corporation. (Se Clements, Arthur L., assignor.)
Dubos, Jean L., Neuilly sur Seine, France. Movable top panel for vehicles. 1,899,857; Feb. 28.
Duisdieker, Carl, New York, N. Y. Cutting fabrics. 1,899,022; Feb. 28.
Dumm, Edwin J. (See Hook, A. U., and Dumm.)
Duncan Electric Manufacturing Company. (See Green, Stanley S., assignor.)
Dunkel, Manfred. (See Mark, H., Dunkel, and Roell.)
Dunlop, James, Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company. Elevator guide. 1,899,751; Feb. 28.
Dunn, John S., Norton-on-Tees, assignor to Imperial Chemical Industries, Limited, London, England. Removal of arsenic from sulphur. 1,899,562; Feb. 28.
Dunning, William E., assignor to The McCaskey Register Company, Alliance, Ohio. Dual cash register. 1,899,083; Feb. 28.
Dunning, William E., assignor to The McCaskey Register Company, Alliance, Ohio. Rotary indicator. 1,899,140; Feb. 28.
Du Pont, E. I., de Nemours & Company. (See Calcott, W. S., Douglass, and Hayden, assignors.)
Du Pont, James Q., Johnstown, Pa. Fluid flow controlling mechanism. 1,899,235; Feb. 28.
Dupuy, Louis E., assignor to The Lamson Company, Syracuse, N. Y. Conveyer mechanism. 1,899,320; Feb. 28.
Dvornikoff, Michael N., assignor to Monsanto Chemical Works, St. Louis, Mo. Manufacture of mixed alkyl phenyl esters. 1,899,919; Feb. 28.
Dyer, Lloyd W., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit interrupter. 1,899,612; Feb. 28.
Earl, Schuyler H., assignor to Gleason Works, Rochester, N. Y. Gear cutter. 1,899,023; Feb. 28.
Early, Rupert N., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn. Dynamo-electric machine. 1,899,797; Feb. 28.
Early, Rupert N., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn. Dynamo-electric machine. 1,899,858; Feb. 28.
Early, Rupert N., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn. Dynamo-electric machine. 1,899,859; Feb. 28.
Early, Thomas F., assignor to Horn & Hardart Baking Co., Philadelphia, Pa. Doorcheck for vending machines. 1,899,024; Feb. 28.
Eash, Ralph D. (See Fink, C. G., and Eash.)
Eastman, Ivan L., assignor to The Aro Equipment Corporation, Bryan, Ohio. Grease gun head and reservoir construction. 1,899,798; Feb. 28.
Eastman Kodak Company. (See Carroll, Stewart J., assignor.)
Eastman Kodak Company. (See Eberlin, L. W., and Blanchard, assignors.)
Eastman Kodak Company. (See Smith, Henry B., assignor.)
Eastman Kodak Company. (See Smith, H. B., and Carroll, assignors.)
Eaton, George R., Oak Park, and G. Kiner, assignors to Kellogg Switchboard & Supply Company, Chicago, Ill. Telephone system. 1,899,084; Feb. 28.
Eaton, John, Schenectady, N. Y., assignor to General Electric Company. Oil burner control. 1,899,563; Feb. 28.
Ebaugh, Irvin A. (See Hitch, A. R., and Ebaugh.)
Eberlin, Leon W., Rochester, N. Y., and L. W. Blanchard, jr., Stoneham, Mass., assignors to Eastman Kodak Company, Rochester, N. Y. Cellulose acetate lacquer containing chlorinated rosin. 1,899,186; Feb. 28.
Eble, Elwood. (See Richter, G. A., and Eble, assignors.)
Eckland Bros. Company. (See Eckland, P. S., and Ryden, assignors.)
Eckland, Peter S., and G. Ryden, assignors to Eckland Bros. Company, Minneapolis, Minn. Brake for driven and steered wheels. 1,899,187; Feb. 28.
Eclipse Machine Company. (See Lansing, Raymond P., assignor.)
Edwards, James H., Passaic, N. J. Welded bracket connection. 1,899,799; Feb. 28.
Eells, Milton M., Chicago, Ill., assignor, by mesne assignments, to W. T. Lewis, Racine, Wis. Radio receiving system. 1,899,025; Feb. 28.
Egan, Milo H., Franklin, Idaho. Illuminating means. 1,899,085; Feb. 28.
Eggleston, Clarence F., and D. D. Gutekunst, Jackson, Mich. Phonograph. 1,899,141; Feb. 28.
Eilers, Henry G. (See Roudebush, K. B., and Eilers.)
Einwaechter, Frederick H., jr., West Halethorpe, and A. E. Anger, Garland Park, Md. Tell-tale flexible staybolt. 1,899,457; Feb. 28.
Electric Controller & Mfg. Company, The. (See Phillips, Robert M., assignor.)
Electric Machinery Manufacturing Company. (See Early, Rupert N., assignor.)
Electric Sprayit Company, The. (See Deutsch, Simon, assignor.)
Elliott, William C., Modesto, Calif. Bed and bedpan combination. 1,899,263; Feb. 28.
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Paper product sized with petroleum hydrocarbons and making the same. 1,899,086; Feb. 28.
Ellis-Foster Company. (See Ellis, Carleton, assignor.)

Ellis, Robert H., assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Control system. 1,899,677; Feb. 28.

Embossing Company, The. (See Fletcher, Walter J., assignor.)

Emmer, Hans. (See Lüttringhaus, A., Neresheimer, and Emmer.)

Enterprise Manufacturing Company, The. (See Adams, Walter L., assignor.)

Enterprise Manufacturing Company, The. (See Pfueger, Charles T., assignor.)

Erickson, Charles, Kirkland Lake, Ontario, Canada. Drill shank and bit. 1,899,458; Feb. 28.

Erickson, John E., assignor to Madison-Kipp Corporation, Madison, Wis. Governor for fluid motors. 1,899,142; Feb. 28.

Ericson, Eric R. (See Kibele, O. B., and Ericson.)

Ernst, Walter, H. F. MacMillin, and R. Thoreson, assignors to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Hydraulic press. 1,899,678; Feb. 28.

Estorff, Walther, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. High voltage bushing. 1,899,752; Feb. 28.

Evans, Cadwallader, jr., Scranton, Pa. Conveyer. 1,899,893; Feb. 28.

Evans, Robert D., Swissvale, C. L. Fortescue, Pittsburgh, Pa., L. N. Crichton, East Orange, N. J., J. B. MacNeill, Wilkinsburg, and S. B. Griscom and C. F. Wagner, Swissvale, Pa., assignors to Westinghouse Electric and Manufacturing Company. Stable power system with high-speed breakers and relays. 1,899,613; Feb. 28.

Eversharp Lawnmower Company. (See Gratiot, Chester A., assignor.)

Exact Weight Scale Company, The. (See Fletcher, Edward, assignor.)

Fairgrieve, Archibald, Toronto, Ontario, Canada. Washing machine. 1,899,459; Feb. 28.

Falls, William A., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Spring structure. 1,899,188; Feb. 28.

Fardella, Jack. (See Pisano, S., and Fardella.)

Faries, Robert, St. Davids, Pa. Track rail spike. 1,899,264; Feb. 28.

Faries, Robert, St. Davids, Pa. Rail joint. 1,899,265; Feb. 28.

Faultless Caster Company. (See Noelting, Clarence B. and W. H., assignors.)

Faultless Caster Company. (See Noelting, William H., assignor.)

Fedeler, John H., New York, N. Y. Separator. 1,899,498; Feb. 28.

Federal Products Corporation. (See Litterio, Caesar B., assignor.)

Federal Telegraph Company. (See Collins, Neil R., assignor.)

Feightner, Lewis E., Elida, Ohio. Railway vehicle truck. 1,898,997; Feb. 28.

Feisenthal, Gustav E., New York, N. Y. Money clip. 1,899,753; Feb. 28.

Ferguson, Donald M. (See Maurer, E. R., and Ferguson.)

Ferguson, Howard C. (See Jones, Claudius V., assignor.)

Ferguson, William F., Candler, N. C. Window fixture. 1,899,800; Feb. 28.

Ferree, Clarence E. and G. R., Baltimore, Md. Lectern lighting unit. 1,899,499; Feb. 28.

Ferree, Gertrude R. (See Ferree, Clarence E. and G. R.)

Fessenden, Reginald A., Chestnut Hill, Mass. Modulating electrical energy by light impulses. 1,899,026; Feb. 28.

Field, Oscar S., assignor to General Railway Signal Company, Rochester, N. Y. Circuit controller. 1,899,894; Feb. 28.

Fillkwik Company. (See Shields, Andrew G., assignor.)

Fink, Colin G., New York, N. Y., and R. D. Eash, East Orange, N. J., assignors to Chemical Treatment Company, Inc., New York, N. Y. Barrel plating apparatus and process. 1,899,679; Feb. 28.

Fink, James O., assignor to Continental Motors Corporation, Detroit, Mich. Engine. 1,899,189; Feb. 28.

Finley, Dozier, Berkeley, assignor to The Paraffine Companies, Inc., San Francisco, Calif. Covering structure. 1,899,885; Feb. 28.

Finska Elektrokemiska Aktiebolaget. (See Björkman, P. O., and Ivanoff, assignors.)

Firebar Corporation. (See Thompson, James S., assignor.)

Firestone Tire & Rubber Company, The. (See Bush, Albert A., assignor.)

Firestone Tire & Rubber Company, The. (See Robertson, Isaac W., assignor.)

Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Expansion joint. 1,899,435; Feb. 28.

Fischer, Herbert G. M. (See Lebo, R. B., and Fischer.)

Fischer, Thomas. (See Caro, N., Frank, Wendlandt, and Fischer.)

Fishburn, Otto E., Muncie, assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind. Overrunning clutch mechanism. 1,899,500; Feb. 28.

Fisher Governor Company, The. (See Browne, Lyle W., assignor.)

Fitch, Benjamin F., Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del. System and apparatus for handling freight. Re18,752; Feb. 28.

Fitz Power, Richard, Hampstead, London, England. Electrical connecter. 1,899,824; Feb. 28.

Fletcher, Edward, assignor to The Exact Weight Scale Company, Columbus, Ohio. Weighing scale. 1,899,436; Feb. 28.

Fletcher, Walter J., assignor to The Embossing Company, Albany, N. Y. Stopper-top and making the same. 1,899,411; Feb. 28.

Flosi, Florio G., Chicago, Ill. Dispensing powder puff. 1,899,386; Feb. 28.

Flower, Lorenzo F., Boulder, Colo. Game apparatus. 1,899,860; Feb. 28.

Floyd, George G., assignor to American Steel Foundries, Chicago, Ill. Side frame. Re18,754; Feb. 28.

Foerster, Ernst, Glogau, Germany. Time recording device. 1,899,236; Feb. 28.

Fogelin, Carl O. V., Paris, France. Permanent hair waving or curling device. 1,899,190; Feb. 28.

Ford, Ira D., Roseland, Ontario, Canada, assignor to Universal Button Fastening & Button Company, Detroit, Mich. Button. 1,899,680; Feb. 28.

Ford, Lyman H. (See Campbell, L. J., Ford, and Rogers.)

Forshee, Frank F., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Vertical toaster. 1,899,681; Feb. 28.

Fortescue, Charles LeG. (See Evans, R. D., Fortescue, Crichton, MacNeill, Griscom, and Wagner.)

Foster Brothers Manufacturing Company. (See Foster, William B., assignor.)

Foster, Walter F., San Francisco, Calif., assignor to Condor Company. Doorcheck. 1,899,266; Feb. 28.

Foster Wheeler Corporation. (See Corbishley, Charles H., assignor.)

Foster Wheeler Corporation. (See Denney, Courtland F., assignor.)

Foster, William B., assignor to Foster Brothers Manufacturing Company, Utica, N. Y. Spring structure. 1,899,087; Feb. 28.

Foster, William H., Elkhart, Ind. Speed control means. 1,899,027; Feb. 28.

Fox, Martin, assignor to The Seng Company, Chicago, Ill. Folding bed. 1,899,412; Feb. 28.

Foxboro Company, The. (See Mason, C. E., and Dixon, assignors.)

Frahm, Carl A., Massillon, and E. W. Riemenschneider, assignors to The Union Metal Manufacturing Company, Canton, Ohio. Tube manufacture. 1,899,143; Feb. 28.

Frank, Albert R. (See Caro, N., Frank, Wendlandt, and Fischer.)

Frank, Frederick C. (See Coutley, J. R., and Frank.)

Free Wheeling Patents Corporation. (See Fishburn, Otto E., assignor.)

Free Wheeling Patents Corporation. (See Lyman, Kenneth E., assignor.)

Freedman, Jack E. (See Karnofsky, J. M., and Freedman.)

Freeman, Ernest B., Newton, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Heat exchange apparatus. 1,899,191; Feb. 28.

Frey, Charles A., Kansas City, Mo. Lawn mower. 1,899,564; Feb. 28.

Frick Company. (See Buehler, Leon, jr., assignor.)

Fried. Krupp Aktiengesellschaft. (See Breitling, Ernst, assignor.)

Fried. Krupp Grusonwerk Aktiengesellschaft. (See Mertz, Fritz, assignor.)

Frigidaire Corporation. (See Candor, Robert R., assignor.)

Frink Corporation, The. (See Spencer, William H., assignor.)

Fritz, Howard E., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Acid vat. 1,899,413; Feb. 28.

Frye, Howard E., Lyman, Nebr. Coin-controlled mechanism. 1,899,321; Feb. 28.

Fuller, Clarence N., Tonawanda, assignor to H. W. Hilliard Co., Buffalo, N. Y. Machine for affixing opening threads to envelopes. 1,899,267; Feb. 28.

Fulton Iron Works Company. (See Kopke, E. W., and Struebig, assignors.)

Funk, Charles J., assignor to Soreng-Manegold Company, Chicago, Ill. Water softener casing. Des. 89,335; Feb. 28.

Gabriel, Wilhelm, Berlin-Spandau, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Cable for communication circuits. 1,899,501; Feb. 28.

Gackenbach, Edward N., Jenkintown, Pa., assignor to American Conduit Corporation, Wilmington, Del. Tile. 1,899,861; Feb. 28.

Gaertner, William, Chicago, Ill. Precision instrument. 1,899,192; Feb. 28.

Gagen, Charles H., Montclair, N. J., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky. Air filter. 1,899,028; Feb. 28.

Gagen, Charles H., Montclair, N. J., assignor to American Air Filter Company Inc., Louisville, Ky. Self-sealing filter. 1,899,029; Feb. 28.

Gagné, Augustin. (See Lawson, R. H., and Gagné.)

Gagnier, George E. (See Place, Bion C., assignor.)

Galbreath, Frank R. (See Pearne, F. Y., and McClintock, assignors.)

Gear Grinding Company Limited, The. (See Bullows, Richard J., assignor.)

Gear Grinding Machine Company, The. (See Ward, Frederick A., assignor.)

Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Adjustable inductance system. 1,899,144; Feb. 28.

Geer, William C., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Bead for pneumatic tire casings and making the same. 1,899,088; Feb. 28.

Gemmer Manufacturing Company. (See Hammond, Charles F., jr., assignor.)

General Aniline Works, Inc. (See Bayer, Otto, assignor.)

General Aniline Works, Inc. (See Lüttringhaus, A., Neresheimer, and Emmer, assignors.)

General Aniline Works, Inc. (See Neresheimer, H., and Schneider, assignors.)

General Aniline Works, Inc. (See Zahn, K., Koch, and Weinand, assignors.)

General Electric Company. (See Bailey, Allen E., jr.)

General Electric Company. (See Bailey, William M., assignor.)

General Electric Company. (See Beekman, Royce A., assignor.)

General Electric Company. (See Borre, Ernst, assignor.)

General Electric Company. (See Caughey, Reed J., assignor.)

General Electric Company. (See Cohn, A., and Dausinger, assignors.)

General Electric Company. (See Eaton, John, assignor.)

General Electric Company. (See Hofmann, Walter, assignor.)

General Electric Company. (See Howe, Goodwin H., assignor.)

General Electric Company. (See Kellogg, Edward W., assignor.)

General Electric Company. (See La Roque, Harold B., assignor.)

General Electric Company. (See Lynn, Lambert H., assignor.)

General Electric Company. (See Navias, Louis, assignor.)

General Electric Company. (See Quesseque, Jean, assignor.)

General Electric Company. (See Rohlfs, Harry C., assignor.)

General Electric Company. (See Segar, Harry D., assignor.)

General Electric Company. (See Simon, Hellmut, assignor.)

General Electric Company. (See Snyder, W. B., and Chambers, assignors.)

General Electric Company. (See Stein, Herbert, assignor.)

General Electric Company. (See Towne, Harold M., assignor.)

General Electric Company. (See Warner, Herbert T.)

General Motors Research Corporation. (See Berry, George P., assignor.)

General Motors Corporation. (See Brittain, R. J., jr., and Young, assignors.)

General Motors Corporation. (See McCuen, Charles L., assignor.)

General Railway Signal Company. (See Field, Oscar S. assignor.)

General Railway Signal Company. (See Morgan, Wesley V., assignor.)

General Rubber Company. (See Teague, Merwyn C., assignor.)

General Tire & Rubber Company, The. (See Dettling, Joseph J., assignor.)

George, Enoch, jr. (See Regan, W. J., and George.)

George, Henri. (See Bayle, E., George, and Maché.)

George, Robert, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 89,336; Feb. 28.

Ghent, William E., assignor to Boggs Manufacturing Corporation, Atlanta, N. Y. Wire bending machine. 1,899,437; Feb. 28.

Gibbs, Thibaud & Cie. (See Charlot, R. J. G., assignor.)

Gilchrist, Harry R. (See Miller, J. L., and Gilchrist.)

Gillican-Chipley Company. (See Hitch, A. R., and Ebaugh, assignors.)

Girard Smelting & Refining Company. (See Hanak, Albert, assignor.)

Girdler Corporation, The. (See Bottoms, Robert R., assignor.)

Glandt, Claus W., Bennington, Nebr. Folding table. 1,898,098; Feb. 28.

Glashuttenwerke vorm J. Schreiber & Neffen. (See Kreidl, Norbert, assignor.)

Glass, Perley R., Salem, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Folding machine. 1,899,089; Feb. 28.

Gleason Works. (See Earl, Schuyler H., assignor.)

Glidden, Alfred A., and T. M. Knowland, Watertown, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Molded pac type boot and constructing same. 1,899,754; Feb. 28.

Globe Automatic Sprinkler Company. (See Rowley, Arthur C., assignor.)

Globe Machine & Stamping Company, The. (See Green, Lee B., assignor.)

Globe Oil Tools Co. (See Howard, John H., assignor.)

Globe Oil Tools Company. (See Ragsdale, John B., assignor.)

Goard, Clara E., Denver, Colo. Typewriter brush. 1,899,090; Feb. 28.

Goddu, Lloyd W., assignor to American Optical Company, Southbridge, Mass. Abrading. 1,899,862; Feb. 28.

Godsey, Frank W., jr., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. Vehicle driving apparatus and system. 1,899,193; Feb. 28.

Goebert, Elmer C., U. S. Army, Philadelphia, Pa., and T. A. Conlon, Silver Spring, Md. Bogie. 1,899,145; Feb. 28.

Goeller, Lawrence E., assignor to The M. G. Goeller's Sons Co., Circleville, Ohio. Broom. 1,899,322; Feb. 28.

Goeller's, M. G. Sons Co., The. (See Goeller, Lawrence E., assignor.)

Goldenberg, Fred, Bronx, N. Y. Gridiron. 1,899,682; Feb. 28.

Goldtrap, Charley L., Phoenix, Ariz. Recording device for airplanes. 1,899,614; Feb. 28.

Goodrich, B. F., Company, The. (See Fritz, Howard E., assignor.)

Goodrich, B. F., Company, The. (See Geer, William C., assignor.)

Goodrich, B. F., Company, The. (See Meyer, Ernest, assignor.)

Goodrich, B. F., Company, The. (See Newton, Edwin B., assignor.)

Goodrich, B. F., Company, The. (See Reed, Marion C., assignor.)

Goodrich, B. F., Company, The. (See Singer, Donald K., assignor.)

Goodrich, B. F., Company, The. (See Sloan, Arthur W., assignor.)

Goodrich, B. F., Company, The. (See Trumbull, Harlan L., assignor.)

Gorton, Thomas S., jr., Chicago, Ill. Container. Des. 89,337; Feb. 28.

Gotelli, Anthony, Brooklyn, N. Y. Fruit pitting machine. 1,899,863; Feb. 28.

Grant, Alexander M., San Diego, Calif. Well drilling apparatus. 1,899,438; Feb. 28.

Grasselli Chemical Company, The. (See Lemmerman, P. C., and Remler, assignors.)

Grasselli Chemical Company, The. (See Schweitzer, William K., assignor.)

Gratiot, Chester A., Portland, Oreg., assignor to Eversharp Lawnmower Company. Lawnmower. 1,899,439; Feb. 28.

Gray, Archie M., Compton, Calif. Bermuda grass cutter. 1,899,414; Feb. 28.

Gray, John W., assignor of one-half to B. V. Curnen, Chattanooga, Tenn. Shock absorber mechanism. Re18,747; Feb. 28.

Gray, John W., assignor of one-half to B. V. Curnen, Chattanooga, Tenn. Shock absorbing mechanism. 1,899,909; Feb. 28.

Graziani, Vincenso, Detroit, Mich. Antiskid chain for pneumatic tires. 1,899,801; Feb. 28.

Gredell, Otto N., Kansas City, assignor to Standard Steel Works, North Kansas City, Mo. Manhole cover. 1,899,565; Feb. 28.

Green, Lee B., Lakewood, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio. Radiator shutter and shell assembly for automobiles. 1,899,323; Feb. 28.

Green, Stanley S., Indianapolis, assignor to Duncan Electric Manufacturing Company, La Fayette, Ind. Circuit breaker. 1,899,566; Feb. 28.

Greenberger, Bernard, New York, N. Y. Cigar lighter or similar article. Des. 89,338; Feb. 28.

Grigis, Eric, Houston, Tex. Welded tank construction. 1,899,755; Feb. 28.

Griscom, Samuel B. (See Evans, R. D., Fortescue, Crichton, MacNeill, Griscom, and Wagner.)

Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,899,324; Feb. 28.

Gross, James, Brooklyn, N. Y. Glass bar and making same. 1,899,146; Feb. 28.

Gruman, Lloyd B., Hillside, N. J., assignor to Ames Pump Company, Inc., New York, N. Y. Liquid straining device. 1,899,030; Feb. 28.

Guckes, George C., Lakewood, Ohio. Cushioning feet for sink strainers. 1,899,415; Feb. 28.

Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,374; Feb. 28.

Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,375; Feb. 28.

Guice, Duke, Greenville, Ala. (Crate. 1,899,864; Feb. 28.

Gutekunst, Duane D. (See Eggleston, C. F., and Gutekunst.)

Guy Motors Limited. (See Stevens, William A., assignor.)

Guy, Sydney S., Wolverhampton, and W. A. Stevens, Maidstone, England. Electrically driven vehicle. 1,899,683; Feb. 28.

Guyer, Reynolds, assignor to Waldorf Paper Products Company, St. Paul, Minn. Egg tray. 1,899,268; Feb. 28.

Hachfeld, Otto, Berlin, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Electromagnet. 1,899,502; Feb. 28.

Haigis, Carleton D., Haddonfield, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Radio apparatus. 1,899,684; Feb. 28.

Hakes, Carlton J., Spencer, Iowa. Tool for cleaning tubes. 1,899,269; Feb. 28.
Hale, George C., Dover, N. J. Propellant powder. 1,899,147; Feb. 28.
Hale, Joe D., Brattleboro, Vt., assignor to Rite-Rite Mfg. Co., Chicago, Ill. Pencil. Des. 89,339; Feb. 28.
Haley, Cate, Rockwood Company. (See Sanborn, Charles H., assignor.)
Hall, Peter P-G., Philadelphia, Pa. Machine for milling threads. 1,899,865; Feb. 28.
Halstead, John F., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Cigar heading device. 1,899,194; Feb. 28.
Hammond, Charles F., jr., assignor to Gemmer Manufacturing Company, Detroit, Mich. Shock absorber. 1,899,271; Feb. 28.
Hammond, Edward P., Detroit, Mich., assignor to Marles Steering Gear Company of America, Incorporated, New York, N. Y. Steering gear. 1,899,270; Feb. 28.
Hammond, John H., jr. (See Purington, Ellison S., assignor.)
Hampton, William C., assignor to The Crawford McGregor and Canby Company, Dayton, Ohio. Coating articles with liquid pyroxylin or the like. 1,899,387; Feb. 28.
Hamre, Marion R., Brooklyn, N. Y. Textile fabric or the like. Des. 89,376; Feb. 28.
Hanak, Albert, assignor to Girard Smelting & Refining Company, Philadelphia, Pa. Apparatus for separating metals or alloys. 1,899,031; Feb. 28.
Hanauer, Albert M. (See Wirth, Louis E., assignor.)
Handschiegl, Bessie. (See Handschiegl, Max, assignor.)
Handschiegl, Max, assignor to Bessie Handschiegl, Los Angeles, Calif. Production of pedigreed negatives. 1,899,032; Feb. 28.
Handy & Marman. (See Leach, Robert H., assignor.)
Hanneman, Walter M., Evansville, Ind., assignor to Union Special Machine Company, Chicago, Ill. Thread controlling mechanism for sewing machines. 1,899,802; Feb. 28.
Hansell, Clarence W., Rocky Point, N. Y., assignor to Radio Corporation of America. Electro-mechanical vibrator. 1,899,503; Feb. 28.
Hanson, Emil J., assignor to U. S. Die Casting Company, Milwaukee, Wis. Air washer and humidifier. 1,899,504; Feb. 28.
Hanson, Hans A., Milwaukee, Wis. Automatic gear shifting mechanism. 1,899,685; Feb. 28.
Hanson & Orth. (See Worden, Edward C., 1st.)
Hardman, Frederick J., and W. Spruegel, Dayton, Ohio, assignors to Delco-Remy Corporation, Anderson, Ind. Commutator assembling machine. 1,899,325; Feb. 28.
Harman, Hugh, and R. C. Ising, Los Angeles, Calif. Doll. Des. 89,340; Feb. 28.
Harmsen, John L., Flint, Mich. Ice cream cone or similar article. Des. 89,341; Feb. 28.
Harper, Worthy C., Caldwell, Ohio. Pumping system and apparatus therefor. 1,899,460; Feb. 28.
Harrington, Ferris T., assignor to Whitman & Barnes, Incorporated, Detroit, Mich. Tool holder. 1,899,326; Feb. 28.
Harris, George, San Francisco, Calif. Drum-head tightening device. 1,899,461; Feb. 28.
Harris Trust & Savings Bank, trustee. (See Woodruff, Leonidas D., assignor.)
Hart, Alan R., Syracuse, N. Y. Score pad or memorandum holder. 1,899,440; Feb. 28.
Harvey, Clayton J., assignor to Jewell Steel & Malleable Co., Buffalo, N. Y. Anchor. 1,899,866; Feb. 28.
Haug, Richard J., Nashua, N. H. Display stand. 1,899,567; Feb. 28.
Hawkins, Wilford J., Claiborne, Md., assignor to American Machine & Foundry Company. Noncorrosive alloy and making and using the same. 1,899,148; Feb. 28.
Hawkins, William S., Washington, D. C. Automobile seat cape. 1,899,327; Feb. 28.
Hayden, Oliver M. (See Calcott, W. S., Douglass, and Hayden.)
Hayes Body Corporation. (See Nelson, A. L., and Pease, assignors.)
Hayes, Fred B., Fort Wayne, Ind. Grate construction. 1,899,033; Feb. 28.
Haythorn, Walter P., Ogallala, Nebr. Gate securing means. 1,899,149; Feb. 28.
Heath, Tarlton F., Charlotte, N. C., assignor to Baxter-Lane Paper Corporation, New York, N. Y. Cloth winding board. 1,899,195; Feb. 28.
Heilinger, Carl, Philadelphia, Pa., assignor to Trainor Food Corporation, New York, N. Y. Vegetable cutting machine. 1,899,867; Feb. 28.
Heinke, Alfred J., Towaco, N. J., assignor to H. R. Mallinson & Co. Inc., New York, N. Y. Textile fabric or similar article of manufacture. Des. 89,342; Feb. 28.
Heise, George W., Malverne, N. Y., assignor to National Carbon Company. Air-depolarized primary battery. 1,899,615; Feb. 28.
Heise, George W., Lakewood, Ohio, assignor to National Carbon Company. Galvanic cell. 1,899,616; Feb. 28.
Helfrich, Michael D., Evansville, Ind. Spudless closet bowl. Des. 89,343; Feb. 28.
Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,899,034; Feb. 28.
Hemphill Company. (See Lawson, R. H., and Gagné, assignors.)
Henneböhle, Frank, Chicago, Ill. Balanced throttle and trip valve. 1,899,328; Feb. 28.
Henst, Abraham V., Grand Rapids, Mich., assignor to W. B. Jarvis Co. Doorlatch. 1,899,686; Feb. 28.
Herlbauer, Joseph J., Long Island, N. Y. Portable convertible lamp. 1,899,868; Feb. 28.
Herrmann, Ella E., assignor to The Lehman Company of America, Cannelton, Ind. Desk and blackboard arrangement. 1,899,687; Feb. 28.
Hertz, Hjalmar, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Electric lamp shade. 1,899,272; Feb. 28.
Hers, Alexander. (See McKee, R. H., and Morse, assignors.)
Hers, Ferdinand B., assignor to Long Manufacturing Company, Detroit, Mich. Making an auxiliary front for a radiator unit. 1,899,617; Feb. 28.
Hess, Henry K., Wolcott, N. Y. Self service bowling alley. 1,899,441; Feb. 28.
Hess, Henry K., Wolcott, N. Y. Bowling alley. 1,899,442; Feb. 28.
Heusser, Hermann, assignor to the Firm Schweizerische Lokomotiv und Maschinenfabrik, Winterthur, Switzerland. Gas engine. 1,899,869; Feb. 28.
Heyland, Alexander, Brussels, Belgium. Polyphase commutator machine. 1,899,462; Feb. 28.
Higgins, Clifford B., Detroit, Mich. Radiator core. 1,899,417; Feb. 28.
Higley, Frank R., Cleveland Heights, assignor to The Insulated Steel Floor and Wall Company, Cleveland, Ohio. Sheathing for metal building structure. 1,899,091; Feb. 28.
Hill, Harry, Belvedere, assignor to Callender's Cable and Construction Company Limited, London, England. Production of impregnated paper and the like. 1,899,688; Feb. 28.
Hilliard, H. W., Co. (See Fuller, Clarence N., assignor.)
Himmel Brothers Company, The. (See Himmel, Fred and I., assignors.)
Himmel, Fred and I., assignors to The Himmel Brothers Company, New Haven, Conn. Store-front construction. Re18,753; Feb. 28.
Himmel, Fred and I., assignors to The Himmel Brothers Company, New Haven, Conn. Store-front construction. 1,899,035; Feb. 28.
Himmel, Isidore. (See Himmel, Fred and I.)
Hinderliter, Frank J., Tulsa, Okla. Casing support and packing head. 1,899,273; Feb. 28.
Hitch, Arthur R., and I. A. Ebaugh, Brunswick, Ga., assignors, by mesne assignments, to Gillican-Chipley Company. Recovering rosin from collected crude matter. 1,899,388; Feb. 28.
Hitch, Arthur R., and I. A. Ebaugh, Brunswick, Ga., assignors, by mesne assignments, to Gillican-Chipley Company. Preparing a high grade rosin. 1,899,389; Feb. 28.
Hoe, R., & Co. (See Ball, Harry V., assignor.)
Hoffman, Jacob, Highland Park, assignor to Hub Metal Bed Co., Chicago, Ill. Disappearing bed. 1,899,803; Feb. 28.
Hoffman, John R., assignor to Madison-Kipp Corporation, Madison, Wis. Fluid operated tool. 1,899,150; Feb. 28.
Hofmann, Walter, Rudolstadt in Thuringia, Germany, assignor to General Electric Company. Cathode structure for vacuum tubes. 1,899,568; Feb. 28.
Hogan, Margaret M., Binghamton, N. Y. Bunion corrective device. 1,899,092; Feb. 28.
Hokanson, Otto A., and J. F. Koca, assignors to Woodstock Typewriter Company, Woodstock, Ill. Remote control mechanism. 1,899,151; Feb. 28.
Holland, Harry W., Elizabeth, N. J., assignor to The Texas Company, New York, N. Y. Service station cart. Des. 89,344; Feb. 28.
Hollingsworth, H. (See Becker, Adam, assignor.)
Holmström, Johan G., Stockholm, Sweden. Radiotelegraph system. 1,899,196; Feb. 28.
Holthe, John, Stratford, Conn. Cartridge. 1,899,618; Feb. 28.
Hood Rubber Company. (See Cate, Malcolm S., assignor.)
Hood Rubber Company. (See Gildden, A. A., and Knowland, assignors.)
Hook, Arley U., and E. J. Dumm, Upper Sandusky, Ohio; said Hook assignor to said Dumm. Clutch member. 1,899,274; Feb. 28.
Hopfield, John J., West Lafayette, assignor to Purdue Research Foundation, Lafayette, Ind. Line image producer. 1,899,804; Feb. 28.
Horgan, George D. (See Molins, W. E., and Horgan.)
Horn & Hardart Baking Co. (See Early, Thomas F., assignor.)
Horste, Joseph E., assignor to Detroit Harvester Company, Detroit, Mich. Mower attachment for endless tread tractors. 1,899,329; Feb. 28.
Hortman, Claude, assignor, by mesne assignments, to The Hortman-Salmen Company, Incorporated, New Orleans, La. Window frame. 1,899,330; Feb. 28.
Hortman-Salmen Company, The. (See Hortman, Claude, assignor.)

Hough Shade Corporation. (See Steffen, Le Roy J., assignor.)
House of Tre-Jur. (See Mosheim, Albert, assignor.)
Houston, George H., South Bend, Ind., assignor to Bendix Research Corporation, East Orange, N. J. Propeller. 1,899,689; Feb. 28.
Hoygaard, Harvey, Houston, Tex. Combination tool. 1,899,505; Feb. 28.
Howard, Frank A., Elizabeth, N. J., assignor to Standard Oil Development Company. Pyrolytic conversion of petroleum oils. 1,899,895; Feb. 28.
Howard, John H., Huntington Park, assignor to Globe Oil Tools Co., Los Nietos, Calif. Well drilling bit. 1,899,331; Feb. 28.
Howard, Leslie E., Lockport, N. Y., assignor to Simonds Saw and Steel Company, Fitchburg, Mass. Method of and apparatus for grinding and polishing materials. 1,899,463; Feb. 28.
Howe, Goodwin H., Scotia, N. Y., assignor to General Electric Company. Coating metals. 1,899,569; Feb. 28.
Howe, Philip L., Wilson, Tex. Automobile radiator condenser. 1,899,570; Feb. 28.
Howe, Thorndike D., assignor, by mesne assignments, to Solescope, Incorporated, Boston, Mass. Method of and apparatus for use in cutting leather. 1,899,805; Feb. 28.
Hub Metal Bed Co. (See Hoffman, Jacob, assignor.)
Huff, Ernest, Milwaukee, and A. Kelding, Whitefish Bay, assignors to American Lace Paper Company, Milwaukee, Wis. Casting fiber articles. 1,899,197; Feb. 28.
Hufschmidt, Carl, Westenfeld, near Wattenscheid, Germany. Powdered fuel furnace. 1,899,464; Feb. 28.
Hughes, Charles H., Hackensack, N. J., assignor to Semet-Solvay Engineering Corporation, New York, N. Y. By-product coke oven. 1,899,275; Feb. 28.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Radiator. Des. 89,345; Feb. 28.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Automobile body. Des. 89,346; Feb. 28.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined radiator, hood, fender, and head lamp casing. Des. 89,377; Feb. 28.
Hulse, George E., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. Refrigeration. 1,899,036; Feb. 28.
Hulshizer, George W., Stewartsville, assignor to Ingersoll-Rand Company, Jersey City, N. J. Feeding device for rock drills. 1,898,999; Feb. 28.
Hultquist, Victor J., Alcoa, Tenn. Tile edge forming apparatus. 1,899,237; Feb. 28.
Hume, Damon M., Redkey, Ind. Device for depositing salt in canned goods. 1,899,619; Feb. 28.
Huntington, Edward E., assignor to The Willys-Overland Company, Toledo, Ohio. Manifold construction. 1,899,690; Feb. 28.
Hupp Motor Car Corporation. (See MacPherson, Earle S., assignor.)
Hutt, Albert E., New Rochelle, N. Y. Dispensing nozzle. 1,899,506; Feb. 28.
Hydraulic Brake Company. (See Bradbury, Clifford C., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Klebert, Ludwig, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Mark, H., Dunkel, and Reoll, assignors.)
Imperial Chemical Industries, Limited. (See Dunn, John S., assignor.)
Ingersoll-Rand Company. (See Hulshizer, George W., assignor.)
Ingersoll-Rand Company. (See Le Valley, John, assignor.)
Insulated Steel Floor and Wall Company, The. (See Higley, Frank R., assignor.)
International Cigar Machinery Company. (See Beutel, R. J., and Peterson, assignors.)
International Cigar Machinery Company. (See Halstead, John F., assignor.)
International Cigar Machinery Company. (See Wheeler, Henry H., assignor.)
International Products Proprietary Limited. (See Abbott, William J., assignor.)
International Shoe Company. (See Krive, James D., assignor.)
Irving Air Chute Company. (See Bird, W. and Ball., assignors.)
Irving Air Chute Company. (See Campbell, L. J., Ford, and Rogers, assignors.)
Irving Air Chute Company. (See Nichols, Erwin H., assignor.)
Irving Air Chute Company, Inc. (See Wigley, F. S., and Austing, assignors.)
Irwin, Davis L., High Holborn, London, and R. E. Tippins, Golders Green, London, England. Floor covering and the like. 1,899,416; Feb. 28.
Ising, Rudolph C. (See Harman, H., and Ising.)
Ivanoff, Leonid. (See Björkman, P. O., and Ivanoff.)
Jablow, Charles, Pittsburgh, and B. Wheeler, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Floating bearing. 1,899,691; Feb. 28.
Jacobi, Edward N., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Handle. 1,899,418; Feb. 28.
Jaeger, Alphon O., Mount Lebanon, and H. J. West, Crafton, assignors, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa. Manufacture of silver salt. 1,899,507; Feb. 28.
James, Henry D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuitous elevator. 1,899,692; Feb. 28.
Janssen, Hermann, and E. Wisniewski, New York, N. Y. Machine for controlling light intensities of motion picture printers. 1,899,756; Feb. 28.
Jansson, Gustav E., Atlantic, assignor to Condit Electrical Manufacturing Corporation, Hyde Park, Mass. Suspension potential transformer. 1,899,693; Feb. 28.
Jansson, Gustav, Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Insulator. 1,899,757; Feb. 28.
Jarvis, Kenneth W., Cincinnati, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Amplifying system. 1,899,758; Feb. 28.
Jarvis, W. B., Co. (See Henst, Abraham V., assignor.)
Jeavons, William R., Cleveland Heights, and M. J. Rentschler, Willoughby, Ohio. Conditioning incoherent finely divided materials. 1,899,152; Feb. 28.
Jeavons, William R., Cleveland Heights, and M. J. Rentschler, Willoughby, Ohio. Composition for and treating molten metals. 1,899,153; Feb. 28.
Jeffries, Schuyler A., assignor to Reo Motor Car Company, Lansing, Mich. Gear shifting mechanism. 1,899,332; Feb. 28.
Jeffries, Schuyler A., assignor to Reo Motor Car Company, Lansing, Mich. Gear shifting mechanism. 1,899,333; Feb. 28.
Jenkins, C. Francis, Inc. (See Jenkins, Charles F., assignor.)
Jenkins, Charles F., assignor to C. Francis Jenkins, Inc., Washington, D. C. Radiomovie lantern slide. 1,899,334; Feb. 28.
Jester, Alfred T., Houston, Tex. Repeater system. 1,899,037; Feb. 28.
Jewell Electrical Instrument Company. (See Simpson, Ray, assignor.)
Jewell Steel & Malleable Co. (See Harvey, Clayton J., assignor.)
Jiffy Pad & Excelsior, Inc. (See d'Este, J. N., and Tower, assignors.)
Jobst, Conrad, assignor to The Toledo Automatic Brush Machine Company, Toledo, Ohio. Brush machine. 1,899,694; Feb. 28.
Jochum, J. H., jr. (See Weber, John J., assignor.)
Johner, Hans. (See de Montmollin, G., Danuser, Bonhôte, and Johner.)
Johnson, Carl G. and K. T., Chicago, Ill. Electric switch. 1,899,000; Feb. 28.
Johnson & Johnson. (See Matts, Walter J., assignor.)
Johnson, Kurt T. (See Johnson, Carl G. and K. T.)
Johnson, Lloyd E. (See Scofield, T. J. Johnson, and Billig.)
Johnson, Percy G., South View, Letchworth, assignor to Victaulic Company Limited, London, England. Pipe joint. 1,899,695; Feb. 28.
Jones, Claudius V., assignor of one-half to H. C. Ferguson, Jackson, Miss. Cotton chopper and cultivator. 1,899,806; Feb. 28.
Jones, Elmore D., et al. (See Jones, Winfield S., assignor.)
Jones, George L. (See Perry, W. M., and Jones.)
Jones, Winfield S., assignor of three-eighths to E. D. Jones, and one-fourth to Charles E. Munn, Long Beach, Calif. Pipe cutter. 1,899,390; Feb. 28.
Junkers, Hugo, Dessau, Germany. Method of, and apparatus for, regulating the fuel supply to internal combustion engines. 1,899,038; Feb. 28.
Kaegi, Edward A. (See Phelps, A. W., and Kaegi.)
Kai, Louis H., and H. Weber, assignors to Shakespeare Products Company, Kalamazoo, Mich. Control rod mounting. 1,899,198; Feb. 28.
Kaiser, John, Dobsina, Czechoslovakia. Electrical rat exterminator. 1,899,199; Feb. 28.
Kalio Inc. (See Lieberknecht, Karl R., assignor.)
Kamps, Otto, Berlin, Germany. Aluminium alloy. 1,899,465; Feb. 28.
Kamrath, Herbert G., assignor to A C Spark Plug Company, Flint, Mich. Crankcase ventilation. 1,899,910; Feb. 28.
Kamrath, Herbert G., assignor to A C Spark Plug Company, Flint, Mich. Air cleaner and muffler. 1,899,911; Feb. 28.
Kapella Limited. (See Warmisham, Arthur, assignor.)
Karnofsky, Joseph M., and J. E. Freedman, Waterbury, Conn. Waterproof bathing receptacle. 1,899,696; Feb. 28.
Karrick, Lewis C., New York, N. Y. Valve. 1,899,154; Feb. 28.
Kass, Irving, New York, N. Y. Applying material. 1,899,391; Feb. 28.
Kastner, Charles A., Louisville, Ky. Rotatable pan for bread baking. 1,899,335; Feb. 28.
Kaumagraph Company. (See Lawrence, Winthrop S., assignor.)
Kavanaugh, Floyd J., Galveston, Tex. Copyholder. 1,899,759; Feb. 28.
Kavanaugh, Henry E., Chicago, Ill. Controlling device. 1,899,807; Feb. 28.

Keech, Dana E., Glendale, Calif. Conveyer control. 1,899,336; Feb. 28.
Keech, Dana E., Glendale, Calif. Conveyer control. 1,899,337; Feb. 28.
Keech, Dana E., Glendale, Calif. Conveyer control. 1,899,338; Feb. 28.
Kees, Ernest G. (See Baker, Benjamin G.)
Keiding, Andrew. (See Huff, E., and Keiding.)
Kellner, Alexis, Berlin, Germany. Collapsible hood for vehicles. 1,899,870; Feb. 28.
Kellogg, Edward W., Moorestown, N. J., assignor to General Electric Company. Film driving mechanism. 1,899,571; Feb. 28.
Kellogg Switchboard & Supply Company. (See Eaton, G. R., and Kiner, assignors.)
Kellogg Switchboard and Supply Company. (See Koch, Earl L., assignor.)
Kellogg Switchboard & Supply Co. (See Miller, Carl, assignor.)
Kelly, O. S., Company, The. (See Ultes, Carl, assignor.)
Kendall Company, The. (See Meagher, Glenn B., assignor.)
Kerk, Charles H., St. Davids, Pa. Tantalum spinneret and making same. 1,899,419; Feb. 28.
Kern, Fernando C. (See Kern, Ludwig and F. C.)
Kern, Ludwig, Webster Groves, Mo. Coking carbonizable material. 1,899,808; Feb. 28.
Kern, Ludwig, Webster Groves, Mo. Porous siliceous carbon and the manufacture thereof. 1,899,810; Feb. 28.
Kern, Ludwig, Webster Groves, Mo. Fuel and the manufacture thereof. 1,899,811; Feb. 28.
Kern, Walter. (See Tobler, R., and Kern.)
Kern, Ludwig and F. C., Webster Groves, Mo. Coking solid carbonizable material. 1,899,809; Feb. 28.
Kerr, Thomas, Long Island City, N. Y., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Electrical weft detector for looms. 1,899,620; Feb. 28.
Kevelson, Max, New York, N. Y. Impregnation of electrical condensers. 1,899,155; Feb. 28.
Kibele, Otto B., Wilmington, and E. R. Ericson, San Pedro, Calif.; said Ericson, assignor to said Kibele. Method of and apparatus for hydraulically pumping oil wells. 1,899,697; Feb. 28.
Killefer Manufacturing Corporation, Ltd. (See Sjogren, O. W., and Vaughn, assignors.)
Kind, Benjamin, Baltimore, Md. Resilient heel. 1,899,093; Feb. 28.
Kiner, Glenn. (See Eaton, G. R., and Kiner.)
Kirchhoff, William G., assignor to The J. H. Day Company, Cincinnati, Ohio. Dough divider. 1,899,238; Feb. 28.
Kistner, Herman H., Baltimore, Md. Closure fastening and locking means. 1,899,466; Feb. 28.
Klar, Walter H., assignor to Milton Bradley Company, Springfield, Mass. Carving material. 1,899,200; Feb. 28.
Klausmeyer, David C., deceased, by H. Henry Sundermann, executor, assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Internal gear drive. 1,899,201; Feb. 28.
Kliebert, Ludwig, Cologne-Deutz, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparation of granulated active charcoal. 1,899,339; Feb. 28.
Klein, James J., Brooklyn, N. Y. Atomizer. 1,899,698; Feb. 28.
Klein, Thomas J., Chicago, Ill. Resilient perch for bird cages. 1,899,508; Feb. 28.
Kluyver, Albert J., and M. A. Scheffer, assignors to Thomas H. Verhave, sr., Delft, Netherlands. Preparation of acetyl-methyl-carbinol and diacetyl. 1,899,094; Feb. 28.
Kluyver, Albert J., and M. A. Scheffer, assignors to Thomas H. Verhave, sr., Delft, Netherlands. Preparation of 2.3-butyleneglycol from carbohyrates. 1,899,156; Feb. 28.
Knapp, Archer L., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,899,276; Feb. 28.
Knapp, Archer L., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicles. 1,899,443; Feb. 28.
Knight, Thomas F., Lyndhurst, N. J., and H. K. Williams, jr., Dunkirk, N. Y. Apparatus for loading projectiles. 1,899,095; Feb. 28.
Knorr, Angelo, Berlin-Tempelhof, A. Weissenborn, Potsdam, and E. Laage, Uerdingen, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Manufacturing aldehydes and the products. 1,899,840; Feb. 28.
Knowland, Thomas M. (See Glidden, A. A., and Knowland.)
Knox, W. & J., Net and Twine Company. (See Bunker, Royce S., assignor.)
Koca, James F. (See Hokanson, O. A., and Koca.)
Koch, Earl L., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Audion tube. 1,899,039; Feb. 28.
Koch, Heinrich. (See Zahn, K., Koch, and Weinand.)
Koehler Manufacturing Company. (See Albee, William H., assignor.)
Kohler, Michael J., assignor to National Nut Company, Oakland, Calif. Nut buttering machine. Des. 89,347; Feb. 28.
Koken, Walter F., Webster Groves, Mo. Physician's chair. 1,899,040; Feb. 28.
Kolenik, Baltazsar V. (See Watral, V. B., and Kolenik.)
Koller, Karl, Budapest, Hungary. Pressure gas producer. 1,899,157; Feb. 28.
Koller, Karl, Budapest, Hungary. Pressure gas producer. 1,899,158; Feb. 28.
Kopke, Ernst W., and L. J. Struebig, assignors to Fulton Iron Works Company, St. Louis, Mo. Cane mill. 1,899,202; Feb. 28.
Kops Brothers, Inc. (See Kops, Waldemar, assignor.)
Kops Brothers, Inc. (See Nickerson, Gertrude, assignor.)
Kops, Waldemar, assignor to Kops Brothers, Inc., New York, N. Y. Garment. 1,899,761; Feb. 28.
Kotur, Petar. (See Bali, J., and Kotur.)
Koufman, Abraham, et al. (See Shulik, William, assignor.)
Kraft, Frank E., Kansas City, Mo. Molding machine. 1,899,277; Feb. 28.
Kramer, Herman. (See Burton, K. H., and Kramer.)
Krebs Pigment & Color Corporation. (See Kubelka, Paul, assignor.)
Kreidl, Norbert, assignor to the Firm Glasbuttenwerke vorm. J. Schreiber & Neffen, Reitendorf a/Tess, Czechoslovakia. Changeant or opalescent glass. 1,899,760; Feb. 28.
Kreuzer, Barton. (See Cass, J. L., and Kreuzer.)
Krive, James D., assignor to International Shoe Company, St. Louis, Mo. Shoe treeing device. 1,899,001; Feb. 28.
Krotee, Walter E., Philadelphia, Pa. Insulated driving connection. 1,899,159; Feb. 28.
Kubelka, Paul, Prague, Czechoslovakia, assignor to Krebs Pigment & Color Corporation, Newark, N. J. Dissolving titanium tetrachloride in aqueous solvents. 1,899,572; Feb. 28.
Kubelka, Paul, Prague, Czechoslovakia, assignor to Krebs Pigment & Color Corporation, Newark, N. J. Preparing clear solutions of titanium chloride. 1,899,573; Feb. 28.
Kubelka, Paul, Prague, Czechoslovakia, assignor to Krebs Pigment & Color Corporation, Newark, N. J. Preparing concentrated clear solutions of titanium chloride. 1,899,574; Feb. 28.
Kussetow, Reinhold E., Oakland, Calif. Process for malting grain. 1,899,160; Feb. 28.
Kusterle, Frank, Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Furniture post end construction. 1,899,699; Feb. 28.
Kuzell, Charles R., assignor to United Verde Copper Company, Clarkdale, Ariz. Metallurgical apparatus. 1,899,161; Feb. 28.
Laage, Emil. (See Knorr, A., Weissenborn, and Laage.)
Labreche, Joseph C. A., Montreal, Quebec, Canada. Combined bottle opener and key ring. 1,899,203; Feb. 28.
Lackner, Rolph J., Ozone Park, N. Y. Hooked clamp. 1,899,162; Feb. 28.
Lake, Fred L., Dallas, Tex. Flexible stem. 1,899,871; Feb. 28.
Lamberty, Conrad H. H., assignor of one-half to Edward B. C. Woodbury, London, England. Producing composite sheets of safety glass. 1,899,621; Feb. 28.
Lamson Company, The. (See Dupuy, Louis E., assignor.)
Lance, William, Scranton, Pa. Clothesline hanger. 1,899,467; Feb. 28.
Landers, Charles, Lansing, Mich. Turning and boring machine. 1,899,700; Feb. 28.
Lane, George S., Ridgewood, N. J. Clutch disk. 1,899,872; Feb. 28.
Lansing, Raymond P., East Orange, N. J., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,899,812; Feb. 28.
Lapin, Bernard, assignor to Nevalost Manufacturing Company, Newark, N. J. Eraser and pencil holder attachment for typewriters. 1,899,509; Feb. 28.
Larkin, Dennis F., assignor to Larkin Specialty Manufacturing Co., San Francisco, Calif. Floor wax applicator. 1,899,892; Feb. 28.
Larkin Specialty Manufacturing Co. (See Larkin, Dennis F., assignor.)
La Roque, Harold B., Upper Darby, Pa., assignor to General Electric Company. Control system. 1,899,575; Feb. 28.
Larsen, Agnew E., Huntingdon Valley, assignor to Autogiro Company of America, Philadelphia, Pa. Aircraft having sustaining rotors. 1,899,096; Feb. 28.
Larsin, Josephine C. (See Seifner, Louis P., assignor.)
Lavarack, William H. B., Pine Bush, assignor to Railroad Accessories Corporation, New York, N. Y. Junction box. 1,899,510; Feb. 28.
Lawrence, Winthrop S., Brooklyn, assignor to Kaumagraph Company, New York, N. Y. Transfer and transfer composition. 1,899,420; Feb. 28.
Lawson, Robert H., Pawtucket, and A. Gagné, assignors to Hemphill Company, Central Falls, R. I. Needle bed. 1,899,278; Feb. 28.
Leach, Robert H., Fairfield, Conn., assignor to Handy & Harman, New York, N. Y. Alloy. 1,899,701; Feb. 28.
Leach, Robert H., Fairfield, Conn., assignor to Handy & Harman, New York, N. Y. Alloy. 1,899,873; Feb. 28.
Leaf, Sol S., assignor to Overland Candy Corporation, Chicago, Ill. Ice cream sandwich. 1,899,511; Feb. 28.
League Corporation of Delaware. (See Pierson, Willett C., assignor.)
Leaper, Thomas D. (See Thomas, G. F., and Leaper.)
Lebo, Robert B., Elizabeth, and H. G. M. Fischer, Westfield, N. J., assignors to Standard Oil Development Company. Production of sodium sulphhydrate and sodium sulphide. 1,899,896; Feb. 28.

Lefever, Charles F., assignor to Daisy Manufacturing Company, Plymouth, Mich. Magazine barrel for guns. 1,899,702; Feb. 28.
Lehman Company of America, The. (See Herrmann, Ella E., assignor.)
Lemaire, Maurice H., Valenciennes, France. System for continuously cleaning the ballast of railway tracks. 1,899,874; Feb. 28.
Lemmerman, Paul C., East Cleveland, and R. F. Remler, Lakewood, assignors to The Grasselli Chemical Company, Cleveland, Ohio. Protecting concrete surfaces during curing. 1,899,576; Feb. 28.
Lessler, Lew W., Johnson City, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Photographic film reel. 1,899,279; Feb. 28.
Lester, Joseph, New York, N. Y. Necktie rack. 1,899,813; Feb. 28.
Le Valley, John, Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Unloader for compressors. 1,899,002; Feb. 28.
Levy, Lucien, Paris, France. Frequency changer. 1,899,622; Feb. 28.
Lewinson, Adolf, Berlin-Charlottenburg, Germany. Making alcohol-weak beverages. 1,899,512; Feb. 28.
Lewis, Herman L., Don Martin, Mexico. Hydraulic steering mechanism. 1,899,814; Feb. 28.
Lewis, William T. (See Eells, Milton M., assignor.)
Lichten, Arthur S., et al. (See Shulik, William, assignor.)
Lidseen, Gustave, Chicago, Ill. Pipe bending machine support. 1,899,280; Feb. 28.
Lidseen, Gustave, Chicago, Ill. Pipe bending apparatus. 1,899,281; Feb. 28.
Lieberknecht, Karl R., Oberlungwitz, Germany, assignor to Kalio Inc., New York, N. Y. Knitting machine needle bar lock. 1,899,577; Feb. 28.
Lieberknecht, Karl K., Oberlungwitz, Germany. Driving mechanism for flat knitting frames. 1,899,875; Feb. 28.
Limpert, John A. (See Rothchild, H. A., and Limpert.)
Lincoln Oil Refining Company. (See Culmer, Thaddeus W., assignor.)
Lindner, Arthur, Staaken near Spandau, Germany, assignor to Westinghouse Electric & Manufacturing Company. Electric motor drive for well drilling equipment. 1,899,703; Feb. 28.
Lindsay, Lynn G., near Dayton, assignor to Trupar Manufacturing Company, Dayton, Ohio. Liquid cooler for refrigerators. 1,899,578; Feb. 28.
Linn, Robert E. (See McCormick, T. J., and Linn.)
Lipman, Carl E. L., assignor to Lipman Patents Corporation, Chicago, Ill. Magnetic unloader. 1,899,341; Feb. 28.
Lipman Patents Corporation. (See Lipman, Carl E. L., assignor.)
Litterio, Caesar B., assignor to Federal Products Corporation, Providence, R. I. Cylinder gauge. 1,899,920; Feb. 28.
Littlefield, Carl, assignor to Battle Creek Bread Wrapping Machine Co., Battle Creek, Mich. Wrapping machine. 1,899,468; Feb. 28.
Lockhart, John F. (See Bedard, W., and Lockhart.)
Loewe, Bernard, Milan, Italy. Reeling-off silk cocoons. 1,899,513; Feb. 28.
Logan Co., The. (See Logan, Z. S., and Pike, assignors.)
Logan, Lloyd L., Calexico, Calif. Oil burner. 1,899,003; Feb. 28.
Logan, Zach S., and W. P. Pike, assignors to The Logan Co., Louisville, Ky. Bed. 1,899,762; Feb. 28.
Lomax, Clarence E., (See Saunders, N. H., Lomax, and Crocker.
Long, Charles A., jr., Haddon Heights, N. J. Method of and device for advertising. 1,899,282; Feb. 28.
Long Manufacturing Company. (See Herz, Ferdinand B., assignor.)
Loomis, Nathaniel E., Westfield, N. J., assignor to Standard Oil Development Company. Separating cracked hydrocarbon material. 1,899,897; Feb. 28.
Lorang, Henry J., St. Louis, Mo. Mop head. 1,899,283; Feb. 28.
Lotter, Adolph G., assignor to Stationers Loose Leaf Company, Milwaukee, Wis. Loose leaf binder. 1,899,763; Feb. 28.
Lowry, Erwin F., Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrode alloy. 1,899,623; Feb. 28.
Lugene Inc. (See Blocker, Walter A., assignor.)
Lug-Less Watch Company. (See Manheimer, Arthur E., assignor.)
Lurrain, Nathaniel M., Woodside, N. Y. Collapsible picture frame. 1,899,815; Feb. 28.
Lüttringhaus, Arthur, Mannheim, H. Neresheimer, Ludwigshafen-on-the-Rhine, and H. Emmer, Mannheim, Germany, assignors to General Aniline Works, Inc. of New York, N. Y. Making dibenzanthrone from the corresponding Bz1, Bz1'-dibenzanthronyls. 1,899,579; Feb. 28.
Lutz, George H., Chicago, Ill. Apparatus for heating surfaces. 1,899,704; Feb. 28.
Lyman, Kenneth E., Rockford, Ill., assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind. Free wheeling transmission mechanism. 1,899,514; Feb. 28.
Lyman, Kenneth E., Rockford, Ill., assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind. Free wheeling transmission mechanism. 1,899,515; Feb. 28.
Lynn, Lambert H., Schenectady, N. Y., assignor to General Electric Company. Signal system. 1,899,580; Feb. 28.
Lyon, Leonidas N., sr., Houston, Tex. Drive or power wheel for automobiles. 1,899,097; Feb. 28.
Mabey, Arthur R., assignor to The Bristol Company, Waterbury, Conn. Control apparatus. 1,899,516; Feb. 28.
MacChesney, Chester M., assignor to Acme Steel Company, Chicago, Ill. Butter tub. 1,899,342; Feb. 28.
MacGlashan Corporation, The. (See Crume, William H., assignor.)
Maché, Augustin. (See Bayle, E., George, and Maché.)
Machinist, Harold, San Quentin, assignor of one-tenth to M. Slater, Berkeley, Calif. Lock. 1,899,876; Feb. 28.
Machlet, Adolph W., Elizabeth, N. J. Gas-measuring device. 1,899,764; Feb. 28.
Mack, Walter L., assignor, by mesne assignments, to Airway Electric Appliance Corporation, Toledo, Ohio. Air heater. 1,899,098; Feb. 28.
Mack, Walter L., assignor, by mesne assignments, to Air-Way Electric Appliance Corporation, Toledo, Ohio. Radiator construction. 1,899,099; Feb. 28.
Mackey, Jesse A. (See Cooper, Albert N., assignor.)
Mackey, Thomas O., Willowbrook, and W. Danaldson, Huntington Park, assignors to Wieman-Kammerer-Wright Company, Incorporated, Hollydale, Calif. Making a connection. 1,899,343; Feb. 28.
Macklin, Justin W. (See Shonkwiler, A. H., and Macklin, assignors.)
MacMillin, Howard F. (See Ernst, W., MacMillin, and Thoreson.)
MacNeill, John B. (See Evans, R. D., Fortescue, Crichton, MacNeill, Griscom and Wagner.)
Macomber, Stanley, Edgefield District, Ohio. Composite wood-metal structural member. 1,899,344; Feb. 28.
MacPherson, Earle S., assignor to Hupp Motor Car Corporation, Detroit, Mich. Vehicle spring mounting. 1,899,624; Feb. 28.
Madden, Frank E. (See Sanborn, Percy G., assignor.)
Madeyski, Juljan, assignor to Warszawska Spolka Akcyjna Budowy Parowozow, Warsaw, Poland. Regulating the superheater temperature of the steam in locomotive engines. 1,899,041; Feb. 28.
Madison-Kipp Corporation. (See Erickson, John E., assignor.)
Madison-Kipp Corporation. (See Hoffman, John E., assignor.)
Maier, Karl, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Feeding mechanism for sewing machines. 1,899,816; Feb. 28.
Mallisoff, William M., assignor to The Atlantic Refining Company, Philadelphia, Pa. Hydrocarbon oil refining. 1,899,042; Feb. 28.
Mallinson, H. R., & Co. (See Heinke, Alfred J., assignor.)
Manhard, Mitchell S., San Francisco, Calif. Display device. 1,899,284; Feb. 28.
Manheimer, Arthur E., assignor, by mesne assignments, to Lug-Less Watch Company, Chicago, Ill. Strap watch. 1,899,285; Feb. 28.
Marcum, Arthur L., Oakland, Calif. Front axle drive. 1,899,240; Feb. 28.
Marden, William L., Elmhurst, assignor to Neptune Meter Company, New York, N. Y. Register box for fluid operated mechanisms. 1,899,048; Feb. 28.
Maringer, Lawrence J., assignor to R. G. Wright & Company, Buffalo, N. Y. Heater. 1,899,581; Feb. 28.
Mark, Hermann, and M. Dunkel, Mannheim, and E. Roell, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Carrying out friedel crafts and similar condensation reactions with nonaromatic compounds. 1,899,582; Feb. 28.
Maries Steering Gear Company. (See Hammond, Edward P., assignor.)
Marr, William S., Nutley, N. J., assignor to Bakeries Service Corporation, New York, N. Y. Transformable container. 1,899,241; Feb. 28.
Marrison, Warren A., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Piezo-electric crystal. 1,899,163; Feb. 28.
Marshall, Earl P., Los Angeles, Calif. Forming cementitious bodies and material for use in same. 1,899,101; Feb. 28.
Martin, Florian J., Medford, Wis. Block for X-ray dental films. 1,899,877; Feb. 28.
Martin, John D., Rayo, Calif. Display method of packing. 1,899,583; Feb. 28.
Marvin, W. B., Manufacturing Company, The. (See Ritter, John J., assignor.)
Mason Box Company, The. (See Rhodes, Russell I., jr., assignor.)
Mason, Clesson E., and A. M. Dixon, assignors to The Foxboro Company, Foxboro, Mass. Controller. 1,899,705; Feb. 28.
Master, Thomas A., South Otselic, and L. D'Angelo, Binghamton, N. Y. Ice grip nonskid. 1,899,517; Feb. 28.
Masters, Paul G., assignor to Pennsylvania Wire Glass Company, Philadelphia, Pa. Corrugated glass window and light. 1,899,912; Feb. 28.

Matt, Morris C., assignor to Abbotts Dairies, Inc., Philadelphia, Pa. Therapeutic milk product and making same. 1,899,817; Feb. 28.
Matthews, Claud L., and T. Birkenmaier, assignors to W. N. Matthews Corporation, St. Louis, Mo. Electrical cut-out. 1,899,915; Feb. 28.
Matthews, John G., Berea, Ohio. Butcher's block planer and cleaner. 1,899,204; Feb. 28.
Matthews, W. N., Corporation. (See Matthews, C. I., and Birkenmaier, assignors.)
Maurer, Edwin R., Detroit, and D. M. Ferguson, Highland Park, assignors, by mesne assignments, to Continental-Divco Company, Detroit, Mich. Delivery vehicle. 1,899,205; Feb. 28.
Max Ams Chemical Engineering Corporation, The. (See Brenzinger, Julius, assignor.)
McCaskey Register Company. (See Dunning, William E., assignor.)
McClean, Alexander W., Webster Groves, Mo. Game apparatus. 1,899,706; Feb. 28.
McClintock, O. B., Company. (See McClintock, Oliver B., assignor.)
McClintock, Oliver B., assignor to O. B. McClintock Company, Minneapolis, Minn. Bullet resisting structure. 1,899,735; Feb. 28.
McClintock, William. (See Pearne, F. Y., and McClintock.)
McConway & Torley Company, The. (See Regan, W. J., and George, assignors.)
McCormick, Charles E., Royal Oak, Mich. Weather strip. 1,899,100; Feb. 28.
McCormick, Thomas J., and R. E. Linn, Detroit, Mich.; said Linn assignor to said T. J. McCormick. Tire cover. Des. 89,348; Feb. 28.
McCray, William B., Winchester, Ind. Chicken feeder. 1,899,818; Feb. 28.
McCuen, Charles L., Lansing, assignor to General Motors Corporation, Detroit, Mich. Rear chassis spring mounting. 1,899,913; Feb. 28.
McCulloch, Leon, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Coating thermionic cathodes. 1,899,765; Feb. 28.
McDermott, August, Cabot, Pa. Rail joint chair. 1,899,819; Feb. 28.
McKee, Ralph H., New York, N. Y., and E. H. Morse, Nutley, N. J., assignors to Alexander Herz, New Rochelle, N. Y. Depilatory and compounding the same. 1,899,707; Feb. 28.
McManus, James L., trustee. (See Bartsch, Frank R., assignor.)
McNab, Alexander, Bridgeport, Conn. Toothbrush holder. 1,899,242; Feb. 28.
McWilliams, James B., Pittsburgh, Pa. Conveyer. 1,899,766; Feb. 28.
Meagher, Glenn B., Chicago, Ill., assignor to The Kendall Company, Boston, Mass. Container for chemical heating composition. 1,899,286; Feb. 28.
Mecum, Harvey, and L. J. Black, Beaumont, Tex. Drill pipe joint. 1,899,469; Feb. 28.
Mehan, Thomas O., Jacksonville, Ill., assignor, by mesne assignments, to Remington Rand Inc. Adding and listing machine. 1,899,444; Feb. 28.
Mehren Lock Co. (See von Mehren, Oswald D., assignor.)
Meiro, Adam, Brussels, Belgium. Extraction of sugar from sugar juices. 1,899,287; Feb. 28.
Meisel, Benjamin W., Crestwood, assignor to The Regan Safety Devices Company, Inc., New York, N. Y. Train control system. 1,899,044; Feb. 28.
Mergenthaler Linotype Company. (See Stouges, Anthony J., assignor.)
Merk, Lawrence A., Pittsburgh, assignor to Railway Maintenance Corporation, Aspinwall, Pa. Lubricator. 1,899,767; Feb. 28.
Mertz, Fritz, Magdeburg, assignor to the Firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Machine for decorticating fibre-containing foliate plants. 1,899,470; Feb. 28.
Messick, Kirwan, Clarendon, Va. Excavator. 1,899,345; Feb. 28.
Metalwash Machinery Company. (See Zademach, Erich R., assignor.)
Metcalf, Abram, Hammond, Ind. Forming forked heads on metal bars. 1,899,288; Feb. 28.
Metropolitan Engineering Company. (See Murray Thomas E., assignor.)
Metts, Walter J., Highland Park, assignor to Johnson & Johnson, New Brunswick, N. J. Packaging surgical dressing. 1,899,625; Feb. 28.
Meyer, Andre J., assignor to Continental Motors Corporation, Detroit, Mich. Internal combustion engine. 1,899,206; Feb. 28.
Meyer, Ernest, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Apparatus for molding belts. 1,899,393; Feb. 28.
Meyer, Victor, Brooklyn, N. Y. Horse boot. 1,899,471; Feb. 28.
Michael, Hugo, Gottingen, Germany. Hair clipper. 1,899,102; Feb. 28.
Michigan Steel Corporation. (See Steele, John H., assignor.)
Miller, Bryan M., Washington, D. C. Oxy-acetylene burner. 1,899,626; Feb. 28.
Miller, Carl, assignor to Kellogg Switchboard & Supply Co., Chicago, Ill. Rectifier. 1,899,045; Feb. 28.
Miller, Clarence E., assignor to The Champion Fibre Company, Canton, N. C. Dehydrating caustic alkali solutions. 1,899,627; Feb. 28.
Miller Devices Inc. (See Miller, Philip M., assignor.)
Miller, Fred M., Bala, Pa. Checker brick molding machine. 1,899,708; Feb. 28.
Miller, Fred M., Bala, Pa. Making bricks. 1,899,709; Feb. 28.
Miller, Gustave, Washington, D. C. Telephone lock. 1,899,445; Feb. 28.
Miller, James L., and H. R. Gilchrist, Youngstown, Ohio. System for lubricating the roll necks of rolling mills. 1,899,472; Feb. 28.
Miller, James S., Pittsburgh, Pa., assignor to The Dravo Contracting Company. Sinking of caissons and the building of piers, etc. 1,899,346; Feb. 28.
Miller, Philip M., Youngstown, Ohio, assignor to Miller Devices Inc., New York, N. Y. Wheel. 1,899,289; Feb. 28.
Mills Falls Company. (See Shortell, William H., assignor.)
Milne, David E., Chattanooga, Tenn. Game. 1,899,820; Feb. 28.
Milne, John D., et al. (See Andersen, Gunnar E., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Minneapolis-Honeywell Regulator Company. (See Bear, Paul S., assignor.)
Minning, Charles P., Los Angeles, Calif. Structures for refrigerators and other devices. 1,899,710; Feb. 28.
Missouri Botanical Garden, The. (See Pring, George H., assignor.)
Mogford, Edmund C., and G. Spatta, assignors to Clark Equipment Company, Buchanan, Mich. Axle. 1,899,347; Feb. 28.
Mohawk Carpet Mills, Inc. (See Underwood, Garfield J., assignor.)
Molins, Walter E., London, England. Cigarette making machine. 1,899,628; Feb. 28.
Molins, Walter E., and G. D. Horgan, Deptford, London, England. Machine for packing cigarettes. 1,899,898; Feb. 28.
Monroe Calculating Machine Company. (See Chase, George C., assignor.)
Monsanto Chemical Works. (See Dvornikoff, Michael N., assignor.)
Moore, John C., Brooklyn, N. Y. Translucent pyrotechnic device. 1,899,518; Feb. 28.
Mote, John E., San Francisco, Calif. Display card. 1,899,421; Feb. 28.
Morgan, Hubert S., Scarsdale, N. Y. Merchandising display stand. Des. 89,349; Feb. 28.
Morgan, Wesley V., assignor to General Railway Signal Company, Rochester, N. Y. Car retarder for railroads. 1,899,899; Feb. 28.
Morse, Clark T., assignor to American Blower Corporation, Detroit, Mich. Steel pipe and fin heater. 1,899,629; Feb. 28.
Morse, Earle H. (See McKee, Ralph H., and Morse.)
Moser, Wilhelm, Rieben, near Basel, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Dyestuffs of the dibenzanthrone series and making same. 1,899,878; Feb. 28.
Moshelm, Albert, assignor to House of Tre-Jur, New York, N. Y. Cake of soap. Des. 89,350; Feb. 28.
Motor Products Corporation. (See Thunder, Harold G., assignor.)
Motor Terminals Company. (See Fitch, Benjamin F., assignor.)
Munn, Charles E., et al. (See Jones, Winfield S., assignor.)
Munson, John M., Lakewood, assignor to The Dobeckmun Company, Cleveland, Ohio. Packaging articles. 1,899,207; Feb. 28.
Munz, Elmer G., Detroit, Mich. Self-cleaning spray head. 1,899,711; Feb. 28.
Murphy, Daniel H., West Hartford, Conn. Massage machine. 1,899,208; Feb. 28.
Murray, John F., et al, executors. (See Murray, Thomas E.)
Murray, Joseph B., et al., executors. (See Murray, Thomas E.)
Murray, Thomas E., jr., et al., executors. (See Murray, Thomas E.)
Murray, Thomas E., deceased, Brooklyn, N. Y., by T. E. Murray, jr., J. B. Murray and J. F. Murray, Brooklyn, N. Y., executors, assignors to Metropolitan Engineering Company. Boiler and the like. Re18,748; Feb. 28.
Nakken Patents Corporation. (See Nakken, Theodorus H., assignor.)
Nakken, Theodorus H., Brooklyn, N. Y., assignor to Nakken Patents Corporation. Electrostatic potential control from photoelectric cells. 1,899,712; Feb. 28.
National Blank Book Company. (See Schade, John, assignor.)
National Carbon Company, Inc. (See Heise, George W., assignor.)
National Nut Company. (See Kohler, Michael J., assignor.)
National Rubber Machinery Company. (See Shook, Florain J., assignor.)
Navias, Louis, Schenectady, N. Y., assignor to General Electric Company. Forming shaped articles. 1,899,584; Feb. 28.

Neidich, Samuel A., Edgewater Park, N. J., assignor to Sylvania Industrial Corporation, Fredericksburg, Va. Lifting and rotating apparatus. 1,899,714; Feb. 28.
Neilsen, Alfred, Kirkland, Wash. Watering trough for poultry. 1,899,519; Feb. 28.
Nelson, August L., and F. W. Pease, assignors to Hayes Body Corporation, Grand Rapids, Mich. Adjustable seat construction. 1,899,585; Feb. 28.
Nelson, George A., Wauwatosa, Wis. Folding boat and trailer carrier therefor. 1,899,900; Feb. 28.
Nelson, Herman, Corporation, The. (See Shurtleff, Wilfred, assignor.)
Nelson, Victor E., assignor to Universal Oil Seal Company, Pontiac, Mich. Oil retaining packing for rods and shafts. 1,899,630; Feb. 28.
Neptune Meter Company. (See Marden, William L., assignor.)
Neresheimer, Heinrich. (See Lüttringhaus, A., Neresheimer, and Emmer.)
Neresheimer, Heinrich, and W. Schneider, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Purification of vat dyestuffs of the anthraquinoneazine series. 1,899,348; Feb. 28.
Nerger, Hans J., New York, N. Y. Textile fabric or the like. Des. 89,351; Feb. 28.
Nerger, Hans J., New York, N. Y. Textile fabric or the like. Des. 89,378; Feb. 28.
Nettenstrom, David, assignor of one-half to Harry C. Wanner, Chicago, Ill. Ground anchor. 1,899,520; Feb. 28.
Nevalost Manufacturing Company. (See Lapin, Bernard, assignor.)
Nevin, James V., Scotia, assignor to The Pacific Lumber Company, San Francisco, Calif. Sawdust wood fiber board and making same. 1,899,768; Feb. 28.
Newton, Edwin B., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Dispersing rubber in water. 1,899,243; Feb. 28.
Nichols, Erwin H., Brooks Field, Tex., assignor to Irving Air Chute Company. Parachute pack. 1,899,713; Feb. 28.
Nichols, Katherine, and R. Bettien, Chicago, Ill.; said Bettien assignor to said Nichols. Telephone. 1,899,046; Feb. 28.
Nichols, Louis R., Weston, Mass. Heat insulating cement. 1,899,473; Feb. 28.
Nickerson, Gertrude, Milford, Conn., assignor to Kops Brothers, Inc., New York, N. Y. Garment. 1,899,769; Feb. 28.
Nickliss, Stephen N., Laureldale, assignor of one-half to Temple Slag Company, Temple, Pa. Crowding and racking in mechanism for excavator cranes. 1,899,901; Feb. 28.
Nivois, Victor. (See Ross, William H., assignor.)
Noelting, Clarence B. and W. H., assignors to Faultless Caster Company, Evansville, Ind. Extensible offset caster construction. 1,899,394; Feb. 28.
Noelting, William H., assignor to Faultless Caster Company, Evansville, Ind. Rocking stem slide. 1,899,395; Feb. 28.
Noelting, William H. (See Noelting, Clarence B. and W. H.)
Norman, Ernest B., assignor to Reliance Machine and Stamping Works, New Orleans, La. Pressure grease gun. 1,899,349; Feb. 28.
Norton Lasier Company. (See Norton, Lewis C., assignor.)
Norton, Lewis C., Pasadena, Calif., assignor to Norton-Lasier Company, Chicago, Ill. Air doorcheck. 1,899,716; Feb. 28.
Norton, Raymond J., Washington, D. C., assignor to Bendix Aviation Corporation, New York, N. Y. Airplane propeller. 1,899,631; Feb. 28.
Norviel, Harry E., assignor to Delco-Remy Corporation, Anderson, Ind. Antitheft device. 1,899,350; Feb. 28.
Noss, James R., Aliquippa, Pa. Safety wrist pin. 1,899,879; Feb. 28.
Nudell, Uza, New York, N. Y., assignor to Baker & Company, Inc., Newark, N. J. Making reenforced vulcanite dentures. 1,899,521; Feb. 28.
Nutt, William H., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for grooving heels. 1,899,047; Feb. 28.
O'Brien, Michael, Chicago, Ill. Spinner sled. 1,899,103; Feb. 28.
Ocker, William C., Kelly Field, Tex. Training plane. 1,899,104; Feb. 28.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,899,522; Feb. 28.
Ohmer Fare Register Company. (See Paden, William L., assignor.)
Ohmer Fare Register Company. (See Wheelbarger, A. S., and Coil, assignors.)
Oleson, Wrisley B., Glen Ellyn, assignor to Allen B. Wrisley Company, Chicago, Ill. Soap cake. Des. 89,352; Feb. 28.
Olinger, Jean B., Milwaukee, Wis. Synchronizing and control mechanism for sound and motion picture apparatus. 1,899,048; Feb. 28.
Olney, George J., Westernville, N. Y. Gravity operating device for sorting fruits or vegetables. 1,899,632; Feb. 28.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Lock nut. 1,899,715; Feb. 28.
Ono, Ryoe, Odori, Sapporo, Hokkaido, Japan. Constructing sub-way tunnels. 1,899,474; Feb. 28.
Oppenheimer, Herbert, New York, N. Y. Method and apparatus for promoting osmotic absorption. 1,899,770; Feb. 28.
Osgood, Walter P., Malden, assignor to Boston Machine Works Company, Lynn, Mass. Forming back seams. 1,899,049; Feb. 28.
Osgood, Walter P., Malden, assignor to Boston Machine Works Company, Lynn, Mas. Seam pressing machine. 1,899,050; Feb. 28.
Osgood, Walter P., Malden, assignor to Boston Machine Works Company, Lynn, Mass. Taping machine. 1,899,051; Feb. 28.
Ostrander, George T., Joliet, Ill. Circuit closer. 1,899,475; Feb. 28.
Otis Steel Company, The. (See Shonkwiler, A. H., and Macklin, assignors.)
Ott, Oran W., Los Angeles, and A. J. Smithers, Alhambra, assignors to Pacific Pipe and Supply Company, Los Angeles, Calif. Water heater. 1,899,523; Feb. 28.
Overfelt, Walter M., Rocky Mount, Va. King pin extracting apparatus. 1,899,351; Feb. 28.
Overland Candy Corporation. (See Leaf, Sol S., assignor.)
Owens, Freeman H., New York, N. Y. Combined motion picture camera and projecting apparatus. 1,899,052; Feb. 28.
Paasche, Jens A., Chicago, Ill. Pressure tank and the like. 1,899,244; Feb. 28.
Pabst Corporation. (See Stoll, Julius E., assignor.)
Pacific Lumber Company, The. (See Nevin, James V., assignor.)
Pacific Pipe and Supply Company. (See Ott, O. W., and Smithers, assignors.)
Packard Motor Car Company. (See Griswold, Walter R., assignor.)
Packard Motor Car Company. (See Knapp, Archer L., assignor.)
Packard Motor Car Company. (See Tibbetts, Milton, assignor.)
Packard Motor Company. (See Woolson, Lionel M., assignor.)
Packie, John W. (See Stines, D. E., and Packie.)
Paden, William L., assignor to Ohmer Fare Register Company, Dayton, Ohio. Check ejecting mechanism. 1,899,290; Feb. 28.
Paine, Harry W., Toledo, Ohio. Auxiliary air valve and fuel modifier for internal combustion motors. 1,899,476; Feb. 28.
Palermiti, Joseph, Flint, Mich. Radiator. 1,899,633; Feb. 28.
Palmer, Edmund W. (See Christian, D. A., and Palmer.)
Pangborn Corporation. (See Rosenberger, William A., assignor.)
Paper Patents Company. (See Rothchild, H. A., and Limpert, assignors.)
Paraffine Companies, The. (See Finley, Dozier, assignor.)
Parker, Cecil J., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md. Container. 1,899,821; Feb. 28.
Parker, Howard, assignor to Brown Company, Berlin, N. H. Mechanism for squeezing tube ends. 1,899,291; Feb. 28.
Parks, Merritt G., Gary, Ind. Making and applying gaskets to jar caps. 1,899,524; Feb. 28.
Paul, Sydney, assignor to Superior Body Company, Lima, Ohio. Seat-back control. 1,899,880; Feb. 28.
Payne, Elmer H., Wood River, assignor to Standard Oil Company, Chicago, Ill. Vacuum distillation. 1,899,916; Feb. 28.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread cutter and shuttle therefor. 1,899,634; Feb. 28.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Electrical warp stop motion. 1,899,717; Feb. 28.
Peace, Gordon, assignor of one-half to The British India Corporation Limited, Cawnpore, British India. Rapid vegetable tanning process. 1,899,422; Feb. 28.
Pearne, Frank Y., Alhambra, and W. McClintock, assignors of one-third to F. R. Galbreath, Los Angeles, Calif. Pot forming machine. 1,899,881; Feb. 28.
Pease, Frank W. (See Nelson, A. L., and Pease.)
Peel, Alfred L., Birmingham, England. Fastening for attaché cases, bags, trunks, and the like. 1,899,822; Feb. 28.
Pennsylvania Wire Glass Company. (See Masters, Paul G., assignor.)
Perfection Stove Company. (See Chadwick, Lee S., assignor.)
Perkins, Louis E., New York, N. Y. Bilge pump. 1,899,917; Feb. 28.
Perpetual Self Winding Watch Corporation. (See Reiner, Max, assignor.)
Perry, Walter M., Brooklyn, and G. L. Jones, East Williston, assignors, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y. Automatic rail locator for brushes of fissure detector cars. 1,899,525; Feb. 28.
Petersen, Arthur E., Westfield, N. J., assignor to Celluloid Corporation. Imitation pearl. 1,899,053; Feb. 28.
Peterson, Gust W., Long Beach, Calif. Hair drying apparatus. 1,899,352; Feb. 28.
Peterson, Pontus. (See Beutel, R. J., and Peterson.)
Petit, Victor M., Rojas, Argentina. Grain cleaning machine. 1,899,209; Feb. 28.

Pflueger, Charles T., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Click spring for fishing reels. 1,899,914; Feb. 28.

Phebus, William C., Berwyn, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,899,105; Feb. 28.

Phelps, Alva W., and E. A. Kaegi, assignors to Delco-Remy Corporation, Anderson, Ind. Electric welding. 1,899,353; Feb. 28.

Phelps, Fred S., Sausalito, Calif., assignor to The American Steel and Wire Company of New Jersey. Fishing line. 1,899,477; Feb. 28.

Philadelphia Drying Machinery Company, The. (See Sibson, W. W., and Dennis, assignors.)

Phillips, Max, Washington, D. C. Varnish. 1,899,526; Feb. 28.

Phillips, Robert M., assignor to The Electric Controller & Mfg. Company, Cleveland, Ohio. Motor control system. 1,899,586; Feb. 28.

Pierce-Arrow Motor Car Company, The. (See Hughes, James R., assignor.)

Pierson, Willett C., East Orange, N. J., assignor to Leagum Corporation of Delaware, New York, N. Y. Lacquer-base, lacquer and making same. 1,899,054; Feb. 28.

Pike, William P. (See Logan, Z. S., and Pike.)

Pisano, Stellario, and J. Fardella, Brooklyn, N. Y. Vending machine. 1,899,478; Feb. 28.

Pitts, Charles A., San Francisco, Calif. Apparatus for conditioning dry matrices. 1,899,055; Feb. 28.

Place, Bion C., assignor of one-half to G. E. Gagnier, Detroit, Mich. Panel foundation making. 1,899,823; Feb. 28.

Poole, James E. (See Walliser, G. F., and Poole.)

Poston, Leon L., Vinton, Iowa. Jacket crown, model, and method of applying. 1,899,718; Feb. 28.

Powell, Edward R., assignor to Banner Rock Corporation, Alexandria, Ind. Making felted mineral fiber. 1,899,056; Feb. 28.

Powrie, Thomas K., Paisley, Scotland. Lubricating rings and travelers in doubling and like frames. 1,899,635; Feb. 28.

Prentice, George E., Berlin, Conn. Fastener unit. 1,899,479; Feb. 28.

Pring, George H., assignor to The Missouri Botanical Garden, St. Louis, Mo. Water lily. Pl. Pt. 55; Feb. 28.

Prosperity Company Inc., The. (See Braun, Philip N., assignor.)

Prosperity Company Inc., The. (See Davis, Ernest, assignor.)

Purdue Research Foundation. (See Hopfield, John J., assignor.)

Purington, Ellison S., assignor to John Hays Hammond, jr., Gloucester, Mass. System for transmitting electro-radiant energy. 1,899,527; Feb. 28.

Putnam, Henry V., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Synchronous motor having high starting and pull-in torques. 1,899,719; Feb. 28.

Putnam, Henry V., Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Nonoscillating transformer. 1,899,720; Feb. 28.

Pym, Arthur F., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Work positioning means. 1,899,057; Feb. 28.

Quesseque, Jean, Issy-les-Moulineaux, France, assignor to General Electric Company. Incandescent electric lamp. 1,899,587; Feb. 28.

R-B-M Manufacturing Co. (See Dashner, William W., assignor.)

Rabin, Della. (See Torch, Louis, assignor.)

Radio Corporation of America. (See Carson, Benjamin R., assignor.)

Radio Corporation of America. (See Cass, J. L., and Kreuzer, assignors.)

Radio Corporation of America. (See Dorsey, Herbert G., assignor.)

Radio Corporaton of America. (See Druyvesteyn, Mari J., assignor.)

Radio Corporation of America. (See Haigis, Carleton D., assignor.)

Radio Corporation of America. (See Hansell, Clarence W., assignor.)

Radio Corporation of America. (See Weinberger, J., and Wolff, assignors.)

Ragsdale, John B., Whittier, Calif., assignor to Globe Oil Tools Company, Los Nietos, Calif. Core catcher. 1,899,354; Feb. 28.

Railroad Accessories Corporation. (See Lavarack, William H. B., assignor.)

Railway Maintenance Corporation. (See Merk, Lawrence A., assignor.)

Ramsay, William A., Honolulu, Hawaii. Closure for vessels. 1,899,210; Feb. 28.

Raule, Clifford T., Brookline, Pa. Protector for bearing for high speed spindles. 1,899,164; Feb. 28.

Raulerson, Rayford, Dubuque, Iowa. Hat shaper. 1,899,636; Feb. 28.

Ravlin, Frederick F., Miami, Fla. Support for serving trays. 1,899,480; Feb. 28.

Ray Burner Company. (See Ray, William A., assignor.)

Ray, William A., assignor to Ray Burner Company, San Francisco, Calif. Oil burning apparatus and method. 1,899,396; Feb. 28.

Reach, Milton B., Springfield, Mass., assignor to A. G. Spalding & Bros., New York, N. Y. Golf bag. 1,899,825; Feb. 28.

Reals, Clifford L., Syracuse, N. Y. Switch for controlling electrically operated circuit interrupters. 1,899,481; Feb. 28.

Reed, Clarence E., Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Blade type bit. 1,899,771; Feb. 28.

Reed, Marion C., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber composition and preserving rubber. 1,899,058; Feb. 28.

Reed, William R. (See Britton, E. C., and Reed.)

Regan Safety Devices Company, The. (See Meisel, Benjamin W., assignor.)

Regan Safety Devices Company, The. (See Shaver, A. G., and Rosenzweig, assignors.)

Regan, William J., Wilkinsburg, and E. George, jr., assignor to The McConway & Torley Company, Pittsburgh, Pa. Draft appliance for railway cars. 1,899,482; Feb. 28.

Regas, George J., Wheeling, W. Va. Safety mechanism for aircraft. 1,899,721; Feb. 28.

Reiche, Kurt, Berlin-Halensee, assignor to Stettiner Chamotte-Fabrik Actien-Gesellschaft vormals Didier, Berlin-Wilmersdorf, Germany. Drying granular or powdered material by means of a fluid. 1,899,397; Feb. 28.

Reichert, August. (See Reichert, Julius and A.)

Reichert, Julius and A., Astoria, N. Y. Submarine salvager. 1,899,059; Feb. 28.

Reid, Allan E., Boston, assignor to Reid Piston Company, Brookline, Mass. Piston and connecting rod. 1,899,355; Feb. 28.

Reid Piston Company. (See Reid, Allan E., assignor.)

Reilly, Peter C. (See Derby, Ira H., assignor.)

Reiner, Max, Bronx, assignor, by mesne assignments, to Perpetual Self Winding Watch Corporation, New York, N. Y. Self-winding watch. 1,899,722; Feb. 28.

Reis, Louis C., Duluth, Minn. Discharge mechanism. 1,899,356; Feb. 28.

Reliance Machine and Stamping Works. (See Norman, Ernest B., assignor.)

Remington Rand Inc. (See Mehan, Thomas O., assignor.)

Remington Rand Inc. (See Wood, Rodney J., assignor.)

Remler, Raymond F. (See Lemmerman, P. C., and Remler.)

Rentschler, Jahlon J. (See Jeavons, W. R., and Rentschler.)

Reo Motor Car Company. (See Jeffries, Schuyler A., assignor.)

Research & Development Corporation. (See Dalgliesh, Herbert V., assignor.)

Rheiner, William, Detroit, Mich. Lamp fixture. 1,899,723; Feb. 28.

Rhode Island Hospital Trust Company, administrator. (See Baldwin, Luther C.)

Rhodes, Russell I., jr., North Attleboro, assignor to the Mason Box Company, Attleboro Falls, Mass. Container for displaying merchandise. 1,899,483; Feb. 28.

Rice, Cyrus, W., Pittsburgh, Pa. Valve mounting means for blowdown control. 1,899,826; Feb. 28.

Richardson, Ralph R., assignor to Chicago Carton Company, Chicago, Ill. Foldable paper carton. 1,899,772; Feb. 28.

Richter, George A., and E. Eble, assignors to Brown Company, Berlin, N. H. Method of and apparatus for treating pulp. 1,899,106; Feb. 28.

Richter, George A., assignor to Brown Company, Berlin, N. H. Chemical pulping and refining process. 1,899,637; Feb. 28.

Richter, William F., assignor to Chemical Holding Corporation, Apollo, Pa. Manufacture of lusterless rayon. 1,899,725; Feb. 28.

Ridderstrom, Andrew R. (See Byron, J. P., and Ridderstrom.)

Riebel, Frederick, jr., assignor to Air-Way Electrical Appliance Corporation, Toledo, Ohio. Vacuum cleaner. 1,899,107; Feb. 28.

Riebel, Frederick, jr., assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio. Vacuum cleaner. 1,899,108; Feb. 28.

Riebel, Frederick, jr., assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio. Vacuum cleaner. 1,899,423; Feb. 28.

Riek, Forest O., Rhinelander, Wis. Defrosting attachment for mechanical refrigerators. 1,899,724; Feb. 28.

Riemenschneider, Edmund W. (See Frahm, C. A., and Riemenschneider.)

Rienks, George W., Denver, Colo. Screening device. 1,899,292; Feb. 28.

Rieschick, Reinhold, New York, N. Y. Piano-accordion. 1,899,357; Feb. 28.

Rigney, William D. (See Ward, W. L., and Rigney.)

Ringler, William A., Wayne, Pa., assignor to Frank A. Weeks Mfg. Co. Inc., New York, N. Y. Memorandum pad. 1,899,773; Feb. 28.

Ripper, Kurt, Berlin, Germany. Molding powder. 1,899,109; Feb. 28.

Rite-Rite Mfg. Co. (See Hale, Joe D., assignor.)

Ritter, John J., assignor to The W. B. Marvin Manufacturing Company, Urbana, Ohio. Window screen. 1,899,358; Feb. 28.

Rivet, Edward L., Chicago, Ill. Combined ornament and dispenser. 1,899,165; Feb. 28.

Robertson, Isaac W., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Vibration insulator. 1,899,293; Feb. 28.

Robinson, Gilbert A., Sutton-on-Hull, England. Making metal containers. 1,899,638; Feb. 28.

Robinson, Gilbert A., Sutton-on-Hull, England. Making metal containers. 1,899,639; Feb. 28.

Rode, Fredrich J., Chicago, Ill. Sheet metal drawing press. 1,899,110; Feb. 28.

Rode, Fredrich J., Chicago, Ill. Sheet metal drawing press. 1,899,111; Feb. 28.

Rodgers, Fay T., Memphis, Tenn. Refrigerator display case. Des. 89,353; Feb. 28.

Rodle, Robert S., Kingston, N. Y. Automatic fuel control for boilers. 1,899,424; Feb. 28.

Roeder, Clyde A., Omaha, Nebr. Hydraulic brake for automobile engines. 1,899,294; Feb. 28.

Roell, Ernst. (See Mark, H. Dunkel, and Roell.)

Rogers, Cephas B., Danbury, Conn. Ceiling fixture. Des. 89,354; Feb. 28.

Rogers, Harold G. (See Campbell, L. J., Ford, and Rogers.)

Rohlfs, Harry C., Schenectady, N. Y., assignor to General Electric Company. Laminated glass. 1,899,588; Feb. 28.

Rosebrook, Guy L., Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa. Service building. Des. 89,355; Feb. 28.

Rosebrook, Guy L., Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa. Service building. Des. 89,356; Feb. 28.

Roseman, Leo, Newark, N. J. Method of and apparatus for making hook and eye tape. 1,899,902; Feb. 28.

Rosenberger, William A., assignor to Pangborn Corporation, Hagerstown, Md. Sand blast tank apparatus. 1,899,528; Feb. 28.

Rosenzweig, Fred M. (See Shaver, A. G., and Rosenzweig.)

Ross, William H., Brooklyn, assignor of one-half to Victor Nivois, New York, N. Y. Dispensing cabinet. 1,899,484; Feb. 28.

Rothchild, Henry A., Appleton, and J. A. Limpert, Kimberly, assignors to Paper Patents Company, Neenah, Wis. Method of and apparatus for testing loading material used in paper manufacture. 1,899,774; Feb. 28.

Rottler, Clarence T., Seattle, Wash. Holding a cutter head while its cutters are being sharpened. 1,899,359; Feb. 28.

Roudebush, Kenneth B., and H. G. Eilers, Cincinnati, Ohio. Electric plug. 1,899,360; Feb. 28.

Rowen, Thomas C., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Folding machine and method. 1,899,245; Feb. 28.

Rowley, Arthur C., assignor to Glove Automatic Sprinkler Company, Philadelphia, Pa. Release mechanism. 1,899,827; Feb. 28.

Rubber Service Laboratories Co., The. (See Scott, Winfield, assignor.)

Rubel, Charles F., assignor to Union Special Machine Company, Chicago, Ill. Stitch forming mechanism for sewing machines. 1,899,828; Feb. 28.

Rubel, Charles F., and F. F. Zeier, assignors to Union Special Machine Company, Chicago, Ill. Thread controlling mechanism for sewing machines. 1,899,882; Feb. 28.

Rubinger, Louis, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,357; Feb. 28.

Rubinger, Louis, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,379; Feb. 28.

Rudy Furnace Company. (See Torr, Thomas W., assignor.)

Rushmore, Samuel W., Plainfield, N. J. Hydraulic brake. 1,899,398; Feb. 28.

Rusnak, Samuel, Chicago, Ill. Seat construction. 1,899,726; Feb. 28.

Russell Burdsall & Ward Bolt & Nut Co. (See Ward, W. L., and Rigney, assignors.)

Ruth Company, The. (See Ruth, Joseph P., jr., assignor.)

Ruth, Joseph P., jr., assignor to The Ruth Company, Denver, Colo. Flotation machine. 1,899,166; Feb. 28.

Rutherford, Eugene W., New Haven, assignor to The Shoe Hardware Company, Waterbury, Conn. Slider for automatic fasteners. 1,899,529; Feb. 28.

Rutter, Alvah E., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Hayrake. 1,899,361; Feb. 28.

Ryden, Gunnar. (See Eckland, P. S., and Ryden, assignors.)

Sacrey, Elmer P., Liverpool, N. Y. Adjustable and interchangeable mounting for motor driven tools. 1,899,883; Feb. 28.

Safety Car Heating & Lighting Company, The. (See Godsey, Frank W., jr., assignor.)

Safety Car Heating & Lighting Company, The. (See Hulse, George E., assignor.)

Sanborn, Charles H., Newburyport, assignor to Haley, Cate, Rockwood Company, Inc., Everett, Mass. Yielding attachment for sewing machines. 1,899,399; Feb. 28.

Sanborn, Percy G., San Francisco, assignor of one-half to F. E. Madden, Oakland, Calif. Locomotive. 1,899,589; Feb. 28.

Sandstone, Harvey D., Los Angeles, Calif. Combination cutting drill and reaming bit. 1,899,727; Feb. 28.

Sandstone, Harvey D., Portland, Oreg. Well drilling apparatus. 1,899,728; Feb. 28.

Sarazin, Robert, Neuilly-sur-Seine, France. Automatic machine with magnetic plates for regulating arcs. 1,899,829; Feb. 28.

Saunders, Norman H., Chicago, C. E. Lomax, Oak Park, and T. F. Crocker, Chicago, assignors to Associated Electric Laboratories, Inc., Chicago, Ill. Multiofice telephone system. 1,899,112; Feb. 28.

Schaake, William, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Current collector. 1,899,729; Feb. 28.

Schade, John, assignor to National Blank Book Company, Holyoke, Mass. File container for loose leaf sheets. 1,899,530; Feb. 28.

Schaefer, Erich, New York, N. Y. Alarm clock attachment. 1,899,113; Feb. 28.

Scheffer, Marinus A. (See Kluyver, A. J., and Scheffer.)

Schey, Robert, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 89,330; Feb. 28.

Schiess-Defries Aktiengesellschaft. (See Vogler, Hermann, assignor.)

Schiff, Sigmund, assignor to the J. H. Day Company, Cincinnati, Ohio. Dough proofing device. 1,899,246; Feb. 28.

Schleicher, Manfred, Berlin-Charlottenburg, assignor to Siemens & Halske Aktiengesellschaft, Berlin-Siemensstadt, Germany. Electrical protective system. 1,899,425; Feb. 28.

Schmidt, Edmund, Berlin-Tempelhof, Germany. Machine for manufacturing dry cells. 1,899,114; Feb. 28.

Schmidt, Leopold, Wesermunde, Germany. Device for rotating and at the same time lifting the gondolas of roundabouts. 1,899,060; Feb. 28.

Schnable, Albert E., New York, N. Y. Instrument for individual vary-sizing of type. 1,899,775; Feb. 28.

Schneider, Wilhelm. (See Neresheimer, H., and Schneider.)

Schnelling, Samuel, Chicago, Ill. Escutcheon for bracelets or the like. Des. 89,358; Feb. 28.

Schofield, Theodore J., L. E. Johnson, and F. W. Billig, assignors to The Sparks-Withington Company, Jackson, Mich. Signaling device. 1,899,731; Feb. 28.

Schultz, Alfred W., Waterloo, Iowa. Mechanism for constructing concrete pipe. 1,899,115; Feb. 28.

Schultze, Louis J., Chenoa, Ill. Power take-off device. 1,899,247; Feb. 28.

Schulze, William H., assignor to Stewart-Warner Corporation, Chicago, Ill. Fuel pump. 1,899,295; Feb. 28.

Schwalbe, Franz G., Toledo, Ohio. Glass treatment. 1,899,640; Feb. 28.

Schwartz, Abraham G., and H. A., Long Branch, N. J. Trap. 1,899,641; Feb. 28.

Schwartz, Harvey A. (See Schwartz, Abraham G. and H. A.)

Schweitzer, William K., East Cleveland, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Curing concrete. 1,899,590; Feb. 28.

Schweizer, Ernst, Zurich, Switzerland. Doubling machine and twining spindles in combination with bobbin-winders and stop motion devices for same. 1,899,780; Feb. 28.

Schweizer, Jack, Rye, N. Y. Textile fabric or the like. Des. 89,331; Feb. 28.

Schweizerische Lokomotiv und Maschinenfabrik. (See Heusser, Hermann, assignor.)

Schweyer, Daniel H., Easton, Pa. Automatic train control. 1,899,642; Feb. 28.

Scott, Winfield, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Age resisting vulcanized rubber product. 1,899,426; Feb. 28.

Segar, Harry D., Pittsfield, Mass., assignor to General Electric Company. Laminated material. 1,899,591; Feb. 28.

Seifner, Louis P., assignor of one-half to J. C. Larsin, Seattle, Wash. Wire puller. 1,899,531; Feb. 28.

Selden Research & Engineering Corporation, The. (See Jaeger, A. O., and West, assignors.)

Semet-Solvay Engineering Corporation. (See Hughes, Charles H., assignor.)

Seng Company, The. (See Fox, Martin, assignor.)

Servel, Inc. (See Zouck, G. H., and De Baufre, assignors.)

Session, Willet A., Detroit, Mich., assignor of one-half to Helen A. S. Cavin. Dump pocket for scows. 1,899,592; Feb. 28.

Severy, Melvin L., assignor to The Vocalsevro Company, Los Angeles, Calif. Electrical musical instrument. 1,899,884; Feb. 28.

Shafer, Samuel, jr., assignor to Chain Belt Company, Milwaukee, Wis. Brake-control mechanism for concrete mixing and other machines. 1,899,167; Feb. 28.

Shakeproof Lock Washer Company. (See Olson, Carl G., assignor.)

Shakespeare Products Company. (See Kal, L. H., and Weber, assignors.)

Shapiro, Joseph. (See Balton, James, assignor.)

Shaver, Archibald G., Chicago, Ill., and F. M. Rosenzweig, Niagara Falls, assignors to The Regan Safety Devices Company, Inc., New York, N. Y. Train control system. 1,899,116; Feb. 28.

Shaw, Maurice E., Los Angeles, Calif. Easy lift sanitary flower container. 1,899,400; Feb. 28.

Sheeley, Howard F., Michigan City, Ind. Adjustable reel. 1,899,117; Feb. 28.

Shell Development Company. (See de Simo, Martin, assignor.)

Pflueger, Charles T., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Click spring for fishing reels. 1,899,914; Feb. 28.

Phebus, William C., Berwyn, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,899,105; Feb. 28.

Phelps, Alva W., and E. A. Kaegi, assignors to Delco-Remy Corporation, Anderson, Ind. Electric welding. 1,899,353; Feb. 28.

Phelps, Fred S., Sausalito, Calif., assignor to The American Steel and Wire Company of New Jersey. Fishing line. 1,899,477; Feb. 28.

Philadelphia Drying Machinery Company, The. (See Sibson, W. W., and Dennis, assignors.)

Phillips, Max, Washington, D. C. Varnish. 1,899,526; Feb. 28.

Phillips, Robert M., assignor to The Electric Controller & Mfg. Company, Cleveland, Ohio. Motor control system. 1,899,586; Feb. 28.

Pierce-Arrow Motor Car Company, The. (See Hughes, James R., assignor.)

Pierson, Willett C., East Orange, N. J., assignor to Leagum Corporation of Delaware, New York, N. Y. Lacquer-base, lacquer and making same. 1,899,054; Feb. 28.

Pike, William P. (See Logan, Z. S., and Pike.)

Pisano, Stellario, and J. Fardella, Brooklyn, N. Y. Vending machine. 1,899,478; Feb. 28.

Pitts, Charles A., San Francisco, Calif. Apparatus for conditioning dry matrices. 1,899,055; Feb. 28.

Place, Bion C., assignor of one-half to G. E. Gagnier, Detroit, Mich. Panel foundation making. 1,899,823; Feb. 28.

Poole, James E. (See Walliser, G. F., and Poole.)

Poston, Leon L., Vinton, Iowa. Jacket crown, model, and method of applying. 1,899,718; Feb. 28.

Powell, Edward R., assignor to Banner Rock Corporation, Alexandria, Ind. Making felted mineral fiber. 1,899,056; Feb. 28.

Powrie, Thomas K., Paisley, Scotland. Lubricating rings and travelers in doubling and like frames. 1,899,635; Feb. 28.

Prentice, George E., Berlin, Conn. Fastener unit. 1,899,479; Feb. 28.

Pring, George H., assignor to The Missouri Botanical Garden, St. Louis, Mo. Water lily. Pl. Pt. 55; Feb. 28.

Prosperity Company Inc., The. (See Braun, Philip N., assignor.)

Prosperity Company Inc., The. (See Davis, Ernest, assignor.)

Purdue Research Foundation. (See Hopfield, John J., assignor.)

Purington, Ellison S., assignor to John Hays Hammond, jr., Gloucester, Mass. System for transmitting electro-radiant energy. 1,899,527; Feb. 28.

Putnam, Henry V., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Synchronous motor having high starting and pull-in torques. 1,899,719; Feb. 28.

Putnam, Henry V., Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Nonoscillating transformer. 1,899,720; Feb. 28.

Pym, Arthur F., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Work positioning means. 1,899,057; Feb. 28.

Quesseque, Jean, Issy-les-Moulineaux, France, assignor to General Electric Company. Incandescent electric lamp. 1,899,587; Feb. 28.

R-B-M Manufacturing Co. (See Dashner, William W., assignor.)

Rabin, Della. (See Torch, Louis, assignor.)

Radio Corporation of America. (See Carson, Benjamin R., assignor.)

Radio Corporation of America. (See Cass, J. L., and Kreuser, assignors.)

Radio Corporation of America. (See Dorsey, Herbert G., assignor.)

Radio Corporaton of America. (See Druyvesteyn, Mari J., assignor.)

Radio Corporation of America. (See Haigis, Carleton D., assignor.)

Radio Corporation of America. (See Hansell, Clarence W., assignor.)

Radio Corporation of America. (See Weinberger, J., and Wolff, assignors.)

Ragsdale, John B., Whittier, Calif., assignor to Globe Oil Tools Company, Los Nietos, Calif. Core catcher. 1,899,354; Feb. 28.

Railroad Accessories Corporation. (See Lavarack, William H. B., assignor.)

Railway Maintenance Corporation. (See Merk, Lawrence A., assignor.)

Ramsay, William A., Honolulu, Hawaii. Closure for vessels. 1,899,210; Feb. 28.

Raule, Clifford T., Brookline, Pa. Protector for bearing for high speed spindles. 1,899,164; Feb. 28.

Raulerson, Rayford, Dubuque, Iowa. Hat shaper. 1,899,686; Feb. 28.

Ravlin, Frederick F., Miami, Fla. Support for serving trays. 1,899,480; Feb. 28.

Ray Burner Company. (See Ray, William A., assignor.)

Ray, William A., assignor to Ray Burner Company, San Francisco, Calif. Oil burning apparatus and method. 1,899,396; Feb. 28.

Reach, Milton B., Springfield, Mass., assignor to A. G. Spalding & Bros., New York, N. Y. Golf bag. 1,899,825; Feb. 28.

Reals, Clifford L., Syracuse, N. Y. Switch for controlling electrically operated circuit interrupters. 1,899,481; Feb. 28.

Reed, Clarence E., Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Blade type bit. 1,899,771; Feb. 28.

Reed, Marion C., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber composition and preserving rubber. 1,899,058; Feb. 28.

Reed, William E. (See Britton, E. C., and Reed.)

Regan Safety Devices Company, The. (See Meisel, Benjamin W., assignor.)

Regan Safety Devices Company, The. (See Shaver, A. G., and Rosenzweig, assignors.)

Regan, William J., Wilkinsburg, and E. George, jr., assignor to The McConway & Torley Company, Pittsburgh, Pa. Draft appliance for railway cars. 1,899,482; Feb. 28.

Regas, George J., Wheeling, W. Va. Safety mechanism for aircraft. 1,899,721; Feb. 28.

Reiche, Kurt, Berlin-Halensee, assignor to Stettiner Chamotte-Fabrik Actien-Gesellschaft vormals Didier, Berlin-Wilmersdorf, Germany. Drying granular or powdered material by means of a fluid. 1,899,397; Feb. 28.

Reichert, August. (See Reichert, Julius and A.)

Reichert, Julius and A., Astoria, N. Y. Submarine salvager. 1,899,059; Feb. 28.

Reid, Allan E., Boston, assignor to Reid Piston Company, Brookline, Mass. Piston and connecting rod. 1,899,355; Feb. 28.

Reid Piston Company. (See Reid, Allan E., assignor.)

Reilly, Peter C. (See Derby, Ira H., assignor.)

Reiner, Max, Bronx, assignor, by mesne assignments, to Perpetual Self Winding Watch Corporation, New York, N. Y. Self-winding watch. 1,899,722; Feb. 28.

Reis, Louis C., Duluth, Minn. Discharge mechanism. 1,899,356; Feb. 28.

Reliance Machine and Stamping Works. (See Norman, Ernest B., assignor.)

Remington Rand Inc. (See Mehan, Thomas O., assignor.)

Remington Rand Inc. (See Wood, Rodney J., assignor.)

Remler, Raymond F. (See Lemmerman, P. C., and Remler.)

Rentschler, Jahlon J. (See Jeavons, W. R., and Rentschler.)

Reo Motor Car Company. (See Jeffries, Schuyler A., assignor.)

Research & Development Corporation. (See Dalgliesh, Herbert V., assignor.)

Rheiner, William, Detroit, Mich. Lamp fixture. 1,899,723; Feb. 28.

Rhode Island Hospital Trust Company, administrator. (See Baldwin, Luther C.)

Rhodes, Russell I., jr., North Attleboro, assignor to the Mason Box Company, Attleboro Falls, Mass. Container for displaying merchandise. 1,899,483; Feb. 28.

Rice, Cyrus, W., Pittsburgh, Pa. Valve mounting means for blowdown control. 1,899,826; Feb. 28.

Richardson, Ralph R., assignor to Chicago Carton Company, Chicago, Ill. Foldable paper carton. 1,899,772; Feb. 28.

Richter, George A., and E. Ebie, assignors to Brown Company, Berlin, N. H. Method of and apparatus for treating pulp. 1,899,106; Feb. 28.

Richter, George A., assignor to Brown Company, Berlin, N. H. Chemical pulping and refining process. 1,899,637; Feb. 28.

Richter, William F., assignor to Chemical Holding Corporation, Apollo, Pa. Manufacture of lusterless rayon. 1,899,725; Feb. 28.

Ridderstrom, Andrew R. (See Byron, J. P., and Ridderstrom.)

Riebel, Frederick, jr., assignor to Air-Way Electrical Appliance Corporation, Toledo, Ohio. Vacuum cleaner. 1,899,107; Feb. 28.

Riebel, Frederick, jr., assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio. Vacuum cleaner. 1,899,108; Feb. 28.

Riebel, Frederick, jr., assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio. Vacuum cleaner. 1,899,423; Feb. 28.

Rick, Forest O., Rhinelander, Wis. Defrosting attachment for mechanical refrigerators. 1,899,724; Feb. 28.

Riemenschneider, Edmund W. (See Frahm, C. A., and Riemenschneider.)

Rienks, George W., Denver, Colo. Screening device. 1,899,292; Feb. 28.

Rieschick, Reinhold, New York, N. Y. Piano-accordion. 1,899,357; Feb. 28.

Rigney, William D. (See Ward, W. L., and Rigney.)

Rimpler, William A., Wayne, Pa., assignor to Frank A. Weeks Mfg. Co. Inc., New York, N. Y. Memorandum pad. 1,899,773; Feb. 28.

Ripper, Kurt, Berlin, Germany. Molding powder. 1,899,109; Feb. 28.

Rite-Rite Mfg. Co. (See Hale, Joe D., assignor.)

Ritter, John J., assignor to The W. B. Marvin Manufacturing Company, Urbana, Ohio. Window screen. 1,899,858; Feb. 28.

Rivet, Edward L., Chicago, Ill. Combined ornament and dispenser. 1,899,165; Feb. 28.

Robertson, Isaac W., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Vibration insulator. 1,899,293; Feb. 28.

Robinson, Gilbert A., Sutton-on-Hull, England. Making metal containers. 1,899,638; Feb. 28.

Robinson, Gilbert A., Sutton-on-Hull, England. Making metal containers. 1,899,639; Feb. 28.

Rode, Fredrich J., Chicago, Ill. Sheet metal drawing press. 1,899,110; Feb. 28.

Rode, Fredrich J., Chicago, Ill. Sheet metal drawing press. 1,899,111; Feb. 28.

Rodgers, Fay T., Memphis, Tenn. Refrigerator display case. Des. 89,353; Feb. 28.

Rodle, Robert S., Kingston, N. Y. Automatic fuel control for boilers. 1,899,424; Feb. 28.

Roeder, Clyde A., Omaha, Nebr. Hydraulic brake for automobile engines. 1,899,294; Feb. 28.

Roell, Ernst. (See Mark, H. Dunkel, and Roell.)

Rogers, Cephas B., Danbury, Conn. Ceiling fixture. Des. 89,354; Feb. 28.

Rogers, Harold G. (See Campbell, L. J., Ford, and Rogers.)

Rohlfs, Harry C., Schenectady, N. Y., assignor to General Electric Company. Laminated glass. 1,899,588; Feb. 28.

Rosebrook, Guy L., Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa. Service building. Des. 89,355; Feb. 28.

Rosebrook, Guy L., Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa. Service building. Des. 89,356; Feb. 28.

Roseman, Leo, Newark, N. J. Method of and apparatus for making hook and eye tape. 1,899,902; Feb. 28.

Rosenberger, William A., assignor to Pangborn Corporation, Hagerstown, Md. Sand blast tank apparatus. 1,899,528; Feb. 28.

Rosenzweig, Fred M. (See Shaver, A. G., and Rosenzweig.)

Ross, William H., Brooklyn, assignor of one-half to Victor Nivois, New York, N. Y. Dispensing cabinet. 1,899,484; Feb. 28.

Rothchild, Henry A., Appleton, and J. A. Limpert, Kimberly, assignors to Paper Patents Company, Neenah, Wis. Method of and apparatus for testing loading material used in paper manufacture. 1,899,774; Feb. 28.

Rottler, Clarence T., Seattle, Wash. Holding a cutter head while its cutters are being sharpened. 1,899,359; Feb. 28.

Roudebush, Kenneth B., and H. G. Eilers, Cincinnati, Ohio. Electric plug. 1,899,360; Feb. 28.

Rowen, Thomas C., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Folding machine and method. 1,899,245; Feb. 28.

Rowley, Arthur C., assignor to Glove Automatic Sprinkler Company, Philadelphia, Pa. Release mechanism. 1,899,827; Feb. 28.

Rubber Service Laboratories Co., The. (See Scott, Winfield, assignor.)

Rubel, Charles F., assignor to Union Special Machine Company, Chicago, Ill. Stitch forming mechanism for sewing machines. 1,899,828; Feb. 28.

Rubel, Charles F., and F. F. Zeier, assignors to Union Special Machine Company, Chicago, Ill. Thread controlling mechanism for sewing machines. 1,899,882; Feb. 28.

Rubinger, Louis, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,357; Feb. 28.

Rubinger, Louis, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,379; Feb. 28.

Rudy Furnace Company. (See Torr, Thomas W., assignor.)

Rushmore, Samuel W., Plainfield, N. J. Hydraulic brake. 1,899,398; Feb. 28.

Rusnak, Samuel, Chicago, Ill. Seat construction. 1,899,726; Feb. 28.

Russell Burdsall & Ward Bolt & Nut Co. (See Ward, W. L., and Rigney, assignors.)

Ruth Company, The. (See Ruth, Joseph P., jr., assignor.)

Ruth, Joseph P., jr., assignor to The Ruth Company, Denver, Colo. Flotation machine. 1,899,166; Feb. 28.

Rutherford, Eugene W., New Haven, assignor to The Shoe Hardware Company, Waterbury, Conn. Slider for automatic fasteners. 1,899,529; Feb. 28.

Rutter, Alvah E., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Hayrake. 1,899,361; Feb. 28.

Ryden, Gunnar. (See Eckland, P. S., and Ryden, assignors.)

Sacrey, Elmer P., Liverpool, N. Y. Adjustable and interchangeable mounting for motor driven tools. 1,899,883; Feb. 28.

Safety Car Heating & Lighting Company, The. (See Godsey, Frank W., jr., assignor.)

Safety Car Heating & Lighting Company, The. (See Hulse, George E., assignor.)

Sanborn, Charles H., Newburyport, assignor to Haley, Cate, Rockwood Company, Inc., Everett, Mass. Yielding attachment for sewing machines. 1,899,399; Feb. 28.

Sanborn, Percy G., San Francisco, assignor of one-half to F. E. Madden, Oakland, Calif. Locomotive. 1,899,589; Feb. 28.

Sandstone, Harvey D., Los Angeles, Calif. Combination cutting drill and reaming bit. 1,899,727; Feb. 28.

Sandstone, Harvey D., Portland, Oreg. Well drilling apparatus. 1,899,728; Feb. 28.

Saraxin, Robert, Neuilly-sur-Seine, France. Automatic machine with magnetic plates for regulating arcs. 1,899,829; Feb. 28.

Saunders, Norman H., Chicago, C. E. Lomax, Oak Park, and T. F. Crocker, Chicago, assignors to Associated Electric Laboratories, Inc., Chicago, Ill. Multioffice telephone system. 1,899,112; Feb. 28.

Schaake, William, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Current collector. 1,899,729; Feb. 28.

Schade, John, assignor to National Blank Book Company, Holyoke, Mass. File container for loose leaf sheets. 1,899,530; Feb. 28.

Schaefer, Erich, New York, N. Y. Alarm clock attachment. 1,899,113; Feb. 28.

Scheffer, Marinus A. (See Kluyver, A. J., and Scheffer.)

Schey, Robert, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 89,880; Feb. 28.

Schiess-Defries Aktiengesellschaft. (See Vogler, Hermann, assignor.)

Schiff, Sigmund, assignor to the J. H. Day Company, Cincinnati, Ohio. Dough proofing device. 1,899,246; Feb. 28.

Schleicher, Manfred, Berlin-Charlottenburg, assignor to Siemens & Halske Aktiengesellschaft, Berlin-Siemensstadt, Germany. Electrical protective system. 1,899,425; Feb. 28.

Schmidt, Edmund, Berlin-Tempelhof, Germany. Machine for manufacturing dry cells. 1,899,114; Feb. 28.

Schmidt, Leopold, Wesermunde, Germany. Device for rotating and at the same time lifting the gondolas of roundabouts. 1,899,060; Feb. 28.

Schnable, Albert E., New York, N. Y. Instrument for individual vary-sizing of type. 1,899,775; Feb. 28.

Schneider, Wilhelm. (See Neresheimer, H., and Schneider.)

Schnelling, Samuel, Chicago, Ill. Escutcheon for bracelets or the like. Des. 89,358; Feb. 28.

Schofield, Theodore J., L. E. Johnson, and F. W. Billig, assignors to The Sparks-Withington Company, Jackson, Mich. Signaling device. 1,899,731; Feb. 28.

Schults, Alfred W., Waterloo, Iowa. Mechanism for constructing concrete pipe. 1,899,115; Feb. 28.

Schultze, Louis J., Chenoa, Ill. Power take-off device. 1,899,247; Feb. 28.

Schulze, William H., assignor to Stewart-Warner Corporation, Chicago, Ill. Fuel pump. 1,899,295; Feb. 28.

Schwalbe, Franz G., Toledo, Ohio. Glass treatment. 1,899,640; Feb. 28.

Schwartz, Abraham G., and H. A., Long Branch, N. J. Trap. 1,899,641; Feb. 28.

Schwartz, Harvey A. (See Schwartz, Abraham G. and H. A.)

Schweitzer, William K., East Cleveland, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Curing concrete. 1,899,590; Feb. 28.

Schweizer, Ernst, Zurich, Switzerland. Doubling machine and twining spindles in combination with bobbin-winders and stop motion devices for same. 1,899,780; Feb. 28.

Schweizer, Jack, Rye, N. Y. Textile fabric or the like. Des. 89,381; Feb. 28.

Schweizerische Lokomotiv und Maschinenfabrik. (See Heusser, Hermann, assignor.)

Schweyer, Daniel H., Easton, Pa. Automatic train control. 1,899,642; Feb. 28.

Scott, Winfield, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Age resisting vulcanized rubber product. 1,899,426; Feb. 28.

Segar, Harry D., Pittsfield, Mass., assignor to General Electric Company. Laminated material. 1,899,591; Feb. 28.

Seifner, Louis P., assignor of one-half to J. C. Larsin, Seattle, Wash. Wire puller. 1,899,531; Feb. 28.

Selden Research & Engineering Corporation, The. (See Jaeger, A. O., and West, assignors.)

Semet-Solvay Engineering Corporation. (See Hughes, Charles H., assignor.)

Seng Company, The. (See Fox, Martin, assignor.)

Servel, Inc. (See Zouck, G. H., and De Baufre, assignors.)

Session, Willet A., Detroit, Mich., assignor of one-half to Helen A. S. Cavin. Dump pocket for scows. 1,899,592; Feb. 28.

Severy, Melvin L., assignor to The Vocalsevro Company, Los Angeles, Calif. Electrical musical instrument. 1,899,884; Feb. 28.

Shafer, Samuel, jr., assignor to Chain Belt Company, Milwaukee, Wis. Brake-control mechanism for concrete mixing and other machines. 1,899,167; Feb. 28.

Shakeproof Lock Washer Company. (See Olson, Carl G., assignor.)

Shakespeare Products Company. (See Kai, L. H., and Weber, assignors.)

Shapiro, Joseph. (See Balton, James, assignor.)

Shaver, Archibald G., Chicago, Ill., and F. M. Rosenzweig, Niagara Falls, assignors to The Regan Safety Devices Company, Inc., New York, N. Y. Train control system. 1,899,116; Feb. 28.

Shaw, Maurice E., Los Angeles, Calif. Easy lift sanitary flower container. 1,899,400; Feb. 28.

Sheeley, Howard F., Michigan City, Ind. Adjustable reel. 1,899,117; Feb. 28.

Shell Development Company. (See de Simo, Martin, assignor.)

Sherrill, Dorothy, Marshfield, Mass. Rag doll. Des. 89,359; Feb. 28.
Shields, Andrew G., assignor to Filkwik Company, Attleboro, Mass. Container. 1,899,732; Feb. 28.
Shook, Florain J., assignor, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio. Vulcanizer. 1,899,211; Feb. 28.
Shoe Hardware Company, The. (See Rutherford, Eugene W., assignor.)
Shonkwiler, Albert H., and J. W. Macklin, Lakewood, assignors to The Otis Steel Company, Cleveland, Ohio. Preventing scale in annealing furnaces. 1,899,776; Feb. 28.
Shortell, William H., assignor to Mills Falls Company, Greenfield, Mass. Hack saw blade. 1,899,212; Feb. 28.
Shulik, William, assignor of one-third to A. Koufman and one-third to A. S. Lichten, Philadelphia, Pa. Flexible slide fastener. 1,899,168; Feb. 28.
Shurtleff, Wilfred, assignor to The Herman Nelson Corporation, Moline, Ill. Temperature controlling means. 1,899,532; Feb. 28.
Sibson, Walter W., and J. W. Dennis, assignors to The Philadelphia Drying Machinery Company, Philadelphia, Pa. Electrically heated drying machine. 1,899,593; Feb. 28.
Siemens Brothers & Company. (See Christian, D. A., and Palmer, assignors.)
Siemens & Halske Aktiengesellschaft. (See Gabriel, Wilhelm, assignor.)
Siemens & Halske Aktiengesellschaft. (See Hachfeld, Otto, assignor.)
Siemens & Halske Aktiengesellschaft. (See Schleicher, Manfred, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Strigel, Robert, assignor.)
Silberrad, Oswald, Loughton, and H. Bleasdale, Edmonton, England. Manufacture of cellulose acetate. 1,899,061; Feb. 28.
Silver, Bertha, administratrix. (See Storey, O. W., and Silver.)
Silver, Charles A. (See Storey, O. W., and Silver.)
Simmons Company. (See Kusterle, Frank, assignor.)
Simon, Arthur R., La Porte, Ind., and W. R. Uhlemann, assignors of one-third to Richard H. Uhlemann, Chicago, Ill. Attachment for spectacles. 1,899,903; Feb. 28.
Simon, Hellmut, Berlin-Friedenau, Germany, assignor to General Electric Company. Preventing arc back. 1,899,594; Feb. 28.
Simonds Saw and Steel Company. (See Howard, Leslie E., assignor.)
Simpson, Ray, River Forest, Ill., assignor, by mesne assignments, to Jewell Electrical Instrument Company. Electrical measuring instrument. 1,899,885; Feb. 28.
Singer, Donald K., Hartford, Conn., assignor to The B. F. Goodrich Company, New York, N. Y. Buffing apparatus. 1,899,427; Feb. 28.
Singer Manufacturing Company, The. (See Hertz, Hjalmar, assignors.)
Singer, Walter M., Glendale, Calif. Quick coupling device. 1,899,119; Feb. 28.
Sjogren, Oscar W., Huntington Park, and J. A. Vaughen, assignors to Killefer Manufacturing Corporation, Ltd., Los Angeles, Calif. Hydraulic wheel scraper. 1,899,118; Feb. 28.
Slater, Margaret. (See Machinist, Harold, assignor.)
Sleeper, Oliver S., and C. J. Westin, assignors to F. J. Stokes Machine Company, Philadelphia, Pa. Rotary pump. 1,899,904; Feb. 28.
Slepian, Joseph, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Oil circuit breaker. 1,899,643; Feb. 28.
Slesinger, Stephen, assignor to Stephen Slesinger, Inc., New York, N. Y. Bowl or similar article. Des. 89,360; Feb. 28.
Slesinger, Stephen, assignor to Stephen Slesinger, Inc., New York, N. Y. Dish or similar article. Des. 89,361; Feb. 28.
Slesinger, Stephen, assignor to Stephen Slesinger, Inc., New York, N. Y. Cup or similar article. Des. 89,362; Feb. 28.
Slesinger, Stephen, Inc. (See Slesinger, Stephen, assignor.)
Sloan, Arthur W., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber composition and preserving rubber. 1,899,120; Feb. 28.
Small, Alfred K., jr., De Land, Fla. Game apparatus. 1,899,830; Feb. 28.
Smith, David R. C., and J. H. Coulter, Canastota, N. Y. Weighing apparatus for packaging onions and the like. 1,899,446; Feb. 28.
Smith, Henry B., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose acetate composition containing oximes. 1,899,213; Feb. 28.
Smith, Henry B., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose organic ester composition containing phenylethyl benzoate. 1,899,214; Feb. 28.
Smith, Henry B., and S. J. Carroll, assignors to Eastman Kodak Company, Rochester, N. Y. Cellulose acetate composition containing a brominated diphenyl ether. 1,899,215; Feb. 28.
Smith, Marie H., Dobbs Ferry, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,382; Feb. 28.
Smith, Rowland D., assignor to Corning Glass Works, Corning, N. Y. Treating glass articles. 1,899,485; Feb. 28.
Smithers, Arthur J. (See Ott, O. W., and Smithers.)
Sneed, John, Kansas City, Mo., assignor to Steeldraulic Brake Corporation, Detroit, Mich. Four-wheel brake. 1,899,644; Feb. 28.
Sneed, John, Grosse Pointe Shores, Mich. Forming links. 1,899,645; Feb. 28.
Snow, Norman L., New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,899,733; Feb. 28.
Snyder, William B., and D. E. Chambers, Schenectady, N. Y., assignor to General Electric Company. Conveyer synchronizing control. 1,899,595; Feb. 28.
Society of Chemical Industry in Basle. (See de Montmollin, G., Danuser, Bonbôte, and Johner, assignors.)
Society of Chemical Industry in Basle. (See Moser, Wilhelm, assignor.)
Society of Chemical Industry in Basle. (See Tobler, R., and Kern, assignors.)
Solescope, Incorporated. (See Howe, Thorndike D., assignor.)
Solomon, Nathan L., Brooklyn, N. Y. Hair holding device, 1,899,428; Feb. 28.
Soreng-Manegold Company. (See Funk, Charles J., assignor.)
Soutier, Alfred, Quincy, Mass. Propeller. 1,899,646; Feb. 28.
Spalding, A. G., & Bros. (See Reach, Milton B., assignor.)
Spano, Romualdo, Utica, N. Y. Curtain drying frame. 1,899,831; Feb. 28.
Sparks-Withington Company, The. (See Scofield, T. J., Johnson, and Billig, assignors.)
Spatta, George. (See Mogford, E. C., and Spatta.)
Speed-Up Geometry Ruler Co. (See Dixon, Edna L., assignor.)
Spencer, William H., New York, assignor to The Frink Corporation, Long Island City, N. Y. Sign and method for making it. 1,899,533; Feb. 28.
Sperry Products, Inc. (See Perry, W. M., and Jones, assignors.)
Spruegel, Walter. (See Hardman, F. J., and Spruegel.)
Standard Gage Company. (See Aldeborgh, Erik H., assignor.)
Standard Oil Company. (See Payne, Elmer H., assignor.)
Standard Oil Company. (See Thiele, Ernest W., assignor.)
Standard Oil Company. (See Wilson, Robert E., assignor.)
Standard Oil Development Company. (See Bayne, Charles D., assignor.)
Standard Oil Development Company. (See Howard, Frank A., assignor.)
Standard Oil Development Company. (See Lebo, R. B., and Fischer, assignors.)
Standard Oil Development Company. (See Loomis, Nathaniel E., assignor.)
Standard Oil Development Company. (See Stines, D. E., and Packie, assignors.)
Standard Steel Works. (See Gredell, Otto, N., assignor.)
Standard Tool Company, The. (See Bascom, Thomas D., assignor.)
Stanley, Nathan M., Dayton, Ohio, assignor, by mesne assignments, one-half to The Univis Corporation, Wilmington, Del., and one-half to United Kingdom Optical Company, Limited, London, England. Lens. 1,899,777; Feb. 28.
Stark Brick Company, The. (See Weis, Ross A., assignor.)
Starr, Charles E., Whittier, Calif. Transmission gearing. 1,899,401; Feb. 28.
Stationers Loose Leaf Company. (See Lotter, Adolph G., assignor.)
Steedman, Edwin H., St. Louis, assignor to Curtis Manufacturing Company, Wellston, Mo. Automobile lift. 1,899,534; Feb. 28.
Steeldraulic Brake Corporation. (See Sneed, John, assignor.)
Steele, John H., Wyandotte, Mich., assignor to Michigan Steel Corporation. Break-down loading device. 1,899,647; Feb. 28.
Steffen, Le Roy J., Evanston, Ill., assignor to Hough Shade Corporation. Splint shade support. 1,899,062; Feb. 28.
Stein, Herbert, Berlin, Germany, assignor to General Electric Company. Motor mounting. 1,899,596; Feb. 28.
Stein, Edward P., assignor to The Bastian-Blessing Company, Chicago, Ill. Valve. 1,899,296; Feb. 28.
Steinecke, Fritz, Sindelfingen near Stuttgart, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Untertürkheim, Germany. Roller hood for power driven vehicles. 1,899,832; Feb. 28.
Steiner Sales Company. (See Tyler, Tracy B., assignor.)
Stelzer, William, Chicago, Ill., assignor to American Propeller Company, Baltimore, Md. Propeller. 1,899,650; Feb. 28.
Stephens Pump Company. (See Abercrombie, James S., assignor.)
Stephens Pump Company. (See Abercrombie, J. S., Tennant, and Allen, assignors.)
Stephens Pump Company. (See Tennant, Joseph A., assignor.)
Sterling, George H., Glenwood, Minn. Draft or coupling device. 1,899,597; Feb. 28.
Stern, David. (See Bustamante, Cesar, assignor.)

Stettiner Chamotte-Fabrik Actien-Gesellschaft vormals Didier. (See Reiche, Kurt, assignor.)
Stevens, William A. (See Guy, S. S., and Stevens.)
Stevens, William A., Maidstone, assignor to Guy Motors Limited, Wolverhampton, England. System of control for electrically driven vehicles. 1,899,649; Feb. 28.
Stewart-Warner Corporation. (See Schulse, William H., assignor.)
Stines, Daniel E., Plainfield, and J. W. Packie, Green Village, N. J., assignors to Standard Oil Development Company. Gauge glass. 1,899,886; Feb. 28.
Stix, Robert, Vienna, Austria, assignor to Westinghouse Electric & Manufacturing Company. Regenerative braking of single phase commutator motors. 1,899,778; Feb. 28.
Stockton, Franklin, Pittsburgh, Pa., assignor to American Sheet and Tin Plate Company. Removal of oxids from ferrous metal. 1,899,734; Feb. 28.
Stokes, F. J., Machine Company. (See Sleeper, O. S., and Westin, assignors.)
Stoll, Julius E., assignor to Pabst Corporation, Milwaukee, Wis. Liquid level control apparatus. 1,899,063; Feb. 28.
Storey, Oliver W., and C. A. Silver, deceased, by B. Silver, administratrix, assignors to C. F. Burgess Laboratories, Inc., Madison, Wis. Manufacture of electrodes. 1,899,064; Feb. 28.
Stortz, John H., Philadelphia, Pa. Machine for making pasteboard boxes. 1,899,652; Feb. 28.
Stouges, Anthony J., Queens Village, N. Y., assignor to Mergenthaler Linotype Company. Typographical machine. 1,899,648; Feb. 28.
Stratton, Frank E., Edgewood, assignor to Diamond Machine Co., Providence, R. I. Machine tool. 1,899,362; Feb. 28.
Streckfuss, Elmer G., assignor to The Cincinnati Time Recorder Company, Cincinnati, Ohio. Fruit juice extractor. Des. 89,363; Feb. 28.
Strigel, Robert, Berlin-Charlottenburg, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Electric circuit working with high voltage. 1,899,216; Feb. 28.
Strobel, Howard M., New York, N. Y. Game. 1,899,833; Feb. 28.
Struebig, Louis J. (See Kopke, E. W., and Struebig.)
Sturtevant, B. F., Company. (See Freeman, Ernest B., assignor.)
Sundermann, H. Henry, executor. (See Klausmeyer, David C.)
Sunterbach Company, The. (See Cassell, John A., assignor.)
Superior Body Company. (See Paul, Sydney, assignor.)
Swanson, Ernest R., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Winding machine. 1,899,651; Feb. 28.
Sweeney, James A., Providence, R. I. Ophthalmic mounting and making the same. 1,899,736; Feb. 28.
Sylvania Industrial Corporation. (See Neidich, Samuel A., assignor.)
Tarbox, John P., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Automobile chassis of sheet metal stampings. Re18,750; Feb. 28.
Tax, Anton H., et al. (See Andersen, Gunnar E., assignor.)
Taylor, Charles F. (See Taylor, Edward S. and C. F.)
Taylor, Edward S., Cambridge, and C. F. Taylor, Weston, Mass., assignors to Continental Motors Corporation, Detroit, Mich. Internal combustion engine. 1,899,217; Feb. 28.
Teague, Merwyn C., Jackson Heights, assignor to General Rubber Company, New York, N. Y. Process and composition for rubberizing water repellent material and product thereof. 1,899,535; Feb. 28.
Teague, Walter D., Forest Hills, assignor to Corning Glass Works, Corning, N. Y. Combined coffee maker and server. Des. 89,364; Feb. 28.
Teeter, Wilford H., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,899,363; Feb. 28.
Tekavec, John, Cleveland, Ohio. Valve reseating tool. 1,899,598; Feb. 28.
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Böhm, Otto, assignor.)
Temple Slag Company. (See Nicklies, Stephen N., assignor.)
Tennant, Joseph A. (See Abercrombie, J. S., Tennant, and Allen.)
Tennant, Joseph A., Houston, Tex., assignor, by mesne assignments, to Stephens Pump Company, Round Rock, Tex. Pump. 1,899,364; Feb. 28.
Texas Company, The. (See Holland, Harry W., assignor.)
Tharp, Victor S., Elmhurst, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Automatic telephone system. 1,899,536; Feb. 28.
Thiele, Ernest W., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Coking coal. 1,899,887; Feb. 28.
Thiele, Ernest W., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Apparatus for carbonization of coal. 1,899,888; Feb. 28.
Thomas & Betts, Co., The. (See Buchanan, Stephen N., assignor.)
Thomas & Betts Co., The. (See Thomas, George C., jr., assignor.)
Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Grounding bushing. 1,899,365; Feb. 28.
Thomas, George F., Camberwell, Victoria, and T. D. Leaper, St. Kilda, Victoria, Australia. Clutch. 1,899,834; Feb. 28.
Thomas, George J., assignor to Bendix Brake Company, South Bend, Ind. Making a brake member. 1,899,599; Feb. 28.
Thompson, James S., New Rochelle, N. Y., assignor to Firebar Corporation, Cleveland, Ohio. Furnace grate. 1,899,537; Feb. 28.
Thompson, James S., New Rochelle, N. Y., assignor to Firebar Corporation, Cleveland, Ohio. Grate bar. 1,899,538; Feb. 28.
Thompson, James S., New Rochelle, N. Y., assignor to Firebar Corporation, Cleveland, Ohio. Grate bar. 1,899,539; Feb. 28.
Thompson Patents Corporation. (See Thompson, Roy E., assignor.)
Thompson, Roy E., Nyack, assignor to Thompson Patents Corporation, New York, N. Y. Remote control system. 1,899,779; Feb. 28.
Thompson, Thorn. (See Cane, Gordon F., assignor.)
Thoreson, Reider. (See Ernst, W., MacMillin, and Thoreson.)
Threefoot, Sam A., Meridian, Miss. Card table. 1,899,366; Feb. 28.
Thum, Martin, Rochester, N. Y. Pedestal table. 1,899,835; Feb. 28.
Thum, Martin, Rochester, N. Y. Spring bed bottom. 1,899,836; Feb. 28.
Thunder, Harold G., assignor to Motor Products Corporation, Detroit, Mich. Windshield operating mechanism. 1,899,367; Feb. 28.
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,899,447; Feb. 28.
Tilbury, Lyle C., Houston, Tex. Well screen. 1,899,065; Feb. 28.
Tilbury, Lyle C., Houston, Tex. Back pressure valve mechanism for well pipe. 1,899,121; Feb. 28.
Tippins, Robert E. (See Irwin, D. L., and Tippins.)
Tobler, Richard, Basel, and W. Kern, Sissach, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Manufacture of dyestuffs of the polymethine series. 1,899,122; Feb. 28.
Toelke, Roy F. (See Bascom, Henry, assignor.)
Toledo Automatic Brush Machine Company, The. (See Robst, Conrad, assignor.)
Tonge, Ross G., Los Angeles, Calif. Transfer and making the same. 1,899,066; Feb. 28.
Torch, Louis, assignor to Della Rabin, Chicago, Ill. Elevator door control. 1,899,368; Feb. 28.
Torr, Thomas W., assignor to Rudy Furnace Company, Dowagiac, Mich. Gas furnace. 1,899,486; Feb. 28.
Tower, William R. (See D'Este, J. N., and Tower.)
Towne, Harold M., Pittsfield, Mass., assignor to General Electric Company. Lightning arrester. 1,899,540; Feb. 28.
Trainor Food Corporation. (See Heilinger, Carl, assignor.)
Trautner, Nicholas W., St. Paul, Minn. Hub removing tool. 1,899,218; Feb. 28.
Trowbridge, Miles L. (See Brogden, E. M., and Trowbridge.)
Trumbull, Harlan L., Hudson, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Making spliced rubber sheets. 1,899,067; Feb. 28.
Trupar Manufacturing Company. (See Lindsay, Lynn G., assignor.)
Tufts, Edward P., Bow, N. H. Sawmill. 1,899,448; Feb. 28.
Turner, Ernest A., Keston, England. Advertising and like devices. 1,899,780; Feb. 28.
Twiss, John R., New York, N. Y. Stomach tube or the like. 1,899,781; Feb. 28.
Tyler, Melvin E., Baltimore, Md. Tool holder. 1,899,169; Feb. 28.
Tyler, Tracy B., Detroit, Mich., assignor to Steiner Sales Company, Salt Lake City, Utah. Towel cabinet. 1,899,369; Feb. 28.
Uebler, Bruno, Berlin, Germany. Recovery of chlorine from gas mixtures. 1,899,123; Feb. 28.
Uhlemann, Richard H. (See Simon, Arthur R. and W. R., assignors.)
Uhlemann, Richard H. (See Uhlemann, William R., assignor.)
Uhlemann, William R., assignor of two-thirds to R. H. Uhlemann, Chicago, Ill. Glare dimmer attachment. 1,899,905; Feb. 28.
Ulrich, Charles B., Jamestown, N. Y. Resilient grizzly and screen. 1,899,737; Feb. 28.
Ulrich, Charles B., assignor to Art Metal Construction Company, Jamestown, N. Y. Filing structure. 1,899,837; Feb. 28.
Ultes, Carl, assignor to The O. S. Kelly Company, Springfield, Ohio. Gasoline dispensing pump. Des. 89,365; Feb. 28.
Underwood Elliott Fisher Company. (See Helmond, William F., assignor.)

Underwood, Garfield J., assignor to Mohawk Carpet Mills, Inc., Amsterdam, N. Y. Fringe. 1,899,219; Feb. 28.
Union Metal Manufacturing Company. (See Frahm, C. A., and Riemenschneider, assignors.)
Union Special Machine Company. (See Hanneman, Walter M., assignor.)
Union Special Machine Company. (See Rubel, Charles F., assignor.)
Union Special Machine Company. (See Rubel, C. F., and Zeier, assignors.)
Union Special Machine Company. (See Zeier, Frederick F., assignor.)
Union Special Maschinenfabrik, G. m. b. H. (See Maier, Karl, assignor.)
United Engineering & Foundry Company. (See Ellis, Robert H., assignor.)
United Kingdon Optical Company. (See Stanley, Nathan M., assignor.)
United Shoe Machinery Corporation. (See Byron, J. P., and Ridderstrom, assignors.)
United Shoe Machinery Corporation. (See Glass, Parley R., assignor.)
United Shoe Machinery Corporation. (See Nutt, William H., assignor.)
United Shoe Machinery Corporation. (See Pym, Arthur F., assignor.)
United Shoe Machinery Corporation. (See Rowen, Thomas C., assignor.)
U. S. Bobbin & Shuttle Company 1929. (See Baldwin, Luther C.)
U. S. Die Casting Company. (See Hanson, Emil J., assignor.)
United States Pipe & Foundry Company. (See Clark, Stuart B., assignor.)
United Verde Copper Company. (See Kuzell, Charles R., assignor.)
Universal Button Fastening & Button Company. (See Ford, Ira D., assignor.)
Universal Oil Seal Company. (See Nelson, Victor E., assignor.)
Universal Winding Company. (See Swanson, Ernest R., assignor.)
Vaughn, Jesse A. (See Sjogren, O. W., and Vaughn.)
Veneeray Invisible Heating Company. (See Austen, Frederick H., assignor.)
Ventimiglia, Carlo, Detroit, Mich. Tile. 1,899,370; Feb. 28.
Venzie, Edmond F., assignor to F. M. Venzie, Philadelphia, Pa. Plaster board or other panel structure. 1,899,653; Feb. 28.
Venzie, Frederick M. (See Venzie, Edmond F., assignor.)
Venzie, Frederick M., Philadelphia, Pa. Building construction. 1,899,403; Feb. 28.
Vereinigte Stahlwerke Aktiengesellschaft. (See Bähner, Josef, assignor.)
Verhave, Thomas H., sr. (See Kluyver, A. J., and Scheffer, assignors.)
Verre, John, Hollywood, Calif. Spectacles temple. 1,899,402; Feb. 28.
Victaulic Company Limited. (See Johnson, Percy G., assignor.)
Vocalsevro Company, The. (See Severy, Melvin L., assignor.)
Vogler, Hermann, assignor to Schiess-Defries Aktiengesellschaft, Duesseldorf, Germany. Boring and turning machine. 1,899,124; Feb. 28.
Vogt, Joseph, Peekskill, N. Y. Razor blade holder. 1,899,738; Feb. 28.
Vollenweider, Georges, Colombes, France. Knitting machine. 1,899,888; Feb. 28.
Von Gerdanovits, Viktor, Temesvar, Rumania. Producing photographic screens. 1,899,248; Feb. 28.
Von Mehren, Oswald D., New York, N. Y., assignor to Mehren Lock Co., Inc., Clifton, N. J. Key. 1,899,739; Feb. 28.
Von Ruden, Edward J., Cashton, Wis. Water heater. 1,899,839; Feb. 28.
Wagner, Charles F. (See Evans, R. D., Fortescue, Crichton, MacNeill, Griscom, and Wagner.)
Wainwright, Lawrence, U. S. Navy. Universal joint. 1,899,170; Feb. 28.
Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Bobbin can for automatic loom. 1,899,600; Feb. 28.
Waldorf Paper Products Company. (See Guyer, Reynolds, assignor.)
Waldron, Russell E., Detroit, Mich., assignor to Dominion Forge & Stamping Company Limited, Walkerville, Ontario, Canada. Drop hammer. 1,899,371; Feb. 28.
Walker, Hugh J., Woburn, Mass. Heater construction. 1,899,541; Feb. 28.
Walliser, George F., and J. E. Poole, Chicago, Ill. Clamping attachment for revolvers and pistols. 1,899,249; Feb. 28.
Wallsten, Walfred A., Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey. Apparatus for coating wire. 1,899,449; Feb. 28.
Walsh, Clara B., New York, N. Y. Garment. 1,899,487; Feb. 28.
Walsh, James F., South Orange, and Björn Andersen, Newark, N. J., assignors to Celluloid Corporation. Decorated thermoplastics and making same. 1,899,068; Feb. 28.
Walsh, James F., East Orange, and M. R. Ximenes, South Plainfield, N. J., assignors to Celluloid Corporation. Molding powder and making same. 1,899,542; Feb. 28.
Walsh, William J., Jersey City, N. J. Automobile headlight. 1,899,740; Feb. 28.
Walter, Carl F., Lincoln, Nebr. Refrigerator. 1,899,372; Feb. 28.
Wanner, Harry C. (See Nettenstrom, David, assignor.)
Wappler, Frederick C., New York, N. Y. Cauterising instrument and electrode. 1,899,220; Feb. 28.
Warburton, Charles A., Exeter, N. H. Hernia truss. 1,899,373; Feb. 28.
Ward, Damon R. (See Cooley, L. W., and Ward.)
Ward, Frederick A., assignor to The Gear Grinding Machine Company, Detroit, Mich. Worm grinding machine. 1,899,654; Feb. 28.
Ward, William L., and W. D. Rigney, Port Chester, N. Y., assignors to Russell Burdsall & Ward Bolt & Nut Co. Nut-facing machine. 1,899,221; Feb. 28.
Warmisham, Arthur, assignor to Kapella Limited, Leicester, England. Photographic and projection objective. 1,899,069; Feb. 28.
Warner, Herbert T., deceased, Coventry, by Ruth Warner, administratrix, Frome, England, assignor to General Electric Company. Contact breaker. 1,899,543; Feb. 28.
Warner, Ruth, administratrix. (See Warner, Herbert T.)
Warren, Virgil P., Atlanta, Ga. Refrigerator construction. 1,899,171; Feb. 28.
Warszawska Spolka Akcyjna Budowy Parowozow. (See Madeyski, Juljan, assignor.)
Warth, Albin H., Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y. Material for facing bottle caps and making same. 1,899,782; Feb. 28.
Warth, Albin H., assignor to Crown Cork & Seal Company, Baltimore, Md. Bottle cap and manufacturing the same. 1,899,783; Feb. 28.
Warth, Albin H., assignor to Crown Cork & Seal Company, Baltimore, Md. Bottle cap. 1,899,784; Feb. 28.
Watral, Valentine B., and B. V. Kolenik, New York, N. Y. Shade frame construction. 1,899,429; Feb. 28.
Weber, Herman. (See Kai, L. H., and Weber.)
Weber, John J., Wilmette, assignor to J. H. Jochum, jr., Chicago, Ill. Surface ornamentation and producing same. 1,899,488; Feb. 28.
Webster, Albert S., Ottawa, Ontario, Canada, assignor to American Bank Note Company, New York, N. Y. Machine for producing gummed web. 1,899,655; Feb. 28.
Weeks, Frank A., Mfg. Co. Inc. (See Ringler, William A., assignor.)
Weinand, Klaus. (See Zahn, K., Hoch, and Weinand.)
Weinberger, Julius, Haddonfield, and I. Wolff, Merchantsville, N. J., assignors to Radio Corporation of America. Loud speaker. Re18,751; Feb. 28.
Weis, Ross A., Canton, assignor to The Stark Brick Company, East Canton, Ohio. Brick holder. 1,899,125; Feb. 28.
Weissenborn, Albert. (See Knorr, A., Weissenborn, and Lisage.)
Wellman, Charles P., Medford, Mass. Method of and mechanism for packaging commodities. 1,899,172; Feb. 28.
Wellman, Charles P., West Medford, Mass. Mechanism for weighing and packaging commodities. 1,899,173; Feb. 28.
Wendlandt, Rudolf. (See Caro, N., Frank, Wendlandt, and Fischer.)
Werder, John F., Cleveland, Ohio. Dispensing liquids under pressure. 1,899,222; Feb. 28.
Werle, Mathew C., Billings, Mont. Engine. 1,899,374; Feb. 28.
West, Herbert J. (See Jaeger, A. O., and West.)
Westerbeck, Frederick, University City, Mo. Container. 1,899,375; Feb. 28.
Western Union Telegraph Company, The. (See Curtin, Leo P., assignor.)
Westgaard, Levi, Seattle, Wash. Paper bag holder. 1,899,376; Feb. 28.
Westin, Charles J. (See Sleeper, O. S., and Westin.)
Westinghouse Electric Elevator Company. (See Dunlop, James, assignor.)
Westinghouse Electric and Manufacturing Company. (See Baker, Benjamin P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bauer, Friedrich, assignor.)
Westinghouse Electric & Manufacturing Company. (See Breisky, John V., assignor.)
Westinghouse Electric & Manufacturing Company. (See Breisky, J. V., and Draper, assignors.)
Westinghouse Electric & Manufacturing Company. (See Brown, Roy L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Clark, Earl K., assignor.)
Westinghouse Electric & Manufacturing Company. (See Clark, George D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Crabbs, Herbert J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Dyer, Lloyd D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Estorff, Walther, assignor.)

Westinghouse Electric and Manufacturing Company. (See Evans, R. D., Fortescue, Crichton, MacNeill, Griscom, and Wagner, assignors.)
Westinghouse Electric & Manufacturing Company. (See Forshee, Frank F., assignor.)
Westinghouse Electric and Manufacturing Company. (See Jablow, C., and Wheeler, assignors.)
Westinghouse Electric & Manufacturing Company. (See James, Henry D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jarvis, Kenneth W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Lindner, Arthur, assignor.)
Westinghouse Electric & Manufacturing Company. (See Lowry, Erwin F., assignor.)
Westinghouse Electric & Manufacturing Company. (See McCulloch, Leon, assignor.)
Westinghouse Electric & Manufacturing Company. (See Putman, Henry V., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schaake, William, assignor.)
Westinghouse Electric & Manufacturing Company. (See Slepian, Joseph, assignor.)
Westinghouse Electric & Manufacturing Company. (See Stix, Robert, assignor.)
Wheelbarger, Albert S., and G. C. Coil, assignors to Ohmer Fare Register Company, Dayton, Ohio. Full stroke mechanism. 1,899,250; Feb. 28.
Wheeler, Brian. (See Jablow, C., and Wheeler.)
Wheeler, Henry H., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Cigar enveloping machine. 1,899,174; Feb. 28.
Whitman & Barnes, Incorporated. (See Harrington, Ferris T., assignor.)
Whitmanis Manufacturing Company. (See Whitney, Karl H., assignor.)
White, Charles H., Los Angeles, Calif. Bookholder and table. 1,899,404; Feb. 28.
Whitney, Karl H., assignor to Whitmanis Manufacturing Company, Kirksville, Mo. Vibratory apparatus. 1,899,544; Feb. 28.
Wickbergh, Godfrey, Seattle, Wash. Screw driver. 1,899,480; Feb. 28.
Wiedmann, Ludwig, assignor to Zahnradfabrik Friedrichshafen Aktiengesellschaft, Friedrichshafen, Germany. Mechanism for driving propellers. 1,899,490; Feb. 28.
Wieman-Kammerer-Wright Company, Incorporated. (See Mackey, T. O., and Donaldson, assignors.)
Wigley, Frank S., Barnes, London, and L. F. Austing, Bromley, England, assignors to Irving Air Chute Company, Inc., Buffalo, N. Y. Parachute harness. 1,899,656; Feb. 28.
Willard, Donald E., Danville, Ill. Supporting means for doors. 1,899,175; Feb. 28.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,366; Feb. 28.
Willheim, William, Co. (See Guhl, Maclyn, assignor.)
Willheim, William, Co. (See Rubinger, Louis, assignor.)
Willheim, William, Co. (See Smith, Marie H., assignor.)
Williams, Estelle P. (See Williams, Villor P., assignor.)
Williams, Henry K., jr. (See Knight, T. F., and Williams.)
Williams, Villor P., assignor, by mesne assignments, to E. P. Williams, Baltimore, Md. Universal joint with adjustable bushings. 1,899,840; Feb. 28.
Willis, Harry, Bangor, assignor to Willis Wiper Co. Limited, Belfast, Northern Ireland. Wiper for windscreens of motor vehicles and for like purposes. 1,899,545; Feb. 28.
Willis Wiper Co. (See Willis, Harry, assignor.)
Willys-Overland Company, The. (See Baker, Arthur J., assignor.)
Willys-Overland Company, The. (See Huntington, Edward E., assignor.)
Wilson, Harry H., Newark, N. J. Square golf game. 1,899,546; Feb. 28.
Wilson, Robert E., assignor to Standard Oil Company, Chicago, Ill. Fractionation of hydrocarbon oils. 1,899,918; Feb. 28.
Winston, Arthur W., assignor to The Dow Chemical Company, Midland, Mich. Casting readily oxidizable metals. 1,899,906; Feb. 28.
Winthrop Chemical Company. (See Knorr, A., Weissenborn, and Lange.)
Wired Radio, Inc. (See Chromy, Ben J., assignor.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wirth, Louis E., assignor to A. M. Hanauer, Pittsburgh, Pa. Stripper bar mounting. 1,899,405; Feb. 28.
Wisniewski, Edmund. (See Janssen, H., and Wisniewski.)
Wolff, Irving. (See Weinberger, J., and Wolff.)
Wood, Rodney J., Dayton, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Filing system. 1,899,430; Feb. 28.
Woodbury, Edward B. C. (See Lamberty, Conrad H. H., assignor.)
Woodruff, Leonidas D., assignor to Harris Trust & Savings Bank, trustee, Chicago, Ill. Gasket holding means. 1,899,785; Feb. 28.
Woodside, Arthur M., Port Arthur, Ontario, Canada. Automatic grain sampler. 1,899,126; Feb. 28.
Woodstock Typewriter Company. (See Hokanson, O. A., and Koca, assignors.)
Woolson, Emma F., executrix. (See Woolson, Lionel M.)
Woolson, Lionel M., deceased, Detroit, Mich.; Emma F. Woolson, executrix, Bloomfield Village, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,899,431; Feb. 28.
Worden, Edward C., 1st., Millburn, N. J., assignor to Hanson & Orth, New York, N. Y. Manufacture of purified cellulose material from hemp fibers. 1,899,223; Feb. 28.
Worrall, Robert H., Washington, D. C. Piezo-electric crystal apparatus. 1,899,127; Feb. 28.
Wright, R. G. & Company. (See Maringer, L. J., assignor.)
Wrisley, Allen B., Company. (See Oleson, Wrisley B., assignor.)
Ximenez, Manuel R. (See Walsh, J. F., and Ximenez.)
Yost, Karl M., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,899,601; Feb. 28.
Young, L. A., Spring & Wire Corporation. (See Falls, William A., assignor.)
Young, Otto W. (See Brittain, R. J., jr., and Young.)
Young, Philip E., Fairhaven, Mass., assignor to Acushnet Process Company, Apparatus for balanced molding of rubber articles. 1,899,907; Feb. 28.
Ytterberg, Arle, Hogberget, Ludvika, assignor to Allmänna Svenska Elektriska Aktiebolaget, Vasteras, Sweden. Compounding voltage regulators for threephase generators. 1,899,406; Feb. 28.
Zacharias, Franz, Brooklyn, N. Y. Smoking device. 1,899,407; Feb. 28.
Zademach, Erich R., Elizabeth, N. J., assignor to Metalwash Machinery Company, New York, N. Y. Washing machinery. 1,899,657; Feb. 28.
Zahn, Karl, and H. Koch, Frankfort-on-the-Main, and K. Weinand, Leverkusen, I. G. Werk, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New acid dyestuffs of the anthraquinone series. 1,899,377; Feb. 28.
Zahnradfabrik Friedrichshafen Aktiengesellschaft. (See Wiedmann, Ludwig, assignor.)
Zeier, Frederick F. (See Rubel, C. F., and Zeier.)
Zeier, Frederick F., assignor to Union Special Machine Company, Chicago, Ill. Looper mechanism for sewing machines. 1,899,786; Feb. 28.
Zerby, Arthur W., Reading, Pa. Frog forming insert for hosiery boxes. 1,899,070; Feb. 28.
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,899,071; Feb. 28.
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Resistance unit. 1,899,251; Feb. 28.
Zimmerman, Beulah B. (See Zimmerman, Harry, assignor.)
Zimmerman, Harry, assignor to Beulah B. Zimmerman, Toronto, Ontario, Canada. Buffing wheel blank plies. 1,899,252; Feb. 28.
Zimmermann, Paul. (See Boynton, A. J., and Zimmermann.)
Zouck, George H., Orange, N. J., and W. L. De Baufre, assignors to Servel, Inc., New York, N. Y. Method of and apparatus for separating a liquid from other liquids. 1,899,378; Feb. 28.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 28TH DAY OF FEBRUARY, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrading. L. W. Goddu. 1,899,862; Feb. 28.
Absorption, Method and apparatus for promoting osmotic. H. Oppenheimer. 1,899,770; Feb. 28.
Acetyl-methyl-carbinol and diacetyl, Preparation of. A. J. Kluyver and M. A. Scheffer. 1,899,094; Feb. 28.
Adding and listing machine. T. O. Meban. 1,899,444; Feb. 28.
Adjustable reel. H. F. Sheeley. 1,899,117; Feb. 28.
Advertising and like devices. E. A. Turner. 1,899,780; Feb. 28.
Advertising device. M. D. Buivid. 1,899,792; Feb. 28.
Advertising, Method of and device for. C. A. Long, jr. 1,899,282; Feb. 28.
Air adjuster, Safety window. J. C. Chalupa. 1,899,853; Feb. 28.
Air, Apparatus for filtering. G. S. Dauphinee. 1,899,017; Feb. 28.
Air cleaner and muffler. H. G. Kamrath. 1,899,911; Feb. 28.
Air conditioning means. F. J. Day. Re18,755; Feb. 28.
Aircraft having sustaining rotors. A. E. Larsen. 1,899,096; Feb. 28.
Air deflector, Hot. B. O. Anderson. 1,899,603; Feb. 28.
Air filter. C. H. Gagen. 1,899,028; Feb. 28.
Air heater. W. L. Mack. 1,899,098; Feb. 28.
Airplane propeller. R. J. Norton. 1,899,631; Feb. 28.
Air washer and humidifier. E. J. Hanson. 1,899,504; Feb. 28.
Aldehydes and the products, Manufacturing. A. Knorr, A. Weissenborn, and E. Lange. 1,899,340; Feb. 28.
Alkali solutions, Dehydrating caustic. C. E. Miller. 1,899,627; Feb. 28.
Alloy. R. H. Leach. 1,899,701; Feb. 28.
Alloy. R. H. Leach. 1,899,873; Feb. 28.
Alloy and making and using the same, Noncorrosive. W. J. Hawkins. 1,899,148; Feb. 28.
Aluminum alloy. O. Kamps. 1,899,465; Feb. 28.
Aluminum alloy, Light. M. Bosshard. 1,899,133; Feb. 28.
Amplifying system. K. W. Jarvis. 1,899,758; Feb. 28.
Anchor. C. J. Harvey. 1,899,866; Feb. 28.
Anchor, Ground. D. Nettenstrom. 1,899,520; Feb. 28.
Antenna system, Directive. E. Bruce. 1,899,410; Feb. 28.
Antitheft device. H. E. Norviel. 1,899,350; Feb. 28.
Arbor for pipe casting molds. T. G. Bush, jr. 1,899,228; Feb. 28.
Arc back, Preventing. H. Simon. 1,899,594; Feb. 28.
Arsenic from sulphur, Removal of. J. S. Dunn. 1,899,562; Feb. 28.
Article and quantity designator for menus and the like. L. Berry. 1,899,332; Feb. 28.
Article case. J. A. Cassell. 1,899,311; Feb. 28.
Articles, Forming shaped. L. Navias. 1,899,584; Feb. 28.
Articles, Packaging. J. M. Munson. 1,899,207; Feb. 28.
Articles, Protection and authentification of. E. Bayle, H. George, and A. Mache. 1,899,452; Feb. 28.
Atomizer. J. J. Klein. 1,899,698; Feb. 28.
Audion tube. E. L. Koch. 1,899,039; Feb. 28.
Automatic machine with magnetic plates for regulating arcs. R. Sarazin. 1,899,829; Feb. 28.
Automobile chassis or sheet metal stampings. J. P. Tarbox. Re18759; Feb. 28.
Automobile jack. W. Bedard and J. F. Lockhart. 1,899,131; Feb. 28.
Axle. E. C. Mogford and G. Spatta. 1,899,347; Feb. 28.
Axle drive, Front. A. I. Marcum. 1,899,240; Feb. 28.
Bag and making the same, Heat-insulated paper. J. N. D'Este and W. R. Tower. 1,899,892; Feb. 28.
Bag holder, Paper. L. Westgaard. 1,899,376; Feb. 28.
Ballast of railway tracks, System for continuously cleaning the. M. H. Lemaire. 1,899,874; Feb. 28.
Bar: *See*—
Grate bar.
Barrel plating apparatus and process. C. G. Fink and R. D. Eash. 1,899,679; Feb. 28.
Base product and making the same, Pigmentary. A. V. Blom. 1,899,132; Feb. 28.
Battery: *See*—
Primary battery.
Bead for pneumatic tire casings and making the same. W. C. Geer. 1,899,088; Feb. 28.
Bed. Z. S. Logan and W. P. Pike. 1,899,762; Feb. 28.
Bed and bedpan combination. W. C. Elliott. 1,899,263; Feb. 28.
Bed and chair, Combination. M. Adler. 1,899,432; Feb. 28.
Bed bottom, Spring. M. Thum. 1,899,836; Feb. 28.
Bed, Disappearing. J. Hoffmann. 1,899,803; Feb. 28.
Bed, Folding. M. Fox. 1,899,412; Feb. 28.
Beds, Mounting foldable roll-about. G. F. Cane. 1,899,851; Feb. 28.

Bell for blast furnaces, Distributing large. A. J. Boynton and P. Zimmermann. 1,899,307; Feb. 28.
Belts, Apparatus for molding. E. Meyer. 1,899,393; Feb. 28.
Beverages, Making alcohol-weak. A. Lewinson. 1,899,512; Feb. 28.
Bilge pump. L. E. Perkins. 1,899,917; Feb. 28.
Binder, Loose leaf. A. G. Lotter. 1,899,763; Feb. 28.
Bit: *See*—
Blade type bit. Well drilling bit.
Blade type bit. C. E. Reed. 1,899,771; Feb. 28.
Blind tilting mechanism. F. J. Burns. 1,899,180; Feb. 28.
Block for X-ray dental films. F. J. Martin. 1,899,877; Feb. 28.
Board: *See*—
Cloth winding board. Game or puzzle board.
Board and making same, Sawdust wood fiber. J. V. Nevin. 1,899,768; Feb. 28.
Boat and trailer carrier therefor. G. A. Nelson. 1,899,900; Feb. 28.
Boats, Auxiliary propulsive device for fishing. J. J. Dorsey. 1,899,319; Feb. 28.
Body, Automobile. J. R. Hughes. Des. 89,346; Feb. 28.
Bogie. E. C. Goebert and T. C. Conlon. 1,899,145; Feb. 28.
Boiler and the like. T. E. Murray. Re18,748; Feb. 28.
Boiler cleaner. N. L. Snow. 1,899,733; Feb. 28.
Bookholder and table. C. H. White. 1,899,404; Feb. 28.
Boot and constructing same, Molded pac type. A. A. Glidden and T. M. Knowland. 1,899,754; Feb. 28.
Boot, Horse. V. Meyer. 1,899,471; Feb. 28.
Booth for restaurants. H. Charnin. Des. 89,334; Feb. 28.
Boring and turning machine. H. Vogler. 1,899,124; Feb. 28.
Bowl for semiindirect illumination, Glass. G. Ainsworth. Des. 89,327; Feb. 28.
Bowl or similar article. S. Siesinger. Des. 89,360; Feb. 28.
Bowl, Spudless closet. M. D. Helfrich. Des. 89,343; Feb. 28.
Bowling alley. H. K. Hess. 1,899,442; Feb. 28.
Bowling alley, Self-service. H. K. Hess. 1,899,441; Feb. 28.
Box: *See*—
Journal box. Packing and display box.
Junction box.
Box and bearing unit, Stuffing. L. W. Browne. 1,899,848; Feb. 28.
Box for fluid operated mechanisms, Register. W. L. Marden. 1,899,043; Feb. 28.
Boxes, Frog forming insert for hosiery. A. W. Zerby. 1,899,070; Feb. 28.
Bracket connection, Welded. J. H. Edwards. 1,899,799; Feb. 28.
Brake: *See*—
Four-wheel brake. Hydraulic brake.
Brake. J. R. Cautley and F. C. Frank. 1,899,609; Feb. 28.
Brake. K. M. Yost. 1,899,601; Feb 28.
Brake-control mechanism for concrete mixing and other machines. S. Shafer, jr. 1,899,167; Feb. 28.
Brake for automobile engines, Hydraulic. C. A. Roeder. 1,899,294; Feb. 28.
Brake for driven and steered wheels. P. S. Eckland and G. Ryden. 1,899,187; Feb. 28.
Brake member, Making a. G. J. Thomas. 1,899,599; Feb. 28.
Braking of single phase commutator motors, Regenerative. R. Stix. 1,899,778; Feb. 28.
Brick holder. R. A. Weiss. 1,899,125; Feb. 28.
Brick molding machine, Checker. F. M. Miller. 1,899,708; Feb. 28.
Bricks, Making. F. M. Miller. 1,899,709; Feb. 28.
Broom. L. M. Goeller. 1,899,322; Feb. 28.
Brush, Greasing. W. F. Dehuff. 1,899,316; Feb. 28.
Brush machine. C. Jobst. 1,899,694; Feb. 28.
Brush, Typewriter. C. E. Goard. 1,899,090; Feb. 28.
Bucket. J. Berg. 1,899,006; Feb. 28.
Bucket, Minnow tackle. H. S. and H. L. Brown. 1,899,308; Feb. 28.
Buffing apparatus. D. K. Singer. 1,899,427; Feb. 28.
Buffing wheel blank piles. H. Zimmerman. 1,899,252; Feb. 28.
Building construction. J. Ball and P. Kotur. 1,899,450; Feb. 28.
Building construction. A. F. Bemis. 1,899,454; Feb. 28.
Building construction. F. M. Venzie. 1,899,403; Feb. 28.
Bullet-resisting structure. O. B. McClintock. 1,899,735; Feb. 28.
Bumper, Vehicle. A. J. Baker. Des. 89,330; Feb. 28.

Bunion corrective device. M. M. Hogan. 1,899,092; Feb. 28.
Burner: *See*—
Oil burner. Oxy-acetylene burner.
Burner control, Oil. J. Eaton. 1,899,563; Feb. 28.
Burner control system, Oil. J. V. Breisky and T. Draper. 1,899,744; Feb. 28.
Bushing, Grounding. G. C. Thomas, jr. 1,899,365; Feb. 28.
Bushing, High voltage. W. Estorff. 1,899,752; Feb. 28.
Button. I. D. Ford. 1,899,680; Feb. 28.
Button fastening. A. Coquette. 1,899,813; Feb. 28.
Cabinet, Dispensing. W. H. Ross. 1,899,484; Feb. 28.
Cabinet, Towel. T. B. Tyler. 1,899,569; Feb. 28.
Cable for communication circuits. W. Gabriel. 1,899,501; Feb. 28.
Caissons and the building of piers, etc. Sinking of. J. S. Miller. 1,899,346; Feb. 28.
Cake of soap. A. Mosheim. Des. 89,350; Feb. 28.
Calculating machine. G. C. Chase. 1,898,996; Feb. 28.
Camera and projecting apparatus, Combined. F. H. Owens. 1,899,052; Feb. 28.
Can filler. L. Buehler, jr. 1,899,134; Feb. 28.
Cane mill. E. W. Kopke and L. J. Struebig. 1,899,202; Feb. 28.
Cap and manufacturing the same, Bottle. A. H. Warth. 1,899,783; Feb. 28.
Cap, Bottle. A. H. Warth. 1,899,784; Feb. 28.
Cape, Automobile seat. W. S. Hawkins. 1,899,327; Feb. 28.
Car retarder for railroads. W. V. Morgan. 1,899,899; Feb. 28.
Carbon and the manufacture thereof, Porous siliceous. L. Kern. 1,899,810; Feb. 28.
Card, Display. J. E. More. 1,899,421; Feb. 28.
Card table. S. A. Threefoot. 1,899,366; Feb. 28.
Cart, Service station. H. W. Holland. Des. 89,344; Feb. 28.
Carton, Foldable paper. R. R. Richardson. 1,899,772; Feb. 28.
Cartridge. J. Holthe. 1,899,618; Feb. 28.
Carving material. W. H. Kiar. 1,899,200; Feb. 28.
Case: *See*—
Article case. Soap case.
Display case.
Cases, bags, trunks, and the like, Fastening for attaché. A. L. Peel. 1,899,822; Feb. 28.
Casing support and packing head. F. J. Hinderliter. 1,899,273; Feb. 28.
Casings, Repairing tire. J. J. Dettling. 1,899,676; Feb. 28.
Caster construction, Extensible offset. C. B. Noelting and W. H. Noelting. 1,899,394; Feb. 28.
Cathode structure for cathode tubes. W. Hofmann. 1,899,568; Feb. 28.
Cathodes, Coating thermionic. L. McCulloch. 1,899,765; Feb. 28.
Cauterizing instrument and electrode. F. C. Wappler. 1,899,220; Feb. 28.
Cellulose acetate composition containing a brominated diphenyl ether. H. B. Smith and S. J. Carroll. 1,899,215; Feb. 28.
Cellulose acetate compositions containing oximes. H. B. Smith. 1,899,213; Feb. 28.
Cellulose acetate lacquer containing chlorinated rosin. L. W. Eberlin and L. W. Blanchard, jr. 1,899,186; Feb. 28.
Cellulose acetate, Manufacture of. O. Silberrad and H. Bleasdale. 1,899,061; Feb. 28.
Cellulose material from hemp fibers, Manufacture of purified. E. C. Worden, 1st. 1,899,223; Feb. 28.
Cellulose organic ester composition containing phenylethyl benzoate. H. B. Smith. 1,899,214; Feb. 28.
Cellulosic composition of matter containing paraldehyde. S. J. Carroll. 1,899,078; Feb. 28.
Cement, Heat insulating. L. R. Nichols. 1,899,473; Feb. 28.
Cementitious bodies and material for use in same, Forming. E. P. Marshall. 1,899,101; Feb. 28.
Chain for pneumatic tires, Antiskid. V. Graziani. 1,899,801; Feb. 28.
Chair: *See*—
Physician's chair.
Charcoal, Preparation of granulated active. L. Klebert. 1,899,339; Feb. 28.
Charge forming device. W. H. Teeter. 1,899,363; Feb. 28.
Check ejecting mechanism. W. L. Paden. 1,899,290; Feb. 28.
Chemical pulping and refining process. G. A. Richter. 1,899,637; Feb. 28.
Chlorates for blasting purposes, Treating. P. O. Björkman and L. Ivanoff. 1,899,076; Feb. 28.
Chlorine from gas mixtures, Recovery of. B. Uebler. 1,899,123; Feb. 28.
Chopper and cultivator, Cotton. C. V. Jones. 1,899,806; Feb. 28.
Cigar enveloping machine. H. H. Wheeler. 1,899,174; Feb. 28.
Cigar heading device. J. F. Halstead. 1,899,194; Feb. 28.
Cigar transferring device. R. J. Beutel and P. Peterson. 1,899,179; Feb. 28.
Cigarette making machine. W. B. Molins. 1,899,628; Feb. 28.

Circuit breaker. W. W. Dashner. 1,899,675; Feb. 28.
Circuit breaker. S. S. Green. 1,899,566; Feb. 28.
Circuit breaker control system. E. Borre. 1,899,553; Feb. 28.
Circuit breaker, Oil. J. Slepian. 1,899,643; Feb. 28.
Circuit closer. G. T. Ostrander. 1,899,475; Feb. 28.
Circuit closing device. J. Anderson. 1,899,604; Feb. 28.
Circuit controller. O. S. Field. 1,899,894; Feb. 28.
Circuit, Glow lamp. M. J. Druyvesteyn. 1,899,021; Feb. 28.
Circuit interrupter. B. P. Baker and E. G. Kees. 1,899,605; Feb. 28.
Circuit interrupter. L. W. Dyer. 1,899,612; Feb. 28.
Circuit working with high-voltage, Electric. R. Strigel. 1,899,216; Feb. 28.
Circuitous elevator. H. D. Jones. 1,899,692; Feb. 28.
Clamp: *See*—
Hooked clamp.
Cleaner: *See*—
Boiler cleaner. Vacuum cleaner.
Cleat, Detachable. W. H. Albee. 1,899,300; Feb. 28.
Clip: *See*—
Money clip.
Clipper, Hair. H. Michael. 1,899,102; Feb. 28.
Clock attachment, Alarm. E. Schaefer. 1,899,113; Feb. 28.
Closure fastener operator. C. H. De Werth. 1,899,234; Feb. 28.
Closure fastening and locking means. H. H. Kistner. 1,899,466; Feb. 28.
Closure for vessels. W. A. Ramsay. 1,899,210; Feb. 28.
Cloth winding board. T. F. Heath. 1,899,195; Feb. 28.
Clothesline hanger. W. Lance. 1,899,467; Feb. 28.
Clutch. G. F. Thomas and T. D. Leaper. 1,899,834; Feb. 28.
Clutch disk. G. S. Lane. 1,899,872; Feb. 28.
Clutch mechanism, Overrunning. O. E. Fishburn. 1,899,500; Feb. 28.
Clutch member. A. U. Hook and E. J. Dumm. 1,899,274; Feb. 28.
Coal, Apparatus for carbonization of. E. W. Thiele. 1,899,888; Feb. 28.
Coal, Coking. E. W. Thiele. 1,899,887; Feb. 28.
Coaster, Two pedal. A. N. Cooper. 1,899,854; Feb. 28.
Coating articles with liquid pyroxylin or the like. W. C. Hampton. 1,899,887; Feb. 28.
Coffee maker and server, Combined. W. D. Teague. Des. 89,364; Feb. 28.
Coffee pot, Glass. H. C. Bates. 1,899,451; Feb. 28.
Coin-control mechanism. H. E. Frye. 1,899,321; Feb. 28.
Coin separator, Spurious. E. P. Donnellan. 1,899,560; Feb. 28.
Collar support. P. E. Alexander. 1,899,602; Feb. 28.
Combination tool. H. Hovgaard. 1,899,505; Feb. 28.
Commodities, Mechanism for weighing and packaging. C. P. Wellman. 1,899,173; Feb. 28.
Commodities, Method of and mechanism for packaging. C. P. Wellman. 1,899,172; Feb. 28.
Commutator assembling machine. F. J. Hardman and W. Spruegel. 1,899,325; Feb. 28.
Commutator machine, Polyphase. A. Heyland. 1,899,462; Feb. 28.
Composition for and method of treating molten metals. W. R. Jeavons and M. J. Rentschler. 1,899,153; Feb. 28.
Concrete, Curing. W. K. Schweitzer. 1,899,590; Feb. 28.
Concrete products, Making faced. W. H. Crume. 1,899,187; Feb. 28.
Concrete surfaces during curing, Protecting. P. C. Lemmerman and R. F. Remler. 1,899,576; Feb. 28.
Condenser: *See*—
High frequency condenser. Radiator condenser.
Condensers, Impregnation of electrical. M. Kevelson. 1,899,155; Feb. 28.
Cone or similar article, Ice cream. J. L. Harmsen. Des. 89,341; Feb. 28.
Connecter: *See*—
Electrical connecter.
Connection, Electrical. P. S. Bear. 1,899,254; Feb. 28.
Connection, Insulated driving. W. E. Krotee. 1,899,159; Feb. 28.
Connection, Making a. T. O. Mackey and W. Donaldson. 1,899,343; Feb. 28.
Contact breaker. H. T. Warner. 1,899,543; Feb. 28.
Container: *See*—
Flower container. Transformable container.
Container. T. S. Gorton, jr. Des. 89,337; Feb. 28.
Container. C. J. Parker. 1,899,821; Feb. 28.
Container. A. G. Shields. 1,899,732; Feb. 28.
Container. F. Westerbeck. 1,899,375; Feb. 28.
Container and shipping package. T. Crawford. 1,899,673; Feb. 28.
Container for chemical heating composition. G. B. Meagher. 1,899,286; Feb. 28.
Container for displaying merchandise. R. I. Rhodes, jr. 1,899,483; Feb. 28.
Container for loose leaf sheets, File. J. Schade. 1,899,530; Feb. 28.
Containers, Apparatus for cleaning. L. Deutsch. 1,899,019; Feb. 28.
Containers, Making metal. G. A. Robinson. 1,899,638–9; Feb. 28.
Control apparatus. A. R. Mabey. 1,899,516; Feb. 28.
Control for electrically driven vehicles, System of. W. A. Stevens. 1,899,649; Feb. 28.

CARNEGIE LIBRARY OF ATLANTA

Control for refrigeration compartments, Temperature. L. S. Chadwick. 1,899,852; Feb. 28.
Control from photoelectric cells, Electrostatic potential. T. H. Nakken. 1,899,712; Feb. 28.
Control system. R. H. Ellis. 1,899,677; Feb. 28.
Control system. H. B. La Roque. 1,899,575; Feb. 28.
Controller. C. E. Mason and A. M. Dixon. 1,899,705; Feb. 28.
Controlling device. H. E. Kavanaugh. 1,899,807; Feb. 28.
Controlling mechanism for sewing machines, Thread. W. M. Hanneman. 1,899,802; Feb. 28.
Conveyer. C. Evans, jr. 1,899,893; Feb. 28.
Conveyer. J. B. McWilliams. 1,899,766; Feb. 28.
Conveyer control. D. E. Keech. 1,899,386–8; Feb. 28.
Conveyer for concrete product machine, Unit. T. S. D'Ononfrio. 1,899,611; Feb. 28.
Conveyer mechanism. L. E. Dupuy. 1,899,320; Feb. 28.
Conveyer synchronizing control. W. B. Snyder and D. E. Chambers. 1,899,595; Feb. 28.
Cooler for refrigerators, Liquid. L. G. Lindsay. 1,899,578; Feb. 28.
Copyholder. F. J. Kavanaugh. 1,899,759; Feb. 28.
Core catcher. J. B. Ragsdale. 1,899,354; Feb. 28.
Coupler, Hose. F. N. Bard. 1,899,842; Feb. 28.
Coupling device, Quick. W. M. Singer. 1,899,119; Feb. 28.
Cover: *See*—
Manhole cover.
Covering structure. D. Finley. 1,899,385; Feb. 28.
Cranes, Crowding and racking in mechanism for excavator. S. N. Nickliss. 1,899,901; Feb. 28.
Crankcase ventilation. H. G. Kamrath. 1,899,910; Feb. 28.
Crate. D. Guice. 1,899,864; Feb. 28.
Crossing gate, Automatic railway. C. T. Day. 1,899,496; Feb. 28.
Crown, model, and method of applying, Jacket. L. L. Poston. 1,899,718; Feb. 28.
Cup or similar article. S. Siesinger. Des. 89,362; Feb. 28.
Current collector. W. Schaake. 1,899,729; Feb. 28.
Curtain drying frame. R. Spano. 1,899,831; Feb. 28.
Cutter: *See*—
Gear cutter. Paper cutter.
Grass cutter.
Cutter and shuttle therefor, Thread. O. V. Payne. 1,899,634; Feb. 28.
Cutter head while its cutters are being sharpened, Holding a. C. T. Rottler. 1,899,359; Feb. 28.
Cylinder boring machine. G. E. Andersen. 1,899,128; Feb. 28.
Cylinder gauge. C. B. Litterio. 1,899,920; Feb. 28.
D-handle. W. H. Bergmann. 1,899,662; Feb. 28.
Defrosting attachment for mechanical refrigerators. F. O. Riek. 1,899,724; Feb. 28.
Dentures, Making reenforced vulcanite. U. Nudell. 1,899,521; Feb. 28.
Depilatory and compounding the same. R. H. McKee and E. H. Morse. 1,899,707; Feb. 28.
Desk and blackboard arrangement. E. E. Herrmann. 1,899,687; Feb. 28.
Diamines and making the same, Unsulphonated diacylated. G. de Montmollin, J. Danuser, G. Bonhôte, and H. Johner. 1,899,856; Feb. 28.
Dibenzanthrone from the corresponding Bzl.Bzl'-dibenzanthronyls, Making. A. Lüttringhaus, H. Neresheimer, and H. Emmer. 1,899,579; Feb. 28.
Dichloro-methyl-anthraquinones and making same. O. Bayer. 1,899,304; Feb. 28.
Diphenyloxide, Purification of. E. C. Britton and W. R. Reed. 1,899,257; Feb. 28.
Discharge mechanism. L. C. Reis. 1,899,356; Feb. 28.
Dish or similar article. S. Siesinger. Des. 89,361; Feb. 28.
Dish washing machine. G. Celaya. 1,899,495; Feb. 28.
Dispensing pump, Gasoline. C. Ultes. Des. 89,305; Feb. 28.
Display and method of packing. J. D. Martin. 1,899,583; Feb. 28.
Display apparatus. H. Bascom. 1,899,074; Feb. 28.
Display case, Convertible. W. M. Buttrick. 1,899,012; Feb. 28.
Display case, Refrigerator. F. T. Rodgers. Des. 89,353; Feb. 28.
Display device. M. S. Manhard. 1,899,284; Feb. 28.
Display stand. R. J. Haug. 1,899,567; Feb. 28.
Display stand, Merchandising. H. S. Morgan. Des. 89,349; Feb. 28.
Doll. H. Harman and R. C. Ising. Des. 89,340; Feb. 28.
Doll, Rag. D. Sherrill. Des. 89,359; Feb. 28.
Doorcheck. W. F. Foster. 1,899,266; Feb. 28.
Doorcheck, Air. L. C. Norton. 1,899,716; Feb. 28.
Doorcheck for vending machines. T. F. Early. 1,899,024; Feb. 28.
Door control, Elevator. L. Torch. 1,899,368; Feb. 28.
Doorknob lock. H. L. Arste. 1,899,380; Feb. 28.
Doorlatch. A. V. Henst. 1,899,686; Feb. 28.
Doorlatch construction. W. C. Devereaux. 1,899,317; Feb. 28.
Dough divider. W. G. Kirchhoff. 1,899,238; Feb. 28.
Dough proofing device. S. Schiff. 1,899,246; Feb. 28.
Draft appliance for railway cars. W. J. Regan and E. George, jr. 1,899,482; Feb. 28.
Draft or coupling device. G. H. Sterling. 1,899,597; Feb. 28.
Drier: *See*—
Hair drier.
Drier roll. T. L. Brannen. 1,899,256; Feb. 28.
Drill and reaming bit, Combination cutting. H. D. Sandstone. 1,899,727; Feb. 28.
Drill pipe joint. H. Mecom and L. J. Black. 1,899,469; Feb. 28.
Drill shank and bit. C. Erickson. 1,899,458; Feb. 28.
Drills, Feeding device for rock. G. W. Hulshizer. 1,898,999; Feb. 28.
Drive for well drilling equipment, Electric motor. A. Lindner. 1,899,703; Feb. 28.
Drive, Internal gear. D. C. Klausmeyer. 1,899,201; Feb. 28.
Drive, Turntable. B. R. Carson. 1,899,669; Feb. 28.
Driving mechanism for flat knitting frames. K. K. Lieberknecht. 1,899,875; Feb. 28.
Driving propellers, Mechanism for. L. Wiedmann. 1,899,490; Feb. 28.
Drum-head tightening device. G. Harris. 1,899,461; Feb. 28.
Drying granular or powdered material by means of a fluid. K. Reiche. 1,899,397; Feb. 28.
Drying machine, Electrically heated. W. W. Sibson and J. W. Dennis. 1,899,593; Feb. 28.
Dust separator. C. Coupard. 1,899,794; Feb. 28.
Dyestuffs of the anthraquinone series, New acid. K. Zahn, H. Koch, and K. Weinand. 1,899,377; Feb. 28.
Dyestuffs of the anthraquinonazine series, Purification of vat. H. Neresheimer and W. Schneider. 1,899,348; Feb. 28.
Dyestuffs of the benzanthrone series and making same. W. Moser. 1,899,878; Feb. 28.
Dyestuffs of the polymethine series, Manufacture of. R. Tobler and W. Kern. 1,899,122; Feb. 28.
Dynamo-electric machine. F. Bauer. 1,899,741; Feb. 28.
Dynamo-electric machine. R. N. Early. 1,899,797; Feb. 28.
Dynamo-electric machine. R. N. Early. 1,899,858; Feb. 28.
Dynamo-electric machine. R. N. Early. 1,899,859; Feb. 28.
Earth conditioning implement. G. R. Botnen. 1,899,306; Feb. 28.
Educational drawing instrument. E. L. Dixon. 1,899,318; Feb. 28.
Electric crystal apparatus, Piezo-. R. H. Worrall. 1,899,127; Feb. 28.
Electric plug. K. B. Roudebush and H. G. Eilers. 1,899,360; Feb. 28.
Electric switch. C. G. and K. T. Johnson. 1,899,000; Feb. 28.
Electrical apparatus, Outdoor. C. D. Ainsworth. 1,899,658; Feb. 28.
Electrical connecter. R. Fitz Power. 1,899,824; Feb. 28.
Electrical cut-out. C. L. Matthews and T. Birkenmaier. 1,899,915; Feb. 28.
Electrical energy by light impulses, Modulating. R. A. Fessenden. 1,899,026; Feb. 28.
Electrode alloy. E. F. Lowry. 1,899,623; Feb. 28.
Electrodes, Manufacture of. O. W. Etorey and C. A. Sliver. 1,899,064; Feb. 28.
Electromagnet. O. Hachfeld. 1,899,502; Feb. 28.
Electrothermic process of treating high resistance material. I. H. Derby. 1,899,233; Feb. 28.
Elevator: *See*—
Circuitous elevator.
Energy, System for transmitting electroradiant. E. S. Purington. 1,899,527; Feb. 28.
Engine: *See*—
Gas engine. Slide valve engine.
Internal combustion engine.
Engine. J. O. Fink. 1,899,189; Feb. 28.
Engine. M. C. Werle. 1,899,374; Feb. 28.
Engine starting device. P. S. Claus. 1,899,229; Feb. 28.
Eraser and pencil holder attachment for typewriters. B. Lapin. 1,899,509; Feb. 28.
Erection apparatus. J. L. de Vou. 1,899,456; Feb. 28.
Escape apparatus, Submarine. R. H. Davis. 1,899,855; Feb. 28.
Escutcheon for bracelets or the like. S. Schnelling. Des. 89,358; Feb. 28.
Esters, Manufacture of mixed alkyl phenyl. M. N. Dvornikoff. 1,899,919; Feb. 28.
Excavator. K. Messick. 1,899,345; Feb. 28.
Exercising machine. J. D. Bell. 1,899,255; Feb. 28.
Expansion joint. A. C. Fischer. 1,899,425; Feb. 28.
Fabrics, Cutting. C. Duisdieker. 1,899,022; Feb. 28.
Fastener: *See*—
Flexible slide fastener.
Fastener unit. G. E. Prentice. 1,899,479; Feb. 28.
Feeder, Chicken. W. B. McCray. 1,899,818; Feb. 28.
Fiber articles, Casting. E. Huff and A. Kelding. 1,899,197; Feb. 28.
Fiber, Making felted mineral. E. R. Powell. 1,899,056; Feb. 28.
Filing structure. C. B. Ulrich. 1,899,837; Feb. 28.
Filing system. R. J. Wood. 1,899,430; Feb. 28.
Film driving mechanism. E. W. Kellogg. 1,899,571; Feb. 28.
Filter: *See*—
Air filter. Self-sealing filter.
Renewable filter.
Filter. G. S. Dauphinee. 1,899,018; Feb. 28.
Fishing apparatus. R. J. Blum. 1,899,790; Feb. 28.
Fishing line. F. S. Phelps. 1,899,477; Feb. 28.
Fishing reel. W. L. Adams. 1,899,908; Feb. 28.
Fixture, Ceiling. C. B. Rogers. Des. 89,354; Feb. 28.
Flexible slide fastener. W. Shulik. 1,899,168; Feb. 28.
Floating bearing. C. Jablow and B. Wheeler. 1,899,691; Feb. 28.
Floor covering and the like. D. L. Irwin and R. E. Tippins. 1,899,416; Feb. 28.
Flotation machine. J. P. Ruth. 1,899,166; Feb. 28.
Flower container, Easy lift sanitary. M. E. Shaw. 1,899,400; Feb. 28.
Fluid flow controlling mechanism. J. Q. du Pont. 1,899,235; Feb. 28.
Fluid-flow indicator. G. D. Clark. 1,899,672; Feb. 28.
Fluid operated tool. J. R. Hoffman. 1,899,150; Feb. 28.
Foam prevention agent. L. J. Clapsadle. 1,899,610; Feb. 28.
Folding machine. P. R. Glass. 1,899,089; Feb. 28.
Folding machine and method. J. P. Byron and A. R. Ridderstrom. 1,899,077; Feb. 28.
Folding machine and method. T. C. Rowen. 1,899,245; Feb. 28.
Folding table. C. W. Glandt. 1,898,998; Feb. 28.
Food products from raw meat, Manufacture of dried. W. J. Abbott. 1,899,224; Feb. 28.
Four-wheel brake. J. Sneed. 1,899,644; Feb. 28.
Frame: *See*—
Side frame. Window frame.
Frame construction, Shade. V. B. Watral and B. V. Kolenik. 1,899,429; Feb. 28.
Freight, System and apparatus for handling. B. F. Fitch. Re18,752; Feb. 28.
Frequency changer. L. Levy. 1,899,622; Feb. 28.
Friction element. C. De Lukacsevics. 1,899,239; Feb. 28.
Friedel crafts and similar condensation reactions with non-aromatic compounds, Carrying out. H. Mark, M. Dunkel, and R. Roell. 1,899,582; Feb. 28.
Fringe. G. J. Underwood. 1,899,219; Feb. 28.
Front for a radiator unit, Making an auxiliary. F. B. Herz. 1,899,617; Feb. 28.
Fruit for market, Preparation of fresh. E. M. Brogden and M. L. Trowbridge. 1,899,606; Feb. 28.
Fruit pitting machine. A. Gotelli. 1,899,863; Feb. 28.
Fuel and the manufacture thereof. L. Kern. 1,899,811; Feb. 28.
Fuel control for boilers, Automatic. R. S. Rodie. 1,899,424; Feb. 28.
Fuel pump. W. H. Schulze. 1,899,295; Feb. 28.
Fuel supply to internal combustion engines, Method of and apparatus for regulating the. H. Junkers. 1,899,038; Feb. 28.
Furnace: *See*—
Gas furnace. Powdered fuel furnace.
Furniture post end construction. F. Kusterle. 1,899,699; Feb. 28.
Galvanic cell. G. W. Heise. 1,899,616; Feb. 28.
Game. D. E. Milne. 1,899,820; Feb. 28.
Game. H. M. Strobel. 1,899,833; Feb. 28.
Game apparatus. L. F. Flower. 1,899,860; Feb. 28.
Game apparatus. A. W. McClean. 1,899,706; Feb. 28.
Game apparatus. A. K. Small, jr. 1,899,830; Feb. 28.
Game or puzzle board. C. F. Bedell. 1,899,177; Feb. 28.
Game, Square golf. H. H. Wilson. 1,899,546; Feb. 28.
Garment. W. Kops. 1,899,761; Feb. 28.
Garment. G. Nickerson. 1,899,769; Feb. 28.
Garment. C. B. Walsh. 1,899,487; Feb. 28.
Garment. Foundation. K. E. Cunningham. 1,899,890; Feb. 28.
Gas engine. H. Heusser. 1,899,869; Feb. 28.
Gas furnace. T. W. Torr. 1,899,486; Feb. 28.
Gas-measuring device. A. W. Machlet. 1,899,764; Feb. 28.
Gas producer, Pressure. K. Koller. 1,899,157–8; Feb. 28.
Gasket holding means. L. D. Woodruff. 1,899,785; Feb. 28.
Gaskets of jar caps, Making and applying. M. G. Parks. 1,899,524; Feb. 28.
Gate: *See*—
Crossing gate.
Gate securing means. W. P. Haythorn. 1,899,149; Feb. 28.
Gauge: *See*—
Cylinder gauge. Snap gauge.
Gear: *See*—
Steering gear.
Gear cutter. S. H. Earl. 1,899,023; Feb. 28.
Gear shifting mechanism. S. A. Jeffries. 1,899,832–3; Feb. 28.
Gear shifting mechanism, Automatic. H. A. Hanson. 1,899,685; Feb. 28.
Gear wheel grinding machine. R. J. Bullows. 1,899,793; Feb. 28.
Gearing for steering mechanically propelled vehicles and for other purposes. R. Bishop. 1,899,663; Feb. 28.
Gearing, Transmission. C. E. Starr. 1,899,401; Feb. 28.
Glare dimmer attachment. W. R. Uhlemann. 1,899,905; Feb. 28.
Glass articles, Treating. R. D. Smith. 1,899,485; Feb. 28.
Glass bar and making same. J. Gross. 1,899,146; Feb. 28.
Glass, Changeant or opalescent. N. Kreidl. 1,899,760; Feb. 28.
Glass, Gauge. D. E. Stines and J. W. Packle. 1,899,886; Feb. 28.
Glass, Laminated. H. C. Rohlfs. 1,899,588; Feb. 28.
Glass mix for opaque containers and making the same. C. W. Crowell. 1,899,230; Feb. 28.
Glass treatment. F. G. Schwalbe. 1,899,640; Feb. 28.
Golf bag. M. B. Reach. 1,899,825; Feb. 28.
Golf club head. F. R. Bartsch. Des. 89,332; Feb. 28.
Gondolas of roundabouts, Device for rotating and at the same time lifting the. L. Schmidt. 1,899,060; Feb. 28.
Governor for fluid motors. J. E. Erickson. 1,899,142; Feb. 28.
Grain cleaning machine. V. M. Petit. 1,899,209; Feb. 28.
Grain, Malting. R. E. Kusserow. 1,899,160; Feb. 28.
Grain sampler, Automatic. A. M. Woodside. 1,899,126; Feb. 28.
Grapple. J. W. O. Dorman. 1,899,750; Feb. 28.
Grass cutter, Bermuda. A. M. Gray. 1,899,414; Feb. 28.
Grate bar. J. S. Thompson. 1,899,538–9; Feb. 28.
Grate construction. F. B. Hayes. 1,899,033; Feb. 28.
Grate, Furnace. J. S. Thompson. 1,899,537; Feb. 28.
Gravity operating device for sorting fruits or vegetables. G. J. Olney. 1,899,632; Feb. 28.
Gridiron. F. Goldenberg. 1,899,682; Feb. 28.
Grizzly and screen, Resilient. C. B. Ulrich. 1,899,787; Feb. 28.
Grounding fitting. S. N. Buchanan. 1,899,309; Feb. 28.
Guide, Elevator. J. Dunlop. 1,899,751; Feb. 28.
Gun, Pressure grease. E. B. Norman. 1,899,349; Feb. 28.
Guns, Magazine barrel for. C. F. Lefever. 1,899,702; Feb. 28.
Hair drier. L. W. Cooley and D. R. Ward. 1,899,261; Feb. 28.
Hair drying apparatus. G. W. Peterson. 1,899,352; Feb. 28.
Hair holding device. N. L. Solomon. 1,899,428; Feb. 28.
Hair waving device. R. D'Orleans. Re18,749; Feb. 28.
Hair waving or curling device, Permanent. C. O. V. Fogelin. 1,899,190; Feb. 28.
Hammer, Drop. R. E. Waldron. 1,899,371; Feb. 28.
Handle: *See*—
D-handle.
Handle. E. N. Jacobi. 1,899,418; Feb. 28.
Hanger: *See*—
Clothesline hanger.
Hat. B. J. Drueding. 1,899,020; Feb. 28.
Hat shaper. R. Raulerson. 1,899,636; Feb. 28.
Hayrake. A. R. Rutter. 1,899,861; Feb. 28.
Head and reservoir construction, Grease gun. I. L. Eastman. 1,899,798; Feb. 28.
Headlight, Automobile. W. J. Walsh. 1,899,740; Feb. 28.
Heat exchange apparatus. E. B. Freeman. 1,899,191; Feb. 28.
Heat exchange device. H. V. Dalgliesh. 1,899,080; Feb. 28.
Heater: *See*—
Air heater. Water heater.
Pipe and fin heater.
Heater. L. J. Maringer. 1,899,581; Feb. 28.
Heater construction. H. J. Walker. 1,899,541; Feb. 28.
Heel, Resilient. B. Kind. 1,899,093; Feb. 28.
Heel trimming machine. M. S. Cate. 1,899,747; Feb. 28.
High frequency condenser. W. M. Bailey. 1,899,176; Feb. 28.
Holder: *See*—
Bag holder. Razor blade holder.
Brick holder. Tool holder.
Map holder. Toothbrush holder.
Package holder.
Pad or memorandum holder.
Hood for power driven vehicles, Roller. F. Steinecke. 1,899,832; Feb. 28.
Hood for vehicles, Collapsible. A. Kellner. 1,899,870; Feb. 28.
Hooked clamp. R. J. Lackner. 1,899,162; Feb. 28.
Hosiery. E. J. Berger. Des. 89,333; Feb. 28.
Hub removing tool. N. W. Trautner. 1,899,218; Feb. 28.
Hydraulic brake. S. W. Rushmore. 1,899,898; Feb. 28.
Hydraulic press. W. Ernst, H. F. MacMillin, and R. Thoreson. 1,899,678; Feb. 28.
Hydrocarbon material, Separating cracked. N. E. Loomis. 1,899,897; Feb. 28.
Hydrogen and carbon monoxide, Producing. M. de Simo. 1,899,184; Feb. 28.
Ice grip nonskid. T. A. Master and L. D'Angelo. 1,899,517; Feb. 28.
Illuminating means. M. H. Egan. 1,899,085; Feb. 28.
Illumination control system. A. E. Bailey, jr. 1,899,548–9; Feb. 28.
Implement for cleaning disk knives. O. R. Deckert. 1,899,433; Feb. 28.
Indicator: *See*—
Fluid-flow indicator. Rotary indicator.
Inductance system, Adjustable. L. A. Gebhard. 1,899,144; Feb. 28.
Inkstand. E. E. Clark. 1,899,182; Feb. 28.

Instrument for individual vary-sizing of type. A. E. Schnable. 1,899,775; Feb. 28.
Insulator. G. Jansson. 1,899,757; Feb. 28.
Insulator, Vibration. I. W. Robertson. 1,899,293; Feb. 28.
Internal combustion engine. J. A. H. Barkelj. 1,899,130; Feb. 28.
Internal combustion engine. W. R. Griswold. 1,899,324; Feb. 28.
Internal combustion engine. A. J. Meyer. 1,899,206; Feb. 28.
Internal combustion engine. E. S. and C. F. Taylor. 1,892,217; Feb. 28.
Internal combustion engine. M. Tibbetts. 1,899,447; Feb. 28.
Internal combustion engine. L. M. Woolson. 1,899,431; Feb. 28.
Jack: *See*—
Automobile jack.
Joint: *See*—
Drill pipe joint. Rail joint.
Expansion joint. Universal joint.
Joint cleaning and finishing tool, Road pavement. E. M. Crus. 1,899,183; Feb. 28.
Joint clearer. G. A. Deane. 1,899,231; Feb. 28.
Joint with adjustable bushings, Universal. V. P. Williams. 1,899,840; Feb. 28.
Journal box. R. J. Brittain, jr., and O. W. Young. 1,899,010; Feb. 28.
Juice extractor, Fruit. E. G. Streckfuss. Des. 89,363; Feb. 28.
Junction box. W. H. B. Lavarack. 1,899,510; Feb. 28.
Key. O. D. von Mehren. 1,899,739; Feb. 28.
Knitting machine. G. Vollenweider. 1,899,838; Feb. 28.
Lacquer-base, lacquer and making same. W. C. Pierson. 1,899,054; Feb. 28.
Ladder, Extension. C. A. Bay. 1,899,742; Feb. 28.
Laminated material. H. D. Segar. 1,899,591; Feb. 28.
Lamp fixture. W. Rheiner. 1,899,723; Feb. 28.
Lamp, Incandescent electric. J. Quesseque. 1,899,587; Feb. 28.
Lamp, Portable convertible. J. J. Herlbauer. 1,899,868; Feb. 28.
Lantern slide, Radiomovie. C. F. Jenkins. 1,899,334; Feb. 28.
Lead for printing machines, Web. H. V. Ball. 1,899,226; Feb. 28.
Leather, Method of and apparatus for use in cutting. T. D. Howe. 1,899,805; Feb. 28.
Lectern lighting unit. C. E. and G. R. Ferree. 1,899,499; Feb. 28.
Ledger sheet. McW. Beers. 1,899,453; Feb. 28.
Lens strap. N. M. Baker. Des. 89,328–9; Feb. 28.
Lenses. N. M. Stanley. 1,899,777; Feb. 28.
Level control apparatus, Liquid. J. E. Stoll. 1,899,063; Feb. 28.
Lift, Automobile. F. Ackerman. 1,899,491; Feb. 28.
Lift, Automobile. E. H. Steedman. 1,899,534; Feb. 28.
Lifting and rotating apparatus. S. A. Neidich. 1,899,714; Feb. 28.
Lighter. R. E. Berthold. 1,899,008; Feb. 28.
Lighter or similar article, Cigar. B. Greenberger. Des. 89,338; Feb. 28.
Lighting set package, Christmas tree. A. L. Buschman. 1,899,666; Feb. 28.
Lightning arresters. H. M. Towne. 1,899,540; Feb. 28.
Lily, Water. G. H. Pring. Pl. Pt. 55; Feb. 28.
Line image producer. J. J. Hopfield. 1,899,804; Feb. 28.
Links, Forming. J. Sneed. 1,899,645; Feb. 28.
Liquid from other liquids, Method of and apparatus for separating a. G. H. Zouck and W. L. De Baufre. 1,899,378; Feb. 28.
Liquid straining device. L. B. Gruman. 1,899,030; Feb. 28.
Liquids under pressure, Dispensing. J. F. Werder. 1,899,222; Feb. 28.
Loading device, Break-down. J. H. Steele. 1,899,647; Feb. 28.
Lock: *See*—
Doorknob lock. Telephone lock.
Needle bar lock.
Lock. H. Machinist. 1,899,876; Feb. 28.
Locomotive. P. G. Sanborn. 1,899,589; Feb. 28.
Looms, Bobbin can for automatic. W. H. Wakefield. 1,899,600; Feb. 28.
Looms, Electrical weft detector for. T. Kerr. 1,899,620; Feb. 28.
Lorgnette. W. A. Blocker. 1,899,664; Feb. 28.
Loud speaker. J. Weinberger and I. Wolff. Re18,751; Feb. 28.
Lubricant spraying apparatus. E. W. Davis. 1,899,262; Feb. 28.
Lubricating apparatus. O. U. Zerk. 1,899,071; Feb. 28.
Lubricating rings and travelers in doubling and like frames. T. K. Powrie. 1,899,635; Feb. 28.
Lubricating the roll necks of rolling mills, System for. J. L. Miller and H. R. Gilchrist. 1,899,472; Feb. 28.
Lubricator. L. A. Merk. 1,899,767; Feb. 28.
Machine for affixing opening threads to envelopes. C. N. Fuller. 1,899,267; Feb. 28.
Machine for controlling light intensities of motion picture printers. H. Janssen and E. Wisniewski. 1,899,756; Feb. 28.
Machine for decorticating fiber-containing foliate plants. F. Merts. 1,899,470; Feb. 28.
Machine for grooving heels. W. H. Nutt. 1,899,047; Feb. 28.
Machine for making pasteboard boxes. J. H. Stortz. 1,899,652; Feb. 28.
Machine for making wire cable. J. C. Damon. 1,899,559; Feb. 28.
Machine for manufacturing dry cells. E. Schmidt. 1,899,114; Feb. 28.
Machine for milling threads. P. P-G. Hall. 1,899,865; Feb. 28.
Machine for packing cigarettes. W. E. Molins and G. D. Horgan. 1,899,898; Feb. 28.
Machine for producing gummed web. A. S. Webster. 1,899,655; Feb. 28.
Machine support, Pipe bending. G. Lidseen. 1,899,280; Feb. 28.
Machine tool. F. E. Stratton. 1,899,362; Feb. 28.
Manhole cover. O. N. Gredell. 1,899,565; Feb. 28.
Manifold construction. E. E. Huntington. 1,899,690; Feb. 28.
Map holder. C. E. Benedict. 1,899,845; Feb. 28.
Massage machine. D. H. Murphy. 1,899,208; Feb. 28.
Material and product thereof, Process and composition for rubberising water repellant. M. C. Teague. 1,899,535; Feb. 28.
Material, Applying. I. Kass. 1,899,391; Feb. 28.
Material, Coking carbonizable. L. Kern. 1,899,808; Feb. 28.
Material, Cooking solid carbonizable. L and F. C. Kern. 1,899,782; Feb. 28.
Material for facing bottle caps and making the same. A. H. Warth. 1,899,782; Feb. 28.
Material-handling apparatus. A. L. Clements. 1,899,260; Feb. 28.
Material used in paper manufacture, Method of and apparatus for testing loading. H. A. Rothchild and J. A. Limpert. 1,899,774; Feb. 28.
Materials, Conditioning incoherent finely divided. W. R. Jeavons and M. J. Rentschler. 1,899,152; Feb. 28.
Materials, Method of and apparatus for grinding and polishing. L. E. Howard. 1,899,463; Feb. 28.
Matrices, Apparatus for conditioning dry. C. A. Pitts. 1,899,035; Feb. 28.
Matrix mold, Interchangeable. A. A. Bush. 1,899,258; Feb. 28.
Measuring instrument, Electrical. R. Simpson. 1,899,885; Feb. 28.
Meat for smoking, Apparatus for shaping. A. N. Benn. 1,899,178; Feb. 28.
Memorandum pad. W. A. Ringler. 1,899,773; Feb. 28.
Metal, Apparatus for rolling sheet. J. Bähner. 1,899,225; Feb. 28.
Metal bars, Forming forked heads on. A. Metcalf. 1,899,288; Feb. 28.
Metal drawing press, Sheet. F. J. Rode. 1,899,110; Feb. 28.
Metal drawing press, Sheet. F. J. Rode. 1,899,111; Feb. 28.
Metal working. E. C. Bullard. 1,899,608; Feb. 28.
Metals, Casting readily oxidizable. A. W. Winston. 1,899,906; Feb. 28.
Metals, Coating. G. H. Howe. 1,899,569; Feb. 28.
Metals or alloys, Apparatus for separating. A. Hanak. 1,899,031; Feb. 28.
Metallurgical apparatus. C. R. Kuzell. 1,899,161; Feb. 28.
Milk product and making same, Therapeutic. M. C. Matt. 1,899,817; Feb. 28.
Mill: *See*—
Cane mill. Rolling mill.
Mixing head, Thermostatic controlled. D. Q. Bowman. 1,899,494; Feb. 28.
Mold: *See*—
Matrix mold.
Molding machine. F. E. Kraft. 1,899,277; Feb. 28.
Money clip. G. E. Felsenthal. 1,899,753; Feb. 28.
Mop head. H. J. Lorang. 1,899,283; Feb. 28.
Motor control system. R. M. Phillips. 1,899,586; Feb. 28.
Motor having high starting and pull-in torques, Synchronous. H. V. Putman. 1,899,719; Feb. 28.
Mounting and making the same, Ophthalmic. J. A. Sweeney. 1,899,736; Feb. 28.
Mounting, Control rod. L. H. Kai and H. Weber. 1,899,198; Feb. 28.
Mounting for motor driven tools, Adjustable and interchangable. E. P. Sacrey. 1,899,883; Feb. 28.
Mounting, Motor. H. Stein. 1,899,596; Feb. 28.
Mounting, Rear chassis spring. C. L. McCuen. 1,899,913; Feb. 28.
Mounting, Stripper bar. L. E. Wirth. 1,899,405; Feb. 28.
Mounting, Vehicle spring. E. S. MacPherson. 1,899,624; Feb. 28.
Mower attachment for endless tread tractor. J. E. Horste. 1,899,329; Feb. 28.
Mower attachment, Lawn. W. M. Bley. 1,899,305; Feb. 28.
Mower, Lawn. P. J. Carolus. 1,899,181; Feb. 28.
Mower, Lawn. C. A. Frey. 1,899,564; Feb. 28.
Mower, Lawn. C. A. Gratiot. 1,899,439; Feb. 28.
Musical instrument, Electrical. M. L. Severy. 1,899,884; Feb. 28.
Necktie rack. J. Lester. 1,899,813; Feb. 28.
Neckwear. J. C. Barbetti. 1,899,789; Feb. 28.

Needle bar lock, Knitting machine. K. R. Lieberknecht. 1,899,577; Feb. 28.
Needle bed. R. H. Lawson and A. Gagné. 1,899,278; Feb. 28.
Negatives, Production of pedigreed. M. Handschiegl. 1,899,032; Feb. 28.
Nozzle, Dispensing. A. E. Hutt. 1,899,506; Feb. 28.
Nut buttering machine. M. J. Kohler. Des. 89,347; Feb. 28.
Nut-facing machine. W. L. Ward and W. D. Rigney. 1,899,221; Feb. 28.
Nut, Lock. C. G. Olson. 1,899,715; Feb. 28.
Oil burner. L. L. Logan. 1,899,003; Feb. 28.
Oil burning apparatus and method. W. A. Ray. 1,899,396; Feb. 28.
Oil fields, Developing. H. L. Doherty. 1,899,497; Feb. 28.
Oil fractionating. C. F. Denney. 1,899,081; Feb. 28.
Oil refining, Hydrocarbon. W. M. Mallisoff. 1,899,042; Feb. 28.
Oil wells, Method of and apparatus for hydraulically pumping. O. B. Kibele and E. R. Ericson. 1,899,697; Feb. 28.
Oils, Eliminating water hazard in treating. C. D. Bayne. 1,899,889; Feb. 28.
Oils, Fractionation of hydrocarbon. R. E. Wilson. 1,899,018; Feb. 28.
Oils, Pyrolytic conversion of petroleum. F. A. Howard. 1,899,895; Feb. 28.
Opener and key ring, Combined bottle. J. C. A. Labreche. 1,899,203; Feb. 28.
Optical instrument. A. S. Cameron. 1,899,135; Feb. 28.
Organ stop operating mechanism. B. G. Austin. 1,899,381; Feb. 28.
Ornament and dispenser, Combined. E. L. Rivet. 1,899,165; Feb. 28.
Oven, By-product coke. C. H. Hughes. 1,899,275; Feb. 28.
Oxalate, Production of ferric. L. P. Curtin. 1,899,674; Feb. 28.
Oxids from ferrous metal, Removal of. F. Stockton. 1,899,734; Feb. 28.
Oxy-acetylene burner. B. M. Miller. 1,899,626; Feb. 28.
Package holder. P. W. Davis and J. M. Booth. 1,899,795; Feb. 28.
Packing and display box. F. J. and P. P. Addis. 1,899,547; Feb. 28.
Packing for rods and shafts, Oil retaining. V. E. Nelson. 1,899,630; Feb. 28.
Pad: *See*—
Memorandum pad.
Pad or memorandum holder, Score. A. R. Hart. 1,899,440; Feb. 28.
Pan for bread baking, Rotatable. C. A. Kastner. 1,899,335; Feb. 28.
Panel for vehicles, Movable top. J. L. Dubos. 1,899,857; Feb. 28.
Panel foundation making. B. C. Place. 1,899,823; Feb. 28.
Paper and the like, Production of impregnated. H. Hill. 1,899,688; Feb. 28.
Paper product sized with petroleum hydrocarbons and making the same. C. Ellis. 1,899,086; Feb. 28.
Paper uniting device for continuous rod cigarette machines. F. Di Ianni. 1,899,185; Feb. 28.
Parachute apparatus. L. J. Campbell, L. H. Ford, and H. G. Rogers. 1,899,668; Feb. 28.
Parachute harness. F. S. Wigley and L. F. Austing. 1,899,656; Feb. 28.
Parachute pack. E. H. Nichols. 1,899,718; Feb. 28.
Parachute pack, Form-fitting. W. Bird and G. M. Ball. 1,899,661; Feb. 28.
Pearl, Imitation. A. E. Petersen. 1,899,053; Feb. 28.
Pedestal. M. C. Barclay. Des. 89,331; Feb. 28.
Pedestal table. M. Thum. 1,899,835; Feb. 28.
Pencil. J. D. Hale. Des. 89,339; Feb. 28.
Perch for bird cages, Resilient. T. J. Klein. 1,899,508; Feb. 28.
Petroleum and hydrocarbon compounds, Purification of. T. W. Culmer. 1,899,314; Feb. 28.
Phonograph. C. F. Eggleston and D. D. Guteknust. 1,899,141; Feb. 28.
Photographic and projection objectives. A. Warmisham. 1,899,069; Feb. 28.
Photographic film reel. L. W. Lessler. 1,899,279; Feb. 28.
Photographic production. L. M. Dieterich. 1,899,139; Feb. 28.
Physician's chair. W. F. Koken. 1,899,040; Feb. 28.
Piano-accordion. R. Rieschick. 1,899,357; Feb. 28.
Picture frame, Collapsible. N. M. Lorrain. 1,899,815; Feb. 28.
Picture screen, Moving. J. L. Cass and B. Kreuzer. 1,898,995; Feb. 28.
Piezo-electric crystal. W. A. Marrison. 1,899,163; Feb. 28.
Pin: *See*—
Safety wrist pin.
Pin extracting apparatus, King. W. M. Overfelt. 1,899,351; Feb. 28.
Pipe and fin heater, Steel. C. T. Morse. 1,899,629; Feb. 28.
Pipe bending apparatus. G. Lidseen. 1,899,281; Feb. 28.
Pipe casting apparatus, Centrifugal. S. B. Clark. 1,899,383; Feb. 28.
Pipe cleaning machine. E. H. Adams. 1,899,879; Feb. 28.
Pipe cutter. W. S. Jones. 1,899,890; Feb. 28.
Pipe joint. P. G. Johnson. 1,899,695; Feb. 28.
Pipe, Mechanism for constructing concrete. A. W. Schultz. 1,899,115; Feb. 28.
Pipe wrapping machine. K. H. Burton and H. Kramer. 1,899,850; Feb. 28.
Piston and connecting rod. A. E. Reid. 1,899,355; Feb. 28.
Plane, Training. W. C. Ocker. 1,899,104; Feb. 28.
Planer and cleaner, Butcher's block. J. G. Matthews. 1,899,204; Feb. 28.
Plaster board or other panel structure. E. F. Veasie. 1,899,653; Feb. 28.
Plug: *See*—
Electric plug.
Pot forming machine. F. Y. Pearne and W. McClintock. 1,899,881; Feb. 28.
Powder and making same, Molding. J. F. Walsh and M. R. Ximenes. 1,899,542; Feb. 28.
Powder, Molding. K. Ripper. 1,899,109; Feb. 28.
Powder, Propellant. G. C. Hale. 1,899,147; Feb. 28.
Powder puff, Dispensing. F. G. Flosi. 1,899,386; Feb. 28.
Powdered fuel furnace. C. Hufschmidt. 1,899,464; Feb. 28.
Power system. R. A. Beekman. 1,899,550; Feb. 28.
Power system with high-speed breakers and relays, Stable. E. D. Evans, C. LeG. Fortescue, L. N. Crichton, J. B. MacNeill, S. B. Griscom, and C. F. Wagner. 1,899,613; Feb. 28.
Power take-off device. L. J. Schultze. 1,899,247; Feb. 28.
Precision instrument. W. Gaertner. 1,899,192; Feb. 28.
Press: *See*—
Hydraulic press. Metal drawing press.
Press and workholder, Ironing. E. Davis. 1,899,891; Feb. 28.
Pressing machine. P. N. Braun. 1,899,847; Feb. 28.
Primary battery, Air-depolarised. G. W. Heise. 1,899,615; Feb. 28.
Projectiles, Apparatus for loading. T. F. Knight and H. K. Williams, jr. 1,899,095; Feb. 28.
Propeller. G. H. Houston. 1,899,689; Feb. 28.
Propeller. A. Sontier. 1,899,646; Feb. 28.
Propeller. W. Stelzer. 1,899,650; Feb. 28.
Propeller arrangement. M. Drexl. 1,899,434; Feb. 28.
Protective apparatus. J. V. Breisky. 1,899,745; Feb. 28.
Protective system, Electrical. M. Schleicher. 1,899,425; Feb. 28.
Protective system for transformers. R. L. Brown. 1,899,746; Feb. 28.
Protector for bearing for high speed spindles. C. T. Raule. 1,899,164; Feb. 28.
Puller: *See*—
Wire puller.
Pulley block holding device, Heel. A. R. Campbell. 1,899,555; Feb. 28.
Pulp, Method of and apparatus for treating. G. A. Richter and E. Ebie. 1,899,106; Feb. 28.
Pulverizing apparatus and the like. C. H. Corbishley. 1,899,015; Feb. 28.
Pump: *See*—
Bilge pump. Reciprocating pump.
Fuel pump. Rotary pump.
Pump. J. S. Abercrombie. 1,899,297; Feb. 28.
Pump. J. S. Abercrombie, J. A. Tennant, and H. Allen. 1,899,298–9; Feb. 28.
Pump. J. A. Tennant. 1,899,364; Feb. 28.
Pumping system and apparatus therefor. W. C. Harper. 1,899,460; Feb. 28.
Radiator. J. R. Hughes. Des. 89,345; Feb. 28.
Radiator. J. Palermiti. 1,899,633; Feb. 28.
Radiator and the like. F. H. Austen. 1,899,787; Feb. 28.
Radiator condenser, Automobile. P. L. Howe. 1,899,570; Feb. 28.
Radiator construction. W. L. Mack. 1,899,099; Feb. 28.
Radiator core. C. B. Higgins. 1,899,417; Feb. 28.
Radiator, hood, fender, and head lamp casing, Combined. J. R. Hughes. Des. 89,377; Feb. 28.
Radiator shutter and shell assembly for automobiles. L. B. Green. 1,899,323; Feb. 28.
Radio apparatus. C. D. Haigis. 1,899,684; Feb. 28.
Radio device. N. R. Collins. 1,899,136; Feb. 28.
Radio receiving system. M. M. Eells. 1,899,025; Feb. 28.
Radiotelegraph system. J. G. Holmström. 1,899,196; Feb. 28.
Rail joint. R. Faries. 1,899,265; Feb. 28.
Rail joint chair. A. McDermott. 1,899,819; Feb. 28.
Rail locator for brushes of fissure detector cars, Automatic. W. M. Perry and G. L. Jones. 1,899,525; Feb. 28.
Rake distributor and electric control, Return type. J. B. Brennen. 1,899,791; Feb. 28.
Rat exterminator, Electrical. J. D. Kaiser. 1,899,199; Feb. 28.
Rayon, Manufacture of lusterless. W. F. Richter. 1,899,725; Feb. 28.
Razor blade holder. J. Vogty. 1,899,788; Feb. 28.
Razor, Safety. R. V. Acken. 1,899,841; Feb. 28.
Receiving system. O. Böhm. 1,899,498; Feb. 28.
Receptacle: *See*—
Waterproof bathing receptacle.
Receptacle for lip sticks. E. S. Cornell, jr. 1,899,748; Feb. 28.
Reciprocating pump. F. Ackerman. 1,898,994; Feb. 28.

Recording device for airplanes. C. L. Goldtrap. 1,899,614; Feb. 28.
Rectifier. C. Miller. 1,899,045; Feb. 28.
Reel: *See*—
Adjustable reel. Photographic film reel.
Fishing reel.
Reel for measuring lines. A. Beker. 1,899,660; Feb. 28.
Refrigerating apparatus. R. R. Candor. 1,899,013; Feb. 28.
Refrigeration. N. Caro, A. R. Frank, R. Wendlandt, and T. Fischer. 1,899,259; Feb. 28.
Refrigeration. G. Hulse. 1,899,036; Feb. 28.
Refrigerator. C. F. Walter. 1,899,372; Feb. 28.
Refrigerator construction. V. P. Warren. 1,899,171; Feb. 28.
Refrigerators and other devices, Structure for. C. P. Minning. 1,899,710; Feb. 28.
Register, Dual cash. W. E. Dunning. 1,899,083; Feb. 28.
Regulator for brake rigging. P. A. Blair. 1,899,075; Feb. 28.
Regulators for three-phase generators, Compounding voltage. A. Ytterberg. 1,899,406; Feb. 28.
Release mechanism. A. C. Rowley. 1,899,827; Feb. 28.
Remote control mechanism. O. A. Hokanson and J. F. Koca. 1,899,151; Feb. 28.
Remote control system. R. E. Thompson. 1,899,779; Feb. 28.
Renewable filter. H. Birkholz. 1,899,007; Feb. 28.
Repeater system. A. T. Jester. 1,899,037; Feb. 28.
Resistance unit. O. U. Zerk. 1,899,251; Feb. 28.
Retort, Oil burner. E. E. Dehart. 1,899,315; Feb. 28.
Revolvers and pistols, Clamping attachment for. G. F. Walliser and J. E. Poole. 1,899,249; Feb. 28.
Rod: *See*—
Piston and connecting rod.
Rod joint. C. A. Boyd. 1,899,846; Feb. 28.
Rolling mill. G. Asbeck. 1,899,659; Feb. 28.
Rosin from collected crude matter, Recovering. A. R. Hitch and I. A. Ebaugh. 1,899,388; Feb. 28.
Rosin, Preparing a high grade. A. R. Hitch and I. A. Ebaugh. 1,899,389; Feb. 28.
Rotary indicator. W. E. Dunning. 1,899,140; Feb. 28.
Rotary pump. O. S. Sleeper and C. J. Westin. 1,899,904; Feb. 28.
Rubber articles, Apparatus for balanced molding of. P. E. Young. 1,899,907; Feb. 28.
Rubber composition and preserving rubber. M. C. Reed. 1,899,058; Feb. 28.
Rubber composition and preserving rubber. A. W. Sloan. 1,899,120; Feb. 28.
Rubber, Compounding. W. S. Calcott, W. A. Douglass, and O. M. Hayden. 1,899,554; Feb. 28.
Rubber deposited from aqueous dispersions, Dehydrating. E. H. Darby. 1,899,016; Feb. 28.
Rubber in water, Dispersing. E. B. Newton. 1,899,243; Feb. 28.
Rubber product, Age resisting vulcanized. W. Scott. 1,899,426; Feb. 28.
Safety device, Transfer. C. F. Bruck. 1,899,849; Feb. 28.
Safety mechanism for aircraft. G. J. Regas. 1,899,721; Feb. 28.
Safety wrist pin. J. R. Noss. 1,899,879; Feb. 28.
Salt from a single salt, Obtaining a double. G. B. Burnham. 1,899,310; Feb. 28.
Salt in canned goods, Device for depositing. D. M. Hume. 1,899,619; Feb. 28.
Salt, Manufacture of silver. A. O. Jaeger and H. J. West. 1,899,507; Feb. 28.
Salts of hydrofluosilicic acid, Producing. M. Buchner. 1,899,607; Feb. 28.
Sand blast tank apparatus. W. A. Rosenberger. 1,899,528; Feb. 28.
Sandwich, Ice cream. S. S. Leaf. 1,899,511; Feb. 28.
Saw blade, Hack. W. H. Shortell. 1,899,212; Feb. 28.
Sawmill. E. P. Tufts. 1,899,448; Feb. 28.
Scale in annealing furnaces, Preventing. A. H. Shonkwiler and J. W. Macklin. 1,899,776; Feb. 28.
Scale, Weighing. E. Fletcher. 1,899,436; Feb. 28.
Scouring device. S. M. Bookman. 1,899,552; Feb. 28.
Scows, Dump pocket for. W. A. Session. 1,899,592; Feb. 28.
Scraper, Hydraulic wheel. O. W. Sjogren and J. A. Vaughn. 1,899,118; Feb. 28.
Screen: *See*—
Picture screen. Window screen.
Wall screen.
Screening device. G. W. Rienks. 1,899,292; Feb. 28.
Screens, Producing photographic. V. von Gerdanovits. 1,899,248; Feb. 28.
Screw driver. G. Wickbergh. 1,899,489; Feb. 28.
Seam pressing machine. W. P. Osgood. 1,899,050; Feb. 28.
Seams, Forming back. W. P. Osgood. 1,899,049; Feb. 28.
Seat-back control. S. Paul. 1,899,880; Feb. 28.
Seat construction. S. Rusnak. 1,899,726; Feb. 28.
Seat construction, Adjustable. A. L. Nelson and F. W. Pease. 1,899,585; Feb. 28.
Self-sealing filter. C. H. Gagen. 1,899,029; Feb. 28.
Separator: *See*—
Coin separator. Dust separator.
Separator. J. H. Fedeler. 1,899,498; Feb. 28.
Service building. G. L. Rosebrook. Des. 89,355–6; Feb. 28.
Sewing machines, Feeding mechanism for. K. Maier. 1,899,816; Feb. 28.
Sewing machines, Looper mechanism for. F. F. Zeier. 1,899,786; Feb. 28.
Sewing machines, Needle holder for. F. Basso. 1,899,303; Feb. 28.
Sewing machines, Thread controlling mechanism for. C. F. Kubel and F. F. Zeier. 1,899,882; Feb. 28.
Sewing machines, Yielding attachment for. C. H. Sanborn. 1,899,399; Feb. 28.
Shade, Electric lamp. H. Herts. 1,899,272; Feb. 28.
Shade support, Splint. L. J. Steffen. 1,899,062; Feb. 28.
Sheathing for metal building structure. F. R. Higley. 1,899,091; Feb. 28.
Sheets, Making spliced rubber. H. L. Trumbull. 1,899,067; Feb. 28.
Sheets of safety glass, Producing composite. C. H. H. Lamberty. 1,899,621; Feb. 28.
Shock absorber. C. F. Hammond, jr. 1,899,271; Feb. 28.
Shock absorber mechanism. J. W. Gray. Re18,747; Feb. 28.
Shock absorbing mechanism. J. W. Gray. 1,899,909; Feb. 28.
Shock absorbing mechanism, Friction. J. F. O'Connor. 1,899,522; Feb. 28.
Shoe tree. C. A. Batchelder. 1,899,844; Feb. 28.
Shoe treeing device. J. D. Krive. 1,899,001; Feb. 28.
Shorthand typewriting or stenographic machine. M. Den Outer. 1,899,232; Feb. 28.
Shuttle. L. C. Baldwin. 1,899,129; Feb. 28.
Side frame. G. G. Floyd. Re18,754; Feb. 28.
Sign and making it. W. H. Spencer. 1,899,533; Feb. 28.
Signal system. L. H. Lynn. 1,899,580; Feb. 28.
Signaling device. T. J. Scofield, L. E. Johnson, and F. W. Billig. 1,899,731; Feb. 28.
Silk cocoons, Reeling-off. B. Loewe. 1,899,513; Feb. 28.
Slack remover for hydraulic brake systems. C. C. Bradbury. 1,899,009; Feb. 28.
Slide, Rocking stem. W. H. Noelting. 1,899,895; Feb. 28.
Slide valve engine. G. P. Berry. 1,899,743; Feb. 28.
Slider for automatic fasteners. E. W. Rutherford. 1,899,529; Feb. 28.
Smoking device. F. Zacharias. 1,899,407; Feb. 28.
Snap gauge. E. H. Aldeborgh. 1,899,253; Feb. 28.
Soap cake. W. B. Oleson. Des. 89,352; Feb. 28.
Soap case, Shaving. R. J. G. Charlot. 1,899,557; Feb. 28.
Sodium sulphydrate and sodium sulphide, Production of. R. B. Lebo and H. G. M. Fischer. 1,899,896; Feb. 28.
Sound and motion picture apparatus, Synchronising and control mechanism for. J. B. Olinger. 1,899,048; Feb. 28.
Spectacles, Attachment for. A. R. Simon and W. R. Uhlemann. 1,899,903; Feb. 28.
Spectacles temple. J. Verre. 1,899,402; Feb. 28.
Speed control means. W. H. Foster. 1,899,027; Feb. 28.
Spike, Track rail. R. Farles. 1,899,264; Feb. 28.
Spindles in combination with bobbin-winders and stop motion devices for same, Doubling machine and twining. E. Schweizer. 1,899,730; Feb. 28.
Spinner sled. M. O'Brien. 1,899,103; Feb. 28.
Spinneret and making same, Tantalum. C. H. Kerk. 1,899,419; Feb. 28.
Spool and container, Combined. G. C. Deane. 1,899,796; Feb. 28.
Spray head, Self cleaning. E. G. Muns. 1,899,711; Feb. 28.
Spraying device. S. Deutsch. 1,899,749; Feb. 28.
Spring for fishing reels, Click. C. T. Pflueger. 1,899,914; Feb. 28.
Spring structure. W. A. Falls. 1,899,188; Feb. 28.
Spring structure. W. B. Foster. 1,899,087; Feb. 28.
Stabilizing device. W. Chater. 1,899,079; Feb. 28.
Stand: *See*—
Display stand.
Starter, Engine. R. P. Lansing. 1,899,812; Feb. 28.
Stay bolt, Tell-tale flexible. F. H. Einwaechter, jr., and A. E. Anger. 1,899,457; Feb. 28.
Steering gear. E. P. Hammond. 1,899,270; Feb. 28.
Steering mechanism, Hydraulic. H. L. Lewis. 1,899,814; Feb. 28.
Stem, Flexible. F. L. Lake. 1,899,871; Feb. 28.
Stitch forming mechanism for sewing machines. C. F. Rubel. 1,899,828; Feb. 28.
Stop motion, Electrical warp. O. V. Payne. 1,899,717; Feb. 28.
Stopper-top and making the same. W. J. Fletcher. 1,899,411; Feb. 28.
Store-front construction. F. and I. Himmel. Re18,758; Feb. 28.
Store-front construction. F. and I. Himmel. 1,899,035; Feb. 28.
Strainers, Cushioning feet for sink. G. C. Guckes. 1,899,415; Feb. 28.
Stroke mechanism, Full. A. S. Wheelbarger and G. C. Coil. 1,899,250; Feb. 28.
Submarine salvager. J. and A. Reichert. 1,899,059; Feb. 28.
Sugar from sugar juices, Extraction of. A. Meiro. 1,899,287; Feb. 28.

Support: *See*—
Collar support. Shade support.
Machine support.
Support for serving trays. F. F. Ravlin. 1,899,480; Feb. 28.
Supporting means for doors. D. E. Willard. 1,899,175; Feb. 28.
Surface ornamentation and producing same. J. J. Weber. 1,899,488; Feb. 28.
Surfaces, Apparatus for heating. G. H. Luts. 1,899,704; Feb. 28.
Surgical dressing, Packaging. W. J. Metts. 1,899,625; Feb. 28.
Switch: *See*—
Electric switch. Thermostatic switch.
Switch for controlling electrically operated circuit interrupters. C. L. Reals. 1,899,461; Feb. 28.
Switch holding device, Tongue. E. Bell, jr., and I. K. Dixon. 1,899,408; Feb. 28.
Switch mechanism, Disconnecting. H. J. Crabbs. 1,899,384; Feb. 28.
Table: *See*—
Card table. Folding table.
Table. W. P. De Saussure, jr. 1,899,082; Feb. 28.
Tank and the like, Pressure. J. A. Paasche. 1,899,244; Feb. 28.
Tank construction, Welded. E. Grigis. 1,899,755; Feb. 28.
Tanning process, Rapid vegetable. G. Peace. 1,899,422; Feb. 28.
Tape, Method of and apparatus for making hook and eye. L. Roseman. 1,899,902; Feb. 28.
Taping machine. W. P. Osgood. 1,899,051; Feb. 28.
Teat dilator. W. L. Beebe. 1,899,492; Feb. 28.
Telephone. K. Nichols and R. Bettien. 1,899,046; Feb. 28.
Telephone lock. G. Miller. 1,899,445; Feb. 28.
Telephone receiver. H. G. Dorsey. 1,899,561; Feb. 28.
Telephone system. D. A. Christian and E. W. Palmer. 1,899,014; Feb. 28.
Telephone system. G. R. Eaton and G. Kiner. 1,899,084; Feb. 28.
Telephone system. W. C. Phebus. 1,899,105; Feb. 28.
Telephone system, Automatic. J. I. Bellamy. 1,899,551; Feb. 28.
Telephone system, Automatic. V. E. Tharp. 1,899,536; Feb. 28.
Telephone system, Multioffice. N. H. Saunders, C. E. Lomax, and T. F. Crocker. 1,899,112; Feb. 28.
Temperature controlling means. W. Shurtleff. 1,899,532; Feb. 28.
Temperature of the steam in locomotive engines, Regulating the superheater. J. Madeyski. 1,899,041; Feb. 28.
Tennis net. R. S. Bunker. 1,899,011; Feb. 28.
Textile fabric. R. George. Des. 89,336; Feb. 28.
Textile fabric. R. Schey. Des. 89,380; Feb. 28.
Textile fabric or similar article. F. Bridier. Des. 89,367; Feb. 28.
Textile fabric or similar article. M. Guhl. Des. 89,374–5; Feb. 28.
Textile fabric or similar article. L. Rubinger. Des. 89,357; Feb. 28.
Textile fabric or similar article. L. Rubinger. Des. 89,379; Feb. 28.
Textile fabric or similar article. M. H. Smith. Des. 89,382; Feb. 28.
Textile fabric or similar article. W. Willheim. Des. 89,366; Feb. 28.
Textile fabric or similar article of manufacture. A. J. Henike. Des. 89,342; Feb. 28.
Textile fabric or the like. M. Brodsky. Des. 89,368–72; Feb. 28.
Textile fabric or the like. M. R. Hamre. Des. 89,376; Feb. 28.
Textile fabric or the like. H. J. Nerger. Des. 89,351; Feb. 28.
Textile fabric or the like. H. J. Nerger. Des. 89,378; Feb. 28.
Textile fabric or the like. J. Schweizer. Des. 89,381; Feb. 28.
Textiles, Dyeing. W. G. Abbott, jr. 1,899,004; Feb. 28.
Thermal responsive device. A. Cohn and F. Dausinger. 1,899,558; Feb. 28.
Thermoplastics and making same, Decorated. J. F. Walsh and B. Andersen. 1,899,068; Feb. 28.
Thermostatic switch. E. K. Clark. 1,899,671; Feb. 28.
Throttle and trip valve, Balanced. F. Henneböhle. 1,899,328; Feb. 28.
Tile. E. N. Gackenbach. 1,899,861; Feb. 28.
Tile. C. Ventimiglia. 1,899,370; Feb. 28.
Tile edge forming apparatus. V. J. Hultquist. 1,899,237; Feb. 28.
Time recording device. E. Foerster. 1,899,236; Feb. 28.
Tire cover. T. J. McCormick and R. E. Linn. Des. 89,348; Feb. 28.
Titanium chloride, Preparing clear solutions of. P. Kubelka. 1,899,573; Feb. 28.
Titanium chloride, Preparing concentrated clear solutions of. P. Kubelka. 1,899,574; Feb. 28.
Titanium tetrachloride in aqueous solvents, Dissolving. P. Kubelka. 1,899,572; Feb. 28.
Toaster, Vertical. F. F. Forshee. 1,899,681; Feb. 28.
Token, Customer's. S. Anthony. 1,899,072; Feb. 28.
Tool: *See*—
Combination tool. Machine tool.
Fluid operated tool. Valve reseating tool.
Hub removing tool.
Tool for cleaning tubes. C. J. Hakes. 1,899,269; Feb. 28.
Tool holder. T. D. Bascom. 1,899,843; Feb. 28.
Tool holder. F. R. Harrington. 1,899,326; Feb. 28.
Tool holder. M. E. Tyler. 1,899,169; Feb. 28.
Toothbrush holder. A. McNab. 1,899,242; Feb. 28.
Toothbrushes, Pressure spray attachment for. Y. H. Babasin. 1,899,301; Feb. 28.
Total taking mechanism. E. Breitling. 1,899,455; Feb. 28.
Tower, Bubble. R. R. Bottoms. 1,899,409; Feb. 28.
Toy, Animated wind. J. A. Baldwin. 1,899,788; Feb. 28.
Toy machine gun. C. W. Brown. Des. 89,373; Feb. 28.
Toy with spark producing device, Siren. C. Arnold. 1,899,073; Feb. 28.
Train control, Automatic. D. H. Schweyer. 1,899,642; Feb. 28.
Train control system. B. W. Meisel. 1,899,044; Feb. 28.
Train control system. A. G. Shaver and F. M. Rosensweig. 1,899,116; Feb. 28.
Transfer and making the same. R. G. Tonge. 1,899,066; Feb. 28.
Transfer and transfer composition. W. S. Lawrence. 1,899,420; Feb. 28.
Transformable container. W. S. Marr. 1,899,241; Feb. 28.
Transformer, Electrical. B. J. Chromy. 1,899,670; Feb. 28.
Transformer, Nonoscillating. H. V. Putman. 1,899,720; Feb. 28.
Transformer, Suspension potential. G. E. Jansson. 1,899,693; Feb. 28.
Translucent pyrotechnic device. J. C. Moore. 1,899,518; Feb. 28.
Transmission mechanism, Free wheeling. K. E. Lyman. 1,899,514–15; Feb. 28.
Trap. A. G. and H. A. Schwartz. 1,899,641; Feb. 28.
Tray, Egg. R. Guyer. 1,899,268; Feb. 28.
Trough for poultry, Watering. A. Neilsen. 1,899,519; Feb. 28.
Truck, Railway vehicle. L. E. Feightner. 1,898,997; Feb. 28.
Truss, Hernia. C. A. Warburton. 1,899,378; Feb. 28.
Tub, Butter. C. M. MacChesney. 1,899,342; Feb. 28.
Tube: *See*—
Audion tube.
Tube ends, Mechanism for squeezing. H. Parker. 1,899,291; Feb. 28.
Tube manufacture. C. A. Frahm and E. W. Riemenschneider. 1,899,143; Feb. 28.
Tube or the like, Stomach. J. R. Twiss. 1,899,781; Feb. 28.
Tunnels, Constructing subway. R. Ono. 1,899,474; Feb. 28.
Turbine, Elastic fluid. R. J. Caughey. 1,899,556; Feb. 28.
Turning and boring machine. C. Landers. 1,899,700; Feb. 28.
2.3-butylene-glycol from carbohydrates, Preparation of. A. J. Kluyver and M. A. Scheffer. 1,899,156; Feb. 28.
Typewriting machine. W. F. Helmond. 1,899,034; Feb. 28.
Typographical machine. A. J. Stouges. 1,899,648; Feb. 28.
Universal joint. L. Wainwright. 1,899,170; Feb. 28.
Unloader for compressors. J. Le Valley. 1,899,002; Feb. 28.
Unloader, Magnetic. C. E. L. Lipman. 1,899,341; Feb. 28.
Vacuum cleaner. F. Riebel, jr. 1,899,107–8; Feb. 28.
Vacuum cleaner. F. Riebel, jr. 1,899,423; Feb. 28.
Vacuum distillation. E. H. Payne. 1,899,916; Feb. 28.
Valve: *See*—
Throttle and trip valve.
Valve. L. C. Karrick. 1,899,154; Feb. 28.
Valve. E. P. Stein. 1,899,296; Feb. 28.
Valve and fuel modifier for internal combustion motors, Auxiliary air. H. W. Paine. 1,899,476; Feb. 28.
Valve mechanism for well pipe, Back pressure. L. C. Tilbury. 1,899,121; Feb. 28.
Valve mounting for blowdown control. C. W. Rice. 1,899,826; Feb. 28.
Valve reseating tool. J. Tekavec. 1,899,598; Feb. 28.
Varnish. M. Phillips. 1,899,526; Feb. 28.
Vat, Acid. H. E. Fritz. 1,899,413; Feb. 28.
Vault, Burial. L. Cochran. 1,899,312; Feb. 28.
Vegetable cutting machine. C. Heilinger. 1,899,367; Feb. 28.
Vehicle, Delivery. E. R. Maurer and D. M. Ferguson. 1,899,205; Feb. 28.
Vehicle driving apparatus and system. F. W. Godsey, jr. 1,899,193; Feb. 28.
Vehicle, Electrically driven. S. S. Guy and W. A. Stevens. 1,899,683; Feb. 28.
Vehicle, Motor. A. L. Knapp. 1,899,276; Feb. 28.
Vehicle, Motor. A. L. Knapp. 1,899,443; Feb. 28.
Vending machine. C. Bustamente. 1,899,667; Feb. 28.
Vending machine. S. Pisano and J. Fardella. 1,899,478; Feb. 28.

Vibrator, Electromechanical. C. W. Hansell. 1,899,503; Feb. 28.
Vibratory apparatus. K. H. Whitney. 1,899,544; Feb. 28.
Vulcanizer. F. J. Shook. 1,899,211; Feb. 28.
Wafer baking machine. J. Balton. 1,899,302; Feb. 28.
Washing machine. A. Fairgrieve. 1,899,459; Feb. 28.
Washing machine and extractor, Combination. P. E. Barker. 1,899,005; Feb. 28.
Washing machinery. E. R. Zademach. 1,899,657; Feb. 28.
Watch, Self-winding. M. Reiner. 1,899,722; Feb. 28.
Watch, Strap. A. E. Manheimer. 1,899,285; Feb. 28.
Water heater. O. W. Ott and A. J. Smithers. 1,899,523; Feb. 28.
Water heater. E. J. Von Ruden. 1,899,839; Feb. 28.
Waterproof bathing receptacle. J. M. Karnofsky and J. E. Freedman. 1,899,696; Feb. 28.
Water softener casing. C. J. Funk. Des. 89,335; Feb. 28.
Wax applicator, Floor. D. E. Larkin. 1,899,392; Feb. 28.
Weather strip. C. E. McCormick. 1,899,100; Feb. 28.
Weighing apparatus for packaging onions and the like. D. R. C. Smith and J. H. Coulter. 1,899,446; Feb. 28.
Welding, Electric. A. W. Phelps and E. A. Kaegi. 1,899,353; Feb. 28.
Well drilling apparatus. A. M. Grant. 1,899,438; Feb. 28.
Well drilling apparatus. H. D. Sandstone. 1,899,728; Feb. 28.
Well drilling bit. J. H. Howard. 1,899,331; Feb. 28.
Well screen. L. C. Tilbury. 1,899,065; Feb. 28.
Wheel. P. M. Miller. 1,899,289; Feb. 28.
Wheel for automobiles, Drive or power. L. N. Lyon, sr. 1,899,097; Feb. 28.
Winding machine. E. R. Swanson. 1,899,651; Feb. 28.
Winding mechanism. J. Brenzinger. 1,899,227; Feb. 28.
Window and light, Corrugated glass. P. G. Masters. 1,899,912; Feb. 28.
Window fixture. W. F. Ferguson. 1,899,800; Feb. 28.
Window frame. C. Hortman. 1,899,330; Feb. 28.
Window screen. J. J. Ritter. 1,899,358; Feb. 28.
Windshield operating mechanism. H. G. Thunder. 1,899,367; Feb. 28.
Wiper for windscreens of motor vehicle and for like purposes. H. Willis. 1,899,545; Feb. 28.
Wire, Apparatus for coating. W. A. Wallsten. 1,899,449; Feb. 28.
Wire bending machine. W. E. Ghent. 1,899,437; Feb. 28.
Wire, Eliminating internal stresses in. A. V. De Forest. 1,899,138; Feb. 28.
Wire puller. L. P. Seifner. 1,899,531; Feb. 28.
Wood-metal structural member, Composite. S. Macomber. 1,899,344; Feb. 28.
Woodworking machine. R. S. Brookman. 1,899,665; Feb. 28.
Work positioning means. A. F. Pym. 1,899,037; Feb. 28.
Worm grinding machine. F. A. Ward. 1,899,654; Feb. 28.
Wrapping machine. C. Littlefield. 1,899,468; Feb. 28.

CLASSIFICATION OF PATENTS

ISSUED FEBRUARY 28, 1933

NOTE.—First number—class, second number—subclass, third number—patent number

2— 13: 1,899,908
1,899,905
30: 1,899,761
1,899,760
1,899,800
87: 1,899,022
98: 1,899,487
150: 1,899,780
181: 1,899,020
185: 1,899,636
4— 200: 1,899,415
5— 22: 1,899,412
66: 1,899,762
90: 1,899,263
142: 1,899,351
170: 1,899,808
192: 1,899,336
269: 1,899,087
7— 1: 1,899,203
1,899,433
8— 5: 1,899,004
9— 2: 1,899,900
10— 83: 1,899,221
154: 1,899,865
12— 42: 1,899,047
51: 1,899,040
1,899,050
55: 1,899,077
1,899,345
116: 1,899,001
128. 6: 1,899,844
141: 1,899,067
15—104. 04: 1,899,379
104. 16: 1,899,269
136: 1,899,301
155: 1,899,107
1,899,108
1,899,423
171: 1,899,322
172: 1,899,080
210: 1,899,552
229: 1,899,263
1,899,845
250: 1,899,545
16— 38: 1,899,294
42: 1,899,295
70: 1,899,716
84: 1,899,266
100: 1,899,175
18— 17: 1,899,211
35: 1,899,907
42: 1,899,268
44: 1,899,258
47. 5: 1,899,064
1,899,157
50: 1,899,088
1,899,120
1,899,426
1,899,554
51: 1,899,063
54: 1,899,725
55: 1,899,768
56: 1,899,784
19— 3: 1,899,512
12: 1,899,470
60: 1,899,260
74: 1,899,791
20— 1. 01: 1,899,735
2: 1,899,450
4: 1,899,403
11: 1,899,230
56. 4: R. 18,753
1,899,035
69: 1,899,100
22— 65: 1,899,383
172: 1,899,232
192: 1,899,906
23— 41: 1,899,310
87: 1,899,572
1,899,573
1,899,574
88: 1,899,607
134: 1,899,806
184: 1,899,627
212: 1,899,184
219: 1,899,123
227: 1,899,562
24— 81: 1,899,753
95: 1,899,690
104: 1,899,313
125: 1,899,162
126: 1,899,531
205: 1,899,166
1,899,479
1,899,539
25— 26: 1,899,881
30: 1,899,706
26: 1,899,115
41: 1,899,277
104: 1,899,237
26— 154: 1,899,101
1,899,576
1,899,590
156: 1,899,584
1,899,709
27— 19: 1,899,231
29— 33: 1,899,114
64: 1,899,027
84: 1,899,325
85: 1,899,218
1,899,351
105: 1,899,023
148: 1,899,343
152: 1,899,500
1,899,645
160: 1,899,617
30— 1: 1,899,102
9: 1,899,414
12: 1,899,841
25: 1,899,726
32— 4: 1,899,521
30: 1,899,718
33— 75: 1,899,505
143: 1,899,253
178: 1,899,920
34— 4: 1,899,256
24: 1,899,233
1,899,207
26: 1,899,261
1,899,352
35— 12: 1,899,315
36— 35: 1,899,093
59: 1,899,260
37— 140: 1,899,113
39— 7: 1,899,496
40— 4: 1,899,284
26: 1,899,730
104: 1,899,074
120: 1,899,773
128: 1,899,282
155: 1,899,515
41— 9: 1,899,485
20: 1,899,098
33: 1,899,098
38: 1,899,498
42— 40: 1,899,790
86: 1,899,641
98: 1,899,199
44— 8: 1,899,511
45— 2: 1,899,537
24: 1,899,531
51: 1,899,480
61: 1,899,404
75: 1,899,398
90: 1,899,687
111: 1,899,535
116: 1,899,098
117: 1,899,052
137: 1,899,699
138: 1,899,823
46— 14: 1,899,786
37: 1,899,241
46: 1,899,073
47— 1: Pl.Pt. 55
41: 1,899,400
48— 66: 1,899,187
1,899,188
49— 47: 1,899,640
79: 1,899,146
81: 1,899,598
1,899,621
82: 1,899,700
51— 12: 1,899,526
51— 57: 1,899,359
95: 1,899,654
1,899,793
123: 1,899,862
198: 1,899,252
233: 1,899,262
255: 1,899,776
263: 1,899,463
52— 12: 1,899,076
13: 1,899,147
53— 3: 1,899,451
5: 1,899,681
1,899,682
6: 1,899,335
54— 82: 1,899,471
55— 91: 1,899,305
56— 23: 1,899,181
25: 1,899,329
1,899,564
44: 1,899,405
249: 1,899,305
294: 1,899,439
376: 1,899,361
58— 88: 1,899,285
60— 54. 5: 1,899,398
61— 44: 1,899,474
52: 1,899,246
62— 4: 1,899,241
24: R. 18,755
42: 1,899,578
89: 1,899,724
95: 1,899,852
115: 1,899,378
117: 1,899,036
141: 1,899,013
175: 1,899,259
63— 2: 1,899,165
64— 91: 1,899,170
100: 1,899,159
102: 1,899,840
66— 75: 1,899,836
114: 1,899,577
115: 1,899,278
67— 7: 1,899,008
68— 3: 1,899,467
9: 1,899,847
1,899,891
37: 1,899,005
70— 9: 1,899,739
14: 1,899,446
52: 1,899,234
53: 1,899,576
91: 1,899,380
1,899,413
1,899,686
72— 7: 1,899,312
16: 1,899,454
18: 1,899,570
19: 1,899,001
48: 1,899,710
127: 1,899,391
73— 21: 1,899,126
51: 1,899,774
167: 1,899,043
1,899,672
1,899,764
74— 6: 1,899,324
7: 1,899,048
1,899,229
1,899,247
14: 1,899,189
1,899,714
34: 1,899,401
39: 1,899,196
1,899,250
1,899,332
1,899,333
41: 1,899,063
57: 1,899,201
1,899,575
50: 1,899,695
78: 1,899,270
106: 1,899,355
1,899,879
75— 1: 1,899,133
1,899,445
75— 1: 1,899,701
1,899,873
17: 1,899,153
65: 1,899,152
76— 107: 1,899,419
77— 2: 1,899,126
3: 1,899,700
4: 1,899,124
1,899,215
78— 29: 1,899,371
60: 1,899,248
80— 34: 1,899,659
81— 189: 1,899,380
82— 1: 1,899,008
83— 9: 1,899,015
84— 1: 1,899,884
341: 1,899,331
376: 1,899,357
411: 1,899,461
85— 1. 5: 1,899,457
10: 1,899,264
86— 1: 1,899,096
88— 16: 1,899,082
17: 1,899,052
20: 1,899,135
24: 1,899,995
32: 1,899,192
41: 1,899,664
47: 1,899,736
53: 1,899,402
54: 1,899,777
57: 1,899,089
90— 12. 5: 1,899,189
1,899,808
116— 114: 1,899,804
13. 1: 1,899,775
20: 1,899,427
91— 18: 1,899,655
37: 1,899,316
39: 1,899,202
46: 1,899,055
68: 1,899,387
1,899,535
1,899,668
1,899,732
120— 8: 1,899,509
33: 1,899,789
70. 1: 1,899,500
70. 2: 1,899,148
92— 11: 1,899,637
14: 1,899,223
21: 1,899,086
29: 1,899,106
57: 1,899,197
93— 2: 1,899,468
3: 1,899,207
7: 1,899,174
26: 1,899,682
36: 1,899,201
76: 1,899,267
94— 3: 1,899,395
18: 1,899,435
45: 1,899,153
95— 5: 1,899,139
75: 1,899,786
81. 5: 1,899,248
97— 13: 1,899,806
98— 38: 1,899,003
99— 1: 1,899,606
2: 1,899,178
11: 1,899,224
1,899,817
16: 1,899,511
100— 47: 1,899,202
101— 300: 1,899,072
102— 20: 1,899,518
26: 1,899,618
103— 10: 1,899,207
28: 1,899,295
44: 1,899,208
1,899,209
1,899,364
46: 1,899,607
203: 1,899,460
216: 1,899,917
105— 37: 1,899,880
117: 1,899,907
205: R. 18,754
354: 1,899,792
106— 7. 5: 1,899,220
106— 18: 1,899,473
33: 1,899,200
36. 1: 1,899,220
37: 1,899,542
40: 1,899,078
1,899,213
1,899,214
1,899,215
107— 15: 1,899,238
58: 1,899,302
108— 16: 1,899,912
110— 1: 1,899,464
29: 1,899,434
111— 2: 1,899,902
152: 1,899,300
199: 1,899,528
200: 1,899,786
215: 1,899,616
221: 1,899,308
248: 1,899,902
1,899,982
113— 33: 1,899,143
46: 1,899,110
1,899,111
114— 16. 6: 1,899,855
36: 1,899,592
53: 1,899,059
208: 1,899,866
115— 18: 1,899,319
116— 114: 1,899,804
118: 1,899,886
135: 1,899,382
117— 20: 1,899,559
28: 1,899,730
52: 1,899,477
118— 59: 1,899,635
119— 5: 1,899,208
26: 1,899,508
52: 1,899,818
72: 1,899,519
120— 8: 1,899,509
33: 1,899,789
59: 1,899,182
121— 9: 1,899,999
20: 1,899,150
122— 17: 1,899,523
218: 1,899,541
235: R. 18,748
262: 1,899,783
480: 1,899,041
123— 16: 1,899,374
28: 1,899,476
32: 1,899,447
75: 1,899,120
51: 1,899,226
98: 1,899,088
119: 1,899,910
120: 1,899,899
122: 1,899,600
130: 1,899,431
173: 1,899,217
188: 1,899,743
124— 11: 1,899,702
126— 173: 1,899,033
180: 1,899,557
1,899,839
271. 2: 1,899,704
127— 61: 1,899,257
128— 57: 1,899,208
1,899,770
129— 12: 1,899,763
16: 1,899,430
130— 36: 1,899,190
130— 36. 1: R. 18,749
50: 1,899,426
78. 5: 1,899,286
83: 1,899,723
134— 17: 1,899,263
26: 1,899,064
1,899,188
1,899,826
28: 1,899,420
67: 1,899,132
135— 17: 1,899,678
136— 315: 1,899,139
355: 1,899,600
263: 1,899,634
272: 1,899,620
358: 1,899,717
407: 1,899,219
140— 3: 1,899,437
102: 1,899,186
141— 9: 1,899,405
143— 114: 1,899,448
133: 1,899,212
144— 87: 1,899,055
117: 1,899,204
136: 1,899,853
309: 1,899,411
145— 80: 1,899,480
146— 17: 1,899,863
78: 1,899,867
148— 8: 1,899,734
149— 2: 1,899,432
150— 1: 1,899,286
1. 5: 1,899,835
5: 1,899,696
32: 1,899,311
151— 37: 1,899,715
152— 14: 1,899,517
1,899,801
153— 36: 1,899,280
40: 1,899,281
77: 1,899,226
154— 2. 6: 1,899,891
14: 1,899,088
1,899,976
28: 1,899,668
41: 1,899,088
42: 1,899,051
1,899,067
45. 9: 1,899,688
49: 1,899,416
155— 14: 1,899,885
28: 1,899,040
49: 1,899,483
163: 1,899,890
179: 1,899,726
180: 1,899,188
156— 16: 1,899,063
17: 1,899,180
23: 1,899,800
28: 1,899,288
157— 27. 4: 1,899,628
28: 1,899,562
1,899,744
36: 1,899,296
91: 1,899,315
118: 1,899,498
164— 17: 1,899,803
20: 1,899,667
63: 1,899,747
166— 5: 1,899,065
14: 1,899,278
20: 1,899,131
21: 1,899,497
167— 98: 1,899,707
170— 189: 1,899,631
162: 1,899,630
167: 1,899,434
169: 1,899,646
172: 1,899,699
171— 76: 1,899,812

171— 95: 1,899,885
119: 1,899,406
242: 1,899,144
327: 1,899,127
1,899,163
1,899,503
172— 8: 1,899,550
179: 1,899,649
1,899,683
239: 1,899,741
274: 1,899,797
1,899,858
1,899,859
276: 1,899,773
278: 1,899,745
280: 1,899,462
1,899,719
173— 269: 1,899,254
318: 1,899,752
1,899,757
343: 1,899,360
175— 30: 1,899,540
41: 1,899,155
1,899,176
183: 1,899,525
294: 1,899,425
1,899,481
1,899,553
1,899,613
1,899,746
312: 1,899,548
1,899,549
1,899,575
336: 1,899,502
356: 1,899,693
1,899,720
363: 1,899,045
1,899,504
375: 1,899,000
176— 16: 1,899,587
124: 1,899,021
126: 1,899,623
177— 7: 1,899,141
346: 1,899,670
178— 6: 1,899,026
1,899,334
45: 1,899,501
71: 1,899,037
179— 16: 1,899,084
1,899,551
27: 1,899,112
1,899,536
30: 1,899,014
100: 1,899,046
115.5: 1,899,561
171: 1,899,025
1,899,560
1,899,758
189: 1,899,445
180— 22: 1,899,240
60: 1,899,443
77: 1,899,205
181— 31: R. 18,751
183— 21: 1,899,017
49: 1,899,029
71: 1,899,007
75: 1,899,028
76: 1,899,018
77: 1,899,794
79: 1,899,498

183— 79: 1,899,911
184— 1.5: 1,899,019
3: 1,899,767
6: 1,898,994
1,899,472
7: 1,899,251
185— 43: 1,899,722
187— 16: 1,899,692
60: 1,899,388
95: 1,899,751
188— 62: 1,899,900
78: 1,899,601
1,899,609
1,899,909
88: R. 18,747
1,899,271
99: 1,899,294
152: 1,899,009
172: 1,899,586
194: 1,899,187
200: 1,899,075
204: 1,899,544
189— 36: 1,899,799
37: 1,899,344
45: 1,899,827
92: 1,899,520
191— 55: 1,899,729
192— 19: 1,899,660
44: 1,899,834
48: 1,899,500
1,899,514
1,899,515
53: 1,899,669
67: 1,899,490
82: 1,899,677
107: 1,899,274
1,899,872
194— 9: 1,899,321
103: 1,899,560
195— 24: 1,899,160
36: 1,899,512
196— 24: 1,899,042
30: 1,899,314
47: 1,899,389
51: 1,899,895
94: 1,899,081
1,899,897
114: 1,899,916
139: 1,899,918
197— 100: 1,899,232
176: 1,899,034
198— 20: 1,899,595
21: 1,899,320
1,899,336
1,899,337
1,899,338
109: 1,899,611
153: 1,899,246
198: 1,899,766
218: 1,899,179
220: 1,899,893
199— 49: 1,899,648
200— 6: 1,899,894
7: 1,899,151
12: 1,899,779
30: 1,899,543
35: 1,899,113
44: 1,899,350
51: 1,899,824
52: 1,899,475

200— 52: 1,899,604
87: 1,899,675
113: 1,899,566
117: 1,899,915
138: 1,899,671
150: 1,899,605
1,899,612
1,899,643
166: 1,899,384
201— 48: 1,899,807
202— 14: 1,899,887
34: 1,899,808
1,899,809
46: 1,899,388
1,899,389
93: 1,899,888
146: 1,899,275
204— 1: 1,899,016
5: 1,899,449
1,899,679
8: 1,899,533
206— 2: 1,899,413
7: 1,899,070
44: 1,899,012
1,899,483
1,899,547
1,899,666
1,899,673
46: 1,899,125
50: 1,899,195
52: 1,899,796
56: 1,899,557
1,899,748
58: 1,899,625
79: 1,899,421
208— 36: 1,899,854
209— 12: 1,899,292
104: 1,899,737
173: 1,899,632
319: 1,899,209
210— 44: 1,899,657
166: 1,899,030
211— 51: 1,899,376
85: 1,899,567
120: 1,899,813
213— 32: 1,899,522
69: 1,899,482
214— 7: 1,899,647
23: 1,899,356
37: 1,899,307
38: R. 19,752
1,899,849
130: 1,899,167
135: 1,899,345
1,899,901
215— 37: 1,899,821
39: 1,899,783
1,899,784
46: 1,899,210
217— 3: 1,899,583
33: 1,899,268
91: 1,899,342
122: 1,899,854
219— 8: 1,899,829
10: 1,899,353
19: 1,899,593
31: 1,899,220
39: 1,899,539
220— 39: 1,899,555
43: 1,899,375

220— 55: 1,899,244
75: 1,899,755
221— 47.3: 1,899,706
95: 1,899,134
223— 18.6: 1,899,602
224— 25: 1,899,795
226— 5: 1,899,898
99: 1,899,619
228— 6: 1,899,742
229— 27: 1,899,772
53: 1,899,892
230— 20: 1,899,002
147: 1,899,904
234— 36: 1,899,236
1,899,614
235— 2: 1,899,455
22: 1,899,093
23: 1,899,140
60: 1,899,444
75: 1,898,906
236— 12: 1,899,494
68: 1,899,532
82: 1,899,705
91: 1,899,516
238— 207: 1,899,819
263: 1,899,265
240— 2: 1,899,499
6.41: 1,899,249
10.1: 1,899,065
10.67: 1,899,868
41.3: 1,899,740
99: 1,899,723
110: 1,899,272
128: 1,899,429
242— 11: 1,899,850
18: 1,899,651
43: 1,899,227
58: 1,899,185
69: 1,899,173
74: 1,899,279
84.4: 1,899,908
84.6: 1,899,914
111: 1,899,117
244— 19: 1,899,096
21: 1,899,104
1,899,656
1,899,661
1,899,668
1,899,713
1,899,721
29: 1,899,079
246— 8: 1,899,105
63: 1,899,642
152: 1,899,044
1,899,116
443: 1,899,408
247— 1: 1,899,309
1,899,365
6 1,899,658
21: 1,899,510
22: 1,899,861
248— 14.2: 1,899,293
16 1,899,506
29: 1,899,242
249— 59: 1,899,172
1,899,446
250— 11: 1,899,410
1,899,493
13: 1,899,196
17: 1,899,527

250— 20: 1,899,622
1,899,664
27: 1,899,216
27.5: 1,899,089
1,899,126
1,899,765
34: 1,899,877
35: 1,899,568
41.5: 1,899,712
251— 29: 1,899,154
97: 1,899,826
116: 1,899,506
252— 3: 1,899,339
1,899,810
5: 1,899,610
254— 7: 1,899,145
89: 1,899,491
93: 1,899,534
102: 1,899,131
166: 1,899,456
255— 1: 1,899,728
4: 1,899,438
19: 1,899,703
61: 1,899,771
64: 1,899,458
71: 1,899,381
72: 1,899,354
76: 1,899,727
257— 25: 1,899,570
77: 1,899,681
124: 1,899,633
130: 1,899,417
132: 1,899,223
136: 1,899,787
137: 1,899,098
1,899,099
153: 1,899,629
245: 1,899,080
247: 1,899,191
259— 101: 1,899,459
260— 3: 1,899,109
11: 1,899,674
31: 1,899,348
47: 1,899,122
57: 1,899,304
1,899,507
60: 1,899,377
61: 1,899,579
1,899,578
102: 1,899,061
103: 1,899,919
124: 1,899,858
134: 1,899,094
1,899,582
136: 1,899,340
150: 1,899,257
156.5: 1,899,156
261— 41: 1,899,363
92: 1,899,504
93: 1,899,166
114: 1,899,409
262— 2: 1,899,874
263— 21: 1,899,031
265— 54: 1,899,436
67: 1,899,006
266— 36: 1,899,161
267— 52: 1,899,913
54: 1,899,624
270— 5: 1,899,226
271— 2.3: 1,899,571

271— 72: 1,899,290
272— 40: 1,899,080
58: 1,899,255
273— 2: 1,899,530
29: 1,899,011
32: 1,899,860
30: 1,899,441
1,899,442
96: 1,899,706
100: 1,899,530
116: 1,899,546
131: 1,899,177
153: 1,899,533
277— 13: 1,899,206
37: 1,899,328
279— 49: 1,899,843
77: 1,899,326
280— 12: 1,899,103
33.16: 1,899,597
87: 1,899,814
106: R. 18,750
281— 15: 1,899,440
43: 1,899,453
285— 68: 1,899,842
146: 1,899,480
161: 1,899,071
163: 1,899,785
175: 1,899,119
177: 1,899,349
193: 1,899,095
286— 7: 1,899,630
287— 100: 1,899,555
103: 1,899,846
290— 17: 1,899,193
292— 113: 1,899,149
145: 1,899,317
215: 1,899,353
247: 1,899,322
294— 57: 1,899,662
106: 1,899,750
296— 81: 1,899,327
84: 1,899,276
1,899,367
105: 1,899,832
117: 1,899,870
137: 1,899,857
297— 12: 1,899,558
299— 61: 1,899,711
88: 1,899,606
89: 1,899,262
1,899,749
95: 1,899,222
142: 1,899,003
300— 11: 1,899,694
301— 6: 1,899,097
1,899,289
124: 1,899,347
303— 84: 1,899,235
305— 20: 1,899,871
308— 36: 1,899,691
41: 1,899,010
134: 1,899,164
1,899,848
312— 35: 1,899,024
38: 1,899,369
67: 1,899,478
75: 1,899,484
183: 1,899,372
186: 1,899,171

U.S. GOVERNMENT PRINTING OFFICE: 1933

THE

OFFICIAL GAZETTE

OF THE

United States Patent Office

Vol. 427—No. 1 TUESDAY, FEBRUARY 7, 1933 Price—$16 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscriptions, $16.00 per annum, including annual index, $18.25; single numbers, 35 cents each.
PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.
CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
Issue of February 7, 1933	1
Notice	1
Interference Notice	1
Notice of Cancellation	1
Suggestion for the Use of Coupons	1
Classification Bulletin No. 64	1
Applications Under Examination	2
Commissioner's Decisions—	
Ex parte Wilcox	3
Decisions of the U. S. Courts—	
In re Fink	3
In re Copperweld Steel Company	4
Patent Suits	5
Adjudicated Patents	6
Adverse Decisions in Interference	6
Disclaimers	6
Trade-Marks Canceled	6
Trade-Marks Published (163 Applications)	7
Trade-Mark Registrations Granted	30
Trade-Mark Registrations Renewed	36
Labels	37
Prints	38
Reissues	39
Designs	40
Patents Granted	60

February 7, 1933

Trade-Marks	137—No.	300,709 to No.	300,845, inclusive.
T. M. Renewals	23		
Labels	24—No.	41,716 to No.	41,739, inclusive.
Prints	7—No.	14,044 to No.	14,050 inclusive.
Reissues	5—No.	18,726 to No.	18,732, inclusive.
Designs	87—No.	89,164 to No.	89,250, inclusive.
Patents	967—No.	1,896,061 to No.	1,897,027, inclusive.
Total	1,260		

Notice

The Patent Office is willing to accept in lieu of India ink drawings *photographs*—not photostats—of designs in textile design applications, provided such photographs are printed on Bristol board of the standard size and that the prints so made are properly developed, fixed and thoroughly washed so that they will not fade. The blacks must be pure black on the prints and the whites pure white. The middle tones should be interpreted by sharp dots of intense black. In the case of shaded color designs, the following should be the process for making the prints:

A negative is made on a panchromatic dry plate through a suitable filter to bring out the various shades in the design. From this negative a halftone screen positive is made by the wet plate process, the ruling of the screen to be 65 lines per inch. From this positive a negative is made in film by contact printing in a vacuum frame, from which negative the finished print on Bristol board is made.

THOMAS E. ROBERTSON,
Commissioner.

Interference Notice

U. S. Patent Office, *Washington, Jan. 25, 1933.*

Michel Hill, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the patent granted April 5, 1932, No. 1,852,240, to Michel Hill, 744 Bush St., San Francisco, California, and an application for patent filed by Charles T. Lyons, Medina, Washington, and a notice of such declaration sent by registered mail to said Hill at the said address having been returned by the post office undeliverable, notice is hereby given that unless said Hill, his assigns or legal representatives, shall enter an appearance therein within 20 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN.
First Assistant Commissioner.

Notice of Cancellation

U. S. Patent Office, *Washington, Jan. 18, 1933.*

The Duo-Is Products Corp., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Simonis Company, 2101 Indiana Avenue, Chicago, Ill., to effect the cancellation of the trade-mark registration of The Duo-Is Products Corp., of 20 East Jackson Boulevard, Chicago, Ill., No. 247,602, dated October 2, 1928, and the notice of such proceeding sent by registered mail to the said The Duo-Is Products Corp. at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said The Duo-Is Products Corp., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Suggestion for the Use of Coupons

The execution of orders for printed copies of U. S. patents, trade-marks, etc., will be considerably expedited if coupons are used. Such coupons may be purchased at the Patent Office in lots of 20 at $2.00 and 100 at $10.00.

Coupon orders do not have to be accompanied by letters of transmittal. They require nothing but the filling in of the patent number, the name of the inventor, the date of issue, and the name and address of the party desiring the service.

Classification Bulletin No. 64

Classification Bulletin No. 64, Jan. 1 to Dec. 31, 1932, is now available and may be purchased from the Superintendent of Documents, G. P. O., at 5 cents a copy.

Condition of Applications Under Examination at Close of Business January 21, 1933

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 88,112: Trade-Mark Division, 1,082. Oldest new case, Aug. 20, 1932; oldest amended, Aug. 21, 1932.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Aug. 22	Aug. 22	699
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Sept. 22	Sept. 22	966
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Oct. 24	Oct. 22	704
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Sept. 12	Sept. 23	447
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Oct. 21	Oct. 21	474
4806C	6. LEWERS, A. M., Carbon Chemistry	Aug. 2	Aug. 24	1,262
5725	7. JARBOE, C. G., Optics; Photography	Sept. 22	Sept. 22	1,101
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Oct. 22	Oct. 25	628
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Oct. 21	Nov. 17	561
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Sept. 25	Sept. 26	606
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus	Aug. 30	Aug. 26	631
7701	12. HENRY, C. O., Machine Elements	Aug. 22	Aug. 22	500
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling	Sept. 24	Sept. 24	870
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes	Oct. 21	Oct. 26	604
4807	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Sept. 8	Sept. 8	1,477
5612	16. SPENCER, C. J., Telegraphy; Telephony	Oct. 22	Oct. 22	627
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting	Aug. 22	Aug. 22	1,221
4812	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Nov. 2	Nov. 4	452
4006	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Aug. 24	Aug. 22	1,377
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Nov. 4	Nov. 12	352
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Sept. 22	Sept. 23	572
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion	Aug. 24	Aug. 24	717
7802	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Sept. 1	Aug. 31	729
5063	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Nov. 22	Nov. 21	496
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors	Sept. 1	Sept. 1	1,266
5803	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Sept. 15	Sept. 20	619
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Oct. 24	Oct. 24	726
4626	28. BENSON, A. R., Internal-Combustion Engines	Aug. 22	Aug. 22	1,045
5062	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Sept. 1	Sept. 1	529
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats	Sept. 21	Oct. 22	670
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Aug. 29	Aug. 27	1,306
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Oct. 24	Oct. 24	708
6006	33. WYMAN, W. L., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings	Aug. 26	Aug. 26	1,508
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders	Aug. 20	Aug. 26	961
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Aug. 27	Aug. 29	800
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Aug. 22	Aug. 22	1,430
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Sept. 21	Oct. 1	782
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells	Aug. 22	Aug. 22	713
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Aug. 25	Aug. 25	1,036
7880	40. OBERLIN, J. J., Receptacles	Sept. 10	Sept. 10	1,920
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices	Aug. 25	Sept. 8	669
5882	42. CUTTING, H. O., Electric Signaling	Aug. 22	Aug. 24	1,217
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members	Aug. 27	Aug. 27	1,246
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Aug. 25	Aug. 23	873
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Nov. 2	Nov. 2	600
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Sept. 2	Aug. 22	619
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Aug. 29	Aug. 31	1,495
5731	48. ROEPKE, O. B., Electricity, General Applications	Aug. 22	Aug. 23	728
7726	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification	Aug. 22	Aug. 26	1,040
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 21	Aug. 21	1,359
5628	51. BACKUS, C. D., Radiant Energy	Oct. 4	Oct. 4	935
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings	Aug. 23	Aug. 24	625
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens	Oct. 15	Oct. 4	487
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light-Sensitive Circuits	Sept. 7	Sept. 7	953
6887	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	Oct. 29	Oct. 29	328
	{Designs	Dec. 24	Dec. 27	313
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Aug. 23	Aug. 29	1,090
5623	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks	Sept. 22	Sept. 21	616
5605	58. DOWELL, E. F., Abrading; Typewriting	Aug. 26	Aug. 26	742
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Aug. 24	Aug. 24	856
[5806	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants	Aug. 25	Aug. 25	1,215
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus	Aug. 25	Aug. 30	936
7825	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles	Sept. 28	Sept. 26	1,129
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates	Aug. 24	Aug. 24	1,269
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Sept. 1	Sept. 1	942
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission	Aug. 22	Aug. 22	1,410
3000B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND—{Trade-Marks	Dec. 27	Jan. 7	899
	{Labels and Prints	Dec. 27	Jan. 9	133

CARNEGIE LIBRARY OF ATLANTA

DECISIONS IN PATENT AND TRADE-MARK CASES

Commissioner's Decision

EX PARTE WILCOX

Decided December 19, 1932

1. DIVISION—RULE 41—ELECTION OF SPECIES.

"The purpose of requiring an election at the time a contest arises over the allowability of generic claims is to remove the necessity for the examination of a plurality of groups of claims in advance of the final allowance of generic claims."

2. SAME—SAME—SAME.

Where generic claims were rejected and division required between two groups of the remaining claims as being for distinct species and, in response, applicant stated that if no generic claims were finally held allowable he elected to prosecute the claims of the first group and subsequently amended the generic claims and the claims of the first group only, *Held* that cancellation of the second group of claims should not have been insisted upon and that the Examiner should proceed with the examination holding the claims of the second group in abeyance.

ON APPEAL.

STEAM DROP HAMMER

Messrs. P. W. Pomeroy & J. W. Colvin for applicant.

KINNAN, *First Assistant Commissioner:*

This petition asks that the Examiner be instructed to enter the amendment of October 25, 1932, and proceed with the prosecution.

An oral hearing is requested; this can not be granted as it is not the practice to have hearings on petitions of this character.

The record shows that on February 8, 1932, the Examiner rejected certain claims on cited references. He stated that the generic claims not being patentable division was required between certain of the claims which he denominated as Groups I and II.

On June 3 the applicant contested the holding that none of the generic claims were patentable and argued on the references cited; he contended he should not be required to divide on the showing made and that he was entitled to an opinion by the Examiner of Classification before the requirement of division was made final; he stated that if no generic claim was finally held allowable he would then elect to prosecute the claims of Group I; he asked that the requirement of division be withdrawn and action on the merits of all the claims be given.

On October 3 the Examiner called attention to rule 42, Order 3,154, 395 O. G. 1142, and the decision in *Ex Parte Doane* 410 O. G. 275, and stated applicant's response caused the case to fall under group b of that decision; he stated further that the response was an election to claim the invention covered specifically by the claims of Group I and gave an action on those claims and all those outside of either group.

On October 25 the applicant canceled four claims and amended a number of others, leaving Group II untouched; he added five claims which he stated were generic and argued for the retention of the claims of Group II which the Examiner had required to be canceled under *Ex parte Higinbotham* 304 O. G. 231.

The controversy that has arisen revolves largely around the question of whether the claims of Group II should be canceled before settlement of the question whether any generic claims are patentable. Applicant has not argued for the allowance of Group II claims but has amended some of the claims of Group I. This may be taken as an election of species. The purpose of requiring an election at the time a contest arises over the allowability of generic claims is to remove the necessity for the examination of a plurality of groups of claims in advance of the final allowance of generic claims.

In the present case the claims of Group II have not been acted on by the Examiner nor is it understood their examination has been insisted on by the applicant. Should generic claims finally be allowed there will be no occasion to submit the matter to the Examiner of Classification.

The Examiner is directed to withdraw his holding of abandonment, enter the amendment of October 25, 1932, and proceed with the prosecution holding the claims of Group II in abeyance.

To this extent the petition is granted.

U. S. Court of Customs and Patent Appeals

IN RE FINK

No. 3,935. Decided December 19, 1932

PATENTABILITY—COMPOSITE METAL.

Claims for a composite metal including the limitation that the alloy is "substantially free from intercrystalline impurities" *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Warfield, Fraser & Brown and *Mr. William W. Fraser* for Fink.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.:*

From a decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner, refusing to allow claims numbered 10 and 11, which were all the claims of appellant's application, appeal is taken to this court.

Claim 10 is regarded as illustrative and reads:

10. A composite metal having relatively high electronic emissivity which comprises an alloy of a highly refractory metal from the imperial class including molybdenum, tantalum and tungsten with an emissive agent from the imperial class including zirconium, cerium, thorium and uranium, said alloy being relatively dense, homogeneous and substantially free from intercrystalline impurities including oxygen; said impurities being less in amount than can be ordinarily detected by quantitative methods.

The references relied upon are: Yunck, 1,422,019, July 4, 1922; Marden, 1,670,463, May 22, 1928.

Appellant's disclosure is of a composition metal comprising definite constituents such as are set

forth in the above claim. Appellant attempts further to define his product in his claims by stating certain claimed characteristics which in claim 10 are expressed in the following language:

> • • • being relatively dense, homogeneous and substantially free from intercrystalline impurities including oxygen; said impurities being less in amount than can be ordinarily detected by quantitative methods.

As we understand the decision of the Board, it is that the claims read directly upon Yunck's disclosure except for the difference that applicant's claims attempt to differentiate from Yunck by—

> merely defining certain matters of degree of purity of the product.

It was pointed out by the Examiner that Yunck discloses an alloy of tungsten and thorium and a process of making the alloy and that Yunck states that the alloy is tough, has a high melting point, will not volatilize at high temperatures and is free from the least traces of oxide. The Examiner said:

> • • • It is well established that a patent which describes an article with sufficient clearness to define the article is a reference for an article claim even if the process disclosed will not produce that article. [Citing *In re Decker*, 1911 C. D. 274 and *Coe* v. *United States Corset Co.*, 1877 C. D. 205.]

The gist of the decision by the Board is, we think, expressed in the following language:

> In view of the record we find that applicant is not entitled to a claim reading directly upon Yunck's disclosure and claims but merely defining certain matters of degree of purity of the product, where there is no reason to believe that Yunck would not have a product as pure as that disclosed by applicant so far as shown.

Appellant argues as follows:

> It is believed clear that applicant in disclosing a product free from intercrystalline impurities, including oxygen, has disclosed a product with a new characteristic not described or suggested by the prior art.
> • • • • • • • • • In the present case neither of the references relied upon in the prior art discloses or suggests a product free from intercrystalline impurities, including oxygen. Neither of the references discloses a process which is capable of producing such a product.

It is not necessary that a reference disclosing an article should disclose how to make the article in order that it be a good reference against an article claim. *In re Marden et al.*, 18 C. C. P. A. (Patents) 1119, 48 F.(2d) 428, 409 O. G. 561 and authorities cited therein. No method is claimed in appellant's application, and he has already received a patent for his method of making the alloy which is the subject matter of the application at bar.

The Board and the Examiner both held that the purity of the product was merely a matter of degree. While there might be invention in the method of making such a product, the product itself, as far as is defined by the claims, shows nothing of patentable merit. As to this phase of the case see *In re Schmidt et al.*, 18 C. C. P. A. (Patents) 827, 45 F.(2d) 916, 407 O. G. 3; *In re Schibsted*, 18 C. C. P. A. (Patents) 1490, 49 F.(2d) 823, 412 O. G. 829, and *In re Richter*, 19 C. C. P. A. (Patents) 756, 53 F.(2d) 525.

We think the decision of the Board of Appeals, affirming that of the Examiner, was proper, and it is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE COPPERWELD STEEL COMPANY

No. 3,029. Decided December 27, 1932

TRADE-MARKS—DESCRIPTIVE—"COPPERWELD" FOR ELECTRIC WIRES, ELECTRIC CABLES, ETC.

The term "Copperweld" as applied to electric wires, electric cables, etc., *Held* merely descriptive of the goods and therefore not registrable.

APPEAL from the Patent Office. Affirmed.

Messrs. Byrnes, Stebbins, Parmelee & Blenko and *Mr. Clyde A. Norton* for Copperweld Steel Co.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

This is an appeal from a decision of the Commissioner of Patents affirming the decision of the Examiner of Trade-Marks, holding appellant not entitled to register the notation "Copperweld" for use as a trade-mark for—

> electric wire, electric cable, ground rods for electric current, bond wires, track connections, and cable rings.

The refusal is based upon the ground that the proposed mark is merely descriptive of the goods and, in consequence, is barred from registration by the provisions of section 5 of the Trade-Mark Registration Act of February 20, 1905.

It is the contention of appellant that the word is not descriptive, but only suggestive; that it is an invented or coined word, not to be found as a whole in the dictionaries; that it calls up no mental picture of the goods and has no descriptive significance to the purchaser, but only indicates origin.

Appellant seems to have been using the word in a trade-mark sense over a long period of years, beginning in 1916. It has secured registrations of certain composite marks in which the word appears, but in these the word itself, except in the connections there shown, was disclaimed.

It appears that some, at least, of the goods upon which the mark is used are produced by sheathing a steel core with a coating of copper. The exact process used in applying the sheathing is not described in the record, other than in certain patents referred to, but it is a matter of general information, of which the court may take judicial notice, that it is a common practice to combine unlike metals by coating one of them with the other in a manner which solidifies the resulting product.

One of the definitions of "weld" as a transitive verb, given in Webster's New International Dictionary, is:

> To unite closely or intimately; to join closely.

The same authority defines the word when used as a noun as:

> State of being welded; also, a welded joint.

These are broad, but by no means unusual, definitions. The word "weld", with these meanings, is in common and almost universal use. It seems to us that when preceded by "copper" (which, as combined with "weld" in the mark, seems to be used in an adjective sense), and applied to the copper sheathed or "copper clad" products of appellant company, the complete word does more than merely suggest the nature or character of those products. When their character is rightly considered, the word, even though it be a coined word, describes that character.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,132,186, E. W. Kelley, Traffic signaling system, appeal filed Nov. 21, 1932, C. C. A., 2d Cir., Doc. 12434, *E. W. Kelley et al.* v. *The City of New York.*

1,173,079, E. F. Alexanderson, Selective tuning system; 1,195,632, W. C. White, Circuit connections of electron discharge apparatus; 1,251,377, A. W. Hull, Method of and means for obtaining constant direct current potentials; 1,573,374, P. A. Chamberlain, Radio condenser; 1,728,879, Rice & Kellogg, Amplifying system, filed Nov. 7, 1932, D. C., S. D. Calif. (Los Angeles), Doc. Y–29–C, *Radio Corp. of America et al.* v. *E. Burns* (*Melrose Distributing Co.*).

1,195,632. (See 1,173,079.)

1,223,180, C. F. Kettering, Ignition system; 1,641,374, W. A. Chryst, Induction coil, filed Nov. 25, 1932, D. C., E. D. Mich. (Detroit), Doc. 5663, *Delco-Remy Corp.* v. *Machined Parts Corp.*

1,223,659, W. S. Barnickel, Treatment of crude oil; 1,467,831, same, Process for treating petroleum emulsions; 1,596,589, M. de Grotte, same, filed Nov. 17, 1932, D. C., S. D. Calif., C. Div., Doc. Y–40–J, *The Tretolite Co. et al.* v. *Dehydrators, Ltd., et al.*

1,243,170, 1,243,171, H. Herz, Vat dye and process of making same, filed Oct. 13, 1932, D. C. Dela., Doc. E 998, *The Chemical Foundation, Inc.*, v. *General Aniline Works, Inc.*

1,243,171. (See 1,243,170.) 1,251,377. (See 1,173,079.)

1,268,473, W. O. Kennington, Distributer-cap for ignition apparatus; 1,351,714, A. E. Berdon et al., Distributer head for ignition devices; 1,372,065, O. F. Conklin, Distributer device for ignition apparatus, filed Nov. 25, 1932, D. C., E. D. Mich. (Detroit), Doc. 5662, *Delco-Remy Corp.* v. *Machined Parts Corp.*

1,272,056, C. F. Kettering, Ignition system; 1,286,803, H. G. Schwarze, Hydrocarbon motor; 1,305,165, W. H. Ratcliff, Circuit breaker; 1,556,901, C. E. Berkdoll, Ignition device; 1,557,207, F. C. Kroeger, same; 1,598,339, F. C. Kroeger, same; 1,687,040, W. D. Schrope, same; 1,825,720, J. T. Fitzsimmons, Ignition timer, Re. 18,276, C. H. Kindl, same, filed Nov. 25, 1932, D. C., E. D. Mich. (Detroit), Doc. 5661, *Delco-Remy Corp.* v. *Machined Parts Corp.*

1,286,803. (See 1,272,056.) 1,305,165. (See 1,272,056.)

1,320,384, Godbold & Fletcher, Drill cutter; 1,480,014, F. L. Scott, Self cleaning roller drill; 1,647,753, Scott & Wellensiek, same, D. C., W. D. Okla. (Oklahoma City), Doc. E 931, *Hughes Tool Co.* v. *A. F. Spengler Co.* Patents held valid and infringed Nov. 30, 1932.

1,351,714. (See 1,268,473.) 1,372,065. (See 1,268,473.)

1,392,107. (See Re. 17,130.) 1,402,685. (See 1,573,805.)

1,405,523, M. C. Latour, Audion or lamp relay or amplifying apparatus, filed Nov. 29, 1932, D. C., S. D. N. Y., Doc. E 72/384, *Latour Corp.* v. *Halson Radio Mfg. Corp.* Doc. E 72/386, *Latour Corp.* v. *L. Lang* (*Lang Radio Co.*).

1,406,913. (See 1,573,805.)

1,407,297, T. W. Pritchard, Cleaning and scouring compound, filed Nov. 30, 1932, D. C., E. D. N. Y., Doc. E 6697, *Zavon Co., Inc.*, v. *Atlas Gum & Sizing Co., Inc.*

1,408,499, Casterline & Brien, Roll paper holder, filed Nov. 26, 1932, D. C., N. D. Calif. (San Francisco), Doc. E 3440–S, *Handy-Roll Co.* v. *Dennison Mfg. Co.*

1,410,499, A. Pacz, Metals and their manufacture, filed Nov. 29, 1932, D. C., S. D. N. Y., Doc. E 72/387, *General Electric Co.* v. *P. Freeman Co., Inc., et al.* Doc. E 73/1, *General Electric Co.* v. *W. Thomashower* (*Thomas Import Co.*).

1,449,586, C. W. Carter, Mop, filed Nov. 30, 1932, D. C., N. D. Ohio, W. Div., Doc. E 1314, *The Du-All Mfg. Co.* v. *The La Salle & Koch Co.*

1,467,831. (See 1,223,659.)

1,474,152, 1,474,597, A. A. Kent, Induction coil, filed Nov. 25, 1932, D. C., E. D. Mich. (Detroit), Doc. 5664, *Delco-Remy Corp.* v. *Machined Parts Corp.*

1,474,597. (See 1,474,152.) 1,480,014. (See 1,320,384.)

1,556,901. (See 1,272,056.) 1,557,207. (See 1,272,056.)

1,573,374. (See 1,173,079.)

1,573,805, M. B. Cary, Lamp structure; 1,402,685, 1,406,913, P. J. Timberlake, Holder for electric lights, etc., filed Nov. 21, 1932, D. C., S. D. N. Y., Doc. E 72/315, *L. Ludwig* v. *A. A. Victor* (*Victor Mfg. Co.*)

1,593,339. (See 1,272,056.) 1,594,235. (See Re. 16,665.)

1,596,589. (See 1,223,659.)

1,601,146, J. B. Replogle, Electric switch; 1,693,998, W. A. Chryst, same; 1,708,751, H. E. Norviel, same; 1,835,019, H. D. Dawson, same, filed Nov. 25, 1932, D. C., E. D. Mich. (Detroit), Doc. 5666, *Delco-Remy Corp.* v. *Machined Parts Corp.*

1,610,893. (See 1,736,284.) 1,622,957. (See Re. 17,393.)

1,641,374. (See 1,223,180.) 1,647,753. (See 1,320,384.)

1,687,040. (See 1,272,056.)

1,687,510, M. Pipkin, Electric lamp bulb, filed Nov. 23, 1932, D. C., N. D. Calif. (San Francisco), Doc. E 3439–L, *General Electric Co.* v. *United Distributors, Ltd., et al.* Same, filed Nov. 29, 1932, D. C., S. D. N. Y., Doc. E 72/388, *General Electric Co.* v. *P. Freeman Co., Inc.*, et al. Same, filed Nov. 30, 1932, D. C., S. D. N. Y., Doc. E 73/2, *General Electric Co.* v. *W. Thomashower* (*Thomas Import Co.*).

1,689,620. (See 1,823,532.)

1,690,091, J. K. Marcus, Process for extracting the nonsaponifiable and difficulty saponifiable matter from fatty material, appeal filed Nov. 22, 1932, C. C. A., 2d Cir., Doc. 12435, *International Vitamin Corp.* v. *E. R. Squibb & Sons.*

1,693,998. (See 1,601,146.) 1,710,558. (See Re. 17,954.)

1,728,879. (See 1,173,079.)

1,736,284, G. F. Hochriem, Weighing and ticket-printing machine; and 1,610,893, V. F. Slezak, Coin controlled weight printing machine, entered by counter-claim Mar. 12, 1932, D. C. Dela., Doc. E 853, *Rhodes-Hochriem Mfg. Co.* v. *International Ticket Scale Corp.* Dismissed Nov. 16, 1932.

1,755,114, L. A. Hazeltine, Uni-control signaling system; 1,755,115, same, Variable condenser, filed Nov. 30, 1932, D. C. Calif. (Los Angeles), Doc. E Y–56–J, *Hazeltine Corp.* v. *El Rey Radio Mfg. Co.* Doc. E Y–58–J, *Hazeltine Corp.* v. *Trans-Continental Radio, Inc.* Same, filed Nov. 7, 1932, D. C., E. D. N. Y., Doc. E 6711, *Hazeltine Corp.* v. *Davega-City Radio, Inc.* Same, filed Nov. 25, 1932, D. C., S. D. N. Y., Doc. E 72/364, *Hazeltine Corp.* v. *J. Wanamaker New York, Inc., et al.* Same, filed Nov. 29, 1932, D. C., S. D. N. Y., Doc. E 72/383, *Hazeltine Corp.* v. *Halson Radio Mfg. Corp.* Doc. E 72/385, *Hazeltine Corp.* v. *L. Lang* (*Lang Radio Co.*).

1,755,115. (See 1,755,114.) 1,755,611. (See 1,763,394.)

1,763,394, Folds & Persons, Combined safety device and resetting mechanism; 1,765,698, 1,755,611, L. M. Persons, Pump, filed Nov. 29, 1932, D. C., E. D. Mich. (Detroit), Doc. 5676, *Cook Electric Co.* v. *Autopulse Corp.*

1,765,698. (See 1,763,394.)

1,771,884, H. G. Evitt, Radiator shield, appeal filed Nov. 18, 1932, C. C. A., 2d Cir., Doc. 12431, *The Parker Metal Decorating Co., et al.* v. *A. Ehramjian* (*Century Mfg. Co.*)

1,796,855, R. H. Ahlers, Electrical condenser; 1,815,496, W. A. Chryst, Ignition apparatus; 1,830,907, C. H.

Kindl, Electrical condenser, filed Nov. 25, 1932, D. C., E. D. Mich. (Detroit), Doc. 5665, *Delco-Remy Corp.* v. *Machined Parts Corp.*

1,798,751. (See 1,601,146.) 1,812,357. (See Re. 17,954.)

1,815,496. (See 1,796,855.)

1,823,532, 1,842,148, W. B. Clifford, Method of forming bellows folds; 1,689,620, same, Apparatus for producing bellows folds in tubing; 1,842,149, same, Method of forming bellows tubing; 1,848,319, same, Method and apparatus for exhausting and sealing metallic bellows; 1,880,184, 1,865,678, same, Apparatus for production of bellows tubing, filed Nov. 25, 1932, D. C., Conn. (New Haven), Doc. E 2262, *Clifford Mfg. Co.* v. *Bridgeport Brass Co.*

1,825,720. (See 1,272,056.) 1,830,907. (See 1,796,855.)

1,835,019. (See 1,601,146.)

1,841,159, L. Silverman, Method of making textile fabrics, filed Nov. 29, 1932, D. C., S. D. N. Y., Doc. E 72/382, *Millinery Braid Manufacturers Research Corp.* v. *Arlyn Knitting Mills, Inc., et al.*

1,842,148. (See 1,823,532.) 1,842,149. (See 1,823,532.)

1,848,319. (See 1,823,532.) 1,864,459. (See Re. 18,498.)

1,864,460. (See Re. 18,498.) 1,865,678. (See 1,823,532.)

1,880,184. (See 1,823,532.)

Re. 16,665 (of 1,594,235), E. A. Arndt, Tire and luggage carrier, D. C., S. D. Iowa. (Des Moines), Doc. E 4441, *Kari-Keen Mfg. Co., Inc., et al.* v. *Herring Wissler Co.* Dismissed Nov. 29, 1932.

Re. 17,180, G. W. Berry, Tilting mechanism for dumping bodies, filed May 24, 1932, D. C., N. D. N. Y., Doc. 2518, *Commercial Shearing & Stamping Co.* v. *Linn Mfg. Corp.*

Re. 17,393, J. Mayer, Hair waving appliance and method, filed Nov. 25, 1932, D. C., S. D. Ohio, W. Div., Doc. E 835, *The Philad Co., et al.* v. *F. Frey Studios.*

Re. 17,954, O. L. Mills, Electric-arc furnace; 1,812,357, same, Process of manufacturing tungsten carbide, filed Nov. 3, 1932, D. C., S. D. Calif. (Los Angeles), Doc. Y-26-C, *Mills Alloys, Inc.* v. *McBel Metal Products Co., Ltd., et al.*

Re. 18,276. (See 1,272,056.)

Re. 18,498, H. E. Norviel, Ignition apparatus; 1,864,459, same, Swith 1,864,460, same, Switch and coil unit, filed Nov. 25, 1932, D. C., E. D. N. Y., Doc. E 6692, *Delco-Remy Corp.* v. *Automotive Specialty Corp.*

Adjudicated Patents

(C. C. A. Mich.) Williams patent, No. 1,219,891, for sectional furniture, claims 1–5, 11, and 12 *Held* not infringed. *American Show Case & Mfg. Co.* v. *Grand Rapids Store Equipment Corporation*, 61 F.(2d) 859.

(C. C. A. N. Y.) Hull patent, No. 1,318,070, for selective signaling apparatus, claims 3, 4, 6–9, if valid, *Held* not infringed. *Appliance Inv. Co.* v. *Western Electric Co.*, 61 F.(2d) 752.

(D. C. N. Y.) Burt patent, No. 1,470,524, for process of making frozen confections, claims 1, 2 and 5 *Held* not infringed. *Good Humor Corporation of America* v. *Bluebird Ice Cream & Charlotte Russe*, 1 F. Supp. 850.

(C. C. A. Conn.) Solenberger patent, No. 1,670,082, for piston ring, claims 13 and 14 *Held* valid but not infringed. *Simplex Piston Ring Co. of America* v. *Horton-Gallo-Creamer Co.*, 61 F.(2d) 748.

(D. C. N. Y.) Burt patent, No. 1,718,997, for frozen confection, claims 1, 5, and 7 *Held* invalid. *Good Humor Corporation of America* v. *Bluebird Ice Cream & Charlotte Russe*, 1 F. Supp. 850.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,755,636, William Dubilier, Loud speaker, decided January 10, 1933, claims 1, 4, 5 and 7.

Pat. 1,774,458, J. D. Tear, Compass, decided January 6, 1933, claims 1, 3, 6 and 7.

Pat. 1,797,965, C. W. Peterson, Loud speaker driving motor, decided January 6, 1933, claims 1, 3 and 5.

Pat. 1,809,530, L. T. Phelan, Volume control, decided December 16, 1932, claims 1, 2, 3 and 6.

Disclaimers

1,700,246.—*Alfred Woelm*, Berlin, Germany. STEP-BY-STEP LEAD PENCIL. Patent dated January 29, 1929. Disclaimer filed January 20, 1933, by the assignee, *Pencil Mechanism Corporation.*

Hereby enters this disclaimer, and disclaims from the scope of claim 25 of said Letters Patent any combination not including means disposed in the path of movement of the grippers to impart to said grippers a jaw-separating movement of definite extent at pre-determined periods in the operation of the mechanism.

1,700,247.—*Alfred Woelm*, Berlin, Germany. MAGAZINE LEAD PENCIL. Patent dated January 29, 1929. Disclaimer filed January 20, 1933, by the assignee, *Pencil Mechanism Corporation.*

Hereby enters this disclaimer and disclaims the subject matter of claim 12 of said Letters Patent except when the mechanism claimed is so arranged that no lead-gripping action of the jaws is caused until the jaws contact with the inclined surface of the member fixedly connected with the casing.

Trade-Marks Canceled

113,792. Animal and poultry feed. Ralston Purina Company, St. Louis, Mo. Registered October 31, 1916. Canceled January 11, 1933.

144,779. Root-beer. Golden Grain Juice Co., Minneapolis, Minn. Registered July 19, 1921. Canceled January 12, 1933.

149,196. Cloth shoes and slippers. Outing Shoe Company, Boston, Mass. Registered December 6, 1921. Canceled January 11, 1933.

164,269. Certain named nonalcoholic beverages. Golden Grain Juice Co., Minneapolis, Minn. Registered February 13, 1923. Canceled January 12, 1933.

184,121. Building material. Delta Lumber Company, New Orleans, La. Registered May 20, 1924. Canceled January 11, 1933.

192,522. Canned fish. The Jos. Garneau Co., Inc., New York, N. Y. Registered December 9, 1924. Canceled January 11, 1933.

198,600. Egg testers. National Eggoscope Corporation, New York, N. Y. Registered January 6, 1925. Canceled January 11, 1933.

274,298. Men's garters. S. H. Kress & Co., New York, N. Y. Registered August 26, 1930. Canceled January 11, 1933.

TRADE-MARKS

OFFICIAL GAZETTE, FEBRUARY 7, 1933

[VOL. 427. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 332,537. ED. F. MANGELSDORF & BROTHER, St. Louis, Mo. Filed Nov. 28, 1932.



The words "Selected," "Field," "Seed," and "St. Louis" being disclaimed apart from the mark shown.

For Field Seeds and Grain Seeds.

Claims use since Sept. 1, 1919.

Ser. No. 332,961. WILHELM PRIEM & COMPANY, G. M. B. H., Magdeburg, Germany. Filed Dec. 10, 1932.

Priemsil

For Fuller's Earth, Bleaching Earth, and Activated Clays.

Claims use since 1929.

CLASS 2

Receptacles

Ser. No. 331,273. VORTEX CUP COMPANY, Chicago, Ill. Filed Oct. 14, 1932.

Cone-Fils

The word "Cone" is disclaimed apart from the mark shown on the drawing.

For Paper Cups for Ice Cream and Confections.

Claims use since Oct. 10, 1932.

Ser. No. 331,865. KNAPP-MONARCH COMPANY, Belleville, Ill. Filed Nov. 3, 1932.

SCOUT JUG

The word "Jug" is disclaimed apart from the mark shown.

For Insulated Jugs and Vacuum Bottles.

Claims use since May 15, 1931.

Ser. No. 331,909. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Nov. 4, 1932.

MODERN DAIRYMAN

For Dairy Pails, Milk Cans, Milk Kettles.

Claims use since 1929.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 333,085. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 14, 1932.



For Overnight Bags, Harness, Brief Cases, and Pocketbooks.

Claims use since Nov. 15, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 329,719. QUALITY SOAP MANUFACTURING COMPANY, Milwaukee, Wis. Filed Aug. 20, 1932.



For Hand Soaps.
Claims use since first part of July, 1932.

Ser. No. 332,645. CHANEL, INC., New York, N. Y. Filed Dec. 1, 1932.

CHANEL

For Soap.
Claims use since Jan. 1, 1921.

CLASS 5

Adhesives

Ser. No. 333,028. JULIA C. DE MILLE, Baltimore, Md. Filed Dec. 13, 1932.

TINKR MENDR

The word "Mend" is disclaimed apart from the mark shown.

For Adhesive Liquid Solder or Cement.
Claims use since July 28, 1932.

Ser. No. 333,376. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio. Filed Dec. 27, 1932.

Air-Way

For Liquid Preparation for Application to the Under Surface of Rugs to Produce a Non-Skidding Surface.
Claims use since Oct. 15, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 311,261. COMPAGNIE DE BÉTHUNE, Bully-Les-Mines, France. Filed Feb. 20, 1931.



The lining shown on the drawing is used for shading purposes only.

For Chemical Products—Namely, Hydrocarbons Derived from Coal Tar—Namely, Benzene, Toluene, Naphthalene, Anthracene, Cyclopentadiene, and the Corresponding Halogen, Sulpho, and Nitro Derivatives; Phenolic Products Derived from Coal Tar—Namely, Phenols, Cresols; Hydrogenation Products of Hydrocarbons and of Phenols of Coal Tar—Namely, Cyclohexane, Methylcyclohexane, Tetraline, Decaline, Cyclohexanol, Methylcyclohexanols; Anhydrous Ammonia, Ammoniacal Solution, Ammoniacal Salts—Namely, Ammonium Chloride, Ammonium Sulphate, Ammonium Phosphate; Nitric Acid, Nitrates—Namely, Calcium Nitrate, Sodium Nitrate, Potassium Nitrate, Ammonium Nitrate, Magnesium Nitrate; Urea, Salts of Urea—Namely, Nitrate of Urea, Phosphate of Urea; Aliphatic Amines—Namely, Methylamine, Ethylamine; Ethanolamine—Namely, Oleate, Stearate, Palmitate; Diphenyl and Paraoxydiphenyl, Chlorodiphenylic Derivatives and Their Polymerization Products; Aliphatic Alcohols—Namely, Methyl, Ethyl, Propyl, Iso-Propyl, Butyl, Iso-Butyl; Alkyl Sulphates—Namely, Methyl Sulphate, Ethyl Suphate (Neutral and Acidic); Alkyl Halides—Namely, Methyl Chloride, Methyl Bromide, Methyl Iodide, Methylene Chloride, Chloroform, Carbon Tetrachloride, Ethyl Chloride, Ethylene Dichloride, Ethyl Bromide, Ethyl Iodide; Formic and Acetic Esters of Aliphatic Alcohols—Namely, Methyl, Ethyl, Propyl, Iso-Propyl, Butyl, Iso-Butyl; Methylal Acetal; Ethers-Oxides—Namely, Methyl Oxide, Ethyl Oxide, Propyl Oxide, Phenyl Oxide; Chlorhydrines—Namely, Ethylene Chlorhydrin, Propylene Chlorhydrin; Ethylene Oxide; Glycols—Namely, Ethylene Glycol, Propylene Glycol; Dioxane; Glycol Ethers—Namely, Mono- and Dimethyl Ethers, Mono- and Diethyl Ethers of Ethylene and Propylene Glycols, Acetates and Formates Corresponding to the Mono Ethers; Esters of Glycols—Namely, Mono- and Diacetates of Ethylene and Propylene Glycols; Dinitrates of Ethylene and Propylene Glycols; Diethylene Glycol, Dinitrate of Diethylene Glycol; Mono- and Dimethyl, Mono- and Diethyl Ether, Mono- and Diformic, Mono- and Diacetic Esters; Formic Acid, Metallic Formates, Organic Formates—Namely, Methyl, Ethyl, Propyl, Iso-Propyl, Iso-Butyl, Benzyl, Cyclohexyl, Geranyl, Formates; Dimethylethylacetic Acid and Esters—Namely, Methyl, Ethyl, Benzyl, Cyclohexyl Esters; Adipic Acid, Methyladipic Acids, Metallic Adipates and Methyladipates and Organic Adipates and Methyladipates—Namely, Those of Propyl, Iso-Propyl, Butyl, Amyl, Iso-Amyl, Cyclohexyl, Methylcyclohexyl, Glycol, Glycerine; Cyclopentenylacetic Acid Substituted with Radicals—Namely, Methyl, Ethyl, N-Propyl, Iso-Propyl, N-Butyl, Phenyl Cyclopentenyl, and Their Esters; Formaldehyde, Paraformaldehyde, Trioxymethylene, Hexamethylenetetramine, Formaldehyde Sulphoxylate of Soda; Acetaldehyde, Methaldehyde, Paraldehyde; Medicinal Products—Namely, Acids 5-Cyclopentenylbarbituric Substituted with Radicals—Namely, Ethyl, Propyl, Iso-Propyl, Butyl, Allyl, Phenyl, Cyclopentenyl; Acid Cyclopentenyl Having Antileprosy Properties—Namely, Hydnocarpic Acids, Chaulmoogric Acid, Their Metallic Salts and Their Esters; Medicinal Derivatives of Urea—Namely, Salicylate, Acetylsalicylate, Quinate, Dibromotannate, Urea-Calcium Iodide, Urea-Calcium Bromide, Urea-Hydrogen Peroxide; Medicinal Derivatives of Formic Acid—Namely, Formates of Calcium, Copper, Lithium, Magnesium, Lead, Mercury, Zinc, Thorium, Potassium, Ammonium; Medicinal Combinations of Formaldehyde—Namely, Combinations with Acetanide, Albumine, Casein, Dibromotannin, Gelatine, Silver Nucleate; Medicinal Derivatives of Hexamethylenetetramine—Namely, Anhydromethylenecitrate, Acetylsalicylate, Bibromide, Biiodide, Bromoethylate, Camphorate, Diphenate, Galacolate, Gallate, Iodobenzylate, Iodomethylate, Iodoethylate, Nucleate, Phosphate, Quinate, Resorcinate, Salicylate, Sulphosalicylates, Tannate, Triborate; Combinations with Chloral, Sodium Acetate, Silver Azotate, Ferric Chloride, Lithium Citrate, Sodium Citrate, Mercuric Cyanide, Hexamethylenetetraminetetraiodide; Products for General Anesthesia—Namely, Anesthetic Ethers, Methyl Oxide, Methylethyl Oxide, Methylal, Amylene, Ethylene, Ethylene Oxide, Chloroform, Ethyl Chloride, Methyl Chloride, Methylene Chloride, Methylchloroform, Ethylidene Chloride, Ethylene Chloride, Ethylene Bromide, Trichlorethylene; Bromoform, Iodoform, Ethylene Periodide; Phenol Snow, Medicinal Derivatives—Namely, Tribromophenol and Bismuth Tribromophenolate, Diiodophenoliodide, Bismuth Triiodophenolate, Orthophenolsulphonic Acid, Paraphenolsulphonic Acid and Their Salts; Bi-Iodo- Paraphenolsulphonic Acid, Phenolbisulphonate of Mercury and Sodium; Pharmaceutical Products—Namely, Anthracene Oil, Phenol, Cresol, Formol for Disinfection, Veterinary Use, and for Destruction of Agricultural Parasites.

Claims use since Dec. 20, 1930.

Ser. No. 311,262. COMPAGNIE DE BÉTHUNE, Bully-Les-Mines, France. Filed Feb. 20, 1931.



The lining shown on the drawing is used for shading purposes only.

For Chemical Products—Namely, Hydrocarbons Derived from Coal Tar—Namely, Benzene, Toluene, Naphthalene, Anthracene, Cyclopentadiene, and the Corresponding Halogen, Sulpho, and Nitro Derivatives; Phenolic Products Derived from Coal Tar—Namely, Phenols, Cresols; Hydrogenation Products of Hydrocarbons and of Phenols of Coal Tar—Namely, Cyclohexane, Methylcyclohexane, Tetraline, Decaline, Cyclohexanol, Methylcyclohexanols; Anhydrous Ammonia, Ammoniacal Solution, Ammoniacal Salts—Namely, Ammonium Chloride, Ammonium Sulphate, Ammonium Phosphate; Nitric Acid, Nitrates—Namely, Calcium Nitrate, Sodium Nitrate, Potassium Nitrate, Ammonium Nitrate, Magnesium Nitrate; Urea, Salts of Urea—Namely, Nitrate of Urea, Phosphate of Urea; Aliphatic Amines—Namely, Methylamine, Ethylamine; Ethanolamine—Namely, Oleate, Stearate, Palmitate; Diphenyl and Paraoxydiphenyl, Chlorodiphenylic Derivatives and Their Polymerization Products; Aliphatic Alcohols—Namely, Methyl, Ethyl, Propyl, Iso-Propyl, Butyl, Iso-Butyl; Alkyl Sulphates—Namely, Methyl Sulphate, Ethyl Suphate (Neutral and Acidic); Alkyl Halides—Namely, Methyl Chloride, Methyl Bromide, Methyl Iodide, Methylene Chloride, Chloroform, Carbon Tetrachloride, Ethyl Chloride, Ethylene Dichloride, Ethyl Bromide, Ethyl Iodide; Formic and Acetic Esters of Aliphatic Alcohols—Namely, Methyl, Ethyl, Propyl, Iso-Propyl, Butyl, Iso-Butyl; Methylal Acetal; Ethers-Oxides—Namely, Methyl Oxide, Ethyl Oxide, Propyl Oxide, Phenyl Oxide; Chlorhydrines—Namely, Ethylene Chlorhydrin, Propylene Chlorhydrin; Ethylene Oxide; Glycols—Namely, Ethylene Glycol, Propylene Glycol; Dioxane; Glycol Ethers—Namely, Mono- and Dimethyl Ethers, Mono- and Diethyl Ethers of Ethylene and Propylene Glycols, Acetates and Formates Corresponding to the Mono Ethers; Esters of Glycols—Namely, Mono- and Diacetates of Ethylene and Propylene Glycols; Dinitrates of Ethylene and Propylene Glycols; Diethylene Glycol, Dinitrate of Diethylene Glycol; Mono- and Dimethyl, Mono- and Diethyl Ether, Mono- and Diformic, Mono- and Diacetic Esters; Formic Acid, Metallic Formates, Organic Formates—Namely, Methyl, Ethyl, Propyl, Iso-Propyl, Iso-Butyl, Benzyl, Cyclohexyl, Geranyl, Formates; Dimethylethylacetic Acid and Esters—Namely, Methyl, Ethyl, Benzyl, Cyclohexyl Esters; Adipic Acid, Methyladipic Acids, Metallic Adipates and Methyladipates and Organic Adipates and Methyladipates—Namely, Those of Propyl, Iso-Propyl, Butyl, Amyl, Iso-Amyl, Cyclohexyl, Methylcyclohexyl, Glycol, Glycerine; Cyclopentenylacetic Acid Substituted with Radicals—Namely, Methyl, Ethyl, N-Propyl, Iso-Propyl, N-Butyl, Phenyl Cyclopentenyl, and Their Esters; Formaldehyde, Paraformaldehyde, Trioxymethylene, Hexamethylenetetramine, Formaldehyde Sulphoxylate of Soda; Acetaldehyde, Methaldehyde, Paraldehyde; Medicinal Products—Namely, Acids 5-Cyclopentenylbarbituric Substituted with Radicals—Namely, Ethyl, Propyl, Iso-Propyl, Butyl, Allyl, Phenyl, Cyclopentenyl; Acid Cyclopentenyl Having Antileprosy Properties—Namely, Hydnocarpic Acids, Chaulmoogric Acid, Their Metallic Salts and Their Esters; Medicinal Derivatives of Urea—Namely, Salicylate, Acetylsalicylate, Quinate, Dibromotannate, Urea-Calcium Iodide, Urea-Calcium Bromide, Urea-Hydrogen Peroxide; Medicinal Derivatives of Formic Acid—Namely, Formates of Calcium, Copper, Lithium, Magnesium, Lead, Mercury, Zinc, Thorium, Potassium, Ammonium; Medicinal Combinations of Formaldehyde—Namely, Combinations with Acetanide, Albumine, Casein, Dibromotannin, Gelatine, Silver Nucleate; Medicinal Derivatives of Hexamethylenetetramine—Namely, Anhydromethylenecitrate, Acetylsalicylate, Bibromide, Biiodide, Bromoethylate, Camphorate, Diphenate, Galacolate, Gallate, Iodobenzylate, Iodomethylate, Iodoethylate, Nucleate, Phosphate, Quinate, Resorcinate, Salicylate, Sulphosalicylates, Tannate, Triborate; Combinations with Chloral, Sodium Acetate, Silver Azotate, Ferric Chloride, Lithium Citrate, Sodium Citrate, Mercuric Cyanide, Hexamethylenetetraminetetraiodide; Products for General Anesthesia—Namely, Anesthetic Ethers, Methyl Oxide, Methylethyl Oxide, Methylal, Amylene, Ethylene, Ethylene Oxide, Chloroform, Ethyl Chloride, Methyl Chloride, Methylene Chloride, Methylchloroform, Ethylidene Chloride, Ethylene Chloride, Ethylene Bromide, Trichlorethylene; Bromoform, Iodoform, Ethylene Periodide; Phenol Snow, Medicinal Derivatives—Namely, Tribromophenol and Bismuth Tribromophenolate, Diiodophenoliodide, Bismuth Triiodophenolate, Orthophenolsulphonic Acid, Paraphenolsulphonic Acid and Their Salts; Bi-Iodo- Paraphenolsulphonic Acid, Phenolbisulphonate of Mercury and Sodium; Pharmaceutical Products—Namely, Anthracene Oil, Phenol, Cresol, Formol for Disinfection, Veterinary Use, and for Destruction of Agricultural Parasites.

Claims use since Dec. 20, 1930.

Ser. No. 330,520. THE PERFECT VICHY BOTTLING CO., Cincinnati, Ohio. Filed Sept. 20, 1932.



All the wording appearing on the drawing is hereby disclaimed when used separate from the other features of the mark as shown on the drawing.
For Artificial Vichy Water.
Claims use since Dec. 5, 1931.

Ser. No. 330,985. WILBER SYLVESTER, doing business as Cook Medical Company, Detroit, Mich. Filed Oct. 4, 1932.

ERSYLIN

For Medicinal Preparation for the Relief of Head Colds, Simple Headaches, Simple Neuralgia, Muscular Aches and Pains, Tooth Ache and Pain After Tooth Extraction.
Claims use since January, 1929.

Ser. No. 331,559. GEORGE A. LASSMAN, doing business as Imunal Manufacturing Company, Brooklyn, N. Y. Filed Oct. 25, 1932.

IMUNAL

For Intra-Vaginal Prophylactic.
Claims use since Mar. 1, 1932.

Ser. No. 331,961. PARKE, DAVIS & CO., Detroit, Mich. Filed Nov. 7, 1932.

ORTAL

For Ethyl-Hexyl Barbituric Acid Hypnotic.
Claims use since Oct. 13, 1932.

Ser. No. 332,156. LOGAN LABORATORIES, LTD., New York, N. Y. Filed Nov. 15, 1932.

Almenol

For Liquid and Jelly Preparations Composed of Various Essential Oils, Benzoate Esters, Etc., Blended to Secure Proper Vaporization for Nasal Inhalation, When Used in a Vaporizer.
Claims use since May 15, 1932.

Ser. No. 333,185. GENERAL DYESTUFF CORPORATION, New York, N. Y. Filed Dec. 19, 1932.

ALGOSOL

For Dyestuffs for Dyeing and Printing.
Claims use since Oct. 20, 1932.

CLASS 7

Cordage

Ser. No. 333,394. A. LESCHEN & SONS ROPE COMPANY, St. Louis, Mo. Filed Dec. 27, 1932.

"P.F.S."

For Wire Rope.
Claims use since Nov. 10, 1932.

CLASS 11

Inks and Inking Materials

Ser. No. 332,706. THE ROBERT KELLER INK COMPANY, Detroit, Mich. Filed Dec. 1, 1932.



No claim is made to the word "Inks" apart from the mark as shown.
For Writing Inks.
Claims use since Apr. 15, 1932.

CLASS 12

Construction Materials

Ser. No. 295,216. FREDERICK E. HORNE, Malden, Mass. Filed Jan. 25, 1930.

CLAP—BRICKS

Applicant hereby disclaims the exclusive use to the word "Bricks" apart from the mark as shown in the drawing.
For Shingles, Clapboards, and Roofing Materials of Asbestos, Felt, Asphalt, Slate or Combinations Thereof, and Imitation Masonry Building Units for Roofs, Walls, and Siding.
Claims use since Jan. 14, 1930.

Ser. No. 332,294. FARLEY & LOETSCHER MFG. CO., Dubuque, Iowa. Filed Nov. 19, 1932.

FARLITE

For Doors, Structural Panels, Panel Stock, Moldings Building Trim, Veneering; Veneered Stock in Sheet, Board, and Stick Form; Lumber in Sheet, Board and Stick Form, Including Natural, Artificial, and Compound Lumber; Such Products Being Usually Treated with or Constructed with a Synthetic Resin Condensation Product.
Claims use since Sept. 6, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 322,192. UTILITY PRODUCTS, INC., Rockford, Ill. Filed Dec. 16, 1931.



The words "Heavy Cast" are disclaimed except in association with the remainder of the trade-mark.
For Cooking Utensils of Base Metal—Namely, Kettles, Tea Kettles, Turkey Roasters, Dutch Ovens, Casseroles, Cooking Boilers, Omelet Pans, Roasters, Skillets, Sauce Pans, Griddles, Reversible Griddles, Breakfast Grills, Pancake Griddles, Fryers, and Triplicate Kettle Sets.
Claims use since Aug. 17, 1931.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 332,864. ADVANCE WELDING & ALLOYS, LTD., Springfield Gardens, N. Y. Filed Dec. 7, 1932.



The words "Welding Rods" and "Produce the Strongest Welds and Hardest Metal Surfaces" are disclaimed apart from the mark shown.
For Welding Rods and Hard Faced Castings.
Claims use since June 1, 1932.

Ser. No. 333,457. CONTINENTAL STEEL CORPORATION, Kokomo and Indianapolis, Ind., and Canton, Ohio. Filed Dec. 29, 1932.

KONIK

For Alloy Steel in Various Shapes Including Blooms, Billets, Sheets, and Wires.
Claims use since Dec. 1, 1932.

CLASS 15

Oils and Greases

Ser. No. 332,665. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed Dec. 1, 1932.

MOTANO

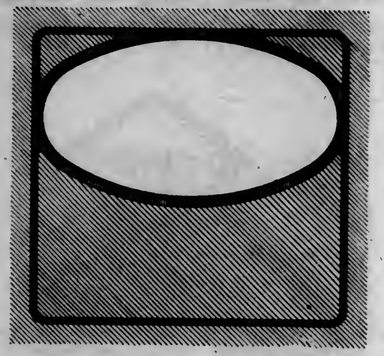
For Lubricating Oils.
Claims use since Nov. 2, 1932.

Ser. No. 332,789. THE SIX STAR LUBRICANTS COMPANY, Denver, Colo. Filed Dec. 5, 1932.



For Lubricating Greases.
Claims use since May 4 1921.

Ser. No. 332,803. WOLVERINE-EMPIRE REFINING CO., New York, N. Y. Filed Dec. 5, 1932.



In the drawing the oblique lines denote the color green and the vertical lines the color red.
For Lubricating Oils and Greases.
Claims use since April, 1911.

Ser. No. 332,851. NEXOL INCORPORATED, New York, N. Y. Filed Dec. 7, 1932.

NEXOL

For Lubricating Oils.
Claims use since Oct. 29, 1932.

Ser. No. 333,101. INDIAN REFINING COMPANY, Lawrenceville, Ill. Filed Dec. 15, 1932.

HYDEX

For Petroleum Products—viz, Lubricating Oil.
Claims use since Oct. 19, 1932.

Ser. No. 333,102. INDIAN REFINING COMPANY, Lawrenceville, Ill. Filed Dec. 15, 1932.

MEDEX

For Petroleum Products—viz, Lubricating Oil.
Claims use since Oct. 19, 1932.

Ser. No. 333,155. E. F. HOUGHTON & Co., Philadelphia, Pa. Filed Dec. 17, 1932.

PERMASOL

For Cutting Oils.
Claims use since Nov. 25, 1932.

Ser. No. 333,156. E. F. HOUGHTON & Co., Philadelphia, Pa. Filed Dec. 17, 1932.

STA-PUT

For Lubricating Oils and Greases.
Claims use since Nov. 25, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 330,749. CHARLES F. KELLOM & CO., INC., Holmesburg, Philadelphia, Pa. Filed Sept. 28, 1932.



For a Polish Consisting of a Cleaner and Polisher for Treating Lacquered, Enameled, and Painted Surfaces; a Rubbing Compound for Preparing a Lacquered Finish for Wax and Reducing "Orange Peel"; a Furniture Cream for Interior Woodwork, Furniture, and Enamels; a Liquid Wax for Floors, Linoleum, Woodwork, and Furniture; and a Paste Wax for Automobiles, Furniture, Linoleum, and Floors.
Claims use since June 6, 1932.

Ser. No. 331,106. GOODLASS WALL & COMPANY LIMITED, Liverpool, England. Filed Oct. 10, 1932.

ANODITE

For Dry and/or Ready-Mixed Paints, Dry and Paste Color for Paints; Paint Enamels, and Paint Oil.
Claims use since Nov. 6, 1931.

Ser. No. 332,447. JOHN C. DOLPH COMPANY, Newark, N. J. Filed Nov. 25, 1932.

DOLCO

For Paint, Varnishes and Paint Pigments in Powder and Paste Form.
Claims use since Feb. 1, 1932

Ser. No. 332,923. LANEX CORPORATION, New York, N. Y. Filed Dec. 9, 1932.

LANEX

For Furniture Polishes and Cleansers.
Claims use since Dec. 5, 1932.

Ser. No. 333,056. GODFREY L. CABOT, INC., Boston, Mass. Filed Dec. 14, 1932.

CARBOLAC

For Carbon Black for Use in the Manufacture of Varnishes and Lacquers.
Claims use since July 27, 1931.

CLASS 17

Tobacco Products

Ser. No. 331,996. JOSEPH S. SLAMEY, Boston, Mass. Filed Nov. 8, 1932.



For Cigarettes.
Claims use since July 1, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 329,733. AERO BATTERY CORPORATION, Birmingham, Ala. Filed Aug. 22, 1932.

AERO

No claim is made herein to the word "Aero" apart from the mark shown in the drawing.
For Storage Batteries.
Claims use since Dec. 1, 1931.

Ser. No. 332,839. THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia, Pa. Filed Dec. 7, 1932.

Micropor

For Electric Storage Battery Separators and Retainers.
Claims use since Nov. 25, 1932.

Ser. No. 332,840. THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia, Pa. Filed Dec. 7, 1932.

Mipor

For Electric Storage Battery Separators and Retainers.
Claims use since Nov. 25, 1932.

Ser. No. 332,980. BLOOMINGDALE BROS., INC., New York, N. Y. Filed Dec. 12, 1932.

GREAT NORTHERN

For Radio Receiving Sets.
Claims use since Nov. 1, 1932.

Ser. No. 333,100. THEODORE L. GENTER, doing business as Pix Products, New York, N. Y. Filed Dec. 15, 1932.

PIX

For Electrical Condensers for Use in Radio Aerials.
Claims use since Oct. 15, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 333,098. COOK, NEWTON & SMITH, INCORPORATED, New Haven, Conn. Filed Dec. 15, 1932.

OPTIC

For Artificial Fishing Flies.
Claims use since April, 1931.

Ser. No. 333,103. NESTOR JOHNSON MANUFACTURING COMPANY, Chicago, Ill. Filed Dec. 15, 1932.

YOUNG AMERICAN

For Ice Skates and Skate Outfits, the Latter Consisting of Attached Shoes and Skates.
Claims use since May 21, 1932.

CLASS 23

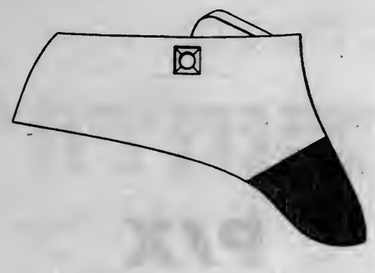
Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 314,043. J. B. CROWELL & SONS, Wallkill, N. Y. Filed May 1, 1931.

DUPLEX

For Brick Molds.
Claims use since Jan. 1, 1931.

Ser. No. 331,673. FARM TOOLS, INC., Mansfield, Ohio. Filed Oct. 29, 1932.



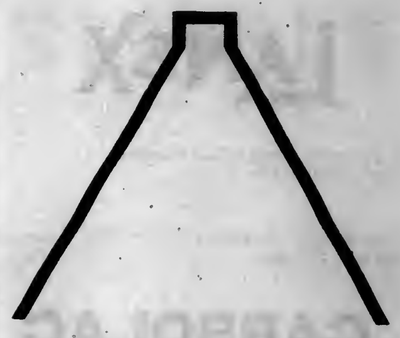
The representation of the plow point per se is disclaimed. The trade mark consists of a wide red band painted around the nose of the plow point.
For Plow Points.
Claims use since Sept. 1, 1932.

Ser. No. 332,194. MARKWELL STAMP CO., Greenfield, Mass. Filed Nov. 16, 1932.

MARKRITE

For Steel Stamps and Metal Marking Devices.
Claims use since Jan. 5, 1932.

Ser. No. 332,683. THE J. M. CARPENTER TAP & DIE CO., Pawtucket, R. I. Filed Dec. 2, 1932.



For Thread Cutting Tools Such as Taps and Dies.
Claims use since Nov. 12, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 328,074. RCA VICTOR COMPANY, INC., Camden, N. J. Filed June 17, 1932.



For Photographic and Electro-Physical Sound Recording Apparatus and Equipment, Apparatus and Equipment for Reproducing and/or Recording Light Effects, Apparatus and Equipment for the Coordinated Recording and/or Reproducing of Light and Sound Effects, Stereopticons, Kinematographs, Kinematographic Cameras, Stereopticon Slides and Records, Stereotropes, Microscopic Motion-Pictures and Slides, Autochrome Slides, Any and All Combinations of Sound Picture Recording and Reproducing Apparatus for Industrial Purposes, Educational Purposes and Entertainment Purposes, Parts Thereof and Accessories Therefor—Namely, Sound Film, Picture Film, Combined Sound and Picture Film, Film-Feeding and/or Guiding Devices, Film Magazines, Film Duplicating Apparatus, Cameras, Current and/or Voltage Indicating Devices, Projection Screens, Faders.
Claims use since May 31, 1932.

Ser. No. 332,364. WALTER E. BREARLEY, doing business as The Brearley Co., Rockford, Ill. Filed Nov. 22, 1932.

DICTATOR

For Weighing Scales.
Claims use since Oct. 26, 1932.

Ser. No. 333,113. JOHN D. BROCK, doing business as Specialty Optical Co., Kansas City, Mo. Filed Dec. 16, 1932.

BROCK-ACE

For Ophthalmic Mountings.
Claims use since Jan. 16, 1932.

Ser. No. 333,150. DWIGHT I. COOKE, Washington, D. C. Filed Dec. 17, 1932.

PHOTOFLOR

For Phosphoric Photo Screens.
Claims use since Sept. 1, 1932.

CLASS 27

Horological Instruments

Ser. No. 332,883. JAEGER WATCH COMPANY, INC., New York, N. Y. Filed Dec. 8, 1932.

MAGNETRIC

For Clocks Operated by Electro-Motive Power.
Claims use since Oct. 15, 1932.

Ser. No. 333,064. GORHAM MANUFACTURING COMPANY, Providence, R. I. Filed Dec. 14, 1932. Under section 5b of the act of 1905 as amended in 1920.

GORHAM

For Clocks, Watches, and Parts Thereof.
Claims use since 1904.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 332,768. FRIEDMAN SILVER CO., INC., Brooklyn, N. Y. Filed Dec. 5, 1932.



For sterling Silver Hollow Ware and for Hollow Ware Plated with Precious Metal.
Claims use since Oct. 25, 1932.

CLASS 29

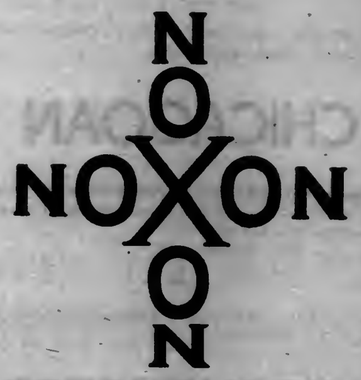
Brooms, Brushes, and Dusters

Ser. No. 322,122. H. L. STERKEL, Ravensburg, Germany. Filed Dec. 12, 1931.



For Artist, Painter, Signpainter, Glider, Druggist Brushes, Varnish, Glue Stencil, Gum, Porcelain, and Shaving Brushes.
Claims use since Nov. 13, 1894.

Ser. No. 332,233. NOXON BROOM COMPANY, LTD., Avoca, N. Y. Filed Nov. 17, 1932.



For Household Brooms and Brushes Made from Broom Corn.
Claims use since 1892.

CLASS 30

Crockery, Earthenware, and Porcelain

Ser. No. 331,004. ONONDAGA POTTERY COMPANY, Syracuse, N. Y. Filed Oct. 6, 1932.

adobe ware

SYRACUSE CHINA

No rights are asserted to the exclusive use of the words "Ware" and "China" apart from the mark as shown in the drawing. Applicant is the owner of Reg. 104,744.

For China Table Ware, Both Domestic and Commercial, and Ornamental China Ware.

Claims use since Sept. 27, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 333,579. ELECTROLUX SERVEL CORPORATION, New York, N. Y. Filed Jan. 3, 1933.

BROOKLYNITE

For Household and Store Refrigerators and Parts Thereof, and Refrigerating Systems Used for the Preservation of Foodstuffs or Other Matter.

Claims use since January, 1930.

Ser. No. 333,580. ELECTROLUX SERVEL CORPORATION, New York, N. Y. Filed Jan. 3, 1933.

CHICAGOAN

For Household and Store Refrigerators and Parts Thereof, and Refrigerating Systems Used for the Preservation of Foodstuffs or Other Matter.

Claims use since January, 1932.

Ser. No. 333,581. ELECTROLUX SERVEL CORPORATION, New York, N. Y. Filed Jan. 3, 1933.

KITCHENETTE

For Household and Store Refrigerators and Parts Thereof, and Refrigerating Systems Used for the Preservation of Foodstuffs.

Claims use since January, 1928.

Ser. No. 333,582. ELECTROLUX SERVEL CORPORATION, New York, N. Y. Filed Jan. 3, 1933.

NEW YORKER

For Household and Store Refrigerators and Parts Thereof, and Refrigerating Systems Used for the Preservation of Foodstuffs or Other Matter.

Claims use since January, 1929.

CLASS 35

Belting, Hose, Machinery Packing, and Nonmetallic Tires

Ser. No. 332,598. JOEL S. PERKINS & SON, Philadelphia, Pa. Filed Nov. 29, 1932.

TUFHAIR

For Round Leather Belting.

Claims use since Oct. 1, 1931.

CLASS 37

Paper and Stationery

Ser. No. 332,654. HAMMERMILL PAPER COMPANY, Erie, Pa. Filed Dec. 1, 1932.

PROVIDENT SAFETY

No claim is made to the exclusive right to use the word "Safety" apart from the mark as shown.

For Safety Paper.

Claims use since Nov. 19, 1932.

Ser. No. 332,962. ROBBINS-SCHULMAN STATIONERY CO. INC., New York, N. Y. Filed Dec. 10, 1932.

ROBIN BOND

No claim is made to the exclusive use of the word "Bond" apart from the mark as shown on the drawing.

For Bond Paper.

Claims use since Sept. 17, 1926.

Ser. No. 333,108. REYNOLDS METALS COMPANY, New York, N. Y. Filed Dec. 15, 1932.

KWICK

For Metallic Foil for Wrapping Paper.

Claims use since Oct. 1, 1932.

Ser. No. 332,442. STRATHMORE PAPER COMPANY, Mittineague, Mass. Filed Dec. 28, 1932.

Thistlemark

For Writing and Printing Paper.

Claims use since Dec. 2, 1932.

CLASS 38

Prints and Publications

Ser. No. 307,543. CRESCENT PUBLISHING CO., INC., New York, N. Y. Filed Nov. 4, 1930.

LIVELY STORIES

For Printed Periodical Published Monthly and at Other Intervals.

Claims use since Oct. 27, 1930.

Ser. No. 307,544. CRESCENT PUBLISHING CO., INC., New York, N. Y. Filed Nov. 4, 1930.

WESTLAND LOVE MAGAZINE

For Printed Periodical Published Monthly and at Other Intervals.

Claims use since Oct. 27, 1930.

Ser. No. 313,282. THE CHICAGO ASSOCIATION OF COMMERCE, Chicago, Ill. Filed Apr. 18, 1931.

COMMERCE

BUSINESS VOICE OF THE MIDDLE WEST

For Periodical Magazine.

Claims use since Feb. 7, 1931.

Ser. No. 329,885. BULLETIN COMPANY, Philadelphia, Pa. Filed Aug. 27, 1932.

Close-Ups on the Sport Screen (Trade Mark) BY LYNN C. DOYLE

The words "Trade Mark" are herein disclaimed apart from the mark as shown. Applicant herein disclaims the exclusive right to the use of the letters "Lynn C. Doyle" apart from the mark as shown, without, however, waiving any common law rights thereto. Applicant, however, does not disclaim the words "Lynn C. Doyle" as a pen name or nom de plume meaning and pronounced "Linseed Oil."

For Newspaper Articles.

Claims use since 1896.

Ser. No. 333,057. CALIFORNIA RETAIL GROCERS AND MERCHANTS ASSOCIATION, LTD., San Francisco, Calif. Filed Dec. 14, 1932.

California Retail GROCERS ADVOCATE

For Weekly Publication.

Claims use since Oct. 17, 1930.

Ser. No. 333,080. H. S. RICH & CO., Chicago, Ill. Filed Dec. 14 1932.

THE WESTERN BREWER

For Publication Published Monthly or from Time to Time.

Claims use since Aug. 15, 1876.

Ser. No. 333,152. REUBEN L. GOLDBERG, New York, N. Y. Filed Dec. 17, 1932.

The Inventions of Professor Lucifer G. Butts, A.K.

For Cartoons and Comic Strips.

Claims use since Jan. 26, 1929.

Ser. No. 333,316. THE F-R PUBLISHING CORPORATION, New York, N. Y. Filed Dec. 28, 1932.

METROPOLITAN MONOTYPES

For Magazine Section.

Claims use since Feb. 28, 1925.

Ser. No. 333,318. THE F-R PUBLISHING CORPORATION, New York, N. Y. Filed Dec. 28, 1932.

OVER THE WAVES

For Magazine Section.

Claims use since June 18, 1932.

Ser. No. 333,319. THE F-R PUBLISHING CORPORATION, New York, N. Y. Filed Dec. 28, 1932.

SHOUTS AND MURMURS

For Magazine Section.

Claims use since Feb. 16, 1929.

Ser. No. 333,320. THE F-R PUBLISHING CORPORATION, New York, N. Y. Filed Dec. 23, 1932.

THE SKY LINE

For Magazine Section.
Claims use since Apr. 11, 1925.

Ser. No. 333,321. THE F-R PUBLISHING CORPORATION, New York, N. Y. Filed Dec. 23, 1932.

READING AND WRITING

For Magazine Section.
Claims use since Oct. 29, 1927.

Ser. No. 333,323. THE F-R PUBLISHING CORPORATION, New York, N. Y. Filed Dec. 23, 1932.

THE WAYWARD PRESS

For Magazine Section.
Claims use since Dec. 3, 1927.

Ser. No. 333,398. NEW YORK EVENING JOURNAL, INC., New York, N. Y. Filed Dec. 27, 1932.

In Mayfair

For Newspaper Section.
Claims use since Apr. 28, 1931.

Ser. No. 333,417. TECHNOCRACY PUBLISHERS, Los Angeles, Calif. Filed Dec. 27, 1932.

TECHNOCRACY

For Publication Issued Monthly.
Claims use since Dec. 12, 1932.

CLASS 39

Clothing

Ser. No. 330,219. WOHL SHOE COMPANY, St. Louis, Mo. Filed Sept. 9, 1932.



For Women's, Misses', and Children's Shoes, Boots, Overshoes, and House Slippers Made of Plain and Fancy Leathers, Satins, Felts, Straws, Rubber, Velvets, and Metal Cloths for Street and Dress Wear.
Claims use since Aug. 15, 1932.

Ser. No. 331,897. KIRBY, BLOCK & FISCHER, INC., New York, N. Y. Filed Nov. 4, 1932.

KIRBURY

For Boys' and Men's Clothing and Furnishings and Women's, Misses', and Children's Wearing Apparel—viz, Underwear, Hosiery, and Leather and Fabric Gloves.
Claims use since Sept. 10, 1932.

Ser. No. 331,904. TERESINA MARIA NEGRI, Paris, France. Filed Nov. 4, 1932.

"GRISINA"

For Bathing Suits.
Claims use since Apr. 1, 1932.

Ser. No. 332,095. THE MENIHAN COMPANY, Rochester, N. Y. Filed Nov. 12, 1932.

LockTRED

For Leather Shoes, Fabric Shoes, and Shoes of Both Leather and Fabric.
Claims use since Nov. 4, 1932.

Ser. No. 332,162. FRANK SCHOBLE AND COMPANY, Philadelphia, Pa. Filed Nov. 15, 1932.

WARBURTON

For Hats for Men, Women, and Children.
Claims use since Sept. 2, 1932.

Ser. No. 332,308. GEORGE MOLTZ, INC., New York, N. Y. Filed Nov. 19, 1932.

PLUS ULTRA NEW YORK Dunmoor Hat

No claim is made to the words "Plus Ultra," "Hat," and "New York" apart from the mark shown on the drawing.
For Ladies' and Children's Hats and Mufflers.
Claims use since Nov. 1, 1932.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 332,366. CROSSETT SHOE CO., Augusta, Me. Filed Nov. 22, 1932.

LONG LIFE

For Shoes of Leather, Leather and Rubber, Leather and Fabric and Combinations Thereof, and Rubber Heels.
Claims use since Jan. 10, 1901.

Ser. No. 332,586. HERBERT A. LOEB, New York, N. Y. Filed Nov. 29, 1932.

SLYDRESS

For Nurses' and/or Maids' Uniforms.
Claims use since Nov. 8, 1932.

Ser. No. 332,686. COHEN, GOLDMAN & CO., INC., New York, N. Y. Filed Dec. 2, 1932.

Knit-tex Angora

No claim is made to the exclusive use of the word "Angora" separate and apart from the mark shown in the drawing.
For Men's, Boys', and Children's Outer Garments, Consisting of Coats, Vests, Pants, Trousers, Top-Coats, Overcoats and Summer Clothing for Men, Boys, and Children, Consisting of Coats, Vests, and Pants Made of Either Woven or Knitted Material.
Claims use since Apr. 15, 1932.

Ser. No. 332,747. LEO M. COOPER, doing business as Leo M. Cooper Co., New York, N. Y. Filed Nov. 30, 1932.

MINITON

For Nurses' Uniforms, Maids' Uniforms, and Uniform Dresses.
Claims use since Nov. 5, 1932.

Ser. No. 332,805. BARON DRESS COMPANY, Boston, Mass. Filed Dec. 6, 1932.

La Jeune Maternitée

No claim being made to the word "Maternitee" apart from the mark shown in the drawing.
For Dresses.
Claims use since September, 1932.

Ser. No. 332,865. BERTHOLD LAMM, Baltimore, Md. Filed Dec. 7, 1932.

Flan-O-Twill

Applicant hereby disclaims the descriptive word "Twill" apart from the mark as shown on the drawing.
For Men's and Boys' Jackets, Coats, Pants, Riding Breeches, and Knickers.
Claims use since Jan. 4, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 325,676. CAMILLO BARBEE, Vienna, Austria. Filed Mar. 31, 1932.

HEPOL

For Hair Combs Which are Filled or Coated with Radio-Active Substances.
Claims use since March, 1931.

Ser. No. 332,074. THE RIKER COMPANY, Newark, N. J. Filed Nov. 11, 1932.

RIKER

For Buckles Made of Non-Precious Metal, Including Ornamental Buckles for Women's Millinery, Dresses and Shoes.
Claims use since 1910.

Ser. No. 332,429. UNIVERSAL BUTTON FASTENING & BUTTON COMPANY, Detroit, Mich. Filed Nov. 23, 1932.

UNIBON

For Buttons of Non-Precious Material.
Claims use since Nov. 15, 1932.

Ser. No. 332,580. MAX FACTOR & CO. INC., Los Angeles, Calif. Filed Nov. 29, 1932.

PERCERN

For Toupees, Wigs, Transformations, Hair Lace Pieces.
Claims use since Sept. 15, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 328,620. RIVERSIDE & DAN RIVER COTTON MILLS, INC., Danville, Va. Filed July 7, 1932.

SWANEE

For Broadcloth Shirting in the Piece.
Claims use since Dec. 1, 1931.

Ser. No. 329,187. COLONIAL MILLS, INC., New York, N. Y. Filed July 28, 1932.

PERLETTE

For Rayon Crepe in the Piece.
Claims use since June 19, 1932.

Ser. No. 330,793. THE MAY DEPARTMENT STORES COMPANY, St. Louis, Mo. Filed Sept. 29, 1932.

BABY ARISTOCRAT

For Blankets.
Claims use since May, 1932.

Ser. No. 331,254. JOHN D. HARRIS, New York, N. Y. Filed Oct. 14, 1932.



Applicant disclaims each of the words "The Italian Oriental Rug" per se except in combination with one or more of the other features of the mark. Applicant disclaims the word "Angora" except in combination with one or more of the other features of the mark.
For Textile Rugs.
Claims use since September, 1928.

Ser. No. 331,276. LOMBARDI KNITCRAFT, INC., New York, N. Y. Filed Oct. 14, 1932.

Lombardi Knitcraft

For Woolen and/or Silk Knitted Fabrics.
Claims use since Sept. 13, 1921.

Ser. No. 331,520. WAMSUTTA MILLS, New Bedford, Mass. Filed Oct. 24, 1932.



All wording appearing on the drawing, with the exception of the word "Wamsutta" is disclaimed apart from the mark as shown.
For Cotton Piece Goods, Pillow Cases, and Sheets.
Claims use since Feb. 1, 1928.

Ser. No. 332,409. ROBERT HELLER, INC., New York, N. Y. Filed Nov. 23, 1932.

METROPA

For Upholstery and Drapery Fabrics Made from Wool, Cotton, Silk, Artificial Silk, Combinations of Wool, Cotton, Silk, and Artificial Silk, and Such Combinations Plus Horsehair, Artificial Horsehair or Other Synthetic Threads.
Claims use since Feb. 10, 1932.

Ser. No. 332,492. B. B. & R. KNIGHT CORPORATION, Providence, R. I. Filed Nov. 26, 1932.

SPUNZETTE

For Cloth in the Piece Made All or in Part of Worsted, Wool, Mohair, Camel's Hair, Alpaca, Silk, Rayon, Cotton.
Claims use since Oct. 18, 1932.

Ser. No. 332,845. HOWLETT & HOCKMEYER CO. INC., New York, N. Y. Filed Dec. 7, 1932.

VELISSÉ

For Textiles of Silk, Wool and Cotton, and Mixtures of Silk and Wool, and Cotton and Wool, All in the Piece.
Claims use since Dec. 2, 1932.

CLASS 43

Thread and Yarn

Ser. No. 332,445. COMPAGNIE FRANCO AUSTRALIENNE DE LAINES FILEES, Roubaix, France. Filed Nov. 25, 1932.

LAINES DU PINGOUIN

The word "Laines" being disclaimed apart from the mark shown on the drawing.
For Woolen Thread and Yarn.
Claims use since June 21, 1927.

Ser. No. 332,446. COMPAGNIE FRANCO AUSTRALIENNE DE LAINES FILEES, Roubaix, France. Filed Nov. 25, 1932.



No claim being made to the representation of the skein of yarn apart from the mark shown.
For Woolen Thread and Yarn.
Claims use since Aug. 12, 1927.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 332,707. THE MASSILLON RUBBER COMPANY, Massillon, Ohio. Filed Dec. 1, 1932.

CHUMS

For Rubber Gloves for Use in Autopsies, Beauty Treatment, and the Like.
Claims use since Oct. 27, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 323,425. C. F. WAID, Dallas, Tex. Filed Jan. 25, 1932.



No claim is made to the representation of a container, nor to any of the words appearing on the drawing, nor to the representation of a pasteboard bottle cap per se.
For Nonalcoholic Maltless Orange Drink.
Claims use since Dec. 1, 1931.

Ser. No. 325,924. SOCIETÀ REGIE TERME DI MONTECATINI, Rome, Italy. Filed Apr. 8, 1932.

TAMERICI

For Natural Mineral Waters and Salts Made Therefrom for Drinking Purposes.
Claims use since 1897.

Ser. No. 330,246. THE DIXI-COLA CO., Birmingham, Ala. Filed Sept. 12, 1932.

DIXI-Cola

No claim is made to the exclusive use of the word "Cola", when used separate and apart from the mark as shown in the drawing.
For Nonalcoholic Maltless Cola Flavored, Carbonated Beverage Sold as a Soft Drink, and for Syrups Used in Making the Same.
Claims use since Oct. 1, 1929.

Ser. No. 331,620. JESSE LU VERN DONAHOO, doing business as The Jin Twin Company, Minneapolis, Minn. Filed Oct. 27, 1932.

jin's twin

For Nonalcoholic Maltless Beverage Sold as a Soft Drink.
Claims use since Oct. 15, 1932.

Ser. No. 333,452. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 27, 1932.



For Root Beer Extract.
Claims use since Nov. 23, 1932.

Ser. No. 333,479. HERCULES MINERAL SPRINGS, INC., Detroit, Mich. Filed Dec. 29, 1932.



The words "Mineral Springs" apart from the mark shown are disclaimed. The drawing is shaded to indicate the color red.
For Mineral Water.
Claims use since Nov. 22, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 314,490. JOSEPH O. EDY, Alameda, Calif. Filed May 13, 1931.

Edy's

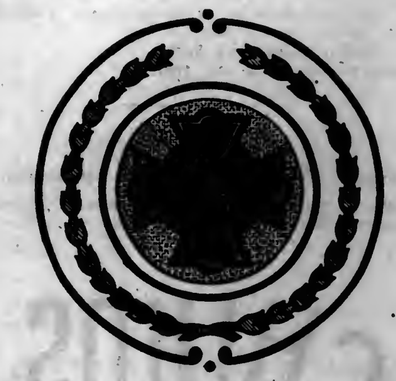
The mark is in the handwriting of applicant.
For Candies, Ice-Cream.
Claims use since May 2, 1925.

Ser. No. 315,727. CANADA'S PRIDE PRODUCTS COMPANY, INC., New York, N. Y. Filed June 12, 1931.

Johnson's Milco-Malt

For Compound for Preparing Chocolate for Drinks, and Making Malted Milk Beverages.
Claims use since Nov. 5, 1926.

Ser. No. 318,681. ROUNDY, PECKMAN & DEXTER CO., Milwaukee, Wis. Filed Sept. 2, 1931.



The cross is usually printed in red, the inner portion of the circular background blue, the outer portion thereof gold and the wreath green and the lining of the drawing is intended to represent such colors. In some instances this particular scheme is varied. It is not desired to limit the mark to any particular color and color is therefore disclaimed.
For Canned Fruits, Canned Vegetables, Canned Fish (Including Oysters, Lobsters, Shrimp), Canned Soups, Canned Sliced Beef in Glass, Mince Meat, Bean Sprouts, Chili Con Carne, Chow Mein Noodles, Mushrooms, Spaghetti, Macaroni, Vermicelli, Egg Noodles, Cranberry Sauce, Pork and Beans, Glace Nut Dates and Figs, Coffee, Cocoa, Tea, Evaporated Milk, Candies, Cocoanut; Graham, Buckwheat, and Pancake Flour; Pure Flavoring Extracts for Food Purposes, Compound Flavoring Extracts for Food Purposes, Rice, Powdered Sugar, Corn Flakes, Corn Starch for Food Purposes, Rolled Oats, Navy Beans, Biscuits, Cookies, Peanuts, Modified Cherries, Honey, Jams, Jellies, Apple Butter, Pure Fruit Preserves, Compounds of Fruit Preserves, Salted Nuts, Prepared Mustard, Salad (Cotton Seed) Oil, Olive Oil, Jelly Powder, Catsup, Chili Sauce, French Dressing, Horse Radish, Mayonnaise Dressing, Pepper Sauce, Sandwich Spread, Thousand Island Dressing, Chow Chow, Chow Relish, Chili Powder, Spices, Herbs for Food Purposes, Seeds for Food Purposes, Pickles, Sweet Onions, Sweet Relish, Olives, Peanut Butter, Povidia (Pure Jam); Cider Vinegar, White Vinegar, and Syrups (Glucose, Glucose and Cane, and Cane and Maple).
Claims use since Aug. 1, 1884.

Ser. No. 318,891. ARTHUR E. BARILI, Los Angeles, Calif. Filed Sept. 8, 1931.



For Pastry and Ravioli.
Claims use since Jan. 1, 1926.

Ser. No. 322,069. SAN FERNANDO HEIGHTS LEMON CO., San Fernando, Calif. Filed Dec. 12, 1931.



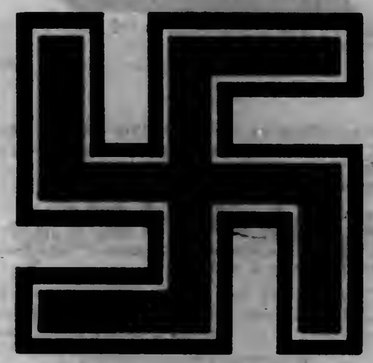
The portrait forming a part of the mark is merely fanciful.
For Fresh Lemons.
Claims use since Apr. 19, 1930.

Ser. No. 322,535. SYLVANUS HYNES, doing business as The Hynes Ice & Cold Storage Co., Canon City, Colo. Filed Dec. 28, 1931.



No claim is made to the words "Apples" and "Brand" nor to the representation of the apple apart from the mark shown.
For Apples in their Natural State.
Claims use since Sept. 1, 1931.

Ser. No. 327,683. FEDERAL MILL, INC., Lockport, N. Y. Filed June 3, 1932.



Applicant is the owner of registrations No. 68,136, dated Mar. 10, 1908 (renewed Mar. 10, 1928), and No. 184,662, dated May 27, 1924, and of the marks shown therein.
For Wheat Flour; Live Stock Feeds Made from Wheat, Corn, and Oats; Cereal Products—Namely, Table Bran, Graham Flour, Muffin Flour, Whole Wheat Flour, Cornmeal Breakfast Food, Gluten Flour, Rolled Oats, and Middlings and Bread.
Claims use since May 28, 1912, on bread; May 20, 1907, on remaining goods.

Ser. No. 328,345. THE BARTELDES SEED COMPANY, Lawrence, Kans. Filed June 28, 1932.

T. N. T.

Applicant is the owner of registration No. 269,861.
For Pop Corn in its Natural State.
Claims use since Dec. 6, 1929.

Ser. No. 328,664. ESKIMO PIE CORPORATION, doing business as New York Eskimo Pie Corporation, New York, and Brooklyn, N. Y. Filed July 9, 1932.

SNOW-MAN

For Frozen Confections.
Claims use since May 15, 1932.

Ser. No. 329,272. STEPHEN B. O'HAGAN, New Scotland, N. Y. Filed July 29, 1932.

Helderberg HO-MAID ICE CREAM

Applicant disclaims the words "Ice Cream" as not a part of the trade-mark sought to be registered.
For Ice Cream.
Claims use since June 6, 1928.

Ser. No. 329,290. GIUSEPPE L. MEZZETTA, San Francisco, Calif. Filed Aug. 2, 1932.



No claim is made to the word "Olio" apart from the mark as shown. The drawing is lined for green and blue.
For Olive Oil.
Claims use since May 12, 1924.

Ser. No. 329,668. COMMERCIAL FOOD CORPORATION, New York, N. Y. Filed Aug. 19, 1932.

LAURA DEEN

For Prepared Biscuit Flour, Prepared Waffle Flour, Prepared Cake Flour, Chocolate Fillings, Fruit Powders; Prepared Jams, Jellies, and Marmalades; and Cream and Pie Fillings.
Claims use since Aug. 10, 1932.

Ser. No. 329,980. COACHELLA GRAPEFRUIT ORCHARDS INC., Los Angeles, Calif. Filed Aug. 30, 1932.

DESERT TREAT

For Fresh Citrus Fruits.
Claims use since May 15, 1931.

Ser. No. 330,256. W. RALPH GILES, doing business as Klik Co., Narberth, Pa. Filed Sept. 12, 1932.

KLIK

For Baking Powder.
Claims use since Aug. 15, 1932.

Ser. No. 330,521. THE RUBEL BAKING COMPANY, Cincinnati, Ohio. Filed Sept. 20, 1932.

RUBEL'S HEIDELBERG RYE

No claim being made for the words "Rubel's, Heidelberg Rye" except in the manner shown.
For Rye Bread.
Claims use since Sept. 1, 1932.

Ser. No. 331,899. FOREMOST DAIRIES, INC., Jacksonville, Fla. Filed Oct. 20, 1932.

DIXIE DOODLE

Applicant expressly disclaims any intention to claim any exclusive right to the use of the words "A Delicious Frozen Confection" and the words "Net Weight 2 Oz," shown on the drawing, it being recognized that such words are descriptive and not capable of exclusive appropriation.
For Chocolate Covered Frozen Confections, Ice Cream, Sherbets, and Custards, Either Chocolate Coated or Without Such Coating.
Claims use since Oct. 1, 1931.

Ser. No. 331,838. F. G. VOGT & SONS, INCORPORATED, Philadelphia, Pa. Filed Nov. 2, 1932.

VITA-G

For Liver Sausage.
Claims use since Sept. 14, 1932.

Ser. No. 331,846. ALBERS BROS. MILLING COMPANY, Portland, Oreg. Filed Nov. 3, 1932.

Calf-Manna

No claim is made to trade-mark rights in the word "Calf" apart from the mark as shown in the drawing.
For Mixed Calf Food.
Claims use since Aug. 11, 1932.

Ser. No. 331,883. APPLE GROWERS ASSOCIATION, Hood River, Oreg. Filed Nov. 4, 1932.

Hood River Brand



No claim is made to the words "Hood River Brand" apart from the mark as shown.
For Fresh Deciduous Fruits.
Claims use since 1928.

Ser. No. 332,000. EMELIA E. SINGER, Los Angeles, Calif. Filed Nov. 4, 1932.

Mrs Singer's

The trade-mark is a facsimile of applicant's signature.
For Prepared Pie-Crust Mixture.
Claims use since July 29, 1931.

Ser. No. 332,127. SNIDER PACKING CORPORATION, Rochester, N. Y. Filed Nov. 14, 1932.

MISTLETOE

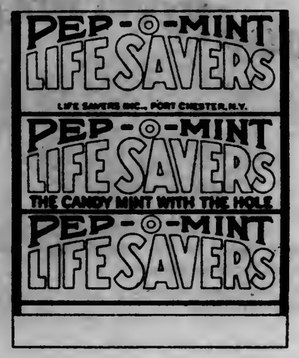
For Food Products in Glass and Tin—Namely, Fruits, Vegetables, Berries, Sauer Kraut, Succotash, Apple Sauce, Tomato Catsup, and Chili Sauce.
Claims use since 1892.

Ser. No. 332,191. MAX LANDAU, doing business as Max Landau & Co., New York, N. Y. Filed Nov. 16, 1932.



All wording is disclaimed apart from the mark as shown on the drawing.
For Cheese.
Claims use since June 1, 1932.

Ser. No. 332,303. LIFE SAVERS, INC., Port Chester, N. Y. Filed Nov. 19, 1932.



No right of registration is claimed for the wording appearing on the drawing except the words "Life Savers" and "Life Savers, Inc." The word "Pep-O-Mint" is claimed as shown on the drawing.

For Candy.

Claims use since Oct. 31, 1930.

Ser. No. 332,304. LIFE SAVERS, INC., Port Chester, N. Y. Filed Nov. 19, 1932.



For Candy.

Claims use since Jan. 27, 1930.

Ser. No. 332,370. THE FITZGERALD MFG. COMPANY, doing business as Old Berkshire Coffee Company, Torrington, Conn. Filed Nov. 22, 1932.



No claim is made to the wording apart from mark as shown in the drawing.

For Coffee.

Claims use since Nov. 1, 1932.

Ser. No. 332,506. ALGERIAN DATE IMPORTING CO., New York, N. Y. Filed Nov. 28, 1932.



The words "Tunis Dates from Touggourt," "Famous" and "Brand" are disclaimed apart from the mark shown on the drawing.

For Fresh Dates.

Claims use since Oct. 12, 1932.

Ser. No. 332,536. R. O. MACDONALD, doing business as Native Son Orchards Co., Lindsay, Calif. Filed Nov. 28, 1932.

FLOR de ORO

For Fresh Citrus Fruits.

Claims use since Dec. 1, 1930.

Ser. No. 332,550. REDLANDS FOOTHILL GROVES, Redlands, Calif. Filed Nov. 28, 1932.

SUNNY COVE

For Fresh Citrus Fruits.

Claims use since Oct. 16, 1931.

Ser. No. 332,621. JOHN C. LETTS, doing business as Ayrlawn Farms, Bethesda, Md. Filed Nov. 30, 1932.

AYRLAWN FARMS

For Dairy Products—Namely, Milk, Cream, Butter, Cheese, and Eggs, and Farm Products—Namely, Live and Dressed Poultry, and Vegetables.

Claims use since 1928.

Ser. No. 332,649. KANSAS CITY WHOLESALE GROCERY CO., Kansas City, Mo. Filed Dec. 1, 1932.

KANSAS CITY MAID



The picture of the girl forming a part of the mark is fanciful.

For Coffee.

Claims use since Nov. 30, 1932.

Ser. No. 332,661. CHAS. W. PRIDDY & COMPANY, INC., Norfolk, Va. Filed Dec. 1, 1932.

THE BEST



No claim is made to the words, "The Best" apart from the mark as shown.

For Fish Meal to be Used as Poultry and Stock Feed.

Claims use since July, 1930.

Ser. No. 332,721. A. H. KENNEDY, Rockport, Ind. Filed Dec. 3, 1932.

KENNEDY'S
LONGEVITY
FOOD

The word "Food" is hereby disclaimed apart from the mark shown.

For Whole Wheat Flour Combined with Flax Seed Meal and Psyllium Seed Meal.

Claims use since Jan. 1, 1932.

Ser. No. 332,828. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, New York, N. Y. Filed Dec. 7, 1932.

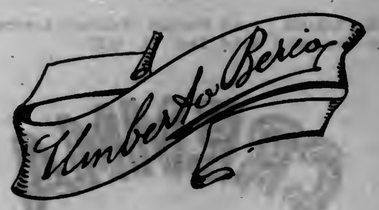
RED
THE GREAT ATLANTIC &
CIRCLE
PACIFIC TEA COMPANY
COFFEE
MAIN OFFICE NEW YORK

The lining in the drawing representing the color red; no claim being made to the exclusive use of the words "Coffee Main Office New York" apart from the mark as shown in the drawing.

For Coffee.

Claims use since Oct. 1, 1932.

Ser. No. 332,911. ARTHUR J. CAPONE, doing business as Elios, New York, N. Y. Filed Dec. 9, 1932.



For Olive Oil.

Claims use since August, 1928.

Ser. No. 332,950. VICTORIA FUSILLI COMPANY, Long Island City, N. Y. Filed Dec. 10, 1932.

NON-SKID

For Spaghetti and Alimentary Paste Products.

Claims use since Oct. 6, 1932.

Ser. No. 333,008. JOHN BENEDICT O'NEILL, doing business as Alaska Sea Products, Inc. and Alaska Distributing Co., Seattle, Wash. Filed Dec. 12, 1932.

Alaska Pak

For Canned Crab Meat, Crab Legs and Clams.

Claims use since Nov. 10, 1931.

Ser. No. 333,010. THE QUAKER OATS COMPANY, Chicago, Ill. Filed Dec. 12, 1932.



The lining indicating shading only; no claim being made to the word "Flour" and the representation of a sack of flour apart from the mark as shown.
For Wheat Flour.
Claims use since 1905.

Ser. No. 333,022. JOHN WRIGHT (LONDON) LIMITED, London, England. Filed Dec. 12, 1932.

CREMMA

For Dog Biscuits.
Claims use since Feb. 21, 1929.

Ser. No. 333,114. CHAPPEL BROS., INC., Rockford, Ill. Filed Dec. 16, 1932.

Earlyne

For Bird Food.
Claims use since Nov. 1, 1932.

Ser. No. 333,532. RIVERSIDE PRODUCTS COMPANY, Cincinnati, Ohio. Filed Dec. 30, 1932.

GUARDSMAN

For Malt Syrup.
Claims use since Nov. 20, 1932.

CLASS 48

Malt Beverages and Liquors

Ser. No. 332,257. KASKO PRODUCTS CO., INC., Philadelphia, Pa. Filed Nov. 18, 1932.

Kasko LAGER

The word "Lager" is disclaimed except in connection with the balance of the mark as shown.
For Malt Beverage, with Not More Than the Legal Alcoholic Content.
Claims use since Nov. 9, 1932.

Ser. No. 333,184. CLOVERDALE SPRING CO., Baltimore, Md. Filed Dec. 19, 1932.

Blue Ridge

For Malt Beverages Having Not More Than the Legal Alcoholic Content.
Claims use since Dec. 9, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 333,383. CRESTA BLANCA COMPANY, San Francisco, Calif. Filed Dec. 27, 1932.

CRESTA BLANCA

For Brandy.
Claims use since May 3, 1929.

Ser. No. 333,421. PENNSYLVANIA DISTILLING COMPANY, INC., Logansport, Pa., and Brooklyn, N. Y. Filed Dec. 28, 1932.



For Whiskey.
Claims use since 1904.

Ser. No. 333,630. THE FRANKFORT DISTILLERY, INC., Louisville, Ky. Filed Jan. 4, 1933.

Lucky Star

For Whiskey.
Claims use since 1925.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

FEBRUARY 7, 1933

300,709. PRETZELS. AMERICAN CONE & PRETZEL COMPANY, Philadelphia, Pa.
Filed March 19, 1930. Serial No. 297,508. PUBLISHED APRIL 29, 1930. Class 46.

300,710. RADIO RECEIVING SETS. UNITED STATES RADIO & TELEVISION CORPORATION, Chicago, Ill.
Filed August 15, 1929. Serial No. 288,578. PUBLISHED OCTOBER 21, 1930. Class 21.

300,711. MALT SYRUP ADAPTED FOR USE AS AN INGREDIENT IN MAKING BREAD AND IN MAKING OTHER BAKERY PRODUCTS. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed September 27, 1932. Serial No. 330,714. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,712. CANNED SALMON. WESCO FOODS COMPANY, Cincinnati, Ohio.
Filed September 27, 1932. Serial No. 330,717. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,713. CANNED FISH, CANNED FRUITS, CANNED VEGETABLES, ALIMENTARY PASTES, OLIVES, EDIBLE OILS, CANDY, CHOCOLATE, TOMATO PASTE, SPAGHETTI, MACARONI. F. & M. IMPORTING CO. INC., doing business as Famico Company, Los Angeles, Calif.
Filed October 4, 1932. Serial No. 330,983. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,714. DOG FOOD. ANIMAL FOODS COMPANY, San Jose, Calif.
Filed October 11, 1932. Serial No. 331,135. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,715. NATURAL AND SYNTHETIC FOOD FLAVORING EXTRACTS. FELTON CHEMICAL COMPANY, INC., Brooklyn, N. Y.
Filed October 11, 1932. Serial No. 331,151. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,716. CANNED PINEAPPLE. HAWAIIAN PINEAPPLE COMPANY, LTD., Honolulu, Territory of Hawaii, and San Francisco, Calif.
Filed October 11, 1932. Serial No. 331,152. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,717. MAYONNAISE. MARTIN BROS., New Orleans, La.
Filed October 11, 1932. Serial No. 331,159. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,718. FROZEN FRUIT BARS. OLD KING KOLD CORPORATION, Nashville, Tenn.
Filed October 12, 1932. Serial No. 331,212. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,719. CANDY. THE CURTISS CANDY COMPANY, Chicago, Ill.
Filed October 14, 1932. Serial No. 331,248. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,720. CANDY USED AS A PERFUME FOR THE BREATH. ARMAND H. DE MOTT, doing business as Safebreath Products Co., Brooklyn, N. Y.
Filed October 18, 1932. Serial No. 331,331. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,721. SCOURING PAD MADE OF STEEL WOOL. JOSEF BRANDSTETTER, doing business as Alto Mfg. Co., Chicago, Ill.
Filed April 29, 1932. Serial No. 326,604. PUBLISHED NOVEMBER 22, 1932. Class 4.

300,722. BRAKE LINING RESTORATIVE PREPARATION. PENN-JERSEY AUTO STORES, INC., Easton, Pa.
Filed May 20, 1932. Serial No. 327,285. PUBLISHED NOVEMBER 22, 1932. Class 4.

300,723. FILLERS FOR DIAPER HOLDING GARMENTS, MADE OF TEXTILE FABRIC. X-OTIC INCORPORATED, New York, N. Y.
Filed July 19, 1932. Serial No. 328,898. PUBLISHED NOVEMBER 15, 1932. Class 42.

300,724. WOOLEN AND WORSTED FABRICS IN THE PIECE. WANSKUCK COMPANY, Providence, R. I., and New York, N. Y.
Filed July 22, 1932. Serial No. 329,005. PUBLISHED NOVEMBER 15, 1932. Class 42.

300,725. BRUSHLESS SHAVING CREAM. KAUFMANN DEPARTMENT STORES, INC., Pittsburgh, Pa.
Filed August 30, 1932. Serial No. 329,993. PUBLISHED NOVEMBER 22, 1932. Class 4.

300,726. WOOLEN PIECE GOODS. HAYWARD HOSIERY COMPANY, Ipswich and Waltham, Mass.
Filed August 31, 1932. Serial No. 330,014. PUBLISHED NOVEMBER 8, 1932. Class 42.

300,727. WASHING FLUIDS AND PREPARATIONS FOR REMOVING STAINS FROM FABRICS. MANUEL S. SIGREN, doing business as Chilean Products Mfg. Company, Boston, Mass.
Filed September 15, 1932. Serial No. 330,883. PUBLISHED NOVEMBER 22, 1932. Class 4.

300,728. COOKIES AND CAKES. MITCHELL BAKERY, Independence, Kans.
Filed September 16, 1932. Serial No. 330,407. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,729. DRESS, NEGLIGEE, AND WORK SHIRTS; PAJAMAS, DRESSING ROBES, BATH ROBES, BEACH ROBES; SUITS FOR MEN, WOMEN, AND CHILDREN; TROUSERS, VESTS, COATS, KNICKERS, TOP-COATS FOR MEN AND BOYS, AND RAINCOATS. STEWART & CO., Baltimore, Md.
Filed September 15, 1932. Serial No. 330,387. PUBLISHED NOVEMBER 22, 1932. Class 39.

300,730. DRY CLEANER PREPARATION. H. BEHLEN & BRO., New York, N. Y.
Filed September 17, 1932. Serial No. 330,416. PUBLISHED NOVEMBER 22, 1932. Class 4.

300,731. LEATHER DRESSING. MARTIN DENNIS COMPANY, Newark, N. J.
Filed September 20, 1932. Serial No. 330,516. PUBLISHED NOVEMBER 29, 1932. Class 4.

300,732. ALENCON LACE IN THE PIECE. STERN & STERN TEXTILE IMPORTERS, INC., New York, N. Y.
Filed September 21, 1932. Serial No. 330,555. PUBLISHED NOVEMBER 15, 1932. Class 42.

300,733. ARTIFICIAL SILK YARN AND THREAD. TUBIZE CHATILLON CORPORATION, New York, N. Y.
Filed September 23, 1932. Serial No. 330,608. PUBLISHED NOVEMBER 8, 1932. Class 43.

300,734. DOG SOAP. WILLIAM COOPER & NEPHEWS, INCORPORATED, Chicago, Ill.
Filed September 26, 1932. Serial No. 330,650. PUBLISHED NOVEMBER 22, 1932. Class 4.

300,735. SILK GOODS IN THE PIECE. LOUIS ROESSEL & CO., INC., Hazleton, Pa., and New York, N. Y.
Filed September 28, 1932. Serial No. 330,759. PUBLISHED NOVEMBER 15, 1932. Class 42.

300,736. BAKING POWDER. LAYTON PURE FOOD COMPANY, Providence, R. I., and East St. Louis, Ill.
Filed September 26, 1932. Serial No. 330,660. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,737. PICKLES. FANNING BREAD AND BUTTER PICKLE COMPANY, INC., New York, N. Y.
Filed September 21, 1932. Serial No. 330,542. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,738. CANNED TOMATOES AND CANNED PEAS. RAYMOND TLAPEK, doing business as Green Bonnet Stores, Elvins, Mo.
Filed September 16, 1932. Serial No. 330,413. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,739. CANNED FRUITS. OLYMPIA CANNING COMPANY, Olympia, Wash.
Filed September 15, 1932. Serial No. 330,378. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,740. FLAVORING SAUCE FOR MEATS, VEGETABLES, AND OTHER FOODSTUFFS. AURELIA PEARL BLANKENSHIP, doing business as The Qu-I-Hi Sauce Co., Atlanta, Ga.
Filed September 14, 1932. Serial No. 330,330. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,741. ICE CREAM IN THE FORM OF ICE CREAM SUNDAES, ICE CREAM CONES, AND ICE CREAM PACKAGES. THE "DRY-KOLD" REFRIGERATOR CO., doing business as Big Frosty Company, Niles, Mich.
Filed September 12, 1932. Serial No. 330,247. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,742. SANDWICHES. VICTOR BASCHE, doing business as Squeelee & Piggee Sandwich Co., San Francisco, Calif.
Filed July 25, 1932. Serial No. 329,089. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,743. POWDERED CEREAL HEALTH FOOD AND OVEN GOODS—NAMELY, COOKIES MADE THEREFROM. FRANK KUMMER, doing business as Astrasan Manufacturing Co., Hackensack, N. J.
Filed June 10, 1932. Serial No. 327,879. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,744. WOMEN'S WEARING APPAREL—NAMELY, WASH DRESSES, SILK DRESSES, AND HOSIERY. CLARK'S DOLLAR STORES, INC., Los Angeles, Calif.
Filed February 20, 1932. Serial No. 324,342. PUBLISHED NOVEMBER 15, 1932. Class 39.

300,745. NONALCOHOLIC MALTLESS BEVERAGES SOLD AS SOFT DRINKS. UNITED DISTILLERS LIMITED, Vancouver, British Columbia, Canada.
Filed January 11, 1932. Serial No. 322,902. PUBLISHED NOVEMBER 29, 1932. Class 45.

300,746. NONALCOHOLIC MALTLESS BEVERAGES SOLD AS SOFT DRINKS. UNITED DISTILLERS LIMITED, Vancouver, British Columbia, Canada.
Filed January 11, 1932. Serial No. 322,901. PUBLISHED NOVEMBER 29, 1932. Class 45.

300,747. NONALCOHOLIC MALTLESS BEVERAGES SOLD AS SOFT DRINKS. UNITED DISTILLERS LIMITED, Vancouver, British Columbia, Canada.
Filed January 11, 1932. Serial No. 322,900. PUBLISHED NOVEMBER 29, 1932. Class 45.

300,748. DRY CLEANING FLUID. COLUMBIA PHONOGRAPH COMPANY, INC., Bridgeport, Conn.
Filed December 24, 1931. Serial No. 322,421. PUBLISHED NOVEMBER 29, 1932. Class 4.

300,749. STICKY FLY PAPER. JOSEPH KOENIG, Philadelphia, Pa.
Filed December 2, 1931. Serial No. 321,707. PUBLISHED NOVEMBER 29, 1932. Class 50.

300,750. MINIATURE GOLF GAME. EMIL KNOPF, JR., doing business as Box Golf Company, West Brighton, Staten Island, N. Y.
Filed October 31, 1931. Serial No. 320,682. PUBLISHED NOVEMBER 29, 1932. Class 22.

300,751. CEIBA FIBER QUILTED BED COMFORTERS. DRY-ZERO CORPORATION, Chicago, Ill.
Filed October 19, 1931. Serial No. 320,187. PUBLISHED NOVEMBER 15, 1932. Class 42.

300,752. SOAPS, METAL POLISHES, ETC. VADSCO SALES CORPORATION, New York and Long Island City, N. Y.
Filed October 7, 1931. Serial No. 319,836. PUBLISHED NOVEMBER 22, 1932. Class 4.

300,753. WHEAT FLOUR. THE COMMERCIAL MILLING COMPANY, Detroit, Mich.
Filed October 5, 1931. Serial No. 319,757. PUBLISHED NOVEMBER 10, 1931. Class 46.

300,754. KNITTED OUTERWEAR—NAMELY, PULLONS, COATS, SWEATERS, JACKETS, VESTS, BEACH PAJAMAS, BEACH ROBES, CAPS, DRESSES, AND SKIRTS, FOR MEN, WOMEN, AND CHILDREN. THE MUNSINGWEAR CORPORATION, Minneapolis, Minn.
Filed September 28, 1931. Serial No. 319,493. PUBLISHED NOVEMBER 22, 1932. Class 39.

300,755. CANNED FRUITS, HONEY, JELLY, ETC. THOMAS G. MCMAHON, doing business as Thos. G. McMahon & Co., Utica, N. Y.
Filed March 16, 1931. Serial No. 312,192. PUBLISHED SEPTEMBER 22, 1931. Class 46.

300,756. SEED POTATOES, SEED OATS, SEED BARLEY, SEED RYE, SEED WHEAT, SEED PEAS, SEED BEANS, SEED CORN, AND CABBAGE SEED. KENNETH C. LIVERMORE, Honeoye Falls, N. Y.
Filed February 2, 1931. Serial No. 310,707. PUBLISHED NOVEMBER 22, 1932. Class 1.

300,757. NONALCOHOLIC MALTLESS BEVERAGES SOLD AS SOFT DRINKS. LUDFORD FRUIT PRODUCTS, INC., Hollywood, Calif.
Filed October 11, 1932. Serial No. 331,157. PUBLISHED NOVEMBER 29, 1932. Class 45.

300,758. SOAP DISHES, TOOTH BRUSH STANDS, EGG CUPS, AND DRIP CATCHERS, MADE OF INDIA RUBBER OF ALL KINDS, PARTICULARLY MADE OF INDIA RUBBER HAVING SPONGE-LIKE OR MOSS-LIKE APPEARANCE. "SEMPERIT" OESTERREICHISCH-AMERIKANISCHE GUMMIWERKE AKTIENGESELLSCHAFT, Vienna, Austria.
Filed October 10, 1932. Serial No. 331,125. PUBLISHED NOVEMBER 29, 1932. Class 2.

300,759. SHEET RUBBER TIRE PATCHING MATERIAL AND TIRE REPAIR KITS. WESTERN STATES MFG. CO., Sioux City, Iowa.
Filed October 8, 1932. Serial No. 331,095. PUBLISHED NOVEMBER 29, 1932. Class 35.

300,760. BREAD AND CAKE BOXES MADE OF METAL. AUGUST F. PFINGSTEN, Rock Rapids, Iowa.
Filed October 8, 1932. Serial No. 331,090. PUBLISHED NOVEMBER 29, 1932. Class 2.

300,761. ADULTS' TARGET AIR PISTOLS. L. OPPLEMAN, INC., New York, N. Y.
Filed October 8, 1932. Serial No. 331,089. PUBLISHED NOVEMBER 22, 1932. Class 9.

300,762. MALTLESS POWDER FOR MAKING NONALCOHOLIC SOFT DRINKS. THE JEL SERT CO., Chicago, Ill.
Filed October 7, 1932. Serial No. 331,050. PUBLISHED NOVEMBER 29, 1932. Class 45.

300,763. TOY OF THE BANDALORE TYPE—NAMELY, A WOODEN BAT OR PADDLE, TENNIS RACKET SHAPED, WITH RUBBER BALL ATTACHED BY RUBBER THREAD, TO BAT OR PADDLE. ALL-METAL BOTTLE COOLER CORPORATION, Atlanta, Ga.
Filed October 8, 1932. Serial No. 330,881. PUBLISHED NOVEMBER 22, 1932. Class 22.

300,764. DOLLS AND DOLLS' HOUSE. BLOOMINGDALE BROS. INC., New York, N. Y.
Filed September 29, 1932. Serial No. 330,776. PUBLISHED NOVEMBER 22, 1932. Class 22.

300,765. BRAKE LINING AND CLUTCH FACINGS. HAROLD S. MIKESELL, Chicago, Ill.
Filed October 1, 1932. Serial No. 330,857. PUBLISHED NOVEMBER 22, 1932. Class 35.

300,766. TRAYS AND FOOD AND DRINK DISHES, CONSTRUCTED OF MOLDED MATERIAL WITH A HEAT HARDENED BINDER. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed September 30, 1932. Serial No. 330,839. PUBLISHED NOVEMBER 29, 1932. Class 2.

300,767. NONALCOHOLIC, MALTLESS BEVERAGE SOLD AS A SOFT DRINK. EDWARD & JOHN BURKE, LIMITED, Long Island City, N. Y.
Filed September 27, 1932. Serial No. 330,693. PUBLISHED NOVEMBER 22, 1932. Class 45.

300,768. GAME PLAYED UPON A TABLE WITH MOVABLE PIECES. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass.
Filed September 23, 1932. Serial No. 330,604. PUBLISHED NOVEMBER 22, 1932. Class 22.

300,769. WHISKEY AND POTABLE SPIRITS. JOSEPH E. SEAGRAM & SONS LIMITED, Waterloo, Ontario, Canada.
Filed September 19, 1932. Serial No. 330,492. PUBLISHED NOVEMBER 22, 1932. Class 49.

300,770. WATER FILTERS. THE CHAMPION HARDWARE COMPANY, Geneva, Ohio.
Filed September 19, 1932. Serial No. 330,451. PUBLISHED NOVEMBER 22, 1932. Class 31.

300,771. CORRUGATED FIBREBOARD BOXES AND PAPER BOXES. CRESCENT BOX CORPORATION, Philadelphia, Pa.
Filed September 15, 1932. Serial No. 330,364. PUBLISHED NOVEMBER 29, 1932. Class 2.

300,772. FELT PIECES TO FORM DESIGNS USED FOR EDUCATIONAL PURPOSES. MORRIS KOHN, doing business as J. T. Thorn Company, Philadelphia, Pa.
Filed September 14, 1932. Serial No. 330,355. PUBLISHED NOVEMBER 22, 1932. Class 22.

300,773. JIG-SAW CUT-OUT PUZZLES. HOWARD J. MURPHY NOVELTY CO., Reading, Mass.
Filed September 9, 1932. Serial No. 330,205. PUBLISHED NOVEMBER 29, 1932. Class 22.

300,774. WHISKEY. JOHN DEWAR & SONS LIMITED, Perth, Scotland, and London, England.
Filed August 18, 1932. Serial No. 329,629. PUBLISHED NOVEMBER 29, 1932. Class 49.

300,775. SACRAMENTAL KOSHER WINE. MIZRACH WINE COMPANY, New York, N. Y.
Filed July 27, 1932. Serial No. 329,104. PUBLISHED NOVEMBER 22, 1932. Class 47.

300,776. KEGS AND BARRELS OF WOOD. PADUCAH COOPERAGE CO., INC., Paducah, Ky.
Filed June 17, 1932. Serial No. 328,072. PUBLISHED NOVEMBER 22, 1932. Class 2.

300,777. PIPES, CIGAR AND CIGARETTE HOLDERS AND FILTER CARTRIDGES THEREFOR. THE PURA-SMOKE COMPANY, INC., Burlington, N. C.
Filed October 4, 1932. Serial No. 330,930. PUBLISHED NOVEMBER 29, 1932. Class 8.

300,778. PEAT MOSS USED FOR HORTICULTURAL PURPOSES AND POULTRY LITTER. ATKINS & DURBROW, INC., New York, N. Y.
Filed October 4, 1932. Serial No. 330,917. PUBLISHED NOVEMBER 29, 1932. Class 1.

300,779. CIGARS. SALVADOR RODRIGUES, INC., Tampa, Fla., and Habana, Cuba.
Filed September 28, 1932. Serial No. 330,758. PUBLISHED NOVEMBER 22, 1932. Class 17.

300,780. CIGARETTES. JOSEPH S. SLAMEY, Boston, Mass.
Filed September 27, 1932. Serial No. 330,732. PUBLISHED NOVEMBER 22, 1932. Class 17.

300,781. TOOTH BRUSHES. PRO-PHY-LAC-TIC BRUSH COMPANY, Northampton, Mass.
Filed September 27, 1932. Serial No. 330,709. PUBLISHED NOVEMBER 22, 1932. Class 29.

300,782. BITUMINOUS COAL. BOONE COUNTY COAL CORPORATION, Sharples, W. Va., and Philadelphia, Pa.
Filed September 27, 1932. Serial No. 330,691. PUBLISHED NOVEMBER 22, 1932. Class 1.

300,783. WOMEN'S, MISSES', AND CHILDREN'S DRESSES, PAJAMAS, SMOCKS, AND WASH FROCKS. MCCLINTOCK-FIELD CO., INC., Ashland, Ky.
Filed September 1, 1932. Serial No. 330,046. PUBLISHED NOVEMBER 15, 1932. Class 39.

300,784. WOMEN'S, GIRLS', JUNIORS', MISSES', AND LADIES' COATS. WITTENBERG SHIMBERG CORP., New York, N. Y.
Filed August 18, 1932. Serial No. 329,663. PUBLISHED NOVEMBER 15, 1932. Class 39.

300,785. THE FOLLOWING RAW MATERIALS—RAW SILK, RAYON (ARTIFICIAL SILK), TUSSAH SILK, WILD SILK OTHER THAN TUSSAH, GOLD SILK AND SILVER SILK. KATAKURA SHISHI BOSEKI KABUSHIKI KWAISHA, Tokyo, Japan.
Filed August 2, 1932. Serial No. 329,289. PUBLISHED NOVEMBER 29, 1932. Class 1.

300,786. LEATHERS. HITZMAN LEATHER COMPANY, INC., West Winfield, N. Y.
Filed July 14, 1932. Serial No. 328,788. PUBLISHED NOVEMBER 22, 1932. Class 1.

300,787. WELDING METALS. THE BASTIAN-BLESSING COMPANY, Chicago, Ill.
Filed July 11, 1932. Serial No. 328,680. PUBLISHED NOVEMBER 29, 1932. Class 14.

300,788. SPONGE RUBBER, MEDICAL SPONGE RUBBER, AND RUBBER SPONGES. THE SPONGE RUBBER PRODUCTS CO., Derby, Conn.
Filed June 21, 1932. Serial No. 328,190. PUBLISHED NOVEMBER 29, 1932. Class 1.

300,789. HOSIERY. APEX HOSIERY COMPANY, Philadelphia, Pa.
Filed October 18, 1932. Serial No. 331,392. PUBLISHED NOVEMBER 22, 1932. Class 39.

300,790. MEN'S AND BOYS' PANTS AND SUITS. SEMINOLE MANUFACTURING COMPANY, McAlester, Okla.
Filed October 19, 1932. Serial No. 331,385. PUBLISHED NOVEMBER 22, 1932. Class 39.

300,791. COTTON PIECE GOODS OF THE TYPE USED IN THE MAKING OF CLOTHING AND DRAPERIES. DACOTAH COTTON MILLS, INC., Lexington, N. C.
Filed October 13, 1932. Serial No. 331,219. PUBLISHED NOVEMBER 15, 1932. Class 42.

300,792. INFANTS' WEAR—NAMELY, INFANTS' DRESSES AND PETTICOATS. RICE-STIX DRY GOODS CO., St. Louis, Mo.
Filed October 8, 1932. Serial No. 331,091. PUBLISHED NOVEMBER 15, 1932. Class 39.

300,793. MEN'S, LADIES', AND CHILDREN'S JACKETS OF WOOL, CORDUROY, AND SUEDE CLOTH. RELIANCE MANUFACTURING COMPANY, Chicago, Ill.
Filed October 7, 1932. Serial No. 331,068. PUBLISHED NOVEMBER 22, 1932. Class 39.

300,794. TOWELS AND TOWELING OF TEXTILE FABRICS. GOLD DUST CORPORATION, New York, N. Y.
Filed October 6, 1932. Serial No. 330,994. PUBLISHED NOVEMBER 15, 1932. Class 42.

300,795. WINES. SOCIEDADE DOS VINHOS DO PORTO CONSTANTINO, LTD.ª, Villa Nova de Gaya, Portugal.
Filed October 25, 1932. Serial No. 331,566. PUBLISHED NOVEMBER 29, 1932. Class 47.

300,796. SHERRY WINE. JOHN HARVEY & SONS, LIMITED, Bristol, England.
Filed October 25, 1932. Serial No. 331,551. PUBLISHED NOVEMBER 29, 1932. Class 47.

300,797. BOYS' SHIRTS. GORDON-EAST COAST COMPANY, Moundsville, W. Va.
Filed September 24, 1932. Serial No. 330,624. PUBLISHED NOVEMBER 15, 1932. Class 39.

300,798. SILK GOODS IN THE PIECE. LOUIS ROESSEL & CO., INC., Hazleton, Pa., and New York, N. Y.
Filed September 28, 1932. Serial No. 330,761. PUBLISHED NOVEMBER 8, 1932. Class 42.

300,799. ARTIFICIAL BAITS. JAMES HEDDON'S SONS, Dowagiac, Mich.
Filed October 22, 1932. Serial No. 331,461. PUBLISHED NOVEMBER 29, 1932. Class 23.

300,800. GINGERALE AND SPRING WATER. JOHN L. TELLER, doing business as Sovereign Mineral Spring Co., Utica, N. Y.
Filed October 18, 1932. Serial No. 331,348. PUBLISHED NOVEMBER 29, 1932. Class 45.

300,801. PICTURE PUZZLES, CONSISTING OF A NUMBER OF PIECES. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass.
Filed October 18, 1932. Serial No. 331,340. PUBLISHED NOVEMBER 22, 1932. Class 22.

300,802. NON-ALCOHOLIC, MALTLESS BEVERAGES, AND SYRUPS AND EXTRACTS FOR MAKING THE SAME. BEN-BURK, INCORPORATED, Boston, Mass.
Filed October 17, 1932. Serial No. 331,297. PUBLISHED NOVEMBER 22, 1932. Class 45.

300,803. BOWLING HAND MOISTENERS. HENRY J. SULLIVAN, Providence, R. I.
Filed October 18, 1932. Serial No. 331,347. PUBLISHED NOVEMBER 22, 1932. Class 22.

300,804. PICTURE PUZZLES, CONSISTING OF A NUMBER OF PIECES. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass.
Filed October 18, 1932. Serial No. 331,339. PUBLISHED NOVEMBER 22, 1932. Class 22.

300,805. JAR RINGS. JENKINS BROS., New York, N. Y.
Filed October 15, 1932. Serial No. 331,286. PUBLISHED NOVEMBER 29, 1932. Class 35.

300,806. PNEUMATIC CUSHION AND SOLID TIRES OF ALL KINDS CONSTRUCTED WHOLLY OR PARTLY OF RUBBER, INNER TUBES THEREFOR; AND HOSE AND TUBING OF ALL KINDS CONSTRUCTED WHOLLY OR PARTLY OF RUBBER. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio.
Filed October 14, 1932. Serial No. 331,253. PUBLISHED NOVEMBER 22, 1932. Class 35.

300,807. PLAYING CARD CASES MADE OF LEATHER, PAPER, PASTEBOARD, AND COMBINATIONS THEREOF. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa.
Filed October 12, 1932. Serial No. 331,207. PUBLISHED NOVEMBER 29, 1932. Class 2.

300,808. BOTTLE CASES, CASES FOR FIELD GLASSES, OPERA GLASSES, SPECTACLE CASES, FLASK HOLDERS, DRINKING GLASS HOLDERS, AND JEWEL BOXES MADE OF MATERIALS OTHER THAN PRECIOUS METAL. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa.
Filed October 12, 1932. Serial No. 331,205. PUBLISHED NOVEMBER 29, 1932. Class 2.

300,809. POULTRY FEEDS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed March 28, 1932. Serial No. 325,414. PUBLISHED JULY 19, 1932. Class 46.

300,810. CIGARETTES. THE FORTUNE TOBACCO COMPANY, New York, N. Y.
Filed October 15, 1932. Serial No. 331,283. PUBLISHED NOVEMBER 29, 1932. Class 17.

300,811. CIGARETTES. THE FORTUNE TOBACCO COMPANY, New York, N. Y.
Filed October 15, 1932. Serial No. 331,282. PUBLISHED NOVEMBER 29, 1932. Class 17.

300,812. CIGARETTES. THE FORTUNE TOBACCO COMPANY, New York, N. Y.
Filed October 15, 1932. Serial No. 331,281. PUBLISHED NOVEMBER 29, 1932. Class 17.

300,813. PRINTING INK. THE INTERNATIONAL PRINTING INK CORPORATION, New York, N. Y.
Filed October 14, 1932. Serial No. 331,256. PUBLISHED NOVEMBER 29, 1932. Class 11.

300,814. CIGARETTES. TOM HUSTON PEANUT COMPANY, Columbus, Ga.
Filed October 14, 1932. Serial No. 331,255. PUBLISHED NOVEMBER 29, 1932. Class 17.

300,815. DRAWING INK, WATERPROOF AND NON-WATERPROOF, BLACK AND COLORED. TALENS & SON, INC., Irvington, N. J.
Filed October 10, 1932. Serial No. 331,180. PUBLISHED NOVEMBER 29, 1932. Class 11.

300,816. ASH RECEIVERS OF NON-PRECIOUS METAL. SMOKADOR MANUFACTURING CO., INC., Bloomfield, N. J.
Filed October 7, 1932. Serial No. 331,066. PUBLISHED NOVEMBER 22, 1932. Class 8.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

300,817. (CLASS 17. TOBACCO PRODUCTS.) BROWN & WILLIAMSON TOBACCO CORPORATION, Louisville, Ky. Filed Dec. 15, 1931. Serial No. 322,129.

KOOL

For Cigarettes.
Claims use since Nov. 20, 1931.

300,818. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DEY BROTHERS & CO., Syracuse, N. Y. Filed Sept. 14, 1931. Serial No. 319,019.

Roberta McDonald

For Cleansing Cream, Nourishing Cream, Tissue Cream, Protective Cream, Skin Tonic, Hand Lotion, Special Astringent, Face Powder, Rouge, and Lipstick.
Claims use since June 17, 1931.

300,819. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SHAMP-U-TINT, INC., New York, N. Y. Filed Oct. 7, 1931. Serial No. 319,832.

SHAMP-U-TINT

For a Combined Hair Dye and Shampoo.
Claims use since July 1, 1931.

300,820. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHARLES F. SARNO, Philadelphia, Pa. Filed Oct. 9, 1931. Serial No. 319,909.

Fast Grow

For Hair Restorer Solution for Treatment of the Scalp.
Claims use since June 24, 1931.

300,821. (CLASS 39. CLOTHING.) LEVY BROS. & ADLER ROCHESTER, INC., Rochester, N. Y. Filed Nov. 5, 1931. Serial No. 320,833.

Kürl

For Men's and Boys' Clothing—Namely, Suits, Overcoats, and Topcoats.
Claims use since Mar. 1, 1930.

300,822. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) KAUFMANN DEPARTMENT STORES, INC., Pittsburgh, Pa. Filed Nov. 10, 1931. Serial No. 320,980.

Vivian Shaw

For Cleansing Cream (Liquefying and Special), Skin Tonic and Freshener, Tissue Cream, Astringent Lotion, Foundation Cream, Cream Rouge, Cold Cream, Face Powder, Lipstick, Liquid Rouge, Almond Lotion, Muscle Oil, Lemon Cleansing and Tissue Cream, Hand Cream, Brilliantine, Deodorant (Cream), Deodorant (Liquid), and Eye Shadow.
Claims use since Oct. 30, 1931.

300,823. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BROWN C. BRATTON, Marlin, Tex. Filed Nov. 27, 1931. Serial No. 321,522.

MARLIN WELLS
MINERAL CRYSTALS

For Mineral Crystals Obtained by the Treatment of Natural Mineral Water and Used for Medicinal Purposes.
Claims use since Nov. 12, 1931.

300,824. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BROWN C. BRATTON, Marlin, Tex. Filed Nov. 27, 1931. Serial No. 321,523.

MARLIN WELLS
POWDERED MINERALS

For Powdered Minerals Obtained by the Treatment of Natural Mineral Water and Used for Medicinal Purposes.
Claims use since Nov. 12, 1931.

300,825. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) AGNES EARLE CAHILL, doing business as Grace Manning Beauty Products, New York and Yonkers, N. Y. Filed Dec. 7, 1931. Serial No. 321,839.

Grace Manning

For Cleansing Cream, Skin Cream, Tissue Cream, Almond Cold Cream, Skin Tonic, Astringent Lotion, Muscle Oil, and Skin Freshener.
Claims use since Nov. 17, 1931.

300,826. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) HENRY J. IMMEL, doing business as No-Blur Polish Co., Chicago, Ill. Filed Dec. 24, 1931. Serial No. 322,426.

No-Blur

For Automobile and Furniture Polish.
Claims use since Dec. 1, 1931.

300,827. (CLASS 39. CLOTHING.) JULIUS KAYSER & CO., New York, N. Y. Filed Dec. 31, 1931. Serial No. 322,589.

FIT-ALL-TOP

For Hosiery.
Claims use since Dec. 1, 1931.

300,828. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE SILICA GEL CORPORATION, Baltimore, Md. Filed Dec. 31, 1931. Serial No. 322,604.

ORIGINAL
SILICA GEL

For Hard, Solid Vitreous Adsorbent Material Consisting of Dried Silicic Acid.
Claims use since Nov. 23, 1931.

300,829. (CLASS 39. CLOTHING.) HILLSDALE MANUFACTURING COMPANY, Hillsdale, Mich. Filed Dec. 31, 1931. Serial No. 322,616.

Slyde-Ay

For Trousers.
Claims use since Dec. 1, 1931.

300,830. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) W. M. CHACE VALVE COMPANY, Detroit, Mich. Filed Jan. 11, 1932. Serial No. 322,878.

CHACE
THERMOSTATIC
BIMETAL
"It Bends With the Heat"

For Thermostatic Metal.
Claims use since Dec. 5, 1931.

300,831. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) HARDWICK & MAGEE COMPANY, Philadelphia, Pa. Filed Jan. 20, 1932. Serial No. 323,198.

GARFIELD
BROADLOOM

For Textile Carpets.
Claims use since Dec. 24, 1931.

300,832. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) HARDWICK & MAGEE COMPANY, Philadelphia, Pa. Filed Jan. 20, 1932. Serial No. 323,199.

MILFORD
BROADLOOM
FRIEZÉ

For Textile Carpets.
Claims use since Dec. 24, 1931.

300,833. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) HARDWICK & MAGEE COMPANY, Philadelphia, Pa. Filed Jan. 20, 1932. Serial No. 323,200.

WESTMONT
CARPET

For Textile Carpets.
Claims use since Dec. 24, 1931.

---

300 834. (CLASS 39. CLOTHING.) FITWEL DRESS CO., INC., Boston, Mass. Filed Feb. 1, 1932. Serial No. 323,654.

Fitwel

For Ladies' and Misses' Dresses.
Claims use since Sept. 1, 1931.

300,835. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ALBERT DURANDE, INC., New York, N. Y. Filed Feb. 6, 1932. Serial No. 323,893.

Albert Durande

For Face Powders, Face Creams, Rouges, Lipstick, Shampoos, Eyebrow Pencils, Mascara, Perfumes, Body Powders, Bath Salts, and Toilet Waters.
Claims use since May 26, 1931.

300,836. (CLASS 45. BEVERAGES, NONALCOHOLIC.) SOCIETÀ REGIE TERME DI MONTECATINI, Rome, Italy. Filed Apr. 8, 1932. Serial No. 325,923.

MONTECATINI

For Natural Mineral Water and Salts Made Therefrom for Drinking Purposes.
Claims use since 1897.

300,837. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN FRED W. PARCHEN, doing business as The So-Wite Company, New York, N. Y. Filed Apr. 15, 1932. Serial No. 326,160.

So-wite!

For Bleaching Fluid for Family Trade, Hydro-Chloride, and is Used as a Washing Fluid for Cleaning Sinks, Marble Floors, Etc.
Claims use since Oct. 13, 1931.

300,838. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE STANDARD OYSTER COMPANY, South Norwalk, Conn. Filed Aug. 6, 1932. Serial No. 329,388.

ROBBINS ISLAND OYSTERS

For Oysters.
Claims use since 1913.

300,839. [WITHDRAWN.]

300,840. (CLASS 37. PAPER AND STATIONERY.) HOLYOKE CARD & PAPER COMPANY, Springfield, Mass. Filed Oct. 25, 1932. Serial No. 331,554.

DURATEX

For Cover and Printing Paper.
Claims use since December, 1931.

300,841. (CLASS 17. TOBACCO PRODUCTS.) JOSE MORAN, Jacksonville, Fla. Filed Nov. 21, 1932. Serial No. 332,347.

MORAN'S

For Cigars.
Claims use since Aug. 1, 1931.

300,842. (CLASS 45. BEVERAGES, NONALCOHOLIC.) FRANK W. BIRELEY, doing business as Bireley's California Fruit Products, Los Angeles, Calif. Filed Nov. 28, 1932. Serial No. 332,513.

BIRELEY'S

For Nonalcoholic, Maltless Fruit Juices and Syrup for Making Soft Drinks.
Claims use since Mar. 1, 1930.

300,843. (CLASS 38. PRINTS AND PUBLICATIONS.) STERLING PRESS, Los Angeles, Calif. Filed Dec. 5, 1932. Serial No. 332,790.

TRUETONE

For Reproductions of Photographs, Drawings, and Prints.
Claims use since Aug. 11, 1930.

300,844. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE PSYCOGRAPH CO., Minneapolis, Minn. Filed Dec. 14, 1932. Serial No. 333,078.

PSYCOGRAPH

For Psychological Test Machines.
Claims use since Apr. 1, 1931.

300,845. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) WM. WYLIE TROY, New Rochelle, N. Y. Filed Nov. 30, 1932. Serial No. 332,800.

TROY'S FOR TREES

For Ornamental and Other Trees and Shrubs.
Claims use since Apr. 1, 1924.

TRADE-MARK REGISTRATIONS RENEWED

89,631. SUSPENDERS. Registered January 13, 1903. THE ROYAL SUSPENDER CO., New York, N. Y. Renewed January 13, 1933, to Pioneer Suspender Company, Philadelphia, Pa., a Corporation of Pennsylvania, assignee by mesne assignments.

40,013. WHISKY. Registered March 31, 1903. EDWARD AND JOHN BURKE LTD., Dublin, Ireland, and New York, N. Y. Renewed March 31, 1933, to Edward & John Burke, Limited, Dublin, Ireland, a Corporation of The Kingdom of Great Britain and Ireland (now of the Irish Free State).

40,325. SECTIONAL BOOKCASES AND FILING CABINETS. Registered May 12, 1903. YAWMAN AND ERBE MFG. CO., Rochester, N. Y., a Corporation of New York. Renewed May 12, 1933.

88,184. WHISTLE-CALLS. Registered September 8, 1912. JOSEPH HUDSON, Birmingham, England. Renewed September 8, 1932, to James Clifford Hudson, doing business as J. Hudson and Company, Hockley, Birmingham, England, successor.

88,758. WHISTLE-CALLS. Registered October 22, 1912. JOSEPH HUDSON, Birmingham, England. Renewed October 22, 1932, to James Clifford Hudson, doing business as J. Hudson and Company, Hockley, Birmingham, England, successor.

89,582. BLANKETS, WOOLEN PIECE GOODS, AND FLANNELS. Registered December 24, 1912. BIRDSALL BROTHERS CO., Seelyville, and Honesdale, Pa. Renewed December 24, 1932, to Birdsall Brothers Company, Honesdale, Pa., a Corporation of Pennsylvania.

89,733. MEDICINAL PREPARATIONS IN CAPSULE FORM. Registered January 7, 1913. THE SAMUEL CHEMICAL COMPANY, as assignee of James Samuel Atkins. Renewed January 7, 1933, to Philip Morton, doing business as The Samuel Chemical Company, Cincinnati, Ohio, successor.

89,795. CERTAIN NAMED SCIENTIFIC APPLIANCES. Registered January 14, 1913. AMERICAN OPTICAL COMPANY. Renewed January 14, 1933, to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts, assignee.

89,886. REFINED PETROLEUM FOR HEATING, LIGHTING, AND POWER PURPOSES. Registered January 14, 1913. STANDARD OIL COMPANY OF NEW YORK. Renewed January 14, 1933, to Socony-Vacuum Corporation, New York, N. Y., a Corporation of New York, by change of name.

90,152. TONIC BITTERS. Registered February 11, 1913. ANGOSTURA BITTERS (DR. J. G. B. SIEGERT & SONS) LIMITED. Renewed February 11, 1933, to Angostura Bitters (Dr. J. G. B. Siegert & Sons) Limited, Port of Spain, Trinidad, British West Indies, a Corporation of Trinidad, assignee.

90,274. DRESSING TO BE USED ON LEATHERS AND ARTICLES MADE THEREFROM. Registered February 11, 1913. WHITTEMORE BROTHERS AND COMPANY. Renewed February 11, 1933, to Whittemore Bros. Corp., Cambridge, Mass., a Corporation of Massachusetts, assignee.

90,429. WHISKY. Registered February 25, 1913. JOHN GILLON & CO. LIMITED, Leith, Scotland. Renewed February 25, 1933, to John Gillon & Company, Limited, Glasgow, Scotland, a Corporation of Great Britain, assignee.

90,519. YARN AND THREAD OF COTTON, WOOL, SILK, LINEN, JUTE, AND RAMIE. Registered March 4, 1913. DOLLFUS-MIEG & CIE. SOCIÉTÉ ANONYME, Mülhausen, Germany. Renewed March 4, 1933, to Dollfus-Mieg & Cie. Société Anonyme, Mulhouse, France, a Corporation of Germany, now of France.

90,520. YARN AND THREAD OF COTTON, WOOL, SILK, LINEN, JUTE, AND RAMIE. Registered March 4, 1913. DOLLFUS-MIEG & CIE. SOCIÉTÉ ANONYME, Mülhausen, Germany. Renewed March 4, 1933, to Dollfus-Mieg & Cie. Société Anonyme, Mulhouse, France, a Corporation of Germany, now of France.

91,380. FLOUR. Registered April 29, 1913. RUSSELL-MILLER MILLING COMPANY, Minneapolis, Minn., a Corporation of North Dakota. Renewed April 29, 1933.

91,642. TONIC LAXATIVE, LAXATIVE, CATHARTIC, HEPATIC STIMULANT, AND CHOLAGOGUE. Registered May 20, 1913. BRISTOL-MYERS COMPANY, Brooklyn and New York, N. Y. Renewed May 20, 1933, to Bristol-Myers Co., New York, N. Y., a Corporation of New Jersey, assignee by mesne assignments.

91,729. PREPARATIONS FOR COLORING BUTTER. Registered May 20, 1913. WELLS & RICHARDSON COMPANY. Renewed May 20, 1933, to Wells & Richardson Co., Inc., Burlington, Vt., a Corporation of Vermont, assignee.

91,774. VARNISH. Registered May 27, 1913. KEYSTONE VARNISH COMPANY, Brooklyn, N. Y., a Corporation of New York. Renewed May 27, 1933.

91,916. CERTAIN NAMED OILS AND GREASES. Registered June 3, 1913. THE SUNFLOWER STATE OIL COMPANY, Coffeyville, Kans. Renewed June 3, 1933, to Sinclair Refining Company, New York, N. Y., a Corporation of Maine, assignee.

92,062. COCOA. Registered June 17, 1913. J. S. FRY AND SONS, LIMITED, Bristol, England, a Corporation of Great Britain. Renewed June 17, 1933.

92,115. REMEDY FOR RHEUMATIC AFFECTIONS. Registered June 17, 1913. PARKE, DAVIS & CO., Detroit, Mich., a Corporation of Michigan. Renewed June 17, 1933.

92,155. TOILET-PAPER. Registered June 24, 1913. ALBANY PERFORATED WRAPPING PAPER COMPANY. Renewed June 24, 1933, to A. P. W. Paper Company, Inc., Albany, N. Y., a Corporation of New York, by change of name.

92,157. TOILET-PAPER. Registered June 24, 1913. ALBANY PERFORATED WRAPPING PAPER COMPANY. Renewed June 24, 1933, to A. P. W. Paper Company, Inc., Albany, N. Y., a Corporation of New York, by change of name.

LABELS

REGISTERED FEBRUARY 7, 1933

41,716.—*Title:* GARTERON. For Garters for Hosiery. MAX F. ASCHER, Chicago, Ill. Published November 1, 1932.

41,717.—*Title:* SANTAVALLEY. For Canned Peaches. BARRON-GRAY PACKING COMPANY, San Jose, Calif. Published August 1, 1932.

41,718.—*Title:* BUDD'S. For Shoes. M. B. CLAFF & SONS, INC., Randolph, Mass. Published December 27, 1932.

41,719.—*Title:* PORK SAUSAGE. For Pork Sausage. KENNETH A. CLARK, doing business as Clark & Co., Washington, D. C. Published December 21, 1932.

41,720.—*Title:* DORAL. For Food Product for Use in Making Beverages. DORAL FOOD PRODUCTS CO., INC., New York, N. Y. Published July 1, 1930.

41,721.—*Title:* DORAL. For Desserts. DORAL FOOD PRODUCTS CO., INC., New York, N. Y. Published July 1, 1930.

41,722.—*Title:* DORAL. For Malted Milk. DORAL FOOD PRODUCTS CO., INC., New York, N. Y. Published July 1, 1930.

41,723.—*Title:* BOND BAKERS SUNSHINE VITAMIN-D BREAD KRUMS. For Bread-Crumbs. GENERAL BAKING COMPANY, New York, N. Y. Published December 15, 1932.

41,724.—*Title:* JANNETTA. For Hairnets. MOSES HERZOG, New York, N. Y. Published July 11, 1932.

41,725.—*Title:* HYO CLEANER. For Cleaning Compound. HYO PRODUCTS COMPANY, Binghamton, N. Y. Published July 14, 1932.

41,726.—*Title:* THE NEW PHANTOM KOTEX WITH PATENTED EQUALIZER. For a Sanitary Pad. KOTEX COMPANY, Chicago, Ill. Published November 22, 1932.

41,727.—*Title:* THE NEW PHANTOM KOTEX WITH PATENTED EQUALIZER (IMPRINTED WEST DISINFECTING COMPANY). For a Sanitary Pad. KOTEX COMPANY, Chicago, Ill. Published November 4, 1932.

41,728.—*Title:* DR. NAYLOR'S UDDER LINIMENT. For Liniment. H. W. NAYLOR, doing business as H. W. Naylor Company, Morris, N. Y. Published December 1, 1932.

41,729.—*Title:* TATTOO. For Chewing Gum. ORBIT GUM COMPANY, Chicago, Ill. Published December 28, 1932.

41,730.—*Title:* TATTOO. For Chewing Gum. ORBIT GUM COMPANY, Chicago, Ill. Published December 28, 1932.

41,731.—*Title:* SADUR'S STAY-SHINE. For Polish. HYMAN SADUR, doing business as H. Sadur & Co., Chicago, Ill. Published August 12, 1932.

41,732.—*Title:* STA-WEL. For Lingerie Clasps. FLORENCE MAY STADER, doing business as Sta-Wel Manufacturing Company, Plymouth, Mich. Published January 2, 1932.

41,733.—*Title:* CHASE AND SANBORN'S SEAL BRAND TENDER LEAF. For Tea. STANDARD BRANDS INCORPORATED, New York, N. Y. Published December 1, 1932.

41,734.—*Title:* PIPESTONE SWEET CREAM BUTTER. For Butter. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published January 7, 1933.

41,735.—*Title:* TROMMER'S WHITE LABEL SPECIAL DARK. For Malt Brew. JOHN F. TROMMER, INCORPORATED, Brooklyn, N. Y. Published October 7, 1932.

41,736.—*Title:* GIRAFFE VACUUM PACKED NATURAL GRAPEFRUIT JUICE. For Grapefruit Juice. TROPICAL JUICE CORPORATION, Titusville, Fla. Published December 10, 1932.

41,737.—*Title:* GIRAFFE VACUUM PACKED NATURAL GRAPEFRUIT JUICE. For Grapefruit Juice. TROPICAL JUICE CORPORATION, Titusville, Fla. Published December 10, 1932.

41,738.—*Title:* GIRAFFE VACUUM PACKED NATURAL ORANGE JUICE. For Orange Juice. TROPICAL JUICE CORPORATION, Titusville, Fla. Published December 10, 1932.

41,739.—*Title:* GIRAFFE VACUUM PACKED NATURAL ORANGE JUICE. For Orange Juice. TROPICAL JUICE CORPORATION, Titusville, Fla. Published December 10, 1932.

PRINTS

REGISTERED FEBRUARY 7, 1933

14,044.—*Title:* EISENLOHR'S CINCO CIGARS. For Cigars. WEBSTER EISENLOHR, INC., New York, N. Y. Published October 21, 1932.

14,045.—*Title:* FREIHOFER'S 24 HOUR COFFEE. For Coffee. CHAS. FREIHOFER BAKING CO. INC., Troy, N. Y. Published November 28, 1932.

14,046.—*Title:* NOW! NO MOTHER NEED FORCE HER CHILD TO EAT HOT CEREALS! For Cereal Food. GENERAL MILLS, INC., Minneapolis, Minn. Published December 27, 1932.

14,047.—*Title:* NO. 1124. For Dental Cream. THE KOLYNOS COMPANY, New Haven, Conn. Published November 22, 1932.

14,048.—*Title:* TATTOO. For Chewing Gum. ORBIT GUM COMPANY, Chicago, Ill. Published December 28, 1932.

14,049.—*Title:* PYREX. For Ovenware. PALMER ADVERTISING SERVICE INC., New York, N. Y. Published October 24, 1932.

14,050.—*Title:* MEET THE TOOTHACHE TWINS. For Toothache Drops and Dental Poultices. POLORIS CO., INC., New York, N. Y. Published December 22, 1932.

REISSUES

FEBRUARY 7, 1933

18,728. BANANA PROTECTOR. ARTHUR PAOLI, Ironwood, Mich. Original No. 1,847,494, dated Mar. 1, 1932, Serial No. 340,932, filed Feb. 18, 1929. Application for reissue filed Oct. 12, 1932. Serial No. 637,516. 9 Claims. (Cl. 45—71.)



5. In a device of the character described, the combination with a shell comprising confronting casings, of means for guiding the approach and separation of said casings to open and close said shell for the purpose set forth, and means for counterbalancing said casings so that movement of one effects the corresponding movement of the other in an opposite direction.

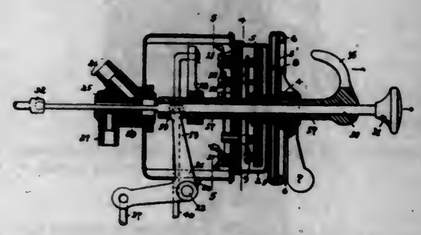
18,729. PROCESS FOR PRODUCING BUTYL AND ISOPROPYL ALCOHOLS. ALEXANDER ISSAK, Central Park, N. J., assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Original No. 1,725,083, dated Aug. 20, 1929, Serial No. 231,991, filed Nov. 8, 1927. Application for reissue filed July 26, 1930. Serial No. 471,077. 18 Claims. (Cl. 195—20.)

1. A process for the manufacture of butyl and isopropyl alcohols by fermentation of a fermentable carbohydrate medium wherein the medium is fermented by a bacillus obtained by saccharifying the starches of barley malt into maltose and incubating the maltose, said bacillus being identified by its having the form of short and long rods, chain formation, rounded ends, by its dimensions of 6 to 20 microns by 2 to 3 microns, and by its property of rapid formation of spores and by its ability to produce mainly butyl and isopropyl alcohols.

18,730. HEAT TREATMENT OF GARNET ABRASIVE. EDWIN W. COLE, Glen Ellyn, Ill., assignor, by mesne assignments, to Armour and Company of Delaware, Chicago, Ill., a Corporation of Delaware. Original No. 1,836,448, dated Dec. 15, 1931, Serial No. 483,763, filed Sept. 22, 1930. Application for reissue filed Jan. 25, 1932. Serial No. 588,807. 9 Claims. (Cl. 51—279.)

9. The method of producing a garnet abrasive, which comprises roasting garnet at a temperature between 400° C. and 950° C. and for a period of time sufficiently long to materially improve the hardness of the garnet.

18,731. AUTOMOBILE CONTROLLER AND SWITCH. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Original No. 1,840,548, dated Jan. 12, 1932, Serial No. 293,412, filed July 17, 1928. Application for reissue filed June 17, 1932. Serial No. 617,842. 14 Claims. (Cl. 74—39.)



1. A controller attachment for the instrument board of an automobile, comprising an electrical switch, and a reciprocable controlling device rotatably supported within said switch, having two independent lines of power-transmitting connections extending therefrom to different operating devices on said automobile.

18,732. METHOD OF MANUFACTURING SOFT COLLARS AND PRODUCT THEREOF. WALTER J. BEATTIE, Cohoes, N. Y., assignor to The Beattie Manufacturing Co., Cohoes, N. Y., a Corporation of New York. Original No. 1,795,704, dated Mar. 10, 1931, Serial No. 474,589, filed Aug. 11, 1930. Application for reissue filed June 28, 1931. Serial No. 546,898. 27 Claims. (Cl. 223—55.)



1. In the manufacture of soft collars of the fold-over multiple, stitched-ply type, the improvement which consists in impregnating with a stiffening material the points of the fold-over top, and interiorly shaping the stitched points before the stiffening material has hardened and while applying heat and pressure.

DESIGNS

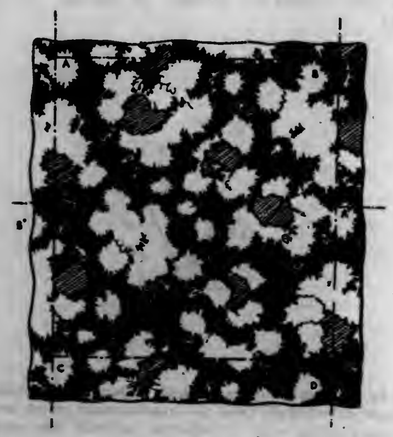
FEBRUARY 7, 1933

89,164. BOX OR SIMILAR RECEPTACLE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed June 10, 1932. Serial No. 44,042. Term of patent 14 years.



The ornamental design for a box or similar receptacle, as shown.

89,165. TEXTILE FABRIC OR SIMILAR ARTICLE. MICHEL BRODSKY, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,723. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,166. COMBINED TELEPHONE SUPPORT, CLOCK CASE AND LAMP. PAUL BUHRLE, Bronx, N. Y., assignor to United Metal Goods Mfg. Co. Inc., Brooklyn, N. Y. Filed Nov. 2, 1932. Serial No. 45,708. Term of patent 7 years.



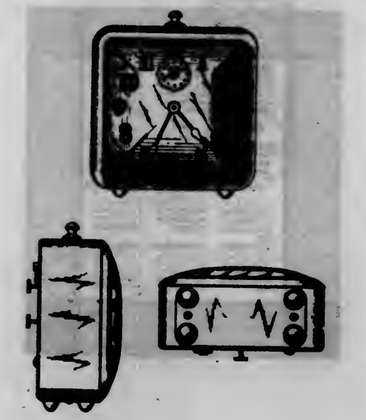
The ornamental design for a combined telephone support, clock case and lamp, as shown and described.

89,167. BUTTON. LEONARD R. CARLEY, Watertown, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 22, 1932. Serial No. 46,110. Term of patent 14 years.



The ornamental design for a button, as shown and described.

89,168. CLOCK CASE. ELOF L. CARLSON, Bristol, Conn., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed Mar. 18, 1932. Serial No. 43,280. Term of patent 14 years.



The ornamental design for a clock case as shown.

89,169. TOWEL OR SIMILAR ARTICLE. NORMAN CLEMENCE, New York, N. Y., assignor to Scott Paper Company, Chester, Pa., a Corporation. Filed Nov. 10, 1931. Serial No. 41,684. Term of patent 3½ years.



The ornamental design for a towel or similar article, as shown and described.

89,170. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM COHEN, New York, N. Y., assignor to L. & H. Stirn, Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,584. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,171. BARBEQUE BROILER. EDWARD A. DOMBS, San Gabriel, Calif., assignor of one-half to Oliver P. Walker, San Gabriel, Calif. Filed Apr. 28, 1932. Serial No. 43,586. Term of patent 3½ years.



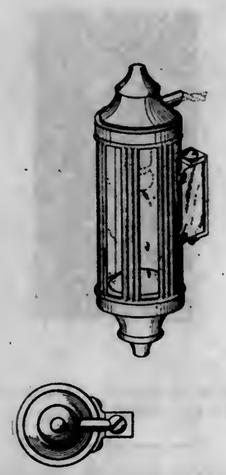
The ornamental design for a barbecue broiler substantially as shown and described.

89,172. BARBECUE BROILER. EDWARD A. DOMBS, San Gabriel, Calif., assignor of one-half to Oliver P. Walker, San Gabriel, Calif. Filed May 2, 1932. Serial No. 43,692. Term of patent 3½ years.



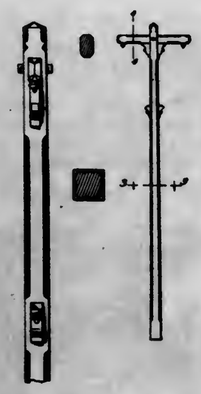
The ornamental design for a barbecue broiler substantiallly as shown and described.

89,173. PILLAR LAMP FOR MOTOR VEHICLE BODIES. HAROLD B. DONLEY, Columbus, Ohio. Filed Oct. 18, 1932. Serial No. 45,402. Term of patent 7 years.



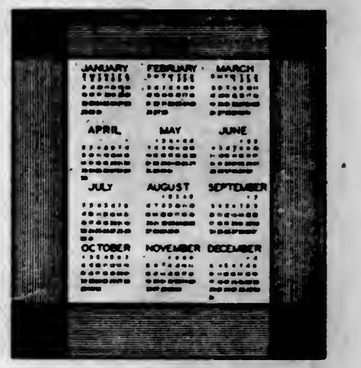
The ornamental design for a pillar lamp for motor vehicle bodies, as shown.

89,174. WIRE LINE POST. JULIAN P. FARNAM, Minneapolis, Minn., assignor to Page & Hill Co., Minneapolis, Minn., a Corporation of Minnesota. Filed Sept. 8, 1932. Serial No. 44,772. Term of patent 3½ years.



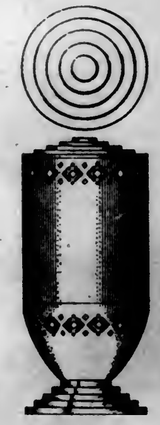
The ornamental design for a wire line post, as shown and described.

89,175. HANDKERCHIEF OR SIMILAR ARTICLE. VAUGHAN FLANNERY, New York, N. Y., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y., a Corporation of New York. Filed Oct. 22, 1932. Serial No. 45,509. Term of patent 14 years.



The ornamental design for a handkerchief or similar article as shown.

89,176. HOUSING FOR AIR CONDITIONING APPARATUS. EDWIN S. GEORGE and HAROLD L. BLYDENBURGH, Detroit, Mich.; said Blydenburgh assignor to said George. Filed Dec. 19, 1932. Serial No. 46,530. Term of patent 3½ years.



The ornamental design for a housing for air conditioning apparatus, as shown.

89,177. SILVERWARE TRAY. ATTILIUS GIACCAGLIA, Mare Island, Calif. Filed Sept. 19, 1932. Serial No. 45,000. Term of patent 3½ years.



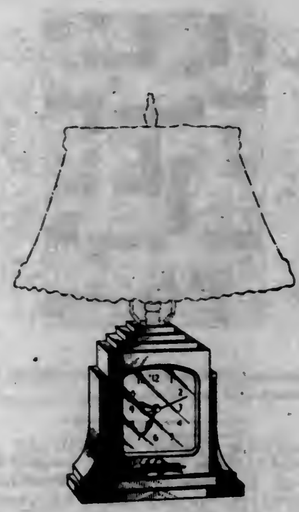
The ornamental design for a silverware tray substantially as shown.

89,178. NIGHTGOWN. LEO J. GOLDBERG, Hewlett, N. Y., assignor to Leonora Silk Underwear Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 10, 1932. Serial No. 46,426. Term of patent 3½ years.



The ornamental design for a nightgown substantially as shown.

89,179. COMBINED CLOCK CASE AND LAMP OR SIMILAR ARTICLE. JOSEPH GOTTLIEB, Jersey City, N. J. Filed Dec. 13, 1932. Serial No. 46,452. Term of patent 3½ years.



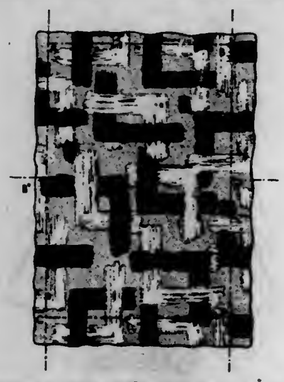
The ornamental design for a combined case and lamp or similar article, as shown and described.

89,180. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,508. Term of patent 3½ years.



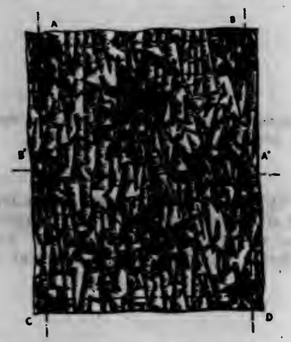
The ornamental design for a textile fabric or similar article as shown and described.

89,181. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,614. Term of patent 3½ years.



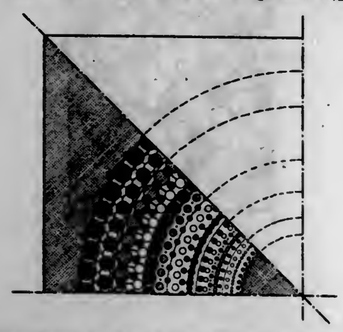
The ornamental design for a textile fabric or similar article as shown and described.

89,182. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,715. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,183. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,716. Term of patent 3½ years.



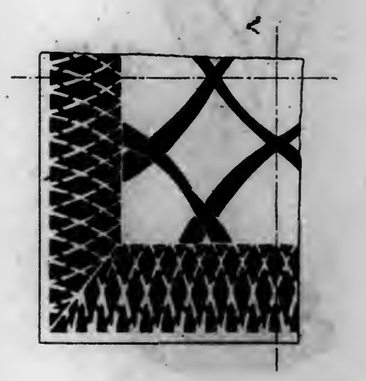
The ornamental design for a textile fabric or similar article as shown and described.

89,184. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,717. Term of patent 3½ years.



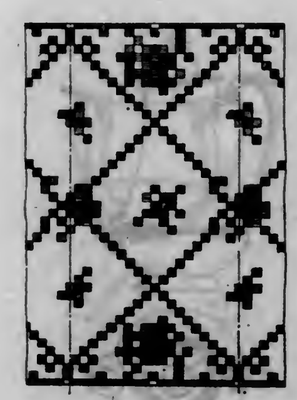
The ornamental design for a textile fabric or similar article as shown and described.

89,185. PILLOW COVER OR THE LIKE. MARION R. HAMER, Brooklyn, N. Y. Filed Jan. 3, 1933. Serial No. 46,679. Term of patent 3½ years.



The ornamental design for a pillow cover or the like substantially as shown, and described.

89,186. TEXTILE FABRIC OR THE LIKE. MARION R. HAMER, Brooklyn, N. Y. Filed Jan. 3, 1933. Serial No. 46,680. Term of patent 3½ years.



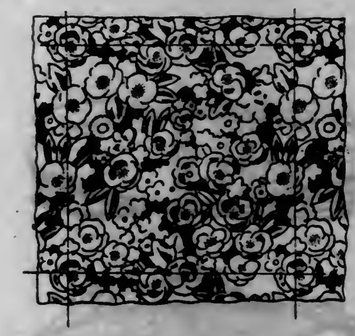
The ornamental design for a textile fabric or the like, as shown and described.

89,187. PILLOW COVER OR THE LIKE. MARION R. HAMER, Brooklyn, N. Y. Filed Jan. 3, 1933. Serial No. 46,681. Term of patent 3½ years.



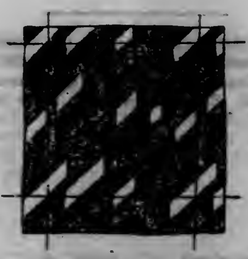
The ornamental design for a pillow cover or the like substantially as shown.

89,188. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J., assignor to H. R. Mallinson & Co., New York, N. Y., a Corporation of Delaware. Filed Nov. 8, 1932. Serial No. 45,885. Term of patent 3½ years.



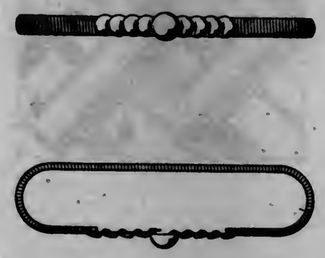
The ornamental design for a textile fabric or the like, as shown and described.

89,189. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J., assignor to H. R. Mallinson & Co., New York, N. Y., a Corporation of Delaware. Filed Nov. 15, 1932. Serial No. 45,977. Term of patent 3½ years.



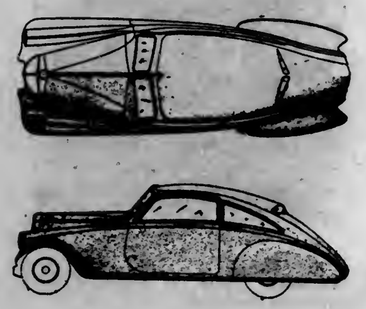
The ornamental design for a textile fabric or the like, as shown and described.

89,190. BELT. SOL HOLSTEIN, New York, N. Y., assignor to Sterling Button Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 18, 1932. Serial No. 44,627. Term of patent 3½ years.



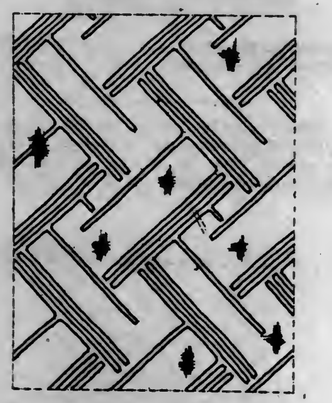
The ornamental design for a belt or similar article substantially as shown and described.

89,191. AUTOMOBILE. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Nov. 12, 1932. Serial No. 45,944. Term of patent 14 years.



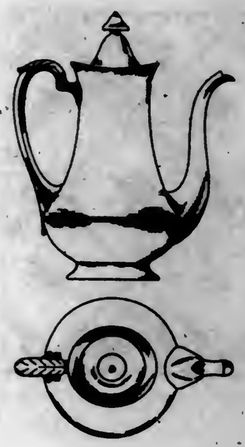
The ornamental design for an automobile substantially as shown.

89,192. TEXTILE FABRIC. MAX U. JUNSTRICH, Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 27, 1932. Serial No. 46,636. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

89,193. COFFEE POT OR SIMILAR ARTICLE. CHARLES KAISER, Great Neck, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,157. Term of patent 7 years.



The ornamental design for a coffee pot or similar article as shown.

89,194. COFFEE POT OR SIMILAR ARTICLE. CHARLES KAISER, Great Neck, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,158. Term of patent 7 years.



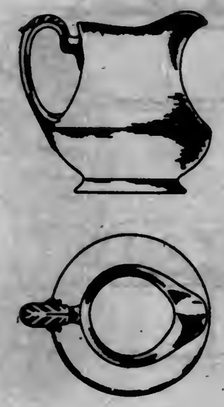
The ornamental design for a coffee pot or similar article as shown.

89,195. SUGAR BOWL OR SIMILAR ARTICLE. CHARLES KAISER, Great Neck, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,160. Term of patent 7 years.



The ornamental design for a sugar bowl or similar article, as shown.

89,196. CREAM JUG OR SIMILAR ARTICLE. CHARLES KAISER, Great Neck, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,161. Term of patent 7 years.



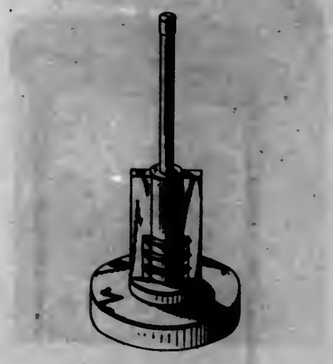
The ornamental design for a cream jug or similar article as shown.

89,197. COMBINATION BASE AND COLUMN FOR DISPLAY STAND. WILLIAM H. KENOS, San Francisco, Calif. Filed Nov. 9, 1932. Serial No. 45,850. Term of patent 3½ years.



The ornamental design for a combination base and column for display stand, substantially as shown.

89,198. COMBINATION BASE AND COLUMN FOR DISPLAY STAND. WILLIAM H. KENOS, San Francisco, Calif. Filed Nov. 9, 1932. Serial No. 45,851. Term of patent 3½ years.



The ornamental design for a combination base and column for display stand, substantially as shown.

89,199. RADIATOR CAP. SAMUEL KLAGSTORMER, Chicago, Ill., assignor to Faith Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed May 27, 1932. Serial No. 43,914. Term of patent 7 years.



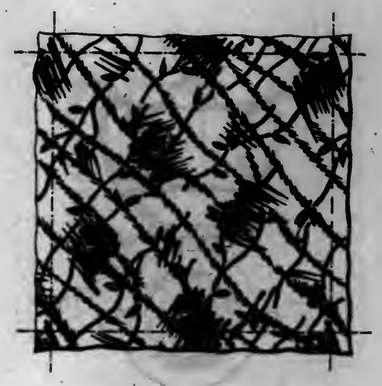
The ornamental design for a radiator cap, as shown.

89,200. LAVATORY. WALTER J. KOHLER, Jr., and FRANK G. BROTZ, Kohler, Wis. Filed Nov. 14, 1932. Serial No. 45,964. Term of patent 14 years.



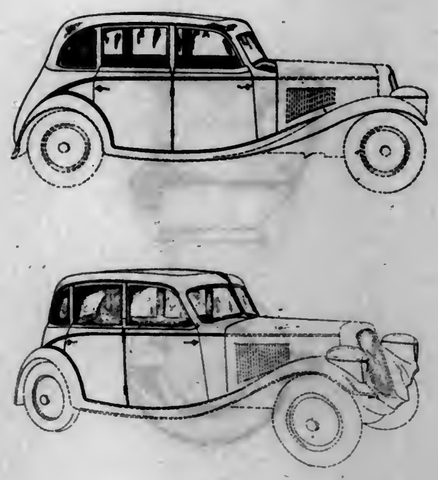
The ornamental design for a lavatory, as shown.

89,201. TEXTILE FABRIC OR SIMILAR ARTICLE. HENRI JULES LAUN, Brooklyn, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,618. Term of patent 8½ years.



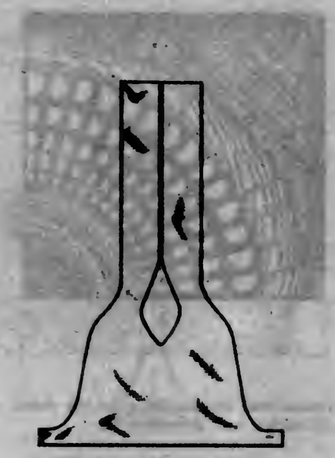
The ornamental design for a textile fabric or similar article as shown and described.

89,202. AUTOMOBILE. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 23, 1932. Serial No. 43,873. Term of patent 8½ years.



The ornamental design for an automobile as shown.

89,203. SCARF OR SIMILAR ARTICLE. JACQUES MAISCH, New York, N. Y., assignor to H. R. Mallinson & Co., Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 8, 1932. Serial No. 46,291. Term of patent 8½ years.



The ornamental design for a scarf or similar article, as shown.

89,204. SHOE SOLE. HARRY W. MARTIN, Belmont, and RAYMOND H. BLANCHARD, Malden, Mass., assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1932. Serial No. 45,650. Term of patent 14 years.



The ornamental design for a shoe sole as shown.

89,205. BASEBALL GAME BOARD. ARTHUR L. NUNN, Fullerton, Calif. Filed Oct. 31, 1932. Serial No. 45,669. Term of patent 7 years.



The ornamental design for a baseball game board, as shown.

89,206. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN OVERMEYER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,612. Term of patent 8½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,207. TOY PISTOL. EDWARD S. PEAKE, East Columbus, Ohio, assignor to The Kilgore Manufacturing Company, Westerville, Ohio, a Corporation of Ohio. Filed Nov. 21, 1932. Serial No. 46,092. Term of patent 7 years.



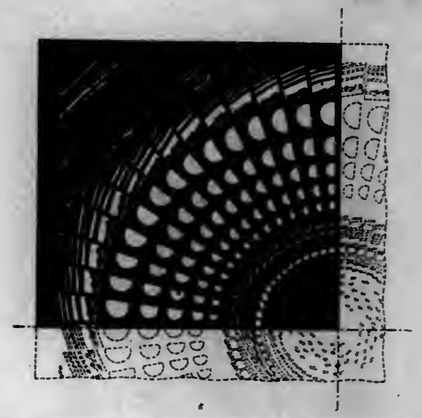
The ornamental design for a toy pistol, substantially as shown.

89,208. HOUSING FOR LAMP FOR SURGICAL WORK AND THE LIKE. ALPHONSE F. PIEPER, Rochester, N. Y. Filed Nov. 25, 1932. Serial No. 46,152. Term of patent 14 years.



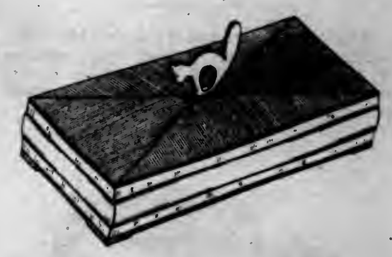
The ornamental design for a housing for lamp for surgical work and the like substantially as shown.

89,209. TEXTILE FABRIC OR SIMILAR ARTICLE. PAUL REIMAN, New York, N. Y., assignor to Sunbury Converting Works, Inc., New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,702. Term of patent 3½ years.



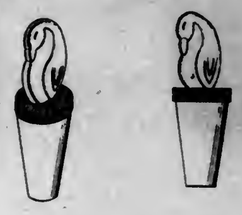
The ornamental design for a textile fabric or similar article as shown and described.

89,210. BOX. KURT RETTICH, Toledo, Ohio, assignor, by mesne assignments, to The Reynolds Spring Company, Jackson, Mich., a Corporation of Delaware. Filed May 31, 1932. Serial No. 43,946. Term of patent 3½ years.



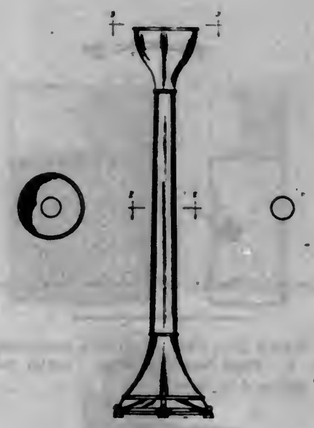
The ornamental design for a box substantially as shown and described.

89,211. CORK. KURT RETTICH, Toledo, Ohio, assignor, by mesne assignments, to The Reynolds Spring Company, Jackson, Mich., a Corporation of Delaware. Filed May 31, 1932. Serial No. 43,948. Term of patent 3½ years.



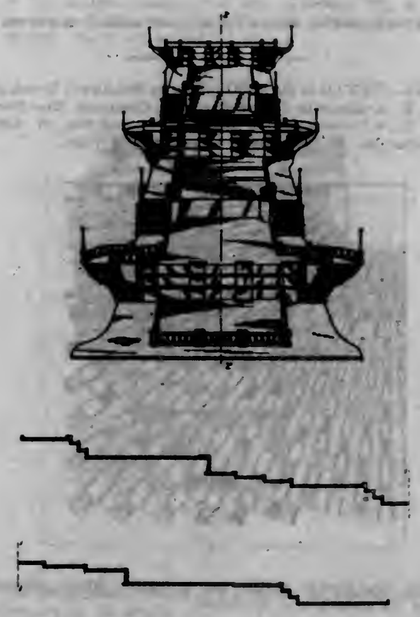
The ornamental design for a cork substantially as shown and described.

89,212. AIR CIRCULATOR. FREDERICK N. ROSS, Detroit, Mich. Filed Dec. 2, 1932. Serial No. 46,283. Term of patent 14 years.



The ornamental design for an air circulator substantially as shown.

89,213. ARTIFICIAL CASCADE STAIRWAY. DONALD E. SARGENT, Jackson, Mich., assignor to William & Matilda Sparks Foundation, Inc., Jackson, Mich., a Corporation of Michigan. Filed July 18, 1932. Serial No. 44,363. Term of patent 14 years.



89,213.—Continued.



The ornamental design for an artificial cascade stairway as shown and described.

89,214. DISPLAY STAND. ROBERT W. SCHWAB, Atlanta, Ga., assignor to Southern Spring Bed Company, Atlanta, Ga., a Corporation of Georgia. Filed Oct. 24, 1932. Serial No. 45,537. Term of patent 14 years.



The ornamental design for a display stand substantially as shown.

89,215. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,600. Term of patent 3½ years.



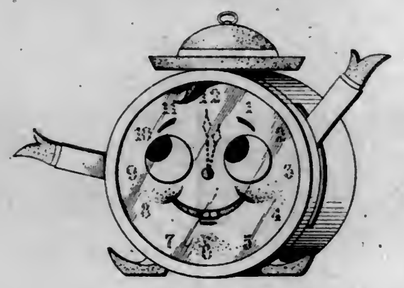
The ornamental design for a textile fabric or similar article as shown and described.

89,216. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,722. Term of patent 3½ years.



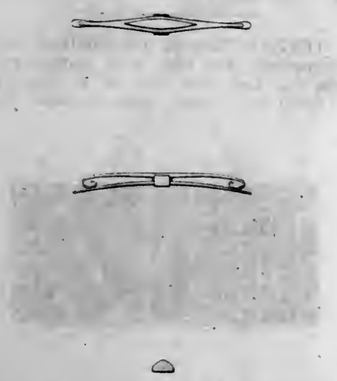
The ornamental design for a textile fabric or similar article as shown and described.

89,217. CLOCK. MARY UDELL SILL, Baltimore, Md. Filed Nov. 18, 1932. Serial No. 46,057. Term of patent 7 years.



The ornamental design for a clock as shown and described.

89,218. COLLAR HOLDER. CHARLES SILVERMAN, Providence, R. I. Filed Nov. 19, 1932. Serial No. 46,073. Term of patent 3½ years.



The ornamental design for a collar holder, as shown.

89,219. COLLAR HOLDER. CHARLES SILVERMAN, Providence, R. I. Filed Nov. 19, 1932. Serial No. 46,074. Term of patent 3½ years.



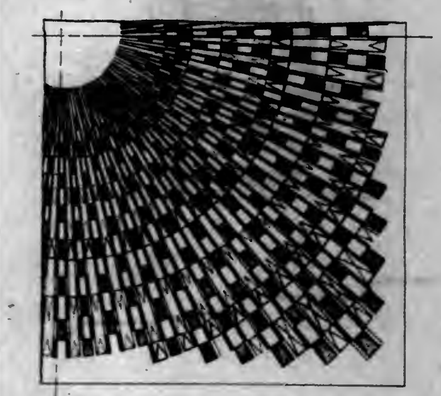
The ornamental design for a collar holder, as shown.

89,220. COLLAR HOLDER. CHARLES SILVERMAN, Providence, R. I. Filed Nov. 19, 1932. Serial No. 46,075. Term of patent 3½ years.



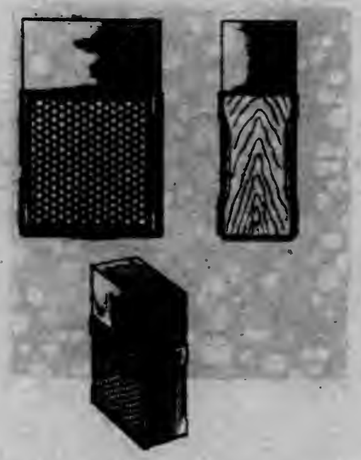
The ornamental design for a collar holder, as shown.

89,221. TEXTILE FABRIC. SOPHIA SOLOMON, Brooklyn, N. Y., assignor to Joseph Berlinger Company, New York, N. Y., a Corporation of New York. Filed Dec. 27, 1932. Serial No. 46,619. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

89,222. PACKAGE. WALTER F. STRAUB, Chicago, Ill., and EDWIN W. FUERST, Toledo, Ohio, assignors, by direct and mesne assignments, to W. F. Straub Laboratories, Inc., Chicago, Ill., a Corporation of Illinois. Filed Nov. 25, 1932. Serial No. 46,155. Term of patent 14 years.



The ornamental design for a package, substantially as shown.

89,223. BOTTLE OR SIMILAR ARTICLE. WALTER F. STRAUB, Chicago, Ill., and EDWIN W. FUERST, Toledo, Ohio, assignors, by direct and mesne assignments, to W. F. Straub Laboratories, Inc., Chicago, Ill., a Corporation of Illinois. Filed Nov. 25, 1932. Serial No. 46,156. Term of patent 14 years.



The ornamental design for a bottle or similar article, substantially as shown.

89,224. EDIBLE FOOD CONTAINER. NORMAN M. THOMAS, Brooklyn, N. Y. Filed Nov. 5, 1932. Serial No. 45,777. Term of patent 14 years.



The ornamental design for an edible food container, as shown.

89,225. EMBROIDERY. JOSEPH VOLLMAN, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 8, 1932. Serial No. 45,842. Term of patent 3½ years.



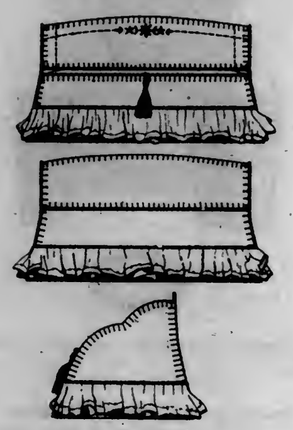
The ornamental design for embroidery, as shown.

89,226. ILLUMINATED HOUSE NUMBER CASING OR SIMILAR ARTICLE. JOSEPH VON ALT, Cleveland, Ohio. Filed Jan. 16, 1932. Serial No. 42,506. Term of patent 7 years.



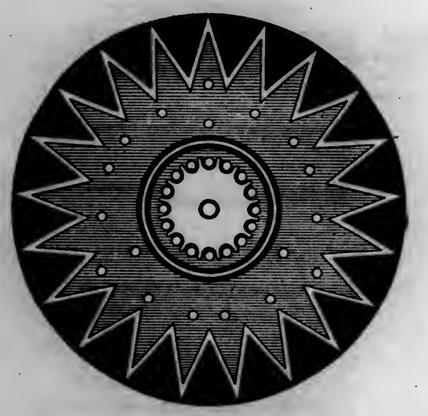
The ornamental design for an illuminated house number casing or similar article, as shown.

89,227. SEWING BOX. ZELLA WALLIS, Chicago, Ill., assignor to Wm. H. Molter Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 2, 1932. Serial No. 46,281. Term of patent 3½ years.



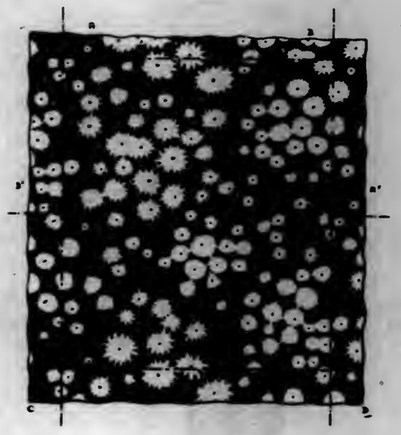
The ornamental design for a sewing box, substantially as shown.

89,228. GAME BOARD. ALBERT J. WATLING, Chicago, Ill., assignor to Watling Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 8, 1932. Serial No. 44,014. Term of patent 3½ years.



The ornamental design for a game board substantially as shown in the drawing and described.

89,229. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,710. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,230. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,712. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,231. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,713. Term of patent 3½ years.



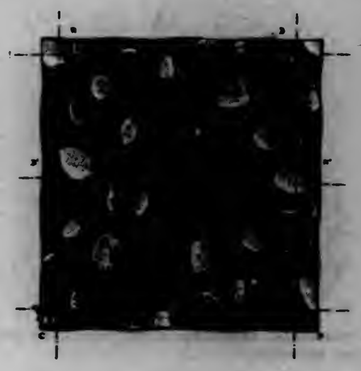
The ornamental design for a textile fabric or similar article as shown and described.

89,232. FRUIT JUICER. SERENUS H. A. YOUNG, St. Paul, Minn. Filed Nov. 14, 1932. Serial No. 45,968. Term of patent 3½ years.



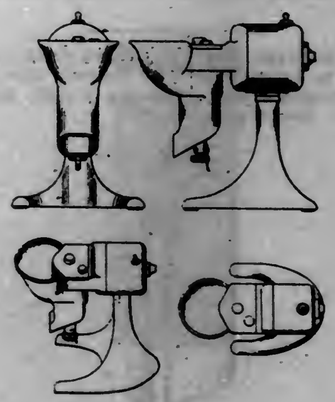
The ornamental design for a fruit juicer substantially as shown.

89,233. TEXTILE FABRIC OR SIMILAR ARTICLE. ALEXANDER KOHUT, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,496. Term of patent 3½ years.



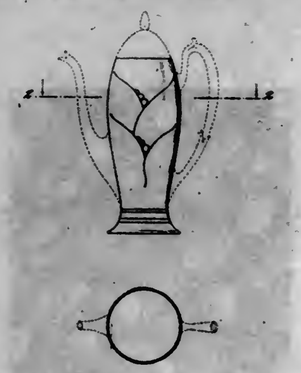
The ornamental design for a textile fabric or similar article as shown and described.

89,234. COFFEE GRINDER. JOSEPH F. LAMB, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed May 2, 1931. Serial No. 89,687. Term of patent 3½ years.



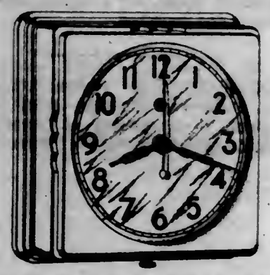
The ornamental design for a coffee grinder as shown.

89,235. POT OR SIMILAR ARTICLE. GEORVENOR N. ALLEN and CHARLES A. BENNETT, Oneida, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Dec. 8, 1932. Serial No. 46,831. Term of patent 14 years.



The ornamental design for a pot or similar article as shown and described.

89,236. CASING FOR A WALL CLOCK. EDGAR BOURQUIN, Framingham, Mass., assignor to Warren Telechron Company, a Corporation of Maine. Filed Nov. 30, 1932. Serial No. 46,202. Term of patent 14 years.



The ornamental design for a casing for a wall clock as shown.

89,237. BOTTLE. EDWIN W. FUERST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 8, 1932. Serial No. 44,547. Term of patent 14 years.



The ornamental design for a bottle substantially as shown.

89,238. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 27, 1932. Serial No. 46,637. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

89,239. TEXTILE FABRIC. MAX U. JUERSTRICH, Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 27, 1932. Serial No. 46,638. Term of patent 3½ years.



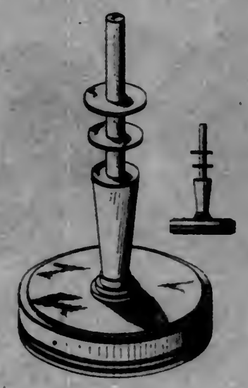
The ornamental design for a textile fabric, substantially as shown and described.

89,240. FINGER RING. JACOB J. KAGAN, Los Angeles, Calif. Filed Oct. 11, 1932. Serial No. 45,314. Term of patent 14 years.



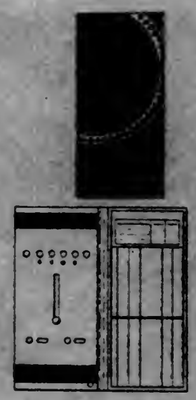
The ornamental design for a finger ring substantially as shown and described.

89,241. COMBINATION BASE AND COLUMN FOR DISPLAY STAND. WILLIAM M. KERNS, San Francisco, Calif. Filed Nov. 9, 1932. Serial No. 45,852. Term of patent 3½ years.



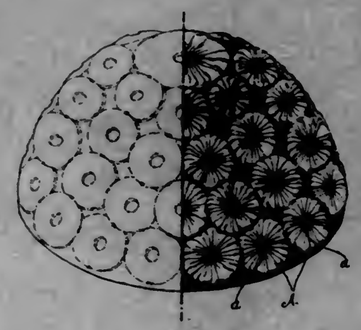
The ornamental design for a combination base and column for display stand, substantially as shown.

89,242. BRIDGE TALLY. VERNON MARTIN, Paris, Ontario, Canada, assignor to Walker Press Limited, Paris, Ontario, Canada. Filed Nov. 11, 1932. Serial No. 45,880. Term of patent 3½ years.



The ornamental design for a bridge tally, as shown.

89,243. CAP. VIRGINIA C. MUSHKIN, Brooklyn, N. Y. Filed July 29, 1932. Serial No. 44,475. Term of patent 3½ years.



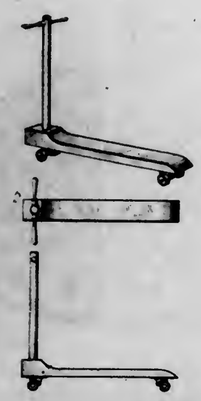
The ornamental design for a cap as shown and described.

89,244. TEXTILE FABRIC OR SIMILAR ARTICLE. JOHN OVERBEEKE, New York, N. Y., assignor to William Willhelm Co., Inc., New York, N. Y. Filed Dec. 27, 1932. Serial No. 46,609. Term of patent 3½ years.



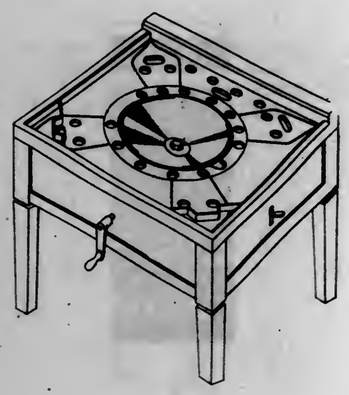
The ornamental design for a textile fabric or similar article as shown and described.

89,245. TOY VEHICLE. EDWIN A. PETERSON, Maywood, Ill. Filed Nov. 16, 1932. Serial No. 46,007. Term of patent 3½ years.



The ornamental design for a toy vehicle, substantially as shown.

89,246. GAME CABINET OR SIMILAR ARTICLE. LEON A. RADEN and ALLAN JOZE, Chicago, Ill. Filed Aug. 19, 1932. Serial No. 44,641. Term of patent 3½ years.



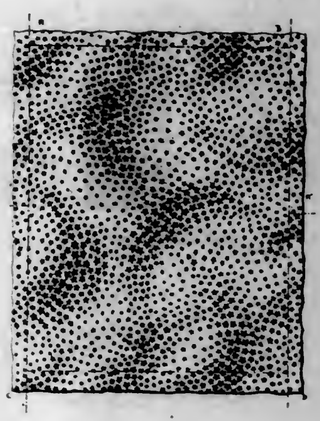
The ornamental design for a game cabinet or similar article, as shown.

89,247. DRESS. ADELE SMITHLINE SIMPSON, New York, N. Y., assignor to Associated Merchandising Corporation, New York, N. Y., a Corporation of New Jersey. Filed Jan. 3, 1933. Serial No. 46,689. Term of patent 3½ years.



The ornamental design for a dress substantially as shown.

89,248. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,721. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

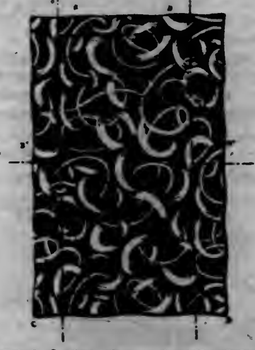
CARNEGIE LIBRARY OF ATLANTA

89,249. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,709. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,250. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,711. Term of patent 3½ years.

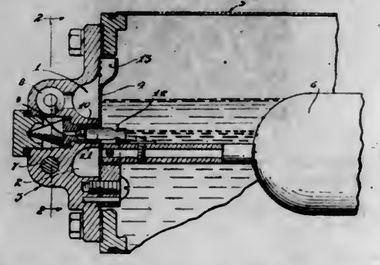


The ornamental design for a textile fabric or similar article as shown and described.

PATENTS

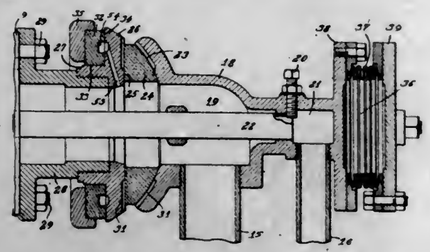
GRANTED FEBRUARY 7, 1933

1,896,061. **APPARATUS FOR RECOVERING AND CONTROLLING THE FLOW OF OIL IN REFRIGERATING SYSTEMS.** RANSOM H. BEMAN, Detroit, Mich., and JOHN H. BENSON, Salem, Ohio, assignors to Mullins Manufacturing Corporation, Salem, Ohio, a Corporation of New York. Filed July 7, 1930. Serial No. 466,055. 5 Claims. (Cl. 62—8.)



1. Evaporator structure for refrigerating systems comprising means for maintaining liquid within the evaporator at a substantially constant level, a small reservoir formed adjacent the main body of liquid in the evaporator, a baffle plate forming a wall of said reservoir and separating the main body of liquid in the evaporator and the liquid in the reservoir, and one or more apertures in said baffle plate for permitting oil or combined oil and refrigerant to pass into the reservoir.

1,896,062. **SELF-BALANCING STEAM FITTING.** EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed May 29, 1931. Serial No. 540,823. 18 Claims. (Cl. 285—22.)



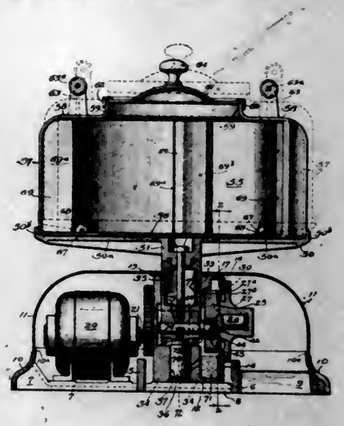
1. In combination, a hollow rotary journal, a supporting bearing for the journal, a main steam fitting having steam supply and condensate outlet pipes connected thereto and serving to support it, a bearing ring interposed between and having bearing contact with said fitting and the end of said journal and allowing motion of the fitting in a plane at right angles to the axis of the journal without breaking said bearing contact, and means operative between said fitting and the journal for maintaining the fitting in a balanced condition and the bearing surfaces in sealing contact, said means including a ring rotative on the journal, an expansible compartment on the fitting, and tie-rods connecting said ring and a wall of said compartment responsive to the steam pressure therein, normally maintaining the fitting in centered relation with respect to the journal, said fitting having capacity for movement in said plane with respect to said ring and said wall to compensate for expansion and contraction of said pipes.

1,896,063. **DEVICE FOR THE TRANSPORTATION AND TRANSPOSITION OF VEHICLES AND THE LIKE.** ALDO BOTTINI, Buenos Aires, Argentina. Filed Aug. 7, 1931. Serial No. 555,734. 7 Claims. (Cl. 104—50.)



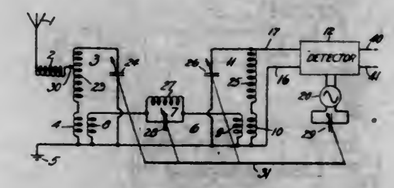
1. Vehicle handling apparatus comprising a wheeled truck, a fixed screw member mounted transversely of the truck, a motor carriage mounted on the truck for movement transversely thereof, a motor mounted on said carriage, a connection between the motor and said screw member whereby operation of the motor results in movement of the motor transversely of the truck, a second screw member extending longitudinally of the truck, a connection between said second screw member and the motor whereby said second screw member is movable bodily in a longitudinal direction with the motor carriage and also longitudinally with respect to the motor and its carriage by operation of the motor, and vehicle engaging means connected with said second screw member for movement therewith to move a vehicle onto and off the truck.

1,896,064. **WASHING MACHINE.** HARRY BOYAR, Chicago, Ill., assignor to Boyar-Schultz Corporation, Chicago, Ill., a Corporation of Illinois. Filed May 29, 1930. Serial No. 456,848. 5 Claims. (Cl. 68—18.)



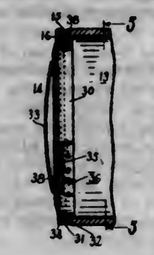
1. In a clothes washing machine, the combination of a vertically disposed shaft mounted for simultaneous oscillatory and vertically reciprocating motions, means for simultaneously vertically reciprocating and oscillating said shaft, a horizontal support carried by said shaft at the upper end thereof, and an imperforate container for clothes and a cleaning liquid seated for ready removability on said support, and coacting means on said support and container for communicating the motion of said support to the container.

1,896,065. **SELECTIVE CIRCUIT FOR SUPERHETERODYNE RADIORECEIVERS.** HORACE T. BUDENBOM, Short Hills, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 29, 1929. Serial No. 374,742. 11 Claims. (Cl. 250—20.)



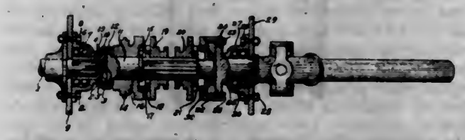
1. A selective circuit comprising a pair of syntonous tuned circuits having their tuning elements mechanically connected for the maintenance of syntony and impedance coupling means for said tuned circuits, said coupling means being adapted to maintain a substantially constant width band transmission characteristic throughout the tuning range, and including a variable element mechanically coupled to the tuning elements of the syntonous circuits, whereby transmission between said circuits is suppressed at a frequency differing by a substantially constant amount from the frequency of tuning of said syntonous circuits.

1,896,066. **HUB CAP OR THE LIKE.** GREGORY BROWN, Bridgeport, Conn., assignor to Bridgeport Brass Company, Bridgeport, Conn. Filed Apr. 12, 1929. Serial No. 354,566. 11 Claims. (Cl. 301—108.)



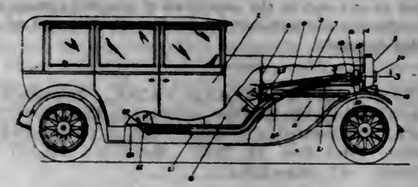
3. A cover plate for the open end of an internally shouldered tubular member, comprising a disk-like member having an axially directed flange thereon adapted to enter said tubular member, said flange having a resilient bowllike portion anchored at both ends to the body of the flange and adapted to compress to permit said flange to enter the tubular member and to expand to engage the member and retain said plate thereon.

1,896,067. **DEMOUNTABLE POWER TAKE-OFF.** ALBERT F. BURGESS, HARRY L. BLAISDELL, and WILLIAM H. CAMPBELL, Melrose Highlands, Mass. Filed Feb. 18, 1932. Serial No. 592,828. 2 Claims. (Cl. 74—7.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a device of the character described, flanged forward and rear shaft sections journaled on cross-members of motor vehicle chassis frame, a flanged, intermediate shaft section, means for demountably securing the forward shaft section to the intermediate shaft section, means for selectively effecting an integral or independent relation of the intermediate and rear shaft sections, demountable means for maintaining linear relation of intermediate and rear shaft sections, a driving member rotatably mounted on the intermediate shaft section, a mating clutch member splined against rotation but slidably mounted on the intermediate shaft section adjacent to the driving member, and means for engaging and disengaging the driving member and mating clutch member.

1,896,068. **HEATING SYSTEM FOR AUTOMOTIVE VEHICLES.** VERNON J. BUTTERFIELD, Minneapolis, Minn., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Nov. 12, 1928. Serial No. 318,762. 5 Claims. (Cl. 237—12.3.)

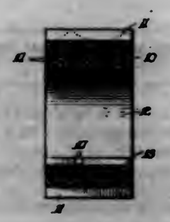


1. A heating system for motor-driven vehicles including an engine cooling system having an inter-communicating jacket and radiator for a circulating cooling medium, said radiator having air passageways therethrough, comprising conduits connecting the interior of the vehicle body with said air passageways and providing therewith a closed channel separated from said cooling medium jacket, and means for withdrawing air from the vehicle body interior, forcing said withdrawn air through said conduits and air passageways, and returning said air to the interior of said vehicle body.

1,896,069. **COMPOSITION OF MATTER AND PROCESS FOR PRODUCING SAME.** OSCAR A. CHERRY and FRANZ KURATH, Chicago, Ill., assignors to Economy Fuse and Manufacturing Company, Chicago, Ill., a Corporation of New York. Original application filed Mar. 30, 1928, Serial No. 266,114. Divided and this application filed Aug. 16, 1929. Serial No. 386,484. 5 Claims. (Cl. 106—22.)

1. A molding composition comprising a potentially reactive phenolic condensation product and the reaction product of carboxylic acid, aromatic amines and aldehydes.

1,896,070. **MOLDED GEAR.** OSCAR A. CHERRY, Chicago, Ill., assignor to Economy Fuse and Manufacturing Company, Chicago, Ill., a Corporation of New York. Filed June 17, 1931. Serial No. 545,081. 7 Claims. (Cl. 74—28.)



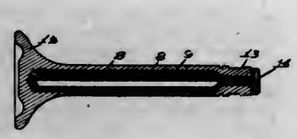
1. A toothed gear molded in situ and comprising a reacted phenolic condensation binder and a filler consisting of relatively short lengths of spun fibrous string-like material.

1,896,071. PESSARY. GEORGE A. CLARK, Elwood, Nebr. Filed Apr. 24, 1931. Serial No. 532,597. 1 Claim. (Cl. 128—130.)



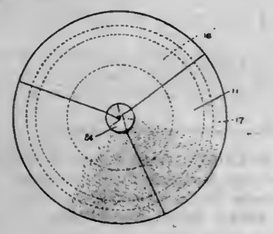
An intra uterine pessary, comprising a circularly bent coil spring closed at one end, and a flexible element connected at one end to the other end of the coil spring, and an anchoring member carried on the opposite end of the flexible element.

1,896,072. COPPER COOLED VALVE. FREDERICK C. CRAWFORD, Cleveland, Ohio, assignor to Thompson Products, Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 13, 1931. Serial No. 515,567. 3 Claims. (Cl. 123—188.)



1. As a new article of manufacture, a hollow stem valve having a metal shell within said hollow stem welded to the walls thereof.

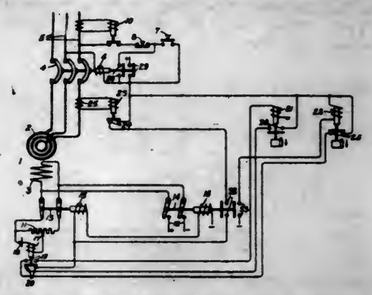
1,896,073. ACOUSTIC DIAPHRAGM. CHARLES F. DILKS, Long Island City, N. Y. Filed Oct. 7, 1930. Serial No. 486,989. 12 Claims. (Cl. 181—32.)
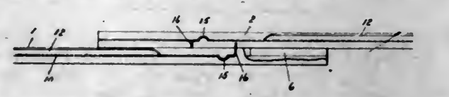


1. An acoustic diaphragm composed of a plurality of layers of soft, rough paper, secured together by cement.

1,896,074. SYNCHRONOUS MOTOR CONTROL SYSTEM. SAMUEL C. EWING, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 23, 1932. Serial No. 588,361. 14 Claims. (Cl. 171—118.)

1. In combination, a synchronous motor having a field winding, switching means including electroresponsive means for controlling the connections of said field winding, means controlled by the speed of said motor for completing for a predetermined time an energizing circuit for said electroresponsive means when said motor operates at substantially synchronous speed, a contact controlling device responsive to a condition indicative of the motor falling out of synchronism, and means controlled by the operation of said switching means for completing a locking circuit for said electroresponsive means through the contacts of said device before said energizing circuit is opened.

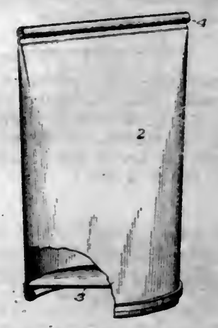


1,896,075. ADJUSTABLE VENTILATOR. VIRGIL F. ESPENSCHIED, Hartville, Ohio, assignor, by mesne assignments, to The Schumacher Corporation, Hartville, Ohio, a Corporation of Ohio. Filed Mar. 28, 1928. Serial No. 265,395. 1 Claim. (Cl. 98—99.)



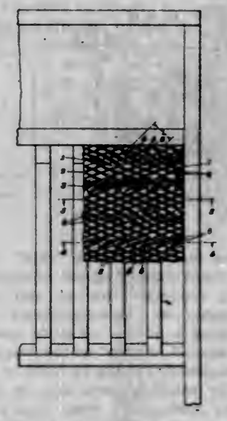
A horizontally adjustable ventilator comprising two frame members, adjustable sliding connections between the frame members, the frame members comprising overlapping metal sheets and louvers stamped in said sheets, an intermediate strip extending transversely of said louvers and spacing the louvers on each side thereof, the louver openings in the metal sheets being oppositely disposed, the adjustable sliding connections spacing the sheets at a sufficient distance to permit free adjustment of the frame members without interference between the louvers, the inner end of each sheet being bent to form a stop cooperating to limit the movement of the members, one of said stops being of a greater depth than the other so as to extend close to the surface of the other sheet.

1,896,076. CONTAINER AND MANUFACTURE OF SAME. GEORGE O. FROSTAD, Milwaukee, Wis., assignor to National Paper Can Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 25, 1929. Serial No. 380,986. 11 Claims. (Cl. 229—1.5.)



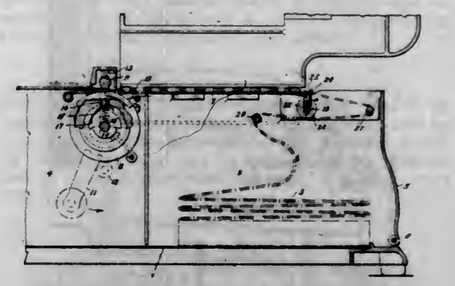
1. A fibrous milk dispensing container having a convolutely wound self-sustaining body opposite edge portions of which are brought together and rolled together to form a liquid-tight joint.

1,896,077. RUBBING ELEMENT FOR WASHBOARDS. HARWOOD J. GILBERT, Saginaw, Mich., assignor to National Washboard Company, Chicago, Ill., a Corporation of West Virginia. Filed Feb. 8, 1932. Serial No. 591,649. 1 Claim. (Cl. 68—29.)



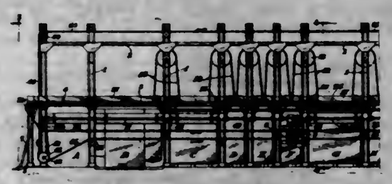
A rubbing element for wash-boards comprising a sheet metal structure presenting parallel ribs and grooves, said ribs having on their crests parallel diagonally disposed alternating wales and indentations, each of said wales consisting of a plurality of bulge elements separated by transverse depressions.

1,896,078. STRIP REGISTERING AND TENSIONING DEVICE. LOUIS F. HAGEMANN, Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada, a Corporation of Province of Ontario, Canada. Filed Nov. 12, 1925, Serial No. 68,501. Renewed Apr. 22, 1932. 11 Claims. (Cl. 282—21.)



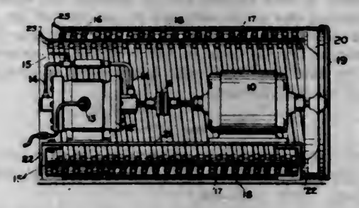
1. A device of the character described including, in combination, a tablet over which superposed strips, each having a series of control apertures, are adapted to be fed, strip feeding means and strip aligning means spaced apart from each other longitudinally of the tablet, said feeding means including a strip gripping and feeding roller adapted to engage an aperture in the strip to relieve the feed grip on the strip, said aligning means including a strip aligning pin mounted to rotate forwardly under the pull thereon of the advancing strip and automatically biased to rotate backwardly to position to be engaged by another aperture in the strip advanced by said strip feeding means.

1,896,079. AUTOMATIC CONVEYER FOR CHEMICAL AND ELECTROCHEMICAL OPERATIONS. WESLEY F. HALL, Matawan, N. J., assignor to Hanson-Van Winkle-Munning Company, Matawan, N. J., a Corporation of New Jersey. Filed Dec. 26, 1931. Serial No. 583,325. 14 Claims. (Cl. 204—5.)



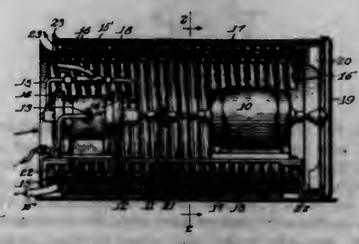
1. Apparatus of the character described, comprising in combination a series of work-stations for the performance of operations upon work-pieces to be conveyed therethrough, a conveyer traversing the series of work-stations, work-piece hangers removably mountable on said conveyer, and means operating in timed relation with said conveyer but at a higher rate of travel for removing each hanger from said conveyer at a point leaving the series of work-stations and returning it to said conveyer at a point approaching said series of work-stations.

1,896,080. REFRIGERATION UNIT. EDWARD A. HAMPSON, Chicago, Ill., assignor to The Hoover Company, a Corporation of Illinois. Filed Oct. 10, 1927. Serial No. 225,152. 5 Claims. (Cl. 62—115.)



1. A refrigeration unit comprising a motor and a compressor, a condenser coil surrounding the motor and compressor and having portions radially spaced from one another and a plurality of annular shell members positioned relative the condenser coil, and acting as baffles to direct a cooling air flow over the condenser coil, one of said shell members being located between said radially spaced portions.

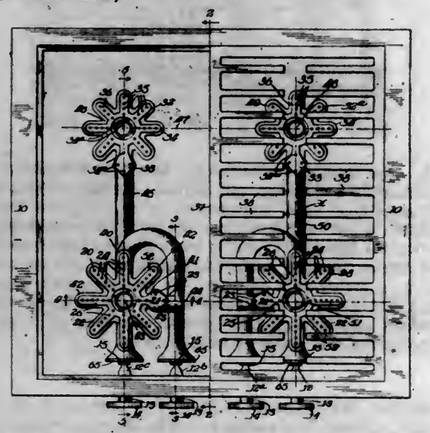
1,896,081. CONDENSER. EDWARD A. HAMPSON, Chicago, Ill., assignor to The Hoover Company, a Corporation of Ohio. Original application filed Oct. 10, 1927, Serial No. 225,152, and in Great Britain July 5, 1929. Divided and this application filed Oct. 19, 1929. Serial No. 400,782. 2 Claims. (Cl. 251—39.)



1. In refrigerating apparatus, the combination of a condenser including a plurality of concentrically disposed elements, each element having its radiating surface ar-

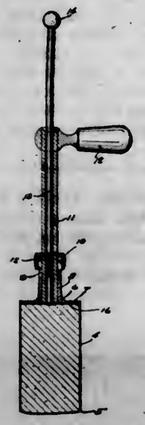
ranged to describe a cylindrical surface, a cylindrically shaped baffle interposed between said elements and a fan adapted to circulate air over said elements in different directions.

1,896,082. BURNER. PHILIP S. HARPER, Chicago, Ill. Filed Apr. 2, 1930. Serial No. 440,895. 15 Claims. (Cl. 158—105.)



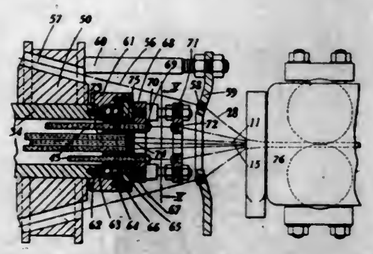
14. In a gas range, a cooking top, a manifold arranged at the front end of said cooking top, a front double section burner, a rear double section burner, the said front burner having one of its sections to the side of its center line perpendicular to said manifold, the said rear burner having one of its sections to the front of its center line parallel to said manifold, and a gas cock in connection with each of said burners.

1,896,083. ICE CREAM DIPPER. ORA E. HARRIS, Kearney, Nebr. Filed Oct. 16, 1931. Serial No. 569,187. 2 Claims. (Cl. 107—48.)



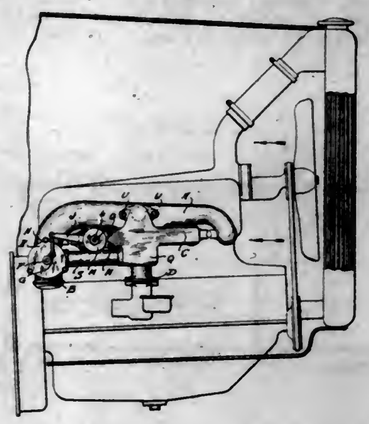
2. An ice cream dipper comprising a cylindrical cup open at one end and provided at its other end with a head having an axial projecting neck split and threaded at its outer end, a tubular stem telescoped through said neck, a nut having tapered threaded engagement with the threads on the split end of said neck for contracting the latter on the said stem, said stem having a handle at its outer end, an ejecting rod working axially through said stem, and a disc-like ejecting head secured to the inner end of said rod and working in said cylindrical cup.

1,896,084. STRANDING MACHINE. HARRY HILL, Belvedere, Kent, England, assignor to Callender's Cable and Construction Company, Limited, London, England, a British Company. Filed Feb. 19, 1932, Serial No. 594,058, and in Great Britain Mar. 27, 1931. 5 Claims. (Cl. 117—20.)



1. A stranding machine of the "cage" type which includes at least three axially alined rotatable cages, each carried upon a separate mandrel and containing an appropriate number of wire-containing bobbins, said machine comprising a number of guide plates (one plate for each cage) located in front of the final cage, a single closing die arrangement located in front of the said guide plates, means for rotating each cage at an appropriate speed, means for guiding the wires from each individual cage (excepting the final cage) to the guide plate which appertains to that individual cage through the mandrel of each cage located between that cage and the closing die arrangement, means for rotating each guide plate at the same speed as that of the cage to which such guide plate appertains and means for effecting the drawing off of the stranded wires from the said single closing die arrangement.

1,896,085. HOT SPOT MANIFOLD. GEORGE M. HOLLEY, Detroit, Mich. Filed Nov. 11, 1929. Serial No. 406,246. 6 Claims. (Cl. 123—122.)



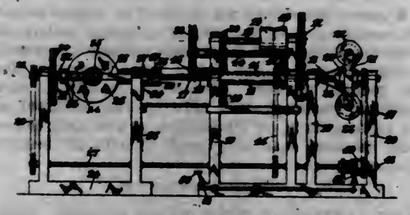
1. In combination with an automobile operated by an internal combustion engine, an exhaust manifold having an exhaust outlet located to the rear of said engine, an inlet manifold associated with said exhaust manifold, an exhaust jacket partially surrounding said inlet manifold, said exhaust jacket communicating with said exhaust manifold, an outlet from said exhaust jacket communicating with the outlet from said exhaust manifold, a valve in said exhaust outlet adapted to close said outlet from said jacket and at the same time open the exhaust manifold directly to the exhaust outlet, and alternately open the said outlet from said jacket and close the exhaust manifold directly to the exhaust outlet, thermostatic means located entirely on the outside of said inlet manifold and connected with said valve for the purpose described.

1,896,086. TRIPOD. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 21, 1929. Serial No. 401,022. 2 Claims. (Cl. 248—42.)



2. In a tripod leg the combination with a pair of tubes telescopically engaged for sliding movement and the inner of which has an expansible portion engaged in the outer tube, of an expansion member within the enclosure of said tubes and movable longitudinally of said inner tube for expanding said expansible portion thereof against the outer tube and releasing the same, a rod extending within said inner tube and connected with said expansion member for operating the same, a bearing at the outer end of said inner tube and having engagement with said rod for longitudinal movement of the rod and to prevent rotation thereof with reference to said inner tube, a helical spring encircling said rod inwardly of said bearing for operating the rod in a direction inwardly from the outer end of said inner tube, and a manually operable member having a screwthreaded engagement with the outer end of said rod for operating the rod against the influence of said spring.

1,896,087. CABLE MAKING AND LIKE MACHINE. FREDERICK JOHN HUMPHREY, Ilford, England, assignor to Armaflex Parent, Limited, London, England, a British Company. Filed Jan. 2, 1930, Serial No. 418,080, and in Great Britain Jan. 21, 1929. 3 Claims. (Cl. 118—35.)

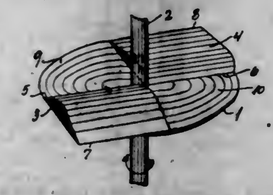


1. A cable-making or like machine of the type set forth, comprising in combination a hollow mandrel, means for rotating said mandrel, a reel to receive a supply of material constituting the core, means for rotating said reel bodily about the axis of the mandrel, means for feeding the core through the mandrel, means for feeding a shaped strip of armouring material on to the mandrel, a take-up device for drawing the armouring material off said mandrel whilst encircling the core, means for bodily rotating the take-up device, which reel and take-up device are rotated at the same speed, a device for compressing the armouring upon the core after it leaves the mandrel, and a plurality of relatively soft pads which are arranged to press upon the armouring before it enters said device, for the purpose described.

1,896,088. PROCESS OF REDUCING ORES. FREDERICK E. KERN, St. Louis, Mo. Filed June 18, 1930. Serial No. 462,133. 4 Claims. (Cl. 75—14.)

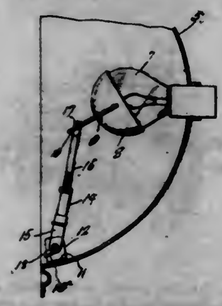
1. The process of reducing low-grade oxide ores having a silica content which comprises pulverizing said ores, mixing said pulverized ores with a pulverized carbonaceous reducing material having an alumina content in such proportions that the alumina is sufficient, without the addition of extraneous material, to flux the silica present, plasticising the mixture, forming the plastic mixture into briquettes, and heating said briquettes to destructively distill said carbonaceous material whereby it is formed into volatiles and coke, and further heating said briquettes whereby said oxide ores are reduced and said alumina and said silica constituents combine to form a slag.

1,896,089. VACUUM PROPELLER PLANE. OTTO CHRISTENSEN KROGH, Odense, Denmark. Filed June 27, 1931, Serial No. 547,860, and in Denmark July 29, 1929. 4 Claims. (Cl. 170—135.)



1. In vacuum propeller planes the combination, with a circular disk, of a number of current-line shaped air-rarefying planes mounted on one side of the said disk, and means for rotating the said disk in order to obtain a lower pressure all over its area on that side, on which the air-rarefying planes are mounted.

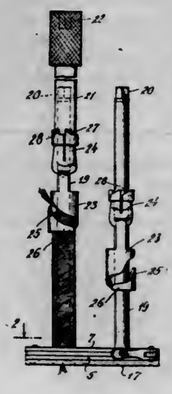
1,896,090. REFLECTOR. CHARLES A. KUHNS, Niagara Falls, N. Y. Filed Mar. 4, 1932. Serial No. 596,818. 2 Claims. (Cl. 240—48.6.)



1. In a headlight, in combination, a casing, a lamp mounted in said casing, an auxiliary reflector engaging said lamp and having its axis disposed at an angle to the axis of said lamp, and means for yieldably retaining said auxiliary reflector in engagement with said lamp;

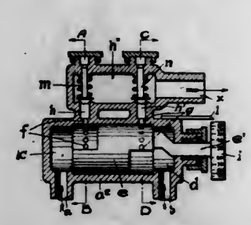
said means comprising a bracket fixedly secured within said casing, a fork having the legs thereof pivotally engaged with the bracket, spring means engaging said bracket and fork and normally urging the latter to rotate in one direction, said fork also having a shank provided with a threaded opening therethrough, a rod having an end screw threadedly engaged with the shank of said fork and having its other end flattened, and spring arms secured at one end to said auxiliary reflector and having remote from said auxiliary reflector parallel portions frictionally engaging therebetween the flattened end of said shank.

1,896,091. METHOD AND APPARATUS FOR WAVING HAIR. WALTER E. LIPPERT, Hewlett, N. Y., assignor to Samuel Bonat and Harry Bonat, doing business as Samuel Bonat & Bro., New York, N. Y. Filed Aug. 14, 1931. Serial No. 556,995. 23 Claims. (Cl. 132—33.)



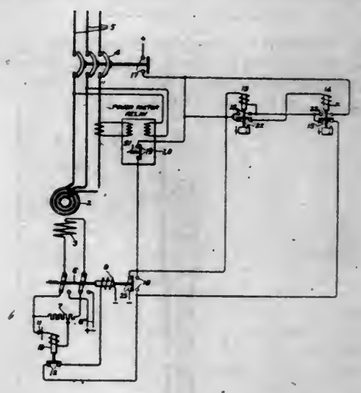
1. The method of waving living hair which comprises separating the hair into strands, clamping the strands near the roots thereof, winding contiguous strands helically in opposite directions, moistening the hair with a treating solution, and subjecting the hair to heat for a period sufficient to fix the wave therein.

1,896,092. APPARATUS FOR MIXING GASES. FRANCESCO MANGIAMELI, Dusseldorf, Germany. Filed Oct. 8, 1931, Serial No. 567,654, and in Germany Aug. 7, 1931. 5 Claims. (Cl. 48—180.)



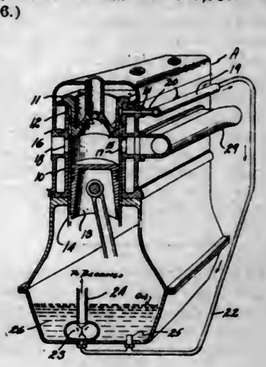
1. A mixing device for gases, comprising a valve casing having inlet and discharge ducts for the respective gases and two peripheral series of wall ports communicating with the respective discharge ducts, and a valve in said casing adapted to uncover the ports of one series successively and simultaneously close a like number of ports in the other series.

1,896,093. CONTROL SYSTEM. DAVID W. MCLENEGAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 23, 1932. Serial No. 588,358. 6 Claims. (Cl. 171—118.)



1. In combination, a synchronous machine having a field winding, a source of excitation connected to said field winding, and means responsive to the power factor of said machine for disconnecting said source from said field winding when said machine falls out of synchronism.

1,896,094. SLEEVE VALVE ENGINE. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Original application filed Sept. 28, 1927, Serial No. 222 499. Divided and this application filed Mar. 11, 1929. Serial No. 345,983. 4 Claims. (Cl. 123—196.)

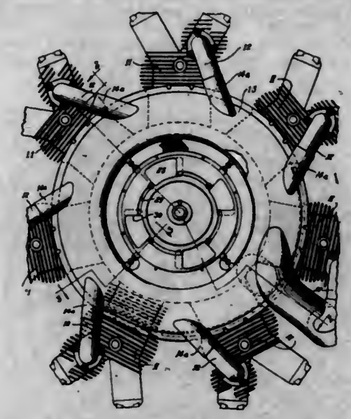


1. A sleeve valve internal combustion engine comprising in combination, a plurality of cylinders each having reciprocable sleeve valve means and a sleeve valve pocket receiving one end of the sleeve valve means, a sleeve valve pocket pressure equalizing manifold, means establishing communication between the manifold and sleeve valve pockets, an oil pump, and a conduit connecting said pressure equalizing manifold with the intake of said pump.

1,896,095. INTERNAL COMBUSTION ENGINE. ARCHIE M. NIVEN, Detroit, Mich., assignor, by mesne assignments, to Continental Aircraft Engine Company, a Corporation of Delaware. Filed May 30, 1930. Serial No. 457,628. 9 Claims. (Cl. 123—55.)

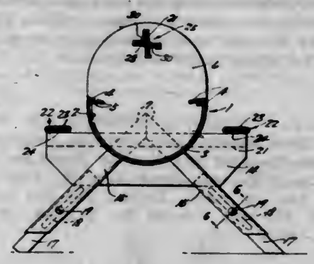
1. In an internal combustion engine of the radial type having a crankcase structure and a propeller shaft

projecting beyond the crankcase front end, an exhaust ring, and a plurality of means adjustably carried by the crankcase structure and provided with a swivelly supported pad, said means adapted for adjustment radially



outwardly to clamp the swivelly supported pad against the inner surface portion of said exhaust ring to support the same in suspended relation with said crankcase structure.

1,896,096. TELESCOPING FEED TROUGH. GEORGE HOWE PARKER, Hiawatha, Kans. Filed Feb. 27, 1932. Serial No. 595,514. 2 Claims. (Cl. 119—61.)



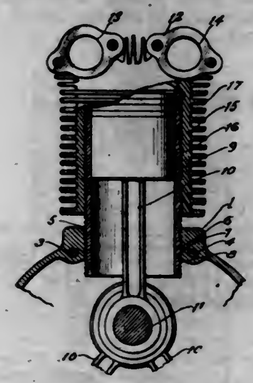
1. In a device of the kind described, a plurality of telescopically connected trough sections, longitudinally adjustable legs secured to the trough sections, and a plurality of telescopically connected perch sections supported along side the trough sections.

1,896,097. BIRD CAGE. HARRY G. PALMER, Hamden, Conn., assignor to The Andrew B. Hendryx Company, New Haven, Conn. Filed Jan. 21, 1930. Serial No. 422,295. 4 Claims. (Cl. 119—17.)



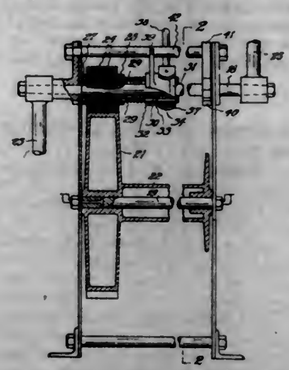
1. A bird cage base, comprising a strip of material bent about with its ends joined together, said strip having an opening in a side surface thereof disposed intermediate its upper and lower edges, and having an outwardly struck rib extending peripherally thereabout adjacent the upper edge and an outwardly struck rib extending peripherally thereabout adjacent the lower edge of the aforesaid opening, the lowermost rib presenting a groove in the interior surface of said strip, a drawer tray adapted to enter the opening in said strip, and a tray support having a part disposed in said groove and secured thereto, and another part extending inwardly away from the interior surface of said strip to support said drawer tray.

1,896,098. ADJUSTABLE COMPRESSION CHAMBER. GUY R. POYER, Wichita, Kans. Filed July 18, 1930. Serial No. 468,755. 3 Claims. (Cl. 123—48.)



1. In an internal combustion engine, a cylinder member comprising seamless tubing provided with exterior threads from end to end, a cast cylinder head having a threaded skirt screwed on to the cylinder member and means for adjustably engaging the exterior threads of the cylinder member to fasten it to the engine block.

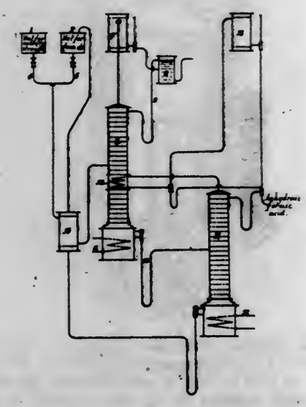
1,896,099. TOOTHED TRANSMISSION GEARING. ALFRED ARTHUR QUICK, Thornbury, Victoria, Australia, assignor to The X-Engine Company Limited, Melbourne, Victoria, Australia. Filed Aug. 6, 1930, Serial No. 473,309, and in Australia Aug. 20, 1929. 10 Claims. (Cl. 74—29.)



1. In flexible gear wheel mechanism, a flexible gear wheel comprising an assemblage of alternately arranged toothed and friction discs, the said toothed discs being rotatively and slidably mounted on a rotary driving member and the friction discs being non-rotatively but slidably mounted on the said member, means for applying a yield-

ing end pressure to the assemblage of discs, pawl and ratchet mechanism for locking the rotatively mounted members against rotation in one of two directions, and means for varying the yielding end pressure on the assemblage of discs whereby the flexible gear wheel will act as a brake to control the rotation of a gear wheel in mesh therewith, said means comprising an operating instrumentality mounted on said rotary driving member clamping members at either end of said assemblage, and means for releasing one of said clamping members from engagement with said assemblage.

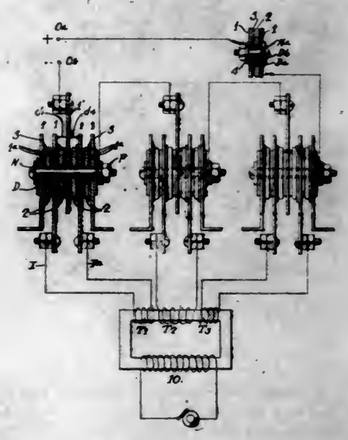
1,896,100. MANUFACTURE OF ANHYDROUS FORMIC ACID. ELOI RICARD and HENRI MARTIN GUINOT, Melle, France, assignors to Societe Anonyme des Distilleries des Deux-Sèvres, Melle, France. Filed Dec. 31, 1928, Serial No. 329,539, and in Belgium Jan. 7, 1928. 15 Claims. (Cl. 202—42.)



1. A process for continuously dehydrating aqueous formic acid by distillation of the aqueous acid in the presence of an organic water-entraining liquid, which is caused to remain in the still by following a circuit, in which process the still is continuously supplied not only with formic acid to be dehydrated also with so large a proportion of organic diluent liquid, which has a boiling point greater than that of the acid, is a solvent for formic acid and has a high affinity therefor, is capable of resisting boiling formic acid and is substantially insoluble in water, that the tendency of the formic acid to distill off with the water-entraining mixture is checked and from the bottom of the still is withdrawn a mixture of anhydrous formic acid and diluent liquid, to be separated by further treatment.

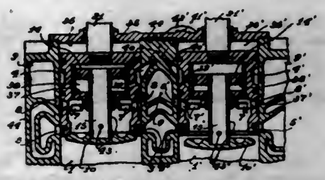
1,896,101. ELECTRIC CURRENT RECTIFIER. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Rectifier Corporation, Englewood, N. J., a Corporation of Delaware. Original application filed June 22, 1925, Serial No. 38,780. Divided and this application filed Jan. 12, 1928. Serial No. 246,256. 9 Claims. (Cl. 175—366.)

1. In dry surface-contact rectifying devices and the like, in combination, an electronegative electrode element of a compound of a relatively highly electronegative chemical element with a metal, an electropositive electrode element of a metal removed at least two groups in the electropositive direction in the electrochemical series from said electronegative chemical element, said electrode elements being adjacently disposed for asymmetric conduction, a layer of resistance material other than the inverse current blocking film interposed at the junction of said electrode elements having a specific resistance higher than that of either of said electrode elements, said layer of resistance material comprising a compound of the electropositive electrode element formed by the decomposition of water between said electrode elements while the latter are maintained under high pressure, and means for holding said elements in assembled relation under pressure sufficient to withstand the destructive effects of the electrical field at said junction when passing current, whereby substantial constancy of current output is insured.



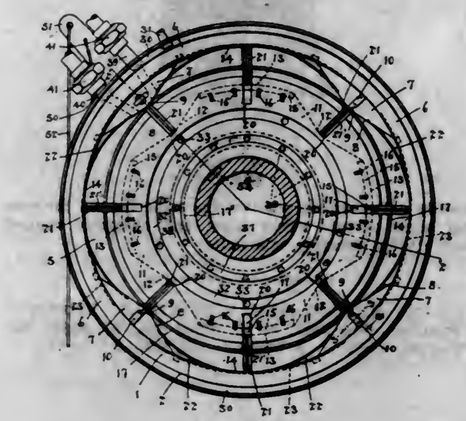
7. The method of producing at the junction of an electropositive and electronegative electrode element for dry surface contact rectifying devices and the like, a permanent initial adhering layer other than the inverse current-blocking film of a material having a higher specific symmetric ohmic resistance than the resistance of either electrode of said device, which comprises applying high pressure to said elements and decomposing water at said junction while said pressure is maintained.

1,896,102. INTERNAL COMBUSTION ENGINE. JACQUES EGIDE SERATE, Laeken-Brussels, Belgium. Original application filed May 8, 1930, Serial No. 450,826, Patent No. 1,853,464, dated Apr. 12, 1932, and in Belgium Aug. 21, 1929. Divided and this application filed Feb. 25, 1931. Serial No. 518,149. 5 Claims. (Cl. 123—79.)



1. In an internal combustion engine, the combination of a plurality of cylinders, pistons movable therein, exhaust and admission ports in each cylinder, a slidable head in one end of each cylinder, a fixed point outside each cylinder against which said slidable head bears, a pivoted member between said fixed point and slidable head and attached to the latter, means for actuating said pivoted member to cause the slidable head to close the exhaust ports, means whereby said slidable head is moved by the pressure of burnt gases in each cylinder to open the exhaust ports thereof, means for connecting the cylinders by pairs so that the closed end of each cylinder containing confined air or gas will communicate with the inner space in the slidable head of the twin cylinder of the pair, and means whereby upon the movement of said movable head for opening the exhaust of its cylinder said air or gas will be forced under pressure into the slidable head of the twin cylinder of the pair to close the admission of fuel into said cylinder, substantially as set forth.

1,896,103. HYDRAULIC BRAKE. ALLAN B. SHANTZ, Toronto, Ontario, Canada. Filed Aug. 28, 1930. Serial No. 478,362. 17 Claims. (Cl. 188—90.)



1. In a fluid brake, the combination with a stationary casing adapted to contain a fluid, a rotor therein having a plurality of vanes extending radially therefrom, and a plurality of cam obstructions successively cooperating with said vanes to reciprocate same, of means including a rotatable valving ring co-operating with said cam obstructions for variably controlling the flow of fluid past said cam obstructions to variably resist the rotation of said rotor.

1,896,104. CEMENT LINING FOR OIL WELLS. RICHARD P. SIMMONS, New York, N. Y. Filed Aug. 16, 1929. Serial No. 386,353. 12 Claims. (Cl. 166—4.)



5. The method of constructing well casings, consisting in placing an outer casing in position in the well, interlocking an inner form to said outer casing whereby to establish an annular pouring space within the outer casing, pouring a tubular inner casing wall in the space between said outer casing and form, and subsequently withdrawing that portion of the outer casing above the interlock.

1,896,105. PERCUSSIVE WELL DRILLING APPARATUS. RICHARD P. SIMMONS, New York, N. Y. Filed Oct. 22, 1929. Serial No. 401,446. 12 Claims. (Cl. 255—4.)



1. A well drilling apparatus consisting of a housing, wall cutting tools slidable in said housing, means slidable in the housing for shifting the cutting means to cutting positions and withdrawing the same from cutting positions, means for coupling the housing in a well casing to support the housing against downward movement therein and against relative rotative movement, a drill element coupled to said shifting means, and a reciprocating hammer in said housing.

1,896,106. CORE BARREL WELL DRILLING APPARATUS. RICHARD P. SIMMONS, New York, N. Y. Filed Oct. 22, 1929. Serial No. 401,447. 6 Claims. (Cl. 255—72.)



1. A well drilling apparatus comprising a core barrel having cutting means at its lower end, the core barrel being of a size to receive substantially all of the material removed by the cutting means, an anvil above and operatively connected with the core barrel, and an impact member having a cushioned support from which it is swung, said member being disposed in operative relation to said anvil to drive the core barrel by successive impacts with said anvil to effect the cutting and filling actions of the latter.

1,896,107. UNDERREAMER WELL DRILLING APPARATUS. RICHARD P. SIMMONS, New York, N. Y. Filed Oct. 23, 1929. Serial No. 401,925. 19 Claims. (Cl. 255—76.)



6. An under reamer having earth receiving pockets, expansible and contractible reamer tools mounted above said pockets said reamer tools including movable cutting elements.

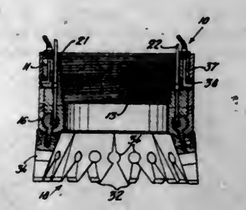
1,896,108. WELL PUMPING APPARATUS. RICHARD P. SIMMONS, Laurelton, Long Island, N. Y. Filed Oct. 23, 1929. Serial No. 401,926. 10 Claims. (Cl. 103—119.)



1. The combination with a well casing of a motor, a housing enclosing the same and interlocked in the well casing against relative rotative movement, and pumping means enclosed by said housing and having driving connection with the motor.

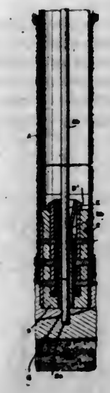
1,896,109. CUTTER HEAD FOR WELL DRILLS. RICHARD P. SIMMONS, New York, N. Y. Filed Feb. 3, 1930. Serial No. 425,643. 14 Claims. (Cl. 255—78.)

1. A drilling device including a hollow tubular cutter head having recesses therein, cutting units movably mounted in said recesses, a plurality of cutting terminals on each of said cutting units, said units being swingable



directly outwardly to position the same beyond the normal plane of said cutter head, and elongated control elements for swinging said units.

1,896,110. METHOD OF MAKING WELLS. RICHARD P. SIMMONS, New York, N. Y. Filed Aug. 27, 1930. Serial No. 478,112. 4 Claims. (Cl. 255—1.)

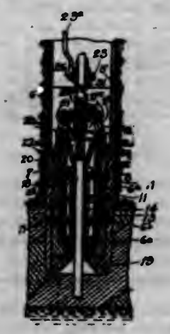


1. The method of mineral oil production which comprises drilling a well of comparatively large diameter from the surface to the cap rock of an oil deposit to provide a gas expansion chamber of sufficient volume to substantially dissipate the natural gas pressure and preclude gushing when the oil flows, then disposing at the bottom of the well a filler having an opening therethrough, and then breaking through the cap rock into the oil deposit with a tool of comparatively small diameter operated through the filler opening to provide a channel of comparatively small cross section effecting communication between said chamber and the oil deposit.

1,896,111. METHOD OF MAINTAINING OIL WELLS IN FLOWING CONDITION AND CONSERVING THE NATURAL GAS SUPPLY THEREOF. RICHARD P. SIMMONS, New York, N. Y. Filed Nov. 6, 1930. Serial No. 493,768. 9 Claims. (Cl. 255—1.)

1. The method of constructing an oil well which consists of drilling the well to a point just above the natural

oil deposit, disposing a flow reducer in place at the base of the well, establishing a discharge pipe from said flow



reducer to the head of the well, and then piercing the wall between the bottom of the well and the oil deposit.

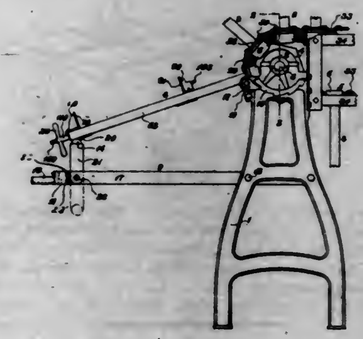
1,896,112. METHOD OF CONSTRUCTING AND OPERATING OIL WELLS. RICHARD P. SIMMONS, New York, N. Y. Filed Apr. 25, 1931. Serial No. 532,814. 17 Claims. (Cl. 255—1.)



1. The method of constructing and operating oil wells consisting in constructing a large diameter oil well, providing a small diameter drill at the base of said oil well, installing a pressure regulator at the base of said oil well through which the drill may operate, operating the drill to penetrate the base of the oil well and form an oil and gas intake passage therefor, operating the pressure regulator to control the pressure in said oil well, and operating the drill to control the flow into said oil well after the intake passage has been formed.

1,896,113. CLAMP CARRYING MACHINE. HUGO V. STEUERNAGEL, East Hartford, Conn. Filed Aug. 19, 1931. Serial No. 558,118. 21 Claims. (Cl. 144—289.)

1. A clamp carrying machine including in combination, frame members laterally spaced, a clamp carrier supported by the frame members and movable about an axis extending therebetween, a series of clamps, each clamp being secured at one end thereof to the carrier and adapted to pass about the axis extended radially therefrom, each clamp having a latch forming lug thereon, a U-shaped bracket secured at its sides to respective frame members, a U-shaped bar, means for pivotally associating the ends of the bar to respective sides of the bracket whereby the bar may be swung from clamp supporting position to clamp clearing position, and means for limiting



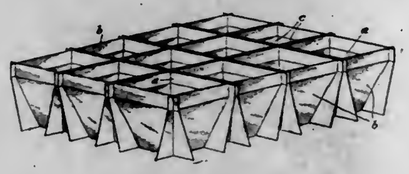
the swinging movement of the bar from a position where it may be held to support the clamps by engaging the latch lugs thereon to a position where it will clear the path of the clamps as moved by the carrier.

1,896,114. APPARATUS FOR TESTING SUCKER RODS. ALFRED MORRIS THOMSON, Newark, N. J., assignor to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 17, 1929. Serial No. 400,262. 18 Claims. (Cl. 265—13.)



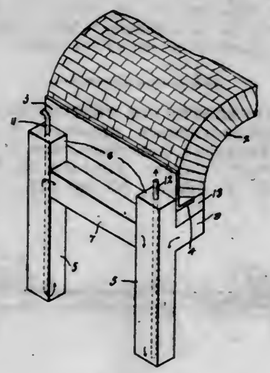
9. An apparatus for testing the couplings of sectional sucker rods, comprising a pair of elongated beams supported in spaced parallel relation; a crank supported by said beams and mounted for rotation therebetween; a crosshead; guides for said crosshead carried by said beams and supporting the crosshead for longitudinal reciprocation between the beams toward and from the crank axis, said guides being spaced a material distance along the beams from the crank; means to connect one end of a sectional, coupled rod operatively and detachably to the crank; means to connect the opposite end of said rod detachably to the crosshead; a tubular section extending longitudinally between the beams in a position between the crank and the crosshead to surround the coupling means between the rod sections, the internal diameter of said tubular section being substantially equal to that of a well casing in which the rod is to be used; means for rotating the crank and reciprocating the crosshead through the medium of the connected rod; means supported by the beams for resisting movement of the crosshead and imposing a load upon the rod; and adjustable means for varying said crosshead resistance, whereby the effects of lateral deflection of the rod under a given load and of the consequent frictional contact of the coupling means with the interior of said tubular section may be determined.

1,896,115. CONTAINER. GEORGE R. THOMSON, Marion, N. Y., assignor of sixteen and two-thirds per cent to M. Hugh Merson, Marion, N. Y., sixteen and two-thirds per cent to Irwin H. Cohen, New York, N. Y., and sixteen and two-thirds per cent to Wilson Parkhill, Yonkers, N. Y. Filed Feb. 10, 1930. Serial No. 427,198. 6 Claims. (Cl. 217—32.)



2. As an article of manufacture, a filler strip for a container having a longitudinal scoring, and transverse cuts in the strip, the cuts being perpendicular to the scoring on one side thereof and slanting with respect thereto on the other side thereof.

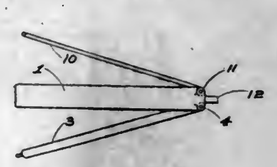
1,896,116. FURNACE CONSTRUCTION. JOHN THORNTON, Youngstown, Ohio. Filed Feb. 6, 1931. Serial No. 513,830. 2 Claims. (Cl. 122—499.)



1. A furnace structure comprising a skew-back support, an arched roof structure engaged upon said skewback, a hollow water-cooled frame for a furnace door beneath said skewback, such frame comprising a pair of upright members and a connecting supporting member projecting upwardly and rearwardly in spaced relation beneath said skewback and its associated arch, said upright members being positioned outwardly of the front wall of the furnace with their upright ends overlapping the forward face of said skewback, and a single layer of fire-resistant packing material interlockingly engaged in the space between said arch and said rearwardly and upwardly inclined supporting member and behind adjacent structural elements and adapted to be forced while plastic into said rearwardly decreasing space between said frame and said arch through wedging action when rammed thereinto from a point outside the front wall of said furnace.

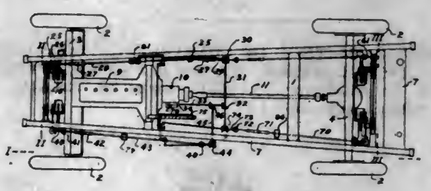
1,896,117. VANITY CASE. EDNA SIBLEY TIPTON, New York, N. Y. Filed July 16, 1932. Serial No. 622,900. 2 Claims. (Cl. 132—66.)

1. A vanity case consisting in combination, of a body of flat substantially rectangular, oblong shape, having in one of the larger sides thereof a depression for the reception of a comb, a comb nested flatwise in said depression and hinged at one of its ends to one end of said body, there being a plurality of receptacles formed in the re-



verse side of said body, and a cover for said receptacles consisting of a mirror hinged at one of its ends to said body.

1,896,118. AUXILIARY JACK LIFT AND TRUCK MECHANISM FOR MOTOR VEHICLES. ADOLPH H. WELLENSIEK, Washington, D. C. Filed Apr. 14, 1928. Serial No. 270,042. 12 Claims. (Cl. 180—1.)



1. In a motor vehicle, a spring mounted main frame, a lifting and parking mechanism with lifting standards pivotally attached by one end to the unsprung portion of said motor vehicle and each connected by another point to a power driven tilting mechanism for moving the standards into position of lifting the vehicle off the ground, which tilting mechanism is attached to the spring mounted portion of said motor vehicle; a ground wheel fitted to each lifting standard; means for selectively connecting and disconnecting said power driven tilting gears and one or more of said ground wheels to the power system of said motor vehicle; means for reversing direction of operation of said tilting gears and ground wheels, and means for control in operating said lifting and parking mechanism from the operator's station on the motor vehicle.

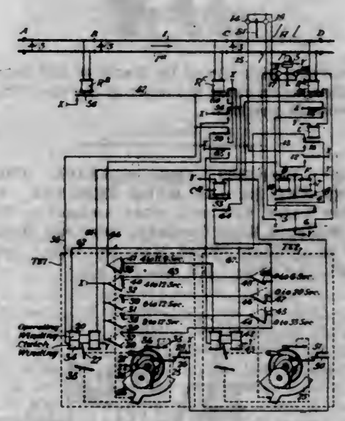
1,896,119. TUBULAR DISPENSING PACKAGE FOR ROLLED WEBS OF FLEXIBLE MATERIAL. JOSEPH C. WILSON, Middletown, Ohio, assignor to The Crystal Tissue Company, Middletown, Ohio, a Corporation of Ohio. Filed June 18, 1930. Serial No. 462,090. 7 Claims. (Cl. 206—58.)



1. A dispensing container for a roll of flexible material comprising a semi-rigid cylindrical member having a longitudinal slot therein, one wall of said cylindrical member having a tear-off knife attached thereto extending into a position adjacent said slot, and the wall of the slotted portion opposite the wall to which the knife

is attached being an integral continuation of said cylindrical member and having peripheral slots at the ends thereof bisecting the longitudinal slot through which a web of material contained in said container may be withdrawn, said last noted wall being resiliently connected to said cylindrical portion so that with the depression of the free end of said wall the web will be tensioned for tearing off and upon release will feed out a sufficient quantity of the web to provide a finger grip to permit the subsequent withdrawal of the web.

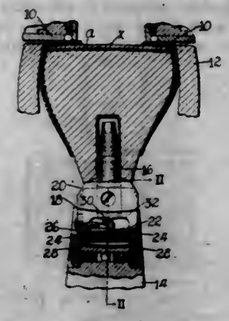
1,896,120. APPARATUS FOR THE CONTROL OF HIGHWAY CROSSING SIGNALS. HENRY S. YOUNG, Wilkinsburg, and HOWELL N. DIXON, Swissvale, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 4, 1932. Serial No. 590,806. 19 Claims. (Cl. 246—130.)



1. In combination, a stretch of railway track intersected by a highway, a highway crossing signal located at the intersection, controlling means for setting the signal into operation when a train approaching the intersection reaches a fixed point, a first time measuring device to register the speed of the train as it approaches said fixed point, a second time measuring device set into operation as the train reaches said fixed point, and means controlled jointly by said two time measuring devices to retain the controlling means ineffective to set the signal into operation until the second time measuring device has operated to a point corresponding to the registered speed determined by the first time measuring device.

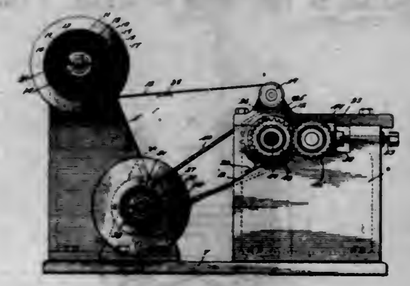
1,896,121. MACHINE FOR SHAPING SHOE UPPERS. JACOB C. JORGENSEN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Apr. 16, 1929, Serial No. 355,566. Divided and this application filed July 8, 1931. Serial No. 549,400. 9 Claims. (Cl. 12—123.)

1. In a machine having wipers for wiping the margin of an upper into lasted position about the heel end of a shoe on a last at the opposite sides of the heel seat simultaneously, a shoe support comprising a member mounted for movement about an axis extending lengthwise of the shoe substantially in the location of the heel seat to permit the shoe to be tipped laterally to provide for substantial equalization of the pressures of the wipers on the shoe bottom at the opposite sides of the heel seat without any substantial lateral displacement of portions of the



shoe near the heel seat, said member being so controlled as to permit it to be moved about its axis in response to pressure of the wipers on the shoe.

1,896,122. MACHINE FOR MANUFACTURING FILTER RIBBON. PAUL B. RENFREW, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed Nov. 5, 1928. Serial No. 317,343. 1 Claim. (Cl. 80—24.)

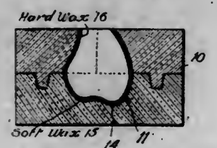


In a machine for making filter ribbon, the combination of a pair of associated indented wheels having interengaging driving means, one of said wheels comprising a die wheel and having ribbon indenting means formed on its periphery for indenting a surface of the ribbon to form spaced apart grooves extending laterally across the ribbon between its opposed side edges, the other of said wheels comprising a roller for pressing the ribbon against the indenting means of the die wheel, an unwinding reel adapted to hold a coil of relatively thin metal ribbon, a winding reel upon which the ribbon is received after passing the indenting wheels, driving means for driving the winding reel and the indenting wheels, said driving means including means for maintaining the ribbon under uniform tension during the indenting and winding operation.

1,896,123. WAX DENTAL FORM AND METHOD OF MAKING SAME. HEINRICH SCHWEITZER, New York, N. Y. Original application filed July 29, 1925, Serial No. 46,757. Divided and this application filed June 13, 1928. Serial No. 285,075. Renewed June 20, 1932. 2 Claims. (Cl. 18—58.)

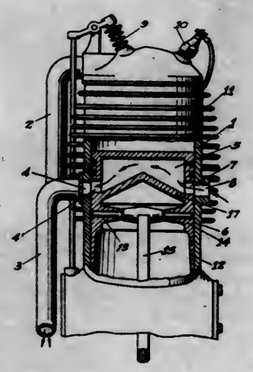
2. In the art of forming wax dental forms, the method which consists in wetting the wall of the cavity in a mold,

filling the same with liquid soft wax, and immediately pouring from the mold cavity all the wax which will flow therefrom, leaving a soft thin wax shell in contact with the outlining wall of the mold, pouring into the wax shell so formed and while retained in the mold, a second filling comprising a hard liquid wax, thereby to cause the two wax layers to adhere to and integrally connect each



other, promptly removing all hard wax not adhering to the first soft wax shell, introducing into the bottom of the second filling an amount of wax sufficient to cover the bottom of said second filling but not sufficient to fill the shell formed by said second filling, thereby to provide a local reinforcement to the cusp portion of the completed shell and removing from the mold the composite multi-layer shell so formed.

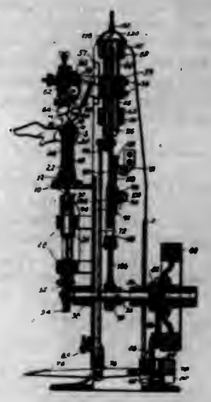
1,896,124. PISTON. JAMES A. SPEER, Wichita, Kans. Filed Jan. 31, 1931. Serial No. 512,512. 3 Claims. (Cl. 123—171.)



1. A piston comprising a head having a cylindrical skirt provided with alining openings, an inverted V shaped web spaced from the head to provide a passageway between the openings, and oil cooling fins on the outer face of the web.

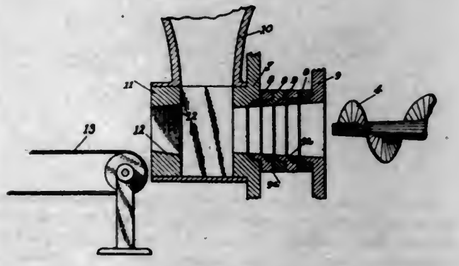
1,896,125. HEEL-ATTACHING MACHINE. JOHN F. STANDISH, Winthrop, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 28, 1930. Serial No. 490,688. 23 Claims. (Cl. 1—32.)

1. In a heel-attaching machine, a shoe-support, a movable pressure member co-operating therewith, operating means, co-operating connecting members joined respectively to the pressure member and operating means, and



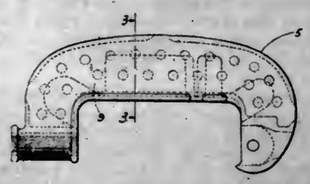
means movable with one of the members and arranged to engage them to transmit the effect of the operating means to the pressure member.

1,896,126. PROCESS FOR SURFACE TREATING BRICKS AND BRICKS MADE THEREBY. CHARLES FORREST TEFFT, Columbus, Ohio, assignor to The Claycraft Mining & Brick Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 20, 1929. Serial No. 348,588. 6 Claims. (Cl. 25—156.)



1. In a method of producing ornamental bricks, the steps comprising forming a column of wet clay, applying an abrasive slush to the column, then commingling the slush superficially with the wet clay surface of the column by subjecting the slush to the grinding action of a restricted die.

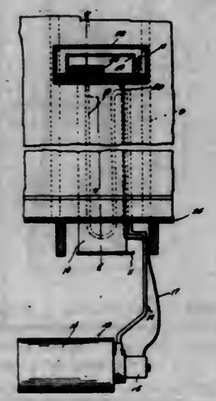
1,896,127. FRAME OR STOCK FOR PIPE CUTTERS AND LIKE TOOLS. WILLIAM O. THEWES, North Ridgeville, Ohio, assignor to The Ridge Tool Company, North Ridgeville, Ohio, a Corporation of Ohio. Filed Mar. 9, 1931. Serial No. 521,188. 6 Claims. (Cl. 81—192.)



1. A frame for pipe cutters and like tools, comprising a reinforcing core and a covering of cast metal interlocked

with the core defining the frame structure, the cast metal portion of the frame being of reduced thickness to correspondingly lessen the pocket-forming tendency of the metal.

1,896,128. CLOTHES BRUSHING AND CLEANING APPLIANCE. RALPH C. THOMPSON, Beaver, Pa. Filed June 8, 1931. Serial No. 542,977. 1 Claim. (Cl. 15—2.)



In combination, a wall structure including a pair of spaced wall units, one of said wall units having an opening therein, a casing disposed in the opening to project into the space between the wall units, said casing having an open front and an opening in the bottom thereof, a receptacle, depending from the casing and in the space between the wall units, said receptacle communicating with the bottom of the casing, a wall receptacle disposed within the casing and being provided with a depending tubular guide and extending through the opening in the bottom of the casing, said wall receptacle being open at its front, a suction line conduit connected from the outside to the depending receptacle adjacent the upper end thereof, a suction hose slidable through the tubular guide and being equipped at its outer end with a brush, said hose being secured at the end within the depending receptacle to the adjacent end of the suction line.

1,896,129. SEPARABLE FASTENER. SENA M. WARD, Brooklyn, N. Y. Filed May 4, 1932. Serial No. 609,301. 4 Claims. (Cl. 24—230.)



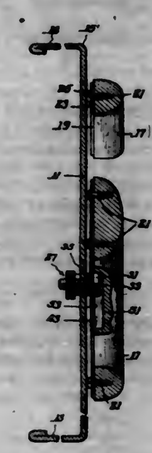
1. A separable fastener comprising a retaining member of flat resilient metal bent upon itself to provide a relatively flat substantially U-shaped part in cross-section with a portion of its crease cut out to provide an opening therethrough, an end of one of the arms of said member being free and normally urged toward the other arm, and a retained member having a tongue insertible between said arms through said opening, and a projection on the end of said tongue for locking engagement with the free end of said one arm.

1,896,130. PLANE COVERING FASTENER. EDWIN H. WHITE, Baltimore, Md. Filed Jan. 30, 1931. Serial No. 512,438. 2 Claims. (Cl. 244—31.)



1. In a plane structure of the character described, in combination, a frame member, a covering, a covering fastener mounted upon and conforming to the shape of said frame member, means for attaching said fastener to said frame member comprising a plurality of pairs of tongues extending downwardly from said fastener on opposite sides thereof and bolt means passing through said tongues and frame member, said fastener having a plurality of series of upwardly projecting teeth of ductile material adapted to receive and be bent over upon said covering.

1,896,131. CHANGEABLE LETTERS. JOHN E. WILLIAMS, Chicago, Ill. Filed Apr. 30, 1931. Serial No. 534,005. 5 Claims. (Cl. 40—142.)

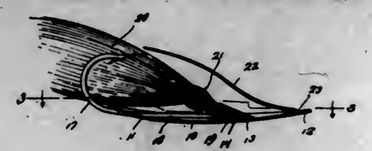


1. In a sign, a letter comprising a formed piece of material, and a backing plate secured to said formed piece, fastening means connecting the backing plate to the formed piece and having portions extending outwardly of the backing plate to form spacing means, a letter support, to the surface of which the letter may be mounted and means to fasten said letter on said support in position such that the spacing means maintain the support and the letter in a pre-determined relative spacement for the purpose of providing an air channel therebetween.

1,896,132. ARTIFICIAL BAIT. HENRY C. BERBERICH, Elmwood Park, Ill. Filed Mar. 7, 1932. Serial No. 597,888. 6 Claims. (Cl. 43—39.)

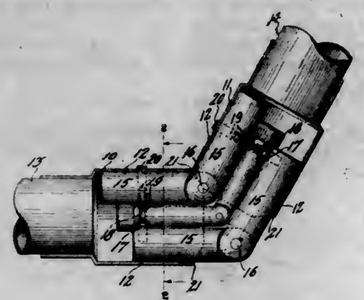
1. An artificial bait comprising a spoon of concavo-convex formation having a longitudinal slot adjacent one

end, a member secured to the upper surface of the spoon, a hook having its shank received by said slot and de-



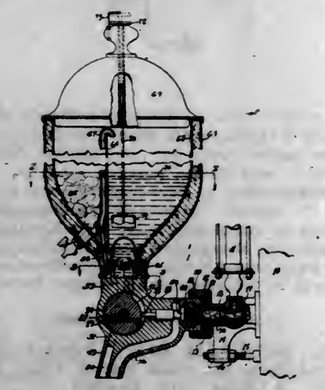
tachably connected with said member, and a buck tail including a shank separably connected with the member above the shank of the hook.

1,896,133. UNIVERSAL JOINT. ROLAND CHILTON, Keyport, N. J., assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Oct. 4, 1928. Serial No. 310,256. 6 Claims. (Cl. 64—94.)



1. In a universal joint, means for retaining a pair of shaft heads in their proper axial spaced relation comprising members pivotally attached together at one of their ends in the plane of the joint and extending through axial bores in the shaft heads, said members having grooves intermediate their ends and positioned within the heads, a pin extending transversely through the shaft head and entering the groove of its respective member to hold the same against longitudinal movement.

1,896,134. LIQUID DISPENSING APPARATUS. DOLPH M. CLARK, Portland, Oreg. Filed Feb. 25, 1929, Serial No. 342,382. Renewed May 27, 1932. 5 Claims. (Cl. 225—26.)



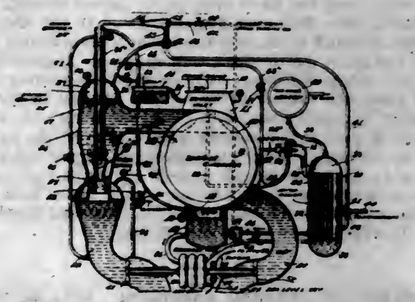
1. A device for selectively combining liquids in definite proportions consisting of a valve having a plurality of measuring compartments formed therein, means for permitting the release of liquids from the desired number of compartments, and a continuous flow cam actuated mechanism operated by said measuring means.

1,896,135. THREAD CORE. CHARLES K. DUNLAP, Hartsville, S. C., assignor to Sonoco Products Company, Hartsville, S. C., a Corporation of South Carolina. Filed Feb. 25, 1931. Serial No. 518,195. 9 Claims. (Cl. 242—122.)



2. The method of fabricating a thread core for use in the textile industry which comprises forming a tube by winding a sheet of paper upon itself, and thereafter smoothing the end of the tube by a burning operation.

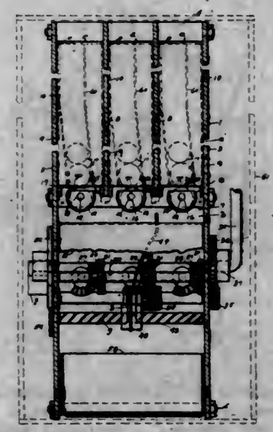
1,896,136. METHOD AND APPARATUS FOR UTILIZING THE POTENTIAL ENERGY OF CIRCULATING CONDENSING WATER. ALFRED R. EARL, Toledo, Ohio. Filed Aug. 12, 1929. Serial No. 385,432. 13 Claims. (Cl. 60—95.)



1. The method which comprises maintaining a constant column of water in heat exchange relation with exhaust vapors from a prime mover to form a condensate, maintaining a vacuum on the column of water to retain the column at a constant height, returning the water to its source, increasing the velocity of the returning water, collecting the condensate and forcing said condensate into heat interchange relation with live steam under pressure, utilizing the live steam to create a vacuum on the column of water before said steam has heated the condensate.

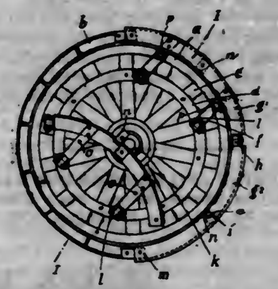
1,896,137. CIGAR VENDING MACHINE. CHARLES H. ECKMANN, Detroit, Mich. Filed Apr. 28, 1931. Serial No. 532,161. 3 Claims. (Cl. 312—48.)

1. A vending machine adapted for dispensing goods from separated compartments, comprising a rigid frame having a series of vertically positioned adjacent merchandise compartments formed in the upper portion thereof and a dispensing chamber formed in the lower portion thereof, a hollow dispensing member open at the top side, pivotally mounted in said frame beneath each of said compartments, each dispensing member being designed and positioned to receive one article of merchandise from its respective compartment, a separate line of geared mechanism for each of said dispensing members and connected thereto for causing a partial rotation of any chosen dispensing member about its supporting pivots, capable



of depositing a single article of merchandise in the lower dispensing chamber, operating mechanism mounted on said frame capable of adjustment for engaging any chosen line of gearing leading to the respective dispensing members for operating same independently of the others.

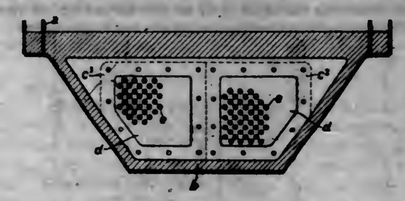
1,896,138. VEHICLE WHEEL. ARNO GÜNZEL, Altenburg, Germany. Filed Mar. 26, 1930, Serial No. 439,166, and in Germany Apr. 2, 1929. 2 Claims. (Cl. 301—39.)



2. A vehicle wheel comprising a main rim and a subsidiary rim made in sections, means for mounting some of said rim sections on said vehicle wheel for rocking movement into and out of operative position in which portions thereof extend beyond the periphery of the main rim, means for pivotally connecting the other rim sections with said rockingly mounted sections for movement into and out of operative position beyond the periphery of the main rim, and means for retaining said rim sections in operative position.

1,896,139. COAL DUST FURNACE. GEORG HAYN, Kassel, Germany. Filed Dec. 26, 1928, Serial No. 328,586, and in Germany Jan. 31, 1928. 2 Claims. (Cl. 110—28.)

1. In a coal dust firing installation, a common coal dust and air supply conduit, a burner in which said conduit terminates, said burner having a face plate provided with a large number of small flaring discharge openings adapted to discharge the mixture of coal dust and air, said openings being closely spaced with their axes parallel to the axis of the burner.



1,896,140. POCKET LIGHTER. ALOIS KAUFMANN, Vienna, Austria. Filed Mar. 30, 1931, Serial No. 526,465, and in Austria Feb. 28, 1931. 4 Claims. (Cl. 67—7.1.)



4. In a pyrophoric lighter, the combination with a fuel receptacle having a pair of ears, a pyrophoric material guide and a wick guide in the upper wall of the receptacle, a pivot pin supported in the ears, a friction wheel mounted on the pivot pin to cooperate with the pyrophoric material guide, a cap mounted on the pivot pin, the cap being extended forwardly and rearwardly of the pivot pin, the forward extension fitting over the wick guide, means between the cap and friction wheel for operating the latter when the cap is opened, a U-shaped lever embracing one side edge of the fuel receptacle and provided with a pair of extended ears, a pivot pin connecting the extended ears and the rearwardly extended portion of the cap, the lower side portions of the receptacle having a cam slot, a pin connecting the sides of the U-shaped lever and extending through the cam slot, and a spring interposed between the U-shaped lever and the edge wall of the fuel receptacle, whereby upon pressure being applied to the U-shaped lever, the pin and cam slot cause said lever to move inwardly and downwardly and the cap and friction wheel to partially rotate.

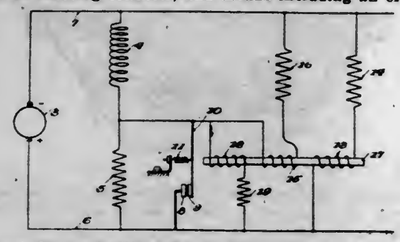
1,896,141. PROTECTING METALLIC SURFACES OF REFRIGERATORS FROM SULPHUR COMPOUNDS. James Kraus, Philadelphia, Pa., assignor to Mineralite Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 28, 1930. Serial No. 439,860. 4 Claims. (Cl. 220—64.)

1. The method of safeguarding the surface of metals in refrigerators from the action of sulphur compounds in mineral wool which consists in placing a chemical barrier such as silicate of sodium between said compound and the metallic surface.

1,896,142. CONTROLLING GENERATOR. CHARLES L. McNEIL, Bloomfield, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Jan. 16, 1929. Serial No. 332,998. 4 Claims. (Cl. 171—229.)

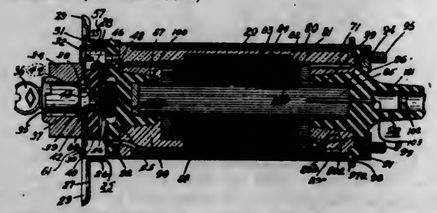
1. In combination with a generator having a field winding and a field resistance, means for regulating the voltage

output of said generator by intermittently placing said resistance in circuit with said field winding including a pair of coacting contacts, and means including an electro-



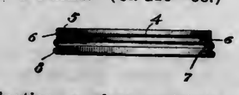
magnet for controlling the engagement of said contacts, the electromagnet embodying a coil in series with said contacts and in parallel with said winding and another coil in parallel with said contacts.

1,896,143. COIL-SWITCH UNIT. HARRY E. NORVIEL, deceased, Anderson, Ind., by Anderson Banking Company, Anderson, Ind., executor, assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 13, 1932. Serial No. 605,094. 13 Claims. (Cl. 175—357.)



1. In a coil and switch unit, the combination of a tubular case providing a coil housing, a contact support within the case, a collar surrounding the case and attached thereto, a plate adapted to bear against the collar, means provided by the case for securing the plate against the collar, the support, collar and plate providing a switch housing, a stationary contact insulatingly supported by the contact support, a contact movable within the switch honsing, and a controller carried by the plate for operating the movable contact.

1,896,144. RECEPTACLE AND CLOSURE THEREFOR. CHARLES A. SOUTHWICK, Jr., Wheeling, W. Va., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Jan. 6, 1930. Serial No. 418,848. 3 Claims. (Cl. 215—38.)

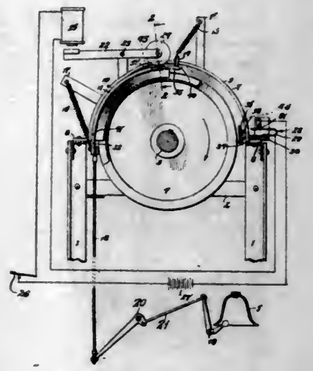


1. In combination, a glass container, a plurality of integral knobs widely spaced about the mouth of the container, a cap having a depending skirt, said skirt provided with a continuous internal groove spaced from the lower edge thereof, said cap seated on the mouth of the jar with the groove engaging over said knobs.

1,896,145. CELLULOSE ACETATE COMPOSITION. CYRIL J. STAUD and CHARLES S. WEBBER, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 17, 1929. Serial No. 363,986. 7 Claims. (Cl. 106—40.)

1. A composition of matter comprising, cellulose acetate having an acetyl content of from substantially 30 per cent to 35 per cent, ethylene chloride, and a lower monohydroxy aliphatic alcohol having less than 6 carbon atoms.

1,896,146. MECHANISM FOR SELECTIVELY ACTUATING A PLURALITY OF MOVABLE MEMBERS. HERMANN A. WENDE, Buffalo, N. Y. Filed Jan. 14, 1930. Serial No. 420,786. 17 Claims. (Cl. 84—406.)

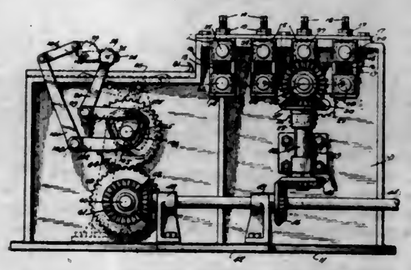


5. In a mechanism for selectively actuating a plurality of movable members, a rotary driving wheel associated with each of said members, a stationary guide embracing a portion of said wheel, an arcuate friction member arranged between said guide and said wheel, spring means yieldingly holding said friction member against said guide, means for moving said friction member into engagement with said wheel to be turned thereby and means operatively connecting said friction member wtih the corresponding movable member.

1,896,147. PRODUCTION OF BENZANTHRONE. ALEXANDER J. WUERTZ, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 19, 1927. Serial No. 214,221. 18 Claims. (Cl. 260—61.)

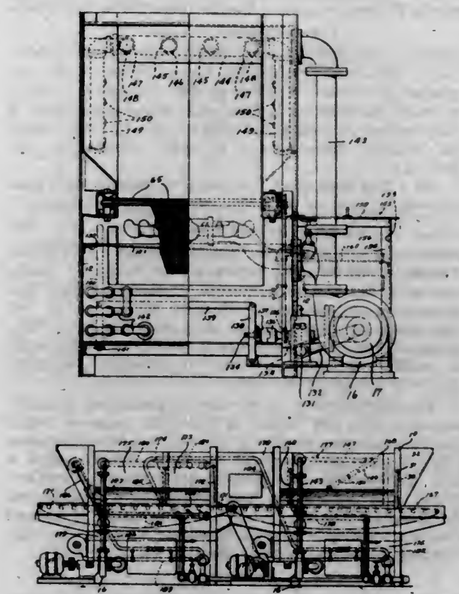
1. The process for producing benzanthrone which comprises suspending anthraquinone in concentrated sulphuric acid and heating the suspension while simultaneously adding glycerine and a metallic reducing agent from the group consisting of iron, copper and aluminum, at a temperature of 110–120° C.

1,896,148. DUSTER AND MACHINE FOR MAKING THE SAME. RALPH YUTTS, Miami, Fla. Filed Nov. 12, 1931. Serial No. 574,665. 19 Claims. (Cl. 93—1.)



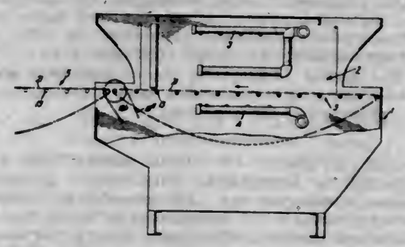
1. The method of manufacturing dusters which includes the production of closely spaced slits across the central portion of a web of material, the dividing of the web longitudinally on its center line, the cutting of the divided web into lengths to form blanks, and the bunching of the unslit portions of said blanks into compact bundles.

1,896,149. TREATING OR WASHING MACHINERY. ERICH R. ZADEMACH, Elizabeth, N. J., assignor to Metalwash Machinery Company, New York, N. Y., a Copartnership composed of Herman Boehme, Erich R. Zademach and Albert C. Nolte. Filed Nov. 13, 1926. Serial No. 148,295. 10 Claims. (Cl. 141—1.)



2. In an article treating machine, in combination, a treating chamber, means in the chamber for projecting treating liquid on the articles, and conveying means for feeding articles through said chamber comprising a driven roller table, the rolls of which, including the delivery end roll, are of small diameter, and a flat wire mesh conveyor running thereon and frictionally driven thereby consisting only of transversely extending, substantially parallel zigzag wires flexibly interlaced with one another, to render the conveyor sufficiently flexible to conform readily to the surface curvature of small rollers without substantial distortion of the wires themselves.

1,896,150. CONVEYER. ERICH R. ZADEMACH, Elizabeth, N. J., assignor to Metalwash Machinery Company, New York, N. Y., a Copartnership comprised of Herman O. Boehme, Erich R. Zademach and Albert C. Nolte. Filed Oct. 1, 1927. Serial No. 223,468. 3 Claims. (Cl. 198—127.)



1. In a conveyer, in combination, a roller table consisting of a multiplicity of small closely spaced driven rollers, including end and intermediate rollers all of substantially the same diameter, and an untensioned flexible endless wire conveyer belt running directly upon the rollers and driven directly and solely thereby, said conveyer belt consisting only of transversely extending wires flexibly interlaced.

1,896,151. CONVEYER BELT. ERICH R. ZADEMACH, Elizabeth, N. J., assignor to Metalwash Machinery Company, New York, N. Y., a Copartnership consisting of Herman O. Boehme, Erich R. Zademach and Albert C. Nolte. Filed Jan. 9, 1930. Serial No. 419,536. 3 Claims. (Cl. 198—203.)



1. In a conveyer, in combination, an endless flexible conveyer belt, a roller table comprising a multiplicity of rollers on which the active stretch of the conveyer belt rests, sprockets at the ends of said rollers with one of said sprockets idle with respect to the corresponding roller and the other sprockets connected with the corresponding rollers to drive the same, a chain engaging said sprockets to drive the same, and means operatively associated with such idle sprocket for supporting and advancing the idle stretch of said conveyer belt.

1,896,152. FOUNTAIN PEN. LEON HEHL ASHMORE, Collingswood, N. J., assignor to The Esterbrook Steel Pen Manufacturing Co., Camden, N. J., a Corporation of New Jersey. Filed July 13, 1931. Serial No. 550,353. 11 Claims. (Cl. 120—52.)

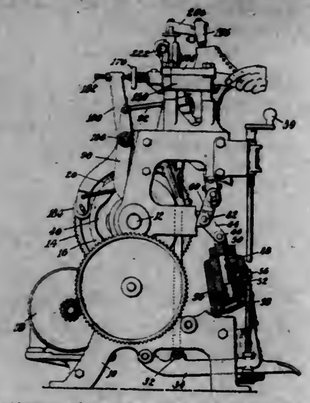


1. A fountain pen comprising a barrel having ink supplying means, a tubular sleeve therefor, a feed-bar permanently associated with said tubular sleeve; the latter being partly cut away to expose a portion of the feed-bar, a pen arranged to overlie the feed-bar and extend over the portion exposed by the tubular sleeve, and a cap in threaded engagement with said sleeve adapted to overlie said pen and secure the same in place.

1,896,153. MACHINE FOR OPERATING UPON THE END PORTIONS OF SHOES. WILLIAM C. BAXTER, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey Filed Feb. 17, 1931, Serial No. 516,385, and in Great Britain July 19, 1930. 43 Claims. (Cl. 12—14.)

1. In a machine for shaping the end portion of the upper of a shoe on its last, the combination of a shoe support to receive the bottom of a shoe held right side up, and a pair of end-embracing wipers, each wiper having a thin blade portion to extend under the last bottom and an abrupt shoulder to engage the side of the shoe, the wipers and support being relatively movable heightwise of

the shoe to wipe the upper about the end of the last, and the support and wipers being relatively movable endwise of the shoe to force the blade portions of the wipers under



the last bottom and to cause the shoulder to engage the side of the shoe to limit relative movement of the wipers and shoe.

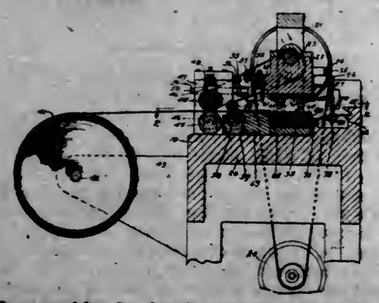
1,896,154. STAIN-RESISTING ALLOY. FREDERICK M. BECKET, New York, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Apr. 16, 1930. Serial No. 444,876. 5 Claims. (Cl. 75—1.)

1. A stain-resisting iron-base alloy containing chromium about 16% to 22%; manganese about 5% to 15%; and carbon, the carbon content being not more than 0.3%; copper about 0.25% to 3.0%; with the balance substantially iron.

1,896,155. CORROSION RESISTANT ARTICLES OF MANUFACTURE. FREDERICK M. BECKET, New York, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Original application filed Apr. 29, 1930, Serial No. 448,428. Divided and this application Filed Oct. 29, 1932. Serial No. 640,340. 2 Claims. (Cl. 75—1.)

1. An oil cracking tube composed of a stain-resisting iron-base alloy having deep-drawing properties and containing chromium about 16% to 22%; manganese about 6% to 16%; copper about 0.25% to 2.5%; and carbon, the carbon content being not more than about 0.3%; with the balance substantially iron.

1,896,156. APPARATUS FOR MAKING HOLDING DEVICES FOR PRINTING MEMBERS. RICHARD A. BOND, Chagrin Falls, Ohio, assignor, by mesne assignments, to Multigraph Company, Wilmington, Del., a Corporation of Delaware. Filed May 13, 1930. Serial No. 452,092. 23 Claims. (Cl. 153—2.)



1. In a machine for forming holders for printing members, the combination with a magazine adapted to contain a pile of blanks, a pair of levers on opposite sides of the magazine pivotally mounted on stationary parts of the machine and having cam ends, and a plunger for feeding the bottommost blank, the plunger having an inclined member to engage the levers opposite the cam ends 6% to 16%; copper about 0.25% to 2.5%; and carbon, the to force the engaged ends outwardly and the cam ends inwardly to raise the pile of blanks above the bottom blank.

1,896,157. SULPHUR CHLORIDE REACTION PRODUCT. WILLIAM S. CALCOTT, Penns Grove, N. J., and ALBERT S. CARTER, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed June 1, 1929, Serial No. 367,831. Renewed Apr. 23, 1932. 20 Claims. (Cl. 260—2.)

1. As a new compound, the reaction product of a non-benzenoid polymer of acetylene with sulphur chloride.

1,896,158. PROCESS OF PROTECTING ARTICLES FROM CORROSION. WILLIAM S. CALCOTT, Penns Grove, N. J., ALBERT S. CARTER, Wilmington, Del., and FREDERICK B. DOWNING, Carneys Point, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 21, 1929. Serial No. 394,377. 11 Claims. (Cl. 91—68.)

1. The improvement in the art of protecting chemical equipment from the action of corrosive reagents which comprises applying thereto a film of a composition containing the reaction product of sulfur chloride with a liquid non-volatile polymerized nonbenzenoid acetylene polymer, said composition also containing a volatile solvent, allowing said film to set in the presence of air and thereafter treating it with an oxidising agent of the class consisting of steam, oxygen, bromine and chlorine.

1,896,159. HALOGENATING ACETYLENE POLYMERS. WILLIAM S. CALCOTT, Penns Grove, N. J., and ALBERT S. CARTER, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 11, 1930. Serial No. 420,275. 20 Claims. (Cl. 260—162.)

1. As a new compound, a halogen derivative of an unsaturated non-benzenoid acetylene polymer, said derivative being obtainable by direct addition of the halogen.

1,896,160. HALOGENATION PROCESS AND PRODUCTS PRODUCED THEREBY. WILLIAM S. CALCOTT, Penns Grove, N. J., and ALBERT S. CARTER, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 7, 1930. Serial No. 434,158. 25 Claims. (Cl. 260—162.)

1. The process which comprises reacting a polymerizable nonbenzenoid polymer of acetylene with sulfuryl chloride.

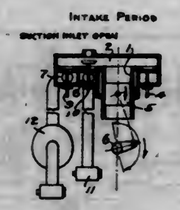
1,896,161. PROCESS OF HYDRATING VINYL ACETYLENE. ALBERT S. CARTER, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 11, 1930. Serial No. 495,001. 13 Claims. (Cl. 260—134.)

1. The method of preparing methylvinylketone which comprises hydrating vinylacetylene under conditions adapted to hydrolyze only the triple bond.

1,896,162. POLYMER OF VINYL ACETYLENE AND PROCESS OF PRODUCING THE SAME. ALBERT S. CARTER, Wilmington, Del., and FREDERICK B. DOWNING, Carneys Point, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 19, 1930. Serial No. 503,606. 23 Claims. (Cl. 260—170.)

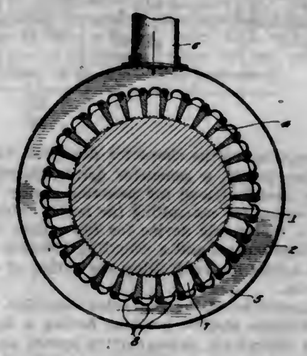
1. A polymer product resulting from polymerising substantially pure vinylacetylene in the absence of other polymerizable substances.

1,896,163. INTERNAL COMBUSTION ENGINE. CARLTON COLE CHAMPION, Jr., Washington, D. C. Filed Mar. 31, 1927. Serial No. 179,923. 25 Claims. (Cl. 123—75.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In the operation of an internal combustion motor the method of exhausting burned gases from a four-cycle combustion engine having a combustion chamber, and primary and secondary exhaust valves, which includes as a step opening the primary exhaust valve for a period within the total exhaust period, closing the primary exhaust valve, recompressing the burned gases remaining within the combustion chamber after the closing of the primary exhaust valve, and opening the secondary exhaust valve for the expulsion of the recompressed burned gases.

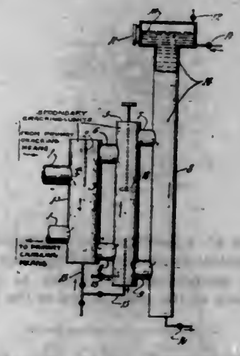
1,896,164. PNEUMATICALLY OPERATED CONTACTOR. PIERRE I. CHANDEYSSON, St. Louis, Mo. Filed Aug. 27, 1930. Serial No. 478,167. 2 Claims. (Cl. 171—324.)



1. A device for the purpose indicated comprising a cylindrical armature, circular series of brushes bearing end-on on the surface of the armature, a plurality of bars of wedge shape in cross section, said bars being disposed between adjacent brushes of each circular series and extending axially of the armature throughout the whole series, the brushes adjacent each bar being electrically connected with the bar, and all of the latter at their inner edges being spaced from the armature, and means for supplying pneumatic pressure directly on top of the brushes to keep them in firm contact with the periphery of the armature.

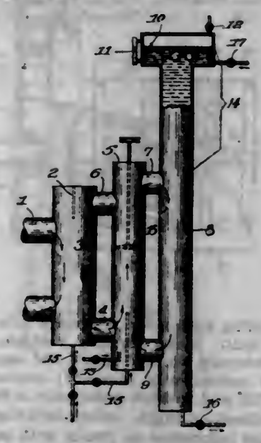
1,896,165. APPARATUS FOR TREATING HYDROCARBONS. HOMER T. DARLINGTON, West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America, a Corporation of Delaware. Filed Apr. 28, 1927. Serial No. 186,005. 2 Claims. (Cl. 196—68.)

1. An apparatus for cracking hydrocarbon oil comprising a pair of vertical tubes of large cross sectional area, one of the tubes being substantially longer than the other and the tubes being connected near the ends of the shorter tube so as to constitute an enlarged chamber adapted to contain a bulk supply of oil under super-atmospheric pressure and cracking temperatures for a prolonged period to effect substantial conversion thereof, means for cyclically supplying highly heated oil to the short tube, means for circulating oil cyclically through the short tube and



part of the longer tube, the upper portion of the longer tube being extended above the circulatory zone, and means for withdrawing vapors from the upper part of the longer tube.

1,896,166. PROCESS OF TREATING HYDROCARBONS. HOMER T. DARLINGTON, West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America, a Corporation of Delaware. Original application filed Apr. 22, 1927, Serial No. 186,005. Divided and this application filed Aug. 11, 1928. Serial No. 298,887. 3 Claims. (Cl. 196—68.)

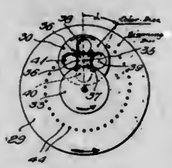


1. The process of cracking hydrocarbon oil comprising cyclically circulating oil in three cyclic streams of oil undergoing liquid phase cracking, each of which is contiguous with one of the others, heating the first of said streams, the second of said streams being contiguous with the first for a portion of its length and receiving heat therefrom by conduction and likewise transmitting heat from the second to the third stream by conduction.

1,896,167. TELEVISION SYSTEM. CHESTER L. DAVIS, Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 12, 1930. Serial No. 460,760. 7 Claims. (Cl. 178—6.)

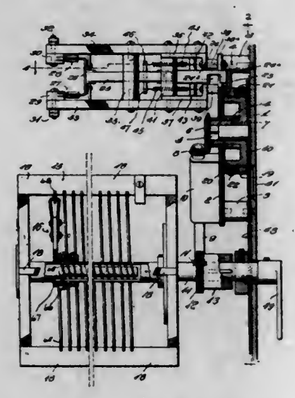
1. In a television system, a transmitter comprising means for transmitting signaling energy over a periodically recurring band of frequencies, means for scanning an object, means for shifting a color filter in the path

of said scanning means and the object to be scanned in successive step by step movements, said color filter shifting means operating in timed relation to the periodic frequency change of said transmitter, and luminously re-



sponsive means at a receiver for reproducing the color effects under control of changes in frequency at said transmitter and in predetermined relation to the successive operations of each of the color filters at the transmitter.

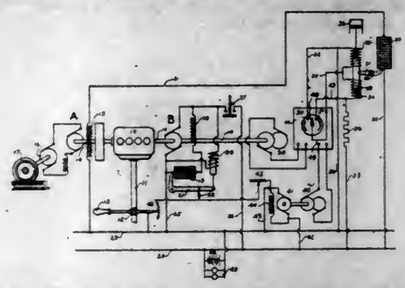
1,896,168. FREQUENCY CHANGING SYSTEM FOR RADIO TRANSMITTERS. LOUIS A. GEBHARD and CORRIE F. RUDOLPH, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 31, 1929. Serial No. 382,421. 3 Claims. (Cl. 250—40.)



1. In a tuning system for covering a wide range of wave lengths, a shaft, a continuously variable inductance, a contactor rotatable on said shaft and engaging said inductance, a permanently connected condenser connected in circuit with said variable inductance, a fixed inductance, a fixed condenser, a toggle switch connected for connecting said fixed inductance in circuit with said variable inductance, a second toggle switch connected for connecting said fixed condenser in circuit with said permanently connected condenser, a rotating member, pins carried by said rotating member and positioned for respectively actuating said toggle switches as said rotating member is rotated, and a system of gears for transmitting rotating motion between said shaft and said rotating member, whereby the rotation of said shaft connects said fixed inductance and said fixed condenser in circuit.

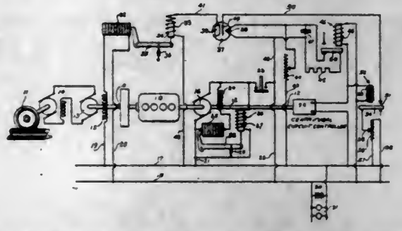
1,896,169. VEHICLE DRIVING APPARATUS AND SYSTEM. FRANK W. GODSEY, Jr., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Aug. 19, 1929. Serial No. 387,049. 18 Claims. (Cl. 290—17.)

17. In apparatus of the character described, in combination, motive means, means providing an alternating potential and mechanically connected to said motive means, a second means for providing an alternating potential and mechanically and electrically associated with said mo-



tive means, and means responsive to a change in frequency between said alternating potentials for changing the speed of said motive means.

1,896,170. VEHICLE DRIVING APPARATUS AND SYSTEM. FRANK W. GODSEY, Jr., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Aug. 19, 1929. Serial No. 387,051. 22 Claims. (Cl. 290—17.)



1. In apparatus of the character described, in combination, a prime mover, a generator driven thereby, means forming an electrical load for receiving energy from said generator, means for controlling the power output of said generator, a thermionic device for controlling the action of said control means, and a centrifugal device driven by said prime mover for controlling the action of said thermionic device.

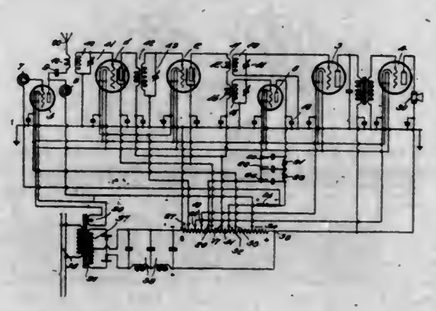
13. In apparatus of the character described, in combination, a dynamo electric machine having a field, means including a thermionic device having anode, cathode and control electrodes for controlling the field of said machine, and means responsive to the speed of said machine for controlling the conductivity of said thermionic device.

1,896,171. IODINE PREPARATION AND PROCESS OF MAKING THE SAME. JOHN CHARLES HARRY, El Paso, Tex. Filed Feb. 20, 1932. Serial No. 594,386. 13 Claims. (Cl. 137—70.)

1. In a process of making an iodine preparation for therapeutic purposes of containing free iodine in amounts exceeding 1% the step of absorbing vapors of iodine in a solution of a substantially dehydrated material selected from the group consisting of glycerol and glycol and tannic acid.

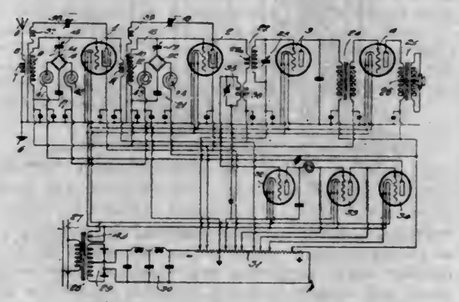
1,896,172. VOLUME CONTROL SYSTEM. ERNEST R. HENTSCHEL, Washington, D. C.; John Olson, administrator of said Ernest R. Hentschel, deceased, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 23, 1930. Serial No. 490,789. 9 Claims. (Cl. 250—20.)

1. In a volume control system for radio receivers, a radio frequency amplifier, a detector, an audio frequency amplifier, a sound reproducer, a radio frequency energy collecting circuit connected with the input of said radio frequency amplifier, an electron tube including a plurality of electrodes connected in said radio frequency energy collecting circuit for establishing an electron discharge



path in series with said radio frequency energy collecting circuit, and means controlled by the amplitude of the signaling current delivered by said radio frequency amplifier for controlling the effective impedance of said electron discharge path in said radio frequency energy collecting circuit.

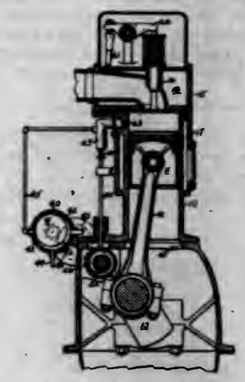
1,896,173. AUTOMATIC VOLUME CONTROL SYSTEM. ERNEST R. HENTSCHEL, Washington, D. C.; John Olson, administrator of said Ernest R. Hentschel, deceased, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 28, 1930. Serial No. 490,790. 8 Claims. (Cl. 250—20.)



1. In an automatic volume control system for radio receivers, a receiving circuit including a radio frequency amplifier, a detector, an audio frequency amplifier and a sound reproducer connected thereto, a resonant circuit connected with the input of said radio frequency amplifier, a resistance disposed in said resonant circuit, means controlled by the amplitude of the incoming signaling energy for modifying the effective value of said resistance, and means connected in circuit with said radio frequency amplifier for compensating for the effect of said resistance in said resonant circuit.

1,896,174. INTERNAL COMBUSTION ENGINE. HARLAN VERNE HONN, San Francisco, Calif. Filed Oct. 4, 1930. Serial No. 486,406. 10 Claims. (Cl. 123—33.)

8. The method of operating an internal combustion engine with liquid fuel which comprises the steps forming a froth of said fuel, compressing a charge of said froth to cause its ignition from the heat of compression



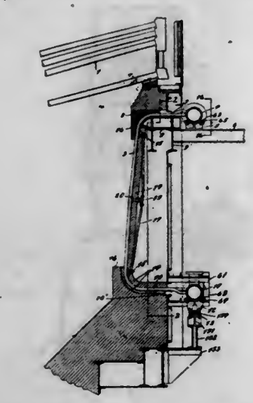
of the included gas, and injecting the ignited fuel into the combustion chamber of the engine.

1,896,175. DEVICE FOR TRAINING PILOTS IN HANDLING AIRPLANES. WILLIAM E. HUFFMAN, Dayton, Ohio, assignor to The Aircraft Appliance Co., Springfield, Ohio. Filed June 11, 1929. Serial No. 370,031. 31 Claims. (Cl. 35—12.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



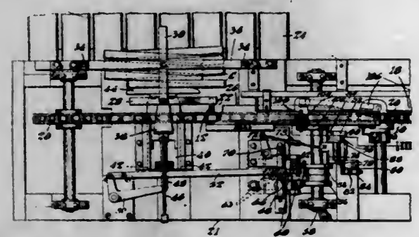
1. In a device of the class described, the combination of a support for a person, said support having aero-dynamic steering surfaces, an organization of pivoted means for mounting said support so as to have rotary movement in three planes at right angles to each other about a relatively fixed point of reference, and a motive power source mounted on said pivotal means independent of said support so that said support is rotatable independently thereof, said motive power source having a propeller operatively connected thereto and acting on said steering surfaces for moving said support at will in a clockwise or counter-clockwise direction and into a position in any plane passing through said point of reference.

1,896,176. TUBE SUPPORT. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 8, 1929. Serial No. 405,608. 16 Claims. (Cl. 122—481.)



1. In combination, a furnace wall having therein a row of tubes subjected to the heat of the furnace, means preventing said tubes from moving outwardly from the furnace while permitting their movement inwardly under the action of said heat, headers connected to the opposite ends of said tubes, means rigidly supporting one of said headers, and means resiliently supporting the other header.

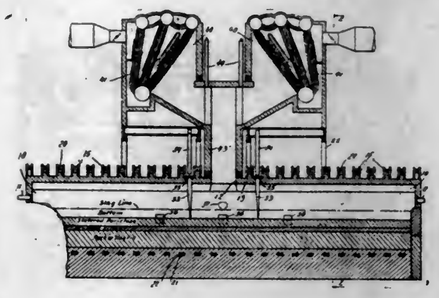
1,896,177. STACKING APPARATUS. CUTLER D. KNOWLTON, Beverly, Mass., assignor to Hoague-Sprague Corporation, Lynn, Mass., a Corporation of Massachusetts. Filed July 9, 1929. Serial No. 377,001. 31 Claims. (Cl. 214—7.)



1. In an apparatus for stacking articles, each of said articles having side-walls between which is an opening, means for advancing the articles to be stacked, such articles under the influence of the advancing means being supported upon one of their side-walls with the openings lying at the same side of the advancing means, a stacking member normally situated at one side of the path of the articles and being movable across such path, means for producing a stacking movement of the member for each article advanced, and a stationary member across which the articles are thrust from the advancing means by the sticking member and upon which they are continuously supported.

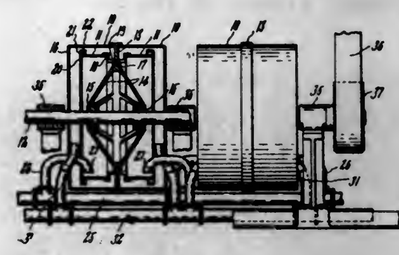
1,896,178. REVERBERATORY FURNACE. CHARLES R. KUSELL, Clarkdale, Ariz., assignor to United Verde Copper Company, Clarkdale, Ariz., a Corporation of Delaware. Filed Oct. 24, 1930. Serial No. 490,884. 5 Claims. (Cl. 263—46.)

5. Apparatus of the class described comprising a reverberatory furnace provided with firing means adjacent two opposite ends, a substantially centrally disposed gas discharge flue extending transversely of the furnace chamber between the side walls, a boiler plant disposed above the furnace and connected to the gas discharge flue, and means adjacent the gas outlet for dividing the furnace



chamber to permit independent operation of one end portion, the dividing means being so disposed as to permit gases to flow through the discharge flue to the boiler plant during the course of operation of one or both end portions of the furnace chamber.

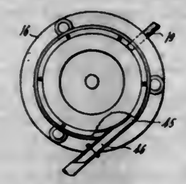
1,896,179. MULTIPLE CENTRIFUGE. SVEN C. LINDBERG, New York, N. Y., assignor, by mesne assignments, to Centrifugal Engineering and Patents Corporation, New York, N. Y., a Corporation of New Jersey. Filed Mar. 7, 1930. Serial No. 433,886. 7 Claims. (Cl. 233—18.)



1. Apparatus of the class described comprising a pair of coaxial mutually spaced drums, one within the other, common means supporting said drums at their median plane, said supporting means including a partition member extending from the outer drum radially inward beyond the wall of the inner drum, inwardly extending flanges at both ends of said drums, said supporting means having openings therein connecting the inner and outer drums at points spaced radially inwardly from the wall of the inner drum, means for supplying liquid to be purified within the inner drum at points adjacent to the opposite ends thereof, means for removing the purified liquid from the outer drum at points adjacent to the ends thereof, and means for rotating said drums.

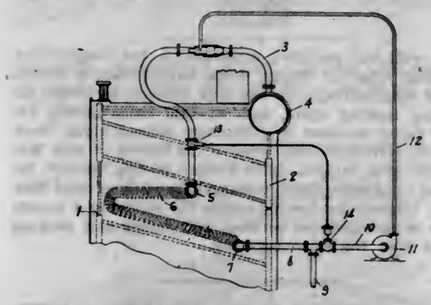
1,896,180. MULTIPLE CENTRIFUGAL SEPARATOR. CHARLES J. LINDEQUIST, Norwood, Mass., assignor, by mesne assignments, to Centrifugal Engineering and Patents Corporation, New York, N. Y., a Corporation of New Jersey. Filed Mar. 22, 1930. Serial No. 438,044. 5 Claims. (Cl. 233—17.)

1. A centrifuge for purifying liquids, comprising a casing having a lower portion adapted to hold a pool of liquid to be purified, a plurality of open ended concentric drums one within the other, a skirt extending downwardly and inwardly from each drum and submerged in the pool in the casing, the skirt on the inner drum extending to



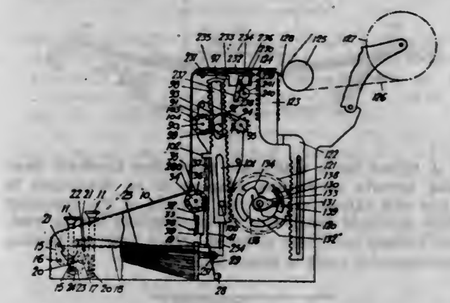
a greater depth in the pool than the skirt on the outer drum, and a shaft supporting said drums for rotation about its axis.

1,896,181. STEAM TREATMENT. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 16, 1929. Serial No. 399,908. 3 Claims. (Cl. 122—459.)



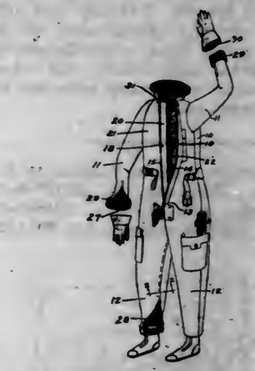
1. The combination with a steam boiler having a steam and water drum and a superheater connected to said drum of means for delivering a portion of the steam from the said superheater to the stream of saturated steam flowing from said drum to said superheater, and means for controlling the operation of said first named means in accordance with the degree of superheat.

1,896,182. CALCULATING MACHINE. CONRAD LUTTROPP, Stockholm, Sweden, assignor of one-half to Anders Lindahl, Stockholm, Sweden. Filed Jan. 4, 1928, Serial No. 244,465, and in Sweden Nov. 2, 1927. 28 Claims. (Cl. 235—60.)



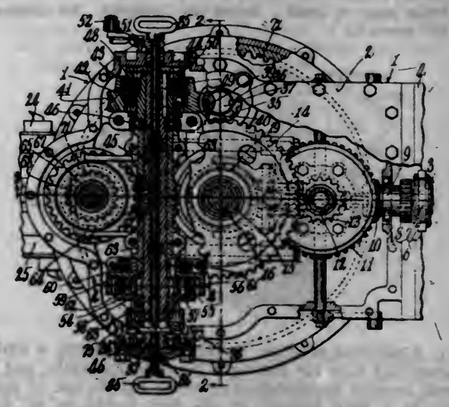
1. In a ten key calculating machine, a set of stops, a key for projecting each stop, a series of vertically disposed gravity-operated racks, key operated depressing means for said racks, means for supporting all the racks in zero position except an unset rack at the left, a pawl supporting the unset rack at the left in its zero position, a carriage in which the racks are mounted, means actuated upon depression of a key to remove the pawl from the rack at the left and allow this rack to drop onto a stop projected by a key, said pawl re-engaging the rack in its set position, stepping mechanism for the carriage actuated from the keys, means for holding the racks in their set position as they are stepped beyond the pawl, and accumulator mechanism on which the digits selected by the keys are transferred by the racks after the number has been set up on the racks.

1,896,183. FLYING SUIT. FRANK G. MANSON, Dayton, Ohio. Filed Apr. 11, 1931. Serial No. 529,459. 18 Claims. (Cl. 2—79.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a garment, separable sections having meeting edges, continuous separable fastening means for securing said meeting edges together throughout their entire length, a flap secured to one of said sections adjacent its edge and extending beyond the edge of the other section to form therewith overlapping portions, and pile material interposed between said overlapped portions and so disposed with respect to said meeting edges such that when in use, a continuous air seal for the meeting edges of said separable sections throughout the length of said flaps is obtained.

1,896,184. MINING APPARATUS. LOUIS A. MAXSON, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Jan. 17, 1929, Serial No. 333,080. Renewed May 28, 1930. 28 Claims. (Cl. 262—28.)



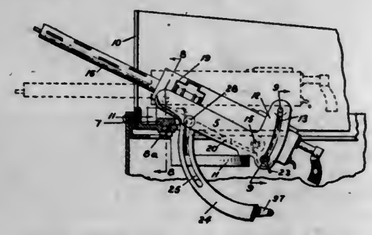
1. In a mining apparatus, kerf cutting mechanism including a pivoted cutter bar, and motor driven mecha-

nism for effecting bar swing at a slow cutting speed and at a relatively fast bar positioning speed comprising a driving gear, a shaft coaxial with and extending through said gear, a controlling clutch for connecting said shaft to said gear, a second gear coaxial with said shaft and operatively connected to said cutter bar, said shaft extending through said second gear, and plural speed mechanism between said shaft and said second gear for driving the latter at a plurality of speeds, said plural speed mechanism lying wholly at one side of said second gear.

1,896,185. MARINE OIL PRODUCT AND PROCESS OF MAKING SAME. HAROLD O. NOLAN, New York, N. Y., assignor of one-third to Ellis-Foster Company, Montclair, N. J., a Corporation of New Jersey. Filed Aug. 4, 1927. Serial No. 210,727. 2 Claims. (Cl. 167—81.)

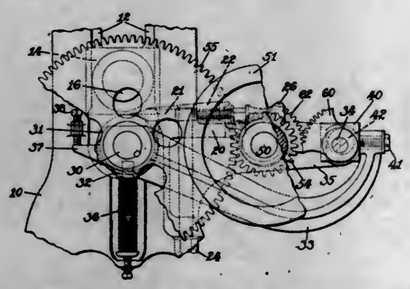
1. A clear liquid partially hydrogenated cod liver oil product of brilliant yellow color, which deposits no substantial solid glycerides upon chilling and which contains glycerides of highly unsaturated acids and substantially its original vitamin content.

1,896,186. GUN MOUNT. BRUCE PALMER, U. S. Army, Fort Riley, Kans. Filed Aug. 19, 1931. Serial No. 558,048. 5 Claims. (Cl. 89—40.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



5. A gun mount including a cradle inclined downwardly to the rear, spaced upstanding guides on the rear of the cradle having arcuate slots for receiving an element of a gun, and means for trunnioning a gun at the forward portion of the cradle, said means positioned in a horizontal plane lying above the lower portion of the slots in the guides.

1,896,187. SPLITTING MACHINE. THOMAS H. SEELY, Melrose, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 2, 1930. Serial No. 472,683. 14 Claims. (Cl. 69—13.)



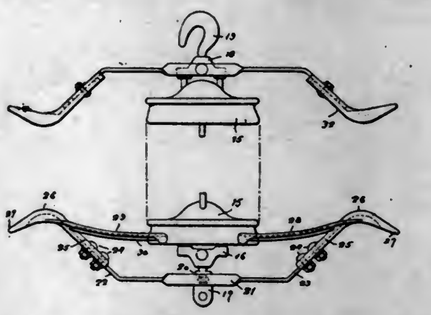
1. A splitting machine, having in combination, a knife cooperating rolls for feeding a blank to the knife, and a single member manipulation of which adjusts one of said rolls in a path parallel to the feed movement of the blank to vary the location of the bite of the rolls with respect to the edge of the knife.

1,896,188. MASONRY FACING CONSTRUCTION. VERN E. SHANKLIN, Dallas, Tex. Filed Sept. 17, 1928. Serial No. 306,439. 1 Claim. (Cl. 72—19.)



In a wall and partition construction, the combination comprising masonry facing units having flaring tenons disposed longitudinally on one face thereof, sectional, interlocking backing units, each of said units having inwardly flared recesses equi-distantly spaced along their lengths to correspondingly receive the tenons of said facing units, said backing units further having smaller recesses of analogous shape intermediate each of said first recesses whereby to provide means for receiving a mastic filler to be incorporated between said facing and backing units to bind the same together.

1,896,189. APPARATUS FOR PROTECTING POWER-LINE INSULATORS. HAROLD P. SLEEMAN, East Liverpool, Ohio, assignor to The R. Thomas & Sons Company, East Liverpool, Ohio, a Corporation of Ohio. Filed Apr. 30, 1927. Serial No. 187,906. 8 Claims. (Cl. 173—318.)



1. A fitting for a multi-unit power-line insulator comprising arcuate conductors adapted to be connected to the line and extend around the line-end of the insulator to form a voltage distributor, said conductors having associated arc-gap terminals whereby arcing over the surface of the insulator units is prevented.

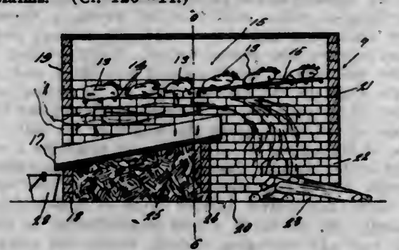
1,896,190. MANUFACTURE OF POROUS STRUCTURES. JULIAN C. SMITH and HARRY T. BELLAMY, Chicago, Ill.; said Smith assignor, by mesne assignments, to said Bellamy. Filed Apr. 12, 1928. Serial No. 269,599. 6 Claims. (Cl. 25—156.)

1. The method of refining crude solid material which is volatile below the boiling point of water which comprises mixing particles of said crude material with a mixture capable of setting to form a monolithic mass, including in the mass an agent capable of absorbing impurities in said crude material, permitting the mix to set into a self-sustaining structure, and volatilizing said material from said structure below the boiling point of water.

1,896,191. PRODUCTION OF VITAMIN D. WILHELM ZIMMERMANN, Friedrichsfeld, and WALTER FRANKENBURGER, Ludwigshafen-on-the-Rhine, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 16, 1928, Serial No. 300,156, and in Germany Aug. 26, 1927. 4 Claims. (Cl. 167—81.)

1. The improvement in the production of vitamin D by exposing a solution of ergosterol to the action of ultra-violet rays which comprises passing a solution of ergosterol by a source of ultra-violet rays, supervising the progress of reaction by spectral analysis of part of the reaction mixture and interrupting the exposure before all of the ergosterol is transformed and before the maximum absorption in the range of the spectrum between $\lambda = 300\,\mu\mu$ and $\lambda = 230\,\mu\mu$ specific to vitamin D is substantially exceeded.

1,896,192. BARBECUE OVEN. JULIUS WILLIAM CAIN, Dallas, Tex. Filed July 15, 1931. Serial No. 551,000. 8 Claims. (Cl. 126—14.)



1. In an oven structure of the class described, a housing provided on its interior with a meat supporting grid located near the upper portion thereof, a central vertical partition in said housing defining one end of a firebox, a pan forming plate supported on that portion of the grid just over the firebox, earth packed in said housing between said partition and an adjacent end wall, a juice collecting and discharging trough supported on said partition wall and earth extending through an opening in the adjacent end wall of the housing, said plate overlying one end of said trough in the manner specified.

1,896,193. CONSTANT RESISTIVITY ALLOY. MICHAEL G. CORSON, Jackson Heights, N. Y., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a Corporation of New Jersey. Filed Oct. 14, 1930. Serial No. 488,697. 6 Claims. (Cl. 75—1.)

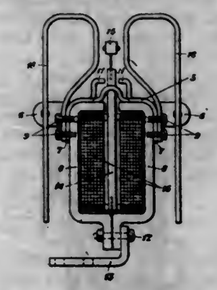
1. An alloy of constant resistivity type comprising copper, manganese 7 to 11% and aluminum 3 to 4.5%.

1,896,194. VEHICLE HEADLIGHT. JUAN GRAU, Habana, Cuba. Filed July 13, 1931. Serial No. 550,601. 1 Claim. (Cl. 24—7.1.)



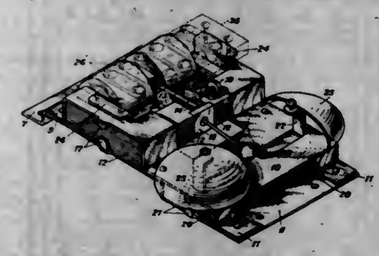
A headlight for motor vehicles including in combination a fixed horizontal supporting shaft situated in front of the vehicle and in close relation to the ground composed of three sections, elongated cylindro-parabolic reflectors interposed in said sections and fixed thereto, elongated cylindrical lamp bulbs mounted in the reflectors at the optical axis thereof and extending entirely across the reflectors and in alignment with the shaft sections, shielding casings rockably mounted on the shaft and housing the reflectors and bulbs and having forwardly and upwardly inclined open front faces with the upper portions serving as a means for intercepting the light rays, light transmitting cover plates at the front faces of the casings for completely closing the same, and manually operable means for tilting the casings about the shaft as an axis.

1,896,195. ELECTROMAGNETIC SIGNALING DEVICE. IRVING W. GREEN, Cranford, and FREDERICK C. BISBEE, Elizabeth, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 1, 1930. Serial No. 432,501. 2 Claims. (Cl. 177—7.)



1. In a permanent magnet bent into substantially rectangular shape and having a gap between its opposite poles, a magnet winding mounted in the rectangular opening and having a hollow cylindrical opening therethrough, an armature pivotally mounted on one side of the rectangular permanent magnet and extending through the coil and between and beyond the poles of the permanent magnet, a gong hammer on the free end of the armature, a frame of sheet metal bridging and secured to the poles of the permanent magnet and having integral therewith mounting lugs for the device and stop members positioned to limit the movement of the armature, and a spring type gong secured to each of the opposite sides of the magnet which are parallel to the armature.

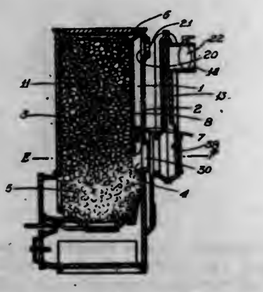
1,896,196. TELEPHONE SUBSTATION APPARATUS. IRVING W. GREEN, Cranford, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Feb. 5, 1931. Serial No. 513,712. 6 Claims. (Cl. 177—7.)



4. A mounting for telephone substation apparatus comprising a supporting plate having a portion bent into the form of a flat U with mounting flanges extending substantially at right angles from the legs of the U, one of said flanges being longer than the other, an auxiliary

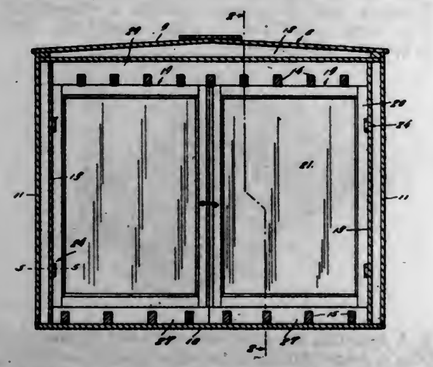
plate having a portion bent into the form of a flat U of less width than the U of the supporting plate and having right-angular extensions from the legs of the U, one of which is longer than the other, the U-shaped member of the auxiliary plate being mounted upon the flat part of the U of the supporting plate to form a compartment, the long angular extension of the auxiliary plate being extended over the long flange of the supporting plate and then bent downward to meet the edges of the long flange of the supporting plate to form a second compartment, a condenser mounted in said second compartment, a ringer having its core mounted in said first compartment, coils mounted upon said core, said U-shaped members being cut away to accommodate said coils, the long right angular extension of said auxiliary plate having tongues cut therefrom and bent to form integral supporting posts for the gongs of the ringer, and tongues cut from the plate portion of the U of said auxiliary plate and bent to form brackets to support a terminal plate.

1,896,197. STOVE. VICTOR LAGNEAU, Tamines, Belgium. Filed Aug. 25, 1931, Serial No. 559,299, and in Belgium Sept. 2, 1930. 8 Claims. (Cl. 126—73.)



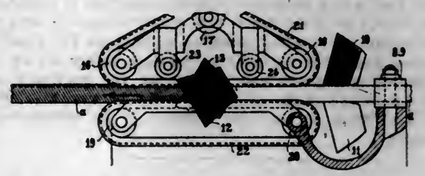
1. In a stove, the combination of a fuel receptacle, the bottom portion of said receptacle forming a fire zone, a flue for leading off combustion gases from the bottom portion of said receptacle, a downwardly extending gas collector communicating with said receptacle at an intermediate point thereof, the bottom end of said collector opening in proximity to the inlet end of said flue, means for detachably securing said collector within said receptacle, and means for admitting air into said collector.

1,896,198. REFRIGERATOR CAR DIVIDER. MURDOCH A. MACMILLAN, Chicago, Ill. Filed Mar. 30, 1932. Serial No. 602,075. 1 Claim. (Cl. 105—376.)



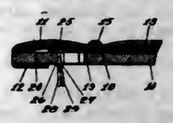
A freight car having a body portion with side door openings, upright posts at one side of said openings, and side doors for said openings, and also having dividing means located in the body in transverse alignment with said upright posts and consisting essentially of horizontally swingable doors the outer vertical edges of which rest close to opposite sides of the body, double acting spring hinges interposed between said edges and the sides and enabling the doors to swing horizontally in opposite directions, and means on the confronting vertical edges of the doors for preventing the passage of air therebetween when the doors are closed.

1,896,199. APPARATUS FOR THE PRODUCTION OF FILES AND FILE CASINGS. ALFRED PEISELER, Remscheid-Haddenbach, Germany. Filed May 30, 1928, Serial No. 281,596, and in Germany June 1, 1927. 10 Claims. (Cl. 76—12.)



1. An apparatus for cutting file teeth on file blades, comprising a rotary milling cutter having a thread-like cutter blade, and means for supporting a blank and producing relative feed motion between the blank and cutter in the direction of the length of the blank and at an oblique angle to the cutting plane of the acting cutting surface of the cutter so as to cause the thread-like cutting surface of the blank along the length of the latter, said blade of the cutter to cut at spaced intervals across a cutter having its axis arranged at an acute angle sufficient to cause the cutting edges to cut diagonal file teeth in the blank, said cutter further being of sufficient length to engage the blank on a line perpendicular to the file teeth cuts and extending entirely across the blank.

1,896,200. TRIM PANEL AND METHOD OF MAKING SAME. BION C. PLACE, Detroit, Mich., assignor of one-half to George E. Gagnier, Detroit, Mich. Filed May 29, 1931. Serial No. 541,008. 5 Claims. (Cl. 45—138.)

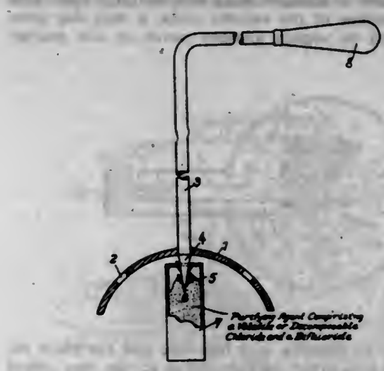


1. An automobile body or similar trim panel comprising a foundation, wadding substantially completely covering said foundation, a riser in ornamental or fanciful outline secured to said foundation through said wadding, and trim material covering said panel, said trim material being stitched through said wadding along the edges of said riser.

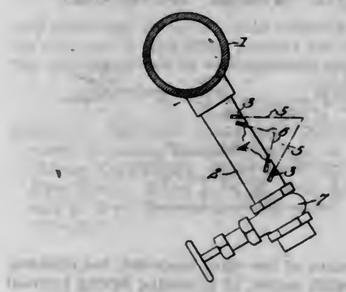
1,896,201. PROCESS OF SEPARATING OXIDES AND GASES FROM MOLTEN ALUMINIUM AND ALUMINIUM ALLOYS. ROLAND STERNER-RAINER, Heilbronn-on-the-Neckar, Germany, assignor to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 14, 1932, Serial No. 586,665, and in Germany Jan. 17, 1931. 18 Claims. (Cl. 75—58.)

1. A process for removing oxides and gases from molten aluminium and aluminium alloys which comprises treating

the molten metal with a purifying agent consisting of a chloride which produces a gaseous product at the temperature of treatment and a volatile fluoride of the group consisting of alkali metal and ammonium bifluorides.



1,896,202. WATER COOLING APPARATUS. ALLAN S. RICHARDSON, Butte, Mont. Filed Apr. 8, 1932. Serial No. 604,074. 6 Claims. (Cl. 299—104.)



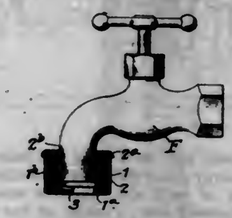
4. A spraying device comprising a pipe having an internal passage, a pair of transverse slots in said pipe to project therefrom impinging sheets of water, and outlet means in the wall of said pipe between said slots for projecting water into the zone within said sheets of water.

1,896,203. AIRCRAFT DOOR. CELESTINO ROSATELLI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed Dec. 11, 1930, Serial No. 501,715, and in Italy Oct. 21, 1930. 2 Claims. (Cl. 16—147.)



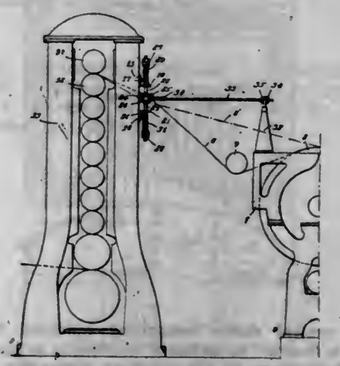
1. A combined hinge and latch device for doors, comprising, in combination with hinge sockets adapted to be fixed to the two frame ledge portions of a door and with rods adapted to be mounted axially displaceable on the sides of a door and carrying the hinge pins, an actuating device for said rods consisting of a push rod for each of said hinge pin carrying rods, a bell-crank lever for connecting each push rod with its respective hinge pin carrying rod, levers operated by hand for actuating said push rods and means for locking said rods in position for holding said hinges assembled, said means being released automatically through the operation of said hand-operated levers.

1,896,204. ANTISPLASHER. CLIFFORD A. SCHACHT, Huntington, Ind. Filed Dec. 9, 1931. Serial No. 580,207. 5 Claims. (Cl. 210—84.)



1. An anti-splasher for faucet nozzles, comprising a cylindrical bushing of molded rubber adapted to fit over the end of the nozzle, and having an external flange at its upper end; a casing around the bushing having an internal flange at its lower end; and screens interposed between the lower end of the bushing and the flange of the casing, the flange on said bushing extending beyond the outer sides of the casing.

1,896,205. SPREADER. JAMES R. SIMPSON, Wisconsin Rapids, Wis. Filed June 8, 1931. Serial No. 542,873. 10 Claims. (Cl. 92—71.)

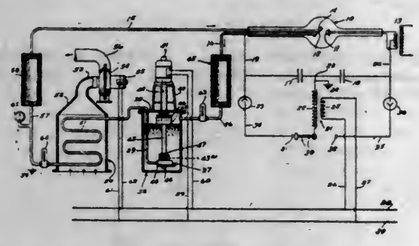


1. In a paper making machine, a spreader between the drier and the calender adapted to guide the paper sheet between the calender rolls comprising a light weight spreader bar, means for adjustably supporting said bar, and resilient means for maintaining said bar against said paper sheet to hold said sheet taut and compensate for variation in the speed thereof.

1,896,206. X-RAY APPARATUS. FRANKLIN S. SMITH, Brooklyn, N. Y. Filed Mar. 3, 1927. Serial No. 172,281. 15 Claims. (Cl. 250—34.)

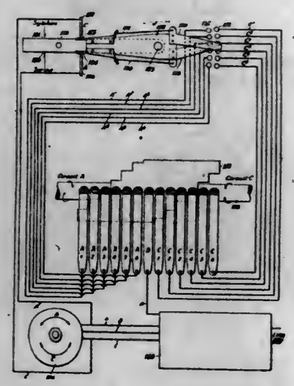
1. In X-ray apparatus, in combination, an X-ray tube having an anode and a cathode; means forming a supply of alternating current of relatively low potential; means including a step-up transformer connected between said supply and the electrodes of said tube for energizing the latter at relatively high potential; a circulating system for passing a cooling fluid in thermal contact with said anode, said system including a heat exchange device, a

pump, and conduit means, the latter having a portion thereof made of solid dielectric material and interposed between said anode and the rest of the circulating system; a fluid dielectric in said system for circulation therethrough by said pump; and electromotive means for op-



erating said pump and said heat exchange device and supplied with energy from said low potential supply, the electrical circuit of said electromotive means being insulated for a relatively low potential on the order of that of said supply.

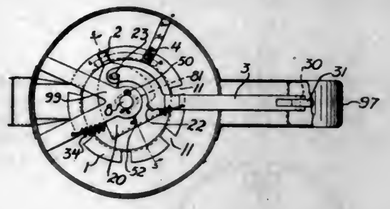
1,896,207. CONDITION CONTROL APPARATUS. HAZOR J. SMITH, Springfield, Mass., assignor to Superstat Company, Springfield, Mass., a Corporation of Massachusetts. Filed Feb. 14, 1931. Serial No. 515,787. 37 Claims. (Cl. 236—76.)



1. A control device comprising condition responsive means, a first set of switches adapted to be operated by slight fluctuations in the condition responsive means, a second set of switches adapted to be connected in circuit with the first set of switches and operated by wider fluctuations in the condition responsive means, a motor device including operating means operatively connected to said switches, means for operating the motor device to correspond to the fluctuations in the condition responsive means.

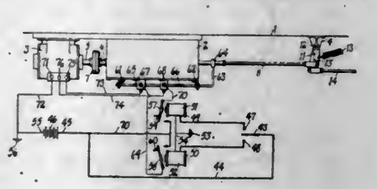
1,896,208. FEED FOR SUGAR CUBE DISPENSERS. HENRY J. THOMPSON, Seattle, and ANTON F. SULAK, King County, Wash., assignors of one-third to Hugh M. Caldwell, one-third to John G. Myers, and one-third to John D. Arrowsmith, Seattle, Wash. Filed Jan. 25, 1932. Serial No. 588,690. 6 Claims. (Cl. 312—89.)

1. In combination with a receptacle having a delivery outlet and a star wheel rotatably mounted in the receptacle and recessed to receive and advance sugar cubes into registry with the outlet, feed means therefor comprising a ratchet plate having spaced notches corresponding to the recesses of the star wheel, and operatively connected to the latter, a fixed holding dog engageable within a notch to retain the ratchet plate and star wheel in delivery position, and when so engaged lying substantially flush with the lower surface of the ratchet plate, a feed dog pivotally mounted to engage another notch of the ratchet



plate, means to advance said feed dog and the plate engaged thereby to bring another recess of the star wheel into delivery position, and when so advanced to be displaced from the notch by the holding dog now entering the same, whereby the feed dog may return over the plate to position to engage a further notch.

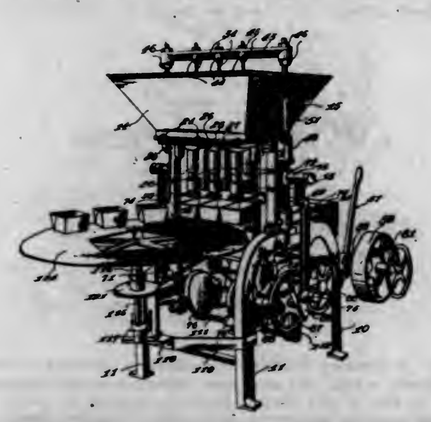
1,896,209. BRAKE MECHANISM. SAMUEL VITALE and EARL M. WILSON, Charlotte, Mich. Filed June 4, 1931. Serial No. 542,114. 16 Claims. (Cl. 188—162.)



1. In an apparatus of the class described, the combination with a reversible motor, of a housing having internal opposed parallel ways, an internally threaded driven member slidable in said ways, an actuated member, a spring acting to return said actuated member to initial position, a connecting rod having a yoke secured to said driven member, the arms of said yoke constituting segmental bearing members, a driving shaft connected with said motor, a driving head having a lost motion connection to said shaft, the inner end of said driving head coacting with said bearings of said yoke, segmental screw driving members disposed within said driven member and mounted on said head for radial movement, a double-lobed cam on said shaft acting to actuate said screw driving members to engaged position, and springs acting to disengage said screw driving members from said driven member.

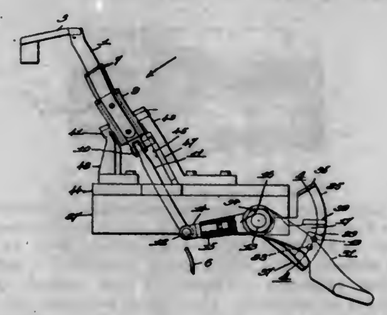
1,896,210. FILLING AND MEASURING MACHINE. CHARLES H. VOOT, Philadelphia, Pa. Filed Jan. 30, 1928. Serial No. 250,472. 7 Claims. (Cl. 226—95.)

1. A machine for filling scrapple into pans comprising a frame; a pan supporting table carried by said frame, a container supported by said frame above said table; a plurality of measuring shells carried by said container terminating in proximity to said table; a frame mounted for reciprocation beneath said table for periodically advancing a plurality of pans to a filling position beneath said measuring shells; a revolvable table supported on a vertically disposed rotatable shaft for carrying the filled pans away from said pan supporting table; a pair of rotatable interconnected shafts supported by said frame; separate means carried by one of said shafts for actuating said reciprocating frame and imparting rotation to said vertically disposed shaft respectively; means carried by the other shaft for discharging measured quantities of material from



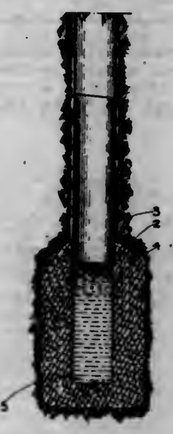
said measuring shells into said plurality of pans upon being advanced to said filling position and means for imparting rotation to one of said rotatable shafts.

1,896,211. SEWING MACHINE. REGINALD BOYD WOODCOCK, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 16, 1931, Serial No. 544,796, and in Great Britain July 24, 1930. 10 Claims. (Cl. 112—51.)



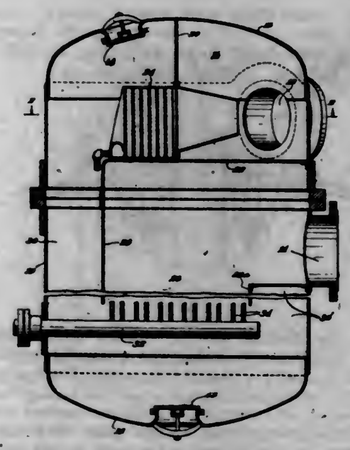
1. An outsole shoe sewing machine having, in combination with the stitch forming devices, a work support arranged to guide the shoe along the angle between the side of the upper and the projecting margin of the shoe sole, an auxiliary guide member also arranged to guide the shoe along the angle between the side of the upper and the projecting margin of the shoe sole mounted in the machine and movable from an operative position in front of the work support to a lowered position below the work support and a lever and suitable connections for moving the auxiliary guide.

1,896,212. CEMENT WELL STRAINER. GORHAM W. WOODS, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Oct. 27, 1931. Serial No. 571,822. 2 Claims. (Cl. 166—21.)



1. In a well having a casing therein, the method of forming a well strainer on said casing comprising, reaming an enlarged cavity, forcing cement which forms a porous filtering medium upon setting into said cavity, and drilling a fluid receiving recess into said cement as a continuation of said casing.

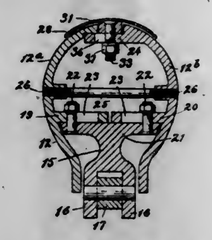
1,896,213. REHEATER. WILBUR H. ARMACOST, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Oct. 31, 1931. Serial No. 572,856. 10 Claims. (Cl. 257—220.)



1. A heat exchanger having a shell, walls within said shell forming a pass for fluid to be heated and which has a polygonal cross section, said walls forming segments within said shell and the walls and shell having

an arrangement such that the fluid in certain of said segments maintains the metal walls thereof at substantially the same temperature at given levels within the segment, heating elements within said polygonal pass, said segments each having communication with said polygonal pass at one end, and an inlet and an outlet connection, one to said polygonal pass and one to one of said segments.

1,896,214. ADJUSTABLE TIRE CORE. HENRY C. BOSTWICK, Akron, Ohio, assignor to The Akron Standard Mold Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 20, 1931. Serial No. 558,233. 18 Claims. (Cl. 154—9.)

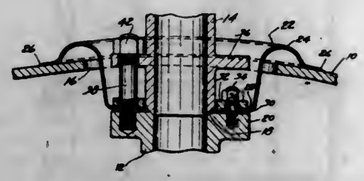


1. A tire-building core having adjustable means for varying the length of its normal tread circumference for building tires of different sizes.

1,896,215. GREASE RESISTANT PAPER. THEODORE F. BRADLEY, Westfield, N. J. Filed Aug. 31, 1927. Serial No. 216,781. 11 Claims. (Cl. 91—70.)

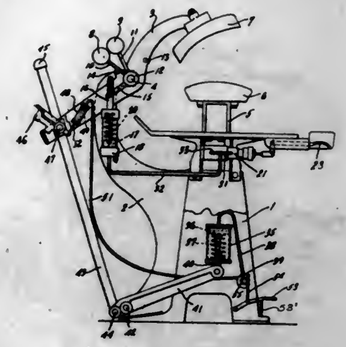
1. Glassine paper carrying a coating of a composition containing a cellulose ester, a wax in an amount sufficient substantially to reduce volatility of solvents for the composition but insufficient to cause substantial blemishing of the coating, and polyhydric alcohol-polybasic acid resin, the ingredients being in amounts sufficient to give substantial grease repellent properties to the paper.

1,896,216. FLEXIBLE GAS TIGHT JOINT. CARL A. BRANDT, Great Neck, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Aug. 19, 1931. Serial No. 558,050. 5 Claims. (Cl. 285—31.)



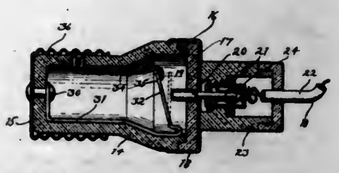
1. The combination with a chamber wall having an aperture therethrough, a pipe, and a member within said chamber and having a passage connected with the passage in said pipe, of means adapted to prevent leakage between the interior of said chamber and the atmosphere comprising a flexible sheet having a tight joint with said shell along a line surrounding said aperture, means for forming a tight joint between the inner edge of said sheet and said member and arranged to permit passage from the end of said pipe to the atmosphere in case there is leakage at the end of the pipe, and means for drawing said pipe against said member to normally prevent leakage therebetween.

1,896,217. PRESSING MACHINE. BLUFORD W. BROCKETT, Cleveland Heights, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 9, 1931. Serial No. 514,827. 2 Claims. (Cl. 68—9.)



1. A pressing machine comprising a stationary work support, a head and head lever structure counter-balanced to be free of any normal tendency to move to closed or open position, motor means including a weight capable of energization independently of head movement to be effective on the head for closing the press, power means for energizing said motor means, a two hand control means for controlling the operation of said power means, power means normally out of operative engagement with said head for effecting pressing pressure between said head and bed, means for making an operative connection between said head and said power means after said head is moved to closed position, motor means for rendering said last named means effective, and a single control means for causing actuation of said last named motor means and said power means for effecting pressing pressure between said head and bed.

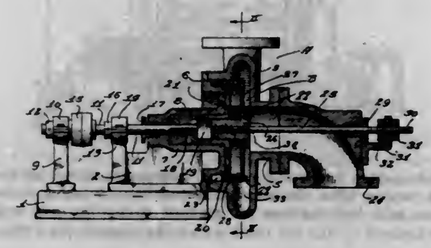
1,896,218. SIGNAL INDICATING SYSTEM. MARIANO BRUNO, Brooklyn, N. Y. Filed Apr. 1, 1931. Serial No. 526,945. 1 Claim. (Cl. 200—117.)



A plug switch of the class described, comprising, a hollow body having an open and a closed end, an electrical contact on the outer side portion of said body, an electrical contact in the closed end of said body, a resilient electrical conductor connected to said contact on the closed end of said body, a cover for said body having a contact tube therein, adapted to project into said body and contact said resilient electrical contact member, fuseable means electrically connected to the electrical contact on the outer side of said body, and normally maintaining said resilient contact out of electrically contacting engagement with the pin, and means for securing said tap to said body.

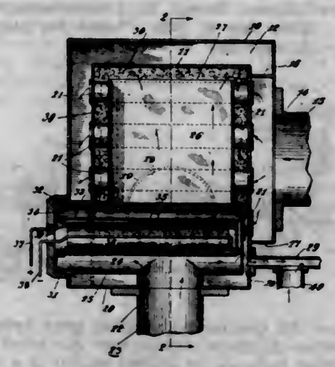
1,896,219. ADJUSTABLE CENTRIFUGAL PUMP. WILLIAM BUCKLEY, Chicago, Ill. Filed Nov. 30, 1931. Serial No. 577,889. 2 Claims. (Cl. 103—97.)

1. A centrifugal pump in combination, an impeller casing having an impeller chamber therein, an impeller rotatable within said chamber, said impeller having a hub and blades on the hub, said hub being provided with a counterbore opening into the chamber, a rod disposed coaxially with said hub and carrying a hub movable within said counterbore, said rod hub carrying radially extending webs disposed between the impeller blades and serving as a movable back wall for the impeller chamber, said webs bridging the spaces between the impeller blades,



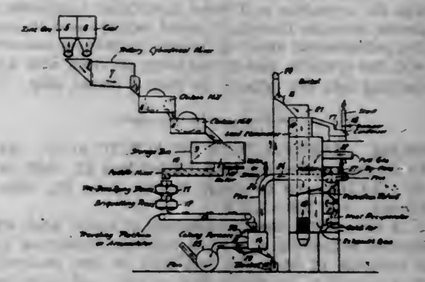
the movement of said rod causing corresponding movement of said movable back wall, and the space between the front wall of the impeller casing and the movable back wall constituting that portion of the impeller chamber subject to impeller action, the movement of said movable back wall within said impeller chamber serving to vary fluid pressure through the pump.

1,896,220. OIL GAS GENERATOR. EVERETT E. BUSSEY, Brooklyn, N. Y., assignor, by direct and mesne assignments, to Bussey Fuel Gasifier Corp., Philadelphia, Pa., a Corporation of Delaware. Filed Oct. 12, 1926, Serial No. 141,229. Renewed June 18, 1932. 2 Claims. (Cl. 48—103.)



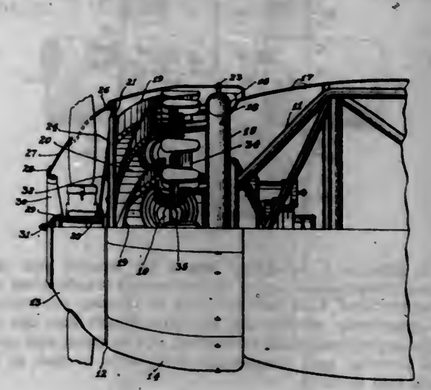
2. An oil gas generator, comprising in combination, an outer casing, an inner casing forming an oil gasifying chamber, a plurality of tubes extending through the inner casing, means for directing hot exhaust gases to and through the tubes to heat the inner casing, means including a conduit extending upwardly into the inner casing for directing oil vapors thereto, an auxiliary electrical heater in the lower portion of the generator for heating the inlet oil vapors, a packing surrounding the tubes and substantially filling the inner casing so as to be heated thereby and to convert the fuel oil vapors therein into a fixed oil gas, and means for conveying the gas from the inner casing.

1,896,221. REDUCING ZINCIFEROUS MATERIALS. EARL H. BUNCE, Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed July 2, 1931. Serial No. 548,389. 18 Claims. (Cl. 266—15.)



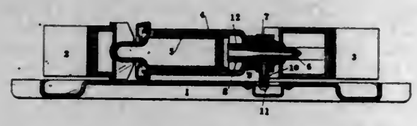
1. In an apparatus for reducing zinciferous material, the combination comprising an externally heated zinc reduction retort, a coking chamber, and a flue in association with said coking chamber and said reduction retort for the passage of partially spent heating gases from the retort to the coking chamber.

1,896,222. ENGINE COWLING. ROLAND CHILTON, Ridgewood, N. J., assignors to Wright Aeronautical Corporation, Paterson, N. J., a Corporation of New York. Filed Dec. 12, 1930. Serial No. 501,789. 28 Claims. (Cl. 244—31.)



1. The combination with a propeller driven by an engine, of a hollow spinner rotatable with the propeller and provided with an axial air entrance ahead of the hub of said propeller and with discharge ports at the back of said spinner disposed at a greater radius than that of said entrance, and fixed means cooperating with said ports to direct the air discharging therefrom upon the cylinders of the engine.

1,896,223. HYDRAULIC BRAKE MECHANISM. BURNS DICK and STEVE SCHNELL, St. Louis, Mo., assignors to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed July 11, 1928. Serial No. 291,723. 2 Claims. (Cl. 188—152.)

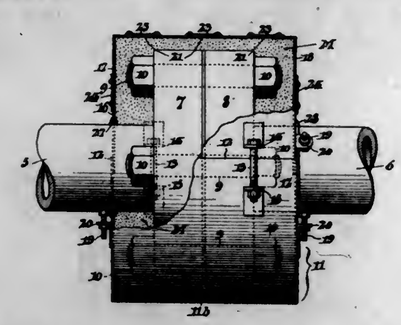


1. A braking device comprising brake shoes, hydraulic means for actuating said shoes comprising a cylinder and a piston movable therein, a liquid supply conduit, and a fitting permanently attached to said conduit for connecting it with the cylinder, said fitting being provided with a part projecting into the cylinder to form a piston stop.

1,896,224. MANUFACTURE OF ACETIC ACID. HENRY DREYFUS, London, England. Filed May 27, 1926, Serial No. 112,166, and in Great Britain June 13, 1925. 5 Claims. (Cl. 260—112.)

1. A process for the manufacture of acetic acid, which comprises subjecting a gaseous mixture containing about one molecule of hydrogen relatively to one molecule of carbon monoxide to the action of heat and superatmospheric pressure at a temperature between 100° and 450° C. in presence of a contact mass containing at least one non-basic catalyst selected from the group consisting of metal acetates which decompose with the formation of acetic acid at a temperature not exceeding 450° C., and metal compounds capable of forming said acetates.

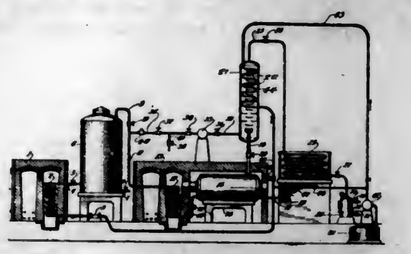
1,896,225. EXPANSION EQUALIZING MEANS FOR PIPE JUNCTURES. WILLIAM E. S. DYER, Noble, Pa. Filed Apr. 18, 1931. Serial No. 531,129. 5 Claims. (Cl. 285—99.)



1. Expansion equalizing means for flanged pipe junctures, comprising a casing of counterpart interlapping components filled with material high in thermal conductivity to completely envelop the juncture flanges and the contiguous portions of the connecting pipe sections, and means for securing said components concentric to and in line with said sections.

1,896,226. PROCESS OF CRACKING HYDROCARBONS. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 21, 1925. Serial No. 76,636. 2 Claims. (Cl. 196—60.)

1. A continuous process for cracking hydrocarbons, comprising initially raising a hydrocarbon oil to a cracking temperature while under a superatmospheric pressure, removing from the hydrocarbon oil such vapors as are evolved therefrom, raising the temperature of all of such vapors, prior to condensation, substantially 300° F., above the temperature to which said hydrocarbon oil was initially subjected, thereafter subjecting such vapors to reflux

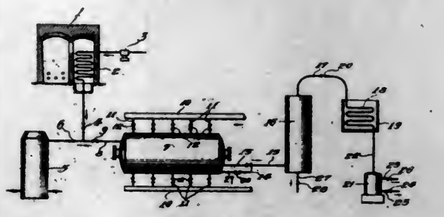


condensation and uniting reflux condensate separated from the vapors with the vaporous constituents being evolved from said hydrocarbon oil without returning said reflux condensate to the oil from which the vapors are evolved.

1,896,227. PROCESS OF PRODUCING RESINOUS COMPOUNDS AND PRODUCTS THEREFROM. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Mar. 24, 1927. Serial No. 178,154. 4 Claims. (Cl. 260—17.)

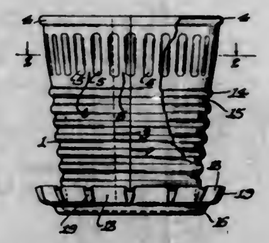
4. A process for producing resinous bodies from cracked hydrocarbon distillates which comprises adding sulphur to the distillate, heating the resultant mixture to a temperature adequate to effect reaction between the sulphur and distillate and simultaneously distilling the mixture, refluxing the vapors evolved by the heating and distillation and returning resultant condensate to the mixture being heated, and continuing such heating and refluxing until a substantial portion of the distillate has been converted into resinous bodies.

1,896,228. PROCESS OF CRACKING HYDROCARBONS. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 6, 1928. Serial No. 244,816. 1 Claim. (Cl. 196—62.)



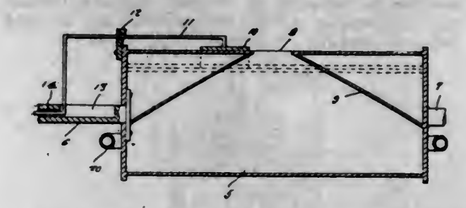
A process for treating high boiling point hydrocarbon oil to produce distillates having high anti-knock properties including the steps of heating the oil to a cracking temperature while flowing through a heating coil under superatmospheric pressure, thence transferring the heated oil constituents to an enlarged reaction zone maintained under lower pressure than that maintained on the oil passing through said heating coil and injecting into the heated oil transferred to said enlarged reaction zone water gas heated to a temperature in excess of the temperature to which the oil is heated in said coil, and also introducing to the oil in the reaction zone air in amounts insufficient to form an explosive mixture and maintaining the constituents in said reaction zone at a temperature in excess of 1000° F.

1,896,229. METAL FLOWERPOT. STUART ELLIS, Fredericksburg, Va. Filed Jan. 16, 1931. Serial No. 509,216. 3 Claims. (Cl. 47—34.)



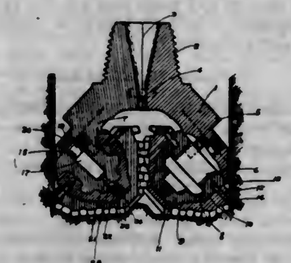
1. A metal flower pot having an annular corrugation at the top thereof, said corrugation being outwardly bowed in cross section, a series of spaced vertical corrugations extending around the pot in proximity to the upper edge of the pot, whereby to stiffen the material and to improve its attractive appearance.

1,896,230. COMBINED COFFEE ROASTER, GRINDER, AND URN. GUGLIELMO FARAGO, New York, N. Y. Filed Jan. 3, 1931. Serial No. 506,444. 2 Claims. (Cl. 34—5.)



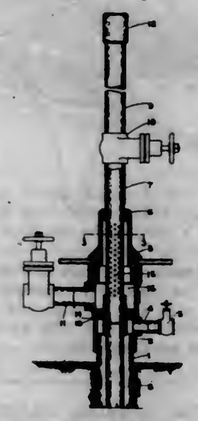
1. A coffee roaster comprising a casing, a roasting cylinder rotatably mounted in said casing, a plurality of shafts for mounting the roasting cylinder in the casing, one of said shafts having a slot and a bore, said bore extending longitudinally of the shaft to its outer end, a discharge opening in the side of said roasting cylinder, means for opening and closing said opening, and means extending through the aforementioned slot and bore to a point exteriorly of the casing for operating the closing means of said discharge opening.

1,896,231. DRILL HEAD AND LUBRICATOR. HAROLD W. FLETCHER, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed July 6, 1931. Serial No. 548,807. 1 Claim. (Cl. 255—71.)



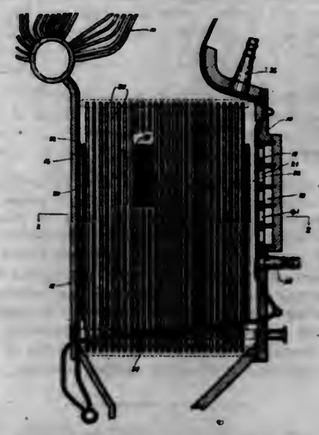
A roller well drill including a head, cutter shafts thereon, cutters on said shafts, a lubricant chamber axially of each shaft, a channel connecting each chamber with the bearing surface of the shaft, means to equalize fluid pressure in said chamber, including a plug closing said chamber and having a small opening therethrough to admit fluid pressure from the well, and a valve in said channel at the end of said shaft.

1,896,232. PLUNGER LIFT EQUIPMENT. HAROLD W. FLETCHER, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Nov. 21, 1931. Serial No. 576,525. 7 Claims. (Cl. 103—52.)



1. A plunger lift device including a well casing, an eduction tube therein, a casing head sealed about said tube at the upper end of said head, a swab plunger operating in said tube, said tube having outlet openings therein on one side only, whereby the fluid pressure below said plunger will tend to hold said plunger against said openings.

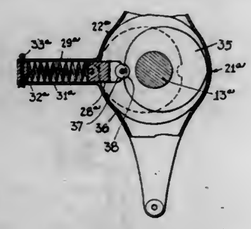
1,896,233. BOILER FURNACE. CHARLES W. GORDON, Munster, Ind., assignor to The Superheater Company, New York, N. Y. Filed Feb. 17, 1931. Serial No. 516,365. 5 Claims. (Cl. 122—235.)



1. In combination, a furnace chamber having heat absorbing side walls, main burners set along the upper part of one of the other walls of said chamber and discharging downward into the chamber, means for introducing air into said chamber through a vertical wall thereof transverse to said side walls and beneath said main burners, and auxiliary burners set beneath the discharge from said

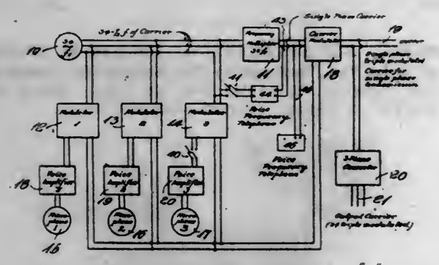
main burners and to discharge into said chamber through said vertical transverse wall, at a level near the lower edge of the stream of air from said means.

1,896,234. TAIL WHEEL. CHARLES E. HATHORN, Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed May 1, 1931. Serial No. 534,181. 6 Claims. (Cl. 244—2.)



6. In an airplane, in combination, a tail wheel, a steering arm, means for releasably retaining said tail wheel in fixed relation with said steering arm, and mechanism for urging the return of said tail wheel upon displacement thereof from said fixed relation.

1,896,235. SINGLE CARRIER FREQUENCY MULTIPLEX TELEPHONY AND TELEGRAPHY. CLINTON W. HOUGH, Boonville, N. Y., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 27, 1926. Serial No. 125,234. 15 Claims. (Cl. 179—15.)

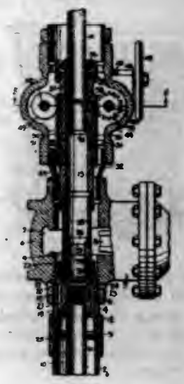


3 The method of transmitting and receiving a multiplicity of messages by means of a single phase high frequency carrier current, which consists in generating a polyphase high frequency current, multiplying the frequency of one of the phases of said polyphase high frequency current, modulating said multiplied frequency carrier current during successive time intervals by impulses corresponding to each of the plurality of messages in successive and recurring order, and selectively receiving signaling energy on definite recurring cycles of said high frequency multiple modulated carrier current

---

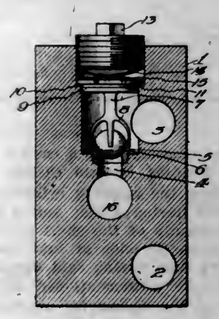
1,896,236. RETRACTABLE TUBING HEAD. JAMES H. HOWARD, EDWIN A. JOHNSON, and JOSEPH H. MCEVOY, Jr., Houston, Tex.; said Howard and said Johnson assignors to J. H. McEvoy & Company, Houston, Tex., a Corporation. Filed Feb. 3, 1931. Serial No. 513,070. 10 Claims. (Cl. 166—15.)

1. A tubing retractor including in combination a casing head, a valve thereon, two suspended sections of tubing, a telescoping section joining said two sections, and means to move said last section including a rack on



said section and a pinion arranged for rotation to move said section.

1,896,237. PUMP VALVE. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 21, 1926. Serial No. 103,478. 7 Claims. (Cl. 277—46.)

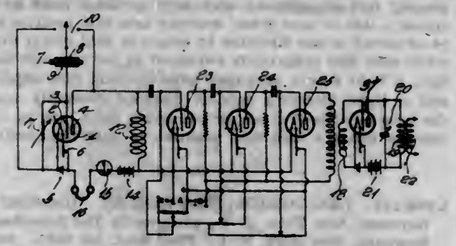


1. The combination with a casing, of a valve seat member having a port therein, a ball valve normally closing said port, a closure cap adapted to be inserted over said port and ball, said closure cap being provided with a projection terminating in spaced guide fingers adapted to surround the ball out of contact with said seat member, said cap having removable engagement with a seat in the casing, and an auxiliary screw plug adapted to have screw-threaded engagement with the casing in substantial alignment with said closure cap.

1,896,238. FREQUENCY CONTROL SYSTEM. AUGUST HUND, Bethesda, Md., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 13, 1926. Serial No. 135,241. 8 Claims. (Cl. 250—36.)

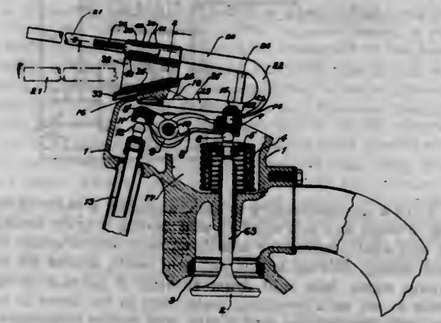
1. A high frequency vacuum tube oscillator comprising an electron discharge device having cathode, grid, and anode electrodes, input and output circuits therefor, both of said circuits being substantially non-resonant to the frequency to be generated, a piezoelectric crystal element connected to a plurality of said electrodes, said input and output circuits and the grid to anode capacity being such that at the generated frequency, energy is

adapted to be transferred from said output circuit to said input circuit through a path independent of said crystal element, and an electron tube amplification system



having resistance coupled stages and an output circuit for the last stage which is tuned to the frequency of said piezo-crystal element.

1,896,239. VALVE SPRING COMPRESSING TOOL. FRANZ HUND, Cleveland, Ohio. Filed Jan. 29, 1932. Serial No. 589,671. 8 Claims. (Cl. 29—86.3.)



1. In a tool of the class described, an unequal legged U-shaped body, a portion of the short leg adjacent the U-bend being adapted to engage a portion of a valve construction, a head slidable on the long leg and having a jaw portion overlapping the short leg.

1,896,240. CATALYTIC MOLECULAR ASSOCIATION OF ORGANIC COMPOUNDS. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Mar. 23, 1928. Serial No. 264,275. 10 Claims. (Cl. 23—212.)

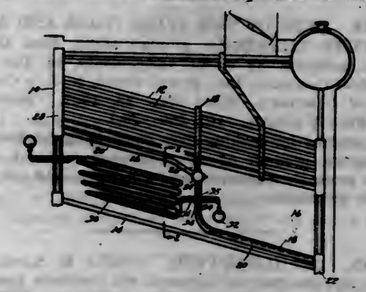
1. A method of effecting esterification reactions which comprises causing the reaction to take place in contact with a contact mass including a catalyst and containing a permutogenetic body.

2. A method of effecting an organic reaction selected from the group consisting of polymerizations and condensations, which comprises causing the reaction to take place in contact with a contact mass including a catalyst and containing a permutogenetic body.

9. A method of producing carbon dioxide and hydrogen, which comprises causing gas containing carbon monoxide to react with steam, at elevated temperatures, in the presence of a contact mass including a catalyst favoring molecular associations and containing at least one permutogenetic body.
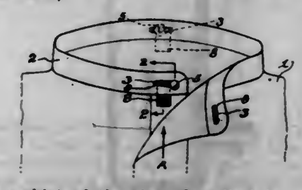
1,896,241. BOILER. JAMES F. KAVANAGH, Calumet City, Ill., assignor to The Superheater Company, New York, N. Y. Filed Aug. 25, 1931. Serial No. 559,218. 3 Claims. (Cl. 122—478.)

2. A boiler having in combination a vertically spaced pair of blanks of horizontally inclined generating tubes, a row of tubes extending along and crossing the space between said blanks, a baffle structure extending in contact with said row from its lower end to a point near said upper bank and thence upwardly through the upper bank so as to separate the first gas pass from the second, said row lying closely adjacent the upper surface of the lower of said banks for a considerable portion of the length



of such row and closely adjacent the lower surface of the upper of said banks for another considerable portion of the length of such row and having a substantially vertical portion intermediate said portions, and header means at the junction of said vertical portion with one of said other portions.

1,896,242. SHIRT. HARRY KLEINBERG, Pittsburgh, Pa. Filed Jan. 29, 1932. Serial No. 589,726. 4 Claims. (Cl. 2—127.)



1. In a shirt of the class described in combination, a neckband having two walls forming pockets between them for the insertion of a collar button, one of said walls provided with a button-hole, said last mentioned wall formed of two thicknesses of material, a tab held between said two thicknesses of material, the top edge of said tab sewed in the overcast stitches of said button-hole.

1,896,243. CUTTER SUPPORT FOR WELL DRILLS. ARCHIE A. MACDONALD, Los Angeles, Calif., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Apr. 12, 1928. Serial No. 269,351. 5 Claims. (Cl. 255—71.)



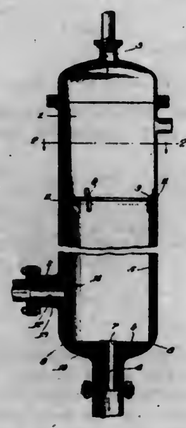
1. In a well drill, a head flattened at its lower end, cutter shafts fitting through openings in said lower end,

and projecting beyond said head, one projecting end of said shaft having a circumferential groove therein, removable latching means on said head engaging in said groove to retain said shaft in said head and cutters on said shafts.

1,896,244. DYES OF THE AZINE CLASS AND MANUFACTURE THEREOF. AUGUST MERZ, East Orange, N. J., assignor, by mesne assignments, to The Calco Chemical Company, Inc., Bound Brook, N. J., a Corporation of Delaware. Filed Mar. 28, 1927. Serial No. 179,197. 17 Claims. (Cl. 260—29.)

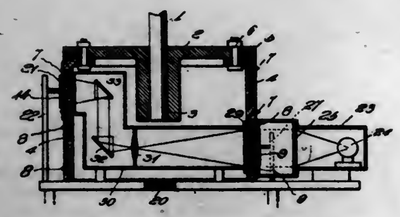
1. A process for making dyes comprising condensing a condensation product of chloronitrobenzene and aniline with an aromatic monamine and a halogen acid salt of an aromatic monamine.

1,896,245. DEPHLEGMATOR. ROBERT E. NAGEL, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 9, 1928. Serial No. 245,388. 1 Claim. (Cl. 196—133.)



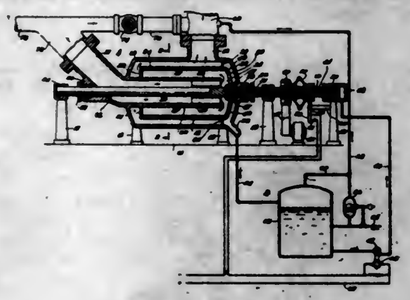
An apparatus of the character described comprising a chamber, a liner of non-corrosive material within said chamber and spaced from the interior wall thereof, the lower portion of said liner being fixed to the interior wall of said chamber and its upper end being free to expand and contract independently of said chamber, and means for preventing vapors from entering the space between said liner and the interior wall of said chamber.

1,896,246. FILM PRINTING APPARATUS. FREEMAN H. OWENS, New York, N. Y. Filed July 13, 1927, Serial No. 205,441. Renewed Oct. 26, 1929. 12 Claims. (Cl. 88—24.)



1. An optical printer comprising a depending rotatable shaft, a plate member carried by said shaft, a homogeneous transparent cylindrical drum carried by said plate member, annular rows of sprocket teeth carried by said cylindrical drum, a film positive pressed into engagement with said sprocket teeth at one side of said drum, a film negative pressed into engagement with said sprocket teeth at the opposite side of said drum, whereby said film positive may be advanced in one direction by means of said rotary drum, while said film negative is advanced in the opposite direction, a light source arranged adjacent said film negative, and a light directing conduit disposed centrally across the interior of said drum for conveying light rays in their passage through said film negative to said film positive.

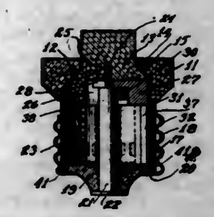
1,896,247. DESUPERHEATING SYSTEM. DAGOBERT W. RUDOFF, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Sept. 19, 1931. Serial No. 563,782. 11 Claims. (Cl. 122—459.)



3. In a desuperheating system, a casing, a shaft extending through and journaled to said casing, a drum mounted on said shaft, means for admitting superheated steam into said casing, driving means for said shaft, means for supplying water into said drum through a portion of said shaft to set up a revolving water film in the drum to contact and desuperheat said steam, and means responsive to the speed of the driving means to regulate the amount of water supplied.

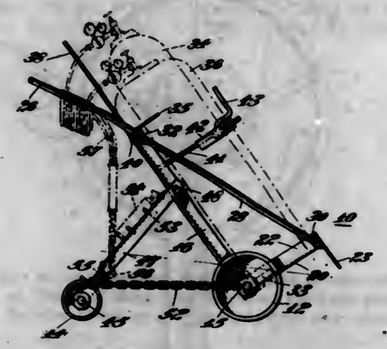
11. In the art of desuperheating steam, the step of contacting a thin rotating film of water rotating at a relatively high velocity with superheated steam traveling in a direction counter to said film and at a high relative velocity to desuperheat said steam.

1,896,248. FUSE PLUG. HENRY RUSKIN, Chicago, Ill. Filed Feb. 2, 1931. Serial No. 512,825. 15 Claims. (Cl. 200—125.)



1. In a fuse plug, a tubular body part, a switch member rotatable within said body part, fuse links supported on the inside of said body part between said part and said switch member, said switch member having a slot for registering with a selected fuse link, a contact member movable with said switch member for engagement with a selected fuse link, a stationary inner terminal member in electrical engagement with said contact member, and an outer terminal member in electrical connection with said fuse links.

1,896,249. CARRIER. FREDERICK B. RUSSELL, Coatesville, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Dec. 14, 1929. Serial No. 414,127. 7 Claims. (Cl. 280—54.)



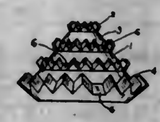
1. A carrier comprising a frame, a platform operatively connected to the lower portion of said frame, a pair of main wheels mounted on an axle connected to the lower portion of the frame, a pair of auxiliary wheels for said carrier and supports for said auxiliary wheels pivotally mounted on the carrier frame at a less distance from the lower end of the carrier than the length of the supports so as to automatically move towards the main wheels upon the carrier assuming a vertical position and away from said main wheels upon the tendency of the carrier to assume a horisontal position, and means continuously effective for arresting the separation of said auxiliary wheels a definite distance from the main wheels, whereby the carrier is continuously prevented from accidentally assuming a horisontal position.

1,896,250. LUBRICATOR COUPLING. FLOYD L. SCOTT, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Oct. 19, 1928. Serial No. 313,392. 3 Claims. (Cl. 255—71.)



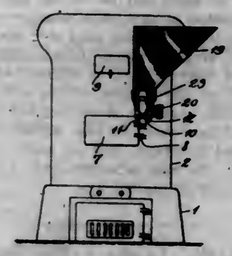
1. In a rotary drill bit, a drill head, a lubricator barrel, a tube for flushing liquid axially of said head, a coupling member connecting said lubricator barrel to said head, said coupling having a threaded recess in its lower end to engage said head, and a head on said tube shaped to fit said recess above said drill head, an extending upper end on said tube projecting above the head thereon, said coupling having a diametrical passage arranged at a right angle to the tube axis and communicating with the upper end of said tube.

1,896,251. CUTTER FOR WELL DRILLS. FLOYD L. SCOTT, Houston, Tex. Filed Dec. 20, 1929. Serial No. 415,489. 8 Claims. (Cl. 255—71.)



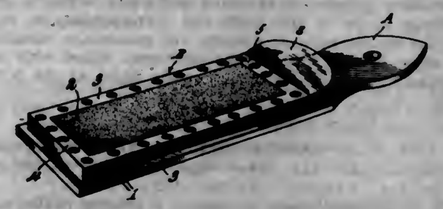
1. A cutter for roller well drills, cutting teeth formed in circumferential rows on the periphery thereof, said teeth in each row being of uniform pitch but formed in sets on adjacent sectors of the circumference of the cutter, each set being spaced from adjacent sets in the same row a distance unequal to the pitch of one of the teeth.

1,896,252. FURNACE. ROBERT J. SLOAN, Elmhurst, N. Y. Filed Mar. 4, 1930. Serial No. 433,060. 1 Claim. (Cl. 110—116.)



In combination with a coal burning furnace having a fire-door, a fire box and a grate, a feeder attachment adapted to be attached to such furnaces, and comprising a hollow elbow having a downwardly inclined portion projecting through an opening formed partially in the front wall of the furnace and partially in the fire-door and so located that the door may be opened and closed when the feeder is in position, an inclined tubular extension hinged to the inner end of the inclined portion of the elbow, the outlet end of said extension being positioned substantially centrally of the fire-box above the grate, means attached to the hinged extension and operable from outside the furnace for lifting the extension for the purpose specified, a storage hopper for coal having an opening in its bottom communicating with the upper end of the elbow, and means for supporting the elbow and the hopper.

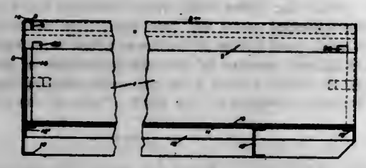
1,896,253. PENCIL POINTER. CLARENCE A. SMITH, 2d, Westtown, Pa., assignor of one-half to Gabriel Massena, Philadelphia, Pa., and Alfred V. Du Pont, Wilmington, Del. Filed May 27, 1932. Serial No. 614,023. 7 Claims. (Cl. 120—89.)



1. A device of the character described comprising a plurality of superposed sheets flat throughout their extents and each having a portion provided with abrasive ma-

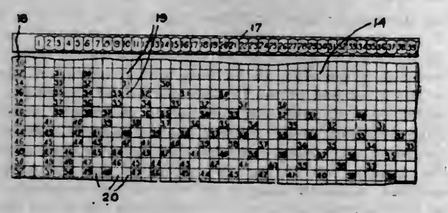
terial and a marginal face portion free from abrasive, and adhesive material on said marginal face portions and adjacent portions of the sheets in relatively wide zones for securing together said marginal portions of adjacent sheets.

1,896,254. DETACHABLE BODY. RALPH E. SMITH, Galion, Ohio, assignor to The Galion Metallic Vault Co., Galion, Ohio, a Corporation of Ohio. Filed Feb. 10, 1930. Serial No. 427,144. 2 Claims. (Cl. 296—28.)



1. In a detachable truck body, side members, an end member welded at each end to one of the side members, a brace piece welded to each side member and to the end member at their line of union, said side members and end member having straight sides terminating in inturned flanges on their lower edges, a transverse channel iron member resting on the flanges of the side members and welded to the side member, a corrugated bottom resting on said channel iron member and welded thereto and to the side and end members, and an angle iron welded to the end member, the side members and to the bottom for supporting one end of the bottom.

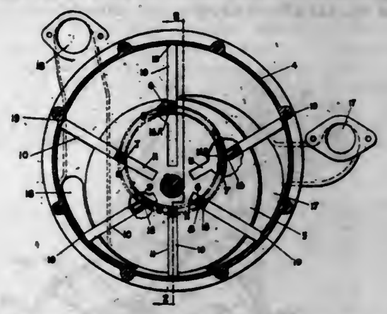
1,896,255. SCALES. LE ROY S. SMITHERS, Woodhaven, N. Y., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Sept. 10, 1929. Serial No. 391,668. 1 Claim. (Cl. 235—87.)



An automatic scale for obtaining percentage variations between two successive weighings of a load, comprising a chart automatically moved by the load to a position corresponding to the magnitude of the load, the chart containing parallel columns of initial weight figures, and also a column of actual weight figures, parallel with the column of initial weight figures, a fixed index extending across the chart, and a fixed scale of percentage figures extending parallel to the fixed index and having a percentage figure in line with and corresponding to each initial weight column, whereby the percentage variation is given by the figure in the fixed scale alined with the column containing the initial weight figure at the index line.

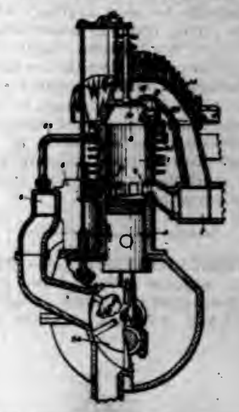
1,896,256. ENGINE CHARGER. OWEN H. SPENCER, Indianapolis, Ind. Filed Mar. 9, 1929. Serial No. 345,811. 5 Claims. (Cl. 230—152.)

1. In a supercharger for motors, a housing having outwardly offset circular channels in its side walls concentric with the housing, a spider eccentrically mounted within said housing, said spider having one or more radiating grooves therein, blades longitudinally movable in said grooves, cross bars extending transversely thru said grooves at the inner ends of said blades, each side edge of which describes an arc of a circle and arcuate shoes



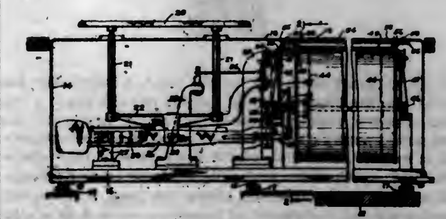
at the ends of said cross bars adapted to enter and travel in said channels, whereby said cross bars will be moved inwardly and outwardly as the spider is rotated.

1,896,257. COOLING MEANS FOR ENGINE STRUCTURES AND CYLINDER HEADS THEREFOR. OWEN H. SPENCER, Indianapolis, Ind. Filed June 27, 1930. Serial No. 464,390. 8 Claims. (Cl. 123—171.)



1. In a cooling means for engines, the combination with a cylinder and head construction of an engine, of an external air enclosure means formed by said structure, and means for directing a cooling medium to the interior and exterior of said construction, and to said enclosure means from a single souce of supply.

1,896,258. COUNTER SCALE. THOMAS H. STRACHAN, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Nov. 12, 1930. Serial No. 495,073. 15 Claims. (Cl. 265—39.)



1. In combination, a counter, a scale carried by the counter and provided with a housing having its upper

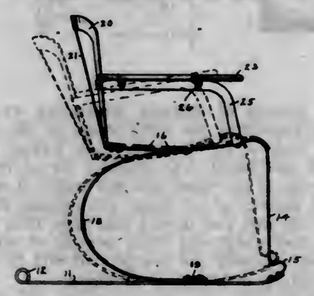
surface forming a continuation of the plane of the top of the counter, a chart within the housing, weighing means for operating the chart, and a reading assembly for the chart in substantially the plane of the counter top.

1,896,259. SHEET PILING. GEORGE E. THACKRAY, Bethlehem, Pa. Filed May 21, 1929. Serial No. 364,904. 9 Claims. (Cl. 61—62.)



1. Sheet piling composed of at least two trough sections having their edges joined together by two part interlocking portions formed thereon, and welds arranged at varied intervals along the interlocking portions, in proportion to the stresses produced by the longitudinal shear due to the tendency to flexure thereof.

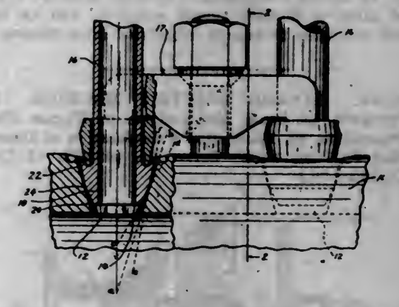
1,896,260. RESILIENT STRUCTURE FOR CHAIRS AND THE LIKE. FELIX J. TRAINOR, New Castle, Ind., assignor to Trainor National Spring Company, New Castle, Ind., a Corporation. Filed July 5, 1932. Serial No. 620,819. 8 Claims. (Cl. 155—50.)



1. In an article of furniture, a pair of elastic runners normally substantially horizontal contacting with the floor, a pair of substantially normally vertical legs secured respectively by their lower ends to the forward ends of the runners, seat rails running rearwardly from the legs, and a U-shaped elastic member between and secured by its ends to the respective runners and seat rails on each side.

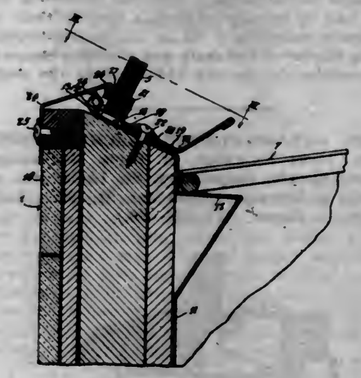
1,896,261. CONICAL JOINT. CHARLES H. TRUE, Chicago, Ill., assignor to The Superheater Company, New York, N. Y. Filed July 3, 1930. Serial No. 465,617. 2 Claims. (Cl. 285—25.)

1. The combination with a substantially conical flaring seat, of a tube having a head adapted to seat thereagainst and having a flaring portion whose flare is greater than that of said seat but is so that an extension of the outer border of its axial section intersects the axis of said tube at an acute angle, and a second flaring portion whose



flare is less than that of said seat, the said portions intersecting to form a ridge adapted to bear against said seat to form a fluid-tight joint.

1,896,262. SWEAT DRAIN ON WINDOWS. KARL A. WEBER, Los Angeles, Calif., assignor to Weber Showcase & Fixture Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 6, 1932. Serial No. 584,947. 5 Claims. (Cl. 20—70.)



1. In window construction a pane of glass, means for supporting said pane, said supporting means comprising a sill member extending below the lower edge of said pane, means for spacing the lower edge of said pane from said sill, said sill member extending downwardly away from said pane on one side and extending upwardly in spaced relation from said pane on the other side, and a nosing extending upwardly over the said upwardly extending portion of said sill whereby said portion is concealed, the edge of said nosing being spaced from said pane to permit drainage therebetween.

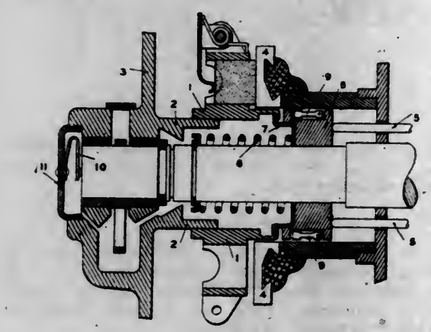
1,896,263. RUBBER COATED ARTICLES AND PROCESS. PARKE H. WATKINS, Naugatuck, Conn., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Sept. 19, 1928, Serial No. 307,062. Renewed Aug. 18, 1931. 18 Claims. (Cl. 91—68.)

2. The process of permanently coating articles with compounded rubber which comprises applying a coating of hard rubber compound to a surface of the article, applying a coating of intermediate rubber compound over the

same, applying a water dispersion of rubber and compounding ingredients over the intermediate rubber, coagulating the dispersion to cause the deposition of solid constituents of the dispersion on the article, and vulcanizing.

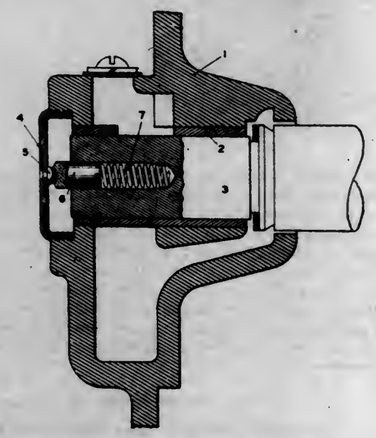
13. An article comprising a metallic member, a superposed layer of metal-to-rubber adhesive, and an in-situ deposit of rubber from acid coagulated latex thereon.

1,896,264. DYNAMO ELECTRIC MACHINE. HANS WEICHSEL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Feb. 23, 1929. Serial No. 342,070. 2 Claims. (Cl. 172—36.)



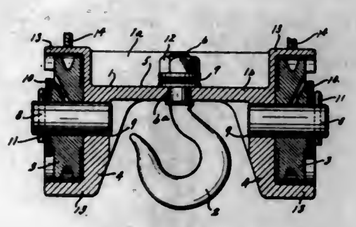
1. Means for establishing electrical connection between a shaft and its bearing other than through their contact faces, which comprises a cap on the bearing-housing and enclosing the end of the shaft, and a contact element resiliently mounted on the cap and engaging the shaft.

1,896,265. DYNAMO ELECTRIC MACHINE CONSTRUCTION. HANS WEICHSEL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Mar. 31, 1932. Serial No. 602,117. 8 Claims. (Cl. 172—36.)



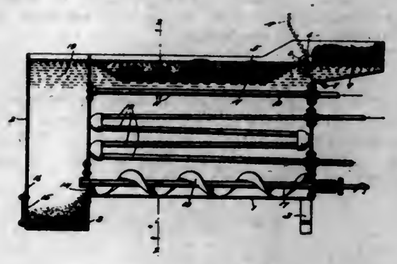
1. In a dynamo electric machine, a rotor shaft provided with a bore in the center of one end thereof, a shaft bearing support, a cap enclosing the end of the shaft and in electrical connection with the bearing support, an electrically conductive element in the shaft recess and capable of longitudinal movement relative to the shaft, and spring means adapted to maintain said element in contact with said cap.

1,896,266. LOAD BLOCK. WILLIAM WHITE, East Cleveland, Ohio, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio, a Corporation of Ohio. Filed June 13, 1931. Serial No. 544,231. 3 Claims. (Cl. 254—192.)



1. A load block for the purpose described comprising a frame of generally arched form, a hook disposed between the legs of the frame and secured with the central arch portion thereof to be dependent from the latter, and a sheave mounted on either leg of the frame, said frame central portion being of U-section, and securing means for said hook arranged in the cavity of said section.

1,896,267. METHOD OF CLEANING LUBRICATING WASTE OR PACKING. LAWRENCE S. WILBUR, Evanston, Ill. Filed Apr. 22, 1929. Serial No. 356,972. 3 Claims. (Cl. 308—243.)

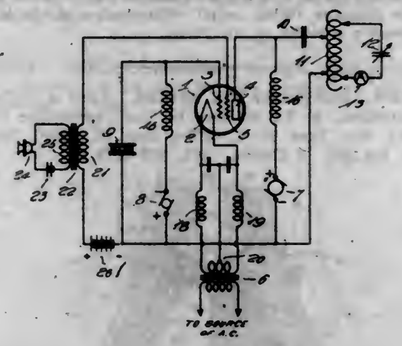


1. The method of cleaning lubricating waste, which comprises supporting the dirty waste in the upper portion of a body of oil or hydrocarbon, leaving the lower portion of said liquid clear, bubbling air up through the upper portion of the liquid and said waste, thus agitating the upper portion of the liquid and causing the precipitation of the dirt and foreign substance from the waste into the clear unagitated lower portion of said body of liquid, and removing the precipitated dirt from the unagitated bottom of said body of liquid.

1,896,268. MODULATOR SYSTEM. JOHN A. WILLOUGHBY, Cambridge, Mass. Filed Dec. 18, 1928. Serial No. 326,880. 4 Claims. (Cl. 179—171.)

4. In an electron tube modulating and generating system, an electron tube having cathode, anode, inner grid and outer grid, a source of inner grid biasing potential connected between said inner grid and said cathode in such manner that a negative bias is applied to said inner grid with reference to said cathode, a piezo electric crystal element connected between said inner grid and said cathode and in parallel with said source of inner grid biasing potential, an output circuit comprising a source of positive anode potential connected between said anode and said cathode, an input transformer having its primary connected to a source of voice-frequency oscillations,

an independent source of outer grid potential, said outer grid being connected to said cathode through the secondary of said transformer and said source of outer grid



potential connected in series in such manner that a positive potential is applied to said outer grid with respect to said cathode.

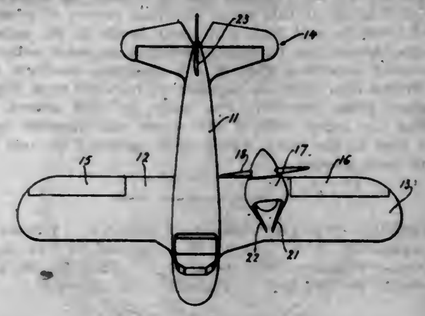
1,896,269. VARIABLE INDUCTANCE UNITS. JOHN A. WILLOUGHBY, Cambridge, Mass. Filed Jan. 19, 1929. Serial No. 333,704. 3 Claims. (Cl. 171—242.)



1. In a variable inductance, an annular core member, an inductive winding wound on said annular core member, a central hub internally threaded and carried by said annular core member, a rotatable shaft coaxial with said annular core member and carried by said hub, said shaft being provided with threads adapted to engage the threads of said hub, a resilient conducting plate member carried by said shaft and adapted to make electrical contact with individual turns of said winding in a plane substantially normal to said shaft, said resilient plate member being angularly disposed so that its outer edge is substantially helical, whereby the rotating advancement of said shaft in screw relationship with said hub causes the turns of said inductance to be selectively short circuited.

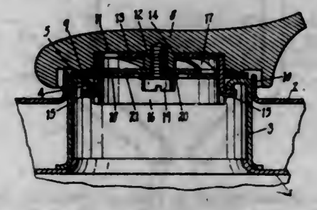
1,896,270. AIRPLANE. THEODORE P. WRIGHT, Port Washington, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,668. 4 Claims. (Cl. 244—14.)

1. An airplane comprising, a fuselage, a supporting wing on each side of the fuselage, one of said wings being subject to greater drag than the other wing, means for exerting a thrust to propel the airplane forward, the thrust being so positioned that in combination with said unbalanced drag, there is a tendency for the airplane to yaw, and a vertical fin having a greater camber on one side than on the other for offsetting said yawing



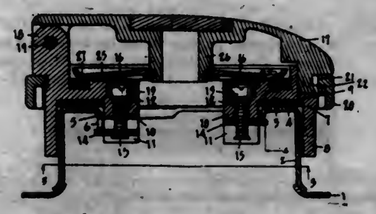
tendency and for maintaining the normal forward course of the airplane substantially parallel with the longitudinal axis of the fuselage.

1,896,271. CLOSURE. MICHAEL B. ANDRIS, Grand Rapids, Mich., assignor to W. B. Jarvis Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Dec. 14, 1920. Serial No. 413,996. 2 Claims. (Cl. 220—40.)



2. In a closure, the combination of a neck provided with keepers, a cap having an internal recess and a stud disposed centrally of the recess, an inverted cupped latch member arranged in said recess and having a central opening to receive said stud and keeper engaging lugs struck outwardly from its side walls, said latch member also having a plurality of integral tongue-like spring members struck downwardly from the top thereof, and a supporting plate mounted on said stud on said cap in supporting relation to said spring members.

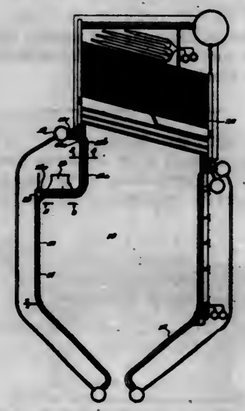
1,896,272. CLOSURE FOR FILLER NECKS AND THE LIKE. MICHAEL B. ANDRIS, Grand Rapids, Mich., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Filed Aug. 8, 1930. Serial No. 473,865. 4 Claims. (Cl. 220—24 R. C.)



1. The combination with a neck having an inturned flange provided with a gasket seat, of a closure body member having a depending flange embracing said neck and a downwardly facing annular gasket seat opposed to said seat on said neck, a gasket arranged between

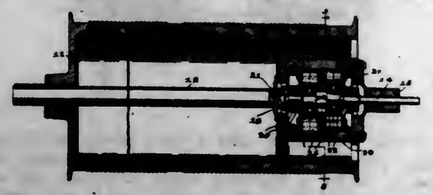
said seats, lugs on said body member depending within said neck, said lugs being slotted at their lower ends and having shouldered bores therein, clamping members disposed in said slots in said lugs to engage the under side of said flange of said neck, clamping screws disposed in said bores in said lugs with their heads in the enlargements thereof and having threaded engagement with said clamping members whereby the clamping members may be drawn into clamping engagement with the neck, cupped closure plugs receiving the heads of said screws and filling the upper ends of said bores and disposed below the tops of the bores, and a cover mounted on said closure body member.

1,896,273. WATER COOLED FURNACE. WILBUR H. ARMACOST, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Oct. 9, 1930. Serial No. 487,490. 4 Claims. (Cl. 122—235.)



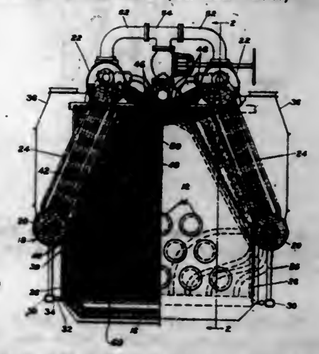
1. The combination of a furnace chamber having an arch portion at its upper end, an inner layer of protecting water tubes over said arch portion, and an outer layer of protecting tubes over said arch portion, the tubes of said inner layer being spaced apart a distance to cause slagging of the refractory when the furnace is operated at high ratings, the tubes in said outer layer having an arrangement such that the projected area of each such tube upon the refractory surface of the arch overlaps the projected area upon such surface of one of the tubes of the inner layer, each pair of said overlapping tubes being sufficiently close to adjacent pairs to shade the refractory surface to prevent slagging thereof at the maximum rating for which a furnace is designed but regularly spaced from adjacent pairs to permit a direct view of the surface of the refractory to the extent whereby a portion of the refractory surface of the arch may reach a temperature adapted to promote combustion in the furnace.

1,896,274. CRANE TROLLEY. HARVEY W. BALL, Alliance, Ohio, assignor to The Morgan Engineering Company, Alliance, Ohio, a Corporation. Filed Dec. 19, 1931. Serial No. 582,113. 7 Claims. (Cl. 254—168.)



6. In combination, a rotatable shaft, a rotatable crane drum, a stationary plunger holder positioned within the drum and having radially disposed bores, a ring within the plunger holder, means on the shaft for moving the ring in an eccentric path, plungers pivotally connected to the ring and slidable in the bores of the holder, and a circular rack fixed to the drum and having teeth engaged by the plungers during radial reciprocation of the latter for causing rotation of the drum.

1,896,275. SUPERHEATER BOILER. JOHN A. BARNES, Chappaqua, N. Y., assignor to The Superheater Company, New York, N. Y. Filed June 27, 1930. Serial No. 464,265. 9 Claims. (Cl. 122—478.)

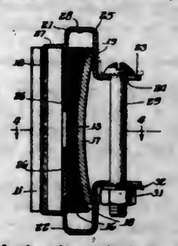


1. A boiler having a pair of lower water drums, a pair of upper steam and water drums set closer together than said lower drums, banks of relatively small generating tubes connecting each of said lower drums to the upper drum on the same side of the boiler as itself, two sets of relatively large generating tubes, each in front of one of said banks and having a function in connecting one of said lower drums and the upper drum on the opposite side of the boiler from itself and each set arranged to provide a space between itself and the one of said banks on the same side of the boiler as itself, and superheater elements arranged in said spaces.

1,896,276. UREA-ACETALDEHYDE-FORMALDEHYDE RESIN AND PROCESS OF MAKING SAME. GEORGE BARSKY, New York, N. Y., and HENRY P. WOHNSIEDLER, Elizabeth, N. J., assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Aug. 12, 1929. Serial No. 385,474. 3 Claims. (Cl. 260—3.)

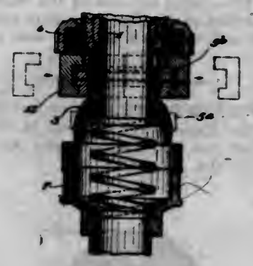
1. A process of preparing a resinous material comprising condensing urea with acetaldehyde and formaldehyde in an acid medium, neutralizing the resulting solution and evaporating to dryness to yield a clear, resinous product soluble in water.

1,896,277. BUMPER ATTACHMENT. CORNELIUS J. BARRY, Chicago, Ill. Filed Feb. 28, 1932. Serial No. 594,619. 10 Claims. (Cl. 293—55.)



1. In a buffer device for attachment to an automobile bumper bar, a vertically disposed buffer pad retaining member, attaching clamps pivotally supported at the upper and lower ends of said member and extending rearwardly over the bumper bar, and a vertically disposed clamping bolt extending through the rearward extensions for drawing said extensions together to clamp said member to the bar.

1,896,278. GASKET. FREDERICK BENGER, Montreal, Quebec, Canada. Filed Dec. 26, 1929. Serial No. 416,558. 2 Claims. (Cl. 22—153.)



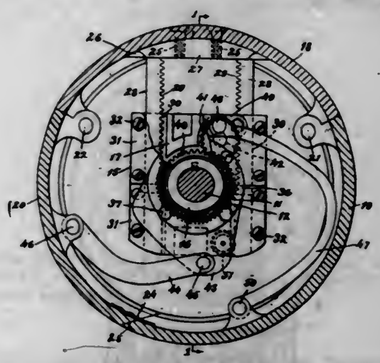
1. A mold for casting a metallic gasket around a pipe to engage a seat on the side away from the pipe end on an enlarged head permanently fixed on the pipe adjacent to the end, said mold comprising a longitudinally split matrix with a cylindrical inner surface, and a longitudinally split core with a corresponding cylindrical outer surface, one of them being provided with a circumferential groove and the other with a complementary circumferential tongue of less radial depth than the groove, the core having a longitudinal opening through it large enough to accommodate the pipe.

1,896,279. STRUCTURAL UNIT AND ASSEMBLY. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich., a Corporation of Michigan. Filed Jan. 4, 1930. Serial No. 418,452. 18 Claims. (Cl. 72—61.)



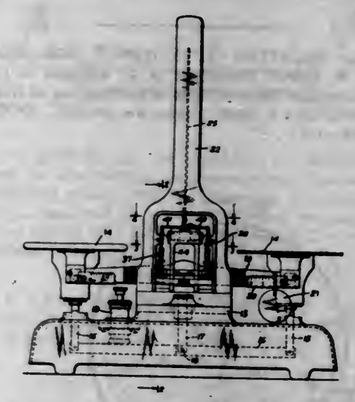
5. A structural unit comprising exclusively a longitudinal rod, and a plurality of arms disposed in spaced relation transversely of the rod and terminating in U-shaped spring clips facing from the rod.

1,896,280. COLLAPSIBLE DRUM. HENRY C. BOSTWICK, Akron, Ohio, assignor to The Akron Standard Mold Company, Akron, Ohio, a Corporation of Ohio. Filed June 17, 1931. Serial No. 545,056. 15 Claims. (Cl. 154—9.)



1. A collapsible form comprising an inner rotary support, a main segment mounted thereon and movable as a whole toward and from the axis of rotation, and foldable segments carried by said main segment and collapsible therewith in the plane of the expanded form.

1,896,281. EVEN BALANCE SCALE. CARROLL E. BREADEN, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Oct. 21, 1930. Serial No. 490,128. 15 Claims. (Cl. 265—59.)

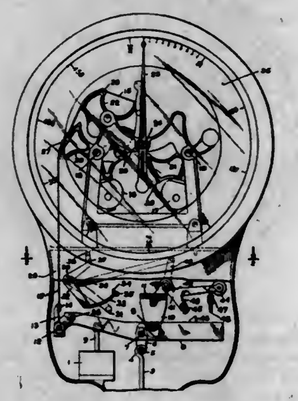


1. A scale of even balance type comprising an even balance beam, an indicator movable transversely thereof, and a plurality of connections spaced transversely and longitudinally of the beam for connecting the beam to the indicator whereby the latter is moved proportionally to but transversely to the movement of the beam.

1,896,282. PROCESS FOR THE PRODUCTION OF HYDROGENATED NAPHTHALENES FROM TECHNICAL NAPHTHALENE. HANS BROCHE and HELMUTH SCHMITZ, Essen, Germany. Filed June 24, 1930, Serial No. 463,563, and in Germany June 27, 1929. 1 Claim. (Cl. 260—168.)

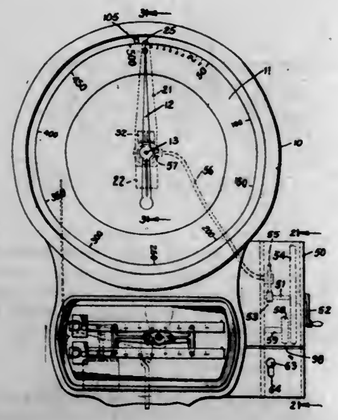
A process for the production of hydrogenated naphthalenes consisting in reducing moderately purified technical naphthalene, with hydrogen at raised temperature and pressure in presence of a known hydrogenation catalyst supported on silica gel as a carrier substance, as set forth.

1,896,283. LOCK FOR WEIGHING SCALES. JAMES W. BRYCE, Bloomfield, N. J., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Nov. 22, 1928. Serial No. 321,061. 10 Claims. (Cl. 265—62.)



1. In a weighing scale, a movable scale beam coacting with a counterbalancing system, a stop member for said beam, a linkage having a flexible spring strip cooperable with said scale beam and hand operated means connected with said linkage to lock said beam against movement by means of said stop member and said flexible spring strip.

1,896,284. PRINTING ATTACHMENT FOR SCALES. JAMES W. BRYCE, Bloomfield, N. J., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed May 5, 1930. Serial No. 450,041. 18 Claims. (Cl. 234—1.5.)



1. In a recording scale, the combination with the scale pointer of a manually settable member positionable to coincide with said pointer, a printing mechanism, operating means for said printing mechanism and interlocking means for preventing operation of said operating means except when said manually settable member is coincident with said pointer.

1,896,285. TUBULAR CASING. GORMAN C. BURD, Adrian, Mich., assignor to American Cable Company, Inc., a Corporation of Delaware. Filed Mar. 25, 1930. Serial No. 438,917. 5 Claims. (Cl. 285—72.)



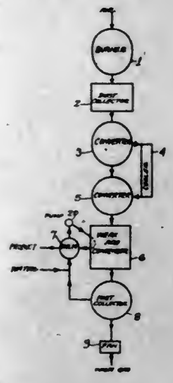
1. A tubular casing formed exteriorly with a helical rib, a sleeve fitted upon one end of the casing, and a flexible packing within said sleeve and solely between the coils of the rib to calk the joint between said sleeve and the casing.

1,896,286. BURNER PLATE. BRUCE BURNS and HOWARD B. LEWIS, Los Angeles, and RUSSELL M. OTIS, Alhambra, Calif. Filed Jan. 23, 1929. Serial No. 334,588. 10 Claims. (Cl. 158—116.)



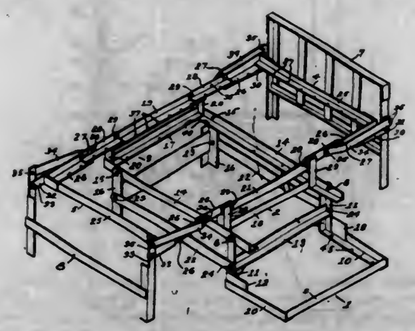
1. A homogeneous integral burner plate with openings for permitting the passage therethrough of combustible gaseous mixtures and for preventing the passage therethrough of flame formed of ribbons of heat resisting material spirally wound and, characterized by the fact that each of the openings on a section in a plane at right angles to the direction of flow of the mixture has an area of not more than one seven-hundredth of a square inch.

1,896,287. MANUFACTURE OF SULPHURIC ACID. CYRIL B. CLARK, Scarsdale, N. Y., assignor to Catalytic Process Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 10, 1929. Serial No. 391,576. 10 Claims. (Cl. 23—167.)



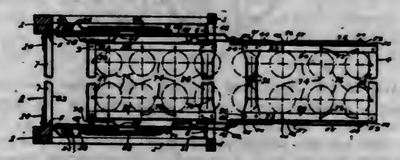
1. In the manufacture of sulphuric acid from undried burner gases, the steps in condensing sulphur trioxide from said gases which comprise contacting such undried burner gases with sulphuric acid of predetermined strength to partly absorb the sulphur trioxide, and humidifying substantially all the unabsorbed sulphur trioxide and condensing same to acid.

1,896,288. FOLDING CLOSET BED. RUDOLPH COOPERSMITH, St. Louis, Mo. Filed May 27, 1929. Serial No. 366,296. 4 Claims. (Cl. 5—156.)



1. A bed comprising a support, an intermediate frame section pivoted to said support at a point above the level of the base thereof, end sections pivotally connected with the ends of the intermediate section and foldable thereover to lie in the same horizontal plane, supports pivoted to the end sections and adapted to hold the end sections in alinement with the intermediate section, one of said supports adapted to fold upon the end section attached thereto in nested relation and the other support adapted to fold upon the end section attached thereto in parallel juxtaposition thereto and in superposition to the said one support.

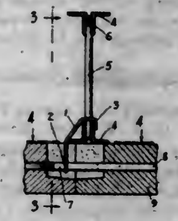
1,896,289. BED DAVENPORT. RUDOLPH COOPERSMITH, St. Louis, Mo. Filed July 17, 1929. Serial No. 378,860. 9 Claims. (Cl. 5—22.)



9. In a bed davenport, a frame, a front, and a rear bottom section, lever means pivotally borne by the frame and pivoted to the rear of the front section, arm means pivotally borne by the frame and pivoted to the rear portion of said rear section, and arm means pivotally borne by the frame and pivoted at one point to the front portion of the rear section and at another point to a portion of said front section, said lever means and frame having conformation co-operating to limit the rearward swing of the lever means, and said rear bottom section and said second-named arm means having conformations co-operating to limit the rearward shift of the latter.

1,896,290. BUILDING CONSTRUCTION AND HANGER USED THEREIN. CLARKE F. DAVIS, Westfield, and EDWARD R. SAUNDERS, Cranford, N. J., assignors to Structural Gypsum Corporation, Linden, N. J., a Corporation of Delaware. Filed July 5, 1929. Serial No. 375,926. 2 Claims. (Cl. 72—118.)

2. The combination with a fabricated beam having a lower longitudinal truss element and an open web, a precast slab of plastic material below the truss element, said slab having a reinforcement therein, a portion of which is exposed, a hanger element having a deformed foot at one end thereof penetrating the web of the beam and engaging

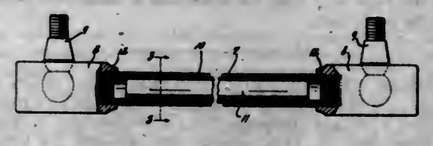


the truss element, the opposite end of the hanger element including a stirrup, the exposed portion of the slab reinforcement resting in the stirrup.

1,896,291. ANTIFREEZE MIXTURE FOR MOTOR VEHICLE RADIATORS. JOHN W. DENNIS and ELMER A. DENNIS, Erick, Okla. Filed Apr. 22, 1930. Serial No. 446,408. 2 Claims. (Cl. 252—5.)

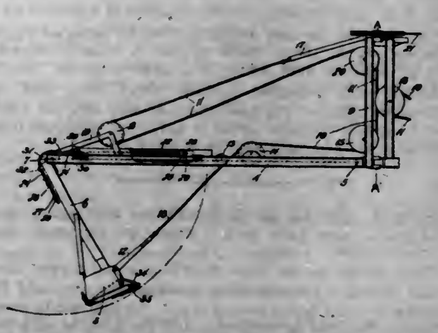
1. An anti-freeze mixture for motor vehicle radiators, comprising filtered engine crank-case drainings, and kerosene oil taken in approximately equal proportions.

1,896,292. VEHICLE STEERING GEAR. HARRY P. DORN, Cleveland, Ohio. Filed Dec. 4, 1931. Serial No. 578,916. 4 Claims. (Cl. 280—89.)



1. In a steering gear for vehicles, a rod associated with a wheel for longitudinal movement upon steering adjustment of said wheel, said rod having a longitudinally extending hollow, and an inertia element of substantial mass arranged within said hollow for limited relative movement therealong.

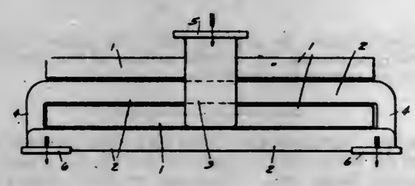
1,896,293. EXCAVATING MACHINE. ROBERT REX DOWNIE, Beaver Falls, Pa. Filed Nov. 14, 1929. Serial No. 407,409. 8 Claims. (Cl. 214—138.)



1. An excavating machine comprising, in combination, a boom pivoted to swing both vertically and horizontally; a ditcher stick pivoted at its upper end to the outer end of the boom; a scoop on the lower end of the ditcher

stick; a hauling line attached to the scoop for moving the stick and scoop inwardly toward the boom; a hoisting line supporting the boom but being free of any connection with the ditcher stick; a spring on the boom; and means connecting the spring to the ditcher stick so that the ditcher stick is swung outwardly beyond the plumb by said spring as the hauling line is released to permit such swing.

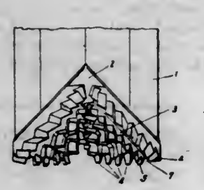
1,896,294. SUPERHEATER. ALFRED DROTH, Kassel-Wilhelmshohe, and CARL VOLLAND, Kassel, Germany, assignors to The Superheater Company, New York, N. Y. Filed May 13, 1930, Serial No. 451,962, and in Germany May 28, 1929. 8 Claims. (Cl. 122—462.)



1. A steam superheater header comprising in combination two separate parts each including parallel chambers, means uniting the chambers of each part, the two parts being positioned relatively to each other so that the chambers of one alternate with those of the other and with their front faces disposed in different planes.

6. A steam superheater header comprising in combination two separate parts each including several interconnected chambers, one of the parts being substantially in the form of a loop for straddling a chambered portion of the other part.

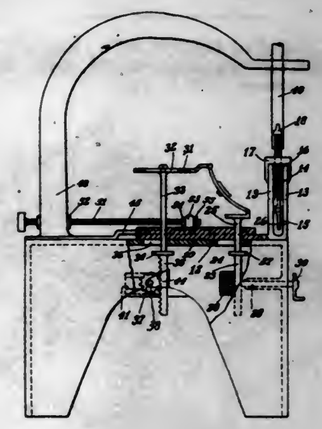
1,896,295. ANGLE TOOTH CUTTER. SETH EVANS and JOHN A. HERRINGTON, Houston, Tex., assignors to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Mar. 3, 1930. Serial No. 432,588. 3 Claims. (Cl. 255—71.)



1. A cutter for well drills, said cutter being of approximately conical shape, teeth formed in endless circumferential rows on said cutter, the rows adjacent the apex thereof being extended radially away from said apex, the teeth adjacent the base thereof being inclined relative to the radius of each cutter to move the material toward the said apex as said drill is rotated.

1,896,296. BRAKE SHOE RELINING DEVICE. GEORGE FAVALLI, New York, N. Y. Filed Oct. 22, 1931. Serial No. 570,358. 1 Claim. (Cl. 78—46.)

In a device of the class described, a flat-topped slotted table having a block slidably mounted thereon, said block having vertical holes therethrough, vertical studs passing through the slots in said table and the holes in said block, horizontal brace members joining said studs together both above and below said table top, spaced-apart arcuate straps supported at their lower ends on said upper brace member, additional studs passing through said table and said block, additional brace members joining said additional studs above and below said table top, the upper of said additional brace members supporting the upper ends of said straps, said ends of said straps being hinged to said



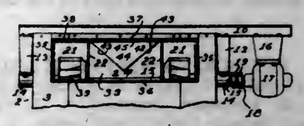
supporting braces, a brake-shoe receiving band joining said straps and adjustably mounted thereon, and means for shifting the position of said studs.

1,896,297. DISK BIT. HAROLD W. FLETCHER and FLOYD L. SCOTT, Houston, Tex., assignors to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Mar. 22, 1930. Serial No. 437,953. 3 Claims. (Cl. 255—71.)



1. A drill bit, including a head, two opposed supports thereon, a straight cutter shaft supported at its ends in said supports, bushings secured non-rotatably on said shaft, and cutters mounted on said bushings, said bushings being formed with diagonal shaft-receiving openings to position the cutters in offset relation, whereby one will contact with the wall of the hole at one side only and the other at the opposite side only.

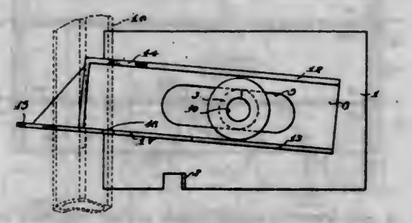
1,896,298. FURNACE. CLARENCE SCOTT FRANKE, St. Louis, Mo., assignor to American Furnace Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 28, 1930. Serial No. 447,806. 15 Claims. (Cl. 126—105.)



1. The combination with a heater and a sleeve-like wall surrounding said heater, of a pair of blowers spaced apart in said sleeve at opposite sides thereof and over said heater, said blowers having their intake sides facing

the space between the blowers and having their discharge sides presented toward the said wall and conduit means for conveying the discharges of the blowers through the said wall.

1,896,299. RADIATOR HANGER. FRANK W. FULLER, St. Paul, Minn. Filed Oct. 6, 1930. Serial No. 486,528. 1 Claim. (Cl. 248—17.)

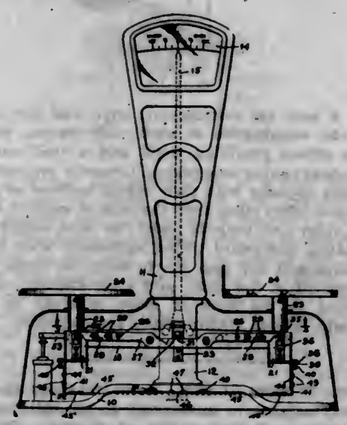


A radiator support comprising an anchored member adapted to be fixed to a wall, and a lever-acting supporting member having oppositely disposed gripping jaws adapted to grip the radiator tube under the action of gravity, said supporting member being connected to said anchoring member by a pivot that includes a slot extended longitudinally of said lever-acting support and permits sliding adjustments thereof onto said pivot to vary the operative position of said gripping jaws.

1,896,300. SOLUBLE CASEIN. ALBERT F. O. GERMANN, Cleveland, Ohio, assignor to S. M. A. Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 19, 1929. Serial No. 415,359. 4 Claims. (Cl. 99—11.)

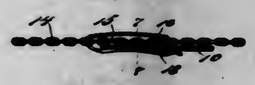
2. The method of producing soluble casein, consisting in peptizing casein with ammonia, and spray drying the mixture to remove both ammonia and water, leaving soluble casein.

1,896,301. EVEN BALANCE SCALES. WILLIAM N. GILBERT, Hudson Heights, N. J., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed July 18, 1928. Serial No. 293,635. 35 Claims. (Cl. 265—59.)



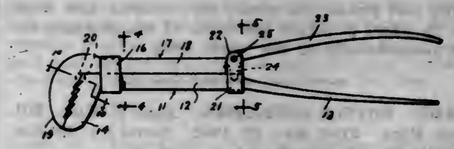
1. A scale comprising a load support, a check link associated therewith to prevent tipping thereof, said check link having a counterbalancing effect on said load support, and means for varying said counterbalancing effect.

1,896,302. WATCH CHAIN GUIDE. CHARLES WESLEY GILES, Norton, Mass., assignor to J. M. Fisher Co., a Corporation of Rhode Island. Filed Jan. 26, 1932. Serial No. 588,961. 3 Claims. (Cl. 24—3.)



3. A watch chain guide comprising a face plate, a pair of laterally spaced resilient arms folded rearwardly from one end of said plate and spaced therefrom, a pair of similarly laterally spaced resilient arms folded rearwardly from the other end of said plate and in contact with the rear surface of the said first mentioned arms, whereby said pairs of arms may engage a piece of fabric placed between them and space the face plate therefrom to permit a chain to be passed thereunder and be guided between the spaced folded portions of said arms.

1,896,303. WRENCH. ADRIAN E. GOTT and NIM R. MCINTOSH, Roy, Mo. Filed July 12, 1932. Serial No. 622,128. 1 Claim. (Cl. 81—86.)

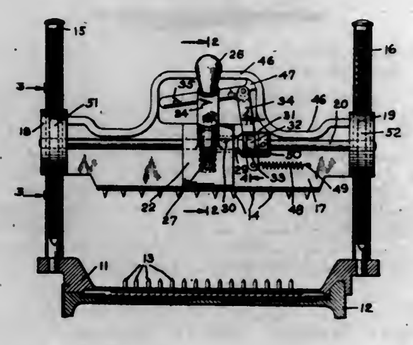


A wrench of the class described comprising a relatively stationary section in the form of a one-piece body including a longitudinally elongated shank, said shank being substantially rectangular in cross sectional shape, formed at its outer end with a laterally directed work gripping jaw, and at its opposite end with a suitably shaped longitudinally directed fixed handle, that portion of the shank adjacent the handle connection having its upper flat face bored at longitudinally spaced points to form a centralized row of depressions constituting spaced keeper sockets, a loop-like guide strap secured to the outer end portion of the shank adjacent said jaw, a relatively movable and adjustable companion section comprising a shank of a shape and proportion corresponding to said first-named shank, the second shank having a jaw at its outer end co-operating with the first-named jaw with that portion of the shank extending through the aforesaid guide, said second-named shank being formed at its extreme inner end with a substantially U-shaped yoke embracing the corresponding end of the first-named shank and having aperture attaching ears formed at the terminals of the arms of the yoke, and a retaining and jaw setting lever arranged for co-operation with said handle and pivoted at its outer end between said apertured attaching ears, the pivoted end of said lever being formed with a right-angularly disposed integral frusto-conical detent functioning as a latch for selective co-operation with the aforesaid keeper sockets, said latch further functioning as a thrust member in conjunction with the walls of the sockets to provide the final take-up and clamping action for said jaws after the initial adjustment of the jaws has been made.

1,896,304. MEAT CLAMP. WILLIAM GUMPRICH, Dayton, Ohio, and CHARLES H. GOOD, Hamilton, Ontario, Canada, assignors to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed July 30, 1929. Serial No. 382,212. 4 Claims. (Cl. 146—217.)

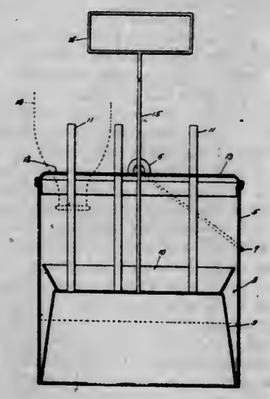
1. In a clamping device of the class described, a movable clamping element, a supporting post for the same on

which said element is movable, a rack on said post, a pinion on said element with means for holding it in mesh with the rack, a worm meshing with a worm wheel for



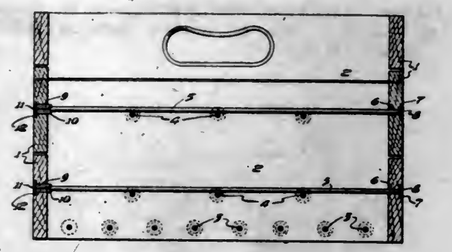
driving said pinion and means for releasing said worm from its wheel to permit movement of the clamping element independently of the worm drive.

1,896,305. BOTTLE STERILIZER. JAKE C. HALL, Billings, Mont. Filed Mar. 26, 1932. Serial No. 601,369. 2 Claims. (Cl. 144—7.)



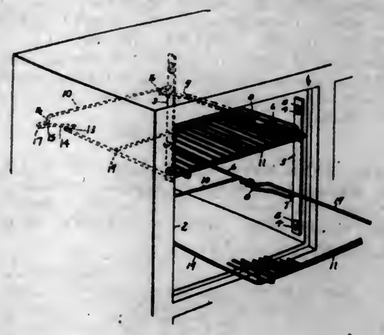
2. A structure of the class described comprising an open top bucket, a steam jet generating and delivery member therein comprising a base in the form of an inverted cup having a marginal upstanding flange attached to the top thereof and forming a drain pan, and having a plurality of circumferentially spaced upright tubes attached to said top and projecting above the open top of the bucket, a lid fitted into the top of said bucket and provided with marginal openings through and beyond which said tubes project, said openings being adapted to serve as seats for inverted nursing bottles, and a rod connected centrally to the base and lid and extending up above the lid and terminating in a hand grip.

1,896,306. GRID WIRE FOR BOTTLE CRATES. NEVIN H. HALL, York, Pa. Filed Oct. 7, 1929. Serial No. 398,056. 7 Claims. (Cl. 217—19.)



1. A grid wire for bottle crates having fastening means at one end and unheaded at its opposite end, and a securing member designed to be fixedly retained in a wall member of the crate and having a sleeve-like portion at one end to receive reciprocably and retain the unheaded end of said wire.

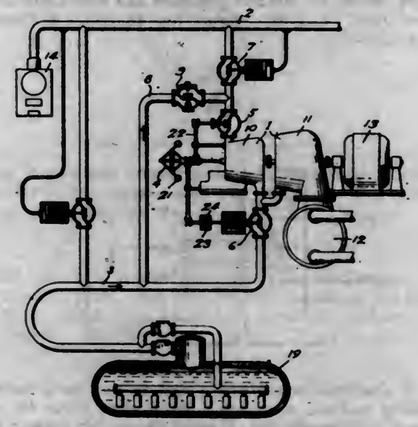
1,896,307. RACK FOR REFRIGERATORS, OVENS, AND LIKE COMPARTMENTS. CHARLES T. HATCH, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Oct. 13, 1930. Serial No. 488,233. 7 Claims. (Cl. 211—143.)



7. In a rack for refrigerator, oven and like compartments, the combination of shelf rails having projecting loop-like offsets providing stops, and a shelf comprising side members having longitudinal inwardly projecting loop-like offsets disposed with their bights inclined so that one arm of each offset rides upon the rails to support the shelf and the other arm projects under the rails supporting the shelf against downward tilting movement when the shelf is extended and one arm coacts with the stops limiting the movement of the shelf, said arms disposed under the rails being in the form of loops, whereby to slidably engage said rails at longitudinally spaced points.

1,896,308. POWER PLANT. RUNE HELLBORG, Stockholm, Sweden, assignor to Ruthsaccumulator Aktiebolag, Berlin, Germany, a Corporation of Sweden. Filed Mar. 14, 1930. Serial No. 435,799, and in Germany, Mar. 14, 1929. 7 Claims. (Cl. 60—94.)

1. A steam plant comprising a relatively high pressure source of steam, a relatively low pressure source of steam, a prime-mover having a plurality of stages, a first steam supply conduit for conducting steam from the first mentioned source to an initial stage of said prime-mover, an overflow valve arranged in said first conduit, a second steam supply conduit for conducting steam from the second mentioned source to a lower pressure stage of said prime-mover, valve mechanism controlling flow of steam through said first steam supply conduit to said initial stage, valve mechanism controlling supply of steam through said second steam supply conduit to said lower pressure stage,



means responsive to speed of said prime-mover for successively controlling said valve mechanisms, a connection connecting said second steam supply conduit with said first steam supply conduit ahead of the speed controlled valve mechanism controlling flow to the initial stage and behind said overflow valve, and means permitting flow of steam through said connection toward said first supply conduit and preventing flow from said first supply conduit through said connection to said second supply conduit.

1,896,309. CLOSURE FOR RADIATORS AND THE LIKE. ABRAHAM VANDER HENST, Grand Rapids, Mich., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Filed Dec. 18, 1929. Serial No. 414,898. 10 Claims. (Cl. 220—40.)



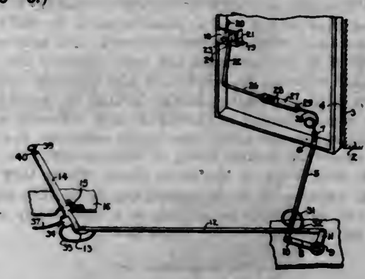
1. In a closure, the combination of a neck having an inturned flange providing a gasket seat and having oppositely disposed segmental cammed keepers on the edges thereof, a chambered cap having a central shouldered stud, the portion of the stud projecting beyond the shoulder being of non-circular cross section, a resilient closure member having a non-circular opening engaging said stud and supported by the shoulder thereof, said closure having an annular rib-like gasket seat, an annular spring member resting on said closure member adjacent the entire periphery thereof exclusively and having a plurality of integral radially disposed tongue-like springs engaging the said stud, a gasket disposed between said gasket seats, a latch member arranged on the non-circular portion of said stud below said closure member and having a downwardly projecting flange with keeper engaging lugs struck outwardly therefrom, and a retaining screw provided with a cupped washer for clamping said latch member and closure upon said stud shoulder.

1,896,310. WATER FILTER. WILLIAM R. HILDEBRAND, Chicago, Ill. Filed Dec. 11, 1929. Serial No. 413,881. 5 Claims. (Cl. 210—112.)



1. In a water filter, means for connecting same to a water supply pipe, consisting of a fitting attached thereto, a base casting for the filter secured to the bottom thereof, vertical parallel pipes connecting the said fitting to the said base casting, said vertical pipes affording means for circulating unfiltered water to and from the filter.

1,896,311. SEMIAUTOMATIC REMOTE CONTROL FOR AUTO DOORS. SYDNEY G. HINDS, Houston, Tex. Filed Apr. 20, 1931. Serial No. 531,335. 3 Claims. (Cl. 268—3.)



1. A device for operating automobile doors from the driver's seat including a lever, a linkage connected to said lever and to the door to be operated, a latch on the door, fluid pressure means carried by said lever and said linkage operable to release said latch, and a valve disposed in said lever to control said fluid pressure means.

1,896,312. MANUFACTURE OF PIGMENTS BY WET-PRECIPITATION. WILLIAM C. HOOBY, Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 21, 1929. Serial No. 334,120. 2 Claims. (Cl. 134—78.)

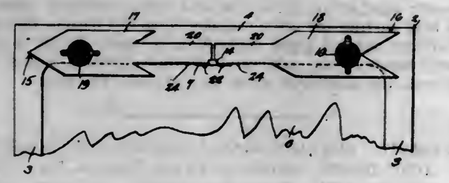
1. In a method of preparing a reaction product suitable for use in the manufacture of lithopone and the like, the steps which comprise subjecting zinc oxide pigment of a particle size not larger than about 0.15 microns to the action of an aqueous solution of barium sulfide, and agitating and heating the slurry of zinc oxide and barium sulfide by introducing live steam therein whereby the zinc oxide particles are kept in suspension until substantially all of the zinc available in the zinc oxide is converted to zinc sulfide pigment suspended in a solution of barium hydrate.

1,896,313. MOLD. CLIFF J. HUBBELL, Deweese, and WALLACE D. MCCAULEY, Lawrence, Nebr., assignors of one-third to Albert W. Person, Crete, Nebr. Filed Dec. 2, 1930. Serial No. 499,604. 1 Claim. (Cl. 107—19.)



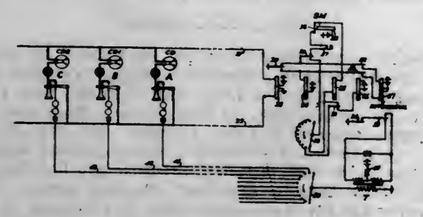
A molded article lifting and form retaining means comprising a flexible sheet provided with a plurality of apertures to engage about upstanding pins provided in a mold or form and adapted to be initially disposed in a mold and conform to the cavity of the mold and to receive on one face thereof an uncooked molded article, and a lifting tab formed with the sheet and providing means whereby the sheet and the article may be removed from the mold, said sheet maintaining the article in its molded form after removal of the article from the mold.

1,896,314. SIGNAL. EDWIN B. JONES, Elmira, N. Y. Filed May 27, 1932. Serial No. 614,020. 5 Claims. (Cl. 116—51.)



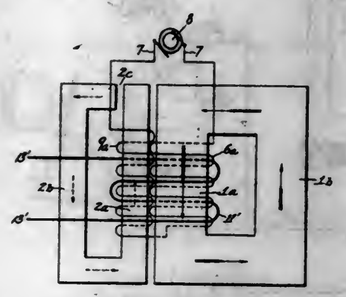
1. The combination with a vehicle including a frame embodying a cross bar and a panel slidable in the frame toward and away from the cross bar, of a thin sheet-metal plate secured in contact with the inner edge of the cross bar, a signal external to the vehicle and movably mounted on the plate, and operating means located at the sides of the plate and connected to the signal and extended within the vehicle, across the inner edge of the cross bar, the plate and the operating means being of substantially the same thickness, and being in the same plane where they pass across the upper edge of the panel, and being thin enough so that the panel can be moved to a practically closed position with respect to the cross bar.

1,896,315. TELEPHONE SYSTEM. WILLIAM F. KAPP, Elmhurst, Ill., assignor to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 25, 1932. Serial No. 601,146. 20 Claims. (Cl. 179—84.)



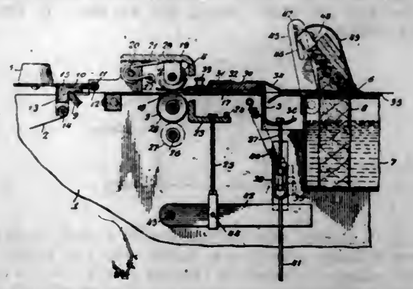
1. In a telephone system, a common talking line provided with a plurality of subscribers' stations, a plurality of individual signalling conductors, a switch, means controlled from one of said stations for operating said switch to connect with any one of said conductors, and means controlled by the operation of the calling subscriber's dial after said connection has been established for transmitting signalling current over the connected conductor to signal the water subscriber on said line.

1,896,316. ELECTRIC CONTROLLING APPARATUS. HAROUTIUN K. KOUYOUMJIAN, Providence, R. I., assignor to Ward Leonard Electric Company, a Corporation of New York. Original application filed Sept. 15, 1928, Serial No. 306,259. Divided and this application filed June 14, 1930. Serial No. 461,253. 8 Claims. (Cl. 171—119.)



1. A controller comprising a core in two parts having adjoining portions and having independent paths for the passage of magnetic flux, a main alternating current exciting winding on one of said adjoining portions, an alternating current exciting winding on the other of said adjoining portions, the path of the flux in said adjoining portions due to said exciting windings being in opposite directions, and an output winding embracing said adjoining portions and also embracing said alternating current exciting windings.

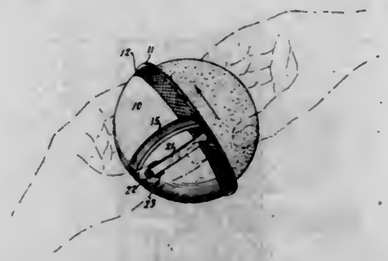
1,896,317. MOISTENING DEVICE. THEODORE H. KRUEGER and ALFRED P. KRUEGER, Derby, Conn., assignors to Better Packages Inc., New York, N. Y., a Corporation of New York. Filed Mar. 15, 1929. Serial No. 347,251. 14 Claims. (Cl. 91—14.5.)



1. A moistening device for gummed tape comprising a moistening brush for the tape, and an absorbent wick having a portion to be immersed in the moistening agent and a portion to make contact with the brush to transfer the moistening agent to the latter.

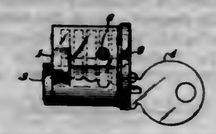
1,896,318. FRUIT PEELER. CONRAD KRUSE, Brooklyn, N. Y. Filed Nov. 26, 1930. Serial No. 498,285. 4 Claims. (Cl. 146—43.)

3. A fruit peeler comprising a substantially hemispherical body member to receive an article of fruit, an inwardly extending blade formed on said body member, extending from the edge to substantially the center and disposed adjacent an opening in the body member for cutting the peeling off the article of fruit by turning motion, and a knife mounted on the body member adjacent the



edge thereof and extending inwardly therefrom to slit the peeling to disconnect the portion within the body member from the projecting portion.

1,896,319. PIN TUMBLER LOCK. NELSON LITTELL, New Canaan, Conn., and WILLIAM P. HAMMOND, Scarsdale, N. Y. Filed Aug. 18, 1928. Serial No. 300,480. 20 Claims. (Cl. 70—93.)



1. In a pin tumbler lock of the type described, a housing, a key barrel in said housing, cooperating pins and tumblers arranged in a single row on one side only of said key barrel to permit locking and unlocking of said lock, and means to change the effective height of said pins and tumblers without removing said barrel from said housing to change the lock combination.

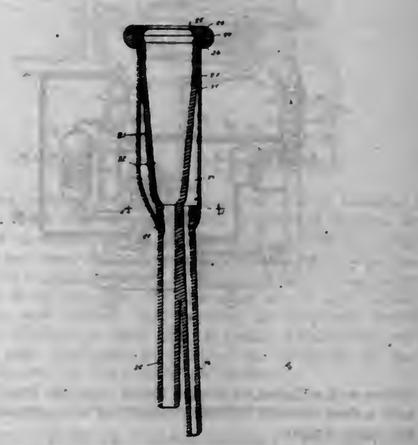
1,896,320. PRODUCTION OF CATALYSTS. OSCAR V. D. LUFT, Mount Lebanon, Pa., assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed May 28, 1930. Serial No. 456,800. 12 Claims. (Cl. 23—233.)

1. A method of producing catalyst pellets, which comprises incorporating with a catalyst composition ½ to 5% of stearic acid, which under the conditions of high temperature vapor phase catalysis does not leave an injurious material in the catalyst, and forming said catalyst material into pellets in an automatic tablet-forming machine.

2. A method of producing compacted catalyst pellets which comprises mixing an active catalyst with abrasive carrier material and an innocuous lubricant in amounts sufficient to offset the abrasive action of the carrier material during compacting, and mechanically compacting the product to form an autogenous bond, independent of any cohesive action of the lubricant.

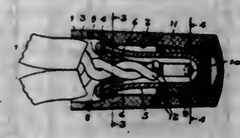
1,896,321. TEATCUP FOR MILKING MACHINE. ROBERT E. MAES, Beloit, Wis. Filed Jan. 10, 1930, Serial No. 419,837. Renewed June 11, 1932. 6 Claims. (Cl. 31—85.)

5. A teatcup comprising a plain tubular shell having a larger open mouth at one end and a smaller opening at its other end, a collapsible resilient inflation disposed in said shell and arranged to make an air-tight joint at its upper end in the mouth of said shell, a milk tube extending from the lower end of said inflation and arranged to be extended through the open lower end of said shell whereby to permit pulling the inflation into said shell through the upper end thereof, a pulsation tube alongside of and fixed to the milk tube and reaching from a point adjacent the lower end of the inflation, the same being thereby arranged to be extended through the open lower end of said shell



with the milk tube, the two tubes being arranged to be pulled outwardly together and to draw up adjacent the lower end of the inflation to an air-tight joint in the lower end of the shell, and means for holding the two tubes together as one, whereby replacement of the pulsation tube is permitted without replacement of the inflation and milk tube.

1,896,322. WIRE CONNECTER. WILLIAM P. MARR, Toronto, Ontario, Canada. Filed Nov. 24, 1930. Serial No. 497,788. 12 Claims. (Cl. 173—263.)

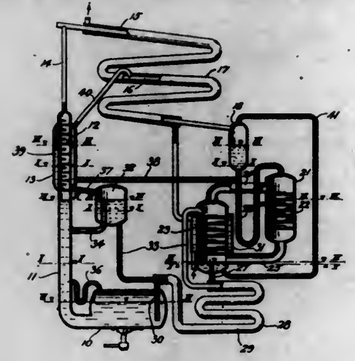


1. A wire connecter comprising a constrictable spring member, and means comprising a pair of relatively rotatable insulating closure members encircling said spring member and engaging each other in pressure contact when rotated relative to each other to constrict said member to grip the wires to be connected.

1,896,323. REFRIGERATION. CARL GEORG MUNTERS, Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 20, 1928, Serial No. 248,244, and in Sweden Jan. 20, 1927. 24 Claims. (Cl. 62—119.5.)

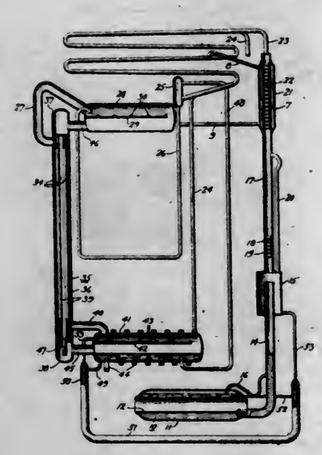
1. Refrigerating apparatus comprising a generator, a condenser, an upwardly extending riser conduit communicating with the generator and extending above the generator and connected at its upper end to the condenser, an absorber, an evaporator, a liquid seal connected between the condenser and the evaporator and arranged to permit a lower pressure to exist in the condenser than in the evap-

orator and absorber, and means for circulation of absorption liquid between the generator and absorber including, a receiver arranged at a high level with respect to the ab-



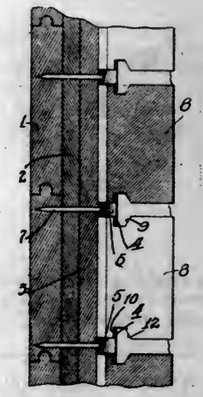
sorber and adapted to receive liquid from the riser conduit and a flow control conduit connecting the generator with the riser conduit.

1,896,324. REFRIGERATION. CARL GEORG MUNTERS, Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed June 13, 1928. Serial No. 285,046. 2 Claims. (Cl. 62—119.5.)



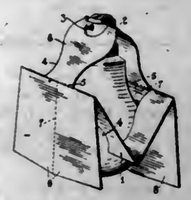
1. In refrigerating apparatus, an absorber, an expeller and means for producing flow of liquid therebetween including a riser conduit communicating with the expeller at a first level and extending upwardly above the expeller, and a tubular flow control member communicating with the expeller below the top thereof at a second level higher than said first level and communicating with said riser conduit at a third level above said second level and said tubular member having an intermediate portion below said second level.

1,896,325. BUILDING CONSTRUCTION. VINCENT W. NOONAN, La Salle, Ill. Filed May 9, 1932. Serial No. 610,019. 23 Claims. (Cl. 72—20.)



1. In combination with veneer tiles, a strip of material having a plurality of integrally offset parts partially sheared from and pressed out of the body of said strip, said offset parts having apertures therein, and means in said apertures for fastening said strip to a wall, said veneer tiles resting on the edges of said offset parts.

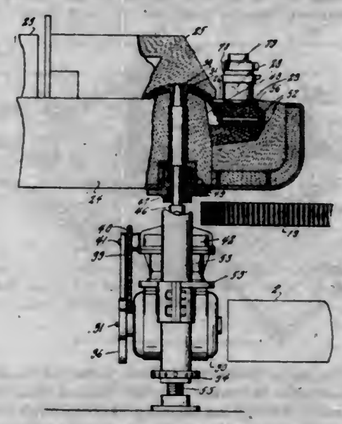
1,896,326. CONTAINER OR BOX FOR FRAGILE ARTICLES. JOHN REGINALD NORTHWAY-LEY, Bishopston, Bristol, England, assignor to E. S. & A. Robinson, Limited, Bristol, England. Filed July 18, 1930, Serial No. 468,958, and in Great Britain Sept. 28, 1929. 19 Claims. (Cl. 229—89.)



1. An improved supporting unit for a fragile article comprising a blank folded to form a support for preventing all lateral movement of one end of an article and a section hinged to the blank at a point intermediate the ends thereof and extending away from said fold when the unit is erected, said section being adapted to support the other end of said article.

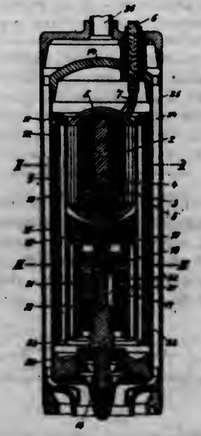
1,896,327. SUBMERGED STIRRER. FRANK O'NEILL, Toledo, Ohio. Original application filed June 1, 1928, Serial No. 282,088. Divided and this application filed Sept. 7, 1929. Serial No. 390,957. 18 Claims. (Cl. 49—5.)

18. The combination of a container for a pool of molten glass, means for successively removing mold charges from a gathering zone in said pool, and means for circulating the glass in said pool consisting of a stirring implement having a glass contacting portion, means for supporting said implement in such a position that the glass contacting portion thereof is wholly submerged in the glass, and extends beneath the surface of the glass in the gathering zone, said glass contacting portion terminating in the glass below the surface thereof, and means for actuating



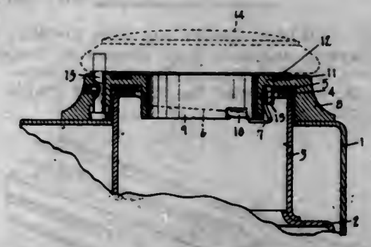
said implement whereby the glass contacting portion thereof creates a current beneath the gathering zone, without directly agitating the surface of the glass.

1,896,328. ELECTRICAL TRANSFORMER FOR SPECIAL PURPOSES. THEODOR POHL, Wriezen (Oder), Germany, assignor to Frida Franke, Berlin-Wilmersdorf, Germany. Filed Feb. 27, 1930, Serial No. 431,899, and in Germany Feb. 26, 1929. 3 Claims. (Cl. 175—361.)



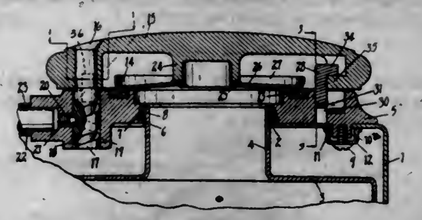
1. In a polyphase transformer, especially for supplying electrical energy to motors working under water or to induction furnaces, the combination of a laminated core, a primary winding, a water-tight transformer casing having a plate disposed therein, the periphery of the plate being in contact with the casing wall, and a secondary winding in the form of a cage-winding composed of several bars insulated from each other both of said windings being water-tight in said casing and the bars of the secondary winding extending through the plate and being encased, fluid-tight therein a pump motor below the plate and to which the lower ends of the bars are connected.

1,896,329. CLOSURE FOR RADIATORS AND THE LIKE. FREDERICK CHARLES RUPPEL, Grand Rapids, Mich., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Filed Dec. 18, 1929. Serial No. 414,890. 7 Claims. (Cl. 220—24.)



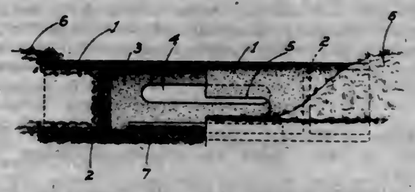
5. The combination of a neck provided with keepers, a closure body member engageable with said keepers by rotative movement of the body member, said body member having an upwardly facing gasket seat, a locking pin arranged through the bottom of said upwardly facing gasket seat to lie in the path of and engage one of said keepers whereby said closure body member is positively locked against rotation on said neck, a gasket arranged in said gasket seat over said pin, and a cap mounted on said body member to coact with said gasket.

1,896,330. CLOSURE FOR RADIATORS AND THE LIKE. FREDERICK C. RUPPEL, Grand Rapids, Mich., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Filed Dec. 23, 1929. Serial No. 415,884. 4 Claims. (Cl. 220—24 R. C.)



1. The combination with the radiator shell of an automobile having an opening in the top thereof, a radiator arranged within said shell and having a neck projecting through said opening, a closure body member mounted on said shell and having a vertical pivot bearing and a horizontally disposed hood supporting rod socket alined therewith, a cap having a central depending closure supporting stud, a pivot having a spiral groove therein disposed in said bearing for rotative and longitudinal movement, a pin disposed in the bottom of said hood supporting rod socket to engage said groove in said pivot, and a resilient closure mounted on said stud on said cap.

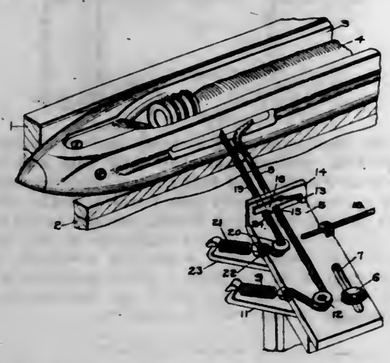
1,896,331. IRRIGATION GATE. WILLIAM R. SHERMAN, Newman, Calif. Filed Apr. 22, 1932. Serial No. 606,828. 5 Claims. (Cl. 61—12.)



2. A liquid control gate comprising a tubular member adapted to be mounted with its longitudinal axis horizontal

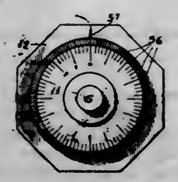
and transversely of the path of the flow of a liquid, said member having intake and discharge openings in its opposite sides above the bottom thereof, and on relatively high and low levels respectively.

1,896,332. FILLING DETECTOR FOR LOOMS. JESSE W. SIMPSON, Anderson, S. C., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Jan. 28, 1932. Serial No. 589,451. 7 Claims. (Cl. 139—282.)



1. In combination with the filling carrying shuttle of a loom, means for detecting substantial exhaustion of the filling supply in the shuttle, and means for determining the presence or absence of a bunch on the filling carrier and preventing operation of said detecting means when no bunch is present on the filling carrier.

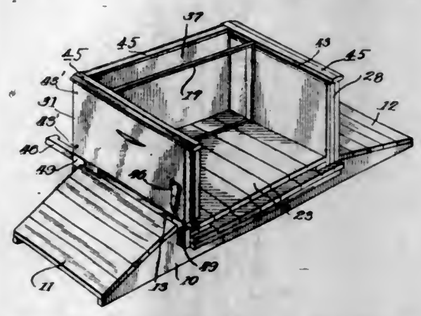
1,896,333. DOOR FITTING. WAINO A. THOR, Berkeley, Calif. Filed July 31, 1930. Serial No. 472,155. 2 Claims. (Cl. 177—314.)



1. A door fitting comprising a shaft slidably and rotatably mounted within a door casement; latch actuating means mounted upon the inner end of the shaft; a pair of relatively rotatable locking members rotatably and slidably mounted upon the shaft and having apertures movable to registering relation when the locking members are in unlocking relation; means operable from outside the casement to move the locking members to unlocking relation; means mounted in connection with the shaft and movable axially therewith to engage the locking members when in locking relation, and to enter the registering apertures when in unlocking relation, the locking members being movable axially with the shaft when in locking relation; and electrical contacts mounted adjacent the shaft and bridged by the adjacent locking member when moved axially thereagainst to close an electric circuit through said contacts.

1,896,334. BEEHIVE. JOHN TOTH, Chicago, Ill. Filed July 10, 1930. Serial No. 466,950. 6 Claims. (Cl. 6—1.)

1. A beehive including in its construction a base board, a stand having a pair of alighting boards for supporting said base board in either one of two positions, four vertical walls for erection upon said base board to form a rigid brood chamber, three of said walls being permanently and rigidly secured to each other, the other of said walls being detachably secured in place whereby the same may be readily removed to permit access to the inside of said brood chamber, means provided in said brood chamber



for supporting a plurality of honey frames, said frames being removable laterally through said opened wall, one of said walls having an opening therethrough for establishing communication between one of said alighting boards and the interior of said brood chamber, and means for regulating the size of said entrance opening.

1,896,335. MOLDED BRAKE LINING. ANDREW T. K. TSENG, Detroit, Mich., assignor to Beach Laboratories, Inc., Detroit, Mich., a Corporation of Michigan. Filed July 15, 1929. Serial No. 378,567. 2 Claims. (Cl. 106—7.5.)

1. A molded brake lining composed of the following ingredients:

	Per cent
Amber brown crepe rubber	14
Litharge	10
Barytes	34
Zinc oxide	5
Gas black	3
Graphite	4
Powdered sulphur	4
Mixed asbestos yarn and brass wire	26
	100

1,896,336. AIRPLANE WING CONSTRUCTION. PEMBROKE A. VAILE, Chicago, Ill., assignor of one-half to Sheldon Clark, Chicago, Ill. Original application filed Aug. 30, 1930, Serial No. 479,056. Divided and this application filed Sept. 14, 1931. Serial No. 562,706. 2 Claims. (Cl. 244—12.)

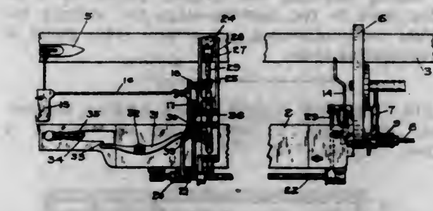


1. In an airplane wing, a series of inverted U-shaped channels located forwardly of the leading edge of the wing and arranged to confine and direct air in streams to the leading edge of the wing.

1,896,337. LOOM. EARLE J. WENTZ, Schoolfield, Va., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Mar. 16, 1932. Serial No. 599,233. 6 Claims. (Cl. 139—224.)

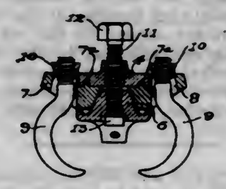
1. In a loom, the combination of filling replenishing mechanism, a filling fork slide and a filling fork carried thereby for detecting the absence of filling in the shed, means controlled by said filling fork for simultaneously

initiating the stopping of the loom and positioning the said replenishing mechanism for replenishment of the filling supply on the first beat-up of the lay following the



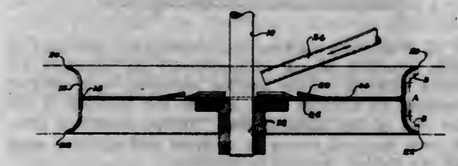
restarting of the loom, and means operable independently of the said slide for initiating replenishment of the filling supply without stopping the loom.

1,896,338. STORAGE BATTERY TERMINAL PULLER. JAMES A. WILES, Hamilton, Ohio. Filed Mar. 18, 1929. Serial No. 347,864. 6 Claims. (Cl. 29—85.)



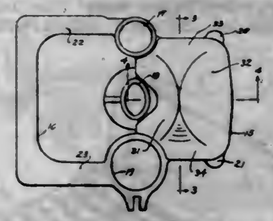
1. A device of the type described for pulling a terminal from a storage battery post, comprising a screw holding member, a top on said member formed with arcuate grooves in its inner surface, said screw holding member and top being formed with oppositely disposed screw holes, a screw in said holes adapted to engage said post, wing members having inner ends shaped to travel in said grooves, and means carried by said wing members for removably engaging said terminal to pull it from the post when the pressure of the screw is applied to the latter.

1,896,339. ATOMIZING HEAD. ALFRED W. ANTHONY, Jr., Belmont, Mass., assignor to Pease, Anthony Equipment Co., Cambridge, Mass., a Corporation of Massachusetts. Filed June 6, 1930. Serial No. 459,469. 3 Claims. (Cl. 299—63.)



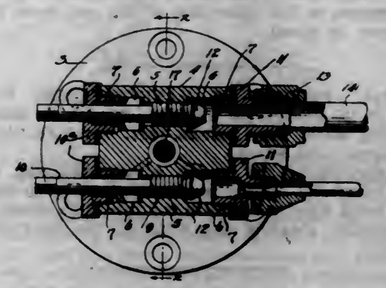
1. A rotary spray head comprising a shaft, a circular rim concentric with the axis of the shaft and comprising a filming surface parallel to the axis of the shaft for building up a uniform film, merging at opposite ends through curved surfaces in sharp delivery edges tending to produce outwardly radiating films of liquid in planes normal to the axis of the shaft, and means for delivering the liquid to be sprayed approximately centrally of the filming surface.

1,896,340. AUTOMATIC TRAIN PIPE CONNECTER HEAD. MARTIN A. BARNES, Cleveland, Ohio, assignor to Consolidated Connector Patent Corporation, Wilmington, Del. Filed July 1, 1929. Serial No. 375,131. 1 Claim. (Cl. 285—58.)



A train pipe coupling for a fluid carrying conduit disposed substantially centrally therein and having a guiding projection adapted to be received in the recess of a coacting coupler, the entire surface of the projection comprising angularly related portions converging to a common point, said projection being substantially free of marginal bearing portions whereby it is adapted to be completely received within the recess under all conditions of service.

1,896,341. EVAPORATOR STRUCTURE FOR REFRIGERATING SYSTEMS. RANSOM H. BEMAN, Detroit, Mich., assignor to Mullins Manufacturing Corporation, Salem, Ohio, a Corporation of New York. Filed Mar. 22, 1929. Serial No. 349,033. 7 Claims. (Cl. 137—104.)



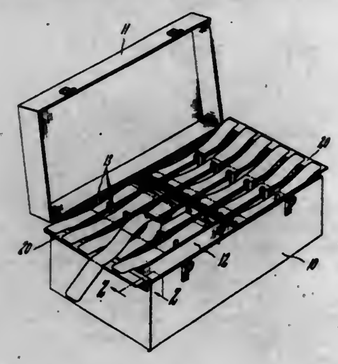
1. An evaporating unit for refrigerating systems of the flooded type, comprising a vessel for receiving liquid refrigerant having a wall formed to provide inlet and outlet passageways and inlet and outlet service valves positioned within said wall, the apertures in said wall for receiving the service valves and valve seat parts, and said service valve and valve seat parts being so designed as to be completely reversible for right or left hand assembly.

1,896,342. METHOD OF MAKING STABLE LOW POUR POINT LUBRICATING OILS. HARRY T. BENNETT and LE ROY G. STORY, Tulsa, Okla., assignors, by direct and mesne assignments, to Mid-Continent Petroleum Corporation, Tulsa, Okla., a Corporation of Delaware. Original application filed Oct. 24, 1927, Serial No. 228,487. Divided and this application filed July 23, 1928. Serial No. 294,933. Renewed Apr. 17, 1931. 6 Claims. (Cl. 87—9.)

1. The method of making stable low pour point lubricating oils which consists in heating a lubricating oil composition to 300 to 350° F., and while thus heated mixing therein five hundredths to three-tenths percent

soap and thereby producing a stable oil of lower pour point than the oil treated without materially affecting the viscosity thereof.

1,896,343. DISPENSING APPARATUS FOR STICKERS. OLIVER E. BENNETT, Boston, Mass. Filed July 19, 1930. Serial No. 469,048. 2 Claims. (Cl. 312—39.)

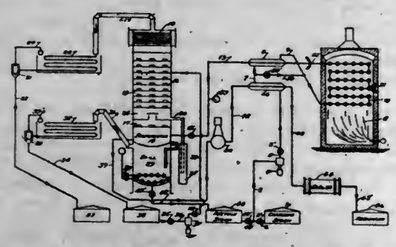


1. Dispensing apparatus for stickers or the like, comprising a case having a flanged cover, a slight clearance being provided between the edge of the cover flange and the abutting edge of one side wall of the case for the egress of stickers, a plurality of separate boxes fitted side by side within said case, the upper edges of said boxes being substantially flush with the upper edges of the side walls of the case, guide elements projecting upwardly from sides of said boxes, said elements terminating adjacent to the under face of the case cover when the cover is closed.

1,896,344. PROCESS OF MANUFACTURING WOOD PULP IN MULTIPLE STAGES. HENRY K. BENSON, Seattle, Wash. Filed June 22, 1931. Serial No. 546,166. 5 Claims. (Cl. 92—6.)

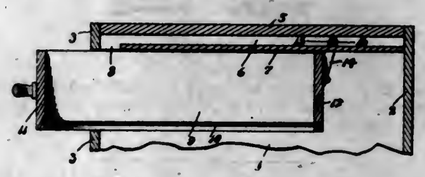
1. Improvements in process of manufacturing wood pulp, comprising heating wood chips with progressively lesser spent reactive liquor, in multiple batch stages, and mechanically abrading the chips in the intermediate stages.

1,895,345. PROCESS AND APPARATUS FOR CRACKING AND SEPARATING GASOLINE STOCK FROM PETROLEUM OILS. JOHN C. BLACK, Destrehan, La., assignor to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Oct. 20, 1926. Serial No. 142,999. 9 Claims. (Cl. 196—47.)



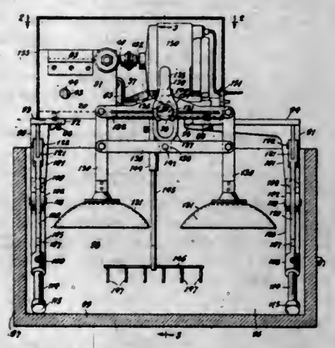
7. A process for treating hydrocarbon oil comprising the steps of cracking said oil under superatmospheric pressure, subjecting the cracked products to evaporation and fractionating the resulting vapors, recovering a pressure distillate, a residual bottom, and a reflux condensate, stripping the reflux condensate of its lighter ends by applied heat distillation before substantial cooling of said condensate to produce light vapors and a bottom therefrom, producing light condensate by condensing said light vapors, recycling the stripped bottom as a recharging stock to the cracking stage and utilizing the said light condensate as a cool control reflux liquid in the fractionating stage.

1,896,346. DRAWER GUIDE. FRANK BOLHUIS, Holland, Mich. Filed May 12, 1930. Serial No. 451,815. 2 Claims. (Cl. 45—77.)



1. In combination, a cabinet having a drawer entrance opening in a side thereof, a drawer passing through said opening, a drawer guide bar located horizontally in the cabinet above the opening, said guide bar comprising an upper horizontal web section, downwardly extending sides and inturned track portions at the lower edges of said sides, a bracket secured to the rear end of the drawer extending upwardly and to the rear therefrom between said tracks, and rollers mounted at the upper end of the bracket to ride on the upper sides of said tracks or against the underside of said web.

1,896,347. WASHING MACHINE. CHARLES S. BOSSIE, New York, N. Y., assignor to Perfection Appliances Inc., New York, N. Y., a Corporation of New York. Filed July 21, 1930. Serial No. 469,298. 5 Claims. (Cl. 259—99.)

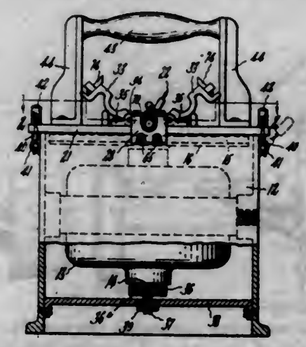


1. In a washing machine the combination of a pair of suction plungers, means to reciprocate the plungers, an agitator adjacent to the suction plungers, said agitator comprising an agitator stem, a cross bar fastened to the lower end of the agitator stem, prongs extending from said cross bar and means to oscillate said agitator stem while the suction plungers reciprocate.

1,896,348. RAZOR BLADE SHARPENER. GEORGE W. BOWERS, Somerville, Mass. Filed Oct. 17, 1930. Serial No. 489,368. 4 Claims. (Cl. 51—124.)

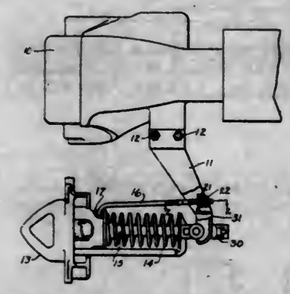
1. A razor-blade sharpener comprising, in combination, a rotary sharpening disk, a blade carrier, and bearings arranged to operatively support and locate the carrier in either of two operative positions relative to the disk, said blade carrier comprising journal members spaced apart

and connected by a pintle member alined therewith, a fixed jaw engaged with said pintle member, and a swinging jaw provided with a socket adapted to turn and move endwise on said pintle member, and a spring normally holding



said socket at one end of its endwise movability, the socket and pintle member being provided with clutch members whereby the swinging jaw is locked when moved against a blade interposed between the jaws.

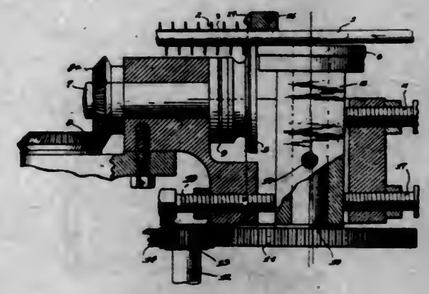
1,896,349. SUPPORT FOR AN AUTOMATIC CONNECTER. JOSEPH M. BRILL, Cleveland, Ohio, assignor, by mesne assignments, to Consolidated Connector Patent Corporation, Wilmington, Del. Filed Feb. 27, 1929. Serial No. 343,093. 1 Claim. (Cl. 285—58.)



In an automatic train pipe connecter having a connecter head which is mounted for universal movement with reference to a supporting bracket, means for supporting said head in normal position for coupling, and comprising a rod pivoted to the head and passing through an opening in the supporting bracket, said opening being substantially larger than said rod and being surrounded by a rearwardly extending boss, and means to secure said rod in said bracket comprising a nut having a concave surface which is dissimilar from that of the boss and which is adapted to engage the edge of the boss in substantial line contact.

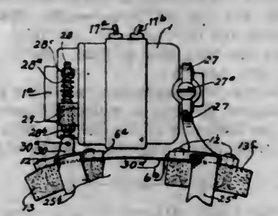
1,896,350. APPARATUS FOR AND METHOD OF MAKING FINNED TUBING. HARRY W. BUNDY, Detroit, Mich., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 30, 1927. Serial No. 243,512. 17 Claims. (Cl. 29—33.)

1. An apparatus for forming finned tube which comprises, a pair of pressure rolls to which strip stock is guided for forming a fin with the stock engaged between the rolls, the engaging surfaces of the rolls being disposed at an angle to each other whereby to displace the metal and give the strip stock a curvature, means for rotating the rolls so that the rolls also feed the curved fin stock, and means for receiving a member in position to be encircled by the curved fin stock as it comes from the rolls,



and means including a cam surface against which the curved fin stock strikes for effecting the helical pitch of the fin.

1,896,351. VIBRATOR. JAMES F. DORAN, Danbury, Conn.; John C. Doran, executor of will of said James F. Doran, deceased, assignor to Sara C. Doran, Danbury, Conn. Filed Dec. 29, 1926. Serial No. 157,653. 18 Claims. (Cl. 128—36.)



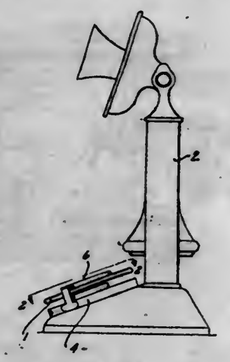
1. A vibrator adapted to be mounted upon the back of the hand comprising, in combination, a frame, a yielding pad secured to said frame and adapted to rest against the back of the hand, means for passing around the hand to hold said frame in position thereon, a rotary electric motor mounted upon said frame, means rotating with the armature shaft of said motor adapted to give said frame a vibratory movement, and means rotatably supporting said last-mentioned means adapted to prevent transmission of strain to the armature shaft.

17. A vibrator comprising, in combination, a frame, a yielding pad secured to said frame and adapted to rest against the back of the hand, means passing around the hand to hold said frame in position thereon, an electric motor, means rotating with the armature substantially at one end of said motor adapted to give said frame a vibratory movement, means rotatably mounting said motor on said frame to provide a relative vibratory motion between said motor and said frame, and means for maintaining said end of said motor in normal position.

1,896,352. ATTACHMENT FOR AUTOMATIC TELEPHONE DIALS. CHARLES D. FIVEASH, Portland, Oreg. Filed Nov. 20, 1929, Serial No. 408,570. Renewed Aug. 8, 1932. 3 Claims. (Cl. 40—10.5.)

1. In a device of the class described, the combination with the dial of an automatic telephone, of a body element detachably attachable to the dial of the telephone, said body element comprising a peripheral rim provided with finger holes and a raised section disposed centrally of the rim and having the designation of a predetermined

station number marked thereon, each character of said designation having a color to distinguish it from unlike characters, and said rim having areas around the finger

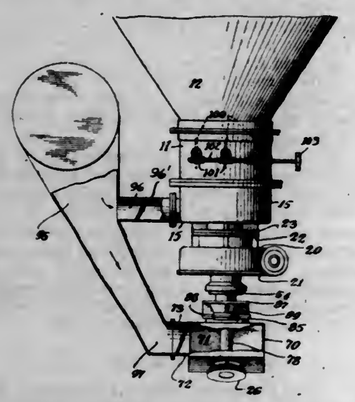


holes which are normally positioned over the respective characters on the dial, said areas having the same colors as the corresponding characters in said designation.

1,896,353. WASHABLE PRINTED LEATHER. CHARLES S. FRIEDMAN, Neuilly-sur-Seine, France, assignor to Société Anciens Etablissements A. Combe & Fils & Cie., Paris, France, a Corporation of France. Original application filed Apr. 13, 1923, Serial No. 631,954, Patent No. 1,716,120, and in France Nov. 30, 1922. Divided and this application filed May 4, 1929. Serial No. 360,606. 1 Claim. (Cl. 149—4.)

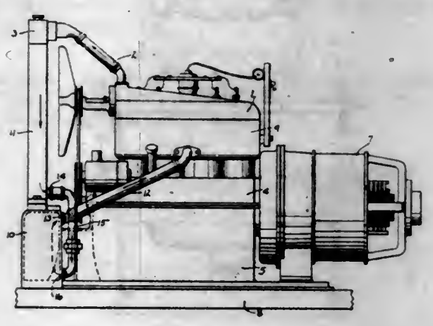
As a new article of manufacture, a leather provided with decorative colored designs in which the coloring extends throughout the thickness of the leather, both said leather and said coloring being adapted to withstand washing.

1,896,354. FEEDER. MARTIN FAISCH, New York, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 21, 1930. Serial No. 437,852. 21 Claims. (Cl. 302—49.)



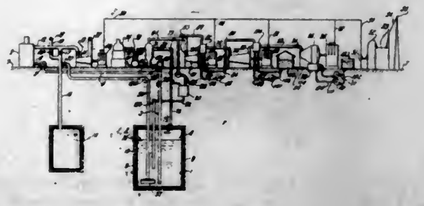
1. A feeder comprising a stationary member having cells therein adapted to receive material by gravity, a rotary member underlying all of said cells with the exception of a cell being discharged, a second rotary member overlying a portion of said cells and having a passage therein for directing an air stream into the cell being discharged, and means for rotating the rotary members in unison.

1,896,355. COOLING DEVICE FOR INTERNAL COMBUSTION ENGINES. JOHN C. GARROTT, Houston, Tex. Filed May 18, 1931. Serial No. 538,159. 6 Claims. (Cl. 123—196.)



1. In an apparatus of the character described, an internal combustion motor, a casing for the head of said motor, a crank case, a base therefor to contain lubricant, a radiator, a base of comparatively large capacity for said radiator, a pipe connecting the upper casing of said motor with the upper end of said radiator, a pipe connecting the lower end of said radiator with the lower end of said radiator base, and a connecting pipe from the upper end of said radiator base with the lower end of said motor casing whereby cooling liquid may be circulated from said motor casing through said radiator and base.

1,896,356. ELECTRIC POWER GENERATING PLANT. FRAZER W. GAY, Newark, N. J. Filed Oct. 25, 1929. Serial No. 402,400. 7 Claims. (Cl. 290—2.)

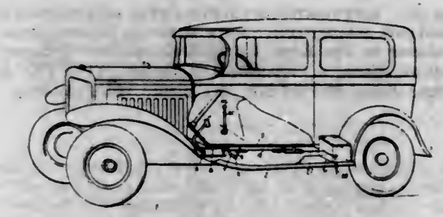


1. An electric power generating plant for supplying a variable system load comprising, steam boilers operating continuously at constant load, steam storage means connected to one of said boilers for storing steam during light load periods, turbo-generators also connected to said boiler and to said steam storage means for operating during heavy load periods, turbo-generators connected to another of said boilers and operating continuously, said last named turbo-generators consuming a portion of the energy output of said second named boiler, and heat storage means arranged to store unused portions of the energy output of said second named boiler for use during heavy load periods.

1,896,357. SANDING DEVICE FOR AUTOMOBILES. JOHN GLEN, Detroit, Mich. Filed Oct. 19, 1931. Serial No. 569,671. 8 Claims. (Cl. 291—15.)

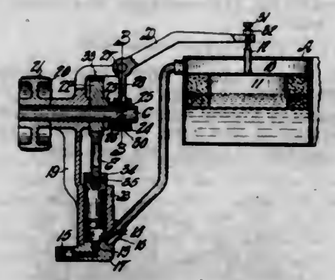
1. A sanding device for motor vehicles having in combination a shaft, a foot brake immovably mounted on said shaft, a second shaft, a lever fixed to said second shaft, means operatively connecting said foot brake and lever, a

rod having a downwardly projecting portion and engaging the said lever, a bracket having a longitudinal slot, the said downwardly projecting portion of said rod fitting into said slot, a link pivotally secured to said bracket, a con-



necting link pivotally secured to said link and to said rod, a container adapted to hold sand having a hole in the bottom, a closure member for said hole, and means connecting the closure member and said link.

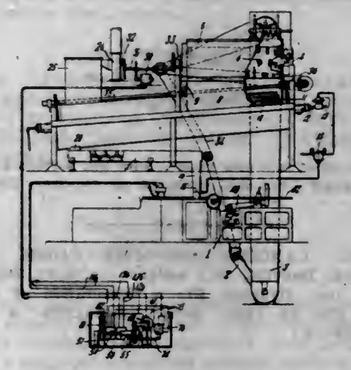
1,896,358. PUMPING APPARATUS. SYLVESTER A. GUTMAN, Flint, Mich. Filed Aug. 6, 1928. Serial No. 297,654. 1 Claim. (Cl. 103—23.)



A pumping apparatus including a pump cylinder having a bracket thereon, a supply receptacle in feeding relation to said cylinder, a receiving receptacle in receiving relation to said cylinder, a pump operating shaft journaled in said bracket, an eccentric mechanism rotatable on said shaft and in operative connection with a plunger in said cylinder and having a member of a clutch mechanism thereon, a companion clutch member of said clutch mechanism on said shaft and rotating therewith and slidable thereon longitudinally thereof, an arm pivoted on said bracket and having one end thereof in operative connection with said companion clutch member and the other end thereof extending over said receiving receptacle, a float in said receiving receptacle having a stem extending above said receiving receptacle and an adjusting screw in said other end of said arm and in contact with the outer end of said stem.

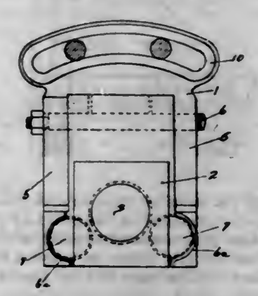
1,896,359. STARCH CONDITIONING MECHANISM AND TIME LAG CONTROL THEREFOR. HAROLD W. HARRIGAN, Melrose, Mass., assignor to Hersey Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 31, 1931. Serial No. 584,058. 11 Claims. (Cl. 107—8.)

8. A starch conditioning apparatus comprising a cleaner, means for introducing starch material to be conditioned into said cleaner, a drier for receiving cleaned material from said cleaner, heating means in said drier, an air



heater, and means for passing air through said heater, then through said cleaner, and then through said drier in the direction of passage of the material through said drier.

1,896,360. CLAPPER BOX. ROBERT T. HAZELTON, Cincinnati, Ohio, assignor to The Cincinnati Shaper Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 8, 1929. Serial No. 376,679. 6 Claims. (Cl. 90—54.)



1. In a clapper structure, the combination of a clapper box, a clapper, means for pivoting the clapper to the clapper box, said clapper and box being characterized by a pair of conical recesses and coacting conical projections adjacent the lower end thereof and interspaced in a direction transverse to the axis of said clapper and box, said conical projections being of sufficient length to hold said clapper positively a substantial distance away from said clapper box, said conical projections and recesses froming the sole seating means for said clapper with respect to said clapper box.

1,896,361. NONSIFTING, ONE-PIECE, POWDER BOX DRUM. HENRY W. HILDEBRAND, Jr., Denver, Colo., assignor to Inland Paper Box Company, Denver, Colo., a Corporation of Colorado. Filed June 19, 1931. Serial No. 545,437. 1 Claim. (Cl. 229—6.)

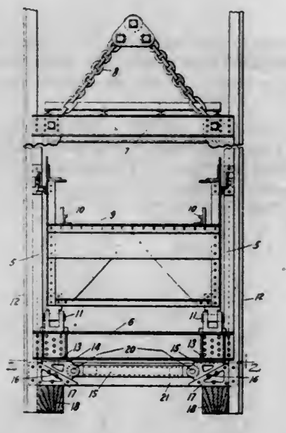
A drum for face powder boxes comprising: a one piece blank; a bottom portion on said blank; a top portion on said blank; a side portion connecting said top and bottom portions along one of their sides; side flaps formed on the other sides of both said top and bottom portions, the side flaps of the top and bottom portions overlapping so as to

form a double wall around said drum; openings formed in both said top and bottom portions; a paper cover cemented over said drum so as to cover one of said open-



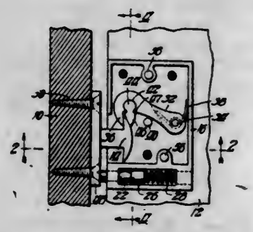
ings and all of said side flaps; and a box portion arranged to fit snugly over said drum so as to cover the other opening.

1,896,362. LANDING FOR MINE CAGES. GRANT HOLMES, Danville, Ill., assignor to Robt. Holmes & Bros. Inc., Danville, Ill., a Corporation of Illinois. Filed Feb. 27, 1930. Serial No. 431,739. 9 Claims. (Cl. 187—1.)



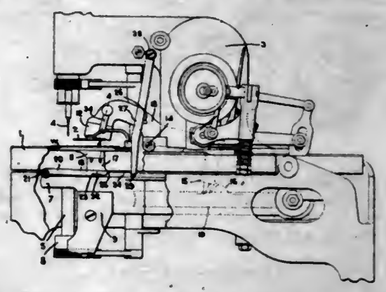
1. A landing for a mine cage or the like, comprising two movable parts arranged in the paths of the respective sides of said cage and means controlled by the downward movement of one of said parts to cause a corresponding upward movement to be imparted to the other part.

1,896,363. BUILDER'S HARDWARE. ELVIN H. JOHNSON, Winnetka, Ill. Filed Mar. 14, 1930. Serial No. 435,719. 3 Claims. (Cl. 292—99.)



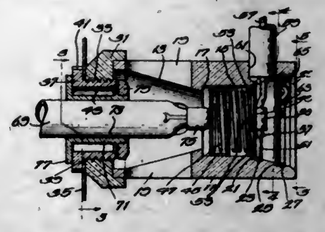
1. The combination with a fixed member and a movable member, of a housing carried by said fixed member, a hook carried by said movable member, a spring pressed latch member, said latch member and hook having inwardly facing hook surfaces for holding the hook against withdrawal, and means mounted upon said latch member and actuated by movement of said hook inwardly beyond latched position for lifting said latch member to clear said hook and release it upon subsequent outward movement of said hook, said hook being symmetrical about a median plane and having a portion positioned substantially in contact with one surface of the housing.

1,896,364. BUTTONHOLE CUTTER FOR BUTTONHOLE SEWING MACHINES. JOHN KIRWICZ, Boston, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed Feb. 5, 1929. Serial No. 337,676. 5 Claims. (Cl. 112—68.)



1. In a buttonhole sewing machine, the combination with work-holding means, of a vertically-moving buttonhole-cutting knife beneath the work, a cutting block above the work movable toward and from the work, means to give the cutting block its operative movement, and a wedge device to raise the knife vertically into cutting relation with the block.

1,896,365. RECEPTACLE FOR LUMINESCENT DISCHARGE TUBES. JAMES C. MCCLELLAND, Chicago, Ill., assignor to Federal Electric Company, Chicago, Ill., a Corporation of New York. Filed Apr. 23, 1930. Serial No. 446,766. 5 Claims. (Cl. 173—328.)

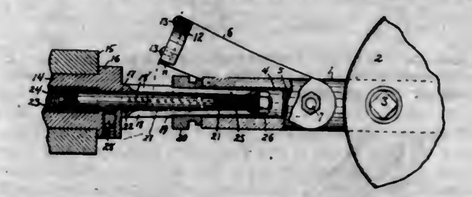


1. In a device of the class described for mounting an electric circuit in a panel having a perforation, a housing adapted to be mounted on the panel and extending rearwardly of the perforation to receive a portion of the unit to be supported extending rearwardly through said opening and into said housing, a conductor comprising a disc resiliently mounted in said housing in position to yieldingly engage the inner end of said portion, means connecting said conductor to a source of electrical power, and a collar for embracing the said portion and mounted in said opening for free movement rearwardly therein, said collar having a flange covering said opening to prevent the penetration of foreign matter into the housing.

1,896,366. PIECE PLACER AND PULLER ATTACHMENT FOR LATHES. HERALD R. MOORE, Fort Wayne, Ind. Filed Aug. 27, 1930. Serial No. 478,097. 4 Claims. (Cl. 29—57.)

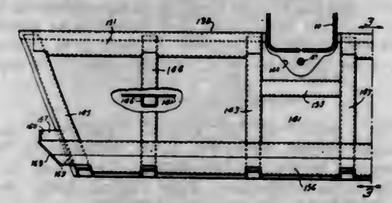
1. In an appliance of the class described, a rotatably mounted hollow spindle provided with a series of longitudinally disposed slots, the slotted portion of said spindle

being tapered internally and externally, a shoulder on the exterior of the spindle constituting a stop, a bolt adjustably positioned having a tapered portion extending into said spindle adapted to expand said spindle, a stub-shaft mounted so as to have longitudinal movement one



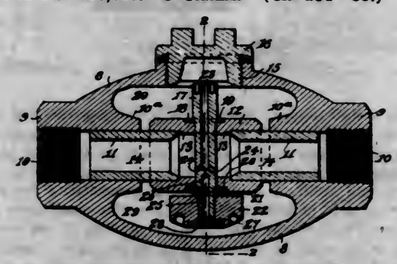
end of which has a bore for the reception of one end of the spindle, a yoke, the arms of which are pivotally connected with said shaft and the forward end of which is slotted so as to straddle said spindle, and means for actuating said shaft.

1,896,367. DUMP CAR DOOR. WILLIAM H. MUSSEY, Chicago, and JULIAN R. RUDULPH, Homewood, Ill., assignors, by mesne assignments, to Pullman Car & Manufacturing Corporation, a Corporation of Delaware. Original application filed May 15, 1931, Serial No. 537,636, Patent No. 1,859,261, dated May 17, 1932. Divided and this application filed Oct. 12, 1931. Serial No. 568,338. 4 Claims. (Cl. 105—280.)



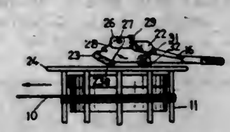
1. In a dump car, the combination comprising doors pivotally hung transversely of the car from side to side and provided with an intermediate opening at the hinged margin thereof to receive a center sill, said marginal portion upon opposite sides of said opening having outwardly bulged rigidifying portions formed to provide door hanging flanges, an associate hinge member on the car having a flange portion adapted to underlie said door hinge flange, and interlocking means intermediate said flanges for pivotally retaining said doors.

1,896,368. LUBRICATOR. GUSTAV C. PEARSON, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Mar. 21, 1930. Serial No. 437,827. 6 Claims. (Cl. 184—55.)



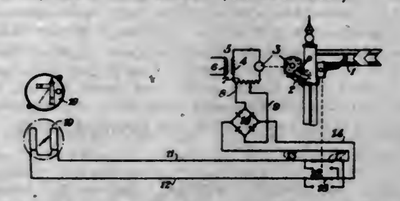
1. A lubricator comprising a casing having a lubricant reservoir, a fluid passageway through the casing including a sleeve member rotatably mounted in the casing, a weight detachably connected to the sleeve member, rotatable means forming the connection between the weight and sleeve member for directing and controlling the flow of lubricant from the reservoir into the fluid passageway, and resilient means surrounding the rotatable means and interposed between the weight and sleeve member for preventing the movement of said rotatable means with respect to the sleeve member.

1,896,369. AUTOMATIC FISHING REEL BRAKE. EMMETT BURGESS PERRINE, Los Angeles, Calif., assignor to Perrine Manufacturing Co., Minneapolis, Minn. Filed Dec. 17, 1928. Serial No. 326,489. 10 Claims. (Cl. 242—84.5.)



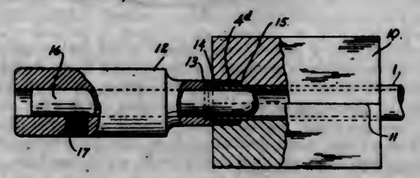
7. In a fishing reel, the combination of a support adapted to be attached to a fishing rod, a rotary spring drum for a fishline mounted on said support, a brake mounted to move in a single plane only and normally exerting a braking pressure in said plane opposing rotation of said drum, the said pressure being reduced when said drum rotates in the direction opposite to that in which it is driven by its spring, and hand-operable means for removing the braking effect of said brake to permit the line to be wound up by said spring drum.

1,896,370. RAILWAY SIGNALING APPARATUS. LESLIE HURST PETER, London, England, assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 17, 1931, Serial No. 569,458, and in Great Britain Oct. 29, 1930. 7 Claims. (Cl. 246—162.)



1. Railway signaling apparatus comprising a movable semaphore arm or spectacle and a continuously illuminated signal lamp adapted to be supplied with operating current from an alternating current supply circuit in which an electrical indicating device of the direct current polarized type is provided at the point of control and is arranged to be supplied with unidirectional operating current through indication conductors, this current being derived from the signal lamp circuit through one or more rectifiers, for the purpose specified.

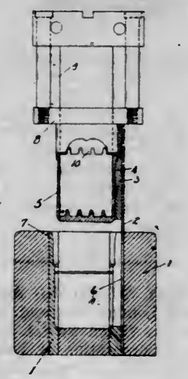
1,896,371. TUBE AND COUPLING. BERT L. QUARNSTROM, Grosse Pointe Park, Mich., assignor to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed June 27, 1929. Serial No. 374,059. 2 Claims. (Cl. 29—148.2.)



2. The method which comprises placing a sleeve of relatively ductile metal over a tube, subjecting the sleeve to pressure axially of the tube to flow the metal thereof to

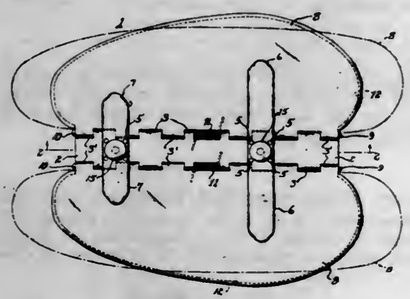
compress the metal of the sleeve against the tube to relatively permanently and independently set the same to the tube, prelocating the sleeve in a definite position relative to the end of the tube, preshaping the ends of the sleeve by pressure at the time the sleeve is compressed against the tube for cooperation with male and female members of a coupling, and supporting the tube from the interior during the subjecting of the sleeve to pressure to prevent substantial distortion of the tube.

1,896,372. BATTERY BOX MOLD. OLIVER O. RIESER, Oak Park, Ill., assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Dec. 2, 1927. Serial No. 237,306. 10 Claims. (Cl. 18—35.)



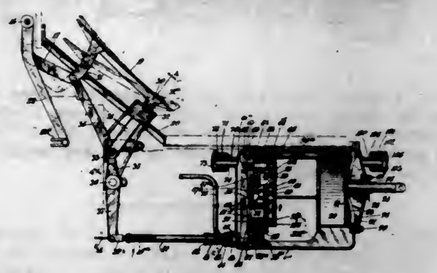
3. In combination with a female mold, and a male mold for molding a box in said female mold, a panel for forming designs on a molded wall of a box, said panel slidable in a wall of a mold sufficiently far as to permit a molded box to clear said female mold, said panel having a resilient mounting enabling said panel to be sprung clear of the wall of the box on which it has formed a design.

1,896,373. SWIMMING PEDAL. ERWIN J. ROBERTS, Newark, N. J. Filed Sept. 23, 1931. Serial No. 564,565. 2 Claims. (Cl. 9—21.)



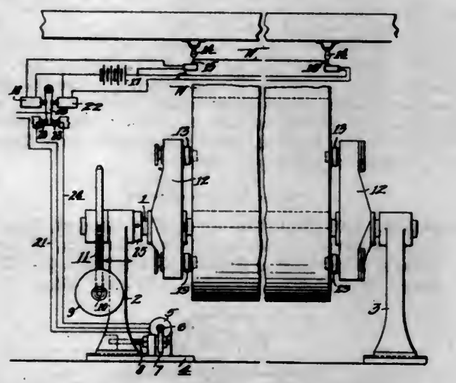
1. A swimming pedal comprising a rigid flat longitudinally extending body member having spaced hinge knuckles formed all along the sides thereof, wing members positioned at the sides of said body member, said wing members having hinge knuckles interfitting with the hinge knuckles of said body member, hinge pins interconnecting the cooperating hinge knuckles of said wing members and said body member, coil torsion springs surrounding said hinge pins, each of said torsion springs having one of its ends engaging said body member and its other end engaging a respective one of said wing members, for urging said wing members into oppositely extended, aligned positions, and a pair of spaced transverse reenforcing bars secured to said body member and overlying said wing members for reenforcing the latter when in their oppositely extended positions.

1,896,374. FLUID PRESSURE BRAKE. EDWARD A. ROCKWELL, Long Island City, N. Y. Filed Dec. 9, 1927. Serial No. 238,828. 12 Claims. (Cl. 188—152.)



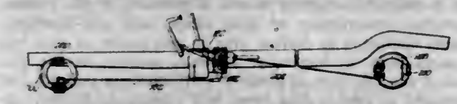
1. In an apparatus for the purpose indicated, in combination with a source of fluid pressure, mechanism adapted to be operated by said pressure for work-performing movement; means operable at will and connections therefrom for controlling the communication of said fluid pressure with said mechanism variably, said connections comprising means for venting in part the pressure admitted and adapted to reduce the ratio of venting to communication as the access for said communication is increased.

1,896,375. WEB REGISTERING MEANS. OSCAR CHARLES ROESEN, Brooklyn, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 22, 1930. Serial No. 476,995. 2 Claims. (Cl. 242—76.)



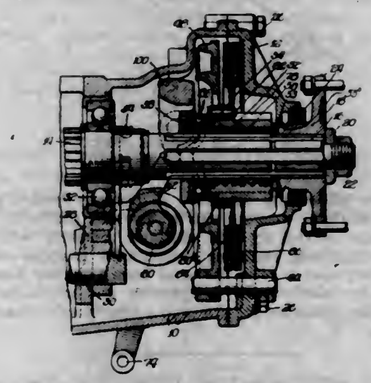
1. In a web supply device for a printing press, the combination with a reel for supporting a roll of paper for supplying the web to the press, a shaft on said reel pedestals supporting said shaft, roll supporting means carried by said shaft, a motor having connections for moving one of said pedestals with the movable shaft back and forth according to the direction of rotation of the motor, a pair of sources of light at a distance apart equal to the width of the web and located at opposite edges of the web, a pair of photo-electric cells located in registration with said lights, whereby, when the web is located out of center, one of the cells will be exposed to the light and energized, and means connected with each cell for causing the rotation of the motor in one direction to move the pedestal and shaft and web back into central position.

1,896,376. LINKAGE CONTROL FOR POWER BRAKES. EDWARD A. ROCKWELL, Chicago, Ill. Filed Jan. 18, 1930. Serial No. 421,709. 4 Claims. (Cl. 188—140.)



1. Brake mechanism for vehicles comprising manually pedal controlled linkage, spring means normally holding said linkage in released position, a power brake unit operable by said pedal linkage, linkage output associated with and extending from said power brake unit to auxiliary brakes, spring means stronger than said first mentioned spring means for holding said last named linkage in released position and a coupling member between said linkages.

1,896,377. POWER BRAKE UNIT. EDWARD A. ROCKWELL and MARCEL GARANCHER, Chicago, Ill. Filed Mar. 4, 1931. Serial No. 519,999. 10 Claims. (Cl. 188—140.)



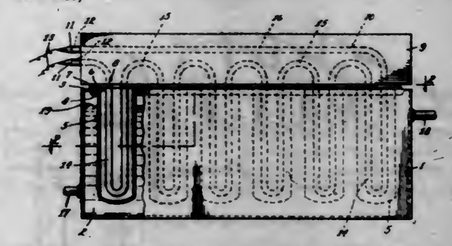
5. In a power brake, a drive shaft, a normally rotatable but retardable braking member mounted concentric with respect to said drive shaft, yieldable coupling means between said braking member and said shaft comprising a pair of sleeves spirally threaded together, each of said sleeves being axially displaceable relative to said shaft and said braking member, abutment means adapted for engagement by the opposite ends of said sleeves, and relatively displaceable with respect to each other in an axial direction, input means for producing frictional retardation of said braking member and output means moved by the relative axial displacement between the abutment means at the opposite ends of said sleeves.

1,896,378. OIL SEAL. EDWARD A. ROCKWELL, Chicago, Ill. Filed June 20, 1929. Serial No. 372,439. 5 Claims. (Cl. 288—1.)



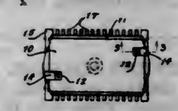
1. A unitary circular seal comprising a flexible packing including an annular flange and a radial sealing flange, a metal ring on the inner side of said annular flange of said packing, said metal ring including radially projecting resilient fingers adapted to engage and yieldably press against the back of said radial sealing flange of said packing and a retaining and supporting member including a channel shaped gripping portion adapted to receive and engage circular marginal edges of said packing and said metal ring.

1,896,379. STERILIZING APPARATUS. JAMES C. ROSS, Los Angeles, Calif. Filed Nov. 17, 1930, Serial No. 496,361. Renewed June 20, 1932. 4 Claims. (Cl. 99—15.)



4. In a sterilizing apparatus, the combination of an elongated body with a sterilizing chamber within the same, said body sterilizing chamber with an upper wall having a plurality of openings therein, a plurality of quartz tubes extending into said openings from above and projecting down into the sterilizing chamber, a cover seating on said body and consisting of a moulded composition, and having a continuous generating tube set in the same with means associated with the tube for producing sterilizing rays emanating from the tube, said tube having U-form extensions projecting downwardly from the cover and received respectively in the said quartz tubes, and means for passing the liquid to be sterilized longitudinally through the said sterilizing chamber and past the said quartz tubes, said continuous tube having both ends projecting from the cover adjacent to each other at the same end of the cover.

1,896,380. SAFETY RAZOR. ERHARD NICOLAUS WEBER, New York, N. Y. Filed July 13, 1932. Serial No. 622,283. 5 Claims. (Cl. 30—12.)



1. In a safety razor, a blade holding plate for location above a razor blade and having a cutout, a blade guard for location beneath the blade and having a projection adapted to extend through a cutout in the blade and to extend into said cutout of the blade holding plate and against the sides thereof and of smaller length than said cutout so that a small area of the blade is exposed and adapted to be provided with edge indicating characters.

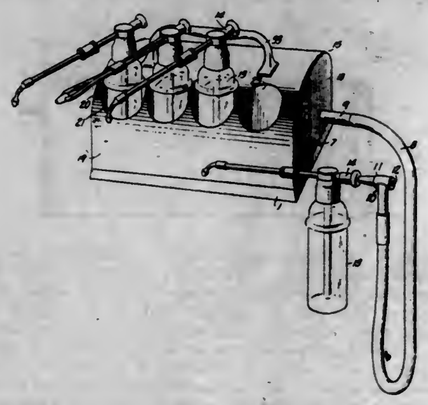
1,896,381. METHOD FOR TREATING NATURAL AND ARTIFICIAL SILK AND PRODUCTS OBTAINED THEREBY. FRIEDRICH WILHELM WEBER, Hackensack, and EUGENE SCHAEFER, Englewood, N. J., assignors to Maywood Chemical Works, Maywood, N. J., a Corporation of New Jersey. Filed Feb. 11, 1931. Serial No. 515,188. 12 Claims. (Cl. 8—13.)

1. As a base for weighting both natural and artificial silk fibers, an aqueous solution of the basic chlorides of tin and of a metal other than a rare earth metal, said latter metal forming a soluble chloride and an insoluble phosphate.

6. The process of weighting both natural and artificial silk fibers, consisting in acting on the fiber with the

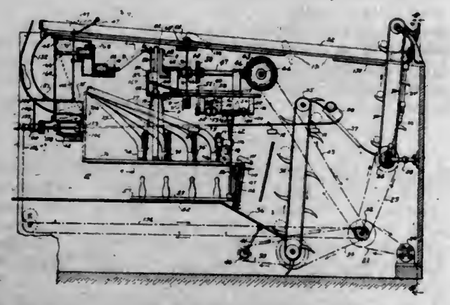
aqueous solution of basic chlorides of a plurality of weighting metals other than rare earth metals, then washing the fiber with water, and subjecting the fiber thus treated to the solution of a salt capable of forming an insoluble salt with the metals of the salts of aforesaid aqueous solution.

1,896,382. PORTABLE POWER VAPORIZER. FRED G. WHITE, Kansas City, Mo., assignor to William H. Jordan, Kansas City, Mo. Filed June 12, 1929. Serial No. 370,426. 3 Claims. (Cl. 299—1.)



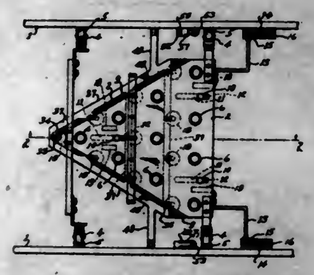
2. In a portable vaporizer of the character described including a vaporizing unit and a plurality of medicament containing flasks adapted to be selectively connected with said unit, a base member supporting the vaporizing unit at one side thereof, a cover member including a hollow shield complementary to the base member and having longitudinally extending curved portions extending over said unit and over a space adjacent said unit to accommodate said flasks, one of the curved portions having openings through which the flasks are inserted, means supported in said openings and depending into said space for supporting the flasks, and a handle fixed to said cover intermediate said curved portions whereby the flasks tend to counterbalance the vaporizing unit when the device is transported.

1,896,383. PIN-SETTING MACHINE. WILLIAM WHITE, Newark, N. J., assignor to Morton L. Adler, New Rochelle, N. Y., trustee. Filed Dec. 10, 1929. Serial No. 412,995. 14 Claims. (Cl. 273—43.)



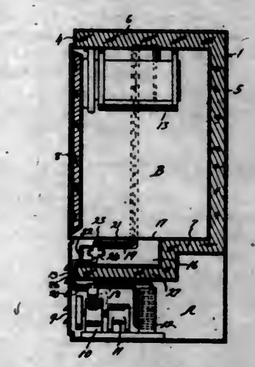
1. In combination with a bowling alley having a primary pit at the rear of the alley and a secondary pit positioned above said primary pit, of a pin-setting machine, therefor, said pin-setting machine comprising an elevator for conveying balls and pins from said primary pit to said secondary pit, guide means for segregating the balls from the pins within said secondary pit and for returning the balls to the head of the alley, pin conveyor means, a second elevator for conveying pins from said secondary pit to said pin conveyor means, a plurality of pin pockets movable transversely of said alley, said pin conveyor means operating to deliver pins in succession to said pin pockets, and a vertically movable spotter having pin chutes movable into alignment with said pin pockets and arranged to convey pins from said pockets to desired upright positions on said alley.

1,896,384. PIN-SETTING MACHINE. WILLIAM WHITE and HENRY C. PETERSEN, Hillside, N. J., and William H. Lansmith, Long Island, N. Y., assignors to Morton L. Adler, New Rochelle, N. Y., trustee. Filed May 2, 1931. Serial No. 534,491. 11 Claims. (Cl. 273—43.)



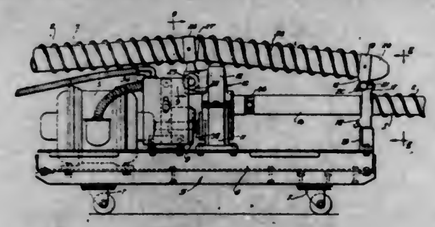
1. In a pin-setting machine, a movable spotter platform, a shiftable member carried by said platform, and pin clamps carried by said shiftable member, said pin clamps comprising, clamping elements for gripping standing bowling pins to raise the same from the alley floor as said spotter platform moves upwardly and means for releasing the pins from the gripping action of said clamping elements.

1,896,385. REFRIGERATING APPARATUS. THOMAS C. WHITEHEAD and HAROLD A. GREENWALD, Detroit, Mich., assignors, by direct and mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 11, 1929. Serial No. 406,412. 8 Claims. (Cl. 62—116.)



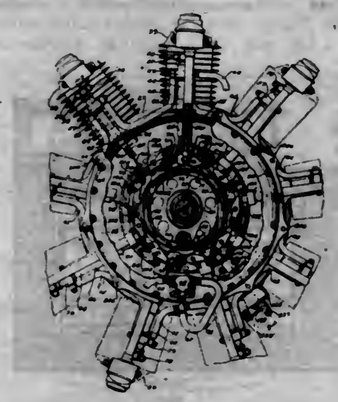
4. In combination, a refrigerator cabinet having a wall and three chambers opening through said wall, and refrigerating apparatus having portions within each of said chambers, the portions of said apparatus within the lowermost and intermediate chambers being movable as a unit and including means in said intermediate chamber whereby the portions within the lowermost and intermediate chambers may be uncoupled from the portion within the uppermost chamber without disturbing the latter.

1,896,386. CONVEYER. ALFRED O. WILLIAMS, Battle Creek, Mich., assignor to Clark Tructractor Company, Buchanan, Mich., a Corporation of Michigan. Filed Sept. 26, 1930. Serial No. 484,546. 12 Claims. (Cl. 198—213.)



1. In a conveyer system, a plurality of conveyer sections including rotatably mounted shafts having threads thereon for propelling articles along the shafts upon rotation thereof, independent driving units for the shafts of the individual sections, means for rotatably supporting the shafts of each section upon and above the driving unit of the next succeeding section, and extension members rotatably supported upon and above each of the driving units and connected to the shafts of the next preceding conveyer section, said extension members delivering to the next succeeding conveyer section.

1,896,387. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 29, 1929. Serial No. 358,899. 4 Claims. (Cl. 244—25.)



4. Propelling means for aircraft comprising a propeller, a self-igniting explosion engine connected to actuate the propeller, means for furnishing the cylinders with air charges of sufficient volume to unite with fuel charges in any volume of their range adjustment, and means for injecting variable charges of liquid fuel into the air charges in the cylinders, said engine construction being such that the speed of the aircraft increases while climbing below a high elevational limit without increasing the volume of the fuel charges.

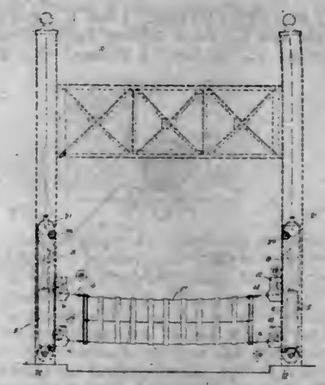
1,896,388. LOCK FOR SCREW THREADED DEVICES. REINHOLD CARL ZEIDLER, Detroit, Mich., assignor to Long Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 12, 1931. Serial No. 508,038. 1 Claim. (Cl. 151—42.)

A stud for association with a supporting member having an internally threaded aperture and a seat around the aperture, and wherein the seat has a portion lying out of the normal plane of the seat, said stud having a body externally threaded at opposite ends, and a relatively thin flange intermediate the ends of the stud and disposed between said screw threaded portions, said flange being shaped for the reception of a tool or the like whereby one end of the stud may be screwed in said aperture with the



flange abutting the seat, said flange having sufficient strength for tightly screwing the stud into the aperture when turned by the tool, and said flange being distortable whereby portions of it may be distorted into cooperative relation with the said portion of the seat which lies out of the normal plane of the seat to lock the stud in place.

1,896,389. BRAKING MECHANISM FOR YIELDING HIGHWAY BARRIERS. PAUL C. BUTTS, San Francisco, Calif., assignor to Joseph B. Strauss, San Francisco, Calif. Filed June 4, 1932. Serial No. 615,453. 6 Claims. (Cl. 39—1.)

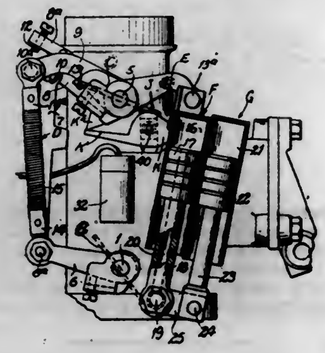


1. In combination with a highway barrier capable of being moved to an operative and inoperative position, of a hydraulic braking mechanism associated with the barrier and connected to said barrier when in operative and inoperative position and serving to retard movement of the barrier in a horizontal direction.

1,896,390. CARBURETOR. WILLIAM C. CARTER, Flint, Mich. Filed June 11, 1930. Serial No. 460,371. 16 Claims. (Cl. 261—52.)

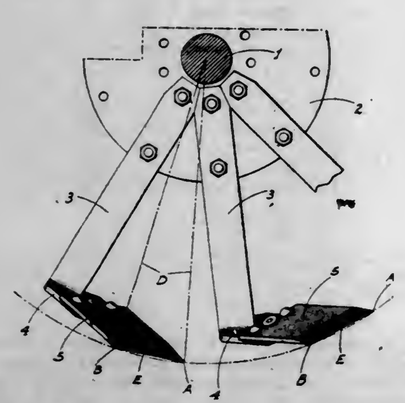
1. A carburetor provided with a main passageway through which air travels to the intake of an engine, a throttle valve and an air admission valve for said passageway, a suction amplifier arranged in said main passageway between said valves, means for causing the position of said air admission valve to change when the position of the throttle valve is changed, means for closing said air admission valve without changing the position of said throttle valve, a fuel orifice for supplying fuel to said main passageway, a fuel valve for restricting said fuel orifice under certain conditions, and an operating mecha-

nism for changing the position of said fuel valve, constructed so that said fuel valve will act as a variable restriction for said fuel orifice in the intermediate positions of the



throttle valve and will be maintained in an inactive or wide open position when the throttle valve and air admission valve are wide open.

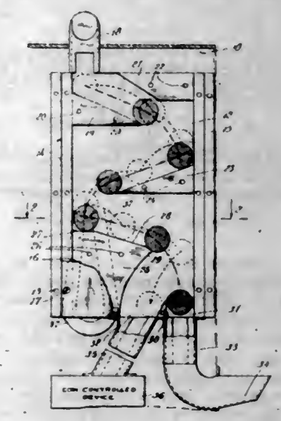
1,896,391. ROTARY CUTTER. LOOK L. CHONG, JUE L. CHONG, and SAM L. CHONG, Isleton, Calif. Filed June 4, 1932. Serial No. 615,384. 2 Claims. (Cl. 97—212.)



1. In a rotary root cutting implement, a rotary member movable along the ground, and a blade mounted on such member substantially tangent to the axis thereof and adapted to rotate therewith; the blade having a straight cutting edge disposed at a transverse acute angle to the line of travel of the implement, and the body of the blade being set relative to the rotary member so that both ends of such cutting edge are equidistant from the axis of rotation of such member.

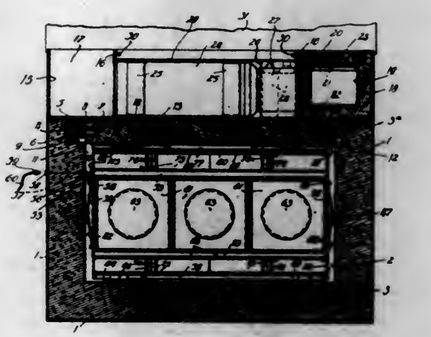
1,896,392. SPURIOUS COIN DETECTOR AND EJECTOR. EMIL DE RYSS, Scarsdale, N. Y. Filed Dec. 11, 1930. Serial No. 501,433. 15 Claims. (Cl. 194—100.)

1. In a spurious coin detector and ejector, the combination of a plurality of inclined anvils arranged in zigzag series, a coin guide leading to the first anvil, the inclination of said anvils decreasing from first to last, and a partition adjacent the discharge end of the last anvil for



separating spurious coins from genuine coins in accordance with their resultant resilient effects after traversing said anvils.

1,896,393. LUNCH BOX. JAMES H. DEVINE, Champaign, Ill., assignor to Dev-Insular Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 17, 1929. Serial No. 333,185. 3 Claims. (Cl. 220—15.)



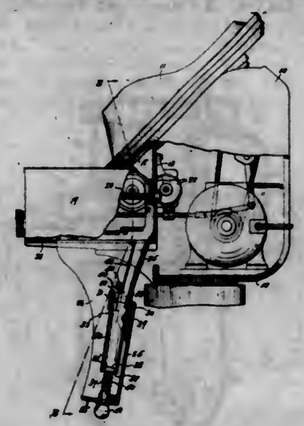
1. In combination in a kit of the character described, an outer casing, a container within the casing and thermally insulated therefrom, an inner casing within the container, and point contact cushioning means holding the inner casing spaced away from the container, said means comprising a spring having a slot therein mounted upon said inner casing, and means secured to said casing and engaging in said slot for providing a slidable connection between said spring and said casing.

1,896,394. COIN GUIDING AND WRAPPER HOLDING MEANS FOR COIN COUNTING MACHINES. EDWARD P. DONNELLAN, Brooklyn, N. Y., assignor to Standard-Johnson Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 28, 1931. Serial No. 533,400. 7 Claims. (Cl. 226—14.)

1. A tubular wrapper holding means for coin counting machines, comprising a carrier frame, means to detachably

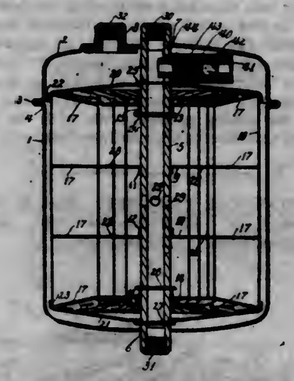
CARNEGIE LIBRARY OF ATLANTA

connect said carrier frame to the machine, said carrier frame having guide chute means to receive counted coins discharged by the machine, wrapper seating means aligned with said guide chute means, said seating means being offset relative to said chute means to provide a stop shoulder



at the juncture thereof engageable by upper open ends of wrappers disposed in said seating means, and a spring biased retractable means to engage lower ends of the thus disposed wrappers to releasably retain the upper ends thereof engaged with said stop shoulder.

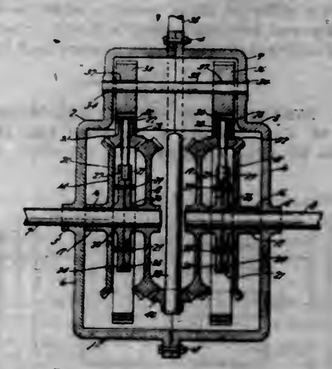
1,896,395. FILTER. DELMAR D. DOOLEY, Rock Island, Ill., assignor to Dooley Improvements, Inc., Rock Island, Ill., a Corporation of Illinois. Filed June 5, 1930. Serial No. 459,318. 6 Claims. (Cl. 210—164.)



1. In an oil filter, a pipe, a slotted cupped disc fastened thereon, a fabric fluted into the slots in said disc and folded within its cupped portion to seal off the ends of the flutes, a second cupped disc disposed on said pipe with its concave face adjacent the concave face of the slotted disc, a flange on said second disc against which the peripheral edge of said first disc binds said fabric, and means for holding said discs together under tension, said tension tending to flatten said first cupped disc to thereby securely bind the said fabric to said flange.

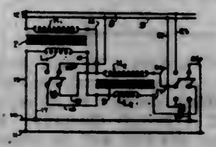
1,896,396. STEERING DEVICE. JOHN E. ERICKSON, East Grand Forks, Minn. Filed June 20, 1932. Serial No. 618,110. 2 Claims. (Cl. 180—9.2.)

1. In a steering device for vehicles, a pair of shafts connected to the driving wheels of the vehicle, outer bevel gears secured to the shafts, inner bevel gears journaled on the shafts adjacent the outer gears, ring gears journaled on the shafts between the inner and outer bevel gears, differential pinions journaled on the ring gears and placed in mesh with the inner and outer bevel gears, a counter-



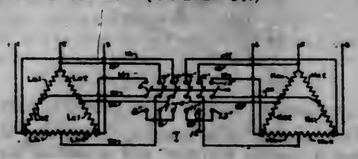
shaft, pinions secured to the countershaft and placed in mesh with the ring gears, a steering shaft, and a steering pinion secured to the steering shaft and meshing with the inner bevel gears.

1,896,397. SERIES PARALLEL TRANSFORMER CONNECTION. FRAZER W. GAY, Newark, N. J. Filed May 28, 1930. Serial No. 456,753. 8 Claims. (Cl. 171—119.)



1. In a transformer having a plurality of primary windings connected in series and a plurality of secondary windings, each of said primary windings being arranged in inductive relation to an individual secondary winding, said secondary windings being connected in series, switch means to throw the load on to one primary and its inductively related secondary winding and additional switch means to reverse the polarity of one half of said windings and connect all said primary windings in multiple and all said secondary windings in multiple.

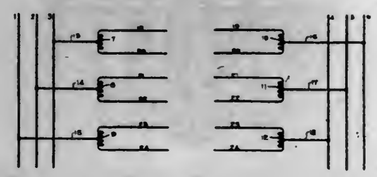
1,896,398. TRANSFORMER CONNECTION. FRAZER W. GAY, Newark, N. J. Filed May 29, 1930. Serial No. 457,074. 7 Claims. (Cl. 171—97.)



1. In a system of transformer connections, a three phase power transmission system having three primary phase conductors and three secondary phase conductors, transformer means connected in said transmission system, said transformer means having a primary circuit comprising a primary winding with six winding sections, there being two of said winding sections connected in series across the two primary phase conductors of each phase of said three phase system, a secondary circuit comprising a sec-

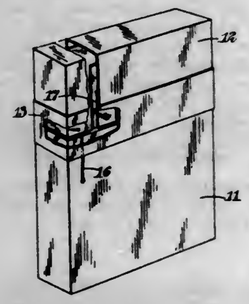
ondary winding with six winding sections, there being two of said winding sections connected in series across the two secondary phase conductors of each phase of said three phase system, and switching means connected to said transformer means for switching each of said winding sections to a different phase position while maintaining said primary and secondary circuits intact, whereby the capacity of said transformer means to carry load is varied.

1,896,399. SYSTEM OF ELECTRIC TRANSMISSIONS. FRAZER W. GAY, Newark, N. J. Filed Dec. 11, 1930. Serial No. 501,607. 3 Claims. (Cl. 171—97.)



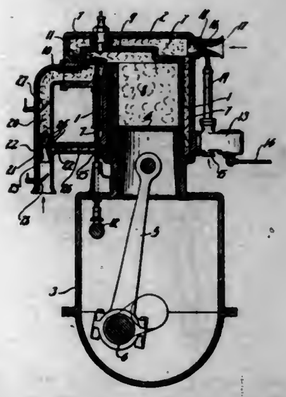
1. A polyphase transmission tower line comprising a plurality of conductors per phase, a high voltage insulator at each supporting tower acting as a common support for all the conductors in one phase, and low voltage insulators maintaining each conductor in a phase in spaced and separately insulated relation to every other conductor in said phase, each conductor in a phase being transposed with respect to the conductors of the remaining phases.

1,896,400. OPENING DEVICES FOR BOXES OR LIKE CONTAINERS. HERBERT TENNYSON GASELTINE, Wembley Park, England, assignor to Ilford Limited, Ilford, Essex, England, a British Company. Filed Sept. 25, 1930, Serial No. 484,360, and in Great Britain Apr. 1, 1930. 6 Claims. (Cl. 229—51.)



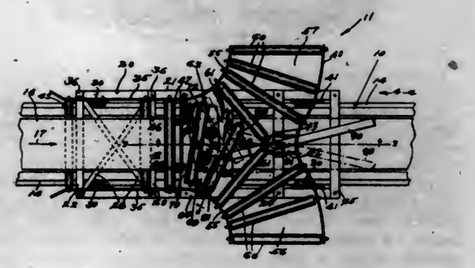
1. The combination of a container comprising a body portion and a closure therefor, and a sealing layer of tearable material overlying the joint between said body and closure portions, and a cutter cord of flexible material which is sealed beneath said sealing layer with one end protruding for a hand grip and which has throughout its length a circumferentially serrated surface structure so constituted as to provide a degree of friction sufficient, without positive anchorage of that end of the cord remote from the hand grip, to resist slip in the lengthwise direction of the cord between it and the sealing layer when the cord is pulled to break the seal.

1,896,401. FUEL DELIVERY SYSTEM FOR INTERNAL COMBUSTION ENGINES. ERNEST R. GODWARD, New York, N. Y., assignor to The Eclipse Petrol Economiser System Company, Limited, Christchurch, New Zealand, a Corporation of New Zealand. Filed Feb. 10, 1931. Serial No. 514,741. 3 Claims. (Cl. 123—122.)



1. Means for preparing and delivering gaseous fuel mixtures to the cylinders of internal combustion engines, comprising an engine cylinder having a jacketing chamber enveloping the walls thereof, a carburetor for producing a fuel mixture, means for connecting said carburetor in communication with said jacketing chamber whereby the fuel mixture is caused to circulate through the latter in contact with the hot cylinder walls with cooling effect upon the latter and vaporizing effect upon the fuel mixture, said cylinder having a fuel mixture admission means communicating with the interior thereof, an intake conduit leading to said admission means, means to conduct the vaporized fuel mixture from said jacketing chamber to said intake conduit, and means associated with said intake conduit for mixing additional air with the fuel mixture conducted therethrough for delivery into said cylinder.

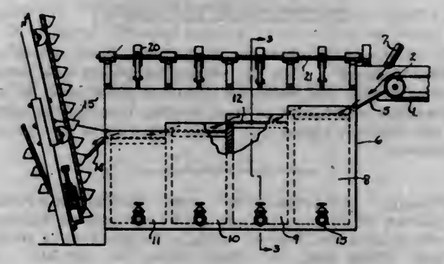
1,896,402. CONVEYER TAKE-OFF. EARL G. GRIFFITH, Los Angeles, Calif. Filed Oct. 24, 1930. Serial No. 490,931. 19 Claims. (Cl. 198—20.)



1. In combination: a belt conveyer having a frame and a power driven belt traveling thereon; a take-off frame shiftably mounted on said conveyer frame; means on said take-off frame for forming a relatively shallow step in said belt; gravity rolls mounted on said take-off frame below the level of the top of said step and adapted to discharge objects from either side of said conveyer; and

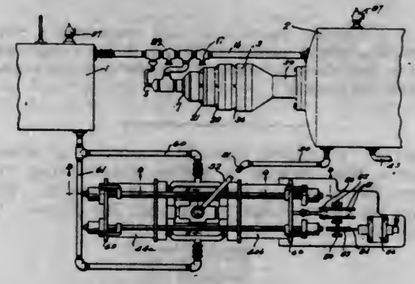
selective means for causing objects such as boxes and the like discharged over said step in said conveyer to pass onto said rolls and to be directed to the right or to the left as desired.

1,896,403. PROCESS OF MAKING LIME FROM OYSTER SHELLS. CECIL RHEA HADEN, Houston, Tex., assignor to The Haden Lime Company, Houston, Tex., a Corporation of Texas. Filed Aug. 29, 1930. Serial No. 478,596. 9 Claims. (Cl. 23—186.)



3. A process of making lime including washing, crushing and screening oyster shells to reduce all the pieces to a substantially uniform size, removing all the small particles from among the pieces and calcining these pieces in a rotary kiln.

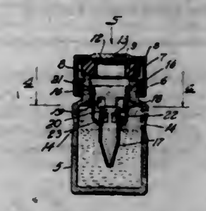
1,896,404. AIR COMPRESSING APPARATUS. WILLIAM B. HALE, Huntington Park, Calif., assignor to Hale Pneumatic, Ltd., Lovelock, Nev., a Corporation of Nevada. Filed June 8, 1929. Serial No. 369,282. 4 Claims. (Cl. 230—104.)



1. In apparatus for raising the pressure of a fluid, the combination of a reservoir for holding the fluid at a given pressure, a reservoir for holding the fluid at a relatively lower pressure, an injector directly connecting the said reservoirs, through which the fluid flows from the high pressure reservoir to the low pressure reservoir, said injector having a plurality of nozzles projecting in the direction of flow, with means for repeatedly admitting and entraining additional quantities of the same fluid at a lower pressure than that in the said reservoirs, a compressor receiving the fluid from the low pressure reservoir, for compressing the fluid from the low pressure reservoir and for forcing a quantity of the same back into the high pressure reservoir.

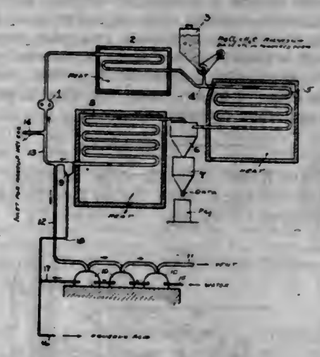
1,896,405. INK BOTTLE. BONNER B. HAUSER, Denver, Colo. Filed May 16, 1932. Serial No. 611,582. 6 Claims. (Cl. 120—69.)

1. An ink bottle comprising a vessel, and a measuring element suspended therein and composed of an entrance chamber having ports for the admission of ink, a container of reduced diameter at the bottom of the chamber,



and a rest for a pen holder projecting upwardly from said bottom to adjacent said ports, and including passages for the flow of ink from said bottom to the container.

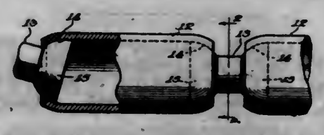
1,896,406. POWDERED ANHYDROUS MAGNESIUM CHLORIDE AND METHOD OF MAKING SAME. SHELDON B. HEATH, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Apr. 5, 1929. Serial No. 352,710. 7 Claims. (Cl. 23—91.)



5. The method of making powdered anhydrous magnesium chloride which comprises suspending air-dried magnesium chloride in powdered form in a rapidly moving current of hydrochloric acid gas at a temperature of approximately 300° C., maintaining the same in suspension until dehydration is substantially complete, separating the substantially anhydrous powdered product from the hot gaseous current, cooling the latter to a temperature of about 40° C. to condense water therefrom as a solution of hydrochloric acid and returning the dehumidified gas to the dehydrating step.

6. The method of dehydrating powdered magnesium chloride which comprises suspending a powdered hydrated form thereof in a current of hydrochloric acid gas heated to a temperature sufficient to vaporize water therefrom and separating the dehydrated product from the hot gaseous current.

1,896,407. CONVEYER. ARTHUR HOEFFLEUR, Chicago, Ill. Filed June 29, 1931. Serial No. 547,720. 5 Claims. (Cl. 198—189.)



3. A conveyer having a chain comprising a series of alternately arranged members having headed ends and

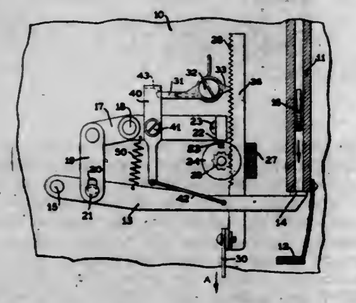
members having socketed ends, the latter having their sockets formed with contracted end margins forming integral endlessly annular lips embracing and securing the heads of the former within said sockets.

1,896,408. METHOD OF MANUFACTURING CHENILLE. RAYMOND B. KALBACH, Philadelphia, Pa. Original application filed Aug. 27, 1930, Serial No. 477,998. Divided and this application filed June 24, 1931. Serial No. 546,491. 2 Claims. (Cl. 712—262.)



1. The herein described method of manufacturing chenille which consists in first taking strands of yarn and forming same around a former of circular cross-section into a continuous, braided strip of material of 8-shaped cross-section, fashioned to provide side edge loops, then stitching said braided 8-shaped strip of material intermediate its side edge loops throughout its extent, and finally severing the loops of at least one side edge of said strip of material to form a pile therefor.

1,896,409. LOCKING DEVICE FOR SCALES. JAMES I. M. KIBBE, Muskegon, Mich. Filed Apr. 20, 1931. Serial No. 531,298. 6 Claims. (Cl. 194—47.)

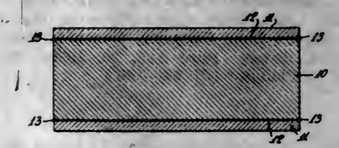


1. In a weighing machine, the combination of a coin chute, a trip lever actuated by a coin passing through said chute, a detent lever, a detent thereon, a reciprocating rack bar, a pinion in mesh therewith, a drum cooperatively associated with the pinion, said drum having a slot therein to receive the detent, means connecting the levers whereby the actuation of the first lever operates the detent lever to raise the detent from its slot, a latching lever having engagement with the teeth on the rack bar and means mounted upon the detent lever and engageable with the latching lever to lock the same against movement in one direction whereby the rack bar is held from movement in one direction.

1,896,410. TARNISH RESISTANT ALLOY. ROBERT H. LEACH, Fairfield, Conn., assignor to Handy & Harman, New York, N. Y., a Corporation of New York. Filed Jan. 19, 1931. Serial No. 509,885. 2 Claims. (Cl. 75—1.)

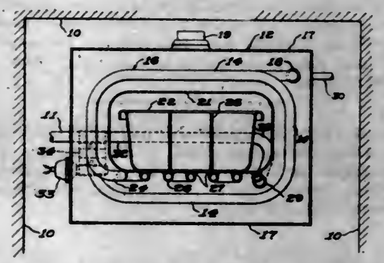
1. An alloy containing silver ranging from 80% to 95%, nickel ranging from 0.10% to 2%, and the remainder cadmium.

1,896,411. CORROSION RESISTANT METAL PLATE AND PROCESS OF MAKING THE SAME. ALFRED E. MARKREY, Irvington, N. J., assignor, by mesne assignments, to The Plykrome Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 3, 1931. Serial No. 527,610. 11 Claims. (Cl. 29—189.)



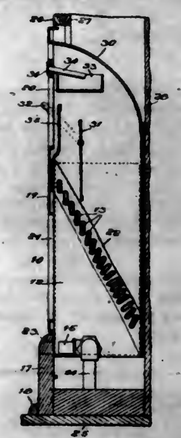
1. The process of making a composite sheet, which includes forming a slab by assembling superposed rolled layers of steel and corrosion resistant metal with an intermediate rolled layer of iron, welding together the edges of the sheets or plates, and rolling said slab to the desired thickness.

1,896,412. EVAPORATOR FOR REFRIGERATORS. GEORGE W. MASON, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 11, 1929. Serial No. 354,847. 10 Claims. (Cl. 62—8.)



3. A refrigerant evaporating unit comprising a refrigerant evaporating conduit having an end portion, and a freezing tray having a resilient member normally contacting said end portion.

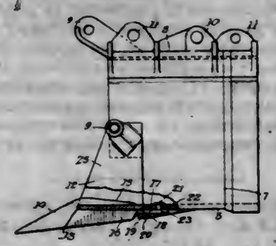
1,896,413. HEATING DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed June 20, 1929. Serial No. 372,359. 10 Claims. (Cl. 257—238.)



6. In a device of the kind described, a housing, a radiator unit positioned in the lower portion of the housing,

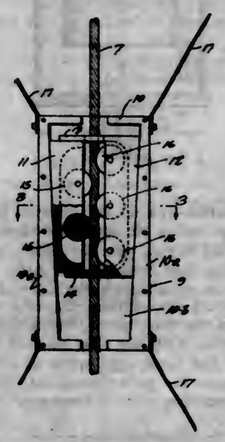
comprising oppositely positioned tanks connected by horizontally extending flat tubes, the spacing between said tubes being divergently inclined to the vertical, said housing having a removable front wall plate, said plate having an outlet grille in its upper end and an inlet grille in its lower end, said inlet grille being adjacent to and extending substantially the full height of the radiator unit, said radiator unit having its upper end adjacent the front wall plate of the housing and its lower end adjacent the rear wall of the housing.

1,896,414. POWER ACTUATED DIPPER. JOSEPH P. MURTAUGH, Chicago Heights, Ill., assignor to American Manganese Steel Company, Chicago Heights, Ill., a Corporation of Maine. Filed Aug. 26, 1931. Serial No. 559,433. 8 Claims. (Cl. 37—141.)



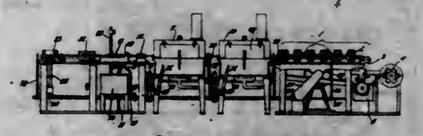
8. In an excavating dipper, a dipper front wall, a digging lip member adapted for detachable securement to said front wall, said lip including a plurality of integral tongue-like extensions rearwardly extending therefrom, said front wall including a flanged forward edge provided with a plurality of openings adapted to receive said extensions of said lip and means for fastening said extensions to said front wall rearwardly of said flanged edge.

1,896,415. LINE TIGHTENER. ROBERT MCDONALD PYLES, Bakersfield, Calif., assignor of one-half to James A. Kammerdiner, Los Angeles, Calif. Filed Nov. 24, 1931. Serial No. 577,012. 5 Claims. (Cl. 254—135.)



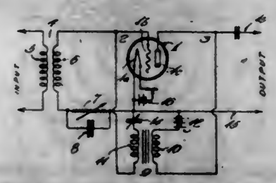
1. A line tightener for a line spooling drum wherein the load on the line is relieved in winding of the line thereon: said tightener comprising a frame, a slipper slidable longitudinally in said frame, said slipper including opposed jaws for grasping, pressing and permitting travel of the line therebetween in both directions and having means coacting with said frame to collapse said jaws at one end of said frame and to enable opening of said jaws at the other end, projecting means on said jaws to define a sinuous path for said line, said slipper being urged toward the collapsing end of said frame by said line when moving in load relieved direction and toward the jaw opening end when moving in the opposite direction.

1,896,416. APPARATUS FOR MAKING TUBE. BERT L. QUARNSTROM, Grosse Pointe Park, Mich., assignor to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed July 21, 1930. Serial No. 469,347. 11 Claims. (Cl. 113—38.)



10. An apparatus for making tube from continuous strip stock comprising in combination, tube-forming means through which the strip and formed tube move with lengthwise movement and which fashions the stock into tube during such movement, a closed heating chamber positioned adjacent the tube-forming means through which the fashioned tube moves, a solder pot within the closed chamber for holding a body of molten solder and over which the tube moves, means within the closed chamber for subjecting the tube to a bath of such molten solder as the same moves through the chamber, a second closed heating chamber positioned adjacent the first mentioned heating chamber and the two chambers being arranged so that the moving tube passes out through the first chamber and into the second chamber with a relatively short length of tube between them, a solder pot within the second chamber for holding a body of molten solder which is entirely separate from the body of molten solder in the first chamber, and means within the second chamber for subjecting the tube to a bath of molten solder as the tube passes through the second chamber.

1,896,417. FREQUENCY DIVISION CIRCUIT. ROBERT M. PAGE, Washington, D. C. Filed Mar. 13, 1931. Serial No. 522,486. 9 Claims. (Cl. 250—30.)

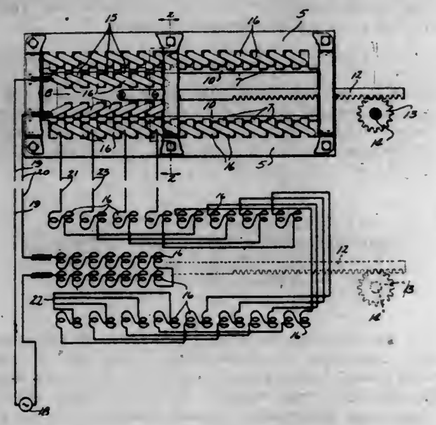


1. A frequency division circuit comprising an electron tube having cathode, grid, and plate electrodes, input and output circuits interconnecting said electrodes, said input circuit including a pair of branch circuits, one of said branch circuits including inductance and capacity and the other of said branch circuits including a resistance and a condenser connected in shunt thereto, electromagnetic means coupling one of said branch input circuits to said output circuit, means for impressing oscillations upon said input circuit, and connections to said output circuit for deriving currents of a submultiple frequency therefrom.

1,896,418. REMOTE CONTROL APPARATUS. HUGH G. PHELPS, Milwaukee, Wis., assignor of one-half to Edward G. Phelps, Milwaukee, Wis. Filed Feb. 8, 1930. Serial No. 426,994. 6 Claims. (Cl. 172—239.)

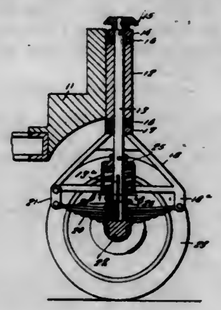
1. A remote control device comprising a plurality of substantially identical units each including a relatively stationary field core and a relatively reciprocable arma-

ture core, the said cores being provided with complementary poles, corresponding windings on the poles of the respective field and armature cores, a series connection



between corresponding windings of the several units, a portion of the poles of the field core being offset with respect to poles of the armature core of each unit.

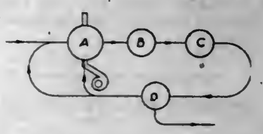
1,896,419. SELF-PROPELLED VEHICLE. WILLIAM LESLIE PINSON, Barboursville, W. Va., assignor to C. L. Harshbarger, Milton, W. Va. Filed Feb. 12, 1932. Serial No. 592,635. 4 Claims. (Cl. 280—97.)



2. A dirigible wheel construction comprising an axle, wheels supporting said axle, a pair of oppositely disposed brackets, multiple leaf springs connecting said brackets with said axle, a bar connecting said brackets and provided with an aperture, a shaft extending through said bar and provided at one end with keys, a socket on said axle provided with internal keyways receiving the keys on said end of said shaft, a collar fixed on said shaft, and a spring disposed about said socket and the proximate end of said shaft, and having one end bearing against said axle, and a relatively opposite end bearing against said collar.

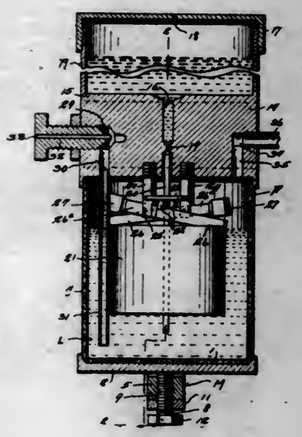
1,896,420. PROCESS OF PRODUCING HYDROGEN. FREDERIC M. PYZEL, Piedmont, Calif., assignor to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Aug. 13, 1928. Serial No. 299,291. 11 Claims. (Cl. 23—212.)

1. In a process for the conversion of hydrocarbons into hydrogen, the steps of: partially decomposing said hydrocarbons by heat while maintaining the thermal conditions of such order that the substantial decomposition of methane is avoided, fractionating the resultant gas into a fraction consisting of hydrogen of the desired degree of purity, and a fraction rich in methane, comprising the undesirable components of the gas resultant from the decomposition, and deriving the heat required for the decomposition from the combustion of the latter fraction.



6. The process of producing substantially pure hydrogen from hydrocarbons, consisting of: partially decomposing said hydrocarbons in a converter by passing the hydrocarbons in gaseous condition over heated refractory material, substantially confining the decomposition to the fractions heavier than methane, by regulation of the velocity and the quantity of gas and the temperature of the refractory material, purifying and fractionating the resultant gas, and heating the converter by combustion of the undesirable compounds, separated by the fractionation.

1,896,421. LUBRICATOR. GEORGE W. QUIVEY, Tacoma, Wash. Filed Feb. 26, 1929. Serial No. 342,766. 2 Claims. (Cl. 137—68.)

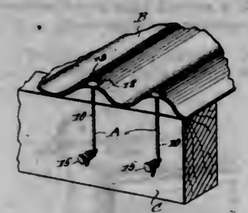


1. In a lubrication system for internal combustion engines, a container having its upper end open, a lid for said open end, said lid having an inlet port, a needle valve for controlling the flow through said port, said valve extending within the container, a disc carried by the needle valve, a float within the container, a rock arm supported by the lid within the container between the float and the disc and contacting with the disc so that upon rise and fall of the float the valve will move into closed or open position, and means for maintaining said disc against rotation while permitting sliding movement thereof.

1,896,422. ROOF ANCHORING MEANS. HERMENEGILDO C. REYES, Manila, P. I. Filed Oct. 23, 1929. Serial No. 401,812. 1 Claim. (Cl. 108—33.)

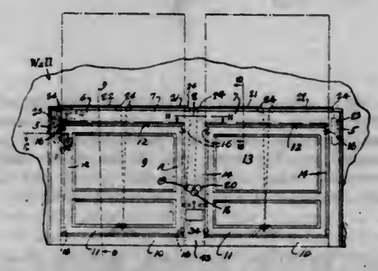
An anchoring device for metal roofs comprising an elongated shank formed of bendable material, and an integral coiled substantially concavo-convex shaped head formed on the upper end of the shank, the convolutions of the coil

lying in different planes increasing in diameter toward the free edge of the head and being in intimate contact with one another, said elongated shank being adapted to be



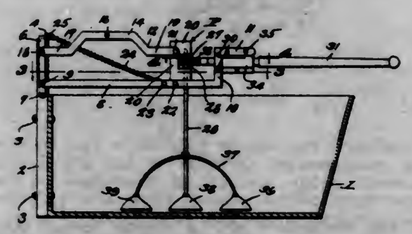
wound around a fastening member at its lower end for permitting a free movement under expansion and contraction of an element adapted to be anchored thereby.

1,896,423. WARDROBE. ROBERT GALLOWAY ROSS, Charlotte, N. C., assignor to Mae Ellis, Charlotte, N. C. Filed Nov. 22, 1929, Serial No. 409,081. Renewed Dec. 15, 1932. 3 Claims. (Cl. 268—26.)



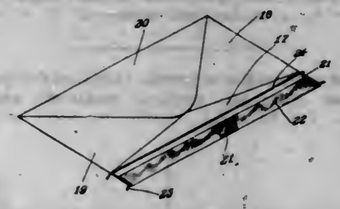
1. In a wardrobe, the combination of a wardrobe frame, a plurality of vertically slidable doors mounted in said frame, a hanger affixed to the bottom of each of the doors, weights for counter-balancing the doors, linear elements connecting the aforesaid weights with the aforesaid hangers on the doors, linear elements connected with the hangers, drums with which the last mentioned linear elements are connected and manually operable means connecting with the aforesaid drums for simultaneously raising and lowering both of the doors.

1,896,424. MACHINE FOR CLEANING FABRICS. PHILLIP M. RUTHERFORD, Jacksonville, Tex. Filed Oct. 29, 1931. Serial No. 571,924. 3 Claims. (Cl. 259—144.)



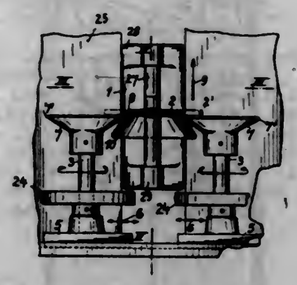
1. A washing machine, comprising a support including a post, a U-shaped end member constituting part of a frame, the U-shaped end member being inverted over the top of the post, means for pivotally connecting the lower part of the U-shaped end member with the post, so that the frame can swing vertically, a shaft mounted to rock in the frame, and disposed in a substantially vertical position, a splasher carried by the shaft, a gear on the shaft, a lever mounted on the frame to swing horizontally, a segment on the lever and engaging the gear, and a stop on the post, the stop engaging the U-shaped end member to limit the downward movement of the frame, and to space the splasher from the bottom of the tub wherein the splasher works.

1,896,425. ENVELOPE. ANTHONY SCARPI, Brooklyn, N. Y. Filed July 2, 1930. Serial No. 465,818. 1 Claim. (Cl. 229—86.)



In an envelope having a body and a main closure flap, an auxiliary closure flap integral with said main closure flap, said closure flaps having the same faces treated with glue and being independently and successively adapted to adhere to said body, a string between said main closure flap and said auxiliary closure flap, a second string between said main closure flap and said body, said strings being adapted to be independently and successively pulled to shirr each successive closure flap.

1,896,426. MACHINE FOR MANUFACTURING HOLLOW ROTARY ELEMENTS FROM CIRCULAR BLANKS OF SHEET METAL. CARL SCHMIDT, Baerl, Germany. Original application filed June 27, 1927, Serial No. 201,850, and in Germany July 5, 1926. Divided and this application filed Sept. 24, 1930. Serial No. 484,201. 2 Claims. (Cl. 80—22.)

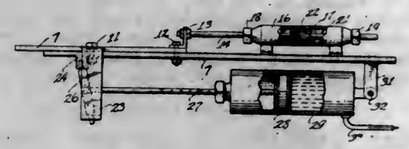


1. A machine for spinning cups from circular blanks of sheet metal, comprising a slide, means on said slide for holding a blank at its centre only, so as to rotate freely, slides adapted to be displaced transversely with respect to said first-mentioned slide, a shaft on each of said last mentioned slides, and rolling tools on said shafts having edges adapted to shape the blank freely into a hollow shape.

1,896,427. HITCH. ARNOLD E. SELVESTER, Korbel, Calif. Filed Feb. 17, 1932. Serial No. 593,624. 3 Claims. (Cl. 280—33.44.)

1. In a hitch for motor vehicles, a draw-bar adapted to be attached to a driven vehicle, of a tongue adapted to

be attached to a trailing vehicle, a cylinder secured to said tongue, a piston positioned in said cylinder and capable of compressing a fluid in said cylinder, means



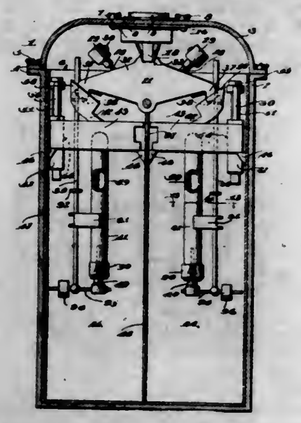
for conducting said fluid to braking mechanism on the trailer, and a lever connected to said tongue and said draw-bar for actuating said piston.

1,896,428. CAMERA FINDER. JOHN SOHN, Deadwood, S. Dak. Filed May 6, 1930. Serial No. 450,189. 1 Claim. (Cl. 88—1.5.)



A new product of manufacture, a finder glass for a camera having formed integral therewith a closed container on one marginal side, the container being provided with a spirit level medium.

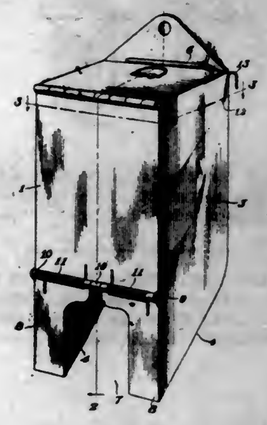
1,896,429. CONDENSATION METER. CHARLES HAROLD SPARKLIN, Topeka, Kans. Filed May 16, 1929. Serial No. 363,691. 15 Claims. (Cl. 73—28.)



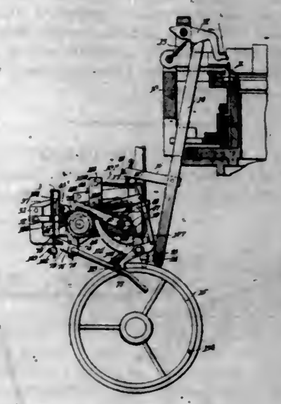
14. In a meter, a liquid compartment, a siphon extending from the compartment for the discharge of the liquid, and a restrictor fitted in the compartment down over the siphon to reduce the amount of liquid necessary in the compartment to start a priming head in the siphon.

1,896,430. CLOTHESPIN BOX. ALEXANDER V. STANAWITZ, Perth Amboy, N. J. Filed May 22, 1930. Serial No. 454,747. 2 Claims. (Cl. 312—73.)

1. A clothes pin holder comprising a receptacle having a back wall, a front wall, side walls and a bottom wall, the side walls extending downwardly below the front wall and said bottom extending forwardly at a downward incline and cut away to form an opening intermediate its sides, the margins defining said opening being turned back to provide a smooth edge about said opening, narrow doors closing against the side walls and the lower forward end of the bottom and having their upper ends extending toward each other to define an opening above the opening in the bottom, said doors having their upper ends hinged to the lower end of the front wall and being movable independently of each other, and springs normally holding the doors in a closed position.

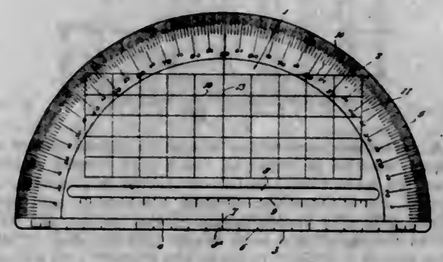


1,896,431. KNITTING MACHINE. EDWARD H. STEERE, Rockwood, Tenn., assignor to Dixie Manufacturing Company, Inc., Rockwood, Tenn., a Corporation of Tennessee. Filed Dec. 4, 1928, Serial No. 323,638. Renewed Aug. 27, 1932. 16 Claims. (Cl. 66—133.)



1. The combination with a circular hosiery knitting machine having a series of needles and a yarn guide adapted to control the feeding of yarn to the needles, of means for controlling the yarn guide including a rotatable drum element having a peripheral depression, a drum follower element adapted to move into and out of said depression upon rotation of the drum element, said follower element being of variable size whereby to vary the period during which it rests in said depression, and means for transmitting vibratory movements of the follower to the yarn guide.

1,896,432. PROTRACTOR. ARTHUR A. VAN WINKLE, Owensboro, Ky. Filed Feb. 5, 1930. Serial No. 426,140. 1 Claim. (Cl. 33—1.)



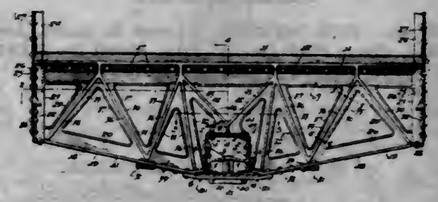
A plotting instrument comprising a body of transparent material having an arcuate edge and a chordal edge, said body having a base line upon one face parallel to the chordal edge and spaced therefrom, the said body being further provided upon its upper face with a protractor scale extending along the arcuate edge thereof between the ends of the base line whereby the said ends of the base line will constitute the zero scale marks of said protractor scale, the face of the body having a linear scale impressed thereon and extending along said chordal edge and beneath the ends of the protractor scale, the under face of the body having a rectangular border delineated thereon and defining a rectangular area partially intersecting the protractor scale and provided with intersecting lines parallel with the border lines to define within the border divisions of said area, said body having a slot extending within the bounds of the protractor scale, one wall of the slot constituting a straight edge disposed parallel with the lower edge of the rectangular border and the other wall of the slot being parallel with the base line and adjacent thereto, the upper face of the body between the lower wall of the slot and said base line bearing a linear scale, the scale at the chordal edge of the instrument having division marking one of which extends inwardly in crossed relation to the base line at the center of said scale.

1,896,433. ARRANGEMENT FOR PRODUCING OPEN SPACES ON BUILDINGS. CARL AUGUST WINDEKNECHT, Berlin, Germany. Filed July 15, 1930, Serial No. 468,076, and in Germany July 27, 1929. 5 Claims. (Cl. 20—2.)



1. A building, comprising in combination telescopable outer building sections, a single pair of rails carrying said outer building sections, and inner building sections supported by said outer sections.

1,896,434. RAILWAY CAR. WILLIAM E. WINE, Toledo, Ohio. Filed Apr. 29, 1930. Serial No. 448,328. 18 Claims. (Cl. 105—230.)



1. In a railway car having a floor, the combination with a center sill having outwardly projecting flanges adjacent its lower portion, of a body bolster involving a tension member extending above the center sill affording a support for the floor, compression members disposed on opposite sides of the center sill and having their inner ends respectively secured to the flanges of the latter, and strut members converging downwardly from said tension member toward the top of the center sill and rigidly secured to the latter in a substantially horizontal plane.

1,896,435. VAT DYESTUFFS OF THE ANTHRAQUINONE SERIES. HUGO WOLFF and MAX ALBERT KUNZ, Mannheim, and KARL KÖBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 8, 1928, Serial No. 276,191, and in Germany May 20, 1927. 8 Claims. (Cl. 260—61.)

7. As new articles of manufacture the vat dyestuffs probably corresponding to the formula:

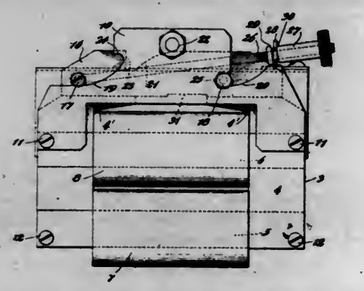


in which each of the -NH- groups may form part of a carbazol ring and in which the anthraquinone nucleus may be substituted by halogen, amino, hydroxy or methoxy groups, which dyestuffs furnish violet vats, dissolve to brownish violet solutions in concentrated sulphuric acid, the colour changing to brown olive on the addition of a few drops of nitric acid, dye the vegetable fiber black shades and are obtainable by condensing a 1'-anthraquinonyl-6-aminobenzanthrone which may contain in the anthraquinone nucleus one of the said substituents, by means of caustic alkali at elevated temperature.

1,896,436. RELUCTANCE CONTROLLING MEANS. CONRAD H. ZIERDT, Rosedale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 24, 1930. Serial No. 430,579. 5 Claims. (Cl. 171—242.)

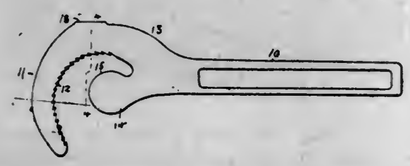
1. In combination, a magnetizable core comprising a fixed portion carrying a winding and a movable portion for varying the reluctance of a path for magnetic flux associated with said winding, a plate secured to said fixed portion and having a plurality of curved notches therein, a plurality of projections on said movable por-

tion each cooperating with one of said notches, and means comprising a notch in said movable portion and



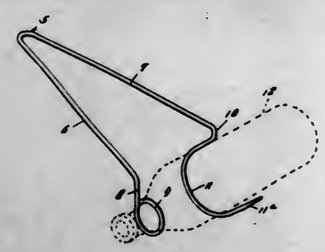
a projection on said plate for steadying said movable portion during its movements.

1,896,437. PIPE WRENCH. ANDREW B. ALLEN, Lockland, Ohio. Filed Jan. 24, 1931. Serial No. 511,038. 1 Claim. (Cl. 81—120.)



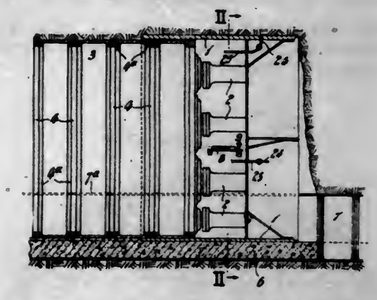
A pipe and rod wrench comprising a handle having an inwardly curved integrally formed toothed jaw at one end and an integral opposing jaw of less curvature than the toothed jaw and spaced therefrom, the jaws being flared outwardly from each other, the last-mentioned jaw having an outer circular face and having greater width than the toothed jaw and provided with a relatively shallow curved groove located intermediate the edges of said jaw thereby forming a pair of work-engaging ribs, the side edges of the first-mentioned jaw being in planes which pass through the work-engaging ribs.

1,896,438. BOTTLE HANDLING DEVICE. JAMES BROWN, Youngstown, Ohio. Filed Sept. 7, 1932. Serial No. 632,056. 3 Claims. (Cl. 294—33.)



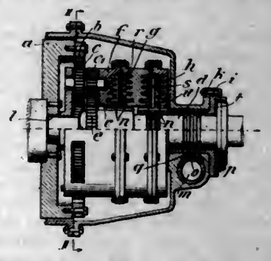
1. A jar or bottle handling device formed from a single piece of wire bent intermediate its ends to form a handle, and at each of its ends to form a loop, one of said loops being of relatively small diameter to receive the neck of the bottle, and the other of the loops being of relatively large diameter to accommodate the body portion of the bottle.

1,896,439. METHOD AND APPARATUS FOR TUNNEL CONSTRUCTION AND THE LIKE. GEORGE HENRY DUNLOP, Melbourne, Victoria, Australia. Filed Apr. 11, 1930, Serial No. 443,535, and in Australia Apr. 13, 1929. 4 Claims. (Cl. 61—85.)



1. In tunnel construction whereby a slidable shield or tunnel machine is employed and a pilot tunnel, smaller than the main tunnel to be constructed is preliminarily formed, the construction whereby the base of said pilot tunnel is located approximately at the prearranged level of the bottom of said main tunnel and the base of said pilot tunnel is utilized to guide and support said slidable shield or tunnel machine and afterwards to support said main tunnel.

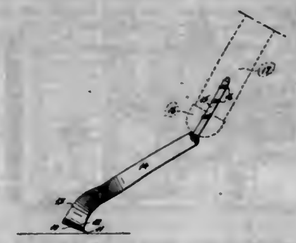
1,896,440. REVERSING GEAR COMPRISING PRESSURE OIL OPERATED CONTROL COUPLINGS PARTICULARLY FOR SHIPS' DRIVES. ALFRED DÜRIG, Winterthur, Switzerland, assignor to Firm Schweiz Lokomotiv- & Maschinenfabrik, Winterthur, Switzerland. Filed Mar. 25, 1932, Serial No. 601,254, and in Germany Apr. 9, 1931. 5 Claims. (Cl. 74—34.)



1. In a reversing gear, in combination, a drive shaft and a driven shaft coaxially disposed to each other, an epicyclic drive intercalated between said two shafts, a mounting member for the orbital gear wheels of said epicyclic drive, surrounding said driven shaft, two pressure oil operated control friction clutches arranged side by side in crowded relation in said mounting member and adapted for respectively coupling said mounting member to said driven shaft and a stationary portion of the gear, bearing surfaces provided between said mounting member and said driven shaft and said member and said stationary portion of the gear for transmitting the torque to said driven shaft in its respective direction of rotation, a valve for the pressure oil for selectively connecting said clutches for driving the driven shaft in either direction, and pressure oil passages interconnecting said valve and said bearing surfaces for automatically lubricating the respective surfaces when the related clutch is connected.

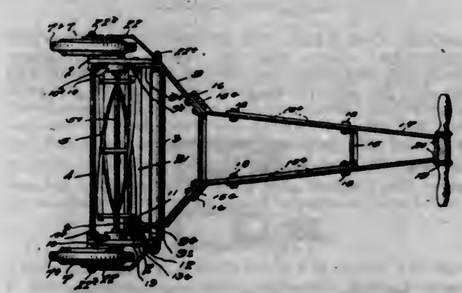
1,896,441. WEEDER HOE. ERNST ENDERES, Guttenberg, Iowa. Filed June 11, 1932. Serial No. 616,654. 2 Claims. (Cl. 97—62.)

1. A garden tool comprising, in integral interrelation, a relatively long, narrow blade portion tapered to a point at one end and provided with a cutting edge along one of its long margins, a shank portion perpendicular to the length of and inclined relative to the plane of said blade, a U-shaped portion connecting the unpointed



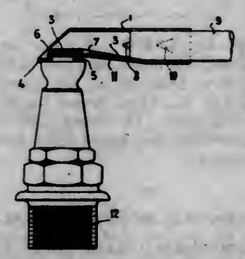
end of said blade with said shank, a stem on said shank laterally offset from said blade and substantially perpendicular to the plane thereof, and a handle secured to said stem.

1,896,442. LAWN MOWER. JOHN H. FARMER, Richmond, Ind. Filed Aug. 18, 1931. Serial No. 557,931. 6 Claims. (Cl. 56—249.)



1. In a lawnmower, a frame, a handle pivoted to said frame, and a pawl and ratchet mechanism including a spring acting upon said ratchet for adjustably positioning the handle in operative position with respect to said frame.

1,896,443. ELECTRIC CONNECTER. GIUSEPPE FOSSATI, Monza, Italy, assignor to Fabbrica Italiana Magneti Marelli Società Anonima, Milan, Italy. Filed July 8, 1930, Serial No. 466,489, and in Italy July 9, 1929. 4 Claims. (Cl. 173—269.)



1. A connecter for electric leads consisting of a metal sleeve forming at one end a seat for said lead and having a longitudinal opening with a cross edge at its front end and a resilient tongue projecting within said sleeve into said opening opposite said cross edge and adapted to bear on a head of the part to be connected.

1,896,444. SPARKING PLUG. GIUSEPPE FOSSATI, Monza, Italy, assignor to Fabbrica Italiana Magneti Marelli Società Anonima, Milan, Italy. Filed Dec. 17, 1930, Serial No. 503,053, and in Italy Sept. 15, 1930. 5 Claims. (Cl. 173—269.)



1. Means for fastening and locking a cable on a spark plug or the like, comprising a metallic sleeve connected with said plug or the like, a perforated cap screwed on the outer end of said sleeve, a member fastened on said cable extending through the bore of said cap and engaged therewith, engaging means on said sleeve, and resilient members connected with said cap and cooperating with said sleeve-engaging-means for locking said cap thereon.

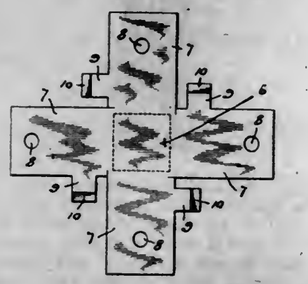
1,896,445. PUMP. FRED GIBSON, Franklin, Minn. Filed Aug. 24, 1931. Serial No. 559,058. 1 Claim. (Cl. 103—205.)



A pump of the class described comprising a vertically arranged casing having a supporting flange at its lower end and having a horizontal chamber at its upper end formed with an extension at one end thereof projecting outwardly from the casing to form a discharge spout, a pair of pipes having their upper portions passing through the casing with their upper ends connected with and in communication with the chamber, a cylinder on the lower end of each pipe, a forked pipe having the limbs of its fork connected to the bottoms of the cylinders, a valve casing connected to the lower end of the stem of the forked pipe and containing an upwardly opening valve, a supply pipe connected to the lower end of the valve casing, a piston containing an upwardly opening valve

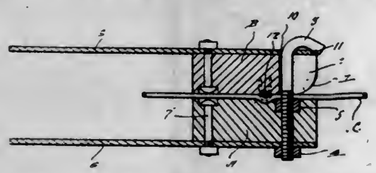
in each cylinder, rods connected to the pistons and passing through the first-mentioned pipes and through the chamber with racks on the upper ends of said rods, a housing supported on the top of the horizontal chamber and through which the upper ends of the piston rods pass, said housing having openings in its top thru which the upper ends of the piston rods pass, packing means for the rods in the upper wall of the chamber and located in the housing, a gear supported in said housing between the rods and meshing with the racks thereof, a handle connected with the upper end of one of the rods and upwardly opening check valves at the lower ends of the cylinders.

1,896,446. COLLAPSIBLE STOOL. LAWRENCE E. GOELLER, Circleville, Ohio. Filed Oct. 30, 1931. Serial No. 573,890. 1 Claim. (Cl. 155—136.)



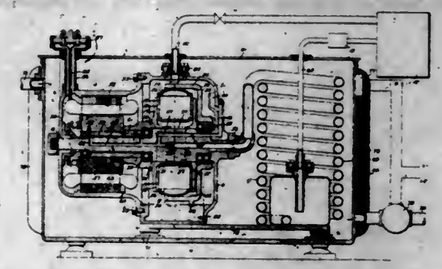
A connecting member of the type specified comprising a blank of cross form having its arm or leg parts bent into parallel relation to form a substantially rectangular body, each of said arm or leg parts constituting a side wall of said body and each provided with a through orifice, and a laterally extending side lug spaced from said orifice, and pivot pin passing through the orifices of oppositely disposed side walls perpendicular to said walls, and to each other, substantially as specified.

1,896,447. CLAMP FOR WIRE FENCES. ARTHUR HAMMER, Tompkinsville, Ky. Filed Dec. 29, 1931. Serial No. 583,763. 5 Claims. (Cl. 254—83.)



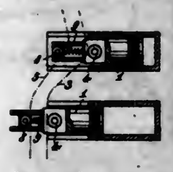
4. A clamp of the class described comprising a pair of elongated members, the rear edge of one member having notches therein, plates connected with the outer face of the last-named member and having portions extending over the notches, said portions having holes therein, hooks carried by the other member passing through the notches and through the holes to hingedly and removably connect the two members together.

1,896,448. REFRIGERATING APPARATUS. ARTHUR J. KEACHER, Berkeley, Calif. Filed Jan. 5, 1927. Serial No. 159,035. 4 Claims. (Cl. 62—115.)



1. In a refrigerating system in which a refrigerant fluid is continuously circulated through a heat exchange device and a heat absorber, a compressor for circulating fluid through the heat exchange device and absorber, a receptacle within which is mounted the compressor and heat exchange device, upstanding cooling fins formed upon the outer surface of the receptacle, and a liquid within the receptacle to minimize transmission of sound from the compressor and to transfer heat from the compressor and heat exchange device to the receptacle.

1,896,449. CAM GEAR FOR INTERNAL COMBUSTION ENGINES. ANTON KREIDLER, Stuttgart, Wurtemberg, Germany. Filed Mar. 12, 1931, Serial No. 522,119, and in Germany Mar. 17, 1930. 3 Claims. (Cl. 74—14.)



1. A cam gear for combustion engines comprising a cylinder, a working piston therein, a rotatable cam disc having its axis disposed parallel to the direction of movement of said piston, opposed cam tracks on said disc, one of said tracks facing in the direction of said piston and the other track facing outwardly in the direction opposite said piston, rollers carried by said piston and engaging the respective tracks, the inclined portions of the cam track which face outwardly from the piston having a lesser degree of steepness than the steeply inclined portions of the cam track which faces the piston whereby the latter, in the case of misfire, is moved to its outstroke position by coaction of one of said rollers with the less steeply inclined out-facing track.

1,896,450. DISAZO DYES. WERNER LANGE, Dessau-Ziebigk in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 14, 1931, Serial No. 530,139, and in Germany May 7, 1930. 18 Claims. (Cl. 260—76.)

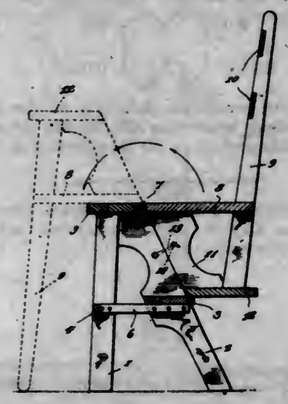
1. As new products the disazo dyes corresponding to the general formula:

$$X'-N=(=N-C_6H_4-CO-)_n=N-C_6H_4-CO-\overset{H}{N}-A-\overset{H}{N}-OC-C_6H_4-N=(-OC-C_6H_4-\overset{H}{N})_n=N-X,$$

wherein A means an aromatic radicle of the benzene or naphthalene series, X and X' stand for the radicle of an azo component producing yellow shades of the group consisting of pyraxolones, aceto-acetic anilides, methylketol, salicylic acid, at least one of these end components bearing an acid radicle of the group consisting of $-SO_3H$ and $-COOH$, and n stands for 0 or 1, said dyes dyeing cotton yellow tints of excellent fastness to light.

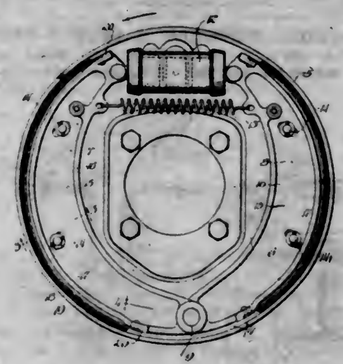
1,896,451. COMBINED CHAIR AND STEPLADDER. LYMAN L. LOFTON, Ardmore, Okla. Filed Nov. 5, 1930. Serial No. 493,620. 1 Claim. (Cl. 155—42.)

A combined chair and step ladder comprising front and rear pairs of legs converging upwardly, horizontal braces connecting said pairs of legs, an upper step member secured to the upper ends of said pairs of legs, an intermediate step member secured to and extending between the rear pair of legs and resting on said horizontal braces, said intermediate step member projecting horizontally beyond the rear pair of legs, a seat member hinged to the upper step member, a step member disposed below the seat member and having its lower face resting upon the upper face of the intermediate step member adjacent their corresponding edges, obliquely disposed braces extending between said seat member and said step



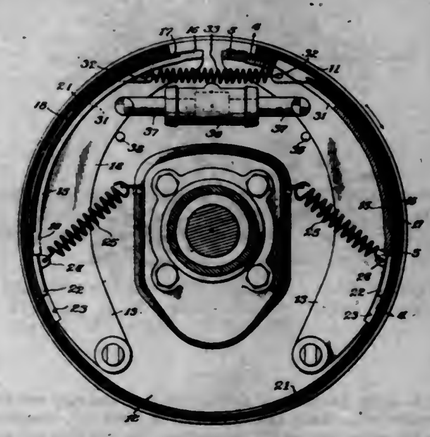
member and adapted to bear against the rear pair of legs, upwardly diverging side bars secured to the last mentioned step member and to said seat member and extending normally upwardly and rearwardly above the seat member, cross bars connecting the diverging side bars, hooks pivoted on the rear pair of legs between the upper step member and the intermediate step member, and keepers on the obliquely disposed braces engaged by said hooks.

1,896,452. BRAKE MECHANISM. MALCOLM LOUGHEAD, Detroit, Mich., assignor to Hydraulic Brake Company, Detroit, Mich., a Corporation of California. Filed Jan. 12, 1929. Serial No. 332,093. 5 Claims. (Cl. 188—250.)



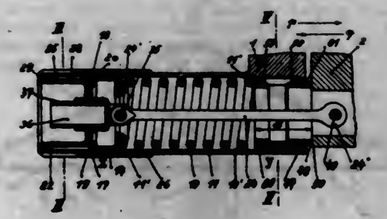
1. A brake shoe for frictional cooperation with a brake drum, comprising a rigid body portion, an arcuate peripheral flange intermediate the ends of said body portion, raised band mounting portions at the ends of said arcuate flange, a flexible brake band mounted on said mounting portions and extending in an arc from one to the other concentrically with and spaced from said arcuate flange, and means preventing said band being forced into engagement with said arcuate flange intermediate its ends when engaging a brake drum.

1,896,453. BRAKE MECHANISM. MALCOLM LOUGHEAD, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif., a Corporation of California. Filed Apr. 10, 1929. Serial No. 353,909. 12 Claims. (Cl. 188—78.)



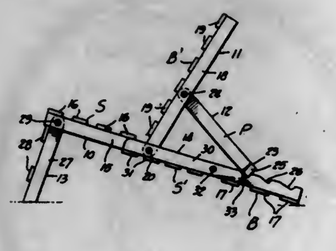
1. In a brake mechanism, a rotatable brake drum, a pair of pivotally mounted shoes having a surface of similar contour as the drum facing the drum, a raised portion at the ends of said surfaces, a flexible band for each shoe having its ends attached to said raised portions, thereby spacing the band from the intermediate portion of the shoe, a low friction member secured to each band, a brake band extending from toe to toe of the pivoted shoes, said brake band being engageable with the drum by the shoes, and means for actuating the shoes to engage the brake band with the drum.

1,896,454. BRAKING DEVICE. ANTON MAREK, Vienna, Austria, assignor to the Firm Československa Zbrojovka Akciová Společnost V Brně, Brunn, Czechoslovakia. Filed June 16, 1931, Serial No. 544,842, and in Czechoslovakia June 20, 1930. 11 Claims. (Cl. 89—44.)



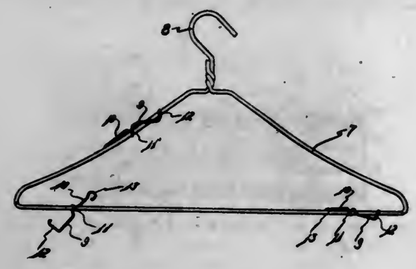
1. A braking and damping arrangement adapted, for instance, for the barrel of firearms, comprising a first machine part, a second machine part normally occupying a position of rest and movable relatively to the first part, braking means associated with the second part, frictional damping means for damping the reflex movement of the second part beyond the position of rest, and means alternately connecting the braking means and the damping means with the first part whereby during movement of the second part to one side of its position of rest only the braking means is brought into operation, the damping means being rendered inoperative, while, during the movement of the second part to the other side of its position of rest, the frictional damping means acts on the second part, the braking means being rendered inoperative.

1,896,455. FOLDING CHAIR. JOHN W. MCCULLOH, Bellflower, Calif., assignor of one-half to Irba E. McCulloh, Long Beach, Calif. Filed Oct. 13, 1930. Serial No. 488,434. 9 Claims. (Cl. 155—139.)



1. A chair comprising a plurality of sections, certain of which form seats and others back rests for co-action with the seats, means for connecting the sections for adjustment to occupy different relative positions wherein the seat forming sections and the respective back rest forming sections can be selectively disposed to provide chairs of different heights, means for maintaining the seat and back rest forming sections in one of said positions when adjusted to provide the chair of one height, and means for maintaining the seat and back rest forming sections in the other of said positions when adjusted to provide the chair of another height.

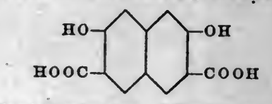
1,896,456. HANGER CLAMP. JOHN H. MOORE, Detroit, Mich. Filed Mar. 13, 1931. Serial No. 522,292. 1 Claim. (Cl. 24—139.)



A hanger clamp of the class described adapted for mounting on a supporting body comprising: an open coil adapted for clamping about said supporting body; a straight body portion projecting outwardly from each side of said coil; a hook on the end of one of said body portions for hooking over said supporting body; an engagement member on the end of the other of said body portions lying in the same plane as said body portion and engageable with said supporting body for clamping an object thereagainst upon the hooking of said hook over said supporting body.

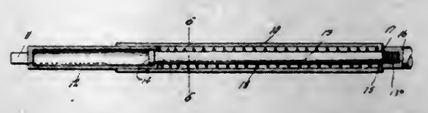
1,896,457. 2.7-DIHYDROXYNAPHTHALENE-3.6-DICARBOXYLIC ACID. HEINRICH MORSCHEL, Cologne-Deutz, and WILHELM LUCE, Hofheim-on-the-Taunus, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 5, 1932, Serial No. 584,898, and in Germany Jan. 12, 1931. 1 Claim. (Cl. 260—110.)

1. As a new product the 2.7-dihydroxynaphthalene-3.6-dicarboxylic acid of the following formula:



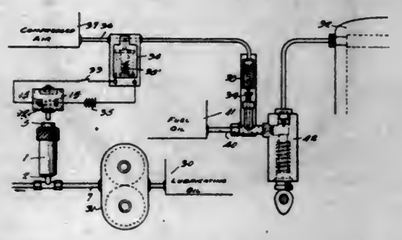
being a yellowish substance, difficultly soluble in water, more easily soluble in aqueous alkalies and being a valuable intermediate product in the manufacture of dyestuffs.

1,896,458. TOOL. JOSEPH R. MORTON, Steubenville, Ohio. Filed May 2, 1932. Serial No. 608,796. 2 Claims. (Cl. 29—85.)



1. A tool of the class described comprising a barrel open at one end and being provided at said one end with a pair of spaced parallel arms adapted to straddle the gear shaft of the differential gearing of a rear axle assembly and to engage the inner end of the inner portion of a broken axle of said assembly, a plunger for reinforcing said arms arranged to reciprocate in said barrel and movable inwardly and outwardly thereof between said arms, and spring means arranged in said barrel and engaging said plunger to normally urge the latter outwardly of said barrel.

1,896,459. OIL PRESSURE SAFETY APPLIANCE. HENRY A. MULLIN, Westwood, Calif. Filed Apr. 21, 1931. Serial No. 531,842. 3 Claims. (Cl. 123—196.)



1. In combination, a fluid controlled switch actuated by fluid under pressure, a magnetic valve opened when a circuit is closed thereto, said valve being in electrical connection with the fluid controlled switch, a manual switch and a source of current, a pipe carrying compressed air controlled by the magnetic valve, a fuel oil conveying conduit, and a cut-off valve for the fuel oil actuated by the compressed air when the switches are closed.

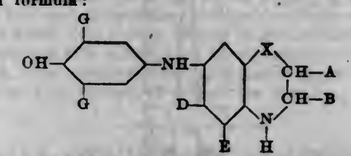
1,896,460. LUBRICATING APPARATUS. HOWARD J. MURPHY, Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Original application filed Mar. 28, 1928, Serial No. 265,276. Divided and this application filed Nov. 21, 1928. Serial No. 320,870. 5 Claims. (Cl. 184—45.)



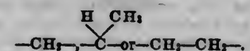
1. A lubricating system including a number of lubricant cups for discharging lubricant at a relatively slow uniform rate to machine bearings, conduit means connecting said cups with a source of lubricant supply, valvular means associated with said cups whereby the discharge of lubricant is cut off to insure positive filling of the cups, a device connected to the conduit and presenting a lubricant-receiving nipple for receiving the nozzle of a lubricant-expelling device which supplies the lubricant to cups, relief means for relieving the pressure of the lubricant in the conduit means and means operable to prevent connection of a lubricant supply device with the said nipple, unless the relief means is first placed in position for relieving the pressure in the conduit after the cups have been filled.

1,896,461. INDOPHENOLS AND LEUCOINDOPHENOLS OF THE AZINE SERIES. FRIEDRICH MUTH, Elberfeld, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 18, 1929, Serial No. 407,007, and in Germany Feb. 14, 1927. 5 Claims. (Cl. 260—38.)

1. As new products, the compounds of the probable general formula:

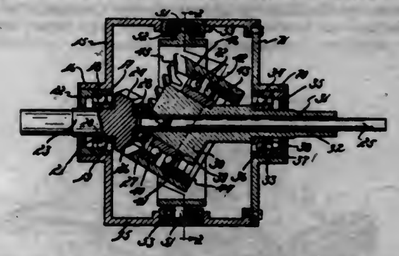


wherein A and B stand for hydrogen, alkyl, phenyl or jointly stand for one of the groupings $-CH_2-CH_2-CH-$, $-CH_2-CH_2-CH_2-CH_2-$ or $-CH_2-CH_2-CH_2-CH_2-CH_2-$, D and E stand for hydrogen or jointly for the grouping $-CH=CH-CH=CH-$ or $-CH_2-CH_2-CH_2-CH_2-$, the G's stand for hydrogen or chlorine, and X means



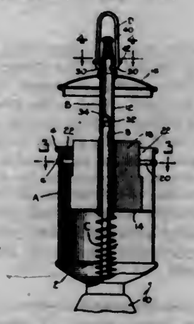
1,896,462. POWER TRANSMISSION APPARATUS. HANS E. NIETSCHE, Detroit, Mich. Filed Aug. 31, 1931. Serial No. 560,268. 15 Claims. (Cl. 74—34.)

1. In a device of the class described, a driving shaft; an actuating head mounted on and rotatable by said driving shaft; a driven shaft extended through said driving shaft; an oscillating member associated with said driven shaft and oscillated upon rotation of said actuating head and effecting rotation of said driven shaft upon



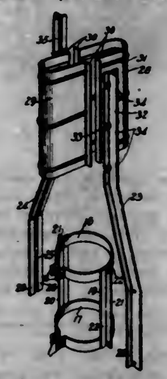
oscillation; and means for adjusting the relative position of said head and said oscillating member relatively to the neutral operating center point.

1,896,463. CIGARETTE HOLDER. LOUIS OFFERMAN, Brooklyn, N. Y. Filed Mar. 11, 1930. Serial No. 434,842. 5 Claims. (Cl. 312—78.)



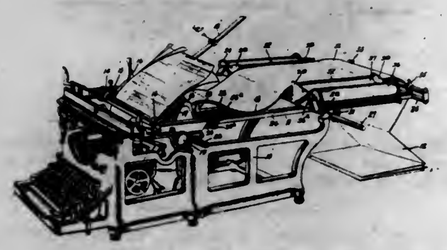
1. A cigarette holder comprising a casing, a post located therein, a sleeve reciprocably mounted on said post, a tray fixed to the lower end of said sleeve, a cover fixed to the upper end of said sleeve, resilient means tending to elevate said sleeve, and mechanism for locking the sleeve in depressed position comprising mating means on the post and on the sleeve.

1,896,464. ELECTRON DISCHARGE DEVICE. VICTOR L. RONCI, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1930. Serial No. 448,498. 20 Claims. (Cl. 250—27.5.)



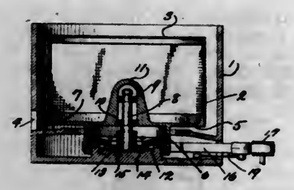
1. In a discharge device, an electrode comprising similar U-shaped portions having flanged ends arranged in opposed relation with the flanges in the same plane, and a grooved member embracing adjacent flanges of said portions.

1,896,465. TYPEWRITING MACHINE. DAVID W. RUBIDGE, Pittsfield, Mass., assignor, by mesne assignments, to Underwood Elliott Fisher Company, a Corporation of Delaware. Filed Nov. 14, 1929. Serial No. 407,251. 18 Claims. (Cl. 197—126.)



1. The combination with a typewriting machine having a platen of means for guiding superposed work-sheets to said platen, a carbon carrier mounted on said machine for movement toward and away from said platen, means for supporting continuous carbon sheets on said carrier, means for directing said carbon sheets crosswise of the line of movement of said carbon carrier for interleavement with said work-sheets, guiding means for directing the carbon sheets into the line of movement of said work-sheets, and means for movably securing said guiding means so that they may readily be moved from their working positions to facilitate the interleavement of said carbon sheets with said work-sheets.

1,896,466. CENTRIFUGAL. FLETCHER SCHAUM, Philadelphia, Pa., assignor to Fletcher Works, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 27, 1929. Serial No. 381,410. 4 Claims. (Cl. 210—71.)

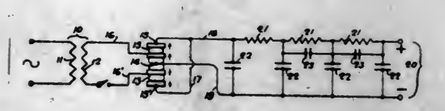


4. In a centrifugal machine, the combination of an underdriven rotatable basket in stable equilibrium, a single slidable supporting member therefor beneath the center of the basket and a vertically extending rotatable shaft in superimposed relation to and supported entirely by said slidable supporting member and carrying said rotatable basket, said shaft terminating within said basket.

1,896,467. PROCESS FOR THE TREATMENT OF FATTY OILS. JOHANNES SCHEIBER, Leipzig, Germany. Filed July 19, 1929, Serial No. 379,581, and in Germany Aug. 4, 1928. 3 Claims. (Cl. 87—12.)

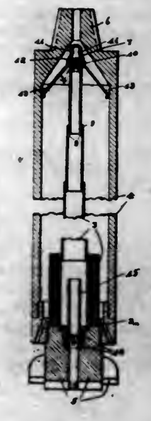
2. A process for treating fatty oils of the linseed oil, poppy seed oil and train oil type, consisting in acting upon the multiple unsaturated fatty acids of the said oils in the manner employed for shifting a single double bond in carbon chains, characterized by treating the said oils directly.

1,896,468. ALTERNATING CURRENT RECTIFYING SYSTEM. HARRY SHOEMAKER, Jersey City, N. J., assignor, by mesne assignments, to P. R. Mallory & Co., Incorporated, Indianapolis, Ind., a Corporation of Indiana. Filed Oct. 4, 1926. Serial No. 139,424. 1 Claim. (Cl. 178—44.)



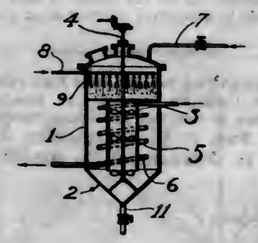
In an electric rectifying system connected to a source of alternating current of relatively low voltage and frequency through dry surface rectifiers, a filter circuit comprising a plurality of similar units, each consisting of an inductance element connected in series with the positive side of said circuit and a polarization cell shunted across said circuit connected to the positive side of said circuit at the input end of the inductance element of said unit, and additional polarization cells connected in parallel with certain of said elements of inductance, and adapted to provide an attenuated supplemental discharge into the output end of said circuit during instants of current minima whereby relatively steady direct currents of relatively low voltage and high amperage may be had.

1,896,469. TELESCOPING CORE-DRILL. ARTHUR SOLL, Compton, Calif., assignor of thirty-seven and one-half per cent to Lewis A. Larson and twenty-five per cent to Sampson C. Bever, Burley, Idaho. Filed Apr. 11, 1931. Serial No. 529,324. 7 Claims. (Cl. 255—72.)



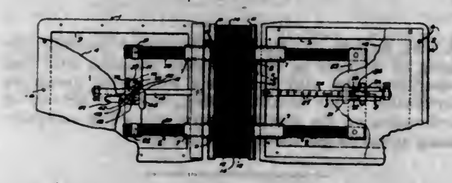
1. In a core-drill for well drilling operations having a cutter-head at the bottom end and a connection at the upper end by which the drill can be applied to upwardly extending drill tools, a core-barrel made of telescoping sections mounted within the hollow of the drill and adapted to telescopically expand when and as a core advances into the drill.

1,896,470. PROCESS FOR THE TREATMENT OF OIL. KARL T. STEIK, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 18, 1928. Serial No. 293,584. 4 Claims. (Cl. 196—40.)



3. An improved process for the treatment of oils with sulfuric acid, comprising mechanically spraying the acid to form a mist in an enclosed space, agitating the oil within the same space, whereby fresh surfaces of the oil are continually exposed to the finely divided acid.

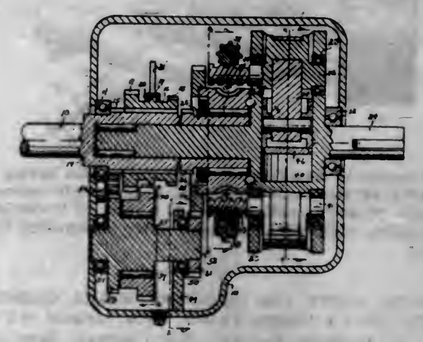
1,896,471. LOOSE LEAF BINDER. NICHOLAS H. STUART, Buffalo, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Mar. 13, 1929. Serial No. 346,592. 5 Claims. (Cl. 129—41.)



2. In a temporary binder the combination of a pair of cover members, a rail mounted on one of said cover members and having a plurality of apertures formed therein, an anchor bar slidably mounted for longitudinal adjustment on said rail, a ratchet bar mounted on the other of said cover members, an adjusting bar slidably mounted on said ratchet bar, means connecting said adjusting bar and said anchor bar, a pin carried by said anchor bar for engagement with said apertures and adapted to maintain said anchor bar in any one of a plurality of positions on said rail to maintain said cover members varying distances apart, and a pawl carried by said adjusting bar for engagement with said ratchet bar and adapted to maintain said cover members varying distances apart within the ranges of adjustment of said anchor bar.

1,896,472. SEMIAUTOMATIC FREE WHEELING TRANSMISSION. THEODORE F. THOMPSON, Fort Dodge, Iowa, assignor to Ida M. Thompson, West Iowa Lake, Iowa. Filed Oct. 13, 1931. Serial No. 568,557. 9 Claims. (Cl. 74—34.)

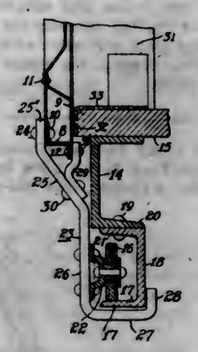
1. In a device of the class described, a shaft designed to have one of its ends operatively connected to a prime mover, a second shaft in alinement with said first mentioned shaft, a collar rotatably mounted on said second shaft, a gear wheel rotatably mounted on said collar, a means for rigidly locking said collar to said gear wheel when said collar is rotated in one direction, a governor base block secured to said second shaft, a bore in said governor base block, a compression piston slidably mounted in said bore, a crank shaft rotatably mounted in said governor base block operatively connected to said compression piston, gears for operatively connecting said gear wheel to said crank shaft, a third shaft secured to said governor base block, a fourth shaft positioned at one side of said first mentioned shaft, a spur gear rotatably mounted on said fourth shaft, a means for rigidly securing said last mentioned gear to said fourth shaft when rotated in one direction, a comparatively small spur gear rigidly secured on said fourth shaft, a comparatively large spur gear rigidly secured to said governor base block and in mesh with said comparatively small spur gear, and a manually operated means for securing said collar and said first mentioned spur gear to said first mentioned shaft.



1,896,473. ARTICLE OF METALLIC COMPOSITIONS OR ALLOYS OF LEAD. JOHN R. TOWNSEND, Bloomfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 14, 1929. Serial No. 347,185. 3 Claims. (Cl. 148—32.)

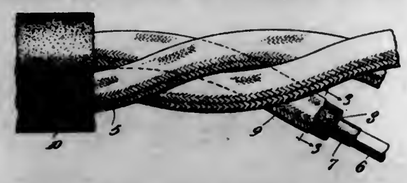
1. A formed lead article subjected during its formation to a heat treatment to temperatures between 300 and 500° F. and cooling to room temperatures containing about 1% of antimony and about from .05 to .10% of tin and having after said heat treatment improved mechanical qualities.

1,896,474. CAR DOOR. HARRY T. ANDERSON, Butler, Pa. Filed Jan. 25, 1930. Serial No. 423,405. 7 Claims. (Cl. 20—22.)



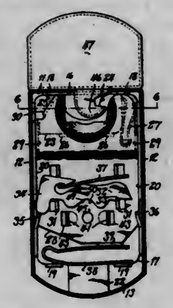
1. In combination with the underframe of a railway car, of a track secured to said underframe between the side margins of the car, a door disposed for movement along the side of the car, a bracket depending from the bottom of the door and having portions extending downwardly in front of and along the underside of and upwardly in back of said track, and a roller on said bracket for supporting the door on the track.

1,896,475. ELECTRIC CONDUCTOR. EDWIN L. ANDREW, Rome, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Nov. 1, 1930. Serial No. 492,651. 1 Claim. (Cl. 173—264.)



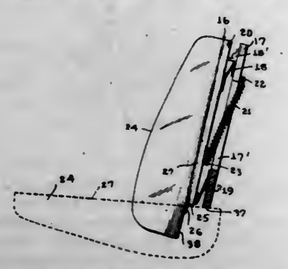
An article of manufacture comprising a cable having a plurality of electrical conductors, a differently colored metallic surface on each conductor, a layer of insulation surrounding each conductor and a cover surrounding the whole.

1,896,476. CATCH FOR SUITCASES, BOXES, CHESTS, ETC. OTTO A. BOSSEL, Ansonia, Conn., assignor to The H. A. Matthews Manufacturing Company, Seymour, Conn., a Corporation. Filed Oct. 3, 1932. Serial No. 635,955. 5 Claims. (Cl. 70—2.)



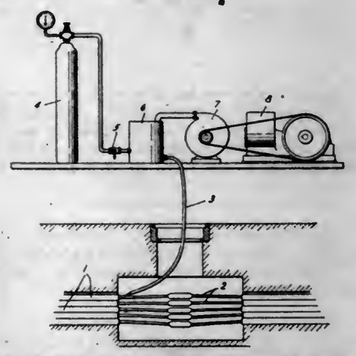
1. A clasp of the character described, comprising a casing adapted to be attached to an article, an assembly plate mounted in the casing, a locking dog horizontally movable in said assembly plate, said locking dog provided with a locking nose and with a beveled edge at one side, a sliding plate arranged on said assembly plate and adapted to be moved vertically thereon, said sliding plate formed at its upper edge with a cam edge adapted to engage with the beveled edge of the dog, whereby the downward movement of the sliding plate will move said dog to one side, and means extending through the casing into engagement with said sliding plate.

1,896,477. BACK SEAT FOR AUTOMOBILES. ALEXANDER BOLLER, New York, N. Y. Filed July 17, 1929. Serial No. 378,988. 8 Claims. (Cl. 155—158.)



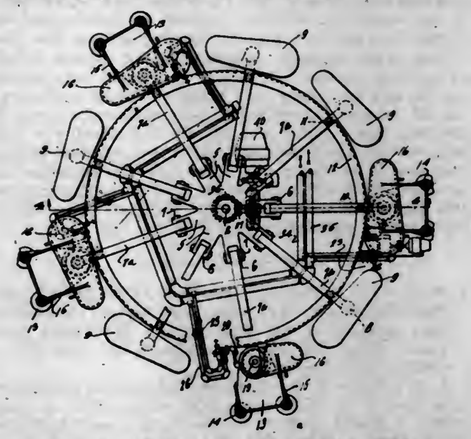
1. In an automobile body construction, in combination with a seat suitable for a plurality of sittings, of an auxiliary section arranged to be disposed in the plane of the back of said seat, mounting means for said section for bodily disposing said section forwardly of the plane of the back of said seat, providing within limits free and unconfined shoulder back supporting portions for three passengers, said mounting means including means for tilting said section out of the plane of said back to dispose said section in a position serving as an arm rest.

1,896,478. TREATING WOOD AND PREVENTING CORROSION OF CABLES. ROBERT M. BURNS, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 18, 1928. Serial No. 300,545. 2 Claims. (Cl. 247—1.)



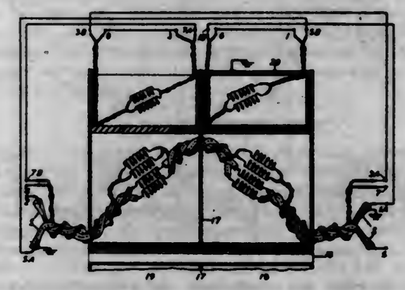
1. The method of treating underground conduits containing or designed to contain cables sheathed with lead compositions and also containing substances promoting deterioration of the sheath for the purpose of preventing deterioration of the sheath by corrosion which comprises passing ammonia gas through the conduit.

1,896,479. CONTINUOUS PRESSING MACHINE. EMIL J. CARROLL, Cincinnati, Ohio. Filed June 15, 1929. Serial No. 371,104. 4 Claims. (Cl. 68—9.)



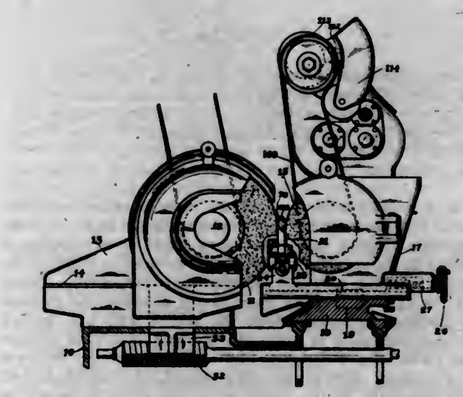
1. In a pressing machine, a number of spaced heads arranged in a path, a plurality of uniformly spaced beds in said path, there being more than twice as many beds as there are heads and the heads except at one portion of the path being spaced apart a distance equal to the spacing between a bed and the next bed save one, means for moving the group of beds along said path for effecting registration of successive beds with a head, and means for effecting pressing engagement of the heads and those of the beds which are in registration therewith.

1,896,480. BALANCED INDUCTANCE DEVICE. ARTHUR J. CHRISTOPHER, Teaneck, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 29, 1931. Serial No. 547,618. 7 Claims. (Cl. 175—359.)



1. An inductive device comprising a spool and two primary and two secondary windings thereon, said windings being applied to said spool partly as a quad comprising turns of both primary and secondary windings and partly as individual twisted pair primary turns and twisted pair secondary turns.

1,896,481. CENTERLESS GRINDING MACHINE. RAYMOND A. COLE, Worcester, Mass., assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed June 27, 1925. Serial No. 40,016. 16 Claims. (Cl. 51—103.)



1. In a centerless grinding machine, a grinding element, means for controlling the contact of work with said element, means for moving said grinding element toward and away from the work, a handle for controlling said moving means, and means operated by said handle for ejecting work from grinding relation with said grinding element.

1,896,482. CEMENT RETAINER. ERD V. CROWELL, Los Angeles, Calif. Filed Mar. 17, 1930. Serial No. 436,434. 13 Claims. (Cl. 166—1.)

1. In combination, a casing string having an interior annular recess forming axially spaced abutment shoulders at right-angles to the axis of the casing, a plug adapted to be lowered in the casing string, expansible slips mounted on the plug and adapted for automatic expansion upon alinement with the annular recess so as to seat between the right-angular abutment shoulders for anchoring the

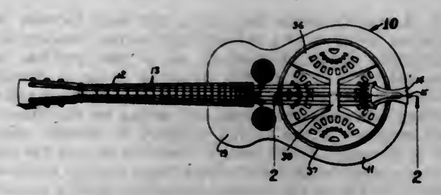


plug against longitudinal displacement in either of opposite directions, the plug having a bore, and a downwardly opening normally closed valve for said bore.

1,896,483. PRODUCTION OF SULPHUR DIOXIDE. HANS DOHSE, Heidelberg, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 29, 1931, Serial No. 583,696, and in Germany Jan. 2, 1931. 4 Claims. (Cl. 23—177.)

1. The process of producing sulphur dioxide which comprises acting with a fuming sulphuric acid at a temperature between about 80° and about 150° C. in a counter current on elementary sulphur.

1,896,484. MUSICAL INSTRUMENT. RUDOLPH DOPYERA, Los Angeles, Calif. Filed Feb. 1, 1932. Serial No. 590,093. 13 Claims. (Cl. 84—296.)



1. A musical instrument comprising a hollow body having a well, an annular ring arranged in said well, and a conical metallic resonator supported on said ring and directed downwardly, said resonator having radial ribs thereon, said ribs being of decreasing depth downwardly.

1,896,485. ACOUSTIC DEVICE. JAMES G. FLINT and DAVID G. MCKIE, Aldwych, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1930, Serial No. 439,932, and in Great Britain Oct. 30, 1929. 5 Claims. (Cl. 179—180.)

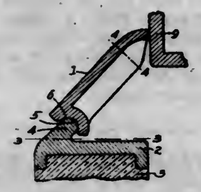
1. The combination of a seating surface with a pile of paper leaves comprising a damping arrangement for

the diaphragm of an acoustic instrument, and a slidable cover of flexible material embracing the pile and seating



surface in such manner as to prevent displacement of the leaves from said seating surface in a lateral direction while permitting proper damping action of the pile.

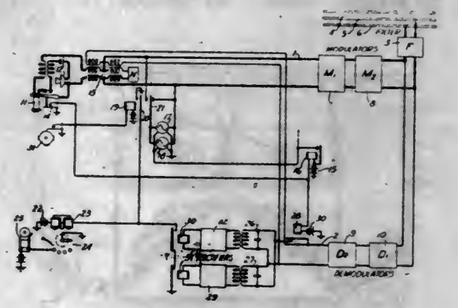
1,896,486. SELF-ADJUSTING SEAL FOR JOINTS OF FURNACES. EDWARD J. FRANKLIN, Salt Lake City, Utah. Filed Jan. 28, 1930. Serial No. 424,124. 3 Claims. (Cl. 122—23.5.)



1. A sealing means for closing the joint between two adjacent members of a furnace construction comprising a supporting means mounted on one of said portions and provided with an upwardly extending flange, a plurality of sealing members hingedly mounted on said flange and extending upwardly therefrom and means on the other of said members of the furnace adapted to slidably engage the upper ends of said sealing memoers to seal the joint between said members while permitting relative movement thereof said supporting means being formed of a plurality of sections provided with overlapping means for sealing the joints between them.

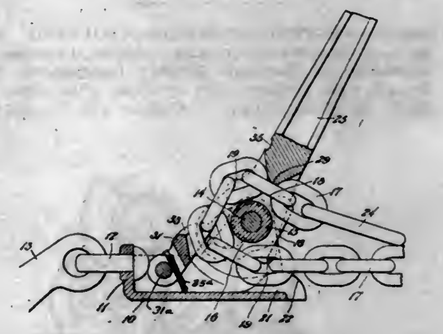
1,896,487. CALLING CIRCUIT. ROBERT D. GIBSON, Rahway, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1930. Serial No. 445,275. 6 Claims. (Cl. 179—2.5.)

6. In a signal system, a power line having a plurality of signal stations connected thereto, means at said stations for transmitting code signals of carrier current modulated with impulses of two voice frequency currents for selective calling purposes, means at said stations for demodulating received code signals, means comprising filters connected to said demodulators for separating the impulses of the two voice frequency currents, two separate relay means operated by the received impulses of the two voice frequency currents for operating a calling selector, and means at a calling station operated upon removal of the



receiver from the switch-hook for preventing operation of the two separate control means when transmitting a signal.

1,896,488. PULLING IMPLEMENT. LEO HAUBERT, Tulsa, Okla., assignor of one-half to Lyman Le Roy Roller, Tulsa, Okla. Filed Aug. 27, 1929. Serial No. 388,780. 6 Claims. (Cl. 254—164.)



1. A pulling implement of the class described comprising in combination; a frame; a sheave in the frame; a take-up chain trained over the sheave; said sheave having a groove in its periphery to receive the edgewise links of the chain, and flat portions on opposite sides of the groove for the flatwise links; a lever having a forked end pivotally mounted to swing about the sheave axis and having arcuate cam slots to cause the lever to be shifted toward and away from the sheave; an integral pawl on the lever at the upper ends of the arms shaped to conform to and grip the links of the chain when the lever is moved to tighten the chain; and a pivoted holding pawl arranged to engage the links of the chain and permit the lever pawl to take another bite.

1,896,489. PRODUCTION OF CYANAMIDES OF THE ALKALINE EARTH METALS. CARL KIRCHER and HANS ACKER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 14, 1931, Serial No. 508,803, and in Germany Feb. 11, 1930. 4 Claims. (Cl. 23—78.)

1. The process of producing alkaline earth metal cyanamides which comprises reacting with cyanogen gas at between about 300° and 900° centigrade on a substance selected from the group consisting of the oxides and carbonates of the alkaline earth metals.

1,896,490. PROCESS FOR THE TREATMENT OF WHEAT-GERMS. ERNST KOMM, Dresden-Weisser Hirsch, Germany. Filed May 24, 1928. Serial No. 280,878. 5 Claims. (Cl. 99—10.)

1. A process for the treatment of wheat-germs, comprising mashing same with 400% of water in the absence of oxygen at 55–65° C. for six hours to thereby extract and preserve the vitamins and vitasterines, separating from the solid the liquid containing fatty-ingredients, vitamins, and vitasterines, drying the solid in such a manner as to remove the bitter principles, and concentrating the liquid.

1,896,491. PROCESS FOR EMULSIFYING DIOLEFINES AND FOR THE PRODUCTION OF PRODUCTS SIMILAR TO LATEX. MARTIN LUTHER, Mannheim, and CLAUS HEUCK, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 27, 1928, Serial No. 328,841, and in Germany Feb. 8, 1928. 7 Claims. (Cl. 260—6.)

1. A process for the production of substances of the nature of latex, which comprises emulsifying diolefines in water by separately dissolving constituent substances, which when placed in mutual contact react to form emulsifying agents, in diolefines and water and mixing the solutions thus obtained and polymerising in the presence of an oxidising agent and a buffer system.

1,896,492. METHOD OF OBTAINING SAMPLES FROM DRILLED WELLS. GEORGE A. MACREADY, Los Angeles, Calif. Original application filed July 5, 1922, Serial No. 572,889. Divided and this application filed Jan. 30, 1928. Serial No. 250,568. 16 Claims. (Cl. 166—21.)



1. The sampling method for deep wells, which consists of cutting a tapered seat in the well at any level, setting a seal forming packer tool upon the well, closing the packer against down flow of well fluid but not against up flow, removing the fluid from above the closure to provide for ascent of undiluted fluid from below the closure, and finally trapping the desired sample in the tool.

1,896,493. ARTIFICIAL RUBBER. HELMUTH MEIS, Wiesdorf-on-the-Rhine, and WILHELM KLEIN and EDUARD TSCHUNKUR, Cologne-Mulheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 7, 1928, Serial No. 291,181, and in Germany July 20, 1927. 18 Claims. (Cl. 260—6.)

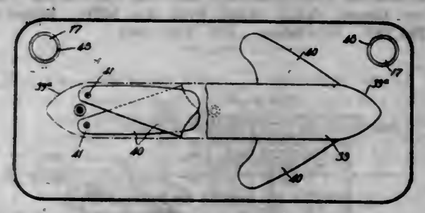
1. Process for the manufacture of artificial rubber-like masses, which comprises treating a diolefine hydrocarbon, with a finely divided heavy metal oxide in aqueous suspension.

2. Process for the manufacture of artificial rubber-like masses, which comprises treating a diolefine hydrocarbon, with a finely divided heavy metal oxide in aqueous suspension, with the addition of a compound of the group consisting of emulsoid colloids and other emulsifying agents of non-colloidal character.

1,896,494. PROCESS OF DEGUMMING SILK. LATIMER D. MYERS and LOU A. STRODMEYER, Cincinnati, Ohio, assignor to The Twitchell Process Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 16, 1929. Serial No. 347,729. 8 Claims. (Cl. 8—2.)

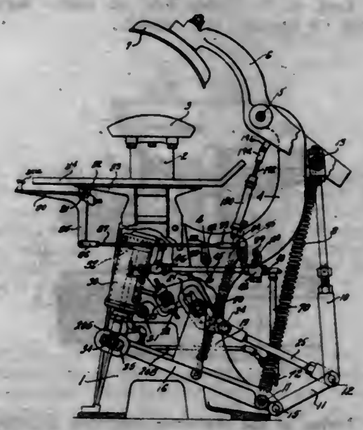
4. The art of effecting a substantially complete removal of sericin from silk without injury to the silk, said art comprising, subjecting the silk bearing the sericin simultaneously to the chemical and colloidal action of a hot aqueous solution, the chemical action being provided by an alkali in said solution equal in strength to between .01 and .08% sodium hydroxide, the colloidal action being provided by water soluble salts of mahogany sulphonic acids adapted to disperse the sericin saponified by the alkali throughout the solution without scum formation.

1,896,495. SIGNAL DEVICE FOR VEHICLES. ELMER C. O'DONNELL, New York, N. Y. Filed May 6, 1930. Serial No. 450,092. 3 Claims. (Cl. 177—327.)



1. The combination with a motor vehicle, of a turn signal adapted to be arranged on the vehicle to be visible from the rear thereof, said signal comprising a casing, open at one side, an elongated, pointed, flat, bar-like signal element arranged in said casing and visible in daylight without illumination, means in said casing for illuminating said element at night, other signal elements arranged rearwardly of and adjacent each end of the first named element, said last named elements comprising independently supported pivoted and movable members normally arranged in overlapping relation with respect to each other and concealed behind the first named signal element, and means for moving said members into position to project at opposite side edges of said element to form in conjunction therewith arrow shaped means indicating the direction in which a vehicle is about to turn.

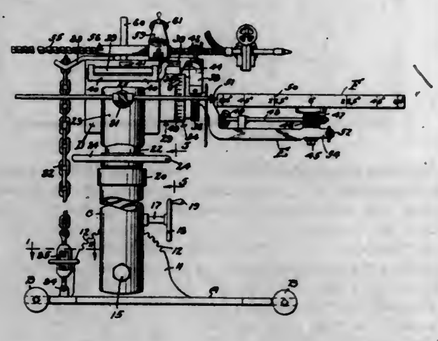
1,896,496. PRESSING MACHINE. ROBERT C. PAULY, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 11, 1929. Serial No. 362,221. 24 Claims. (Cl. 192—131.)



4. A pressing machine, comprising relatively movable pressing members, means for effecting engagement and disengagement of said pressing members to thereby close and open the press and including a piston and cylinder

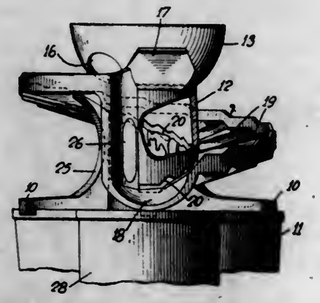
structure, and mechanism for controlling the flow of fluid to and from said piston and cylinder structure and including an inlet valve and an outlet valve, said outlet valve normally tending to close under the influence of a spring, and means for automatically maintaining said outlet valve open when the press is open, said maintaining means including spring means compressed by opening of the press and thereby strengthened to overcome the valve closing spring, whereby said outlet valve will be held open by said maintaining means when the press is open.

1,896,497. WELDING AND CUTTING APPARATUS. AUGUST L. SEGELHORST and ERNIE L. LAUNDER, Huntington Beach, Calif. Filed Sept. 30, 1929. Serial No. 396,123. 16 Claims. (Cl. 266—23.)



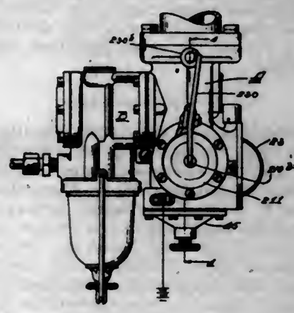
1. In a welding and cutting apparatus: a welding and cutting tool having means for longitudinal advancement and retraction with respect to the work; means for transverse advancement and retraction with respect to the work, said means for longitudinal advancement including a square screw-threaded traveling bar; a supporting member for said bar, said supporting member having a square opening adapted to receive said bar and prevent turning of the same and screw-threaded means for advancing and retracting said bar through said opening.

1,896,498. EGG SEPARATOR. KYUSABURO TANIGUCHI, New York, N. Y. Filed Feb. 18, 1931. Serial No. 516,738. 8 Claims. (Cl. 146—2.)



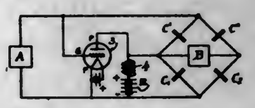
1. A device of the character described including elements forming an inclined V-shaped groove having steps upon one side of said V and a slot at the bottom thereof too narrow to permit the passage of the yolk, the steps upon said side increasing in height toward the bottom of the incline.

1,896,499. CARBURETOR. PERCIVAL S. TICE, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Original application filed Sept. 5, 1929, Serial No. 390,602. Divided and this application filed Oct. 25, 1930. Serial No. 491,129. 5 Claims. (Cl. 261—34.)



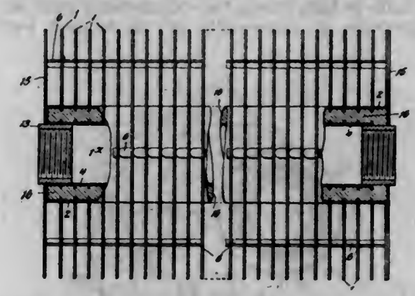
1. In a carburetor comprising a fuel accumulating chamber and means for governing the level to which the fuel may accumulate therein, an air and fuel mixing chamber and conduits therefrom leading for discharge at the engine intake; fuel flow connection from the accumulating chamber to the mixing chamber comprising a variable capacity chamber having a movable wall member by whose movement the chamber capacity is varied, said variable capacity chamber having means for free one-way flow through the variable capacity chamber from the accumulating chamber to the mixing chamber; a port arranged for restricting the fuel flow in both directions between the fuel accumulating chamber and the variable capacity chamber; means for momentarily operating the movable wall member for reducing the capacity of the variable capacity chamber for momentary acceleration of fuel flow from said chamber to the mixing chamber, and a stand pipe in the fuel accumulating chamber extending therein above the governed level thereof, said restricted port opening from the variable capacity chamber into the lower part of said stand pipe.

1,896,500. METHOD OF AND MEANS FOR ELIMINATING CAPACITIVE COUPLING. HAROLD A. WHEELER, Washington, D. C., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Sept. 22, 1924. Serial No. 739,080. 14 Claims. (Cl. 179—171.)



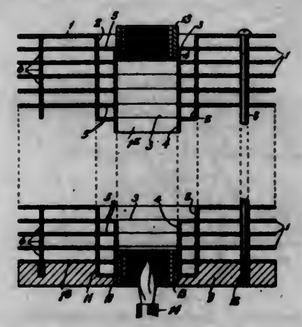
4. An amplifying system including at least one audion having grid, plate and cathode electrodes, an input circuit connected to said grid, and an output circuit connected to said plate, inherent grid-plate capacitive coupling between said input and output circuits, inherent grid-cathode capacity, and a capacity bridge composed of a plurality of pure capacities only associated with the input circuit, said bridge being effective to neutralize said inherent capacitive coupling, at least one of the capacities of said bridge being connected between the grid and cathode electrodes of said audion and being of a value substantially six times that of the inherent grid-plate capacity.

1,896,501. PROCESS OF MAKING HEAT EXCHANGERS. LOUIS PREVOST WHITAKER, New York, N. Y., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa., a Corporation of Pennsylvania. Filed Jan. 31, 1931. Serial No. 512,576. 5 Claims. (Cl. 22—204.)



1. The herein described method of manufacturing heat exchangers comprising a hollow body and a plurality of thin fins united thereto, which consists in assembling in spaced relation a plurality of apertured plates provided with cylindrical portions of different diameters coaxial with the apertures in the plates and united by spaced connecting portions, with the cylindrical portions of larger and smaller diameter respectively, in substantial alignment to form outer and inner mold walls, and casting a cylindrical body of metal between said mold walls, with said connecting portions of said plates anchored in said body of cast metal.

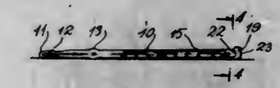
1,896,502. HEAT EXCHANGER. LOUIS PREVOST WHITAKER, New York, N. Y., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa., a Corporation of Pennsylvania. Original application filed Jan. 31, 1931, Serial No. 512,576. Divided and this application filed Oct. 10, 1931. Serial No. 568,007. 8 Claims. (Cl. 257—263.)



1. A heat exchanger comprising a plurality of spaced apertured plates, each provided with cylindrical portions of different diameters coaxial with the aperture in the plate and united by spaced connecting portions, the cylindrical portions of larger and smaller diameter respectively being in substantial alignment, and a cylindrical body of cast metal completely filling the space between the aligned cylindrical portions of different diameters, uniting said plates and having said connecting portions anchored therein.

1,896,503. THERMOMETER. FRANK J. ADDIS, Ozone Park, N. Y. Filed June 29, 1929. Serial No. 374,665. 1 Claim. (Cl. 73—52.)

The combination with a thermometer of substantially triangular cross sectional form, one side of said triangle forming the back of the thermometer, and the other sides terminating in a front reading edge arranged longitudinally of the thermometer, of an enlarged rectangular head

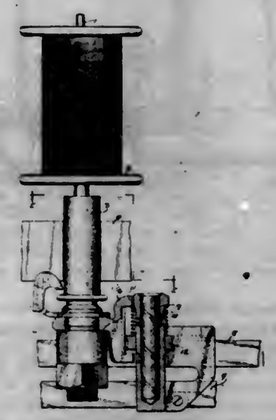


having flat side walls, one of said flat walls being arranged parallel to the back of the thermometer to facilitate supporting the reading edge of the thermometer in proper position in taking a reading.

1,896,504. PROTECTIVE AGENT FOR META STYRENE. HAROLD J. BARRETT, Wilmington, and EMMETTE F. IZARD, Elsmere, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 18, 1930. Serial No. 481,800. 5 Claims. (Cl. 134—26.)

1. A composition comprising meta styrene and di-o-tolyguanidine.

1,896,505. SPINDLE SWING BRACKET. ROBERT J. BARTHOLOMEW, Germantown, Pa., assignor to Fletcher Works, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 3, 1931. Serial No. 506,481. 8 Claims. (Cl. 118—63.)

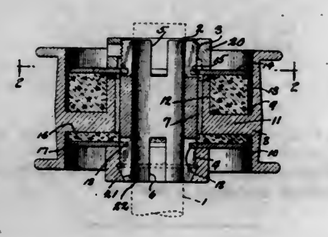


1. A machine of the class described comprising a plurality of spindles, a whorl for each spindle, a driving belt common to said whorls, a swing bracket for each spindle, a spring for each bracket for holding said whorls in contact with said belt, said springs being adjustable independently to effect independent adjustment of the pressure of said whorls against said belt.

1,896,506. STARTING PULLEY. ROBERT J. BARTHOLOMEW, Germantown, Pa., assignor to Fletcher Works, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 3, 1931. Serial No. 506,482. 3 Claims. (Cl. 64—99.)

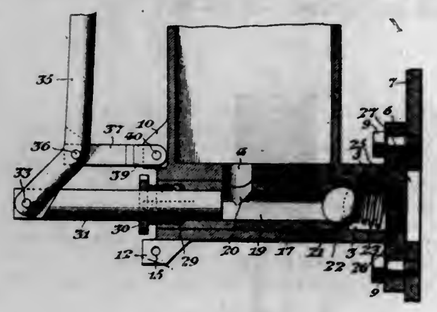
1. A starting pulley comprising in combination an outer member, a central sleeve, said sleeve being threaded at each end, said outer member being provided with upper and lower annular grooves, a friction ring in each groove,

a friction disc in each groove overlying said rings, said sleeve being slotted axially, keys on said discs entering said slots, and a member threaded on each end of said



sleeve, for controlling the pressure of said discs on said rings and for contracting the sleeve to effect rotation thereof with a supporting shaft.

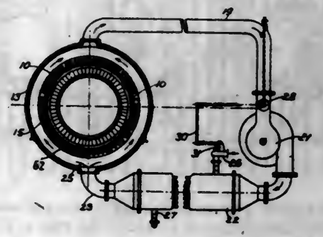
1,896,507. LUBRICANT COMPRESSOR. JOHN R. BATTLE, Ardmore, Pa., assignor to Gun-Fil Corporation, a Corporation of Delaware. Filed Feb. 28, 1930. Serial No. 432,055. 7 Claims. (Cl. 184—28.)



2. In a device of the class described, the combination with a lubricant reservoir having a pump-casing provided with an inlet and outlet and having a plurality of attaching means spaced about the mouth of said casing, a replaceable bushing of uniform diameter throughout affording a valve-seat disposed in said pump-casing and having a bore forming communication between said inlet and said outlet, a check-valve cooperative with said valve-seat, a plunger mounted to reciprocate in said bore and to force lubricant in opposition to said check-valve through said outlet, and a lever operatively connected with any one of said attaching means capable of operation in relatively different radial positions and arranged to effect reciprocation of said plunger.

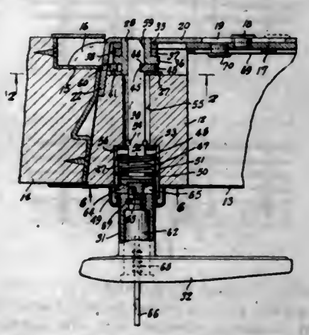
1,896,508. METHOD AND APPARATUS FOR THE PREHEATING AND MAINTAINING AT OPERATING TEMPERATURE THE CYLINDERS OF STEAM OR GAS TURBINES. ERIC BROWN, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie, Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Nov. 24, 1928, Serial No. 321,749, and in Germany Nov. 26, 1927. 5 Claims. (Cl. 253—39.)

5. In the art of operation of steam turbine apparatus wherein it is required that said apparatus be placed from a state of non-operation into a state of operation substantially instantaneously, and that the state of operation into which said apparatus is placed substantially instantaneously be at any degree of load for which said apparatus is designed; the method for such purpose which comprises maintaining the temperatures throughout the high-pressure end of the turbine structure at least substantially as high, during the non-operating state, as the temperatures of condensation of the full-load working



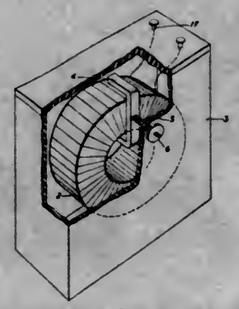
steam, and in such manner that the temperature gradients in the turbine structure, formed in the substantially instantaneous transition from the non-operating state to the full-load operating state, are maintained within the range of substantially instantaneous temperature change to which the materials of the turbine structure can be subjected and still remain within the range of permissible strain below their elastic limits.

1,896,509. SNAP-IN LOCK. WILLIAM A. CARMICHAEL, Hamden, and FRANKLIN H. HART, New Haven, Conn., assignors to C. Cowles and Company, New Haven, Conn., a Corporation of Connecticut. Filed June 25, 1929. Serial No. 373,583. 3 Claims. (Cl. 292—352.)



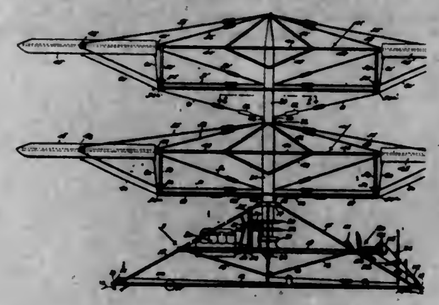
1. In a door latch, a movable latch bolt, a handle having a non-circular latch operating spindle, a bushing having a non-circular opening to receive said spindle and having spaced guiding surfaces, means operated by the bushing for shifting the latch bolt, a shoulder carried by the spindle, a catch carried by the bushing and having an opening therethrough with opposite sides of the opening guided for sliding movement by said surfaces, and a spring for yieldingly holding the catch in cooperation with said shoulder to prevent removal of the spindle from the bushing.

1,896,510. ADJUSTABLE INDUCTANCE. FREDERICK J. GIVEN, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 28, 1930. Serial No. 464,449. 7 Claims. (Cl. 171—242.)



1. An inductance device comprising a toroidal coil, a magnetic material core therefor, means for impressing upon said core a unidirectional external magnetic field, and means to vary the inductance of said coil, comprising means to vary the strength of said unidirectional field.

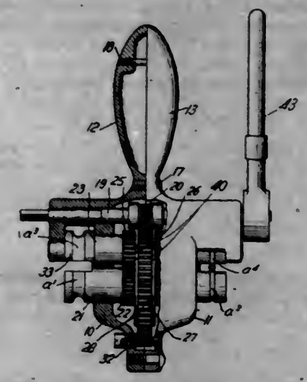
1,896,511. FLYING MACHINE. JULIUS GOLDMAN and DIMITRI LIAMIN, Los Angeles, Calif.; said Liamin assignor to said Goldman. Filed May 11, 1931. Serial No. 536,896. 11 Claims. (Cl. 244—19.)



1. A flying apparatus of the class described embodying: a pair of airplane units each comprising a plurality of wings; means for supporting said airplane units in vertically spaced relation with each other; means for rotating said units in opposite directions; and means including a single control for adjusting the angle of attack of the wings of both units and for varying the angle of attack of the wings in one unit relative to the angle of attack of the wings in the other unit.

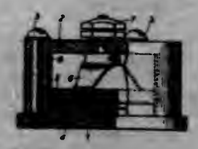
1,896,512. METAL-ROLLING TOOL. WALTER S. HAYFORD, Morristown, and CHARLES R. MOORE, Maplewood, N. J., assignors, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed May 2, 1930. Serial No. 449,132. 7 Claims. (Cl. 140—118.)

1. In a rolling tool, an operating shaft, an actuating member therefor, a plurality of driven shafts, a gearing mechanism operatively connecting said shafts to said operating shaft, forming rollers carried by said shafts,



a two-part casing for housing said mechanism and for supporting said shafts, said casing having cooperating portions arranged to form a handle for the tool.

1,896,513. PIEZO-ELECTRIC CRYSTAL. OLE M. HOVGAARD, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 8, 1930. Serial No. 487,193. 6 Claims. (Cl. 171—327.)



1. A circular piezo-electric crystal plate, a holder therefor, means within said holder for fixedly positioning said crystal by applying pressure over an annular surface area at its periphery, said plate being so dimensioned that its diameter is at least twenty-two times its thickness.

1,896,514. HUMIDIFIER. LEROY W. HOYT, Stamford, Conn. Filed Mar. 6, 1931. Serial No. 520,495. 9 Claims. (Cl. 237—78.)



9. In a humidifier, a conduit to be connected with a steam line to receive steam therefrom, a pipe communi-

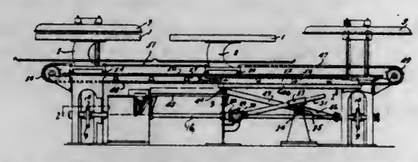
cating with the interior of said conduit to receive steam therefrom and carry it to the exterior thereof, said pipe encircling the conduit adjacent one end of the latter, said pipe perforated in its conduit encircling portion for the discharge of steam, an open ended casing spaced from and surrounding said conduit and into which said steam is discharged, and baffles between said conduit and casing and forming air passages through the latter.

1,896,515. AMMUNITION. OTTO V. HUFFMAN, Bedford Hills, N. Y. Filed Mar. 26, 1931. Serial No. 525,420. 8 Claims. (Cl. 102—26.)



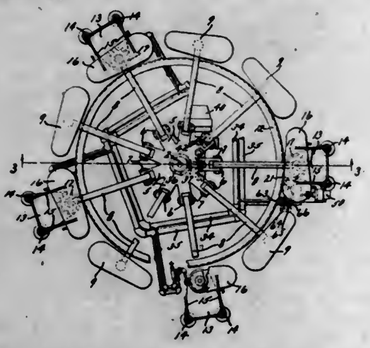
8. In combination, a rifled gun, ammunition therefor having a permanent, asymmetric, deformed base and means to determine the rotary set of said ammunition in said gun.

1,896,516. PRESSING MACHINE. GEORGE W. JOHNSON, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 4, 1930. Serial No. 479,704. 4 Claims. (Cl. 68—9.)



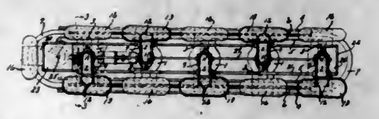
1. A pressing machine comprising spaced pressing beds arranged in a gang and adapted to travel in a path, spaced pressing heads arranged along said path and spaced apart with the distance between the centers of the heads approximately twice the distance between the centers of companion beds, whereby only one of a pair of beds may be in registry with a head while the companion bed is in exposed position between said spaced heads, means for reciprocating said gang to bring each bed successively into and out of registry with a head, and means for causing pressing engagement between the registered heads and beds.

1,896,517. CONTROL MECHANISM FOR CONTINUOUS PRESSING MACHINES. GEORGE W. JOHNSON, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 8, 1930. Serial No. 487,149. 10 Claims. (Cl. 68—9.)



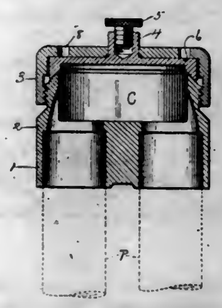
2. In a pressing machine, a number of spaced heads arranged in an endless path, a plurality of uniformly spaced beds in said path, there being more than twice as many beds as heads and the heads except at one portion of the path being spaced apart a distance equal to the spacing between alternate beds, means for moving the group of beds step by step for effecting registration of successive beds with a head, means for effecting pressing engagement between the heads and those of the beds in registration with said heads, and means for timing the step by step movement of said beds and the pressing operation.

1,896,518. CONTROL MECHANISM FOR PRESSING MACHINES. GEORGE W. JOHNSON, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 20, 1930. Serial No. 489,894. 6 Claims. (Cl. 68—9.)



1. A pressing machine comprising spaced pressing beds arranged in a gang and adapted to travel about a loop with straight sides, spaced pressing heads arranged about said loop and in the path of travel of said beds, said pressing heads being spaced apart with the distance between the centers of the heads substantially twice the distance between the centers of companion beds, whereby only one of a pair of beds may be in registry with a head while the companion bed is in exposed position, means for progressively moving said beds about said path to move each of said beds successively into and out of exposed position and into and out of registry with a head, and means for producing pressing engagement between the registered heads and beds.

1,896,519. SANITARY PIPE COUPLING. IRA H. KENDALL, Potsdam, N. Y., assignor to Genevieve A. Kendall, Potsdam, N. Y. Filed Aug. 25, 1928. Serial No. 302,045. 2 Claims. (Cl. 137—86.)



2. A pipe fitting comprising a head which is provided at its free end with a ground and beveled face which tapers outwardly from the free end thereof, a cup-shaped cap adapted to be threaded upon the outer periphery of said head, said cap being provided with a central opening, a cup-shaped closure member having a projection which projects slidably through said opening, said closure member being retained in assembled relation with said cap by means external to said cap, said closure member having a ground and beveled inner rim which has the same shape as said beveled face, said inner rim being adapted to form a tight-fitting ground joint with said beveled face, the adjacent lateral walls of said cap and of said closure members having sufficient clearance to permit said cap to be turned relative to said closure member until the inner end face of said cap abuts the adjacent end face of the closure member.

1,896,520. PROCESS FOR THE MANUFACTURE OF A DISEMBITTERED PRODUCT OF WHEAT-GERM. ERNST KOMM, Dresden-Weisser Hirsch, Germany. Filed May 24, 1928. Serial No. 280,379. 3 Claims. (Cl. 99—10.)

1. A process for the manufacture of a disembittered product of wheat-germ of an agreeable taste and a high proportion of vitamine and vitasterine, which consists in that, for the purpose of removing the bitter-principles from the wheat-germs the latter are mashed in the presence of an atmosphere of carbonic dioxide and the mixture obtained by reaction is, for the removal of the bitter-principles, subjected to a distillation by steam.

1,896,521. PROCESS FOR OBTAINING HIGH-VALUED NUTRIENTS FROM THE PRODUCTS OF CEREALIA AND LEGUMENS. ERNST KOMM, Dresden-Weisser Hirsch, Germany. Filed June 2, 1928. Serial No. 282,507. 2 Claims. (Cl. 99—10.)

1. The method of producing a food-product rich in vitasterines as well as in vitamines, comprising taking a grain by-product rich in cellulose and bitter principles, meshing same with water while adding a diastasic substance thereto and retaining the vitasterines, separating the liquid produced thereby, and passing steam through said liquid at a temperature and rate sufficient to volatilise the bitter principle without impairing the activity of the vitasterines and the vitamins.

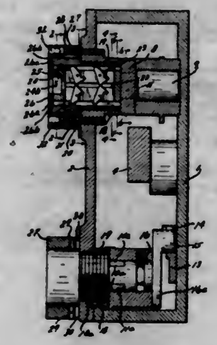
1,896,522. APPARATUS FOR OBTAINING SAMPLES FROM DRILLED WELLS. GEORGE A. MACREADY, Los Angeles, Calif. Filed July 5, 1922, Serial No. 572,889. Renewed Oct. 10, 1927. 7 Claims. (Cl. 166—1.)



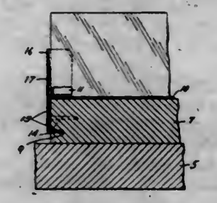
1. A device for obtaining test samples from drilled wells comprising a pipe having a swiveled packer at its foot to engage a seat in the well hole, said device having valve means permitting expulsion of fluid by displacement from within the pipe into the space outside of the pipe above the packer but preventing flow of fluid in the opposite direction.

1,896,523. JAIL LOCK. ANDREW MAIN, Cleveland, Ohio, assignor, by mesne assignments, to Cleveland Fare Box and Four-Way Lock Co., Cleveland, Ohio, a Corporation of Ohio. Filed June 26, 1930. Serial No. 463,954. 11 Claims. (Cl. 70—46.)

1. Lock mechanism of the character described, comprising a lock casing, bolt operating parts therein, a combination unit including relatively rotatable cylinder and plug members, said cylinder being attached to the casing and removable through its front wall, said plug having operating connections with the bolt operating parts capable of assembly and disassembly by motion in the direction of the plug axis, the plug and its operating connection being endwise removable through the key end of the cylinder in disassembling, and a collar removably attached to the front wall of the casing and having interlocking relation with the cylinder to prevent rotation thereof.



1,896,524. COUNTER CONSTRUCTION. PIERRE H. MEYER, New York, N. Y. Filed June 28, 1930. Serial No. 464,457. 4 Claims. (Cl. 312—140.)

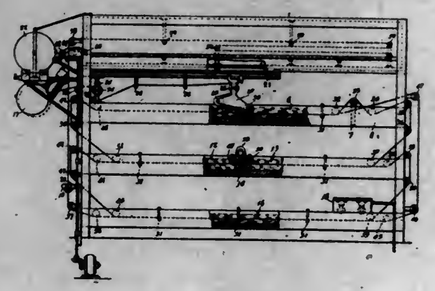


1. A device of the class described comprising a plate, a flange extending angularly from one end of the plate, a U-shaped body disposed at the other end of the plate and comprising a crosshead in alinement with the plate and side walls projecting angularly therefrom, the side walls of said body being set inwardly adjacent the crosshead thereof to increase the spring properties of said side walls, the side walls of said body converging from said crosshead to the free edges thereof and being adapted to be flexed laterally, and the upper edges of the side walls of said body flaring outwardly.

1,896,525. FILM PROCESSING MACHINE AND METHOD. CHARLES ROY HUNTER and ROBERT M. PIERCE, Los Angeles, Calif., assignors to Universal Pictures Corporation, Universal City, Calif., a Corporation of New York. Filed Oct. 16, 1931. Serial No. 569,162. 5 Claims. (Cl. 95—94.)
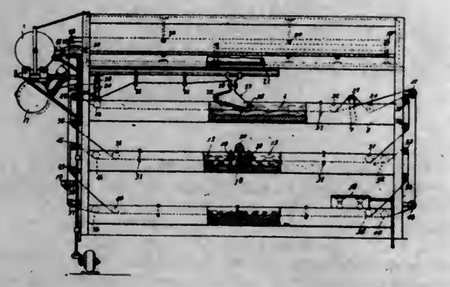
1. In a machine for developing a positive image on an exposed motion picture film tape by a single, continuous process, a plurality of elongated, shallow reservoirs, means for guiding film tape in substantially a straight line through each reservoir, roller means for guiding said film tape into the first of said reservoirs, roller means for guiding said film tape from each reservoir into the next succeeding reservoir, a drying chamber, means for guiding the film tape from the last of said reservoirs into said drying chamber, and a single, take-up means engaging with the film tape beyond said drying chamber and serving as the sole means for moving the film tape through

the machine; said successive reservoirs, in the order in which the film tape passes therethrough, containing developing fluid, washing fluid, clearing fluid, washing fluid,



redeveloping fluid, and washing fluid, respectively, and a source of actinic light for illuminating said film tape between said washing and re-developing reservoirs.

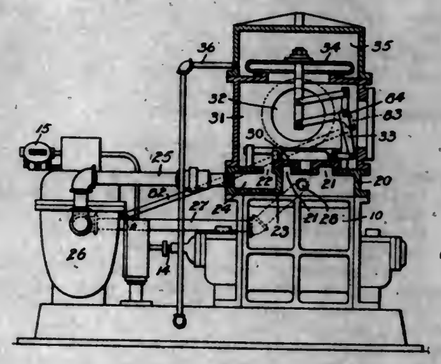
1,896,526. FILM PROCESSING MACHINE AND METHOD. CHALMERS C. SMITH, CHARLES ROY HUNTER, and ROBERT M. PIERCE, Los Angeles, Calif., assignors to Universal Pictures Corporation, Universal City, Calif., a Corporation of New York. Filed Oct. 20, 1931. Serial No. 569,884. 15 Claims. (Cl. 95—94.)



1. A developing machine for motion picture film tape comprising a treating reservoir, means comprising fixed guides and guides movable longitudinally of the reservoir for guiding a plurality of film tapes through said reservoir, a plurality of feed reels for simultaneously feeding said film tapes into said reservoir, a plurality of take-up means for drawing said film tapes through said reservoir, a common source of motion for driving all said take-up means, and a plurality of clutch elements for connecting each take-up means to said source of motion, each clutch element functioning independent of the others.

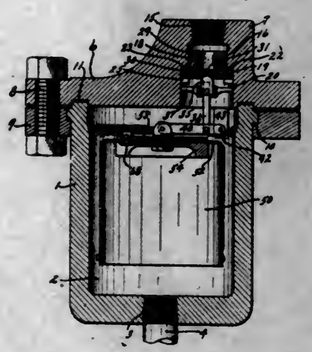
1,896,527. TANDEM METER. CARL R. HOUGHTON, Connersville, Ind., assignor to The Connersville Blower Company, Inc., Connersville, Ind., a Corporation of Indiana. Filed Mar. 12, 1928. Serial No. 260,912. 1 Claim. (Cl. 73—167.)

A meter unit comprising a positive displacement meter having a movable element the rate of movement of which varies with variations in differential pressure across the meter unit, a register, a driving train between the element and register, and means varying with variations in the rate of movement of said moving meter element for varying the effect of the driving train on the register in-



versely with the rate of movement of said moving meter element, said means including a movable element shiftable by variations in differential pressure across said meter.

1,896,528. STEAM TRAP. LESLIE P. STRONG, Lakewood, Ohio, assignor to The Clark Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 14, 1931. Serial No. 522,585. 3 Claims. (Cl. 137—103.)



1. A steam trap, comprising a casing having a chamber and also having an inlet opening through which water, steam and air enter said chamber and an outlet opening through which water and air leave said chamber, valve mechanism for controlling said outlet opening, an inverted bucket arranged within said chamber for actuating said valve mechanism, said bucket being provided in its top wall with a vent and with a valve seat surrounding said vent, and a valve for closing and opening the major part of said vent, the remaining part of said vent being open at all times for vent purposes, said valve being arranged above said bucket vent and being of sufficient weight to enable it to normally rest upon its seat against the pressure of the air and/or steam within said trap bucket.

1,896,529. LIQUID FOOD PRODUCT AND METHOD OF PACKAGING THE SAME. DONALD K. TRESSLER, Gloucester, and KARL B. NORTON, Manchester, Mass., assignors to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Sept. 6, 1930. Serial No. 480,196. 16 Claims. (Cl. 99—14.)

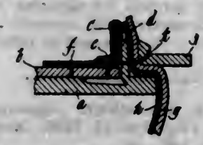
1. The method of preparing liquid or semi-liquid food products which consists in forming the fresh product into a frozen cake having exterior surface consisting entirely of the said product and then protecting it by completely enclosing the frozen cake in an aqueous glaze directly engaging the said surface.

1,896,530. DERRICK CONSTRUCTION. WILLIAM A. TROUT, Los Angeles, Calif., assignor to Emsco Derrick and Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 12, 1929. Serial No. 332,179. 6 Claims. (Cl. 189—19.)



1. In a derrick construction, the combination of a frame element; a plate member secured to said frame element; a bracing member; securing means for securing together said plate member and said bracing member; and aligning rivets on opposite sides of said securing means for preventing relative rotational movement of said members, said aligning rivets being supported by one of said members and having pin-heads resting in openings in the other one of said members.

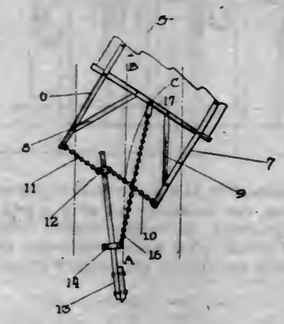
1,896,531. COMPOUND INNERSOLE FOR WELT SHOES. PERCY W. VALENTINE, Natick, Mass. Filed May 15, 1929. Serial No. 363,143. 3 Claims. (Cl. 36—22.)



1. A composite innersole consisting of a leather body having an integral flap protruding from one face, a filler piece occupying the space bounded by said flap and adhesively united to the face of the body, and a fabric rib element having a base flange stitched independently to the filler piece and a rib proper portion extending away from the filler piece substantially flush with the edges thereof and contiguous to the inner side of the flap.

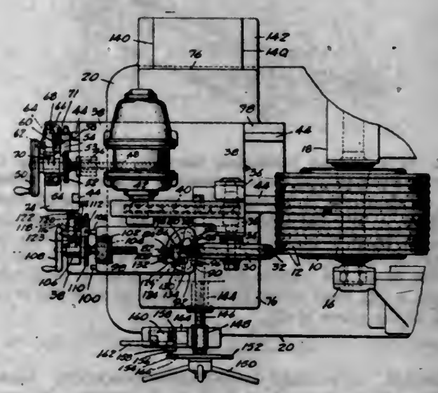
3. The method of making a composite innersole which comprises channeling a body piece and turning up the flap of said channel on a line within the edge of the body substantially similar to such edge, separately providing a self-sustaining filler piece having outlines and dimensions substantially conforming to the space within said upturned flap, separately stitching a doubled strip of fabric to the marginal portion of said filler piece and turning up the fold of said strip as a rib proper substantially flush with the edge of the filler piece, and placing the filler piece against the innersole body within the space bounded by said flap and with said rib proper extending contiguous to the flap.

1,896,532. PLOW GUIDING MEANS. CIRO J. VLARDI, Sacramento, Calif. Filed June 29, 1932. Serial No. 619,997. 1 Claim. (Cl. 97—47.)



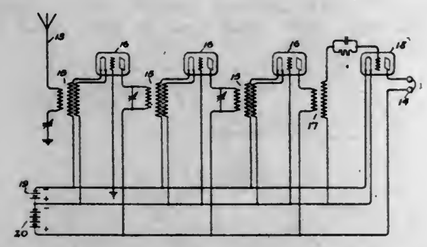
In a device of the character described, the combination of a tractor having a pair of spaced rearwardly extending members attached thereto, a slider centrally positioned between the extremities of said members, a guide bar movable in said slider and adapted to have an implement secured thereto, a clamp secured to said guide bar at a point remote from said slider and a flexible coupling extending from said clamp to said tractor, the point of connection of said coupling being in alignment with said slider when said tractor is moved in a straight line.

1,896,533. SHAPING OR DRESSING APPARATUS. ALBERT VUILLEUMIER, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Mar. 22, 1930. Serial No. 438,200. 4 Claims. (Cl. 125—11.)



1. In a machine for shaping a rotary member, means for rotating the member around an axis, a cutting wheel for rotatably engaging the member, a truing tool for the cutting wheel, a slide for feeding the cutting wheel and the truing tool towards the rotary member, a slide for feeding the truing tool towards the cutting wheel, an oscillating support for the truing tool, and fluid pressure means for oscillating the support and actuating the slides; substantially as described.

1,896,534. ELECTRICAL SYSTEM. ERNST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 13, 1927. Serial No. 191,254. 4 Claims. (Cl. 179—171.)

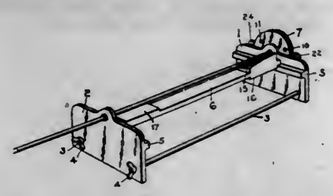


1. The combination of a space discharge device provided with a cathode and an anode and with a grid maintained at a fixed potential, an output circuit comprising said cathode and anode, and means connected between said grid and anode for tuning said output circuit.

1,896,535. VULCANIZATION OF RUBBER. OSWALD BEHREND, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 18, 1930. Serial No. 429,461. 10 Claims. (Cl. 18—53.)

1. The process of vulcanising rubber which comprises heating rubber and sulfur in the presence of a vulcanization accelerator comprising a product formed by treating an aliphatic aldehyde aromatic amine reaction product with toluene containing at least one substituted halogen atom in the methyl group.

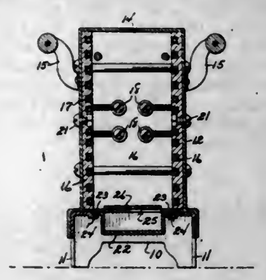
1,896,536. ARROW FEATHERING MACHINE. THOMAS BELSHAW, Seattle, Wash. Filed Nov. 20, 1931. Serial No. 576,333. 11 Claims. (Cl. 273—106.5.)



1. In an arrow feathering machine, a feathering bar having a plurality of seats for feather sections to be mounted to an arrow, said seats defining a right hand screw portion, a left hand screw portion and a straight portion to be positioned parallel with the arrow shaft and adapted, during the placing of a feather section on an arrow to set the feather section with a right hand screw pitch, a left hand screw pitch or parallel with the center line of the arrow shaft.

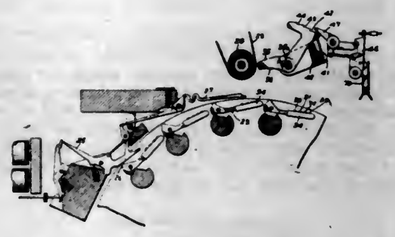
1,896,537. ELECTRIC SMOKELESS ROASTER. JOSEPH JOHN BONACCORSI, New York, N. Y., assignor, by mesne assignments, of one-half to Santo Salamone, New York, N. Y. Filed June 19, 1931. Serial No. 545,540. 1 Claim. (Cl. 53—5.)

A roaster of the character described comprising a base having supporting legs and an elongated opening longitudinally thereof in its top, a casing rising from the base and closed at its sides, top and rear with an open front and bottom, the open bottom registering with the elongated slot in the base, electric heating units arranged within the casing at opposite sides thereof and insulated therefrom and having an electric conductor for supplying electric current thereto, guides formed at the opposite longer edges of the elongated slot, a drip tray slidably fitted in



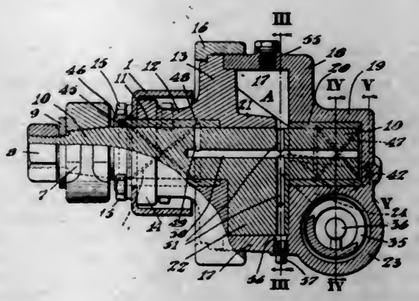
the guide and closing the open bottom of the casing, and a perforated cover plate for said tray and removably supported over the open top thereof.

1,896,538. TABULATING MACHINE. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed July 10, 1930. Serial No. 467,100. 10 Claims. (Cl. 101—93.)



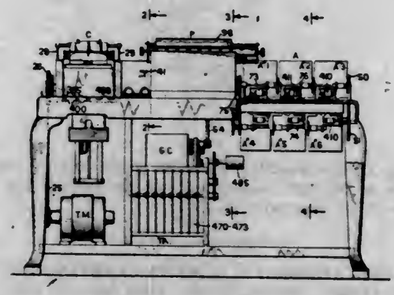
1. In a machine of the class described having a plurality of type carriers each with multiple type thereon and in which printing is effected during continuous flight and movement of the type, means for selecting the type carriers for selective printing action, and means for shifting the type upon the carriers for effecting a further selection of the type themselves for controlling which of the type upon a carrier is to be caused to print.

1,896,539. SHOCK ABSORBER. GROSVENOR M. CROSS, Newton, Mass. Filed Feb. 12, 1930. Serial No. 427,831. 31 Claims. (Cl. 188—89.)



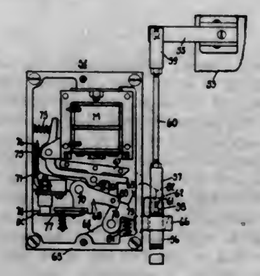
1. A spring reaction neutralizer having, in combination, two members having a limited relative movement, a fluid-containing element rigidly connected to one of them, a fluid-actuating element connected to the other and to the first element and being so constructed and arranged that motion between said members causes fluid flow within the first element, and an element including a valve, a spring, and a spring-stressing member, said valve allowing free flow of fluid in one direction but opposing flow in the other direction when said spring is stressed, said spring-stressing member being actuated by said fluid flow.

1,896,540. TABULATING MACHINE. GEORGE F. DALY, Johnson City, and RALPH E. PAGE, Binghamton, N. Y., assignors to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Mar. 30, 1928. Serial No. 265,958. 38 Claims. (Cl. 235—92.)



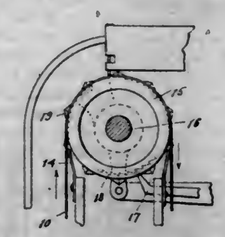
5. In a record controlled tabulating machine in combination, record analyzing means and a pair of entry receiving devices adapted to be controlled thereby, means controlled by machine operation to limit entries into said entry receiving devices to a single record of each group and record controlled means for selecting one or the other of said pair of entry receiving devices to receive items therefrom.

1,896,541. ELECTROMECHANICAL INTERLOCK. EDWARD LEE DUNN, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 29, 1929. Serial No. 359,049. 18 Claims. (Cl. 187—291.)



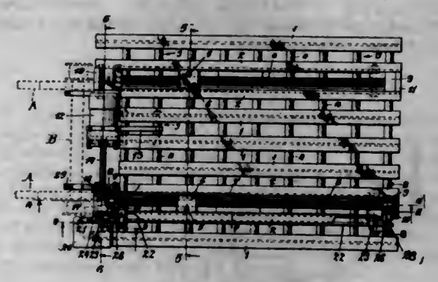
1. Interlocking mechanism for an elevator hatchway door comprising; circuit controlling means; a member secured to said door for movement therewith; means movable into the path of movement of said door member to obstruct the movement thereof from its door closed position; and means for closing said circuit controlling means, said last mentioned means acting to secure said obstructing means in its obstructing position when said circuit controlling means is closed, thereby locking the door.

1,896,542. PERFORATED RECORD SHEET. KELLEY D. EVANS, Hamilton, Ohio, assignor of one-half to C. E. Hooven, Hamilton, Ohio. Filed May 14, 1927. Serial No. 191,315. 2 Claims. (Cl. 74—31.)



1. A record sheet control mechanism comprising a sheet having a series of perforations adjacent each margin, each of said perforations comprising a transversely elongated body portion and a longitudinal extension, and a sprocket having teeth engaging in said perforations, each of said teeth comprising a transversely elongated block and a longitudinal extension intermediate the ends of said block, said block and said extension having their top surfaces oppositely beveled to facilitate engagement and disengagement of the teeth and perforations.

1,896,543. INDUSTRIAL TRUCK. ALBERT H. GROEBE, Buffalo, N. Y., asignor to The Automatic Transportation Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Feb. 18, 1929. Serial No. 340,782. 6 Claims. (Cl. 214—82.)

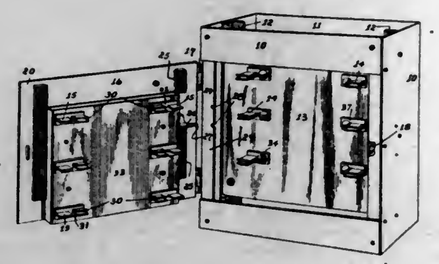


1. A truck platform of the class described comprising a load supporting frame, a member mounted on said frame for movement back and forth between determined limits, said member being adapted for connection with a load to move it on or off the load supporting frame, an electric motor on the frame for moving said member and means for breaking the circuit through said motor when said member reaches the limit of its movement in either direction.

1,896,544. ANTIOXIDANT FOR VULCANIZED RUBBER PRODUCTS. JOSEPH R. INGRAM, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 18, 1931. Serial No. 516,835. 14 Claims. (Cl. 18—50.)

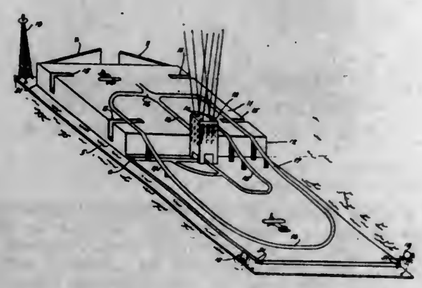
1. The process of vulcanizing rubber which comprises heating rubber and sulfur in the presence of an antioxidant comprising a reaction product of an aromatic secondary amine and a sulfur chloride, wherein the nitrogen atom of said amine is joined directly to a sulfur atom.

1,896,545. SAFETY SWITCH MECHANISM. JOSEPH F. JIRKA and RALPH N. MCCURDY, Cleveland, and ERNEST SLAGER, Garfield Heights Village, Ohio, and RALPH D. ERNEST, Dearborn, Mich., assignors to The Powerlite Switchboard Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 2, 1928. Serial No. 258,482. 13 Claims. (Cl. 200—114.)



1. In a safety switch, frame members movable toward and from each other, one said member bearing spaced contact points and the other member having a conductor carrying element slidably mounted thereon in a vertical plane, the said conductor carrying element having spaced contact points normally out of register with the points on the first-mentioned member when in its lower position by reason of gravity but in register therewith when in their raised position, and means connected to said contacts for receiving detachable fuses.

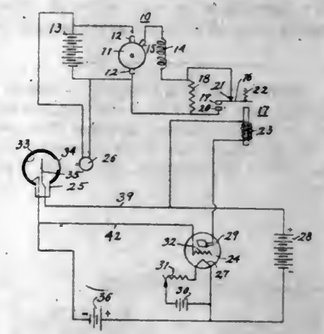
1,896,546. FLOATING AIRPORT. IRVING KULIK, Brooklyn, N. Y. Filed Jan. 20, 1930. Serial No. 421,941. 6 Claims. (Cl. 114—0.5.)



1. A floating airport having different landing levels, and an endless track extending over a plurality of levels and embodying ramps between said levels.

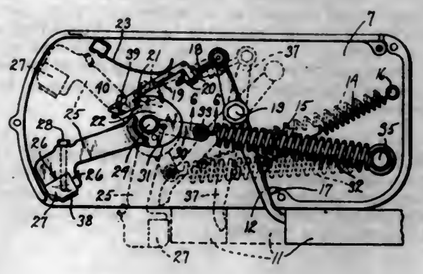
1,896,547. REGULATING MEANS. BENNETT M. LEECE, Cleveland, and DALE S. COLE, Cleveland Heights, Ohio, assignors to The Leece-Neville Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 21, 1930. Serial No. 469,578. 11 Claims. (Cl. 171—312.)

1. In apparatus of the character described, the combination with a generator having a field circuit, of a regulator comprising means for radiating light energy at an intensity which varies as the result of changes in the voltage generated, and means including a device



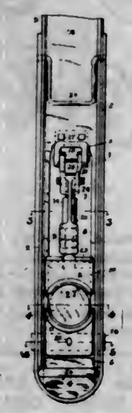
having a light-sensitive electrode responsive to the intensity of the light energy radiated for varying the excitation of the generator field.

1,896,548. AUTOMATIC LUMBER STAMPING DEVICE. GUS LUNDEN, Colville, Wash. Filed Mar. 16, 1931. Serial No. 522,804. 1 Claim. (Cl. 101—4.)



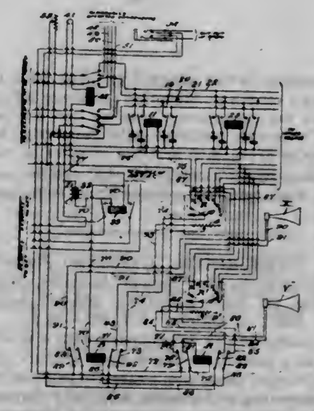
An automatic lumber stamping device having in combination a casing, a lever arm pivotally mounted in the casing with one of its ends normally projecting through an opening in the bottom of said casing, a spring arranged to normally retain said lever in the retracted position, a trigger, adjustable connecting means between the lever and trigger, a cam eccentrically pivoted to the casing, a shoulder for said cam adapted to be engaged by said trigger, a spring arranged to normally retain said trigger in engagement with said shoulder, a hammer fixedly connected to the cam, a die for the head end of the hammer, said cam having a segmental slot, a link member having one end pivotally mounted in said slot with its upper edge normally in engagement with the upper wall thereof, a spring pivotally connected to the other end of said link and to the casing whereby said link and cam are retained in the normal position, said lever adapted to impart rotary movement to the cam, lifting the hammer and creating tension in the spring connected to the cam when the exterior end of said lever is moved forward, adjustable means for regulating the limits of the upward movement of the hammer, said trigger adapted to release its hold on the cam shoulder at a predetermined position whereby the tension of said spring causes the hammer to swing downwardly through the bottom casing opening, and said springs adapted to cause the lever arm, hammer and trigger to return to their respective normal positions when the exterior end of the lever is released.

1,896,549. PITMAN CONSTRUCTION. JOSEPH R. MAHAN, Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 29, 1930. Serial No. 491,903. 4 Claims. (Cl. 287—93.)



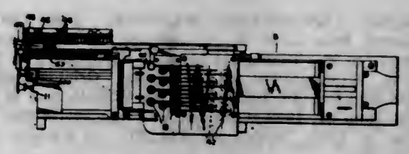
1. In a pitman construction, a frame work comprising a U-shaped terminal member, an I-beam having the outer faces of its flanges secured to the inner opposing faces of the U-shaped member, a portion of the web of the I-beam being removed to leave opposing ribs, a traveling wrist pin bearing slidable astride the ribs and having lateral movement transversely thereof and limited thereby, a non-traveling wrist pin bearing opposite the first bearing, a pivotal support for the second bearing, and means providing limited pivotal movement thereof transversely of the ribs.

1,896,550. REMOTE CONTROL APPARATUS FOR RADIO CIRCUITS. EDWIN JULIUS MANZ, New York, N. Y. Filed Apr. 17, 1930. Serial No. 445,000. 5 Claims. (Cl. 250—40.)



2. In the "broadcasting" art the combination with a modern radio receiving circuit capable of intercepting entertainment programs broadcast on frequencies from about 500 to about 1500 kilocycles from a plurality of radio sending stations, of a plurality of sets of tuning elements mounted adjacent to each other upon an integral panel and including a plurality of associated adjustable condensers for bringing the circuit into resonance with a signal received from a selected sending station, said condensers mounted on a base adjacent to and in alignment with each other, one plate of each of said condensers arranged to support the other plate of the condenser and wide enough to shield the condenser and associated parts thereof from all adjacent condenser and associated parts, electro-magnetic means for connecting each of said sets of tuning elements to said radio circuit, an armature associated with each electro-magnetic means and arranged to operate all of the condensers of a set of tuning elements simultaneously, a plurality of connector means located at a plurality of remote points and connected with said electro-magnetic means and selector means associated with said connector means for selecting the desired radio-sending station and causing the energizing of the electro-magnetic means associated with the tuning element for the selected station whereby the said electro-magnetic means is energized and actuated and the radio receiving circuit is tuned into resonance with the signals of the selected station.

1,896,551. ACCOUNTING MACHINE FOR PUNCHING TOTALS. MICHAEL MAUL, Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed July 30, 1927, Serial No. 209,457, and in Germany Nov. 20, 1926. 7 Claims. (Cl. 235—92.)



1. An accounting machine comprising a plurality of denominational order accumulating elements having means for effecting concurrent data entries therein, a punching mechanism, manual means for initiating operation of the punching mechanism in accordance with the data entered into the first denominational order accumulating elements, and automatic means for causing operation of the punches in accordance with the data entered into the accumulating elements above the first denomination.

1,896,552. PRODUCTION OF ACETYLENE. RUSSELL WARD MILLAR, Berkeley, Calif., assignor to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Mar. 10, 1930. Serial No. 434,819. 7 Claims. (Cl. 260—170.)

1. A process for the decomposition of hydrocarbons, comprising: decomposing the hydrocarbons by means of an inverted flame, a portion of the hydrocarbons serving as the supporter of combustion and wherein the ratio of initial hydrocarbon to oxygen lies between about 1.2 and about 1.7 (volumetric basis).

1,896,553. HYDROMETER SYRINGE WITH LAMP ATTACHMENT. JOHN M. NEWKIRK, Mount Healthy, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed Nov. 9, 1931. Serial No. 573,746. 9 Claims. (Cl. 240—2.)

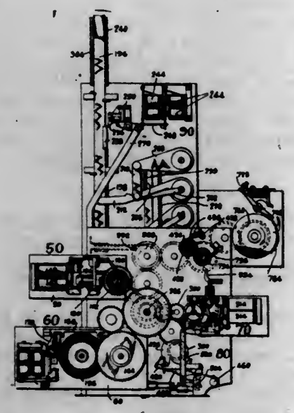
2. A hydrometer syringe having a float and an electric lamp mounted thereon in position to illuminate the float,

and having a pair of contactors which are connected to the terminals of the lamp and which are adapted to engage the terminals of a battery cell when the syringe is inserted



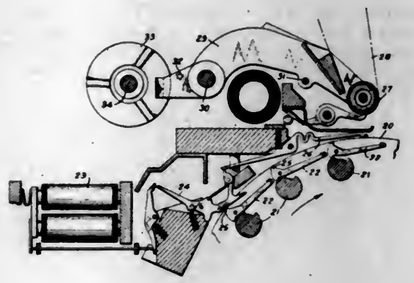
therein to make a reading, the contactors being yieldable and thereby free to engage the ends of terminals of uneven heights.

1,896,554. ACCOUNTING MACHINE. JOHN ROYDEN PEIRCE, New York, N. Y., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Original application filed Oct. 18, 1927, Serial No. 226,845, and in Canada June 21, 1928. Divided and this application filed Aug. 8, 1929. Serial No. 384,297. 24 Claims. (Cl. 101—93.)



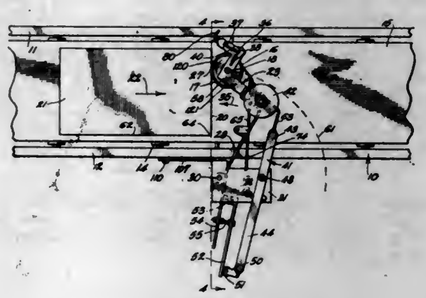
1. In an accounting machine adapted for control by record cards containing numerical and alphabetical data in the form of perforations, in combination, a single set of analyzing means for sensing said perforations in a plurality of card columns once while the cards are in motion and means controlled by said sensing means for printing said numerical and alphabetical data on a record sheet.

1,896,555. ROTARY PRINTING MACHINE. JOHN ROYDEN PEIRCE, New York, N. Y., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 14, 1931. Serial No. 508,678. 12 Claims. (Cl. 101—93.)



1. A printing machine including a printing drum having a plurality of circumferential columns of type thereon, electrically controlled means for selecting a type in one of said columns for printing and means for associating said selecting means with each of said columns of type in succession.

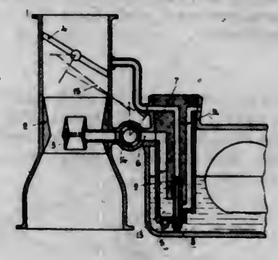
1,896,556. ROLLER TYPE STAMPING MACHINE. JOHN S. PHELPS, Whittier, Calif. Filed Dec. 8, 1930. Serial No. 500,926. 22 Claims. (Cl. 101—35.)



1. A stamping device adapted to print an article as it moves along a conveyor, including: a rotary printing member adapted for engagement with an end of the article; supporting means for translationally supporting said printing member to cause said printing member to move laterally as it is moved forwardly by said article; and means for lifting said printing member from engagement with said article.

1,896,557. CARBURETOR. GUGLIELMO PIRINOLI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed Sept. 23, 1931, Serial No. 564,655, and in Italy July 13, 1931. 2 Claims. (Cl. 261—41.)

1. In a carburetor, in combination with a constant level chamber and a conduit having a main Venturi tube, a central spray Venturi tube, and a throttle valve, a connecting member connecting said conduit with said chamber, an adjusting valve in said connecting member, a pipe projecting from said connecting member into said conduit and serving for supporting and connecting said central Venturi tube with the outlet of said valve, a plug in said chamber, a main nozzle, a compensating nozzle and a slow-speed nozzle in a chamber at the lower end of said plug, said plug having passages for connecting said last-named chamber



with the inlet of said adjusting valve and with the atmosphere and means for operatively connecting said adjusting valve with said throttle valve.

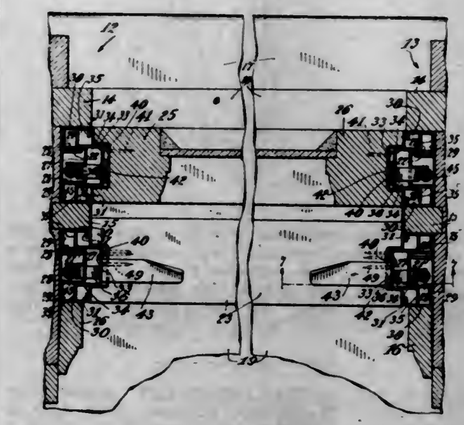
1,896,558. OIL PUMPING APPARATUS. LESLIE A. RAWSON, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 23, 1931. Serial No. 582,764. 9 Claims. (Cl. 74—14.)



1. In an apparatus for pumping oil from an oil well, the combination of: an oil tubing extended into a well; a sucker rod extending from said oil tubing; a walking beam pivotally supported with one end above said oil tubing; a horizontal supporting shaft supported by said end of said walking beam; a sucker rod hanger supported by said supporting shaft and supporting said sucker rod; and means for adjusting said sucker rod hanger on said supporting shaft.

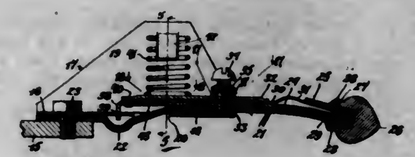
1,896,559. REVOLVING WINDOW SASH. ZAN RUCHIN, Bay Shore, N. Y. Filed Mar. 20, 1931. Serial No. 524,113. 2 Claims. (Cl. 20—49.)

1. In a revoluble window sash, in combination, a window frame, vertical guides carried by the inner faces of said window frame adapted for the vertical movement of a window sash guide; a window sash having recesses in opposite sides thereof; a vertical double U-shaped window sash guide positioned between said vertical frame guides and vertically movable therein, a U-shaped member, the base of which is vertically movable over the exposed face of the double U-shaped sash guide, the legs of said U-shaped member abutting upon the faces of the double U-shaped member, said U-shaped member capable of being horizontally moved into and out of said sash recess pre-



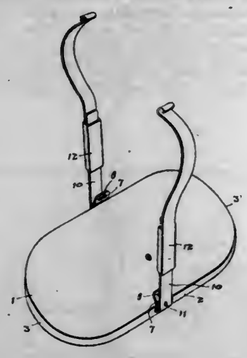
venting and allowing a pivotal movement of said sash with respect to said frame; a pivotal member connecting said sash, said U-shaped member and said double U-shaped member; resilient means normally retaining the base of said U-shaped member within a sash recess preventing a pivotal movement of said sash and means adapted to remove said U-shaped member from within said sash recess allowing pivotal movement of said sash upon said pivotal member.

1,896,560. CONTACT FINGER FOR ELECTRICAL CONTROLLERS AND SWITCHES. ROSLYN V. H. RUSSELL, Niagara Falls, N. Y., assignor to Russell Manufacturing Co., New York, N. Y., a Copartnership composed of Richard Russell and Roslyn V. H. Russell. Filed Apr. 15, 1931. Serial No. 530,175. 19 Claims. (Cl. 200—166.)



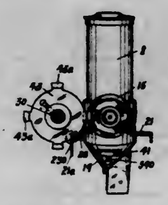
1. The combination with a contact finger having one of its ends bent back to form a loop and a contact tip having a recess adapted to embrace the bend of said loop, of a spring arranged in said loop and yieldingly forcing the loop legs into engagement with said recess, said spring being formed to yieldingly permit the legs of said loop to be intentionally compressed together whereby said tip can be removed and replaced on said loop.

1,896,561. KNEE PAD. WILLIAM J. RUTH, Toronto, Ontario, Canada. Filed Apr. 2, 1931. Serial No. 527,214. 4 Claims. (Cl. 2—24.)



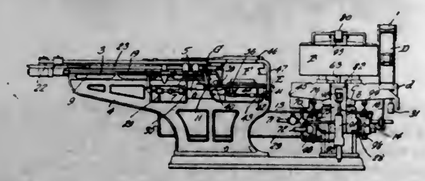
1. A knee pad, comprising in combination a resilient pad of moulded rubber, said pad being reinforced bodily by a reinforcing metal plate embedded therein to impart body rigidity thereto, said plate having attachment lugs projecting from the edges, and means secured to said lugs for securing the pad to the leg of the wearer.

1,896,562. SEED-SOWING IMPLEMENT. ROBERT LINDSAY SCARLETT, Musselburgh, Scotland. Filed Apr. 26, 1929, Serial No. 358,190, and in Great Britain May 1, 1928. 7 Claims. (Cl. 111—82.)



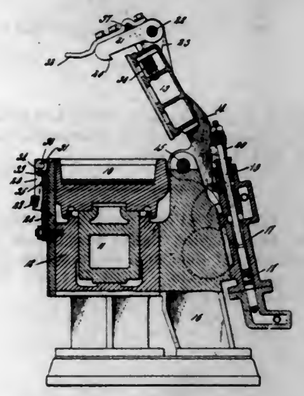
1. In a seed sowing implement, a wheeled carriage, a seed receptacle mounted on said carriage and having an aperture in the bottom thereof, an adjustable slide in said receptacle for controlling the effective size of said aperture, means rotatably mounted in said receptacle for intermittently forcing seeds therefrom through said aperture, and means actuated by movement of said carriage for intermittently rotating said seed forcing means.

1,896,563. CAKE MOLDING OR FORMING MACHINE. FOREST C. SIMON, Piqua, Ohio, assignor to The French Oil Mill Machinery Company, Piqua, Ohio. Filed Dec. 15, 1928. Serial No. 326,235. 28 Claims. (Cl. 100—51.)



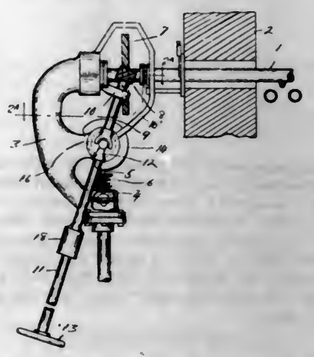
1. In a cake molding machine, the combination of a cake molding having a pivotally movable end wall member provided with a handle by which it may be grasped and moved to a predetermined operative position, a charge box movable to deposit material in the mold, and operating means for the charge box controlled by the movement of said end member and operating only when the end member is moved its full stroke by hand to its operative position at the end of the mold to actuate said operating means to advance said charge box to deposit the material in the mold.

1,896,564. LATCH MECHANISM FOR CAKE FORMERS AND THE LIKE. FOREST C. SIMON, Piqua, Ohio, assignor to The French Oil Mill Machinery Company, Piqua, Ohio. Filed May 8, 1931. Serial No. 535,871. 9 Claims. (Cl. 100—51.)



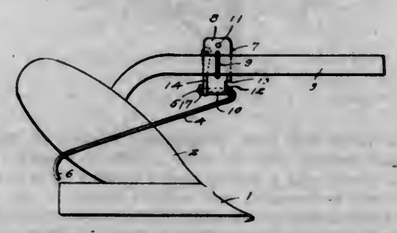
1. The combination with a vertically movable mold, and a head block movable toward and from pressing relation to said mold, of a latch for releasably securing said head block in pressing position a latch releasing device carried by said mold, and means acting upon the movement of the mold away from the head block to actuate the latch releasing device to release the latch.

1,896,565. BOILER CLEANER. NORMAN L. SNOW, New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 28, 1924, Serial No. 689,099. Renewed July 28, 1931. 32 Claims. (Cl. 122—392.)



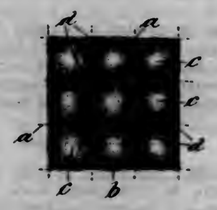
1. In a boiler cleaner, the combination with a blower element and a valve for controlling the passage of cleaning fluid through said blower element, of mechanism for operating said blower element and valve, said mechanism including a swinging member adapted to rotate about its axis, said mechanism being adapted by the swinging movement to operate said valve, and by the rotary movement to operate said blower element.

1,896,566. WEED TURNER FOR PLOWS. AUGUST C. TEGTMEYER, Nebraska City, Nebr. Filed Oct. 27, 1931. Serial No. 571,423. 3 Claims. (Cl. 97—193.)



1. In combination, the beam and moldboard of a plow, a bracket secured to the beam, a weed turning bar extending downwardly and rearwardly across the face of the moldboard and provided at its rear end with a hook extending downwardly and inwardly therefrom, means connecting the bar to the bracket for swinging movement towards and away from the moldboard, a spring constantly urging the bar in the direction of the moldboard, an arm connected to the bar, and a set screw carried by the arm, said arm and said set screw constituting adjustable means cooperating with the bracket to limit the movement of the bar in a direction toward the moldboard.

1,896,567. SCREEN FOR PHOTOGRAPHIC PURPOSES, PHOTOMECHANICAL PRINTING PROCESSES AND THE LIKE. ARTHUR RONALD TRIST, London, England, assignor, by mesne assignments, to Pantone Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 28, 1927, Serial No. 229,814, and in Great Britain Nov. 4, 1926. 6 Claims. (Cl. 95—81.)



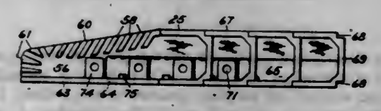
1. Improved means for producing screens of the type specified comprising a light tight chamber; a half tone or ruled screen in half tone relation to a film of photographically sensitive material arranged behind said screen in said chamber; a fixed diaphragm in said chamber having an aperture in half tone relation to said screen, said aperture being similar in shape to the shape of the openings formed by the rulings of the screen employed; a rotatable diaphragm associated with said aperture, the opaque part of said diaphragm being of such shape as will give a predetermined rate of change of opacity in the images thereof on the sensitive material; a source of illumination and means for continuously rotating said diaphragm.

1,896,568. EARTHWORKING IMPLEMENT. RALPH W. AMMONS, Los Angeles, Calif. Filed Mar. 24, 1931. Serial No. 524,993. 1 Claim. (Cl. 306—6.)

An implement of the character described comprising an element, a bracket on the element having a plurality of threaded bores angularly related, and a handle having an externally threaded shank capable of being threaded into any one of said bores to detachably secure the element to the handle in different positions of adjustment, the bracket having a channel and a duct communicating with the channel and with the bores to enable foreign substances to discharge from the latter.

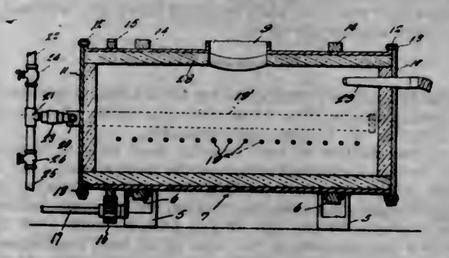


1,896,569. TUYÈRE BLOCK. JAMES W. ARMOUR, Worcester, Mass., assignor to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 10, 1930. Serial No. 501,253. 8 Claims. (Cl. 110—44.)



1. An underfeed stoker comprising side walls defining a retort through which fuel is moved in a direction lengthwise thereof, and a series of long substantially horizontal tuyère blocks mounted on the upper margins of the walls and arranged in step-like formation, each tuyère block having an edge exposed to the fuel and sloping away from the retort in the direction of fuel movement, and a series of spaced ribs forming air channels terminating at said edge which direct air at an angle opposed to the direction of fuel movement.

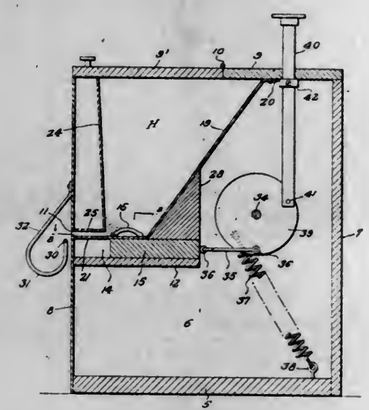
1,896,570. COPPER TREATING FURNACE. WILLIS J. BENSON, Douglas, Ariz. Filed Aug. 13, 1932. Serial No. 628,754. 2 Claims. (Cl. 266—36.)



2. A metal treating apparatus of the character described comprising a horizontally disposed cylinder provided with an opening in the top thereof, manifolds mounted on the

cylinder at relatively opposite sides thereof, each manifold having a series of spaced branches extending therefrom and terminating inwardly of the cylinder, steam and air pipes each provided with a valve, a T-fitting connecting said steam and air pipes, and conduit means connecting said T-fitting with said manifolds and including a universal joint, said conduit means also including a pair of valves arranged at relatively opposite sides of the universal joint, there being one of such valves for each manifold, and a burner nozzle projecting into said cylinder and located in a plane above said manifolds.

1,896,571. TOOTHPICK DISPENSER. EDWIN C. BAOLIN, Antioch, Calif. Filed July 18, 1932. Serial No. 623,275. 1 Claim. (Cl. 312—78.)

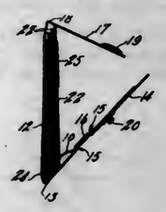


In a dispensing device of the class described, a casing having a discharge slot in a wall thereof, a horizontally arranged supporting member located in the casing, a block slidably arranged on said supporting member, a hopper located in the casing and including a horizontal bottom portion extending to the lower edge of the slot and a second horizontal portion extending from the lower end of the front wall of the hopper to the upper edge of the slot, said horizontal portions being spaced apart and forming a discharge passage for the articles in the hopper, of first-mentioned horizontal portion and the supporting member forming a horizontal guideway for the block, said first-mentioned horizontal portion having a pair of parallel slots therein, a substantially U-shaped member formed of wire and having its limbs connected to the upper face of the block with said limbs bowed upwardly and passing through the slots in the horizontal portion with the bight of said U-shaped member slidably engaging the portion of the first-mentioned horizontal part between the slots for moving an article through the passage and through the first-mentioned slot, when the block is moved forwardly, and means for reciprocating the block.

1,896,572. HEAT TREATMENT OF RAILS. JOHN BRUNNER, Chicago, Ill. Filed Oct. 22, 1931. Serial No. 570,496. 10 Claims. (Cl. 148—12.)

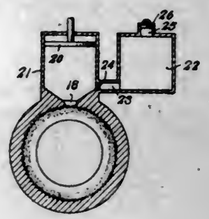
1. The method of heat treating steel rails to increase the surface hardness thereof on the head at and near its ends which comprises heating the rail to temperatures approximating but above the thermal critical range, quenching the head of the rail at and near its ends until the surface temperatures of the head at its ends approximate but are not less than 200° C. the center portion of the rail intermediate the said ends being substantially not chilled and thereafter slowly cooling the rail to atmospheric temperatures.

1,896,573. LOOSE LEAF BINDER. WARNER R. BUXTON, Longmeadow, Mass. Filed Mar. 15, 1930. Serial No. 436,081. 7 Claims. (Cl. 129—41.)



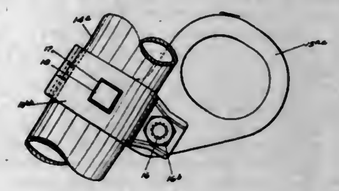
6. A loose leaf book, comprising, a strip of flexible material doubled over to form a pair of hingedly connected covers, and a flexible binder member on which the leaves may be threaded, said member hinged to the inner face of one cover at a location close to but spaced from the hinge line of the covers and biased to slope toward and follow along the other cover extending away from the hinge line of the covers and free to slide relatively to the last named cover.

1,896,574. PROCESS FOR MAKING A NONSKID TIRE FOR VEHICLE WHEELS. EARL W. COVEY, Big Moose, N. Y. Filed Feb. 27, 1931. Serial No. 518,771. 8 Claims. (Cl. 154—14.)



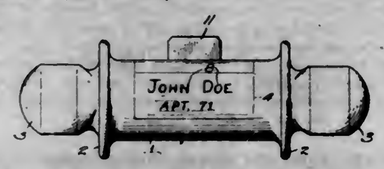
1. In a process for making a non-skid tire by forming the body of the tire by weaving a cord fabric intermeshed with rubber and molding on its outer surface a layer of rubber latex, whereby to form an integral portion that will provide a rough serrated yielding surface, to prevent skidding.

1,896,575. BOILER CLEANER. SAMUEL F. COX, Detroit, Mich., and JOHN H. ROBERTSON, Lock No. 4, Pa., assignors to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 2, 1927. Serial No. 165,479. 38 Claims. (Cl. 122—392.)



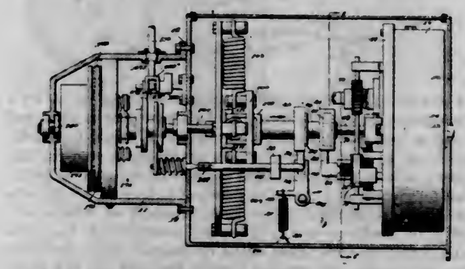
26. In combination, a boiler part having an apertured projection substantially integral therewith, a blower tube adjacent the boiler part, and means for supporting the blower tube from the boiler part including a member having a portion engaging said blower tube, and means engageable with said member and in the aperture of said projection.

1,896,576. INSULATOR. CARLOS E. DAUSSA, New York, N. Y. Filed June 9, 1930. Serial No. 460,047. 6 Claims. (Cl. 40—10.)



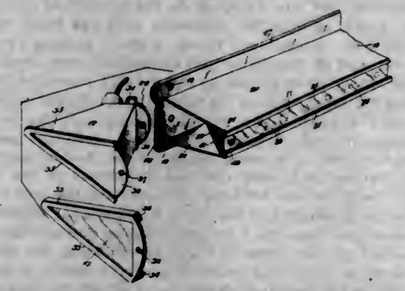
1. An insulator comprising a body formed from insulating material and having means to engage a conductor connected thereto; and an identifying member detachably mounted within the body for identifying the conductor, and provided with an outwardly extending means for removing the member from the body.

1,896,577. HYDRAULIC CHANGE SPEED TRANSMISSION FOR MOTOR VEHICLES. EDWIN E. FOSTER, Austin, Tex. Filed July 26, 1930. Serial No. 470,963. 9 Claims. (Cl. 192—61.)



1. A transmission for vehicles comprising a main housing, a crank shaft revolving said housing, an auxiliary housing in the main housing, a liquid under pressure filling the main housing, the auxiliary housing having an inlet passage connecting said housing with the main housing, a valve normally open for controlling said passage, the auxiliary housing having a restricted outlet passage, a pump in the auxiliary housing including a plurality of intermeshing gears, a driven shaft connected with a gear of said pump, the opening of the valve permitting liquid to flow to the pump and preventing rotation of one of the gears so that the other gear and driven shaft are revolved when the main housing is rotated, and means for actuating the valve at will.

1,896,578. TURNING SIGNAL. LARS L. FURAN, Thief River Falls, Minn., assignor to Willard J. Furan, Thief River Falls, Minn. Filed Aug. 3, 1931. Serial No. 554,899. 4 Claims. (Cl. 177—327.)



1. In a signal, a horizontally elongated plate, opposite edges of said plate having longitudinal guideways, a horizontally elongated casing section having portions slidably engaged with said guideways, two additional casing sections abutting the ends of said elongated casing section, and means securing said additional casing sections to said back plate, whereby the casing sections and plate are held assembled and said elongated section normally held against sliding along said guideways.

1,896,579. THERMOSTAT. CHARLES F. GERMEYER, Harrisburg, Pa. Filed Mar. 18, 1930. Serial No. 436,878. 6 Claims. (Cl. 200—138.)



1. In a thermostat, a permanent horseshoe magnet, a contact support mounted on one pole of said magnet, a contact on said support adjacent the other pole of said magnet, said support and contact being composed of material having low reluctance, thereby forming an essentially closed magnetic circuit, a temperature responsive element having a free end adjacent said contact, an armature and a second contact on the free end of said element, said armature being influenced by leakage flux from said magnetic circuit, said second contact adapted to engage said first contact.

1,896,580. SCRIBER GUARD. CHACE D. GILMORE, West Chester, Pa. Filed Apr. 13, 1932. Serial No. 605,085. 13 Claims. (Cl. 81—1.)



1. A guard for sharp pointed instruments having straight shanks comprising an annular cap ring adapted to enclose a point; a spiral coil secured at one end to the cap ring and movable longitudinally on the shank of the instrument; and a sleeve surrounding the shank and the spiral coil and engaging the latter so that it screws through the sleeve.

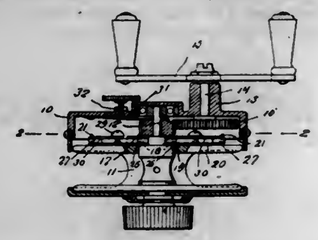
1,896,581. ELECTRIC INSULATING MATERIAL. MAX HAGEDORN, Dessau in Anhalt, OTTO REICHERT, Dessau-Ziebigk in Anhalt, and EUGEN GUHRING, Dessau in Anhalt, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 31, 1930, Serial No. 425,056, and in Germany Feb. 13, 1929. 3 Claims. (Cl. 106—40.)

1. An electric insulator comprising a compound selected from the group consisting of a cellulose acetate-butyrate and a cellulose acetate propionate.

1,896,582. FISHING REEL. JAMES WILLIAM HAMILTON and JOEL WALKER WATTS, Biloxi, Miss. Filed Feb. 8, 1932. Serial No. 591,684. 3 Claims. (Cl. 242—84.7.)

1. The combination in a fishing reel having a spool and shaft therefor, of an automatically operable clutch, including a driven pinion loosely mounted on the shaft and having slots therein, a base plate secured to the

spool about the shaft, a ring secured to the plate and having opposed channels, and spring influenced dogs slidable on said plate through said channels and normally

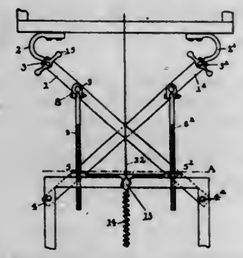


received by the adjacent slots of the pinion, and movable therefrom by centrifugal force incident to the rapid rotation of the spool.

1,896,583. PROCESS OF REMOVING ACID SLUDGE FROM VISCOUS HYDROCARBON OIL. CHARLES O. HOOVER, San Antonio, Tex. Filed Oct. 28, 1929. Serial No. 403,129. 2 Claims. (Cl. 196—38.)

1. The process of removing acid sludge from a viscous hydrocarbon oil which has been mixed with sulphuric acid during a refining operation which comprises intimately mixing with the mixture of oil and sulphuric acid, without previous substantial removal of acid sludge and without previous addition of a substantial amount of water thereto, a substantially dry mixture of an adsorbent earth and an alkali, the said alkali being used in such amount as to only partly neutralize acidic bodies, so that the oil still contains free acid, whereby the acid sludge will gather in large grains or large chunks which are smooth and soft and which will settle rapidly.

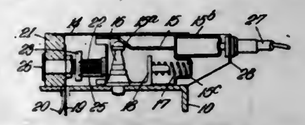
1,896,584. TRAILER VEHICLE. FÉLICIEN JACQUET, Paris, France. Filed Apr. 10, 1931, Serial No. 529,169, and in France Apr. 26, 1930. 8 Claims. (Cl. 280—33.44.)



1. A trailer draft device comprising a pair of draft arms pivotally connected to the trailer, a rack carried by each of said arms and extended adjacent a portion of the trailer, and means on said portion of the trailer and engageable with said rack bars to lock the trailer in fixed relation to the draft arms.

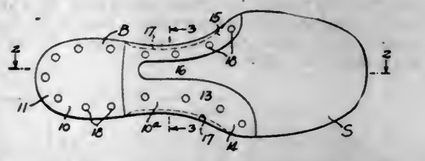
1,896,585. PHOTOGRAPHIC FLASH LIGHT APPARATUS. FREDERICK GEORGE JOHNSON, London, England. Filed May 2, 1931, Serial No. 534,619, and in Great Britain Mar. 28, 1931. 4 Claims. (Cl. 67—29.)

1. A switch device for operating the shutter release of a photographic camera in timed relation to the closing of the ignition circuit of flash-light apparatus, comprising a member slidable to operate a press release for the shutter of said camera, a housing in which said member slides, an insulating plate constituting part of said housing, a screw-threaded member mounted in said insulating plate, a non-rotatable member traversable along said screw-threaded member, and a contact on said non-rotatable



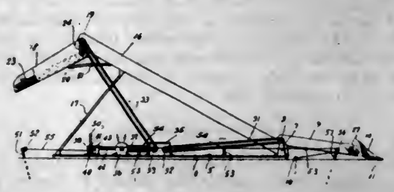
member with which said slidable member engages to complete said electric circuit and ignite said photographic flash-lamp.

1,896,586. ARCH SUPPORTING DEVICE FOR FOOTWEAR. SAMUEL JOHNSTONE, Alhambra, Calif., assignor of one-half to Frederick H. Herman, Alhambra, Calif. Filed Nov. 30, 1931. Serial No. 578,079. 1 Claim. (Cl. 36—76.)



A device of the character described comprising: a body of yieldable material adapted to be secured to a shoe and having a heel portion and a portion projecting forwardly therefrom, to underlie the shank of the shoe sole for the support of the foot arch, said second portion being bifurcated longitudinally from its forward extremity to provide spaced apart tongues the outer side edges of which substantially conform to the marginal contour of the shoe shank, one of said tongues being of greater width than the other to provide for greater weight imposed on the outer side of a shoe as in walking.

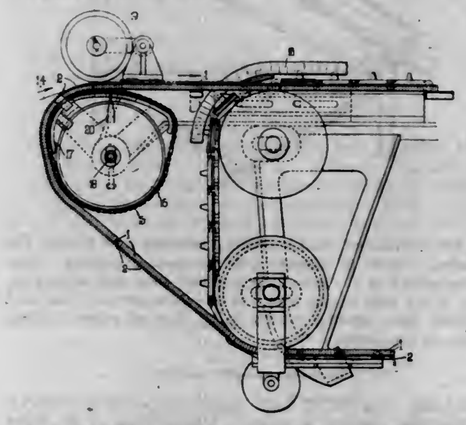
1,896,587. LOADING MECHANISM. GARRETT LAMBERT, Rock Springs, Wyo., assignor of forty per cent to Tony Radalj. Filed May 6, 1931. Serial No. 535,459. 1 Claim. (Cl. 198—7.)



A loading apparatus of the class described comprising a platform, runners attached to the bottom of the platform, a pair of uprights connected with the front end of the platform, a conveyor frame, a shaft passing through the rear end of the frame and having its ends journalled in the upper ends of the uprights, said conveyor frame having the front ends of its side portions flaring outwardly and the upper edges of said flaring portions sloping downwardly and forwardly, a bottom forming member connected with the lower edges of the flaring portions, teeth having their rear portions connected to the front edge of said bottom forming member with the front ends of the teeth adapted to rest upon a surface for supporting the conveyor frame in a position sloping downwardly and forwardly at the front end of the platform, an endless conveyor in the frame passing over the shaft, a beader located in the conveyor frame in front of the front end of the conveyor for engaging the material passing over the bottom forming member, a second shaft journalled in intermediate portions of the uprights, a second conveyor

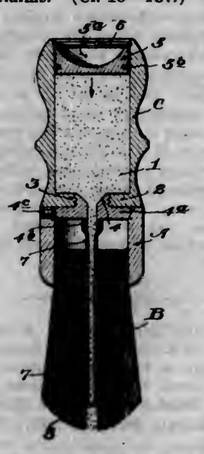
frame having its lower end attached to the front part of the platform, said second frame extending upwardly and rearwardly, brace means connecting the upper portion of the second frame to the rear end of the platform, an endless conveyor in the second frame passing over the second shaft, said second shaft being arranged under the first shaft, supporting means for the front end of the conveyor in the first frame and supporting means for the rear end of the conveyor member in the second frame.

1,896,588. TREATMENT OF TEXTILE FABRICS. KENNETH SOMERVILLE LAURIE, Glossop, England, assignor to Tootal Broadhurst Lee Company Limited, Manchester, England, a British Company. Filed Jan. 5, 1931, Serial No. 506,777, and in Great Britain Jan. 16, 1930. 4 Claims. (Cl. 26—57.)



1. A stentering machine comprising an endless band, a plurality of pins each mounted on said band to be capable of angular movement relatively to each other, a guide plate of variable curvature supporting said band and means to feed a web of fabric to said pins, whilst the band is passing over said guide plate.

1,896,589. SHAVING BRUSH. SCOTT W. MULHOLLEN, Bellwood, Pa., assignor of one-third to Emory L. Groff, Washington, D. C. Filed June 14, 1932. Serial No. 617,219. 2 Claims. (Cl. 15—187.)



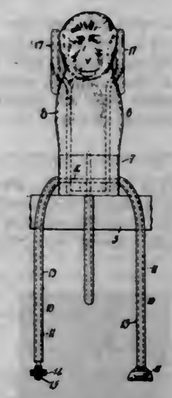
1. A soap dispensing shaving brush including a body provided with a boss at the side thereof opposite the bristle portion, a hollow handle open at one end, a floating plunger accessible from said open end of the handle, an end wall on the handle having an opening adapted to detachably interlock with said boss, the said handle when detached being adapted to have said opening placed in communication with a collapsible soap tube whose contents may be squeezed into the handle to float the plunger back toward the open end of the handle.

1,896,590. FASTENER. BION C. PLACE, Detroit, Mich., assignor of one-half to George E. Gagnier, Detroit, Mich. Filed Mar. 12, 1930. Serial No. 435,819. 7 Claims. (Cl. 24—215.)



1. A spring fastener complete in itself and formed from stiff wire comprising a head in the form of a pair of separate substantially closed loops disposed in substantially the same plane in closely arranged side by side relation, a pair of holding elements in the form of arms disposed in planes substantially normally to the plane of said head and in divergent relation to each other so that when the arms are sprung in an opening or socket they will engage the walls thereof, each holding element being carried by one of said loops so that the inherent resilience in each loop maintains the holding element carried thereby in its divergent relation to the other of said elements.

1,896,591. TARGET. JOHN J. PLUNKETT, Boston, Mass. Filed May 26, 1930. Serial No. 455,640. 7 Claims. (Cl. 273—102.)

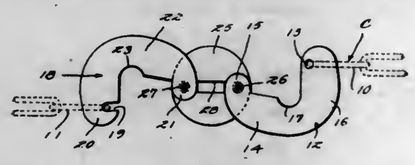


1. A target simulating an animate object and comprising, in combination, a body member adapted to stand in an upright position upon a support, and oppositely bowed resilient arms rigidly fastened at one end thereof to and projecting laterally from opposite end portions of said body member, the latter being adapted to be suspended from said support by either of said arms when dislodged from its upright position.

1,896,592. CHAIN LOCKING DEVICE. JOHN POTTER, Elizabeth, Ill. Filed Jan. 5, 1932. Serial No. 584,839. 2 Claims. (Cl. 24—68.)

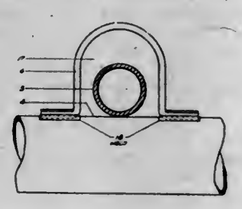
2. A chain locking and tightening means comprising a pair of substantially L-shaped chain engaging members disposed in opposed relation to each other, a pair of plates positioned one on each side of the L-shaped members and

engaging one leg of each of said members, pivot means for securing the plates to the members, said plates having registering tool receiving openings disposed between the pivot means, a curved lug formed with the inner end of each of the L-shaped members, said members having a



curved cut out portion at substantially the junction between the two legs of the members, the cut out portion of one of the members receiving the curved lug of the other member upon turning of the plates whereby to lock the two members together.

1,896,593. BOILER CLEANER. THOMAS E. PURCELL, Pittsburgh, Pa., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 27, 1929. Serial No. 366,350. 3 Claims. (Cl. 122—392.)



3. The combination with a boiler tube and a blower tube adjacent the same, of a loop member having spaced end portions supported by said boiler tube and welded to fix said portions against movement in respect to said boiler tube, said loop member and its supporting boiler tube cooperating to completely surround the blower tube.

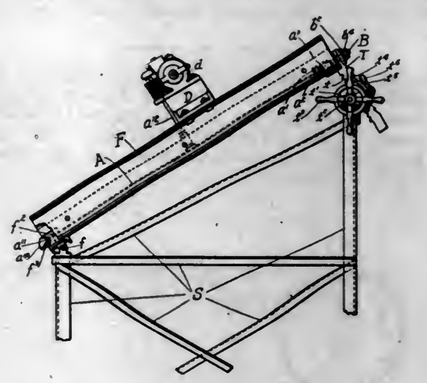
1,896,594. WRINKLE COATING. FRANK BRIAN ROOT, East Orange, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Mar. 7, 1929. Serial No. 345,205. 28 Claims. (Cl. 91—70.)



1. A wrinkle finish composition comprising raw Chinawood oil, a wrinkle finish resin, drier and thinner in proportions to yield a wrinkle finish when dried.

1,896,595. SCREEN FOR GRANULAR MATERIALS. CHESTER A. SCOTT, Fort Wayne, Ind., assignor to Deister Concentrator Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Apr. 28, 1926. Serial No. 105,111. 1 Claim. (Cl. 209—403.)

In combination with an apparatus for screening granular material, having an inclined frame and a strip of resilient screening medium maintained under tension from the top and bottom edges in said frame, binding means for the bottom tension edge of said medium, a part of said binding means extended beyond the edge of said medium and provided with a knife-edge bearing adapted to co-act with said frame to form a flexible connection therewith, so that said vibration affect said end as well as the main body



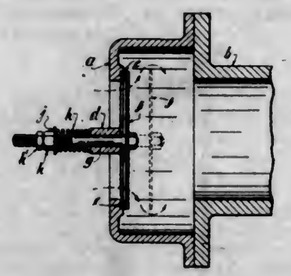
of the surface of said screening medium and permit the binding means to adjust itself to meet oncoming transverse waves of the screening medium, said connections being to the side of the frame at the delivery end, and said bottom edge binding means being free of other connections to the frame.

1,896,596. MACHINE FOR PRODUCING BIAS WEAVE FABRIC. ROBERT S. SEDDON, White Plains, N. Y. Filed May 18, 1931. Serial No. 538,222. 7 Claims. (Cl. 164—65.)

1. A substantially cylindrical support for a woven seamless tube of fabric, means for rotating said support, a cutter arranged to engage the fabric tube on the support while being rotated, a series of conveyors carried by the rotatable support, and means for actuating the conveyors while the support is being rotated to cause the fabric tube to advance on the rotating support while the fabric tube partakes of the tube rotation, whereby the fabric tube will receive a continuous helical severance in its periphery to produce a fabric web or band with the two side web margins constituted by the helical line of severance of the cutter and which margins will extend at an angle to the normal thread elements of the unsevered woven fabric tube.

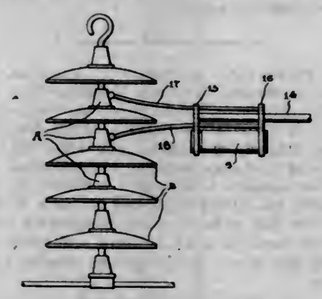
1,896,597. AIR-CONTROL VALVE FOR PNEUMATIC CONVEYERS. WILLIAM ALLEN SMITH, Manchester, England, assignor to Pneumatic Conveyance & Extraction (1929) Limited, London, England, a Company of Great Britain. Filed Oct. 27, 1928, Serial No. 315,536, and in Great Britain Nov. 5, 1927. 2 Claims. (Cl. 302—58.)

1. In apparatus for effecting the pick-up of powdered, granular, and like materials, for pneumatic conveyance, wherein the material entering a pipe at one point is exposed to a draft of air entering the said pipe from an inlet valve at another point beyond the said entrance for the material, means for effecting the automatic balancing of



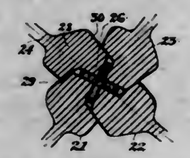
the volume of the draft and of the suction assisting the entrance of the material, comprising a self-opening spring-loaded inlet valve as set forth.

1,896,598. PRONG-TYPE HOLDER FOR SAFETY TESTING DEVICES. CHARLES H. SPANGLER, Reading, Pa., assignor to Metropolitan Edison Company, Reading, Pa., a Corporation of Pennsylvania. Filed July 13, 1931. Serial No. 550,433. 1 Claim. (Cl. 175—183.)



A safety tester device for high tension line suspension-type insulators, comprising a pair of spaced contact prongs, a ray reflecting luminous detector, and a supporting pole therefor having adjacent one end thereof spaced arms of insulating material forming supports for said luminous detector and for said contact prongs, said arms having embedded conductors operatively connecting said prongs respectively with opposite ends of said luminous detector.

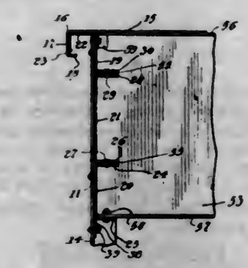
1,896,599. STEM AND METHOD AND MEANS FOR MAKING SAME. JOHN A. SPENCER, Newton, Mass., assignor to Raytheon Production Corporation, Newton, Mass., a Corporation of Delaware. Filed Oct. 7, 1929. Serial No. 397,861. 18 Claims. (Cl. 49—2.)



1. The method of making stems having cruciform presses which comprises pressing the glass inwardly toward the center to form wings and then pressing the glass normal to the wing sides with different pressures.

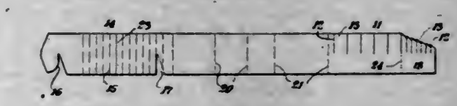
4. In a head for making stems having a cruciform press, a plurality of anvils, each of said anvils having a forwardly projecting portion adapted to shape the glass, a rear portion adapted to cooperate with adjacent anvils to exert pressure on the glass and means for pressing each of said anvils toward the center of the head along axes having dissimilar angles with horizontal axes of the press.

1,896,600. RACK. WALTER N. VANCE, North Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed July 29, 1929 Serial No. 381,755. 12 Claims. (Cl. 45—31.)



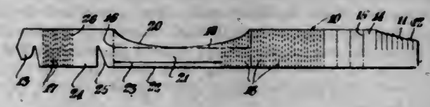
1. A rack having a plurality of rails, one of said rails comprising upper, lower, and intermediate members, a top for said rails, a bottom flange on said upper member, a top flange on said lower member, and top and bottom flanges on said intermediate member and fastened to the bottom and top flanges on said upper and lower members respectively.

1,896,601. BREAD BAND. OLIVER B. ANDREWS, Chattanooga, Tenn. Filed May 19, 1931. Serial No. 538,450. 6 Claims. (Cl. 24—17.)



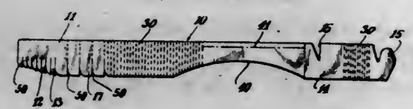
3. A band for sliced bread or the like comprising a band of box board having at one end a plurality of tongues and at the other end a plurality of notches adapted to variably engage said tongues for locking the band in closed position, said band having perforations between certain of said notches whereby the outer section may be torn off when not in use, said band also being perforated intermediate certain of said tongues whereby the unused portion of said tongues may be removed.

1,896,602. PACKAGE FOR SLICED BREAD. OLIVER B. ANDREWS, Chattanooga, Tenn. Filed Oct. 15, 1931. Serial No. 568,893. 12 Claims. (Cl. 24—17.)



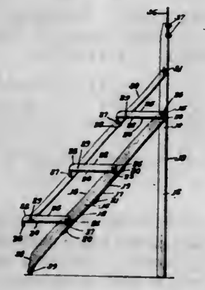
9. A band for sliced bread adapted to encircle the slices to maintain the same in loaf form, said band having a loaf supporting portion intermediate the ends thereof, means for securing the ends together, a crimp formed adjacent one edge of the loaf supporting portion and a cut-out portion in the other side of the loaf supporting portion, said crimp and cutout being adapted to force the edges of the loaf supporting portion tightly against the loaf, when the band is applied to the loaf.

1,896,603. BREAD BAND. OLIVER B. ANDREWS, Chattanooga, Tenn. Filed Mar. 2, 1932. Serial No. 596,259. 2 Claims. (Cl. 24—17.)



1. An improved bread band for sliced bread and the like, including, a band having a plurality of slots at one end thereof forming tongues therebetween, hooked portions at the other end of said band adapted to adjustably engage said tongues, said tongues being of progressively decreasing length, and arcuate guide portions formed on the end of said tongues to facilitate interlocking engagement with said hook portions.

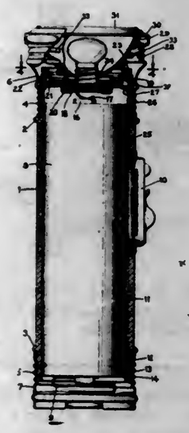
1,896,604. FOLDING DISPLAY STAND. JAMES E. BALES, Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Dec. 14, 1931. Serial No. 580,768. 2 Claims. (Cl. 211—142.)



1. A collapsible frame comprising a vertical supporting member having its lower end adapted to rest upon a base such as a floor, a lower member extending outwardly at an angle from the supporting member and having its upper end pivoted to the supporting member, the lower end of said lower member adapted to engage the same base as the lower end of the supporting member, an upper member parallel to the lower member and having its lower end spaced from the said base, the upper end of said upper member being pivotally and disconnectedly fastened to the supporting member, and spaced shelves carried by the frame, said shelves having their inner ends pivoted to the lower member and their outer ends pivoted to the upper member.

1,896,605. FLASH LIGHT. GEORGE H. BARBER, New Rochelle, N. Y., and FRANK G. STIMSON, Belleville, and GOODRICH B. PRATT, Jersey City, N. J., assignors to Bond Electric Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Jan. 8, 1930. Serial No. 419,254. 8 Claims. (Cl. 240—10.66.)

1. In combination with a flash light casing, a cup shaped lamp socket support threaded therein, and a hood threaded externally thereon, an insulating washer within the support, and a coil spring normally expanding within and

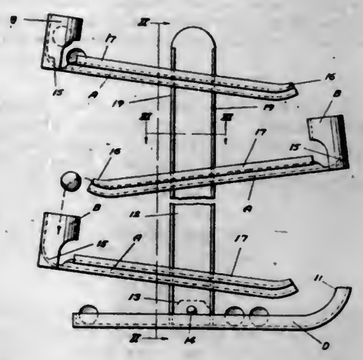


against the walls of the hood and exerting an axial force against the insulating washer.

1,896,606. PURIFYING TUNGSTEN. CHARLES FREDERICK WILLIAM BATES, Cleveland Heights, Ohio, assignor to The Ohio Instrument Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 5, 1928. Serial No. 317,493. 2 Claims. (Cl. 176—132.)

1. Process of producing tungsten articles which are free from included tungstic oxide which contains the steps of first producing an intimate mixture of finely divided metallic tungsten and metallic silver, compacting the same, subjecting the same to a temperature sufficiently high to volatilize all the silver, and afterward forging and shaping the mass.

1,896,607. TOY. PETER BRUNNER, Kenosha, Wis. Filed Sept. 21, 1932. Serial No. 634,135. 8 Claims. (Cl. 46—37.)

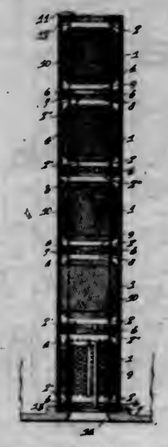


2. A toy comprising a plurality of runways upon which a small spherical body may ride under force of gravity, said runways each having a receiving member at one end presenting a relatively large orifice for admitting and guiding the spherical body to the runway and having the opposite end upturned and independent means for adjustably mounting each of said runways upon a vertical supporting member for longitudinal movement relative to said member so that the discharge end of one will bear a desired relationship to the receiving member of the next succeeding and lower runway.

1,896,608. ESTERS DERIVED FROM PETROLEUM HYDROCARBONS AND METHOD OF PRODUCING SAME. HERMAN A. BRUSON, Germantown, Pa., assignor to The Resinous Products & Chemical Co. Inc., a Corporation of Delaware. Filed Dec. 10, 1929, Serial No. 413,138. Renewed Dec. 16, 1932. 15 Claims. (Cl. 260—99.)

14. A new composition of matter comprising a terpene ester of the organic acids obtained by hydrolysis from the condensation product of an essentially nonaromatic petroleum oil hydrocarbon, a Friedel-Crafts type of metal halide catalyst, and the anhydride of a polycarboxylic acid.

1,896,609. APPARATUS FOR FILAMENT TREATMENT. THOMAS H. BYRON, Elizabethton, and RALPH H. CARTER, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 14, 1932. Serial No. 598,866. 12 Claims. (Cl. 34—26.)



1. In a device for simultaneously drying several units of spooled filaments from one side only, in combination an open-ended tube, a series of individual containers sized to fit within the tube, the said containers being placed in superimposed condition within the said open-ended tube, the tube then being placed around positioning lugs on a plate.

1,896,610. CRANK CASE PIT. HARLAN R. COUNCE, New Rochelle, N. Y., assignor to Socony-Vacuum Corporation, New York, N. Y., a Corporation of New York. Filed July 23, 1926, Serial No. 124,475. Renewed June 25, 1932. 13 Claims. (Cl. 184—1.5.)

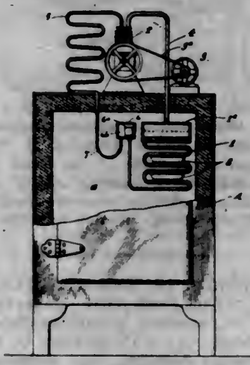


1. A pit of the character described, including a body portion and a bow portion, said bow portion comprising curved plates meeting at their front edges and extending rearwardly to opposite sides of said body portion and secured thereto, said plates constituting means for deflecting the wheels of a vehicle coming in contact therewith, and reinforcing material deposited between said plates.

1,896,611. TIRE PUNCTURE PREVENTIVE. ROY CROSS, Kansas City, Mo., assignor to Silica Products Company, Kansas City, Mo., a Corporation of Delaware. Filed July 10, 1929. Serial No. 377,327. 3 Claims. (Cl. 134—17.5.)

1. Tire puncture preventive containing bentonite, magnesium oxide and asbestos fiber.

1,896,612. REFRIGERATING APPARATUS. RANSOM W. DAVENPORT, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 18, 1927. Serial No. 161,730. 12 Claims. (Cl. 62—115.)



1. In combination, a cabinet, and refrigerating apparatus of the closed cycle type operating on the Rankine cycle associated with said cabinet, said apparatus being so constructed and arranged that all liquid refrigerant is moved into and stored within said cabinet during the shut down periods of said apparatus, and means restricting the area of contact between the liquid and vapor phases of the refrigerant.

1,896,613. PROCESS OF TREATING ZINC-COATED WIRE. FRANK F. FOWLE, Winnetka, Ill., assignor to Indiana Steel & Wire Company, Muncie, Ind., a Corporation of Indiana. Filed Aug. 13, 1931. Serial No. 556,856. 4 Claims. (Cl. 205—21.)

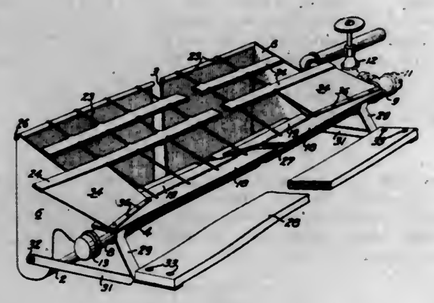


1. The process of treating zinc-coated wire, which consists in drawing such wire through a die to reduce its diameter while it is at a temperature within the temperature range where zinc is improved in quality by mechanical working.

1,896,614. GAS CONTENT RECTIFIER. AUGUST GEHRTS, Berlin-Friedenau, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany, a Corporation of Germany. Filed Apr. 24, 1928, Serial No. 272,570, and in Germany Apr. 25, 1927. 1 Claim. (Cl. 250—27.5.)

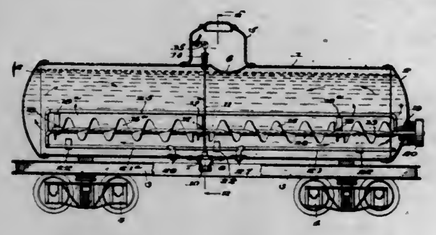
A method of manufacturing a filament of highly refractory metal containing on its surface a high percentage of thorium, which consists in applying thorium nitrate and borax to the highly refractory metal, and disintegrating such nitrate by the application of heat.

1,896,615. POULTRY DRINKING FOUNTAIN. JAMES F. GIBBS, Gilroy, Calif. Filed Nov. 20, 1929. Serial No. 408,489. 8 Claims. (Cl. 119—74.)



1. A drinking fountain comprising a trough formed to provide a basin and an adjacent sump, and means including a pipe having a plurality of discharge apertures positioned at one side of the basin for optionally supplying a trickle or a flushing stream to said basin, said flushing stream flowing over the basin bottom in a sheet to wash any foreign matter into the sump.

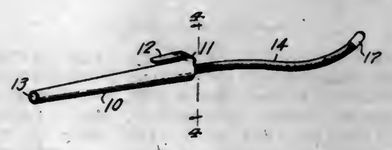
1,896,616. METHOD OF AND APPARATUS FOR DELIVERING CRUDE PINE GUM. CHARLES C. GILLICAN, Brunswick, Ga., assignor to Gillican-Chipley Company, Inc., Brunswick, Ga., a Corporation of Delaware and Hercules Powder Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Sept. 20, 1930. Serial No. 483,370. 5 Claims. (Cl. 257—85.)



1. An apparatus for handling viscous liquids comprising a tank car equipped on its interior with a mechanical agitator and a hollow imperforate heating element extending longitudinally of the tank car within the same and below and above said mechanical agitator, said heating element and said mechanical agitator being located in the bottom portion of the tank car.

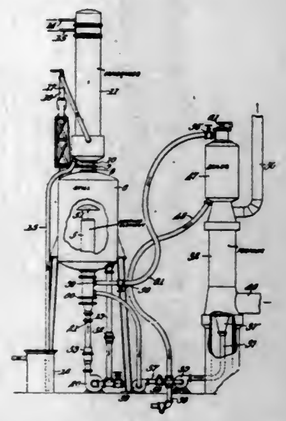
1,896,617. HAIR CURLER. ABRAHAM GOODMAN, Brooklyn, N. Y., assignor to Emeth Financial Corporation, a Corporation of New York. Filed July 2, 1930. Serial No. 465,262. 3 Claims. (Cl. 132—40.)

3. A hair curler comprising a tubular member on which the hair may be rolled, a finger integral with the tubular member bent to extend over said member at one end thereof for engaging and clamping the ends of the hair to be rolled, and a flexible elastic cord stretched lengthwise over the tube for holding the rolled hair and preventing it from unrolling, said elastic cord having one



end fixed in one end of the tubular member and carrying a tip at its free end, which tip is adapted to be removably inserted in the opposite end of the tubular member.

1,896,618. EVAPORATING APPARATUS. FRANCIS X. GOVERS, Lawrenceville, Ill., assignor to Indian Refining Company, Lawrenceville, Ill., a Corporation of Maine. Filed Nov. 5, 1928. Serial No. 317,298. 2 Claims. (Cl. 196—119.)



1. Distilling apparatus comprising a still, an indirect heating element comprising a shell and circulation heating tubes secured therein and projecting a substantial distance into the interior of the still, means for circulating the distilling liquid from the still through the tubes and back again, heat generating means adapted to generate a vaporous heating medium from a rapidly circulating stream of organic liquid, means for cyclically circulating the heating medium through the shell and exteriorly over the tubes of the heating element, condensing means in vapor communication with the still, and means for maintaining a vacuum on said condenser and still.

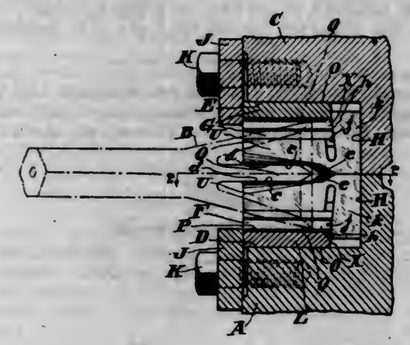
1,896,619. METHOD OF OBTAINING ANTIPYRINE. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Jan. 29, 1930. Serial No. 424,457. 10 Claims. (Cl. 260—45.)

1. In a method of purifying antipyrine, the step which consists in vaporising the same at a temperature between 115° and 200° C., in the presence of a gaseous diluent substantially inert thereto.

1,896,620. METHOD OF TREATING VEGETABLE FIBROUS MATERIAL AND RESULTING PRODUCT. GEORGES HEBERLEIN and ALBERT BODMER, Wattwil, Switzerland, assignors to Heberlein Patent Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 23, 1928, Serial No. 321,505, and in Germany Nov. 28, 1927. 5 Claims. (Cl. 8—20.)

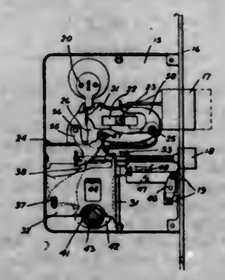
1. Method of producing permanent finish effects on cellulosic material which comprises subjecting the material to a swelling action with cupric ammonium solution of swelling strength and then without permitting an intermediate coagulation of the material subjecting it to a swelling action with caustic alkali of swelling strength.

1,896,621. FORGING MECHANISM. ALFRED A. HENTZELL, Littleton, Colo., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 23, 1931. Serial No. 552,582. 11 Claims. (Cl. 76—5.)



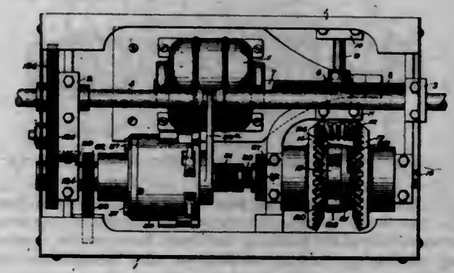
1. In forging mechanism, the combination of coacting die holders relatively movable toward and from each other and having seats in their opposing faces, base members on the seats, a pair of forming dies on each base member, and means for adjusting the dies on one base member laterally of the dies on another base member and for effecting relative lateral adjustment of the dies of a pair.

1,896,622. LOCK. JOHN HINES, Astoria, N. Y., assignor to Segal Lock & Hardware Co. Inc., New York, N. Y., a Corporation of New York. Filed May 18, 1929. Serial No. 364,249. 4 Claims. (Cl. 70—29.)



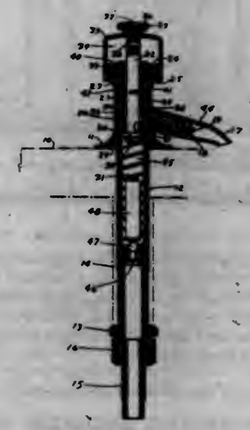
1. A lock including, in combination, a casing, a latch bolt means for projecting said latch bolt from within said casing, a pair of levers rockingly mounted within said casing, a pair of plates connected to said levers whereby one of the latter will be rocked to retract said latch bolt when one of said plates is shifted, and means optionally disposable within the path of travel of said plates to prevent movement of one of the same.

1,896,623. SCREEN OR SHADE OPERATING MEANS. ALFRED J. HIXON, Braintree, Mass., assignor to Fire Alarm Signal Company, South Boston, Mass., a Corporation of Massachusetts. Filed Mar. 25, 1931. Serial No. 525,078. 16 Claims. (Cl. 156—28.)



1. A shade or screen raising and lowering mechanism comprising a shade operating shaft, a shade compensating weight therefor, a cone pulley supporting the weight, said shaft adapted to simultaneously operate a plurality of shade rollers; and driving means therefor comprising a motor, a reversible driving shaft, and an auxiliary driving shaft both driven from said motor, and a clutch on the driving and auxiliary shafts, and reversing means for the shafts.

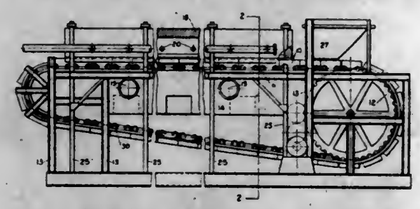
1,896,624. SOAP LATHER DISPENSER. HAROLD W. HOLLANDS, River Forest, Ill., assignor to The Pullman Company, Chicago, Ill., a Corporation of Illinois. Filed June 27, 1929. Serial No. 374,243. 9 Claims. (Cl. 299—83.)



1. In a soap lather dispenser, the combination comprising a hollow body assembly including a discharge spout, lather generating means in said spout, a liquid soap supply conduit communicating with said body, a check valve in said conduit for admitting liquid soap to said body, a housing mounted upon and defining with said body an air chamber normally open to the atmosphere, an air bushing within said body and chamber providing a passageway communicating with said lather generating means, a

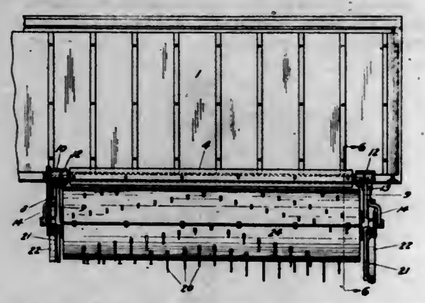
liquid soap bushing within said body providing a passageway communicating with said lather generating means and supply conduit, a plunger supporting said housing and vertically operable in said bushings and depressible to admit air and soap liquid to said passageways respectively, and means associated with said housing for closing said air chamber.

1,896,625. HEAT TREATING APPARATUS. REED W. HYDE, Summit, N. J. Filed Jan. 26, 1931. Serial No. 511,262. 10 Claims. (Cl. 222—4.)



1. In an apparatus for heat treating material, a heating chamber in which a charge of said material is heated, a series of receptacles having perforate bottoms for supporting said charge in a pervious layer, said receptacles being movable successively through said heating chamber, a portion of said heating chamber overhanging said receptacles, and openings for burners in said overhanging portion, said burners being located a sufficient distance from said receptacles so that the combustible material is completely burned before being applied to said charge and whereby a uniform transverse distribution of the hot gases is obtained.

1,896,626. GRAIN PICK-UP MECHANISMS. GEORGE INNES, Davenport, Iowa, assignor to Innes Manufacturing Company, Bettendorf, Iowa, a Corporation of Delaware. Filed Oct. 30, 1929. Serial No. 403,451. 14 Claims. (Cl. 56—364.)



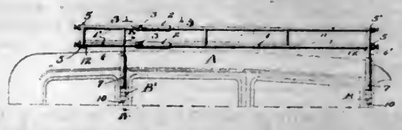
1. A structure for the purpose indicated comprising a rotary drum having pickup teeth, means to mount said drum in connection with transporting means, and means to maintain the drum at a given fixed distance above the earth's surface, said pick-up teeth being arranged in spiral rows along the drum surface.

1,896,627. CATALYTIC OXIDATION OF AMMONIA. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Mar. 22, 1929. Serial No. 349,275. 14 Claims. (Cl. 23—162.)

1. A method of oxidizing ammonia to oxides of nitrogen, which comprises passing ammonia admixed with air at an elevated temperature over a contact mass containing an acid leached base exchange body.

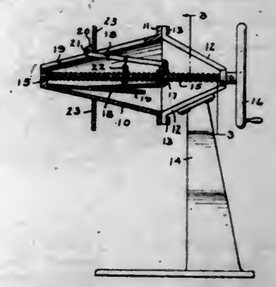
8. In the oxidation of impure ammonia containing oxidizable impurities, the step which comprises bringing about reaction between the pure ammonia and air at an elevated temperature in the presence of a contact mass containing an acid leached base exchange body which favors the selective oxidation of the impurities.

1,896,628. LUGGAGE CARRIER FOR VEHICLES. SOPHUS JEPSEN, Racine, Wis. Filed Oct. 26, 1929. Serial No. 402,705. 2 Claims. (Cl. 224—29.)



1. A luggage carrier for the roofs of automobiles comprising a frame including adjustable side rails and adjustable connecting end rails, whereby the width and length of the frame can be varied, removable and independent slats for the bottom of the carrier, means carried by the terminals of the slats for gripping certain of said rails, and means for securing the frame to an automobile.

1,896,629. HOLDING CLUTCH FOR WHEELS AND THE LIKE. EDGAR C. JULIAN, Elwood, Ind. Filed June 2, 1932. Serial No. 614,908. 5 Claims. (Cl. 144—288.)



1. In a retaining device, a hollow tapered mandrel having longitudinal slots, a plurality of jaws extending from the inside of the mandrel through the slots in the mandrel, and means acting on the inner ends of the jaws for advancing and retracting the jaws longitudinally of the mandrel.

1,896,630. SNAP FASTENER STUD. CARL L. KNUTSON, Maywood, Ill., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 30, 1931. Serial No. 583,801. 10 Claims. (Cl. 24—73.)



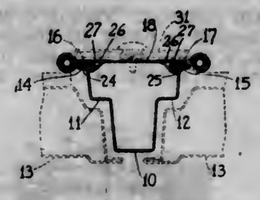
1. A one-piece snap fastener stud member having a shank comprising two spring arms formed to make snap fastening engagement with a cooperating socket and each of said arms having a locking portion adapted to engage with the locking portion on the other arm when moved directly toward each other thereby to limit movement of the arms toward each other and prevent disengagement of the shank from the socket when the arms are engaged therewith, said arms being arranged to move the locking portions out of the plane of each other for movement of the arms toward each other in a scissors-like action when the fastener is twisted and pressed into an engagement with the socket.

1,896,631. WOMAN'S COAT. JOSEPH KRAELER, New York, N. Y., assignor to Kraeler Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 25, 1931. Serial No. 559,174. 4 Claims. (Cl. 2—93.)



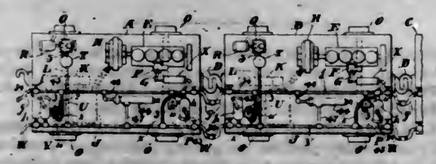
1. A lady's coat having a body portion capable of being lengthened, and including a body material section and a facing section secured to said body material section, both of said sections being of a length greater than that of a coat of normal length, the excess sections being folded upwardly and the facing section with its upwardly turned excess portion being folded to cover the body material section, and the upper edges of said excess portions of the facing and the body material being secured together so that the excess material, where the facing and body material overlap, forms a pocket opening downwardly, the depth of which is substantially that of the excess material.

1,896,632. DEVICE FOR AND METHOD OF SECURING WINDBREAKS. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 2, 1929. Serial No. 396,828. 1 Claim. (Cl. 296—28.)



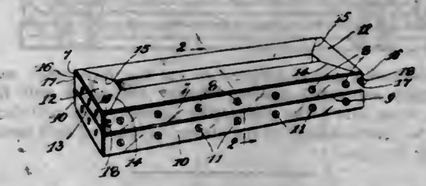
In combination, a grooved metal paneling, an upholstery element seated in the groove, metal tabs struck wholly from the side wall of the groove and pressed down upon the upholstery element with their outer faces flush with the outer face of the metal paneling, and an upholstery covering for the metal panel in contact with its outer face and overlying the element in the groove and the tabs which hold it in place, whereby the smoothness of the metal panel and its upholstery facing is undisturbed by the tabs.

1,896,633. SPEED CONTROL APPARATUS FOR LOCOMOTIVES. HERMANN LEMP, Glen Rock, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 29, 1930. Serial No. 498,961. 19 Claims. (Cl. 105—62.)



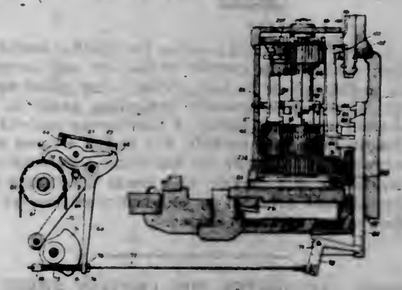
1. In a control apparatus for locomotives, the combination of an internal combustion engine and fuel controlling means for the engine, pressure responsive means for actuating the fuel controlling means, a valve for controlling the supply of pressure fluid to the pressure responsive means, and means associated with the valve and moving independently of the valve to maintain a constant pressure in the pressure responsive means.

1,896,634. ASSEMBLING DEVICE FOR CARD CASES. CHARLES L'ENFANT, New York, N. Y. Filed Dec. 8, 1927. Serial No. 238,511. 1 Claim. (Cl. 100—57.)



An assembling device for card cases having a base member, side presser strips and end presser strips for making marginal contact with the side presser strips, and hinge members hingedly connecting the side presser and end presser strips to the edge of the base for permitting infolding of the strips onto the base; rigid metal plates fixed to the side presser strips and extending over the lateral sides of the end presser strips, and extending pins on the end presser strips projecting therefrom, and said metal plates having cam slots in the extending portions thereof for permitting the pins to enter said slots as the end presser strips are hingedly moved onto the base plate, whereby to retain the side presser strips thereof in position on the base plate under the resistance offered by the material held on the base plate by the presser strips.

1,896,635. KNITTING MACHINE. VINCENT LOMBARDI, Brooklyn, N. Y. Filed Jan. 19, 1931. Serial No. 509,656. 14 Claims. (Cl. 66—50.)

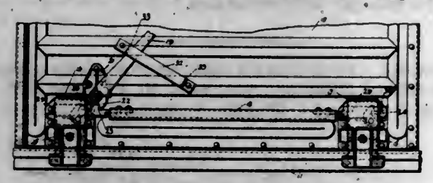


1. A knitting machine comprising a circular row of needles, a pattern sheet having rows of similar perforations therein, a pattern drum rotating around said needles and simultaneously rotating on its own axis, adjustable elements supported by said drum, and means comprising one of said elements and responsive to one of said perforations in one row for partially advancing one of said needles and subsequently responsive to another perforation in said one row for fully advancing said one needle.

1,896,636. DOOR ELEVATING MECHANISM. GABRIEL MADLAND, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 26, 1931. Serial No. 518,333. 6 Claims. (Cl. 16—99.)

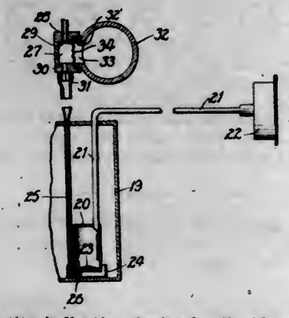
1. In combination, a sliding door, a track, said door in its lowered position having frictional engagement with said track, a plurality of hangers secured to said door, each of said hangers comprising a housing member fastened to said door and a roller supporting member hav-

ing vertical movement relative to said door, rollers mounted in said roller supporting members in engagement with said track, means pivotally supported on said door to swing substantially longitudinally relative to the door and having abutment upon each of said roller supporting



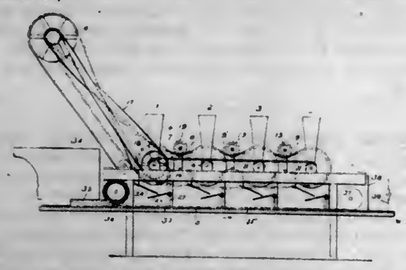
members and means adapted to exert a force upon said pivotally supported means, whereby the latter will fulcrum upon said roller supporting members and said force will be communicated to the pivotal support of said means to lift the door.

1,896,637. QUANTITY INDICATING DEVICE FOR LIQUIDS. JAMES MACCALLUM, Jr., University City, Mo., assignor to James MacCallum, sr. Original application filed Sept. 25, 1922, Serial No. 590,302. Divided and this application filed Aug. 1, 1927. Serial No. 209,759. 11 Claims. (Cl. 73—54.)



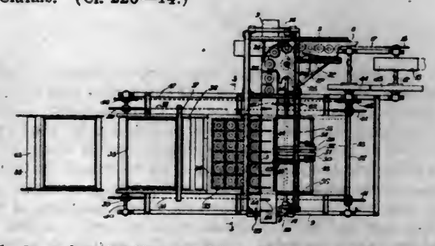
1. A quantity indicating device for liquid containers of engines, comprising a conduit having one end submerged in the liquid, the air in said conduit being sealed against escape, a pressure-responsive indicating gauge in communication with said conduit, a pipe having one end communicating with said conduit, and means secured to the opposite end of said pipe for delivering a pressure-carrying medium to said conduit, said means including a reciprocable element actuated by physical variations of fluid communicating with said engine.

1,896,638. APPARATUS FOR COATING SHEET MATERIAL WITH GRANULAR MATERIAL. JOHN C. MACILDOWIE, Nashua, N. H., assignor to Asbestos Wood & Shingle Co., Nashua, N. H., a Corporation. Filed Aug. 30, 1926. Serial No. 132,360. 7 Claims. (Cl. 91—67.9.)



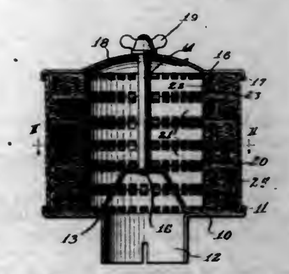
1. In apparatus for applying granular material to the surface of sheet material, the combination of a conveyor for the sheet material, delivering means located above the sheet material at a distance therefrom permitting free fall of granular material, to let fall said granular material intermittently in successively varying quantities and from successively different locations, upon said sheet material, and means in the path of falling granular material to arrest temporarily and distribute the same during its descent to the sheet material.

1,896,639. AUTOMATIC BOX LOADER. GEORGE J. MEYER, Milwaukee, Wis., and GERHARDT J. PATITZ, Peekskill, N. Y., assignors to Geo. J. Meyer Manufacturing Company, Cudaby, Wis., a Corporation of Wisconsin. Filed May 2, 1929. Serial No. 359,886. 9 Claims. (Cl. 226—14.)



1. In a box loading machine, the combination of feed belts running at an angle to each other, a notched turret for transferring a predetermined number of bottles one at a time from one belt to another, means for stopping the other bottles advancing on the first belt, means for feeding a box below the upper run of the second belt, and means for removing the predetermined number of bottles from said second belt and depositing them in an aligned row of pockets in the box.

1,896,640. AIR CLEANER. THOMAS G. MOULDING, Chicago, Ill., assignor to United Air Cleaner Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 20, 1930. Serial No. 483,201. 4 Claims. (Cl. 183—49.)

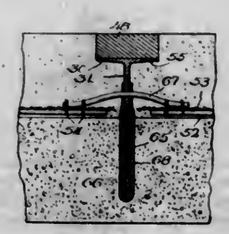


1. In an air cleaner, an outer protective screen cylinder, individual filter elements stacked inside said cylinder, each of said filter elements comprising a relatively short cylinder having openings therethrough and outwardly channeled and wavy wire wound around said short cylinder in the channel thereof, and means for closing the structure at the ends thereof, said means having an outlet therein for cleaned air.

1,896,641. ROAD MARKER. JAMES RAYMOND O'BRIEN, Chicago, Ill., assignor, by mesne assignments, to Rubber Products Corporation, Dover, Del. Filed Feb. 4, 1927. Serial No. 165,802. 20 Claims. (Cl. 94—1.5.)

1. A road marker embodying a substantially horizontal elastic body portion, an anchor plate upon which the body portion is secured, said body portion being substantially co-extensive with the supporting face of the plate, a projection depending from the lower face of said plate,

there being an opening through the said projection, and an anchor seated in said opening and projecting beyond the lateral faces of said projection, all of said parts be-

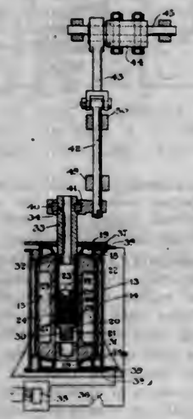


ing adapted to be embedded in a pavement with the upper face of said body portion substantially flush with the adjacent portion of the surface of said pavement.

1,896,642. PROCESS OF MAKING NITROCELLULOSE POWDERS. ARTHUR S. O'NEIL, Alton, Ill., assignor to Western Cartridge Company, East Alton, Ill., a Corporation of Delaware. Continuation of application Serial No. 589,722, filed Sept. 21, 1922. This application filed Apr. 11, 1927. Serial No. 183,013. 5 Claims. (Cl. 52—20.)

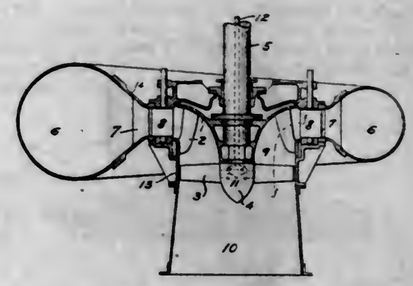
1. The process of making explosives comprising, converting part of the cellulose of nitrocellulose pulp to a hydrated condition and felting or gathering the so partially converted pulp into a sheet.

1,896,643. PROCESS OF MAKING TUNGSTEN ALLOYS. HARRY PETERSSON, Montreal, Quebec, Canada, assignor, by mesne assignments, to Petersson Alloys Limited, Montreal, Quebec, Canada, a Corporation of Quebec. Filed Aug. 5, 1929. Serial No. 383,570. 5 Claims. (Cl. 75—1.)



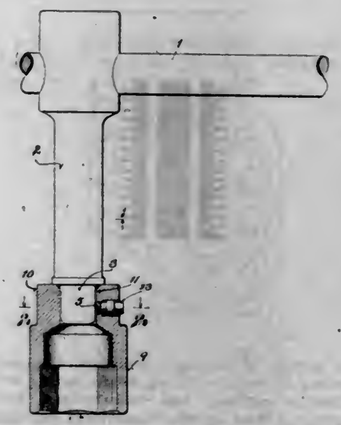
1. A method of making tungsten alloys which consists in placing a tungsten mixture in a charging chamber, subjecting the charging chamber to a violent shaking action and heating the mixture to its melting temperature while retaining said mixture in the charging chamber and then causing the molten alloy to flow into receiving moulds while continuing the shaking action.

1,896,644. HYDRAULIC TURBINE. ARNOLD PFAU, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 4, 1930. Serial No. 486,837. 12 Claims. (Cl. 253—107.)



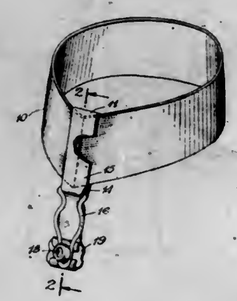
1. In combination, a casing having an annular side inlet, a conduit forming with said casing an axial flow passage, a runer rotatably mounted within said casing and having a vane section adjacent said inlet and an axial flow type of vane section in said flow passage, said sections being separated by an annular free space concentric with the axis of the runner, and means for conducting a hydraulic fluid to said inlet.

1,896,645. COUPLING FOR SOCKET WRENCHES. EDWARD M. PFAUSER, Milwaukee, Wis., assignor to Blackhawk Manufacturing Company, Milwaukee, Wis. Filed Aug. 24, 1929. Serial No. 388,201. 1 Claim. (Cl. 287—119.)



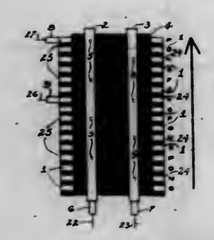
In a tool connection, a shank of polygonal shape in cross section, a member having a socket similarly shaped for releasably receiving the shank, a spring-pressed latch plunger carried by the shank, the member having a keeper opening for receiving the latch plunger, said opening extending entirely through the member and having limiting shoulders adjacent to its opposite ends, and a release button for the plunger latch slidably mounted in the opening having an annular enlargement intermediate its ends for engaging the limiting shoulders at the ends of its movement.

1,896,646. GARTER AND METHOD OF MAKING THE SAME. HANS ALBERT PHILIPS, Stratford, Conn., assignor to American Fabrics Company, a Corporation of Connecticut. Filed Apr. 28, 1932. Serial No. 607,942. 10 Claims. (Cl. 241—6.)



1. The method of attaching a tab member to the leg encircling member of a garter, which comprises the steps of moistening a film of adhesive material in a non-adhesive solvent for said material, laying the film on one of said members, laying the other of said members upon the film, and pressing the two members together.

1,896,647. ELECTROTHERAPEUTIC SYSTEM AND APPARATUS THEREFOR. HERMAN P. PULLWITT, Oak Park, Ill., assignor to McIntosh Electrical Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 26, 1930. Serial No. 504,814. 7 Claims. (Cl. 174—177.)



1. In a system of the class described, the combination of alternating current rectifying means having alternating current supply terminals and unidirectional current delivery terminals, first circuit connections extending from said delivery terminals, pulsation suppressing means in said circuit connections, high frequency circuit changing contacts connected with said first circuit connections, and output circuit connections extending from said contacts, whereby rapid current impulses are abruptly and repeatedly communicated to said output circuit connections.

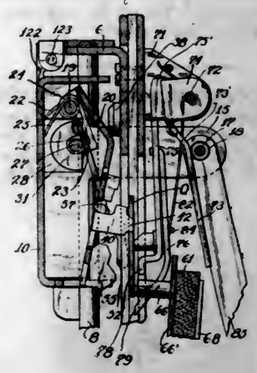
1,896,648. DISH STERILIZER. JOHN THOMAS, Milwaukee, Wis. Filed Aug. 6, 1931. Serial No. 555,443. 5 Claims. (Cl. 167—3.)

3. In a dish and utensil sterilizer, a supporting frame, a tank mounted therein and having an open upper end, a rigid carriage vertically movably mounted in said frame and having a portion extending into said tank, a tray carried by said carriage portion, a cover for the open end of



the tank hingedly connected with said carriage, a treadle, and mechanism between the treadle and carriage for imparting vertical movements to the carriage.

1,896,649. FARE BOX. ERNEST H. THOMPSON, Winnetka, Ill., assignor to Johnson Fare Box Company, Chicago, Ill., a Corporation of New York. Filed Sept. 15, 1930. Serial No. 481,914. 7 Claims. (Cl. 235—32.)



1. In a fare box embodying a coin chute, a reciprocating carriage, coin ejector mechanism in said carriage, a fare register operated during reciprocation of said carriage, means whereby during the first downward movement of said carriage said ejector mechanism will enter into ejecting engagement with a deposited coin, cam mechanism operable after an initial downward movement of said carriage to withdraw said ejector mechanism from the coin whereby said coin is only partially ejected, and means for causing said cam mechanism to withhold said ejector mechanism from said coin for a predetermined number of reciprocations of said carriage and corresponding number of actuations of said fare register.

1,896,650. LOCK WASHER. GEORGE C. TROTTER, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed July 20, 1931. Serial No. 551,907. 2 Claims. (Cl. 151—3.)

1. A lock washer formed from spring stock including an annular dished body portion, the outer margin of which is adapted to clampingly engage a work piece, a plurality

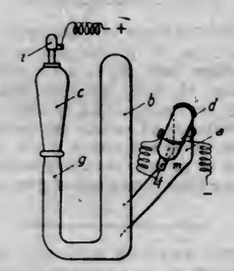
CARNEGIE LIBRARY OF ATLANTA

of radial prongs spaced along the internal margin of said body portion, said prongs being warped so as to present sharp work engaging teeth out of the plane of said body portion for lockingly engaging the clamping surface of a



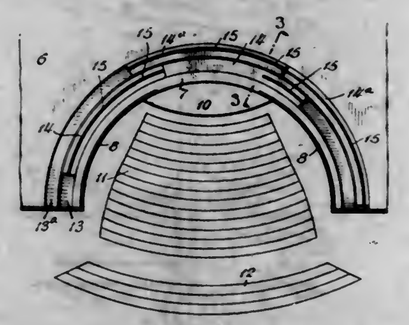
rotary tightening element such as a nut, and means provided on the washer for interlocking with an element adapted to extend through the washer and receive said nut, whereby to prevent relative rotation between said parts.

1,896,651. MERCURY VAPOR LAMP. FELIX RITTER KALBACHER V. TÜRKENBURG, Berlin-Mahlsdorf, Germany. Filed Sept. 4, 1930, Serial No. 479,672, and in Germany Dec. 20, 1929. 6 Claims. (Cl. 176—42.)



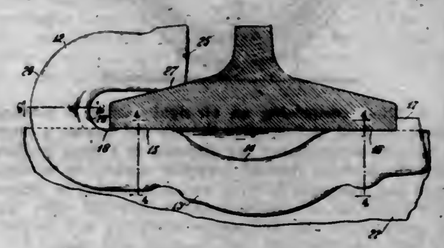
1. Mercury vapor lamp comprising a closed cathode, an anode, a burner tube joining said cathode and said anode, a vertical circulation cooler arranged between said cathode and said anode, means mounted on said anode for automatically taking up the mercury displaced by the light arc and, after extinction of the latter, for automatically returning the said mercury to the burner tube under co-operation of the outer atmospheric pressure, means for completely filling the lamp with mercury and means for partially vaporizing the mercury.

1,896,652. STAGE FOR THEATERS AND THE LIKE. CARMINE VITOLO, New York, N. Y. Filed Oct. 16, 1931. Serial No. 569,256. 6 Claims. (Cl. 20—1.123.)



1. A theater comprising a stage floor and a seating floor, a pair of separated walls concave with respect to said seating floor defining and outlining said stage opening on said stage floor, and, a plurality of concentric and movably mounted annular scenery supporting floor elements arranged behind said walls and adapted to be moved at will into view into the separation between said stage opening defining walls.
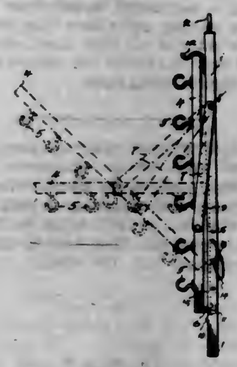
1,896,653. RAIL ANCHOR AND METHOD OF MAKING THE SAME. HAROLD G. WARR, Park Ridge, Ill., assignor to The P & M Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 26, 1931. Serial No. 511,314. 9 Claims. (Cl. 29—169.)



1. A rail anchor having a cross sectional configuration of a rectangle with the corners removed and bends to provide rail gripping portions having flat bearing surfaces of substantial width.

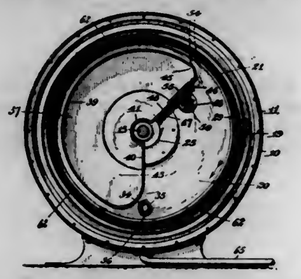
8. The method of making a rail anchor which consists in heating a metal blank of predetermined length, the cross-sectional configuration of which at all points throughout the length of the blank is in the form of a rectangle with rounded corner portions, bending the blank about a form having a surface contour corresponding to the shape of the anchor desired, and applying metal displacing pressure on the blank at predetermined locations to square up the said corner portions at said locations and form flat surfaces which meet the adjacent sides of the blank at substantially right angles.

1,896,654. CLOTHES HANGER. PERCY E. WEATON, Hamden, Conn. Filed Jan. 10, 1931. Serial No. 507,861. 3 Claims. (Cl. 211—99.)



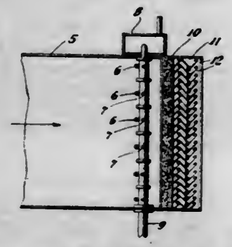
3. A device of the class described comprising a base or support, an arm having hooks on the underside thereof providing a clothes hanger rack, said arm being connected by pivotal means to said base, said means travelling within a straight longitudinal slot provided in said base, suspension means located above said arm co-operating with said pivotal means to hold said arm in the open or operative position, and means interposed in the path of travel of said pivotal connection whereby said arm is retained in a determinable adjusted position.

1,896,655. FILTER. WILLIAM G. ZERZOW, Buffalo, N. Y. Filed Apr. 23, 1930. Serial No. 446,562. 13 Claims. (Cl. 210—70.)



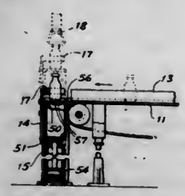
7. A filter, comprising an air-tight casing, a filtering element confined and movable therein and having a filtering wall, an accumulator box disposed in a fixed position within the filtering element, scraping mechanism movable toward and from said filtering wall and serving to remove matter adhering to said wall and deliver the same into said accumulator box, and means rendering said accumulator box accessible only upon opening said casing.

1,896,656. ASSEMBLY OF METAL SURFACES. SAMUEL M. ANDERSON, Sharon, Mass., assignor to B. F. Sturtevant Company, Boston, Mass., a Company. Filed Sept. 10, 1930. Serial No. 481,013. 2 Claims. (Cl. 113—116.)



1. The method of forming a separator baffle, which comprises bending a galvanized metal sheet to form a zigzagged outline, welding galvanized fluid restraining hooks to the straight sides of the bent sheet, placing the assembly in an acid bath to remove the surface of the galvanizing, and then regalvanizing same.

1,896,657. CONVEYING MECHANISM FOR GLASSWARE AND THE LIKE. RAYMOND G. BACHELLER, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Original application filed Jan. 9, 1928, Serial No. 245,315. Divided and this application filed July 6, 1931. Serial No. 548,921. 3 Claims. (Cl. 198—20.)



1. In glass machinery, a conveyor for transporting articles of glassware, a ware-receiving platform at the delivery end of said conveyor, an elevator for transporting ware from said receiving platform to a different level, and vertically adjustable means carried by the elevator for engaging with the ware delivered thereto to position the ware on the elevator and to maintain such ware in upright position.

1,896,658. METHOD OF MASHING MALT AND MALT MIXTURES. PHILIPPE DE GASPE BEAUBIEN, Outremont, Quebec, and JOHN F. SCHNEIDER, Montreal, Quebec, Canada, and FRANÇOIS M. DUPONT, Chicago, Ill., assignors, by direct and mesne assignments, to The Canadian Research Corporation, Limited, Montreal, Quebec, Canada, a Corporation of Canada. Filed Sept. 9, 1929. Serial No. 391,515. 12 Claims. (Cl. 195—32.)

12. The method of mashing cereal products, consisting of mixing the milled cereal product with water to form a mash and producing an enzymatic solution thereby, withdrawing a part of said solution, heating the remaining mash to effect saccharification, rupturing starch and other carbohydrates of the mash grains including hemicelluloses, lichenins, amylopectins and pentosans and effecting partial hydrolysis, and mixing the mash with the withdrawn enzymatic solution to effect saccharification of the then available carbohydrates.

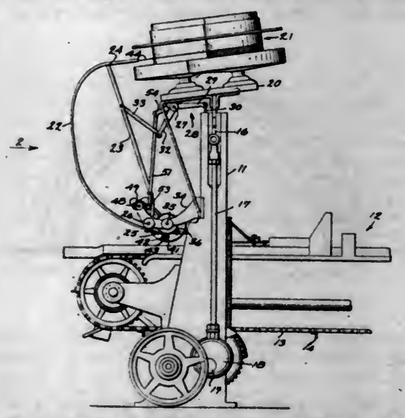
1,896,659. COMPOSITION OF MATTER. ANDREW F. BIGGER, New York, N. Y., assignor to Rubber Process Corporation, New York, N. Y., a Corporation of Michigan. Filed Jan. 27, 1923, Serial No. 615,380. Renewed July 14, 1932. 17 Claims. (Cl. 18—50.)

17. In the treatment of rubber, the process which comprises subjecting vulcanized rubber to the beneficial effects of a composition of matter containing sodium bicarbonate, and a gum of the class consisting of gum acacia and gum tragacanth.

1,896,660. TREATMENT OF RUBBER. ANDREW F. BIGGER, New York, N. Y., and ARTHUR C. SQUIRES, Newark, N. J., assignors to Rubber Process Corporation, New York, N. Y., a Corporation of Michigan. Filed Jan. 29, 1923, Serial No. 615,729. Renewed July 14, 1932. 2 Claims. (Cl. 18—52.)

1. A process of devulcanizing rubber which includes admixing the material to be devulcanized with a composition containing gum acacia and sodium bicarbonate, and heating.

1,896,661. WIRE FEEDING DEVICE FOR STAPLING MACHINES. GEORGE E. BREECE, Albuquerque, N. Mex. Original application filed Feb. 20, 1931, Serial No. 517,181. Divided and this application filed Dec. 17, 1931. Serial No. 581,654. 10 Claims. (Cl. 140—129.)



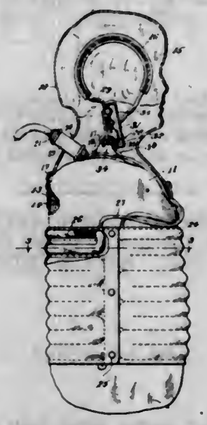
1. In a stapling machine, a wire feeding mechanism comprising a driving shaft having a driving gear mounted

thereon and a feeding wheel connected to said gear, a radius arm on the shaft, a driven pinion operatively connected to said arm, said driven pinion having a complementary feeding wheel connected thereto, and means to oscillate the arm, the connection between the arm and the pinion and the complementary feeding wheel causing a periodic release of the wire by such complementary feeding wheel.

1,896,662. STAIN. DONAT A. BRODEUR, Marlboro, Mass. Filed Oct. 6, 1931. Serial No. 567,299. 7 Claims. (Cl. 134—48.)

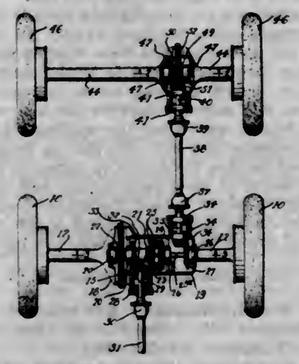
1. A non-drying stain comprising a light-colored paraffin oil having a higher boiling point than that of kerosene, of substantial body, and having an unctuous feel, combined with pigment ground in oil.

1,896,663. ELECTRICALLY HEATED TOY. WILLIAM O. COLLINS, Wellsville, Kans. Filed May 1, 1931. Serial No. 534,363. 3 Claims. (Cl. 219—19.)



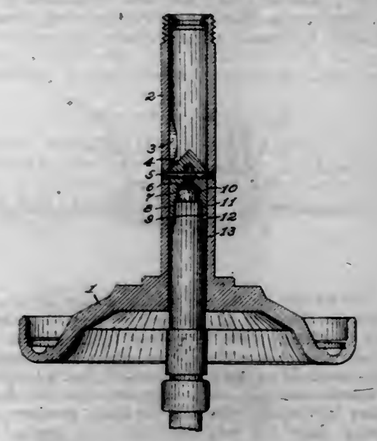
1. A toy including a removable hollow head, a body, a removable electric heating pad disposed in the head, a removable heating pad wrapped around the body, and a thermal switch in the head automatically controlling the heat of both pads.

1,896,664. MULTIPLE DRIVE FOR MOTOR VEHICLES. HARVEY A. DE WOLFE, Santa Ana, Calif. Filed Feb. 11, 1930. Serial No. 427,512. 4 Claims. (Cl. 180—22.)



1. In a multiple drive for vehicles, a pair of driving axles, each formed in two parts, a differential gearing connecting the two parts of each axle, a two part shaft journaled for rotation in bearings and arranged parallel with one of the two-part axles, driving connections between one of the parts of said two-part shaft and the other one of the two-part axles, a differential gearing connecting the two parts of said shaft, a housing enclosing said differential gearing, a beveled pinion on said housing, a driving shaft, a beveled pinion carried by said driving shaft and meshing with the beveled pinion on said differential gear housing, said two-part shaft, the differential gearing that connects the two parts of said shaft, said differential gear housing and the beveled pinion carried by the differential gear housing, all being located directly above and supported by the two-part axle with which the two-part shaft is associated, and a driving connection between the other one of the parts of the two-part shaft and the differential gearing that connects the parts of the axle that is positioned adjacent to and parallel with said two-part shaft.

1,896,665. BOWL AND SPINDLE CONNECTIONS FOR CENTRIFUGAL LIQUID SEPARATORS. JAMES McCOSH EDWARDS, Cedar Heights, and HERMAN RUDOLPH DILGER, Waterloo, Iowa, assignors to Associated Manufacturers Corporation of America, Waterloo, Iowa. Filed Feb. 19, 1930. Serial No. 429,732. 2 Claims. (Cl. 308—148.)

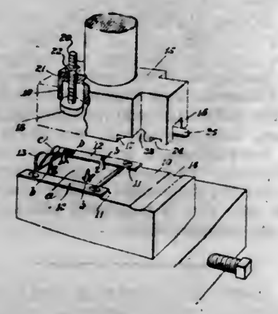


1. The combination with the base of a centrifugal liquid separator bowl having a downwardly opening axial socket-bearing for the upper end of a rotary spindle, and having as parts of the bearing depending furcations, of a spindle whose upper termination is domical with opposite parts shouldered therebelow to slidably rockingly engage said furcations, said bearing including a central hollow to receive said domical termination.

1,896,666. BUCKLE SETTING DEVICE. HARRY H. EVANS, New York, N. Y., assignor to Adjusta Company, New York, N. Y., a Corporation of New York. Filed Apr. 29, 1931. Serial No. 533,713. 1 Claim. (Cl. 1—4.)

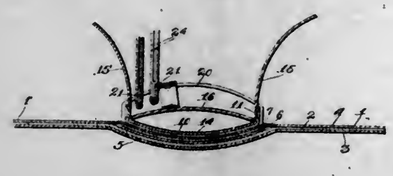
A buckle setting device comprising, in combination, a seating member having oppositely disposed guide elements adapted to engage the sides of and to position laterally a pronged buckle with an upwardly projecting hookpiece, a stop adapted to engage the end of and to position the buckle longitudinally, and, cooperating with the said member, a setting member having oppositely disposed anvil elements adapted to engage the tips of the upwardly pro-

jecting prongs on the sides of the buckle positioned on the seating member and to press them first to one side and then over and back to the body of the buckle, and an



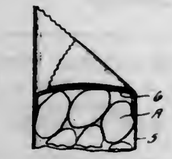
adjustably mounted element adapted to engage the end of the upwardly projecting hook-piece of the buckle to form the hook.

1,896,667. LOOSE-LEAF BINDER. CHARLES H. FRANZ, Jr., Wauwatosa, Wis. Filed May 14, 1931. Serial No. 537,297. 4 Claims. (Cl. 129—38.)



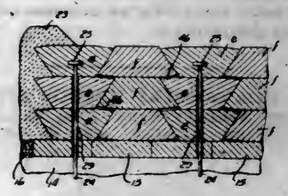
4. A loose-leaf binder comprising a back portion, guide members at the ends of the back portion, a transversely curved retaining plate extending longitudinally of the back portion between the guide members, retaining bars slidably mounted on the guide members, and a longitudinally disposed clamping strip extending the full length of the bars frictionally engaging the guide members and the retaining plate for retaining said bars against lateral shifting movement on the guide members.

1,896,668. BAG ADAPTED TO BE SEALED BY GUMMED TAPE. FRANK FRIEDHEIM, Minneapolis, Minn. Filed Oct. 29, 1930. Serial No. 491,954. 3 Claims. (Cl. 229—62.)



1. A bag formed of flexible material and having an open upper end, a plate formed of relatively stiff though bendable material and secured to one side of the bag adjacent its upper end and projecting above the said side of the bag, said plate being adapted to be bent downwardly over the open end of the bag into substantially reverse U-shape to form a smooth base of resistance against which gummed tape may be pressed to bind the upper portions of the bag securely together.

1,896,669. FURNACE FLOOR STRUCTURE. MARTIN FRISCH, Bronx, N. Y., and HAROLD O. WOOLLEY, Maplewood, N. J., assignors to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 16, 1930. Serial No. 475,744. 32 Claims. (Cl. 263—46.)



4. A furnace floor structure comprising a plurality of blocks adapted to slide with respect to each other and having bevelled sides so arranged that the contact between adjacent blocks is on reciprocally bevelled surfaces.

1,896,670. METHOD AND APPARATUS FOR FORMING WIRE COILS. ARTHUR H. GARST, Providence, R. I. Filed May 31, 1930. Serial No. 457,877. 23 Claims. (Cl. 153—65.)



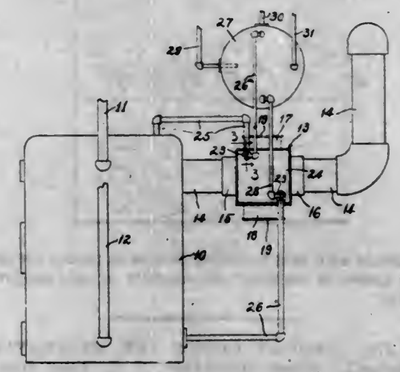
1. The method of making substantially oblong wire coil having spaced substantially parallel coils which comprises forming wire into a series of oblong coils by continuously forming it under tension, imparting to each coil as it is formed the desired pitch by bending it obliquely outwardly the desired amount, compressing each half coil side beyond its desired set position to cause it to resiliently spring back to its desired flat position to shape each side of the coil to the desired shape and pressing each oblique half coil transversely to the axis of the coil beyond its desired finished position to give the desired set degree of curvature to each respective half coil end.

7. In an apparatus for forming substantially oblong wire coil, a revolvable oblong mandrel having the center portion of one end thereof open to form winding pins projecting forwardly therefrom, means to continuously feed wire under tension to said mandrel, means to bend said wire as formed on said mandrel towards the free end of said mandrel to impart more than the winding pitch thereto, means to compress each half coil side as formed beyond its desired set position to cause it to spring to the desired shape, and means to press each oblique half coil side as one end thereof passes beyond the mandrel end through the open center portion of said mandrel to give the desired set degree of curvature to each respective half coil end.

1,896,671. WATER HEATING APPARATUS. ROSS D. HEAPS, Lockport, Ill. Filed July 30, 1930. Serial No 471,701. 7 Claims. (Cl. 122—20.)

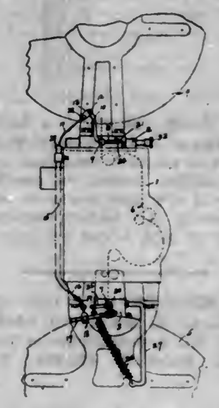
1. In an apparatus of the type described, the combination of a boiler, a storage tank for hot water, a double coil arrangement comprising two coil parts one inside of the other, means for connecting the outside coil part into a

circuit with said boiler, other means for connecting the inside coil part into a circuit with said storage tank, and means for applying heat exteriorly to said coils whereby



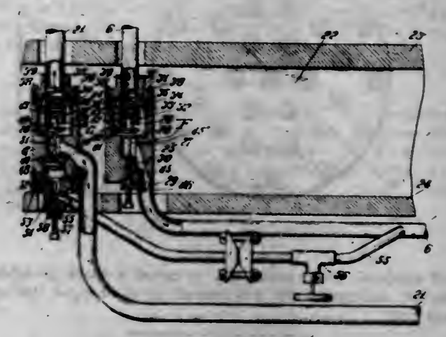
the boiler water supply has heat applied directly thereto and the storage tank water supply is heated indirectly from the hot water in said outside coil.

1,896,672. SAFETY CONTROL FOR MOTION PICTURE PROJECTION MACHINES. ARCHIE E. IRONS and DARRELL S. KEPLER, Sharon, Pa. Filed Feb. 10, 1930. Serial No. 427,155. 2 Claims. (Cl. 88—17.)



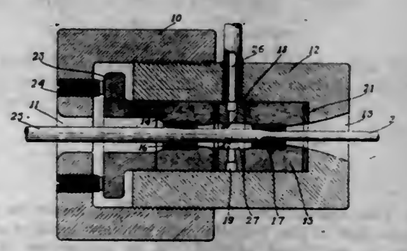
1. In a device of the class described, a housing capable of attachment to a motion picture projection machine, said housing positioned between an upper portion of a motion picture projection machine and a film magazine, an electric switch, a rotatable round shaft provided with a cutting edge positioned within said housing, a lower housing, a rotatable round shaft positioned within said lower housing, a flattened place on said shaft, a plunger for the purpose of closing said electric switch, a trigger arm, means for releasing said trigger arm, means for holding said trigger arm under tension in order that said rotatable shafts with cutting edges may be rotated in order to cut a film at two points, one before entering the upper film magazine and another before entering the lower film magazine, means for closing openings through which said film passed before cutting, substantially as described.

1,896,678. SAFETY CUT-OFF VALVE FOR REFRIGERATOR CARS. JULIUS KORSA, Chicago, and EDMUND D. BRIGHAM, Jr., Highland Park, Ill., assignors to North American Car Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 6, 1930. Serial No. 493,899. 11 Claims. (Cl. 62—115.)



1. In combination with a refrigerating system for a railway car including a compressor mounted beneath the car body, and suction and pressure pipes leading from the compressor to the portions of the system within the car body, automatically closing valves in each of the pressure and suction pipes, and means for holding both valves open automatically by the pressure of the fluid in the pressure pipe.

1,896,674. WIRE DRAWING APPARATUS. JAMES R. LONGWELL, Cleveland, Ohio, assignor to Carboloy Company, Inc., Detroit, Mich., a Corporation of New York. Filed Jan. 31, 1931. Serial No. 512,541. 6 Claims. (Cl. 205—25.)

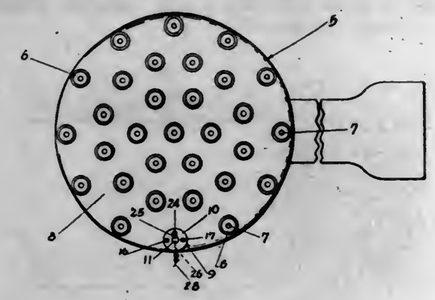


1. Wire drawing apparatus, comprising, in combination, a pair of drawing dies in tandem arrangement, having registered orifices through which material may be drawn, a spacer between said dies having an opening in registry with said orifices, means laterally embracing and alining said dies and said spacer and confining them against outward lateral bursting strains, and means for introducing and maintaining a lubricant in the space defined by said spacer opening and said dies under sufficient pressure substantially to maintain a film of lubricant between said dies and the material drawn therethrough during a drawing operation.

1,896,675. IGNITION MEANS. WALTER E. MILLER, Oakland, Calif. Filed Mar. 15, 1929. Serial No. 347,407. 2 Claims. (Cl. 175—116.)

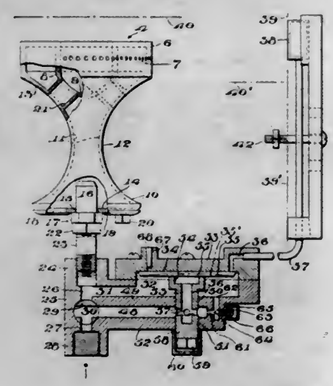
1. A sparking device of the class described, comprising, in combination with a gas burner having a plurality of burner tips, a refractory element adapted for substitution for one of said tips and having a gas port extending

therethrough and communicating with the gas supply chamber of the burner, and spark-gap tips arranged in said port below the upper end of said refractory element



and adapted, when energized, to cause a spark to bridge the gap and ignite the gas column as discharged through said port.

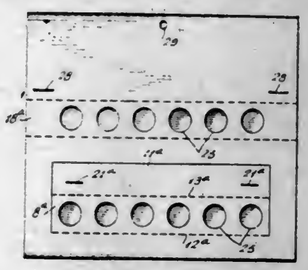
1,896,676. AUTOMATIC FLUID CONTROL VALVE. FREDERICK R. MOTT, Wyncote, Pa., assignor of one-third to L. A. Von Seldeneck, Elkins Park, Pa., and one-third to Harry Weissinger. Filed June 16, 1931. Serial No. 544,743. 2 Claims. (Cl. 236—95.)



1. The combination of a valve casing, means to regulate the flow of fuel therethrough, a hollow member adapted to be positioned adjacent to an extraneous article, a tube connecting the interior of said member with said fuel regulating means, a heat expansible fluid within said member and said tube, operative to vary said means in accordance with the temperature of such article, and a bracket having a recess for said member and adapted to secure said member in fixed relation to such article, said bracket also having spaced lugs between which said tube is normally positioned in order to prevent its relative movement and vibration.

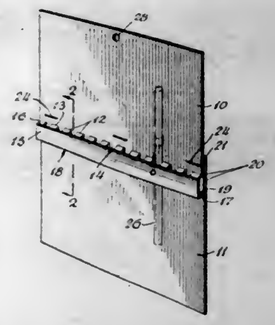
1,896,677. DISPLAY DEVICE. HAROLD L. MYERS, Morristown, N. J. Filed Apr. 8, 1931. Serial No. 528,540. 5 Claims. (Cl. 211—73.)

5. A display device comprising a pair of panels, one of which is provided with at least one display opening, foldable means comprising integral parts of at least one of said panels for spacing said panels apart to form a display recess in registry with said display opening, a supporting member foldably connected with one of said panels for supporting said device in a display position, foldable means for maintaining said supporting member in supporting position, and fastening devices whereby said folding means are connected with said one panel, said supporting member being provided with apertures



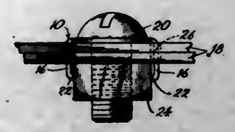
in registry with said fastening devices to permit the latter to be placed in position independently of said supporting member.

1,896,678. DISPLAY DEVICE FOR MERCHANDISE. HAROLD L. MYERS, Morristown, N. J. Filed June 26, 1931. Serial No. 546,995. 11 Claims. (Cl. 206—79.)



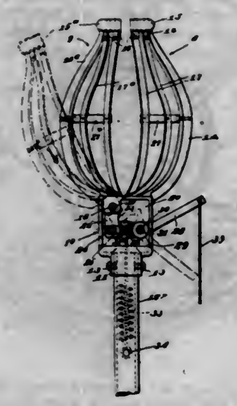
1. A display device comprising a back folded upon itself in three plies at an intermediate point and secured in folded position to provide overlapping upper and lower sections, and a holding section for merchandise located at the lower edge of said upper section in integral, foldable connection therewith and foldably connected with the intermediate ply of said folded portions.

1,896,679. LOCKING DEVICE. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 7, 1930. Serial No. 473,552. 5 Claims. (Cl. 151—2.)



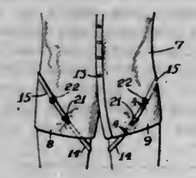
1. In combination with a plate, a clamping screw extending through the plate, and a threaded member positioned on one side of said plate for receiving said clamping screw, a locking device including an annular body portion of flat stock, a plurality of screw engaging teeth extending out of the plane thereof, and a locking member projecting laterally of the body portion and extending through the plate and interlocked with the threaded member, whereby said threaded member is secured against relative rotation with respect to said screw.

1,896,680. INCANDESCENT LAMP SOCKET REMOVER. FLOYD L. PALMER, Waverly, Mass., assignor to Lundin Electric & Machine Co., Boston, Mass. Filed May 5, 1932. Serial No. 609,446. 5 Claims. (Cl. 294—20.)



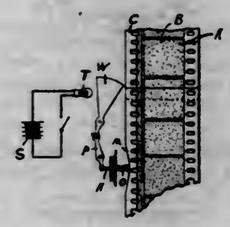
2. An incandescent lamp socket remover consisting of a box-like casing, a cage member located at the upper side of said casing and a tubular member located at the under side of said casing, said cage member comprising a fixed jaw portion integral with said casing and a movable jaw portion pivoted on said casing, a cam lever pivoted within said casing having a protruding extension arm, said cam lever adapted to engage on its cam surface with the side of a lower depending portion of said movable jaw member, a tension spring located within said tubular member having one end attached to said tubular member the other end anchored to said cam lever.

1,896,681. RETAINING DEVICE. CHARLES E. PECKHAM, Chicago, Ill. Filed Jan. 28, 1931. Serial No. 511,672. 1 Claim. (Cl. 241—7.)



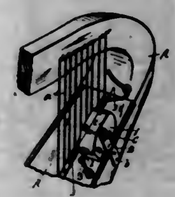
In a garment which has shoulder and trunk portions and front and rear tail portions at the lower end of the trunk portion with adjacent edges of the front and rear tail portions spaced from each other, the combination therewith of a pair of elastic strips having connecting devices at corresponding ends thereof, said connecting devices being disposed adjacent the edges of the rear tail portions that are spaced from the front tail portions, said strips being extended over said front tail portions and having other connecting devices at the other ends thereof, another pair of elastic strips having connecting devices at corresponding ends thereof, said last-named connecting devices being adapted to respectively cooperate with the first-named connecting devices to attach the rear tail portions to said connecting devices and to attach the connecting devices together, said second-named elastic strips being extended over the inner sides of the thighs of the wearer of the garment and toward said other ends of the first-named strips and having connecting devices at the ends thereof opposite the ends connected to the first-named strips, these last-named connecting devices attaching the front tail portions to said other connecting devices on the first pair of strips and being attached to these other connecting devices whereby said strips are connected into continuous loops, the strips acting to hold the shoulder portions of the garment snugly about the shoulders of the wearer and holding the trunk portion taut to prevent wrinkling thereof.

1,896,682. SOUND PICTURE APPARATUS. THEODORE WILLARD CASE, Auburn, N. Y., assignor to Case Research Laboratory, Incorporated, Auburn, N. Y., a Corporation of New York. Filed July 24, 1926. Serial No. 124,724. Renewed July 18, 1932. 12 Claims. (Cl. 274—43.)



9. A film having a sound record thereon, a source of light to which said sound record is exposed, a shutter movable between the source of light and the film, means for actuating the shutter for gradually varying the degree of exposure of a selected portion of said sound record to said source of light, said exposure varying gradually throughout said portion from normal exposure at the beginning to substantially no exposure at the central portion and back to normal exposure at the end.

1,896,683. TONE AMPLIFIER. MELVILLE CLARK, Syracuse, N. Y. Filed Mar. 30, 1931. Serial No. 526,302. 1 Claim. (Cl. 84—294.)

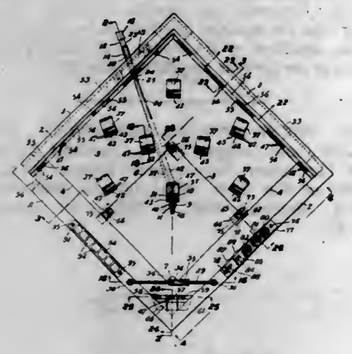


The combination with a harp, of an electric pick-up device supported independently of the sounding board and having its vibratory element rigidly connected to the sounding board of the harp at a point nearer to the neck than to the base of the harp.

1,896,684. BASEBALL GAME. RICHARD H. CUTTING, Cleveland, and EDWARD F. STUKBAUER, Cleveland Heights, Ohio; said Cutting assignor to said Stukbauer. Filed Aug. 9, 1928. Serial No. 298,456. 23 Claims. (Cl. 273—89.)

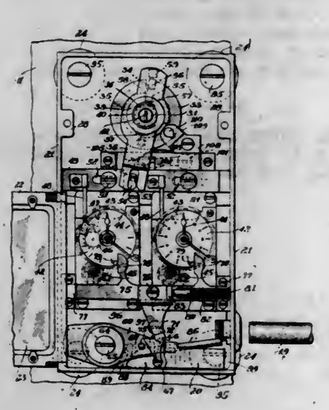
1. A baseball game comprising a carrier having a home plate displayed thereon, a ball-catching receptacle located in the corresponding position of a member of a ball team

and provided with an opening facing said plate, a standard secured to said carrier at said plate and a bat slidably and swingably mounted on said standard and adapted for



unrestrained bodily movement crosswise of said plate and to transcribe an arc in a relatively transverse plane respectively.

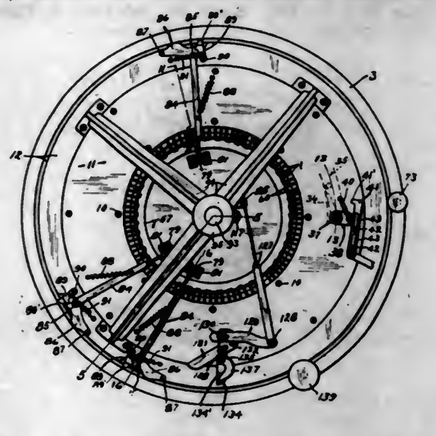
1,896,685. LOCKING MECHANISM. WILLIAM F. DIESEL, Rochester, N. Y., assignor to Sargent & Greenleaf, Inc., Rochester, N. Y., a Corporation of New York. Filed Mar. 2, 1926. Serial No. 91,765. 71 Claims. (Cl. 70—26.)



1. In combination, a container including a closure and locking means therefor, including relatively movable securing and protecting mechanisms, the latter being conditioned for movement automatically to obstructing position with respect to the former upon release of the former, whereby when the securing mechanism is moved to securing position the protecting mechanism will obstruct and prevent release of the securing mechanism.

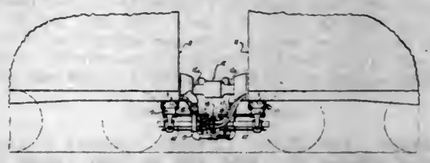
1,896,686. KNITTING MACHINE. WILLIS ADOLPHUS INGALLS, Syracuse, N. Y. Filed Sept. 28, 1931. Serial No. 565,600. 14 Claims. (Cl. 66—24.)

1. In a knitting machine, co-operative sets of knitting needles, the needles of each set being normally arranged to align with the spaces between the needles of the other set and selective means for sequentially shifting portions



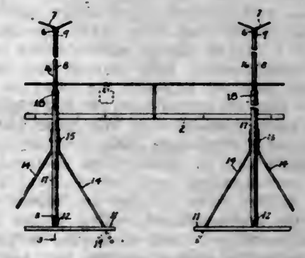
of the needles of one set to bring them into alignment with needles of the other set or with the next adjacent spaces.

1,896,687. AUTOMATIC TRAIN PIPE CONNECTER. ALBERT S. JOHNSON, Los Angeles, Calif., assignor to Johnson Connector Company, Ltd., Los Angeles, Calif., a Corporation of California. Filed July 19, 1930. Serial No. 469,014. 51 Claims. (Cl. 285—24.)



1. In combination, a vehicle, a coupler extending in the direction of the vehicle length and embodying two parts arranged for horizontal telescopic movement, one of said parts being applied to said vehicle for vertical swinging movement about a horizontal axis which is transverse of the vehicle length, and means yieldingly holding said one part against such movement in one direction during telescopic movement of said parts, said means embodying a substantially horizontal flat spring applied to said other part and extending, in effect, into sliding engagement with the vehicle.

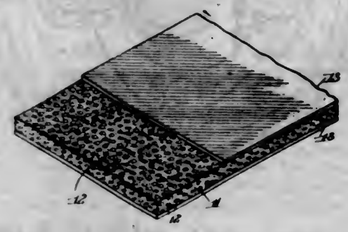
1,896,688. SCAFFOLDING. ALBERT KOLVOORD, Augusta, Mich. Filed Apr. 10, 1931. Serial No. 529,073. 11 Claims. (Cl. 304—19.)



3. A scaffold comprising a channel base adapted to rest on a supporting surface, a supporting column pivotally

mounted on said base, a spacing and wall-engaging forked member secured to the top of said column, and braces extending from the sides of the column to the outer ends of the base.

1,896,689. BUILDING MATERIAL AND METHOD OF MAKING THE SAME. HUGH M. SPENCER, Lockport, N. Y., assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Original application filed dated Mar. 1, 1932. Divided and this application filed Feb. 23, 1932. Serial No. 594,688. 8 Claims. (Cl. 154—2.)



1. Building material comprising a moisture-resistant intumesced core including sodium silicate, a filler, and a minor quantity of light magnesium carbonate, and a liner of sheet material adhering to a surface of said core.

1,896,690. METHOD OF CASTING TYPE FACES, STEREOTYPE, ETC. PAUL EMMITT WHITE, Lancaster, Ohio. Filed Dec. 4, 1930. Serial No. 500,134. 5 Claims. (Cl. 22—200.)

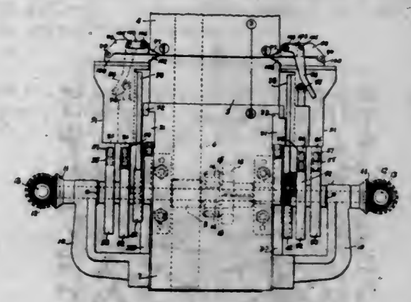
1. A method of making printing plates which consists in placing a mat in a mold box, holding the mat in position therein, pouring molten metal into the mold box and vibrating the mold box and the metal during the period of pouring whereby any warpage of the mat is overcome and a perfect impression obtained.

1,896,691. DOOR. ARTHUR B. WINCHELL, Jackson, Mich., assignor, by mesne assignments, to The Sparks-Withington Company, Jackson, Mich., a Corporation of Ohio. Filed June 10, 1930. Serial No. 460,220. 3 Claims. (Cl. 312—191.)



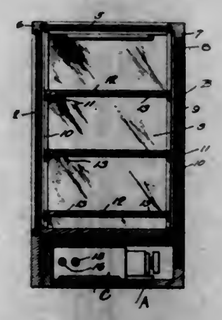
1. The combination with a cabinet having a door opening, of a folding door for closing said opening and comprising two sections hinged together, one of said sections being hinged at one side to the cabinet to swing from the closed position within the opening to the open position at one side thereof and in parallel relation to the front of the cabinet and means attached to the cabinet and to the outer lower edge of the other door section in spaced relation to the hinge connection between the door sections and movable in a path out of the path of movement of the folding door for automatically folding and unfolding the door sections during the opening and closing movements of the door.

1,896,692. AUTOMATIC FORGING MACHINE. OLLIE J. BERGER, Chicago, Ill. Filed Sept. 30, 1929. Serial No. 396,161. 4 Claims. (Cl. 78—13.)



1. In a work-clamping and moving means, stationary and movable jaws pivoted to one another, yielding means spreading said jaws, a lever for closing said jaws, a vertical slide for engaging said lever to close the jaws, a support for said slide and for slidably supporting said jaws, a second vertical slide on said support, a segmental rack pivoted on said support operatively connected with said second slide and a rack on said jaws operatively engaged by the segmental rack for reciprocating said jaws on said support whereby successive movement of said slides will close the jaws and reciprocate them.

1,896,693. REFRIGERATED DISPLAY DEVICE. DONALD A. BATTISTA, Philadelphia, Pa., assignor of one-half to William De Cou, jr., Philadelphia, Pa. Filed July 7, 1932. Serial No. 621,262. 5 Claims. (Cl. 62—89.5.)

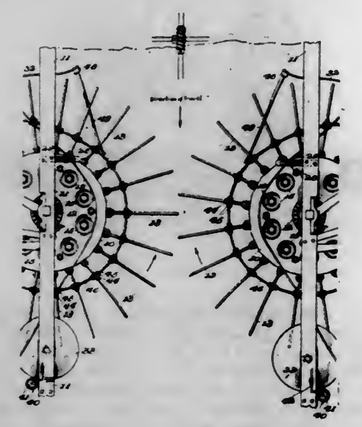


1. In a display counter of the character described having glass side walls, a pair of transparent shelves supported in spaced relation between the walls of the counter, said shelves being formed with a passageway extending therethrough, and means connecting the passageways of each shelf to form a continuous circuit for circulating a refrigerating medium through the passageways of the shelves.

1,896,694. COTTON PICKER. HIRAM N. BERRY, Greenville, Miss., assignor, by direct and mesne assignments, to Cotton Harvester Corporation of America, Greenville, Miss., a Corporation of Delaware. Filed Apr. 7, 1926, Serial No. 100,438. Renewed June 28, 1932. 17 Claims. (Cl. 56—44.)

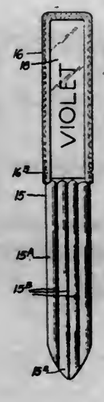
1. In a cotton picker, a revolving picking cylinder, picking fingers radiating from the said cylinder, vertical shafts in an annular series around and within the cylinder, each shaft being geared at vertically spaced points therealong to the picking fingers in vertical line there-

with, said shafts being arranged in groups, gearing connecting the shafts of each group, one shaft of each group having an extended pulley, and driving connections for



rotating the shafts during revolution of the cylinder and including a belt with which the pulleys of the shafts are movable into and out of engagement.

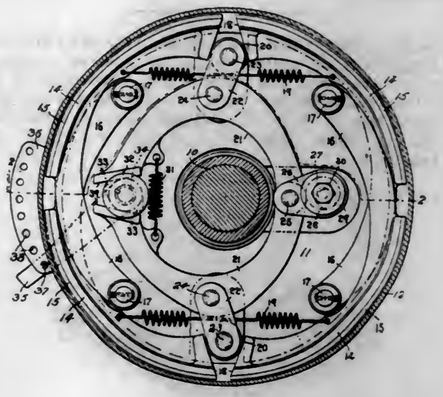
1,896,695. PLANT MARKER. JOHN BOROVICKA, Hubbard Woods, Ill. Filed May 22, 1931. Serial No. 539,197. 5 Claims. (Cl. 40—17.)



1. A marking device of the class described, comprising an elongated body, the upper part of said body having a flat portion and the lower part of said body being corrugated longitudinally thereof, a label adapted to be placed adjacent said flat portion of the body, a transparent cover for said label, a frame adapted to be positioned on said flat portion of the body, and cooperative means on said body and said frame for resiliently retaining said body and said frame together.

1,896,696. BRAKE. SWINFEN BRAMLEY-MOORE, White Plains, N. Y. Filed Oct. 2, 1930. Serial No. 485,986. 10 Claims. (Cl. 188—78.)

1. In a brake, a casing, opposed pairs of brake shoes pivoted to the casing and biased to a retracted position, projecting means for each pair of brake shoes, and a shiftable floating member, and relatively movable brake

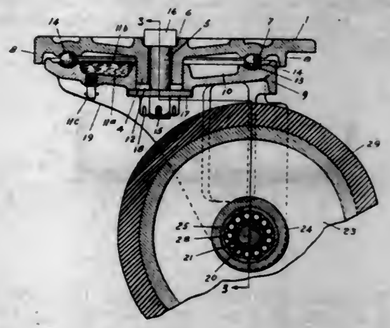


actuating means carried by said floating member and, connected between said projecting means for actuating the same.

1,896,697. PROCESS OF DECOMPOSITION OF COMPLEX HYDROFLUORIC SALTS. MAX BUCHNER, Hannover-Kleefeld, Germany. Filed July 26, 1927, Serial No. 208,607, and in Germany July 26, 1926. 5 Claims. (Cl. 23—88.)

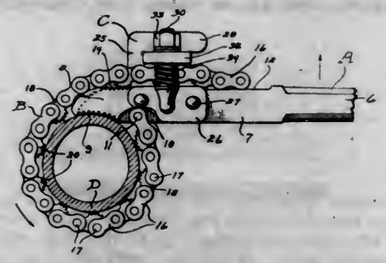
1. Process for the decomposition of complex hydrofluoric salts, which comprises heating the salts to be decomposed while avoiding temperatures at which a partial melting or sintering takes place and at the same time maintaining the atmosphere of the decomposition chamber free from water or steam.

1,896,698. CASTER. SHERWOOD M. CHASE, Columbus, Ohio, assignor to The Chase Foundry & Mfg. Co., Columbus, Ohio, a Corporation of Ohio. Filed Mar. 21, 1931. Serial No. 524,294. 2 Claims. (Cl. 16—36.)



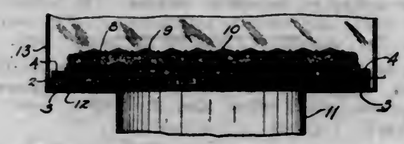
1. In a caster, a lower plate having a central hole therein, and a peripheral groove, a lubricant chamber having substantially parallel lateral walls between the hole and the groove, an upper plate having a central hub fitting in said hole, and a peripheral groove cooperating with the first groove to form a ball race, balls in said race and a cover for the chamber forming with the chamber a lubricant passageway to the central hole and to the ball race.

1,896,699. CHAIN PIPE WRENCH. FRANK L. COOK, South Bend, Ind. Filed June 15, 1931. Serial No. 544,639. 6 Claims. (Cl. 81—64.)



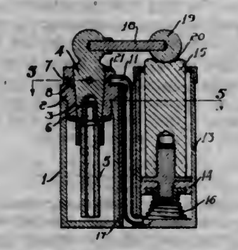
1. A chain wrench comprising a lever having a head at one end thereof provided with teeth along its upper face, a chain including grip links having grip portions projecting from one side thereof, said grip portions having toothed arcuate faces, latch and pivot members carried by opposite sides of the head, and a keeper plate pivotally carried by the pivot member for retaining the free end of the chain longitudinally of the upper face of the head with the teeth on said grip portions engaging the teeth on the head.

1,896,700. DUST COLLECTOR. HERMAN J. CROSS, Louisville, Ky., assignor to Tuttle Register Dust Catcher Company, Louisville, Ky., a Corporation of Kentucky. Filed Sept. 10, 1928. Serial No. 304,891. 3 Claims. (Cl. 183—49.)



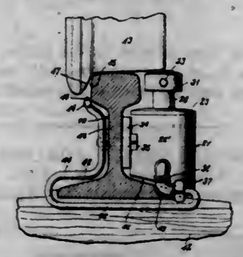
1. In a dust collector for a hot air furnace register, a frame comprising a channel section forming a closed figure with the flanges of the channel turned inwardly, a sheet of wire mesh with its edge portions extending between the flanges of said frame and resting against the lower of said flanges, a second sheet of wire mesh with its edge portion extending between said flanges and resting against the upper of said flanges, said sheets being spaced apart by a mass of loose fibrous compressible material between and confined by said sheets and forming an air filter, a portion of said sheets and material being offset to bring the lower sheet of wire mesh above the level of the upper flange of said frame.

1,896,701. PUMP ATOMIZER. FRED CUSTER, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 3, 1930. Serial No. 425,437. 8 Claims. (Cl. 299—88.)



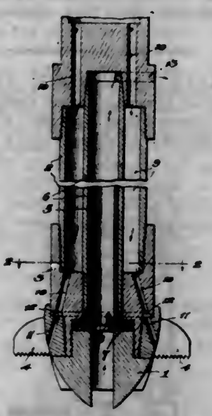
1. In combination, an atomizer having a head with air and liquid discharge passages, a rotary valve operable to open and close said passages, an air pump attached to the atomizer in communication with the air passage of the spray head and having a plunger with an operating stem projecting without the pump cylinder, and means secured to the valve and operable to engage the plunger stem and hold it in inoperative position when the valve is in passage-closing position.

1,896,702. RAIL AND FLANGE OILER. DELANCEY W. DAVIS, Wilkes-Barre, Pa. Filed Feb. 6, 1929. Serial No. 337,921. 3 Claims. (Cl. 184—3.)



1. In combination with a rail, a delivery pipe section arranged to discharge lubricant adjacent the head of the rail, said section being disposed transversely under the rail, thence upwardly and over the base on both sides of the rail, a nozzle on one terminal of the pipe section and lubricant supply means connected to the other terminal of the pipe section.

1,896,703. CORE DRILL. CHARLES A. DEAN, Bakersfield, Calif. Filed May 28, 1930. Serial No. 456,686. 5 Claims. (Cl. 255—72.)

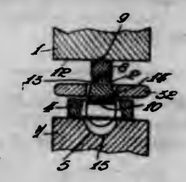


1. A core drill having a tubular drill barrel, and a thin gage core container extending freely and loosely into said barrel and freely withdrawable therefrom with vertical play limited solely through the conformation of the bottom portion of said core container, and a wall surrounding said container to protect it from external pressure upon its own walls.

1,896,704. PROCESS FOR MANUFACTURING STEEL TIRES AND THE LIKE BY FORGING AND PRESSING INGOTS. ALBERT DÉCHENNE, Seraing, Belgium. Filed Mar. 13, 1931, Serial No. 522,833, and in Belgium Mar. 22, 1930. 2 Claims. (Cl. 29—160.4.)

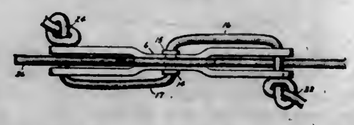
1. In a process of manufacturing steel tires and the like by forging and pressing ingots, the steps of placing an ingot with its dead head in a cavity of an anvil, said cavity having a volume capable of receiving the complete

piping and segregation part, flattening said ingot and simultaneously driving the dead head completely into said cavity, thus obtaining a flat workpiece having a central



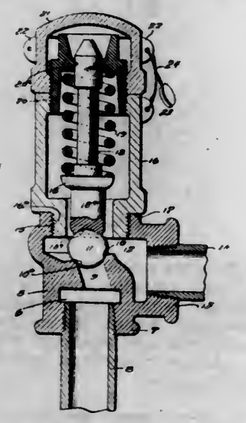
projection on the face formed by the piplug and segregation part of the ingot, and punching out the central part of the workpiece together with said projecting portion.

1,896,705. TAKE-UP DEVICE FOR ROPES. HENRY GEISENHONER, Schenectady, N. Y. Filed Apr. 1, 1932. Serial No. 602,463. 2 Claims. (Cl. 24—115.)



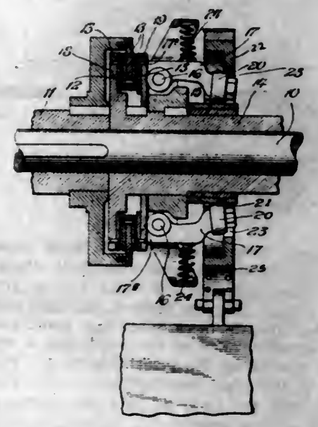
2. A take-up device for a clothes line or the like comprising a member having a hub portion having a passage of such size that two ends of a clothes line will pass therethrough with frictional resistance, and bifurcated members extending outwardly from said hub portion, said bifurcated members having notches near their ends adapted to receive the loose ends of said line, whereby such loose ends may be used to prevent unwinding of said hub when said line has been tightened by winding thereon.

1,896,706. VALVE. THADDEUS S. GRIMES, Columbus, Ga., assignor to Lummus Cotton Gin Company, Columbus, Ga., a Corporation of Georgia. Filed Mar. 7, 1929. Serial No. 345,158. 11 Claims. (Cl. 137—53.)



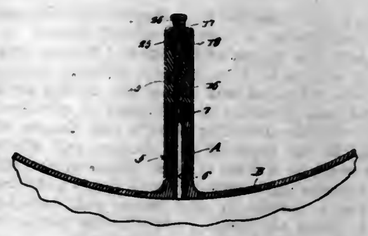
11. In a valve casing, a seat, a substantially free valve adapted to engage said seat and adapted for movement laterily of the seat when unseated, a plunger opposed to said valve seat and having an end recess receiving said valve, and said casing having an oversized bearing through which said plunger slidably extends for limited rocking movement transversely of said seat whereby to maintain the valve seated at one point and unseated at another point.

1,896,707. CLUTCH. CLIFFORD O. HANSON, Tiffin, Ohio, assignor to The Hanson Clutch & Machinery Co., Tiffin, Ohio, a Corporation of Ohio. Filed May 18, 1931. Serial No. 537,142. 4 Claims. (Cl. 192—36.)



1. A clutch including a driven member with a friction disc; a driving member with a friction disc; a bell crank on the driving member, movement of said bell crank adapted to move the discs into frictional engagement; a control member rotatably mounted on the driving member and having a cam surface; a part on the bell crank in engagement with said cam surface; and means for imposing a drag on the control member.

1,896,708. TIRE VALVE. DOLPHUS E. JONES, Seminole, Okla., assignor of one-half to Herschel A. Gassaway, Seminole, Okla. Filed Mar. 31, 1930. Serial No. 440,401. 1 Claim. (Cl. 152—12.)

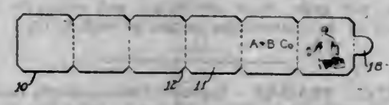


A valve for a pneumatic tire comprising an integral rubber stem provided with a comparatively narrow longitudinally extending bore through the center thereof, contracted near the outer end, said stem also being provided with a reduced neck, a second section formed of rubber detachably secured to said reduced neck and provided with a longitudinal bore of greater diameter than the contracted end of said first mentioned bore, said bore of the second section being contracted at the outer end to form a valve seat, valve means in the larger portion of said longitudinally extending bore, a spring for holding said valve means on said seat, said spring resting at one end on the outer extremity of said stem around the contracted portion of the bore thereof, and closure means for the outer end of said second section.

1,896,709. ADVERTISING DEVICE. RICHARD E. KIMBALL, Toledo, Ohio, assignor of one-half to Kenneth P. MacNaughton, Detroit, Mich. Filed Apr. 14, 1932. Serial No. 605,232. 3 Claims. (Cl. 40—102.)

1. A device of the class described comprising in combination with a container having a recess adjacent the

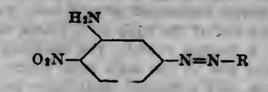
mouth thereof providing a ledge, a cap on said ledge frictionally engaging the side walls of said recess, a folder having accordion plaits seating on said cap and in contact with the side walls of said recess, a tab on the upper-



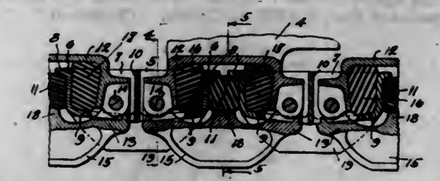
most leaf of said folder, whereby the folder is progressively unfolded during removal, and a strip disposed across said folder and in frictional engagement with the side walls of said recess for retaining the folder in place.

1,896,710. AZO DYES. WERNER LANGE, Dessau-Ziebigk in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 15, 1931, Serial No. 581,265, and in Germany May 30, 1930. 17 Claims. (Cl. 260—72.)

9. The azo dyes corresponding to the general formula:



1,896,711. RUBBER JOINTED CHAIN FOR TRENCH EXCAVATING DEVICES. ERICH H. LICHTENBERG, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 31, 1930. Serial No. 505,887. 14 Claims. (Cl. 37—191.)

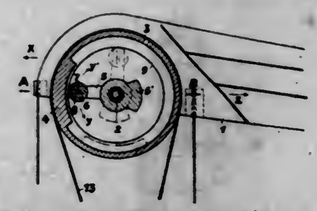


1. A digger chain comprising spaced links, yieldable spacing means interposed therebetween, connecting means encircling the adjacent ends of said links, and yieldable spacing means interposed between the ends of said links and said connecting means.

10. A digger chain comprising a plurality of links yieldably connected together, certain of said links carrying digging instrumentalities yieldably mounted for universal movement.

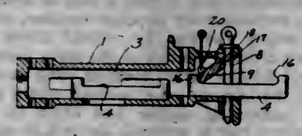
1,896,712. OSCILLATION GENERATOR FOR SIEVES, TROUGHS, AND LIKE APPARATUS. GERHARD LINKE, Magdeburg, Germany, assignor to the Firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Filed July 22, 1931, Serial No. 552,529, and in Germany July 11, 1930. 11 Claims. (Cl. 74—14.)

1. In combination with reciprocating apparatus, of a vibration generator comprising a shaft fixed to said reciprocating apparatus, a hollow cylindrical housing rotatably mounted upon said shaft, a balance weight fixed to said housing at the interior thereof, means for rotating said housing, a second balance weight rotatably mounted upon said shaft in the interior of said housing, a bevel gear assembly intermediate said housing and said second balance weight whereby said last-mentioned weight is rotated by said housing and maintained in definite relationship with said first balance weight upon said housing,



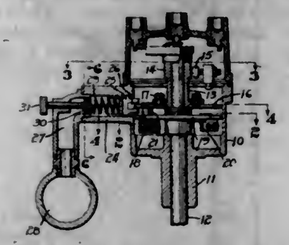
said rotation imparted to said second balance weight being of the same angular velocity and in an opposed direction with respect to that of said first balance weight.

1,896,713. DRAWBAR AND COUPLING. WILLIAM BOGART LYON, Lakewood, Ohio. Filed Oct. 23, 1929. Serial No. 401,869. 1 Claim. (Cl. 213—197.)



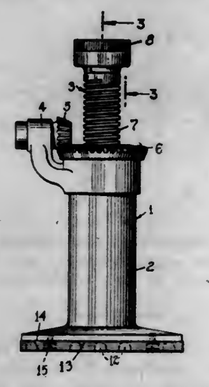
In a device of the character described, the combination with a car coupler head, of a locking member adapted to extend into the head, said member having a shoulder thereon, a pivoted pawl having a chamfered portion at its upper end providing an engaging face below the pivot mounted within the head and being adapted when locked in position, to have one end in engagement with the shoulder on the locking member and the other end in engagement with the head, said member having an opening extending therethrough and said head having aligned openings in the top and bottom walls thereof, the upper opening being interrupted by the engaging face of the pawl when the locking member is removed, a locking pin adapted to extend through all of said openings and held in elevated position prior to coupling by pressure of the engaging face of the pawl thereagainst, said pin being released automatically upon insertion of the locking member into the head to engage the pawl.

1,896,714. IGNITION TIMER. MARION MALLORY, Toledo, Ohio, assignor to The Mallory Research Company, a Corporation of Delaware. Filed Sept. 28, 1931. Serial No. 565,454. 9 Claims. (Cl. 123—117.)



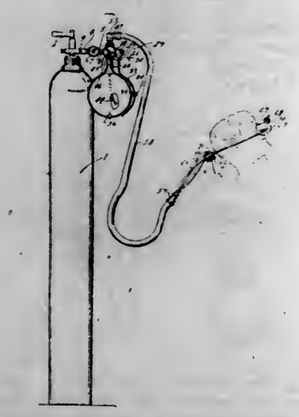
1. In an ignition system, a timer shaft, a circuit breaker cam mounted for relative circumferential movement on the shaft, means including a centrifugal governor for advancing the cam, a brake for resisting such advance, and means operable under predetermined conditions to render the brake inoperable.

1,896,715. AUTOMOBILE LIFTING JACK. CARLO D. MARTINETTI, Orange, N. J. Filed Dec. 12, 1929. Serial No. 413,564. 6 Claims. (Cl. 254—1.)



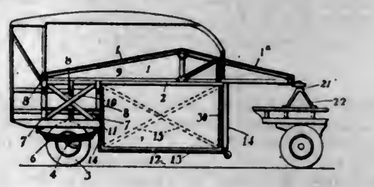
1. An automobile jack having a base or lower member, a vertically movable head or upper member, and suitably associated means whereby the vertical lifting movement of the upper member relative to the lower member can be effected, said head or upper member being small as compared with the base or lower member which has a relatively flat supporting surface and which is sufficiently large to support and to maintain the jack in upright position while functioning to lift and support its load, said jack being characterized in that the top of the upper member and the bottom of the lower member is each provided with a suitable rubber pad with vacuum cups on the exposed surface thereof whereby as the jack functions in the lifting of an automobile part the suction of the vacuum cups become effective to prevent slipping as between the bottom of the jack and the roadway on the one hand and the top of the jack and the automobile part engaged thereby on the other hand, each said pad being constructed and arranged with respect to the part of the jack to which it is secured so that all of the load which at one time is lifted and carried through the jack is transmitted at least substantially entirely to and through each said pad.

1,896,716. GAS HANDLING APPARATUS. ELMER I. MCKESSON, Toledo, Ohio. Filed Dec. 21, 1926. Serial No. 156,212. 7 Claims. (Cl. 128—203.)



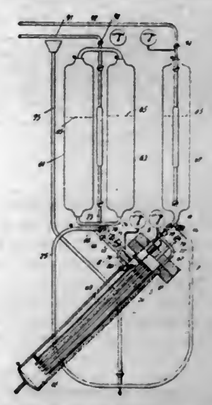
1. A gas supply tank having a valve and a discharge duct, a fitting mounted on the duct and thereby rigidly assembled with the tank with which the gage is rigidly mounted, a control valve having a supply duct from the fitting for flow from the duct, expansible reservoir carried by the fitting and thereby sustained by the tank, and a controller for the control valve carried by the fitting for holding the reservoir against the tank as a rigid assembly unit, and sustaining means for the fitting thereby to mount the gage, valve controller, and reservoir to be carried by said sustaining means at said fitting.

1,896,717. TRAILER. STANLEY FIELDER MOTT, Leamington-Hastings, near Rugby, England. Filed Jan. 7, 1930, Serial No. 419,132, and in Great Britain Jan. 11, 1929. 5 Claims. (Cl. 280—33.4.)



5. A trailer comprising a rear wheel frame, a high level central frame connected to said rear wheel frame, a coupling at one end of the high level frame for connecting the latter to a towing vehicle, the coupling providing a support for one end of the high level frame, and a floor suspended from and arranged materially below the high level frame, the floor providing a clear floor space transversely of the trailer.

1,896,718. ELECTRODE VESSEL FOR ELECTROLYTIC APPARATUS. JACOB EMIL NOEGGERATH, Berlin, Germany. Original application filed Feb. 23, 1926, Serial No. 89,928, and in Germany Dec. 19, 1924. Divided and this application filed Aug. 21, 1928, Serial No. 301,017. Renewed June 9, 1932. 2 Claims. (Cl. 204—5.)



1. Pressure electrolytic apparatus comprising a pressure resistive vessel, the length of which is considerably greater than any dimension transverse to the length, and a plurality of cells in said vessel arranged longitudinally thereof, the length of each of said cells being considerably greater than any dimension transverse to its length.

1,896,719. PUMP BARREL AND PLUNGER. HENRY W. PARKIN, Los Angeles, Calif., assignor, by direct and mesne assignments, to Oil Field Appliance Company, Ltd., a Corporation of Nevada. Filed July 5, 1928. Serial No. 290,298. 1 Claim. (Cl. 103—204.)

A pump comprising a barrel, a plurality of superposed rings in the barrel forming corrugations therein, means securing said rings in the barrel, a plunger, a plurality of superposed rings on the plunger whereby the outer surface of the plunger is corrugated, and means to secure



said last named rings on the plunger, a check valve on the top of said plunger, and a second check valve on the bottom of the plunger.

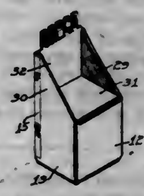
1,896,720. OTOSCOPE. WILLIAM L. PATTERSON, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed June 7, 1929. Serial No. 369,088. 1 Claim. (Cl. 128—9.)



An otoscope comprising a support, a speculum mounted at one end of said support, a light source mounted at the other end of said support, a vertical tubular casing surrounding said light source, a reflector positioned at the top of said casing for reflecting light rays from said source into said speculum, said casing having two aligned sight openings in its wall, said openings being located between said reflector and said light source and in visual alignment with said speculum, a lens in one of said openings whereby an object may be viewed through said lens and speculum.

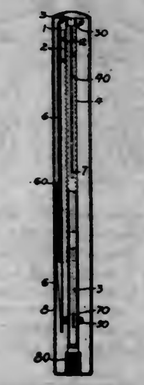
1,896,721. COMBINATION SHIPPING CASE AND DISPLAY STAND. RALPH N. RICHARDS, Toledo, Ohio, assignor to Ottawa River Paper Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 11, 1931. Serial No. 580,270. 12 Claims. (Cl. 206—44.)

5. A display stand made from stiff sheet material and having front, rear, and side walls, a score line extending transversely across the front wall, and score lines in the side walls extending upwardly and rearwardly from the ends of said transverse score line to the edges of the rear wall, whereby the upper portion of the front wall may be folded rearwardly and the upper front portions of the side walls folded against the inside faces of said side



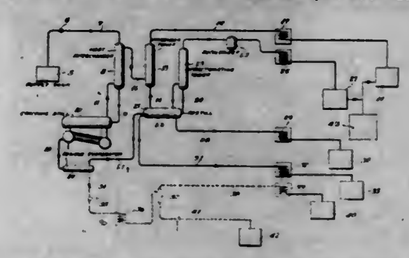
walls so that the entire upper edges of the side walls are in supporting relation to the rearwardly folded portion of the front wall to constitute a display stand seat.

1,896,722. COLLAPSIBLE UMBRELLA. ELLSWORTH E. SAXTON, Bremerton, Wash. Filed Aug. 27, 1928, Serial No. 302,240. Renewed June 29, 1932. 2 Claims. (Cl. 135—26.)



1. In a folding umbrella having a stem and runner thereon, two-part ribs, each inner rib section being pivoted to the stem, and being of U-shape in cross-section, opening towards the stem, the associated outer rib section being likewise of U-shape in cross-section, opening towards the stem, and telescoping within the corresponding inner rib section, a brace pivoted by its outer end to the inner end of the outer rib section, the pivot being so disposed that the brace lies, when folded, within the cross-section of the inner rib section, the inner end of said brace being pivoted to said runner.

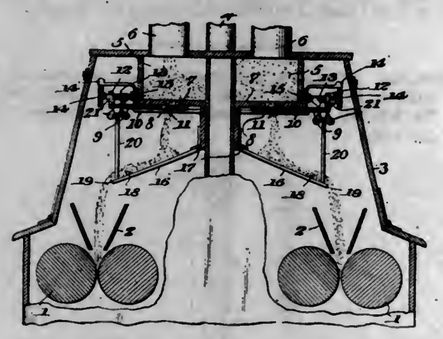
1,896,723. METHOD AND MEANS FOR PRODUCING MOTOR FUEL. STEPHEN SCHWARTZ, Calumet City, Ill., assignor to Jenkins Petroleum Process Company, Chicago, Ill., a Corporation of Wisconsin. Filed Dec. 7, 1925. Serial No. 73,643. 10 Claims. (Cl. 196—48.)



4. The method of producing petroleum distillates which comprises subjecting a suitable stock to cracking condi-

tions, condensing the heavier ingredients of the vapors from the stock in two stages at successively lower temperatures and pressures, the condensate from the first stage being returned to the still, and the condensate from the second stage being kept separate, stripping the condensate from the second stage of its lighter ingredients by heating to a higher temperature than that used in said second stage, relieving the pressure on the residue from the cracked stock, and utilizing the heat of the vapors from said residue to strip said second stage condensate.

1,896,724. **FEEDING APPARATUS FOR MILL ROLLS.** WILLIAM STEIN, Evansville, Ind. Filed Dec. 8, 1931. Serial No. 578,821. 2 Claims. (Cl. 84—44.)

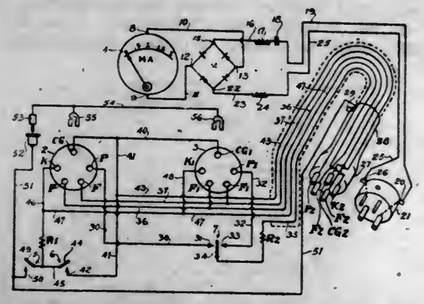


1. In a feeding apparatus for mill rolls, the combination with a bin or reservoir for the material, and a valve for regulating the discharge of the material from said bin or reservoir, of a feed board arranged to receive the material discharged from said bin under the control of said valve and which is adapted for disposition at different angles of inclination, and adjusting means for said feed board which connects it to said valve.

1,896,725. **PRODUCTION OF CELLULOSE PHOSPHATES.** WELLINGTON L. TANNER, Panasoffkee, Fla., assignor to National Chemical and Mfg. Co., Inc., a Corporation of Illinois. Filed June 12, 1931. Serial No. 544,041. 7 Claims. (Cl. 260—100.)

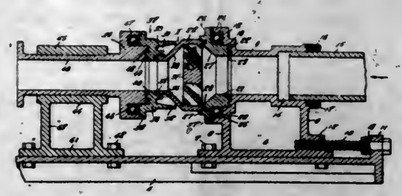
1. The method of producing cellulose phosphate esters which comprises reacting upon cellulose with an acid mixture containing concentrated sulfuric acid, a phosphoric acid and a relatively small quantity of a weak acid catalyst.

1,896,726. **RADIO TUBE COMPARATOR.** DALE TAYLOR, Elmira, N. Y. Filed June 9, 1931. Serial No. 543,186. 7 Claims. (Cl. 250—27.)



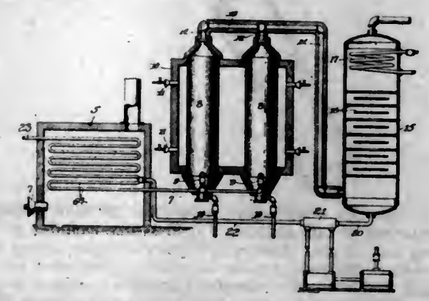
1. A radio tube comparator comprising a meter, means for operably connecting the meter to the output of a radio set, a pair of tube receiving sockets, means for connecting said pair of sockets to any of the tube sockets of the said set, and means for alternatively connecting the plate elements of each of the said pair of sockets to said meter.

1,896,727. **PUMP.** GEORGE WALLACH, Chapman Camp, British Columbia, Canada. Filed Dec. 23, 1929, Serial No. 416,098, and in Canada Oct. 26, 1929. 1 Claim. (Cl. 103—91.)



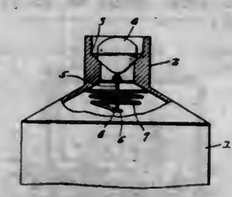
A pump including in combination a pair of opposed rotatably mounted transmitters, each of said transmitters including a body having an opening therethrough, one of said transmitters at one end of its body being provided with a relatively large discharge mouth, an impeller including a casing having a cylindrical part and a conical part, said cylindrical part on said casing at one end of the casing fitted within the mouth of said one transmitter, the other of said transmitters interiorly of its body being provided with an annular shoulder having a circular flange projecting therefrom, and the conical part of said impeller casing at its free end aranged within the confines of said flange and having an outstanding annular flange engaging with the first named flange and blades arranged within the cylidrical part of the impeller casing.

1,896,728. **ART OF CONVERTING HIGH BOILING HYDROCARBON OILS INTO LOWER BOILING HYDROCARBON OILS.** GENTRY CASH, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed July 13, 1927. Serial No. 205,316. 1 Claim. (Cl. 196—48.)



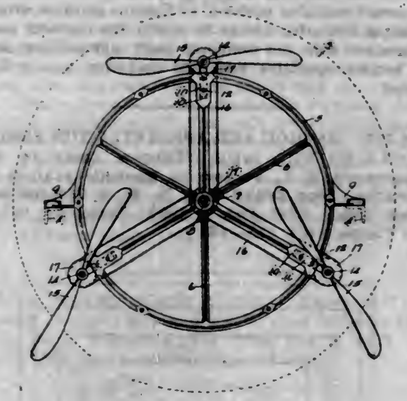
The method of effecting conversion of hydrocarbon oils into lower boiling hydrocarbon oils such as gasoline, which comprises passing the hydrocarbon oils to be converted in a continuous stream through a heating zone in which they are brought to conversion temperature and are subsequently passed through a portion of the heating zone in which they are subjected to the direct radiant heat of the flame, separating from the heated oil products leaving the heating zone vapors of converted products including the desired low boiling products, cooling the separated vapors to condense and remove therefrom products heavier than gasoline as a reflux condensate, and forcing the reflux condensate while hot directly into the flowing stream of oil in the heating zone at a single point after the oil reaches cracking temperature and as it enters the portion of the heating zone subjected to the greatest radiant heat of the flame.

1,896,729. **SELF-SEALING TUBE.** PAUL J. JAKUBEC, Charleroi, Pa. Filed Jan. 11, 1932. Serial No. 586,041. 1 Claim. (Cl. 221—60.)



In combination with a tube having a neck formed with a bore having an enlarged outer end with the intermediate part of the wall of the bore sloping downwardly and inwardly from the large part of the bore to the smaller inner part thereof, a valve member having a bevelled lower portion for engaging said sloping intermediate wall, an eye member connected to the lower end of the valve member, a link having a hook at its upper end engaging the eye member, a spiral spring, the convolutions of which gradually increase in diameter from one end to the other, the small end of the spring being connected to the lower end of the link and the upper end of the spring bearing against the inner wall of the top part of the tube.

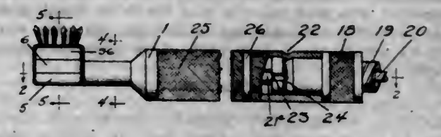
1,896,730. **AIRPLANE PROPELLER MOUNTING.** EDWIN CLIFFORD LARSON, San Francisco, Calif., assignor of one-half to John F. Arnold, San Francisco, Calif. Filed Sept. 16, 1931. Serial No. 563,203. 3 Claims. (Cl. 244—25.)



1. A mounting for propellers comprising a frame having a central bearing for receiving a drive shaft, radially disposed bearings secured to the frame and being adjustable only in a radial direction, propellers carried by the radial bearings, and operative connections between the drive shaft and the propellers.

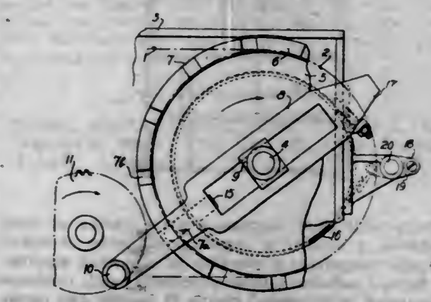
1,896,731. **POWER OPERATED TOOTHBRUSH.** LOUIS J. LIPPETT, Albuquerque, N. Mex. Filed Nov. 2, 1927. Serial No. 230,543. 10 Claims. (Cl. 15—28.)

1. In a rotary brush, a hollow handle, a casing tangentially offset at one end of the hollow handle, a drive shaft journaled in the casing and projecting therebeyond substantially at right angles to the direction of off-set of the casing, a brush mounted on the projecting end of the drive shaft, and a driving connection for the drive shaft mounted in the casing and extending into the hollow handle.



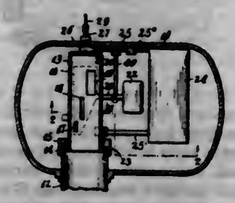
10. A mounting for a brush having a disc-like back, said mounting comprising a cylindrical housing rotatably enclosing and supporting said back and having an axial opening through which the bristles of said brush project, and means for rotating said brush.

1,896,732. **MECHANICAL MOVEMENT.** ALBERT ALEXANDER STONE, Deptford, London, England. Filed Nov. 4, 1930, Serial No. 493,441, and in Great Britain Nov. 23, 1929. 9 Claims. (Cl. 74—54.)



1. A mechanical movement comprising a rotatable driven element, a lever, a rotatable driving member having an eccentric connection with said lever for imparting oscillatory movement to the latter, a fixed fulcrum on which said lever is slidably supported, said lever having a driving portion arranged to engage said driven element during oscillatory movement of said lever in one direction only to impart intermittent motion thereto, the driven element and the driving portion of said lever being so disposed that the eccentric connection between the lever and the driving member moves through that portion of its path of movement nearest the fulcrum while the lever is disengaged from said driven member, whereby driving connection between said lever and said driven member may be maintained during movement of said eccentric connection through an arc greater than 180°, and a friction brake for said driven member operable by said lever immediately on the completion of the driving stroke of the latter.

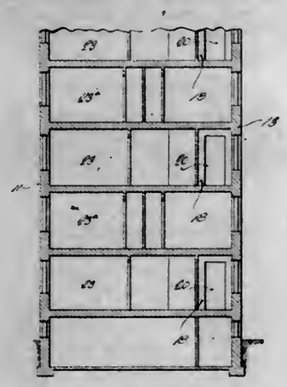
1,896,733. **STEAM TRAP.** GERGELY SZUCS, Astoria, N. Y. Filed Apr. 8, 1932. Serial No. 603,908. 11 Claims. (Cl. 137—103.)



1. A steam trap, comprising a hollow casing having an inlet near the top, an outlet pipe extended in through the

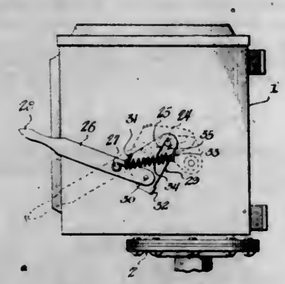
side of the casing intermediate of its height, a cup rotatively mounted on the inner end of said pipe and having openings on its bottom side, a valve acting against the bottom side of said cup for closing said openings, a weight connected with said valve to hold the valve closed, and a float connected with said cup to turn the cup when water collects within the hollow body above a pre-determined height.

1,896,734. APARTMENT HOUSE. HERBERT W. TULLGREN, Milwaukee, Wis. Filed Feb. 11, 1931. Serial No. 514,934. 5 Claims. (Cl. 20—1.1.)



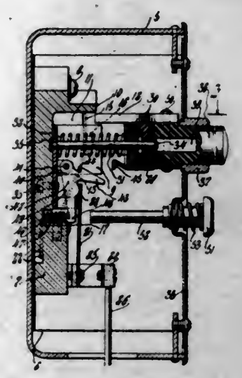
3. In a multi-story apartment house having at least four stories, a number of superimposed series of apartments each comprising a plurality of connected superimposed floors, a sufficient number of interior public corridors communicated with vertical means of ingress and egress to afford access to one floor of each apartment so that corridors are located only at certain non-adjacent stories, the total floor space area of the apartments and corridors on those stories having corridors being co-extensive with the floor space area of the other stories whereby all the stories lie entirely within common exterior walls.

1,896,735. CUT-OUT MECHANISM FOR ELECTRIC SWITCHES. HERMON L. VAN VALKENBURG, Wauwatosa, Wis., assignor to Square D Company, Detroit, Mich. Filed July 3, 1930. Serial No. 465,460. 6 Claims. (Cl. 200—83.)



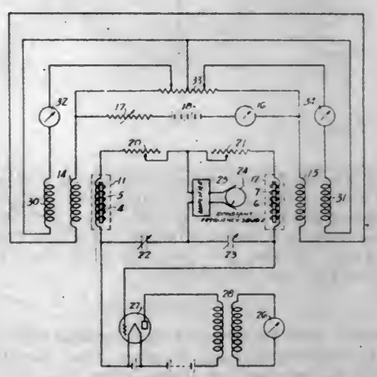
1. The combination of an electric switch, fluid actuated means for operating said switch, said switch having a movable member, a snap latch adapted to snap into either of two positions, one position being across the path of movement of said movable member, and the other position being out of the path of movement of said movable member, and means for moving said snap latch into one or the other of said two positions.

1,896,736. PROTECTIVE OVERLOAD DEVICE OR CIRCUIT BREAKER. GUSTAV O. WILMS, Milwaukee, Wis., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 23, 1928. Serial No. 321,317. 10 Claims. (Cl. 200—116.)



1. An electrical appliance of the character described, comprising a pair of yieldable members each mounted at one end with their outer end portions free, contacts carried by the free end portions of said members, a contactor mounted for linear movement to and from engagement with said contacts to electrically bridge the same, means normally urging the contactor out of engagement with said contacts, means movable independently of the contactor and along its axis of linear movement and operable to move the contactor against its urging means and towards the contacts, means for holding the contactor in its contact engaging position, and means movable with the contactor operating means to retain the contacts out of engagement with the contactor until said holding means has become operative and said operating means is retracted.

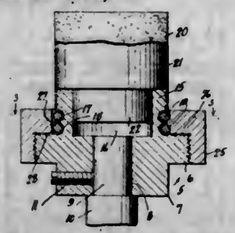
1,896,737. METHOD AND APPARATUS FOR TESTING RAILS OR THE LIKE. THEODOR ZUSCHLAG, West Englewood, N. J., assignor to Magnetic Analysis Corporation, Long Island City, N. Y., a Corporation of New York. Filed Aug. 6, 1932. Serial No. 627,750. 13 Claims. (Cl. 175—183.)



1. The method of testing rails or the like which includes creating a magnetic field about the specimen to be tested by passing current therethrough, positioning a ferro-magnetic body in the created field so as to have its

permeability affected thereby and noting the effect of the permeability of said body upon the impedance of a circuit associated therewith and through which alternating current is continuously passed.

1,896,738. SANDPAPER HOLDER. CARMELO ADORNETTO, New York, N. Y. Filed June 4, 1932. Serial No. 615,296. 5 Claims. (Cl. 51—194.)



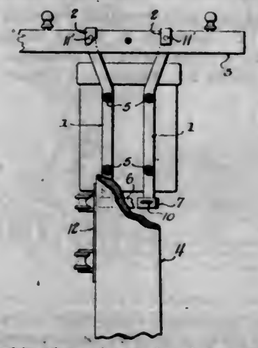
1. A holder for a sheet of sand paper, comprising a support having a peripheral groove, a substantial half ring adapted to be snapped into the said groove for temporarily holding the sheet in place, and means for clamping the sheet against the support and maintaining the half ring in place.

1,896,739. PRODUCTION OF COLOR PLATES. RUDOLF BRESLAUER, Leipzig, Germany. Filed June 18, 1930, Serial No. 462,134, and in Germany Jan. 21, 1929. 3 Claims. (Cl. 95—5.1.)



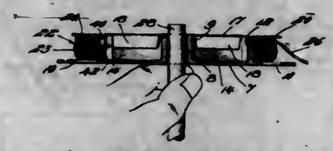
3. A process for the production of color printing plates, comprising in steps: producing from an original a number of different color records sufficient for the printing of the various colors required; securing one of said color records in a laterally inverted manner on a glass mounting plate; producing photographically from said last-named mounted color record a number of prints on sensitized glass plates; coloring said prints with dyestuffs which allow of the passage of actinic rays without hindrance; employing said prints for the mounting of the remaining color records; and printing said color records photographically on to the printing plate.

1,896,740. TRANSFORMER HANGER. KENNETH S. COSSEBOOM, Bangor, Me., assignor to Line Material Company, South Milwaukee, Wis. Filed Aug. 5, 1929. Serial No. 383,746. 2 Claims. (Cl. 248—30.)



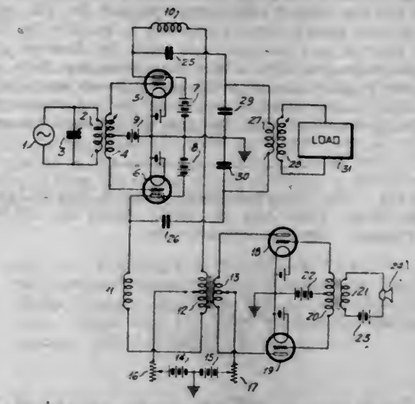
1. The combination of a pair of hanger straps for a transformer, a lower spacing member having transversely slotted arms, and bolts passing through the slots in said arms for adjustably attaching said hanger straps to said arms, whereby said hanger straps may be laterally shifted to correctly position said straps with reference to a transformer.

1,896,741. LINE CARRYING REEL. JULIAN T. CRANDALL, Ashaway, R. I., assignor to Ashaway Line and Twine Manufacturing Company, a Corporation of Rhode Island. Filed May 25, 1932. Serial No. 613,451. 3 Claims. (Cl. 242—84.1.)



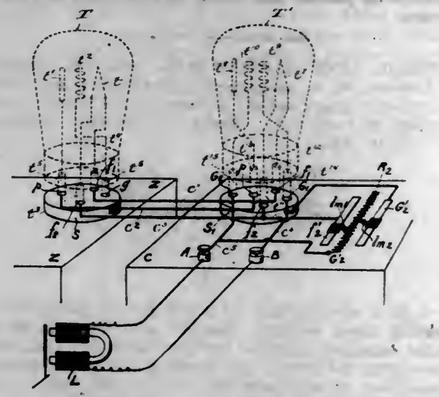
1. In a carrying reel for a fish line, a rotary disk, a bearing sleeve centrally disposed upon the disk, an annular marginal partition integral with the disk, webs connecting the sleeve and partition and guide members comprising shanks upon the tops of the webs, lateral flanges frictionally engaging the opposite sides of the webs, and heads upon the outer ends of the shanks projecting beyond the partition.

1,896,742. MODULATION SYSTEM. CHARLES A. CULVER, Northfield, Minn. Filed Jan. 28, 1932. Serial No. 588,277. 1 Claim. (Cl. 179—171.)



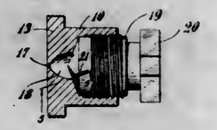
A modulation system comprising, a source of high frequency energy, a high frequency amplification system including space discharge tubes having input and output circuits respectively interconnected in balanced formation, means for coupling said input circuits to said source of high frequency energy, a source of modulation energy, a modulation energy amplification system including space discharge tubes having input and output circuits respectively interconnected in balanced formation, means for coupling said source of modulation energy to said input circuits of said last mentioned amplification system, a transformer having windings one of which is connected with the output circuits of the space discharge tubes of said modulation energy amplification system and the other of which is connected with the output circuits of the space discharge tubes of said high frequency amplification system, resistor controlled means for supplying direct current to the midpoints of said windings, a utilization circuit capacitatively connected to the anodes and cathodes of each of the space discharge tubes of said high frequency amplification system, and choke coils in the output circuits of the space discharge tubes of said high frequency amplification system for preventing the passage of high frequency energy to said transformer.

1,896,743. AMPLIFIER. JEAN DIEUX, Paris, France. Filed Jan. 31, 1928, Serial No. 250,820, and in France Dec. 14, 1927. 4 Claims. (Cl. 179—171.)



1. In an installation for the transformation of amplifiers for changing the source of current supply, an amplifier, a socket for an audion tube, said socket having four tube pin receiving openings, a tube with a plate filament and a single grid comprising four pins to be inserted in the four openings of said socket, an auxiliary transformation means comprising a socket with five tube pin receiving openings, a tube having a plate, a filament and two grids and five related pins engaged in said five pin openings of said socket, wires connecting in parallel the filament pins of said two-grid tube with the filament pins of said single-grid tube, a wire connecting said plate pin of said two-grid tube with the plate pin of said single-grid tube, and a vibrated source of current of variable amplitude connected with the grid pins of said two-grid tube.

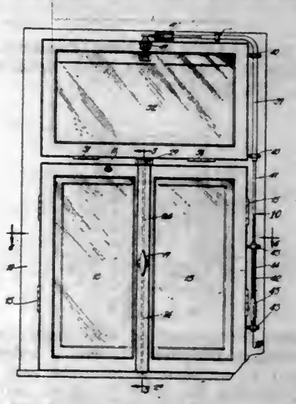
1,896,744. LIQUID ATOMIZER. CARL S. FRICK, Janesville, Wis. Filed July 27, 1931. Serial No. 553,332. 2 Claims. (Cl. 299—120.)



1. A liquid atomizer consisting of a cap and plug, the cap having longitudinal cut away portions forming recesses extending inwardly from the rear end of said cap and said cap being formed with a central discharge orifice and also formed with a whirl chamber at the rear of said orifice and an annular seat around said chamber, and said plug having at its inner end a plurality of straight tangential slots which with said seat form inwardly tapering passages communicating with said whirl chamber the outer ends of said passages communicating with said recesses when said plug and cap are assembled.
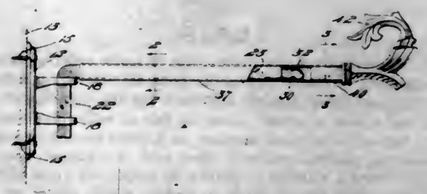
1,896,745. WINDOW AND ATTACHED WINDOW OPENER. GEORGE HEIN, West Fort Lee, N. J. Filed Jan. 19, 1931. Serial No. 509,727. 2 Claims. (Cl. 292—171.)

1. A catch device comprising a housing, a catch member slidably mounted in said housing, spring means acting to move said catch member to an extended position, a yoke member pivoted to opposite walls of said housing, a seat provided on said yoke member, a push and pull element having one end seated upon said seat, a clamping plate bearing against said push and pull element, a threaded bolt passing through said clamping plate and seat, a nut member with which the threaded shank of said bolt is threaded and which bears against said yoke member, and a finger extending from said catch member into



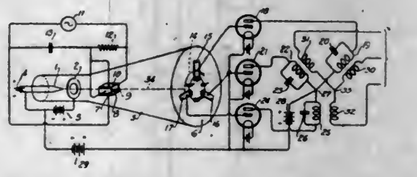
the path of movement of said nut member during the swinging movement of said yoke member in one direction to move said catch member to a retracted position against said spring means.

1,896,746. CURTAIN SUPPORT. JAMES N. HENRY, Providence, R. I. Filed July 21, 1932. Serial No. 623,744. 1 Claim. (Cl. 156—22.)



In a telescoping curtain rod having an outer member, an inner shaft member having one end recessed to provide a flat bearing surface with an integral stud projecting therefrom and a lock shoulder, a friction spring having a flat base abutting said lock shoulder and an opening for receiving said stud, said stud being riveted over said spring, and said spring have a reverse bend of greater width than the inner diameter of the outer telescoping member.

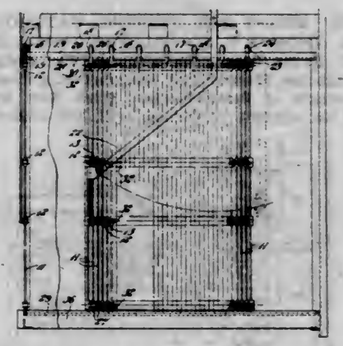
1,896,747. PHASE MULTIPLIER. AUGUST HUND, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 20, 1930. Serial No. 496,841. 3 Claims. (Cl. 175—363.)



3. A phase multiplier comprising, an evacuated envelope, means for producing an electronic discharge within said envelope, a plurality of electrodes exteriorly positioned with reference to said envelope, a source of

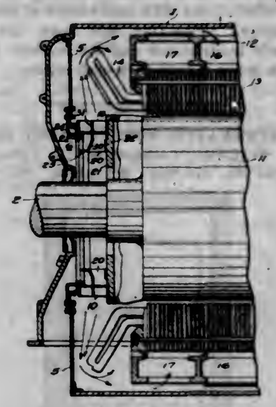
alternating current, means under control of said alternating current for moving said electronic discharge to successively energize said electrodes by electrostatic induction, a plurality of thermionic amplifiers each having input and output circuits, a plurality of resonant circuits interconnected in polyphase manner and through a source of direct current potential to the output circuits of said thermionic amplifiers, and each of said exterior electrodes being connected to the input circuit of a different one of said thermionic amplifiers.

1,896,748. SLIDING DOOR, GATE, OR PARTITION. JAMES MILLER KIRKPATRICK, London, England. Filed May 29, 1931, Serial No. 540,883, and in Great Britain June 7, 1930. 7 Claims. (Cl. 20—19.)



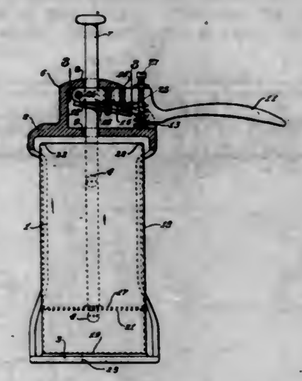
1. A sliding door of the kind described comprising a plurality of vertical pickets and at least one spring extending transversely through openings in all the pickets and secured at its ends to the end pickets to hold the said pickets together.

1,896,749. STATIONARY BLOWER INTAKE FOR LARGE TURBINE GENERATORS. CARTHRAE M. LAFFOON, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 4, 1930. Serial No. 441,588. 8 Claims. (Cl. 230—127.)



1. A blower system for a dynamo-electric machine comprising a casing having fluid passages therein, a stationary blower intake coaxial with the machine having fluid-inlet passages in communication with the fluid passages in the casing, a rotary blower having a plurality of axially displaced passages, the said blower intake having a dividing ring coaxial with the shaft of the machine to provide a plurality of concentric passages in the inlet end of the blower intake, curved means for diverting the concentric passages to outlet ports angularly disposed in respect to the inlet passages and in communication with the blower passages, and radially curved vanes in said outlet ports, the direction of curvature of the vanes being in the direction of rotation of the blower.

1,896,750. DISPENSER. JULIAN MAAS, St. Louis, Mo. Filed Sept. 17, 1930. Serial No. 482,524. 6 Claims. (Cl. 221—78.)



1. In a dispenser of the kind described, a bracket having a pair of spaced lips each having an opening therethrough, a removable container mounted between said lips, and means movable through the opening in one of said lips for forcing material from said container through the opening in the other lip, said means adapted to be withdrawn from the region of said container to permit removal of the latter from between the lips.

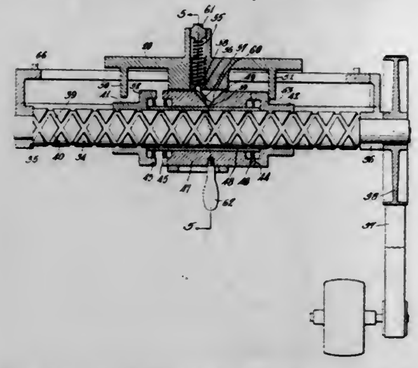
1,896,751. LIQUID DISPENSING APPARATUS. LYON MCCANDLESS, Rochester, Pa., assignor to The Wayne Pump Company, Baltimore, Md., a Corporation of Maryland. Filed May 18, 1929. Serial No. 362,840. 28 Claims. (Cl. 221—95.)



1. In liquid dispensing apparatus, the combination of an indicating device including a visible chamber, an upwardly directed inlet entering the bottom of said chamber at an angle to the axis thereof to produce greater

turbulence therein, an outlet communicating to a draw off connection disposed in the bottom thereof, buoyant indicating means in said chamber to indicate the amount or flow of liquid therein, and a tubular member having an opening near the top thereof and extending into said outlet, the opening in said member being adjacent the top of said chamber whereby air, vapor and the like are drawn off from said chamber to said outlet by flow of liquid through said device.

1,896,752. REVERSING MECHANISM FOR MACHINE TOOLS. CLIFFORD T. RAULE, Brookline, Pa. Filed Oct. 7, 1926. Serial No. 140,035. 20 Claims. (Cl. 74—14.)



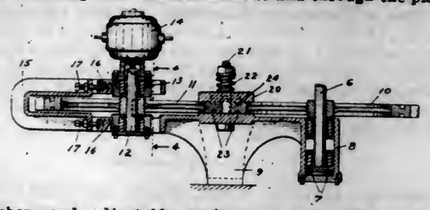
1. In a reversing mechanism for machine tools, a carriage, a feeding mechanism therefor, including a lead screw and a quick throw connection having lost motion between part of the feed mechanism and the carriage providing for continued rotation of the lead screw to accumulate energy applied to the quick throw connection when the carriage has been stopped to terminate feed in one direction, and reversing devices operated by the quick throw mechanism through taking up the lost motion to reverse the driving connection.

1,896,753. SACCHARIFICATION OF WOOD AND OTHER CELLULOSIC MATERIALS. ELOI RICARD and HENRI MARTIN GUINOT, Melle, France, assignors to Societe Anonyme des Distilleries des Deux-Sevres, Melle, France. Filed Apr. 29, 1929, Serial No. 359,174, and in Belgium May 14, 1928. 15 Claims. (Cl. 127—37.)

1. A process for the saccharification of wood or other cellulose material, comprising (a) converting the cellulose into formates of cellulose by acting thereon with highly concentrated formic acid in the presence of a small quantity of any of the salts and acids known to act as catalysts in the preparation of cellulose esters and preferably with the application of heat so as to accelerate the formylation reaction, and (b) directly hydrolyzing the formates obtained, without separating them from the mass, by the progressive addition to the concentrated formic medium of small quantities of water, whilst preferably assisting the reaction by stirring and heating.

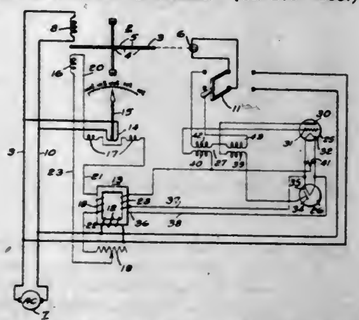
1,896,754. ENGINE. ANDREAN G. RONNING, deceased, Minneapolis, Minn., by Adolph Ronning and Jacob A. Ronning, joint executors, Minneapolis, Minn. Original application filed Oct. 14, 1927, Serial No. 226,199. Divided and this application filed Aug. 6, 1930. Serial No. 473,474. 4 Claims. (Cl. 123—12.)

4. A device of the character described comprising a base member, a pair of intermeshing gears mounted thereon, a pair of end walls at opposite sides of the median line between the two gears, and a plate member in contact with the gears and combining therewith and with said base and end walls to form a pair of chambers, bolt members extending from the base member and through the plate



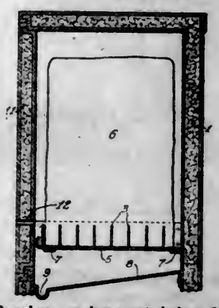
member, and adjustable springs on said bolt members tending to close the plate and base member toward each other.

1,896,755. MEANS FOR TESTING WATTHOUR METERS. DOUGLAS S. SCHNELL, Fort Thomas, Ky., and ROY C. FRYER, Mount Washington, Ohio, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 21, 1929. Serial No. 408,846. 2 Claims. (Cl. 175—183.)



1. The combination with an alternating-current source of electro-motive force and an integrating meter to be tested having a disc marked for stroboscopic comparison and current and voltage windings, of means for testing said meter including a lamp for lighting the marks on said disc, a wattmeter calibrated in percent registration having voltage and current windings, a loading transformer having primary and secondary windings, and a variable load, means connecting said lamp, the voltage windings of said meters and said primary winding of said transformer in parallel circuit with said source of electro-motive force, and means connecting said load, the secondary winding of said transformer and the current windings of said meters in series circuit with each other.

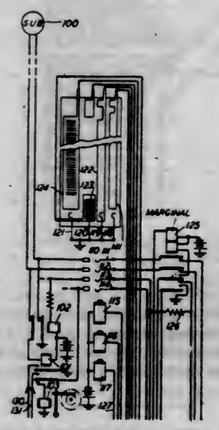
1,896,756. APPARATUS FOR FORMING ICE CUBES. JAMES E. SPALDING, Collinsville, Ill. Filed July 30, 1930. Serial No. 471,644. 9 Claims. (Cl. 62—31.)



1. An ice-box having an ice sustaining floor comprising, a grid-work of intersecting plates, disposed for edgewise

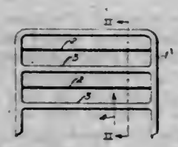
contact with a block of ice resting thereupon, and means disposed when in one position to prevent penetration of said plates into said block and when in another position to limit penetration of said plates into said block.

1,896,757. TELEPHONE EXCHANGE SYSTEM. WALTER B. STRICKLER, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 5, 1931. Serial No. 573,059. 13 Claims. (Cl. 179—27.)



1. In a telephone exchange system, a calling subscriber's line, selector switches for extending a connection from said line, a register sender for controlling said switches, a decoder associable with said sender, a dial associated with the calling line for setting the registers of said sender in accordance with the designation of a desired connection, routing relays in said decoder controllable in accordance with the setting of certain of the registers of said sender for controlling said sender to route connections, a trunk circuit terminating in an operator's position, a time measuring device in said sender, and means controlled thereby for operating one of said routing relays to cause said sender to route a connection from said calling line to said trunk circuit.

1,896,758. MEANS FOR PURIFYING GASES ELECTRICALLY. ROBERT STRIGEL, Berlin-Charlottenburg, and WILHELM FELDMANN, Berlin-Spandau, Germany, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 2, 1931, Serial No. 519,438, and in Germany Apr. 29, 1930. 4 Claims. (Cl. 183—7.)



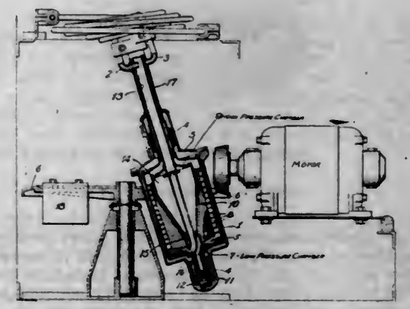
1. In a gas treater, an electrode comprising sections of small surface area per unit length for facilitating an electric discharge therefrom, sections of comparatively large surface area per unit length for restricting electric discharge therefrom, said sections being disposed alternately, and means for insulating the sections from each other.

1,896,759. COMPOSITION FOR REMOVING CARBON DEPOSITS. CHARLES A. THOMAS and CARROLL A. HOCHWALT, Dayton, Ohio, assignors to Thomas & Hochwalt Laboratories, Inc., Dayton, Ohio, a Corporation of Ohio. Filed Oct. 8, 1929. Serial No. 397,144. 10 Claims. (Cl. 87—5.)

8. A carbon removing composition comprising a halogenated aromatic hydrocarbon.

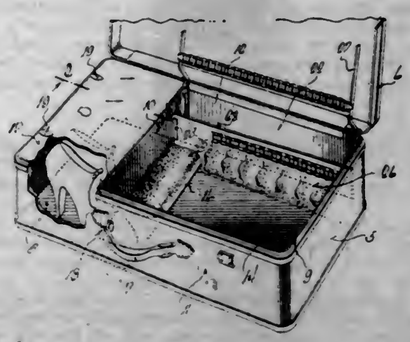
9. A carbon removing composition comprising as an essential ingredient a chlorinated naphthalene.

1,896,760. COMPRESSOR. LAWRENCE E. WARNER, Oakland, Calif., assignor, by mesne assignments, to J. G. De Remer Research Corporation, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 24, 1930, Serial No. 446,839. Renewed Aug. 4, 1932. 10 Claims. (Cl. 230—75.)



1. A compressor or the like comprising in combination, a piston liquid circuit, a rotating member having a helical passage included in said circuit with its axis of rotation disposed at an angle to the axis of the helical passage, the direction of helical pitch acting to screw the piston liquid inwards or toward said axis of rotation, means for conducting fluid to the entrance to said helical passage, and means for conducting it away from the exit of said helical passage.

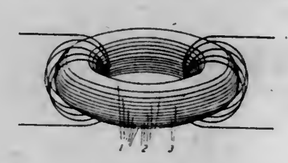
1,896,761. HAND LUGGAGE. GEORGE HENRY WHEARY and BENJAMIN M. HAMLIN, Racine, Wis., assignors to Wheary Trunk Company, Racine, Wis., a Corporation of Wisconsin. Original application filed Apr. 22, 1929, Serial No. 357,088. Divided and this application filed Apr. 26, 1930. Serial No. 447,528. 5 Claims. (Cl. 190—51.)



1. In a luggage carrier including a main section, a partition dividing the main section into two compartments, the lower edge of the partition being spaced from the

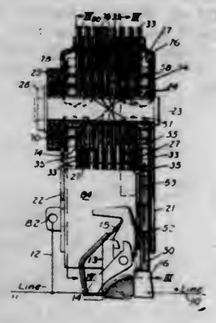
bottom of the main section, a fabric closure for the space between the lower edge of the partition and the bottom of the case, and said fabric closure being of greater width than the height of the space whereby articles received in one compartment may project past said partition, the projecting portion of the articles being received in the folds of the fabric closure.

1,896,762. COIL. HORACE WHITTLE, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1930. Serial No. 505,798. 2 Claims. (Cl. 175—356.)



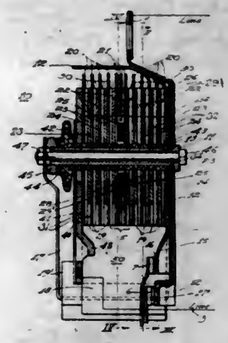
1. An inductance device having a core comprising laminations of iron-cobalt alloy of 40 to 70% iron and the balance chiefly cobalt, iron-nickel alloy of 40 to 85% nickel and the balance chiefly iron, and iron-nickel alloy of 40 to 85% nickel containing 1% to 10% of a third element.

1,896,763. ARC EXTINGUISHING STRUCTURE. WALTER M. AUSTIN, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 9, 1932. Serial No. 591,798. 17 Claims. (Cl. 200—144.)



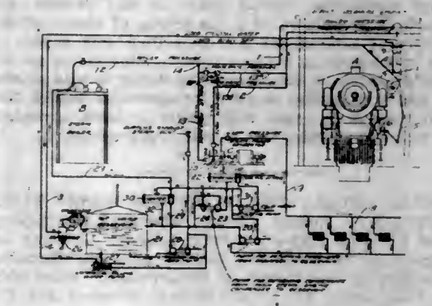
1. In an arc-extinguishing structure, a plurality of non-magnetic conducting plates, a magnetic plate substantially co-planar with, and surrounding, each of the said non-magnetic conducting plates, and insulating means for spacing the said plates, said insulating means being such as to confine the arc on said conducting plate and to provide a passage for ventilating the said plates.

1,896,764. CIRCUIT BREAKER. MAURICE W. BRAINARD, Los Angeles, Calif., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 16, 1932. Serial No. 593,236. 15 Claims. (Cl. 200—144.)



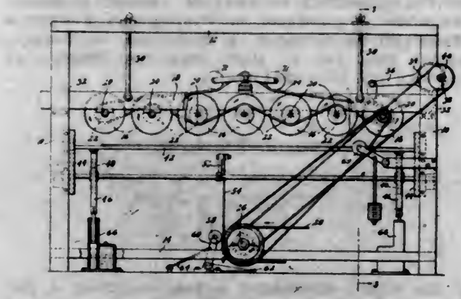
1. In an arc extinguishing structure, a plurality of plates of conducting material, and a plurality of plates of magnetic material, some of said plates of magnetic material having raised portions on the outer edge thereof.

1,896,765. RAILWAY TERMINAL OF THE DIRECT STEAMING TYPE. EDISON BROCK, Cincinnati, Ohio, assignor to Railway Engineering Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 20, 1931. Serial No. 517,150. 6 Claims. (Cl. 60—1.)



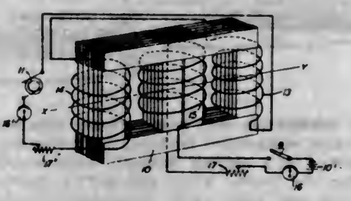
1. In a railway terminal, a locomotive direct steaming station, a steam generating source supplying steam at a pressure at least equal to the maximum pressure required for direct steaming of locomotives, two steam supply pipes leading independently to said station and each adapted to deliver steam of said source to a locomotive thereat, and a steam actuated engine interposed between said source and said station, producing power by the expansion of steam on its way to said station, and releasing steam to one of said supply pipes at a pressure which is lower than that of the steam received by the other of said pipes, whereby two distinct supplies of steam are made available to the locomotive at constant pressures, respectively, appropriate to two different phases of direct steaming practice.

1,896,766. METHOD OF AND APPARATUS FOR TOOL OPERATION ON A LONG LINE. JOHN S. BROWN, deceased, Newton, N. H., by Charles W. Spalding, administrator, Watertown, Mass., assignor to Everett E. Kent, Newton, Mass. Filed Jan. 28, 1931. Serial No. 511,848. 7 Claims. (Cl. 143—40.)



1. The method of making a long cut in sheet material, comprising the cutting of the sheet to the full ultimate depth of the cut at a plurality of separated aligned locations simultaneously, the alignment being that of the desired long cut; and the extending of these cuts, by relative movement of material and cutters along the said alignment, until the said plurality of cuts become merged into and constitute the said long cut whereby the cut as a whole is composed of an aligned series of separate coordinate cuts.

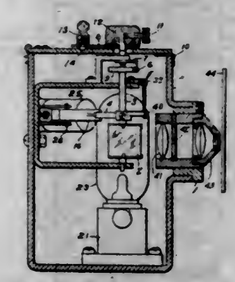
1,896,767. SIGNALING SYSTEM. OLIVER E. BUCKLEY, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 29, 1931. Serial No. 547,689. 7 Claims. (Cl. 178—46.)



1. A signaling system comprising a coil substantially free of modulation characteristics having a core of magnetic material, windings on said core carrying alternating or pulsating current for operating said system, said magnetic material possessing high permeability at low magnetizing forces, means for causing the impedance of said coil to said current to remain substantially constant, said means comprising instrumentalities for subjecting at least a portion of said core to a unidirectional magnetic field, said instrumentalities being independent of the winding carrying the alternating current.

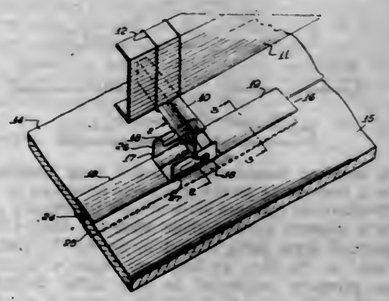
1,896,768. PHOTOGRAPHIC SOUND RECORDING. LEWIS WARRINGTON CHUBB, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 31, 1929. Serial No. 382,573. 18 Claims. (Cl. 274—5.)

1. In combination, an optical system, a plurality of lamps, means for operatively associating said lamps in turn with said optical system, means for causing the lamp thus associated to be brilliant and means for so preparing the lamp which has the next turn for said association that it may be made brilliant in a shorter time than an unprepared lamp.



2. In combination, a plurality of lamps, an optical system, said lamps being fixed and stationary in position, means for operatively associating any one of said lamps with said optical system, and means controlled by the life of the lamp thus associated and controlling said associating means, whereby, upon the failure of the associated lamp, another lamp of said plurality will be operatively associated with said optical system.

1,896,769. WALL OR CEILING CONSTRUCTION. WILLIAM C. DAVIS and OLIVER E. GIBSON, Chicago, Ill., assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 31, 1931. Serial No. 560,288. 7 Claims. (Cl. 72—118.)

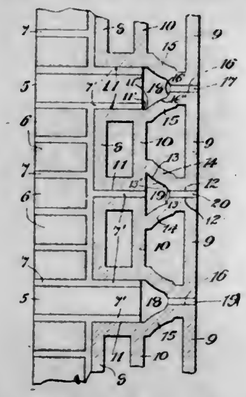


1. The combination with a channeled frame member and wallboard, of a wallboard engaging member comprising a double channel having opposed integral channels, and flanges and clips forming integral extensions of the upper flanges of the double channel, and provided with engagement portions for engaging said frame member.

1,896,770. BUILDING BLOCK AND WALL CONSTRUCTION. WILLIAM G. DEMAREST, Plainfield, N. J. Filed Nov. 23, 1928. Serial No. 321,857. 1 Claim. (Cl. 72—41.)

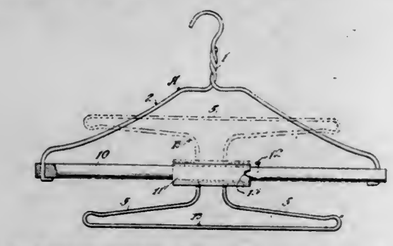
In a hollow building block having two sections joined together to form a unitary structural piece, both sections having aligned bearing surfaces at one end and transposed bearing surfaces at the other end, one bearing surface being raised above the other substantially half the depth of a header brick, the improvement which consists in two curvate walls in one section disposed between the end bearing surfaces of both sections, said curvate walls having nicks at the ends thereof, and straight faced portions interposed between the walls and the adjacent bearing surfaces, said curvate walls form-

ing, when a plurality of blocks are superposed upon each other, symmetrical dead air spaces of identical configuration at each end of the blocks with the binding mortar



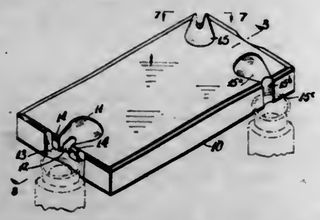
of the bearing surfaces of smaller layer section forming a median line in the plane of symmetry of said dead air spaces.

1,896,771. GARMENT HANGER. ROBERT A. DORRILL, Little Silver, N. J. Filed Aug. 13, 1931. Serial No. 556,749. 8 Claims. (Cl. 223—65.)



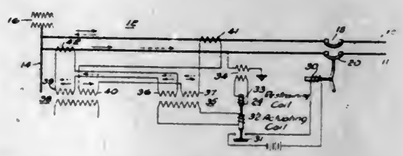
1. A garment hanger comprising a main portion, including a suspending means and parts extending in opposite directions at opposite sides of said suspending means and in a common vertical plane when the hanger is suspended, said parts being shaped to receive the shoulders of a coat or the like, an auxiliary trousers supporting portion pivotally connected to said main portion, so that said auxiliary portion can be arranged selectively in positions with its plane substantially perpendicular to or substantially parallel with the plane of said main portion, and means for holding said auxiliary portion in at least one of said positions.

1,896,772. DENTAL SLAB. HARRY DRESPEL, Brooklyn, N. Y. Filed Jan. 16, 1932. Serial No. 586,979. 7 Claims. (Cl. 32—5.)



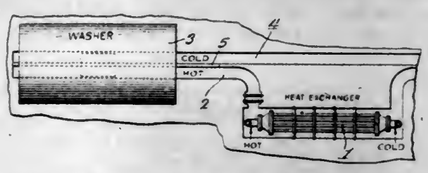
1. A dental slab, comprising material in the form of a dental slab and having a funnel-like cavity on the top surface extending to one side and terminating in a small discharge end, and said side of the dental slab being formed with a substantially U-shaped recess arranged in a manner so as to produce a pair of projections on opposite sides of the mouth of said cavity.

1,896,773. PROTECTIVE SYSTEM. ROBERT D. EVANS, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 27, 1929. Serial No. 358,620. 13 Claims. (Cl. 175—294.)



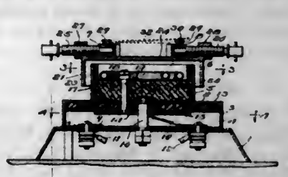
1. An electric distribution system comprising a plurality of parallel-connected circuits, sources of energy adapted to be connected to said circuits at spaced points, circuit breakers for sectionalizing said circuits and for isolating sections of said circuits from said sources, instantaneous impedance relays for controlling said circuit breakers, current transformers in said circuits, a differential, compensating current transformer having primary windings adapted to be individually energized by said first-mentioned current transformers, and a secondary winding connected to the current winding of said impedance relay.

1,896,774. HEAT EXCHANGE APPARATUS. HENRY J. GEBHARDT, Chicago, Ill. Filed Mar. 17, 1930. Serial No. 436,277. 10 Claims. (Cl. 257—242.)



1. In combination with heat exchange apparatus to receive heated waste water for heating other water, through the medium of a heating element, instrumentalities for supplying the heated water and having provisions for separating any cold water discharged therefrom and for preventing such cold water from entering the heat exchange apparatus, operative to divert the cold water without restricting the heated water passage to said apparatus.

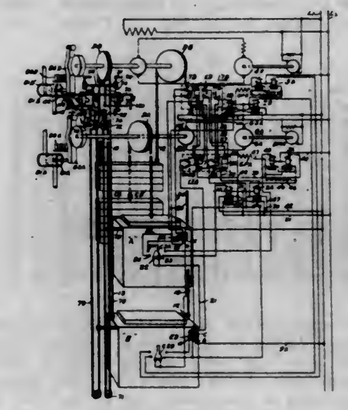
1,896,775. METHOD OF FORMING CRYSTALS. ALEXANDER HORVATH, Chicago, Ill. Filed May 9, 1928. Serial No. 276,350. 2 Claims. (Cl. 18—51.)



1. A method of making a crystal for an opening in a bezel which consists in placing a piece of transparent celluloid material on the bezel in which the opening is formed and in which the crystal is to be positioned,

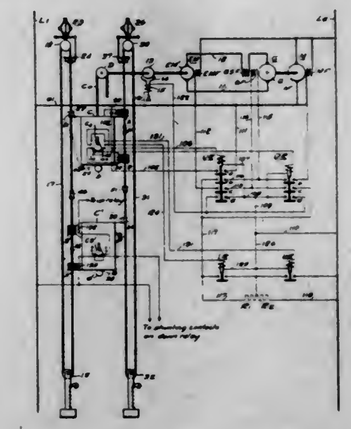
applying heat to soften said material, pressing the material into said opening to form an outline of the opening and an offset portion on said material, and removing from said piece of material the portion thereof defined by said outline.

1,896,776. MULTIPLE ELEVATOR SYSTEM. HENRY D. JAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 17, 1928. Serial No. 255,049. 29 Claims. (Cl. 187—16.)



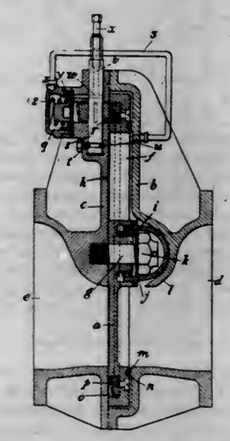
1. The combination with a plurality of elevator cars operating in the same hatchway, of means for controlling the movements of said cars in accordance with the distance between said cars and the speed of movement of said cars.

1,896,777. ELEVATOR SAFETY SYSTEM. HENRY D. JAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 27, 1930. Serial No. 505,086. 6 Claims. (Cl. 187—16.)



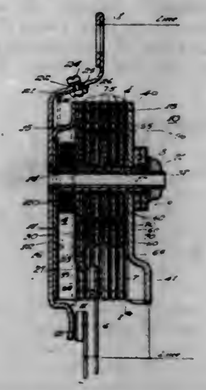
1. In combination, a pair of elevator cars operable in a single hatchway, a control system comprising a hoist motor and machine brake for each car, a safety braking device carried by each car, means actuated by the proximate approach of either car toward the other car for deenergizing the hoist motor and applying the machine brake associated with the approaching car only, and means operable for applying the safety device on the approaching car only, if it thereafter continues to approach the other car.

1,896,778. VALVE. ROBERT WILLIAM LEACH and WILLIAM HENRY BATEMAN, Newport, England. Filed Oct. 17, 1930, Serial No. 489,400, and in Great Britain Aug. 20, 1930. 6 Claims. (Cl. 251—90.)



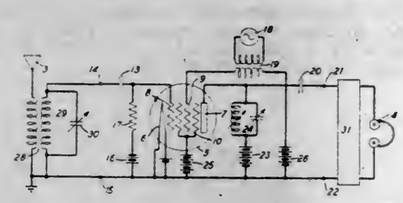
1. In a valve of the character described, the combination with a valve casing provided with a valve seat, a rotary valve disc cooperating with said valve seat, resilient means for holding the valve disc on its seat, an annular groove provided in the working face of the valve disc and disposed toward the valve seat, said groove forming a recess for a lubricating fluid, a toothed rack located in the groove, the valve casing having a recess for the reception of lubricating fluid, a pinion located in the recess for engaging the rack, and means for applying pressure to the lubricating fluid.

1,896,779. CIRCUIT INTERRUPTER. HARRY J. LINGAL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 16, 1932. Serial No. 593,273. 24 Claims. (Cl. 200—144.)



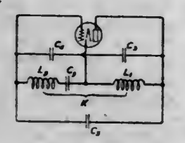
1. In an arc extinguishing structure, a plurality of plates of conducting material, and a plurality of plates of magnetic material; some of said plates of magnetic material having raised edge portions.

1,896,780. MODULATING DEVICE. FREDERICK B. LLEWELLYN, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 2, 1931. Serial No. 519,304. 6 Claims. (Cl. 250—20.)



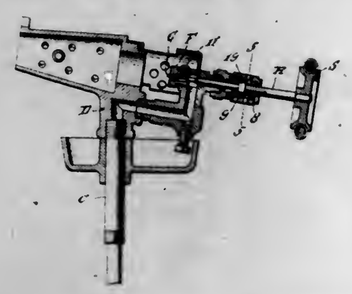
1. A heterodyne detector comprising a space discharge device having a cathode, an anode, an inner grid and an outer grid, circuits individual to said anode, inner grid and outer grid respectively, and a screening system interposed between said anode and outer grid and between said outer grid and inner grid, said screening system being positively polarized at a potential intermediate the anode and cathode potentials whereby electrostatic coupling between every pair of said individual circuits due to interelectrode capacity is substantially eliminated.

1,896,781. CONSTANT FREQUENCY OSCILLATOR. FREDERICK B. LLEWELLYN, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 16, 1931. Serial No. 522,941. 17 Claims. (Cl. 250—36.)



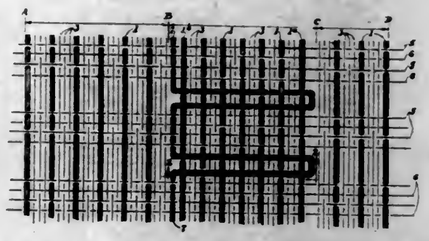
3. An oscillator comprising an electric discharge device having a cathode, anode and impedance control electrode, input and output circuits therefor, a frequency determining circuit energetically related to said input and output circuits, and a frequency stabilizing reactance included in said frequency determining circuit.

1,896,782. PLUMBER'S TORCH. PHILIP MEYER, Newark, N. J., assignor to Otto Bernz Co. Inc., Newark, N. J., a Corporation of New Jersey. Filed Dec. 31, 1930. Serial No. 505,675. 2 Claims. (Cl. 158—120.)



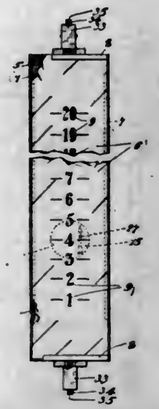
1. The combination with a burner head having a burner block formed with a fuel outlet orifice, and a fuel passage leading to said orifice, of a valve-seat in said passage coaxial with said orifice, a valve-rod having a screw-threaded connection in said burner head to move into and out of engagement with said valve seat upon rotation of the valve-rod in opposite directions to control said passage, a cleaning wire to enter said orifice and mounted on the inner end of said valve-rod, and means mounting said valve-rod in said burner head for reciprocation independently of said screw-threaded connection for moving said cleaning wire into and out of said orifice.

1,896,783. ELASTIC FABRIC. THOMAS F. MOORE, Westerly, R. I., assignor to George C. Moore Company, Westerly, R. I., a Corporation of Rhode Island. Filed June 24, 1932. Serial No. 619,076. 11 Claims. (Cl. 139—421.)



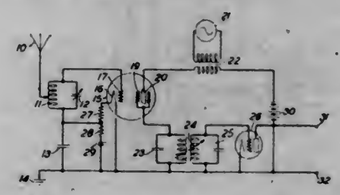
1. In a corset, girdle, or the like supporting garment, elastic fabric having in combination parallelly extending elastic elements, and other elastic elements extending intermediate each adjacent pair of the first elements in angular relation to the latter, one of the two sets of elastic elements being capable of exerting a strong contractive effort and the other restricted to a contractive effort materially below that of the first set as the garment is worn.

1,896,784. POSITION AND DIRECTION INDICATOR FOR ELEVATORS. HARRY R. NORTON, New York, N. Y.; Mary Ellen Norton and Arthur G. Blair, administrators of said Harry R. Norton, deceased, assignors, by mesne assignments, to Westinghouse Electric Elevator Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 10, 1927, Serial No. 218,594. Renewed Feb. 6, 1929. 12 Claims. (Cl. 177—336.)



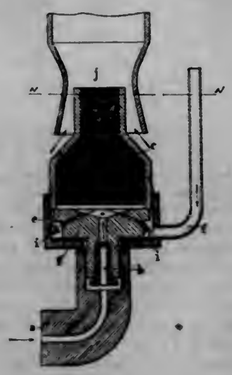
1. In a direction and position indicator for elevators, an indicator plate having a row of floor indicating numbers thereon, a carriage, means mounting said carriage at one side of said plate for movement longitudinally thereof, means operatively connecting the carriage to a part of the elevator operating mechanism, means movable with said carriage and with respect to said plate including a part movable relative to the carriage and having means for indicating the direction of travel of the car, and means for automatically actuating said movable part at the end of the travel of the carriage in each direction to reverse the direction indicated by said direction indicating means.

1,896,785. MODULATING DEVICE. RUSSELL S. OHL, Little Silver, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 1, 1931. Serial No. 548,079. 6 Claims. (Cl. 250—20.)



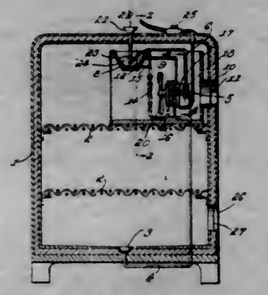
1. A modulating system comprising a space discharge device having a cathode, an anode, a control grid, and a screen grid positioned between said anode and said control grid, two sources of currents to be combined, means for connecting one of said sources to said control grid and to said cathode, means for connecting the other of said sources to said anode and to said cathode, and means connected to said screen grid and to said cathode for utilizing combination currents generated in said space discharge device.

1,896,786. GASOLINE ATOMIZER FOR INTERNAL COMBUSTION ENGINES. RENÉ OPPENHEIM, Gennevilliers, France, assignor to Société Anonyme le Carbone, Gennevilliers, France. Filed Oct. 30, 1928, Serial No. 316,061, and in France Apr. 23, 1928. 9 Claims. (Cl. 261—95.)



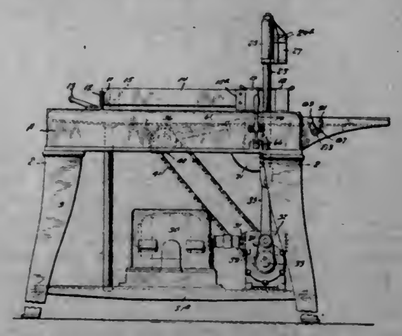
1. An apparatus for cold vaporization of volatile fuel feedable to the intake of an internal combustion engine, including the combination, with a suction intake associated with said engine and a fuel feed pipe, of a casing communicating with said feed pipe and provided with a calibrated nozzle limiting the flow of fuel from said feed pipe into said casing in predetermined manner, air supply means associated with said casing for introducing a limited supply of air into said casing beyond said nozzle in order to atomise the fuel flowing from said nozzle, and a porous body occupying an opening in said casing in a position beyond said nozzle and air supply means in the path of the atomised fuel, and a projection upon said porous body extending beyond said casing into an exposed position relatively adjacent to the intake of said engine, so that when the speed of the engine is retarded, the suction of said intake will be weak so as to permit said porous body to become saturated with fuel, and when the speed of said engine is accelerated, the suction of said intake will be increased and will draw air past said projection and tend to dry said porous body and also cause the atomized fuel from within said casing to traverse said porous body and become further diluted by said air.

1,896,787. COOLING APPARATUS. JOHN ANTHONY PRUDENTE and ROY THOMAS IULA, Ardmore, Pa. Filed Apr. 25, 1931. Serial No. 532,892. 4 Claims. (Cl. 45—133.)



1. A refrigerator including a box having horizontally arranged reticulated partitions therein and having an air outlet opening adjacent to the bottom thereof and an air inlet opening adjacent to the top thereof, a casing having an open top and an open front communicating with the last named opening, a water containing pan in the casing, a coil having a pipe connection with the bottom of the pan, and a return pipe which communicates with the top of the pan, an electrically driven fan in the casing, and a loosely woven fabric sheet affording a front for the casing and extending into the pan and having a back portion which is wound around the coil.

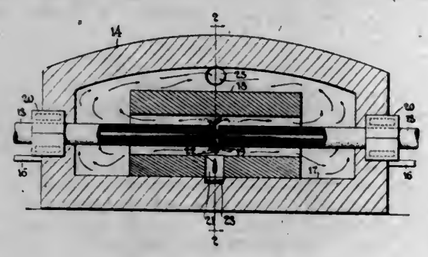
1,896,788. MACHINE FOR CUTTING ICE CREAM BLOCKS. JOHN F. SCHMERHEIM, Cleveland, Ohio, assignor to The Kay Machinery Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 5, 1928. Serial No. 323,930. 2 Claims. (Cl. 107—21.)



2. In a machine of the character described, the combination of a bed, a knife-carrying frame reciprocable toward and from said bed, a carriage movable along said bed toward and from said frame, an electric motor, connections between said motor and said carriage for feeding the carriage intermittently toward and beyond the said frame, connections between said motor and said frame for reciprocating the latter, a switch for opening and closing the motor circuit arranged to be operated by the

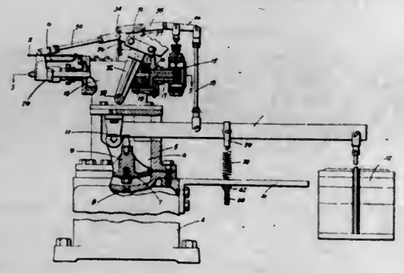
carriage to open said circuit when the carriage shall have been fed a predetermined distance, and means for automatically locking the said switch in circuit-opening position.

1,896,789. APPARATUS FOR REDUCING CHROME ORES. DONALD M. SCOTT, Buffalo, N. Y., assignor to Buffalo Electric Furnace Corporation, Buffalo, N. Y. Filed Apr. 20, 1931. Serial No. 531,560. 3 Claims. (Cl. 13—9.)



1. A furnace for the electrothermic reduction of ore which comprises an enveloping furnace structure, hollow juxtaposed electrodes extending into said structure, and a heat resistant sleeve enclosing the ends of said juxtaposed electrodes having communication with the hearth of said furnace through the lower portion thereof.

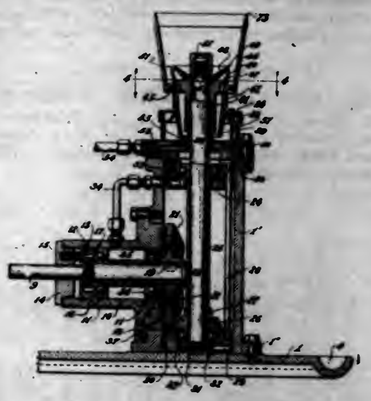
1,896,790. AUTOMATIC REGULATOR FOR COMPRESSORS. LESTER L. COLLINS, Franklin, Pa., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed June 4, 1931. Serial No. 542,080. 5 Claims. (Cl. 230—21.)



1. In automatic regulating apparatus for a variable volume compressor, a pilot valve controlled by receiver pressure, a reciprocable piston controlled by said pilot valve, means for returning the pilot valve to neutral position after each movement comprising a cam having a generally arcuate control surface, an arm extending from said cam and radially of said control surface and arranged for swinging or rocking movement about a pivotal point remote from said cam, and a connection between said cam and said piston whereby axial movement of the latter causes rocking movement of the former.

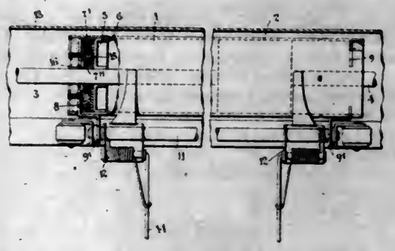
1,896,791. OIL BURNER. PIERRE P. GILLES, deceased, Springfield, Mass., by Florence May Gilles, administratrix, Cortland, N. Y. Filed July 31, 1928. Serial No. 296,617. 8 Claims. (Cl. 158—77.)

1. In oil burning apparatus, the combination of an oil container, driving mechanism below the same, the container having its bottom formed with an elevated portion provided with an aperture, an atomising element having



an upwardly diverging receiving end dipping into the container, and driving connections between said element and the driving mechanism passing through said aperture.

1,896,792. PACKING FOR WINDSHIELD CLEANERS. HENRY HUEBER, Buffalo, and EDWIN C. HORTON, Hamburg, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y. Filed July 2, 1930. Serial No. 465,417. 3 Claims. (Cl. 286—26.)



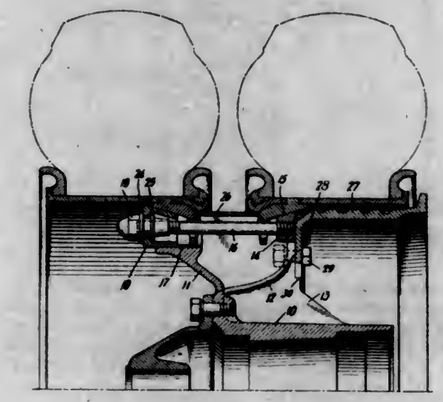
2. A packing for sliding shafts comprising a hollow member having a rigid supporting part, a cupped washer seating on the supporting part, and having a peripheral flange extending in packing embrace with the inner periphery of the hollow member, an outside locking plate for the cupped washer, said peripheral flange being coextensive with the space between the inner rigid supporting part and the outside locking plate, said cupped washer having an axially extending packing flange extending away from the supporting part and from within the cupped washer in packing embrace with a shaft, a resilient ring formed from a coiled spring and disposed within the cupped washer about the axially extending packing flange to urge the latter into packing embrace with the shaft, and a pusher plate seating on the end of the axially extending packing flange and extending outwardly over the resilient ring to hold the same against displacement from said axially extending packing flange, said locking plate also retaining said pusher plate operative.

1,896,793. METHOD OF SEPARATING TERPENE COMPOUNDS FROM GASOLINE USED FOR EXTRACTING ROSIN FROM WOOD. ALAN C. JOHNSTON, Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed June 19, 1928. Serial No. 286,713. 12 Claims. (Cl. 260—158.)

1. The method of separating terpene compounds from gasoline used in extracting rosin from wood, from which

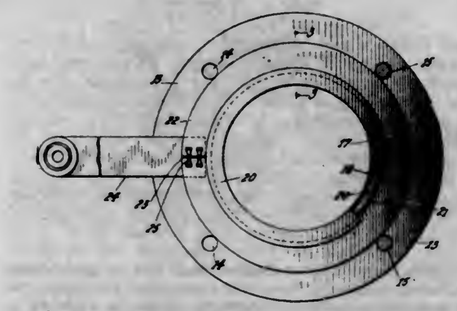
turpentine and pine oil have been removed which includes treating a mixture of solvent and terpene compounds with hydrogen chloride, steam distilling the mixture from an alkaline medium and fractionating the mixture.

1,896,794. VEHICLE WHEEL. CHARLES G. KELLER, Poughkeepsie, N. Y. Filed Apr. 24, 1928. Serial No. 272,404. 3 Claims. (Cl. 301—12.)



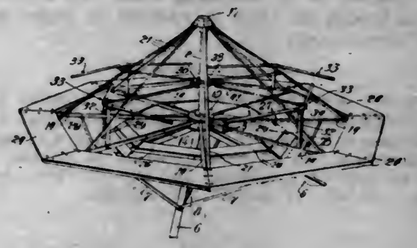
2. In a vehicle wheel, a rim securing means including a wheel body portion having an axially extending guide surface, a bolt extending parallel thereto, a hollow rim clamping member slidable on said surface and having a wall engaging said guide surface, an inclined rim supporting wall, and a comparatively thin end wall, a nut having a shank projecting through said end wall, and means within the interior of said hollow member and intermediate of the ends of said shank for engaging the inner side of said end wall to pull said member out of said recess when said nut is rotated in one direction.

1,896,795. GASKET. HARRY B. KENDALL, Roselle, N. J., assignor to The M. W. Kellogg Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 23, 1931. Serial No. 532,171. 5 Claims. (Cl. 288—1.)



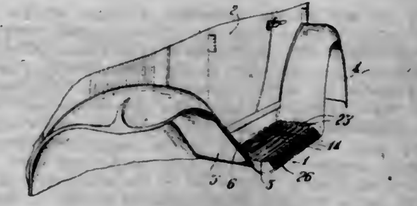
1. A gasket having a peripheral groove; a split annular member resting in said groove and extending beyond the periphery of the gasket; and a radially extending handle connecting with said annular member so as to join with the annular member on both sides of the split.

1,896,796. ROUNDABOUT. DELL J. LAHAY, Carney, Mich., assignor, by direct and mesne assignments, to Universal Playground Equipment Company, Menominee, Mich., a Corporation of Michigan. Filed Jan. 2, 1930. Serial No. 418,057. 5 Claims. (Cl. 272—33.)



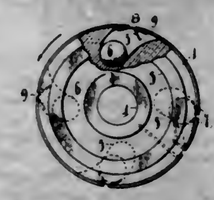
1. A roundabout embodying therein, a base, a mast thereon, a frame structure including seat members rotatively mounted with respect to the mast, an eccentric fixed to the mast, a strap rotatable on said eccentric, lever members arranged in operative relation to the seat members and means operatively connecting each lever member with said strap one of said means comprising a link operatively engaged at its ends with said lever and strap respectively and a bar connecting said strap with said link adjacent that end engaged with said strap.

1,896,797. RUNNING BOARD FOR AUTOMOBILES. ALAN H. LEAMY, Auburn, Ind., assignor to Manning & Co., Chicago, Ill., a Corporation of Illinois. Filed July 24, 1929. Serial No. 380,508. 9 Claims. (Cl. 280—169.)



1. A running board for automobiles embodying therein a one piece sheet metal step portion having longitudinal band portions formed therein and separated from each other by grooves having drainage openings therein, and antislip tread members fixed upon said band portion.

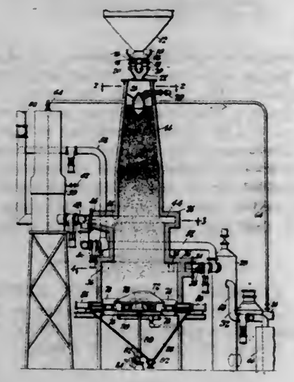
1,896,798. CENTRIFUGAL SWITCH. WILLIAM H. LESLIE, Toronto, Ontario, Canada. Filed Feb. 29, 1932. Serial No. 595,798. 4 Claims. (Cl. 200—80.)



1. In a switch, the combination with a rotating member having a plurality of pockets therein; contact members movable in said pockets, said pockets being arranged to

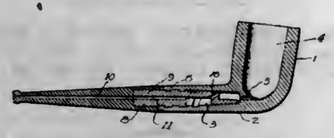
direct the contact members towards the outer end of said pockets when the member is rotated; and divided conducting means extending across the mouths of said pockets, the divisions being in front of the pockets, said pockets being arranged when the member is rotating to direct the balls towards the outer ends of said pockets to bridge the divisions in the conducting means, said conducting means forming the means for retaining the contact members in the pockets.

1,896,799. APPARATUS FOR MANUFACTURING COMBUSTIBLE GAS. HENRY O. LOSSELL, Whitestone, N. Y., assignor to Henry L. Doherty, New York, N. Y. Original application filed Dec. 7, 1923, Serial No. 679,132. Divided and this application filed Oct. 12, 1926. Serial No. 141,047. 11 Claims. (Cl. 202—88.)



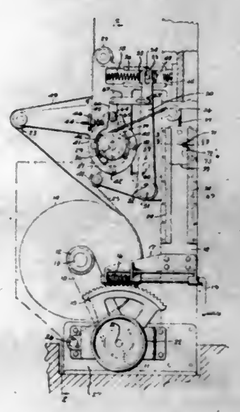
11. In gas making apparatus, a single upright gas-generating shaft having two circumferential vertically-spaced lateral-inner wall extensions at about its vertical mid-section, the said shaft having vertically-spaced nostril openings in its walls immediately beneath each of the said wall extensions, means for selectively controlling the admission of air and steam and the withdrawal of blast gases through each of the respective vertically-spaced nostrils whereby a deep high-temperature gas-generating zone is maintained in the mid-portion of the shaft, and a rich gas offtake mounted axially at the top of said shaft.

1,896,800. PIPE. LOUIS B. LINKMAN, Chicago, Ill., assignor to M. Linkman & Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1932. Serial No. 604,553. 2 Claims. (Cl. 131—12.)



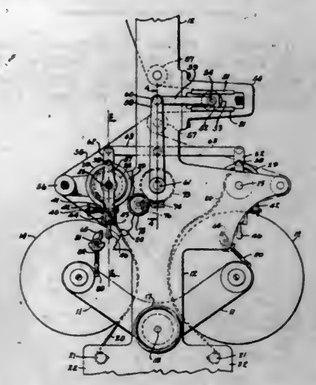
1. A smoking pipe, the body of which consists of a bowl and stem, the latter being provided with a bore tapered inwardly, the outer end of said stem having a coarse, square internal thread, and a mouthpiece having a passageway therethrough and an enlarged bore at the end of the mouthpiece adjacent the stem of the bowl, a metallic member fitting the enlarged bore of the mouthpiece which is cemented to said mouthpiece and is provided with a thread for fitting the thread of the bowl stem and otherwise fits the tapered bore of the bowl stem except that it is cut away on one side at its end, and is cut away at another point offset from the end cut to leave an intermediate portion which fits the bore of the bowl stem, said intermediate portion being perforated, and said metal element also having a passageway in line with the passageway of the mouthpiece.

1,896,801. WEB CONTROLLING MECHANISM. CHARLES J. RICHTER, Berwyn, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Dec. 14, 1929. Serial No. 414,121. 17 Claims. (Cl. 242—75.)



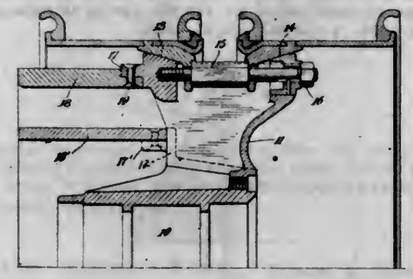
1. Web controlling mechanism including in combination, a web roll support, friction belts engaging the surface of the web roll, weighted means to move the belts to maintain them in contact with the periphery of the web roll and means for periodically rendering the weighted means operative.

1,896,802. WEB CONTROLLING MECHANISM. CHARLES J. RICHTER, Berwyn, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Dec. 14, 1929. Serial No. 414,122. 19 Claims. (Cl. 242—75.)



6. Web controlling mechanism including in combination a web roll support, friction belts engaging the surface of the web roll, a roller to which the belts are attached, a pilot roller, connecting means directly mechanically connecting the pilot roller and belt roller and moving the belt roller by changes in web tension, said connecting means including means for releasing the direct mechanical connection upon a predetermined movement of the pilot roller and means for moving the belt roller when released to wind the belts on their rollers.

1,896,803. VEHICLE WHEEL. WILLIAM D. SARGENT, West Orange, N. J., and CHARLES G. KELLER, Poughkeepsie, N. Y.; said Sargent assignor to Durafer (Inc.), Dover, Del., a Corporation of Delaware. Filed Dec. 17, 1926. Serial No. 155,875. 2 Claims. (Cl. 301—6.)



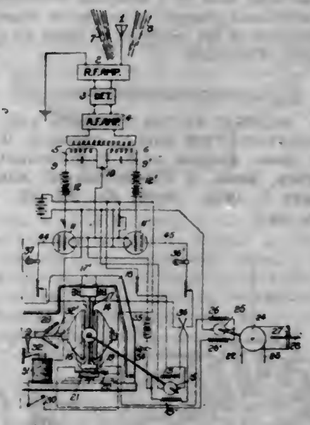
1. A fellyless vehicle wheel having a hub, spokes cast integral therewith, a web connecting the spokes, a head at the outer end of each spoke and a lug carried by each head, said lugs presenting cylindrical surfaces for the attachment of a cylindrical brake flange thereto.

1,896,804. CLOSURE. STANLEY K. SMITH, Westfield, Mass., assignor to The H. B. Smith Company, Westfield, Mass., a Corporation of Massachusetts. Original application filed May 24, 1929, Serial No. 365,629. Divided and this application filed Jan. 21, 1930. Serial No. 422,382. 2 Claims. (Cl. 110—173.)



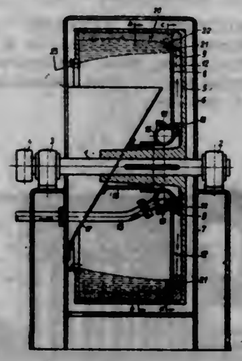
1. A door having a body portion with a dished formation providing an integral marginal flange, an extension of said flange upon one edge of the closure defining a hinge axis about which the closure may swing, an internal lug projecting from the body portion of the door and its flange, said lug being integral with the marginal flange at the edge of the door opposite said extension, and a control element of ductile strap material having its inner end embedded in the metal of the lug and its outer end projecting from the door, the inner end of the control element being disposed in a plane substantially at right angles to the direction of extent of said hinge axis, the element having an intermediate twisted portion disposed adjoining the surface of the door, and having its outer end disposed in a plane which is substantially parallel to said hinge axis, the outer end of the element being shaped for connection with a control member to swing the door about its hinge axis whereby the embedded portion of the control element is disposed with its maximum dimension positioned in the direction of a normal strain imposed thereon by the control member to swing the door about its hinge axis.

1,896,805. DIRECTIONAL RADIO STEERING DEVICE. ELMER A. SPERRY, Jr., Brooklyn, N. Y., and BRUNO A. WITTKUHNS, Chatham, N. J., assignors to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 20, 1930, Serial No. 429,886. Renewed June 28, 1932. 16 Claims. (Cl. 244—29.)



1. An automatic steering device for dirigible craft comprising a gyroscope having freedom about a vertical and a horizontal axis, means actuated therefrom for normally steering the craft, means for applying a torque about the horizontal axis of the gyroscope in either direction, and radio responsive means for controlling said torque means.

1,896,806. CENTRIFUGAL MACHINE. GUSTAV TER MEER, Munich, Germany, assignor to Albert T. Otto & Sons, New York, N. Y., a Corporation of New York. Filed Sept. 23, 1931, Serial No. 564,602, and in Germany Jan. 10, 1930. 8 Claims. (Cl. 233—45.)

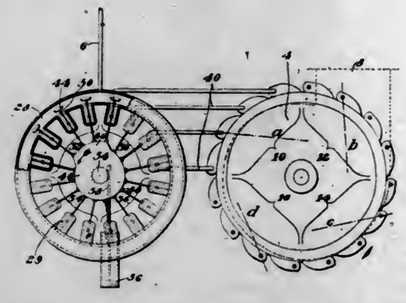


1. A centrifugal machine for separating solids from liquids, including a rotary drum having an imperforate peripheral wall, an annular series of radially extending conduits for delivering the material to be treated towards the periphery of said drum, and an annular nozzle at the outer ends of said conduits for projecting the material in a direction substantially parallel to the axis of rotation of the drum.

1,896,807. PROCESS FOR THE RECOVERY OF PLATINUM AND ITS BYMETALS FROM MATTES. GEORG BAUER, Hanau on the Main, Germany. Filed Feb. 26, 1930, Serial No. 431,624, and in Germany Jan. 24, 1929. 4 Claims. (Cl. 75—64.)

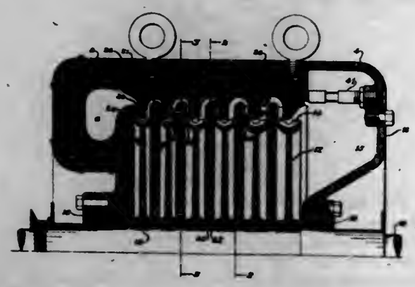
1. The process for the recovery of platinum and noble metals accompanying it, from mattes containing at least 60% of copper, which consists in causing the matte to react at smelting heat in a reducing atmosphere with a sufficient additional amount of copper to cause the noble metals contained in the matte to be taken up or collected by the copper of the melt.

1,896,808. ELASTIC FLUID TURBINE AND METHOD OF OPERATING THE SAME. OLIVER D. H. BENTLEY, Norfolk, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed May 5, 1928. Serial No. 275,416. 4 Claims. (Cl. 253—54.)



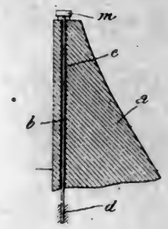
1. A variable speed elastic fluid turbine having, in combination, a rotor provided with buckets, a plurality of nozzle units constructed and arranged for operation of the rotor at different speeds, each nozzle unit comprising a nozzle and a plurality of reversing buckets, the inclination of each bucket along the path of flow of the fluid through a nozzle unit being progressively less with respect to a rotor tangent, and means for supplying working fluid to one of the nozzle units to operate at a selected speed.

1,896,809. MULTISTAGE TURBINE. OLIVER D. H. BENTLEY, Norfolk, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed Mar. 3, 1930. Serial No. 432,637. 4 Claims. (Cl. 253—48.)



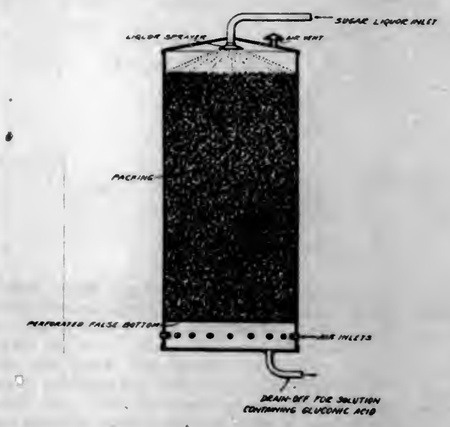
1. A multi-stage, elastic fluid turbine comprising a shaft, a plurality of rotors each provided with a series of peripherally disposed buckets, and means forming radial flow inter-stage passages between adjacent rotors, said means comprising a diaphragm having a periphery rounded in axial cross-section and separating the rotors and a ring surrounding the diaphragm and having an annular internal groove of corresponding rounded axial cross-section and spaced from the outer surface of the diaphragm, and fluid directing vanes in the inter-stage passages.

1,896,810. REENFORCED AND ANCHORED MASONRY STRUCTURE. ANDRÉ COYNE, Paris, France. Filed Apr. 18, 1930, Serial No. 445,297, and in Morocco Apr. 24, 1929. 7 Claims. (Cl. 61—80.)



1. The method of anchoring a masonry structure comprising the steps of constructing a masonry mass, passing a metallic anchoring element through said mass, fixing one end of said anchoring element rigidly in position, submitting said anchoring element to a tractive force, and bonding said masonry mass and said anchoring element together along the greater part of the length of the latter while said anchoring element is under the action of said tractive force.

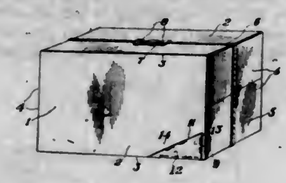
1,896,811. PRODUCTION OF GLUCONIC ACID. JAMES N. CURRIE and RALPH H. CARTER, Brooklyn, N. Y., assignors to Charles Pfizer & Company, Brooklyn, N. Y., a Corporation of New Jersey. Filed Feb. 3, 1930. Serial No. 425,373. 13 Claims. (Cl. 260—120.)



1. Process for the production of gluconic acid comprising fermenting a sugar liquor in the form of thin films in contact with air with gluconic acid forming bacteria from the acetobacter group.

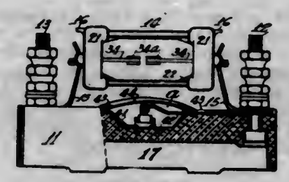
1,896,812. BOX FOR SHIPPING COAL. JACK J. DREW, McAlester, Okla. Filed May 29, 1930. Serial No. 457,135. 2 Claims. (Cl. 229—7.)

1. A dispensing receptacle including two plane side walls intersecting in a line and a plane end wall intersecting said side walls in a point at one end of said line, a guide line inscribed along said line of intersection, another guide line normal thereto inscribed on each of the side walls near the plane of the end wall, and a hinge line connecting the ends of said guide lines and forming therewith a pair of triangular portions, whereby when the



receptacle is severed along the guide lines the triangular portions may be folded back along the hinge lines to provide a pair of hinged flaps cooperating to serve as a spout of variable cross section.

1,896,813. ELECTRIC DEVICE. EDWARD A. EVERETT, Long Island City, N. Y. Filed Dec. 24, 1928. Serial No. 328,270. 10 Claims. (Cl. 175—30.)



1. In an electric device, the combination, a base, a pair of clips supported by said base, a device comprising a glass tube with a pair of caps and bars spacing said caps, said caps detachably supported by said clips and conductors in said tube electrically connected with said clips through said caps.

1,896,814. MOUTHPIECE OF WIND MUSICAL INSTRUMENTS. WALTER GEMEINHARDT, New York, N. Y. Filed Feb. 4, 1928. Serial No. 251,894. 3 Claims. (Cl. 84—383.)

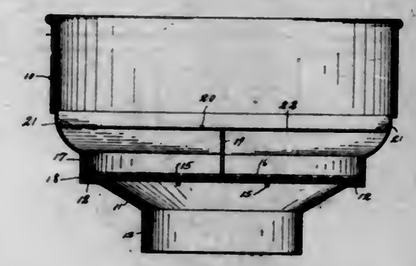


1. A mouthpiece for musical wind instruments having a lay, said lay having a depression transversely thereof, a split ligature for clamping a reed on said lay, said ligature comprising two connected bands and means for tightening said bands, and additional means carried by said ligature for exerting pressure on said reed at a point directly over the depression portion whereby the end of said reed may be maintained in spaced relation to the tip of the mouthpiece.

1,896,815. FABRIC TREATING COMPOUND. MAX GOLDBERG, New York, N. Y. Filed Feb. 9, 1929. Serial No. 338,711. 2 Claims. (Cl. 134—79.)

1. A coating composition for fabrics, to prevent unraveling and fraying of the cut edges thereof, consisting of a mixture of pyroxylin, castor oil, diethyl phthalate, methyl alcohol and benzol, in such proportions as to form, on drying, a flexible film for the respective threads of a fabric, said coating being of a nature as not to affect the texture, appearance or flexibility of the fabric.

1,896,816. MILK STRAINER. EDWIN E. GOTTMAN, Tonganoxie, Kans. Filed Apr. 9, 1931. Serial No. 528,903. 6 Claims. (Cl. 210—159.)



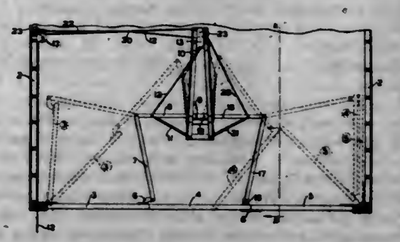
5. In a milk strainer including a hopper and a straining element mounted within the hopper, an imperforate baffle engaging the hopper, said baffle having a relatively large central portion and restricted opposite end portions, and means carried by the hopper and the element for tensioning the baffle to hold the element against movement in the hopper.

1,896,817. SAFETY BLASTING PLUG. RICHARD J. HEITZMAN, Shamokin, Pa., assignor of one-fourth to Wm. E. Ressler, Shamokin, Pa. Filed Aug. 18, 1932. Serial No. 629,347. 4 Claims. (Cl. 102—11.)



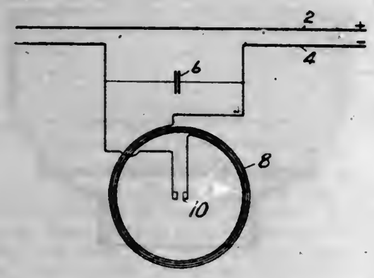
1. Safety blasting plug comprising a cylindrical member having a radially expansible relatively soft anterior portion, and a relatively rigid rearward portion, said member having spaced longitudinal bores extending through both said portions.

1,896,818. DOOR OPERATING DEVICE. CLARENCE R. HILL, Muskegon, Mich. Filed Oct. 28, 1930. Serial No. 491,710. 3 Claims. (Cl. 268—68.)



1. The combination with a hinged door of means for opening or closing said door comprising, a swinging arm, means connecting a swinging portion of said arm with a swinging portion of said door and spring means connected with said arm whereby the spring means will be tensioned during the first part of the movement of the door in either an opening or closing direction and said spring means will act upon said arm to complete the swinging movement of the door in either of said directions, said arm being adapted to lie in substantially the same position regardless of whether the door is in a fully opened or a fully closed position.

1,896,819. METHOD AND MEANS FOR REDUCING RADIO INTERFERENCE. ERNEST N. HYDE, Philadelphia, Pa. Filed May 5, 1931. Serial No. 535,119. 3 Claims. (Cl. 178—44.)



1. An arrangement for reducing electromagnetic radiations due to the opening or closing of contacts in a circuit, including a coil arranged to carry current, the contacts being located in the field of the coil, and a capacity in parallel with the coil, the coil and capacity forming a circuit having a high natural frequency.

1,896,820. FIREARM. CHARLES J. JOLIDON, Hartford, Conn. Refiled for application Serial No. 191,776, filed May 16, 1927. This application filed Dec. 24, 1930. Serial No. 504,617. 25 Claims. (Cl. 42—4.)



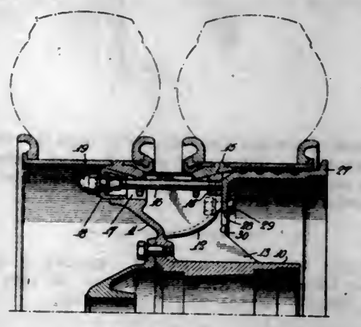
11. A firearm including a sear bar notched at one end to form a shoulder, a detent bar having a housing formed on its side, each pivotally mounted, and a spring located in said housing and thrusting with its opposite ends against both of said bars to retain them in their normal positions.

19. A firearm including a frame having a recess in the side thereof, a sear bar located in said recess, a detent plate recessed on its inner surface to receive said sear bar and forming a cover for said recess, and a member mounted on the frame to be held by said detent plate.

23. A firearm including a breech slide and a barrel, an extractor mounted on the slide to engage the rim of a cartridge shell to remove it from the barrel, and a button formed on said extractor and pressed by resiliency of the extractor into an opening in the slide and disengageable from said opening by force applied therethrough to said shell.

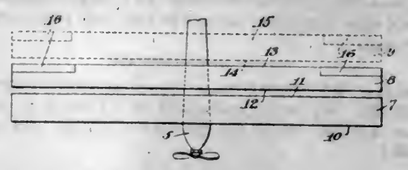
1,896,821. VEHICLE WHEEL. CHARLES G. KELLER, Hyde Park, N. Y. Original application filed Apr. 24, 1928, Serial No. 272,404. Divided and this application filed July 31, 1931. Serial No. 554,183. 2 Claims. (Cl. 301—6.)

2. A vehicle wheel structure having a hub, a plurality of U-shaped spokes open at the radially outer ends and on the inboard sides thereof, a web integral with the spokes and extending substantially axially between adjacent spokes, and spaced from the hub and extending radially at the inboard sides of the spokes, reenforcing ribs connecting the axially extending portion of said web and the radially outer surface of said hub between adjacent spokes, each having a portion extending in an inboard direction beyond said web, said extending portions presenting radially outwardly facing shoulders, said ribs, web and hub being



cast integral, a brake drum having a radially inwardly directed flange partly enclosing the inboard sides of said spokes to form therewith air passages for the radial flow of air through said spokes, said flange engaging with and centered by the shoulders, and directly engaging the radially extending portion of the web, and members extending through the radial portion of said web and said flange to secure said brake drum to the web.

1,896,822. TANDEM WING AEROPLANE. ANTHONY LANZETTA, New York, N. Y. Filed June 9, 1931. Serial No. 543,089. 9 Claims. (Cl. 244—12.)



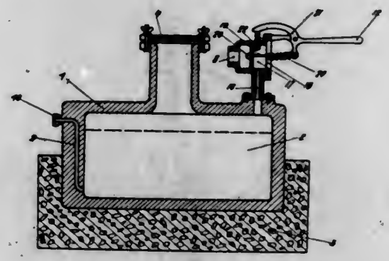
1. In an aeroplane a plurality of wings arranged in close proximity one behind the other in such a manner that in the middle vertical longitudinal plane the rear edges of all the wings are in approximately the same horizontal line with the front edge of the first wing, whereas the front edges of all the wings following the first wings are in consecutive order higher than the front edge of each preceding wing, so as to give to the different wings in consecutive order a higher angle of incidence.

1,896,823. POLISHING COMPOSITION AND METHOD OF PREPARING SAME. PAUL LOGUE, Birmingham, Ala., and THEODORE W. SCHILB, St. Louis, Mo., assignors to Swann Research, Inc., a Corporation of Alabama. Filed June 3, 1931. Serial No. 541,950. 3 Claims. (Cl. 51—280.)

1. A polishing base comprising dicalcium phosphate dihydrate which has been partially dehydrated and a relatively small amount of aluminum phosphate.

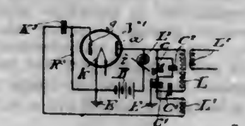
1,896,824. APPARATUS FOR MOLDING. PAUL MAHIEU, Paris, France. Filed Dec. 6, 1930, Serial No. 500,617, and in France Dec. 7, 1929. 2 Claims. (Cl. 22—69.)

2. In a molding apparatus of the character described, a crucible having a contracted outlet leading to a mold, a conduit connected to the crucible for the admission of air under pressure, having an intake chamber and an expansion chamber, and having a manually operable valve between said chambers to control the passage of air from



the intake chamber, and means in a wall of said expansion chamber for automatically closing said valve when a determined back pressure has been built up in said expansion chamber.

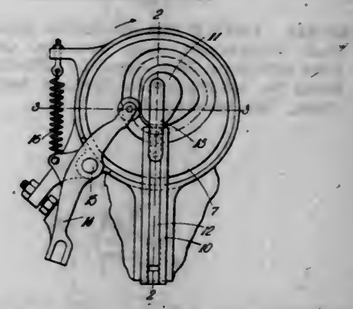
1,896,825. RADIO RECEIVING SYSTEM. VERNON C. MACNABB, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 5, 1931. Serial No. 573,100. 15 Claims. (Cl. 250—20.)



1. In radio reception, the method which comprises tuning in a receiving system to signal-representing oscillations throughout a range of frequencies thereof by varying a capacity, locally generating oscillations by coupling the output system of a thermionic tube to its input system magnetically and capacitatively through a capacity common to said output and said input systems, through an inductive coupling impressing upon said receiving system locally generated oscillations, by said magnetic and capacitative couplings rendering constant throughout the frequency range the voltage of the oscillations so impressed on said receiving system, controlling the frequency of the generated oscillations by varying another capacity in said input system, and utilizing said capacity common to said output and input systems to modify the action of said last named variable capacity in series therewith in said input system to cause the variable capacities of said receiving system and said input system to be adjustable in unison to effect throughout the frequency range a constant difference between the frequencies of the locally generated and signal-representing oscillations.

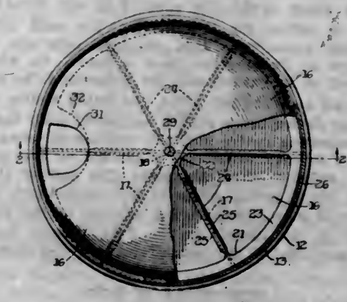
1,896,826. WIRE STITCHING MACHINE. JOHN IRVING NASMITH, Eltham, England, assignor to Vickers-Armstrongs Limited, Westminster, England, a British Company. Filed Jan. 18, 1931, Serial No. 508,456, and in Great Britain Dec. 1, 1930. 10 Claims. (Cl. 1—2.)

1. A wire stitching machine comprising a two armed feed lever for feeding a length of wire, a revolving cam for operating said feed lever, a former for forming the length of wire into a staple, a cam for operating said former, and a driver for driving the staple thus formed



into the work, both arms of said feed lever and the said cam lying and moving in the same plane as that of the driver and former.

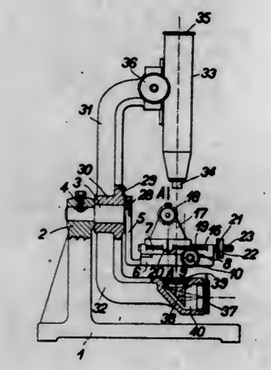
1,896,827. ASSORTMENT DISPENSING CONTAINER. ALBERT E. NEELY, Chicago, Ill., assignor to W. C. Ritchie and Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 8, 1932. Serial No. 591,623. 4 Claims. (Cl. 229—7.)



1. In an assortment dispensing container, the combination of a round receptacle having a bottom-wall and a circular side-wall the upper portion of which is turned over inwardly of the receptacle, V-shaped partition walls dividing said receptacle into separate compartments, said partition-walls having their apexes at the center of the receptacle and their free ends at the inner surface of said side-wall, the top edges of said partition-walls sloping upwardly from said side-wall to the center of the receptacle, a slightly dome-shaped bent metal frame overlying said partition-walls and having a central section at the center of the receptacle, an outer ring section at the inner surface of said side-wall and radiating arms connecting said central and ring sections and in register with said partition-walls, each of said arms having depending flanges on opposite sides of the corresponding partition-wall and maintaining it in position, the margin of said outer ring section having an upstanding circular flange below the inturned section of said side-wall, a transparent round disc cover overlying said frame with its margin in the circular groove between said frame and said inturned side-wall section, and means revolubly connecting the central part of said disc to the central section of said frame, said cover having a delivery aperture

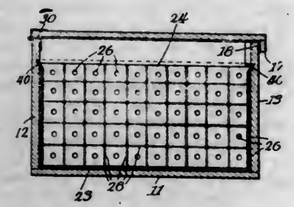
adapted by the turning of the cover to be brought into register with any one of said compartments, said frame having a blank portion with which said cover aperture may register when the cover is in non-delivering position.

1,896,828. DEVICE FOR GAUGING BOLT THREADS. PAUL NICHTERLEIN, Jena, Germany, assignor to the Firm Carl Zeiss, Jena, Germany. Filed Apr. 22, 1930, Serial No. 446,295, and in Germany Apr. 27, 1929. 1 Claim. (Cl. 88—14.)



An instrument for gauging bolt threads, comprising a stand, a fixing device for supporting the thread to be gauged, a device for illuminating the said thread, a microscope whose tube axis coincides with the axis of the pencil of illuminating rays, a device for displacing the thread to be gauged and for measuring the displacements, and a pivot, this pivot, the fixing device and the displacing device being rigidly connected with the stand, the illuminating device and the microscope being rigidly connected to each other and supported on the pivot for conjoint rotation about the pivot, the axis of the pivot lying in the focusing plane of the microscope, and the direction of displacement being parallel to the longitudinal axis of the thread on the fixing device, regardless of the positions of the microscope and the illuminating device.

1,896,829. CEDAR CHEST. EDWARD ROOS, River Forest, Ill. Filed Dec. 11, 1930. Serial No. 501,485. 4 Claims. (Cl. 312—1.)



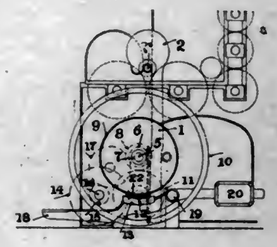
2. In combination, a chest having an inner surface of cedar, a liner for said surface, said liner comprising fibrous material, porous on its outer sides and having its inner surface calendered, said material being provided with a plurality of openings therethrough for permitting the aroma and oil vapors from the cedar to escape into the interior of said chest.

1,896,830. DEVICE FOR INFLUENCING BY MEANS OF A RAY PROJECTOR A CELL SENSITIVE TO LIGHT. FRANZ SCHARFF, Jena, Germany, assignor to the Firm Carl Zeiss, Jena, Germany. Filed Sept. 11, 1930, Serial No. 481,124, and in Germany Sept. 20, 1929. 1 Claim. (Cl. 177—352.)



A ray receiver to be influenced by a pencil of light rays emanating from a ray transformer, the receiver and transmitter moving relatively to each other in directions transverse to that of the ray pencil, the said ray receiver having an electrical cell sensitive to light and an optical system rigidly connected to the said cell, the optical system consisting of two parts, the foremost of these two parts including means to produce on the hindmost part of the optical system an image of the ray transmitter when the ray transmitter is anywhere within a space extending a substantial distance to either side of the axis of the said optical system, the said electrical cell being located behind the said hindmost part, the said hindmost part including means to produce an image of the foremost part over substantially the entire area of the said electrical cell.

1,896,831. METHOD OF AND MEANS FOR WEIGHTING THE SLIP ROLLS FOR LAPS IN TEXTILE MACHINES WHEREIN THE MATERIAL ACTED ON IS FORMED INTO LAPS. HENRY WILKINSON and ARTHUR ROS, Barrowshaw, Oldham, England, assignors of one-third to Platt Brothers and Company Limited, Oldham, England. Filed June 5, 1931, Serial No. 542,282, and in Great Britain Aug. 23, 1930. 4 Claims. (Cl. 19—162.)



1. In a device of the kind described, a pair of vertically extending and vertically movable rack bars, a slip rod extending between and carried by the upper parts of said rack bars, weight supporting means on said rack bars below said slip rod, and weights carried by said weight supporting means.

1,896,832. FLAG HOLDER. EDWARD B. WILEY, Somerville, Mass. Filed Feb. 10, 1932. Serial No. 592,078. 3 Claims. (Cl. 116—173.)



1. A flag support having a tubular staff member within which a flag may be withdrawn, and a tubular supporting member within which the staff member may telescope; and means secured to the end of the staff member adapted to overlap the end of the supporting member when in telescoped position, for the purpose of protecting the enclosed flag from the elements.

1,896,833. OIL AND WATER EXTRACTOR. SVEND BRAMSEN and FRITZ WAHLIN, Chicago, Ill., assignors to Binks Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 25, 1931. Serial No. 525,070. 11 Claims. (Cl. 183—48.)



1. In a liquid and gas separator, an upright tubular shell, a relatively smaller-diametered inner tube disposed within the shell concentric with the shell, a filling of liquid-collecting material in the annular space between the said tube and the upper portion of the shell, means within the shell for supporting the liquid collecting material, baffle means housed by the inner tube intermediate of the height of the tube, and gas-filtering means housed by the inner tube above the baffle means.

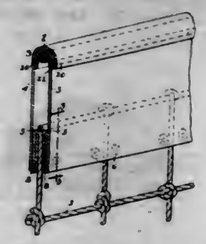
1,896,834. DEVICE TO BE ATTACHED TO CONTAINERS. ROBERT R. BROWN, Upper Montclair, N. J., assignor to Outserts, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 4, 1930. Serial No. 472,840. 19 Claims. (Cl. 40—2.)

1. In a device of the character described, a back sheet of flexible material, and a front sheet of flexible material attached to said back sheet and lapped over it, said front sheet being transversely weakened to permit its being



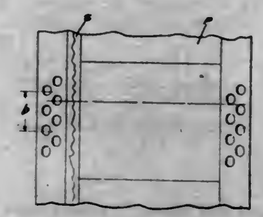
severed, and areas on opposite sides of said transversely weakened part having adhesive material applied thereto.

1,896,835. TENNIS NET. ROYCE S. BUNKER, Baltimore, Md., assignor to W. & J. Knox Net and Twine Company, Baltimore, Md., a Corporation of New Jersey. Filed Dec. 4, 1931. Serial No. 578,950. 6 Claims. (Cl. 273—29.)



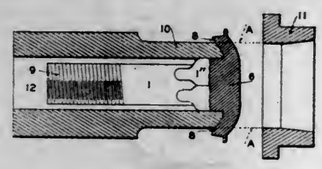
1. A net of the class described comprising a net proper, two elongated fabric plies extending lengthwise of and between which a margin of the net proper is interposed, means penetrating the plies and the net proper and arranged lengthwise of the plies, for securing the plies and net proper together, said plies being folded outwardly from the net proper and as so folded extending beyond said margin thereof, and means to secure the plies together beyond said margin.

1,896,836. MOTION PICTURE FILM. HAGAR BOLTON BYRON, New York, N. Y., assignor of one-half to Frederick Kalmbach, New York, N. Y. Filed Apr. 23, 1931. Serial No. 532,183. 4 Claims. (Cl. 88—19.5.)



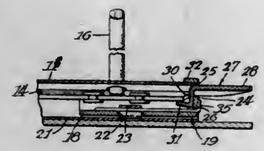
1. A motion picture film having a picture zone, and a succession of feeding perforations arranged in echelonic formation, said perforations being spaced from one another but overlapped longitudinally of the film.

1,896,837. METHOD OF FORMING BOLTS. STERLING H. CAMPBELL and FREDERICK K. HABENICHT, St. Louis, Mo., assignors to Western Railway Equipment Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 29, 1931. Serial No. 533,650. 3 Claims. (Cl. 10—27.)



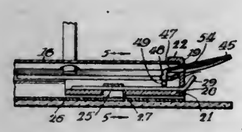
1. The method of forming a self-counter-sinking bolt which comprises forging on a length of stock a head having an annular flange with an inwardly tapering under face, and trimming the head to a diameter substantially less than the diameter of said face, the trimming cut intersecting the tapering face, whereby a continuous annular cutting edge is formed on the under side of the head.

1,896,838. LOOSE LEAF BINDER. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Filed Feb. 28, 1931. Serial No. 519,135. 14 Claims. (Cl. 129—24.)



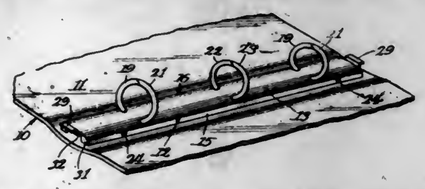
1. In a loose leaf binder, a plate arched transversely with the sides turned inwardly, prong-bearing toggle members articulated at their adjacent edges to form a toggle joint and having their remote edges mounted to rotate on the inturned sides of the plate, a fitting extending beneath the toggle members and engaging with the inturned sides of the plate, and a booster lever fulcrumed on the fitting and having one arm cooperating with the toggle joint to open the prongs.

1,896,839. LOOSE LEAF BINDER. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Filed Feb. 28, 1931. Serial No. 519,136. 10 Claims. (Cl. 129—24.)



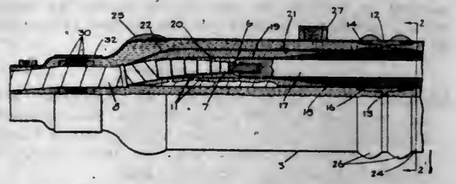
9. In a loose leaf binder, a booster lever having a portion adapted to pass through a pair of articulated toggle plates and to lift said plates, a support for the lever comprising a tongue and an end closure, means to pivot the lever upon the support, and means to retain the support within the binder.

1,896,840. LOOSE LEAF BINDER. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Filed Apr. 29, 1931. Serial No. 533,716. 5 Claims. (Cl. 129—24.)



5. In a loose leaf binder, a cover plate having downturned marginal portions, a pair of articulated toggle elements therein, and a pivoted booster lever supported upon the down-turned marginal portions of the clover plate and adapted to engage the toggle elements and to lift them.

1,896,841. FLUID STOP JOINT FOR SHEATHED HIGH TENSION CABLES. EUGENE B. EBY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 8, 1928. Serial No. 298,357. 10 Claims. (Cl. 173—268.)



1. A stop joint for fluid-filled cable, comprising sheathed cable sections containing fluid, a metal partition which has as many openings as there are conductors, rods which extend through the openings and are united with the conductors, insulation which surrounds each of the rods, extends through an opening and is held under radial compression between the rod and the wall of the opening, a casing for the joint which is sealed fluid-tight to the partition and also to the sheaths, and a dam located on each side of the partition to prevent the cable sections from draining.

1,896,842. PHENOL-ALDEHYDE-DRYING OIL RESIN COMPOSITION AND PROCESS OF MAKING SAME. CHARLES STEWART FERGUSON, Troy, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 13, 1931. Serial No. 522,529. 11 Claims. (Cl. 260—4.)

1. The process of preparing a liquid coating composition which comprises reacting substantially pure xylenol, an aldehyde, triethanolamine and a drying oil.

1,896,843. MOP. EDWARD B. HALL, Jr., Chicago, Ill., assignor to O-Cedar Corp'n., Chicago, Ill., a Corporation of Illinois. Filed Sept. 16, 1931. Serial No. 563,119. 8 Claims. (Cl. 306—11.)



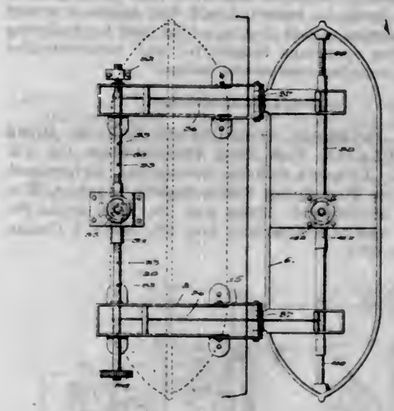
3. In a mop head, swatch holding means terminating in spaced ends, a handle socket member pivotally mounted between said ends, resilient means adjacent said socket member, cover plates over the ends of the swatch holding means and each provided with a neck portion embracing the swatch holding means to stiffen the same, and means for clamping said resilient means against said socket member.

1,896,844. ACOUSTICS. OSCAR B. HANSON, Long Island City, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 28, 1931. Serial No. 511,772. 7 Claims. (Cl. 181—30.)



1. A variable acoustic element comprising a movable folding screen having a plurality of hinged members, the opposite surfaces of which have different acoustical characteristics.

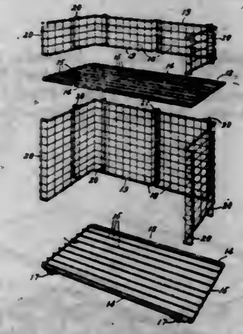
1,896,845. FOLDING DAVIT. JOHN L. HYLAND, New York, N. Y. Filed May 6, 1929. Serial No. 360,803. 8 Claims. (Cl. 9—22.)



6. In a device of the character described, the combination of lowering cables for a life-boat, a shaft for receiving the cables and having a tapered portion, means for engaging the tapered portion, and means for causing relative longitudinal movement between the tapered portion and the engaging means, said tapered portion and its engaging means cooperating to limit said longitudinal movement and control the release of the cables.

1,896,846. REFRIGERATOR CABINET SHELF. JAMES L. KNIGHT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 29, 1930. Serial No. 484,951. 1 Claim. (Cl. 311—153.)

In combination, a plurality of shelves, means for supporting said shelves in a cabinet in spaced relation to each other, said means including vertically extending spacers formed of a network arranged about the periphery of said shelves and their lower edges resting on the shelves above which they extend, said spacers having outwardly extending portions for maintaining said network in spaced relation with the inner walls of the cabinet, so as to prevent articles on the shelves from entirely covering the same and cutting off the circulation of air within the cabinet.

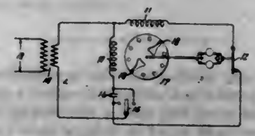


1,896,847. ELECTRIC SWITCH. GEORGE W. LIEBERUM, Stratford, Conn., assignor to General Electric Company, a Corporation of New York. Filed Mar. 30, 1929. Serial No. 351,288. 2 Claims. (Cl. 200—11.)



1. An electric switch comprising an insulating support in two enclosing members adapted to be secured together and said members being provided with aligned studs, one member having stationary contacts thereon and the other member having a series of hills and valleys in arcuate relation to said studs, and a unitary switch mechanism having a hollow shaft mounted on said studs, an operating lever mounted on said shaft and extending outwardly between said members, a movable pole piece of springy sheet metal centrally mounted on said shaft and provided at one end with contacts and at the other end with a boss for engaging said hills and valleys, and a biasing spring connecting said lever and said pole piece.

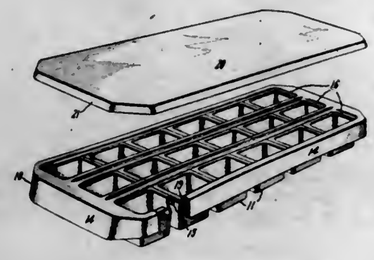
1,896,848. TWO-SPEED SINGLE PHASE MOTOR. WAYNE J. MORRILL, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed July 8, 1932. Serial No. 621,898. 6 Claims. (Cl. 172—279.)



2. An alternating current motor having a primary winding, a supply circuit therefor, a secondary member for said motor designed to induce low frequency voltages in the

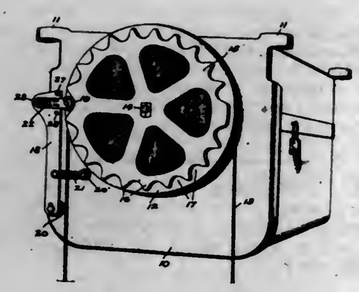
primary winding at a fraction of the maximum speed of the motor, a frequency responsive impedance, and means for inserting said frequency responsive impedance in and removing it from the primary winding circuit to vary the speed of the motor.

1,896,849. FREEZING TRAY. DELBERT F. NEWMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 18, 1931. Serial No. 529,689. 2 Claims. (Cl. 62—108.5.)



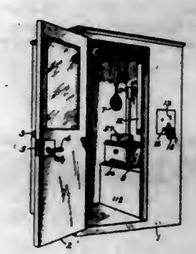
1. A freezing tray comprising a frame having a plurality of openings therein, the portion of said frame about the openings therein being depressed below the upper surface thereof, and a plurality of cups in the openings in said frame below the upper surface thereof, said frame having longitudinal portions on opposite sides of said cups formed to retain them in said frame.

1,896,850. NOTCHING MECHANISM. CHARLES L. PERRY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 1, 1929. Serial No. 359,705. 15 Claims. (Cl. 74—14.)



1. In a notching mechanism, the combination of a relatively movable pawl and a notched member, a movable member carrying said pawl and means for biasing said movable member to cause said pawl to engage said notched member, and a biasing means carried by said movable member and operably connected with said pawl whereby upon movement of said notched member said pawl member will move therewith in either direction for a limited distance and be returned to initial position.

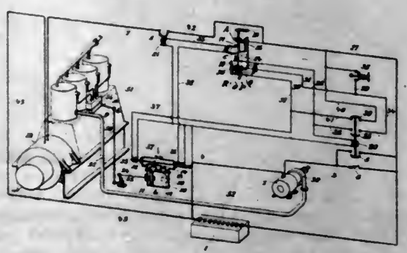
1,896,851. SOUND RECORDING APPARATUS. DAVID W. REYNOLDS and PAUL J. SCHWARZHAUPT, Scotia, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Mar. 20, 1930. Serial No. 437,521. 16 Claims. (Cl. 274—1.)



1. Sound recording apparatus comprising a rotatable member adapted to support a record blank, means for rotating said member, a stylus supporting carriage, latching means for retaining the carriage in an inoperative position, and means responsive to a movement of said rotating means for releasing said latching means.

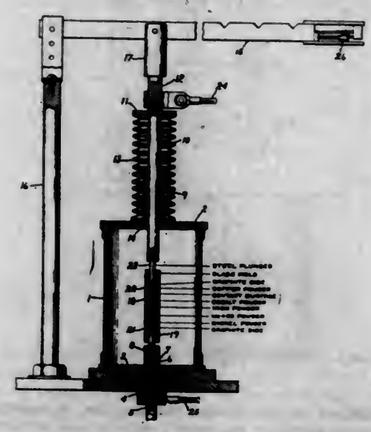
7. In combination, a booth having a door, sound recording apparatus therein having means for rendering it inoperative after a predetermined number of operations, means responsive to the opening of the door by an operator within the booth for restoring said first means, a second means responsive to said opening of the door for rendering the recording apparatus inoperative and coin-controlled means for restoring said second means.

1,896,852. INTERNAL COMBUSTION ENGINE, MORE PARTICULARLY FOR THE PROPULSION OF VEHICLES. CHARLES SCHAER, Langenthal, Switzerland, assignor to Firm Sulzer Frères Société Anonyme, Winterthur, Switzerland. Filed Aug. 21, 1931, Serial No. 558,480, and in Switzerland Aug. 30, 1930. 5 Claims. (Cl. 290—38.)



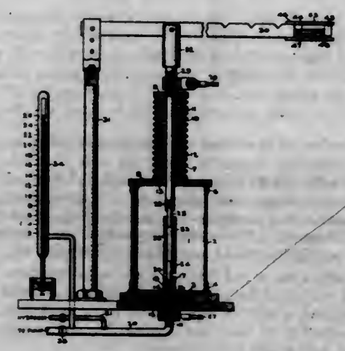
1. A control system for an internal combustion engine having a fuel injection device, a starting motor and switch, a cooling water pump and motor and switch, and means for controlling the supply of fuel to the engine, comprising connections between the means for controlling the fuel supply to the engine and the switch controlling the starting motor and the switch controlling the pump motor, and means in said connection whereby the pump motor is switched on before the starting motor and can thereafter be switched off only simultaneously with or subsequently to cutting off the fuel supply.

1,896,853. WELDING PROCESS. GEORGE F. TAYLOR, Niskayuna, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 22, 1930. Serial No. 483,525. 6 Claims. (Cl. 219—10.)



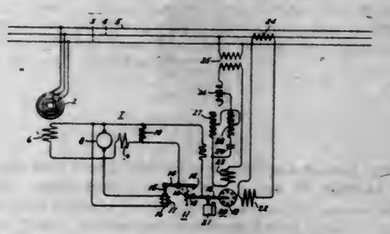
1. The method of welding together two metal structures having different melting points which comprises superimposing said structures in powdered form one upon the other, applying pressure thereto and simultaneously pressing and sintering each of said compositions.

1,896,854. APPARATUS FOR MAKING HARD METAL COMPOSITIONS. GEORGE F. TAYLOR, Niskayuna, N. Y., assignor to General Electric Company, a Corporation of New York. Original application filed June 19, 1930, Serial No. 462,868. Divided and this application filed July 7, 1931. Serial No. 549,150. 9 Claims. (Cl. 13—23.)



1. In combination, an evacuated receptacle having a member provided with a depending stem, flexible means connecting said member and receptacle, an insulating tube adapted to contain powdered material positioned in said receptacle, means whereby said powdered material may be compressed by said stem, and means for simultaneously heating the powdered material to an elevated temperature whereby the powdered material may be formed into a compact mass.

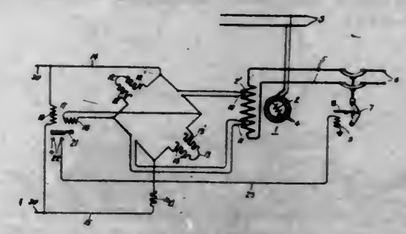
1,896,855. ELECTRICAL REGULATOR. LOUIS W. THOMPSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 7, 1930. Serial No. 459,776. 13 Claims. (Cl. 172—246.)



2. In a power factor regulator, a control element consisting of a movably mounted inductor armature member, a current winding whose axis intersects said armature member, and a voltage winding whose axis intersects said armature member at an angle different from the angle of intersection of the axis of said current winding and said armature.

12. Adjusting means for a power factor regulator having a two winding induction motor power factor responsive element comprising a variable inductive reactance, a variable resistance and a capacitance in series with one of the windings of said element and a second variable resistance in parallel with said first mentioned variable resistance and said capacitance.

1,896,856. TEMPERATURE RELAY. OLIVER C. TRAVER, Penfield, Upper Darby, Pa., assignor to General Electric Company, a Corporation of New York. Filed May 1, 1930. Serial No. 449,063. 13 Claims. (Cl. 175—294.)

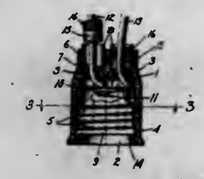


1. In an electrical system including an electrical translating device, means for controlling said device in response to the variation of the temperature of the device from the ambient temperature, comprising a plurality of resistance elements responsive to the temperature of the device, a plurality of resistors responsive to the ambient temperature and control means energised in accordance with the variations of the resistance of said resistance elements and said resistors.

1,896,857. LAMP SOCKET. OTTO H. VAN AMBURG, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed Dec. 4, 1928. Serial No. 323,666. 3 Claims. (Cl. 173—358.)

2. A weatherproof socket comprising a thimble-shaped outer shell of insulation having a contact-receiving recess therein with an annular groove provided adjacent the open end thereof, a metal screw shell contact having a continuous bell-shaped open end adapted to snap with a

tight fit into said groove upon said contact being forced longitudinally into said recess and the closed end of said outer shell being provided with line wire apertures and



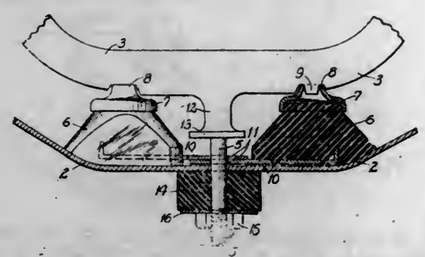
packing glands disposed respectively about said apertures and adapted to make watertight joints about the lead wires.

1,896,858. PROCESS FOR WEIGHTING TEXTILE FIBERS AND PRODUCT OBTAINED THEREBY. FRIEDRICH W. WEBER, Hackensack, N. J., assignor to Maywood Chemical Works, Maywood, N. J., a Corporation of New Jersey. Filed Feb. 3, 1930. Serial No. 425,707. 24 Claims. (Cl. 8—13.)

1. The process of weighting textile fibers, said process consisting in acting upon a weighting metal salt solution with the compound of a rare earth metal capable of combining with the acid component of aforesaid mteal salt thereby obtaining a practically clear solution of the reaction products, passing the fiber through the solution of the reaction products, washing the fiber thus treated with water, and then passing the fiber through the solution of a salt capable of forming an insoluble salt with each of the metals introduced into the fiber.

18. As a base for the weighting of both natural and artificial silk, an aqueous solution of a basic tin chloride and of a basic rare earth metal chloride.

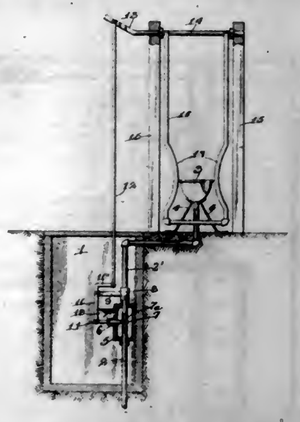
1,896,859. FRONT MOTOR MOUNTING. ERNEST L. WYLIE and EDWARD H. MOHME, St. Louis County, Mo. Filed July 9, 1932. Serial No. 621,638. 4 Claims. (Cl. 248—14.2.)



1. A pair of front motor supports each of which comprises a block of resilient material, a lug receiving member mounted on the upper end of said block, and a metal member secured to said block near its opposite end and projecting from the inner side thereof, said member having a holding means provided at its outer end.

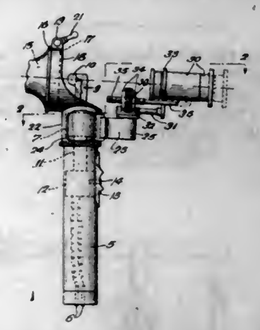
1,896,860. CONTROLLING MECHANISM FOR ANIMAL WATERING TROUGHS. ERICH BEYER, Chicago, Ill. Filed July 17, 1930. Serial No. 468,652. 2 Claims. (Cl. 119—75.)

1. In a device of the class described, a drinking receptacle, a supply pipe leading thereto, a valve for controlling the supply of fluid through said trough, a bell crank mounted adjacent said valve and having one end connected thereto, means for retaining said valve in closed position, a movable rod connected to the other end of said bell crank, and a movable yoke adjacent the receptacle having operative connection with said movable rod and adapted



to be engaged by an animal nearing the receptacle for moving said valve to an open position against said retaining means.

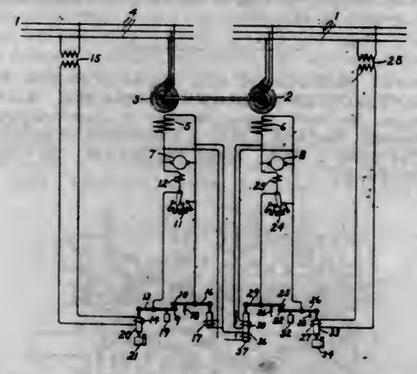
1,896,861. ILLUMINATED TELESCOPE FOR INSTRUMENTS. WILLIAM J. CAMERON, Chicago, Ill. Filed May 4, 1931. Serial No. 534,801. 2 Claims. (Cl. 128—3.)



1. A device of the kind described comprsing a support, a tool extending laterally from an end thereof, a lamp coacting with said tool and support, a bracket carried by said support, an arm mounted on and extending from said bracket and capable of swinging movement independent thereof, a telescope supported by said swinging arm and normally alined with the axis of said tool, spaced ears on said arm, a rod having a threaded portion that enters said ears and has its opposite end connected to said telescope, and a nut on the rod between said ears, whereby the rotation of said nut moves the rod longitudinally to adjust and focus said telescope.

1,896,862. REGULATING SYSTEM. ROBERT M. CAROTHERS and LOUIS W. THOMPSON, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,828. 10 Claims. (Cl. 172—281.)

1. In combination, a generator mechanically coupled to a synchronous motor, automatic means for varying the field excitation of the generator so as to maintain substantially constant terminal voltage regardless of the load on said generator, and means responsive to the variations in the field excitation of said generator for causing corresponding variations in the field excitation of said synchrnous motor.



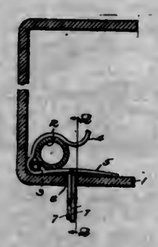
9. In combination, a power supply circuit, a synchronous motor energized thereby, a load device operated by said motor, a regulator responsive to an operating condition of said motor for maintaining an electrical condition of said motor substantially constant, and means operative in accordance with a function of the power demand of said load device for continuously modifying the action of said regulator.

1,896,863. WELDED PRESSURE VESSEL. FRED DAVIS, Saugus, Mass., assignor to General Electric Company, a Corporation of New York. Filed June 25, 1931. Serial No. 546,845. 5 Claims. (Cl. 220—67.)



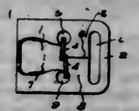
1. A pressure vessel comprising a shell headed at each end by disks, welds between the edges of said disks and the ends of said shell, a reinforcing shell for said first-mentioned shell having end portions inturned over said welds, and welds between said disks and the edges of the inturned end portions of said reinforcing shell.

1,896,864. SNAP FASTENER ATTACHED CLIP MEMBER. CHARLES L. HALL, Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 27, 1931. Serial No. 533,038. 3 Claims. (Cl. 24—73.)



1. A clip device formed from a single piece of sheet metal bent to form a pair of fingers between which may be engaged a member to be held in place by said clip device and a pair of thin, edgewisely movable socket-engaging portions formed from material entirely between the ends of the said pair of fingers for the purposes described.

1,896,865. DETACHABLE CLIP MEMBER. CHARLES L. HALL, Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed June 2, 1931. Serial No. 541,563. 3 Claims. (Cl. 24—73.)



1. A snap fastener device having a pair of spaced finger portions joined at one end and adapted to receive an element between them, snap fastening means formed from material entirely within the periphery of said device and mostly from one of said fingers inwardly from the free end and toward the joined end, said snap fastening means extending outwardly from that finger and comprising a pair of socket-engaging portions arranged to move toward and away from each other, said finger from which said snap fastening means project having a transverse cut spaced inwardly from the free end thereof and having a longitudinal cut extending from between the socket-engaging portions to the transverse cut thereby providing yieldable portions connected to said socket-engaging portions, and said yieldable portions being adapted to bend upon lines extending longitudinally relative to said device thereby permitting the movement of said socket-engaging portions.

1,896,866. HAIR DRESSING APPLIANCE. GEORGE A. HOLMES, Newton, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 22, 1932. Serial No. 588,095. 1 Claim. (Cl. 132—38.)



A hair dressing appliance comprising, in combination, a pair of relatively long, narrow, superposed pieces, one of said pieces being longitudinally extensible relative to the other, fastening members securing said pieces together at predetermined intervals, and one of said fastening members comprising a stud member secured to one of said pieces and a stud-receiving socket member secured to the other of said pieces, said stud-receiving socket having a keyhole slot arranged to receive the stud through the larger portion thereof only when the extensible piece is extended relative to the other piece and to receive and hold the stud against separation by movement axially of the stud when the stud is pulled into the smaller portion of the key-hole slot by contraction of the extensible piece and said stud-receiving member having integral attaching means engaging one of the said pieces to hold it in fixed engagement therewith.

1,896,867. SLIDE FASTENER. GUSTAV JOHNSON, West Roxbury, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed May 26, 1931. Serial No. 540,026. 2 Claims. (Cl. 24—77.)

1. A snap fastener installation comprising, in combination, a stud member having contractible and expansible

socket-engaging means, a socket member having a hollow boss to receive and house the socket-engaging means and provided with an elongated aperture reduced slightly at one end and a socket-carrying medium to which said socket member is attached, said stud member being adapted to enter said boss by a snap action through the largest part



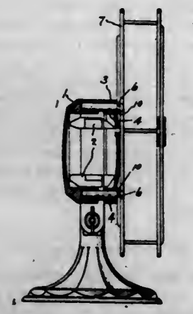
of said aperture and being normally pulled by lateral stress into the reduced end of said aperture to prevent accidental separation of the fastener member when in use and attaching means formed integral with one of said fastener members and formed for sliding attachment thereof to a strap.

1,896,868. WEARING APPAREL AND SNAP FASTENER THEREFOR. ARTHUR W. KIMBELL, Newton Center, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 1, 1931. Serial No. 554,436. 2 Claims. (Cl. 24—208.)



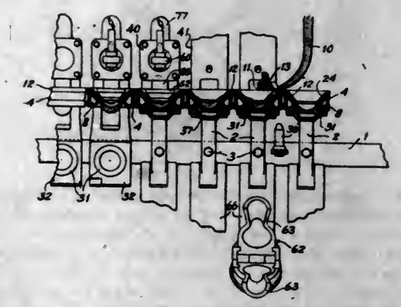
2. A snap fastener member installation comprising, in combination, a carrying medium, a snap fastener member, attaching means comprising a part located at that side of the carrying medium opposite the side at which the fastener member is located and means passing through the carrying medium and securing the said part and fastener member to the carrying medium, said part presenting, when attached, a smooth substantially continuous surface throughout which is substantially flush with the surface of the carrying medium and a vulcanized covering material covering that side of the carrying medium at which the said part is located and vulcanized thereto thereby to conceal said part while being supported by the smooth surface of the said part and attaching means during the vulcanizing process in such a manner as to prevent objectionable irregularities in the surface of the vulcanized material.

1,896,869. ELECTRIC FAN. EVERETT P. LARSH, Vandalia, Ohio assignor to The Master Electric Company, Dayton, Ohio, a Corporation of Ohio. Filed July 18, 1931. Serial No. 551,717. 9 Claims. (Cl. 230—275.)



1. In a fan having a housing including a cover, an electric motor mounted in said housing, and a fan driven by said motor characterized by a plurality of studs fixedly carried by said housing and passing through apertures in said cover, said studs having a shoulder and a guard provided with supports having U-shaped clasps for snapping under the shoulders of said studs so as to lock the cover in position and support the guard in a fixed relation with respect to said fan.

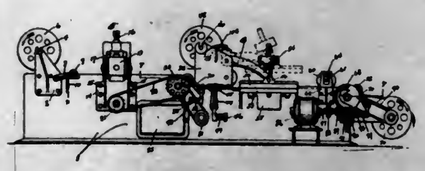
1,896,870. METHOD OF AND APPARATUS FOR THE MANUFACTURE OF BLOWN GLASSWARE. ALGY J. SMITH, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed June 2, 1928. Serial No. 282,388. 20 Claims. (Cl. 49—5.)



1. In the manufacture of hollow glassware, the method which comprises depositing the lower end portion of a downwardly moving stream of molten glass across an orifice in a moving support, severing the deposited glass from the remainder of the stream, anchoring the severed glass to the walls of the orifice, causing a portion of the severed glass to descend through the orifice, and shaping the glass below the orifice into an article of hollow glassware while said glass is still attached to said support.

9. Apparatus for shaping hollow glassware comprising a plurality of supporting members, each having an aperture provided therein, means for moving said supporting members successively through the line of flow of a downwardly moving stream of molten glass from a source of supply so that successive portions of said stream will be laid across the apertures of the successive supporting members, means for severing the glass deposited on each supporting member from the remainder of the stream, and separate means operating initially after the severance for cooperating with each of said supporting members to form the glass deposited thereon into an article of blown glassware while such glass is attached to the supporting member.

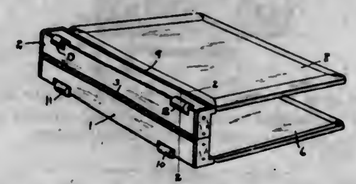
1,896,871. FILM SPLICING MACHINE. EARL I. SPONABLE, New York, N. Y., assignor to Fox Case Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 27, 1929. Serial No. 343,184. 7 Claims. (Cl. 154—42.)



1. In a device of the class described, a frame, a reel rotatably mounted on the frame, a film on the reel, a cutter mounted on the frame, means for moving the film past the cutter whereby the film will be divided longitudinally into two parts, a second reel mounted on the frame, a film on the second reel, a cement receptacle mounted on the

frame, cement in the cement receptacle, means for moving one part of the first named film and the second named film in juxtaposition past the cement receptacle, means for placing cement upon the adjacent edges of the two last mentioned films, means for exerting pressure upon the edges of the films having cement thereon whereby the two films will be joined together, a third reel on the frame, and means for winding the joined film on the last named reel.

1,896,872. LOOSE LEAF BINDER. PAUL O. UNGER, Syracuse, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed Nov. 1, 1929. Serial No. 404,044. 3 Claims. (Cl. 129—17.)



1. In a loose leaf binder, a pair of elongated back members having angular outer corners at the rear, hinge means connecting the inner edges of said back members, leaf-holding members carried by said back members and movable toward and from each other about said hinge means, each of said back members having an opening in its angular outer corner, rods mounted in said back members and extending across said openings, and a roller mounted on each of said rods and projecting rearwardly from the rear wall of its respective back member and laterally from the side wall of its respective back member, so that in any position of movement of said back members about said hinge means, the back members of the binder will rest on said rollers to facilitate opening and closing of the book.

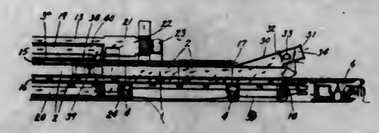
1,896,873. SEPARABLE SNAP FASTENER. PRESTON UPHAM, Brookline, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 19, 1931. Serial No 523,732. 4 Claims. (Cl. 24—216.)



1. A snap fastener member having means for cooperative separable snap fastening engagement with another snap fastener member, receiving and clenching means provided as an integral part of the fastener member whereby it may upset and attach suitable means to attach said snap fastener member to a suitable carrying medium and integral bendable attaching means provided at the outer periphery of the fastener member whereby a cap may be secured thereto by upsetting the bendable attaching means in the cap thereby to provide a finished appearance to one face of the fastener member.

1,896,874. GLASSWARE ANNEALING LEER AND DRIFT CONTROLLING APPARATUS THEREFOR. HAROLD A. WADMAN, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Dec. 27, 1930. Serial No. 505,017. 5 Claims. (Cl. 49—47.)

1. Apparatus for annealing glassware, comprising an elongate tunnel, means for conveying articles of glassware therethrough, means disposed adjacent to the exit end of said tunnel for positively blowing a current of atmospheric air into and along said tunnel in a direction generally counter-current to the movement of the glassware, independent means for positively withdrawing tunnel atmosphere therefrom having communication with the tunnel between the entrance end thereof and that portion of the tunnel at which the air is introduced by



the last named means, and automatic means responsive to gaseous flow longitudinally of the tunnel at a point therein at which it is desired to control such flow for balancing and controlling the relative amounts of gaseous media blown into and withdrawn from the tunnel to control the flow at the index point as desired.

1,896,875. UPHOLSTERY INSTALLATION AND FASTENER ELEMENT FOR USE THEREWITH. ROLLO F. WALTERS, Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed July 24, 1924. Serial No. 727,956. 6 Claims. (Cl. 45—138.)



1. A reinforcing fastener strip for an upholstered part comprising a single sheet of metal presenting fastening means for engagement with cooperating separable fastening means located upon the part to be covered by the upholstered part, a plurality of prongs for securing the reinforcing strip to the backing of the upholstered part and a flap portion adapted to be bent over the edge of the backing and against the opposite face thereof, thereby to reinforce the edge of the backing.

5. An upholstered part including a generally stiff backing, a reinforcing strip secured to the edge of said backing to protect and stiffen said edge, and a stud member formed from the material of said strip and presented for engagement with a suitable socket presented by a part to which the upholstered part is to be secured.

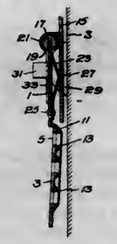
1,896,876. PROCESS OF RECOVERING MERCURY. HARRY G. WILDMAN, Westmount, Quebec, Canada, assignor of one-half to Carl H. Fowler, New York, N. Y. Filed Nov. 21, 1931. Serial No. 576,614. 4 Claims. (Cl. 75—22.)

1. The method of recovering mercury from cinnabar ores, which comprises dissolving the cinnabar from the ore with sodium sulfide to form a soluble double salt of mercuric sulfide and sodium sulfide, acidulating the solution with sulfur dioxide to precipitate mercuric sulfide, treating the precipitated mercuric sulfide with oxygen to produce metallic mercury with the evolution of sulfur dioxide, and using such sulfur dioxide for precipitating more mercuric sulfide from a subsequent batch.

1,896,877. STENCIL DEVICE. OLIVER P. WOLFE, Jr., Boston, Mass., assignor of one-half to Richard C. Mottu, Baltimore, Md. Filed Jan. 11, 1932. Serial No. 585,961. 10 Claims. (Cl. 101—128.)

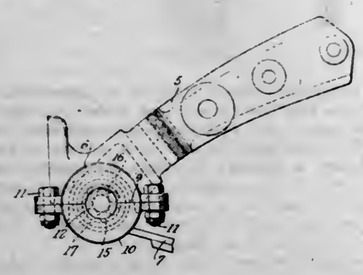
6. In a device of the character described, a stencil comprising a plate-like part formed with an opening corresponding to the character to be stenciled, a bead of resilient non-absorbent material carried by said plate-like part

and surrounding said opening, said bead formed with a line like edge for contacting with the surface on which said character is to be formed, a support, readily detachable means for hingedly connecting said plate-like part



to said support for movement toward and away from said surface, and resilient means cooperating with said plate-like part operative to urge said edge of said bead normally out of contact with said surface.

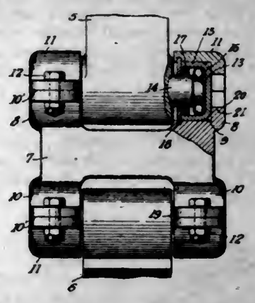
1,896,878. SPRING END CONNECTION. FRED J. BECHERT, Stamford, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Nov. 3, 1928. Serial No. 316,908. 1 Claim. (Cl. 267—54.)



In a spring connection, a frame member having spaced apart bosses thereon, each of said bosses having a half bearing recess for receiving a bearing raceway, cover cap means secured to said bosses and having half bearing recesses complementary to the first mentioned bearing recesses, a bearing raceway held between each pair of complementary recesses, bearing raceway means interposed between said first mentioned raceways, anti-friction bearing members interposed between each pair of complementary raceways, and means at the outer ends of each of said bearing recesses including means carried by said bosses and said cover cap means for supporting the raceways in said recesses against outward displacement.

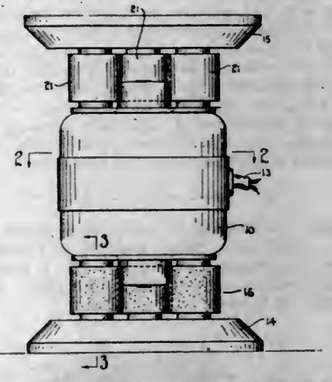
1,896,879. SPRING END CONNECTION. FRED J. BECHERT, Stamford, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Nov. 3, 1928. Serial No. 316,910. 2 Claims. (Cl. 267—54.)

1. In an antifriction spring shackle construction, bearing raceway means to be carried by a frame, bearing raceway means to be carried by a spring, antifriction bearing members coacting with said raceway means to be carried by a spring and frame, a rigid shackle member having antifriction bearing recesses at the ends thereof for receiving said bearing raceway means, two of said recesses being arranged at each end of said shackle member, said recesses at one end of said shackle members opening oppositely to the recesses at the other end thereof, said recesses being substantially semicircular in section, cover members for retaining said antifriction bearing members assembled with said rigid shackle member and means at



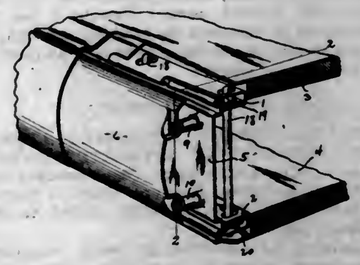
the outer ends of said recesses in said shackle member and cover members to engage said bearing raceway means to hold the same against outward displacement.

1,896,880. DEMONSTRATING DEVICE. ROY W. BROWN, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 27, 1931. Serial No. 553,824. 6 Claims. (Cl. 35—16.)



1. A demonstrating device comprising a vibratory body, and a rigid and a resilient support secured to said body upon which it may be alternatively positioned.

1,896,881. LOOSE LEAF BINDER. JAMES COOPER, Solvay, N. Y., assignor to Hall & McCheseney, Inc., Syracuse, N. Y., a Corporation of New York. Filed Nov. 20, 1930. Serial No. 496,970. 4 Claims. (Cl. 129—28.)



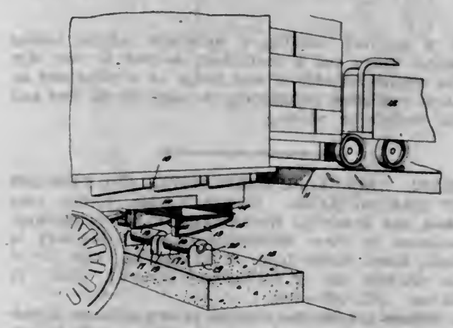
1. In a loose leaf binder, a back member, a housing hinged to each longitudinal edge of the back member, opposed covers hinged to the back member, a plurality of posts connecting the housings, and a supplementary back member rigidly held in spaced relation to the first named back member.

1,896,882. POISON SPREADER. JAMES M. BUTLER, Blaney, S. C. Filed Aug. 22, 1931. Serial No. 558,787. 2 Claims. (Cl. 299—101.)



2. A poison spreader comprising spaced containers open at the bottom and at the top, means for suspending the containers from the operator's shoulders to overhang spaced rows of plants, fabric brushes hanging downwardly from each container and having converging portions in the containers forming fabric troughs, and sponges in the troughs.

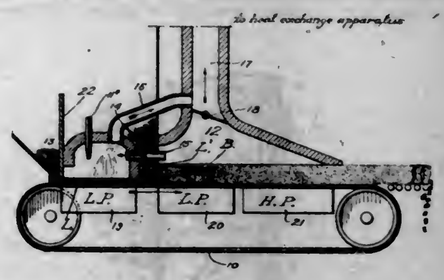
1,896,883. AUTOMATIC LEVELING DEVICE FOR VEHICLES. ABNER F. CALLISON, New York, N. Y. Filed Mar. 16, 1932. Serial No. 599,289. 6 Claims. (Cl. 214—38.)



1. In combination with a load-carrying vehicle and a freight platform, a pair of cam members mounted under the rear end of the vehicle frame; and a pair of spaced, horizontal rollers supported above the ground level independently of the platform and adapted to co-operate with said cam members when the vehicle is backed toward the platform automatically to bring the floor of the vehicle to a level with the platform.

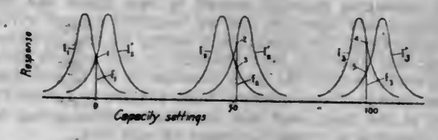
1,896,884. METHOD OF PRODUCING LIGHT WEIGHT AGGREGATES FROM BREAKER WASTE AND THE LIKE. CLARENCE E. COOPER and HENRY S. GILBERTSON, Lansford, Pa., assignors to Lehigh Navigation Coal Company, Lansford, Pa., a Corporation of Pennsylvania. Filed Nov. 6, 1931. Serial No. 573,507. 1 Claim. (Cl. 25—156.)

The method of producing light weight aggregates by burning carbonaceous material having a high ash content consisting in forming a bed of successive layers, igniting the upper surface of each layer and after application of the final layer conducting the products of combustion of the bed over the bed to initiate and promote



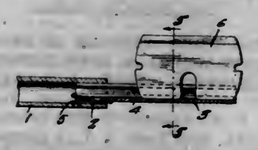
combustion of the upper surface of the final layer of the bed and over the upper surface of a previously laid layer of the bed to initiate and promote combustion thereof.

1,896,885. APPARATUS FOR CORRECTING VARIABLE CONDENSERS. NOEL DEISCH, Washington, D. C. Filed Sept. 5, 1931. Serial No. 561,490. 26 Claims. (Cl. 90—20.)



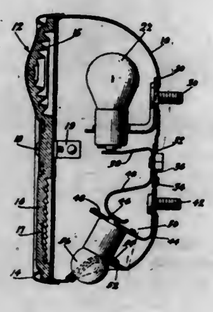
6. A machine for correcting the aberrations of a condenser to change the original capacity curve of said condenser into a curve of different and predetermined form, said condenser comprising overlapping plates movable into different positions of overlap to change the capacity of said condenser, said machine including means to determine the capacity of said condenser at different positions of overlap corresponding to different abscissal points of said original capacity curve, means to detect a difference between said capacity determinations and the capacity reading of the desired curve at similar abscissal points, and means controlled by said difference detecting means to effect stable changes in the capacity of said condenser at positions of overlap corresponding to the positions at which said capacity determinations were made, to reform the capacity curve of the condenser.

1,896,886. SAFETY-RAZOR. ARTHUR R. DOUGLASS, Chariton, Iowa. Filed Jan. 18, 1932. Serial No. 587,421. 1 Claim. (Cl. 30—25.)



A razor comprising a holder triangular in cross section having one corner open throughout the length of the holder and the remaining corners closed, a rod folded at a point midway between its length and having opposite side portions fitting within the closed corner portions of the holder, the arrangement being such that the edge of a razor blade may be clamped between the opposite side portions of the rod and the blade snugly received in the open corner of the holder.

1,896,887. STOP AND TAIL LAMP. ROBERT N. FALGE and ALBERT R. LEWELLEN, Detroit, Mich., and CLARENCE A. MICHEL, Anderson, Ind. Filed Mar. 12, 1932. Serial No. 598,366. 9 Claims. (Cl. 177—329.)



1. In a lamp a housing having an aperture therein, a spring finger secured within the housing having an aperture in its free end alined with the aperture in the housing, insulating material carried by said finger and surrounding said aperture, and an electrical contact spring secured within the housing and having its free end overlying said aperture, said aperture in the housing being adapted to receive the glass envelope of an incandescent lamp, said insulated aperture being adapted to receive the base of the lamp, and said electrical contact spring being arranged to engage a contact on said base.

1,896,888. NITRIDED ARTICLE OF FERROUS CHARACTER CONTAINING A CASE-TOUGHENING ELEMENT COMBINED WITH A BALANCED CASE-FORMING ELEMENT. HERBERT JAMES FRENCH, Elizabest, N. J., assignor to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed June 12, 1931. Serial No. 544,044. 3 Claims. (Cl. 148—31.)

1. An article of manufacture comprising a ferrous body having a tough nitrided case, as nitrided, and containing a plurality of case-toughening elements of the group comprising nickel and molybdenum balanced with a plurality of case-forming elements of the group comprising chromium, aluminum and vanadium, the ratio of said case-toughening elements to said case-forming elements being not less than about 0.8 : 1 and not greater than about 5 : 1, and the case forming elements being present to an extent of more than about 1.5% and less than about 4% and the case-toughening element being present to an extent less than about 6%.

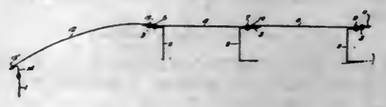
1,896,889. NITRIDED ARTICLE OF FERROUS CHARACTER CONTAINING A CASE-TOUGHENING ELEMENT COMBINED WITH A BALANCED CASE-FORMING ELEMENT. HERBERT JAMES FRENCH, Elizabeth, N. J., assignor to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Original application filed June 12, 1931, Serial No. 544,044. Divided and this application filed Sept. 6, 1932. Serial No. 631,894. 3 Claims. (Cl. 148—31.)

1. An article of manufacture comprising a ferrous body having a tough nitrided case, as nitrided, and containing nickel acting as a case-toughening element combined with at least one balanced case-forming element of the group consisting of chromium and vanadium, the ratio of said case-toughening element to said case-forming element being not less than about 0.8 : 1 and not greater than about 5 : 1, and the case forming element being present to an extent of more than about 1.5% and less than about 4% and the case-toughening element being present to an extent less than about 6%.

1,896,890. NITRIDED ARTICLE OF FERROUS CHARACTER CONTAINING A CASE-TOUGHENING ELEMENT COMBINED WITH A BALANCED CASE-FORMING ELEMENT. HERBERT JAMES FRENCH, Elizabeth, N. J., assignor to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Original application filed June 12, 1931, Serial No. 544,044. Divided and this application filed Sept. 6. 1932. Serial No. 631,895. 3 Claims. (Cl. 148—31.)

1. An article of manufacture comprising a ferrous body having a tough nitrided case, as nitrided, and containing nickel acting as a case-toughening element combined with aluminum acting as a balauced case-forming element, the ratio of said case-toughening element to said case-forming element being not less than about 0.8 : 1 and not greater than about 5 : 1, and the case-forming element being present to an extent of more than about 1.5% and less than about 4% and the case-toughening element being present to an extent less than about 6%.

1,896,891. METAL CAR ROOF. CHARLES E. GIBBS and ALDEN B. LAWSON, Baltimore, Md. Filed Mar. 22, 1929. Serial No. 349,106. 11 Claims. (Cl. 108—5.4.)



11. A car roof including a transverse car-line having a lateral flange and a roof sheet secured at one edge to the contiguous edge of said flange by riveting and an adjacent roof sheet overlapping the edge of the first and united thereto by welding.

1,896,892. CELLULOSE DERIVATIVES AND PROCESS OF MAKING SAME. ROBERT HALLER, Riehen near Basel, and ALPHONSE HECKENDORN, Basel, Switzerland, assignors to Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Jan. 23, 1930, Serial No. 422,950, and in Switzerland Apr. 11, 1929. 11 Claims. (Cl. 260—100.)

1. Process for the manufacture of new cellulose derivatives, consisting in treating alkali cellulose with heterocyclic compounds which contain at least once the

$$-C(=N)-\text{halogen}$$

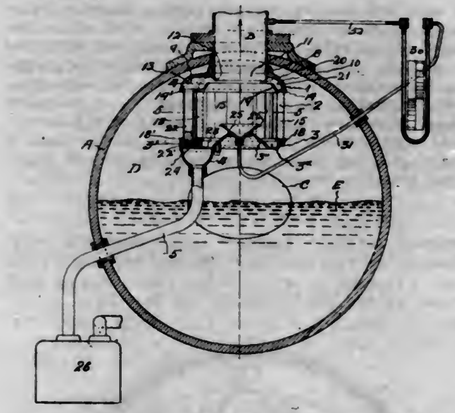
group.

1,896,893. GEAR SHIFTING DEVICE. GUY M. HARTSOCK, Detroit, Mich., assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind., a Corporation of Delaware. Filed Apr. 20, 1931. Serial No. 531,433. 6 Claims. (Cl. 74—39.)

1. A gear shift lever comprising, a stepped tubular outer member, an inner member axially movable within said outer member, a knob carried by one end of said inner member slidable on said outer member, a stop member carried by the other end of said inner member slidable in said outer member, and guide means between said inner member and said outer member comprising, a non-metallic washer surrounding said inner member and bearing against said outer member, and metallic washers surrounding said inner member and bearing against said non-metallic washer retained in position by protuberances struck out of said inner member.



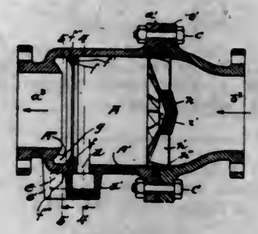
1,896,894. CENTRIFUGAL FIXTURE. CHARLES GILBERT HAWLEY, Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 2, 1927. Serial No. 217,133. 16 Claims. (Cl. 183—89.)



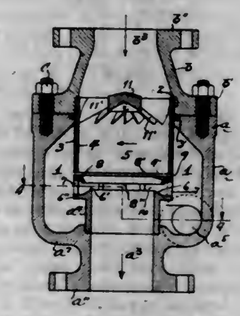
2. A centrifugal fixture for unburdening fluids, comprising in combination, a member containing an outlet orifice and having a pressure-effecting lip in advance of said orifice, an accumulator co-axial with and converging toward said lip but of slightly larger internal diameter and separated therefrom, means which cause the burdened fluid to approach said accumulator, lip and orifice vertically, the space between said lip and accumulator being formed to gather and eject burden received from the periphery of the vortex, other burden eject means at the distant end of the fixture relative to said orifice and reaction means which co-act with said eject means and exclude burden from the axial portion of the vortex.

1,896,895. DUST SEPARATOR. CHARLES GILBERT HAWLEY, Chicago, Ill. Filed Mar. 1, 1932. Serial No. 596,139. 2 Claims. (Cl. 183—90.)

1. A line separator of the fixed centrifugal type, comprising a two-part casing containing a cylindrical separating chamber, in combination with a whirl-promoting tuyère fixed in and forming the inlet of said chamber, the other end of said chamber containing a central outlet of less internal diameter than said chamber, two eject passages adjacent said outlet and leading tangentially from said chamber at different distances from said outlet, a circumferential rib shouldered inwardly from the wall of said chamber and positioned to direct substances into the first of said passages, and an angled lip forming the inner margin of said outlet and with said rib completing a race which delivers stray substances to the second of said passages.



1,896,896. STEAM SEPARATOR. CHARLES GILBERT HAWLEY, Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 5, 1929. Serial No. 337,597. 5 Claims. (Cl. 183—92.)

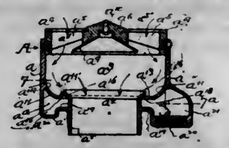


2. A separator of the fixed centrifugal type, comprising a cylindrical separating chamber, in combination with a whirl-promoting tuyère co-axially fixed in and forming the inlet of said chamber, the other end of said chamber containing a central outlet of less internal diameter than said chamber, a circumferential slot leading laterally from said chamber adjacent said outlet, said chamber having a shoulder ring which converges radially toward said outlet between the same and said slot, and a reception chamber enclosing said slot and itself having an eject nozzle.

1,896,897. CENTRIFUGAL STEAM CONDITIONER. CHARLES GILBERT HAWLEY, Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 31, 1931. Serial No. 512,721. 9 Claims. (Cl. 183—92.)

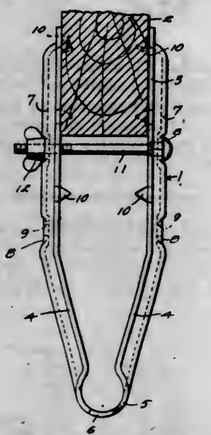
1. A non-rotative centrifugal fixture adapted to separate entrained substances from fluid moving therethrough and comprising a separating bowl which is open at the top and has in its lower part a drain and a centrally positioned outlet element, the latter rising from the bottom

of the bowl, in combination with a whirl-promoting tuyère occupying said top of the bowl and forming its fluid inlet, and, said bowl containing an inwardly and down-



wardly pitched whirl-damping flange that is positioned above its bottom and which terminates short of and below the top of said outlet element.

1,896,898. SUPPORTING DEVICE. CARL E. HILDEBRAND, Cleveland, Ohio. Filed June 30, 1931. Serial No. 547,965. 2 Claims. (Cl. 248—31.)



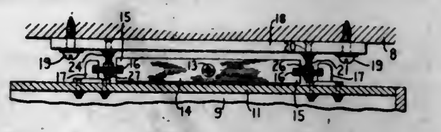
1. A device of the character described, comprising a body of elongated substantially U-shaped design, each of the side portions of the body being relatively broad and substantially straight throughout the major portion of their lengths and merging into converging portions at their inner ends, said converging portions being joined at their adjacent ends by a circular yoke portion, a reinforcing rib extending longitudinally throughout the side members of the body upon their outer faces, said reinforcing ribs having transversely aligned apertures therethrough, spur elements struck from each of said side portions at each side of the rib thereof and projecting inwardly toward the opposite portion, and means connecting said side portions and passing through said apertures, for drawing the side portions together into gripping relation with a body interposed therebetween.

1,896,899. PREPARATION SUITABLE AS WETTING AGENT. WOLFGANG JAECK and JOSEPH LANG, Basel, Switzerland, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Mar. 18, 1931, Serial No. 522,517, and in Switzerland Mar. 19, 1930. 5 Claims. (Cl. 252—1.)

1. An aqueous solution consisting of an alkali salt of a sulfonic acid having a capacity for inducing wetting, water, and a polyhydric alcohol, this solution containing at least 20 per cent. of the alkali salt of the said sulfonic acid.

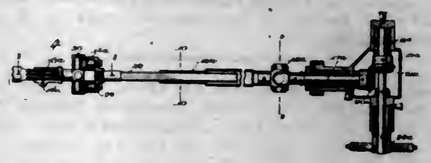
5. An aqueous solution consisting of an alkali salt of a condensation product of naphthalene-β-sulfonic acid, benzoin and isopropylalcohol, water, and thiodiglycol, this solution containing at least 20 per cent. of the alkali salt of a condensation product of naphthalene-β-sulphonic acid, benzoin and isopropylalcohol.

1,896,900. ELEVATOR GUIDE MEANS. LEROY H. KIESLING, Brooklyn, N. Y. Filed June 15, 1931. Serial No. 544,333. 8 Claims. (Cl. 187—95.)



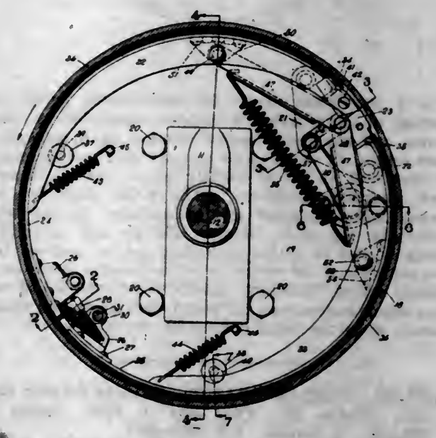
1. In combination with an elevator car and its counterweight movable in a shaft, a pair of vertical guide rails, a series of horizontal cross bars attached in the shaft, threaded posts outstanding from the cross bars, and nuts adjustable on each post holding a guide rail between them; the car and counterweight each having running means engaging both guide rails.

1,896,901. TRACTOR POWER COUPLING MECHANISM. EDGAR KNAPP and CARL G. ALLGRUNN, Middleport, N. Y., assignors to Niagara Sprayer Company, Middleport, N. Y., a Corporation. Filed Dec. 2, 1927. Serial No. 237,203. 2 Claims. (Cl. 64—91.)



1. In a device of the class described, a slip-joint transmission shaft, comprising a tubular shaft internally squared throughout a portion of its length and having its bore adjacent said squared portion of a diameter greater than the maximum diameter of the squared portion, an externally squared shaft slidably fitted in said internally squared portion and adapted to extend into and be contained within said larger bore of the tubular shaft a distance not less than the normal slip of said shafts during operation thereof.

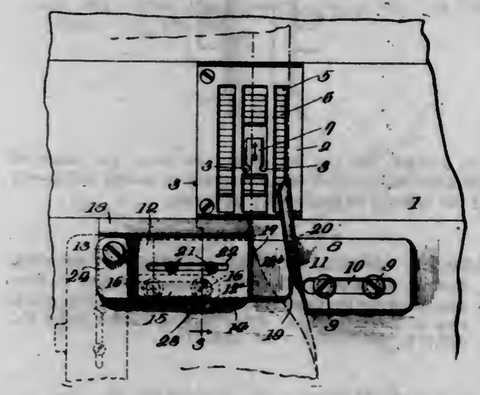
1,896,902. BRAKE. ROBERT F. KOHR, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed May 10, 1928. Serial No. 276,636. 6 Claims. (Cl. 188—78.)



1. In a vehicle brake, a rotatable drum, a free floating brake element engageable therewith comprising, a pair of

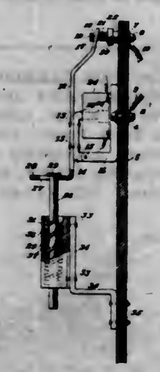
semi-circular friction members having rigid radial reinforcements for the greater portion of their lengths and resilient portions for the remainder of their lengths, threaded brackets secured to said flexible portions, and screw means having oppositely threaded ends threaded into said brackets to rigidly interconnect said friction members and to adjust the space between the same.

1,896,903. FABRIC GUIDING MEANS FOR SEWING MACHINES. FRANK A. KUCERA, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 25, 1932. Serial No. 595,187. 6 Claims. (Cl. 112—136.)



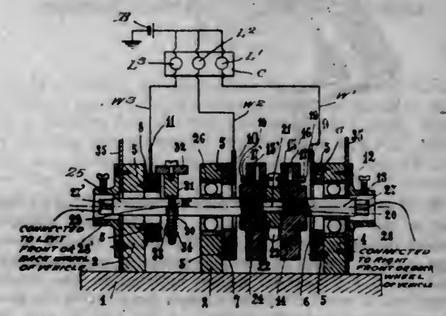
1. A fabric guiding means for forming a hem comprising an edge guiding and folding member located at one side of the stitching line, a fabric supporting member extending across the stitching line and cooperating with said edge guiding and folding member for underfolding the edge portion of the fabric section, a supporting plate on which said fabric supporting member is pivotally mounted whereby the same may be swung for withdrawing said fabric supporting plate from the hem fold to permit the completing of the stitching of the hem, said supporting plate serving as an edge guide for the folded under edge of the fabric section, and said fabric supporting member being formed in sections whereby the position of the outer end thereof may be adjusted relative to its pivotal support.

1,896,904. TIME LAG DEVICE. HARRIS L. LAVEN, Brooklyn, N. Y. Filed June 24, 1931. Serial No. 546,577. 1 Claim. (Cl. 188—94.)



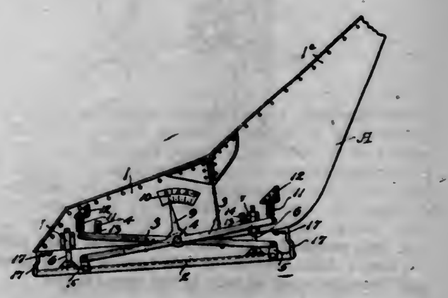
The combination of a vertically swinging pivotally supported member adapted for controlling an electric switch, an outturned slotted ear on said member, a bracket fixedly mounted below said member and having a vertical extension directed toward said member, an internally threaded nut carried by said bracket, a threaded bolt engaged in said nut and passed upwardly through the slotted ear, the threads of said bolt and nut being of wide pitch, antifriction bearings interfitted with the threads of the nut and bolt, and a head on the bolt for positively connecting it with the slotted ear.

1,896,905. AUTOMATIC SIGNALING DEVICE FOR MOTOR VEHICLES. FERNAND HENRI ALBERT LECOLLE, Vincennes, France. Filed Feb. 14, 1929, Serial No. 339,848, and in France Feb. 16, 1928. 6 Claims. (Cl. 177—339.)



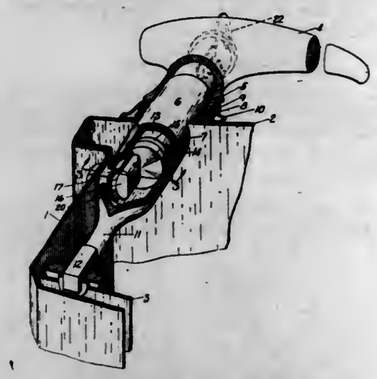
1. A signaling device for motor vehicles, comprising two indicating members, signal circuits therefor, a pair of independently rotatable disks adapted to be driven by the wheels of the vehicle, a movable contact on each disk, a fixed contact adapted to be engaged with the movable contact to close one of the signal circuits, and means for actuating each movable contact.

1,896,906. AGGREGATES WEIGHING LOADING SKIP. ERICH H. LICHTENBERG, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Dec. 12, 1928. Serial No. 325,559. 10 Claims. (Cl. 265—68.)



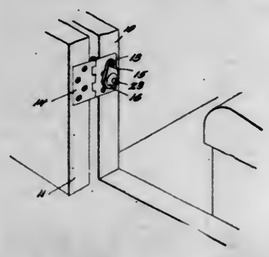
1. In combination, a concrete mixing machine loading skip and a weighing device comprising a pressure member secured to the skip, the weighing device being arranged to engage the ground and to carry the skip when the skip is in charging position, the weighing device being operated incident to the depositing in the skip of aggregates to be weighed, and registering the weight of the said aggregates incident to engagement of the pressure member against the ground.

1,896,907. DOORLATCH. ALEXANDER R. LINDSAY, Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Jan. 30, 1929. Serial No. 336,194. 4 Claims. (Cl. 70—91.)



1. In combination with a door structure having an opening in the edge face thereof, a rotatable latch operating handle including a tubular shell mounted in the side face of said door, a cylindrical member rotatably mounted within said shell, key-operated means inserted in the exposed outer end of said cylindrical member for rotating the same, a member eccentrically formed on the end of said first member opposite to said key-operated means, a locking member supported by said shell transversely of said first member in engagement with said second member whereby rotation thereof in one direction moves said locking member into the opening in the edge face of said door, and a leaf spring supported by said locking member within said tubular shell for retracting said locking member when said second member is turned in the opposite direction.

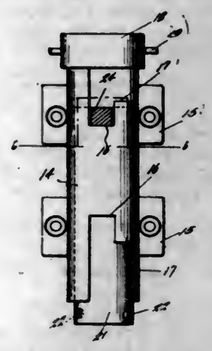
1,896,908. CUSHIONING DEVICE. ROBERT J. LOOCK, Baltimore, Md. Filed Apr. 30, 1930. Serial No. 448,655. 3 Claims. (Cl. 16—86.)



1. In a cushioning device, a flat base of hard rubber or the like, a dome formed on said base, a recess formed in said dome and opening only at the apex thereof.

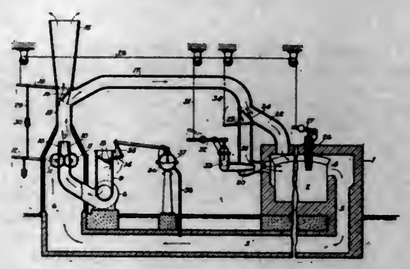
1,896,909. GATE LATCH. PERRY THEODORE MAXWELL, Potosi, Mo. Filed Mar. 16, 1932. Serial No. 599,316. 1 Claim. (Cl. 292—340.)

As a new article of manufacture, a relatively stationary keeper device for use in connection with a gate latch of the class described comprising an open ended cylinder provided with apertured attaching members, and having L-shaped longitudinally alined notches formed at opposite ends defining upper and lower selectively usable keeper recesses, also having its opposite ends apertured, a removable cap selectively usable for either end of said cylinder, a connecting pin co-operable with the apertures



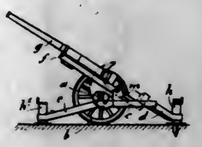
for holding the cap detachably in place, the order of the aforesaid notches being reversed to permit either end of the cylinder to be disposed upwardly.

1,896,910. REGULATION OF HEATING FURNACES. GUSTAV A. MERKT, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 4, 1932. Serial No. 596,777. 22 Claims. (Cl. 236—15.)



1. In a waste gas recirculating system for a heating furnace, an air blast operative for the entrainment and discharge of waste furnace gases, means for diverting a portion of the mixture thus formed of air and furnace gases to the intake of the furnace, to support combustion of the fuel used in said furnace, and means for regulating by the temperature in said furnace the amount of said mixture so diverted.

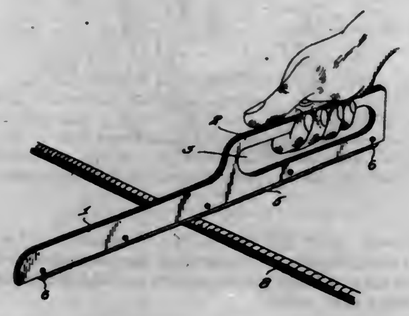
1,896,911. WHEELED GUN CARRIAGE ADAPTED TO BE TRANSFORMED RAPIDLY INTO A GUN CARRIAGE FOR FIRING UPON AIRCRAFT. NICOLAS EMILIEN METHLIN, Paris, France, assignor to Schneider & Cie., Paris, France, a Company of France. Filed Nov. 13, 1931, Serial No. 574,906, and in France June 10, 1931. 8 Claims. (Cl. 89—40.)



1. In a split trail wheeled gun mount of the type adapted to be rapidly transformed for anti-aircraft firing, an annular saddle, transportation means removably

mounted on said saddle, a plurality of trails pivotally connected to said saddle and provided with ground engaging means for supporting said saddle independently of and at substantially the same height as said transportation means, a top carriage for the gun rotatably mounted within said annular saddle and adapted for training through 360°, and a gun supporting slide pivotally mounted on said top carriage, the length of said slide to the rear of its pivot point being less than the distance from said pivot point to the diametrically opposite portion of the interior of said saddle.

1,896,912. CABLE CUTTER. ALBERT L. MORSE, Sanford, Me. Filed Aug. 3, 1931. Serial No. 554,856. 1 Claim. (Cl. 145—31.)



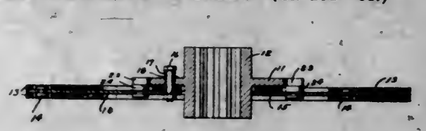
A saw for electricians' use, comprising two similar flat pieces to include a body having a longitudinally disposed widened end which is slotted longitudinally to provide a handle and having one of its edges straight throughout the length thereof, the confronting faces of the pieces, from the straight edge thereof, being grooved longitudinally to provide a pocket for a saw blade whose ends are provided with openings, bolt members passing through the saw and through the openings in the blade and other bolt members also passing through the saw for contacting with the inner and non-toothed edge of the blade and for holding the two-piece body connected, and the handle being disposed directly opposite and in a plane with the saw and being of a length equalling or exceeding one-third of the length of the saw.

1,896,913. TOY. HENRY F. NELSON, Muncie, Ind., assignor to Clay Prosser, Muncie, Ind. Filed July 7, 1931. Serial No. 549,272. 1 Claim. (Cl. 124—14.)



A toy pistol for individually or simultaneously exploding a cap and projecting a pellet or the like, said pistol having the top of its barrel grooved longitudinally and having a cap receiving chamber at the terminal of the groove and a rounded shoulder between the chamber and the groove, a pivotally supported hammer having a tail end, a pivotally supported trigger having an angle end, a spring wound around the pivot of the trigger contacting the angle portion and with the bottom of the pistol for normally swinging the trigger angularly to cause the tail of the hammer to ride over the angle end of the trigger and to be then engaged thereby, an elastic band removably secured on the outer end of the barrel and designed to be stretched and brought over the hammer for holding the tail end thereof in friction engagement with the arm of the trigger and for likewise holding the hammer in cocked position.

1,896,914. CLUTCH. CLYDE R. PATON, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Nov. 3, 1927. Serial No. 230,776. 7 Claims. (Cl. 192—68.)



1. In a clutch, a clutch plate, a hub therefor having movement relative thereto, a circumferential flange on said hub, a friction disc between said flange and plate, stops for limiting the movement between said hub and plate, bolts extending from said flange, and coiled springs surrounding said bolts holding said disc in frictional contact with said flange to dampen said movement between said hub and plate.

1,896,915. GAME OF SKILL. HOWARD J. PEO, Rochester, N. Y. Filed Jan. 5, 1931. Serial No. 506,799. 2 Claims. (Cl. 273—112.)

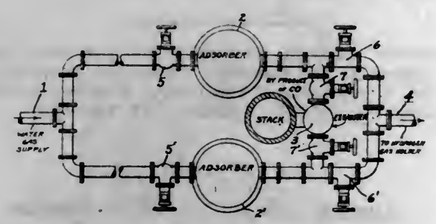


1. A game apparatus comprising a raceway having exit apertures, a ball member adapted to be projected along the race-way and pass through one of said apertures, means for holding the ball in starting position, a bulb member adapted to be pressed by the hand, and a tube connecting said bulb member at the place of starting position of the ball, substantially as set forth.

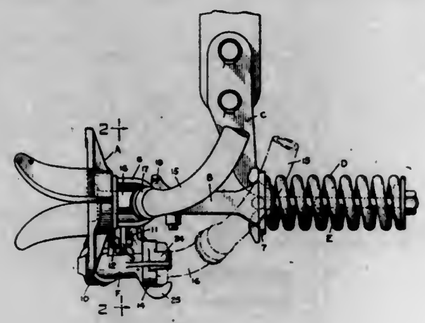
1,896,916. METHOD OF MAKING COMMERCIAL HYDROGEN. GEORGE A. PERLEY, Durham, N. H. Filed Oct. 27, 1928. Serial No. 315,426. 7 Claims. (Cl. 23—211.)

1. The method of producing commercial hydrogen from water gas, which consists in subjecting a current of water gas to the adsorbing action of an adsorbing medium capable of adsorbing the carbon monoxide and carbon dioxide components of such gas while permitting of the free passage therethrough of the hydrogen without adsorption, collecting the hydrogen gas so separated in a receptacle which is temporarily in communication with

said adsorber, then opening up communication between said adsorber and vacuum producing means to exhaust the adsorbed gases from said adsorbing medium and thereby revivifying the adsorbing medium and then again re-establishing communication between the source of water gas supply and said adsorbing medium.



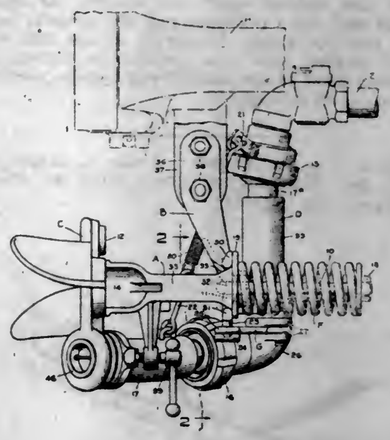
1,896,917. AUTOMATIC TRAIN PIPE CONNECTER. JOSEPH ROBINSON, New York, N. Y. Filed Feb. 26, 1929, Serial No. 342,686. Renewed May 5, 1932. 13 Claims. (Cl. 285—58.)



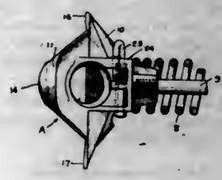
1. In combination with an automatic train pipe coupling head and a support therefor, of a coupling member comprising a tubular shank extending across the longitudinal center line of the connecter and carrying on one side of said center line an ordinary hand hose coupling, and on the opposite side of said center line a seat for receiving a conduit, a conduit on said seat and connected with the train pipe hose, spaced lugs adjacent said seat having portions which embrace one end of said conduit, means for flexibly connecting said hollow shank to said support, and a projection extending laterally away from a lower edge of said support for engaging a lug on said coupling member to hold the member out of contact with said conduit when the parts are not in interchange connection.

1,896,918. AUTOMATIC TRAIN PIPE CONNECTER. JOSEPH ROBINSON, New York, N. Y. Filed Oct. 8, 1929. Serial No. 398,225. 20 Claims. (Cl. 285—58.)

1. An automatic train pipe connecter comprising in combination, a coupling head, a train pipe hose attached to the head, said hose being comparatively stiff, a bracket for supporting the head from the car, means including a spring for yieldingly holding the head in front of the bracket and means movably associated with the bracket and connected to said hose rearwardly of its point of attachment to said head for shifting the hose to the various positions required in service, without overburdening said spring.



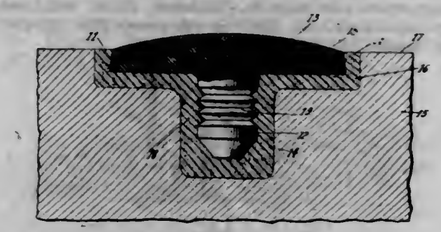
1,896,919. AUTOMATIC TRAIN PIPE CONNECTER. JOSEPH ROBINSON, New York, N. Y. Filed Dec. 23, 1929 Serial No. 416,141. Renewed June 23, 1932. 6 Claims. (Cl. 285—58.)



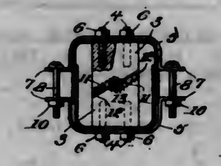
1. An automatic train pipe connecter head comprising a funnel member and a pin member each disposed on the opposite sides of the longitudinal direction of the head, said pin member having a blunt rounded forward end, and said funnel having at the apex thereof a complementary seat or bearing for the pin member of a mating head, these parts being so proportioned and arranged that when they are in engagement mated coupling heads are accurately aligned, a plurality of bearing surfaces on said head arranged adjacent the base of the pin member, said surfaces being vertically disposed with their faces in a plane substantially at right angles to the longitudinal center line of the head and being tapered inwardly toward the center of the coupling head, and means on the rear side of the head for supporting the same.

1,896,920. STREET MARKER. PETER SHAPIRO, New York, N. Y. Filed Jan. 5, 1931. Serial No. 506,588. 1 Claim. (Cl. 94—1.5.)

The combination with a pavement having an opening formed therein and provided with a counter bore at the pavement surface, of an all-rubber marker having a disc-shaped body portion provided with a beveled edge located in said counter bore, a layer of colored rubber vulcanized to said body portion and provided with a beveled edge forming a continuation on the beveled edge of said body portion and located in said counter bore with the upper surface thereof substantially flush with the surface of said pavement, a holding plug formed integrally with the material of said body portion and extending downwardly therefrom into said opening, recesses formed in said plug and said body portion and cementing material molded in said opening and said counter bore around said beveled edge and in said recesses and engaging the walls of said opening for securing said marker in place.



1,896,921. TREE AND WIRE PROTECTOR. JOHN LESTER SMITH, Cobasset, Mass. Filed Feb. 10, 1931. Serial No. 514,895. 1 Claim. (Cl. 173—28.)



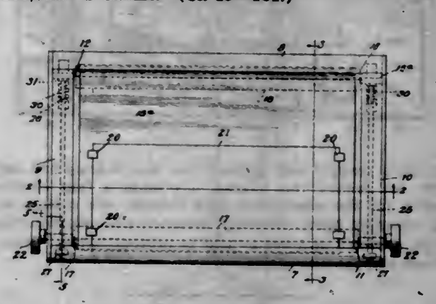
A protector comprising a casing to be positioned about a conductor and including a pair of overlapped sections, means adjustably and detachably connecting the sections of the casing, insulators arranged in oppositely disposed pairs secured to said casing and having their opposing ends cut in V-shaped formation to receive the conductor and cut away at opposite sides of the V-shaped portions to provide inclined faces adapted to permit the insulators to have overlapped relation with each other and thereby permit the insulators to accommodate conductors of different sizes.

1,896,922. APPARATUS FOR FORMING GOLF BALL TEES. RAYMOND V. SWEENY, Brooklyn, N. Y. Filed Nov. 30, 1931. Serial No. 578,121. 5 Claims. (Cl. 140—102.5.)



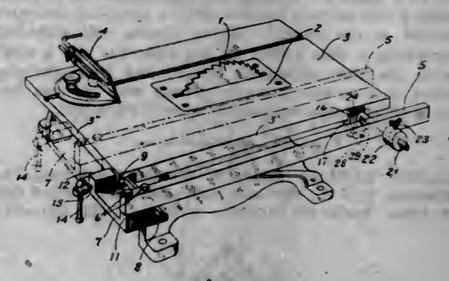
1. A portable device for forming a golf ball tee of the character described, said device including a pair of telescopically interfitted relatively rotatable sections, one of which sections is formed with a longitudinally extending aperture for receiving the shank defining portion of the tee and a radial notch to admit therethrough the ball rest terminal defining portion of the tee, the other section having a substantially non-radial or tangential notch to admit therethrough said latter terminal and cooperative portions of said sections defining a confined annular tunnel within which said latter terminal is fashioned upon relative turning of the sections.

1,896,923. DRAFTING BOARD. HAGOP P. TREVONIAN, Brooklyn, N. Y. Filed July 14, 1931. Serial No. 550,763. 2 Claims. (Cl. 45—131.)



1. A drafting board comprising rollers, a movable endless web mounted on the rollers, one of said rollers being movable to and away from the other roller, and means for holding the movable roller in a desired position, said means comprising nuts fixedly mounted and rotatable rods threadedly engaging the nuts, and springs between the ends of the rods and adapted to exert force against the movable roller.

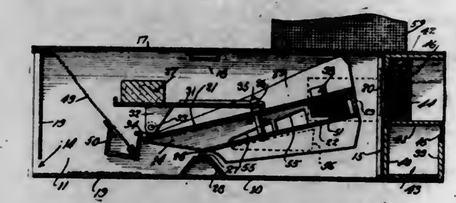
1,896,924. TABLE FOR SAWS OR THE LIKE. CHARLES A. ULRICH, Hartford, Conn. Filed Feb. 1, 1932. Serial No. 590,154. 33 Claims. (Cl. 143—132.)



1. In a power tool, a rotating tool, a table having a guideway perpendicular to the plane of operation of said tool, a work guide adjustable relative to said guideway along one edge of said table and disposed parallel to said plane, supporting means for one end of said guide and adjustable in said guideway and disposable beyond an intersecting edge of said table, and supporting means for the opposite end of said guide extending beyond said intersecting edge of the table and relative to which said guide is adjustable.

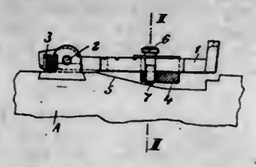
33. In a power saw, a saw blade, a table, extension means for the latter including a guideway on said table and a bracket adjustable in said guideway transversely of said blade along one edge of the table and movable to project one end of said bracket beyond an intersecting edge of the table, a longitudinal gage member secured to said projecting end and movable therewith, and cooperating extension means comprising a gage supporting rod carried by said table and projecting laterally therefrom providing a sliding support for the free end of said gage member, said first mentioned extension means being disposable at will wholly within the limits of the table, and said last mentioned extension means being removable at will.

1,896,925. TRAPPER AND RETAINER FOR BEE SWARMS AND SEPARATOR FOR DRONES AND QUEENS. MATHIAS R. VIKLA, Lonsdale, Minn. Filed Nov. 9, 1931. Serial No. 573,989. 20 Claims. (Cl. 6—7.)



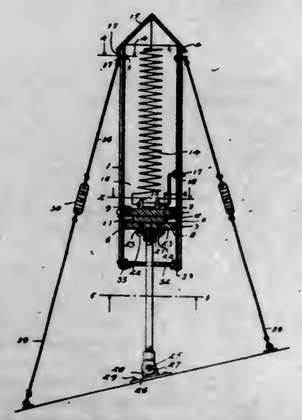
1. In a trapper and retainer for bee swarms and separator for drones and queens, a casing, a trip chamber therein for the passage of bees through the casing, said trip chamber being pivotally mounted and overbalancing in the presence of a bee swarm to prevent normal passage of bees through the casing.

1,896,926. BACK SIGHT FOR FIREARMS. RUDOLF VON FROMMER, Budapest, Hungary. Filed Aug. 13, 1928, Serial No. 299,313, and in Hungary Aug. 27, 1927. 2 Claims. (Cl. 33—58.)



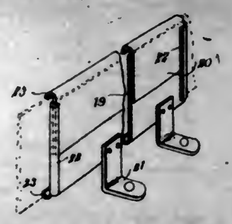
1. In a sight for firearms the combination of a barrel having a cam surface thereon, with a sight-leaf rotatably mounted on the barrel, a spring turning said sight-leaf downwards, a slide guided on the sight-leaf and a member on the slide adjustable toward and from the cam surface, said member being in contact with the cam surface to effect a fine adjustment of said sight leaf.

1,896,927. AERIAL. EDGAR W. WARREN, Gettysburg, Pa., assignor to J. L. Williams, Gettysburg, Pa. Filed Oct. 7, 1930. Serial No. 487,061. 9 Claims. (Cl. 250—33.)



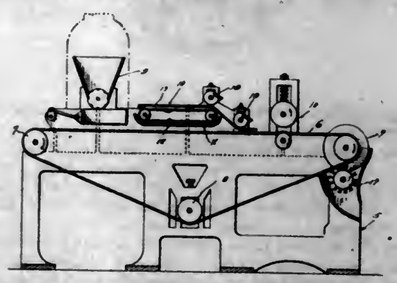
1. An aerial comprising in combination a metal tube, a metal closure for the upper end of the tube, an insulating plug within the tube below its upper end, a crystal rectifier carried by the upper side of the plug, a metal coil within the tube between the closure and plug and fixed at its upper end to the cap and at its lower end to the crystal rectifier, a binding post fixed to and insulated from the tube, and a conductor extending from the binding post to the crystal rectifier.

1,896,928. ADVERTISING PROJECTOR. LEO O. WHITE and EUGENE B. RENNER, Coshocton, Ohio. Filed July 3, 1928, Serial No. 290,086. Renewed Feb. 23, 1932. 4 Claims. (Cl. 88—28.)



1. In an advertising device, the combination of a web disposed on edge, means for imparting a movement thereto, a projecting lens, a source of light coacting with the lens and web, and a flat guide and support for the web comprising sections arranged to engage opposite edge portions of the web, one of the sections being fixed and having a longitudinal edge portion projecting under the lower edge of the web and the other section being slidably mounted on the fixed section and having its upper longitudinal edge overlapping the upper edge of the web and engaged with the same by gravity.

1,896,929. DRY GLAZING PROCESS. GEORGE F. WILDE, Keyport, N. J. Filed Jan. 12, 1931. Serial No. 508,253. 3 Claims. (Cl. 91—68.)



1. A process for glazing ceramic articles comprising applying a coating of adhesive to the under-surface of the article while it is in a horizontal position, applying a coating of glazing material on the adhesive coated surface by pressing the adhesive coated surface downwardly onto a surface bearing the glazing material, then passing the articles face down through a press for pressing the glazing material into the adhesive coating and finishing the article preparatory to burning the same.

1,896,930. FOUR-IN-HAND NECKTIE. CHARLES WINKLER, New York, N. Y. Filed June 24, 1931, Serial No. 546,587. Renewed Dec. 1, 1931. 5 Claims. (Cl. 2—146.)



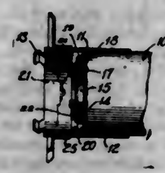
1. A four-in-hand tie comprising a body, having edges folded inwardly and lying flat against the rear face of the body, a lining positioned between the front and rear faces of the body, and a line of stitching extending through the abutting edges of said turned-in portions and through said lining for connecting the lining to the rear of the body of the tie and for connecting said edges together.

1,896,931. ROAD GRADING MACHINE. THOMAS D. WORKMAN, Geneseo, Kans. Filed July 17, 1929, Serial No. 379,032. Renewed Dec. 29, 1932. 2 Claims. (Cl. 37—146.)



2. A motorized road roller and grading machine comprising a main frame including spaced side beams provided with downwardly extending converging forward portions merging together at their forward ends, steering means including ground engaging rollers arranged adjacent the foward ends, a cross beam bridging the side beams adjacent the rear ends thereof, rearwardly extending portions formed with the ends of the cross beam, legs depending from the rearwardly extending portions, means for detachably securing a wheeled propelling means to the side beams for disposal between the legs, traction members journaled to the legs and fixed to the wheels of the propelling means for cooperation therewith to provide ground engaging rollers, and scraping means having connection with the frame.

1,896,932. IGNITION COIL. FRANK YOERGER, Rego Park, N. Y., assignor to Standard Motor Products, Inc., Long Island City, N. Y., a Corporation of New York. Filed Nov. 2, 1932. Serial No. 640,915. 6 Claims. (Cl. 175—357.)



1. In an ignition coil having a housing for a movable switch and contacts electrically, connected with the coil and fixedly mounted in the housing for cooperation with movable contacts on the switch, a disc of insulating material in said housing and having fixed contacts extending therethrough, and means on said disc and a part of the housing to maintain said contacts on the disc in engagement with said first contacts and in position for engagement by the movable contacts on the switch.

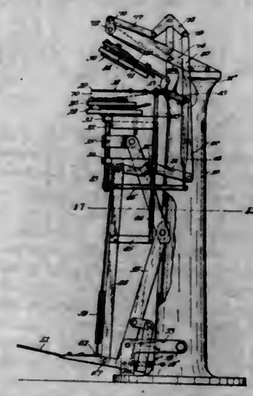
1,896,933. HAIR AND SCALP TREATING APPARATUS. PASQUALE ANASTASI, Washington, D. C. Filed Nov. 7, 1931. Serial No. 573,696. 1 Claim. (Cl. 128—260.)

Hair and scalp treating apparatus comprising air circulating means including an inlet and an outlet, a motor for operating the air circulating means; a heater element adapted to be placed in communication with the air circulating means, an electric conduit from a source of energy in communication with the motor and heater element and separate switches controlling operation of the motor and heater element, the heater element including a receptacle, a valve controlled pipe connection between the top wall of the heater receptacle and the air inlet for directing air into the receptacle, a valve controlled pipe connection between the side of the heater receptacle adjacent the upper end and the air outlet, said heater element adapted to contain a fluid for hair and scalp treatment



and a spray nozzle in communication with the heater receptacle at a point adjacent the bottom thereof and below liquid level therein.

1,896,934. COLLAR POINT SHAPING MACHINE. WALTER J. BEATTIE, Cohoes, N. Y., assignor to The Beattie Manufacturing Co., Cohoes, N. Y., a Corporation of New York. Filed Aug. 11, 1930. Serial No. 474,590. 39 Claims. (Cl. 223—55.)

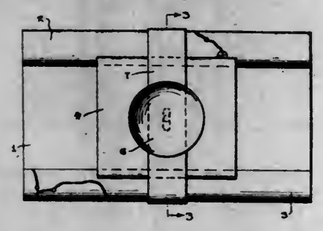


1. A collar point shaping machine for use in collar manufacture comprising a substantially flat die having a narrow end adapted to be inserted between the plies and into a point of a collar having its plies stitched together to form the collar points, a bed, means for positioning the die upon the bed with a collar fitted thereon, a head for applying pressure to the die and collar while the latter are on said bed, spaced walls above said bed forming a recess adapted to receive said die, said walls being arranged to confine and abut closely the edges of a collar positioned therebetween by said die, said walls extending transversely to the plane of the bed, and means for applying heat to the collar while under pressure.

1,896,935. STRIP MAP HOLDER. ARTHUR E. BLOOMFIELD and KENNETH G. BLOOMFIELD, West Webster, N. Y. Filed Dec. 14, 1931. Serial No. 580,948. 6 Claims. (Cl. 40—86.)

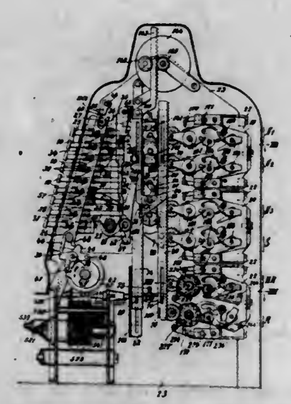
1. A strip having directing matter thereon and having opposite end portions reversely rolled, a supporting mem-

ber disposed between the rolls and holding them in spaced relation with the intermediate portion of the strip taut and exposing the matter thereon for ready reading, and an elastic retainer member engaging the outer portion of the rolls and cooperatively arranged with respect to



the supporting member in a manner to prevent displacement of the rolls and simultaneously subjecting them to a braking action to prevent casual unwinding of the strip and a loosening of the intermediate exposed portion thereof.

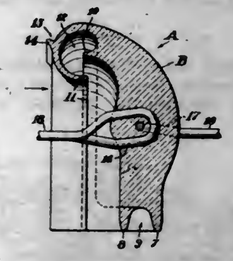
1,896,936. BOOKKEEPING MACHINE. BRUNO BORNKESSEL, ERNST BREITLING, WILHELM BRAUER, and KARL AUGUST LEHMANN, Essen, Germany, assignors to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Feb. 24, 1925, Serial No. 11,373, and in Germany Feb. 25, 1924. 79 Claims. (Cl. 235—60.)



1. In a machine of the class described the combination of a main totalizer, an auxiliary totalizer, a plurality of differentially movable actuators for said totalizers, a totalizer governing mechanism, an auxiliary totalizer key for throwing-in said auxiliary totalizer with determined operations of said main totalizer, and means adapted to interrupt the connection existing between said actuators and said main totalizer and for engaging said auxiliary totalizer with said actuators when the main totalizer is inactive.

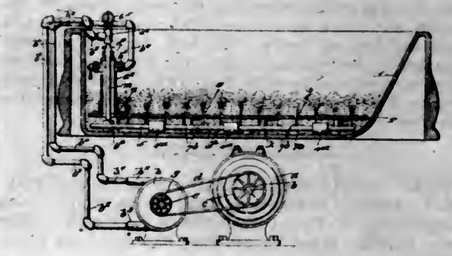
1,896,937. INSULATOR. PERRY G. BRINEY, Torrance, Calif. Filed Apr. 23, 1931. Serial No. 532,236. 7 Claims. (Cl. 173—366.)

5. An electrical insulator adapted to be so used that the line of the strain exerted thereon by the electrical conductor supported thereby will be at an angle from the perpendicular; a pair of spaced lips at one end of such insulator, such lips being flared outwardly and upwardly and extending over such line of strain; a ledge on the



outer face of the outer lip of said pair of lips, such ledge forming a valley between the top of such ledge and such outer face.

1,896,938. BATH APPARATUS. ISADORE BOROWSKY, Atlantic City, N. J. Filed Apr. 18, 1930. Serial No. 445,468. 2 Claims. (Cl. 4—180.)

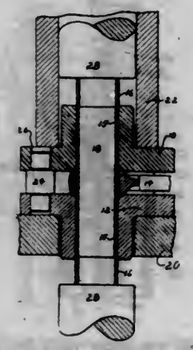


1. In a bath apparatus, a flat support to be positioned in a container which receives a bathing fluid, said support having perforations throughout its area, a manifold suspended from the under surface of the support and arranged in close parallel relation thereto, said manifold comprising a plurality of parallel conduits having outlet jets, a stand pipe rising from one end of the support and having its lower end in communication with a space below the support, a conduit extending through the stand pipe, suction means for drawing the bathing fluid upwardly through the stand pipe and having a discharge outlet merging into said conduit, the latter being in communication with one of the conduits of said manifold for maintaining a constant circulation of the bathing fluid through the manifold and outwardly through the outlet jets, means carried by the stand pipe for the admission of air from the atmosphere to be entrained by said circulating fluid, and said outlet jets being spaced below the support and axially aligned with said perforations to permit discharge of the bathing fluid from the outlet jets of the manifold through the perforations thereby causing an entraining action of the bathing fluid between the manifold conduits and support and hence through the perforations to cause an agitation of the bathing fluid against the body of the bather.

1,896,939. METHOD FOR MANUFACTURING BEARINGS. WILLIAM G. CALKINS and MELBOURNE L. CARPENTIER, Detroit, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,498. 7 Claims. (Cl. 29—149.5.)

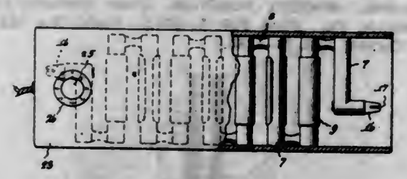
1. The method of forming a two part bearing which consists in forming an elliptical opening in a one part

member, parting the member adjacent the center of the opening by removing a portion of the wall of the opening, assembling the two parts together with shims therebetween to make the opening circular, said shims projecting



radially into the opening, inserting a cylindrical member into and coaxial with the opening, and compressing a powdered metal into the annular space between said cylindrical member and said two part member.

1,896,940. PERMANENT WAVE DEVICE. SALVATOR CEFALU and ANDREW CEFALU, Brooklyn, N. Y. Filed Apr. 26, 1932. Serial No. 607,606. 4 Claims. (Cl. 132—31.)



1. A permanent wave device comprising a series of bars, clamping sleeves on said bars and terminals on the end bars of the series, said terminals each comprising a member rotatable only in one direction and adapted to hold fastening means.

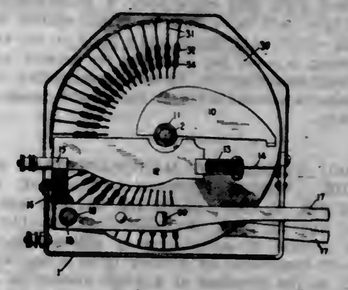
1,896,941. APPLICATOR. OSCAR COHEN, New York, N. Y. Filed Mar. 5, 1932. Serial No. 597,064. 1 Claim. (Cl. 15—227.)



A dental applicator including a facing of absorbent material, a dentifrice supported by the facing, and a protector normally secured by an adhesive to the facing and enclosing the dentifrice, said casing being readily removable when the facing is moistened to soften the adhesive.

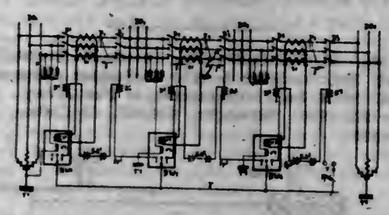
1,896,942. CONDENSER. NOEL DEISCH, Washington, D. C. Filed Aug. 20, 1930. Serial No. 476,641. 10 Claims. (Cl. 175—41.5.)

1. A variable condenser including more than one operator by the movement of any one of which operators the capacity of said condenser is varied, an adjustable cam associated with one of said operators, a follower for said



cam associated with another of said operators and by which the shape of said cam is changed when said other operator is moved independently.

1,896,943. SELECTIVE CIRCUIT PROTECTING DEVICE. ROGER DUBUSC and AVRAM DAVID ILIOVICI, Paris, France, assignors to Compagnie pour la Fabrication des Compteurs et Matériel d'Usines à Gaz, Montrouge, Seine, France, a Joint Stock Company of France. Filed Apr. 15, 1930, Serial No. 444,536, and in France Apr. 30, 1929. 4 Claims. (Cl. 175—294.)



1. In a selective protective system for an alternating current network, the combination of a plurality of relays, means for rendering said relays responsive to the negative or zero symmetrical phase sequence component of the power or current of said network, a plurality of circuit-breakers mounted in said alternating current network and including trip coils, auxiliary sources of current, a plurality of auxiliary relays, pilot wires adapted to convey current from said auxiliary source both to said trip coils and to said auxiliary relays, and two sets of switch means operated by said first mentioned relays and said auxiliary relays respectively for closing circuits for said auxiliary relays and trip coils respectively through said pilot wires.

1,896,944. FAUCET. MIGUEL ESNARD, Matanzas, Cuba. Filed Apr. 28, 1932. Serial No. 608,108. 3 Claims. (Cl. 251—27.)



2. An improved faucet comprising a casing having a ported diaphragm with a valve seat extending about the port, and a flange rising from the outer portion of the

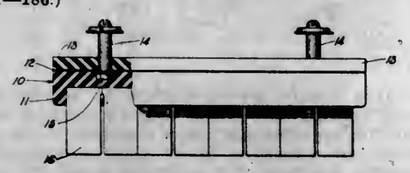
valve seat, a valve body in the faucet movable toward and from the valve seat, a valve stem having a rotatable connection with said valve body, a compressible washer carried upon said valve stem for fitting against said valve seat and within said flange, and a plate on the valve stem for forming a cover for retaining the washer within the flange and receiving the upward compressive strains of the washer when subjected to downward pressure of the valve body.

1,896,945. PROCESS OF MANUFACTURING NITROUS OXIDE. WALTER FRIEDERICH, Troisdorf, Germany. Filed Feb. 4, 1929, Serial No. 337,530, and in Germany Apr. 27, 1928. 5 Claims. (Cl. 23—158.)

1. A process of manufacturing nitrous oxide out of nitrate of ammonium by heating it to between 220° and 240° C. in the presence of a small amount of ammonia by adding a concentrated aqueous solution of nitrate of ammonium, containing a small amount of free ammonia in the same proportion as the nitrate of ammonium is decomposed.

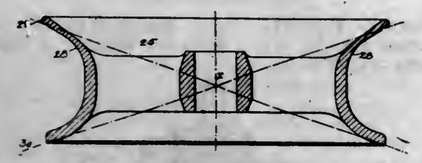
5. A process of manufacturing nitrous oxide out of nitrate of ammonium by flowing a concentrated aqueous solution of nitrate of ammonium, containing a small amount of free ammonia into a mixture of indifferent salts selected from a group consisting of nitrate of potassium, nitrate of sodium, nitrate of ammonium, ammonium, sulfate, potassium sulfate, and sodium sulfate heated to between 220 and 240° C. in the same proportion as the nitrate of ammonium is decomposed.

1,896,946. RUBBING BLOCK. JULIUS M. GAUSS, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed May 22, 1930. Serial No. 454,637. 9 Claims. (Cl. 51—186.)



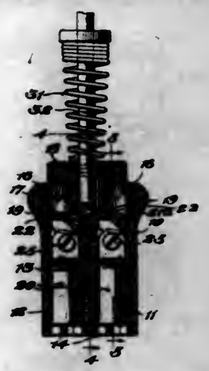
1. A rubbing block comprising, a cup-shaped resilient base, a plurality of slotted abrasive members positioned therein in face to face contact, and means within said slots for securing said members to said base.

1,896,947. THROTTLE FOR LOCOMOTIVES. HARRY GLAENZER, Philadelphia, Pa. Filed Nov. 19, 1931. Serial No. 576,145. 5 Claims. (Cl. 251—83.)



3. The combination in a throttle valve, of a casing having a valve chamber therein; an inlet passage communicating with the chamber; an outlet passage extending around the valve chamber and lateral ports forming communication between the valve chamber and the outlet passage; a seat ring mounted in the valve casing and surrounding the valve chamber, the seat ring having upper and lower members and connecting posts; a valve mounted in the valve casing and open at the center, the rim of the valve being in the form of an arc and having upper and lower conical edges fitting corresponding edges in the upper and lower edges of the seat ring, the lower portion of the valve being heavier than the upper portion thereof.

1,896,948. ELECTRICAL CONNECTER. CALE GOUGH, Albion, Ill. Filed Nov. 20, 1930. Serial No. 497,029. 7 Claims. (Cl. 173—332.)



2. An electrical connecter comprising a one-piece body member of insulating material divided by a partition integral with said body into two parallel terminal housings having each an opening at one end and communicating at the other end with a common chamber in said body member having a screw-threaded opening; a threaded closure plug for engagement with said threaded opening; conductors passing through said plug; and terminals for said conductors and positioned in said terminal housings respectively, said conductors and terminals being removable with said plug when the latter is unscrewed.

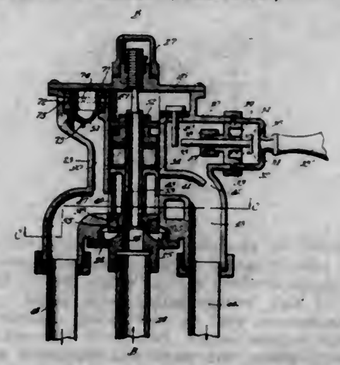
1,896,949. SOCKET WRENCH. JOHN GREINER, Philadelphia, Pa. Filed Feb. 5, 1932. Serial No. 591,189. 3 Claims. (Cl. 81—185.)



1. In a socket wrench, the combination with an outer wrench body shell having a contracted nut engaging socket section of elongated formation and a tubular handle section of larger diameter than the first section and an intermediate tapered section integrally connecting the first two sections, of a plurality of telescopically united nut engaging socket tubes telescopically mounted in the first section of the shell, a head for the handle section, said plurality of nut engaging socket tubes having extension arms, flanged rings of gradual increasing diameters located at one end of the handle section and having arms connected to the arms of the nut engaging socket tubes, said flange rings being abutted and the flanged ring of larger diameter engaging a shoulder where the tapered section merges into the handle section, thereby limiting the nut engaging socket tubes with their outer end edges flush, and spring means interposed between the flanged rings and the head, thereby yieldably mounting the nut engaging socket tubes.

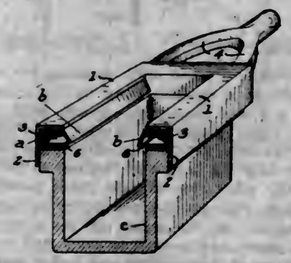
CARNEGIE LIBRARY OF ATLANTA

1,896,950. FLUSH VALVE. WILLIAM C. GROENIGER, Columbus, Ohio, assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed Nov. 10, 1930. Serial No. 494,742. 5 Claims. (Cl. 137—93.)



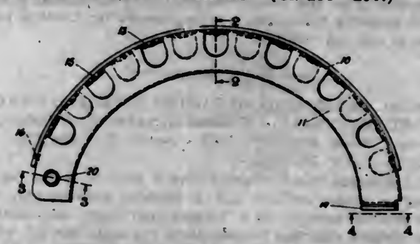
1. In a valve, an intake supply passage, independent outlet passages, a plunger having ports, a chamber above said plunger and communicating with one of said outlet passages when said valve is actuated, a trip valve opening into said chamber, means to unseat said trip valve, said ports communicating with said outlet passages, and said ports being arranged in said plunger to direct the flow of water in various sequences to said outlet passages.

1,896,951. EXHAUSTION DEVICE. OSKAR HAHN, Markranstadt near Leipzig, Germany, assignor, by mesne assignments, to Heyman Rosenberg, New York, N. Y. Filed Nov. 30, 1927, Serial No. 236,827. Renewed Feb. 12, 1931. 8 Claims. (Cl. 38—115.)



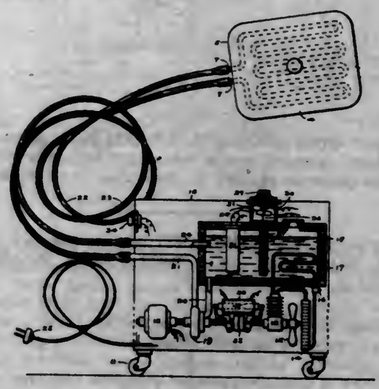
1. In a metal treating container, an exhaustion duct for carrying off the injurious vapors, one wall of the duct being divided therefrom to provide an inlet for the vapors from the container, said wall being movable to vary the size of the inlet.

1,896,952. BRAKE. GUY M. HARTSOCK, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Aug. 3, 1929. Serial No. 383,186. 4 Claims. (Cl. 188—250.)



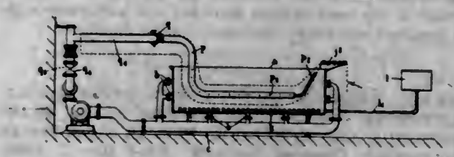
1. A brake shoe comprising a pressed metal member having an arcuate portion and webs integral with and extending radially from the outer edges of said arcuate portion, said radial webs conveying toward and contacting with each other at their free edge, and a journal bushing extending through said converging webs.

1,896,953. ELECTRIC ICE CAP. CECIL STARKE HASSELL, Miami, Fla. Filed May 18, 1931. Serial No. 538,383. 3 Claims. (Cl. 62—141.)



1. A thermal applicator, comprising a hollow pad having an inlet and outlet for circulation of a fluid; a fluid container having an outlet and inlet; flexible tubes connecting the container outlet and inlet with the pad inlet and outlet; a pump for circulating fluid through the circuit so provided; a constantly driven motor for driving the pump; a mechanical refrigerator for cooling such fluid in the container; a magnetic clutch adapted to connect the refrigerator to the motor; and a thermostat exposed to the circulating fluid, controlling the electric circuit through the magnetic clutch.

1,896,954. DYEING. JOHN HUDSON HEAP, Rochdale, England. Filed Aug. 22, 1930, Serial No. 477,106, and in Great Britain Oct. 26, 1929. 5 Claims. (Cl. 8—17.)

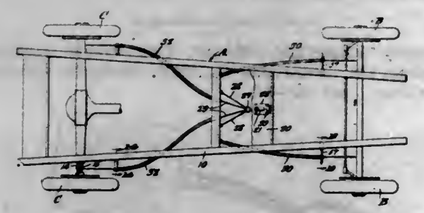


1. A method of dyeing fabric in the piece such as knitted or other goods in tubular form comprising feeding the fabric at uniform determined speed through a vessel or conduit containing dyeing liquor at a suitable temperature while the fabric is surrounding a liquid supply source, positively circulating the liquor from the supply source through the thickness of the fabric to maintain the same in a distended condition while moving through said vessel or conduit and adding continuously to the circulating liquor sufficient dye to compensate for that abstracted by dyeing the moving fabric.

1,896,955. SWITCH. WARREN LELAND HIGLEY, Shawnee, Okla. Filed July 28, 1931. Serial No. 553,673. 1 Claim. (Cl. 200—5.)

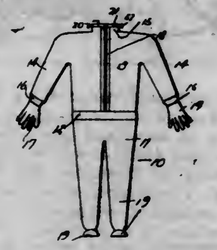
A switch for an indicator of the character described, comprising a housing, resilient normally separated contacts disposed within the housing at opposite ends thereof and each arranged in an electric circuit and having ring-like portions, plungers movable through the ring-like portions of said contacts and slidably fitted in opposite

ends of the housing, heads on said plungers and working against the ring-like portions of the contacts to bring the same together for the closing of said circuit, a coiled



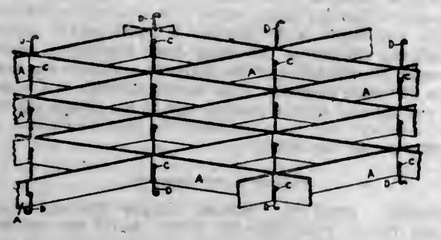
retractile spring coupling the plungers together, and mechanically operated means for action upon the plungers to move the same against the resistance of the spring.

1,896,956. LIFE SAVING SUIT. DEZSÖ HORNYÁK, Cleveland, Ohio. Filed Oct. 1, 1932. Serial No. 635,832. 5 Claims. (Cl. 9—20.)



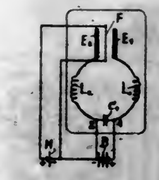
1. A life saving garment of the character described, comprising a bifurcated trunk portion, a waist portion having sleeves and a neck portion, a sliding closure extending from the neck portion to the bottom of the waist portion, a pair of semi-circular hinged neck engaging members carried by the neck portion, means for fastening the semi-circular members together, an air chamber incorporated in the semi-circular members and adjustable sealing members carried by the semi-circular members.

1,896,957. REENFORCEMENT CONNECTED WITH REENFORCED CONCRETE BUILDINGS, SLABS, PLAYGROUNDS, AND SUCH LIKE. WILLIAM JAMES FRASER HUTCHESON, Glasgow, Scotland. Filed May 7, 1930, Serial No. 450,449, and in Great Britain Apr. 7, 1930. 2 Claims. (Cl. 94—30.)



1. A reenforcement for concrete construction and for use as armour for cement and asphalt surfaces or other compositions comprising two crossing sets of bars, each bar being slotted to allow the bars to engage with each other, apertures in each bar opening into said slots, and keys passing through said apertures.

1,896,958. SYSTEM FOR PRODUCING HIGH FREQUENCY WAVES. KARL KOHL, Erlangen, Germany. Filed Sept. 17, 1928, Serial No. 306,605, and in Germany Sept. 17, 1927. 2 Claims. (Cl. 250—36.)



1. A device for producing high frequency waves comprising a pair of spaced plates, a filament between the plates, a source of direct current supply for the filament, a source of high voltage supply, said plates being in circuit, respectively, with the positive and negative points of the high voltage supply, inductance elements in the circuit of the plates, said plates and inductance elements constituting only one oscillatory circuit.

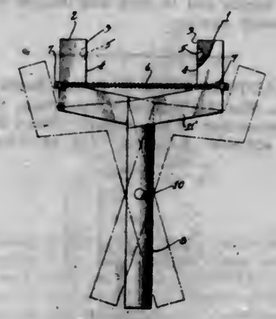
1,896,959. AUTOMATIC COUPLING FOR RAILWAY VEHICLES. LÁSZLÓ KÜRTÖSSY, Budapest, Hungary. Filed Oct. 21, 1926, Serial No. 143,244, and in Hungary Oct. 28, 1925. 6 Claims. (Cl. 213—100.)



3. An automatic central buffer coupling for railway vehicles, comprising a coupling head having an upper projection and a lower projection opposite said upper projection, the upper projection having a vertical guiding surface on one side of the vertical central longitudinal plane of the coupling head and inclined thereto, a buffer surface on the other side of said plane parallel to said guiding surface, said guiding and buffer surfaces overlapping one another in the region of the vertical central longitudinal plane and a surface connected to the overlapping portions of said guiding and buffer surfaces so as to form an engaging member and a recess for the engaging member of a second head, the lower projection extending beyond the confines of said recess forwardly and downwardly therefrom and having a vertical guiding surface inclined to the vertical central longitudinal plane in an opposite direction to the vertical guiding surface of the upper projection and adapted to engage the corresponding vertical guiding surface of the lower projection of a second head for guiding the heads laterally into alignment, and a guiding surface inclined downwardly and forwardly from the horizontal central longitudinal plane of the coupling head, and coupling means for holding two heads in coupled relation.

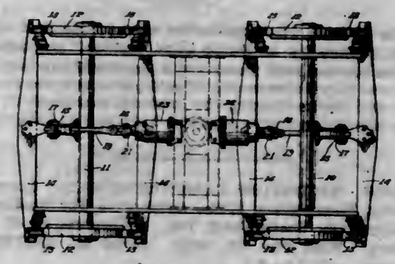
1,896,960. MEANS FOR BREAKING ROCK AND OTHER HARD MINERALS. EDWARD LAFAYETTE, Pittsburgh, Kans. Filed Apr. 18, 1932. Serial No. 606,030. 2 Claims. (Cl. 262—12.)

1. A mineral breaker comprising a pair of shafts, each having a plane surface and a surface semi-circular in cross section meeting in a longitudinal edge, said shafts being pivoted together intermediate the ends thereof with said plane surfaces in contact, spaced angular arms extending from corresponding ends of said shafts for receiving mechanism for swinging said shafts on said pivot to force said longitudinal edge of each shaft into the walls of an opening in which said shafts have been inserted



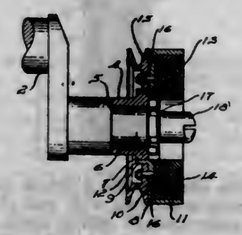
whereby said curved surfaces exert wedging actions in opposite directions and substantially normal to the plane of said plane surfaces.

1,896,961. BRAKING APPARATUS FOR CAR TRUCKS. ELMER LATSHAW, Philadelphia, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 10, 1932. Serial No. 616,554. 4 Claims. (Cl. 188—56.)



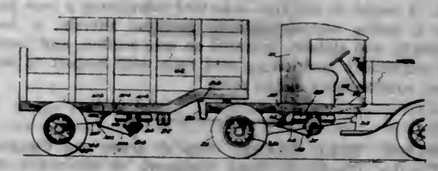
1. In a car truck, a plurality of axles, independent braking mechanisms for the wheels of each axle, the braking mechanism of each axle comprising a braking cylinder, said braking cylinders being graduated in size from one end to the other of the truck.

1,896,962. VIBRATION DAMPER. ROGER K. LEE, Highland Park, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 22, 1930. Serial No. 483,545. 7 Claims. (Cl. 74—6.)



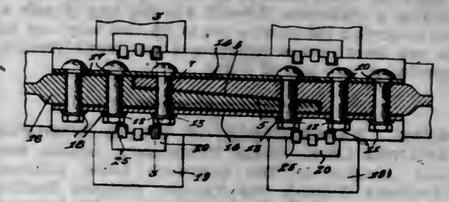
2. A vibration damper including a support, an expansible inertia member, a rigid element on said support surrounding the outer extremities of said inertia member, and a yieldable non-metallic element located between and secured to said rigid element and inertia member.

1,896,963. BRAKE FOR MOTOR VEHICLES. PETER P. LEVENTIS, Gastonia, N. C. Filed Jan. 15, 1932. Serial No. 586,894. 8 Claims. (Cl. 188—8.)



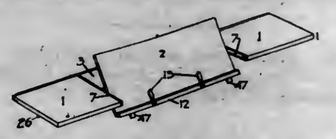
1. A braking apparatus for vehicles comprising a rockable countershaft, a plurality of lever arms secured to said shaft, brake bands, means connecting the free ends of the lever arms with the brake bands, a pair of electric motors, a shaft having a worm and directly coupled to the motors, one of the motors adapted to drive the shaft in one direction, the other adapted to drive the shaft in the opposite direction, a second shaft, a worm gear in mesh with the worm and secured to the second shaft, a lever arm secured to the second shaft, means connecting said last mentioned lever arm with the countershaft so that said shaft may be rocked in one direction when one of the motors is operated, electric circuit for each motor, a double-acting switch for opening and closing either circuit, and means for returning the countershaft to a normal inoperative position.

1,896,964. RAIL SPLICE. CARL AMEL LIND, Altona, Ill. Filed May 9, 1930. Serial No. 451,121. 1 Claim. (Cl. 178—280.)



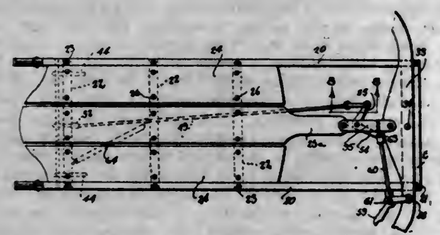
An electric bond for jointed railway rails and which rails have their opposite sides cut angularly and arranged in contacting engagement, and the confronting faces thereof being grooved longitudinally and the said ends of the rails being provided with openings for the reception of bolts, said bond comprising a substantially rectangular thin plate of electric conductivity of a length to be received in the grooves and to have its ends bent over the ends of the rails at the joint thereof, said plate having elongated bolt openings to receive the securing bolts therethrough and having oppositely disposed outwardly bulged portions above and below the bolt openings therein and likewise having a central outwardly bulged portion which is projected from the plate in an opposite direction from the first-named bulged portions and the outer walls afforded by the said bulged portion contacting with the walls provided by the grooves and designed to be flattened or compressed thereagainst when the nuts for the securing bolts are screwed home.

1,896,965. PORTABLE DESK TOP. LELAND S. MADDEN, Pleasantville, N. J. Filed May 13, 1932. Serial No. 611,210. 7 Claims. (Cl. 45—82.)



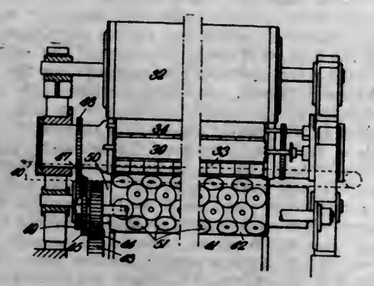
1. A device of the kind described comprising a base having a center section slidably mounted therein, a rack pivotally and slidably mounted on said section, and means for adjustably positioning said rack with respect to said base, substantially as set forth.

1,896,966. SLED BRAKE. GUS C. MATE and CHARLES TAKÁCS, Cleveland, Ohio, assignors of thirty-five per cent to said Gus C. Mate and sixty-five per cent to said Charles Takács. Filed Apr. 12, 1932. Serial No. 604,812. 2 Claims. (Cl. 188—8.)



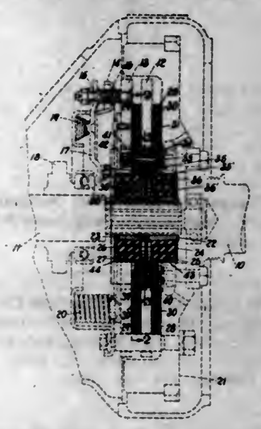
1. A brake for sleds, wherein the sled includes T-runners, a platform body and means supporting the body above the runners, said brake comprising a cross-shaft having crank ends directed outwardly to form trunnions, stand-brackets rising from the runners and having bearings at their upper ends for the support of the trunnions, a bracket shoe fixed to each trunnion, a tensioned link rod connected to the cross shaft, link and lever devices connected to the forward end of the link rod for operating the cross shaft to lower the brake shoes to operative positions, the sled including a transverse forward steering bar, a pair of links connecting the steering bar to the sled body, and the link and lever devices including a bell crank pivotally supported on said pair of links.

1,896,967. MANUFACTURE OF INLAID LINOLEUM AND THE LIKE. HARRY MONTGOMERY, London, England, assignor to The Greenwich Inlaid Linoleum (Frederick Walton's New Patents) Company Limited, London, England, a British Company. Filed Oct. 9, 1931, Serial No. 567,925, and in Great Britain Feb. 12, 1931. 10 Claims. (Cl. 154—24.)



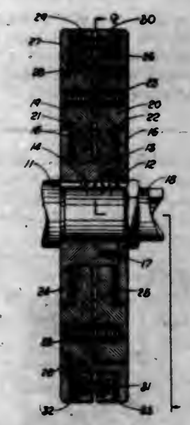
10. In apparatus for the manufacture of inlaid floor-cloths, said apparatus being of the kind to which sheets of plastic material are fed and pattern elements are cut from said sheets, rotary cutting means, a movable member having an assembly surface, a plurality of flexible turning devices, each of said devices being rotatably mounted and operable to receive a pattern element from said rotary cutting means and to turn and dispose said element on said assembly surface.

1,896,968. CLUTCH. CLYDE R. PATON, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Feb. 8, 1930. Serial No. 426,865. 8 Claims. (Cl. 192—69.)



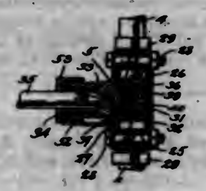
1. In a clutch, the combination of, a plurality of clutch plates, a plurality of clutch hubs, resilient members positioned between said plates and hubs permitting torsional movement therebetween and of said plates relative to each other, and means limiting the torsional movement of said plates relative to their respective hubs and to each other.

1,896,969. VIBRATION DAMPING DEVICE. CLYDE R. PATON, Birmingham, Mich., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Nov. 28, 1930. Serial No. 498,709. 9 Claims. (Cl. 74—6.)



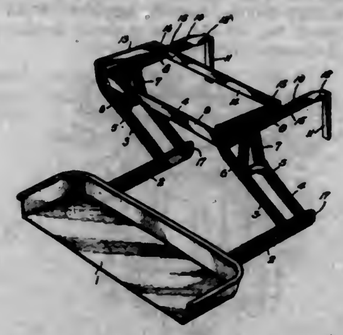
1. A vibration dampener for a rotary shaft comprising means frictionally associated with said shaft adapted to operate at a predetermined critical speed to absorb torsional vibration and a second means mounted upon said first means and frictionally associated therewith and adapted to operate at a different predetermined critical speed to absorb torsional vibration.

1,896,970. GEAR PUMP. ORON N. PHILLIPS, Reynolds, Ill. Original application filed May 10, 1929, Serial No. 362,089. Divided and this application filed Apr. 4, 1930, Serial No. 441,618. Renewed Dec. 8, 1932. 1 Claim. (Cl. 103—126.)



A gear pump comprising a single, exposed pump casing having a liquid inlet and a liquid outlet and provided in one side wall with an internal shoulder, intermeshing pump gears in the casing and substantially as wide as the interior of the casing, means for mounting one of said gears for rotation, an inwardly projecting hollow stud fixedly mounted at one end in the opposite side wall of said casing, a one-piece, longitudinally-inextensible operating shaft having an enlarged tubular end receiving and journaled upon the hollow stud with accuracy of workmanship, the shaft extending outwardly through the first-specified side wall of said single casing, the other of the pump gears being secured to the enlarged end of the shaft, the enlarged end of the shaft defining on the shaft, a shoulder shaped to abut tightly against the shoulder of the casing, with accuracy of workmanship, to avoid rattling, and a push spring located within the hollow stud and, exerting pressure against the outer end of the stud, and against the end of said one-piece operating shaft, to press the shoulder of the shaft against the shoulder of the casing, and afford a liquid-tight joint at the shoulders, the hollow stud forming a bearing for the shaft and a housing for the spring.

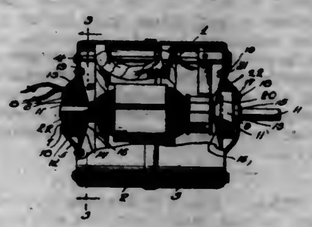
1,896,971. REMOVABLE SERVICE TRAY AND SUPPORT THEREFOR. FREDERICK F. RAVLIN, Miami, Fla. Filed Oct. 4, 1932. Serial No. 636,246. 18 Claims. (Cl. 45—51.)



3. A tray and support therefor, said support including tray-carrying arms and glass pocket engaging hooks, a parallel ruler connection between the arms and hooks, means for operating the parallel-ruler connection to adjust the arms and hooks relatively, said parallel-ruler connection maintaining the tray level in all adjustments.

11. A tray support having terminal hanger hooks, bearing feet below the plane of the hooks to engage the wall surface with which the hooks are connected, and means adjustably supporting the feet on the support and including locking means permitting relative movement of the hooks and feet in vertical planes toward each other but precluding such movement away from each other.

1,896,972. ELECTRIC MOTOR. ALBERT G. REDMOND, Flint, Mich. Filed Aug. 12, 1930. Serial No. 474,796. 3 Claims. (Cl. 172—36.)



1. An electric motor comprising a housing formed of sections, each section having a substantially semi-spherical portion at each end provided with an aperture through which is adapted to extend an armature shaft, a bearing enclosed in a casing arranged within said semi-spherical portion, said housing being provided with notches, filling projections for said bearing casings arranged within said notches and rings having inwardly extending spring arms carried by the ends of said sections of said housing engaging the casings of said bearings for yieldably supporting said bearings in the ends of said housing.

1,896,973. MOLDING OF CONCRETE AND LIKE PIPES. ABRAHAM RUTENBERG, Haifa, Palestine. Filed May 23, 1929, Serial No. 365,571, and in Great Britain June 1, 1928. 2 Claims. (Cl. 25—135.)

1. In a process for molding spun concrete or like pipes by centrifugal force, the step of introducing metal in small particles with the concrete material into a revoluble mold and due to the higher specific gravity of the metal the metal particles become lodged in pores of the concrete and form with the concrete material a dense layer of increased strength and impermeability within the pipe wall.

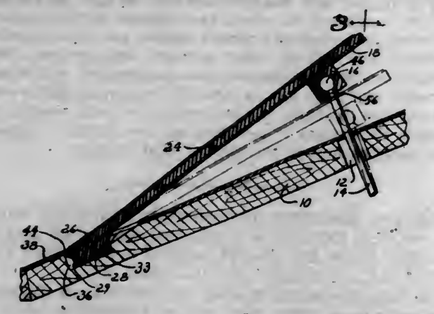
1,896,974. WHEEL BALANCING. JOHN W. SAILLENS, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 10, 1930. Serial No. 487,647. 1 Claim. (Cl. 301—5.)



In a vehicle wheel and tire assembly, a rim having a channel in its outer periphery, a tire including an outer casing having bead portions adjacent the sides of said channel and having an inner tube extending between said bead portions at the intermediate part of said rim, inwardly extending protuberances on the inner periphery

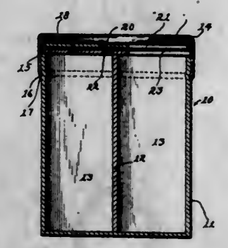
of said rim, a hub, spokes connecting said rim and hub, each having a head portion seated in one of said protuberances and extending therethrough, weights on the inner periphery of said rim for balancing the out of balance portions of said wheel, each having a notched extremity for embracing one of said protuberances and having edge portions engageable with said protuberances for holding the notched extremities of said weights against displacement and means extending through apertures in said weights and rim and registering with a bead portion of said casing for firmly clamping said weights together and to said rim.

1,896,975. PEDAL. RUFUS C. SANDERS and CARROLL L. HUMPHREY, Detroit, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 2, 1929. Serial No. 396,738. 2 Claims. (Cl. 74—81.)



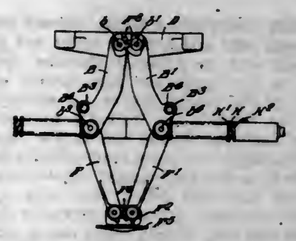
1. An accelerator pedal for automobiles comprising a rectangular flexible body portion having a thickened end portion projecting downwardly below the plane of the body portion, a reinforcing plate on the lower surface of said body portion having one end thereof embedded in the thickened end portion and bent in a plane substantially at right angles to the plane of the body portion, a resilient socket at the opposite end of said body portion for connection to an accelerator rod, a rigid member on the lower surface of the thickened end portion spaced from the embedded end of said reinforcing plate, and attaching means on said rigid member beyond the marginal edges of said body portion and below the plane of the upper surface thereof.

1,896,976. CONTAINER. AUGUST SCHIFFERDECKER, Brooklyn, N. Y. Filed Feb. 20, 1931. Serial No. 517,334. 1 Claim. (Cl. 220—33.)



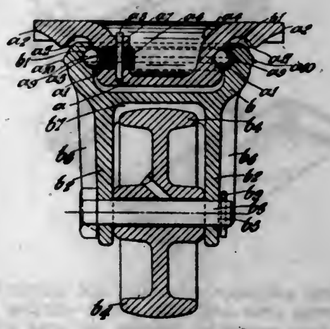
A device of the class described comprising a container, partitions extending longitudinally therein and dividing the container into a number of compartments, one end of the container being open, a cap having its flange rotatably connected with the container, with the top part of the cap extending across the open end of the container and spaced therefrom, said top part of the cap having an opening therein for exposing a compartment when the cap has been properly adjusted to place said opening over a compartment, and a disc located in the space between the top of the cap and the open end of the container and disconnected from both the container and the top part of the cap and having an opening therein of the same shape as the opening in the top of the cap and said disc having an upstanding projection thereon, one side of which is in alinement with, a wall of the opening in the disc and a wall of the opening in the top of the cap having a notch therein for receiving said projection.

1,896,977. LIFTING JACK FOR VEHICLES. DONALD WILFRED SESSIONS, Finchley, London, England. Filed July 14, 1930, Serial No. 467,864, and in Great Britain July 23, 1929. 13 Claims. (Cl. 254—86.)



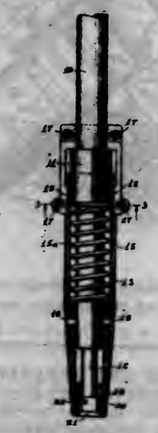
1. A lifting jack comprising two sets of four bars forming a toggle device in which adjacent bars in each set act as toggle levers, a horizontal plate located between the two sets and not extending substantially above the level of the highest portions of the bars when the jack is in the collapsed condition, said plate having slots therein of inverted T-shaped cross-section to receive the heads of bolts secured to a vehicle, the inner ends of the upper bars being pivoted to said plate, a plate adapted to rest on the ground to which the inner ends of the lower bars are pivoted, and a screw device for moving the outer ends of the bars towards and away from each other to cause extension and collapse of the jack.

1,896,978. CASTER. HENRY SELBY HELE-SHAW and THOMAS EDWARD BEACHAM, Westminster, London, and NORMAN ALBERT DAVIES, Radlett, England. Filed May 14, 1931, Serial No. 537,454, and in Great Britain June 4, 1930. 3 Claims. (Cl. 16—21.)



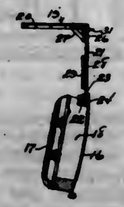
1. A ball bearing caster comprising an inner ball race, an outer ball race, a caster fixing flange, a member carrying a roller, a non-rotatable detachable ball-retaining plug, and a vertically arranged plug fixing pin, the outer ball race being at the top of the member carrying the roller while the inner ball race is formed on the outside of the wall of a concavity formed in the fixing flange and having a horizontal hole extending from the hollow thereof to the base of the inner race and in which is fixed the detachable ball-retaining plug, the end of the ball-retaining plug being formed as a continuation of the inner race, and being held in such position by the plug fixing pin passing vertically through it and the surrounding metal of the caster fixing flange.

1,896,979. TOOL. JOSEPH J. SMITH, Deep River, Conn. Filed Jan. 31, 1930. Serial No. 425,036. 2 Claims. (Cl. 1—46.1.)



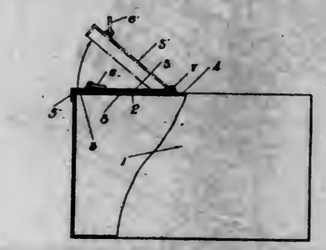
1. A nail guiding, setting and impact transmitting device including a tubular casing having an external annular groove adjacent one of its ends, an impact shaft mounted therein for guided axial movement, having one end constantly projecting from the casing and the other end normally retracted within the casing, a circumferential enlargement formed on said impact shaft and a member having mating sections clampingly engaging the end of the casing through which the shaft constantly projects, said sections formed with inwardly projecting annular ribs fitting within said casing groove, and an inwardly projecting shoulder formed on said sections for cooperation with the upper end of the enlargement to limit the outward movement of the impact shaft from the casing.

1,896,980. RUMBLE SEAT TOP. GENNARO SPARANO, Philadelphia, Pa. Filed Feb. 19, 1932. Serial No. 594,039. 1 Claim. (Cl. 296—99.)



A rumble seat cover comprising a cover element movable into positions for opening and closing a rumble seat compartment, and adapted to extend vertically when occupying an open position, a strip secured to the cover element adjacent the free end thereof, a cushion removably secured to said cover element and cooperating with the latter in providing a top chamber, a top including hinged sections with one of said sections hinged to the strip and resting on the latter when disposed vertically, braces between said sections to permit folding of the latter on each other and within the top chamber, one of said sections having a rear vision opening, a transparent panel closing said opening, and means on said strip and engageable with one of the sections to retain the top in an operative position for protecting the rumble seat compartment.

1,896,981. TEA CONTAINER. SABURO SUZUKI, Shizuoka-Shi, Shizuoka-Ken, Japan, assignor to Shizuoka Boeki Kabushiki Kaisha, Shizuoka-Ken, Japan. Filed Aug. 22, 1930, Serial No. 477,115, and in Japan June 9, 1930. 1 Claim. (Cl. 220—32.)



A tea-container comprising a closed rectangular box-like metallic body, the top of which is partly cut away near one side thereof so as to provide a relatively small opening and to leave an inturned flange along three adjacent side walls of the body, a metallic lid hinged to the top of the body and near the center thereof and also provided with a depending flange along its free ends and side edges for engagement with the adjacent outer sides of the body, a hand ring fitted to said hinged lid, and a thin sheet of metal soldered to the upper surface of the top about the opening and on the internal flange for permanently sealing the contents of the body.

1,896,982. TOOTHBRUSH. RICHARD J. TALBOT, Springfield, Mass. Filed Nov. 20, 1930. Serial No. 497,018. 9 Claims. (Cl. 15—137.)

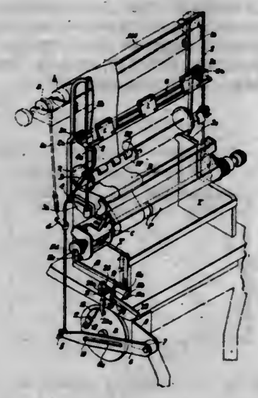


1. A tooth brush of the character described, comprising an elongated casing having apertures at one end thereof, tooth brush bristles mounted adjacent the apertures, a closure for the opposite end of the casing, means for feeding a series of individual tooth paste tablets to a position adjacent the apertured portion of the casing, and means for retarding the forward movement of the capsules whereby one tablet will be allowed to be moved into the compartment in close relation to the apertured portion of the casing at a time.

1,896,983. PAPER FEED MECHANISM FOR TABULATING OR OTHER PRINTING MACHINES. ARTHUR THOMAS, Thornton Heath, and FRANCIS GUY SYDENHAM ENGLISH, West Croydon, England, assignors to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Filed Jan. 10, 1930, Serial No. 419,977, and in Great Britain Jan. 21, 1929. 5 Claims. (Cl. 235—58.)

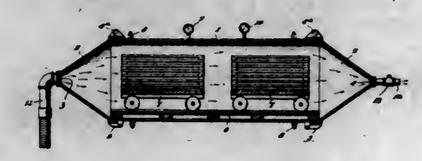
1. A printing machine including a platen provided with line spacing mechanism, comprising in combination with a bar disposed parallelly with the machine platen and guides for the bar arranged in a plane transverse to said platen and at right angles thereto, of bearings on said bar, a finger member hinged on said bearings and means for reciprocating said bar along said guides connected eccentrically to said finger member whereby in one direc-

tion of movement the finger member is first rocked to said bar to grip paper therebetween and then the bar forced along said guide with the grip maintained, and in



the other direction of movement the finger member is first retracted from said bar and then returned to initial position with said bar.

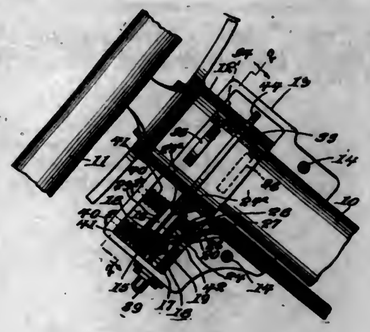
1,896,984. METHOD FOR TREATING GREEN LUMBER. ALBERT L. TAYLOR, Jacksonville, Fla. Filed Mar. 29, 1930. Serial No. 440,049. 2 Claims. (Cl. 34—24.)



1. A lumber and wood conditioning process comprising subjecting the material to the action of air having low relative humidity, low temperature, and high pressure, whereby to expel moisture from the interstices of the material and simultaneously introduce said air thereinto.

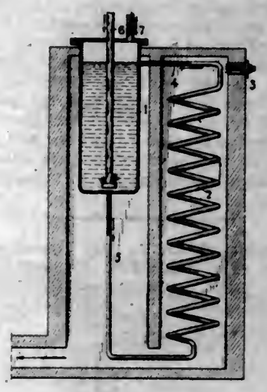
1,896,985. AUTOMATIC SWITCH. THOMAS WILLIAM THIRLWELL, St. Albans, W. Va. Filed Oct. 14, 1929. Serial No. 399,569. 2 Claims. (Cl. 200—59.)

1. A switch for operating signals comprising a casing having switch arm openings, an insulating member mounted in the casing, stationary contacts carried by the member and electrically connected to signals, switch arms pivoted to said member and electrically connected to the signals and extending through the openings to permit manual operation thereof, movable contacts carried by the arms to be engaged and disengaged with the stationary contacts to control the signals, a flexible switch arm secured to the insulating member and electrically connected to the stationary contacts, means actuated by a steering mechanism to cause the flexible switch arm to engage either of the manually operated switch arms to control the signals depending in the direction in which the steering mechanism is moved, angularly disposed extensions on the manually operated switch arms, and cams moved by the steering mechanism and engageable with the extensions to actuate the manually operable



switch arms for breaking the circuits to the signals after a certain movement of the steering mechanism in either direction.

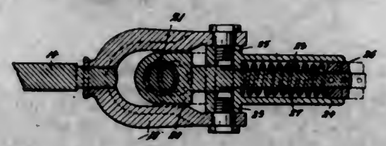
1,896,986. PROCESS AND APPARATUS FOR CRACKING HYDROCARBONS. RICHARD TILLMANN, The Hague, Netherlands, assignor to Naamloose Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Filed Feb. 7, 1930, Serial No. 426,752, and in the Netherlands Feb. 9, 1929. 7 Claims. (Cl. 196—7.)



1. Process of cracking hydrocarbons comprising the steps of: bubbling the hydrocarbons in vapor form upwardly through a bath of molten lead, circulating the lead downwardly through the bath and through a separate heater, supplying sufficient heat to the latter to maintain the bath at reaction temperature and maintain the lead circulation by thermosiphonic action in such a manner that substantially no heating of the reaction chamber takes place from the outside, and withdrawing the reaction products from the bath.

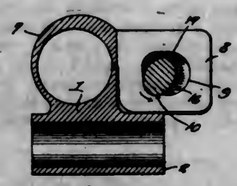
7. A process of cracking hydrocarbons in a system comprising an enlarged reaction vessel substantially filled with a body of molten metal and a tubular siphon having upflow and downflow limbs for circulation of hot metal from opposite ends of the reaction vessel, the steps consisting of passing hydrocarbons through the body of molten metal, discharging reaction products from the upper portion of the vessel, setting up a flow of a heating medium and directing the flow of the heating medium so as to by-pass the reaction vessel and the downflow limb of the siphon, and concentrating the heating effect thereof on the upflow limb of the siphon to circulate the molten metal through the reaction vessel and siphon.

1,896,987. DISCHARGE CHUTE ACTUATING MECHANISM. EMIL TRANAAS, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Oct. 14, 1929. Serial No. 399,555. 2 Claims. (Cl. 74—48.)



1. Mechanism for actuating the discharge chute of a concrete mixing drum comprising a shaft for transmitting power from a power source to the chute, a pitman connected to the shaft and chute, the inter-connection between the pitman and shaft comprising a yoke, a member mounted on the shaft and slidable in the yoke, the said member being provided with a stem, a resilient cushioning means for the stem, and a housing pivotally mounted on the yoke and enclosing the said stem and cushioning member, whereby power from the said shaft is yieldingly transferred to the said pitman.

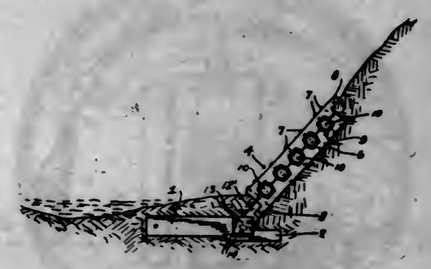
1,896,988. TERMINAL CONNECTER. JOHN H. VAN DERHOOF, Warwick, N. Y. Filed Apr. 4, 1931. Serial No. 527,747. 6 Claims. (Cl. 173—259.)



6. A connecter including a split sleeve, spaced apertured ears extending from one side thereof, an apertured ear extending from the other side of the sleeve for sliding movement between the spaced ears, a pin mounted for rotation in the ears, and a cam integral with the pin for rotation in the intermediate ear, the wall of the opening in said ear having a cam-receiving seat, an arcuate portion leading to the seat, and a flattened cam-engaging portion opposite the seat, said cam and the wall of the intermediate ear cooperating to contract and to spread the sleeve when the pin is rotated, the seat and cam cooperating to hold the pin against accidental rotation when the sleeve is contracted.

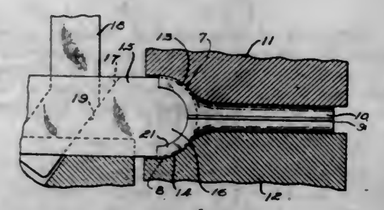
1,896,989. BANK PROTECTOR. LEE WALKER, North Hornell, N. Y. Filed Mar. 8, 1932. Serial No. 597,584. 7 Claims. (Cl. 61—37.)

1. A bank protector comprising footings to be embedded in the bed of a stream, said footings including downwardly offset end portions providing shoulders, plates secured on the vertical sides of the footings and extending adjacent the shoulders, cross members for mounting on the bank, rails extending between the cross members and



secured thereto, and hinges pivotally mounted between the plates and secured to the cross members for connecting the footings in said cross members for swinging movement.

1,896,990. METHOD OF MAKING AXLE HOUSINGS. DAVID A. WALLACE, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 1, 1930. Serial No. 485,677. 10 Claims. (Cl. 29—153.1.)

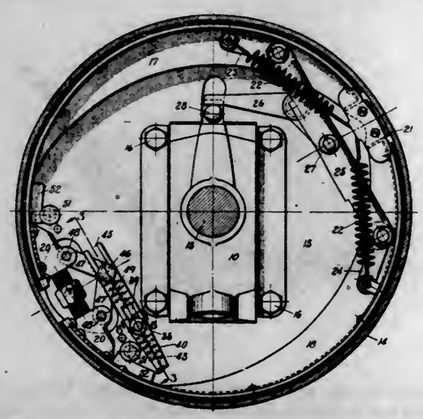


10. The method of forming an axle housing assembly including spaced axle receiving sleeves and an intermediate casing which consists in shearing one end of each of a pair of planular pieces of stock so as to provide a pair of prongs on each piece of stock, forming the unsheared ends of said stock into tubular sleeves and positioning one prong on each side of said sleeves, forming the pair of prongs with each sleeve substantially to semi-cylindrical shape so as to provide a half-section of the differential casing on each sleeve, bending the end portions of the differential casing sections inwardly, placing rings adjacent the inwardly turning end portions of said half differential casing sections, and securing said inwardly turning end portions to respectively opposite segments of said rings.

1,896,991. BRAKE. ANDREW P. WISNER, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Jan. 24, 1929. Serial No. 334,707. 5 Claims. (Cl. 188—78.)

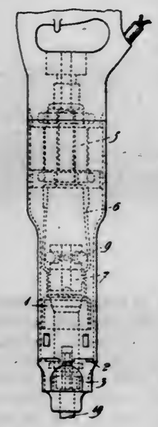
1. A brake comprising, a rotatable drum, a brake element, and means for moving said brake element into engagement with said drum, having in combination therewith, means for centering said brake element relative to

said drum comprising a pivot pin and a spring controlled member slidable thereon movable in the general direction of said brake element when the same is engaged with



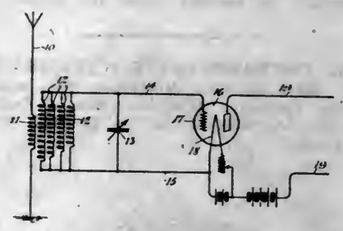
said drum and movable in the opposite direction when the brake element is released from said drum to automatically return said brake element to its initial position.

1,896,992. ARRANGEMENT IN STRIKING TOOLS. ERNST MALCUS ÅGREN, Stockholm, Sweden. Filed Dec. 1, 1930, Serial No. 499,359, and in Sweden Feb. 6, 1930. 3 Claims. (Cl. 125—33.)



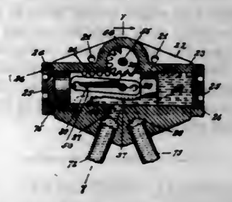
1. A striking tool of the character described including a striking body, an anvil having a body portion and an enlarged head, a sectional ring detachably engageable with said body portion, a plurality of frame sections and means for releasably fastening said frame sections together in longitudinal alignment, one of said frame sections having a bore serving as a guide for one end of the anvil body and another of said frame sections having a bore through which the other end of the anvil body passes, said bores at adjacent ends of said frame sections being both enlarged to form a chamber to receive and guide said sectional ring, one end of said chamber constituting an abutment for the sectional ring to limit the axial movement of the anvil towards the striking body, while when said frame members are released and moved apart the sections of the ring are in alignment with and removable through the resulting peripheral opening in the chamber to permit withdrawal of the anvil.

1,896,993. RESONANT CIRCUIT. FREDERICK L. ARLAND, White Plains, N. Y. Filed May 14, 1929. Serial No. 362,992. 8 Claims. (Cl. 178—44.)



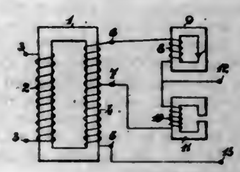
1. A radio receiving circuit, including a primary transformer coil associated with the receiving aerial, and a plurality of secondary coils connected in parallel inductively related with said primary coil for selectively receiving from said primary coil one band of frequencies.

1,896,994. WINDSHIELD WIPER. LEONARD J. ARMSTRONG, Mariners Harbor, N. Y. Filed Feb. 17, 1931. Serial No. 516,450. 10 Claims. (Cl. 121—101.)



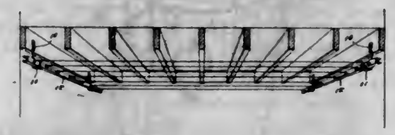
1. In a device of the class described, a cylinder with heads and having inlet and exhaust ports, a piston for reciprocating in the cylinder, the piston having at its periphery a cam means inclined laterally longitudinally of the axis of the piston, a member on the cylinder for engaging the cam means for rocking the piston in the cylinder, the piston having passages for connecting the ports with the cylindeer adjacent the cylinder heads, and means for holding the member out of active engagement with the cam means during a predetermined portion of the stroke of the piston.

1,896,995. MEANS FOR VOLTAGE REGULATION IN ALTERNATING CURRENT SUPPLIES. ROBERT IRONSIDE BAGNALL, London, England. Filed May 1, 1931, Serial No. 534,501, and in Great Britain May 8, 1930. 2 Claims. (Cl. 171—119.)



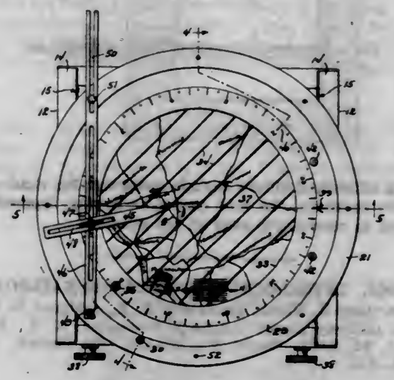
1. Means for the automatic regulation of voltage in alternating current supplies comprising a supply transformer having tappings giving pressures respectively above and below a predetermined normal pressure in a load circuit, a choke coil having permanent high electro-magnet induction characteristics connected between the high pressure tapping and the load circuit and a choke coil of permanent lower electro-magnetic induction characteristic connected between the low pressure tapping and the load circuit, said choke coils co-operating in determining automatically the pressure applied to the load circuit for any current consumption of given amount of type.

1,896,996. CLOTHES HANGING DEVICE. NELDA M. BEGLINGER, Pittsburgh, Pa. Filed Feb. 27, 1931. Serial No. 518,841. 1 Claim. (Cl. 211—118.)



A clothes hanger comprising spaced pairs of hook-shaped hangers fixed to spaced rafters of a ceiling, channel U-shaped bars supported by said hangers with the connecting portion thereof disposed in confronting relation with one another, relative spaced hooks struck-out from the connecting portion of each of the U-shaped bars and forming therein for the full length thereof openings, said spaced hooks extending lengthwise of said bars and bent in a direction toward one end of the bars and preventing any lateral displacement of the bars in said hangers, and a clothes line laced to the hooks of said bars and providing runners in the line extending parallel with each other.

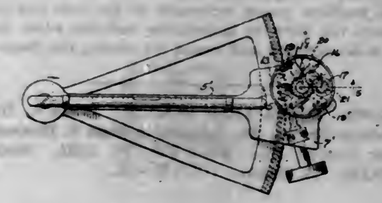
1,896,997. COMPASS COURSE FINDER. EDWIN B. BENNETT, Avalon, N. J. Filed Dec. 6, 1929. Serial No. 412,205. 3 Claims. (Cl. 33—76.)



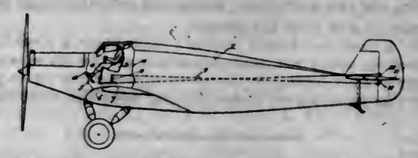
1. In a compass course finder, a pair of concentrically arranged rotatable rings, a chart positioned beneath the rings, spaced parallel transverse wires arranged within the inner ring, said inner ring having the points of the compass thereon, an indicator mark upon the outer ring, means to lock one or both of the rings against rotation, or to lock said rings together for rotation as a unit, and a wind drift scale carried by the outer rotatable ring.

1,896,998. SHIP'S TRIM INDICATOR. HARRY BENNETT, Galveston, Tex. Filed Oct. 30, 1929, Serial No. 403,578, and in Germany May 25, 1929. 1 Claim. (Cl. 33—214.)

A device of the class described comprising a frame having an arc shaped part provided with a scale, an arm pivoted to the frame at one end and having an enlargement at its free end arranged over the arc shaped part, a bubble glass carried by the arm, said arc shaped part having a rack thereon, a shaft journaled in the enlarged part of the arm and having a gear thereon engaging the rack, dials on the enlarged part of the arm, arbors rotatably arranged in the enlargement and having fingers thereon cooperating with the dials and gearing for driving the arbors from the shaft.

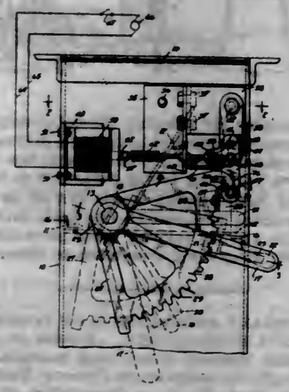


1,896,999. AIRCRAFT CONTROL MEANS. EDWARD M. BERTLAN, Baltimore, Md., assignor to Chas. M. Stieff, Inc., Baltimore, Md., a Corporation. Filed Feb. 12, 1932. Serial No. 592,606. 3 Claims. (Cl. 244—29.)



1. In an airplane including control mechanism, and means forming a part of said mechanism and automatically variable in harmony with changing speeds of the airplane to vary the effectiveness of the control mechanism when said means is operated.

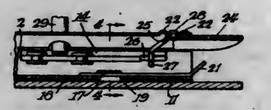
1,897,000. CLOSURE OPERATING MECHANISM. JOHN E. BIERY, Grantwood, N. J., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 1, 1930. Serial No. 485,622. 7 Claims. (Cl. 137—139.)



1. A device of the character described, comprising a member having an opening, a closure for the opening, means for opening the closure, a latch having operative

and inoperative positions and adapted to hold the closure in open position, a solenoid having a movable core adapted to move the latch to, and retain it in, operative position, a connection between the core and the latch, said connection having means for limiting the movement of the latch, resilient means connected to the core and adapted to move the latch to inoperative position when the solenoid is deenergized and means for closing the closure.

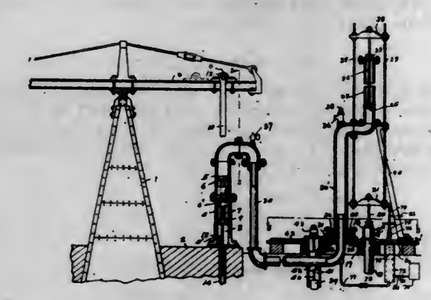
1,897,001. LOOSE LEAF BINDER. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Filed Feb. 28, 1931. Serial No. 519,137. 12 Claims. (Cl. 129—24.)



5. In a loose leaf binder, a plate arched transversely with the crown upward, a toggle including prong-bearing members having a toggle joint beneath the intermediate portion of the plate, a rivet through the plate in the crown of the arch, a booster lever fulcrumed upon the rivet and having one arm operatively associated with the toggle joint to raise it and open the prongs.

10. A loose leaf binder having a cover plate, a rivet head projecting above the normal surface of the plate, and a transverse rib formed in the cover adjacent the rib to prevent the paper leaves from catching upon the rivet head.

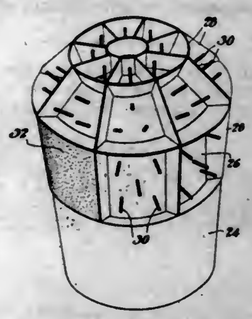
1,897,002. HYDRAULIC OPERATING MECHANISM. MONROE W. CARROLL, Beaumont, Tex., assignor to William M. Carroll, Beaumont, Tex. Filed Feb. 15, 1927. Serial No. 168,349. 11 Claims. (Cl. 60—54.5.)



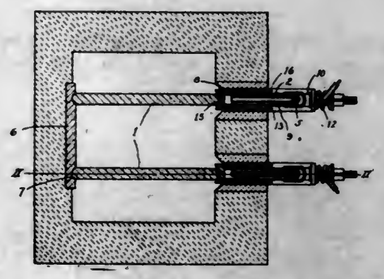
1. An apparatus for effecting the uninterrupted operation of a transmission system including a pair of cylinders, a plunger in each cylinder, a fluid pressure line connecting said cylinders, operating means connected to one of said plungers, and load carrying means carried by the other plunger, a working load and an idle load, said last mentioned plunger and its cylinder being pivotally mounted, to adapt said plunger for connection to either load.

1,897,003. MEANS AND METHOD OF COATING ARTICLES WITH REFRACTORY. WINDER E. GOLDSBOROUGH, South Norwalk, Conn., and RUSSELL E. LOWE, New York, N. Y., assignors to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 11, 1929. Serial No. 339,029. 2 Claims. (Cl. 18—59.)

1. The process of heat insulating the internal surfaces of a heat motor which consists in affixing a plurality of intersecting metallic strips perpendicular to said internal surfaces, packing the mixed aggregate composing a refractory material upon the surface and about said strips and baking the whole to cause said aggregate to set.

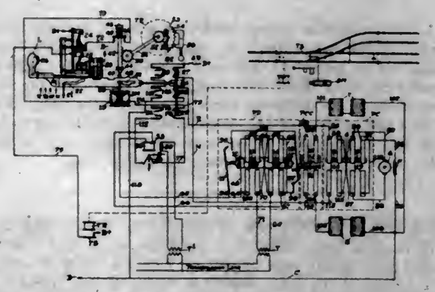


1,897,004. ELECTRICAL CONNECTION FOR NONMETALLIC RESISTORS. ALBERT H. HEYBOTH, Niagara Falls, N. Y., assignor to The Globar Corporation, Niagara Falls, N. Y. Filed Jan. 19, 1931. Serial No. 509,598. 8 Claims. (Cl. 13—20.)



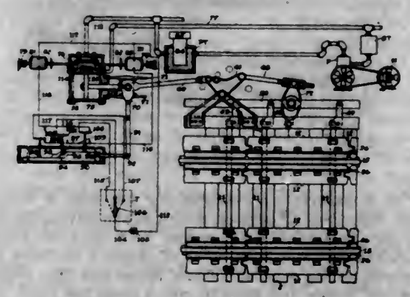
1. A siliconized silicon carbide connector for rigid nonmetallic resistors, the said connector having depressions adapted to receive the ends of the resistors.

1,897,005. INTERLOCKING SYSTEM FOR RAILROADS. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Sept. 12, 1929. Serial No. 392,138. 26 Claims. (Cl. 246—135.)



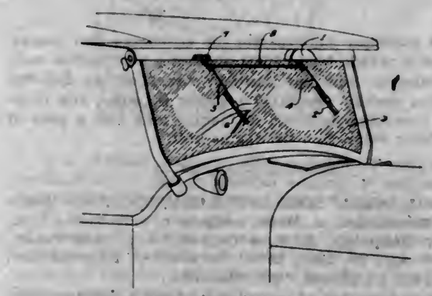
1. In an interlocking system of the type shown and described, a control lever operatively governing the movement of a switch machine, an indication latch mechanism associated with said control lever, indication means capable of actuating said indication latch mechanism when said control lever and said switch machine are in correspondence, and a time element device operably preventing actuation of said indication latch mechanism by said indication means for a predetermined time after each governing operation of said control lever.

1,897,006. CAR RETARDER FOR RAILROADS. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Dec. 30, 1929. Serial No. 417,439. 5 Claims. (Cl. 303—20.)



1. In a car retarder, the combination with a railway track, brake shoes on opposite sides of each track rail, springs associated with said brake shoes, a member for operating said brake shoes through the medium of said springs, a piston for operating said member, a liquid fluid source of pressure, an electrically operated valve for applying fluid pressure to either side of said piston, a circuit for controlling said valve including a manually operable controller, and other means in said circuit for operating said valve to its inactive position when said member has been operated to a predetermined position.

1,897,007. HANGER FOR AUXILIARY WIPER ARMS. HENRY HUEBER, Buffalo, and EDWIN C. HORTON, Hamburg, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y. Filed Jan. 17, 1930. Serial No. 421,571. 6 Claims. (Cl. 15—255.)



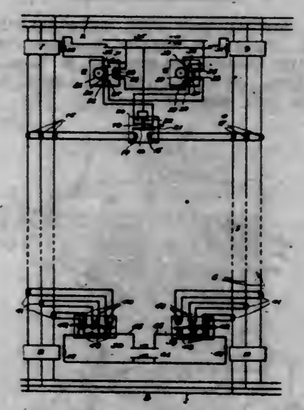
1. A mounting for pivoting wiper arms, comprising a supporting member having an opening, a bearing member disposed in the opening and having a part seating against one side of the supporting member, said bearing member protruding from the opposite side of said supporting member, a shaft journaled in said bearing member and having a wiper arm supporting portion adjacent said bearing member, means preventing axial displacement of the shaft from its bearing, and means including a lubricant reservoir secured over the protruding end of said bearing member for securing the same to the supporting member.

1,897,008. REGENERATIVE HEATING FURNACE. GEORGE H. ISLEY, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 1, 1930. Serial No. 425,304. 2 Claims. (Cl. 263—15.)



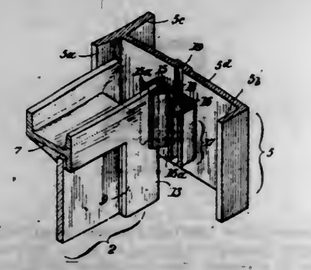
1. A regenerative heating furnace comprising a pair of regenerator passages adapted to serve alternatively, as the furnace is reversed, for the inflow of combustion-supporting air, and for the outflow of combustion products, a heating chamber having ports at its upper end communicating with both of said passages, and a substantially vertical partition in said chamber arranged to block off communication between said ports except by way of the extreme lower end of said chamber, whereby in both directions of the flow through said chamber of flame and hot gases, the latter pass first downwardly, then horizontally, and finally upwardly, to completely envelop the charges in said chamber on both sides of said partition.

1,897,009. AUTOMATIC ISOLATION OF PARALLEL THREE-PHASE ELECTRIC POWER TRANSMISSION LINES. CHARLES JAMES MONK and EDWARD FRANK RENDELL, Johannesburg, Transvaal, Union of South Africa, assignors to The Victoria Falls and Transvaal Power Company, Limited, Johannesburg, Transvaal, Union of South Africa. Filed Oct. 30, 1930, Serial No. 492,310, and in the Union of South Africa Dec. 21, 1929. 3 Claims. (Cl. 175—294.)



1. A three phase electric power transmission system comprising a plurality of parallel lines, a main switch in each line at one end of the system, a device in each line at that end adapted to open its main switch upon fault current flowing through any conductor of that line, selecting mechanism controlling said devices whereby only one can be operative at one time, a main switch in each line at the other end of the system and means operating in response to low load conditions in any of the conductors of that line and controlling the main switch at such other end so as to open the latter upon becoming operative.

1,897,010. WINDOW. BENJAMIN H. POLLOCK, Jenkintown, and JOSEPH H. SHEARD, Philadelphia, Pa., assignors to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 5, 1930. Serial No. 493,510. 15 Claims. (Cl. 189—72.)

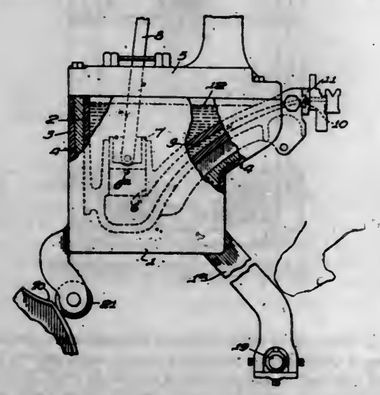


1. In a metallic window, a frame, sashes slidably guided within the frame; and channel section parting strips at opposite sides of the frame to guide the sashes, the said strips having outwardly-directed medial longitudinal tongues fitting central lengthwise positioning grooves in the jamb rails of the window frame.

1,897,011. METHOD OF SEPARATING EMULSIONS. JOSEPH F. PUTNAM, Berkeley, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed June 11, 1929. Serial No. 370,163. 5 Claims. (Cl. 204—1.)

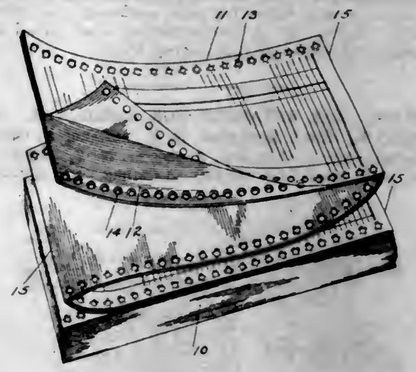
1. A method of separating emulsions containing a material dispersed in a continuous electrolytic phase, comprising placing an anode and a cathode in said emulsion, passing a unidirectional current through said emulsion to deposit said viscous material from said emulsion upon said anode, and then increasing the flow of current to express the liquid constituting the continuous phase from the deposit of material formed upon said anode.

1,897,012. METAL POT FOR TYPOGRAPHICAL MACHINES. WALTER F. SEVERIN, Evanston, Ill., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 15, 1932. Serial No. 593,150. 9 Claims. (Cl. 199—47.)



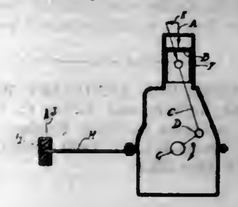
1. A metal pot for typographical machines having an upwardly extending throat for the discharge of molten metal therefrom and a mold-engaging mouthpiece at the upper discharge end of said throat, and having an opening extending from the interior of the throat at a point adjacent to the mouthpiece to the exterior of the throat below the discharge end thereof.

1,897,013. MANIFOLDING PAPER. JOHN Q. SHERMAN, Dayton, Ohio. Filed July 18, 1932. Serial No. 623,118. 19 Claims. (Cl. 282—12.)



1. In a manifolding assembly for use with a machine having sheet feeding devices, record sheets having punched holes for simultaneous engagement with the sheet feeding devices and an interposed sheet of transfer material having corresponding punched holes of larger size than those of the record sheets and through which holes the sheet feeding devices are received.

1,897,014. ENGINE MOUNTING. ROLLAND S. TROTT, Denver, Colo. Original application filed May 27, 1929, Serial No. 366,406, now Patent No. 1,834,907, dated Dec. 1, 1931. Divided and this application filed Nov. 10, 1931. Serial No. 574,172. 10 Claims. (Cl. 248—14.2.)



6. A stabilizer construction for an engine unit mounted upon a vehicle for oscillation about a longitudinal axis, comprising at least two resilient means having different vibration periods associated together in series and forming a connection between the engine unit and a part of the vehicle other than the engine unit.

1,897,015. CELLULOSE ESTER COMPOSITION. HARRY M. WEBER, Boston, Mass., assignor to Ellis-Foster Company, Montclair, N. J., a Corporation of New Jersey. Filed Apr. 28, 1925, Serial No. 26,518. Renewed Dec. 15, 1932. 2 Claims. (Cl. 134—26.)

1. A composition of matter comprising a cellulose ester and a benzoic rosin phthalic glyceride resin.

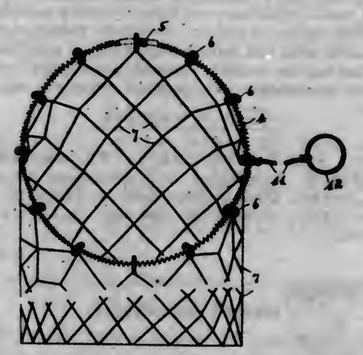
1,897,016. PLASTIC WALL COATING. WILLIAM H. ALTON, New York, N. Y., assignor to R. T. Vanderbilt Company, New York, N. Y., a Corporation of New York. Filed Dec. 21, 1928. Serial No. 327,753. 2 Claims. (Cl. 134—46.)

2. A plastic composition in dry, pulverulent form, adapted for use in forming textured wall coatings, said composition comprising the herein described adhesive, being a residue from cereal flour after removal of starch and gluten which is readily soluble in water and when so dissolved forms a "short" binder which is not at all stringy, and pyrophyllite, the particles of which are in platelet form, said dry composition having the property, when addd to water, of readily forming, without need of standing, a smooth gel-like plastic paint which flows freely from the brush without flowing freely on the surface to which applied, which enables textured finishes to be readily obtained and which dries without objectionable shrinking and cracking.

1,897,017. PROCESS OF MAKING LOW-CARBON CHROMIUM ALLOYS. FREDERICK M. BECKET, New York, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Mar. 12, 1927. Serial No. 175,009. 7 Claims. (Cl. 75—45.)

1. The process of making iron-chromium alloys low in carbon which comprises combining high-carbon ferrochrome with low carbon iron to form a melt having a chromium content at least as high as that desired in the finished alloy; said melt containing an excess of carbon and being covered by a slag; adding chromite to said slag, maintaining the melt at a high temperature under the slag to decarburize the metal, whereby the slag becomes rich in chromium; and then, without removing the slag, deoxidising the metal and recovering a substantial proportion of chromium from the slag by adding silicon to the slag while keeping the latter in a basic condition.

1,897,018. SHOPPING BAG. PAUL E. DRAHEIM, Los Angeles, Calif., assignor to Paul Kluge and Paul Kendsir, Los Angeles, Calif. Filed Oct. 10, 1930. Serial No. 487,760. 1 Claim. (Cl. 150—1.7.)

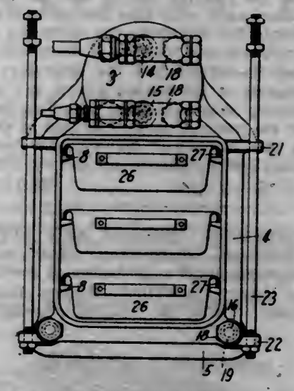


In a shopping bag, an edge member of endless form made of a coil spring material adapted to automatically resume its normal open shape when released, rings slidingly disposed on the edge member, a shopping bag proper attached to the rings and adapted to be held open by the edge member, and a handle member attached to one of the rings and adapted to facilitate an opening of the bag, the edge member being shiftable within the rings and otherwise exposed to be grasped at any point to cause the rings thereon to slide so as to close the bag.

1,897,019. TREATMENT OF CUT OILS. FRITZ EMIL FUCHS, Maplewood, N. J., assignor, by mesne assignments, to The Dehydro Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Apr. 22, 1931. Serial No. 532,117. 3 Claims. (Cl. 252—1.)

1. A material for treating cut oil consisting of a sulphonated fatty oil, mineral oil and pine oil obtained as a rosin distillate mixed prior to sulphonation.

1,897,020. REFRIGERATION UNIT. FREDERICK CARL GEILER, Dayton, Ohio, assignor to Trupar Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed July 18, 1927. Serial No. 206,535. 15 Claims. (Cl. 62—95.)

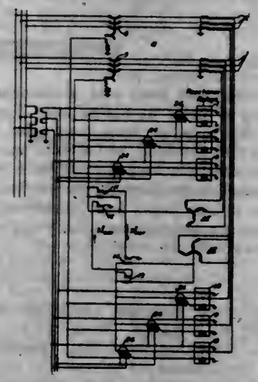


1. A refrigerator unit comprising a reservoir, and a plurality of dependent loop like conduits of substantially triangular cross-sectional contour, the ends of which communicate with the reservoir, said loops being arranged with their apices turned outward and their flat faces inturned and aligned with like faces of adjacent conduits.

1,897,021. MEDIUM FOR DEHYDRATING CUT OILS. PHILIP KAPLAN, Brooklyn, N. Y., assignor to The Dehydro Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Apr. 22, 1931. Serial No. 532,127. 2 Claims. (Cl. 252—1.)

1. A material for separating water and oil emulsions comprising sulphonated linseed oil and raw linseed oil.

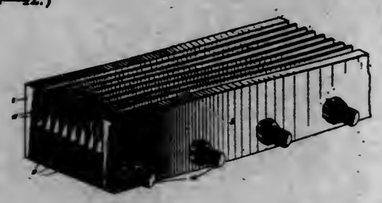
1,897,022. COMPENSATED RELAY SYSTEM FOR GROUND FAULTS. WILLIAM A. LEWIS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 9, 1931. Serial No. 521,153. 28 Claims. (Cl. 175—294.)



1. A distance-responsive ground-fault relaying system for protecting a three-phase commercial-frequency synchronous transmission system having a quality of transmission circuits with neutral grounding beyond both ends of a line-section between two successive sectionalizing stations, comprising the combination, with said transmission system, of a ground-fault-responsive impedance relay for each line-conductor, each relay balancing a cur-

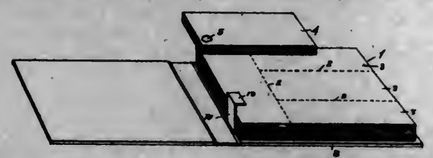
rent function of the faulty line-conductor against a voltage function of the same conductor, means for sectionalizing a faulty line-circuit in response to said impedance relay, said means including a directional element for causing said response only when the fault current is flowing out of the relaying station into the line-section, and means associated with said ground-fault-responsive impedance relays for modifying the balancing action of the same in response to a function of the residual current in the faulted line-circuit and the equivalent phase-sequence impedances of the faulted circuit and means for further modifying said balancing action in response to a function of the residual currents of each of the parallel circuits and the equivalent zero-sequence mutual impedance between said parallel circuit and the circuit being protected.

1,897,023. MOLDING METHOD AND APPARATUS. RENS E. SCHIRMER, Newton Center, Mass., assignor, by mesne assignments, to Rens E. Schirmer, Newton Center, Mass., and Lawrie L. Witter, Boston, Mass. Filed Dec. 9, 1929. Serial No. 412,822. 5 Claims. (Cl. 18—42.)



1. A sectional mold comprising side plates and a plurality of relatively thin and parallel bottom-forming strips therebetween and extending to different elevations in a manner to produce a plurality of recesses and a fin between adjacent recesses in the bottom face of the article molded thereby.

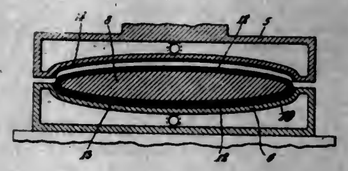
1,897,024. CONSTRUCTION OF BOOKS. CLOYD A. SHUSS, Baltimore, Md., assignor to The Oscar T. Smith & Son Company, Baltimore, Md. Filed Aug. 22, 1932. Serial No. 629,949. 1 Claim. (Cl. 129—23.)



The herein described issue and permanent memoranda book containing a series of independent pages or leaves, each divided into one or more detachable parts and a record stub by line punching, the several pages detachably secured to one side of a hinged cover by a headed retaining stud passing down through perforations in the recording spaces of the pages and joined to the cover by a headed screw passed through the cover and into the stud, all substantially as shown.

1,897,025. HOLLOW RUBBER ARTICLE AND METHOD OF MAKING THE SAME. STEPHEN L. PALMER, Teaneck, N. J. Filed Jan. 30, 1929. Serial No. 336,209. 8 Claims. (Cl. 18—56.)

1. The method of making a hollow article of vulcanized rubber which consists in assembling sheets of rubber composition and knitted fabric material to constitute opposite side walls of the bag together with an interposed rigid core within a suitable mold and forming said sheets under the application of heat and pressure to vulcanize the lateral edges of the bag walls together and homogeneously unite the several sheets with each other and forming



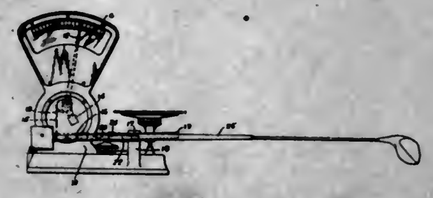
the bag at one end with a contracted neck portion having relatively expansible parts permitting the withdrawal of the core through said neck portion of the bag, and subsequently folding said expansible portions upon the contiguous portions of the neck wall and cementing the same together.

1,897,026. PROCESS FOR TREATING CELLULOSE AND PRODUCTS THEREFROM. PAUL KARRER, Zurich, Switzerland, assignor to Heberlein & Co., A. G., Wattwil, Switzerland, a Corporation of Switzerland. Filed May 14, 1929, Serial No. 363,102, and in Germany June 15, 1928. 10 Claims. (Cl. 8—20.)

1. A process of the kind described which comprises treating cotton with a caustic alkali and an agent including a product resulting from the treatment of a higher fatty acid with thionyl-chloride, capable of esterifying the surface of said cotton, and maintaining the treatment of cotton by said agent to form a water-repellent product having a soft fatty feel and a wooly texture.

10. A fabric containing cellulose retaining substantially its original fibrous structure chemically combined with a higher fatty acid and have a repellence to moisture, said fabric having its activity toward substantive dyestuffs relatively diminished as compared with the untreated material.

1,897,027. SCALE ATTACHMENT. WILLIAM GUMPRICH, Brooklyn, N. Y., assignor to International Scale Company, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 1, 1932. Serial No. 590,142. 4 Claims. (Cl. 265—61.)



1. A scale comprising automatic counterbalancing and indicating means, a lever operating said means, and a device carried by said lever to hold an object, said device being trough-shaped to receive the object and hold it against lateral displacement, said device being provided with an end wall to abut the object and hold it in definite position relative to said lever, and a top abutment provided for the object in the holder to prevent displacement upwardly of the object.

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office

Vol. 427—No. 2 TUESDAY, FEBRUARY 14, 1933 Price—$16 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscriptions, $16.00 per annum, including annual index, $18.25; single numbers, 35 cents each.
PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.
CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
ISSUE OF FEBRUARY 14, 1933	239
ADJUDICATED PATENTS	256
ADVERSE DECISIONS IN INTERFERENCE	259
CHANGES IN CLASSIFICATION	260
INTERFERENCE NOTICE	260
NOTICE OF CANCELLATION	259
APPLICATIONS UNDER EXAMINATION	260
DECISIONS OF THE U. S. COURTS—	
In re Fleisher	261
Chessin v. Robertson	261
In re Disbarment of William E. Baff	262
PATENT SUITS	263
DISCLAIMERS	264
TRADE-MARKS PUBLISHED (193 APPLICATIONS)	265
TRADE-MARK REGISTRATIONS GRANTED	299
TRADE-MARK REGISTRATIONS RENEWED	300
LABELS	301
PRINTS	302
REISSUES	303
DESIGNS	304
PATENTS GRANTED	313

February 14, 1933

Trade-Marks	270—No.	260,846 to No.	261,115, inclusive.
T. M. Renewals	45		
Labels	29—No.	41,740 to No.	41,768, inclusive.
Prints	4—No.	14,631 to No.	14,634, inclusive.
Reissues	3—No.	18,738 to No.	18,740, inclusive.
Designs	42—No.	89,281 to No.	89,322, inclusive.
Patents	964—No.	1,897,028 to No.	1,897,991, inclusive.
Total	1,365		

Adjudicated Patents

(D. C. Minn.) Teigen patent, No. 1,554,898, for tobacco pipe, claim 1 *Held* not infringed. *Teigen* v. *United Cigar Stores Co. of America, of New Jersey*, 1 F. Supp. 921.

(D. C. N. Y.) Goldberg patent, No. 1,723,729, for appliqué fabric, claims 1 and 2 *Held* invalid, claims 3 and 4 *Held* valid and infringed. *Goldberg* v. *Orloff*, 1 F. Supp. 928.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,717,938, F. K. Richtmyer, Sign, decided November 25, 1932, claims 1, 2, 5, and 7.

Pat. 1,741,124, Paul Dugelay, Feed water heater, decided January 20, 1933, claims 6, 7, and 9.

Pat. 1,871,218, James Dunlop, Overspeed brake at terminals, decided January 18, 1933, claim 1.

Changes in Classification

Order No. 3,282, January 30, 1933, directs:

In *class 137, Water Distribution* (Division 30), establish the following subclass:

Valve actuation
Flow control
152.5 Differential pressure.

The patents contained in this subclass have been taken for the most part from class 137, subclass 78, Mains and pipes, Systems, and from various subclasses in class 50, Fluid Pressure Regulators.

Interference Notice

U. S. PATENT OFFICE, *Washington, Jan. 26, 1933.*

Michel Hill, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the patent granted April 5, 1932, No. 1,852,240, to Michel Hill, 744 Bush St., San Francisco, California, and an application for patent filed by Charles T. Lyons, Medina, Washington, and a notice of such declaration sent by registered mail to said Hill at the said address having been returned by the post office undeliverable, notice is hereby given that unless said Hill, his assigns or legal representatives, shall enter an appearance therein within 20 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, JAN. 28, 1933.*

The Duo-Is Products Corp., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Simonis Company, 2101 Indiana Avenue, Chicago, Ill., to effect the cancellation of the trade-mark registration of The Duo-Is Products Corp., of 20 East Jackson Boulevard, Chicago, Ill., No. 247,602, dated October 2, 1928, and the notice of such proceeding sent by registered mail to the said The Duo-Is Products Corp. at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said The Duo-Is Products Corp., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business January 28, 1933.

(Total number of applications awaiting action, excluding Trade-Mark Division, 57,645; Trade-Mark Division, 1,016. Oldest new case, Aug. 26, 1932; oldest amended, Aug. 25, 1932. The dates given are 1932 except where † indicates 1933.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Sept. 1	Sept. 1	631
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Sept. 28	Sept. 29	969
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Oct. 28	Nov. 3	718
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Oct. 3	Sept. 23	471
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Oct. 29	Nov. 2	477
4806C	6. LEWERS, A. M., Carbon Chemistry	Sept. 6	Sept. 9	1,226
5725	7. JARBOE, C. G., Optics; Photography	Sept. 30	Sept. 29	1,090
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Oct. 28	Nov. 4	631
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Oct. 25	Nov. 23	586
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Oct. 5	Oct. 7	613
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Aug. 30	Aug. 25	629
7701	12. HENRY, C. C., Machine Elements	Sept. 8	Aug. 31	521
3096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Oct. 3	Oct. 5	831
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Oct. 29	Nov. 3	598
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Sept. 16	Sept. 16	1,445
5612	16. SPENCER, C. J., Telegraphy; Telephony	Oct. 28	Oct. 28	606
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Aug. 31	Aug. 31	1,233
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Nov. 14	Nov. 14	448
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Aug. 29	Aug. 29	1,352
6613	20. GROVE, S. D., Miscellaneous Hardware: Closure Fasteners; Locks and Latches; Safes; Undertaking	Nov. 19	Nov. 19	334
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Sept. 30	Oct. 1	889
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Sept. 6	Sept. 6	746
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Sept. 10	Sept. 10	727
5063	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Nov. 30	Nov. 30	496
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Sept. 10	Sept. 10	1,264
5893	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Oct. 1	Sept. 28	502
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Nov. 2	Nov. 1	686
4628	28. BENSON, A. R., Internal-Combustion Engines	Aug. 29	Aug. 29	1,027
5062	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Sept. 9	Sept. 8	528
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	Sept. 29	Oct. 29	666
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Sept. 8	Sept. 7	1,292
4096	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Nov. 1	Nov. 1	705
5096	33. WYMAN, W. L., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Sept. 6	Sept. 6	1,471
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	Aug. 29	Aug. 29	971
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Sept. 6	Sept. 8	902
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Aug. 29	Aug. 27	1,448
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Oct. 5	Oct. 6	749
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Sept. 3	Sept. 3	727
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Sept. 1	Sept. 6	1,025
7330	40. OBERLIN, J. J., Receptacles	Sept. 20	Sept. 20	1,693
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Sept. 2	Sept. 16	659
5832	42. CUTTING, H. O., Electric Signaling	Sept. 2	Aug. 30	1,189
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Sept. 6	Sept. 6	1,244
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Aug. 31	Sept. 3	858
7007	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Nov. 12	Nov. 12	596
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Sept. 9	Sept. 6	613
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Sept. 2	Sept. 8	1,491
5731	48. ROEPKE, O. B., Electricity, General Applications	Sept. 6	Sept. 6	749
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Aug. 26	Aug. 27	1,017
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 29	Aug. 29	1,365
5028	51. BACKUS, C. D., Radiant Energy	Oct. 15	Oct. 15	931
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Sept. 8	Sept. 10	611
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Nov. 16	Nov. 14	467
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Sept. 12	Sept. 14	935
6887	55. BOWEN, S. T., (Bread, Pastry, and Confection Making; Cutlery	Nov. 5	Nov. 7	322
	(Designs	Dec. 27	†Jan. 3	337
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Sept. 12	Sept. 3	1,081
3623	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Sept. 28	Sept. 28	602
5605	58. DOWELL, E. F., Abrading; Typewriting	Aug. 30	Sept. 12	730
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Sept. 6	Sept. 6	840
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Sept. 2	Sept. 2	1,202
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Sept. 2	Sept. 7	900
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Sept. 17	Sept. 15	1,200
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Sept. 2	Sept. 2	1,256
4708	64. NASH, F. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Sept. 10	Sept. 9	958
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Aug. 30	Aug. 30	1,390
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND, (Trade-Marks	†Jan. 3	†Jan. 16	890
	(Labels and Prints	Dec. 29	†Jan. 14	126

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE FISCHER

No. 3,000. Decided December 12, 1932

PATENTABILITY—DOUBLE PATENTING.

Claims for an expansion joint *Held* unpatentable over the claims of applicant's prior patent.

APPEAL from the Patent Office. Affirmed.

Mr. Albert F. Robinson for Fischer.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office, which decision rejected claims 8 and 9 of appellant's application for a patent on alleged improvements in expansion joints. The rejected claims are as follows:

8. An expansion joint comprising a waterproof binder reenforced throughout with long and short cotton fibers which have been interlocked in a mat-like structure.

9. Construction material comprising a preformed body of bituminous material reenforced throughout with long and short cotton fibers which have been interlocked in a mat-like structure.

Appellant's alleged invention is sufficiently described for the purposes of this case in the quoted claims. The claims were rejected by the Board of Appeals on the ground that to allow the same would be to grant to the appellant a second patent on the same subject matter; that there was issued to the appellant on September 11, 1928, a patent, No. 1,683,881, for an expansion joint which includes the disclosure of, and claims for, substantially the same article; and that, as there was no substantial difference between the product disclosed in this application and that claimed in said patent, the allowance of the claims here in issue would be an undue prolongation of the monopoly already enjoyed by appellant. It is admitted that the two applications were copending.

An examination of the cited patent shows that appellant there disclosed an expansion joint composed of a fibrous material, permeated with a bituminous filler. The patent specification recites, in part:

In developing this structure I select two different kinds of fibrous material, that is to say, a relatively short fibre and a relatively long fibre. For the purpose of illustration I will take felt, which is ordinarily a short fibre, although long enough to interlock or intertwine. For the relatively long fibre I will take, as an example, ordinary coreen (cocoanut fibre), which is a relatively long fibre. • • •

It further recites:

• • • I do not mean by this that I am necessarily limited to the use of felt and coreen, but I have simply selected these materials as being preferable in most instances as a very good example of the nature of the material which I will have to use.

Fourteen claims were allowed in said patent. Claim 5 is typical, and is as follows:

5. A preformed expansion joint comprising waterproofing material having incorporated therein individual long fibres of tough, non-brittle material and also relatively short interlocking fibres, said joint being formed by mixing the fibres into the waterproofing material while warm in order to form a plastic homogeneous mass and then forming the mixture into strips.

It will be observed that the patent not only discloses, but claims, an expansion joint made of a bituminous binder and short and long fibres mixed and interlocked and embedded in the mass.

Appellant claims, however, that he has, in his application here, taught the use of long and short *cotton fibres*, and that inasmuch as this is a new material not disclosed nor claimed in the patent, that he is now entitled to a patent therefor. No affidavits were presented, nor is there any showing in the record that any different results are produced by the use of said long and short cotton fibres, than would be produced by the materials disclosed in appellant's patent. Insofar as the present disclosure goes, appellant has substituted a different material for the old, which substitution is thought by the Board of Appeals to constitute "no substantially different or patentably novel invention from that covered by the claims in appellant's prior patent."

The mere substitution of materials, that is, the employment of short and long cotton fibres for the fibres described in the patent, in substantially the same manner, and with the same effect, as the materials disclosed by the patent, constitutes no invention. *Hotchkiss* v. *Greenwood*, 11 How. 248, 265; *Hicks* v. *Kelsey*, 18 Wall. 670; *Florsheim* v. *Schilling*, 137 U. S. 64, 76, 53 O. G. 1737; *Smith* v. *Goodyear Dental Vulcanite Co.* 93 U. S. 486, 11 O. G. 246; *In re Lobdell*, 56 App. D. C. 91, 10 F.(2d) 656, 345 O. G. 540; *In re Holst*, 18 C. C. P. A. (Patents) 748, 44 F.(2d) 873, 403 O. G. 4.

As it does not appear that substitution of the long and short cotton fibres accomplishes a new and useful result, or any increased efficiency. It is believed that the appellant has not shown any patentable distinction between the claims of his present application and those of his patent. This being true, his present claims were properly rejected. He may not have two patents upon the same invention. *In re Peiler*, 19 C. C. P. A. (Patents) 1051, 56 F.(2d) 878, 421 O. G. 3; *In re Fischer*, 19 C. C. P. A. (Patents) 1060, 57 F.(2d) 371, 420 O. G. 569; *In re Fischer*, 19 C. C. P. A. (Patents) 1077, 57 F.(2d) 369, 420 O. G. 814.

The decision of the Board of Appeals is affirmed. Affirmed.

Court of Appeals of the District of Columbia

CHESSIN *v.* ROBERTSON

No. 5,600. Decided January 9, 1933

1. PATENTABILITY—SECTION 4915, REVISED STATUTES.

The remedy by bill in equity under section 4915, Revised Statutes, applies only when the Commissioner decides to reject an application for a patent on the ground that the applicant is not on the merits, entitled to it.

2. SAME—SAME—HOLDING OF ABANDONMENT NOT REVIEWABLE THEREUNDER.

Where the Examiner held an application abandoned because no responsive amendment was filed within the six months period fixed by section 4894, Revised Statutes, and the Commissioner denied a petition to "revive" that application, *Held* that section 4915, Revised Statutes, does not give a right of review of the Commissioner's action since that action was not a rejection of the application on the merits.

APPEAL from the Supreme Court of the District of Columbia.

Mr. Alexander Chessin, pro se.

Mr. T. A. Hostetler, for the Commissioner of Patents.

Before MARTIN, Chief Justice, and ROBB, VAN ORSDEL, HITZ, and GRONER, Associate Justices.

PER CURIAM:

Appeal from a decree in the Supreme Court of the District dismissing appellant's bill (claimed to be authorized by sec. 4915, R. S. (sec. 63, tit. 35, U. S. C.)) against the Commissioner of Patents for the issuance of a patent to appellant "as specified in his claims."

On October 29, 1920, appellant filed his application for a patent. In due course the Examiner allowed 52 and rejected 7 of the 59 claims of the application. On appeal the Board of Appeals on November 29, 1927, affirmed the decision of the Examiner in the rejection of the 7 claims. *No appeal was taken from that decision*, but on May 25, 1928, four days before the expiration of the six months' period for filing responsive action, appellant filed an amendment authorizing the cancellation of the 7 rejected claims, *but substituting 5 new claims.* This amendment was held nonresponsive by the Examiner and appellant was advised that his application had become abandoned. A petition to the Commissioner to revive under the provisions of section 4894, Revised Statutes (sec. 37, tit. 35, U. S. C.) was filed. This petition was denied because not accompanied by a responsive amendment. The Commissioner was careful to add to his decision that—

the petition will be reconsidered if the applicant so requests and accompanies that request with an amendment which the Examiner reports puts the case in condition for allowance and at the same time pays the final fee so that the patent on this application which has been pending for nearly eight years can be issued without further delay.

Section 4894, Revised Statutes, requires all applications for patents to be completed and prepared for examination within six months after filing the application, and failure of the applicant in that regard, or to prosecute his application within six months after any action therein, works an abandonment of the application,

unless it be shown to the satisfaction of the Commissioner of Patents that such delay was unavoidable.

In *In re Carvalho*, 47 App. D. C. 584, 250 O. G. 514, it was ruled that the decision of the Commissioner denying a petition to revive an application is not subject to judicial review. That decision was followed in the *Seiss case*, 48 App. D. C. 581, 262 O. G. 168. Appellant, therefore, has no pending application in the Patent Office.

Appellant here seeks in effect a revival of his application and the allowance of five claims in addition to those passed upon by the Patent Office. Those five claims are not even in this record. In *Shoemaker* v. *Robertson*, 60 App. D. C. 345, 54 F. (2d) 456, we ruled, on the authority of *Butterworth* v. *United States ex rel. Hoe*, 112 U. S. 50, 68, 29 O. G. 615,

that the remedy by bill in equity under section 4915, Revised Statues, applies only when the Commissioner decides to reject an application for a patent on the ground that the applicant is not on the merits entitled to it.

That ruling is applicable here, because the Commissioner has not passed on the merits of the five claims which appellant filed in the nonresponsive amendment to his application. For the reason already stated, he refused to consider them at all, and that action is not reviewable here.

It results that the decree must be affirmed.

Affirmed.

Supreme Court of the United States

Attorneys—Disbarment

January 23, 1933

IN RE DISBARMENT OF WILLIAM E. BAFF

PER CURIAM:

A committee of the bar of this Court appointed in this matter by order of this Court entered February 15, 1932, having reported that William E. Baff, of Los Angeles, Calif., was disbarred from the practice of the law in the United States Patent Office by an order duly entered March 18, 1921, with the approval of the Secretary of the Interior, made after notice and hearing, and based upon finding of gross misconduct, and that the application of the said Baff for re-registration has been refused by the Commissioner of Patents and that such refusal had been sustained by the Chief Justice of the Supreme Court of the District of Columbia; and the said committee having recommended that the said William E. Baff be disbarred from the practice of the law in this Court unless he should show good and sufficient cause to the contrary; and this Court having issued a rule directing the said Baff to show cause why, upon the record of his disbarment in the United States Patent Office and of the denial of his application for re-registration his name should not be stricken from the roll of attorneys admitted to practice before the bar of this Court; and the Court, upon consideration of the return of the said Baff to the said rule, presented to this Court on December 5, 1932, being of the opinion that the said William E. Baff has failed to show good and sufficient cause as in that rule required; therefore, upon consideration of all the records and proceedings in this matter.

It is now here ordered that the said William E. Baff, be, and he is hereby, disbarred from the practice of the law in this Court, and that his name be stricken from the roll of attorneys admitted to practice in this Court.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

971,838, W. M. Fulton, Process of making tubular metal walls, D. C., N. D. Ohio, E. Div., Doc. E 2236, *The Fulton Co.* v. *The Bishop & Babcock Mfg. Co.* Patent held valid and infringed Dec. 8, 1932.

1,102,152, P. Jones, Process of pumping oil wells, D. C., S. D. Calif. (Los Angeles), Doc. E O–45–H, *Jones McLaughlin, Inc.*, v. *G. F. Getty, Inc.* Dismissed Sept. 17, 1932.

1,223,659, W. S. Barnickel, Treatment of crude oil; 1,467,831, same, Process for treating petroleum emulsions; 1,596,589, M. de Groote, same, D. C., S. D. Calif. (Los Angeles), Doc. E Y–44–H, *The Tretolite Co. et al.* v. *C. H. Hills et al.* Decree for plaintiff Nov. 21, 1932.

1,231,764, F. Lowenstein, Telephone relay; 1,403,475, H. D. Arnold, Vacuum tube circuit, filed Nov. 7, 1932, D. C., S. D. Calif., C. Div., Doc. E Y–28–H, *Radio Corp. of America et al.* v. *M. Seaton et al.*

1,309,979, J. P. Booker, Process of making cream centers for coated candy, D. C., S. D. N. Y., Doc. E 47/380, *The Numoline Co.* v. *Haug & Co., Inc.* Dismissed (notice Dec. 2, 1932).

1,315,585, C. Weizmann, Production of acetone and alcohol by bacteriological process, C. C. A., 3d Cir., Doc. 4866, *Union Solvents Corp.* v. *Guaranty Trust Co. of New York.* Decree affirmed Dec. 6, 1932.

1,328,107, S. B. Waring, Expansion joint strip; 1,339,094, F. C. Bowman, Preformed expansion joint strip; Re. 16,554 (of 1,503,942), A. C. Fischer, Elastic and expansible paving joint; 1,572,474, 1,683,881, same, Expansion joint; 1,726,613, same, Constructional material; 1,744,714, same, Constructional material and method of making same, filed Dec. 2, 1932, D. C., N. D. Ohio, W. Div., Doc. E 1315, *Construction Materials Patents, Inc.*, v. *W. C. Fischer et al.*

1,339,094. (See 1,328,107.)

1,363,304, A. Bickel, Apparatus for concrete work, D. C., S. D. Ind. (Indianapolis), Doc. 1835, *The Jaeger Machine Co.* v. *Lee Transit Mixer Corp.* Injunction Nov. 28, 1932.

1,371,015, C. Amiquet, Lighting fixture, D. C., S. D. N. Y., Doc. B 71/295, *The Miller Co. et al.* v. *O. Plant & Co., Inc. et al.* Consent decree for plaintiff (notice Dec. 6, 1932).

1,384,115, D. L. Baxter, Package wrapper, D. C., E. D. N. Y., Doc. E 6076, *Simplici-T-Folding Box Co.* v. *Star Corrugated Box Co., Inc.* Dismissed Dec. 8, 1932.

1,403,475. (See 1,231,764.)

1,413,577, J. M. Eldredge, Mattress border, filed Oct. 3, 1932, D. C., S. D. Ind. (Indianapolis), Doc. 1419. *Eldredge Border Co. et al.* v. *Backstay Welt Co. et al.*

1,422,841, W. H. Dey, Luminous article, filed Dec. 5, 1932, D. C., S. D. N. Y., Doc. E 73/67, *U. S. Radium Corp.* v. *New York Merchandise Co., Inc.*

1,459,855, H. L. Olden, Sheet metal roofing, filed Dec. 6, 1932, D. C., S. D. Ohio, W. Div., Doc. E 837, *The Cincinnati Sheet Metal & Roofing Co.* v. *The Edwards Mfg. Co.*

1,460,716, B. F. Greer, Book form savings bank, D. C., N. D. Ohio, E. Div., Doc. E 2585, *Bankers Utilities Co., Inc., et al.* v. *The Bankers Savings & Credit System Co.* Dismissed without prejudice Dec. 7, 1932.

1,462,266, G. D. Degner, Traffic regulator; 1,522,617, same, Traffic-signal device, D. C., S. D. Calif. (Los Angeles), Doc. (4528–H) E U–107–H, *G. D. Degner* v. *General Electric Co.* Dismissed Nov. 30, 1932.

1,466,656, Barr & Jackson, Electric toaster, filed Dec. 8, 1932, D. C., W. D. Mich. (Grand Rapids), Doc. 2607, *H. C. Le Vine* v. *Graybar Electric Co. et al.*

1,467,831. (See 1,223,659.) 1,503,942. (See 1,328,107.)

1,522,617. (See 1,462,266.)

1,526,982, E. W. Hill, Stencil sheet, D. C., S. D. N. Y., Doc. E 71/218, *A. B. Dick Co.* v. *Gebe-Aktiengesellschaft et al.* Decree for plaintiff Nov. 30, 1932. Same, filed Dec. 7, 1932, D. C., S. D. N. Y., Doc. E 73/99, *A. B. Dick Co.* v. *Mailing Equipment Corp. et al.*

1,540,628, Hurxthal & Hurxthal, Automatic temperature control for bread toasters, filed Dec. 5, 1932, D. C. Md., Doc. E 2116, *Proctor & Schwartz Electric Co.* v. *Montgomery Ward & Co.*

1,572,474. (See 1,828,107.)

1,581,803, J. Underation, Auger head, filed Dec. 6, 1932, D. C., S. D. Iowa (Des Moines), Doc. E 4494, *Hardsocg Mfg. Co. et al.* v. *Central Mine Equipment Co.*

1,596,589. (See 1,228,659.)

1,614,136, M. C. Latour, Thermionic amplifying apparatus, filed Nov. 30, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y–54–H, *Latour Corp.* v. *Trans-Continental Radio, Inc.* Doc. E Y–57–H, *Latour Corp.* v. *El Rey Radio Mfg. Co.*

1,624,226, W. S. Elters, Register hood, D. C., S. D. Ind. (Indianapolis), Doc. 1337, *Gem Metal Shield Co., Inc.*, v. *Barclay Mfg. Co.* Dismissed without prejudice Nov. 5, 1932.

1,641,937. H. Sunstedt, Air propelled barge, filed Dec. 6, 1932, Court of Claims, Doc. 42112, *H. Sundstedt et al.* v. *The United States.*

1,648,808, L. A. Hazeltine, Wave signaling system, filed Nov. 30, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y–52–M, *Hazeltine Corp.* v. *Trans-Continental Radio, Inc.* Doc. E Y–55–C, *Hazeltine Corp.* v. *El Rey Radio Mfg. Co.* Consent decree for injunction Dec. 10, 1932. Same, filed Dec. 7, 1932, D. C., E. D. N. Y., Doc. E 6710, *Hazeltine Corp.* v. *Davega-City Radio, Inc.* Same, filed Dec. 12, 1932, D. C., E. D. N. Y., Doc. E 6722, *Hazeltine Corp.* v. *Abraham & Straus, Inc.* Doc. E 6726, *Hazeltine Corp.* v. *Michaels Bros., Inc.* Same, filed Dec. 13, 1932, D. C., E. D. N. Y., Doc. E 6729, *Hazeltine Corp.* v. *Davega-City Radio, Inc.* Same, D. C., S. D. N. Y., Doc. E 73/145, *Hazeltine Corp.* v. *Emerson Radio & Phonograph Corp.* Same, D. C., S. D. N. Y., Doc. E 72/363, *Hazeltine Corp.* v. *J. Wanamaker New York, Inc.* Consent order of discontinuance (notice Dec. 13, 1932).

1,658,323, L. Blackmore, Refrigerator control, D. C., S. D. Iowa (Des Moines), Doc. E 4462, *Frigidaire Corp. et al.* v. *M. L. Munn et al.* Dismissed Nov. 30, 1932.

1,680,370, P. E. Edelman, Radio power supply unit, filed Dec. 2, 1932, D. C., W. D. Mich., S. Div., Doc. E 2606, *E. Benning* v. *Sears, Roebuck & Co.*

1,683,881. (See 1,328,107.)

1,684,716, Seeger & Seeger, Refrigerator, filed May 27, 1932, D. C. Minn. (St. Paul), Doc. E 2484, *Seeger Refrigerator Co.* v. *Bohn Refrigerator Co.*

1,684,900, C. B. Waters, Automobile circulation and heating system, filed Dec. 18, 1931, D. C. Minn. (St. Paul), Doc. E 2401, *Tropic-Aire, Inc.*, v. *S. J. Mack.*

1,691,904, H. C. Gamble, Collapsible hat bag; 1,691,905, same, Bag, C. C. A., 2d Cir., Doc. 12094, *H. C. Gamble* v. *The Daisy Products, Inc.* Decree affirmed (notice Dec. 7, 1932).

1,691,905. (See 1,691,904.) 1,726,613. (See 1,828,107).

1,737,620, E. R. Talbot, Waffle iron, filed Nov. 26, 1932, D. C., S. D. Ind. (Indianapolis), Doc. 1431, *Ruth Moore* v. *Porter Steel Specialties, Inc.*

1,744,714. (See 1,328,107.)

1,761,627, C. F. Hine, Material classifier, D. C., N. D. Calif. (San Francisco), Doc. E 3050–K, *Reisener Chocolate Co., Inc.*, v. *Rees Blow Pipe Mfg. Co. et al.* Dismissed Dec. 2, 1932.

1,768,121, W. A. Curtis, Dumbwaiter closing and locking device, filed Dec. 1, 1932, D. C., S. D. N. Y., Doc. E 73/18, *Dumbwaiter Closer Lock Co. of New York, Inc.*, v. *S. Goldstein.*

1,768,600, H. B. Hull, Refrigerating apparatus, D. C., S. D. Iowa. (Des Moines), Doc. E 4463, *Frigidaire Corp.* v. *M. L. Munn et al.* (*Munn & Cassaday Co.*). Dismissed Nov. 30, 1932.

1,771,166, M. E. Davis, Process for applying paints or cements to skived articles, D. C., N. D. Ohio, E. Div., Doc. 4053, *H. E. Moyses et al.* v. *The Leo Meyer Co.* Dismissed Dec. 5, 1932.

1,791,267, 1,888,031, H. L. Fink, Terrazzo strip, filed Dec. 6, 1932, D. C., E. D. N. Y., Doc. E 6709, *H. L. Fink* v. *V. Foscato, Inc., et al.*

1,850,902, R. E. Thompson, Safety razor blades, D. C., S. D. N. Y., Doc. E 66/266, *Gillette Safety Razor Co.* v. *Segal Lock & Hardware Co., Inc.* Dismissed (notice Dec. 7, 1932).

1,858,316, Thompson & Smith, Safety razor, D. C., S. D. N. Y., Doc. E 68/148, *Gillette Safety Razor Co.* v. *Segal Lock & Hardware Co., Inc.* Dismissed (notice Dec. 7, 1932).

1,876,660, J. Giltsch, et al., Vehicle body construction, filed Dec. 2, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y-63-J, *Standard Carriage Works, Inc.*, v. *Welbilt Body Co.*

1,887,501, H. A. Enrich, Dress hanger, filed Dec. 7, 1932, D. C., S. D. N. Y., Doc. E 73/101, *H. A. Enrich* v. *S. Marks et al.* (*Phoenix Novelty Mfg. Co.*).

1,888,031. (See 1,791,267.) Re. 16,554. (See 1,828,107.)

Re. 17,180, C. T. Hibbard, Method and means for starting synchronous motors, filed Dec. 2, 1932, D. C., S. D. N. Y., Doc. E 73/43, *Electric Machinery Mfg. Co.* v. *General Electric Co.*

T. M. 137,699, T. M. 202,599, Simmons Co., Metal bedsteads, bed springs, couches, etc.; T. M. 207,821, same, Mattress, D. C. R. I., Doc. 370, *Simmons Co.* v. *Simon's Bedding Co. et al.* Consent decree Dec. 6, 1932.

T. M. 202,599. (See T. M. 137,699.)

T. M. 207,821. (See T. M. 137,699.)

Disclaimers

1,194,752.—*Theodore H. Krueger,* New York, N. Y. MOISTENING DEVICE FOR GUMMED STICKERS OR LABELS. Patent dated August 15, 1916. Disclaimer filed January 24, 1933, by the assignee, *Better Packages, Inc.*

Hereby disclaims from the operation of claim 12 any construction of moistening device in which the guard means does not rest upon and maintain constant contact with the top of the inverted brush except when gummed strips are being passed through the moistener.

1,825,564.—*Joe B. Whitlow,* Johnson City, Tenn. REVOLVING SIGN. Patent dated September 29, 1931. Disclaimer filed January 24, 1933, by the patentee.

Hereby enters this disclaimer to claim 2 in said specification.

"2. A wind operated sign comprising a supporting standard, a rotatable head carried by the standard including an open rectangular frame having a top wall, a bottom wall, and end walls, marginal flanges formed on the longitudinal edges of the top and bottom walls, and side sign plates having guide flanges on their longitudinal marginal edges receiving the flanges of the top and bottom walls, and means for locking the sign plates together against accidental displacement from the frame."

1,844,434.—*Brouwer D. McIntyre,* Monroe, Mich. COMPOSITION BOARD AND METHOD OF MANUFACTURING THE SAME. Patent dated February 9, 1932. Disclaimer filed January 24, 1933, by the assignee, *Insulation Development Corporation.*

Hereby enters the following disclaimer; to wit:

In the specification, page 1, lines 92 to 96, petitioner disclaims ground asphalt, emulsions of asphalt and coal tar pitch as a sizing or water resisting material except when these materials are introduced into the beater or mixer in a cold condition and in a ground or emulsified form and caused to commingle with the other materials of the mixture without the application of sufficient heat to melt or soften the asphalt or coal tar pitch in the beater or mixer.

Your petitioner also disclaims from the scope of claim 1 the use of ground asphalt, emulsions of asphalt and coal tar pitch as a water-proofing agent except when introduced into the other ingredients in a cold condition and in a ground or emulsified form and caused to commingle therewith in the mixer or beater without the application of heat sufficient to melt or soften the asphalt or coal tar pitch.

CARNEGIE LIBRARY OF ATLANTA

TRADE-MARKS

OFFICIAL GAZETTE, FEBRUARY 14, 1933

[VOL. 427. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 332,017. JEFFERYS & CO., LTD., Burbank, Calif. Filed Nov. 7, 1932.

FILAC

For Washed Motion Picture Film Scrap.
Claims use since Oct. 1, 1930.

Ser. No. 332,092. CHAPPEL BROS., INC., Rockford, Ill. Filed Dec. 12, 1932.

BIRD-E-GRAVEL

No claim being made to the words "Bird" and "Gravel" apart from the mark as a whole.
For Gravel for Caged Birds.
Claims use since Nov. 1, 1932.

CLASS 2

Receptacles

Ser. No. 308,845. ELLIS-FOSTER COMPANY, Montclair, N. J. Filed Dec. 10, 1930.

UNYTE

For Molded Articles Produced from Synthetic Resin Compositions—Namely, Dishes, Dish-Like Containers and Closures Therefor.
Claims use since Apr. 1, 1930.

Ser. No. 332,778. MACOLITE PRODUCTS CORPORATION, New York, N. Y. Filed Dec. 5, 1932.

MAC-O-PAC

For Paper or Pasteboard Cartons Sold to the Trade Empty.
Claims use since Nov. 28, 1932.

Ser. No. 333,692. THE WATERBURY PAPER BOX COMPANY, Waterbury, Conn. Filed Jan. 5, 1933.

METALON

For Metal Covered Boxes.
Claims use since Dec. 13, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 323,437. KLEEN CHEMICAL COMPANY, Philadelphia, Pa. Filed Jan. 23, 1932.

KLEEN & BLEECH

The drawing is lined for blue, no claim being made to the words "Kleen" and "Bleech" except in the form and arrangement substantially as shown in the drawing.
For Floor Cleaner and Bleach—Namely, a Preparation That Will Remove Paint, Varnish, and Shellac From Floors and Bleach the Same Back to the Original Color
Claims use since Oct. 1, 1931.

Ser. No. 326,076. BEHR-MANNING CORPORATION, Troy at Watervliet, N. Y. Filed Apr. 14, 1932.

Speed-wet

No claim is made to either of the words "Wet" "Speed" apart from the mark as shown.
For Flexible Abrasive Paper and Cloth.
Claims use since Apr. 4, 1932.

Ser. No. 327,060. KRESGE DEPARTMENT STORES CORP., Newark, N. J. Filed May 18, 1932.

AL-WATER BRAND SOAP

No claim is made to the words "Al-Water Brand Soap" apart from the mark shown in the drawing.
For Soap.
Claims use since Oct. 15, 1931.

Ser. No. 329,725. BALTZ & KOERPER, Philadelphia, Pa. Filed Aug. 20, 1932.

A L K O
DOUBLE K K·W·K K
QUICK SOAP

The use of the words "Double Quick Soap" and of each of these words separately and of any two of them together is not claimed apart from the mark as shown in the drawing.
For Soaps.
Claims use since June 12, 1932.

Ser. No. 330,517. METAL TEXTILE CORPORATION, West Orange, N. J. Filed Sept. 20, 1932.

CHORE DAD

For Metallic Abrasive Scouring Pads.
Claims use since September, 1927.

Ser. No. 330,646. F. M. RIGGS, Maywood, Ill. Filed Sept. 23, 1932.

P.M.E.
PURE MILD EFFICIENT

The words "Pure", "Mild", "Efficient" are hereby disclaimed apart from the mark as shown on the drawing.
For Cleansing Compound for General Cleaning Purposes Having Incidental Water Softening Qualities.
Claims use since Jan. 1, 1920.

Ser. No. 332,693. IOWA SOAP COMPANY, Burlington, Iowa. Filed Dec. 2, 1932.

Protex

For Toilet Soap.
Claims use since Nov. 8, 1932.

Ser. No. 333,173. ILLINOIS DYESTUFF CORPORATION, Chicago, Ill. Filed Dec. 6, 1932.

CARPETONE

For Carpet Cleaning Compound.
Claims use since Aug. 28, 1931.

Ser. No. 333,285. FERMAX PRODUCTS CO., Irvington, N. J. Filed Dec. 22, 1932.

FERMAX

For Washing Compounds for Tub, Washing Machine, Dishes, and Household Uses.
Claims use since July 29, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 282,000. ANTONIO INGARGIOLA, Brooklyn, N. Y. Filed Apr. 8, 1929.

RESOLVE
SPERANZA
TRADE MARK
DIRECTIONS: Apply to affected parts and cover with bandage. KEEP the bar closed
Price 75c
Manufactured by A. INGARGIOLA
Patent Applied for

The portrait appearing on the drawing is that of the applicant, and all of the wording with the exception of the words "Resolve", "Speranza", and "A. Ingargiola" is disclaimed.
For Pharmaceutical Preparation for the Treatment of Rheumatism, Lumbago, Neuralgia, and the Relief of Swellings and Skin Irritations or May Be Applied to Relieve Superficial Sores, Bruises, and Burns, also Relieving Colds, Headaches, and in Many Cases Acute Pains.
Claims use since Mar. 15, 1929.

Ser. No. 323,436. SYLVAN M. EDISON, doing business as Sanident Company, Chicago, Ill. Filed Jan. 23, 1932.

Sanihold
DENTURE ADHESIVE POWDER

All but the word "Sanihold" on the accompanying drawing is disclaimed.
For Dental Plate Adhesive Powder.
Claims use since Mar. 15, 1928.

Ser. No. 326,288. IODINE PRODUCTS CORPORATION, Fort Worth, Tex. Filed Apr. 20, 1932.

I-O-DY-NO

For Medical Preparation for Blood Disorders Such as Rheumatism, Arthritis, Neuritis, Glandular Disorders, Goitre, Asthma and Hay Fever.
Claims use since Feb. 10, 1932.

Ser. No. 328,791. KALI-CHEMIE AKTIENGESELLSCHAFT, Berlin, Germany. Filed July 14, 1932.

Omdigest

For Pharmaceutical Preparations for Aiding and Regulating Digestion and for Treating Digestive Disorders.
Claims use since June, 1931.

Ser. No. 330,986. KLEEN CHEMICAL COMPANY, Philadelphia, Pa. Filed Oct. 5, 1932.



The drawing is lined for red. No claim is made to the words "Kleen a Drain" apart from the mark substantially as shown.
For Drain Pipe Solvent—Namely, a Preparation that Will Remove Grease, Scum, and Similar Refuse in Drain Pipes and Prevent Their Accumulation.
Claims use since July 1, 1932.

Ser. No. 331,113. JOHN H. LABES, Grandville, Mich. Filed Oct. 10, 1932.



The portrait is fanciful.
For Salves, Lotions, and Herbs for Hemorrhoids, Sores, Fevers, Colds, Nervousness, Gassed or Sour Stomach or Light Indigestion.
Claims use since Sept. 15, 1911.

Ser. No. 331,298. CADY L. DANIELS, INC., Colorado Springs, Colo. Filed Oct. 17, 1932.

ONE FIL

For Anti-Freeze Solution for Motor Vehicle Radiators.
Claims use since Sept. 28, 1932.

Ser. No. 331,718. DR. SCAT CHEMICAL COMPANY, Chicago, Ill. Filed Oct. 29, 1932.

Dr. Scat Refinisher

Applicant makes no claim to the exclusive use of the word "Refinisher" apart from its use in the mark shown.

For Liquid Used for Refinishing, Resurfacing Mimeograph, Typewriter, and Multigraph Rubber Rolls, Etc., Making the Same Resilient.

Claims use since Sept. 15, 1921.

Ser. No. 331,814. A P PRODUCTS COMPANY, Greensboro, N. C. Filed Oct. 31, 1932.

A P

For Headache Powders, Recommended for Relief of Simple Headaches, Neuralgia, Head Colds, Muscular Aches, Periodic Pains.

Claims use since Aug. 15, 1932.

Ser. No. 331,824. JOSEPH U. GREENSTEIN, doing business as Columbia Drug Store, Washington, D. C. Filed Nov. 2, 1932. Under 10-year proviso.

CRANE'S SPECIFIC

For Cough Syrup for Colds and Hoarseness.

Claims use since 1892.

Ser. No. 331,960. PARKE, DAVIS & CO., Detroit, Mich. Filed Nov. 7, 1932.

ERGONE

For Physiologically Active Aqueous Solution Prepared from Ergot for Hypodermic Use.

Claims use since Aug. 13, 1903.

Ser. No. 332,069. THEODOR LEONHARD WAX CO. INC., Haledon, N. J. Filed Nov. 11, 1932.

BB BRAND

The word "Brand" is disclaimed apart from the mark as shown.

For Beeswax.

Claims use since Jan. 26, 1932.

Ser. No. 332,083. HENRY BLUESTONE, doing business as Sody Products Co., Pittsburgh, Pa. Filed Nov. 12, 1932.

SODY THE PLEASANT LAXATIVE

Registration of the words "The Pleasant Laxative" is not claimed apart from the mark shown.

For Laxative Drink.

Claims use since Nov. 4, 1932.

Ser. No. 332,122. JANIE LINCOLN LABORATORIES, Tiffin, Ohio. Filed Nov. 14, 1932.

Janie Lincoln

The portrait appearing on the drawing is fanciful.

For Cosmetics—Namely, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Bleach Creams, Astringent Cerates, Astringents, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs; Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow Pencils, Eyebrow and Eyelash Darkener, Hand Lotions, Skin Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Tonics, Shampoos, Lip Sticks, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Deodorants, Perfumes, Toilet Waters, Brilliantine Liquid and Paste, Lip Pomades, Compact Powder Refills.

Claims use since Feb. 5, 1932.

Ser. No. 332,141. CHRYSON'S, LTD., Los Angeles and Hollywood, Calif. Filed Nov. 15, 1932.

chryson

For Face Powders, Foundation Creams, and Cream Rouge.

Claims use since Oct. 1, 1932.

Ser. No. 332,220. BILTRITE MOTOR EQUIPMENT CO. INC., New York, N. Y. Filed Nov. 17, 1932.

BILTRITE

For Flushing Compounds and Preparations for Motor Vehicle Engines, Compounds and Preparations for Stopping Leaks in Radiators, Glycerine, Compounds and Preparations for Removing Road Tar from Motor Vehicles, Motor Vehicle Engine Carbon Remover, Anti-Freeze Compounds and Preparations for Motor Vehicle Radiators, and Denatured Alcohol (Non-Beverage Purposes).

Claims use since July 2, 1923.

Ser. No. 332,300. KESTER SOLDER COMPANY, Chicago, Ill. Filed Nov. 19, 1932.

KESTER

For Soldering Fluxes.

Claims use since Nov. 14, 1932.

Ser. No. 332,421. RHUTONG COMPANY, Wheeling, W. Va. Filed Nov. 23, 1932.

RHUTONG

For Liquid Preparation Taken Internally for Use in Treating Stomach and Bowel Disorders, Nervous Indigestion, Constipation, Insomnia, and Hyperacidity.

Claims use since Nov. 12, 1932.

Ser. No. 332,433. CLARENCE P. WYNNE, doing business as Phoenix Preparations, Scranton, Pa. Filed Nov. 23, 1932.

Acula

For Vaginal Antiseptic and Deodorant in Tablet Form.

Claims use since Mar. 15, 1932.

Ser. No. 332,479. THE AYER COMPANY, Lowell, Mass. Filed Nov. 26, 1932.

TRIOLUOL

For Medicinal Preparation for Spasmodic Coughs Resulting from Colds.

Claims use since Nov. 25, 1932.

Ser. No. 332,528. HAMPDEN SALES CORPORATION, Springfield, Mass. Filed Nov. 28, 1932.

MIRA-TEX

For Filling or Sizing Material for Textiles.

Claims use since Nov. 16, 1932.

Ser. No. 332,571. ABBOTT LABORATORIES, Chicago, Ill. Filed Nov. 29, 1932.

A-B-D MALT

The word "Malt" is disclaimed apart from the mark shown in the drawing.

For Compounds Containing Malt and Vitamins for Use as Nutritional Preparations.

Claims use since July, 1930.

Ser. No. 332,582. S. A. HARDIN, doing business as Bontabs Company, Winchester, Ky. Filed Nov. 29, 1932.

Bontabs

For Medicinal Preparation for Internal Administration for Relief of Constipation.
Claims use since July 1, 1921.

Ser. No. 332,620. KESTER SOLDER COMPANY, Chicago, Ill. Filed Nov. 30, 1932.

KESTER

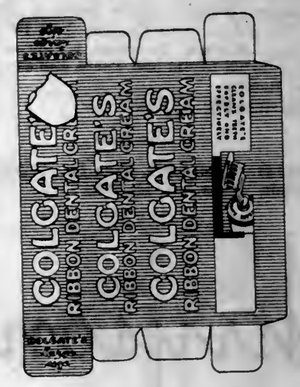
For Soldering Fluxes.
Claims use since Nov. 26, 1932.

Ser. No. 332,651. THE D. G. MANUFACTURING COMPANY, Atlanta, Ga. Filed Dec. 1, 1932.

DG

For Preparation to Relieve Simple Headaches, Head Colds, Neuralgia, Muscular Aches and Pains and to Reduce Fever.
Claims use since Aug. 1, 1932.

Ser. No. 332,686. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed Dec. 2, 1932.



Applicant makes no claim herein to the exclusive use of the representation of a carton appearing on the drawing, or to any of the words appearing upon the said trade-mark other than "Colgate's" and "Ribbon." The drawing is lined for red and black.
For Dental Cream.
Claims use since June, 1932.

Ser. No. 332,716. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Dec. 3, 1932.

Preloban

For Preparation Used in the Hormonal Treatment of Disturbances of Sexual Functions and Metabolic Anomalies.
Claims use since Nov. 1, 1932.

Ser. No. 332,733. ROBESON PROCESS COMPANY, New York, N. Y. Filed Dec. 3, 1932.

LACTANX

For Material Used as a Tanning Extract.
Claims use since Oct. 3, 1932.

Ser. No. 332,774. ELGIN W. JOHNSTON, doing business as E. W. Johnston Co., Toledo, Ohio. Filed Dec. 5, 1932.

GALLOX

For Medicine Comprising Principally Purified Ox Bile Compounded with Minor Ingredients to be Used in Treatment of Liver Disturbances, Constipation, Indigestion, and Gall Stones.
Claims use since Nov. 1, 1932.

Ser. No. 332,814. HINZE AMBROSIA, INC., New York, N. Y. Filed Dec. 6, 1932.

AMBRŌSIA

For Face and Skin Creams.
Claims use since Mar. 14, 1931.

Ser. No. 332,842. CATHERINE C. FENTON, INC., Waterbury, Conn. Filed Dec. 7, 1932.

ACCELRAYTONE

For Body Lotion, Foot Lotion, Hand Lotion, Deodorant Lotion, Hair Tonic, Shampoo, Astringents, Cold Cream, Wave Fluid, Hair Oil, Hair Pomade, Perfumes, Toilet Water, Face Powder, Dusting Powder, Bath Salts, Hair Dye, Face Pack, Meal Face Bag.
Claims use since Nov. 10, 1932.

Ser. No. 332,905. YBRY, INC., New York, N. Y. Filed Dec. 8, 1932.

l'amour toujours

For Perfume.
Claims use since Nov. 26, 1932.

Ser. No. 332,945. ALTON B. P. BREITHAUPT, doing business as Breithaupt Drug Co., Sherrill, N. Y. Filed Dec. 10, 1932.

STOPPO

For Medicinal Preparation for Coughs.
Claims use since February, 1929.

Ser. No. 333,021. THE WILBUR WHITE CHEMICAL COMPANY, INC., Owego, N. Y. Filed Dec. 12, 1932.

BRYTENE

For Wax Emulsion for the Preservation and Improvement in Appearance of Citrus Fruit and Other Edibles.
Claims use since Dec. 5, 1932.

Ser. No. 333,031. FUEL DEVELOPMENT CORPORATION, New York, N. Y. Filed Dec. 13, 1932.

For Chemicals for Producing Anti-Knock Conditions in Fuel Oils and Gasoline.
Claims use since Nov. 18, 1932.

Ser. No. 333,043. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed Dec. 13, 1932.

Nujol

For Mineral Oils and Compounds, Emulsions, and Mixtures of Mineral Oils with Other Substances for Medicinal Purposes.
Claims use since July 6, 1932.

Ser. No. 333,074. PAUL H. LEMEN, doing business as Amita Laboratories, Philadelphia, Pa. Filed Dec. 14, 1932.

AMITA

For Preparation for the Relief of Painful Menstruation.
Claims use since July 15, 1931.

Ser. No. 333,105. PILGRIM COMPANY, St. Louis, Mo. Filed Dec. 15, 1932.

DERMA ROSE

For Liquid Skin Cleanser.
Claims use since June 15, 1932.

Ser. No. 333,106. PITMAN-MOORE COMPANY, Indianapolis, Ind. Filed Dec. 15, 1932.

CYTIN-ZYME

For Medicinal Product for Treatment of Pernicious Anemia.
Claims use since Oct. 20, 1932.

Ser. No. 333,139. ELIZABETH ARDEN, INC., New York, N. Y. Filed Dec. 17, 1932.

Elizabeth

For Perfumes and Perfumery, Cleansing Cream, Face and Hand Lotion, Face Powder and Dentifrice.
Claims use since January, 1905.

Ser. No. 333,142. HARRY G. BLANCHARD, doing business as Beauty Maid Products Company, Buffalo, N. Y. Filed Dec. 17, 1932.

Beauty Maid

For Cosmetics—Namely, Skin Creams and Skin Lotions and Hair Tonic.
Claims use since Dec. 12, 1932.

Ser. No. 333,167. PARIS LABORATORIES, INC., New York N. Y. Filed Dec. 17, 1932.

Countess Maritza

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener in Liquid, Cream, and Solid Form, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since August, 1931.

Ser. No. 333,190. THE ROBERT J. KING COMPANY, INCORPORATED, Stamford, Conn. Filed Dec. 19, 1932.

PLASTOGEN

For Chemical Composition for Use in Compounding Rubber.
Claims use since Aug. 10, 1931.

Ser. No. 333,191. THE ROBERT J. KING COMPANY, INCORPORATED, Stamford, Conn. Filed Dec. 19, 1932.

BONDOGEN

For Chemical Composition for Use in Compounding Rubber.
Claims use since Oct. 3, 1931.

Ser. No. 333,375. P & M TONAGREN CO., Kansas City, Mo. Filed Dec. 27, 1932.



For Fungicide.
Claims use since June 1, 1932.

Ser. No. 333,560. FRANK C. REILLY, New York, N. Y. Filed Dec. 31, 1932.

Après-midi
(Afternoon)

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener in Liquid, Cream, and Solid Form, Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Jan. 5, 1931.

Ser. No. 333,572. THE AYER COMPANY, Lowell, Mass. Filed Jan. 3, 1933.

DERMASKIN

For Medicinal Ointment for Skin Disorders.
Claims use since Dec. 31, 1932.

CLASS 7

Cordage

Ser. No. 333,086. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 14, 1932.



For Manilla Rope.
Claims use since Nov. 16, 1932.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 322,570. RENÉ BOLLORÉ, Odet, France. Filed Dec. 31, 1931.

OZONISÉ

For Cigarette Papers.
Claims use since June, 1931.

Ser. No. 331,206. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa. Filed Oct. 12, 1932.

REDLEAF



For Smoking Pipes, Cigarette Cases, Cigar Cases, Pipe Cases and Tobacco Pouches.
Claims use since 1927.

CLASS 12

Construction Materials

Ser. No. 331,797. HARRY C. NEUBERGER, New York, N. Y. Filed Nov. 1, 1932.



All wording appearing on the drawing is disclaimed apart from the mark shown.
For Asphalt.
Claims use since Sept. 9, 1931.

Ser. No. 332,198. PIONEER PAPER COMPANY, Los Angeles, Calif. Filed Nov. 16, 1932.

Pioneer



No claim is made to the use of the word "Products" apart from the mark as shown.
For Bituminous Emulsions.
Claims use since Oct. 16, 1929.

Ser. No. 333,217. ANTI-HYDRO WATERPROOFING COMPANY, Newark, N. J. Filed Dec. 20, 1932.



For Transparent Dampproofing Liquid for Masonry.
Claims use since Mar. 1, 1932.

Ser. No. 333,514. R. GUASTAVINO COMPANY, Boston, Mass. Filed Dec. 30, 1932.

PLASTACOUSTIC

For Plaster.
Claims use since Nov. 15, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 331,412. ROCKWOOD SPRINKLER COMPANY OF MASSACHUSETTS, Worcester, Mass. Filed Oct. 20, 1932.

SPRINKLARM

For Pressure Operated Valves for Operating Alarms for Sprinkler Systems.
Claims use since Sept. 29, 1932.

CLASS 15

Oils and Greases

Ser. No. 331,955. THE HYDROCARBON COMPANY, State College, Pa. Filed Nov. 7, 1932.

HYDRGAS

For Motor Fuel Oils and Gasoline.
Claims use since Oct. 1, 1931.

Ser. No. 332,396. BYRON H. BOYES, Kenmore, N. Y. Filed Nov. 23, 1932.

MOR-MYL

For Gasoline, Motor Fuel Oils, and Lubricants in the Form of Lubricating Oils, Lubricating Greases, and Lubricating Compounds.
Claims use since Nov. 12, 1932.

Ser. No. 332,694. MACMILLAN PETROLEUM CORPORATION, Los Angeles, Calif. Filed Dec. 2, 1932.

RING-FREE



The representation of a piston is disclaimed apart from the mark shown in the drawing.
For Petroleum Products Consisting of Gasoline, Kerosene, Lubricating Oils, and Lubricating Greases.
Claims use since Nov. 2, 1932.

Ser. No. 332,695. MACMILLAN PETROLEUM CORPORATION, Los Angeles, Calif. Filed Dec. 2, 1932.

RING-FREE

For Petroleum Products Consisting of Gasoline, Kerosene, Lubricating Oils, and Lubricating Greases.
Claims use since Nov. 2, 1932.

Ser. No. 333,172. ALBERT SPLETTER, Washington, D. C. Filed Dec. 17, 1932.

STABILUS

For Lubricant for Watches, Chronometers, Clocks, and Other Delicate Mechanisms.
Claims use since Dec. 1, 1932.

Ser. No. 333,210. THE WHITE & BAGLEY COMPANY, Worcester, Mass. Filed Dec. 19, 1932.

SUPERFILM

For Lubricating Oils and Greases.
Claims use since Dec. 10, 1932.

Ser. No. 333,211. THE WHITE & BAGLEY COMPANY, Worcester, Mass. Filed Dec. 19, 1932.

VITAFILM

For Lubricating Oils and Greases.
Claims use since Dec. 10, 1932.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 333,239. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif. Filed Dec. 20, 1932.

EOCENE

For Kerosene.
Claims use since 1892.

Ser. No. 333,426. THE CRESCENT SUPPLY COMPANY, Marietta, Ohio. Filed Dec. 28, 1932.

Cresco

For Petroleum Lubricating Oils and Greases.
Claims use since October, 1932.

Ser. No. 333,495. ASHLAND REFINING CO., Ashland, Ky. Filed Dec. 30, 1932.

SUPER PEPPER

For Gasoline.
Claims use since Dec. 14, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 333,501. GODFREY L. CABOT, INC., Boston, Mass. Filed Dec. 30, 1932.

CHARON

For Carbon Black for Use in the Manufacture of Paints and Varnishes.
Claims use since May 29, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 332,966. SOCIETE ANONYME DES ANCIENS ETABLISSEMENTS PANHARD & LEVASSOR, Paris, France. Filed Dec. 10, 1932.



For Automobiles, Motor Boats, Airplanes, Motor-Cycles, Automobile Trucks, and Parts Thereof.
Claims use since Apr. 1, 1909.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 322,072. GEORGE B. RATTERMAN, doing business as The Annabelle Manufacturing Company, New York, N. Y. Filed Dec. 12, 1931.

ANNABELLE

For Electric Sad Iron Stand.
Claims use since Aug. 10, 1931.

Ser. No. 332,331. BURNDY ENGINEERING COMPANY, INC., New York, N. Y. Filed Nov. 21, 1932.

QIKLUG

For Electrical Connectors for Wires, Cables, Tube, Rod, and Similar Conductors.
Claims use since July 1, 1932.

Ser. No. 332,404. DETROIT VAPOR STOVE COMPANY, Detroit, Mich. Filed Nov. 23, 1932.



The words "Detroit Electric" are disclaimed apart from the mark shown in the drawing.
For Electric Ranges.
Claims use since Oct. 4, 1932.

Ser. No. 332,999. HYGRADE SYLVANIA CORPORATION, Salem, Mass. Filed Dec. 12, 1932.

Vibratuned

For Electric Incandescent Lamps.
Claims use since Nov. 30, 1932.

Ser. No. 333,235. NOAH'S ARK AUTO ACCESSORIES, INC., Rochester, N. Y. Filed Dec. 20, 1932.



The drawing is lined for red and green and represents a face of the carton in which the goods are packed.
For Radio Tubes.
Claims use since Oct. 3, 1932.

Ser. No. 333,407. REYNOLDS ELECTRIC COMPANY, Chicago, Ill. Filed Dec. 27, 1932.

NEONIMATER

For Electrical Flashers and Flasher Controls.
Claims use since May 10, 1932.

Ser. No. 333,428. FIRESTONE BATTERY COMPANY, Akron, Ohio. Filed Dec. 28, 1932.

MAGNEX

For Spark Plugs, Storage Batteries, and Storage Battery Parts Consisting of Positive and Negative Plates, Wood and Rubber Separators, Battery Cases, Connecting Bars, Cell Covers, Vent Plugs, Terminal Posts, and Battery Handles.
Claims use since Nov. 4, 1932.

Ser. No. 333,536. SIGNACO COMPANY, New York, N. Y. Filed Dec. 30, 1932.

SIGNACO

For Automatic Electric Flashing Devices.
Claims use since June 1, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 333,293. THE LINEN THREAD COMPANY, New York, N. Y. Filed Dec. 22, 1932.

TOXINIZED

For Fish Nets.
Claims use since Nov. 2, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 333,269. NATIONAL SPECIALTIES CO., INC., Fort Wayne, Ind. Filed Dec. 21, 1932.

"MITERITE"

For Miter Box or Device.
Claims use since Apr. 12, 1932.

Ser. No. 333,431. HEPPENSTALL COMPANY, Pittsburgh, Pa. Filed Dec. 28, 1932.

THOR

For Razor Blades.
Claims use since Dec. 1, 1931.

CLASS 24

Laundry Appliances and Machines

Ser. No. 333,411. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 27, 1932.



For Laundry Wash Boards and Clothes Wringers.
Claims use since Nov. 16, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 333,386. S. G. ECKER CO. INC., New York, N. Y. Filed Dec. 27, 1932.

MICROSET

For Microscopes, Microscope Parts, and Microscope Sets.
Claims use since Nov. 12, 1932.

Ser. No. 333,607. PRO-KER LABORATORIES, INC., New York, N. Y. Filed Jan. 3, 1933.

KERASCOPE

For Appliances for Measuring and Recording the Growth or Production of Growing Human Hair.
Claims use since Nov. 16, 1932.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 331,589. I. OLLENDORFF CO., INC., New York, N. Y. Filed Oct. 26, 1932. Under section 5b of the act of 1905 as amended in 1920.

Ollendorff

For Watch Bracelets, Fobs, and Chains, Pins, Necklaces, Finger Rings, Cases for Cigars, Cigarettes, and/or Matches, Vanity Cases, Powder Boxes, Purses, Card Cases, Stamp Cases, All Made of Gold, Silver, Platinum in Whole or in Part or of Combinations Thereof.
Claims use since June 4, 1929.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 333,107. PRO-PHY-LAC-TIC BRUSH COMPANY, Northampton, Mass. Filed Dec. 15, 1932.



The trade-mark claimed is the word "Masso" as shown in the drawing in combination with the blue carton, the color of which is indicated by the lining on the drawing. Except in combination with the other features shown in the drawing and without waiving any common-law rights, no claim is made to the representation of the box nor the exclusive use of the phrases "Cerdas dispuestas en forma especial para dar masaje a las encias" and "A la vez que limpia da masaje", and of "Cepillo de dientes Tipo Dental" wherever it appears; nor to the words "Esterilizado" and "Garantizado," or other printing appearing thereon except the word "Masso."
For Tooth Brushes.
Claims use since Dec. 7, 1932.

Ser. No. 333,390. HOLTON & ADAMS, New York, N. Y. Filed Dec. 27, 1932.

HY-A-LITE

For Tooth Brushes.
Claims use since Dec. 12, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 333,793. ELECTROLUX SERVEL CORPORATION, New York, N. Y. Filed Jan. 10, 1933.

CHATEAU

For Household and Store Refrigerators and Parts Thereof and Refrigerating Systems Used for the Preservation of Foodstuffs or Other Matter.
Claims use since January, 1929.

Ser. No. 333,794. ELECTROLUX SERVEL CORPORATION, New York, N. Y. Filed Jan. 10, 1933.

COUNTRY CLUB

For Household and Store Refrigerators and Parts Thereof and Refrigerating Systems Used for the Preservation of Foodstuffs or Other Matter.
Claims use since January, 1931.

Ser. No. 333,795. ELECTROLUX SERVEL CORPORATION, New York, N. Y. Filed Jan. 10, 1933.

DOUBLE DUTY

For Household and Store Refrigerators and Parts Thereof and Refrigerating Systems Used for the Preservation of Foodstuffs or Other Matter.
Claims use since January, 1928.

Ser. No. 333,797. ELECTROLUX SERVEL CORPORATION, New York, N. Y. Filed Jan. 10, 1933.

MANOR

For Household and Store Refrigerators and Parts Thereof and Refrigerating Systems Used for the Preservation of Foodstuffs or Other Matter.
Claims use since January, 1932.

Ser. No. 333,798. ELECTROLUX SERVEL CORPORATION, New York, N. Y. Filed Jan. 10, 1933.

QUAKER

For Household and Store Refrigerators and Parts Thereof and Refrigerating Systems Used for the Preservation of Foodstuffs or Other Matter.
Claims use since January, 1931.

Ser. No. 333,799. ELECTROLUX SERVEL CORPORATION, New York, N. Y. Filed Jan. 10, 1933.

SENATOR

For Household and Store Refrigerators and Parts Thereof and Refrigerating Systems Used for the Preservation of Foodstuffs or Other Matter.
Claims use since January, 1931.

Ser. No. 333,800. ELECTROLUX SERVEL CORPORATION, New York, N. Y. Filed Jan. 10, 1933.

TUDOR

For Household and Store Refrigerators and Parts Thereof and Refrigerating Systems Used for the Preservation of Foodstuffs or Other Matter.
Claims use since January, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 333,864. SUN GLOW INDUSTRIES, INC., Mansfield, Ohio. Filed Dec. 24, 1932.

Sun Glow

For Smoking Stands and Cabinets, Combination Tables; Telephone Sets, Each Consisting of a Table and Chair; Book Cases, Console Tables, Occasional Tables, End Tables, Coffee Tables, Magazine Baskets, Drop Leaf Tables, Pier Cabinets, and High-Ball Tables.
Claims use since Aug. 31, 1932.

CLASS 33

Glassware

Ser. No. 332,965. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 10, 1932.



For Root Beer Steins of Glass.
Claims use since Nov. 25, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 311,648. CHAMPION PRODUCTS CO., Worcester, Mass. Filed Mar. 3, 1931.

CHAMPION

For Oil Burners.
Claims use since Sept. 5, 1929.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 329,145. JOHNS-MANVILLE CORPORATION, New York, N. Y. Filed July 28, 1932.

SEA

For Rod and Piston Packing Made of Fabric and Compositions.
Claims use since July 18, 1911.

CLASS 37

Paper and Stationery

Ser. No. 332,668. HUGH FELIX CARROLL, Cedarhurst, N. Y. Filed Nov. 30, 1932.



The drawing is lined for the color black.
For Toilet Paper Rolls, Folded Toilet Sheet Paper.
Claims use since Sept. 1, 1931.

CLASS 38

Prints and Publications

Ser. No. 333,317. THE F-R PUBLISHING CORPORATION, New York, N. Y. Filed Dec. 23, 1932.

SMALL FRY

For Cartoons.
Claims use since Apr. 2, 1932.

Ser. No. 333,322. THE F-R PUBLISHING CORPORATION, New York, N. Y. Filed Dec. 23, 1932.

TABLES FOR TWO

For Magazine Section.
Claims use since Sept. 12, 1925.

Ser. No. 333,325. THE F-R PUBLISHING CORPORATION, New York, N. Y. Filed Dec. 23, 1932.

—AUDAX MINOR

For Nom de Plume for a Magazine Section.
Claims use since July 10, 1926.

Ser. No. 333,326 THE F-R PUBLISHING CORPORATION, New York, N. Y. Filed Dec. 23, 1932.

—CONSTANT READER

For Nom de Plume for a Magazine Section.
Claims use since Oct. 1, 1927.

Ser. No. 333,327. THE F-R PUBLISHING CORPORATION, New York, N. Y. Filed Dec. 23, 1932.

—GUY FAWKES

For Nom de Plume for a Magazine Section.
Claims use since Dec. 8, 1927.

Ser. No. 333,518. KING FEATURES SYNDICATE, INC., New York, N. Y. Filed Dec. 30, 1932.

Pete the Tramp

For Series of Cartoon Strips.
Claims use since Dec. 16, 1932.

Ser. No. 333,605. THE POST PRINTING AND PUBLISHING COMPANY, Denver, Colo. Filed Jan. 3, 1933.

LET'S GO TO A SHOW!

For Section or Column Appearing in a Newspaper.
Claims use since June 28, 1931.

Ser. No. 333,688. ROY PRESS, New York, N. Y. Filed Jan. 5, 1933.

MOTORBOAT

For Periodical.
Claims use since Apr. 10, 1904.

Ser. No. 333,745. STAR-CHRONICLE PUBLISHING COMPANY, St. Louis, Mo. Filed Jan. 7, 1933.

ST. LOUIS STAR AND Times

For Daily Newspaper.
Claims use since July 25, 1932.

Ser. No. 333,770. NEW YORK WORLD-TELEGRAM CORPORATION, New York, N. Y. Filed Jan. 9, 1933.

THE WORLD ALMANAC

For Periodical.
Claims use since 1932.

CLASS 39

Clothing

Ser. No. 323,598. VAN RAALTE COMPANY, New York, N. Y. Filed Jan. 29, 1932.

Wynsom-Wyns

For Hosiery and Underwear.
Claims use since Jan. 10, 1932.

Ser. No. 330,925. FAMILY SHOE CORP., New York, N. Y. Filed Oct. 4, 1932.

Dr. Moser

For Men's, Women's, and Children's Leather, Rubber, and Fabric Shoes.
Claims use since Aug. 19, 1932.

Ser. No. 331,526. ABRAHAM ZWIEBELSON, doing business as Mollie Mayers, New York, N. Y. Filed Oct. 24, 1932.

Lovee-Form

Applicant disclaims the right to the exclusive use of the descriptive word "Form."
For Brassières.
Claims use since Sept. 15, 1932.

Ser. No. 332,296. GAROFALO BRO'S SHOE CO. INC., Brooklyn, N. Y. Filed Nov. 19, 1932.

BREVAMP

For Shoes Made of Leather and of Combinations of Leather and Fabric.
Claims use since June 1, 1932.

Ser. No. 332,729. NORWICH KNITTING COMPANY, Norwich, N. Y. Filed Dec. 8, 1932.

THE

RACKETEER

For Knit Goods—Namely, Polo Shirts, Sweat Shirts, Sweaters, and Knit Underwear.
Claims use since Nov. 18, 1932.

Ser. No. 332,848. JOSEPH LOVE, INC., New York, N. Y. Filed Dec. 7, 1932.

The Story-Book Line

The lining on the drawing is shown for shading only.
For Children's Dresses and Top Coats.
Claims use since Nov. 26, 1932.

Ser. No. 333,088. SUSSBERG & FEINBERG, INC., New York, N. Y. Filed Dec. 14, 1932.

SYLFIT

For Ladies' Silk Underwear—Namely, Pajamas, Nightgowns, Slips, Dance Sets, and Panties.
Claims use since Dec. 2, 1932.

Ser. No. 333,174. DAVID FELDMAN, doing business as Feldman & Sons, Baltimore, Md. Filed Dec. 15, 1932.

1x1

For Work Shirts and Dress Shirts.
Claims use since Oct. 1, 1932.

Ser. No. 333,259. INTERNATIONAL SHOE CO., St. Louis, Mo. Filed Dec. 21, 1932.

KOOLWAY

For Boots and Shoes of Leather, Fabric, and/or Combinations Thereof.
Claims use since Nov. 18, 1932.

Ser. No. 333,260. JARMAN SHOE COMPANY, Nashville, Tenn. Filed Dec. 21, 1932.

SKY RIDERS

For Shoes of Leather, Fabric, or Combinations Thereof.
Claims use since Dec. 5, 1932.

Ser. No. 333,297. THE MIDDISHADE COMPANY, INC., Philadelphia, Pa. Filed Dec. 22, 1932.

Brownshire

For Men's Clothing—Namely, Suits, Coats, Pants, Vests, Overcoats, and Topcoats.
Claims use since Nov. 28, 1932.

Ser. No. 333,298. THE MIDDISHADE COMPANY, INC., Philadelphia, Pa. Filed Dec. 22, 1932.

Grayshire

For Men's Clothing—Namely, Coats, Pants, Vests, Overcoats, and Topcoats.
Claims use since Nov. 28, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 322,612. THE HUMP HAIRPIN MANUFACTURING COMPANY, Chicago, Ill. Filed Dec. 30, 1931.



The words "For Long or Bobbed Hair," "Waveset," and "Set Your Waves with Wavesets Practical Efficient" are disclaimed apart from the other features shown in the drawing. The vertical lining shown in the drawing represents the color red and the picture shown in the drawing is fanciful.
For Hairpins (Said Hairpins Being More Particularly Described as Composed and Made of Steel, Aluminite, and Various Other Metals, Alloys, and Materials, but Said Hairpins are Not Made of, Plated with, or Ornamented with Precious Metals.)
Claims use since May 8, 1931.

Ser. No. 333,069. THE HUMP HAIRPIN MANUFACTURING COMPANY, Chicago, Ill. Filed Dec. 14, 1932.

LADY RUTH

For Hairpins (Being More Particularly Described as Bifurcated Metallic Members Having One Crimped and One Straight Leg).
Claims use since May 18, 1932.

Ser. No. 333,071. THE HUMP HAIRPIN MANUFACTURING COMPANY, Chicago, Ill. Filed Dec. 14, 1932.

SANIMAID

For Hairpins (Being More Particularly Described as Bifurcated Metallic Members Having One Crimped and One Straight Leg).
Claims use since May 18, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 332,100. PECK & PECK, New York, N. Y. Filed Nov. 12, 1932.

"TOBACCO TWINE"

Applicant disclaims exclusive use to the word "Twine", apart from its use in the mark, as shown on the drawing and in association with the other features thereof.
For Piece Goods of Cotton, Silk, Wool, Linen, and Mixtures of Same for Dresses, Sweaters, Coats, and the Like.
Claims use since Sept. 15, 1932.

Ser. No. 332,205. THE WARREN WOOLEN COMPANY, Stafford Springs, Conn. Filed Nov. 16, 1932.

STADIUM RUG

Applicant disclaims an exclusive right to the word "Rug" apart from the mark shown in the drawing.
For Rugs Made from Textile Fabrics of Wool.
Claims use since Oct. 1, 1932.

Ser. No. 332,909. TRIPPE, BARKER & CO., New York, N. Y. Filed Dec. 10, 1932.

TRIPPLE-RIPPLE

No rights are asserted to the exclusive use of the word "Ripple" apart from the mark as shown in the drawing.
For Textile Fabrics—Namely, Cotton Piece Goods.
Claims use since Oct. 25, 1932.

Ser. No. 333,061. THE ESMOND MILLS, Esmond, Smithfield, R. I. Filed Dec. 14, 1932.



The horizontal lining in the upper corners of the shield indicating the color blue and the shading in the lower portion of the shield indicating the color silver.
For Textile Blankets.
Claims use since Dec. 5, 1932.

Ser. No. 333,236. PELZER MANUFACTURING COMPANY, Boston, Mass. Filed Dec. 20, 1932.

PELZART

For Sheets, Pillow Cases, and Cotton Piece Goods.
Claims use since May 10, 1932.

Ser. No. 333,243. TUCAPAU MILLS, Tucapau, S. C. Filed Dec. 20, 1932.

WONDER-DRI

No exclusive right to "Dri" is claimed apart from the mark as shown on the drawing.
For Towels of Textile Fabric.
Claims use since Dec. 30, 1931.

Ser. No. 333,350. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Dec. 24, 1932.

Sapadulo

For Pile Fabrics in the Piece.
Claims use since Dec. 12, 1932.

Ser. No. 333,547. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Dec. 31, 1932.

Miracle

For Pile Fabrics in the Piece.
Claims use since Dec. 23, 1932.

CLASS 43

Thread and Yarn

Ser. No. 332,139. AMERICAN ENKA CORPORATION, Asheville, N. C. Filed Nov. 15, 1932.

Briglo

For Rayon Yarns.
Claims use since Oct. 27, 1932.

Ser. No. 332,572. AMERICAN YARN CO., INC., Brooklyn, N. Y. Filed Nov. 29, 1932.

ANGORAY

Applicant hereby disclaims representation of the yarn apart from the trade-mark as shown on the drawing in the application.
For Knitting Yarn Spun of Rayon and Kid Mohair.
Claims use since Oct. 1, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 331,831. DOUGLAS ROSS LOCKE, Montreal, Quebec, Canada. Filed Nov. 2, 1932.

COOKIE

For Foot Arch Correctives in the Nature of Arch Supports.
Claims use since Aug. 27, 1932.

Ser. No. 333,124. HYMAN & HYMAN, INC., New York, N. Y. Filed Dec. 16, 1932.

TINTADE

For Applicator for Treatment of Hair and Scalp for Tinting, Retouching, and Bleaching the Hair.
Claims use since Sept. 15, 1932.

Ser. No. 333,454. J. F. JELENKO & COMPANY, INC., New York, N. Y. Filed Dec. 28, 1932.

Sturdicast

For Dental Golds.
Claims use since Oct. 1, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 326,363. CLICQUOT CLUB COMPANY, Millis, Mass. Filed Apr. 22, 1932.

Clicquot

For Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and for Syrups, Extracts, and Concentrates Used in Making the Same.
Claims use since 1886.

Ser. No. 332,326. WILLIAM F. LAWRENZ, Long Beach, Calif. Filed Nov. 18, 1932.

NAPPLE

For Non-Alcoholic Maltless Beverage Sold as a Soft Drink.
Claims use since Sept. 28, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 301,829. CARNATION COMPANY, Wilmington, Del.; Oconomowoc, Wis.; and Seattle, Wash. Filed May 31, 1930.



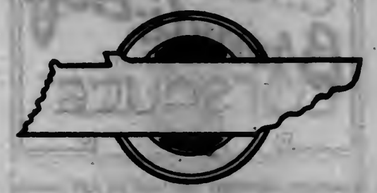
The drawing is lined for the color red.
For Flaked Wheat.
Claims use since Apr. 12, 1930.

Ser. No. 317,277. HABICHT, BRAUN & CO., New York, N. Y. Filed July 24, 1931.

GOLDEN PALM

For Dates.
Claims use since June 13, 1931.

Ser. No. 319,769. EAST TENNESSEE PACKING COMPANY, Knoxville, Tenn. Filed Oct. 6, 1931.



The representation of the map of the State of Tennessee is disclaimed apart from the mark shown in the drawing.
For Fresh and Cured Meats, Including Sliced Bacon, Breakfast Bacon, Frankfurt Style Sausage, Ham, Boiled Ham, Luncheon Loaf, Skinless Frankfurts, Lard, Cheese and Butter.
Claims use since August, 1919.

Ser. No. 325,337. MARION R. MONEY, doing business as Vee-Dee Bar Corp., Spencer, Ind. Filed Mar. 21, 1932.

VEE-DEE

For Ice-Cream Bars.
Claims use since Feb. 1, 1932.

Ser. No. 326,144. HUGHES-CURRY PACKING CO., Anderson, Ind. Filed Apr. 15, 1932.



No claim is made to the words "Baked Ham" except in association with the rest of the mark, nor is any claim made to the words "Anderson, Indiana," except in association with the rest of the mark.
For Hams.
Claims use since Feb. 25, 1932.

Ser. No. 327,025. G. B. RAFFETTO INCORPORATED, New York, N. Y. Filed May 12, 1932.



The applicant disclaims the use of the words "Fruit Sauce." The words "Brandi-Chef" are in black letters with gold border. The dark line of the outer border is in black, the two faint lines of the outer border indicating a gold band.

For Brandied Fruit Sauce for Use on Ice Cream, Pudding, and Other Desserts.

Claims use since Apr. 12, 1931.

Ser. No. 328,017. REID, MURDOCH & CO., Chicago, Ill. Filed June 15, 1932.

MONARCH



For Confectionery—Namely, Chocolates, Bonbons, Hard Candies, Clear Mints, Butter Mints, Marshmallows, Toffee, Fruit Flavored Gum Drop Patties, Glacé Fruits, and Crystallized Ginger.

Claims use since 1902.

Ser. No. 329,665. ALPINE ICE CREAM CO. INC., Corona, N. Y. Filed Aug. 19, 1932.

BUNGALOW BAR

No claim is made to the word "Bar" apart from the mark as shown in the drawing.

For Ice Cream.

Claims use since Apr. 14, 1932.

Ser. No. 329,823. CHAS. F. CATES & SONS, INC., Faison, N. C. Filed Aug. 24, 1932.

SWATHMOOR FARM

For Sweet Pickles, Sour Pickles, Dill Pickles, Sweet and Sour Relish, Canned and in Bulk.

Claims use since April, 1929.

Ser. No. 329,979. MRS. G. E. CLAUSEN, doing business as C. B. Gentry Chili Powder Co., Los Angeles, Calif. Filed Aug. 30, 1932.



For Chili Powder.

Claims use since February, 1926.

Ser. No. 330,227. THE HARBAUER COMPANY, Toledo, Ohio. Filed Sept. 10, 1932.

HARCO

For Chili Sauce, Tomato Catsup, Tomato Juice, Tomato Puree, Sliced Sweet Pickles Known as Sweet Chips, Sweet Pickles, Sweet Mixed Pickles, Sweet Pickle Relish, Sour Pickles, Dill Pickles, Prepared Mustard, Chow Chow, and Vinegar.

Claims use since Jan. 1, 1927.

Ser. No. 330,971. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Filed Oct. 5, 1932. Under 10-year proviso.

STUHMER'S

For Bread (Rye Bread and Pumpernickel).

Claims use since 1884.

Ser. No. 330,972. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Filed Oct. 5, 1932. Under 10-year proviso.

STUHMER'S

The shading indicating the color red.

For Bread (Rye Bread and Pumpernickel).

Claims use since 1884.

Ser. No. 330,974. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Filed Oct. 5, 1932.



The words "Rye Bread" and "Pumpernickel" being disclaimed apart from the mark as shown.

For Bread (Rye Bread and Pumpernickel).

Claims use since November, 1910.

Ser. No. 330,975. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Filed Oct. 5, 1932.



The shading indicating the color red and the words "Rye Bread" and "Pumpernickel" being disclaimed apart from the mark as shown.

For Bread (Rye Bread and Pumpernickel).

Claims use since November, 1910.

Ser. No. 330,976. GEO. F. STUHMER & COMPANY, New York, N. Y. Filed Oct. 5, 1932.



The words "Rye Bread" and the Hebrew characters meaning "Kosher" are disclaimed apart from the mark as shown.

For Bread (Rye Bread and Pumpernickel).

Claims use since January, 1926.

Ser. No. 330,977. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Filed Oct. 5, 1932.



The lining indicating the color red and the words "Rye Bread" and the Hebrew characters meaning "Kosher" being disclaimed apart from the mark as shown.

For Bread (Rye Bread and Pumpernickel).

Claims use since January, 1926.

Ser. No. 330,978. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Filed Oct. 5, 1932.



The words "Small Pumpernickel" are disclaimed apart from the mark as shown.
For Bread (Rye Bread and Pumpernickel).
Claims use since June 23, 1930.

Ser. No. 331,187. GERHARD LANG BREWERY, doing business as Gerhard Lang Bottling Works and Buffalo Products Co., Buffalo, N. Y. Filed Oct. 12, 1932.

AA

For Malt Extract.
Claims use since Nov. 1, 1928.

Ser. No. 331,294. STILLWALL GROVE PRODUCTS, INC., Winter Park, Fla. Filed Oct. 15, 1932.

SUN-PURE

No claim is made to the word "Pure" apart from the mark as shown.
For Canned Fruit and Canned Fruit Juices.
Claims use since Oct. 5, 1932.

Ser. No. 331,426. JAS. V. DUNBAR, INC., New Orleans, La. Filed Oct. 21, 1932.



The outline of the word "Shrimp" and the vertical lines in white being gold and the parts vertically shaded being red, no claim being made to the exclusive right to the use of the representation of a shrimp and/or the word "Shrimp" apart from the mark shown in the drawing.
For Canned Shrimp.
Claims use since June 1, 1932.

Ser. No. 331,730. FIDALGO ISLAND PACKING COMPANY, Seattle, Wash. Filed Oct. 31, 1932.



For Canned Salmon.
Claims use since Oct. 4, 1932.

Ser. No. 331,731. FIDALGO ISLAND PACKING CO., Seattle Wash. Filed Oct. 31, 1932.



The drawing is lined to indicate shading.
For Canned Salmon.
Claims use since Oct. 4, 1932.

Ser. No. 332,153. ADA KESSELMAN, doing business as The Play Money Candy Co., Philadelphia, Pa. Filed Nov 15, 1932.



No claim is made to the exclusive use of the word "Candy" apart from the mark as shown.
For Candy.
Claims use since Oct. 28, 1932.

Ser. No. 332,242. AMY F. WILLIAMS, doing business as Nu-Sno Company, Greeley, Colo. Filed Nov. 17, 1932.



For Frozen Confections.
Claims use since Sept. 20, 1932.

Ser. No. 332,594. THE MORRISON COMPANY, Philadelphia, Pa. Filed Nov. 29, 1932.



For Prepared Food for Dogs.
Claims use since May 25, 1932.

Ser. No. 332,685. CHAPPEL BROS., INC., Rockford, Ill. Filed Dec. 2, 1932.

BIRD-E-RATION

No claim being made to the word "Bird" and "Ration" apart from the mark as a whole.
For Prepared Food for Cage Birds.
Claims use since Nov. 1, 1932.

Ser. No. 332,762. CIRO ESCOBEZA, Downey, Calif. Filed Dec. 5, 1932.



For Pickled Chiles.
Claims use since Feb. 21, 1931.

Ser. No. 332,995. DECATUR MILLING COMPANY, INC., Decatur, Ill. Filed Dec. 12, 1932.

MULL-N-DEX

For Cornflour.
Claims use since Aug. 12, 1932.

Ser. No. 333,186. GENERAL MILLS, INC., Minneapolis, Minn. Filed Dec. 19, 1932.

SURECALF

For Stock Food.
Claims use since Nov. 28, 1932.

Ser. No. 333,206. ELIE F. A. SIVADE, doing business as Sivade Good Foods Company, Atlantic City, N. J. Filed Dec. 19, 1932.



The portrait and signature are those of applicant.
For Hollandaise Sauce and au Gratin Cheese Sauce.
Claims use since Dec. 13, 1932.

Ser. No. 333,575. BURNHAM & MORRILL COMPANY, doing business as Oxford Packing Co., Portland, Me. Filed Jan. 3, 1933.

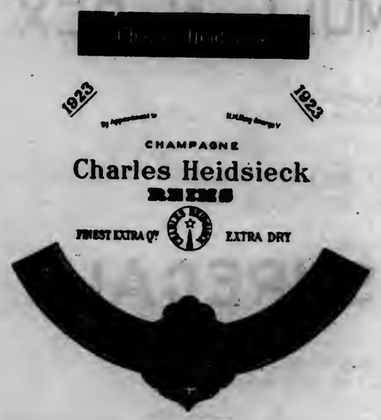
Golden Dew

For Canned Vegetables.
Claims use since Dec. 9, 1931.

CLASS 47

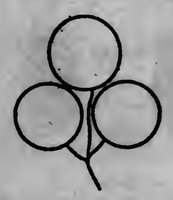
Wines

Ser. No. 330,452. CHARLES HEIDSIECK REIMS SOCIÉTÉ A RESPONSABILITÉ LIMITÉE, Reims, France. Filed Sept. 19, 1932.



All words appearing on the drawing, excepting the name of the applicant, are hereby disclaimed apart from the association shown in the drawing.
For Champagne Wine.
Claims use since 1851.

Ser. No. 332,633. SANDEMAN HERMANOS Y COMPANIA, Jerez de la Frontera, Cadiz, Spain. Filed Nov. 30, 1932.



PEMARTIN

For Wines.
Claims use since 1878.

CLASS 48

Malt Beverages and Liquors

Ser. No. 329,747. KOFFMAN AND BLUMENAU, Bay City, Mich. Filed Aug. 22, 1932.

RED ROSE

For Malt Beverages with Not More Than the Legal Alcoholic Content and Extracts Therefor.
Claims use since Mar. 15, 1930.

Ser. No. 332,106. JOHN F. TROMMER, INCORPORATED, Brooklyn, N. Y. Filed Nov. 12, 1932.

White Label

No right is claimed for the exclusive use of a white label.
For Malt Beverage Having Not More Than the Legal Alcoholic Content and Extracts Therefor.
Claims use since April, 1925.

Ser. No. 333,349. ANHEUSER-BUSCH, INCORPORATED, St. Louis, Mo. Filed Dec. 24, 1932.





No claim is made to exclusive right to the word "Lager" apart from the mark shown. Lines in the drawing show both labels mainly red in color, the body label having a green border.
For Malt Beverage with Not More Than the Legal Alcoholic Content.
Claims use since April, 1928.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 330,716. J. G. TURNEY & SON, LIMITED, London, England. Filed Sept. 27, 1932.

GREAT SCOTT

For Whiskey, Rum, Gin, and Brandy.
Claims use since January, 1932.

Ser. No. 331 783. THE GLENFYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland. Filed Nov. 1, 1932.



No claim is made to any of the words appearing on the drawing except in the association shown thereon, and no exclusive use is claimed in the word "Glenfyne."
For Whisky.
Claims use since Sept. 10, 1926.

Ser. No. 332,405. THE DISTILLERS AGENCY LIMITED, Edinburgh, Scotland. Filed Nov. 28, 1932.



For Rum, Whisky, Gin, and Brandy.
Claims use since 1914.

Ser. No. 332,406. THE DISTILLERS AGENCY LIMITED, Edinburgh, Scotland. Filed Nov. 28, 1932.



For Whisky, Rum, Gin, and Brandy.
Claims use since 1913.

CLASS 50

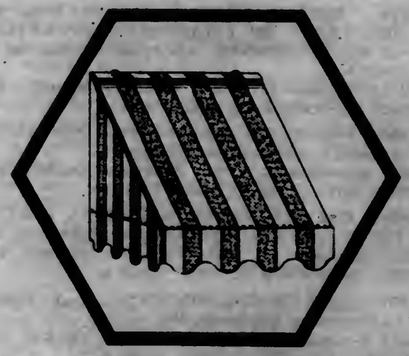
Merchandise Not Otherwise Classified

Ser. No. 326,351. HERMAN G. GALLAS, Chicago, Ill. Filed Apr. 20, 1932.

EASY-WAY

The lining on the drawing represents the color orange.
For Awnings and Awning Hardware.
Claims use since Oct. 12, 1931.

Ser. No. 326,352. HERMAN G. GALLAS, Chicago, Ill. Filed Apr. 20, 1932.



The lining on the drawing represents the color orange. Applicant hereby disclaims the representation of the awning per se.
For Awnings and Awning Hardware.
Claims use since Oct. 12, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

FEBRUARY 14, 1933

300,846. TRANSPARENT RUBBER NURSING NIPPLES. ERNEST MONNIER, INC., Boston, Mass.
Filed October 3, 1932. Serial No. 330,897. PUBLISHED NOVEMBER 29, 1932. Class 44.

300,847. MASSAGE MACHINES. THE WM. MEYER CO., Chicago, Ill.
Filed October 1, 1932. Serial No. 330,856. PUBLISHED NOVEMBER 29, 1932. Class 44.

300,848. COMBINED HOT-WATER BOTTLE AND SYRINGE. DONALD F. DUNCAN, INC., Chicago, Ill.
Filed October 4, 1932. Serial No. 330,923. PUBLISHED NOVEMBER 22, 1932. Class 44.

300,849. WHEAT FLOUR. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn.
Filed September 30, 1932. Serial No. 330,829. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,850. HAIR DYE AND HAIR RINSE. GRAITMORE COMPANY, New York, N. Y.
Filed October 1, 1932. Serial No. 330,848. PUBLISHED NOVEMBER 22, 1932. Class 6.

300,851. COSMETIC PREPARATIONS. PEOPLES DRUG STORES, INC., doing business as Barnard Company, Washington, D. C.
Filed September 28, 1932. Serial No. 330,754. PUBLISHED NOVEMBER 22, 1932. Class 6.

300,852. DENTURES. AUSTENAL LABORATORIES, INC., New York, N. Y., and Chicago, Ill.
Filed September 26, 1932. Serial No. 330,648. PUBLISHED NOVEMBER 29, 1932. Class 44.

300,853. COSMETIC PREPARATIONS, AND THE LIKE. RICHARD HUDNUT, New York, N. Y.
Filed September 24, 1932. Serial No. 330,625. PUBLISHED NOVEMBER 22, 1932. Class 6.

300,854. MEDICINAL PREPARATION FOR THE TREATMENT OF POSTOPERATIVE PARALYSIS OF THE INTESTINES. SCHERING CORPORATION, New York, N. Y.
Filed September 17, 1932. Serial No. 330,432. PUBLISHED NOVEMBER 22, 1932. Class 6.

300,855. PORCELAIN ADAPTED FOR DENTAL USE. AMERICAN PORCELAIN CO., Chicago, Ill.
Filed September 16, 1932. Serial No. 330,391. PUBLISHED NOVEMBER 29, 1932. Class 44.

300,856. CERTAIN NAMED MEDICINAL PREPARATIONS. THE E. L. PATCH COMPANY, Stoneham, Mass.
Filed September 15, 1932. Serial No. 330,880. PUBLISHED NOVEMBER 22, 1932. Class 6.

300,857. ANTI-FREEZE SOLUTION. J. A. TUMBLER LABORATORIES, Baltimore, Md.
Filed September 12, 1932. Serial No. 330,356. PUBLISHED NOVEMBER 22, 1932. Class 6.

300,858. PREPARATION FOR HOLDING DENTAL PLATES IN POSITION. SUPERIOR LABORATORIES, INC., Cleveland, Ohio.
Filed September 13, 1932. Serial No. 330,316. PUBLISHED NOVEMBER 22, 1932. Class 6.

300,859. MEDICINAL PREPARATION. NICHOLAS J. MATRAGOS, doing business as Nicholas C. Vallos, New York, N. Y.
Filed September 12, 1932. Serial No. 330,269. PUBLISHED NOVEMBER 22, 1932. Class 6.

300,860. SURGICAL SUPPLIES AND APPLIANCES, ETC. S. H. KRESS & Co., New York, N. Y.
Filed September 12, 1932. Serial No. 330,263. PUBLISHED NOVEMBER 22, 1932. Class 44.

300,861. BILLIARD ACCESSORIES—NAMELY, BILLIARD BALLS, CUE BALLS, BOWLING ALLEY BALLS, BRIDGEHEADS, CUE TIPS, CUE RACKS, TRIANGLES, AND TALLY BALLS. THE BURNET COMPANY, New York, N. Y.
Filed September 21, 1932. Serial No. 330,535. PUBLISHED DECEMBER 6, 1932. Class 22.

300,862. REFRIGERATORS AND REFRIGERATING UNITS. GIBSON ELECTRIC REFRIGERATOR CORPORATION, Greenville, Mich.
Filed September 26, 1932. Serial No. 330,725. PUBLISHED DECEMBER 6, 1932. Class 31.

300,863. WHISKY. GOODERHAM & WORTS, LTD., Toronto, Ontario, Canada.
Filed September 30, 1932. Serial No. 330,813. PUBLISHED DECEMBER 6, 1932. Class 49.

300,864. [WITHDRAWN.]

300,865. NONALCOHOLIC, MALTLESS, GINGER CORDIAL SOLD AS A SOFT DRINK. DOUGLAS SENTELL, Keyport, N. J.
Filed October 15, 1932. Serial No. 331,357. PUBLISHED DECEMBER 6, 1932. Class 45.

300,866. MALT BEVERAGE, WITH NOT MORE THAN THE LEGAL ALCOHOLIC CONTENT. INDEPENDENT MILWAUKEE BREWERY, Milwaukee, Wis.
Filed October 19, 1932. Serial No. 331,376. PUBLISHED DECEMBER 6, 1932. Class 48.

300,867. ROWING MACHINES. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y.
Filed October 29, 1932. Serial No. 331,680. PUBLISHED DECEMBER 6, 1932. Class 22.

300,868. ROWING MACHINES. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y.
Filed October 29, 1932. Serial No. 331,682. PUBLISHED DECEMBER 6, 1932. Class 22.

300,869. ROWING MACHINES. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y.
Filed October 29, 1932. Serial No. 331,684. PUBLISHED DECEMBER 6, 1932. Class 22.

300,870. ROWING MACHINES. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y.
Filed October 29, 1932. Serial No. 331,685. PUBLISHED DECEMBER 6, 1932. Class 22.

300,871. WINES. GEO. G. SANDEMAN SONS & CO. LIMITED, London, England.
Filed October 29, 1932. Serial No. 331,704. PUBLISHED DECEMBER 6, 1932. Class 47.

300,872. WINES. GEO. G. SANDEMAN SONS & CO. LIMITED, London, England.
Filed October 29, 1932. Serial No. 331,706. PUBLISHED DECEMBER 6, 1932. Class 47.

300,873. PORT. ROBERTSON & COMPANY, Glasgow, Scotland.
Filed November 1, 1932. Serial No. 331,799. PUBLISHED DECEMBER 6, 1932. Class 47.

300,874. WAX FOR COATING AND POLISHING WOOD, METAL, AND OTHER SURFACES AND LACQUER. S. C. JOHNSON & SON, Racine, Wis.
Filed March 21, 1932. Serial No. 325,330. PUBLISHED DECEMBER 6, 1932. Class 16.

300,875. LUMBER. FRANK A. NILES LUMBER CO. INC., New York, N. Y.
Filed March 25, 1932. Serial No. 325,481. PUBLISHED NOVEMBER 15, 1932. Class 12.

300,876. MONTHLY DIGEST OF RADIO AND ALLIED MAINTENANCE. JOHN F. RIDER PUBLICATIONS, New York, N. Y.
Filed May 2, 1932. Serial No. 326,692. PUBLISHED NOVEMBER 15, 1932. Class 38.

300,877. PRINTED HOROLOGICAL CHARTS. SAMUEL WHITTEMORE BOGGS, Chevy Chase, Md.
Filed June 23, 1932. Serial No. 328,286. PUBLISHED NOVEMBER 15, 1932. Class 38.

300,878. PAINTS IN PASTE, SEMI-LIQUID, OR READY-MIXED FORM, VARNISHES, LACQUERS, PAINT ENAMELS, JAPANS, STAINS, AND PAINT FILLERS. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio.
Filed August 15, 1932. Serial No. 329,564. PUBLISHED NOVEMBER 22, 1932. Class 16.

300,879. WATCH CRYSTALS—NAMELY, UNBREAKABLE WATCH CRYSTALS. GERMANOW-SIMON MACHINE CO., Rochester, N. Y.
Filed August 18, 1932. Serial No. 329,634. PUBLISHED NOVEMBER 29, 1932. Class 33.

300,880. THINNERS FOR SHELLAC, LIQUID AND PASTE PAINTS, PAINT COLORS, STAINS, PAINT FILLERS, VARNISHES, AND LACQUERS. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio.
Filed September 2, 1932. Serial No. 330,073. PUBLISHED NOVEMBER 22, 1932. Class 16.

300,881. FRESH DECIDUOUS FRUITS. PINNACLE PACKING COMPANY, INC., Medford, Oreg.
Filed October 21, 1932. Serial No. 331,489. PUBLISHED NOVEMBER 29, 1932. Class 46.

300,882. DRESSED POULTRY. POLO PRODUCE COMPANY, Chicago, Ill.
Filed October 17, 1932. Serial No. 331,391. PUBLISHED NOVEMBER 29, 1932. Class 46.

300,883. MALT SYRUP. MAXWELL HOME SUPPLY CORP., New York, N. Y.
Filed October 19, 1932. Serial No. 331,380. PUBLISHED DECEMBER 6, 1932. Class 46.

300,884. FITTED MANICURE CASES. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa.
Filed October 12, 1932. Serial No. 331,210. PUBLISHED NOVEMBER 22, 1932. Class 44.

300,885. PREPARATION FOR THE TREATMENT OF DIARRHOEA, ETC. HENRY K. WAMPOLE AND COMPANY, INCORPORATED, Philadelphia, Pa.
Filed October 7, 1932. Serial No. 331,069. PUBLISHED NOVEMBER 22, 1932. Class 6.

300,886. DENTAL SUPPLIES. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa.
Filed October 4, 1932. Serial No. 330,942. PUBLISHED NOVEMBER 29, 1932. Class 44.

300,887. PREPARED ROOFING AND SHINGLES WHICH COMPRISE SHEETS OF FIBROUS MATERIAL WHICH MAY OR MAY NOT BE COATED AND/OR SATURATED IN WHOLE OR IN PART WITH A BITUMINOUS OR ASPHALTIC COMPOUND. THE PARAFFINE COMPANIES, INC., San Francisco, Calif.
Filed September 19, 1932. Serial No. 330,491. PUBLISHED NOVEMBER 15, 1932. Class 12.

300,888. COMIC NEWSPAPER STRIPS. HERBERT F. MARTIN, Great Neck, N. Y.
Filed September 17, 1932. Serial No. 330,428. PUBLISHED NOVEMBER 15, 1932. Class 38.

300,889. CAST STONE. CAMBRIDGE CEMENT STONE COMPANY, Brighton, Mass.
Filed September 16, 1932. Serial No. 330,394. PUBLISHED NOVEMBER 15, 1932. Class 12.

300,890. POLISH FOR CLEANING, WAXING, AND POLISHING AUTOMOBILES. GLISSENITE CORPORATION, Duluth, Minn.
Filed September 10, 1932. Serial No. 330,226. PUBLISHED NOVEMBER 15, 1932. Class 16.

300,891. THERMAL INSULATING BOARD. CONTAINER CORPORATION OF AMERICA, Chicago, Ill.
Filed September 6, 1932. Serial No. 330,120. PUBLISHED NOVEMBER 29, 1932. Class 12.

300,892. BUILDING PAPER. WOOD CONVERSION COMPANY, Cloquet, Minn.
Filed September 3, 1932. Serial No. 330,112. PUBLISHED NOVEMBER 15, 1932. Class 12.

300,893. HOT WATER BOTTLES, FOUNTAIN SYRINGES, ETC. WHITALL TATUM COMPANY, Millville, N. J.
Filed August 26, 1932. Serial No. 329,876. PUBLISHED NOVEMBER 22, 1932. Class 44.

300,894. COSMETICS AND TOILET PREPARATIONS. DEUTSCHE GOLD- UND SILBER SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.
Filed July 29, 1932. Serial No. 329,181. PUBLISHED NOVEMBER 22, 1932. Class 6.

300,895. PROPHYLACTIC RUBBER ARTICLES. YOUNGS RUBBER CORPORATION, INC., New York, N. Y.
Filed July 15, 1932. Serial No. 328,825. PUBLISHED NOVEMBER 22, 1932. Class 44.

300,896. PROPHYLACTIC RUBBER ARTICLES. YOUNGS RUBBER CORPORATION, INC., New York, N. Y.
Filed July 15, 1932. Serial No. 328,824. PUBLISHED NOVEMBER 22, 1932. Class 44.

300,897. CLEANING COMPOUND FOR GENERAL USE. FUGER AND BAKES, Lincoln, Nebr.
Filed June 10, 1932. Serial No. 327,870. PUBLISHED NOVEMBER 29, 1932. Class 4.

300,898. COMMERCIAL FEEDS FOR LIVESTOCK. SOYA PRODUCTS, INC., Chicago, Ill.
Filed May 14, 1932. Serial No. 327,112. PUBLISHED NOVEMBER 29, 1932. Class 46.

300,899. DEPILATORY PREPARATION. THE DELATONE COMPANY, Chicago, Ill.
Filed May 9, 1932. Serial No. 326,894. PUBLISHED NOVEMBER 22, 1932. Class 6.

300,900. EYELASH DYE AND PERMANENT WAVE SOLUTIONS. EILARM CO., Los Angeles, Calif.
Filed March 14, 1932. Serial No. 325,092. PUBLISHED NOVEMBER 22, 1932. Class 6.

300,901. PREPARATION USEFUL IN THE TREATMENT OF SCALP TO STIMULATE GROWTH OF HAIR, IN LIQUID AND CREAM FORM. GIARAMITA & NUONES, Brooklyn, N. Y.
Filed February 19, 1932. Serial No. 324,814. PUBLISHED NOVEMBER 29, 1932. Class 6.

300,902. CHOCOLATES, CARAMELS, PEPPERMINTS, LICORICE CANDIES, AND BON BONS. JULIA FRANKL, New York, N. Y.
Filed February 9, 1932. Serial No. 324,052. PUBLISHED NOVEMBER 29, 1932. Class 46.

300,903. LIQUID PUMPS AND MOTORS OPERATED BY LIQUID PRESSURE, AIR, AND GAS COMPRESSORS. AKTIEBOLAGET IMOINDUSTRI, Stockholm, Sweden.
Filed February 8, 1932. Serial No. 323,929. PUBLISHED NOVEMBER 22, 1932. Class 23.

300,904. PERFUMES, TOILET WATERS, SACHETS, BATH SALTS, COLD CREAMS, VANISHING CREAM, CLEANSING CREAM, HONEY AND ALMOND LOTION, AND SMELLING SALTS. SAMUEL S. KLEIN, doing business as Villon and Villon, Perfumer, Brooklyn, N. Y.
Filed February 16, 1932. Serial No. 323,807. PUBLISHED NOVEMBER 15, 1932. Class 6.

300,905. LIPSTICKS, FACE POWDERS, ROUGES, FACE LOTIONS, CLEANSING CREAMS, COLD CREAMS, FACE CREAMS, FILLED POWDER AND ROUGE COMPACTS AND VANITY CASES, FACIAL MASQUE, PERFUMES, AND BATH SALTS. CHRISTY COSMETICS, INC., New York, N. Y.
Filed January 30, 1932. Serial No. 323,608. PUBLISHED NOVEMBER 29, 1932. Class 6.

300,906. DENTAL INSTRUMENTS AND SUPPLIES. THE RANSOM & RANDOLPH COMPANY, Toledo, Ohio.
Filed January 22, 1932. Serial No. 323,311. PUBLISHED NOVEMBER 29, 1932. Class 44.

300,907. DENTURE MATERIALS. THE RANSOM & RANDOLPH COMPANY, Toledo, Ohio.
Filed January 22, 1932. Serial No. 323,310. PUBLISHED NOVEMBER 29, 1932. Class 44.

300,908. LUBRICATING OIL. CHARLES E. FLAGER, Lima, Ohio.
Filed October 13, 1932. Serial No. 331,223. PUBLISHED DECEMBER 6, 1932. Class 15.

300,909. LUBRICATING GREASES. E. F. HOUGHTON & Co., Philadelphia, Pa.
Filed October 12, 1932. Serial No. 331,184. PUBLISHED DECEMBER 6, 1932. Class 15.

300,910. DEODORIZED KEROSENE. L. SONNEBORN SONS, INC., New York, N. Y.
Filed October 10, 1932. Serial No. 331,126. PUBLISHED DECEMBER 6, 1932. Class 15.

300,911. ELECTRIC LIGHT PLANTS. WITTE ENGINE WORKS, Kansas City, Mo.
Filed October 7, 1932. Serial No. 331,073. PUBLISHED NOVEMBER 22, 1932. Class 21.

300,912. CEILING-ATTACHED AND WALL-ATTACHED LIGHTING FIXTURES. THE F. W. WAKEFIELD BRASS CO., Vermilion, Ohio.
Filed October 6, 1932. Serial No. 331,018. PUBLISHED NOVEMBER 22, 1932. Class 21.

300,913. COPPER WIRE AND CABLE FOR ELECTRICAL USE. PHELPS DODGE COPPER PRODUCTS CORPORATION, Dover, Del., and New York, N. Y.
Filed September 15, 1932. Serial No. 330,564. PUBLISHED NOVEMBER 29, 1932. Class 21.

300,914. LUBRICATING OILS AND GREASES. THE CANFIELD OIL COMPANY, Cleveland, Ohio.
Filed September 14, 1932. Serial No. 330,333. PUBLISHED NOVEMBER 29, 1932. Class 15.

300,915. GASOLINE AND OTHER MOTOR FUEL OILS. OLIXIR CORPORATION, Buffalo, N. Y.
Filed September 1, 1932. Serial No. 330,049. PUBLISHED NOVEMBER 29, 1932. Class 15.

300,916. INCANDESCENT LAMPS. STANTEST LAMP CORPORATION, New York, N. Y.
Filed August 31, 1932. Serial No. 330,025. PUBLISHED DECEMBER 6, 1932. Class 21.

300,917. LUBRICATING OILS AND GREASES. HARWOOD BROS., INC., Richmond, Va.
Filed August 29, 1932. Serial No. 329,945. PUBLISHED NOVEMBER 29, 1932. Class 15.

300,918. RADIO RECEIVING SETS, RADIO TRANSMITTING SETS, AND PARTS THEREOF. THE RADOLEK COMPANY, Chicago, Ill.
Filed August 23, 1932. Serial No. 329,773. PUBLISHED DECEMBER 6, 1932. Class 21.

300,919. AUTOMOBILE BRAKES. RAYBESTOS-MANHATTAN, INCORPORATED, Passaic, N. J., and Bridgeport, Conn.
Filed July 8, 1932. Serial No. 328,655. PUBLISHED NOVEMBER 29, 1932. Class 19.

300,920. ELECTRIC BLOCK SIGNAL LIGHT SYSTEMS FOR RAILWAYS, ELECTRIC LIGHT SIGNAL SYSTEMS FOR STREET TRAFFIC, MECHANISM FOR ACTUATING SIGNAL LIGHT CIRCUITS AND FOR BREAKING SUCH CIRCUITS, VISUAL AND AUDIBLE HIGHWAY CROSSING SIGNALS, AND PARTS THEREOF. NACHOD & UNITED STATES SIGNAL CO., INC., Louisville, Ky.
Filed June 13, 1932. Serial No. 328,049. PUBLISHED NOVEMBER 29, 1932. Class 21.

300,921. ELECTRIC LIGHTING EQUIPMENT. CENTURY LIGHTING EQUIPMENT, INC., New York, N. Y.
Filed June 11, 1932. Serial No. 327,903. PUBLISHED NOVEMBER 22, 1932. Class 21.

300,922. FLAT GLASS. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa.
Filed October 25, 1932. Serial No. 331,562. PUBLISHED DECEMBER 6, 1932. Class 33.

300,923. PUBLICATION ISSUED MONTHLY. INDUSTRIAL MEDICINE, INC., Chicago, Ill.
Filed October 22, 1932. Serial No. 331,465. PUBLISHED NOVEMBER 29, 1932. Class 38.

300,924. VARNISH COMPOUND FOR THE PRESERVATION OF LINOLEUM. A. C. HORN COMPANY, Long Island City, N. Y.
Filed October 22, 1932. Serial No. 331,464. PUBLISHED NOVEMBER 29, 1932. Class 16.

300,925. LUGGAGE—NAMELY, SUITCASES, HATBOXES, WARDROBE SUITCASES, WARDROBE HATBOXES, SATCHELS, HANDBAGS, GLADSTONE CASES, GRIPS, UTENSIL CASES FOR TOILET ACCESSORIES, AND FITTED CASES. LIDO LUGGAGE CO., INC., New York, N. Y.
Filed October 14, 1932. Serial No. 331,262. PUBLISHED NOVEMBER 29, 1932. Class 3.

300,926. READY MIXED PAINT, VARNISH, AND PAINT ENAMEL. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio.
Filed October 8, 1932. Serial No. 331,081. PUBLISHED NOVEMBER 29, 1932. Class 16.

300,927. READY-MIXED, LIQUID, SEMI-PASTE, AND PASTE PAINTS; PAINT ENAMELS, VARNISHES, LACQUERS, JAPANS, STAINS, COLORS IN JAPAN, COLORS IN OIL, PREPARED SHELLAC, PREPARED SHELLAC SUBSTITUTE, WHITE ZINC, WAX FOR POLISHING PURPOSES, AND FILLERS. CHILTON PAINT COMPANY, College Point, N. Y.
Filed October 4, 1932. Serial No. 330,920. PUBLISHED NOVEMBER 22, 1932. Class 16.

300,928. HOTEL CHINA WARE. BOHEMIA KERAMISCHE WERKE, AKTIENGESELLSCHAFT, Neurohlau near Karlsbad, Czechoslovakia.
Filed October 3, 1932. Serial No. 330,888. PUBLISHED DECEMBER 6, 1932. Class 30.

300,929. GLASS MILK BOTTLES. USERVO, INC., South Bend, Ind.
Filed September 30, 1932. Serial No. 330,876. PUBLISHED NOVEMBER 22, 1932. Class 33.

300,930. REFRACTORY CEMENTS, REFRACTORY MORTARS, AND REFRACTORY CONCRETE. JAMES B. DICK, Somerville, Mass.
Filed September 27, 1932. Serial No. 330,696. PUBLISHED NOVEMBER 22, 1932. Class 12.

300,931. READY MIXED PAINT, PASTE COLORS IN OIL, SHELLAC, AND VARNISHES. MAX ABELMAN, doing business as M. Abelman Co. and Hartwell Paint Co., Boston, Mass.
Filed September 24, 1932. Serial No. 330,683. PUBLISHED NOVEMBER 22, 1932. Class 16.

300,932. CANDLES. WILL & BAUMER CANDLE CO., INC., Syracuse, N. Y.
Filed January 18, 1932. Serial No. 323,152. PUBLISHED NOVEMBER 29, 1932. Class 15.

300,933. SALVE FOR USE IN RELIEVING THE DISCOMFORTS OF TOOTHACHE AND PAIN THAT IS DUE TO EXPOSURE TO COLD, AS WELL AS FOR USE IN TREATING SIMPLE COUGHS WHEN DUE TO COLDS AND FOR MINOR OR SIMPLE IRRITATIONS OF THE SKIN AND NONVENOMOUS INSECT BITES, AS WELL AS FOR USE IN RELIEVING THE DISCOMFORTS OF HEAD COLDS. CHIN YUK SUN, New York, N. Y.
Filed January 9, 1932. Serial No. 322,866. PUBLISHED NOVEMBER 15, 1932. Class 6.

300,934. DRIVING BELTS AND DRIVING BELT FASTENERS MADE OF LEATHER. S. SCHWABE & SÖHNE LEDER-U. TREIBRIEMENFABRIKEN A.-G., Varel/Oldenburg, Germany.
Filed October 27, 1931. Serial No. 320,514. PUBLISHED DECEMBER 6, 1932. Class 35.

300,935. MEDICINAL PREPARATIONS FOR USE IN THE TREATMENT OF DISEASES OF THE LIVER, DISEASES OF THE BLOOD, SKIN DISEASES, CONSUMPTIVE DISEASES, NERVOUS DISEASES, RHEUMATISM, INFECTIOUS DISEASES, GASTRIC DISEASES, HEART DISEASES, PULMONARY DISEASES, AND INSOMNIA. NORDMARK-WERKE G. M. B. H., Hamburg, Germany.
Filed October 19, 1931. Serial No. 320,202. PUBLISHED NOVEMBER 15, 1932. Class 6.

300,936. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. VADSCO SALES CORPORATION, New York and Long Island City, N. Y.
Filed October 7, 1931. Serial No. 319,840. PUBLISHED NOVEMBER 29, 1932. Class 6.

300,937. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. VADSCO SALES CORPORATION, New York and Long Island City, N. Y.
Filed October 7, 1931. Serial No. 319,839. PUBLISHED NOVEMBER 29, 1932. Class 6.

300,938. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed October 6, 1931. Serial No. 319,764. PUBLISHED NOVEMBER 22, 1932. Class 42.

300,939. SELF-WINDING WRIST WATCHES AND WATCHES AND CHRONOMETERS. AUTORIST S. A. AUTORIST LTD., Fribourg, Switzerland.
Filed October 7, 1931. Serial No. 319,799. PUBLISHED NOVEMBER 22, 1932. Class 27.

300,940. NEWSPAPER SECTION. NEW YORK AMERICAN, INC., New York, N. Y.
Filed October 1, 1931. Serial No. 319,624. PUBLISHED NOVEMBER 29, 1932. Class 38.

300,941. FOODS AND INGREDIENTS OF FOODS FOR SPECIAL DIETS. LISTER BROS. INC., New York, N. Y.
Filed August 19, 1931. Serial No. 318,154. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,942. BOOK PAPER, BOND PAPER, INDEX PAPER, LEDGER PAPER, WRITING PAPER, OFF-SET PAPER, ENAMEL BOOK PAPER, COATED BOND PAPER, AND COATED MANILA PAPER. COPY PAPERS INC., Chicago, Ill.
Filed July 17, 1931. Serial No. 317,029. PUBLISHED NOVEMBER 29, 1932. Class 37.

300,943. CREAMERY PRODUCTS—NAMELY, EVAPORATED MILK. BORDEN'S MILK PRODUCTS COMPANY, INC., New York, N. Y., assignor to Borden Quality Inc., New York, N. Y., a Corporation of Delaware.
Filed July 7, 1931. Serial No. 316,693. PUBLISHED DECEMBER 6, 1932. Class 46.

300,944. BUILDING PAPER FOR THERMAL AND/OR ACOUSTICAL INSULATION, LINING PAPER FOR BUILDINGS AND FREIGHT CARS, WATERPROOFING PAPER FOR USE IN BUILDING AND OTHER CONSTRUCTION WORK, AND A PROTECTIVE COVERING SHEET FOR CONCRETE FLOORS, ALL OF WHICH COMPRISE A SHEET OF FIBROUS MATERIAL WHICH MAY OR MAY NOT BE COATED AND/OR SATURATED IN WHOLE OR IN PART WITH A BITUMINOUS OR ASPHALTIC COMPOUND. THE PARAFFINE COMPANIES, INC., San Francisco, Calif.
Filed July 2, 1931. Serial No. 316,567. PUBLISHED NOVEMBER 15, 1932. Class 12.

300,945. NUTS, NUTS COMBINED WITH BRAKE BANDS WHICH SERVE TO LOCK THE NUT AGAINST BACKWARD ROTATION OF THE BOLT WITH WHICH IT IS ASSOCIATED, AND FOR BRAKE BANDS PER SE WHICH COMBINE WITH NUTS AND BOLTS TO LOCK THE NUT AGAINST BACKWARD ROTATION OFF THE BOLT. SAFETY NUT CORPORATION, Philadelphia, Pa.
Filed March 10, 1931. Serial No. 311,979. PUBLISHED NOVEMBER 22, 1932. Class 13.

300,946. LAXATIVE NATURAL MINERAL WATER. FRENCH LICK SPRINGS HOTEL CO., French Lick, Ind.
Filed March 6, 1931. Serial No. 311,830. PUBLISHED DECEMBER 6, 1932. Class 45.

300,947. EMBLEMS AND BADGES MADE OF OR PLATED WITH PRECIOUS METAL. STATE YOUNG MEN'S CHRISTIAN ASSOCIATION OF PENNSYLVANIA, Harrisburg, Pa.
Filed May 14, 1931. Serial No. 314,586. PUBLISHED DECEMBER 6, 1932. Class 28.

300,948. WALL PAPER. OTTO GRIMMER, doing business as Charles Grimmer & Son, New York, N. Y.
Filed January 6, 1931. Serial No. 309,643. PUBLISHED NOVEMBER 15, 1932. Class 37.

300,949. RUBBER FLOORING MADE PRINCIPALLY OF RUBBER, VULCANIZING AND CURING INGREDIENTS AND PIGMENTS. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed October 10, 1930. Serial No. 306,628. PUBLISHED NOVEMBER 22, 1932. Class 12.

300,950. STORAGE BATTERIES. PREST-O-LITE STORAGE BATTERY CORPORATION, Speedway, Ind.
Filed September 5, 1930. Serial No. 305,369. PUBLISHED NOVEMBER 22, 1932. Class 21.

300,951. AERIAL AND LEAD-IN WIRES FOR RADIO RECEIVERS. THE HOLYOKE COMPANY, INC., Holyoke, Mass.
Filed June 22, 1929. Serial No. 285,973. PUBLISHED DECEMBER 6, 1932. Class 21.

300,952. COFFEE. BALZAC BROS. & COMPANY, INC., New York, N. Y.
Filed October 4, 1932. Serial No. 330,918. PUBLISHED NOVEMBER 29, 1932. Class 46.

300,953. FRESH CITRUS FRUITS. CAMARILLO CITRUS ASSOCIATION, Camarillo, Calif.
Filed October 11, 1932. Serial No. 331,138. PUBLISHED NOVEMBER 29, 1932. Class 46.

300,954. FRESH CITRUS FRUITS. CAMARILLO CITRUS ASSOCIATION, Camarillo, Calif.
Filed October 11, 1932. Serial No. 331,139. PUBLISHED NOVEMBER 29, 1932. Class 46.

300,955. FRESH CITRUS FRUITS. CAMARILLO CITRUS ASSOCIATION, Camarillo, Calif.
Filed October 11, 1932. Serial No. 331,140. PUBLISHED NOVEMBER 29, 1932. Class 46.

300,956. COSMETIC—NAMELY A HAND AND FACE LOTION, AND FOR USE AS AN AFTER SHAVING LOTION, BABY RASHES AND FOR THE TREATMENT OF SUNBURN, WINDBURN, CHAPPING AND CHAFFING, CRACKED LIPS, STINGS, SMARTING, ITCHING, PRICKLY HEAT AND TIRED FEET. JAMES F. SULLIVAN, doing business as Kitgen Laboratories, Camden, N. J.
Filed October 12, 1932. Serial No. 331,204. PUBLISHED NOVEMBER 29, 1932. Class 6.

300,957. SKIN CLEANSING CREAM. THE BARBASOL COMPANY, Indianapolis, Ind.
Filed October 19, 1932. Serial No. 331,365. PUBLISHED NOVEMBER 29, 1932. Class 6.

300,958. ALIMENTARY PASTES. LONG ISLAND MACARONI CO. INC., Long Island City, N. Y.
Filed August 13, 1932. Serial No. 329,569. PUBLISHED NOVEMBER 15, 1932. Class 46.

300,959. FLAVORINGS FOR FOODS. S. J. BARON CORPORATION, New York, N. Y.
Filed September 17, 1932. Serial No. 330,415. PUBLISHED NOVEMBER 29, 1932. Class 46.

300,960. COFFEE. GOLDBERG, BOWEN & CO., San Francisco, Calif.
Filed September 20, 1932. Serial No. 330,512. PUBLISHED NOVEMBER 29, 1932. Class 46.

300,961. MALT SYRUP. THE AMERICAN DIAMALT COMPANY, Cincinnati, Ohio.
Filed September 26, 1932. Serial No. 330,647. PUBLISHED NOVEMBER 29, 1932. Class 46.

300,962. FROZEN CONFECTIONS IN THE NATURE OF SHERBETS. GEORGIA-CAROLINA DAIRIES, Augusta, Ga.
Filed June 14, 1932. Serial No. 327,976. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,963. NUT PASTE FOR MAKING MACAROONS, CAKES, PIES, AND CANDY. ROBERT W. FUHR, New Orleans, La.
Filed June 14, 1932. Serial No. 327,975. PUBLISHED NOVEMBER 29, 1932. Class 46.

300,964. ASTRINGENTS, BLEACH CREAMS, BEAUTY CREAMS, ETC. PARFUMERIE ST. DENIS, New York, N. Y.
Filed May 24, 1932. Serial No. 327,409. PUBLISHED NOVEMBER 29, 1932. Class 6.

300,965. WRITING INK. THE WAHL COMPANY, Chicago, Ill.
Filed September 28, 1932. Serial No. 330,769. PUBLISHED NOVEMBER 8, 1932. Class 11.

300,966. FUEL-HANDLING EQUIPMENT — NAMELY, FUEL STOKERS. COMBUSTIONEER, INC., Springfield, Ohio.
Filed October 10, 1932. Serial No. 331,100. PUBLISHED NOVEMBER 22, 1932. Class 34.

300,967. PETROLEUM COKE PRODUCED FROM THE DISTILLATION OR HEAT TREATMENT OF HYDROCARBON OILS. THE PURE OIL COMPANY, Chicago, Ill.
Filed October 10, 1932. Serial No. 331,117. PUBLISHED DECEMBER 6, 1932. Class 1.

300,968. INNERSPRING MATTRESSES FOR BURIAL CASKETS. ATLANTA CASKET COMPANY, Atlanta, Ga.
Filed October 12, 1932. Serial No. 331,173. PUBLISHED NOVEMBER 29, 1932. Class 32.

300,969. PHOTOGRAPH FRAMES. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa.
Filed October 12, 1932. Serial No. 331,208. PUBLISHED NOVEMBER 29, 1932. Class 32.

300,970. STEEL IN THE FORM OF BARS, RODS, BILLETS, BLOOMS, SHEETS, PLATES, SLABS, STRIPS, BLOCKS, AND FORGINGS. HALCOMB STEEL COMPANY, Geddes, Syracuse, N. Y.
Filed October 24, 1932. Serial No. 331,498. PUBLISHED DECEMBER 6, 1932. Class 14.

300,971. CABINETS AND PARTS THEREOF FOR THE DISPLAY OF MERCHANDISE FOR SALE. SERVICE STATION EQUIPMENT COMPANY, Conshohocken, Pa.
Filed September 17, 1932. Serial No. 330,433. PUBLISHED NOVEMBER 29, 1932. Class 32.

300,972. CAMERAS, SENSITIZED PHOTOGRAPHIC PLATES, AND FILMS; PHOTOGRAPHIC CAMERA TRIPODS, AND CAMERA PLATE-HOLDERS. WILLOUGHBY CAMERA STORES, INC., New York, N. Y.
Filed September 17, 1932. Serial No. 330,440. PUBLISHED NOVEMBER 22, 1932. Class 26.

300,973. LUBRICATING DEVICES—NAMELY, DROP FEEDERS FOR MACHINERY BEARINGS, AND OIL SEPARATORS FOR USE IN CONNECTION WITH LUBRICATING SYSTEMS FOR MACHINERY. NATIONAL INDUSTRIAL PRODUCTS CORPORATION, Wilkinsburg, Pa.
Filed September 19, 1932. Serial No. 330,490. PUBLISHED NOVEMBER 22, 1932. Class 23.

300,974. BRONZE ARTICLES, WROUGHT OR PARTLY WROUGHT, AND BRONZE ALLOYS IN INGOT FORM. FONDERIES DE BRONZE DE NANTERRE, SOCIÉTÉ ANONYME, Nanterre, France.
Filed September 21, 1932. Serial No. 330,543. PUBLISHED DECEMBER 6, 1932. Class 14.

300,975. BOX-SPRINGS AND MATTRESSES. SLEEPER PRODUCTS, INC., Wilmington, Del., and Philadelphia, Pa.
Filed September 21, 1932. Serial No. 330,679. PUBLISHED NOVEMBER 22, 1932. Class 32.

300,976. MATTRESSES, PILLOWS, BOLSTERS, CUSHIONS, BEDSTEADS, AND BOX-SPRINGS. OSTERMOOR & COMPANY, INC., New York, N. Y.
Filed August 10, 1932. Serial No. 329,454. PUBLISHED NOVEMBER 22, 1932. Class 32.

300,977. LOOP FORMING IMPLEMENTS FOR USE IN PRODUCTION OF RUGS AND PILE EFFECTS ON FABRICS. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J., and New York, N. Y.
Filed August 11, 1932. Serial No. 329,482. PUBLISHED NOVEMBER 22, 1932. Class 23.

300,978. CHAIRS, STOOLS, TABLES, GLIDERS, AND SWINGS FOR HOUSEHOLD AND OFFICE USE. THE McKAY COMPANY, Pittsburgh, Pa.
Filed August 29, 1932. Serial No. 329,967. PUBLISHED NOVEMBER 15, 1932. Class 32.

300,979. BARB WIRE. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio.
Filed September 10, 1932. Serial No. 330,220. PUBLISHED NOVEMBER 22, 1932. Class 13.

300,980. MACHINES FOR THE MANUFACTURE OF ARTIFICIAL SNOW FROM ICE. CHARLES B. BILLS, Sacramento, Calif.
Filed September 12, 1932. Serial No. 330,244. PUBLISHED NOVEMBER 22, 1932. Class 23.

300,981. INTERNAL COMBUSTION ENGINES AND THEIR PARTS. THE "SOCIÉTÉ FRANÇAISE HISPANO-SUIZA", Bois-Colombes, France.
Filed March 24, 1932. Serial No. 325,443. PUBLISHED NOVEMBER 22, 1932. Class 23.

300,982. FERROUS METAL CASTINGS. GUNITE FOUNDRIES CORPORATION, Rockford, Ill.
Filed April 4, 1932. Serial No. 325,789. PUBLISHED DECEMBER 6, 1932. Class 14.

300,983. GASOLINE FUEL BURNING LAMPS AND LANTERNS. THE COLEMAN LAMP AND STOVE COMPANY, Wichita, Kans.
Filed April 6, 1932. Serial No. 325,845. PUBLISHED NOVEMBER 22, 1932. Class 34.

300,984. COIN DISPENSING CHANGE MAKING MACHINES. MONEX CORPORATION, New York, N. Y.
Filed April 21, 1932. Serial No. 326,331. PUBLISHED NOVEMBER 22, 1932. Class 26.

300,985. RAZORS AND RAZOR BLADES. SEGAL SAFETY RAZOR CORPORATION, New York, N. Y.
Filed April 27, 1932. Serial No. 326,557. PUBLISHED NOVEMBER 22, 1932. Class 28.

300,986. RAZORS AND RAZOR BLADES. SEGAL SAFETY RAZOR CORPORATION, New York, N. Y.
Filed April 27, 1932. Serial No. 326,558. PUBLISHED NOVEMBER 22, 1932. Class 28.

300,987. DOUBLE ACTING PISTON PUMPS. GOULDS PUMPS, INCORPORATED, Seneca Falls, N. Y.
Filed May 3, 1932. Serial No. 326,711. PUBLISHED NOVEMBER 22, 1932. Class 23.

300,988. FURNITURE. THE STATTON FURNITURE MFG. COMPANY, Hagerstown, Md.
Filed June 2, 1932. Serial No. 327,665. PUBLISHED NOVEMBER 22, 1932. Class 32.

300,989. DOMESTIC STAND BOILER FOR USE IN CONJUNCTION WITH HEATING PLANTS. PLEN-T-HOT PRODUCTS, INC., New Rochelle, N. Y.
Filed July 14, 1932. Serial No. 328,800. PUBLISHED NOVEMBER 22, 1932. Class 34.

300,990. PORTABLE SELF CONTAINED MACHINES FOR DISPENSING DRINKS. ROSS M. TURNER, New York, N. Y.
Filed July 28, 1932. Serial No. 329,169. PUBLISHED NOVEMBER 22, 1932. Class 28.

300,991. CHOCOLATE MALT SYRUP. BLUMA RUBIN, Brooklyn, N. Y.
Filed September 26, 1932. Serial No. 330,669. PUBLISHED NOVEMBER 22, 1932. Class 46.

300,992. WRITING AND PRINTING PAPER. STRATHMORE PAPER COMPANY, Mittineague, Mass.
Filed October 26, 1932. Serial No. 331,598. PUBLISHED DECEMBER 6, 1932. Class 37.

300,993. EMPTY RECEPTACLES—NAMELY, BOXES, CASES, CARTONS, BAGS, AND TUBES MADE OF WOOD, NON-PRECIOUS METALS, MINERALS, OR FIBERS, OR COMBINATIONS THEREOF, NOT GLASS OR EARTHENWARE. WALTER H. ROLL, Kansas City, Mo.
Filed March 14, 1932. Serial No. 325,117. PUBLISHED DECEMBER 6, 1932. Class 2.

300,994. FACE AND BODY CREAMS, FACE AND HAND LOTIONS, ASTRINGENTS, LIP STICKS, FACE POWDERS AND ROUGES, NAIL POLISH AND LIQUID FINGER NAIL POLISH REMOVER, CUTICLE CREAM, AND LIQUID FINGER NAIL CUTICLE REMOVERS. INSTITUT DE BEAUTÉ, INC., New York, N. Y.
Filed March 16, 1932. Serial No. 325,173. PUBLISHED NOVEMBER 29, 1932. Class 6.

300,995. NAIL POLISH AND NAIL POLISH REMOVER. MCCRORY STORES CORPORATION, New York, N. Y.
Filed June 17, 1932. Serial No. 328,066. PUBLISHED NOVEMBER 29, 1932. Class 6.

300,996. NAIL POLISH AND NAIL POLISH REMOVER. MCCRORY STORES CORPORATION, New York, N. Y.
Filed June 17, 1932. Serial No. 328,067. PUBLISHED NOVEMBER 29, 1932. Class 6.

300,997. PERFUMES, TOILET WATER, FACE POWDER, TALCUM POWDER, BATH SALTS, BRILLIANTINE, BANDOLINE, ROUGE, LIP STICKS, DUSTING POWDER, SACHET, COLD CREAMS, LOTION FOR THE SKIN AND HAIR; POWDER AND ROUGE COMPACTS AND EAU VEGETAL. HOUBIGANT, INC., New York, N. Y.
Filed July 15, 1932. Serial No. 328,618. PUBLISHED NOVEMBER 29, 1932. Class 6.

300,998. PLAYING CARDS. BID-RITE PLAYING CARD CORPORATION, New York, N. Y.
Filed August 18, 1932. Serial No. 329,621. PUBLISHED DECEMBER 6, 1932. Class 22.

300,999. SKIN LOTIONS. GLEE D. DAVIDSON, doing business as Etel-Ga Laboratories, Rifle, Colo.
Filed September 6, 1932. Serial No. 330,122. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,000. SUN GLASSES AND GOGGLES. BACHMANN BROS. INC., Philadelphia, Pa.
Filed September 19, 1932. Serial No. 330,442. PUBLISHED NOVEMBER 29, 1932. Class 26.

301,001. GLASSINE PAPER. RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y.
Filed October 10, 1932. Serial No. 331,120. PUBLISHED DECEMBER 6, 1932. Class 37.

301,002. WEEKLY MAGAZINE. PARADE, INC., Cleveland, Ohio.
Filed October 12, 1932. Serial No. 331,198. PUBLISHED NOVEMBER 22, 1932. Class 38.

301,003. PUBLICATION IN MAGAZINE FORM. CHICAGO ROTOPRINT COMPANY, Chicago, Ill.
Filed October 14, 1932. Serial No. 331,246. PUBLISHED NOVEMBER 22, 1932. Class 38.

301,004. WRITING AND PRINTING PAPER. STRATHMORE PAPER COMPANY, Mittineague, Mass.
Filed October 26, 1932. Serial No. 331,597. PUBLISHED DECEMBER 6, 1932. Class 37.

301,005. GOLF SCORE PADS AND BRIDGE SCORE PADS. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa.
Filed October 12, 1932. Serial No. 331,209. PUBLISHED NOVEMBER 22, 1932. Class 37.

301,006. BLANKBOOKS. LEWIS M. ADAMS, Clinton, Mass.
Filed October 14, 1932. Serial No. 331,287. PUBLISHED NOVEMBER 22, 1932. Class 37.

301,007. TOILET PAPER, PAPER TOWELS, PAPER NAPKINS, AND CREPE PAPER. FORT HOWARD PAPER COMPANY, Green Bay, Wis.
Filed October 29, 1932. Serial No. 331,678. PUBLISHED DECEMBER 6, 1932. Class 37.

301,008. MAGAZINE ISSUED QUARTERLY. DOUBLEDAY, DORAN & COMPANY, INC., Garden City, N. Y.
Filed August 24, 1932. Serial No. 329,792. PUBLISHED NOVEMBER 22, 1932. Class 38.

301,009. PERIODICAL. BROWN-MAYER PUBLISHING CO. INC., New York, N. Y., assignor to Colonel L. Brown, New York, N. Y.
Filed September 16, 1932. Serial No. 330,893. PUBLISHED NOVEMBER 22, 1932. Class 38.

301,010. PUBLICATION PUBLISHED FROM TIME TO TIME. NATIONAL BISCUIT COMPANY, New York, N. Y.
Filed October 5, 1932. Serial No. 330,965. PUBLISHED NOVEMBER 22, 1932. Class 38.

301,011. COFFEE. BIEDERMANN BROTHERS, INC., Chicago, Ill.
Filed October 22, 1932. Serial No. 331,453. PUBLISHED NOVEMBER 29, 1932. Class 46.

301,012. CALCIUM CARBIDE. NATIONAL CARBIDE CORPORATION, Wytheville, Va.; New York, N. Y.; and Ivanhoe, Va.
Filed April 21, 1932. Serial No. 326,835. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,013. SHAMPOO PREPARATION IN PASTE FORM. DAVID RODERICK WATKINS, Dormont, Pa.
Filed April 27, 1932. Serial No. 326,565. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,014. PAPER TOWELS, TOILET TISSUES, AND NAPKINS. HOSMER PAPER & FIBRE COMPANY, Green Bay, Wis.
Filed March 28, 1932. Serial No. 325,579. PUBLISHED NOVEMBER 22, 1932. Class 37.

301,015. FLOOR DRESSING. ACME CHEMICAL COMPANY, Milwaukee, Wis.
Filed June 13, 1932. Serial No. 327,930. PUBLISHED NOVEMBER 22, 1932. Class 16.

301,016. DRY CLEANING APPARATUS, TO WIT: LAUNDRY STILLS, DRY CLEANING, CLEAN AND DIRTY FLUID TANKS, RESERVE TANKS, CONDENSERS, COOLERS, SUMP TANKS, EXTRACTORS, WASHERS, LAUNDRY AND SPOTTING TABLES, AND LAUNDRY DRY ROOMS. ELMER RICHARDS COMPANY, Chicago, Ill.
Filed August 15, 1932. Serial No. 329,618. PUBLISHED NOVEMBER 15, 1932. Class 24.

301,017. PAPER BOX LINERS AND SHEETS. HARRY M. HITCHINS, Minneapolis, Minn.
Filed September 22, 1932. Serial No. 330,574. PUBLISHED NOVEMBER 22, 1932. Class 37.

301,018. PAPER NAPKINS. FORT HOWARD PAPER COMPANY, Green Bay, Wis.
Filed October 10, 1932. Serial No. 331,104. PUBLISHED NOVEMBER 22, 1932. Class 37.

301,019. PAPER GOODS—NAMELY, WRITING TABLETS. BUTLER BROTHERS, Chicago, Ill.
Filed October 7, 1932. Serial No. 331,037. PUBLISHED NOVEMBER 22, 1932. Class 37.

301,020. GLASSINE PAPER. RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y.
Filed October 10, 1932. Serial No. 331,119. PUBLISHED NOVEMBER 22, 1932. Class 37.

301,021. WRITING AND PRINTING PAPER. RISING PAPER COMPANY, Housatonic, Mass.
Filed October 10, 1932. Serial No. 331,121. PUBLISHED NOVEMBER 22, 1932. Class 37.

301,022. LADIES' PURSES, POCKETBOOKS, AND HAND BAGS. KOHET, INC., New York, N. Y.
Filed October 17, 1932. Serial No. 331,309. PUBLISHED DECEMBER 6, 1932. Class 3.

301,028. GERMICIDE FOR BURNS, MINOR CLIPS, CUTS, AND SKIN ABRASIONS. THE CRAMER CHEMICAL CO., Gardner, Kans.
Filed October 3, 1932. Serial No. 330,889. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,024. MEDICINAL PREPARATION FOR TREATMENT OF ANEMIA. THE WM. S. MERRELL COMPANY, Cincinnati, Ohio.
Filed October 1, 1932. Serial No. 330,855. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,025. AUXILIARY AGENT FOR DYEING. GENERAL DYESTUFF CORPORATION, New York, N. Y.
Filed October 1, 1932. Serial No. 330,847. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,026. BASE FOR ANTISEPTIC JELLY. DUREX PRODUCTS INC., New York, N. Y.
Filed September 30, 1932. Serial No. 330,840. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,027. SOLUBLE FERRIC SULPHATE USED AS A COAGULATE IN THE TREATMENT OF INDUSTRIAL, AGRICULTURAL AND MUNICIPAL WASTES AND WATER SUPPLIES. THE CALCO CHEMICAL COMPANY, INC., Bound Brook, N. J.
Filed September 30, 1932. Serial No. 330,808. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,028. NON-TOXIC IODINE FOR INTERNAL ADMINISTRATION WHEREVER IODINE IS INDICATED. JACQUES ROMANO, New York, N. Y.
Filed September 29, 1932. Serial No. 330,799. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,029. HEMORRHOIDAL OINTMENT. HOLLAND PHARMACAL COMPANY, Philadelphia, Pa.
Filed September 28, 1932. Serial No. 330,747. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,030. PREPARATIONS FOR USE IN THE TREATMENT OF MANGE. LEONARD B. HANNA, Caldwell, Kans.
Filed September 28, 1932. Serial No. 330,746. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,031. ANTISEPTICS. C. D. BURCHARD, INC., New York, N. Y.
Filed September 28, 1932. Serial No. 330,738. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,032. LIQUID NAIL POLISH. THE MONROE SANDER CORPORATION, Long Island City, N. Y.
Filed September 27, 1932. Serial No. 330,707. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,033. PREPARATIONS FOR FULLING AND FINISHING TEXTILE FABRICS. ERNST BISCHOFF COMPANY, INCORPORATED, New York, N. Y.
Filed September 27, 1932. Serial No. 330,690. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,034. LOTION USED IN THE TREATMENT OF SORES AND SKIN IRRITATIONS, ESPECIALLY FOR ANIMALS. FREDERICK YOUNGER, Papillion, Nebr.
Filed September 26, 1932. Serial No. 330,676. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,035. INSECTICIDES. OIL JOBBERS REFINING COMPANY, Chicago, Ill.
Filed September 26, 1932. Serial No. 330,666. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,036. HAIR GROWER AND TONIC. THOMAS E. KEATING, New York, N. Y.
Filed September 24, 1932. Serial No. 330,630. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,037. HAIR RESTORATIVE. E. & A. R., Binghamton, N. Y.
Filed September 19, 1932. Serial No. 330,472. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,038. POWDERED DEODORANT. CHICHESTER CHEMICAL COMPANY, Philadelphia, Pa.
Filed September 18, 1932. Serial No. 330,324. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,039. POWDERED DEODORANT. CHICHESTER CHEMICAL COMPANY, Philadelphia, Pa.
Filed September 18, 1932. Serial No. 330,323. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,040. ANTI-FREEZE SOLUTION. LINCOLN LABORATORIES, INCORPORATED, Brooklyn, N. Y.
Filed September 18, 1932. Serial No. 330,302. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,041. SKIN LOTION AND TOILET PREPARATION FOR SOFTENING AND BEAUTIFYING THE SKIN. ESTELLA LIND JONES, San Diego, Calif.
Filed September 18, 1932. Serial No. 330,301. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,042. AUTOMOBILE RADIATOR ANTI-FREEZE SOLUTION OR COMPOUND. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed September 10, 1932. Serial No. 330,233. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,043. FACIAL CLEANSER AND FACIAL CREAM. DANIEL HUNT, Bremerton, Wash.
Filed September 7, 1932. Serial No. 330,190. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,044. BAY RUM, TOOTH POWDER, SHAVING POWDER, ETC. E. F. YOUNG, Jr., doing business as E. F. Young, Jr. Mfg. Co., Meridian, Miss.
Filed September 8, 1932. Serial No. 330,189. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,045. PERFUME AND INCENSE. MORTON G. NEUMANN, doing business as Mo-Jo Products Co., Chicago, Ill.
Filed September 1, 1932. Serial No. 330,048. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,046. CREAMS, SALVES, OR SKIN OINTMENTS, EXTERNALLY USED AS A FACIAL OR OTHER SKIN TREATMENT TO SOFTEN THE SKIN AND/OR TO RELIEVE IRRITATIONS AND INFECTIONS THEREOF, AND/OR TO INCREASE THE SKIN RESISTANCE TO INFECTION. G. H. SHERMAN, M. D., INC., Detroit, Mich.
Filed August 31, 1932. Serial No. 330,023. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,047. HAIR DRESSING AND STRAIGHTENER, HAIR OIL, BRILLIANTINE, WAVESET, COLD CREAM, CLEANSING CREAM (LIQUEFYING), FOUNDATION CREAM (VANISHING), COCOANUT OIL SHAMPOO, ALMOND HONEY CREAM LOTION, ASTRINGENT AND TIGHTENER FOR THE SKIN, COMPLEXION POWDER, TALCUM POWDER, TOILET WATER, AND PETROLEUM JELLY (PERFUMED), ROSE GLYCERINE ALMOND LOTION, LEMON CREAM LOTION, HOUSEHOLD ALMOND CREAM LOTION, AND HOUSEHOLD LEMON BLEACH LOTION. SUPERIOR PRODUCTS COMPANY, doing business as S-P Laboratories, Dallas, Tex.
Filed August 30, 1932. Serial No. 330,001. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,048. ADHESIVE CEMENT COMPOUND. PIONEER LABORATORY & MFG. CORP., Chicago, Ill.
Filed August 26, 1932. Serial No. 329,867. PUBLISHED DECEMBER 6, 1932. Class 5.

301,049. MEDICINAL OINTMENT FOR PREPARING THE SKIN FOR THE ABSORPTION OF PIGMENTS PRODUCED BY LIGHT RAYS. OBERMEYER & CO. A. G., Hanau-on-the-Main, Germany.
Filed August 1, 1932. Serial No. 329,264. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,050. GENERAL TONIC. FORD HOPKINS CO., doing business as Vin-Kola Co., Chicago, Ill.
Filed March 28, 1932. Serial No. 325,576. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,051. PREPARATION FOR THE TREATMENT OF CONSTIPATION, CONSISTING OF PSYLLIUM SEED COATED WITH AGAR-AGAR. PETROLAGAR LABORATORIES, INC., Chicago, Ill.
Filed June 27, 1932. Serial No. 328,337. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,052. MEDICINAL PREPARATIONS FOR THE TREATMENT OF BRONCHIAL ASTHMA, EXUDATIVE DIATHESIS, HAY FEVER, AND DISEASES OF THE SKIN. NORDMARK-WERKE G. M. B. H., Hamburg, Germany.
Filed March 17, 1932. Serial No. 325,234. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,053. MEDICINAL PREPARATIONS FOR THE CAUSATIVE TREATMENT OF MELANCHOLIA AND DEPRESSION. NORDMARK-WERKE G. M. B. H., Hamburg, Germany.
Filed March 17, 1932. Serial No. 325,236. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,054. ECZEMA LOTION. MARY A. BAUR, Edmonston, Md.
Filed September 27, 1932. Serial No. 330,689. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,055. PREPARATIONS FOR THE TREATMENT OF DISEASES OF THE PULMONARY AND RESPIRATORY TRACTS. MOISÉS L. DE GUEVARA, doing business as Laboratorios Ionine, Mexico, Mexico.
Filed September 26, 1932. Serial No. 330,654. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,056. DICED PINEAPPLES. G. B. RAFFETTO INC., New York, N. Y.
Filed October 12, 1932 Serial No. 331,197. PUBLISHED DECEMBER 6, 1932 Class 46.

301,057. DOG AND CAT FOOD. UNITED GROCERS, LTD., San Francisco, Calif.
Filed October 11, 1932. Serial No. 331,168. PUBLISHED NOVEMBER 29, 1932. Class 46.

301,058. BLOOD INVIGORATOR AND GENERAL TONIC. ROBERT H. VAN SANT, doing business as The Hemafil Company, Chicago, Ill.
Filed October 3, 1932. Serial No. 330,916. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,059. PREPARATION FOR PRESERVING VICTUALS. FAHLBERG-LIST AKTIENGESELLSCHAFT, CHEMISCHE FABRIKEN, Magdeburg Sudost, Germany.
Filed September 30, 1932. Serial No. 330,816. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,060. COMMERCIAL FEEDS FOR LIVESTOCK. SOYA PRODUCTS, INC., Chicago, Ill.
Filed March 10, 1932. Serial No. 325,020. PUBLISHED NOVEMBER 29, 1932. Class 46.

301,061. MEDICINAL PREPARATION FOR USE AS A TONIC, STIMULANT AND RESTORATIVE. THOMAS KERFOOT & CO., LIMITED, Bardsley, England.
Filed October 1, 1932. Serial No. 330,852. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,062. CANNED FRUITS. MOR-PAK PRESERVING CORPORATION, Stockton, Calif.
Filed October 11, 1932. Serial No. 331,161. PUBLISHED NOVEMBER 29, 1932. Class 46.

301,063. FRESH CITRUS FRUITS. LA VERNE ORANGE ASSOCIATION, La Verne, Calif.
Filed October 11, 1932. Serial No. 331,155. PUBLISHED NOVEMBER 29, 1932. Class 46.

301,064. FRESH CITRUS FRUITS. CAMARILLO CITRUS ASSOCIATION, Camarillo, Calif.
Filed October 11, 1932. Serial No. 331,141. PUBLISHED NOVEMBER 29, 1932. Class 46.

301,065. PREPARED CHILI IN COMPRESSED FORM. JOSEPH E. SAUNDERS, doing business as Saunders Company, Kansas City, Mo.
Filed October 10, 1932. Serial No. 331,124. PUBLISHED DECEMBER 6, 1932. Class 46.

301,066. CANDY. WILLIAMSON CANDY COMPANY, Chicago, Ill.
Filed October 8, 1932. Serial No. 331,096. PUBLISHED DECEMBER 6, 1932. Class 46.

301,067. FROZEN CONFECTIONS. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y.
Filed September 30, 1932. Serial No. 330,832. PUBLISHED NOVEMBER 22, 1932. Class 46.

301,068. ICE CREAM CONES. MARY CICCARELLI, doing business as East Boston Sugar Cone Co., East Boston, Mass.
Filed September 29, 1932. Serial No. 330,781. PUBLISHED NOVEMBER 29, 1932. Class 46.

301,069. PANCAKE FLOUR. THE QUAKER OATS COMPANY, Chicago, Ill.
Filed September 3, 1932. Serial No. 330,100. PUBLISHED DECEMBER 6, 1932. Class 46.

301,070. SEWING COTTON THREAD IN BALLS. R. F. & J. ALEXANDER AND COMPANY, LIMITED, Neilston, Scotland.
Filed August 26, 1932. Serial No. 329,844. PUBLISHED NOVEMBER 15, 1932. Class 48.

301,071. SEWING COTTON THREAD IN BALLS. R. F. & J. ALEXANDER AND COMPANY, LIMITED, Neilston, Scotland.
Filed August 26, 1932. Serial No. 329,843. PUBLISHED NOVEMBER 15, 1932. Class 48.

301,072. WHEAT FLOUR. L. L. CORTELL & SON, Lincoln, Nebr.
Filed August 22, 1932. Serial No. 329,741. PUBLISHED NOVEMBER 22, 1932. Class 46.

301,073. MARMALADES, JELLIES, PRESERVES, ETC. THE CROSSE & BLACKWELL COMPANY, Baltimore, Md.
Filed August 5, 1932. Serial No. 329,346. PUBLISHED DECEMBER 6, 1932. Class 46.

301,074. CANNED FISH. AKTIEBOLAGET SVERIGES FÖRENADE KONSERVFABRIKER, Gottenborg, Sweden.
Filed July 28, 1932. Serial No. 329,126. PUBLISHED NOVEMBER 22, 1932. Class 46.

301,075. MALT SYRUPS. JOHN F. HUNT & CO. INC., New York, N. Y.
Filed July 27, 1932. Serial No. 329,114. PUBLISHED NOVEMBER 22, 1932. Class 46.

301,076. COFFEE. THE MORBY MERCANTILE COMPANY, Denver, Colo.
Filed April 11, 1932. Serial No. 325,990. PUBLISHED NOVEMBER 29, 1932. Class 46.

301,077. NOODLES. THE DAN-DEE PRETZEL & POTATO CHIP COMPANY, Cleveland, Ohio.
Filed March 30, 1932. Serial No. 325,644. PUBLISHED NOVEMBER 29, 1932. Class 46.

301,078. PRETZELS. THE DAN-DEE PRETZEL & POTATO CHIP COMPANY, Cleveland, Ohio.
Filed March 30, 1932. Serial No. 325,643. PUBLISHED NOVEMBER 29, 1932. Class 46.

301,079. ANTISEPTIC VAGINAL JELLIES FOR FEMININE HYGIENE. GOTHAM LABORATORIES, INC., New York, N. Y.
Filed September 1, 1932. Serial No. 330,044. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,080. AMINO-DIPHENYLS, INCLUDING PRODUCTS OBTAINED BY SUBSTITUTING AN AMINO GRO[illegible] HYDROGEN NEITHER AN [illegible] WITH RESPECT TO THE DIPHENYL LINKAGE OF DIPHENYL. THE DOW CHEMICAL COMPANY, Midland, Mich.
Filed August 29, 1932. Serial No. 329,941. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,081. PHENYL-SALICYLIC ACID, INCLUDING THE ORTHO- AND PARA-PHENYL-SALICYLIC ACIDS—I. E., THE PRODUCT OBTAINED BY SUBSTITUTING A PHENYL GROUP FOR THE HYDROGEN IN [WITHDRAWN] POSITION WITH RESPECT TO THE HYDROXYL GROUP OF SALICYLIC ACID. THE DOW CHEMICAL COMPANY, Midland, Mich.
Filed August 29, 1932. Serial No. 329,940. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,082. MONOBROMO-DIPHENYLS, INCLUDING ORTHO-, META-, AND PARA-MONOBROMO-DIPHENYLS; PARA-PARA'-DIBROMO-DIPHENYL; ORTHO-, META-, AND PARA-PARA'-DIBROMO-DIPHENYLS. THE DOW CHEMICAL COMPANY, Midland, Mich.
[WITHDRAWN]
Filed August 29, 1932. Serial No. 329,939. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,083. MONOCHLORO-DIPHENYLS, INCLUDING THE ORTHO-, META-, AND PARA-MONOCHLORO-DIPHENYLS; PARA-PARA'-DICHLORO-DIPHENYL; ORTHO-, META-, AND PARA-PARA'-DICHLORO-DIPHENYLS; AND POLYCHLORO-DIPHENYLS. THE DOW CHEMICAL COMPANY, Midland, Mich.
[WITHDRAWN]
Filed August 29, 1932. Serial No. 329,938. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,084. MONOCHLORO-DIPHENYLS, INCLUDING THE ORTHO-, META-, AND PARA-MONOCHLORO-DIPHENYLS; PARA-PARA'-DICHLORO-DIPHENYL; ORTHO-, META-, AND PARA-PARA'-DICHLORO-DIPHENYL; AND POLYCHLORO-DIPHENYLS. THE DOW CHEMICAL COMPANY, Midland, Mich.
[WITHDRAWN]
Filed August 29, 1932. Serial No. 329,937. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,085. PLASTIC SYNTHETIC RESINS. BECK, KOLLER & COMPANY, INC., Detroit, Mich.
Filed August 29, 1932. Serial No. 329,925. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,086. MEDICINAL SALVE, SPECIFICALLY, PILE OINTMENT. FOLEY & CO., Chicago, Ill.
Filed August 24, 1932. Serial No. 329,793. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,087. ASTRINGENTS, ASTRINGENT CERATES, BLEACH AND BEAUTY CREAMS, ETC. TRIX PERFUMERS, New York, N. Y.
Filed August 23, 1932. Serial No. 329,775. PUBLISHED NOVEMBER 15, 1932. Class 6.

301,088. FACIAL CREAMS. ISADORE SCHNITZER, South Norwalk, Conn.
Filed August 20, 1932. Serial No. 329,721. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,089. MEDICINAL OINTMENT FOR DISEASES OF THE FOOT—NAMELY, ATHLETE'S FOOT OR RINGWORM. ROBERT M. KING, doing business as The Foot-King Co., Minneapolis, Minn.
Filed August 18, 1932. Serial No. 329,697. PUBLISHED NOVEMBER 15, 1932. Class 6.

301,090. THYROID EXTRACT PREPARATION FOR TREATMENT OF GOITER, OBESITY, KINDRED AILMENTS. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y.
Filed August 11, 1932. Serial No. 329,486. PUBLISHED NOVEMBER 15, 1932. Class 6.

301,091. ANTI-FERMENT AND CHOLAGOGUE FOR CONSTIPATION, INDIGESTION, FLATULENCE, AND ALL TOXIC CONDITIONS DUE TO DERANGEMENTS OF THE LIVER, GALL BLADDER OR INTESTINAL TRACT. MCCOY'S LABORATORIES, INC., New York, N. Y.
Filed August 8, 1932. Serial No. 329,314. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,092. MEDICINAL TONIC EMBODYING HIGHLY CONCENTRATED EXTRACTS FROM GREEN LEAFY VEGETABLES AND RECOMMENDED FOR PELLAGRA, HIGH BLOOD PRESSURE, ANEMIA, STOMACH TROUBLE, AND NERVOUS DISORDERS IN THE HUMAN SYSTEM. LOUIS J. BAYLISS, doing business as Nature's Food Laboratory, Keene, Tex.
Filed July 5, 1932. Serial No. 328,542. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,093. PLANT AND FLOWER PRESERVATIVE. THE EASTERN CHEMICAL AND RESEARCH COMPANY, New Haven, Conn.
Filed May 6, 1932. Serial No. 326,809. PUBLISHED NOVEMBER 22, 1932. Class 6.

301,094. PREPARATION USED AS A LINIMENT FOR THE TREATMENT OF HEADACHES, COLD IN THE HEAD, INFLUENZA, AFFECTIONS OF THE NASAL SINUSES, AND SIMILAR AILMENTS; AS A LINIMENT IN THE TREATMENT OF NEURALGIA, SORE THROAT, RHEUMATISM, STIFF JOINTS, SPRAINS, SWOLLEN AND SORE MUSCLES, BRUISES, SWOLLEN AND TIRED FEET, AND SIMILAR AILMENTS; AS A SKIN TONIC AND TOILET WATER AND FOR USE AFTER SHAVING. JOSÉ DE JESÚS, doing business as Laboratorios Farmaceuticos de Puerto Rico, New York, N. Y.
Filed September 24, 1932. Serial No. 330,621. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,095. TOOTH PASTE AND AN ANTISEPTIC PREPARATION FOR USE AS A GARGLE AND MOUTH WASH. MALCOLM J. MURRAY, doing business as Dent-O-Fras Tooth Paste Co., San Bernardino, Calif.
Filed September 19, 1932. Serial No. 330,488. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,096. TONIC, STIMULANT RECONSTRUCTIVE FOR THE TREATMENT OF DISORDERS RESULTING FROM EXHAUSTED CONDITION OF THE SYSTEM. JOHN WYETH & BROTHER INCORPORATED, Wilmington, Del., and Philadelphia, Pa.
Filed September 17, 1932. Serial No. 330,436. PUBLISHED NOVEMBER 15, 1932. Class 6.

301,097. GENERAL TONIC. INDIAN LAKE MEDICINE CO., Fort Wayne, Ind.
Filed September 17, 1932. Serial No. 330,425. PUBLISHED NOVEMBER 15, 1932. Class 6.

301,098. TOOTH PASTE. THE WILLIAM A. WEBSTER CO., Memphis, Tenn.
Filed September 15, 1932. Serial No. 330,389. PUBLISHED NOVEMBER 15, 1932. Class 6.

301,099. COSMETICS—NAMELY, PERFUMES, TOILET WATERS, FACE CREAMS, POWDERS, BATH SALTS, AND ROUGE. HENRI BENDEL, INC., New York, N. Y.
Filed September 15, 1932. Serial No. 330,360. PUBLISHED NOVEMBER 15, 1932. Class 6.

301,100. SULPHONATED FATS AND OILS FOR TREATING LEATHER. RITTER CHEMICAL COMPANY, INC., Amsterdam, N. Y.
Filed September 13, 1932. Serial No. 330,308. PUBLISHED NOVEMBER 15, 1932. Class 6.

301,101. PREPARATION FOR IMPROVING AND BEAUTIFYING THE HAIR AND FOR RELIEVING ITCHING AND DANDRUFF. CAPITAL CHEMICAL DRUG COMPANY, INC., Montgomery, Ala.
Filed September 13, 1932. Serial No. 330,291. PUBLISHED NOVEMBER 15, 1932. Class 6.

301,102. ESTER GUMS. BECK, KOLLER & COMPANY, INC., Detroit, Mich.
Filed August 29, 1932. Serial No. 329,929. PUBLISHED NOVEMBER 15, 1932. Class 6.

301,103. LAXATIVES AND INTESTINAL LUBRICANTS. E. R. SQUIBB & SONS, New York, N. Y.
Filed August 27, 1932. Serial No. 329,906. PUBLISHED NOVEMBER 22, 1932. Class 6.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

301,104. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS AND PARTS THEREOF.) SUPERIOR FLOOR SURFACING MACHINE CORPORATION, New York, N. Y. Filed Jan. 11, 1932. Serial No. 322,896.

SUPERIOR

For Floor Surfacing Machines, i. e., Motor Driven Sand Paper Scrapers and Polishers.
Claims use since July, 1926.

301,105. (CLASS 20. LINOLEUM AND OILED CLOTH.) SANDURA COMPANY, INC., Paulsboro, N. J., and Philadelphia, Pa. Filed Jan. 11, 1932. Serial No. 322,893.

KOLOR-THRU

For Composition Floor Coverings—Namely, Rugs and Yard Goods by the Roll.
Claims use since Jan. 4, 1932.

301,106. (CLASS 11. INKS AND INKING MATERIALS.) SANFORD MANUFACTURING CO., Chicago, Ill. Filed Jan. 2, 1932. Serial No. 322,655.

WASHINK

For Writing Inks.
Claims use since Dec. 22, 1931.

301,107. (CLASS 2. RECEPTACLES.) CHICAGO MILL AND LUMBER CORPORATION, Chicago, Ill. Filed Dec. 14, 1931. Serial No. 322,091.

PIANOPAK

For Boxes for Shipping Pianos.
Claims use since Nov. 1, 1931.

301,108. (CLASS 18. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) AMERICAN GRILL CO., Milwaukee, Wis. Filed Dec. 5, 1931. Serial No. 321,797.

GRILLETTE

For Grills.
Claims use since Aug. 20, 1931.

301,109. (CLASS 39. CLOTHING.) MEIER & FRANK COMPANY, Portland, Oreg. Filed Oct. 29, 1931. Serial No. 320,599.

PITTWOOD

For Men's and Boys' Dress and Negligee Shirts, and Boys' and Children's Waists and Blouses.
Claims use since Oct. 1, 1931.

301,110. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE CENTRAL FOUNDRY COMPANY, New York, N. Y. Filed Dec. 23, 1932. Serial No. 333,311.

DUAL-LOK

For Metal Pipes, Such as Used for Water, Gas, Etc.
Claims use since Oct. 28, 1930.

301,111. (CLASS 33. GLASSWARE.) KERR GLASS MANUFACTURING CORPORATION, Sand Springs, Okla., and Los Angeles, Calif. Filed Nov. 11, 1932. Serial No. 332,067.

Kerr

For Glass Jars and Glass Containers for Use in Preserving Foods.
Claims use since May 12, 1915.

301,112. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE BLAIR MILLING CO., Atchison, Kans. Filed Aug. 15, 1932. Serial No. 329,548.

Blair's

BEST

For Wheat Flour.
Claims use since July 19, 1929.

301,113. (CLASS 39. CLOTHING.) IRVING FRIEDRICKS, doing business as Irving Friedricks Co., New York, N. Y. Filed June 18, 1932. Serial No. 328,096.

TANGIER

For Ladies' Sport Coats.
Claims use since Jan. 2, 1932.

301,114. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE P. GOLDSMITH SONS COMPANY, Cincinnati, Ohio. Filed Dec. 27, 1930. Serial No. 309,379.

Kenwood

For Golf Clubs and Golf Balls.
Claims use since Nov. 1, 1930.

301,115. (CLASS 39. CLOTHING.) KAUFMANN DEPARTMENT STORES, INC., Pittsburgh, Pa. Filed Jan. 22, 1932. Serial No. 323,297.

A PAIR AND A SPARE

For Hosiery.
Claims use since Jan. 6, 1932.

TRADE-MARK REGISTRATIONS RENEWED

39,557. CERTAIN NAMED NEEDLES AND PINS. Registered December 30, 1902. NEUSS GEBRÜDER. Renewed December 30, 1932, to Neuss Gebruder Gesellschaft mit beschränkter Haftung, Aix-la-Chapelle, Germany, a Corporation of Germany, successor.

39,620. SCOURING AND POLISHING SOAP. Registered January 6, 1903. LEVER BROTHERS, LIMITED, Port Sunlight, England. Renewed January 6, 1933, to Lever Brothers Company, Cambridge, Mass., a Corporation of Maine, assignee.

40,016. A MEDICAL COMPOUND FOR EXTERNAL USE. Registered March 31, 1903. EUGEN VICTOR FELLER, Stubica, Austria-Hungary. Renewed March 31, 1933, to The Chemical Foundation, Incorporated, Wilmington, Delaware, and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

40,027. CHEMICALS FOR PHOTOGRAPHIC BATHS. Registered March 31, 1903. CHEMISCHE FABRIK HELFENBERG A. G. VORM. EUGEN DIETERICH, Helfenberg, Germany. Renewed March 31, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,327. CIGARETTE-PAPER. Registered September 10, 1912. SAUL D. MODIANO, Trieste, Austria-Hungary. Renewed September 10, 1932, to Saul D. Modiano "Società in Accomandita", Trieste, Italy, a Firm, assignee.

89,552. CANVAS DUCKING. Registered December 24, 1912. THE FULTON BAG & COTTON MILLS, Atlanta, Ga., a Corporation of Georgia. Renewed December 24, 1932.

89,633. MANICURE SETS COMPRISING BUFFERS, CUTICLE-SCISSORS, NAIL-SCISSORS, NAIL-FILES, CUTICLE-KNIVES, AND CORN-KNIVES. Registered December 31, 1912. J. C. DOWD & CO. Renewed December 31, 1932, to J. C. Dowd & Co., Inc., New York, N. Y., a Corporation of New York, assignee.

89,868. BISCUIT. Registered January 14, 1913. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed January 14, 1933, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

89,879. TOILET-PAPER. Registered January 14, 1913. JOHN SEXTON & COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed January 14, 1933.

89,923. GUARDS FOR MOWING-MACHINES. Registered January 21, 1913. INTERNATIONAL HARVESTER COMPANY OF AMERICA. Renewed January 21, 1933, to International Harvester Company, Chicago, Ill., a Corporation of New Jersey, assignee.

90,038. BISCUIT. Registered January 28, 1913. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed January 28, 1933, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

90,040. BISCUIT. Registered January 28, 1913. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed January 28, 1933, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

90,042. BISCUIT. Registered January 28, 1913. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed January 28, 1933, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

90,083. A CONSTIPATION REMEDY, A LAXATIVE, AND INTESTINAL ANTISEPTIC. Registered February 4, 1913. AGAR-LAC, INC. Renewed February 4, 1933, to Arlo Chemical Laboratories, Inc., New York, N. Y., a Corporation of New York, assignee.

90,088. ELECTRIC WIRE. Registered February 4, 1913. ATLANTIC INSULATED WIRE & CABLE COMPANY, Jersey City, N. J., and New York, N. Y. Renewed February 4, 1933, to General Cable Corporation, New York, N. Y., a Corporation of New Jersey, assignee by mesne assignments.

90,450. SOAP AND SCOURING COMPOUND. Registered February 25, 1913. LEVER BROTHERS COMPANY, Portland, Me., and Cambridge, Mass. Renewed February 25, 1933, to Lever Brothers Company, Cambridge, Mass., a Corporation of Maine.

90,505. A PREPARATION OF OPIUM, BOTH IN LIQUID AND SOLID FORM. Registered March 4, 1913. ALBERT BOEHRINGER, Nieder-Ingelheim, Germany. Renewed March 4, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,518. OLIVES AND OLIVE-OIL. Registered March 4, 1913. VINCENT P. DOLE. Renewed March 4, 1933, to Old Monk Olive Oil Co., Chicago, Ill., a Corporation of Illinois, assignee.

90,591. CERTAIN NAMED FOODS. Registered March 4, 1913. JOHN SEXTON & COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed March 4, 1933.

90,657. CHILDREN'S DRESSES, ROMPERS, AND OVERALLS. Registered March 11, 1913. RELIANCE MANUFACTURING COMPANY. Renewed March 11, 1933, to Reliance Manufacturing Company, Chicago, Ill., a Corporation of Illinois, assignee.

90,691. CERTAIN NAMED ARTICLES OF SILVER AND ELECTROPLATE. Registered March 18, 1913. ELLIS & CO. (BIRMINGHAM) LIMITED. Renewed March 18, 1933, to Ellis & Company (Birmingham) Limited, Birmingham, England, a Corporation of Great Britain, assignee.

90,712. SALVES FOR MEDICAL AND HYGIENIC PURPOSES. Registered March 18, 1913. AUGUST ADOLF LAUBENHEIMER, Frankfort-on-the-Main, Germany. Renewed March 18, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,749. BAKING-POWDER. Registered March 18, 1913. JOHN SEXTON & COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed March 18, 1933.

90,802. LEUCITE PHONOLITE (MINERAL MANURE). Registered March 25, 1913. GEWERKSCHAFT LEUCHTENBURG, Cologne, Germany. Renewed March 25, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,854. A REMEDY FOR CERTAIN SKIN AFFECTIONS AND OTHER SKIN DISEASES. Registered March 25, 1913. CHEMISCHE FABRIK GÜSTROW, DR. HILLRINGHAUS & DR. HEILMANN, Gustrow and Heideweg, Germany. Renewed March 25, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,993. WHEAT-FLOUR. Registered April 8, 1913. J. F. IMBS MILLING COMPANY, St. Louis, Mo., and Belleville, Ill. Renewed April 8, 1933, to J. F. Imbs Milling Company, Inc., St. Louis, Mo., a Corporation of Illinois, successor.

91,087. MEN'S DRESS, NEGLIGEE, WORK, AND UNDER SHIRTS, COLLARS, AND CUFFS. Registered April 15, 1913. HALL, HARTWELL & CO. Renewed April 15, 1933, to Hall, Hartwell & Co. Inc., Troy, N. Y., a Corporation of New York, assignee.

91,249. PNEUMATIC TIRES FOR VEHICLE-WHEELS. Registered April 22, 1913. THE REPUBLIC RUBBER COMPANY, Youngstown, Ohio. Renewed April 22, 1933, to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio, assignee.

91,250. PNEUMATIC TIRES FOR VEHICLE-WHEELS. Registered April 22, 1913. THE REPUBLIC RUBBER COMPANY, Youngstown, Ohio. Renewed April 22, 1933, to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio, assignee.

91,587. CANDIES, CHOCOLATES, AND BONBONS. Registered May 13, 1913. PASQUALE MARGARELLA, New York, N. Y. Renewed May 13, 1933.

91,599. OLIVE-OIL. Registered May 13, 1913. JOSEPH PETROCELLI & COMPANY. Renewed May 13, 1933, to Cellas', Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

91,769. A BROMIN COMPOUND FOR USE AS A SEDATIVE. Registered May 27, 1913. THE HOFFMANN-LA ROCHE CHEMICAL WORKS, New York, N. Y. Renewed May 27, 1933, to Hoffmann-La Roche, Inc., Nutley, N. J., a Corporation of New Jersey, assignee.

91,851. A MEDICATED INHALER. Registered June 3, 1913. COCKBURN & COMPANY, LIMITED, Glasgow, Scotland, a Corporation of Great Britain. Renewed June 3, 1933.

91,895. A PHARMACEUTICAL PREPARATION OF COD-LIVER OIL. Registered June 3, 1913. PAYNE, SEAY & ANDERSON, Lynchburg, Va., a Corporation of Virginia. Renewed June 3, 1933.

91,959. HOSIERY. Registered June 10, 1913. GOTHAM SILK MFG. CO. Renewed June 10, 1933, to Gotham Silk Hosiery Company, Inc., New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

91,977. HEATING STOVES AND RANGES. Registered June 10, 1913. MICHIGAN STOVE COMPANY. Renewed June 10, 1933, to Detroit-Michigan Stove Company, Detroit, Mich., a Corporation of Michigan, assignee.

92,028. WOVEN AND KNITTED GOODS, PIECE GOODS, SHIRTINGS, SHEETINGS, AND BLANKETS. Registered June 17, 1913. ALDEN MILLS, New Orleans, La., a Corporation of Louisiana. Renewed June 17, 1933.

92,070. MUCILAGINOUS PRODUCTS OF VEGETABLE ORIGIN. Registered June 17, 1913. THE GUM TRAGASOL SUPPLY COMPANY LIMITED. Renewed June 17, 1933, to Tragasol Products Limited, Hooton, England, a Corporation of Great Britain, by change of name.

92,071. LEATHER DRESSINGS AND POLISHES. Registered June 17, 1913. THE GUM TRAGASOL SUPPLY COMPANY LIMITED. Renewed June 17, 1933, to Tragasol Products Limited, Hooton, England, a Corporation of Great Britain, by change of name.

92,072. LEATHER DRESSINGS AND POLISHES. Registered June 17, 1913. THE GUM TRAGASOL SUPPLY COMPANY LIMITED. Renewed June 17, 1933, to Tragasol Products Limited, Hooton, England, a Corporation of Great Britain, by change of name.

92,088. A CHOLAGOGUE. Registered June 17, 1913. THE MARCY COMPANY Boston, Mass., a Corporation of Massachusetts. Renewed June 17, 1933.

92,132. TEAS, BLENDED TEAS, AND SPICES. Registered June 17, 1913. WILLIAM S. SCULL COMPANY, Camden, N. J., a Corporation of New Jersey. Renewed June 17, 1933.

92,184. TEA. Registered June 24, 1913. CHASE & SANBORN, Boston, Mass. Renewed June 24, 1933, to Standard Brands Incorporated, New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

92,196. HOSIERY. Registered June 24, 1913. THE DORMER BROTHERS CO., Cincinnati, Ohio, a Corporation of Ohio. Renewed June 24, 1933.

92,320. PEROXID OF HYDROGEN. Registered July 1, 1913. CITRO CHEMICAL CO. OF AMERICA, Maywood, N. J., a Corporation of New Jersey. Renewed July 1, 1933.

92,429. CERTAIN NAMED PRINTS AND PUBLICATIONS. Registered July 8, 1913. ANNA JARVIS, Philadelphia, Pa. Renewed July 8, 1933.

92,430. BOOK-MARKS, HYMNS, MAGAZINES, AND BOOKS. Registered July 8, 1913. ANNA JARVIS, Philadelphia, Pa. Renewed July 8, 1933.

92,476. CERTAIN NAMED CONSTRUCTION MATERIALS. Registered July 8, 1913. STANDARD PAINT COMPANY. Renewed July 8, 1933, to The Ruberoid Co., Boundbrook, N. J., and New York, N. Y., a Corporation of New Jersey, by change of name.

LABELS

REGISTERED FEBRUARY 14, 1933

41,740.—*Title:* SWEET CLOVER CHEWING GUM. For Chewing Gum. AMERICAN CHEWING PRODUCTS CORP., Newark, N. J. Published July 19, 1932.

41,741.—*Title:* BRIDGE CHEWING GUM. For Chewing Gum. AMERICAN CHEWING PRODUCTS CORP., Newark, N. J. Published June 29, 1932.

41,742.—*Title:* KLEAR-KLEAN. For Bleach. VINCENT ANTONUCCI, doing business as Klear-Klean Company, Youngstown, Ohio. Published November 5, 1932.

41,743.—*Title:* OVATION—ALL THE WORLD'S A STAGE. For Hosiery. B-Z-B KNITTING CO., Rockford, Ill. Published October 24, 1932.

41,744.—*Title:* BURT'S. For Shoes. BIRD & SON, INC., East Walpole, Mass. Published January 6, 1933.

41,745.—*Title:* TRUE SHAPE. For Hosiery. JOHN BLOOD & CO., INCORPORATED, Philadelphia, Pa. Published April 15, 1931.

41,746.—*Title:* AFFROID. For Pharmaceutical Preparation for Sexual Disorders. BROGIROT, INCORPORATED, New York, N. Y. Published December 17, 1932.

41,747.—*Title:* YEAST-BRAN, 2 DELICIOUS HEALTH FOODS IN 1. For Breakfast Cereal Consisting of a Combination of Yeast and Bran Flavored with Malt, Sugar, and Salt. W. S. BROWN, doing business as Louisiana Yeast-Bran Products Company, New Orleans, La. Published November 5, 1932.

41,748.—*Title:* UMBERTO BERIO. For Olive Oil. ARTHUR J. CAPONE, New York, N. Y. Published December 15, 1929.

41,749.—*Title:* MANHATTAN DELIGHTS YOU'LL ENJOY THEIR FLAVOR. For Waffles. M. & B. CONE COMPANY, Brooklyn, N. Y. Published February 24, 1932.

41,750.—*Title:* DAIRY BELT. For Evaporated Milk. DAIRY BELT MILK PRODUCTS COMPANY, Spencer, Wis. Published January 16, 1933.

41,751.—*Title:* KARAGON BRAND. For Coffee. THE DAYTON SPICE MILLS CO., Dayton, Ohio. Published November 30, 1932.

41,752.—*Title:* JEMIMA'S DELIGHT SYRUP. For Syrup. L. FLIEHMANN, Thermopolis, Wyo. Published December 8, 1932.

41,753.—*Title:* G-W BUTTER. For Butter. THE GRAY AND WHITE COMPANY, Tiffin, Ohio. Published November 15, 1932.

41,754.—*Title:* GRISWOLD'S. For Tomatoes. R. W. GRISWOLD, Ashtabula, Ohio. Published April 20, 1932.

41,755.—*Title:* POCKET PACKET OF FULL SIZE SHEETS KLEENEX. For Pocket Size Packets of Disposable Tissues. KLEENEX COMPANY, Chicago, Ill. Published November 4, 1932.

41,756.—*Title:* KLEENEX DISPOSABLE TISSUES IN ASSORTED COLORS. For Disposable Tissues. KLEENEX COMPANY, Chicago, Ill. Published December 8, 1932.

41,757.—*Title:* MANISCHEWITZ MATZOS. For Matzos. THE B. MANISCHEWITZ COMPANY, Cincinnati, Ohio. Published November 6, 1932.

41,758.—*Title:* LEEKPROOF. For Asbestos Liquid Roof Coating. THE MIDWEST PRODUCTS COMPANY, Cleveland, Ohio. Published June 1, 1932.

41,759.—*Title:* MAPES TOMATOES. For Canned Tomatoes. PHILLIPS SALES COMPANY, INC., Cambridge, Md. Published September 30, 1932.

41,760.—*Title:* FUNNY FACES. For Color Books. SHARFAM PRODUCTS, New York, N. Y. Published December 1, 1932.

41,761.—*Title:* THE NEWDAWN. For Climbing Rose Plants. SOMERSET ROSE NURSERY, INC., New Brunswick, N. J. Published December 28, 1932.

41,762.—*Title:* STUHMER'S (IN HEBREW CHARACTERS, SPELLED "STIHMER'S"). For Bread. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Published August 24, 1932.

41,763.—*Title:* STUHMER'S. For Bread. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Published August 24, 1932.

41,764.—*Title:* STUHMER'S. For Bread. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Published August 24, 1932.

41,765.—*Title:* STUHMER'S. For Bread. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Published August 24, 1932.

41,766.—*Title:* STUHMER'S. For Bread. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Published August 24, 1932.

41,767.—*Title:* DOC BULL'S NEW MIRACLE CLEANER. For Cleaning Preparation. SUNCLEAN PRODUCTS CO., Brooklyn, N. Y. Published April 15, 1932.

41,768.—*Title:* YOUNG'S BEST BUTTER. For Butter. YOUNG'S MARKET COMPANY, Los Angeles, Calif. Published November 1, 1932.

PRINTS

REGISTERED FEBRUARY 14, 1933

14,051.—*Title:* HEWDECO. For Dental Plates. DR. HEWSON DENTAL CO. INC., Boston, Mass. Published November 4, 1932.

14,052.—*Title:* CLE-TUBE MEANS A CLEAN TUBE. For Collapsing Devices for Collapsible Tubes. JOHNSON, JOHNSON & JOHNSON, Hartford, Conn. Published September 1, 1932.

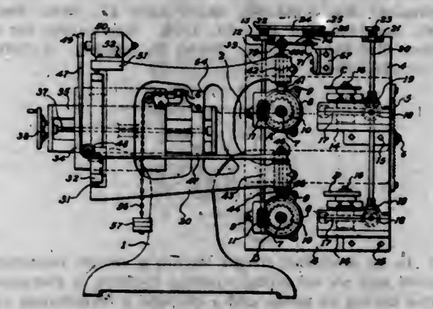
14,053.—*Title:* BE MUSICAL—PLAY A "CALURA" FLUTE—ANYONE CAN PLAY IT. For Flutes. CHARLES KATZ, New York, N. Y. Published November 10, 1932.

14,054.—*Title:* NELSON ORIGINAL DETECTIP ROCKFORD SOCKS. For Socks. NELSON KNITTING COMPANY, Rockford, Ill. Published October 19, 1932.

REISSUES

FEBRUARY 14, 1933

18,733. CAM GRINDING MACHINE. JOHN C. SHAW and ROBERT D. SHAW, Hartford, Conn., assignors, by mesne assignments, to Pratt & Whitney Company, a Corporation of New Jersey. Original No. 1,796,125, dated Mar. 10, 1931, Serial No. 120,014, filed July 2, 1926. Application for reissue filed June 30, 1932. Serial No. 620,212. 14 Claims. (Cl. 51—101.)

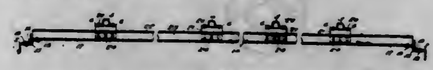


1. A cam grinding machine comprising a work table, a pair of rotatable elements on said table for grinding barrel cams, one of said elements supporting a master cam and the other the cam to be ground, a second pair of rotatable elements mounted on said table for grinding edge cams, one of the last named elements supporting a master cam and the other the cam to be ground, a swinging arm pivotally mounted and carrying a tracer roller and an abrasive wheel for cooperation respectively with the master cam and cam to be ground of one pair or of the other of said rotatable elements, a slide member upon which said swinging arm is pivotally mounted and means for moving said slide member to bring the master roller and abrasive wheel into position to cooperate with the cams of one or the other of said pairs of elements.

18,734. PROCESS FOR PRESERVING OR PROTECTING SUBSTANCES OR OBJECTS. ANNA PETRONELLA CRAMER-VAN DEVENTER, Chesieres, Switzerland. Original No. 1,548,776, dated Aug. 4, 1925, Serial No. 665,475, filed Sept. 28, 1923. Application for reissue filed Dec. 14, 1932. Serial No. 647,292. 8 Claims. (Cl. 99—8.)

2. The method of temporarily protecting and preserving articles subject to easy injury, deterioration by exposure, and the like, which includes coating the article with a film of liquid latex, and allowing the latex to set up into a homogeneous, flexible, readily peelable, temporary coating.

18,735. RAILWAY CAR. EDWARD H. MATTINGLEY, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Maryland. Original No. 1,694,424, dated Dec. 11, 1928, Serial No. 157,227, filed Dec. 27, 1926. Reissue No. 17,778, dated Aug. 26, 1930, Serial No. 465,774, filed July 3, 1930. This application for reissue filed Dec. 9, 1930. Serial No. 501,153. 7 Claims. (Cl. 108—5.)



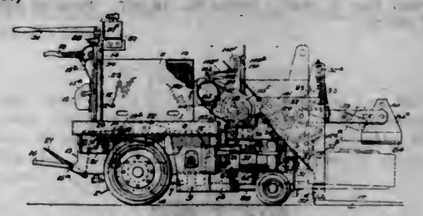
1. A railway car having side plates, end plates secured thereto, carlines fashioned with oppositely disposed laterally extending flanges resting upon and secured to the side plates, roof sheets carried by the carlines and extending from side plate to side plate, and means extending longitudinally of the car constituting a load lifting device, said means being secured to the lateral flanges of the carlines in spaced relation thereto.

18,736. WORK CLAMPING FIXTURE FOR CRANK GRINDING MACHINES. AMOS P. STEINER, Waynesboro, Pa., assignor to Landis Tool Company, Waynesboro, Pa., a Corporation. Original application filed Aug. 2, 1926, Serial No. 126,588. Divided and application filed June 1, 1928. Serial No. 282,173. Original No. 1,755,937, dated Apr. 22, 1930. Application for reissue filed Feb. 18, 1932. Serial No. 594,651. 11 Claims. (Cl. 51—237.)



1. In a crank grinding machine having a grinding wheel, opposed crank heads, a lever on each head having a gripping jaw, a cylinder on each head, a piston in the cylinder acting on the corresponding lever, and means for applying pressure equally and simultaneously to said pistons, substantially as set forth.

18,737. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Original No. 1,827,878, dated Oct. 20, 1931, Serial No. 148,240, filed Nov. 13, 1926. Application for reissue filed Feb. 23, 1932. Serial No. 594,674. 24 Claims. (Cl. 214—65.)

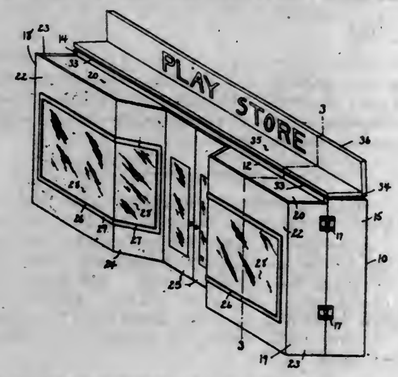


1. In a power driven industrial truck comprising a frame having a relatively low portion at one end, wheels for supporting the opposite ends of said frame, a support mounted on said low portion to move laterally at substantially right angles to the direction of travel of said frame, inclined guides mounted on the outer portion of said support, a member slidably mounted on said guides and arranged to be projected below a load to lift it, and means for operating said support and said member.

18,738. TOY STORE. PERCIVAL O. GILMOND, Hamden, Conn. Original No. 1,787,976, dated Jan. 6, 1931, Serial No. 360,150, filed May 3, 1929. Application for reissue filed Dec. 16, 1932. Serial No. 647,086. 8 Claims. (Cl. 46—37.)

5. A toy store of the class described comprising a forwardly opening box-like body-member; a complementary

box-like wing-member hinged to the end of the said body-member and provided at its free end with a door-panel inset from its front face; and a member hinged to the



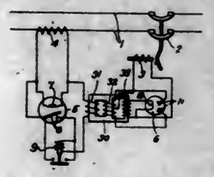
top of the body-member and of sufficient width to overlie and provide a roof for the inset-portion of the said wing-member when the same is in its closed position.

18,739. ACOUSTIC PLASTER. CARLISLE K. ROOS, Wheaton, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Original No. 1,871,806, dated Aug. 16, 1932, Serial No. 166,600, filed Feb. 7, 1927. Application for reissue filed Oct. 18, 1932. Serial No. 638,414. 26 Claims. (Cl. 106—34.)

17. A dry mix composition that on gaging with water forms a plastic mortar capable of application by troweling to walls, ceilings and the like and which sets to form an acoustic sound-absorbing plaster surface, comprising a minor quantity of an aged low-consistency calcined gypsum base, a major quantity of a graded sized aggregate, and a small quantity of a foam-producing agent of the saponin type capable of entrapping air bubbles.

25. A sound-absorbing wall plaster composition comprising calcined gypsum, a graded sized aggregate, and a foaming agent of the saponin type, the ratio by weight of aggregate to calcined gypsum being at least 2:1.

18,740. PROTECTIVE SYSTEM. JOHN V. BREISKY, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original No. 1,764,385, dated June 17, 1930, Serial No. 125,144, filed July 27, 1926. Application for reissue filed Jan. 15, 1931. Serial No. 509,041. 6 Claims. (Cl. 175—294.)

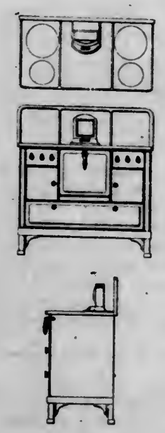


1. In an electrical circuit having a circuit interrupter therein and an actuating winding therefor, a thermionic device having an anode and a cathode, a transformer core having a winding thereon for energization in accordance with an electrical condition in said circuit, a second winding on said core for energizing said cathode and means for limiting the energization thereof, and a third winding on said core for energizing the actuating winding of said interrupter through a circuit including the anode and cathode of said thermionic device.

DESIGNS

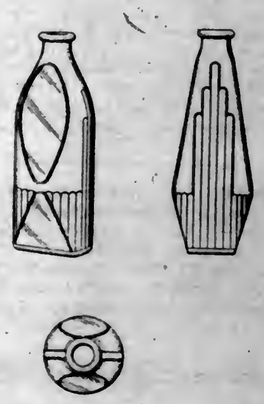
FEBRUARY 14, 1933

89,251. ELECTRIC RANGE. ALFONS BARNSTEINER, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 9, 1932. Serial No. 46,407. Term of patent 7 years.



The ornamental design for an electric range substantially as shown.

89,252. NURSING BOTTLE. MORRIS H. BLOCK, Denver, Colo., assignor to Harry Kortz, David A. Block, and Phillip Kleiger, Denver, Colo. Filed June 25, 1932. Serial No. 44,194. Term of patent 14 years.



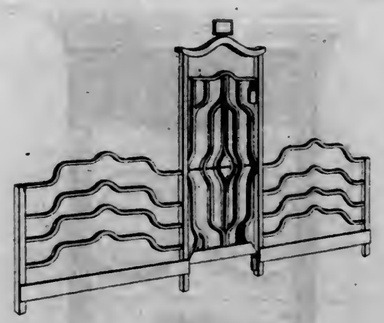
The ornamental design for a nursing bottle, as shown.

89,253. ELECTRICAL CONNECTION PLUG. JOSEPH D. BROWN, New York, N. Y., assignor to Hatfield Wire and Cable Co., Hillside, N. J. Filed June 15, 1932. Serial No. 44,080. Term of patent 7 years.



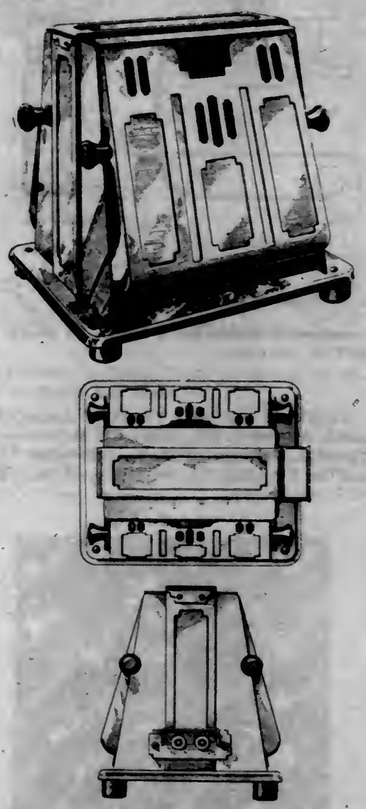
The ornamental design for an electrical connection plug as shown.

89,254. COMBINED FENCE AND GATE. ZACHARIAH B. BURGE, Roanoke, Va. Filed Nov. 15, 1932. Serial No. 45,994. Term of patent 7 years.



The ornamental design for a combined fence and gate, as shown.

89,255. TOASTER OR LIKE ARTICLE. THOMAS A. EDISON, Jr., East Orange, and HENRY S. CARLSON, Orange, N. J., assignors to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Dec. 13, 1932. Serial No. 46,457. Term of patent 7 years.



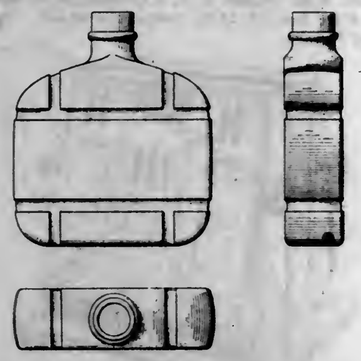
The ornamental design for a toaster or like article, substantially as shown.

89,256. ASH TRAY. FREDERICK E. GREENE, New Haven, Conn., assignor to The Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Nov. 14, 1932. Serial No. 45,961. Term of patent 7 years.



The ornamental design for an ash tray substantially as shown.

89,257. BOTTLE. CHARLES A. FULLE, Jr., Montclair, N. J. Filed Dec. 2, 1932. Serial No. 46,279. Term of patent 14 years.



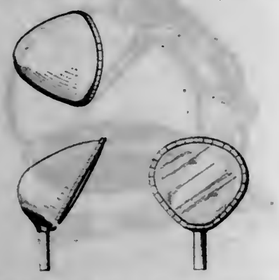
The ornamental design for a bottle, as shown in the accompanying drawing.

89,258. COUNTER SERVICE TEAPOT. JAMES GRAYSON LUTTRELL, Baltimore, Md., assignor to McCormick & Co., Incorporated, Baltimore, Md., a Corporation of Maryland. Filed Nov. 30, 1932. Serial No. 46,205. Term of patent 7 years.



The ornamental design for a counter service teapot, substantially as shown.

89,259. VEHICLE LAMP. SAMUEL LYMAN, Brooklyn, N. Y. Filed Apr. 27, 1932. Serial No. 43,630. Term of patent 3½ years.



The ornamental design for a vehicle lamp substantially as shown and described.

89,260. PASTRY CRUST. THOMAS J. MATASSA, Los Angeles, Calif. Filed June 22, 1932. Serial No. 44,164. Term of patent 14 years.



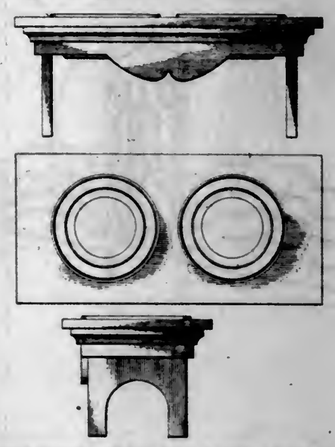
The ornamental design for a pastry crust, as shown and described.

89,261. BUTTON. ABRAHAM MENTKOW, Brooklyn, N. Y. Filed Dec. 19, 1932. Serial No. 46,527. Term of patent 3½ years.



The ornamental design for a button, as shown.

89,262. DOG FEEDING TABLE. HARRY N. NUNIMAKER, Groveton, Pa. Filed May 28, 1932. Serial No. 43,929. Term of patent 3½ years.



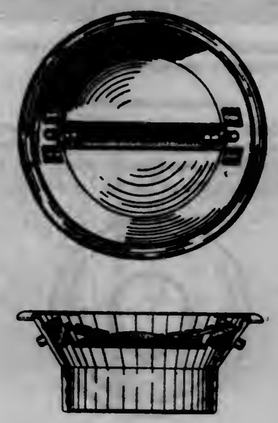
The ornamental design for a dog feeding table, as shown.

89,263. TYPE OR SIMILAR ARTICLE. EUGENE I. PAYNE, Chicago, Ill. Filed Apr. 25, 1932. Serial No. 43,606. Term of patent 3½ years.



The ornamental design for type or similar article substantially as shown and described.

89,264. MILK CAN LID. LESTER A. PERKINS and ALBERT C. WILSON, Centerville, Iowa. Filed Sept. 12, 1932. Serial No. 44,820. Term of patent 7 years.



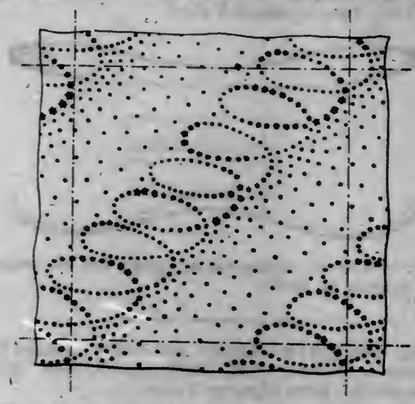
The ornamental design for a milk can lid, substantially as shown.

89,265. LABEL. WILLIAM F. SCHACHT, Huntington, Ind. Filed Nov. 18, 1932. Serial No. 46,058. Term of patent 7 years.



The ornamental design for a label, substantially as shown.

89,266. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,720. Term of patent 3½ years.



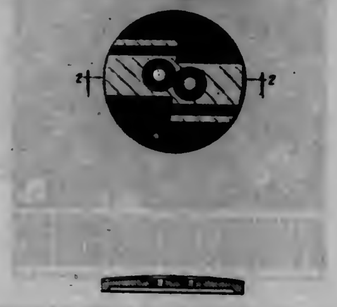
The ornamental design for a textile fabric or similar article as shown and described.

89,267. TEXTILE FABRIC OR THE LIKE. JACK SCHWEIZER, Rye, N. Y. Filed Jan. 16, 1933. Serial No. 46,837. Term of patent 3½ years.



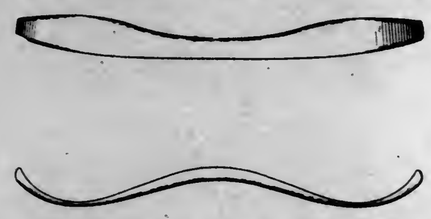
The ornamental design for a textile fabric or the like as shown.

89,268. BUTTON. JOSEPH SHADLOWSKY, Passaic Park, N. J., assignor to B. Blumenthal & Co. Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,521. Term of patent 3½ years.



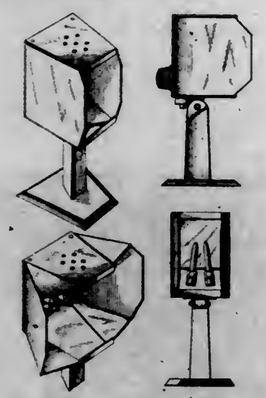
The ornamental design for a button, as shown.

89,269. IMPACT BAR FOR AUTOMOBILE BUMPERS. BLADEN M. SHORT, Detroit, Mich., assignor to General Spring Bumper Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 28, 1932. Serial No. 46,189. Term of patent 7 years.



The ornamental design for an impact bar for automobile bumpers as shown.

89,270. PORTABLE CARBON ARC LAMP. ISRAEL SILBERSTEIN, Baltimore, Md. Filed Dec. 10, 1932. Serial No. 46,418. Term of patent 7 years.



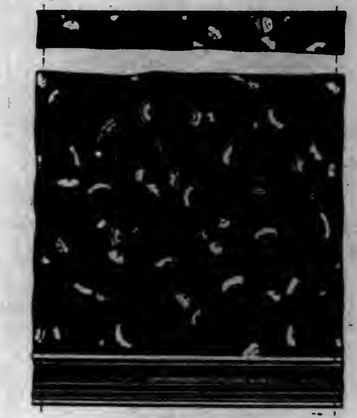
The ornamental design for a portable carbon arc lamp, substantially as shown and described.

89,271. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 16, 1933. Serial No. 46,841. Term of patent 3½ years.



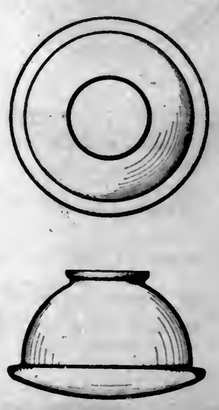
The ornamental design for a textile fabric or similar article as shown and described.

89,272. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 16, 1933. Serial No. 46,842. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,273. GLOBE. HENRY H. BLAU, Charleroi, Pa., assignor to Macbeth-Evans Glass Company, Charleroi, Pa., a Corporation of Pennsylvania. Filed Dec. 1, 1932. Serial No. 46,273. Term of patent 7 years.



The ornamental design for a globe, as shown.

89,274. LIGHTING FIXTURE GLOBE. MEYER BENJAMIN CHERNIAK, New York, N. Y. Filed July 14, 1932. Serial No. 44,319. Term of patent 7 years.



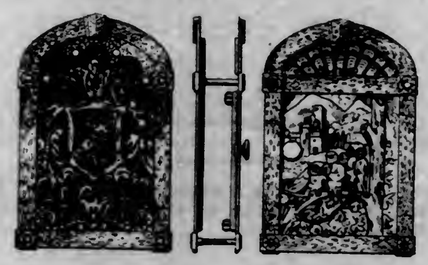
The ornamental design for a lighting fixture globe substantially as shown.

89,275. WICKET GRILLE. ANTON FAZEKAS, San Francisco, Calif. Filed Dec. 21, 1932. Serial No. 46,545. Term of patent 14 years.



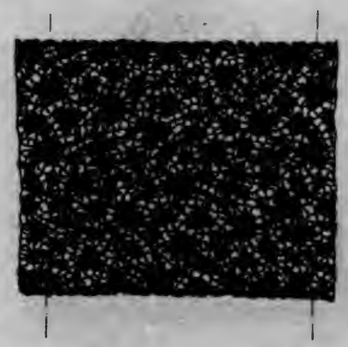
The ornamental design for a wicket grille, as shown.

89,276. WICKET GRILLE. ANTON FAZEKAS, San Francisco, Calif. Filed Dec. 21, 1932. Serial No. 46,546. Term of patent 14 years.



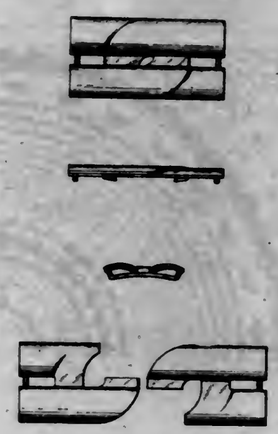
The ornamental design for a wicket grille, as shown.

89,277. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Oct. 18, 1932. Serial No. 45,392. Term of patent 3½ years.



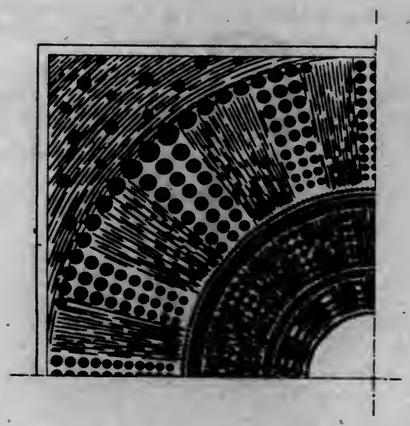
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

89,278. CLASP. WILLIAM F. HAAS, Rockaway, Long Island, N. Y. Filed Dec. 19, 1932. Serial No. 46,519. Term of patent 3½ years.



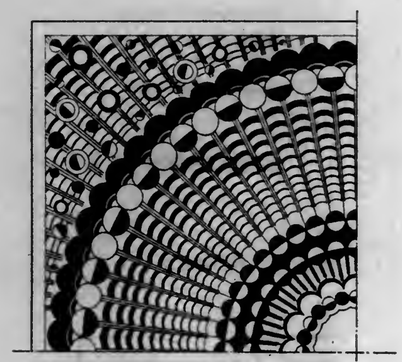
The ornamental design for a clasp, as shown.

89,279. TEXTILE FABRIC OR SIMILAR ARTICLE. FRANK HEADON, Great Neck, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 16, 1933. Serial No. 46,849. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,280. TEXTILE FABRIC OR SIMILAR ARTICLE. FRANK HEADON, Great Neck, N. Y., assignor to William Willhelm Co., Inc., New York, N. Y. Filed Jan. 16, 1933. Serial No. 46,850. Term of patent 3½ years.



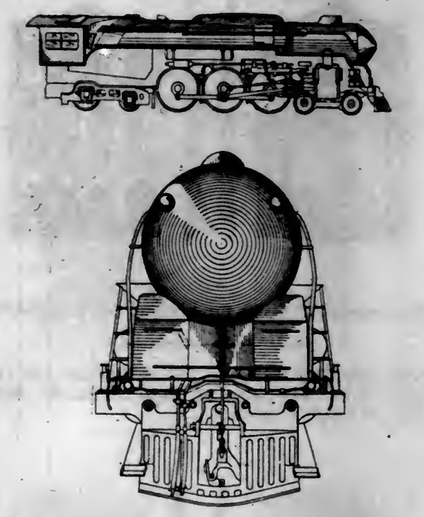
The ornamental design for a textile fabric or similar article as shown and described.

89,281. SIGNAL CHIME. ROBERT D. KARNELL, Cleveland, Ohio, assignor to Karmac Inc., Cleveland, Ohio, a Corporation of Ohio. Filed June 6, 1932. Serial No. 43,993. Term of patent 7 years.



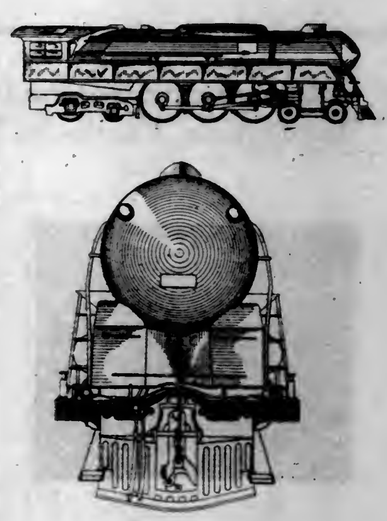
The ornamental design for a signal chime substantially as shown.

89,282. LOCOMOTIVE. RAYMOND G. F. LOEWY, New York, N. Y. Filed Apr. 23, 1932. Serial No. 43,590. Term of patent 7 years.



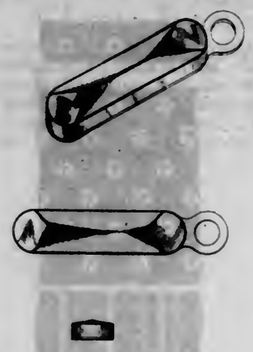
The ornamental design for a locomotive as shown and described.

89,283. LOCOMOTIVE. RAYMOND G. F. LOEWY, New York, N. Y. Filed Apr. 23, 1932. Serial No. 43,591. Term of patent 7 years.



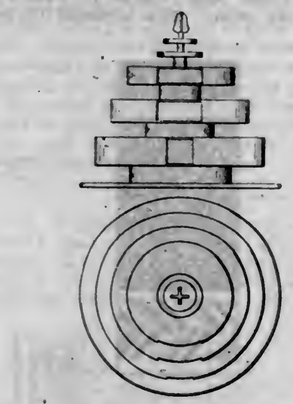
The ornamental design for a locomotive as shown and described.

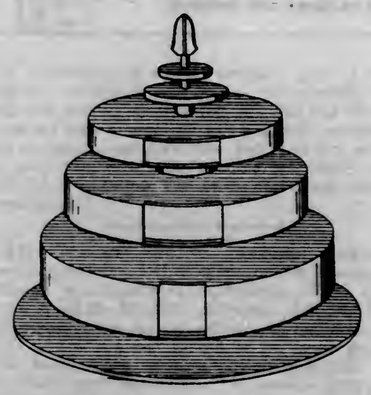
89,284. IDENTIFICATION TAG HOLDER. JOHN A. MAHNK, Beaumont, Calif. Filed Oct. 26, 1932. Serial No. 45,585. Term of patent 7 years.



The ornamental design for an identification tag holder as shown.

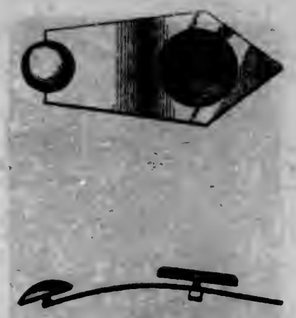
89,285. PERPETUAL CALENDAR. MARC A. MIGNEY, Rochester, N. Y., assignor to Metal Arts Co. Inc., Rochester, N. Y. Filed Aug. 22, 1932. Serial No. 44,659. Term of patent 3½ years.





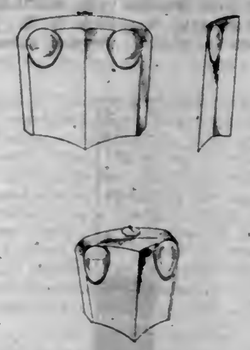
The ornamental design for a perpetual calendar, as shown.

89,286. BUCKLE. SIDNEY ROSENTHAL, Cedarhurst, N. Y., assignor to B. Blumenthal & Co. Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,526. Term of patent 3½ years.



The ornamental design for a buckle, as shown.

89,287. COMBINED RADIATOR AND HEADLIGHTS OR THE LIKE ARTICLE. JACK SCHWEIZER, New York, N. Y. Filed Nov. 2, 1932. Serial No. 45,703. Term of patent 14 years.



The ornamental design for a combined radiator and headlights or like article, as shown.

89,288. BUTTON. JOSEPH SHADLOWSKY, Passaic Park, N. J., assignor to B. Blumenthal & Co. Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,522. Term of patent 3½ years.



The ornamental design for a button, as shown.

89,289. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,703. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,290. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,708. Term of patent 3½ years.,



The ornamental design for a textile fabric or similar article as shown and described.

89,291. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 16, 1933. Serial No. 46,844. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,292. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 16, 1933. Serial No. 46,845. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

PATENTS

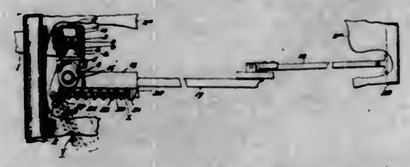
GRANTED FEBRUARY 14, 1933

1,897,028. PLUG AND INSERTING QUILL AND METHOD OF CONNECTING THE SAME. WILLIAM M. ANDERSON, Minneapolis, Minn., assignor, by mesne assignments, to Kex Company, Incorporated, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 14, 1927. Serial No. 233,108. 2 Claims. (Cl. 152—27.)



1. The method of making a self-contained tire-casing repair plug for insertion from within the casing, which comprises applying a quill to the stem of a tire casing repair plug having a pull wire attached thereto and of a diameter greater than the internal diameter of the quill which consists in inserting the wire through the quill and pulling the outer end portions of the stem into the quill to connect said plug and quill and thereafter when the plug is to be used in completing the making of the self-contained plug for repair use by pulling the stem completely into the quill.

1,897,029. LATERAL ARM AWNING CONSTRUCTION. EDWIN F. BELL and FREDERICK A. ANTON, Topeka, Kans., assignors to Topeka Tent & Awning Company, Topeka, Kans., a Corporation of Kansas. Filed Sept. 2, 1930. Serial No. 479,144. 8 Claims. (Cl. 156—44.)



4. In an awning, a bracket having a pair of lugs, an awning arm pivoted to said bracket, an extension on said awning arm having an opening, a guide rod pivoted to said bracket lugs at one end and slidingly engaging said extension opening at its other end, and an expansion spring encircling said guide rod and pressing at one end against the bracket lugs and at its other end against the arm extension.

1,897,030. VALVE SPRING LIFTER. HERBERT A. BERKMAN, Chicago, Ill., assignor to Zim Manufacturing Company, a Corporation of Illinois. Filed July 23, 1931. Serial No. 552,601. 2 Claims. (Cl. 29—86.3.)

1. A device of the character described, two arms, hinged together at one end and shaped at the other end to engage the work, a cam mounted between said arms and rotatable about the hinge axis of the arms, a lever fixed to and projecting from the cam for turning the same, a stem disposed between and extending lengthwise of the arms, one end of said stem abutting against said cam, a wedge formation at the other end of the stem, and abutments on said arms on opposite sides of and in engagement with said wedge formation, whereby, when the



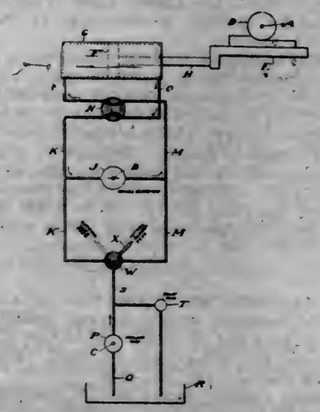
lever is swung in a direction to cause the stem to be pushed forward, the work-engaging ends of the arms are moved relatively to each other.

1,897,031. RECOVERING IODINE FROM NATURAL WATERS AND THE LIKE. LEONARD C. CHAMBERLAIN, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 2, 1931. Serial No. 519,697. 8 Claims. (Cl. 23—217.)

1. In a method of extracting iodine from natural waters and the like wherein iodine is converted to the elemental state in the aqueous medium, the steps which consist in separating such iodine from the aqueous medium by blowing out with a current of air, removing iodine from the iodine-laden air by contacting the same with a body of active charcoal and recovering elemental iodine from such charcoal by heating with a current of superheated steam.

6. In a method of extracting iodine from natural waters and the like wherein iodine is converted to the elemental state in the aqueous medium, the steps which consist in separating such iodine from the aqueous medium by blowing out with a current of air, removing iodine from the iodine-laden air by contacting the same with a body of active charcoal, removing iodine from the charcoal by subjecting the latter to the action of steam first at a temperature between 100° and 200° C., whereby a portion of the iodine is expelled, and then subjecting to the action of superheated steam at a temperature between 200° and 300° C. to distill off a further portion of the iodine.

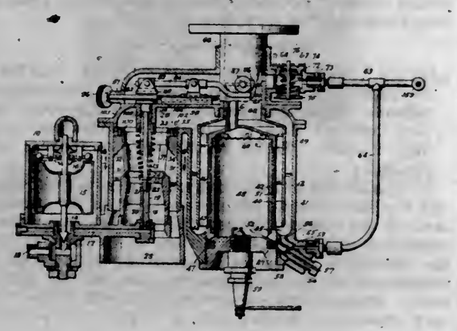
1,897,032. CONVERTIBLE TYPE FEED SYSTEM. HANS ERNST, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 31, 1928. Serial No. 303,176. 4 Claims. (Cl. 90—21.)



3. A machine-tool combining tool and work carriers; a mechanically-driven reversible tool-spindle on one of

said carriers; a piston and cylinder arranged in propelling relation with one of said carriers; a high-pressure pump; a low-pressure pump and means for causing both of said pumps to deliver simultaneously to the intake side of said piston, or the former to withdraw from, and the latter simultaneously to deliver to, the discharge side of said piston according to the direction of rotation of said spindle.

1,897,033. HEAVY OIL CARBURETOR AND PREHEATER. GIUSEPPE GARIBALDI, Stamford, Conn., assignor to Fuel Oil Carburetion Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 29, 1929. Serial No. 410,363. 23 Claims. (Cl. 123—122.)



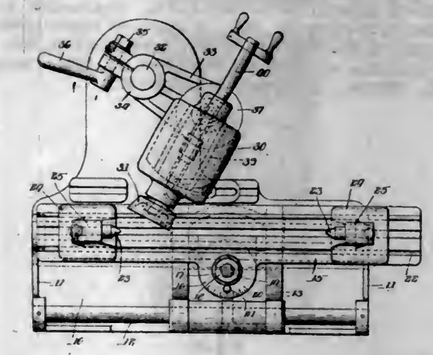
1. In mechanism of the character described, a float chamber, an independent fuel and air mixing chamber including a venturi having an air passage in the interior thereof, a spray nozzle coaxially arranged therein, and an air passage closed at its upper end surrounding the venturi and communicating only with the interior thereof, means responsive to the throttle opening for controlling the feed of fuel through the spray nozzle, a combustion chamber independent of the float chamber and the mixing chamber, and a passage for leading the mixture from the mixing chamber about the combustion chamber for heating the mixture.

1,897,034. DENTAL IMPRESSION MATERIAL. LAURENCE E. HARRISON, Tujunga, and STANLEY E. NOYES, Los Angeles, Calif., assignors, by mesne assignments, to Stanley E. Noyes, Los Angeles, Calif. Filed Nov. 10, 1930, Serial No. 494,801. Renewed May 31, 1932. 20 Claims. (Cl. 18—47.)

19. A dental impression material comprising a product obtained by intimately mixing and heating 2 1/2 to 4 1/2 parts by weight of oleaginous material consisting in part of mineral oil and in part of drying oil; 1 1/2 to 2 1/2 parts by weight of waxy material consisting in part of beeswax and in part of paraffin; 2 1/2 to 3 1/2 parts by weight of aluminum stearate; not more than 1/16 part by weight of a material selected from the group consisting of rubber, gutta and balata; 1/2 to 1 1/2 parts by weight of starch; and not more than 1/8 part by weight of glycerol.

1,897,035. GRINDING MACHINE. CARL J. ANDERSON, Chicago, Ill., assignor of fifty-one and two-thirds per cent to Erik Borg and fifteen per cent to Carl U. Johanson, Chicago, Ill. Filed Aug. 13, 1930. Serial No. 474,915. 8 Claims. (Cl. 51—95.)

1. A grinding machine comprising, in combination, a frame, a carriage slidably mounted on said frame, a work support mounted on said carriage and angularly adjustable relative to the direction of movement of said carriage, rotary means for grinding the work, a pair of arms supporting said grinding means for vertical adjustment relative to the frame and for angular adjustment relative



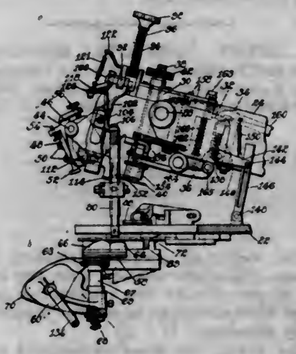
thereto and to each other, and means interposed between said arms and the grinding means for longitudinal adjustment of the grinding means along its axis.

1,897,036. BABY CARRIAGE. CARL J. APPENHEIMER and CHARLES MUELLER, Regina, Saskatchewan, Canada. Filed May 18, 1931. Serial No. 538,050. 5 Claims. (Cl. 280—29.)



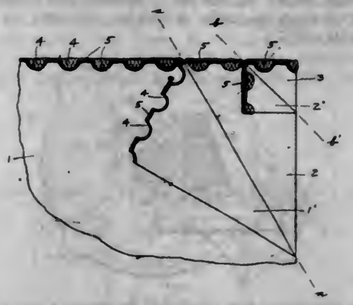
1. In a baby carriage having a frame and main rotatable supporting elements, an auxiliary running gear swingingly suspended from said frame, springs normally depressing said running gear below the horizontal supporting plane of said elements, a locking bar on the carriage, locking arms on the running gear in sliding engagement with the locking bar, said arms being formed with longitudinal recessions disposed to be engageable with the locking bar when the auxiliary running gear is operating on a common horizontal plane with the main supporting elements to permit a limited yielding movement of the running gear, a spring normally holding said locking bar and arms frictionally engaged as opposed to an upward movement of the arms, and a manual release for said locking bar.

1,897,037. MACHINE FOR SHAPING SHOE UPPERS. ARTHUR BATES, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 2, 1931, Serial No. 541,585, and in Great Britain June 13, 1930. 104 Claims. (Cl. 12—14.)



1. In a machine for shaping uppers over lasts, means for positioning an upper before it is mounted on a last, and mechanism constructed and arranged to move a last toward the upper while the operator supports the last in position to be operated upon by said mechanism.

1,897,038. BINDING MEANS FOR PAPER SHEETS. WILLIAM C. BOHMERT, Mamaroneck, N. Y. Filed Sept. 19, 1930. Serial No. 483,035. 3 Claims. (Cl. 281—21.)

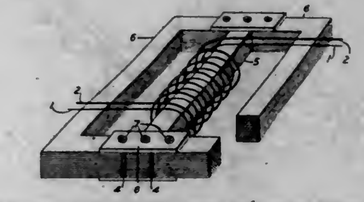


3. A pad or assembly of sheets of paper in which alternate sheets have the corresponding ends irregular in outline, and adjacent interposed sheets having the corresponding ends straight-edged, binding adhesive applied to all the said ends, the construction being such that the adhesive adheres not alone to the ends of the alternate sheets but also to the surfaces of the adjacent sheets.

1,897,039. METHOD OF OBTAINING VITAMIN CONCENTRATES FROM FATS. WALTER G. CHRISTIANSEN, Bloomfield, N. J., WILLIAM S. JONES, Brooklyn, N. Y., and EUGENE MONESS, New York, N. Y., assignors to E. R. Squibb & Sons, New York, N. Y., a Corporation of New York. Filed Sept. 7, 1928. Serial No. 304,620. 8 Claims. (Cl. 167—81.)

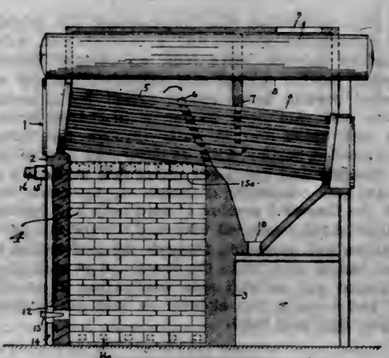
1. In obtaining a vitamin concentrate from fats, the step of precipitating an aluminum soap from such fats by means of an aluminum salt.

1,897,040. INDUCTIVE DEVICE. ARTHUR J. CHRISTOPHER, Teaneck, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 8, 1932. Serial No. 597,479. 12 Claims. (Cl. 175—356.)



1. An inductive device comprising a core with windings thereon, said core comprising a magnetic material, the continuity thereof being broken by an air gap, the opposed portions of said material terminating in the air gap being bridged by means comprising a magnetic material having a lower reluctance at high flux densities and a higher reluctance at low flux densities than the first stated material.

1,897,041. FURNACE CONSTRUCTION. GEORGE W. DAVEY, Mahwah, N. J. Filed July 2, 1928. Serial No. 290,014. 4 Claims. (Cl. 72—101.)

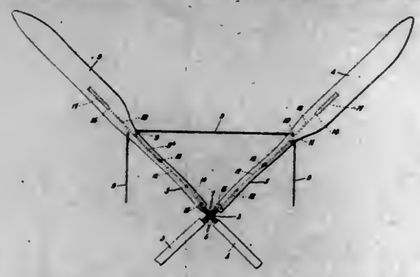


1. A furnace wall structure including in combination, a series of upright buckstays, a series of vertically spaced brick supporting ledges carried thereby, each ledge having an upwardly and inwardly inclined shoulder in the nature of a hook portion, and a plurality of bricks carried by said ledges, the outside face of each brick being formed with a correspondingly inclined pocket adapted to supportingly embrace said hook portion and the upper and lower faces of each brick being likewise correspondingly inclined whereby to permit removal of the bricks on a ledge by bodily motion in the direction of said incline without disturbing bricks on an adjacent ledge.

1,897,042. SUSTAINING ROTOR CONSTRUCTION FOR AIRCRAFT. JUAN DE LA CIERVA, Madrid, Spain, assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 4, 1930. Serial No. 500,062. 19 Claims. (Cl. 244—19.)

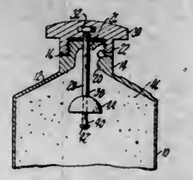
17. In an aircraft, a sustaining rotor with a blade mounted thereon, having means permitting blade displace-

ment movements under the influences of various forces, means controlling movements of the blade, and weight means mounted in association with said blade for move-



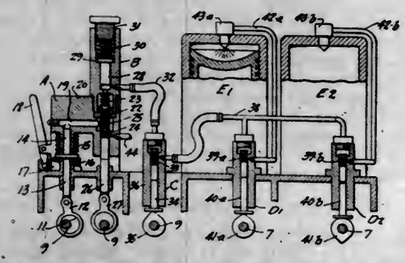
ment generally along its axis under the influence of variations in centrifugal force to alter the effect of the control means.

1,897,043. COLLAPSIBLE TUBE CLOSURE. RALPH N. ELLIS, Des Moines, Iowa. Filed Feb. 8, 1932. Serial No. 591,555. 7 Claims. (Cl. 221—60.)



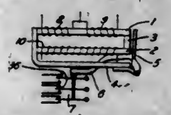
1. In a collapsible tube construction, the combination with a container portion and a neck thereon, said neck having an interior valve seat, an exterior shoulder, a threaded portion beyond said shoulder, the end of said threaded portion being closed, except for a perforation therein and said neck having a discharge passageway from said valve seat laterally through the threads of said threaded portion with its outer end located between said shoulder and the closed end of said neck, of a closure for said neck comprising a closure cap interiorly threaded to fit the threaded portion of said neck and against said shoulder, a pin connected with said closure cap, projecting therefrom and extending through the perforation of said closed end of said neck, the inner end of said pin being shouldered and reduced and terminating in an enlarged head and a valve plug slidable on said pin between said shoulder and said head.

1,897,044. FUEL INJECTION SYSTEM FOR INTERNAL COMBUSTION ENGINES. LLOYD E. ELWELL, Los Angeles, Calif. Filed Nov. 3, 1930. Serial No. 493,045. 2 Claims. (Cl. 123—139.)



1. In combination with a multiple cylinder internal combustion engine having a fuel manifold: a liquid fuel injection system comprising a metering fuel pump; a receiver chamber for delivery thereto of fuel from said pump, means urging expulsion of fuel from said chamber; a timing valve to release fuel for delivery from said chamber to said manifold; selector mechanism for directing fuel from said manifold to the cylinder; and means operated by said engine to actuate in seriatim said pump and said selector mechanism, and said timing valve whereby to deliver a metered quantity of fuel to the receiving chamber and release it by means of the timing valve to the engine at a selected time.

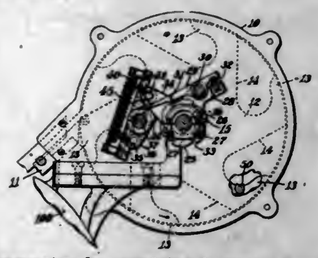
1,897,045. RELAY. JACOB R. FRY, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 23, 1927. Serial No. 242,112. 9 Claims. (Cl. 175—335.)



1. A relay having an armature, operating and polarizing windings, and means whereby when said windings are energized in one manner the armature is partially attracted and when energized in another manner the armature is fully attracted.

4. A relay having two cores magnetically connected at each end, an armature, a separate magnetic connection between the cores and the armature, an operating winding on one core, two polarizing windings on the other core and means including said core structure and windings whereby when all three windings are energized the armature is partially attracted towards the cores and when the operating winding and a certain one of the polarizing windings are energized the armature is fully attracted.

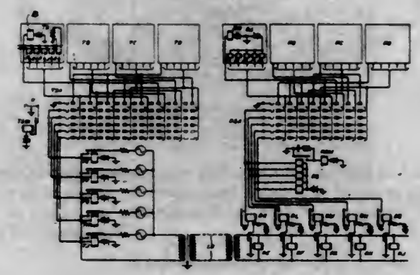
1,897,046. FASTENER SUPPLYING MECHANISM. PERLEY R. GLASS, Wayland, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Sept. 10, 1929, Serial No. 391,657. Divided and this application filed Sept. 26, 1930. Serial No. 484,624. 11 Claims. (Cl. 218—17.1.)



1. An apparatus for supplying fasteners from a hopper to a raceway leading therefrom, comprising a fastener-feeding member rotatably mounted in the hopper in cooperative relation to the raceway, and resilient driving mechanism by which periodic power impulses are applied with resilient driving effect to turn said feeding member step by step under normal conditions, said mechanism being provided with relatively movable abutting members by which the feeding member is prevented from overrunning certain predetermined positions of dwell.

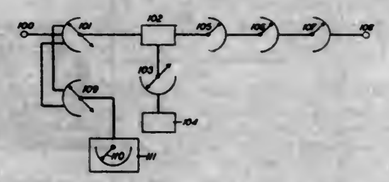
1,897,047. FREQUENCY DISCRIMINATION SIGNALING SYSTEM. BERTRAM BARNETT GRACE, THOMAS SAMUEL SKILLMAN, ALLEMAN HOLLY ROCHE, and EDWARD KENNETH SANDEMAN, Aldwych, London, England, assignors to Western Electric Company Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 25, 1930, Serial No. 491,158, and in Great Britain Nov. 5, 1929. 3 Claims. Cl. 178—52.)

1. A communication circuit comprising means for transmitting successive signal characters, each character being represented by code combinations of impulses, the impulses of each combination being transmitted over the same line simultaneously and at different frequencies, a receiving mechanism having a plurality of recording devices adapted to be actuated by the respective impulses in each code combination of impulses for recording the trans-



mitted characters, a stepping device for distributing said code combinations of impulses to said recording devices in sequence, and means under control of the received impulses effective to control the operation of said stepping device and to condition the receiving mechanism for the reception and the recording of the succeeding character.

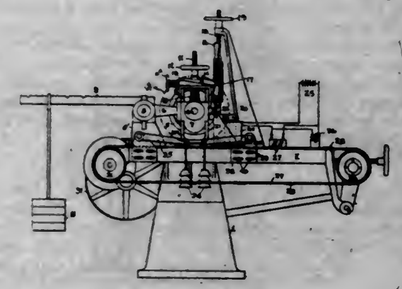
1,897,048. TELEPHONE SYSTEM. WILLIAM HATTON, Paris, France, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 1, 1931, Serial No. 560,554, and in France Dec. 1, 1930. 24 Claims. (Cl. 179—27.)



1. In a telephone system, a subscriber's line, a selector switch for extending calls from said line, a register sender for controlling said selector switch, means responsive to the initiation of a call on said line to associate said selector switch and said sender with said line, and auxiliary means responsive to a false call on said line to connect said line with an operator's position independent of said selector switch.

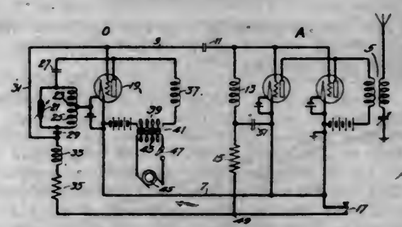
1,897,049. POLISHING AND GRINDING MACHINE. CHARLES L. HAWES, Ashtabula, Ohio. Filed July 22, 1926. Serial No. 124,221. 12 Claims. (Cl. 51—38.)

1. In a machine of the character described, the combination of a spindle having a drive means and a grinding wheel, means for holding such grinding wheel against an article to be treated, and coacting wedges one for effecting a fine adjustment of the position of such grinding wheel,



and the other for providing a quick-acting adjustment, means for operating the fine adjustment wedge, and lever means for operating the quick-acting wedge.

1,897,050. ELECTRIC WAVE TRANSMISSION. RAYMOND A. HEISING, Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 27, 1926. Serial No. 91,206. 13 Claims. (Cl. 250—8.)



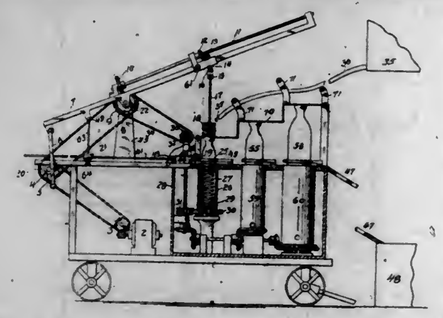
1. The method of operating an electric space discharge tube having a cathode and an electric space discharge device connected to said tube for influencing the output wave of said tube, which comprises causing transmission through said device to be blocked intermittently in accordance with a telegraphic code by accumulation of electrons from said cathode of said tube.

1,897,051. YARN AND KNITTED WEARING APPAREL PRODUCED THEREFROM. HUGO HEMMERICH, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Nov. 20, 1931. Serial No. 576,315. 10 Claims. (Cl. 66—178.)



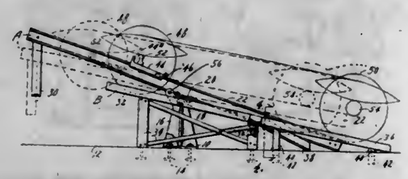
1. A knitting yarn composed of two groups of strands combined by united-twisting in one direction, one of said groups including one or more untwisted strands, and the other group including one or more strands individually twisted in the direction opposite to said united-twisting.

1,897,052. BOTTLE WASHER. FRANK B. HORTON, Los Angeles, Calif. Filed Aug. 3, 1931. Serial No. 554,647. 11 Claims. (Cl. 15—59.)



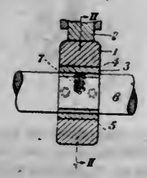
1. In a bottle washing machine, a covered tank, bottle supporting means in said tank and yieldingly held elevated in line with the tank cover, a lever mounted for vertical oscillation above the tank, cleaning means pivotally suspended from said lever and positioned directly above said bottle supporting means, means for oscillating the lever to cause said cleaning means to enter a bottle on said supporting means and to depress the bottle and its yielding support into the tank, and means connected for operation by said lever intermittently to advance bottles to position on said support in line with said cleaning means.

1,897,053. GREASE RACK. SEVERT O. HOUGE, Slater, Iowa. Filed Sept. 2, 1931. Serial No. 560,782. 11 Claims. (Cl. 254—88.)



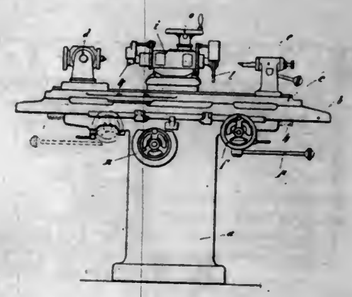
1. In a grease rack for automobiles, a pivoted platform for supporting an automobile inclined tracks for positioning an automobile on said platform by driving the automobile up the tracks and the wheels at the upper end of the automobile off the upper ends of the tracks, portions of said tracks being removable to allow tipping of said platform to a position where said wheels are above alignment with said tracks to facilitate removal of the automobile from the platform and down the tracks.

1,897,054. COUNTER-PRESSURE MEMBER FOR SHEET FEEDING AND LIKE MACHINES. CHARLES ERNEST HUNTER, Wimbledon, London, England, assignor to The Accounting & Tabulating Corporation of Gt. Britain Limited. London, England. Filed Nov. 18, 1931, Serial No. 575,864, and in Great Britain Nov. 21, 1930. 3 Claims. (Cl. 271—51.)



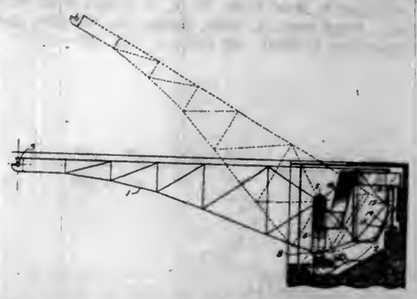
1. In a counter-pressure device, particularly for sheet feeding and like machines, the combination of a fixed spindle, an inner sleeve fixed on the spindle as regards rotation, a resilient medium disposed between the sleeve and the spindle and a pressure applying member mounted to rotate about the sleeve.

1,897,055. TOOL GRINDING MACHINE. LEONHARD KELLENBERGER, St. Gallen, Switzerland. Filed Oct. 27, 1930. Serial No. 491,611, and in Germany Nov. 5, 1929. 1 Claim. (Cl. 51—232.)



A tool-grinding machine, comprising, in combination with the tool-grinding means proper, a plurality of means for effecting the longitudinal movements of the work-table, these means being provided in such a number and in such positions that the operative can actuate them from any place he may have assumed at the front or at the rear of the machine without interrupting the grinding operation, and being assembled in a casing which is common thereto and attachable to, and detachable from the machine at respective places, substantially as set forth.

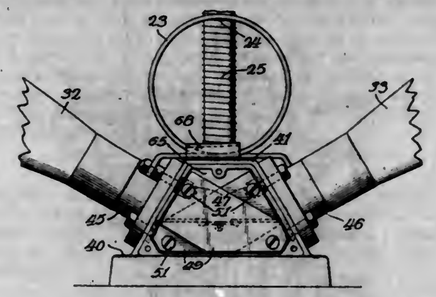
1,897,056. BRIDGE. CHARLES L. KELLER, Chicago, Ill. Filed Oct. 21, 1930. Serial No. 490,196. 8 Claims. (Cl. 14—36.)



1. In a device of the class specified, a pivotally mounted bridge member having an oscillatable support, said support comprising a substantially vertical member having a pivot at its upper end for said bridge member, a pivot at its lower end, and an outwardly and upwardly extending member for limiting the movement of said first mentioned pivot.

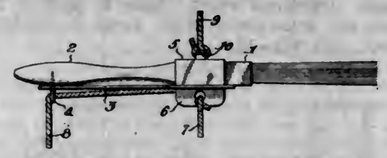
1,897,057. RADIO DEMONSTRATION APPARATUS. PAUL E. KLOPSTEG, Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 4, 1929. Serial No. 404,631. 10 Claims. (Cl. 250—13.)

1. In educational apparatus for demonstrating the principles governing the production of short wave oscillations and their transmission through space, the combination of a raised base having an integral upstanding housing thereon, a pair of condensers mounted within the housing, tube sockets mounted on opposite side walls of the housing, a single turn oscillator coil mounted on the top wall of the housing, antenna holders directly associated with the ends of the oscillator coil adapted to support a horizontal antenna, means within the housing for electrically



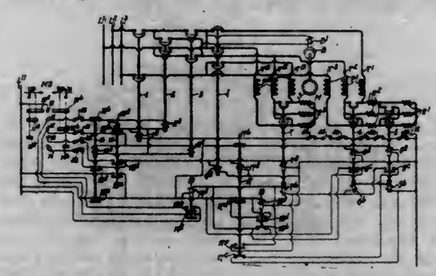
connecting the condensers with the tube sockets to form a part of an oscillator circuit, and a socket in the base adapted to support a second antenna inductively coupled with the oscillator coil.

1,897,058. HOLDER OF PAINTBRUSHES FOR PAINTING FLAGPOLES. EINAR KLING, Chicago, Ill. Filed Aug. 4, 1930. Serial No. 473,073. 1 Claim. (Cl. 91—37.)



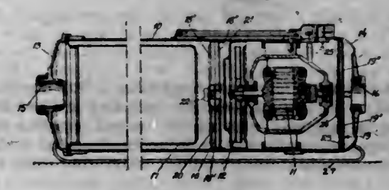
In combination with a paint brush, a holder composed of two parts a metal seat and a metal clamp constructed to hold a paint brush when assembled, the paint brush being laid between the seat and clamp, an eye screw passing through one end of the seat into the paint brush handle, a line secured to the center of the seat at the other end passing through the eye of the screw and extended for tipping the brush when suspended from a hoistline, means at each side of clamp for engaging the seat, ropes secured to said means for fastening the parts together and extended for guiding the brush and means on the center portion of the clamp for attaching a hoistline.

1,897,059. CONTROLLER FOR ELECTRIC MOTORS. CLARENCE WILBUR KUHN, Milwaukee, Wis., and PHILIP RYAN, New York, N. Y., assignors to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 2, 1932. Serial No. 584,368. 8 Claims. (Cl. 172—289.)



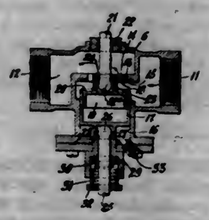
6. The combination with a multi-speed alternating current motor, of a plurality of electroresponsive switches for controlling the rate of acceleration and deceleration of said motor, each of said switches having a direct current restraining winding associated therewith for preventing response thereof, and means for controlling energization of said restraining windings to provide for response of said switches in a given sequence upon starting of said motor and also upon braking thereof, said means providing for delay in the operation of certain of said switches during acceleration and also deceleration of said motor by self inductive action of their associated restraining windings and for delay in the operation of another of said switches by self inductive action of its associated restraining winding but only during deceleration of said motor.

1,897,060. VACUUM CLEANER. SVEN ERIC LAMBERT, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation, a Corporation of Delaware. Filed Nov. 30, 1929, Serial No. 410,673, and in Germany Dec. 3, 1928. 7 Claims. (Cl. 183—37.)



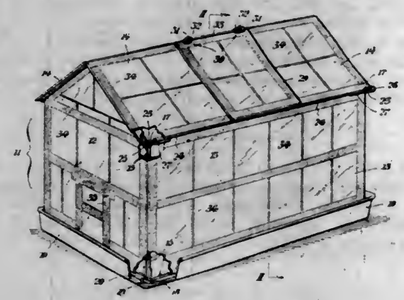
1. A vacuum cleaner comprising a casing including a cylindrical barrel portion of substantially uniform diameter, end covers on said barrel portion having air inlet and air outlet openings therein, said casing providing a straight cylindrical chamber of substantially uniform diameter extending substantially between the air inlet and the air outlet, air suction means in said chamber including a fan and a motor for driving said fan, a dust bag in said chamber on the inlet side of said suction means and mounted therein so that all air passing through said chamber is forced to pass through said dust bag, a filter on the outlet side of said suction means extending transversely across the full width of said chamber and including a frame and a plurality of spaced layers of cloth stretched on said frame and in frictional contact with the inside surface of the casing, and a second disc-shaped filter between said dust bag and said suction means extending across the full width of said chamber and including a frame and a layer of cloth held on said frame and in frictional contact with the inside surface of said casing.

1,897,061. GAS VALVE MECHANISM. EDWARD LAPP and ALBERT WOLPERT, Pittsburgh, and BURTON E. SHAW, Crafton, Pa. Filed Jan. 8, 1930. Serial No. 419,272. 3 Claims. (Cl. 277—44.)



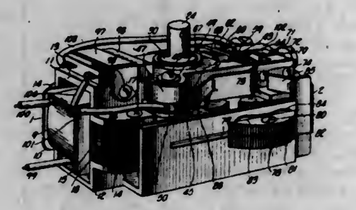
1. Gas valve mechanism including in combination telescoping members seating upon a common seat, an operating stem for each member, and a flexible joint between each member and its operating stem.

1,897,062. MINIATURE HOTHOUSE. ADOLF LIERMANN, Philadelphia, Pa. Filed June 27, 1932. Serial No. 619,533. 9 Claims. (Cl. 47—17.)



1. A miniature hot house comprising a tray-like bottom for soil; and a superstructure including a base frame seating in said tray with wire-reinforced opposing walls, other opposing walls with a hingedly-connected roof, all covered with non-breakable flexible transparent sheet material.

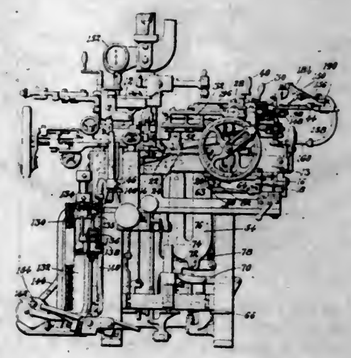
1,897,063. MOTOR. ARTHUR M. LUTES, Kansas City, Mo., assignor of one-half to A. C. Flack, Fredonia, Kans. Filed Sept. 26, 1929. Serial No. 395,336. 7 Claims. (Cl. 172—36.)



1. A motor including an electro-magnet, a rotor movable through the field of the magnet, a cam carried by the rotor, a pivoted arm engageable with the cam, a breaker point on the arm, a fixed breaker point, a spring leaf normally retaining the arm from closing the breaker points, a shiftable plate having a projecting tongue for engaging the spring to close the breaker points, a pawl pivotally carried on the plate for initially moving the rotor, a cam plate associated with the pawl for moving the pawl into engagement with the rotor when the plate is shifted in one direction and for retaining the pawl away from the rotor when the plate is shifted in the opposite direction, and means for sliding the plate.

1,897,064. MACHINE FOR SHAPING SHOE UPPERS. ALBERT A. MACLEOD, Swampscott, and SIDNEY J. FINN, Beverly, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 5, 1930. Serial No. 433,422. 118 Claims. (Cl. 12—14.)

1. In a machine of the class described, a support for an upper-shaping form, and fluid-pressure means constructed and arranged to extend around an unlasted end of an upper on the form and to press the upper against the form over a substantial area extending from the bottom edge of the form heightwise of the upper, said support



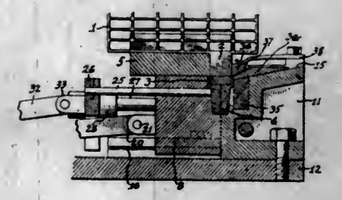
and fluid-pressure means being relatively movable lengthwise of the form to position the form and said means in operative relation to each other.

1,897,065. SMOKING PIPE. JOHN P. MARTIN, Pittsburgh, Pa. Filed Oct. 9, 1931. Serial No. 567,803. 9 Claims. (Cl. 131—12.)



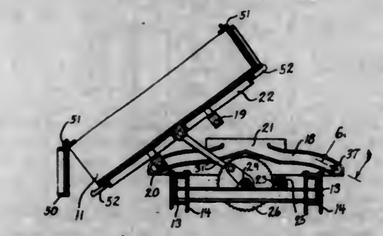
1. A smoking appliance comprising a stem having a longitudinally extending passage therethrough closed at the bit end thereof, and a transverse smoke discharge tube passing through the stem and having an opening therein communicating with said passage, said smoke discharge tube being removably held in the stem, and said tube contacting with said stem only where it passes through the walls thereof, there being a smoke space entirely around the tube of relatively larger dimensions than the tube itself.

1,897,066. METHOD OF CASTING STRAPS FOR BATTERY PLATES. ARTHUR MAYER, Detroit, Mich. Original application filed Sept. 26, 1930, Serial No. 484,601. Divided and this application filed June 23, 1931. Serial No. 546,355. 1 Claim. (Cl. 22—203.)



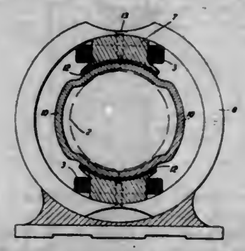
In the casting of a strap across the lugs of battery plates in a mold comprising a recessed mold block and a top member upon the same adapted to receive the lugs, the method consisting in inserting the lugs of said plates downwardly through said member to extend below the same and into the recesses of said mold block in spaced relation to the walls of said recesses, pouring molten metal into said recesses in a stream crossing one of the lower corners of each lug at such an acute angle to the vertical axis of said lugs and with such directive force as to melt off only a portion of the lug parts lying below the top member and in the mold recesses, whereby the residues of the last named lug parts lying in the mold recesses retain such high temperature as to permit the poured metal to be welded thereto.

1,897,067. SIDE DUMP TRUCK. HARVEY J. MILLER, Niles Center, Ill., assignor to Arcole Construction Co., Niles Center, Ill., a Corporation of Illinois. Filed May 31, 1930. Serial No. 458,036. 10 Claims. (Cl. 298—18.)



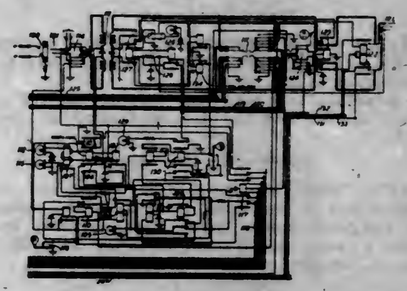
1. In a vehicle of the character described, a body adapted for tilting movement to either side, a rotating shaft, closed track rails provided on opposite sides of said shaft, means for rotating the shaft, crank means provided on said shaft for rotation therewith, and link members having one end connected to said crank means, and their other ends connected to the body, whereby when the shaft is rotated in the desired direction it will cause a tilting of the body in that direction, and spaced rollers provided on said body adapted for riding in said closed track rails provided on opposite sides of the shaft.

1,897,068. CONSTANT SPEED MOTOR. EDMUND R. MORTON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 23, 1930. Serial No. 483,798. 3 Claims. (Cl. 172—36.)



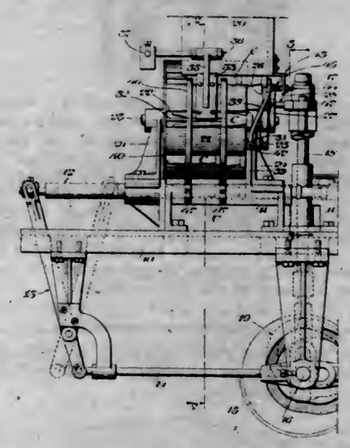
1. A constant-speed direct-current motor comprising an armature, a shunt field winding, a field structure having field pole pieces with non-magnetic gaps included therein, and fixed magnetic shunts extending between the pole pieces and having the portions thereof adjacent the pole pieces positioned close to the armature and the portions thereof between the pole pieces positioned a greater distance from the armature for shunting an appreciable portion of the field flux from the armature and for preventing the magnetic shunts carrying any appreciable amount of the cross flux caused by armature reaction.

1,897,069. TELEPHONE EXCHANGE SYSTEM. JAMES B. NEWSOM, Great Neck, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 18, 1932. Serial No. 599,611. 12 Claims. (Cl. 179—27.)



1. In a telephone system, an operator's position having a cord circuit, a trunk circuit accessible to said cord circuit and terminating in a selector switch, a register sender accessible from said trunk circuit for controlling said selector switch, a calling device at said operator's position for controlling the registration of desired-line numbers in said sender, operator-controlled means for associating said calling device with said cord circuit, and means controlled from said trunk circuit for disassociating said calling device from said cord circuit.

1,897,070. MECHANISM FOR FEEDING CLOTHESPINS. JOHN R. NOLAN, New York, N. Y. Refiled for abandoned application Serial No. 341,355, filed Feb. 20, 1929. This application filed Mar. 20, 1930. Serial No. 437,586. 26 Claims. (Cl. 140—93.)



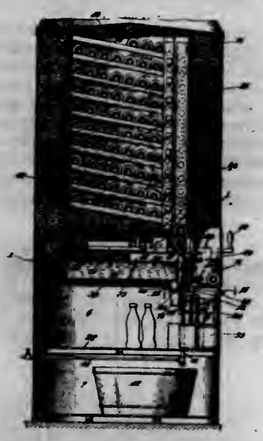
16. The combination with a guide structure for forked clothespins, and means for advancing clothespins in said structure, of mechanism for successively delivering clothespins to and longitudinally of said structure, said mechanism comprising an intermittently rotatable wheel having its axis of rotation parallel to the guide structure and having a succession of peripheral receptacles arranged and adapted to support individual clothespins parallel to the axis of the wheel, a positioning member for each receptacle, means for actuating the wheel and the clothespin-advancing means in timed relation, means for supplying a clothespin to each succeeding receptacle with the forked end of the pin in proximity to the positioning means, a frictional member arranged in the path of the clothespin borne by the wheel and operative to impart in-

dependent rotary motion to the pins, and a pressure member operative against the heads of the pins to urge them longitudinally toward and into embracing relation with the positioning members preparatory to the successive delivery of the pins to the guide structure.

1,897,071. QUICK DRYING INK. GEORGE B. OTTLEY, Arlington, Mass. Filed Oct. 31, 1929. Serial No. 403,901. 3 Claims. (Cl. 134—37.)

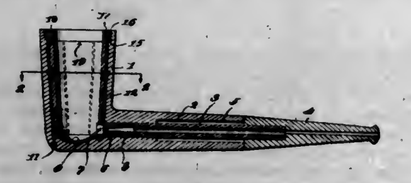
1. A writing ink containing diacetone alcohol, ethyl acetate, acetone and the monoethyl ether of ethylene glycol.

1,897,072. VENDING MACHINE. ROBERT D. PARKS and GLENN HILDENBRAND, Lohrville, Iowa, assignors to Self-Serve Bottle Vendor Company, Fort Dodge, Iowa, a Corporation of Iowa. Filed Dec. 24, 1928. Serial No. 328,190. 9 Claims. (Cl. 312—36.)



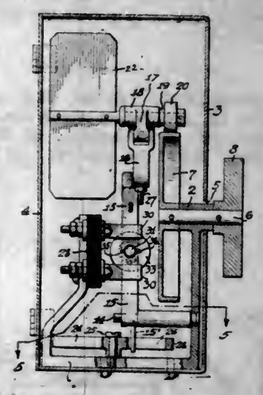
2. In a vending machine, means providing a downwardly extending discharge passage for the articles handled by the machine, a depressible platform at the lower end of the passage to receive the articles therefrom, ejector means for ejecting the articles one at a time from the platform, said ejector means supporting the articles in the passage while ejecting an article from the platform, and means for moving the platform up to the articles supported by the ejector means so that the weight of the articles in the passage may be transferred to the platform as soon as released by the ejector means.

1,897,073. SMOKING PIPE. CHARLES W. PEPPER, Denver, Colo. Filed July 11, 1931. Serial No. 550,254. 4 Claims. (Cl. 131—12.)



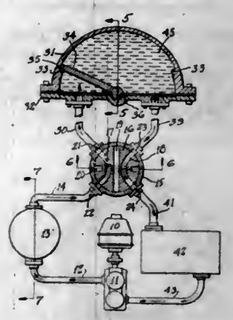
1. A pipe of the class described comprising a bowl, a liner mounted therein, a clamping means engaging the upper edge of said liner for holding the same in a set position within said bowl, a concavo-convex saucer mounted within the bottom of said bowl and provided with a depending annular flange biting into the body of said bowl for anchoring said saucer in position, said liner being provided with a notch near the bottom edge thereof, and a draft tube extending through said notch for communicating with the interior of said liner at a point above the upper face of said saucer.

1,897,074. INERTIA RELAY. MACKWORTH G. REES, Detroit, Mich. Filed Jan. 14, 1932. Serial No. 586,545. 13 Claims. (Cl. 200—52.)



1. A relay of the character described comprising a driving member adapted to be geared to a member to be controlled, an arm pivotally mounted adjacent said driving member, a rotatable shaft carried by said arm, a driven member mounted on said shaft and adapted to be driven by said driving member, a switch operating member carried by said arm and operable on movement thereof, a fan carried by said shaft, and means resisting pivotal movement of said arm.

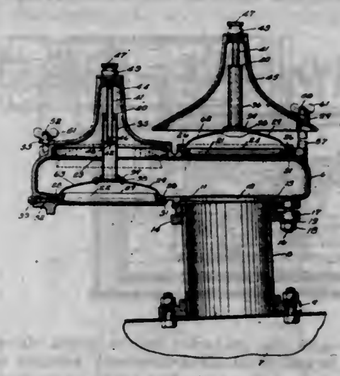
1,897,075. FLUID PRESSURE SYSTEM. SAM SAMSON, Stevenson, Wash. Filed Nov. 5, 1930. Serial No. 493,598. 1 Claim. (Cl. 60—52.)



A hydraulic control system including a semi-cylindrical body a control blade therein, means in the body for limiting movement of the blade in both directions, said means including shoulders formed in the body and limiting the blade in movement in both directions short of the similar limit of the body, pipes leading into the body on opposite sides of the blade, a valve casing with which the pipes communicate, a pump for the hydraulic medium, pressure and exhaust pipes for the pump leading from the valve casing, and a valve in said casing formed with curved ports to simultaneously establish communication between the respective pipes of the said body and the pressure and exhaust pipes of the pump, said valve being formed with diametric ports adapted in one position to establish communication between said pipes in a direction reverse to that provided through the curved ports.

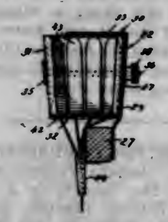
CARNEGIE LIBRARY OF ATLANTA

1,897,076. VALVE. REGINALD C. SHAND, Berkeley, Calif. Filed Dec. 17, 1929. Serial No. 414,663. 10 Claims. (Cl. 277—61.)



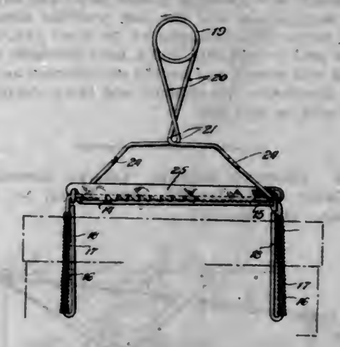
1. In a breather valve adapted to be connected to a fluid containing tank, a body apertured to provide an inlet valve seat and an outlet valve seat, each surrounding passages for vapor passing to and from said tank, a movable inlet valve member for positioning on the inlet valve seat to seal off vapor passing to the tank, the body having an apertured portion immediately over the inlet valve seat through which the inlet valve member can be passed, a hood adapted to engage the body to seal the said apertured portion, a dash pot mechanism carried cooperatively by the hood and the valve and extending between them within the body so as to leave a free fluid path through the passage sealed by the valve member, another movable valve member for positioning on the outlet valve seat to seal off vapor passing from the tank, said valve members being respectively operable in response to a lower than atmospheric pressure and a higher than atmospheric pressure within the tank, a hood member secured over the other movable valve member in spaced relationship to the body to permit free fluid passage past the other valve member, and a dash pot mechanism extending between the other valve member and the hood member outside of the body so as to permit an entirely free fluid path through the passage sealed by the other valve member.

1,897,077. TUFT YARN CARRIER FOR LOOMS. EDWIN C. SHUTTLEWORTH, Amsterdam, N. Y., assignor to Mohawk Carpet Mills, Inc., Amsterdam, N. Y., a Corporation of New York. Filed Jan. 8, 1932. Serial No. 585,472. 9 Claims. (Cl. 139—9.)



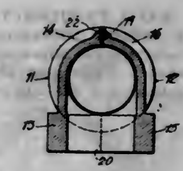
1. A tuft yarn carrier for looms comprising a carrier frame, means for carrying a plurality of separate packages of yarn upon the frame including a plurality of box-like magazines each having an open vertical side and a slotted bottom through which the yarns are drawn from the packages, each magazine containing a plurality of yarn packages and being removable independently of the other magazines, and means for feeding a yarn from each package to the tuft-forming mechanism of the loom.

1,897,078. TROUSERS HANGER. HUGO SJOWALL, Chicago, Ill. Filed June 29, 1931. Serial No. 547,476. 11 Claims. (Cl. 223—67.)



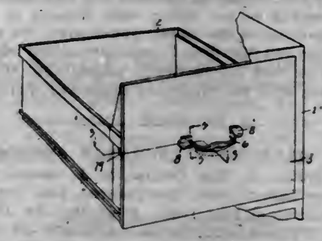
1. In a trousers hanger, in combination, a pair of means adapted to enter a trousers leg, resilient means tending to move said trousers engaging means to approach each other, manually operated means for extending said trousers engaging means, and means adapted to maintain said trousers engaging means in extended condition.

1,897,079. ELECTRIC BUTT WELDING. ALBERT A. SMITH, Riverdale, N. J., assignor to Metropolitan Engineering Company, Brooklyn, N. Y., a Corporation of New York. Filed Sept. 25, 1929. Serial No. 394,956. 12 Claims. (Cl. 219—10.)



1. The step in the method of electric butt welding parts to form objects of unequal wall thicknesses which comprises forming added metal to the thinner walls at the areas to be welded to increase the mass of metal at the edge of said thinner part to substantially the thickness of the thicker part.

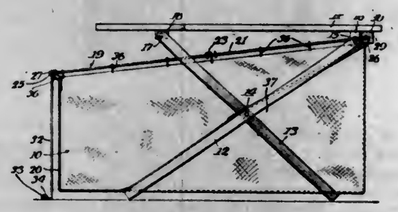
1,897,080. DRAWER PULL. RAYMOND H. SOPER, Muskegon, Mich., assignor to Browne-Morse Company, Muskegon, Mich. Filed Jan. 22, 1932. Serial No. 588,181. 3 Claims. (Cl. 292—165.)



1. The combination in a filing cabinet or like structure provided with a drawer having a front panel with an opening therein, of a cross bar disposed horizontally on the inner side of said front panel and having an opening registering with said opening in said panel, pivot

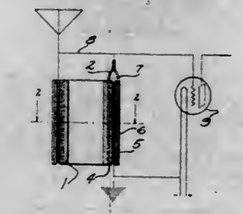
ears disposed on the outer side of said panel, screws arranged through said bar to engage said ears, a pull pivotally mounted on said ears and provided with an arm disposed through said openings in said panel and bar, a bolt slidably mounted on said bar and provided with spaced inwardly projecting abutments at its inner end, a spring acting to project said bolt, and a lever pivotally mounted on one of said screws and having an upturned end engaging said abutments, its opposite end being slotted to receive the arm on said pull.

1,897,081. IRONING BOARD. LILLIAN SORENSEN, Detroit, Mich. Filed Jan. 23, 1932. Serial No. 588,285. 7 Claims. (Cl. 68—10.)



1. In combination with an ironing board having folding legs, a laterally and longitudinally extensible frame permanently hinged to one end of the board, a frame support secured to the free end of the frame, and a fabric bag suspended from the frame for preventing material which is being ironed from coming in contact with the floor.

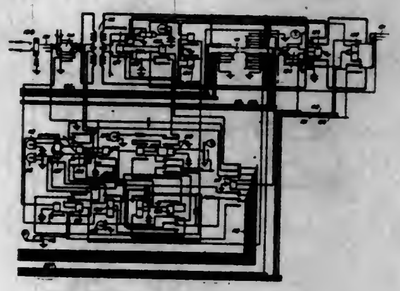
1,897,082. BROAD BAND FREQUENCY RESPONSIVE MEANS. ERWIN R. STOEKLE, Milwaukee, Wis., assignor to Central Radio Laboratories, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 19, 1929. Serial No. 386,760. 9 Claims. (Cl. 178—44.)



9. An electrical circuit having inductive means incorporated therein, means connected to a part of the circuit and coacting with the inductive means to supply distributed capacity in electrical relation to and co-extensive with the inductive means whereby the inductive and capacitive reactances are varied with changes in the frequency impressed on the circuit and control the extent of the inductive and distributed capacitive means effective in the circuit to thus automatically maintaining the circuit in resonance with the frequency impressed thereon.

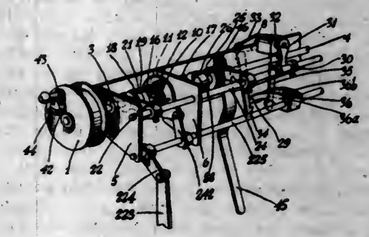
1,897,083. TELEPHONE EXCHANGE SYSTEM. WALTER B. STRICKLER, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 18, 1932. Serial No. 599,684. 22 Claims. (Cl. 179—27.)

1. In a telephone exchange system a plurality of trunk circuits of different character, connection extending means operable over said trunk circuits, a plurality of senders for controlling said connection extending means, means operable upon the seizure of any one of said trunk circuits for associating an idle one of said senders therewith, a plurality of decoders common to said senders, means for associating an idle decoder with any one of said senders and means in said sender operable in ac-



cordance with the character of the trunk circuit with which it is associated for determining whether said decoder associating means shall or shall not be operated.

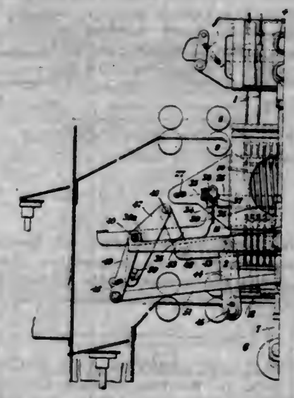
1,897,084. INK RIBBON FEED MECHANISM. ARTHUR THOMAS, Thornton Heath, England, assignor to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Filed June 25, 1931, Serial No. 546,714, and in Great Britain July 10, 1930. 11 Claims. (Cl. 197—160.)



1. Ink ribbon feed mechanism for tabulating machines comprising in combination a rocking member, two spools for the ribbon, a driving member reversing mechanism for connecting one or other spool to the driving member, an operative connection between said rocking member and said reversing mechanism, two catch members carried by said rocking member, a feed pawl operating shaft, an arm disposed on said feed pawl operating shaft, and means for moving one or other of the two said catch members into operative relation with the arm on the feed pawl operating shaft, the said arm being so disposed on the feed pawl operating shaft that it only moves one of the two said catch members when the feed pawl is being retracted, whereby the reversing mechanism is positively operated from the feed pawl operating shaft.

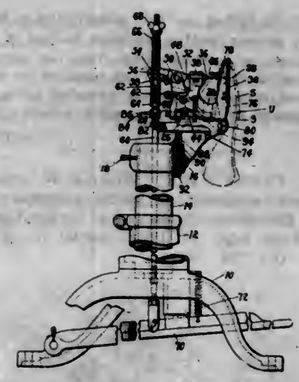
1,897,085. MACHINE FOR COMPARING STATISTICAL RECORD CARDS. ARTHUR THOMAS, Wallington, England, assignor to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Filed Dec. 21, 1931, Serial No. 582,378, and in Great Britain Jan. 8, 1931. 7 Claims. (Cl. 209—110.)

1. In a machine for comparing two supposedly similar sets of record cards, the combination of an upper sensing pin box, a lower sensing pin box, means for feeding a card from one set to the upper sensing pin box, means for simultaneously feeding a card from the other set to the lower pin box, a plurality of upper testing pins adapted to engage with the upper sensing pins, a plurality of lower testing pins adapted to engage with the lower sensing pins, a plurality of testing bars one for each column of upper testing pins, means acting upon said testing bars tending to tilt all the associated upper testing pins about one end, means for locking one set of testing pins against the other set and means whereby



when two record cards agree, said locking means is disengaged and permits movement of the testing bars, whereas when two cards do not agree the testing pins are locked and the testing bars prevented from moving.

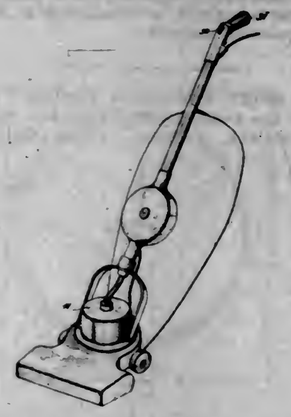
1,897,086. MACHINE FOR SHAPING SHOES. WILLIAM D. THOMAS, Lynnfield, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 6, 1929. Serial No. 412,236. 18 Claims. (Cl. 12—1.)



1. In a machine for shaping shoes, means constructed and arranged to expand within a shoe to stretch the shoe both widthwise and heightwise, and means constructed and arranged upon continuous movement in a single direction to operate said stretching means to initiate the expansion thereof first in a widthwise direction and then in heightwise direction.

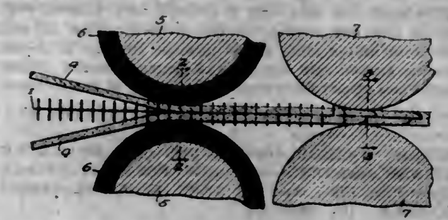
1,897,087. VACUUM CLEANER CORD CONTROL DEVICE. BERNARD JACQUES TAMARIN, Philadelphia, Pa. Filed Dec. 14, 1927. Serial No. 240,051. 7 Claims. (Cl. 15—257.)

1. An attachment for a vacuum cleaning machine comprising a handle adapted for pivotal connection to the machine, a take up in the length of the handle for preventing any slack in the electric cord employed for supplying current to the machine and a controllable means



for operating the take up from a movable part of the machine including a driving connection between the handle and the machine.

1,897,088. GASKET. BENJAMIN J. VICTOR, Oak Park, Ill., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1930. Serial No. 470,057. 1 Claim. (Cl. 154—2.)



The herein described method of making sheet material for use in the manufacture of gaskets and the like which consists in providing sheets of gasket material and a metal core having prongs projecting outwardly from both sides thereof, arranging the core between two sheets of gasket material and pressing the sheets upon the core to arrange the sheets and core in parallel and contacting relation by passing the sheets and core between a pair of soft faced rolls, and in then bending the prongs bodily to clench them in the sheets with their points below the outer surfaces of the sheets by passing the sheets and core between a pair of hard faced rolls.

1,897,089. ELECTRIC HEATING ELEMENT. RUDOLF VON BROCKDORFF, Munich, Germany, assignor to Schutte and Koerting Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 16, 1929, Serial No. 399,926, and in Germany May 29, 1929. 4 Claims. (Cl. 219—19.)



1. An electric heating element comprising a coil of wire, the said wire having a coating of insulating material, a rod of insulating material mounted within and supported by said coil the diameter of said rod being

slightly less than the internal diameter of said coil to leave an appreciable space therebetween, portions of the said wire at the opposite ends of said coil extending crosswise of the said coil to retain the said rod therein, and means having connection with said coil at its opposite ends for supporting said coil.

1,897,090. SHIRT RETAINING DEVICE. SAMUEL O. WALDING, Los Angeles, Calif. Filed Dec. 7, 1931. Serial No. 579,612. 1 Claim. (Cl. 24—73.)



Means for holding a shirt down along its front button line and consisting of an integral end piece with an elongated ribbon-receiving opening therethrough and with a hole through one side and a doubled cord therethrough with its free end adapted to loop over a button on said shirt front and a slide sleeve member thereon to secure the same around said button, and means attached to said integral end piece to be attached to the top of the trousers.

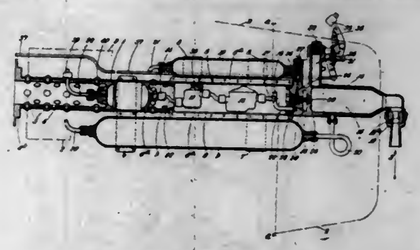
1,897,091. ANCHOR DEVICE FOR AIR BRAKE RETAINER VALVES. JOSEPH W. WEINLAND, Philadelphia, Pa. Filed Apr. 10, 1930. Serial No. 443,035. 5 Claims. (Cl. 303—1.)



5. The combination with a railway car and an air brake retainer valve of a thin, flat plate for anchoring said valve to the car, distance pieces arranged between the car end and said plate, bolts passing through said car end, distance pieces and plate, the heads of said bolts being contained in said car, said plate being vertically slotted to accept retainer valve bolts, and being further slotted in a manner including a cross slot arranged at an inclination to permit insertion of said bolts through the front face of said plate.

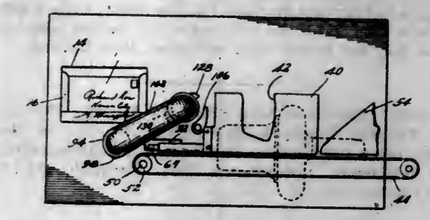
1,897,092. AIRCRAFT WITH ROTATIVE WINGS. JAMES GEORGE WEIR, Aldwych, London, England, assignor, by mesne assignments, to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 26, 1929, Serial No. 409,814, and in Great Britain Jan. 11, 1929. 14 Claims. (Cl. 244—18.)

1. In an aircraft a system of rotative wings or supporting surfaces or lifting airscrews having fluid jet reaction devices embodying means for generating steam at a suitable pressure, and discharge nozzles of a type adapted to utilize the generated steam expansively for producing the required jet reaction, such means for generating steam comprising a vessel or vessels in which air or oxygen may be stored at a high pressure, vessels for the storage of water and liquid fuel, a combustion chamber, one or more mixing and atomizing nozzles through



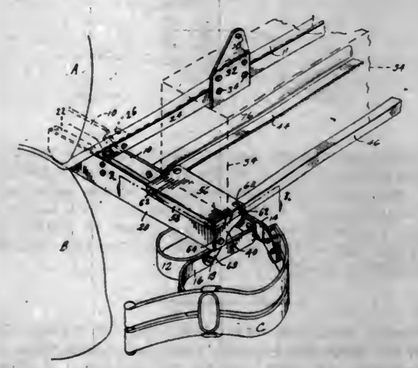
which air and atomized liquid fuel are discharged into the combustion chamber, an evaporating chamber, and controllable means for admitting the fuel-air mixture to the mixing nozzles and igniting same.

1,897,093. MAIL SEPARATING AND FACING APPARATUS. DICK G. WERNER, Kansas City, Mo. Filed May 31, 1930. Serial No. 458,248. 15 Claims. (Cl. 214—11.)



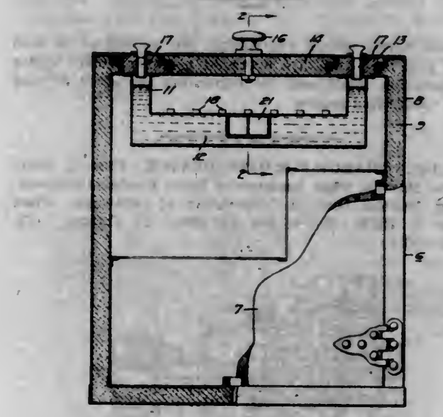
1. A mail handling machine comprising a feed trough, a conveyor, a transferring member having a nozzle disposed between said trough and conveyor, and structure associated with the transferring member to act upon a piece of mail including a head mounted upon the nozzle of said member for limited rotation relative thereto.

1,897,094. TRUNK RACK. WILLIAM W. WILSON, Sioux City, Iowa, assignor, by mesne assignments, to The Gabriel Karl-Keen Company, a Corporation of Delaware. Filed Sept. 16, 1929. Serial No. 392,960. 10 Claims. (Cl. 793—55.)



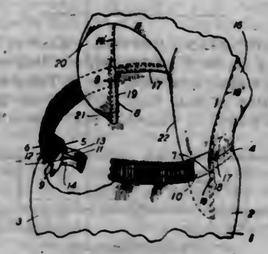
1. In combination with an automobile having rearwardly extending members formed at their extremities with a horizontally curved portion, a rearward extension to the straight portion of said rearwardly extending member, a trunk rack structure adapted to be attached to the rear portion of the body of the automobile to form a major support therefor, resilient bumpers connected at their inner ends of said rearward extensions and supported intermediate of their ends by a resilient member attached to said horizontal curved portion of said rearwardly extending member, and means connecting the rearward end of said rearward extension to the end portions of said trunk rack structure.

1,897,095. REFRIGERATOR BOX AND SYSTEM OF REFRIGERATION. JOHN H. WOOLL, San Francisco, Calif. Filed Oct. 28, 1930. Serial No. 491,671. 8 Claims. (Cl. 62—91.5.)



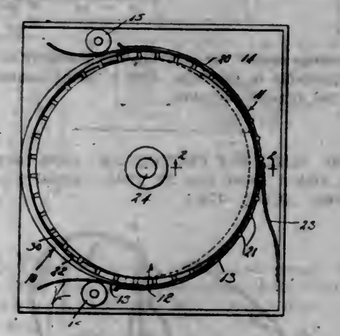
1. In a refrigerator box, a fluid container carried by a first removable section of the box, a fluid in said container, and a second section of the box removable directly over said container so that a refrigerant can be placed upon said container to receive heat transmitted from within said box through said fluid in said container to said refrigerant.

1,897,096. GARMENT. CLAIR G. WRIGHT, Kansas City, Mo. Filed Mar. 6, 1930. Serial No. 433,767. 3 Claims. (Cl. 2—80.)



1. A garment comprising bloomers including front and back members having substantially aligned upper edges and vertical edges defining side seams of said bloomers, and a blouse comprising a front member having a lower edge attached to the upper edge of the front member of the bloomers and a back member having a lower edge portion depending below the upper edge of the back member of the bloomers and anchored to said side seams.

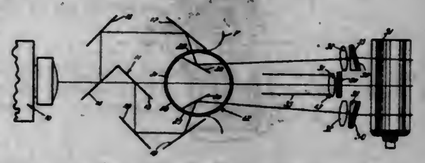
1,897,097. FILM HANDLING MECHANISM. WALTER L. WRIGHT, Santa Monica, Calif., assignor to Synchrome Corporation, Los Angeles County, Calif., a Corporation of California. Filed June 12, 1928. Serial No. 284,837. 7 Claims. (Cl. 88—17.)



1. Film handling apparatus including, a film guide having a convex film carrying face, there being a plurality of exposure apertures in said face, and a film actuating sprocket engaging the film at said face.

6. Film handling apparatus including, a stationary curved film guide for carrying a film in a curved position, the guide having a plurality of circumferentially spaced apertures, and a rotatable film actuating member eccentric to the guide and engaging the film at the curved portion being carried by the guide, the actuating member having a film engaging face curved in the same direction as the guide and of only slightly shorter radius than the guide.

1,897,098. MOTION PICTURE PROJECTOR. WALTER L. WRIGHT, Santa Monica, Calif., assignor to Synchrome Corporation, Los Angeles County, Calif., a Corporation of California. Filed Sept. 3, 1929, Serial No. 390,121. Renewed July 11, 1932. 6 Claims. (Cl. 88—16.4.)

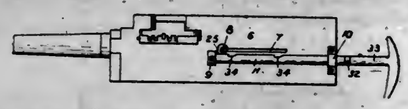


1. In an optical system, a film support, a film carried by the support about a center, means directing spaced shafts of light through pictures on the film toward said center and directing one of the shafts of light through said center and toward a screen, means reflecting another of said shafts of light before it reaches said center to direct it in the general direction of the first-mentioned shaft, and means intercepting the shafts directed toward the screen and directing them into register on the screen.

1,897,099. OPERATING MECHANISM FOR MACHINE GUNS. GEORGE A. WOODY, Tilden, Tex., and RICHARD C. COUPLAND, Norfolk, Va. Filed Sept. 27, 1932. Serial No. 635,040. 6 Claims. (Cl. 89—27.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

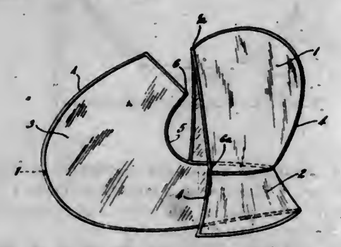
6. Mechanism for manually operating the bolt of a machine gun including a tube, a front bracket having an

end plate and receiving an end of the tube, a plug fitting in the end of the tube and secured to the end plate of the bracket, a bolt passing through the tube, bracket and plug



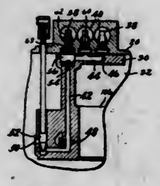
and affording means for securing the assembly to a gun, a rod reciprocable in the tube, and a spring normally holding the rod against the plug.

1,897,100. GARMENT PROTECTOR. EDNA IONE ABBOTT, Tiffin, Ohio. Filed Aug. 22, 1932. Serial No. 629,833. 5 Claims. (Cl. 2—174.)



1. In a device of the class described, a hood adapted to be disposed upon the head of a wearer to protect the coiffure thereof, an apron part dependant therefrom to cover the neck of said wearer, a transparent pane member associated with said hood to be removably supported thereby to cover the face of said wearer, and means for supporting said pane member disposed as a bib upon the chest of said wearer.

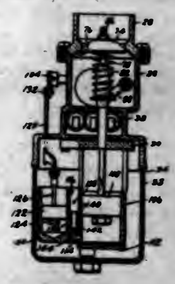
1,897,101. CHARGE FORMING DEVICE. FRED E. ASELTINE, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 30, 1929. Serial No. 359,318. 18 Claims. (Cl. 261—61.)



1. A charge forming device for internal combustion engines comprising a mixing chamber, means for supplying fuel and air thereto, a throttle controlling the flow of mixture from said chamber, means for regulating the mixture from said chamber, means for regulating the mixture ratio, said means tending to lean the mixture during a part of the opening movement of the throttle, and means effective during another part of the opening of the throttle for so controlling the action of the means for regulating the mixture ratio as to compensate for the tendency to produce a lean mixture, whereby a substantially uniform mixture is provided throughout the operating range.

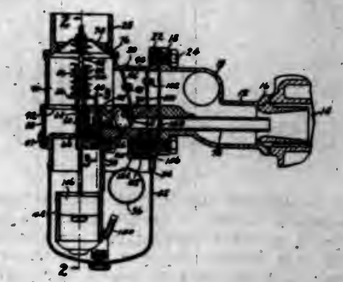
1,897,102. CHARGE FORMING DEVICE. FRED E. ASELTINE, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 30, 1929. Serial No. 359,320. 18 Claims. (Cl. 261—47.)

1. A charge forming device for internal combustion engines comprising a mixing chamber, fuel and air inlets therefor, a throttle controlling the flow of mixture therefrom, an auxiliary air passage, a valve controlling flow through said passage and operated by suction effective



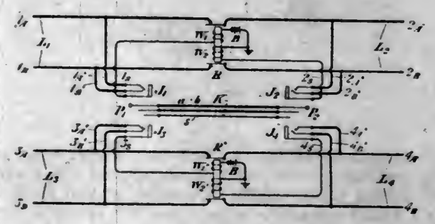
on said valve, means controlling the movement of said valve and fluid pressure operated means effective under all operating conditions, for regulating the effect of said valve controlling means.

1,897,103. CHARGE FORMING DEVICE. FRED E. ASELTINE, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 3, 1929. Serial No. 375,688. 23 Claims. (Cl. 261—55.)



1. A charge forming device for internal combustion engines comprising a mixing chamber, fuel and air inlets therefor, a throttle controlling the flow of mixture therefrom, a main air valve controlling the admission of air thereto, means controlling the operation of said valve, an air passage, and pressure operated means in said passage for regulating the effect of said valve controlling means.

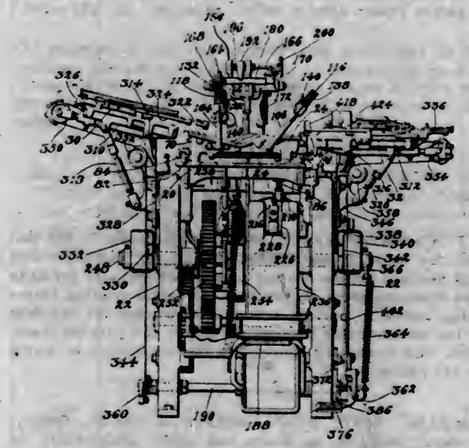
1,897,104. SIGNALING SYSTEM. RAND S. BAILEY, Glen Ridge, and HUGH F. SHOFFSTALL, Maplewood, N. J., assignors to American Telephone & Telegraph Company, a Corporation of New York. Filed June 28, 1932. Serial No. 619,796. 3 Claims. (Cl. 179—175.3.)



1. In a signaling system, the combination of a plurality of lines each transmitting currents from its input circuit to its output circuit, a relay associated with each line

having an armature normally interposed in series with the line so that the line will remain closed until the relay operates, two jacks associated with each line, one of which is connected to the input circuit of the line and the other to its output circuit, a cord equipped at each end with a plug, each plug being adapted to engage in one of said jacks, and means responsive to the insertion of one of the plugs of the cord into one of the jacks associated with the input circuit of any one of said lines and to the insertion of the other of the plugs into the jack associated with the output circuit of another of said lines for operating the relays of both lines, thereby disconnecting the input circuits of the two lines from their respective output circuits and connecting the input circuit of the first mentioned line to the output circuit of the second mentioned line.

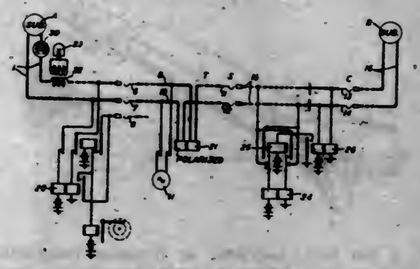
1,897,105. MACHINE FOR PRESSING SOLES UPON SHOES AND PAD THEREFOR. MILTON H. BALLARD, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 27, 1929. Serial No. 388,739. 89 Claims. (Cl. 12—33.)



72. A machine for cement-attaching soles to shoes having, in combination, a pad member arranged to receive a sole and a shoe to which the sole is to be cement-attached, a weight normally supported while the machine is inoperative and arranged when released to cause the pad to press the sole forcibly into engagement with the shoe, means constructed and arranged to engage the shoe and the last on which the shoe is mounted to receive the thrust resulting from the pressure of the pad upon the sole of the shoe, an eccentric, means for operating the eccentric through a single revolution, and connections from the eccentric to the weight constructed and arranged to cause one revolution of the eccentric to release the weight, thereby causing the weight to actuate the pad to apply pressure to the sole of the shoe, and thereafter to return the weight to and support it in its original position.

1,897,106. TELEPHONE SYSTEM. HENRY M. BASCOM, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 18, 1932. Serial No. 587,370. 11 Claims. (Cl. 179—81.)

1. In a telephone system, a calling station, a dial at said calling station, an automatic switch controlled by the operation of said dial, switching means responsive to the removal of the receiver at said calling station for connecting said station with said automatic switch, a



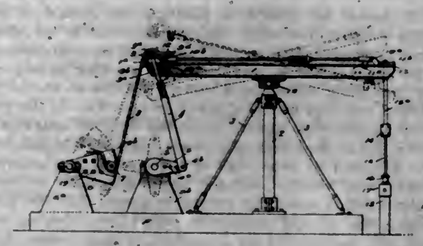
visual signal at said calling station and means effective upon the connection of said automatic switch with said calling station for energizing said visual signal.

1,897,107. AUTOMOBILE TABLE. BERNARD P. BAUS, Waco, Tex. Filed Nov. 13, 1931. Serial No. 574,850. 10 Claims. (Cl. 45—51.)



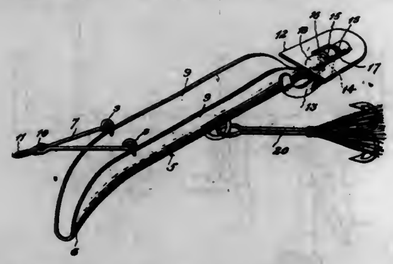
1. An adjustable automobile table comprising, in combination, a tray, extension members slidably mounted in the bottom of the tray; supporting members pivotally connected to the ends of the extension members; hangers connected to the supports and having means to engage the window ledges of an automobile; and means releasably to hold the supporting members substantially at right angles to the extension members.

1,897,108. PUMP OPERATING MECHANISM. LEE J. BLACK, Beaumont, Tex. Filed Dec. 2, 1930. Serial No. 499,589. 17 Claims. (Cl. 74—14.)



1. In a pumping apparatus, the combination of a pump operating member and actuating means therefor, a counterbalance supported independently of said operating member and its actuating means, and means on said operating member for releasing said counterbalance from said member upon a predetermined diminishment of the pump load on said pumping connection.

1,897,109. FISH LURE. EDWARD H. BOBO, Ranger, Tex. Filed Mar. 28, 1932. Serial No. 601,655. 9 Claims. (Cl. 43—42.)

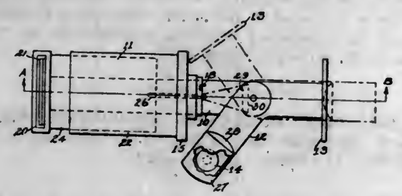


1. A fish lure comprising an elongated longitudinally channeled hook-carrying body having its open side disposed upwardly, and a line-attaching bail having its ends loosely pivoted to the opposite side walls of said body in rearwardly spaced relation with the front end of the latter.

1,897,110. PROCESS OF PURIFYING PHTHALIC ANHYDRIDE. PAUL C. BOWERS, Penns Grove, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 24, 1929. Serial No. 388,267. 5 Claims. (Cl. 260—123.)

1. The process of purifying crude phthalic anhydride prepared by the vapor phase catalytic oxidation of naphthalene, which comprises treating it with a condensing agent comprising an acidic material having an SO_4 group, and vaporizing the phthalic anhydride from the relatively non-volatile impurities.

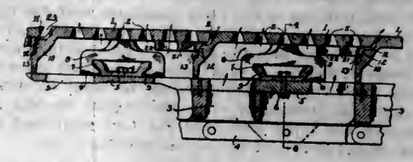
1,897,111. PHOTOGRAPHIC DUST COUNT APPARATUS. SEWELL M. CORBETT, U. S. Army, and LELAND H. STANFORD, U. S. Army, Fort Sam Houston, Tex. Filed Dec. 12, 1930. Serial No. 501,861. 10 Claims. (Cl. 95—11.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A device for making a photographic record of the relative density of foreign matter suspended in air, comprising in combination a base, composed of a stationary and an angular member, said angular member having radially extending arms and a central portion at the intersection of its arms which is pivotally mounted on the stationary member; a camera mounted on said stationary member, an opaque darkened screen and an illuminating source mounted on either end of the arms of said angular member, said angular member being adaptable to such adjustment that when the screen is moved into the photographic field of said camera the rays of the illuminating source will be directed on a surface of said screen substantially as shown.

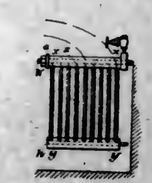
1,897,112. STOKER GRATE. THOMAS J. COURTNEY, Orange, N. J. Filed Apr. 12, 1929. Serial No. 354,615. 1 Claim. (Cl. 110—40.)

The herein described stoker grate, comprising adjoining grate bars having a transverse member at one end, grate sections mounted on and spaced above said bars, each grate section being undercut at the end adjoining the other section to form a beveled edge, the adjoining end of the said other section having a downwardly extending flange, the outer surface of which is first inclined downward and outward to fit the undercut end of the first-



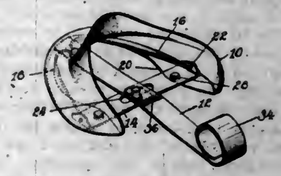
named grate section, and then extended in a generally downward direction into sealing engagement with said transverse member throughout its length, whereby the spaces directly beneath the grate sections are sealed from the spaces beneath adjoining sections, the grate sections being perforated to permit the passage of air.

1,897,113. RADIATOR. EDMOND GABRIEL DOUCET, Rheims, France. Filed June 2, 1930, Serial No. 459,006, and in France June 6, 1929. 2 Claims. (Cl. 257—139.)



1. A hot water radiator, comprising an upper intake conduit for water, a lower outlet conduit for water, parallel and vertical hollow heating plates between said conduits and communicating therewith, said hollow heating plates being ribbed to provide a restricted portion for the flow of the water, sheets between the plates and parallel therewith, and means for controlling the circulation of water in the plates.

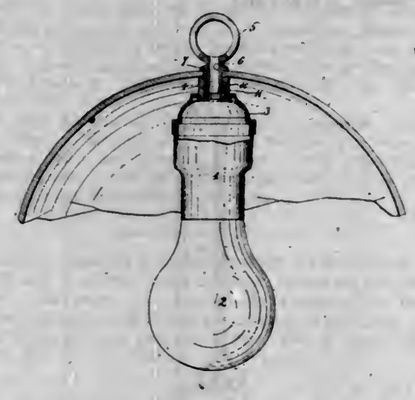
1,897,114. SHOE TREE. SEXTUS A. EDDINS, Quincy, Mass., assignor, by direct and mesne assignments, to O. A. Miller Treeing Machine Company, Portland, Me., a Corporation of Maine. Filed June 6, 1930. Serial No. 459,525. 27 Claims. (Cl. 12—128.4.)



1. A shoe tree arranged to fill the forward end of a shoe comprising an expansible toe piece adapted to be compressed laterally as it is inserted in a shoe, and extensible means rigidly secured to the toe piece and positioned transversely of the toe piece constructed and arranged to permit and at the same time to limit relative in-and-out movement of the sides of the top piece.

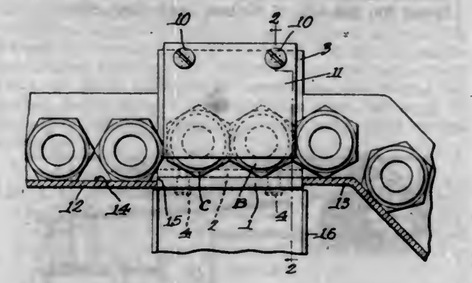
1,897,115. SOCKET FOR ELECTRIC LIGHT BULBS. THOMAS W. FITZGERALD, Boston, Mass. Filed May 17, 1930. Serial No. 453,220. 1 Claim. (Cl. 173—362.)

An electric socket of the type specified with a collar upstanding therefrom, a nipple screw-threaded to fit within the collar, and a screw between the collar and the nipple to prevent the nipple from turning when seated within the collar, said collar having within it a groove extending substantially parallel with the nipple with side opening onto the threads of the nipple and with end opening into



the chamber of the cap whereby said screw may be introduced through said end opening to turn on the threads of the nipple and be driven into place seated between the threads on the nipple and the wall of the groove in the collar.

1,897,116. NUT BLANK SORTER FOR TAPPING MACHINES AND THE LIKE. JOHN H. FRIEDMAN, Tiffin, Ohio, assignor to The National Machinery Company, Tiffin, Ohio. Filed Feb. 16, 1932. Serial No. 593,337. 8 Claims. (Cl. 10—162.)

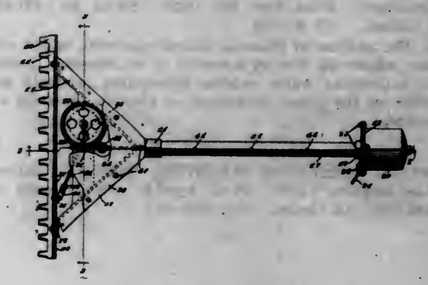


1. A sorter for crowned nut blanks including a chute for supporting a series of alining blanks on their lower sides for sliding movement, an inclined backing plate at the end of said chute, a ledge cooperating with the backing plate to form an angle for supporting blanks only when their plain faces are positioned adjacent to or against the backing plate, and a nut tripping means at one end of the ledge.

1,897,117. POWER OPERATED HEDGE CLIPPERS. JOSHUA FAIRCHILD GRAHAM, Maynard, Mass. Filed Dec. 23, 1931. Serial No. 582,833. 1 Claim. (Cl. 30—11.)

A tool for the purpose indicated comprising relatively movable cutter bars of cross-sectionally angular form with the one disposed in the angle of the other, the flange of the upper cutter bar being formed with longitudinal slots, screws engaged in the flange of the lower bar and passing through said slots to provide for sliding movement of the upper bar on the lower bar, a head frame comprising divergent arms to the extremities of which the lower bar is

secured, the head frame being formed with a handle receiving socket at the point of juncture of said arms, a rotary member mounted on the head frame between said



arms and having a link connection with the upper of said bars to reciprocate the latter as said member rotates, and driving means for said member.

1,897,118. CIRCUIT CONTROLLER. STANLEY S. GREEN, Indianapolis, Ind., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind., a Corporation of Illinois. Filed June 13, 1928. Serial No. 285,114. 37 Claims. (Cl. 200—113.)



1. An electric circuit controller, comprising a container movable to "off" and "normal on" positions, a conduit having a tubular passage communicating with said container, liquid conductor within the space provided by said container and conduit, and two electrodes exposed within said space and separated from each other lengthwise of said passage and positioned to be interconnectible within said space only by liquid conductor contained within and filling a predetermined length of said tubular passage between said electrodes to allow current flow for a substantial distance in a direction along said passage, said electrodes being located with relation to said container and conduit so that they are interconnected only when the container is substantially in the "normal on" position, and said conduit being so shaped and positioned with respect to the container that when the container is in "normal on" position and said predetermined length of said tubular passage is not filled with liquid conductor a flow of the liquid conductor from said container into said passage can be obtained only by first moving said container to the "off" position.

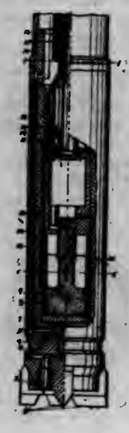
1,897,119. VAT DYESTUFF AND PROCESS OF MAKING THE SAME. IVAN GUBELMANN and ROBERT J. GOODRICH, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Feb. 26, 1930. Serial No. 431,628. 7 Claims. (Cl. 8—5.)

1. In the process of forming a readily dispersible vat dyestuff, the step of incorporating in the dyestuff an abietene sulfonic acid body.

1,897,120. TREATING BATH AND PROCESS OF TREATING TEXTILE FIBERS. IVAN GUBELMANN, HENRY J. WEILAND, and CLYDE O. HENKE, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Feb. 26, 1930. Serial No. 431,629. 8 Claims. (Cl. 8—5.)

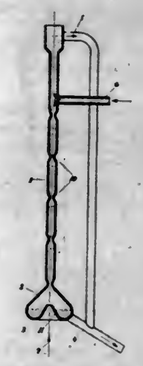
1. The process of treating fibrous material, which comprises subjecting fibrous material to an aqueous treating bath containing water soluble sulfonation products of a member of the group consisting of abietene, abietine and abietane.

1,897,121. DRILLING MACHINE. IRVING C. HARRIS, Los Angeles, Calif. Filed Apr. 7, 1930. Serial No. 442,289. 12 Claims. (Cl. 255—4.)



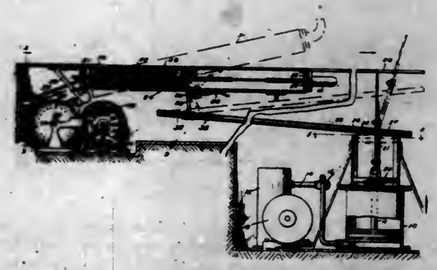
1. In a drilling machine of the character described, a rotatable drill-pipe; a fluid-pressure-actuated drilling mechanism connected to the drill-pipe and rotatable with the same; a fluid-pressure-actuated hammer mechanism comprising the lower part and a control mechanism comprising the upper part of the drilling mechanism, the two said mechanisms being slidably connected with each other to permit relative movement between the two in an axial direction; a drill-head rigidly connected to the lower end of the cylinder of the hammer mechanism and adapted to be percussively actuated by blows of the hammer transmitted through the end of the cylinder and the rigid connection between the cylinder and the drill-head; means of actuating the control mechanism to cause movement of the slidable connection aforesaid necessary to regulate the feeding of the hammer mechanism and the drill-head downward; means of conveying the scavenging fluid to and from the drilling mechanism; means of conveying the actuating fluid to and from the drilling mechanism, in which a valve is placed in the discharge conduit near the exhaust of the hammer mechanism and so constructed as to prevent a flow of fluid in a reverse direction back into the hammer mechanism; a chamber, in communication with the scavenging fluid and near the control mechanism, in which gas may be trapped and stored to provide a cushion of compressible fluid in communication with the scavenging fluid.

1,897,122. APPARATUS FOR TREATING SINGLE THREADS WITH LIQUIDS. AUGUST HARTMANN, WALTER HÖFINGHOFF, and FRITZ FISCHER, Barmen, Germany, assignors to American Bemberg Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 25, 1930, Serial No. 477,782, and in Germany Sept. 9, 1929. 9 Claims. (Cl. 91—46.)



1. An apparatus for treating single threads by liquids comprising a pipe provided with spaced constrictions and a channel shaped member connected with the lower end of the pipe adapted to drain off the liquid.

1,897,123. SAFETY APPARATUS FOR HIGHWAYS. WARREN B. HASTINGS, Norfolk, Va. Filed Mar. 2, 1932. Serial No. 596,358. 7 Claims. (Cl. 246—127.)

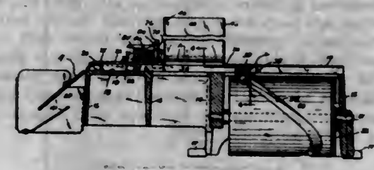


1. Safety system for highways comprising automobile catching and holding means, and trigger means for raising said automobile catching and holding means into the path of the part of the automobile which is to be caught and held thereby, when said trigger means is engaged by the automobile, both said trigger means and said automobile catching and holding means being normally below the plane of the highway, said trigger means comprising a resilient sweep, a cylinder and piston, the latter reciprocating substantially vertically within said cylinder, said sweep being pivotally secured to said piston, a source of compressed air communicating with said cylinder beneath said piston, a switch actuated by an object which is a factor of danger intermittently created adjacent said automobile catching and holding means, for actuating a valve controlling the admission of compressed air to said cylinder, and a connecting link between said sweep and said automobile catching and holding means.

1,897,124. PROCESS OF TANNING. CLYDE O. HENKE, South Milwaukee, and AUGUST C. ORTHMANN, Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed May 25, 1931. Serial No. 540,009. 11 Claims. (Cl. 149—4.)

1. The process of tanning which comprises subjecting hide to the action of a bath containing a vegetable tanning agent and a member of the group consisting of sulfonic acid bodies of the abietene family, their salts and aldehyde condensation products.

1,897,125. MEANS FOR STRIPPING AND TRUING ADDRESS PLATES. JOHN A. HULT, Cleveland, and PETER M. COLQUHOUN, Lakewood, Ohio, assignors, by mesne assignments, to Multigraph Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 8, 1930. Serial No. 426,819. 19 Claims. (Cl. 101—1.)



1. In a machine for removing strips from address plates, the combination with one or more abutments, of a reciprocating slide adapted to carry the address plate and movable beneath the abutments in such manner that the abutments may engage strips on the address plate and retain them while the plate continues its movement, and means for driving the slide by a comparatively slow movement in the active direction, and a comparatively quick return movement.

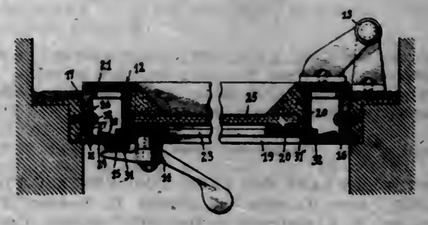
1,897,126. QUADRANGULAR TUBE. MATTHIAS INGENKAMP, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed June 19, 1931, Serial No. 545,601, and in Germany July 16, 1930. 5 Claims. (Cl. 122—360.)



1. As a new article of manufacture a quadrangular tube adapted for the manufacture of corrugated headers for water tube boilers and having rounded outer corners, the wall thickness in the neighborhood of the corners being greater than elsewhere.

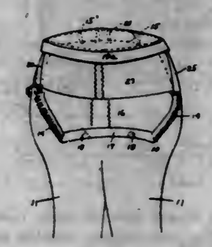
1,897,127. WEATHER-STRIP. OSCAR G. JOHNSON, Bayside, N. Y. Filed Feb. 28, 1931. Serial No. 519,068. 4 Claims. (Cl. 189—65.)

1. A weather-strip for hinged windows and the like, comprising an angularly bent strip of sheet material including a base branch with means to secure the same on the frame of the window, a resilient sealing branch substantially transverse to said base branch, and a resilient



loop formed at the joint of said two branches by doubling the material of the sealing branch upon itself adjacent to the meeting corner of said two branches.

1,897,128. RIDING HABIT. THEODORE KOTZIN, Los Angeles, Calif. Filed Jan. 27, 1931. Serial No. 511,505. 1 Claim. (Cl. 2—228.)

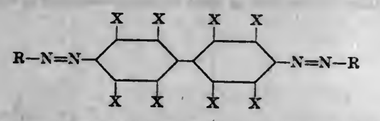


In combination riding breeches consisting of a waist portion formed buttonless at its front and rear portions, means forming the back portion into a drop seat, means disposed laterally of the breeches for detachably securing the drop seat in closed relation to the breeches, a belt extending around the waist portion and overlapping the outer part of the drop seat when the latter is in closed position, loops secured around the waist portion of the breeches and accommodating the belt therein adjustably, and a series of hook elements secured to the upper edge and outer face of the drop seat, so when the drop seat is in closed position the belt may be tucked under and be retained by the hook elements, and whereby when it is desired to open the drop seat the hook elements may be disengaged from the belt while the latter remains intact in waist-girdling position.

1,897,129. PRODUCTION OF COLORED RUBBER ARTICLES. RUDOLPH KRECH, Mannheim, WILHELM SCHEURER, Ludwigshafen-on-the-Rhine, and ADOLPH KOCH, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 14, 1932, Serial No. 617,258, and in Germany Feb. 28, 1931. 9 Claims. (Cl. 18—50.)

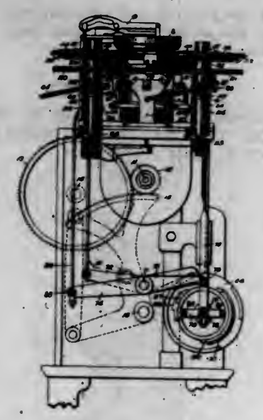
1. The process of producing colored rubber products which comprises mixing a rubber product with a water-

insoluble azo dyestuff corresponding to the general formula:



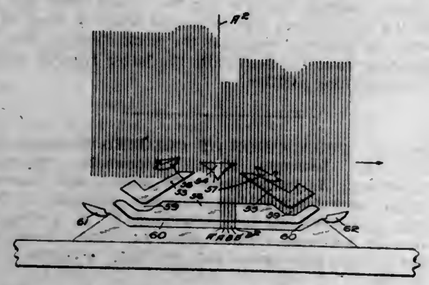
wherein one of the X's in each benzene nucleus is a chlorine atom, the other X's being hydrogen or alkyl, and wherein R is the radicle of an arylamide of acetoacetic acid, and then vulcanizing the mixture.

1,897,130. MEANS FOR EFFECTING REVERSE PLATING. JOHN LAWSON and ROBERT H. LAWSON, Pawtucket, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Nov. 1, 1926. Serial No. 145,512. 26 Claims. (Cl. 66—107.)



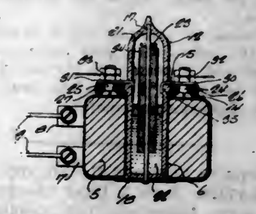
1. In selective means for effecting reverse plating in knitting mechanism, a receiving member having means to retain a series of narrow, elongated, jack like instrumentalities received by said member in fixed but readily removable position for respectively individual action upon substantially single sinkers or like yarn engaging devices to cause reversal in position of the two plating yarns, thereby to change from normal to reverse plating.

1,897,131. METHOD AND MECHANISM FOR KNITTING FULL-FASHIONED HOSIERY. ROBERT H. LAWSON, Pawtucket, R. I., assignor to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Jan. 24, 1929. Serial No. 334,825. 8 Claims. (Cl. 66—48.)



1. That method of knitting full fashioned hosiery which comprises knitting tubular work as far as desired and then reciprocating and in so doing severing the thread end at the commencement of the reciprocation and drawing the severed end through a terminal loop to be pinched or held thereby from raveling.

1,897,132. SWITCH. OSCAR J. LEINS, Milwaukee, Wis., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 13, 1932. Serial No. 592,752. 8 Claims. (Cl. 200—112.)

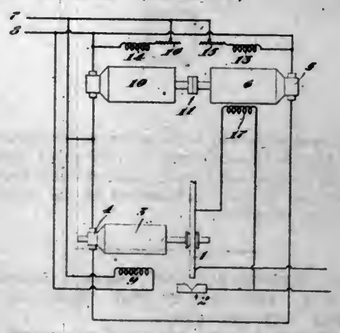


1. In a switch of the character described, a hollow core, a solenoid wound about said core, mounting means at one end of said solenoid, a receptacle supported from said mounting means within said core, a rod passing through the bottom of said receptacle, means carried by said rod to prevent the withdrawal of said receptacle from said core, terminal members mounted on said mounting means projecting into said receptacle, mercury in the bottom of said receptacle normally at a level below said contact members and a plunger within said receptacle floatingly mounted on said mercury and adapted to be drawn into said solenoid to raise the level of said mercury into engagement with said contact members upon application of current to said solenoid.

1,897,133. PRODUCTION OF MASSES RESEMBLING RUBBER OIL SUBSTITUTE. MARTIN LUTHER, Mannheim, and HANS BELLER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 26, 1929. Serial No. 373,933, and in Germany July 3, 1928. 5 Claims. (Cl. 260—17.)

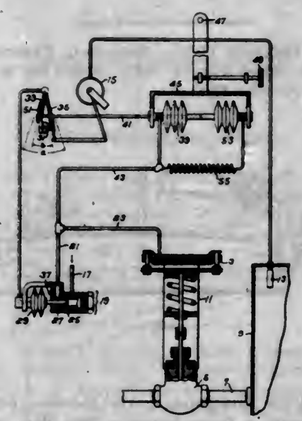
1. The process for the production of masses resembling rubber oil substitute, which comprises heating a mixture of esters of polyhydric alcohols with unsaturated acids prepared by splitting off water from the mixture of acids resulting from the oxidation of waxes, in the presence of a sulphurizing agent.

1,897,134. ELECTRICAL APPARATUS. ALVIN S. MANCIB, Somerville, Mass., assignor to James S. Smyser, Brighton, Mass. Filed Oct. 16, 1930. Serial No. 489,058. 12 Claims. (Cl. 219—8.)



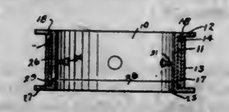
8. An electric arc-welding device, a pair of electrodes, one at least of which is movable, and means to maintain an arc of constant potential between said electrodes, said means comprising an electrode motor for moving one electrode, means to determine the direction of rotation of said motor, said latter means comprising two control motors having their shafts connected together, one of said control motors having an auxiliary field in parallel with said arc, and one of said motors having its armature in series with the armature of said first motor, and means for manually adjusting the strength of the main field of one of the control motors relatively to that of the other so as to change the effect of the auxiliary field at will, whereby the current strength in the armature of the electrode motor is so changed as correspondingly to change the normal position of the electrode.

1,897,135. CONTROL MECHANISM. CLESSON E. MASON, Foxboro, Mass., assignor to The Foxboro Company, Foxboro, Mass., a Corporation of Massachusetts. Filed Sept. 15, 1930. Serial No. 482,127. 19 Claims. (Cl. 236—82.)



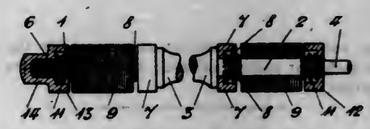
1. A fluid-pressure-operated control mechanism of the supply and waste valve type comprising a control couple, one element of which affords a port to atmosphere and the other a valve for said port, the relative approach and recession of said elements governing the pressure in the system, means for positioning one of said elements responsively to the values of a variable condition which is affected by the controlled action, and means responsive to the controlled pressure for positioning the other.

1,897,136. DEMOUNTABLE RIM FOR PNEUMATIC TIRES. ALFRED MAYENZET, East Orange, N. J. Filed Nov. 3, 1930. Serial No. 493,219. 1 Claim. (Cl. 301—35.)



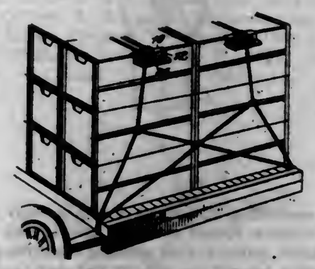
A demountable rim for vehicle tires comprising a pair of separable companion sections, one of which includes an annular body having a rim flange formed on one edge thereof, a tire receiving member having an internal annular rib fitted on the body and secured thereto, said rib abutting the flange, the tire engaging member, the rib and the body forming an annular channel way opening out one side of the mentioned section, the outer edge of the body terminating short of the outer edge of the tire receiving member, the other section including an annular portion slidably received in the channel, and a tire engaging flange having an annular seat fitted in the annular portion, the inner edge of the seat defining a stop shoulder for engaging the outer edge of the body of the first section inward of the tire receiving member, the inner edge of the annular portion of the second section engaging the inner face of the rib, and means detachably locking the sections together.

1,897,137. DRAFTING AND LIKE ROLLER EMPLOYED IN YARN-PREPARING AND SPINNING FRAMES. HENRY MEYNELL, Accrington, England. Filed June 24, 1931, Serial No. 546,550, and in Great Britain Nov. 4, 1930. 2 Claims. (Cl. 19—143.)



1. A top drafting or like roller or series of top drafting-roller or like lengths for use in drawing, slubbing, intermediate and roving frames, also in ring spinning and like frames, comprising a foundation, a number of metal discs resiliently and freely mounted upon said foundation, with their faces parallel to a plane at right angles to the axis of said foundation, or thereabouts, said discs initially closely adjacent to each other, and adapted in shape for use in said frames, and whereby the discs are capable of movements in radial directions, as well as movements in resilient manner in longitudinal directions, for the purpose herein intended and as herein set forth.

1,897,138. CONTAINER GUARD. WILLIAM C. NORTH, Sebring, Fla. Filed July 31, 1931. Serial No. 554,334. 5 Claims. (Cl. 280—179.)

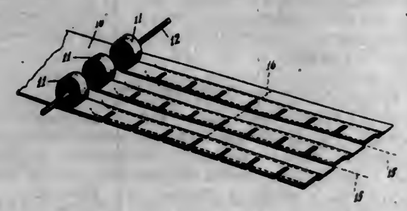


1. A container guard comprising an elongated member of angular cross section including a front vertical flange, top rearwardly directed flange sections spaced apart at their inner ends to provide a space to receive the partition of a container, and upwardly directed flanges at the inner ends of said top flange sections for engagement with the sides of the container partition.

1,897,139. METHOD OF MAKING ROOFING STOCK. FREDERICK C. OVERBURY, Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed May 27, 1926. Serial No. 111,913. 6 Claims. (Cl. 154—2.)

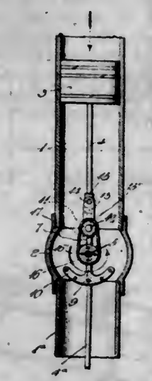
1. The method of making roofing stock, which comprises applying to a sheet of roofing felt of indefinite length a

plurality of spaced parallel strips of felt extended lengthwise of the sheet, and securing each of said strips to said



sheet by two lines of fasteners entering both the sheet and the strips at points adjacent to the respective edges of the strips.

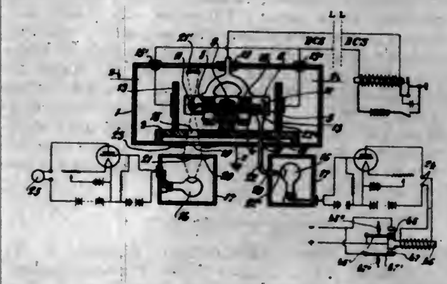
1,897,140. MECHANICAL MOVEMENT. MANUEL HUMBERTO PÉREZ, San Pedro Sula, Honduras. Filed Aug. 27, 1925, Serial No. 52,769. Renewed May 2, 1932. 3 Claims. (Cl. 74—14.)



1. In a mechanical movement, a rotary shaft composed of alined sections, spaced members fixed to and rotatable with the shaft sections, each member comprising a crank arm extending beyond one side of the shaft and a counterweighted arm extending beyond the opposite side of the shaft, stationary gears arranged coaxially with the shaft sections, an auxiliary crank composed of spaced links provided at their inner ends with journals having bearing in the outer ends of the crank arms of the crank members, gears fixed to and rotatable with said journals, a wrist pin connecting the outer ends of the links, a reciprocatory rod coupled to said wrist pin, and sprocket chain connections between the stationary gears and the gears on the journals of the links.

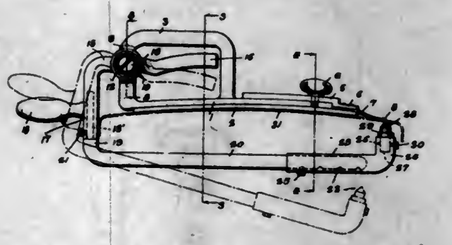
1,897,141. SYSTEM FOR DETECTING FAULTS IN SHARP EDGED TOOLS. PETER NICHOLAS PETERS, Brooklyn, N. Y. Filed Jan. 8, 1930, Serial No. 419,206. Renewed Oct. 15, 1931. 32 Claims. (Cl. 175—183.)

1. A system for detecting the condition of the edge of a sharp edged metallic body comprising means for creating a sufficiently great difference in potential between said body and the surrounding medium to cause a flux along



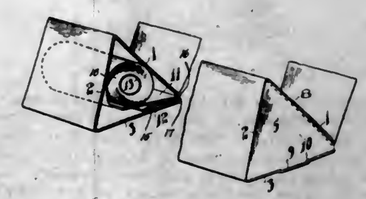
said edge, a detector responsive to said flux, and means associated with said detector for measuring the density of said flux.

1,897,142. FENDER TOOL. EDWARD G. PETERSON, Seattle, Wash. Filed Aug. 19, 1931. Serial No. 558,165. 5 Claims. (Cl. 81—15.)



1. A tool for straightening the indented portions of plates, including a frame having a thin plate whose end is pointed, and which end is designed to be arranged opposite an indenture when the frame rests on the plate to be operated upon, said frame having an arched end affording a handle, a member having offset ends, one of which is pivotally secured to the outer end of the handle and extending into the handle to afford a finger grip and a pointed hammer on the second angle end of the member disposed directly opposite the pointed end of the plate when the handle and finger grip are grasped by an operator to move the finger grip toward the handle to cause the hammer to contact with the under face of the plate.

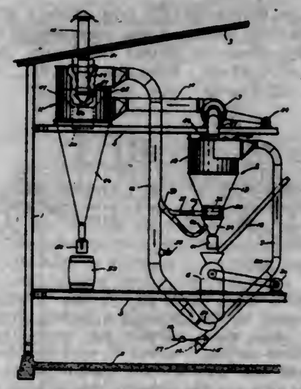
1,897,143. CONTAINER FOR ROLL PAPER. WILLIAM B. POWELL, Hamilton, Ontario, Canada, assignor to Appleford Paper Products Limited, Hamilton, Ontario, Canada. Filed July 23, 1931. Serial No. 552,608. 9 Claims. (Cl. 206—58.)



1. A container for roll paper formed of stiff flexible material and shaped as a hollow triangular prism, each of

two adjacent sides having a free edge adjacent the free edge of the other side, the edges forming between them a passage for paper contractible by pressure on the said adjacent sides.

1,897,144. DUST SEPARATOR AND COLLECTOR SYSTEM. WILLIAM B. PROUTY, Evanston, Ill. Filed Dec. 7, 1925, Serial No. 73,581. Renewed Apr. 21, 1932. 4 Claims. (Cl. 209—144.)

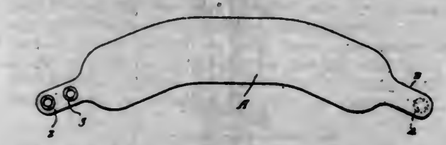


3. In a dust collector and separator system, a separator, a collector, a main conduit for conducting dust laden air into the upper portion of said separator, a conduit for conducting dust laden air from said separator to said collector, a fan in said conduit, a return conduit, and passages for conducting air from said return conduit tangentially and axially into said separator.

1,897,145. PAPER MANUFACTURE. HAROLD ROBERT RAFTON, Andover, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed May 1, 1931. Serial No. 534,461. 22 Claims. (Cl. 92—21.)

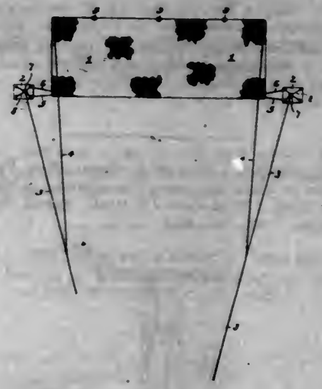
1. The method of manufacturing paper filled with alkaline filler comprising mixing fibrous material and size precipitant, and adding to the resulting mix size and alkaline filler under conditions favoring the minimizing of the time of contact of the constituents of the mix, and thereafter making paper therefrom.

1,897,146. HEAD BAND. WILLIAM RICHARDSON, Flushing, N. Y. Filed May 18, 1931. Serial No. 538,322. 1 Claim. (Cl. 2—171.)



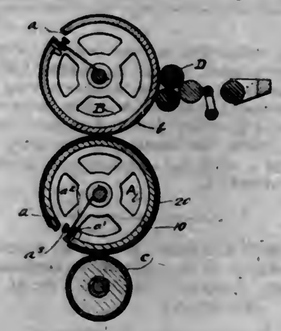
A band of the class described comprising a single strip of elastic material having an elongated straight middle portion and two curved end portions, said end portions curving outwardly and downwardly from the middle portion, the extremities of the curved portions being reduced to form tabs, a male member of a snap fastener on one tab and a female member of the snap fastener on the other tab, the major parts of the end portions being of substantially the same width as the middle portion and said middle portion having its edges substantially parallel, whereby said middle portion will cover the eyes and the curved end portions the ears of a person receiving a shampoo.

1,897,147. NET FOR TRAWLERS. ALTON J. ROWE, Wells Beach, Me., assignor of one-fourth to Fred F. Boyce, Portland, Me., and one-fourth to Willis B. Hall, Cape Elizabeth, Me. Filed Oct. 6, 1930. Serial No. 486,819. 1 Claim. (Cl. 43—9.)



The combination with a trawler net, of a door beyond each end thereof, a series of cables connected with the corners of each door, certain of the cables being shorter than the remaining cables, a ring common to and connected with the series of cables and disposed offset relative to the center of said door, a line connecting the lower innermost corner of each door with a lower corner of the net, a line connecting the upper innermost corner of each door with the bottom of the net at a considerable distance from its end, and a tow line connected with each ring and having a branch removed a distance from the connection of the tow line with the ring and engaged with the upper portion of the net.

1,897,148. TRANSFER BLANKET FOR OFFSET PRINTING. GEORGE S. ROWELL, Cleveland, Ohio, assignor to Multigraph Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 7, 1931. Serial No. 528,808. 2 Claims. (Cl. 101—217.)

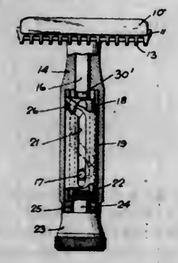


1. A transfer blanket for an offset printing machine, comprising a metal plate having its opposite end portions provided with means for its attachment about the transfer roller of the press and having its intermediate region impervious and covered on one side only with a rubber facing of uniform thickness vulcanized to the metal backing and terminating short of the fastening portions of the backing.

1,897,149. PROCESS OF AND PRODUCT FOR ATTACHING PORTIONS OF MOLDS OR CORES. CHARLES MARSHALL SAEGER, Jr., Bowmanstown, Pa. Filed Feb. 17, 1930. Serial No. 429,223. 9 Claims. (Cl. 22—188.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

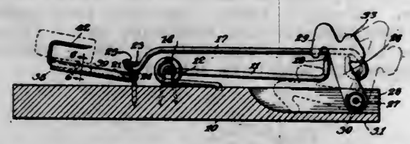
1. The method of joining together separate portions of a mold or core for the making of castings of molten steel, iron, brass, aluminum and the like high melting point metals, including the step of placing between such portions, a substance containing rubber adapted to be juxtaposed to and subjected to disintegration by the heat of the cast metal.

1,897,150. RAZOR. HYMAN R. SEGAL, New York, N. Y., assignor to Segal Founders Corporation, a Corporation of New York. Filed June 11, 1931. Serial No. 543,503. 12 Claims. (Cl. 30—12.)



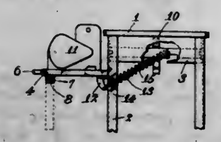
1. A razor including a guard, a clamping plate, a sleeve secured to said guard, a member slidable within said sleeve for shifting said plate, one of said last named elements being formed with a recess and packing means disposed within said recess for cooperation with the second of said elements.

1,897,151. TRAP. EMIEL P. SEGHERS, Chicago, Ill. Filed Feb. 21, 1927. Serial No. 169,750. 10 Claims. (Cl. 43—81.)



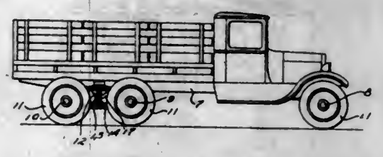
1. A trap comprising a base member, a jaw mounted on said base member, trigger mechanism for holding said jaw in set position, said base member having a slot therein, a web spanning said slot, a safety catch of less width than said slot pivotally mounted in said slot, means on said safety catch for frictionally engaging the wall of said slot, and a screw for tightening the pivotal mounting for said safety catch.

1,897,152. WORKTABLE. WALTER O. SUSTINS, Saginaw, Mich., assignor to Sommers Bros. Appliance Co., Saginaw, Mich. Filed Oct. 16, 1930. Serial No. 489,103. 4 Claims. (Cl. 68—9.)



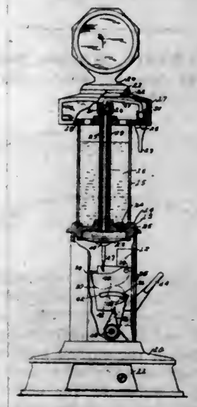
4. In combination with a table, a shelf hinged to said table and arranged to swing to an inverted position beneath the table top, a member supporting said shelf in forwardly extended horizontal position, a machine fixed to said shelf, an arm projecting from the opposite face of the shelf, and counterpoise means including a spring operatively interposed between the table top and the arm and adapted to exert pushing force against the arm below the hinge when the shelf is in its extended position and against the arm above the hinge when the shelf is in its inverted concealed position.

1,897,153. TANDEM DRIVE FOR MOTOR VEHICLES. RAY THORNTON, Detroit, Mich., assignor, by direct and mesne assignments, to Patent Developers, Inc., a Corporation of Michigan. Filed Jan. 12, 1931. Serial No. 508,322. 10 Claims. (Cl. 180—22.)



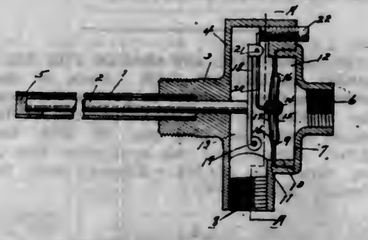
1. A tandem drive for motor vehicles including a rigid member secured to the frame of a motor vehicle, means secured to said rigid member for supporting vehicle springs, vehicle springs secured to said means, a driving axle adjacent one side of said rigid member, a second driving axle adjacent the opposite side of said rigid member, means secured to said axles for attachment to said vehicle springs, means for driving said axles including a source of power, and means for transmitting power from said source of power to said axles and including a shaft operatively connected with said source of power and a second shaft operatively connected with said axles, a chain box secured to said rigid member, means within said chain box for transmitting motion from one of said shafts to the other of said shafts and including sprockets secured to said shafts, and a splined hub mounted on one of said shafts adjacent the sprockets carried on said shaft, and means for moving said hub to engage selectively one of said sprockets.

1,897,154. LIQUID DISPENSING DEVICE. RAYMOND W. VAN SCHYNDLE and WINTON D. LANSING, Green Bay, Wis., assignors to Van-Lansing Novelty Co., Green Bay, Wis. Filed Nov. 12, 1928. Serial No. 318,677. 14 Claims. (Cl. 221—80.)



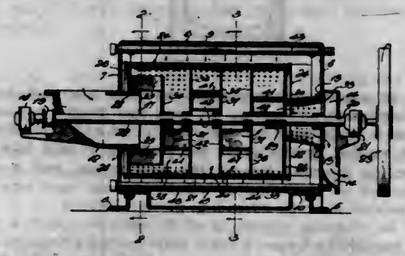
1. A liquid dispensing device including a reservoir, a pump disposed entirely beneath the reservoir, a conduit for dispensing liquid from the pump through the reservoir, and a downwardly extending dispensing nozzle for delivery of liquid by gravity.

1,897,155. THERMOSTATIC VALVE. SIDNEY P. VAUGHN, U. S. Navy, Ackerman, Miss. Filed Apr. 6, 1931. Serial No. 528,055. 18 Claims. (Cl. 236—48.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



18. In a thermostat including a flexible diaphragm having fluid passageways therethrough, a mushroom valve mounted on said flexible diaphragm and adapted to close the fluid passageways when the flexible diaphragm is released said mushroom valve having cupped edges overlapping said passageways, said mushroom valve being resilient centrally of said cupped edges whereby the center of said mushroom valve may resiliently yield after said cupped edges have contacted with said flexible diaphragm.

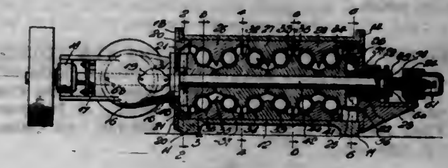
1,897,156. PULP AND DIRT SEPARATOR. HAROLD D. WELLS, Glens Falls, N. Y. Filed Sept. 26, 1931. Serial No. 565,372. 7 Claims. (Cl. 92—35.)



1. A machine of the class described comprising a horizontal cylindrical casing having a pulp inlet in one end wall, a clean pulp outlet in its other end wall, and a liquid and dirt outlet in the lower portion of its side wall; a driven rotatably mounted drum within and unidirectional with said casing, said drum having its side wall of screen form, one end of said drum communicating centrally of the latter with said pulp inlet to receive pulp therefrom, the other end of said drum communicating centrally of the latter with said pulp outlet; and pitched blades secured in said drum and spaced apart in the path of the pulp entering through said inlet, said blades being pitched in a direction to co-act with the ingoing pulp in assisting to rotate the drum.

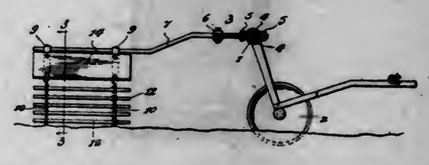
1,897,157. PAPER STUFF HYDRATOR. HAROLD DONALD WELLS, Glens Falls, N. Y. Filed Feb. 13, 1932. Serial No. 592,783. 11 Claims. (Cl. 92—26.)

1. In a machine of the class described, a fixed casing and a driven shaft extending longitudinally therethrough, an outer succession of race members slidably and non-rotatably mounted in said casing in concentric relation with said shaft, an inner succession of race members slidable on and rotatable bodily with said shaft, said inner race members being spaced from said outer race members to provide a material channel, all of said race members having combined end and radial thrust surfaces, a succession of annular series of rollers in said channel contacting with said combined end and radial thrust surfaces of said race members, yieldable means exerting a force on at least one succession of said race members to



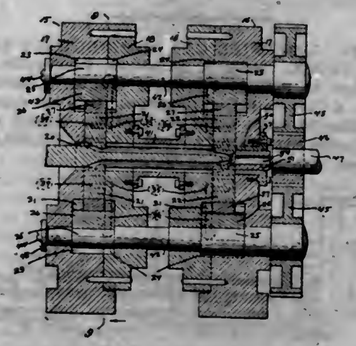
hold all of said race members and said rollers in yielding contact, a material inlet into the aforesaid channel, and a material outlet from said channel.

1,897,158. CULTIVATOR FENDER. DONALD G. WILLIAMS, Broken Bow, Nebr. Filed Mar. 17, 1932. Serial No. 599,500. 1 Claim. (Cl. 97—188.)



A fender attachment for cultivators comprising a draft bar, means for connecting the front end of the draft bar to a cultivator frame, arches secured to the rear portion of the draft bar and spaced longitudinally thereof, imperforate plates secured upon the upper portions of the arches and extending longitudinally of the draft bar, the lower portions of the arches being disposed vertically and provided with openings therethrough, tubes having their ends fitted through said openings, and stops engaged with the tubes to abut the arches and prevent displacement of the tubes.

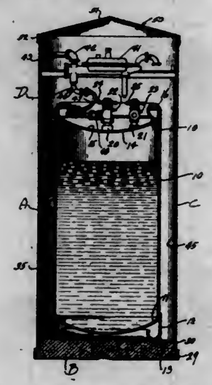
1,897,159. PROCESS FOR MAKING SPIKES. FRANK H. WILLIAMS, Incompetent, Buffalo, N. Y., by Annie M. Williams, guardian, Buffalo, N. Y., assignor to Spiral-Rolled Products Company, Inc., New York, N. Y., a Corporation of New York. Original application filed Nov. 16, 1922, Serial No. 601,262. Divided and this application filed July 19, 1929. Serial No. 379,448. 4 Claims. (Cl. 10—63.)



1. A process of making a spike, comprising the formation of a body by progressively compressing successive longitudinal portions thereof on more than two sides at once so that the displaced metal flows only inwardly toward

the axis, and longitudinally thereof, and then forming a fluted point continuously with the formation of the body by compressing the point at more than two sides at once at angles which correspond to the natural angle of flow of the metal.

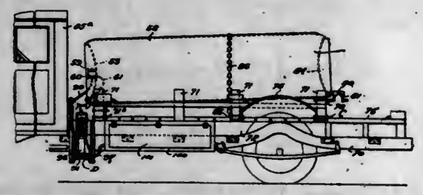
1,897,160. CUSTOMER'S APPARATUS FOR STORING AND DISPENSING LIQUID GAS. PAUL S. ENDACOTT, Bartlesville, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation of Delaware. Filed May 26, 1928. Serial No. 280,745. 13 Claims. (Cl. 220—85.)



10. Customers' equipment for dispensing liquid gas, comprising a tank of a nature suitable for receiving in its liquid phase a superatmospheric pressure liquefied gas, said tank having means thereon to enable the supply of liquid fuel to be fed thereinto, and means connecting the tank with the service line to the customer's premises including a stationary pressure reducing valve rigidly connected to the line leading to the customer's premises, and a loosely disposed length of high pressure resisting flexible tubing connected between the pressure reducing valve and tank through which gas passes from the tank to the pressure reducing valve and service line and which will enable the tank to be lifted for weighing without disrupting service flow of gas from the tank to the service line.

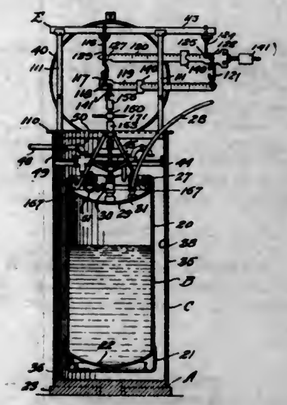
13. In equipment for dispensing liquefied gas, a base having a reduced upper portion, the base having lateral recesses therein extending through the thickness thereof, and a housing body receiving the upper reduced portion of the base therein, said housing body having a top ventilating opening and when assembled on the base having said recesses of the base opening thereinto for ventilation at the bottom of the housing body.

1,897,161. LIQUEFIED GAS DISTRIBUTOR'S SERVICING TRUCK. PAUL S. ENDACOTT, Bartlesville, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation of Delaware. Original application filed May 26, 1928, Serial No. 280,746. Divided and this application filed July 27, 1929. Serial No. 381,502. 2 Claims. (Cl. 280—5.)



1. In apparatus of the class described the combination of a truck including a chassis, a detachable tank for the chassis, a hook fixedly connected with the chassis at the front end thereof for engaging the front of the tank at the lower portion thereof, and a longitudinally extending clamping screw at the rear end of the chassis having a threaded connection with the chassis for movement longitudinally thereof into engagement with the rear end of the tank near the lower portion thereof.

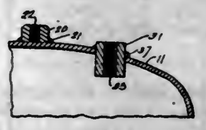
1,897,162. WEIGHING APPARATUS FOR TANK CONTAINED LIQUEFIED GAS. PAUL S. ENDACOTT, Bartlesville, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation of Delaware. Original application filed May 26, 1928, Serial No. 280,746. Divided and this application filed July 27, 1929, Serial No. 381,503. Renewed Sept. 16, 1932. 9 Claims. (Cl. 265—52.)



1. In weighing apparatus of the class described, a supporting frame comprising an open base frame, oppositely disposed upstanding legs on said frame and a stationary beam carried by the upper end portions of said legs and extending laterally beyond the base frame, and a scale supported on the beam at points between said legs and on the said laterally extending portion thereof.

8. In weighing apparatus of the class described, a ring-like supporting frame, a beam scale having a balance arm, means supporting said scale by and above said frame with the balance indicating end of the balance arm centrally located above said base frame, and a suspending device operatively connected to the scale and extending downwardly therefrom and thru the ring-like frame.

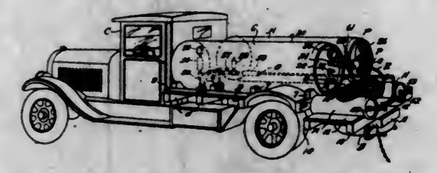
1,897,163. LIQUID GAS CONTAINER. ROSSWELL W. THOMAS, Bartlesville, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation. Filed Oct. 8, 1929. Serial No. 398,239. 4 Claims. (Cl. 220—3.)



1. In a drawn metal container, a cylindrical body having a dome-shaped top wall, said top wall provided with an opening, the axis thereof parallel to the axis of the cylindrical body and to one side of the crown portion of the top wall, and an elongate internally screw threaded sleeve fitting and extending through said opening, welded at its upper portion to the curved outer surface of the top wall.

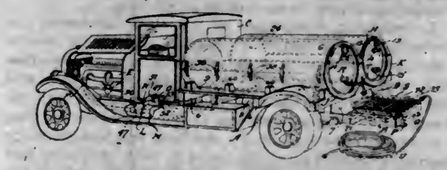
3. A closed drawn steel container having a convex surface, and a relatively small mass of metal welded on the surface preserving the convexity of the surface at that point, said mass of metal having a recess or hole therein, said recess or hole having such shape as to adapt it to receive a hook-like element, the longitudinal axis of the hook-like element passing through the center of gravity of the container.

1,897,164. LIQUEFIED GAS DISTRIBUTOR'S SERVICING TRUCK. PAUL S. ENDACOTT, Bartlesville, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation. Filed Nov. 9, 1929. Serial No. 406,148. 5 Claims. (Cl. 280—5.)



1. In a truck for transporting and distributing liquefied gas, the combination of a chassis including a cab, a plurality of elongated containers arranged in side by side spaced relation on said chassis to each side of the longitudinal axis thereof, longitudinally thereof and to the rear and spaced from the cab, said containers each having a controlled inlet and a controlled outlet, an air compressor directly to the rear of said cab betwen the cab and containers, and a conduit operatively connected with said compressor and adapted for connection with said controlled inlets for expressing liquefied gas from said containers thru said controlled outlets, said conduit extending longitudinally from said air compressor between said containers.

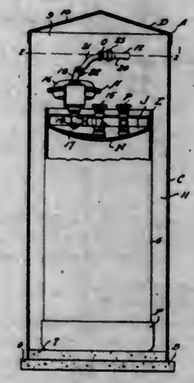
1,897,165. METHOD AND APPARATUS FOR TRANSPORTATION AND DISTRIBUTION OF LIQUEFIED GAS. PAUL S. ENDACOTT and ROSSWELL W. THOMAS, Bartlesville, Okla., assignors to Phillips Petroleum Company, Bartlesville, Okla., a Corporation. Filed Nov. 9, 1929. Serial No. 406,149. 7 Claims. (Cl. 221—67.)



1. In apparatus for distribution of liquefied gas, the combination of a truck including a heat engine for operation of the truck, provided with a conduit for the exhaust thereof, a container for liquefied gas under superatmospheric pressure, carried by the truck, means in communication with said conduit to conduct exhaust gases of said heat engine into such proximity to the liquefied gas in said container as to raise the temperature and increase the pressure thereof, a valve in said conduit for directing the exhaust gases to said means or to the atmosphere without passing thru said means, and a radiator carried by the truck, in communication with the outlet of said container for reducing the temperature of the outgoing liquefied gas.

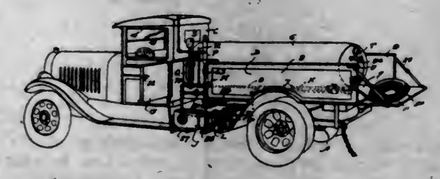
1,897,166. CUSTOMER'S EQUIPMENT FOR STORING, PROTECTING, AND DISPENSING LIQUEFIED GAS. ROSSWELL W. THOMAS, Detroit, Mich., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation. Filed Jan. 31, 1930. Serial No. 425,022. 8 Claims. (Cl. 221—73.5.)

1. Customer's equipment for dispensing an inflammable liquefied gas comprising a portable drum for the liquefied gas under superatmospheric pressure, a pressure regulator rigid with the drum and in communication therewith so as to emit the contents of the drum from the regulator at reduced pressure and in a gaseous phase changed form, a cabinet enclosing said drum and pressure regulator and spaced laterally therefrom so that the drum and its contents may be lifted while in the cabinet for weighing purposes, and a service conduit line including a flexible



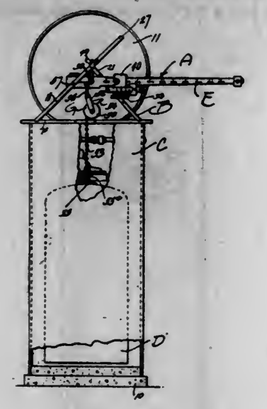
section in said cabinet operatively connected to the outlet of said pressure regulator and a rigid section connected to said flexible section, and extending thru said cabinet, so that the flexible section is subjected to a considerably lower pressure than the drum and so that the drum may be lifted for weighing purposes while in the cabinet and while said cabinet and rigid section of the service conduit line remain stationary.

1,897,167. APPARATUS FOR TRANSPORTATION AND DISTRIBUTION OF LIQUEFIED GAS. ROSSWELL W. THOMAS, Detroit, Mich., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation. Filed Jan. 31, 1930. Serial No. 425,023. 9 Claims. (Cl. 221—67.)



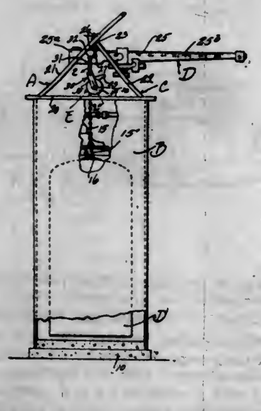
1. In apparatus for transporting and distributing liquefied gas, the combination of a pump, means for operating same, a container for liquefied gas, intake conduit means affording communication between the said container and the intake of the pump, a relatively long discharge conduit means in communication with the discharge of said pump and provided with a valve at its end portion remote from said pump, adapted to control exit of said discharge conduit means, means in communication with said discharge conduit means for cushioning the pulsations of the pump when operating, by-pass means operating automatically upon the building up of a predetermined pressure in said cushioning means for by-passing the liquefied gas from the discharge directly to the intake of said pump when the latter is operating and said valve is closed, and manually operable by-pass means to by-pass the liquefied gas from the discharge directly to the inlet of said pump.

1,897,168. WEIGHING MECHANISM. HURLBERT R. BRIDGWATER, Detroit, Mich., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation. Filed Feb. 14, 1930. Serial No. 428,479. 7 Claims. (Cl. 265—52.)



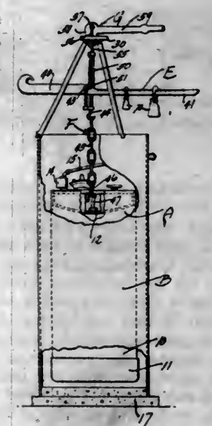
1. In weighing apparatus the combination of a supporting frame, a balance beam, means pivotally mounting the balance beam upon the supporting frame in suspended relation therefrom, a weight slidable on the balance beam, and a support on the frame for receiving the said weight therein to support the beam through the weight in a rest position inoperative upon the frame.

1,897,169. WEIGHING MECHANISM. ROSSWELL W. THOMAS, Detroit, Mich., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation. Filed Feb. 14, 1930. Serial No. 428,502. 1 Claim. (Cl. 265—52.)



In weighing mechanism of the class described, the combination with a customer's tank, and a housing for receiving the customer's tank in a vertically movable relation therein, of a portable frame removably disposed upon said housing, a scale including a balance beam pivotally carried by said frame and having a minor portion to one side of the pivot above the central portion of said housing and a major portion to the other side of the pivot, extending laterally beyond the frame and housing, and a longitudinally adjustable device adapted for detachable connection to the tank and pivotally connected to the minor portion of said balance beam, whereby tanks of different heights may be initially connected to said scale through said longitudinally adjustable device and subsequently lifted by swinging of said balance beam.

1,897,170. WEIGHING MECHANISM. ROSSWELL W. THOMAS, Detroit, Mich., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation. Filed Feb. 14, 1930. Serial No. 428,503. 2 Claims. (Cl. 265—52.)

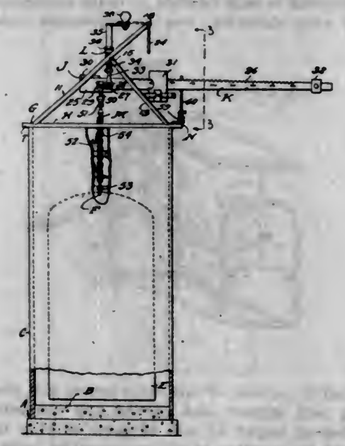


1. In weighing apparatus, the combination of a frame including a platform having an elongate slot therein open to the top and bottom of the platform, a load supporting and weighing device including a link having spaced legs extending thru said slot, and a cam above said platform engaging at the longitudinal marginal portions of the slot and to which said legs of the link are operatively connected for raising and lowering of the load supporting and weighing device by movement of the cam.

2. In weighing mechanism of the class described, the combination with a customer's tank, a housing for receiving the customer's tank in a vertically movable relation therein, and a service connection to the tank which will permit the tank to be elevated in the housing without disconnecting flow of gas therefrom to the service connection, of a portable frame including a platform and legs pivotally connected to and extending beneath said platform and with their lower end portions formed for detachably engaging the upper marginal portion of said housing, and a load lifting, supporting and weighing device carried by said platform and extending beneath the upper marginal portion of said housing and adapted to be detachably connected to said tank for weighing the tank and its contents while in said housing.

1,897,171. LOAD LIFTING AND WEIGHING DEVICE. KENNETH R. LEWIS, Orchard Lake, Mich., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation. Filed May 2, 1932. Serial No. 608,800. 6 Claims. (Cl. 265—52.)

4. A load lifting and weighing device comprising a supporting frame, a scale including a balance beam, means pivotally connected with the beam and pendantly supporting the scale from the frame and for bodily raising and lowering the scale with respect to the frame, an arm pivotally carried by the frame provided with a C-shaped terminal portion, remote from the pivot of the arm for embracing the scale beam remote from its connection with said first mentioned means to restrict movement of the beam to narrow limits during the raising and lowering of the scale, said arm being movable to a non-embracing position to permit movement of the beam thru wide limits, and a device for coupling the scale to the load.



6. In weighing mechanism of the class described, the combination with a customer's tank, and a housing for receiving the customer's tank in a vertically movable relation therein, of a portable frame removably disposed upon said housing, a scale, means adjustably suspending said scale from the frame above the housing, and a coupling device for suspending the customer's tank from the scale, including a plurality of independent hooks located at different distances vertically below the scale and in the housing below the base of said supporting frame.

1,897,172. VANE RIM FOR TURBINES. FREDRIK LJUNGSTRÖM, Brevik, Sweden, assignor to Aktiebolaget Spontan, Stockholm, Sweden, a Corporation of Sweden. Filed Aug. 16, 1929, Serial No. 386,241, and in Sweden Aug. 18, 1928. 21 Claims. (Cl. 253—16.5.)



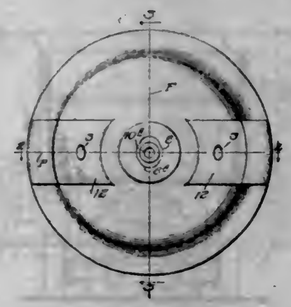
1. In a turbine, a rotor comprising axially spaced supporting members and a plurality of blades secured to and extending between said members, said blades having axially curved inlet and outlet edges, the conformation of said blades being such that stress therein due to centrifugal force, on rotation of the blades, is substantially uniformly distributed over and at right angles to any cross-section of minimum area.

1,897,173. AIR NOZZLE FOR SPRAY APPLIANCES. ROBERT LONO and ERIC GUSTAFSSON, Chicago, Ill., assignors to Binks Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 29, 1931. Serial No. 533,664. 22 Claims. (Cl. 91—45.)

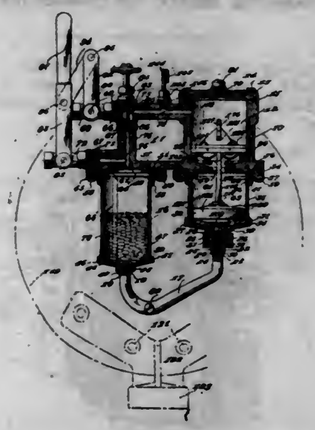
1. The method of producing a flattened spray of liquid material of sharply defined cross-sectional contour, which consists in forming the liquid into a stream of elliptical cross-section and subjecting said elliptically sectioned stream to the compressing action of two opposed jets of air having their axes in a common plane with the longer axis of the said elliptical cross-section of the stream.

13. In a liquid spray appliance, an air-projecting member having a frontal wall provided with an air discharge port;

the front and rear ends of the said port each being substantially elliptical, with the major ellipse axis of both ends in a common plane diametric of the port, and with the length of the said major axis longer at the rear end of the port than at the forward end, the minor ellipse axes being equal at both ends of the port.



1,897,174. ORIFICE METER. ALLEN D. MACLEAN, Wilkinsburg, and FRITZ NIBSEMANN, Pittsburgh, Pa., assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 14, 1928. Serial No. 292,819. 11 Claims. (Cl. 73—167.)

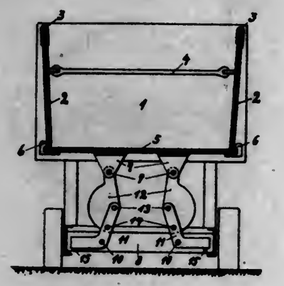


5. In a differential pressure meter, a high pressure chamber and a low pressure chamber connected by a U conduit, liquid in said chambers and conduit, a float in said low pressure chamber, a rack-bar carried by said float and having rack teeth on opposite sides thereof, gears on opposite sides of the rack bar in mesh with the teeth on said rack-bar and adapted to be rotated in opposite directions upon movement of said float, and indicator-operating means interchangeably operated with either of said gears.

1,897,175. AUTOMATIC FLAT-BOTTOM UNLOADING DEVICE. ARTHUR MEYER, Hamburg, Germany. Filed Nov. 8, 1929, Serial No. 405,830, and in Germany Nov. 9, 1928. 3 Claims. (Cl. 298—26.)

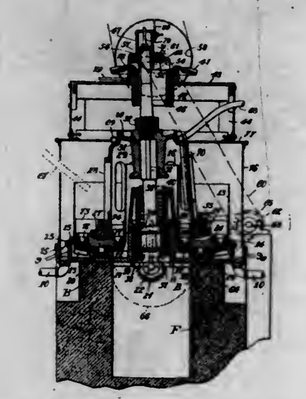
1. A dump car including a car bottom, a frame, levers pivoted to the frame on opposite sides of the center thereof, levers depending from the car bottom on opposite sides of the center thereof and pivoted thereto, said latter levers having pivotal connection with the levers pivoted

to the frame, and interlocking means for connecting the levers on the frame and the levers depending from the car bottom to hold the car body in loading position, the levers pivoted to the frame being held at an angle to the ver-



tical when connected with the levers depending from the car bottom by said interlocking means whereby to normally present a discharge moment of the body on release of the interlocking means.

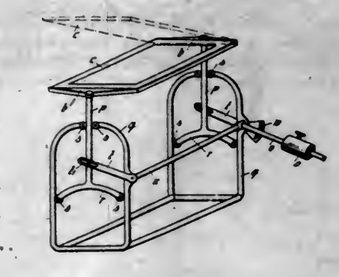
1,897,176. APPARATUS FOR PULVERIZING AND CLASSIFYING ORE AND THE LIKE. FRANK C. PERRY, Los Angeles, Calif., assignor of one-half to Edgar T. Wallace, Los Angeles, Calif. Filed Dec. 31, 1928. Serial No. 329,511. 15 Claims. (Cl. 83—10.)



1. In comminuting apparatus, a pair of superposed annular crushing members one supported from the other, and actuating means therefor operative to gyrate one member and progressively move successive portions of said member into and out of engagement with the other member and simultaneously rotate the other member in a direction opposite to the gyratory movement of the gyratory member to simultaneously exert crushing and attrition forces on material between the crushing members.

1,897,177. SUPPORTING FRAME FOR RÖNTGEN RAY APPARATUS. ERNST POHL, Kiel, Germany. Filed July 9, 1928, Serial No. 291,384, and in Germany July 12, 1927. 8 Claims. (Cl. 250—84.)

1. In Röntgen ray apparatus adapted for Röntgen observation and photography of a patient in various positions, the combination of a stand, a support for Röntgen ray apparatus adapted to be moved towards and away from a patient, and means for adjustably supporting said support at various desired heights, comprising a member carrying said support, and arranged for movement in its axial direction only, lever means pivoted to said stand and connected to said member to cause movement thereof in said axial direction, and an adjustable counterpoise



connected to an arm of said lever means and arranged to balance said support and carried and connected parts, at a desired height of said support, varying in accordance with the position of said counterpoise, each different position of said counterpoise corresponding to a different height of said support.

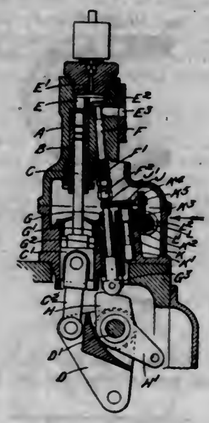
1,897,178. REFRIGERANT COMPRESSOR COOLING SYSTEM. LAWRENCE A. PHILIPP, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Mar. 14, 1930. Serial No. 435,938. 15 Claims. (Cl. 62—115.)

1. A refrigerant condensing unit comprising a compressor for increasing the pressure of refrigerant fluid exhausted from a refrigerant evaporating unit, a condenser for receiving the fluid discharged from the high side of said compressor, means associated with the compressor for retaining a quantity of cooling fluid in thermal contact therewith, and a heat radiating device connected to said means for radiating the heat absorbed thereby.

1,897,179. VALVE OPERATING MECHANISM FOR FLUID PRESSURE ENGINES, PUMPS, OR COMPRESSORS. HARRY RALPH RICARDO, London, England. Filed May 27, 1930, Serial No. 456,238, and in Great Britain June 25, 1929. 3 Claims. (Cl. 103—37.)

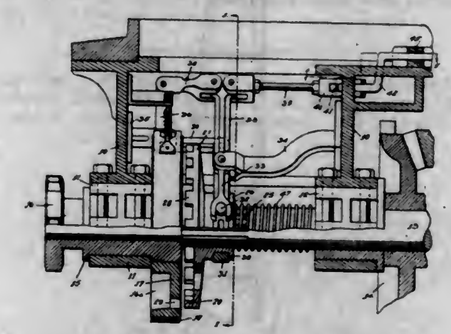
1. Mechanism for adjusting the clearance between a valve and tappet including in combination a rotatable member of the nature of a face cam having thereon a curved wedge-like part disposed circumferentially with respect to the axis about which the cam member can rotate and adapted to be interposed between the tappet and valve, this rotatable member being movable in the axial direction with the valve and tappet, a gear wheel rotatable with the cam member, a rack engaging the gear wheel and formed as a worm on a rotatable shaft, means for moving

the worm shaft longitudinally so as to rotate the cam member and thereby adjust the position of the wedge-like part between the tappet and valve, and means whereby



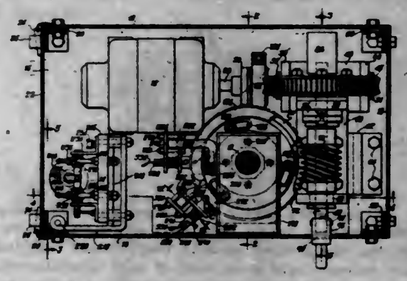
the worm shaft can be rotated while being held against movement in the axial direction so as to effect a fine adjustment of the cam member.

1,897,180. STEERING MECHANISM FOR TRACTORS. GEORGE T. RONK, Cedar Rapids, Iowa. Filed Feb. 28, 1928. Serial No. 257,772. 1 Claim. (Cl. 192—17.)



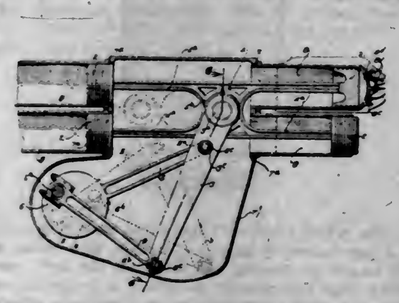
In a device of the class described, a supporting frame, a driving shaft rotatively mounted therein, a gear fixed to one end of said shaft, a sleeve rotatively mounted on the opposite end of said shaft, said sleeve being provided with a sprocket wheel for operating a link tread, said sleeve being provided with a brake drum, the web of said drum being provided with a circular row of openings concentric with said shaft, a band for said drum, a hub splined to said shaft having a disk, said disk being provided with laterally projecting lugs to coact with the openings of the drum, a spring supported on said shaft for yieldably retaining said lugs within said openings, a lever for releasing the lugs of said disk from said drum, a rock shaft having an arm connected with said brake band, a second arm on said rock shaft, a bell crank lever, and an adjustable link for connecting one end of said bell crank lever with the second rock arm, a link for connecting the other end of said bell crank lever with the lever for releasing said disk, and an adjustable link for operating the last said link.

1,897,181. POWER OPERATED SWITCH MECHANISM. HOWARD D. SALISBURY, Birmingham, Ala. Filed July 25, 1928. Serial No. 295,338. 6 Claims. (Cl. 200—92.)



1. An apparatus of the class described comprising a main switch, a motor and power transmission mechanism including worm gearing operatively connected therewith, a self-contained controller unit driven through said worm gearing by said motor, and means coacting with said controller for maintaining a circuit through the motor for a sufficient time interval to effect the movement of the main switch to its full open or its full closed position, and means for adjusting the controller unit as a whole relatively to said worm gearing and transmission mechanism whereby an accurate setting is secured so that the motor circuit will be controlled with precision to stop the main switch in exactly its full open or full closed position.

1,897,182. INTERNAL COMBUSTION ENGINE. ALOYSIUS S. TERHAAR, San Diego, Calif. Filed Apr. 9, 1930. Serial No. 442,748. 9 Claims. (Cl. 74—14.)

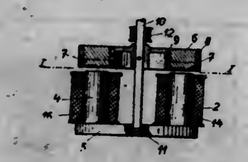


1. In an internal combustion engine, a plurality of cylinders arranged in opposed sets, pistons for said cylinders, a cross head connecting a plurality of said pistons, master rods connected to and supported by said cross head, a crankshaft, and connecting rods arranged upon said master rods so as to transmit movement thereof to said crankshaft.

1,897,183. METHOD OF AND MATERIAL EMPLOYED IN THE MANUFACTURE OF REFRACTORY ARTICLES. HAROLD E. WHITE, Zelienople, Pa., assignor to Lava Crucible Company of Pittsburgh, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 30, 1930. Serial No. 424,737. 5 Claims. (Cl. 25—156.)

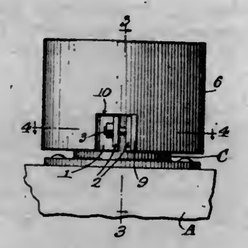
1. A material for making a refractory article comprising crystalline alumina in grain form and of high crystallization, crystalline mullite in grain form and having finer grains than the crystalline alumina, and a high alumina bonding clay.

1,897,184. INDUCTION MOTOR. AUGUST ZOPF, Modling, near Vienna, Austria. Filed May 3, 1930, Serial No. 449,481, and in Austria May 6, 1929. 6 Claims. (Cl. 172—280.)



1. An induction motor having an iron stator element which comprises spaced individual pole cores secured to a yoke ring and a rotor element magnetically bridging the spaces between said cores, one of said elements comprising a substantially annular iron member which is subdivided by slots which extend substantially normal to the air gap and which cross the annular member at other than right angles to the direction of movement of the rotor surface, said annular iron member being interposed in the magnetic circuit in such position that one surface thereof forms one side of the air gap and thus serving to distribute the magnetic flux generated in the stator, whereby said flux can develop freely and higher harmonics in the rotor are suppressed.

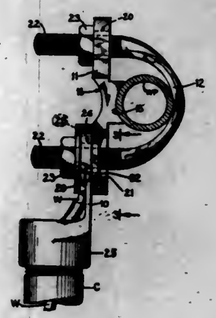
1,897,185. LOCK FOR GASOLINE TANKS. WILLIAM G. BRUNING, Omaha, Nebr. Filed Apr. 8, 1932. Serial No. 604,077. 2 Claims. (Cl. 70—90.)



1. The combination with the filling neck of a container and a cap removably mounted thereon, of a collar on the neck, means for binding the collar on the neck, ears extending from the ends of the collar, a projection on the collar at a point opposite the ears, a cover adapted to be positioned over and around the cap and collar and having an opening to receive the ears and an angular slot to receive the projection, and an ear on the cover adjacent to the opening, said cover being rotatable relative to the cap to position the projection in the innermost portion of the angular slot and the ear of the cover close to the ears on the collar, there being apertures in all of the ears for the reception of a lock to hold the cover against rotation to release it from the projection.

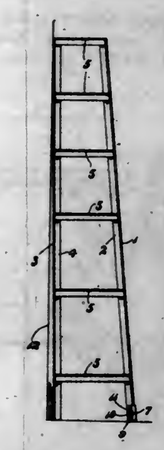
1,897,186. GROUNDING FITTING. STEPHEN N. BUCHANAN, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed May 15, 1930. Serial No. 452,570. 6 Claims. (Cl. 247—1.)

1. A grounding fitting comprising a conduit receiving member, anchorage means to anchor a conduit thereto, a member having a seat upon opposite sides thereof to receive grounded pipes of different diameters, means to clamp the grounded pipe thereto, angularly disposed faces upon one of said members, means upon the other member engaging at least one of the angularly disposed faces of the other member irrespective of which seat is in clamping



position thereby locking these two parts against angular displacement, and means to secure the two members together.

1,897,187. SHELVING APPLIANCE. ELVAH O. BULMAN, Grand Rapids, Mich., assignor to E. O. Bulman Manufacturing Company, Grand Rapids, Mich., a Corporation of Michigan. Filed June 3, 1929. Serial No. 367,961. 2 Claims. (Cl. 45—139.)



1. In combination with a supporting leg T-shaped in cross section, of a foot member formed of sheet metal to embrace and slidably engage the lower end of the leg and including spaced apart flanges located one at each side of the web of said leg, each of said flanges having an elongated slot therein, and a bolt passing through said slots and the web of said leg to draw said flanges toward said web and clamp the foot member tightly upon the leg in any position to which adjusted.

1,897,188. DIALKYL RESORCINOLS. WALTER G. CHRISTIANSEN, Glen Ridge, N. J., and SIDNEY E. HARRIS, Lynbrook, N. Y., assignors to E. R. Squibb & Sons, New York, N. Y., a Corporation of New York. Filed July 7, 1932. Serial No. 621,300. 4 Claims. (Cl. 260—154.)

1. Dialkyl resorcinols of the general formula $C_6H_2(OH)_2R'R''$ wherein R' and R'' represent different alkyls one of which contains three or more carbon atoms

1,897,189. PREPARATION OF VULCANIZABLE LATEX. JAMES B. CROCKETT, Malden, Mass. Filed Nov. 22 1930. Serial No. 497,609. 6 Claims. (Cl. 18—50.)

1. A process which comprises adding to latex considerably more than about 1% flowers of sulphur based on latex solids, and heating the latex while maintaining it in substantially unvulcanised condition and substantially free from visible agglomerations of rubber particles to associate some of the sulphur in a non-subsiding state with the latex.

1,897,190. ROTARY PUMP MACHINE. GEORGE EDWARD THOMAS EYSTON, London, England, assignor to Powerplus (1927) Limited, London, England, a Corporation of Great Britain. Filed Apr. 21, 1931, Serial No. 531,763, and in Great Britain Apr. 22, 1930. 10 Claims. (Cl. 103—160.)



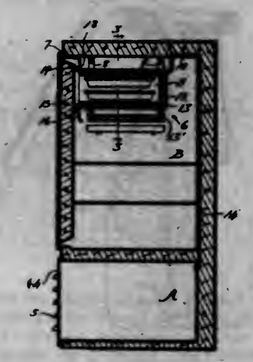
1. Rotary pump or like machine comprising an outer casing, a rotary working chamber in said casing, a piston operative in said working chamber, a circular surface on the piston and a circular surface mounted eccentrically in said casing, said surfaces being adapted to have rolling contact engagement with each other to control movement of the piston in said working chamber, an axial drive shaft for said rotary working chamber and a gear drive between said shaft and said piston.

1,897,191. EXPLOSION ENGINE. GIOVANNI FARINA, Turin, Italy. Filed July 19, 1930, Serial No. 469,123, and in Italy Aug. 8, 1929. 5 Claims. (Cl. 123—55.)



1. A manifold for internal combustion engines with star-arranged cylinders, comprising walls providing an annular space, the outer one of said walls having a cylindrical profile, outlets departing from said outer wall and each leading to one of the engine cylinders, the inner wall of said space being shaped to a plurality of volute arches following each other which separate the annular space in compartments communicating through restricted passages, pockets formed in said inner wall intermediate the beginning and the end of two subsequent volute arches, said pockets opening tangentially in said annular space, means for supplying fuel mixture, and a connection from each of said pockets to said means for supplying fuel mixture.

1,897,192. FRONT PLATE CONSTRUCTION FOR TRAY COMPARTMENTS. HAROLD A. GREENWALD, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Oct. 14, 1929. Serial No. 399,544. 2 Claims. (Cl. 62—116.)



1. In combination, an ice tray compartment having an open forward end and provided at said end with a marginal laterally extending flange, and a front piece for the compartment comprising a substantially flat plate having an opening receiving the lateral flange and having laterally extending substantially flat wing portions provided with openings for receiving refrigerator instruments.

1,897,193. COIN CONTROLLED DEVICE. LOUIS M. HALL, Fort Thomas, Ky., and HARRY MCCREARY, Youngstown, Ohio, assignors to The Monarch Tool & Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 27, 1932. Serial No. 589,072. 6 Claims. (Cl. 194—92.)

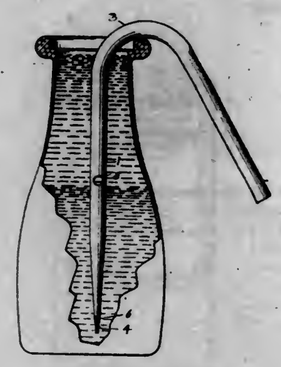


6. A coin controlled device comprising a support plate adapted to be vertically positioned against a wall member or the like and having an aperture therein, a housing extending through said aperture, and having a coin-release opening adjacent its inner end, a coin-carrying member slidable in the housing and adapted for full inward movement when provided with a coin of predetermined diameter, locking means positioned above the housing and adapted to preclude full operation of the coin carrying member without a coin of the predetermined diameter, means associated with the upper and the lower surfaces and the sides of the coin carrying member and housing precluding access to said locking means from the exterior of the support plate, and means associated with said coin release opening for positively directing a coin through the opening.

1,897,194. SIPHON CREAM REMOVER. ROLLYN HAWKINS, Indianapolis, Ind. Filed June 4, 1932. Serial No. 615,275. 2 Claims. (Cl. 137—20.)

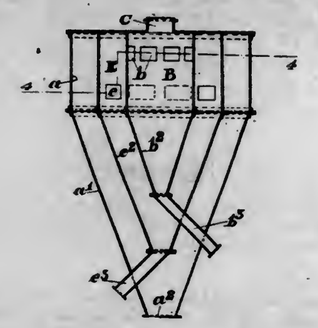
1. A siphon device comprising a body portion closed at its lower end and tapering on two opposite sides toward

said closure, said end having an aperture through two of its most distantly separated walls near the closure, a downwardly discharging spout and a goose neck con-



necting the upper body and spout portions, the body portion being laterally apertured on two diametrically opposite sides in the upper portion for the inflow of liquid.

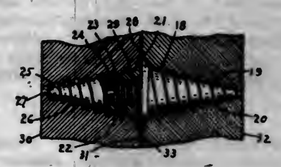
1,897,195. CENTRIFUGAL APPARATUS FOR DUST EXTRACTION. PETER HOWDEN, Halifax, England, assignor to British Rema Manufacturing Co., Ltd., Halifax, England, a Corporation of Great Britain. Filed June 5, 1930, Serial No. 459,309, and in Great Britain July 18, 1929. 2 Claims. (Cl. 209—144.)



1. A separator and grader comprising inner, intermediate and outer cones, vanes at the upper portions of the intermediate and inner cones providing communication with the outer and intermediate cones respectively, the vanes of the intermediate cone being disposed substantially below the vanes in the inner cone, a tangential inlet adjacent the upper end of the outer cone, an axial outlet at the upper end of the inner cone, and outlets for deposited material at the lower ends of each of said cones.

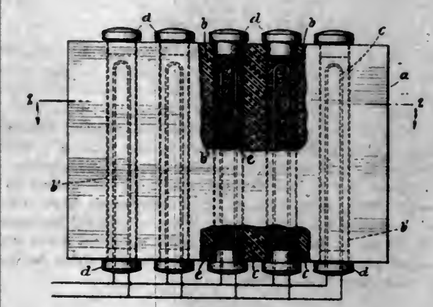
1,897,196. COMBINATION MACHINE AND WOOD SCREW. EMMA F. HUNT, New York, N. Y. Filed Aug. 21, 1929. Serial No. 387,351. 1 Claim. (Cl. 85—42.)

In a new article of manufacture, the combination of two conventional screws adapted to cooperate with each other in holding two articles firmly and detachably together, both screws having the conventional slotted heads and provided with wood threads, one having a female threaded portion within the screw head and the other a projecting male portion upon its head adapted to engage



with said female portion both male and female threaded portions beginning at the flat surface of the conventional screw head.

1,897,197. HEATING PLATE. FRANZ JOLAS, Cologne, Germany. Filed Mar. 15, 1930, Serial No. 436,156, and in Germany Dec. 30, 1929. 1 Claim. (Cl. 219—37.)



A heating plate comprising in combination a plate having a plurality of straight parallel insulated channels, means for closing said channels at both ends, insulated electric resistances in said channels, and a mercury filling in said channels surrounding said insulated resistances.

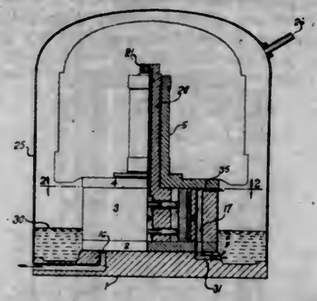
1,897,198. PAPER BOARD. CHARLES L. KELLER, Glendale, Ohio, assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed June 27, 1927. Serial No. 201,667. 7 Claims. (Cl. 93—36.)



1. That method of protecting poorly bending box board from cracking at the score lines, which consists in coating said box board, at the score lines, at least, with a tenacious layer of a flexible substance.

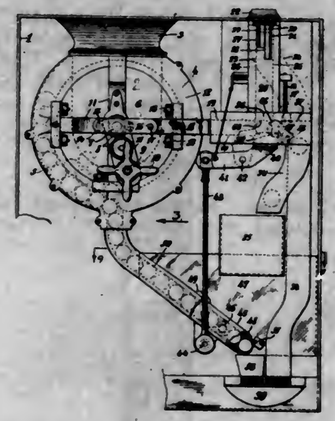
1,897,199. COMPRESSOR. MAHLON W. KENNEY, Elmhurst, Ill., assignor, by mesne assignments, to Grigsby-Grunow Company, a Corporation of Illinois. Filed Mar. 30, 1931. Serial No. 526,312. 7 Claims. (Cl. 230—232.)

5. A compressing system comprising a compressor adapted to operate upon a gas, said compressor being provided with intake and exhaust ports, a chamber having a body of liquid therein in communication with said exhaust port, said exhaust port being adapted to release a substantial portion of the compressed gases beneath the surface of the



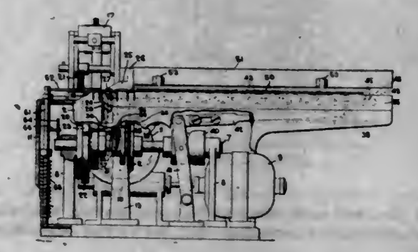
liquid, and an auxiliary port within the high pressure region in said chamber above said liquid in communication with said exhaust port, whereby when the compressor stops back-flow of said liquid into said compressor will will be avoided.

1,897,200. COIN CHANGING MACHINE. HENRY G. KLETT, New York, N. Y. Filed Jan. 8, 1931. Serial No. 506,376. 1 Claim. (Cl. 194—75.)



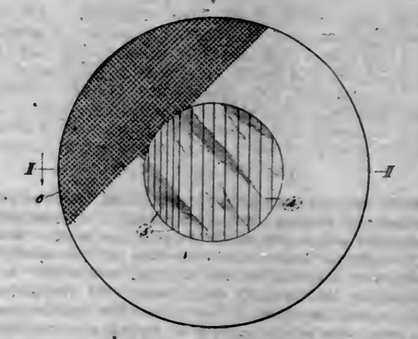
In a coin changing machine in combination, a relatively flat drum shaped container for containing a supply of coins in indiscriminate order, one side of said container being open and formed with an annular coin groove, a disk for closing said open side of the container, coin agitating means on said disk extending into the container, means supporting said disk in movable relation to the container, means for rotating said disk whereby to cause said agitating means to agitate the coins and cause them to pass into said coin groove, a coin delivery member for containing a given number of coins, a coin feeding chute leading from said coin groove and coin container to said delivery member, gravity operated means for normally maintaining said delivery member in coin receiving position with respect to said coin feeding chute, a stop normally preventing delivery of the coins from said delivery member, means for placing a larger coin in a given position with respect to said gravity operated means, a member for displacing said larger coin and cause it to actuate the said gravity operated means whereby to effect automatic delivery of the coins in the delivery member and means for operating said displacing member from the said rotating means.

1,897,201. MACHINE FOR OPERATING UPON A TICKET STRIP. FREDERICK W. LAENCHER, Elmhurst, N. Y., assignor to A. Kimball Company, New York, N. Y., a Corporation of New York. Original application filed Mar. 11, 1924, Serial No. 698,406. Divided and this application filed Sept. 12, 1930. Serial No. 481,438. 3 Claims. (Cl. 101—292.)



1. A machine for operating upon a ticket strip comprising a horizontal platen, means for feeding a ticket strip step by step to present successive sections thereof onto the platen, means for printing and severing from the strip the sections successively fed onto the platen, a kick-off arm mounted to sweep in a horizontal plane across and parallel with the face of the platen, and means for swinging the kick-off arm at the completion of each printing operation to cause it to sweep the printed and severed section from the platen.

1,897,202. HEADLIGHT OR SEARCHLIGHT. JOHN L. LEHMAN, Kansas City, Mo. Filed Mar. 12, 1931. Serial No. 521,895. 2 Claims. (Cl. 240—41.4.)

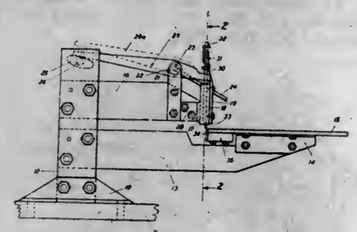


1. A light comprising the combination of a parabolic reflector, and an electric light bulb, a lens closing the open end of the reflector and having a central refracting area corresponding in extent to the diameter of a beam of light reflected by that portion of the reflector rearward of a vertical line passing through the focus of the reflector, and a surrounding, diffusing or interrupting surface to prevent concentration of any light except that transmitted through the central refracting area, said central refracting area comprising a plurality of concave cylindrical portions to diffuse a fixed part of said light horizontally and a plurality of plane triangular prisms to produce a fixed concentrated lateral or side beam.

1,897,203. GASKET CUTTING MACHINE. CLARENCE C. LENARTH, Gardena, Calif. Filed Mar. 2, 1932. Serial No. 596,218. 2 Claims. (Cl. 164—47.)

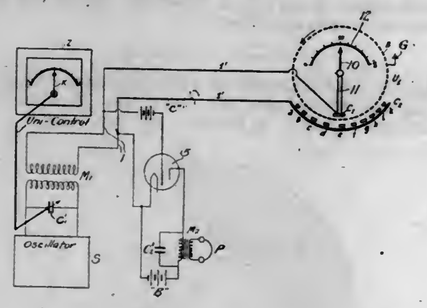
1. A gasket cutting machine, comprising: a cam and a means for rotating said cam; a chisel arranged for longitudinal reciprocation; a pivoted rocker arm, one end of

said arm arranged to contact with said cam, the other end of said arm actuating said chisel; means to raise the pivotal point of said arm to prevent contact between



said arm and said cam; and a table having a shearing edge arranged to cooperate with the cutting edge of said chisel.

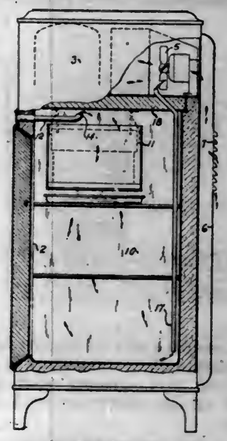
1,897,204. MEANS FOR THE REMOTE READING OF INSTRUMENTS. SIEGMUND LOEWE, Berlin, Friedenau, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 26, 1927, Serial No. 171,359, and in Germany May 15, 1926. 18 Claims. (Cl. 177—351.)



9. In an arrangement for determining from a central station the reading of an instrument at a substation, means for generating oscillations at the central station, a plurality of piezo-electric crystals at the substation, means for transmitting the central oscillations to the substation, said crystals being selectively responsive to said central oscillations for generating oscillations at the substation at a frequency in accordance with the position of the indicator of the instrument desired to be read at the substation, said oscillations generated at the substation being transmitted back to the central station over the aforementioned transmission means, means for heterodyning the central and substation oscillations at the central station, means for detecting the resulting beats, and means for intermittently interrupting the excitation of the crystals at the substation.

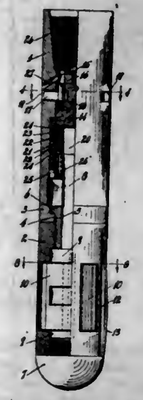
1,897,205. REFRIGERATION APPARATUS. DAVID E. MACCABEE, Elmhurst, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 3, 1931. Serial No. 554,728. 3 Claims. (Cl. 62—116.)

1. In a refrigerator of the mechanical refrigeration type having a fan or similar means for establishing a flow of air in the neighborhood of said refrigerating apparatus, the combination of an air inlet giving access to said refrigerating chamber from the outside, and an air exhaust, one end of said exhaust being disposed within said refrigerating chamber and the other end of said exhaust being disposed in proximity to said fan, whereby when said fan is operated a forced circulation of air through the refrigerating chamber is established, the flow



of air being so small in comparison to the volumetric capacity of the refrigerating chamber as to have a negligible effect on the refrigeration process.

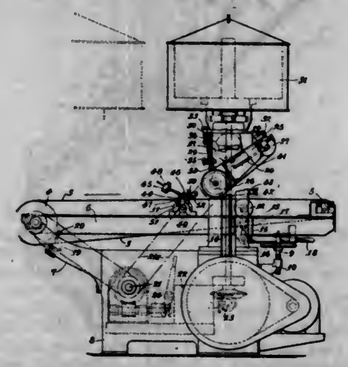
1,897,206. CASING CUTTER. NEAL THOMAS MCCANN, Huntington Beach, Calif., assignor of one-fourth to Grover C. Dodson, Long Beach, Calif. Filed Dec. 1, 1981. Serial No. 578,831. 9 Claims. (Cl. 81—173.)



1. A casing cutter comprising a body, a plurality of cutters in said body and relatively rotatable with reference to said body to project the cutters, a plurality of dogs, means mounting said dogs and being relatively rotatable with reference to said body to project said dogs, said mounting means being held stationary by engagement of the dogs with the casing, and friction drive means between said dog mounting means and the cutters.

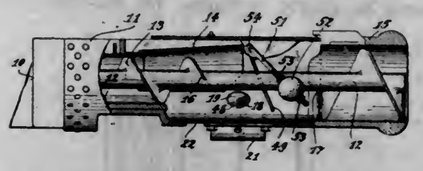
1,897,207. WAFER ICING MACHINE. ROBERT FRENCH MACFARLANE, Fulham, London, England, assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed May 28, 1930, Serial No. 456,728, and in Great Britain June 4, 1929. 7 Claims. (Cl. 91—2.)

1. In combination, a wafer forwarding conveyor and means for actuating the same, a movable frame upon which said conveyor is mounted, adjusting means for raising and lowering an end of said frame, a roller mounted on said frame and independently adjustable toward and from the wafer-carrying run of the conveyor, a cream supply hopper above said run, an endless traveling band beneath said hoppper, cream feeding devices and thickness-gauging devices operatively associated with the hopper and the traveling band, means for appropriately directing the portion of said band carrying a layer of cream, toward said wafer forwarding conveyor so as to



bring the outer or exposed face of said layer of cream into contact with the faces of wafers on the conveyor, the direction of travel of said cream-carrying band, at such point of cream application, being opposite to the direction of travel of the wafer conveyor, spring hold-down means arranged to yieldingly press wafers against the conveyor while they are passing said point of cream application, and cream-spreading, cream-smoothing and thickness-gauging devices operatively associated with said conveyor beyond said point, for the purposes set forth.

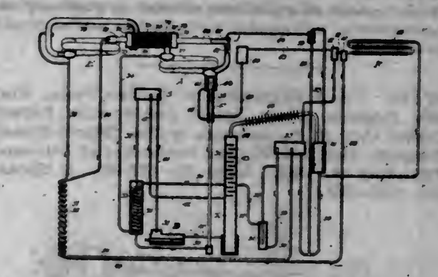
1,897,208. MEASURING DEVICE. GEORGE H. MASSY, Bayonne, N. J. Filed Aug. 23, 1929. Serial No. 387,831. 10 Claims. (Cl. 73—37.)



3. In a measuring device, the combination with a nearly horizontal conduit having an opening in its wall, of means for feeding granular material through the conduit, a swinging gate in the conduit journalled near its top so as to swing well clear of the wall of the conduit, a weight holding the gate against the pressure of the oncoming material to keep constant the cross-sectional area of the column of material, a relatively smooth rotatable device projecting through the opening in the wall of the conduit so that the material turns the rotatable device before it has cleared the gate, and a registering device driven by the rotating device to indicate the volume of material fed through the conduit.

1,897,209. ABSORPTION REFRIGERATING APPARATUS. RUDOLPH S. NELSON, Rockford, Ill., assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Jan. 14, 1931. Serial No. 508,572. 6 Claims. (Cl. 62—119.5.)

1. A vessel suitable for use as an evaporator or an absorber of refrigerating apparatus comprising sections of pipe substantially elliptical in cross-section welded together to form a substantially rectangular shaped coil, cer-



tain of said sections having spaced transversely extending ridges formed along the bottom to provide for the formation of pools of liquid when the vessel is in use.

1,897,210. PROCESS OF MANUFACTURING ALDEHYDE-AMINE REACTION PRODUCTS. CLAYTON OLIN NORTH, Akron, Ohio, assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed Mar. 29, 1926. Serial No. 98,361. 4 Claims. (Cl. 260—180.)

1. The process of manufacturing a butyl aldehyde-amine reaction product which comprises refluxing about three mols of butyl aldehyde with one mol of aromatic primary amine, removing water of condensation produced by the reaction of the aldehyde and amine and heating the reaction product so formed at substantially 100 to 145° C. for substantially 2 to 20 hours.

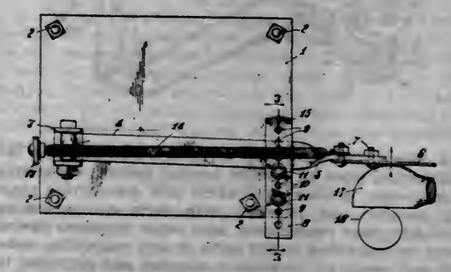
1,897,211. PROCESS FOR PRODUCING AZO DYES. JAMES P. PENNY, Buffalo, N. Y., assignor to National Aniline and Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed May 19, 1930. Serial No. 453,876. 19 Claims. (Cl. 260—84.)

1. In the production of azo dyes by a process which comprises diazotizing an amino-azoaryl compound which belongs to the class having the following general formula

$$X—R—N=N—R'—NH_2$$

wherein R and R' represent like or unlike aryl residues of the benzene or naphthalene series, and X represents a hydrogen atom or an arylazo residue of the benzene or naphthalene series, and coupling the resulting diazo compound with a naphthol sulfonic acid compound which is free from an amino group, the improvement which comprises carrying out the coupling in a reaction medium comprising a heterocyclic tertiary nitrogenous base.

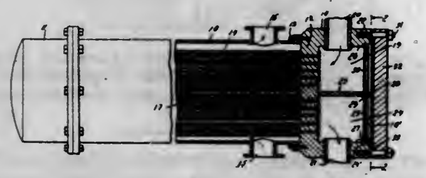
1,897,212. AUTOMATIC GOLF INSTRUCTOR. WILLIAM G. PORTER, Chicago, Ill. Filed May 7, 1931. Serial No. 535,678. 20 Claims. (Cl. 273—35.)



1. An automatic golf instructor comprising a golf club head abutting member mounted on a base, means for

normally holding said member out of the path of the head of a golf club and means for holding said member in the path of the head of a golf club adapted to yieldingly resist movement of said member horizontally a predetermined distance.

1,897,213. HEAT EXCHANGER. JOSEPH PRICE, West New Brighton, Staten Island, and STANLEY BROWN, Garden City, N. Y., assignors to The Griscom-Russell Company, New York, N. Y., a Corporation of Delaware. Filed July 28, 1932. Serial No. 625,400. 8 Claims. (Cl. 257—239.)

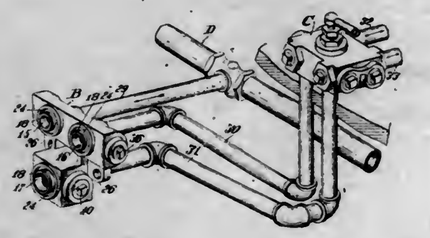


8. A heat exchanger comprising a head having a chamber therein and an opening for access to said chamber, a plurality of tubes communicating with the chamber, a partition in the chamber dividing it into a plurality of compartments each communicating with different tubes, a relatively heavy cover plate for the opening in the head, a relatively light inner cover plate forming a second chamber in the head, and connections between at least one of the said compartments and the said second chamber.

1,897,214. BORON CARBIDE AND METHOD OF MAKING THE SAME. RAYMOND RONALD RIDGWAY, Niagara Falls, N. Y., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 14, 1930. Serial No. 452,512. 12 Claims. (Cl. 204—62.)

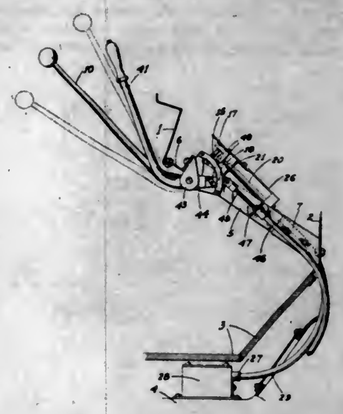
1. A composition of matter comprising boron carbide having a composition which corresponds substantially with the formula B_4C.

1,897,215. VAPOR REGULATOR AND MEANS FOR SUPPORTING SAME. EDWARD A. RUSSELL, Chicago, Ill., assignor to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York. Filed Apr. 3, 1931. Serial No. 527,456. 6 Claims. (Cl. 285—2.)



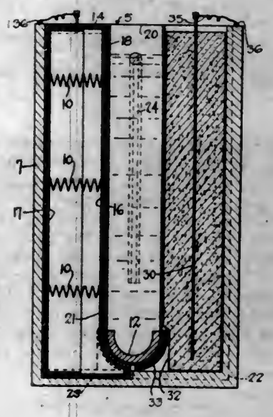
3. Means for connecting a vapor regulator with the distributing pipes of a vapor heating system, comprising a supporting member with which said distributing pipes are conected and provided with ports communicating with said pipes respectively, said vapor regulator having ports corresponding to the ports in said supporting member, and means for detachably securing said regulator to said supporting member with said corresponding ports in register with each other.

1,897,216. SINGLE-CABLE COWL MOUNTED GEAR SHIFT. BENJAMIN FRANKLIN SCHMIDT, Los Angeles, Calif. Filed Feb. 9, 1931. Serial No. 514,455. 9 Claims. (Cl. 74—39.)



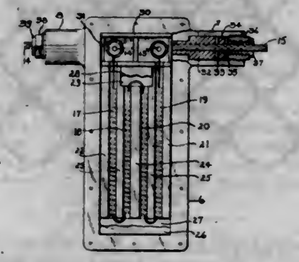
1. A gear shift mechanism for a motor vehicle including a shift lever, means mounting said lever for rocking movement laterally of the vehicle and independent swivel movement lengthwise of the vehicle, a flexible element connected at one end to the turnable and longitudinally movable shift-fork engaging member of the transmission of the vehicle, means between the other end of the element and the lever to rotate said element with the lateral movement of the lever and to move said element lengthwise with the swivel movement of the lever and means directly associated with said last named means to definitely limit the separate movements of the elements.

1,897,217. PURIFICATION APPARATUS. HERMAN J. SCHNEIDERWIRTH, Yonkers, N. Y. Filed Oct. 22, 1929. Serial No. 401,570. 8 Claims. (Cl. 204—25.)



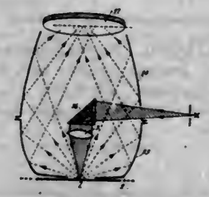
1. An apparatus for the treatment of fluids comprising a casing, a membrane having cut-out portions positioned in said casing, an electrode at one side of said membrane in alignment with a cut-out portion and a porous mass surrounding said electrode and closing said membrane cut-out portion.

1,897,218. SWITCH HEATER FOR RAILROADS. WILLIAM P. SCHOLZ, Morristown, N. J. Filed July 17, 1930. Serial No. 468,546. 2 Claims. (Cl. 219—19.)



1. A rail heater comprising a casing having a cover therefor, cylindrical lugs formed integral with said casing, electrical conductors passing through said lugs, compression means within said lugs for engaging said conductors, heater coils within said casing and binding posts for connecting said conductors to said coils, and a plurality of normally loose barriers for separating said heater coils, for retaining said coils and for separating said binding posts from said coils, an insulating and waterproof means between said cover and said casing and a ground clamp upon said casing, all combined for joint operation.

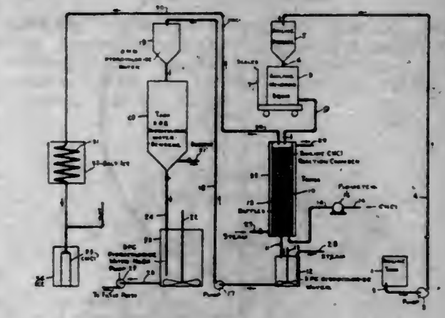
1,897,219. APPARATUS FOR PHOTOELECTRIC EXPLORATION BY REFLECTION METHOD IN COPYING AND PICTURE TELEGRAPHY. FRITZ SCHRÖTER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 31, 1929, Serial No. 336,344, and in Germany Feb. 8, 1928. 10 Claims. (Cl. 178—6.)



1. In a picture reproducing system, a picture support, a pick-up device comprising a source of light, a photo cell, means for concentrating the light from said source upon a spot on the picture, a zone of a paraboloid of revolution having its apex on the side of said support opposite said pick-up device and the focus point at said spot for forming a light guiding means receiving a major part of the light diffusely reflected from said spot and directing it to said photo cell and means for causing relative motion between said picture support and said pick-up device whereby the said spot is caused to explore the picture.

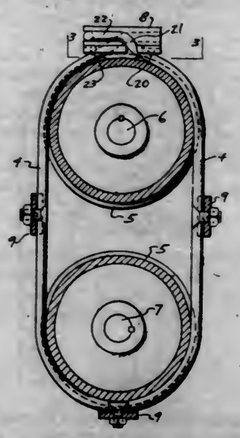
1,897,220. PROCESS FOR THE CONTINUOUS PREPARATION OF A DI-SUBSTITUTED GUANIDINE. WILLIAM P. TER HORST, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed May 7, 1928. Serial No. 275,646. 6 Claims. (Cl. 260—125.)

1. In the the process of manufacturing a diaryl substituted guanidine by a continuous process, the steps in combination comprising continuously flowing vapors of cyanogen chloride containing not more than 1.7% of water counter-current to a stream of an aromatic primary amine, removing any unreacted amine from the diaryl



guanidine hydrochloride thus produced by washing with a neutral organic solvent and precipitating the diaryl guanidine by the addition of an alkali of constant strength.

1,897,221. DEAD-END ATTACHMENT. ARTHUR WARNER, Haverford, Pa. Filed Feb. 7, 1931. Serial No. 514,174. 6 Claims. (Cl. 24—123.)

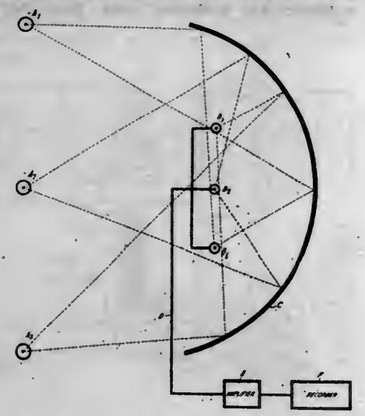


5. A dead end attachment for ropes comprising a body having grooves therein which permit free flexing of ropes in said grooves, a groove connected to a pair of said first mentioned groves for attaching a loop of rope to said body, a throat piece attached to said body so as to hold a rope in the connection between said first mentioned and said last mentioned groves, and means for attaching a plurality of rope ends to said body.

1,897,222. SOUND RECORDING. JULIUS WEINBERGER, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 10, 1928. Serial No. 318,410. 18 Claims. (Cl. 179—100.4.)

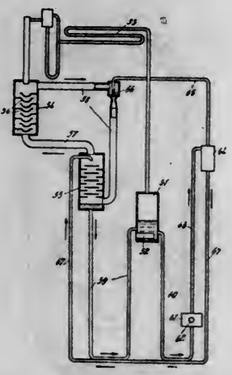
1. The method of sound recording, which comprises, concentrating sound from a plurality of locations in a

focal region, and recording said sound in accordance with the location of said concentration upon said focal region



and thereby producing a record which will indicate the location of the sound source and the maximum sound intensity at any given instant.

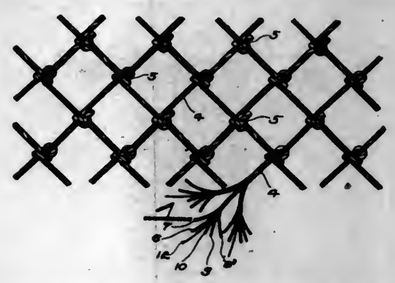
1,897,223. PROCESS AND APPARATUS FOR OPERATING CONTINUOUS ABSORPTION MACHINES. EDMUND ALTENKIRCH, Neuenhagen near Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, a Corporation of Germany. Filed Oct. 24, 1929, Serial No. 402,027, and in Germany Oct. 26, 1928. 9 Claims. (Cl. 62—119.5.)



1. In a normally continuous, open circulation absorption machine including an evaporator and an absorber in its conduit system, the method of operating said machine at substantially normal output intermittently with a restricted artificial heat supply, which consists in producing and storing during the normal heat supply to the machine at normal operation excessive amounts of condensed operating medium in the evaporator, and permitting the evaporation of said stored medium during the restriction of heat supply, and in maintaining the absorption liquid circulation through the absorber during said restriction, whereby the production of cold by the evaporator is continued during the period of restricted heat supply.

1,897,224. PRESERVING MEANS FOR FISH NETS. PHILLIP R. ANDREWS, Seattle, Wash. Filed Aug. 31, 1931. Serial No. 560,255. 1 Claim. (Cl. 117—52.)

A fish net possessing preservative qualities and fashioned of twine comprising a plurality of intertwined fiber strands, said strands being made up of twisted threads, one of said strands having a wire containing copper and intertwined therein, said wire being exposed at the surface of the



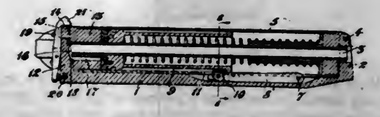
twine and subject to corrosive action in salt water to form a chemical compound on the net and prevent accumulation of pernicious marine growths on the net.

1,897,225. GRIP ATTACHMENT FOR VIOLIN BOWS. CHARLES B. ARCHER, Homestead, Pa. Filed Nov. 10, 1930, Serial No. 494,753. Renewed July 30, 1932. 7 Claims. (Cl. 84—282.)



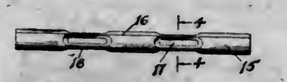
1. A bow grip attachment comprising a skeleton sleeve having an under-cut portion and a plurality of depressed apertures appropriately sized to fit portions of the first, third and fourth fingers of the hand, and said sleeve having a recess at one side to receive a portion of the second finger.

1,897,226. AIR PISTOL. EDWIN GEORGE ANSON, Birmingham, England, assignor of one-half to Frank Clarke, Birmingham, England. Filed May 18, 1931, Serial No. 538,057, and in Great Britain July 9, 1930. 8 Claims. (Cl. 124—10.)



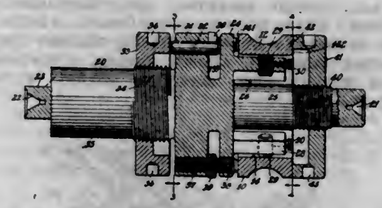
1. An air pistol which comprises, in combination, a stock, an air cylinder, a laterally inclined breech end on the cylinder, a discharging barrel located axially within the cylinder, a spring-actuated plunger operating within the cylinder in a direction towards the stock when discharging, a trigger having a sear catch engageable with the plunger, a side cocking lever fulcrumed on the forward end of the cylinder, a link pivoted to the side cocking lever and slidably connected to the plunger, a laterally inclined breech block carried by the side cocking lever so as to have an air-tight closure engagement with the inclined breech end, a bridge projecting from the breech end, a terminal nose on the breech block having a wedging engagement with the bridge, the air cylinder having an outlet air duct through the breech end thereof, the breech block having a by-pass air duct to connect the air cylinder with the discharging barrel, and a snap-action catch which normally secures the side cocking lever at the breech end of the pistol.

1,897,227. SPOOL. GEORGE D. ATWOOD, Brooklyn, N. Y. Filed Feb. 14, 1930. Serial No. 428,274. 1 Claim. (Cl. 242—68.)



A spool comprising a metallic cylindrical tube having at one portion of its length indentations forming interiorly extending flat spindle-engaging projections arranged circularly and curved regions between adjacent projections, said curved regions having substantially the same radius as the tube, said tube having substantially equal perimeters at its circular and non-circular portions.

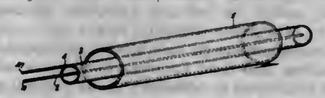
1,897,228. CHUCK AND CENTERING ARBOR. HARRY S. BECKETT, Pitman, N. J., assignor to The Hess-Bright Manufacturing Company, Philadelphia, Pa., a Corporation of Delaware. Filed Oct. 23, 1931. Serial No. 570,669. 13 Claims. (Cl. 82—40.)



1. A device of the character specified, comprising a body portion, a slightly flexible radially disposed plate having one side directed toward the body portion, a series of longitudinally disposed fingers carried by the plate at its other side, pins slidably mounted in the body portion and engaging the plate, means for projecting the pins toward and against the plate for flexing it, and back stops carried by the body portion and freely extending through the plate for engaging the side face of a work piece seated on the fingers.

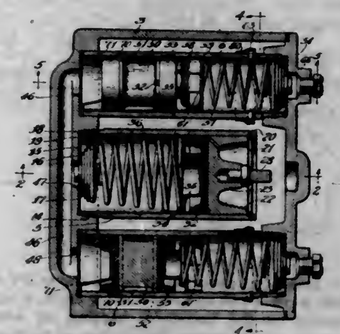
10. A device of the character specified, comprising an arbor having centers at its respective ends, a radially extended, centrally disposed body portion, a flange-like plate carried by the arbor forwardly of the body portion and spaced therefrom and having a fill edge, a series of forwardly projecting fingers carried by such plate inwardly of its free edge and constituting the work piece centering members, back stops adjustably carried by the body and freely extending through the plate for positioning the work piece longitudinally of the arbor, there being longitudinally disposed openings in the body portion outwardly of the finger positions, pins mounted in such openings for reciprocation and adapted to engage the plate between the respective finger positions and the said free edge, means adapted to press the pins against the plate to flex it and deflect the fingers, and means adapted to press the work piece against the back stop pins.

1,897,229. INDIRECTLY HEATED CATHODE. OTTO BÖHM, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Dec. 4, 1928, Serial No. 323,641, and in Germany Dec. 6, 1927. 9 Claims. (Cl. 250—27.5.)



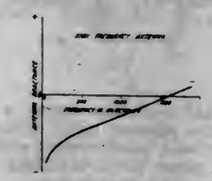
1. A thermionic electron emitter comprising a cylindrical cathode, filamentary means for indirectly heating the cathode, positioned along the longitudinal axis of the cathode, and cathode shielding means comprising a cylindrical metallic envelope concentric with the heater and within the cathode, said shielding means being electrically connected with the means for heating the cathode.

1,897,230. HYDRAULIC BRAKING SYSTEM. MYRON W. BOWEN, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif., a Corporation of California. Filed Mar. 12, 1930. Serial No. 435,081. 13 Claims. (Cl. 60—54.5.)



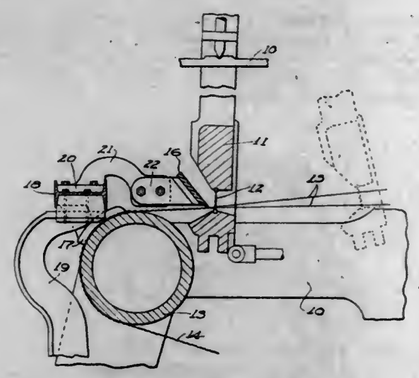
2. In a hydraulic braking system, in combination a plurality of cylinders adapted to contain fluid, a piston in each of said cylinders, a plurality of hydraulically operable brakes, a conduit connecting each of said cylinders to one or more of said brakes for transmitting fluid pressure thereto, hydraulic equalizing means communicating with said cylinders for delivering equal fluid pressure thereto and actuating the pistons to create fluid pressure in said conduits, resilient means in each of said cylinders for returning said pistons to their initial position, means individually restraining the returning action of said resilient means in said cylinders and other means for restraining the return action of said pistons upon failure of pressure in the conduits connecting the respective cylinders to the brakes.

1,897,231. ANTENNA COUPLING CIRCUIT. RENE A. BRADEN, Merchantville, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 2, 1931. Serial No. 519,504. 16 Claims. (Cl. 250—20.)



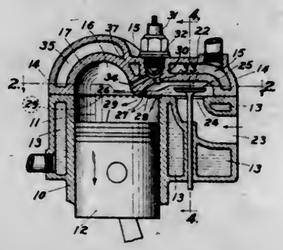
1. A method of efficiently transferring energy from an antenna circuit to a receiver circuit at all frequencies in a receiver frequency range, which consists in tuning the receiver to a desired frequency, adjusting the coupling between the antenna and receiver to substantially the optimum value desired, and causing the antenna tuning to vary simultaneously with the receiver tuning through a frequency range different from the said receiver range in such a manner that the said coupling value remains substantially constant.

1,897,232. METHOD AND MEANS FOR WEAVING FOURDRINIER WIRES. WILLIAM EUGENE BUCHANAN, Appleton, Wis., assignor to Appleton Wire Works, Inc., Appleton, Wis., a Corporation of Wisconsin. Filed June 23, 1930. Serial No. 463,171. 6 Claims. (Cl. 139—291.)



1. In a loom, the combination of a frame for supporting thereon warp wires and woven wire cloth, a lay swingably mounted on the frame for beating up weft wires into the face of the work, and a bar extending transversely above the cloth in spaced parallel relation to the face of the work and having a straight lower edge engageable with the upper side of the cloth completely across the cloth for maintaining the newly woven cloth flat during the beating up of the weft wires.

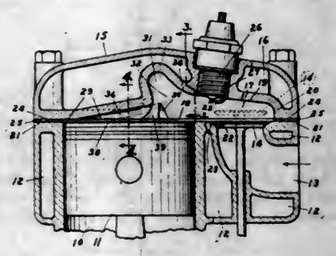
1,897,233. MULTIPLE IGNITION CYLINDER HEAD. FRANK A. BULLINGTON, Kansas City, Mo., assignor to Bullington Engine Heads, Kansas City, Mo., a Common Law Trust consisting of Louis R. Ash, Howard P. Treadway, and Frank A. Bullington. Filed Feb. 12, 1927. Serial No. 167,756. 17 Claims. (Cl. 123—191.)



1. In an internal combustion engine, a cylinder head, having a combustion chamber, and a valve chamber therein, means on said head for separating said chambers and a single ignition means for substantially simultaneously igniting the contents of both chambers.

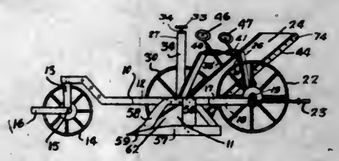
1,897,234. ANTIDETONATION COMBUSTION CHAMBER. FRANK A. BULLINGTON, Kansas City, Mo., assignor to Bullington Engine Heads, Kansas City, Mo., a Common Law Trust consisting of Henry C. Tammen, Howard P. Treadway, and Frank A. Bullington. Filed Nov. 12, 1928. Serial No. 318,965. 14 Claims. (Cl. 123—191.)

1. In an internal combustion engine, a cylinder and a cylinder head having a valve pocket combustion chamber at one side thereof and having a combustion pressure cushioning chamber in said head communicating with said valve pocket chamber said head having a wall portion



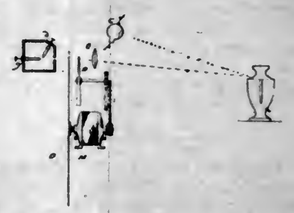
channeled to provide combustion pressure distributing means in said cylinder head extending from said valve pocket chamber over said cylinder.

1,897,235. ROAD GRADING AND DITCHING MACHINE. SIGURD HANS BURNSTAD, Ohaton, Alberta, Canada, assignor to Burnstad Grading Machine Company Limited, Edmonton, Alberta, Canada, a Corporation. Filed Nov. 19, 1930. Serial No. 496,665. 6 Claims. (Cl. 37—110.)



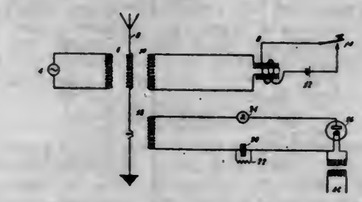
1. In road grading and ditching machines, a vehicle frame, running gear formed of a midside wheel, a rear land wheel and a dirigible front wheel, a plowshare and moldboard, a conveyer structure mounted on said frame in line with said moldboard and horizontally and vertically adjustable and adjusting means for said midside wheel, comprising a screw actuated by co-acting gears, a clutch means between two of said gears and a control lever for said clutch means.

1,897,236. SIGNALING SYSTEM. VANNEVAR BUSH, Belmont, Mass., assignor to Raytheon, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Nov. 6, 1928, Serial No. 317,597. Renewed Nov. 22, 1930. 6 Claims. (Cl. 178—6.)



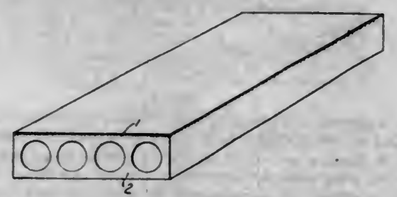
1. In a system of the character described, means for resolving an object scene into discrete scenic elements, said means operating continuously and repeatedly over said scene, means for creating electrical impulses corresponding to said scenic elements, means for creating light impulses corresponding to said electrical impulses, means for orientating said light impulses to recreate said object scene, and additional independent means including a prism to cause the scenic elements corresponding to one cycle of said resolving means to be displaced relative to the scenic elements of a succeeding cycle.

1,897,237. METHOD AND MEANS FOR MEASURING ELECTRICAL ENERGY. PHILIP S. CARTER, Stony Brook, and JAMES L. FINCH, Rocky Point, N. Y., assignors to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 28, 1929. Serial No. 357,451. 3 Claims. (Cl. 250—17.)



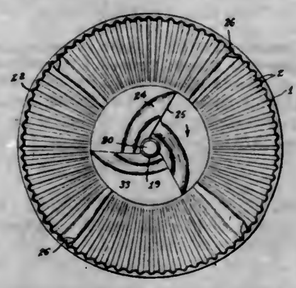
1. An arrangement for measuring the transmission current flowing in an antenna circuit during signalling, despite rapid interruption of the current for signalling, comprising a three electrode vacuum tube, having anode cathode and a control electrode, a control electrode circuit, means coupling the control electrode circuit of the tube to the antenna circuit, a condenser and a shunting leak resistance connected in series in the control electrode circuit, the leak resistance being of such magnitude relative to the capacitance of the condenser that no appreciable discharge takes place during signal pulsations, an anode circuit including a source of anode current, a high resistance approximately equal in value to the internal resistance of the tube, and a measuring instrument connected in series in the anode circuit of the tube.

1,897,238. STRUCTURAL UNIT AND PROCESS FOR MAKING SAME. CLOYD M. CHAPMAN, Douglaston, N. Y. Filed Dec. 28, 1927. Serial No. 242,801. 12 Claims. (Cl. 72—69.)



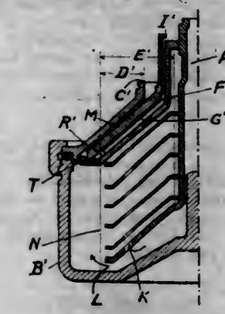
1. A portion of a structure containing gypsum the surface portion of which contains a chloride rendering it capable of bonding with a coating containing cement.

1,897,239. CLOTHES WASHING MACHINE. PAUL F. CHAPMAN, Boston, Mass. Filed Oct. 10, 1931. Serial No. 568,026. 3 Claims. (Cl. 259—101.)



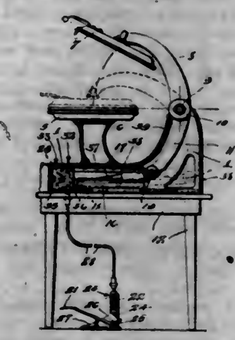
1. In a washing machine, a receptacle, a cover therefor, a power shaft extending upwardly into said receptacle from the bottom thereof and terminating at its upper end below the cover, a dolly removably mounted on the upper end portion of said shaft, the receptacle cover having a bearing, the upper end of the dolly having a journal formation received within said bearing when the cover is applied to the receptacle, whereby the upper end of the dolly is supported against lateral movement.

1,897,240. PROCESS FOR SEPARATING LIQUIDS OF DIFFERENT SPECIFIC GRAVITIES. SVEN ALFRED BERTIL DAHLGREN, Alsten, Sweden, assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed June 21, 1930, Serial No. 462,773, and in Sweden July 3, 1929. Renewed July 13, 1932. 7 Claims. (Cl. 233—14.)



1. In the separation of two liquids of different specific gravities in which the separated heavier liquid that has been separated in the main separating space is discharged through a liquid seal formed by the heavier liquid, the process which comprises flowing the lighter liquid that has been separated in the main separating space into an auxiliary body of the heavier liquid communicating with said liquid seal and at a level approximating the level between the two liquids in the main separating space, and in said auxiliary body of the heavier liquid separating therefrom said lighter liquid and discharging it from an outlet at a level between the outlet for the heavier liquid and the level of the lighter liquid in the main separating space, whereby the level between the two liquids in the main separating space is maintained constant notwithstanding variations in the specific gravities of the two liquids.

1,897,241. PRESSING MACHINE. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 19, 1926, Serial No. 102,872. Renewed May 2, 1930. 14 Claims. (Cl. 68—9.)



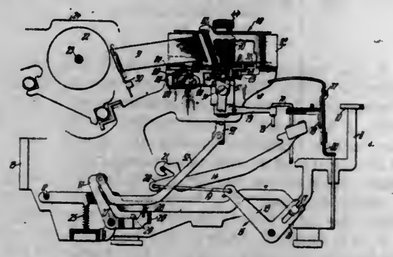
1. A pressing machine comprising a hollow base having a standard rising therefrom, a buck mounted on the base,

a head movable toward and from the buck, a lever supporting the head, the lever carrying the head at one end and being pivoted between its ends to the standard and having its lower arm extending downwardly and forwardly and into the base, actuating mechanism including a motor located in the base and connections between the motor and the lower arm of the lever for moving the same in one direction and returning means located in the base and connected to the lower arm of the lever for moving the lever in the opposite direction.

1,897,242. PROCESS OF PREPARING CHOCOLATE. GEORGE DEFFEBN, Newton, Mass. Filed Apr. 11, 1930. Serial No. 443,629. 7 Claims. (Cl. 99—11.)

1. The process of making chocolate which comprises preparing a chocolate liquor, mixing intimately therewith a solution of a solid modifying agent in a solvent, and removing the solvent from the mixture so rapidly that the solution of the solid modifying agent becomes supersaturated and the solid modifying agent is caused to exist mainly as microscopic particles which are dispersed intimately throughout the chocolate.

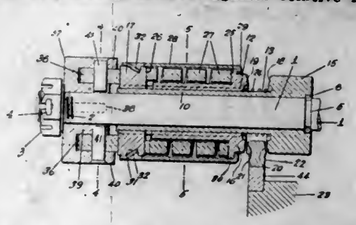
1,897,243. TYPEWRITING MACHINE. WILLIAM A. DOBSON, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 6, 1929. Serial No. 352,980. 5 Claims. (Cl. 197—165.)



1. In a ribbon-feed-reversing mechanism for a typewriting machine, the combination of a ribbon-spool, means for rotating said spool to wind the ribbon thereon, including a ratchet-wheel disposed in a plane parallel to said spool and below the same, an arm oscillated by each key-stroke in a plane parallel to said ratchet-wheel, a drive pawl pivoted on said arm, and spring urged into operative engagement with said ratchet-wheel, a rotary-mounted plate-member coaxial with said ratchet-wheel and parallel thereto and having cam-edges for engaging said pawl and moving it out of engagement with said ratchet-wheel, a plurality of ratchet-teeth on said plate-member, a second drive pawl pivoted on said arm coaxial with said first-named pawl for engagement with the teeth of said plate-member for operatively moving the latter, a spring urging said last-named drive pawl out of effective engagement with said teeth, and means controlled by the unwinding of the ribbon to move said last-named pawl into operative engagement with the teeth of said plate-member, whereby the latter may be operatively moved by subsequent key-strokes for the purpose set forth.

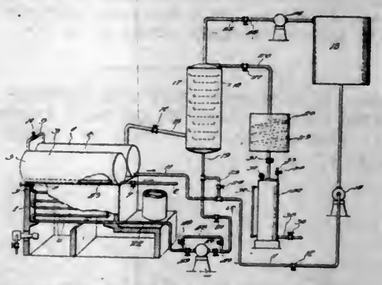
1,897,244. POWER TRANSMISSION MECHANISM. ALEXANDER DOW, New York, N. Y., assignor to Dow Patents Holding Corporation, a Corporation of Delaware. Filed Dec. 2, 1930. Serial No. 499,438. 28 Claims. (Cl. 74—7.)

1. In a power transmission mechanism, the combination of a driving shaft, a pair of gripping members mounted on said shaft in spaced apart relation and free for rotation relative to the shaft, a driven member projecting between the gripping members to be gripped and driven thereby, means for securing the gripping members against rotation relative to one another while permitting relative axial movement between said members into and out of engagement with said driven member, a cam member secured to the gripping members against relative rotation



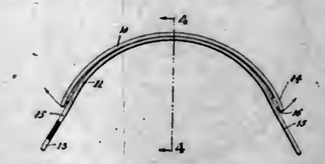
with respect thereto, a resilient element operatively interposed between the cam member and one of the gripping members and a cam follower mounted on the shaft and coacting with said cam member, said follower being secured to the shaft against rotation relative thereto.

1,897,245. PROCESS FOR CRACKING PETROLEUM OIL. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Feb. 11, 1922, Serial No. 535,781. Renewed Dec. 10, 1928. 4 Claims. (Cl. 196—58.)



1. A process for cracking hydrocarbon oil, consisting in heating an advancing stream of oil to a cracking temperature, in passing heated oil from said stream to an enlarged reaction zone wherein conversion occurs and from which no unvaporized oil is permitted to return to said stream, in passing the vapors evolved from the oil to a second enlarged zone wherein heavier fractions of the vapors are condensed, in returning a portion of the vapors from said second enlarged zone to the first enlarged zone at a point below the liquid level of the oil therein to accelerate the conversion of the oil in said first enlarged zone and to prevent excessive carbon deposition therein, and in taking off the remaining vapors from said second enlarged zone for condensation and collection.

1,897,246. HAIR DEVICE. HENRY EISLER, New York, N. Y., assignor to Emeth Financial Corporation, a Corporation of New York. Filed Jan. 12, 1932. Serial No. 586,125. 4 Claims. (Cl. 132—38.)



4. A hair device of the character described comprising a bow-shaped resilient member of relatively fixed curvature, and a pliable member fastened to the bow-shaped

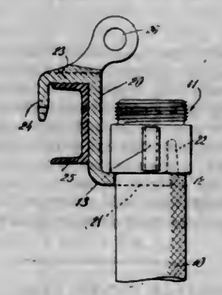
member at points adjacent to the ends of the latter, said pliable member having free end portions which extend outwardly beyond the ends of the bow-shaped member, the portion of the pliable member which extends between the points of attachment being adapted to be conformed substantially to the curvature of the inner face of the bow-shaped member and being held in engagement with said face by resilient pressure of said bow-shaped member, said pliable member being readily separable from said bow-shaped member upon flexing the latter into a bow of decreased curvature.

1,897,247. CONDENSED PHOTOPHONOGRAPHIC SOUND RECORD. BYRON E. ELDRED, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Original application filed Jan. 9, 1928, Serial No. 245,634. Divided and this application filed Dec. 24, 1930. Serial No. 504 622. 5 Claims. (Cl. 274—43.)



1. A photophonographic record of sound comprising a sound track of microscopic dimensions.

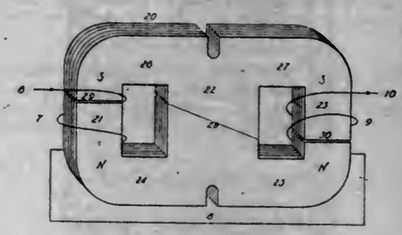
1,897,248. HOSE HANGER. WILLIAM J. FERGUSON, Yonkers, N. Y., assignor of one-half to Benjamin Geller, Yonkers, N. Y. Filed June 4, 1932. Serial No. 615,827. 8 Claims. (Cl. 248—28.)



1. A hose hanger comprising an upright post, bifurcated arms extending forwardly from the lower end of the post adapted to form a flat seat for a hose coupling having diametrical extending lugs, fingers projecting upwardly from the ends of said arms beyond the lugs on the hose coupling to prevent lateral movement of the coupling on said seat, an integral rigid portion extending backwardly from the upper end of the post and downwardly to form a hook adapted to engage a transverse supporting member.

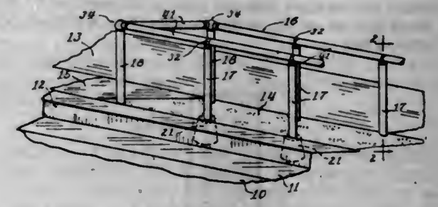
1,897,249. ELECTRICAL SYSTEM. WILFRED K. FLEMING, Cambridge, Mass., assignor to Raytheon Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 21, 1927. Serial No. 241,558. 1 Claim. (Cl. 178—44.)

A device for obtaining a substantially constant current from a source of variable direct current, including an inductance adapted to be connected in series with said source, said inductance comprising a plurality of coils, magnetic material forming a magnetic circuit for each of said coils, said material being so arranged that said magnetic circuits have one section in common, said coils being so arranged that the fluxes tend to oppose each other at



their meeting place and pass through said common section in the same direction, and a capacity having one side thereof connected between said coils, the other side of said capacity being adapted to be connected to the opposite terminal of said source.

1,897,250. YIELDABLE BARRIER. JOHN FREI, Jr., Chicago, Ill. Filed Aug. 9, 1930. Serial No. 474,154. 5 Claims. (Cl. 256—1.)



4. A fence construction comprising a plurality of posts deflectable laterally in all directions at all points along their length, and rigid barrier means connecting said posts together remote from the lower ends thereof.

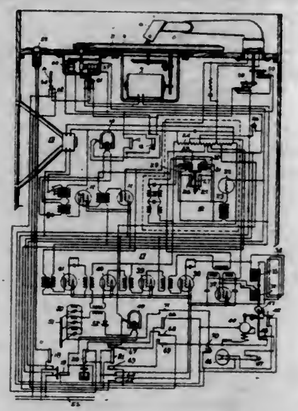
1,897,251. FOOD PRODUCT. CHARLES N. FREY, New York, N. Y., assignor, by mesne assignments, to Standard Brands Incorporated, Dover, Del., a Corporation of Delaware. Filed Mar. 5, 1926. Serial No. 92,618. 3 Claims. (Cl. 99—10.)

1. In a method of making cake, the steps which comprise using a flour which has been chlorinated to a hydrogen-ion concentration of approximately 5.3 pH, adjusting the reaction of auxiliary ingredients so that the resultant baked product will have an approximately neutral reaction.

1,897,252. RADIO RECEIVING SYSTEM. JOHN E. GARDNER, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 28, 1926. Serial No. 130,807. 12 Claims. (Cl. 250—20.)

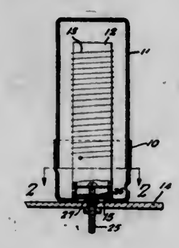
1. A radio receiving set comprising in combination, means for receiving radio frequency oscillations, means for producing local oscillations and combining the local

oscillations with the received oscillations to create oscillations of a different frequency, means for tuning the receiving set to render it responsive to received radio fre-



quency oscillations having a definite frequency, and means controlled by the oscillations of said received definite frequency to control said tuning means.

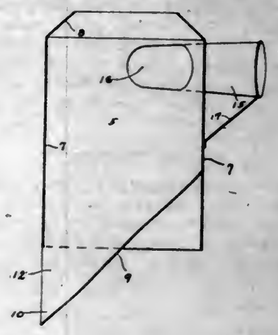
1,897,253. RADIO COIL AND SHIELD MOUNTING. JOHN Q. GAUBERT, HERBERT L. BRUMP, and JAMES B. FORSYTHE, Dayton, Ohio, assignors to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Feb. 23, 1932. Serial No. 594,756. 8 Claims. (Cl. 175—356.)



1. In combination, a shield support cup having an aperture in its bottom, a coil core insulating tube having its bottom end supported upon said cup bottom, and means for rigidly fixing said tube to said cup, said means comprising: an interior metal bridge secured to the sides of said tube and having an aperture therein, and a screw extending through said apertures in said bridge and cup bottom and also projecting beyond said cup bottom and serving as a securing shank for said cup.

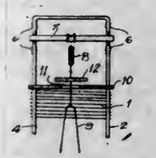
1,897,254. STRAW COLLECTOR. FLOYD V. HANDY and CLARENCE L. HANDY, Lynden, Wash.; said Floyd V. Handy assignor to said Clarence L. Handy. Filed Jan. 8, 1929. Serial No. 331,041. 1 Claim. (Cl. 183—83.)

In a portable straw collector of the wheeled vehicle type, the combination with a base comprising a rectangular frame, and a pair of rearwardly extending laterally spaced side bars, of a collector frame pivoted at the junction of the rectangular frame and the side bars and adapted to recline on the side bars, a cylindrical collector rigidly supported in the collector frame with its lower portion below and between the side bars when located in reclining position, a pair of lifting poles hinged at the free end of the collector frame, and said poles adapted for use as



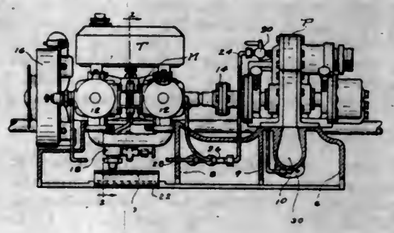
braces with their free ends on the ground when the collector is supported on the rectangular frame in upright position.

1,897,255. DISCHARGE TUBE. DIRK JAN HEUVELINK, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 16, 1929, Serial No. 347,505, and in the Netherlands Mar. 30, 1928. 3 Claims. (Cl. 250—27.5.)



1. In an electron discharge device the combination with a looped filamentary cathode, and a grid surrounding said cathode and comprising support rods and a helix of grid wire on said rods, of a metal disc supported on said rods in position to cover one end of said helix and having a central aperture, an insulating bar mounted on said rods adjacent said disc, a filament support extending through said aperture and secured at one end to said bar, and a metal plate larger than said aperture mounted on said filament support to be over said aperture but spaced away from said disc.

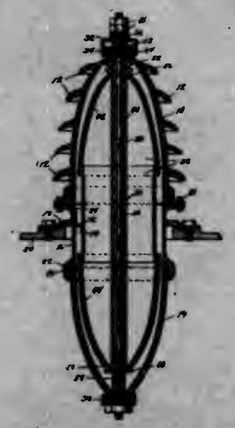
1,897,256. PORTABLE POWER PUMP. EARL W. HIMBERGER, Seattle, Wash., assignor to Pacific Marine Supply Company, Seattle, Wash., a Corporation of Washington. Filed Apr. 30, 1930. Serial No. 448,473. 1 Claim. (Cl. 103—218.)



The combination in a pumping unit with an open-bottom, hollow base having spaced transversely arranged bracepartitions, and an interior, integral pump-intake at one

end of the base, of a transversely arranged rotary pump mounted on the exterior of the base, an internal combustion engine mounted on a higher level at the opposite end of the base, power transmission mechanism between the pump and the engine, said base having a recess depressed below the level of the engine to accommodate the fly wheel of the engine, and a concave cross-plate, (forming a shield when the unit is packed on the back) secured at its opposite ends to and spanning a portion of the open bottom of the base.

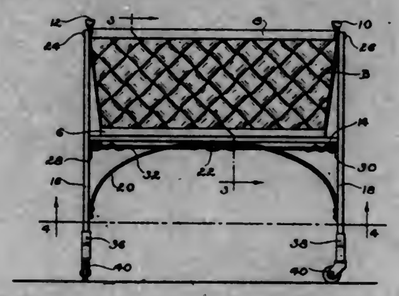
1,897,257. VACUUM-TYPE INSULATING BUSHING. GUSTAV E. JANSSON, Atlantic, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed July 20, 1929. Serial No. 379,758. 20 Claims. (Cl. 173—318.)



1. In an insulating bushing, the combination of an outer insulating and supporting shell, an axial conducting stud extended through said shell, and means disposed between said stud and shell including a composite evacuated envelope having serially connected wall-sections of insulating and conducting material.

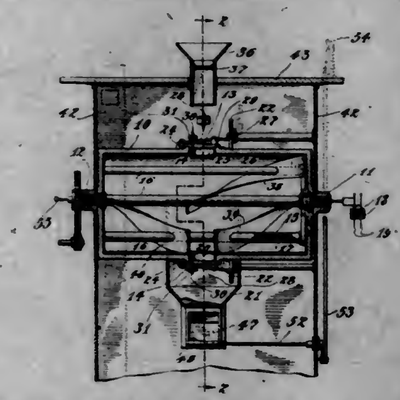
19. A vacuum-type insulating bushing including an enclosing casing, a conducting stud extended therein, a highly-evacuated insulating shell surrounding said stud within said casing and resilient means to support said insulating shell free from deleterious mechanical contact with said enclosing casing, said resilient means comprising a spring surrounding said stud and interposed between said insulating shell and casing.

1,897,258. BASSINET. CARL F. JENNE, Carnation, Wash. Filed May 14, 1930. Serial No. 452,408. 8 Claims. (Cl. 5—93.)



1. A bassinet consisting of a yieldable basket-like receptacle; upright supporting standards disposed one at each end of said receptacle and each fixedly secured to it at one point above its horizontal axis; a horizontal compression member disposed between said standards to space them and adapted to support the receptacle when the receptacle is deformed by a weight placed therein; a resilient truss member fixedly secured at its opposite ends to the standards below the compression member and bowed upwardly to engage the under side of the compression member, and tension means yieldably securing said standards in engagement with said compression member.

1,897,259. APPARATUS FOR CALCINING GYPSUM. LEWIS C. KARRICK and WILLIAM LEON ELLERBECK, Salt Lake City, Utah. Filed Jan. 30, 1928. Serial No. 250,463. 10 Claims. (Cl. 222—6.)

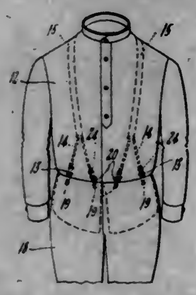


1. The combination with a closed rotary kiln of internal heating devices adapted to be covered at least part of the time by the charge, of a valve, and means operated in unison with the rotation of the kiln for operating the valve to cause sudden and periodic releasing of the pressure generated in the kiln.

1,897,260. FLEXIBLE ALKYD RESIN AND METHOD OF PREPARATION. ROY H. KIENLE and HARRY C. ROHLFS, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Sept. 16, 1929, Serial No. 393,119. Renewed Jan. 11, 1933. 13 Claims. (Cl. 260—8.)

1. The method of producing a flexible resinous body which comprises preparing an alkyd resin in the presence of glycol succinate.

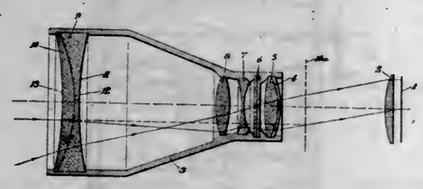
1,897,261. SHIRT FOR USE WITH CONCEALED SUSPENDERS. MARTIN F. KILLORY, Brockton, Mass. Filed Apr. 21, 1932. Serial No. 606,582. 1 Claim. (Cl. 2—117.)



A shirt provided with horizontally extending slits in its waist portion, horizontally extending washable stop strips

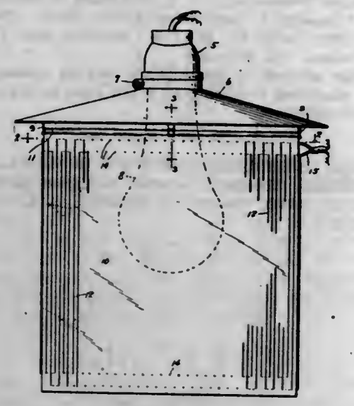
attached at their ends to the inner side of the shirt adjacent opposite ends of the slits, and detachable coupling members extending loosely through said slits, each member including two upper tabs located within the shirt and extending across opposite sides of a strip, and a single lower tab located outside the shirt, the upper tabs having means whereby they may be engaged with a suspender and, and with each other, the lower tab being engageable with trousers, the arrangement being such that when the upper tabs are connected with each other, the coupling member is confined on the shirt by the stop strip, and when the upper tabs are disconnected, the coupling member is separable from the shirt to permit independent washing of the shirt, the upper tabs being elongated to permit independent vertical movements of the stop strips and the shirt portions to which they are attached.

1,897,262. CINEMATOGRAPHIC OBJECTIVE. ISAAC KITROSER, Paris, France, assignor to Keller-Dorian Colorfilm Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 13, 1930. Serial No. 488,805. 26 Claims. (Cl. 88—16.4.)



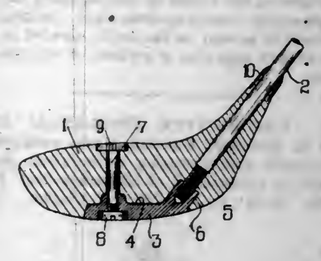
1. A photographic objective, comprising a collimatric lens, an ordinary objective adapted for use therewith and a negative lens located in the neighborhood of the anterior focal plane of the ordinary objective.

1,897,263. INSECT DESTROYER. OLAF KYLLO, Kettle Falls, Wash. Filed Jan. 8, 1931. Serial No. 507,467. 2 Claims. (Cl. 43—112.)



1. An insect destroyer comprising a tubular member formed of non-conducting material and having holes therein adjacent its ends and position and negative electric wires vertically arranged in spaced relation on the inner and outer walls of the member with portions of the wires passing through the holes the positive and negative wires being alternately arranged.

1,897,264. GOLF CLUB. RALPH LAMB, Liverpool, England, assignor of one-half to Joseph Walwyn White, Birkdale, England. Filed Feb. 25, 1930, Serial No. 431,114, and in Great Britain Apr. 11, 1929. 1 Claim. (Cl. 273—77.)

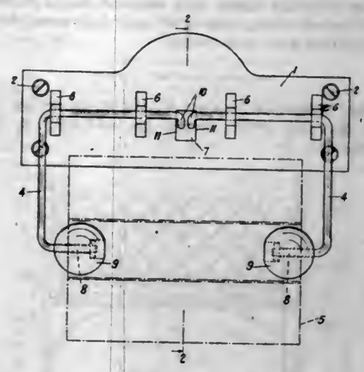


A golf club comprising a metal shaft, a wooden head having a recess in the sole thereof, a plate member in the recess in the head having screw threads formed thereon for connection with the shaft and having a recess in the outer surface thereof, a threaded bolt passing through the head and plate member and a nut in said recess in the plate member engaging said bolt, the head of said bolt being elongated in a direction perpendicular to the face of the club.

1,897,265. MINERAL TREATMENT. RHETHERFORD B. MARTIN, Roselle, N. J. Filed July 13, 1928. Serial No. 292,606. 8 Claims. (Cl. 209—166.)

1. In a method of concentrating ores and like bodies, the steps of conditioning the ore pulp so as to provide a froth, and introducing into the conditioned ore the reaction product of the interaction of an alkali metal ethyl xanthate with an ammonium salt, in which the ammonium radical of the ammonium salt is substituted for the alkali metal of said xanthate and subjecting the so treated pulp to froth flotation.

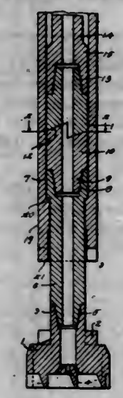
1,897,266. TOILET ROLL HOLDER. LAUCHLAN ALEXANDER MACKAY MCGEOCH and WILLIAM ALEXANDER MCGEOCH, Glasgow, Scotland. Filed Apr. 25, 1932, Serial No. 607,463, and in Great Britain Mar. 7, 1932. 1 Claim. (Cl. 242—55.2.)



A toilet roll holder comprising, in combination, a plate equipped on its outer face with aligned apertured lugs and formed with an aperture, a bail slidingly and rotatably mounted in said lugs and divided substantially mid-way between its ends to form two bail sections each

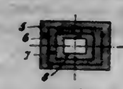
formed at its inner end with a crank adapted for co-operation with said aperture, and roll-carrying mandrels journalled one on the free end of each of said sections, said sections being capable of performing movements relatively to said plate such that, in the operation of inserting said toilet roll between said mandrels, said sections may be rocked about said apertured lugs into a position such that said cranks vacate said aperture and then slide endwise through said apertured lugs into a position such that said mandrels are spaced to an extent sufficient to permit passage of said roll therebetween and such that the ends of said cranks abut against said outer face of said plate and support said mandrels in raised position and, in the operation of restoring said sections to normal position, said cranks are caused to enter said aperture and to engage the lateral boundaries of said aperture so as to prevent separation of said sections.

1,897,267. ROCK DRILL. HARVEY MECOM, Liberty, Tex. Filed Oct. 5, 1929, Serial No. 397,605. Renewed Dec. 27, 1932. 9 Claims. (Cl. 255—28.)



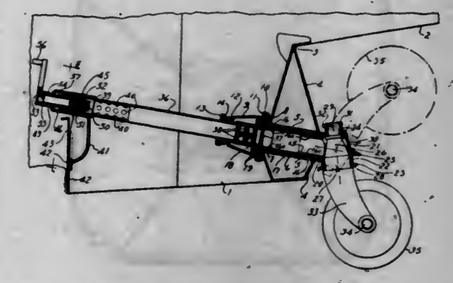
1. In a rock drill, a cutter head, a stem carried thereby, a sleeve receiving in one end one end of said stem, means permitting limited longitudinal movement of the sleeve upon the stem and relative rotary movement therebetween, a hammer member, the stem and hammer member having coacting cam faces, a collar surrounding said hammer having movement longitudinally thereof but prevented from rotating thereabout, means for coupling said collar with a drill stem, and means whereby upon movement of said sleeve in one direction upon the first mentioned stem a coupling of the sleeve and cutter head may be effected.

1,897,268. FINDER FOR CAMERAS PROVIDED WITH OBJECTIVES OF DIFFERENT FOCI. ANDRÉ NOËL MERLE, Vincennes, France, assignor to Pathe Cinema, Anciens Etablissements Pathe Freres, Paris, France, a French Company. Filed July 25, 1932, Serial No. 624,525, and in France Sept. 24, 1931. 5 Claims. (Cl. 88—1.5.)



1. In a camera, in combination a plurality of objectives of different foci, a finder, means for forming in the field of said finder a number of coaxial figures equal to the number of objectives, said figures limiting in the finder regions corresponding to the fields of the different objectives, and means for imparting different transparent colours to the spaces comprised between each two consecutive figures.

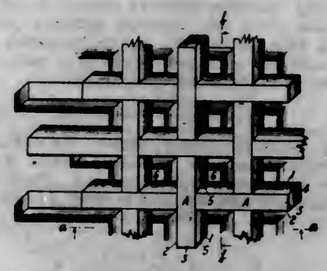
1,897,269. BEACH LANDING GEAR. GABRIEL MIDDOR, Dundalk, Md., assignor to General Aviation Corporation, Dundalk, Md., a Corporation of Maryland. Filed June 21, 1932. Serial No. 618,528. 24 Claims. (Cl. 244—2.)



1. In a landing gear, in combination with a body structure, a rotatable shaft supported in bearings on the body structure and having at one end a housing, and a wheel structure mounted on the shaft in the housing for rotation therewith.

11. In a landing gear, in combination with a body structure, a shaft having an extension, a bearing for the shaft supported by the body structure, a cap-like member supported by said bearing and forming a bearing for one end of the extension, and a bearing for the other end of the extension supported by the body structure.

1,897,270. CHECKER BRICKWORK CONSTRUCTION FOR REGENERATOR FURNACES. WILLIAM BOYD MITCHELL, Glasgow, Scotland. Filed June 16, 1932, Serial No. 617,516, and in Great Britain Feb. 16, 1932. 9 Claims. (Cl. 263—51.)

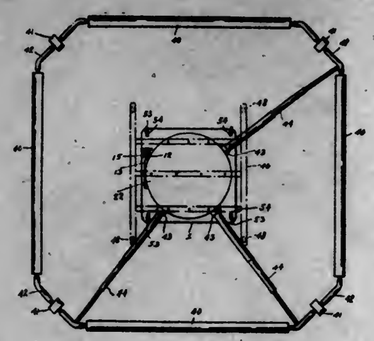


7. A checker brickwork construction for regenerator furnaces comprising superposed courses of filler bricks each of simple prismatic form presenting only six ruled surfaces, the bricks in each course being arranged in T-relation to present a plurality of gas passages of substantially rectangular form in horizontal section and substantially the same horizontal cross sectional area throughout, said passages being uninterrupted by projections and presenting paths for the gases such that the gases are deflected by at least two walls of each passage.

1,897,271. DISPLAYING MACHINE FOR SHOW ROOMS, SHOW WINDOWS, AND THE LIKE. ALPHEUS M. MOORE, Somerset, Pa. Filed July 7, 1931. Serial No. 549,243. 5 Claims. (Cl. 240—2.)

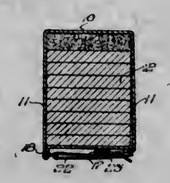
1. In combination with a supporting member, a frame extending around the same, said frame including lamp

housings, lamps in the housings for illuminating articles on the supporting member, means whereby the frame can



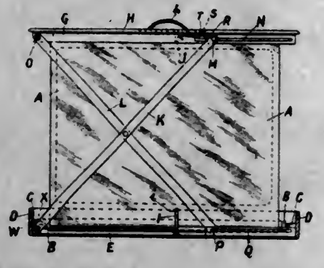
be retracted or expanded, the lamps in the housings being arranged in groups, a circuit for each group, and means for alternately opening and closing each circuit.

1,897,272. SPRING COVER. THOMAS MUNRO, Philadelphia, Pa. Filed Mar. 18, 1929. Serial No. 347,830. 4 Claims. (Cl. 267—37.)



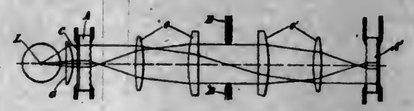
1. In combination, in a spring cover, flexible spring member secured in one edge thereof, loops formed in said member, and fastening members secured to the opposite side of said cover, said fastening members each in the form of a bendable metallic tongue engageable with one of said loops and each provided with a transverse slot adapted to receive the rebent end thereof.

1,897,273. PROJECTION SCREEN. HUGO NAGEL, London, England, assignor to Robert Forgie Hunter and Arthur Blackburn, London, England. Filed Sept. 30, 1930, Serial No. 485,442, and in Great Britain Sept. 15, 1930. 3 Claims. (Cl. 88—24.)



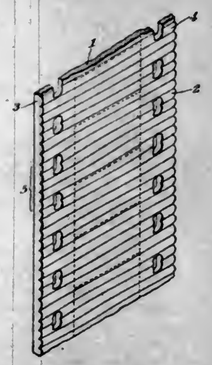
1. A projection screen comprising in combination with a box for said screen, a roller mounted within the sides of said box, a cover for said box, a projection screen wrapping said roller and attached to said cover, means for stretching said screen, said means comprising a lazy-tongs device comprising a pair of pivoted struts connecting the cover and the box, and positive, separate, mechanical means for holding said stretching device in extended position, said means including a catch in the cover adapted to engage one part of said lazy-tongs device.

1,897,274. MACHINE FOR REPRODUCING CINEMATOGRAPHIC FILMS. ANDRÉ OSWALD, Paris, France, assignor to Keller Dorian Colorfilm Corporation of America, New York, N. Y., a Corporation. Filed Feb. 7, 1928, Serial No. 252,648, and in France Feb. 7, 1927. 9 Claims. (Cl. 88—24.)



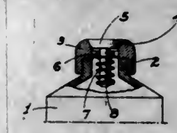
1. In a machine for reproducing an image from cinematographic lined films of the Keller-Dorian type, the combination of a source of light, a collimator and an illuminating slot disposed in the focus of said collimator, the said slot being parallelly disposed for the purpose disclosed.

1,897,275. CINEMATOGRAPHIC FILM. ANDRÉ OSWALD, Paris, France, assignor, by mesne assignments, to Keller-Dorian Colorfilm Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 22, 1928, Serial No. 307,601, and in France Oct. 17, 1927. 3 Claims. (Cl. 88—16.4.)



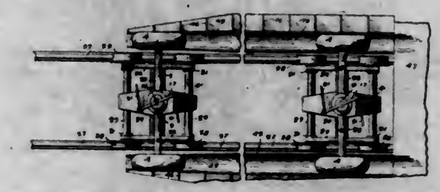
1. As a new industrial product, a cinematographic film comprising a support having a series of successive images adapted to be reproduced in colors to produce moving pictures, and a plurality of microscopic lenticular elements on the support, each in the form of a line located at right angles to the side of said support, the ratio of the height of said images to the height of each of said elements being a mixed number and the dividing lines between the lenticular elements being so located as to be placed in different relative positions on the successive images.

1,897,276. SELF-SEALING PASTE TUBE. WALTER PETERSEN, Santa Maria, Calif. Filed Oct. 26, 1931. Serial No. 571,086. 1 Claim. (Cl. 221—60.)



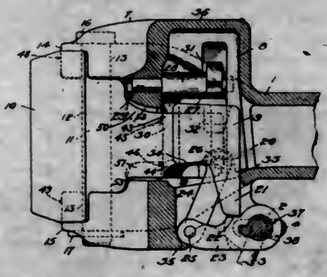
A valve attachment for the outlet neck of a collapsible tube comprising a tubular cap adapted to be secured on the neck, said cap at its outer end being formed with a valve seat, an outwardly opening valve to engage the seat, a stem depending from the valve through the cap and into the neck, a bearing element in the cap through which the stem slidably projects, and a spring about the stem acting to hold the valve normally closed; the cap having a cylindrical bore of unbroken contour from the inner end of the valve seat to the outer end of the neck and forming a continuation of the outlet thereof; said bore being the same size as the outlet.

1,897,277. VEHICLE. HOWARD A. REINHART and HARRY W. REINHART, Oakland, and JAMES WADSWORTH, Berkeley, Calif. Filed Dec. 21, 1931. Serial No. 582,328. 9 Claims. Cl. 105—159.)



1. The combination with a vehicle and running gear thereof, of a rail truck; means for detachably connecting said rail truck to said vehicle; and means mounted upon said vehicle for normally preventing detachment of said truck from said vehicle and manually operable to permit such detachment.

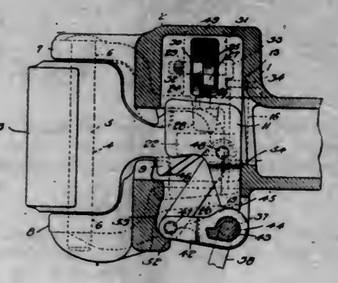
1,897,278. COUPLER. WILLARD FILLMORE RICHARDS, Depew, N. Y., assignor to The Gould Coupler Company, New York, N. Y., a Corporation of Maryland. Filed May 19, 1928. Serial No. 279,017. 14 Claims. (Cl. 213—126.)



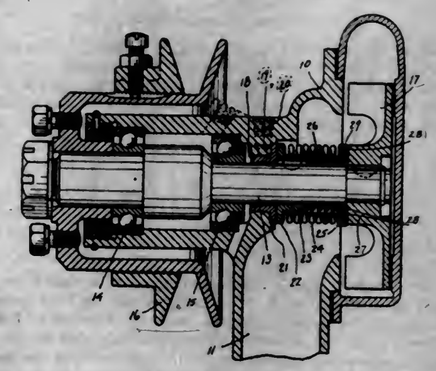
6. In combination, a coupler head, a swinging knuckle, a locking device for said knuckle comprising a block, operating means for said block comprising a rocker shaft, a lock lever on said shaft, a limiting stop ledge for said lock lever on the bottom of said head, and a link connecting said lever and block.

1,897,279. COUPLER. WILLARD F. RICHARDS, Depew, N. Y., assignor to The Gould Coupler Company, New York, N. Y., a Corporation of Maryland. Filed Aug. 23, 1929. Serial No 387,878. 4 Claims. (Cl. 213—126.)

1. In combination, a coupler head, a swinging knuckle, a locking device for said knuckle comprising a block formed with a depending portion, operating means for said block comprising a shaft, an arm thereon, and a link connecting said arm and block, said shaft being disposed with its axis directly beneath said depending portion, and said arm being formed with a hub on said shaft serving to directly support said depending portion above the axis of said shaft when the block is in its lowermost position.

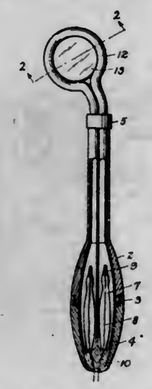


1,897,280. SHAFT SEAL. LOUIS SCHWITZER and CARL J. WINKLER, Indianapolis, Ind., assignors to Schwitzer-Cummins Company, Indianapolis, Ind., a Corporation. Filed Dec. 17, 1931. Serial No. 581,574. 2 Claims. (Cl. 286—11.)



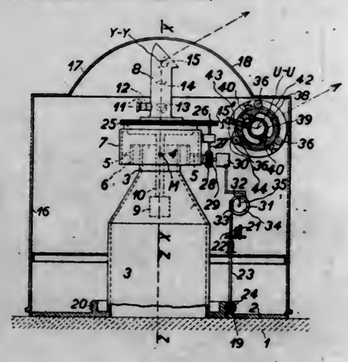
1. The combination with a housing having a bearing and a shaft supported therein, of a member secured to said shaft having a recess formed in the surface thereof, a resilient packing ring mounted in engagement with said member and extending into said recess, and a sealing unit secured to said shaft for sealing that portion thereof between the said member and housing, said sealing unit including a sealing ring secured to said shaft in sealing engagement with said housing, a second sealing ring in sealing contact with said packing ring, and a flexible extensible metal sleeve permanently secured to said sealing rings and extending therebetween.

1,897,281. ILLUMINATED REFLECTOR. ANTHONY M. SPAMPINATO, Houston, Tex., assignor of one-half to William J. Buford, Houston, Tex. Filed Aug. 12, 1929. Serial No. 385,206. 7 Claims. (Cl. 128—12.)



1. An illuminated reflector including a handle, a neon tube having its ends anchored in said handle, and a reflector carried by said tube.

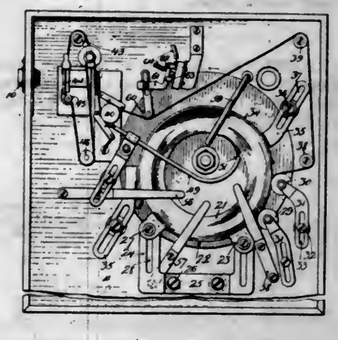
1,897,282. TURRET ROTATABLY MOUNTED ON BOARD SHIP. ADOLF STEINLE, Jena, Germany, assignor to N. V. Nederlandsche Instrumenten Compagnie "Nedinsco", Venlo, Netherlands. Filed Sept. 8, 1932, Serial No. 632,200, and in Germany Aug. 10, 1931. 2 Claims. (Cl. 89—41.)



1. A turret, means for so mounting this turret on the deck of a ship that it is rotatable about an axis perpendicular to the deck, a sighting telescope adapted to follow air-craft and Cardanically disposed on the neck inside the turret, the telescope having means for rotating its sighting line about an axis, a stabilizing device connected to the telescope and adapted to maintain this axis vertical, and means coupling the telescope and the turret and effecting that rotating the sighting line of the telescope about the said vertical axis entails an equal rotation of the turret about its axis of rotation relatively to the deck.

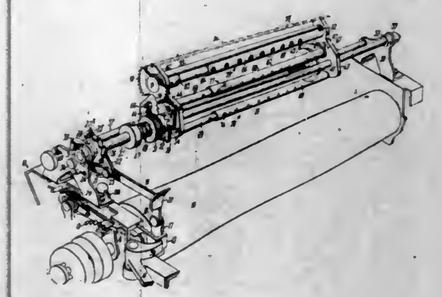
1,897,283. MOVING PICTURE PROJECTOR. HERBERT J. TEMPLETON, Brooklyn, N. Y., assignor of one-tenth to Edward C. O'Donnell, New York, N. Y. Refile of application Serial No. 253,368, filed Feb. 10, 1928. This application filed May 27, 1932. Serial No. 614,015. 8 Claims. (Cl. 88—18.7.)

2. In a projecting apparatus the combination of means for projecting pictures from a continuous strip of film arranged in the form of a multi layer coil, a portion of the film arranged to be operated on by the projecting means, means for supporting said coil solely by exterior contact with the periphery thereof and adapted to permit the coil to be revolved by propelling force acting through the strip of film, the inner portion of the coil



of film being free to expand and contract, means for guiding the strip of film from the outer layer of said coil to the projecting means, means for guiding a portion of the film coming from said projecting means to the inner layer of said coil and revolving means independent of said support engaging the side of the coil of film for assisting in the revolution thereof.

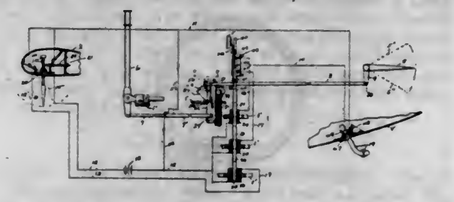
1,897,284. TYPEWRITING MACHINE. OTTO THIEME, Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 8, 1928. Serial No. 304,653. 34 Claims. (Cl. 197—132.)



19. In a tally-attachment for a typewriting machine, the combination of a two-part arbor telescoping for different widths of tallies, and a two-part telescoping frame for supporting said arbor.

1,897,285. AIRPLANE CONTROL APPARATUS. ANTON L. VEIT, San Francisco, Calif., assignor of one-half to William Wagner, San Francisco, Calif. Filed Sept. 16, 1931. Serial No. 563,078. 10 Claims. (Cl. 244—29.)

1. In an airplane automatic control, a movable device exposed to the varying wind pressure and responsive thereto, means determining the general position of said device during normal flight and wind pressures, an electrical circuit actuated by said device at other than normal wind pressures, means disconnecting the pilot's manual control from operative connection with the elevators of the plane, means re-establishing the connection of the

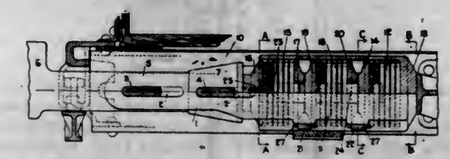


pilot's manual control upon resumption of normal wind pressures, and means swinging the elevators of the plane upon the actuation of said circuit.

1,897,286. DENTAL PLATE BASE. JAMES F. WALSH, East Orange, N. J., assignor to Celluloid Corporation, a Corporation of New Jersey. Filed Dec. 1, 1928. Serial No. 328,204. 2 Claims. (Cl. 106—37.)

1. A dental plate base containing cellulose nitrate and dibutyl phthalate.

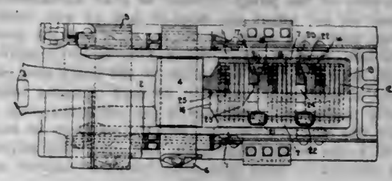
1,897,287. CENTRAL BUFFING AND DRAWGEAR. REGINALD LAWRENCE WHITMORE, London, England. Filed Jan. 6, 1930, Serial No. 418,824, and in Great Britain Dec. 4, 1929. 1 Claim. (Cl. 213—47.)



In buffing and draw gear of the type set forth, a draw yoke the inner end of which is formed as a casing and the limbs of which are slotted, a follower head, a cotter passed through the said follower head and through slots in the limbs of the yoke, a draw rod, a cotter passed through said draw rod and through slots in the limbs of the yoke, three sets of India-rubber springs located one behind the other in said casing, a compression plate for the front end of the inner set of springs mounted to slide in said casing, a compression plate for the rear end of the intermediate set of springs mounted to slide in said casing, cotters mounted in said casing between the said two compression plates and constituting abutments for the same, a compression plate for the front end of the intermediate set of springs mounted to slide in said casing, an axial boss projecting rearwardly from said last-mentioned compression plate and on which said intermediate set of springs is mounted, an axial boss projecting forwardly from said last-mentioned compression plate and on which the front set of springs is mounted, a compression plate for the rear end of the front spring mounted to slide in said casing, cotters mounted in said casing between the said two last-mentioned compression plates and constituting abutments for the same, and a front compression plate located between said follower head and the front set of springs.

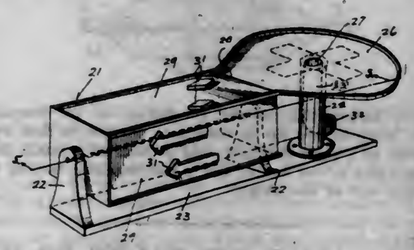
1,897,288. CENTRAL BUFFING AND DRAWGEAR FOR RAILWAY VEHICLES. REGINALD LAWRENCE WHITMORE, London, England. Filed Jan. 25, 1930, Serial No. 423,434, and in Great Britain May 14, 1929. 8 Claims. (Cl. 213—48.)

8. In central buffing and draw gear of the kind set forth, a draw bar yoke, a casing embraced by said yoke, three sets of India-rubber springs arranged tandemwise within said casing, a compression plate endways movable in said casing for each of said sets of springs, rigid members positively spacing alternate compression plates,



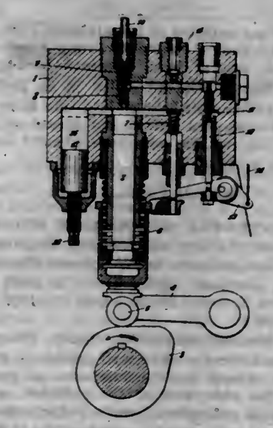
and cotters forming abutments for said compression plates, removably carried by said casing to effect compression of said three sets of springs in parallel when either buffing or drawing.

1,897,289. GOLF GAME. LOUIS WIEDEN, Livermore, Calif. Filed Jan. 7, 1931. Serial No. 507,111. 14 Claims. (Cl. 273—32.)



1. A miniature golf course comprising a plurality of putting surfaces united together, and means to rotatably support said united surfaces to permit the surfaces to be brought successively into an operative position.

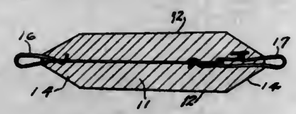
1,897,290. FUEL PUMP FOR DIESEL ENGINES. EUGEN WÜTERICH, Winterthur, Switzerland, assignor to Swiss Locomotive and Machine Works, Winterthur, Switzerland, a Corporation of Switzerland. Filed May 5, 1930, Serial No. 449,821, and in Switzerland May 11, 1929. 1 Claim. (Cl. 103—37.)



A fuel pump for airless Diesel engines, comprising a pump cylinder, an operating piston therein, valve controlled means for the supply of fuel to and the discharge

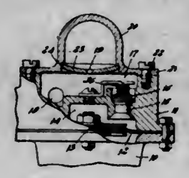
of fuel from said cylinder, means providing a fuel chamber adjacent to and in communication with said pump cylinder, an adjustable plug within said fuel chamber to vary the capacity of the latter, the fuel chamber being located to one side of the pump cylinder so that adjustments of the plug do not affect the flow of fuel to and from the cylinder, said plug being inherently rigid and its position within said fuel chamber being adapted to remain unchanged during normal operation of the pump and engine whereby the effective capacity of said chamber remains normally unchanged, and means for adjusting said plug to vary the effective capacity of said chamber in accordance with the compressibility of the fuel, said adjusting means serving to hold said plug normally against movement.

1,897,291. FISHING LINE WEIGHT. PHILLIP R. ANDREWS, Seattle, Wash., assignor to Pacific Marine Supply Company, Seattle, Wash., a Corporation of Washington. Filed Oct. 8, 1929. Serial No. 398,129. 2 Claims. (Cl. 43—52.)



1. A fishing line weight consisting of an elongated metal body having an intermediate portion formed as a frustum of a right pyramid; end portion of pyramid form at each end of the weight and a line engaging loop at the extreme end of the weight.

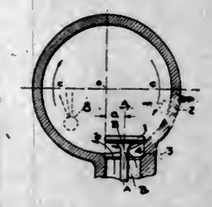
1,897,292. AIRDOME TYPE PULSATOR FOR FUEL PUMPS. ABRAHAM M. BABITCH, Flint, Mich. Filed Sept. 20, 1929. Serial No. 393,974. 1 Claim. (Cl. 103—224.)



In a fuel pump pulsator of the air-dome type: a pulsator body element; and a bubble-receiving dome element secured thereto, one of said elements having connected therewith a throat element which is so positioned and proportioned as to admit bubbles into said dome element,—the cross-sectional area within the throat of said throat element and that within said dome element being in substantially the ratio of 1 to 8.

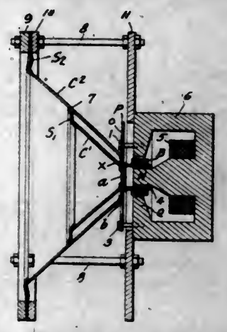
1,897,293. INTERNAL COMBUSTION ENGINE. RICHARD WILLIAM BAILEY, Altrincham, England, assignor, by mesne assignments, to Associated Electrical Industries, Ltd., England. Filed Dec. 15, 1928, Serial No. 326,363, and in Great Britain Dec. 28, 1927. 5 Claims. (Cl. 123—32.)

1. In an internal combustion engine, the combination of a cylinder having a side wall which is a surface of revolution, a passage for the admission of gaseous media provided in the side wall of the cylinder, a valve seat embodied in said passageway, and a valve cooperating with the valve seat and opening toward the cylinder, said valve having its axis arranged in a chordal direction with respect to less than half of the side wall of the cylinder as well as inclined toward one end of the cylinder, and said passageway being so formed as to deflect the gaseous media, when the valve is in open position, circumferentially into the cylinder in an initial direction



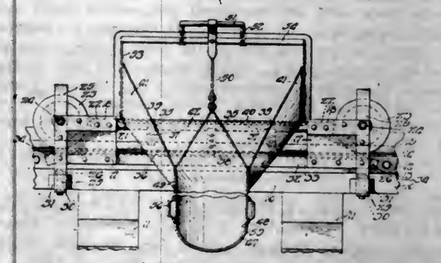
which is approximately normal to the valve axis and which has a component of direction toward the other end of the cylinder.

1,897,294. LOUD SPEAKER AND LIKE APPARATUS. MARCEL BERNARD, Paris, France, assignor to Societe Francaise Radio-Electrique, Paris, France, a Corporation of France. Filed July 30, 1931, Serial No. 553,958, and in France Aug. 14, 1930. 5 Claims. (Cl. 181—31.)



1. An acoustic apparatus comprising a support, a moving coil, means for producing an electro-dynamic action upon said coil, a plurality of truncated conical membranes located within the said support, said membranes having different dimensions, one of said membranes being partly coextensive with and spaced within the other and associated with the said coil, elastic suspension means upon each of said membranes connected to another element of said apparatus and elastic suspension means connecting one of said membranes to the other.

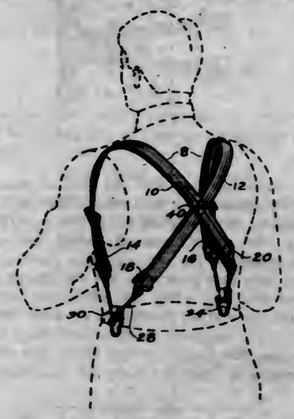
1,897,295. CRUSHED ICE CHUTE. ALBERT L. BLATTI, Chicago, Ill., assignor to The Railways Ice Company, a Corporation of Delaware. Filed Dec. 31, 1930. Serial No. 505,763. 1 Claim. (Cl. 193—3.)



An ice loading device comprising a chute having an apron top extension to receive broken ice, means for supporting said apron comprising a longitudinal member upon which the upper edge of said extension is pivoted, wheels at the ends of said longitudinal member and having axes of revolution in substantially the same horizontal plane as the upper edge of said apron extension, a track for said wheels and over which said longitudinal member rides, a support for said track, and means depending below said horizontal member and the edge of said extension and engaging said support beneath said track for preventing tilting of said longitudinal member in the direction of said apron and chute.

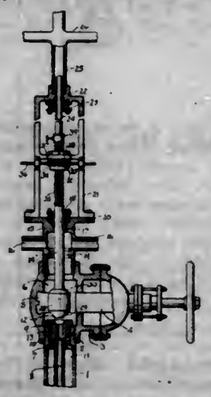
CARNEGIE LIBRARY OF ATLANTA

1,897,296. SELF-ADJUSTING SUSPENDERS. HARRY J. BLOCK, Ellensburg, Wash. Filed Mar. 29, 1932. Serial No. 601,864. 2 Claims. (Cl. 241—23.)



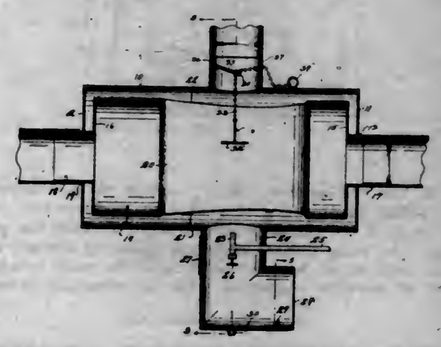
1. The combination with a pair of crossed and joined elastic shoulder straps each having a front looped end, an adjusting buckle for each looped end, and a slotted suspending plate supported from each of the four strap ends, of a pair of cords having looped ends, means for suspending the looped ends of the cords from said slotted plates, a slidable member supported on each cord, an openable loop having one end secured to the slidable member and adapted to fold over said slidable member, securing means on the ends of said openable loop, and a button-engaging member supported by each said slidable member.

1,897,297. CASING HEAD EQUIPMENT. CICERO C. BROWN, Houston, Tex. Filed Jan. 28, 1930. Serial No. 423,926. 11 Claims. (Cl. 166—15.)



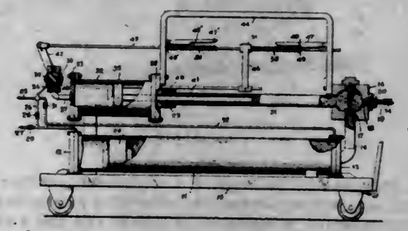
1. In combination a well casing, a master valve therein, a casing head above said valve, a tubing supported in said casing, said tubing being divided adjacent the lower side of said valve into upper and lower sections, means to move said upper section upwardly to allow the closing of said valve, and means to close the space between said casing head and said tubing at the lower end of said casing head.

1,897,298. HUMIDIFIER. CARL J. BYBOTH, Rushford, Minn. Filed Sept. 1, 1931. Serial No. 560,597. 6 Claims. (Cl. 261—14.)



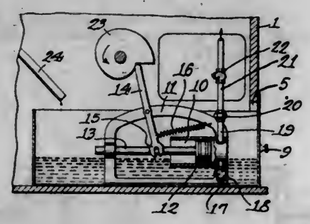
1. A humidifier of the character described comprising an outer drum, an inner drum mounted in spaced relation to the outer drum, means for connecting the two drums to a smoke pipe whereby to permit the heat from the smoke pipe to pass through the inner drum, a heating member disposed diametrically of the inner drum and interposed in the path of heat passing therethrough, and means for spraying a liquid within the heating member whereby to evaporate the liquid upon heating of the member.

1,897,299. DISPENSING APPARATUS. EDWARD RAMSAY CANDOR, Montclair, N. J., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 31, 1927. Serial No. 243,779. 9 Claims. (Cl. 221—47.1.)



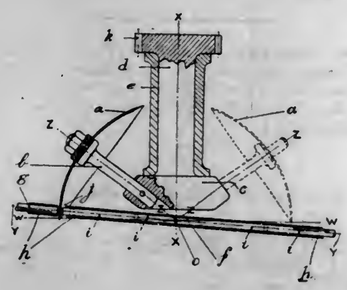
1. A grease dispensing apparatus comprising a grease storage chamber, a valve chamber communicating with the storage chamber and formed with a discharge outlet, a check valve for preventing the contents of the valve chamber from re-entering the storage chamber, a working barrel in continuous open communication with the valve chamber, a plunger in the working barrel, means for admitting compressed air to one end of said grease storage chamber in order to continuously apply uniform pressure to the grease in said storage chamber and force said grease into the working barrel, means for applying pressure to the plunger in the working barrel to discharge grease through the discharge outlet in the valve chamber, and a valve in said discharge outlet for controlling the flow of grease therethrough and, when closed, for stopping the movement of the plunger and establishing a condition of balanced pressures throughout the entire apparatus.

1,897,300. LUBRICANT PUMP. WILLIAM L. CLOUSE, Tiffin, Ohio, assignor to The National Machinery Company, Tiffin, Ohio. Filed Nov. 10, 1930. Serial No. 494,792. 6 Claims. (Cl. 184—27.)



1. The combination with a machine to be lubricated including an operating element, of a lubricant pan, and a pump in the pan for elevating lubricant from the pan, said pan being slidable under the operating element and into and out of the machine to move the pump into and out of operative connection with the operating element.

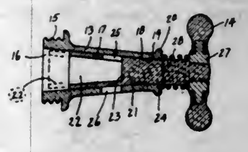
1,897,301. CUTTING-OFF MECHANISM IN CIGARETTE MAKING AND SIMILAR MACHINES, WHEREIN THE ROD OR THE LIKE IS MOVING CONTINUOUSLY IN A LENGTHWISE DIRECTION. WILLIAM COLE, Bristol, England, assignor to The Baron Cigarette Machinery Company Limited, London, England, a Corporation of Great Britain. Filed June 29, 1926, Serial No. 119,444, and in Great Britain July 31, 1925. 18 Claims. (Cl. 131—37.)



1. In a machine for cutting a continuously moving cigarette rod, cutting mechanism comprising in combination a rotor mounted to rotate about a fixed axis and a cutter mounted on said rotor adapted to intersect the rod during the cutting action, said cutter having a section of substantially involute curvature on a plane normal to the said fixed axis.

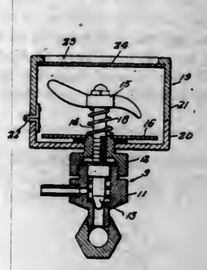
1,897,302. FRUIT JUICE DISPENSER VALVE. HENRY HAYS CRIMMEL, Hartford City, Ind. Filed Jan. 9, 1931. Serial No. 507,555. 1 Claim. (Cl. 251—4.)

A valve suitable for the dispensing of fruit juice and the like, including a glass body having an elongated tapered internal bore therein, and a cylindrical extension of said bore at its smaller end, said bore having an axial open opposite end and a lateral discharge directly communicating with the tapered bore intermediate the ends, an exteriorly tapered glass valve plug member of considerable less length than the bore and seatable therein, said plug member including a coaxial chamber having an open end communicating with the body bore at its large and open end and having a closed opposite end, and a cylindrical extension of appreciable length and materially greater than the bore extension for appreciable reciprocation of the plug in the tapered bore and cylindrical extension thereof and capable of independent rotation in the last mentioned cylindrical extension and the bore, said chamber having a lateral discharge opening intermediate the ends and adapted to register with the bore discharge opening, an exposed handle portion carried by the exposed end of the cylindrical extension of the glass plug member, and externally exposed yielding means interposed be-



tween the handle portion and the end of the cylindrical portion of the glass body and concentric with the cylindrical extension of the glass plug member for normally constraining the latter toward valve closing position, said plug member in its reciprocation having a cleaning action in the bore and providing for the discharge through the bore and chamber when the discharge openings communicate and permitting discharge between the body and plug and through the plug chamber and discharge opening to and through the body opening when the plug member is moved axially in opposition to the constraint.

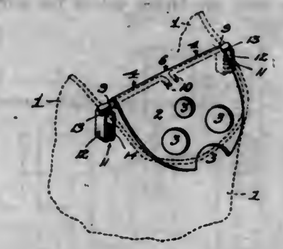
1,897,303. SAFETY PROTECTOR FOR OIL BURNERS. AUGUSTO A. DA SILVA, Whitman, Mass. Filed Sept. 26, 1932. Serial No. 634,935. 2 Claims. (Cl. 116—125.)



1. In a structure of the class described, a valved pipe assembly comprising a fuel delivery pipe, a distributing pipe connected thereto, valve units connected to said distributing pipe, valve stems incorporated in said valve units, each valve stem being provided with an indicator, a box-like protective casing formed in its bottom with openings, adjacent portions of the valve units extending through said openings into the casing, a dial plate connected with said valve units and confined in said casing, said indicators being co-operable with the dials.

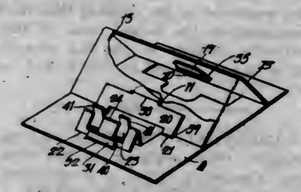
1,897,304. ICE SHIELD. LEONARD H. DAVIS, Washington, D. C. Filed Nov. 13, 1931. Serial No. 574,898. 3 Claims. (Cl. 65—18.)

1. In a device of the character described, comprising a shield having one edge formed in end bearings and its intermediate portion between the bearings extended to form an open slot, shafts mounted in the bearings and extending laterally from the shield, extensions on the shafts



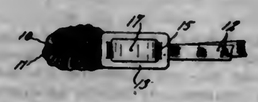
which fit in the slot, and clamps on the extended ends of the shafts to fasten the device on an article on which it is to be used.

1,897,305. BOOK SUPPORT. THOMAS A. DOHERTY, Queens Village, N. Y. Filed Oct. 30, 1930. Serial No. 492,285. 4 Claims. (Cl. 45—57.)



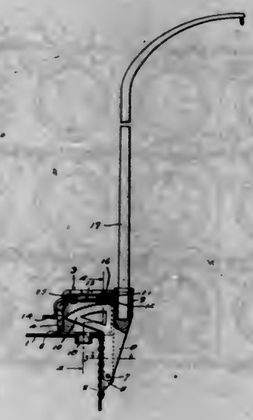
1. A device of the character described comprising a cardboard base member, a cardboard book supporting member adapted to fold upon itself to provide a book support and a prop therefor, and means carried by the base member for engagement with the book support and prop for removably attaching them to the base member, said means comprising tongues formed in the base member and engageable in slots in the book support and prop.

1,897,306. FASTENER FOR SHOE BAGS. FRANK C. FLINT, Chicopee Falls, Mass. Filed Feb. 24, 1932. Serial No. 594,901. 8 Claims. (Cl. 24—30.5.)



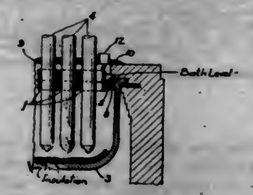
3. A fastener for the draw strings of elastic shoe bags and the like which comprises a body portion having spaced holes through which the draw strings may pass and upstanding ears at the outer edges of the holes, and a resilient celluloid friction piece longer than the distance between the ears and wider than the holes and having tongues extending through the holes to preserve the friction piece against sideways displacement, the friction piece being in frictional contact with the draw strings, bowed between the ears, and roughened on its external surface to permit marking thereon with a pencil.

1,897,307. BOAT DAVIT SUPPORT. EVERETT B. GREHAM, Sharondale, Ky., assignor of one-half to Calvin B. Stallard, Sharondale, Ky. Filed Jan. 14, 1932. Serial No. 586,670. 3 Claims. (Cl. 9—22.)



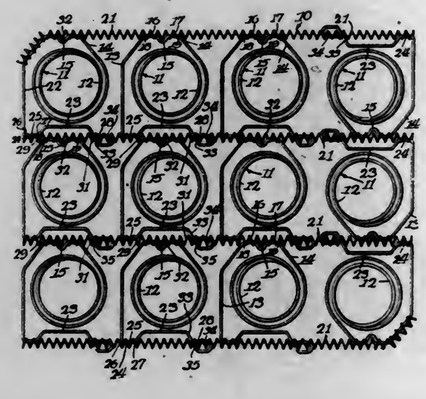
1. In a boat davit structure, an arm, means for pivotally connecting one end of the same to a ship's side to extend upwardly therealong, a socket at the upper end of and carried by the arm, a davit mounted in the socket, a gear segment integral with the arm at one side to extend inwardly over an adjacent deck, and a crank operated worm mounted for connection with the segment for facilitating the movement of the same and the arm about the pivot of the arm.

1,897,308. APPARATUS FOR ELECTROLYSIS OF A FUSED BATH. RALPH M. HUNTER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 31, 1929. Serial No. 367,494. 2 Claims. (Cl. 204—19.)



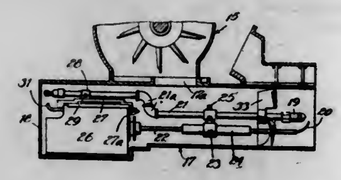
1. In an apparatus for the electrolysis of a fused bath to produce a metal lighter than the electrolyte, the combination of a metallic vessel to contain such bath and constituting the cathode, an inwardly directed inverted metallic trough member connected to the upper part of the sidewall of said vessel in electrical contact therewith and adapted to entrap molten metal rising from the active cathode surface, a plurality of vertically adjustable anodes depending in said bath, and a removable one-piece sleeve-like curtain member of ceramic material circumscribing each anode in spaced relation therefrom, said curtain member being immersed in said bath to a depth sufficient to cover the surface of said trough member facing the anode and thereby to restrict the flow of current therebetween.

1,897,309. SPRING ASSEMBLY. FRANCIS KARR, Holland, Mich., assignor, by mesne assignments, to Charles Karr Company, Holland, Mich., a Corporation of Michigan. Filed Nov. 23, 1928. Serial No. 321,811. 8 Claims. (Cl. 5—269.)



8. In a spring assembly, a plurality of spiral springs arranged in rows, each spring having its ends return bent and having its terminal coils provided with non-circular portions, helical connecting coils extending about certain of said non-circular portions and return bent ends of the springs of adjacent rows for connecting said springs and rows together.

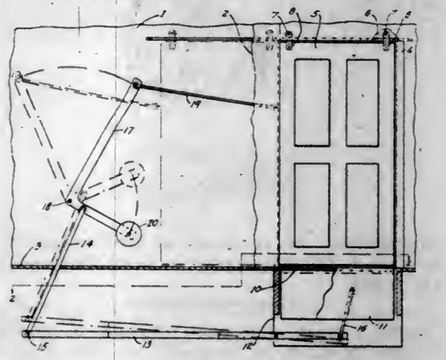
1,897,310. OIL BURNER. WILLIAM RAY KIEFER, Rockford, Ill., assignor to Sundstrand Engineering Company, Rockford, Ill., a Corporation of Illinois. Filed Jan. 25, 1930. Serial No. 423,303. 7 Claims. (Cl. 158—28.)



5. In an oil burner having a draft tube with a substantially straight portion, the inner end of which is adapted to extend into a combustion chamber, said tube having an opening therein substantially alined with said straight portion, a transformer positioned in the outer end of said tube and removable through said opening, a pair of substantially rigid conductors rigidly connected to the inner side of said transformer so as to receive current therefrom, said conductors extending longitudinally through said tube and having spark terminals on their inner ends, and means arranged to support the conductors at points spaced from said transformer.

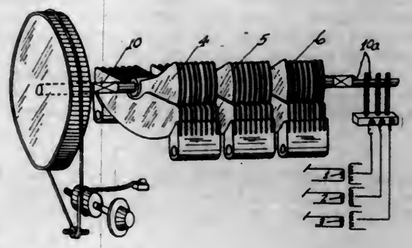
1,897,311. AUTOMATIC DOOR. FRANK KUOLER Jr., Bremen, Saskatchewan, Canada. Filed May 10, 1930. Serial No. 451,394. 1 Claim. (Cl. 268—41.)

The combination with a spaced apart wall provided with a door opening, a horizontally reciprocating door mounted to close the opening having an angled lever pivotally mounted connected for actuation of the door and having a counterweight automatically operable to move the door into a normal closed position, and a floor structure in conjunction with the wall formed with an opening below the door opening, of a treadle structure for opening the door comprising a forked lever intermediately suspended in the floor structure with the forked end of the lever aligned



with the floor opening, an open box structure depending from the floor surrounding the opening therein, a platform pivotally supported on the forked arms of the lever and mounted vertically slidable in the box structure, and a link connecting the other end of the forked lever to the angled lever.

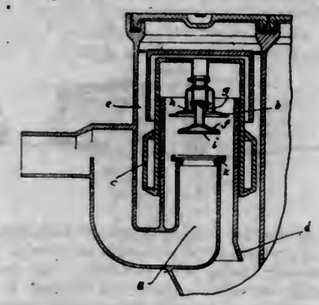
1,897,312. RADIO TUNING METHOD. RALPH H. LANGLEY, Cincinnati, Ohio, assignor to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 11, 1929. Serial No. 339,073. 3 Claims. (Cl. 250—40.)



3. In a radio receiver, a plurality of vacuum tube circuits each comprising a tapped input transformer and a tuning condenser, the condensers for the several circuits operated by a common rotor shaft, an extension on said shaft to serve as a contact drum, said drum cut away in part to provide a non-contact portion, and a plurality of brushes connected to the taps of the several transformers respectively and arranged to contact said drum.

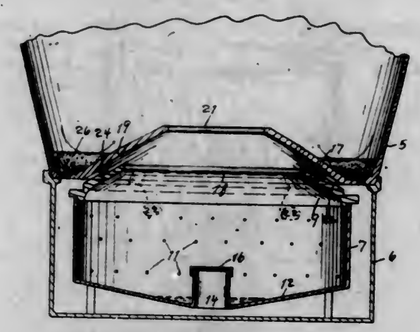
1,897,313. SEPARATOR. WILHELM LINNMANN, Essen, Germany. Filed Apr. 1, 1931, Serial No. 526,988, and in Germany Jan. 11, 1930. 9 Claims. (Cl. 210—56.)

1. In a separator for liquids of different specific gravity, the combination with a float movable over an outlet passage of the separator, of a main closure member depending from the float for covering the mouth of the passage, and an auxiliary closure member movable within the main closure member for reducing the cross section of the passage to reduce the suction on the main member when



the liquid passes through the passage, said auxiliary closure member being mounted within the main member to permit perpendicular movement within said member.

1,897,314. OIL BURNER. HARRY C. LITTLE, San Rafael, Calif. Filed Jan. 27, 1930. Serial No. 423,740. 1 Claim. (Cl. 158—91.)



An oil burner comprising an open-topped generating and mixing chamber having oil supply means therefor, an inwardly extending annular deflector plate positioned on the open top of said chamber and defining a central outlet therefrom; the inner upper surface of the said plate having an annular recess extending outwardly a substantial distance from the said outlet, a second annular plate spaced above and mounted coaxially with the first mentioned plate to form an annular air inlet and having a similar annular recess formed on its underside which coacts with the first mentioned recess to form an annular expansion chamber surrounding the said outlet, whereby the velocity of the incoming air will be reduced prior to its entering the said outlet which will eliminate noise and result in a higher heating of the air.

1,897,315. PENCIL. JOHN P. LYNN, Sycamore, Ill., assignor to Dur-O-Lite Pencil Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 5, 1928, Serial No. 244,573. Renewed June 30, 1932. 21 Claims. (Cl. 120—18.)

21. A pencil in which is comprised two relatively rotatable parts, means slidable axially of one part and operable thereby having a screw-threaded connection with the other part, and a lead carrier mounted for limited movement with said means and having a threaded connection therewith whereby to be advanced a distance less than the travel limit of said slidable means, substantially as described.



1,897,316. THERMOSTATIC SWITCH. LAURENCE K. MARSHALL, Cambridge, Mass., assignor to Spencer Thermostat Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 26, 1923, Serial No. 627,855. Renewed June 27, 1932. 18 Claims. (Cl. 200—138.)

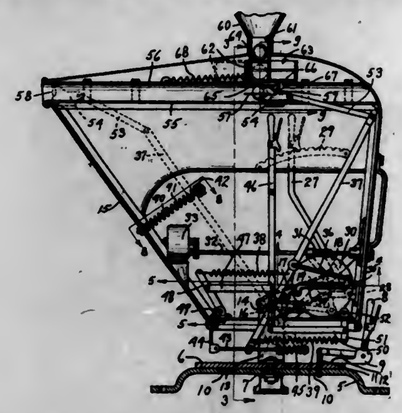


1. An electrical switch comprising two superposed disks of insulating material, one of the disks being rotatable relatively to the other disk, interengaging rows of contacts mounted concentrically upon the opposed faces of said disks, two of the contacts constituting circuit termini and the contacts of the respective rows being spaced to close circuit between said termini at a plurality of points in series in each angular position of the rotatable disk.

1,897,317. BALL THROWING APPARATUS. HENRY R. MCEACHERN, Spokane, Wash. Filed Mar. 15, 1930. Serial No. 436,029. 3 Claims. (Cl. 273—26.)

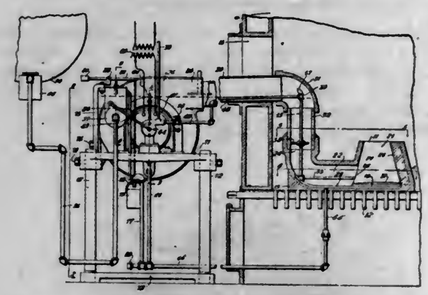
1. A ball throwing apparatus having in combination a housing mounted for vertical and horizontal pivotal movement, a tubular barrel carried by the housing, an ejector cup slidably disposed within the barrel, a lever ejector pivotally mounted within the housing and connected to the ejector cup, springs adapted to violently move said ejector lever on its pivot when released from a retracted position whereby a ball is forcibly ejected from

the housing, by the ejector cup means for adjusting the springs, shock absorbers for the lever ejector, means whereby the lever ejector is intermittently and continu-



ously retracted and released, and hopper means whereby balls are fed by gravity to said ejector at each retractile movement thereof.

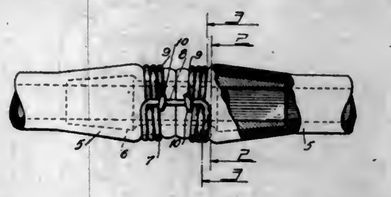
1,897,318. APPARATUS FOR BURNING LIQUID FUEL. JOHN H. MCILVAINE, Lake Forest, Ill. Filed Dec. 8, 1923. Serial No. 679,467. 36 Claims. (Cl. 158—28.)



1. Apparatus for burning liquid fuel comprising in combination with a furnace, an open combustion chamber positioned in the fire box of the furnace and having an air inlet, an air delivery pipe passing through the fire door opening of the furnace and having a downturned end delivering into said inlet, and a liquid fuel delivery pipe for delivering fuel under pressure, said pipe having an overflow point therein and, extending from this point, having a gravity feed portion within said downturned portion of the air pipe, the last mentioned portion of said fuel pipe being open to the air pressure therein at the overflow point at its upper end and discharging at its lower end into the combustion chamber.

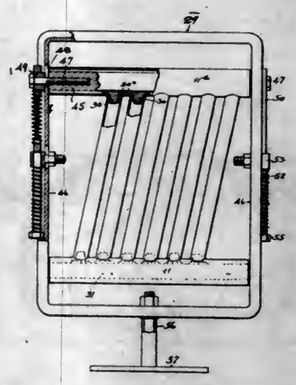
7. An oil burner comprising a combustion chamber having an air inlet opening, said chamber having means for supplying liquid fuel along with the air delivered, the chamber being of elongated form with the air inlet at one end thereof and the flame outlet at the other end thereof, the latter being in the top of said chamber, an upright dividing ridge on the end wall of said chamber at the latter end thereof diametrically opposite the air inlet, and a fuel trough provided in the middle of the bottom of said chamber and reaching in a line from the air inlet to the dividing ridge, the ridge and the trough substantially dividing the chamber into half portions so as to insure equal distribution of the fuel vapors on both sides of the combustion chamber.

1,897,319. HOSE-COUPLING. GLENN L. MCKEE, Jerome, Ariz., assignor, by direct and mesne assignments, to Hose Stayput Tool Company, Denver, Colo., a Corporation of Colorado. Filed Dec. 2, 1925. Serial No. 72,661. 7 Claims. (Cl. 285—77.)



7. A clamp for the purpose described comprising a coil consisting of a plurality of convolutions of wire, one substantial extremity being bent to form a loop over which the remaining extremity passes and is bent to form a lock, the remaining continuous convolutions passing under the lock to afford continuous application of the clamping pressure upon a member to be clamped.

1,897,320. METHOD OF FORMING TUBE CONNECTIONS. RUFUS R. MCKNIGHT and ARTHUR WEBBER, Chicago, Ill., assignors to The De Moe Engineering Laboratories, Inc., Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1930. Serial No. 425,104. 8 Claims. (Cl. 29—157.4.)

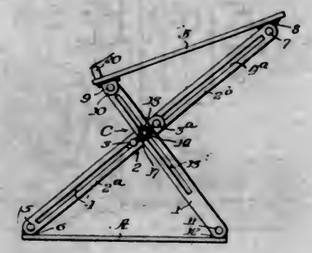


1. The method herein described, which consists in forming a plurality of aligned apertures in the wall of a cylindrical header, distending the margins of the apertures to furnish in each instance an outwardly projecting flared throat, bringing the ends of a plurality of substantially parallel tubes into abutting relation respectively with said throats, and maintaining such abutting relation under support applied individually from within through each of the respective throats, and maintained as to all of said throats by a common support furnished from within the interior of the header, and uniting the joints between the respective tubes and throats while thus positioned.

1,897,321. ADJUSTABLE LINK-SYSTEM TABLE. OSSIAN K. MITCHELL and LEONARD O. MITCHELL, Oak Park, Ill. Filed Apr. 11, 1928. Serial No. 269,144. 3 Claims. (Cl. 45—46.)

1. In a collapsible table, a base member, a table member, and a pair of crossed links connecting said members together and having at their crossing point a crossing pivot movable lengthwise of both links; each link of said pair having its respective ends pivotally connected at fixed points to said base member and said table member; one

link of said pair being of fixed length; the other link of said pair comprising an upper and a lower link section lapped and relatively movable one upon the other; said upper and lower link sections being both slotted and receiving a crossing pivot of the pair through their slots; said table member being bodily movable upwardly to various levels of elevation by the pivotal action of the link ends, and to a limit determined by the arrival of the



crossing pivot at the upper end of the slot of the lower link section; and said table being angularly movable about the upper end of the fixed length link as a pivot to develop various angles of depression of the table member up to a limit determined by the arrival of the crossing pivot at the lower end of the slot of the upper link section; means being provided for securing the table member at its various adjustments.

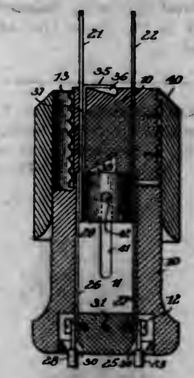
1,897,322. TORSION AND COUPLING CONTROLLING DEVICE. GUSTAVUS A. MONTGOMERY, Dallas, Tex. Filed June 24, 1927. Serial No. 201,077. 16 Claims. (Cl. 64—106.)



1. In a coupling for a well-bit drill stem, a driving member including a longitudinal clutching surface, a driven member including a longitudinal clutching surface, a longitudinal clutch interposed between the clutching surfaces of said members, a stuffing box intermediate the driving and driven members, and resilient means acting upon said box and clutch for urging said clutch into engagement with the clutching surfaces of said members.

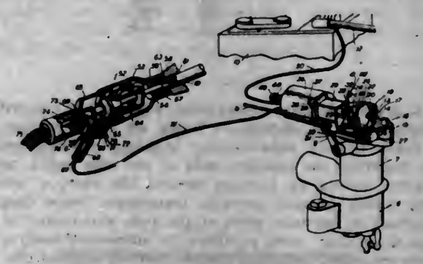
1,897,323. ELECTRICAL PLUG. JOHN H. MOORHOUSE, Rochester, N. Y., assignor, by mesne assignments, of one-half to Salvatore Condello, Rochester, N. Y. Filed Mar. 9, 1929, Serial No. 345,625. Renewed Jan. 27, 1932. 7 Claims. (Cl. 173—361.)

1. An electrical plug comprising a body having a screw threaded portion to cooperate with a threaded socket, a prong member to cooperate with a prong receiving socket, said prong member being movable from an ineffec-



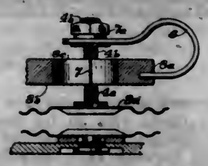
tive to an effective position, and a guard member for the screw threaded portion, said guard member being controlled by movement of said prong member.

1,897,324. SPEED CONTROL. WILLIAM R. MURROW, Independence, Kans., assignor of one-half to O. W. Compton, Independence, Kans. Filed Jan. 27, 1930. Serial No. 423,875. 5 Claims. (Cl. 123—108.)



1. A speed control device including in combination with a suction line of an automobile engine, and a throttle valve under the control of the operator of the engine for controling flow of fuel through the line, means including a control valve operable by suction in the line for automatically limiting flow of fuel through the line, and means responsive to the speed of the engine for setting up operation of the control valve.

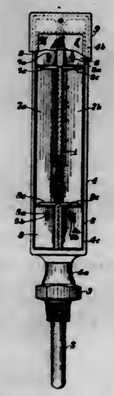
1,897,325. ANEROID BAROMETER. FLOYD B. NEWELL, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Oct. 15, 1927. Serial No. 226 467. 2 Claims. (Cl. 73—4.)



1. In a pressure-responsive device of the aneroid type, an aneroid chamber, a flat spring anchored at one edge and having a portion overlying the aneroid chamber in

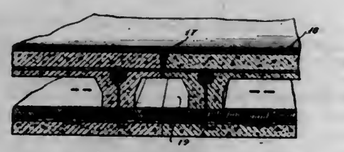
spaced relation, and a connection between the aneroid chamber and the spring, said connection comprising a ribbon of thin resilient metal having substantially the tensile strength of steel and being disposed in a plane substantially parallel to the upper free edge at which the spring is anchored.

1,897,326. THERMOMETER. HARRY Y. NORWOOD, West Rush, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Apr. 30, 1931. Serial No. 533,877. 5 Claims. (Cl. 73—52.)



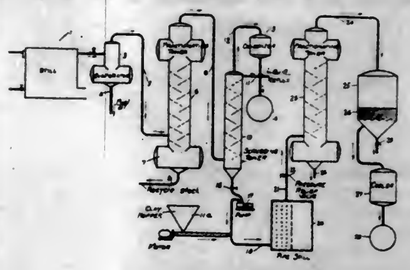
3. A thermometer comprising, in combination with a mercury tube, a support including an upper portion and a lower portion substantially V-shaped in cross-section for receiving the opposite ends of the tube and a middle portion having an opening toward the rear, a translucent screen in said opening, translucent scale members disposed on opposite sides of the tube and means on the said upper and lower portions for adjustably holding the scale members, including means abutting against the tube on opposite sides thereof to hold the latter against lateral and against forward movement.

1,897,327. ROOF STRUCTURE. EDWARD M. OLSON, Detroit, Mich. Filed July 7, 1930. Serial No. 465,806. 11 Claims. (Cl. 72—68.)



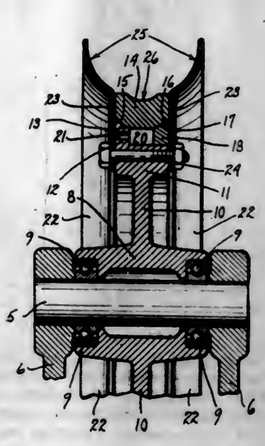
2. A roofing or wall slab comprising a concrete outside member having integral ribs on its interior surface, a fibrous sheet of insulation abutting the ribs with dead air spaces formed between the insulation and the concrete, another concrete member cast upon said insulation material, and wire screen or mesh secured to the insulation material into which the second concrete member ties.

1,897,328. METHOD OF TREATING HYDROCARBON DISTILLATES. RUDOLPH C. OSTERSTROM, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Apr. 19, 1929. Serial No. 356,569. 1 Claim. (Cl. 196—79.)



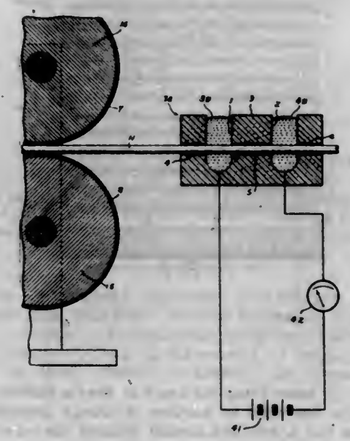
The method of decolorizing and degumming petroleum oils comprising adding a catalytic material in finely divided form to a flowing stream of oil, subjecting the flowing stream of said mixture to temperatures in excess of 500° F. and to pressures in excess of 200 pounds per square inch, releasing said superatmospheric pressure, discharging the mixture into a vaporizing and fractionating zone, separately discharging treated oil vapors and catalytic materials from said zone, and passing the treated oil vapors through a stationary bed of said catalytic materials.

1,897,329. TRAMWAY CARRYING PULLEY. EDWARD OSTRANDER, Chewelah, Wash., assignor of one-half to Royal N. Riblet, Spokane, Wash. Filed Nov. 2, 1931. Serial No. 572,711. 1 Claim. (Cl. 295—31.)



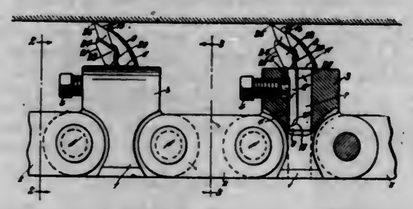
A tramway carrying pulley comprising in combination a pulley wheel having a beveled spur portion on one side of its rim, an annular rim-plate having inner beveled edges with one of said edges seated against the beveled spur portion, a resilient split-ring having a beveled edge seated against the other inner beveled edge of the rim-plate, and annular side-plates secured against the pulley rim and the rim-plate whereby the split-ring is forced into wedge-like engagement between the pulley rim and the rim-plate.

1,897,330. APPARATUS FOR TESTING RESISTANCE. HAROLD PENDER, Merion, Pa., assignor to International Resistance Company, Philadelphia, Pa., a Corporation of Delaware. Original application filed May 28, 1925, Serial No. 33,327, and in Germany Aug. 8, 1925. Divided and application filed Aug. 16, 1929, Serial No. 386,385. Again divided and this application filed Jan. 15, 1932. Serial No. 586,730. 3 Claims. (Cl. 175—183.)



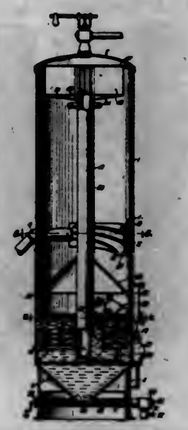
1. Resistance measuring apparatus comprising a pair of cups, liquid in said cups, passages extending through said cups and connecting them whereby a straight piece of material may be passed through the liquid being covered thereby, and an electric circuit including a resistance measuring instrument connecting said cups.

1,897,331. MINING MACHINE BIT AND BIT HOLDER. BENJAMIN F. RASSIEUR, Webster Groves, and CALVIN P. BASCOM, Clayton, Mo., assignors to Central Mine Equipment Co., St. Louis, Mo., a Corporation of Missouri. Filed June 20, 1932. Serial No. 618,262. 24 Claims. (Cl. 262—33.)



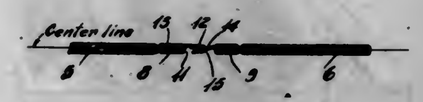
1. A device of the character described comprising a pair of clamping members, one of which is resilient and tapers outwardly from its inner end, clamping jaws on the outer ends of said clamping members adapted to engage and clamp a bit between them, and means for preventing inward longitudinal displacement of said tapered and resilient member.

1,897,332. OIL AND GAS SEPARATOR. GWYNNE RAYMOND, Kansas City, Mo. Filed Dec. 9, 1929. Serial No. 412,816. 2 Claims. (Cl. 183—2.7.)



1. In a separator of the character described, including a vertical, cylindrical tank, a plate on the inner surface of and conforming to the contour of the tank, having inwardly and downwardly extended ribs for directing liquid discharged onto the plate downwardly and spirally over the inner surface of the tank, and means for delivering liquid onto the plate at the upper ends of the ribs.

1,897,333. NECKTIE FASTENER. EARL H. RESSEGUIE, Flint, Mich. Filed July 8, 1932. Serial No. 621,899. 3 Claims. (Cl. 24—50.)

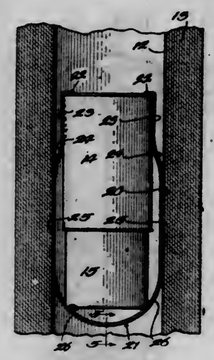


1. A necktie fastener of the class described, and comprising a pair of members formed of relatively thin material, each member comprising a main body provided with end and wing portions, said wings being adapted to be folded over to clamp the split end of a tie band to the main body, each member when in attached position being of a width or thickness which does not exceed the width or thickness of the neckband to which it is attached, the end portion directly adjacent the wings being bent to form an end wall for the main body and then bent to extend substantially in the longitudinal direction of the body, one of said end portions terminating in a hook and the other in an eye; said end portions being so constructed and arranged that the "draw" will be through the longitudinal center line of the neckband when the members are in connected relation.

1,897,334. PACKAGE HOLDER. JOSEPH R. RICHER, Oak Park, Ill., assignor to Jens P. Nielsen. Filed Oct. 24, 1930. Serial No. 490,900. 11 Claims. (Cl. 206—59.)

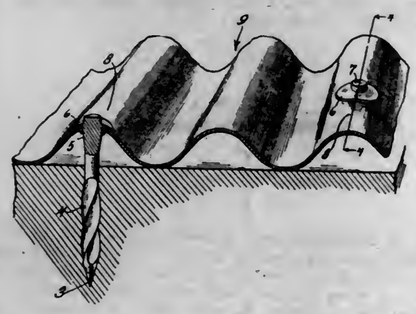
1. A holder for retaining a package in the bore of a roll said holder comprising a single strip of sheet metal adapted

to extend between a package and the side of a bore, and formed intermediate its ends to exert a yielding force



between the bore and the package, and formed at its ends to provide means to hold the package against displacement longitudinally of the strip.

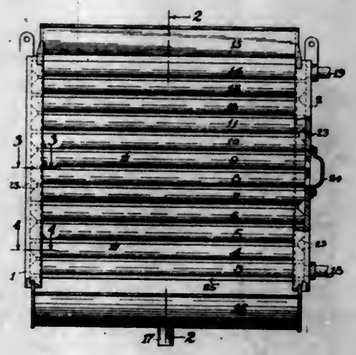
1,897,335. CORRUGATED METAL FASTENER. JOSEPH RIEDEL, JOHN DOMAGALL, and HAMILTON MAZE, Peru, Ill., assignors to W. H. Maze Company, Peru, Ill., a Corporation of Illinois. Filed Oct. 8, 1930. Serial No. 486,102. 3 Claims. (Cl. 85—28.)



2. A corrugated metal fastener of the character described comprising a comparatively hard pointed shank, high pitch threads on said shank adjacent said point, and a head on the opposite end of said shank and integral therewith and comprising a concave flange adjacent the end of said shank, the head portion being annealed sufficiently to conform to the contour of a corrugation when the nail is driven completely in but hard enough to prevent the nail from turning by upward pressure of the corrugation.

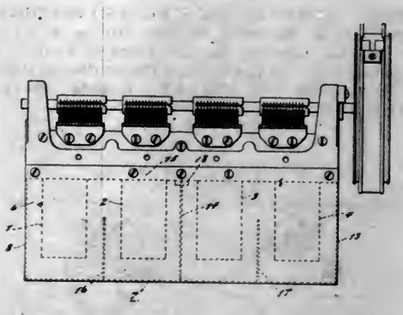
1,897,336. MILK COOLER. JAMES ROBERTSON and GEORGE H. PURDY, San Francisco, Calif. Filed Jan. 2, 1931. Serial No. 506,198. 8 Claims. (Cl. 257—187.)

2. In a cooler, a pair of opposed hollow headers, a series of tubes substantially circular in cross section and mounted in substantially vertical alignment with their ends located in the headers, the extreme ends of the tubes being in contact with walls of headers, and adjacent parts of the



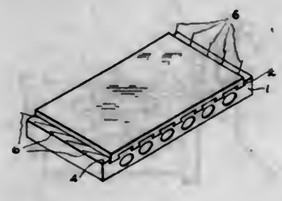
ends of the tubes being cut away so that a fluid may proceed from one tube to another, a trough located above the tubes and a drip pan located beneath the tubes.

1,897,337. TUNING ELEMENT. THEODORE JOHNSON SCOFIELD, Jackson, Mich., assignor to The Sparks-Withington Company, a Corporation of Ohio. Filed Oct. 30, 1929. Serial No. 403,526. 3 Claims. (Cl. 250—16.)



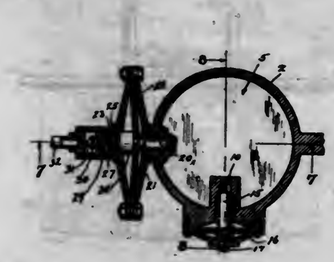
1. In radio units, a metal frame member, a shield member attached to said frame consisting of a different metal adapted to produce with said metal frame an electrolytic couple of predetermined electromotive force and a sheet of still different metal integrally joined to one of said members and contacting with the other of said members, the metal of said sheet adapted to produce wtih said other member an electrolytic couple of materially less electromotive force whereby electrolytic action between said parts is reduced.

1,897,338. BUILDING CONSTRUCTION. MAX Y. SHATON, Porterville, Calif., assignor to California Chemical Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 2, 1929. Serial No. 396,608. 18 Claims. (Cl. 72—68.)



1. As an article of manufacture for use in building construction, a precast slab formed of material unsuited for nailing, said slab having a bituminous coating on one face and attached to such face a layer composed of a nail-penetrable magnesium oxy-chloride cement mixture.

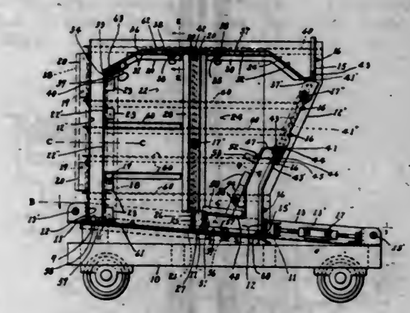
1,897,339. PRESSURE CONTROL VALVE FOR AUTOMATIC AIR BRAKES. OLIVER SEIFFERLE, Portland, Oreg., assignor to International Air Brake Control Company, Portland, Oreg., a Corporation of Oregon. Filed Mar. 29, 1930. Serial No. 440,023. 20 Claims. (Cl. 303—65.)



1. In an air brake mechanism of the character described, an auxiliary pressure control comprising a control valve connected with the brake cylinder and provided with a pressure chamber connected with the brake pipe, said control valve comprising a valve chamber having inlet and outlet ports, the latter connected with an exhaust port, a valve member in said chamber adapted to seat on either of said ports, a stem connecting said valve member with a diaphragm, a passageway connecting the other side of said diaphragm with said pressure chamber, whereby a predetermined pressure in said pressure chamber will cause said diaphragm to unseat the valve member from said outlet port and a greater pressure will cause said diaphragm to seat the valve member on said inlet port for the purpose set forth.

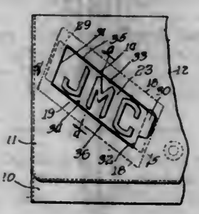
1,897,340. KNOCKDOWN GARBAGE RECEPTACLE MOLD. HERBERT F. SIELAFF, Chicago, Ill. Filed June 8, 1928. Serial No. 283,877. 6 Claims. (Cl. 25—130.)

2. The combination in knock down molding devices of the class set forth, of a set of outer side wall mold plates, an inclined outer top surface mold plate supporting said plates, outer vertical walls raised from the said top surface mold plate and set in from the edges thereof to form a surrounding ledge, and means to clamp said side wall mold plates, supported by the said ledge, snugly and securely to the said vertical walls to secure, substantially, a leak proof joint; a set of inner side wall mold plates supported by the said inclined mold plate, and, inner vertical walls spaced a uniform parallel distance in from the said outer vertical wall and the said wall set in from the edges of a rectangular opening in the said top surface mold plate to form a ledge around the said opening, and



the said inner vertical wall adapted to space the said set of inner wall mold plates relative to the said set of outer wall mold plates so as to secure a suitable thickness of the walls of the concrete garbage receptacle molded thereby, substantially as described and for the purpose specified.

1,897,341. INITIAL OR ORNAMENT HOLDER FOR WOMEN'S HAND-BAGS AND OTHER ARTICLES. RUDOLPH STAUFERT, Chicago, Ill., assignor to Robbins & Staufert, Inc., Chicago, Ill., a Corporation of Illinois. Filed Oct. 13, 1932. Serial No. 637,659. 5 Claims. (Cl. 40—159.)

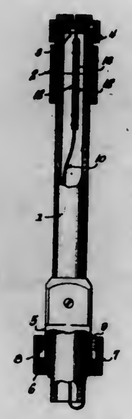


1. In an article of the class described, the combination of a main body member, an aperture in said body member, stitching entirely surrounding said aperture, the stitching being outside the perimeter of said aperture to form a frame which entirely surrounds the aperture, and a removable, flexible element adapted to be inserted in said opening from above the said opening, the side and end stitching not permitting the sliding into said opening of said removable element.

1,897,342. FUSE LINK. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 26, 1929. Serial No. 416,325. 4 Claims. (Cl. 200—127.)

1. A flexible fuse link adapted to be bodily threaded into a fuse cartridge comprising a composite fuse consist-

ing of two spaced fusible strips forming the major portion of the fuse link, an intermediate fusible portion electrically joining said spaced portions and of lesser



cross section than said spaced portions, and an insulating member joining said spaced fusible portions and holding said intermediate fusible portion in a slack condition.

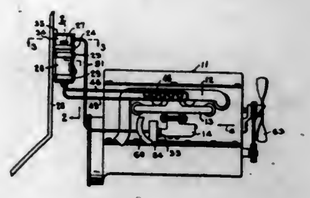
1,897,343. ASPIRATOR. THOMAS B. STEPHENSON, Springfield, Mass. Filed Dec. 19, 1930. Serial No. 503,530. 4 Claims. (Cl. 128—200.)



1. An aspirator bottle which comprises a liquid container, a closure for the container, inlet and outlet pipes supported by the closure, an inhaling head mounted on the outlet pipe for movement toward and from the closure, means movable with the head to close the inlet pipe when the head is moved toward the closure, spring means to normally hold the head in raised position, a cap, means carried by the cap to close the outlet pipe and means carried by the cap to maintain the head and the parts movable therewith in position to close the inlet pipe.

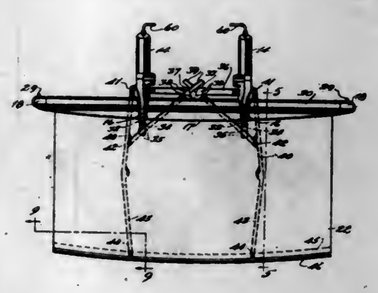
1,897,344. VAPORIZING DEVICE FOR INTERNAL COMBUSTION ENGINES. CARL STIMETZ, Cincinnati, Ohio. Filed June 11, 1930. Serial No. 460,391. 5 Claims. (Cl. 123—25.)

1. The combination with an internal combustion engine comprising a carburetor, an exhaust pipe and intake pipe, a water supply tank mounted near said engine, a secondary tank adjacent said supply tank, a passage between said tanks, a tube extending from said supply tank to said secondary tank, a coil in said tube arranged adja-



cent to a heated part of the engine, said secondary tank provided with an expansion chamber and a tube extending from said expansion chamber to the air intake port of said carburetor.

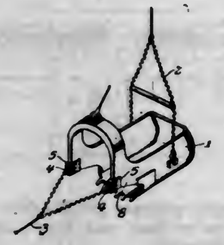
1,897,345. VEHICLE BUMPER. WILLIAM E. ARTHUR TODD and FREDERICK R. L. STOTT, Hamilton, Ontario, Canada. Filed Nov. 12, 1931. Serial No. 574,543. 12 Claims. (Cl. 293—26.)



1. A bumper for vehicles including an apron, a spring roller whereon said apron is normally wound, an edge strip attached to the free edge of the apron, a pair of pneumatic cylinders mounted rearwardly of the roller, pistons in said cylinders, piston rods carried by said pistons and projecting from said cylinders, operating rods arranged to pivot about fixed points and slidable relative to said fixed points, connections between said piston rods and operating arms, pair of arms, the arms of each pair each having one end connected to the coacting end of the other arm, the remaining ends of each pair of arms being respectively pivoted to a fixed point and to the edge strip, and a pivotal connection between each operating rod and an arm of a respective pair.

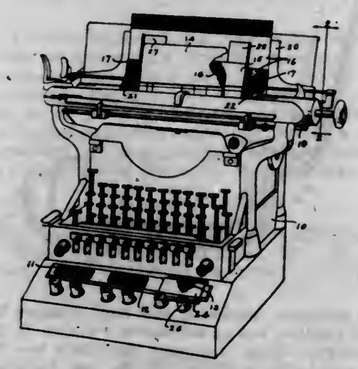
1,897,346. EXCAVATING BUCKET SHACKLE. JOHN L. TUNISON, Chicago, Ill., assignor to Bucyrus-Monighan Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 8, 1932. Serial No. 603,989. 2 Claims. (Cl. 37—135.)

1. An excavating bucket having side walls, a one-piece clevis bracket formed to provide pairs of jaws, one pair of said jaws extending rearwardly from the forward edge of a side wall and secured thereto, the other of said pairs of jaws extending forwardly of the forward edge of said side wall and being provided with a plurality of spaced alined apertures extending at right angles to the plane of said bracket, in combination with a U-shaped clevis, the ends of which are provided with apertures and are inserted between said forwardly extending jaws with



the apertures in the jaws in alinement with those in the clevis and bolts extending through said apertures for rigidly clamping said clevis to said bracket.

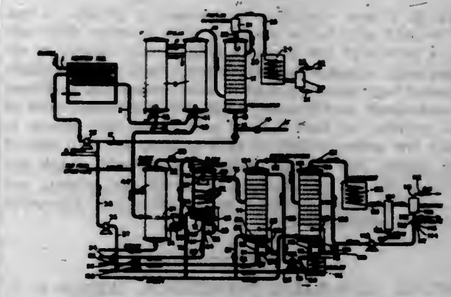
1,897,347. METHOD AND MEANS FOR OPERATING BOOKKEEPING MACHINES. CRAWFORD J. WALKER, Indianapolis, Ind., assignor to The Protectu Corporation, Indianapolis, Ind. Filed Apr. 7, 1930. Serial No. 442,090. 6 Claims. (Cl. 235—60.)



6. For checking the accuracy of totals of individual items on sales tickets simultaneously with the posting of accounts and new balances on record sheets in a combined typewriting and computing machine having a readable crossfooter register and blind proving register, a shiftable carriage, a proof sheet, a non-readable back transfer sheet over the proof sheet, a record sheet over and less in width than the transfer sheet, means for printing an old balance through the transfer sheet on the proof sheet beyond the record sheet and placing the old balance in said readable register, means operative upon shifting said carriage to a second position over the extending portion of said transfer sheet for printing the total of a sales ticket on said proof sheet independently of said old balance and simultaneously adding said total to said balance to cause a new balance to appear in said readable register, means operative upon shifting said carriage to a third position for printing in columnar form on said record sheet the individual items taken from said sales ticket and simultaneously adding said items to give a total thereof in said blind register, means operative upon shifting said carriage to a fourth position for printing in a new balance column on said record sheet the amount appearing in said readable register and simultaneously placing said amount in said blind register as a negative number, means operative upon shifting said carriage to a fifth position to print in a proof column on said record sheet said old balance and simultaneously

place that old balance as a positive number in said blind register whereby said blind register may return to a normal zero position, and a star key rendered operative upon said zero position being obtained.

1,897,348. CRACKING PROCESS. CLAUDE W. WATSON and JAMES H. GRAHAME, Port Arthur, Tex., assignors to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 28, 1929. Serial No. 334,394. 2 Claims. (Cl. 196—94.)



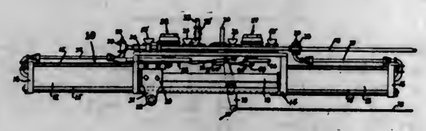
1. In the conversion of higher boiling hydrocarbons into lower boiling ones, the process that comprises heating said oil in a stream of restricted cross section to a cracking temperature under superatmospheric pressure, separating the heated oil into vapors and residual liquid, passing said vapors to a fractionating zone, withdrawing condensed portions of the vapors from the fractionating zone and returning same to an intermediate point in said stream, expanding said residual liquid into a flash chamber maintained at a pressure lower than that of the cracking operation to subject said residual liquid to distillation, subjecting evolved vapors to fractionation in a primary fractionating zone to form a heavy condensate and a vapor fraction, subjecting said vapor fraction to further fractionation in a secondary fractionating zone to form an intermediate condensate and a light vapor fraction, condensing said light vapor fraction to form a final light distillate, introducing steam into said intermediate condensate to strip light components therefrom, conducting the stripped intermediate condensate to the primary fractionating zone to serve as a reflux therefor, and returning the heavy condensate to the intermediate point in said stream.

1,897,349. CURVED BOOT TOP, SHOE TOP, AND SHOE TONGUE TOP. WILLIAM S. WHITE, Palmer, Tenn. Filed Oct. 24, 1928. Serial No. 314,786. 3 Claims. (Cl. 36—45.)



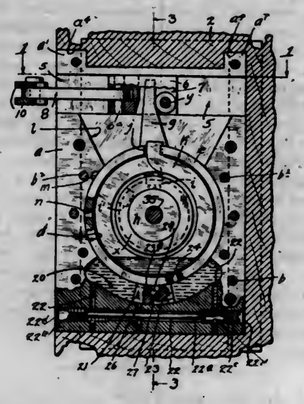
1. In a heavy work shoe with the upper edges of the quarter and tongue being curved outwardly, with the extreme outer edges of the shoe quarter and shoe tongue being curved downwardly, whereby chafing of the wearer at the upper edges of the shoe and shoe tongue is prevented, said curved upper edges being of the same thickness as the adjacent quarter and tongue portions.

1,897,350. DOOR CONTROL MECHANISM. SIMON P. WIDGNER, Los Angeles, Calif. Filed Sept. 25, 1929. Serial No. 395,028. 12 Claims. (Cl. 121—44.)



12. In a door operating mechanism, a cylinder, a piston in said cylinder, a source of high pressure fluid supply, a source of low pressure fluid supply, means to exhaust said cylinder on each side of said piston, means to admit high pressure fluid to said cylinder on each side of said piston and means to admit low pressure fluid to said cylinder on each side of said piston and means to admit low pressure fluid to said cylinder on each side of said piston, and means operable when said piston approaches the end of its stroke to cut off said exhaust and to admit low pressure fluid to the previously exhausted portion of said cylinder.

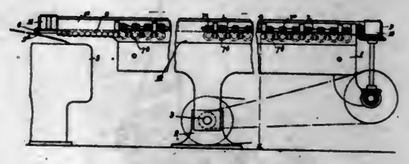
1,897,351. CONCEALED DOORCHECK. ARTHUR H. T. WILLIAMS, Portland, Oreg., assignor of one-half to Roy Feldenheimer, Portland, Oreg. Filed Dec. 29, 1930. Serial No. 505,299. 7 Claims. (Cl. 16—58.)



1. In a door check, a housing provided with an annular chamber having a lower end exterior cavity for holding a liquid, a spring controlled checking member oscillatable in said chamber, such member provided with a radial piston operative in said cavity, a duct connecting the opposite ends of said cavity, said checking member traversing said cavity and provided with a duct on one side of said piston to permit the passage of the liquid, and a relief port connecting said duct with said cavity and opened and closed by the movement of said piston.

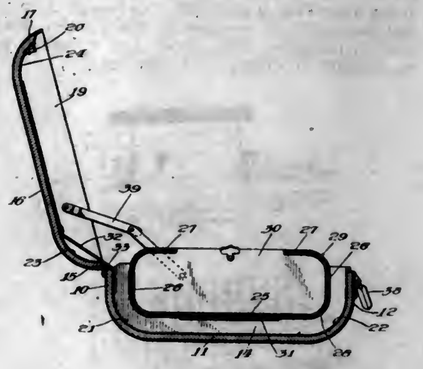
1,897,352. DOUGH PROVING APPARATUS. JAMES ELLIOTT WILSON, SAMUEL MCCONNELL and CAMPBELL BROWN, Belfast, Ireland. Filed Apr. 15, 1931, Serial No. 530,212, and in Great Britain May 10, 1930. 10 Claims. (Cl. 107—57.)

6. Dough proving apparatus comprising a series of rollers, means for rotating said rollers each in the same direction, a supporting frame wherein all said rollers are mounted so as to constitute a travelling conveyor for dough to be proved, a pivotal axis located midway along said series of rollers to enable the conveyor constituted thereby to be rocked in the direction of feed, an overhanging integral bracket at the forward end of said frame, and wheel means whereby said frame is adjustable in



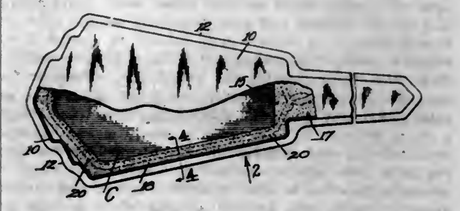
level to maintain constant relationship of said rollers with the surface whereon said dough, after proving on said rollers, is deposited.

1,897,353. WARDROBE SUITCASE. ELMER ELLSWORTH WILT, Chicago, Ill. Filed July 2, 1931. Serial No. 548,393. 3 Claims. (Cl. 190—41.)



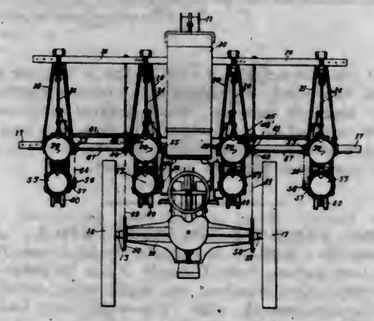
1. A suit case comprising two body members hingedly secured together, and an accessories container in the case, said container being of a width and depth less than the width and depth respectively of the case, the contour of the inner surfaces of the case and of the outer surfaces of the container being correlated to provide a continuous space of substantially uniform depth between the top, bottom and side walls of the container and case respectively for the reception of clothing.

1,897,354. REENFORCING FRAME MEMBER FOR TOILET ARTICLES. JOSEPH S. WILCOX, Athol, Mass., assignor to The Wilcox Company, Athol, Mass., a Corporation of Massachusetts. Filed Dec. 29, 1931. Serial No. 583,785. 5 Claims. (Cl. 15—159.)



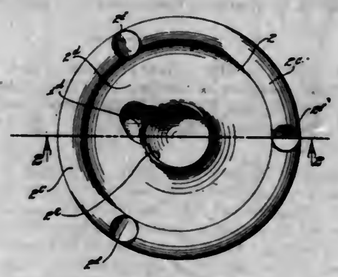
1. In a toilet article having a casing, a reenforcing frame member separate from but mounted within said casing and having a central recess, said frame member being formed of substantially rigid hardened material and having a wire reenforcement embedded therein and extending continuously around said central recess.

1,897,355. AGRICULTURAL IMPLEMENT. HERMAN E. ALTOELT, South Bend, Ind., assignor to Oliver Farm Equipment Company, a Corporation of Delaware. Filed May 19, 1930. Serial No. 453,541. 12 Claims. (Cl. 111—52.)



1. In a tractor implement, the combination with a tractor, means for supporting a plurality of sets of planting units on the opposite sides of said tractor, planting mechanisms for each individual unit of the set, a drive shaft for each set of planting units, means for driving said shafts from the traction power of said tractor, a fertilizing attachment for each planting unit and means for driving each fertilizing mechanism from said drive shaft.

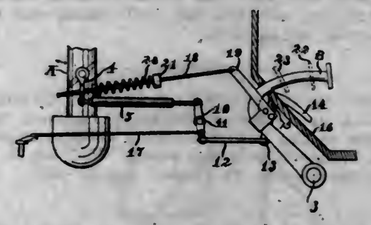
1,897,356. PORTABLE ASH TRAY AND EXTINGUISHER. GERALD L. BALDWIN, San Diego, Calif. Filed June 10, 1929. Serial No. 369,678. 4 Claims. (Cl. 131—51.)



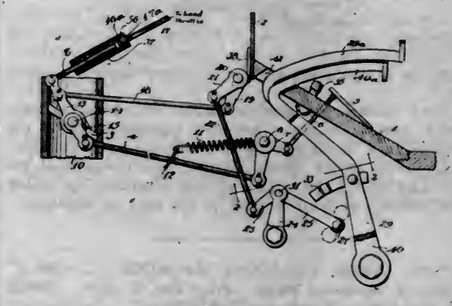
4. In an ash tray and extinguisher, a receptacle with an outer annular covered liquid chamber and a central liquid chamber open at its upper side, said receptacle being constricted between said liquid chambers forming an ash tray on its upper surface.

1,897,357. GAS CONTROL MECHANISM FOR AUTOMOBILES. JOSEPH BELLIS, St. Paul, Minn. Filed Aug. 16, 1929. Serial No. 386,427. 7 Claims. (Cl. 192—.01.)

1. In combination with a carburetor control valve and connected hand control and clutch pedal, a rod connected with said pedal, a spring supported by said rod in position to be moved into actuating relationship with the carburetor valve on the depressing of the pedal, a split connection between the hand control and carburetor valve, including a sleeve, and a slidable rod having a spring supported thereon whereby said spring will act to leave the hand control unaffected in the actuation of the pedal.

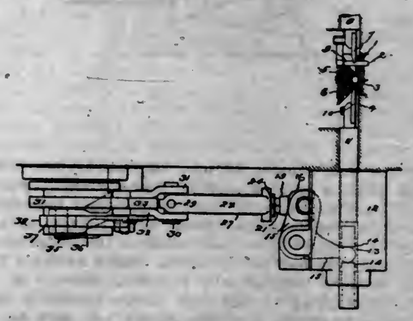


1,897,358. CARBURETOR CONTROL MECHANISM. JOSEPH BELLIS, St. Paul, Minn. Filed Oct. 6, 1930. Serial No. 486,610. 8 Claims. (Cl. 192—.01.)



1. In a carburetor control mechanism for an automobile having a clutch pedal and a brake pedal, an adjustable hand throttle, a pair of foot pedals mounted one adjacent each of the clutch and brake pedals of an automobile and separate therefrom, the upper end of said pedals being higher than the corresponding parts of the clutch and brake pedals, respectively, and carburetor control means mounted to be engaged by said separate pedals upon a depression of either thereof to close the throttle prior to the upper end of said pedals coming into alinement with the upper end of said brake and clutch pedals, respectively.

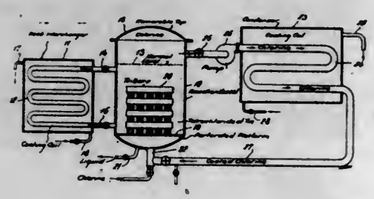
1,897,359. CUT-OFF MECHANISM FOR BALL MACHINES. CHARLES T. BRENNAN, Waterbury, Conn. Filed Aug. 25, 1932. Serial No. 630,325. 5 Claims. (Cl. 29—34.)



1. In a ball header in combination with the punch, dies and reciprocatory cut-off blade, a backing blade movable

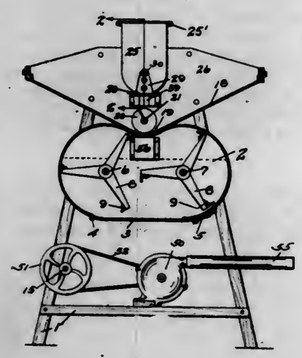
toward, then with, and then from the cut-off blade, a reciprocatory bar carrying the backing blade, a bell crank lever engaged with said bar, a yielding slip-joint link connected with said lever, and a cam actuated bell crank lever connected with said link, and causing said movements of the backing blade.

1,897,360. MANUFACTURE OF STANNIC CHLORIDE. WILLIAM JAMES BUTTFIELD, North Plainfield, N. J., assignor to The Vulcan Retinning Company, Sewaren, N. J., a Corporation of New Jersey. Filed July 9, 1929. Serial No. 376,990. 21 Claims. (Cl. 23—98.)



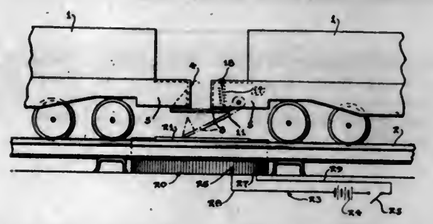
1. The method of manufacturing anhydrous stannic chloride which comprises bringing together metallic tin immersed in a liquid medium and chlorine gas, withdrawing a portion of the liquid mixture from the zone of reaction and cooling the same, and then returning the cooled liquid mixture at least in part to the zone of reaction.

1,897,361. SEED TREATING MACHINE. CLAUDE C. CALKINS, Spokane, Wash. Filed Feb. 3, 1930. Serial No. 425,508. 3 Claims. (Cl. 83—28.)



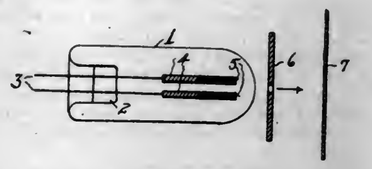
1. In a seed treating machine, the combination with a closed drum, a pair of spaced parallel shafts journaled therein and revolvable in opposite directions toward the longitudinal center of the drum, and agitators on said shafts, of a hopper above and extending the length of the drum, a gravity feed bottom in the hopper having a port to the drum, a longitudinally extending conveyer in the hopper discharging at said port, means located in position for co-operation with the gravity feed port for introducing a treating powder to the drum, and means for discharging the treated grain from the drum.

1,897,362. TOY TRAIN DRAFT COUPLING. WILLIAM GEORGE DANIELS, Freeport, N. Y. Filed June 17, 1931. Serial No. 545,107. 2 Claims. (Cl. 213—211.)



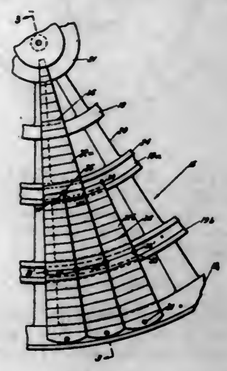
2. In combination with a pair of cars, a coupling means between said cars, said coupling means comprising a part of magnetic material, and a magnet positioned in the path traveled by said cars for coaction with said magnetic part of the coupler to uncouple the cars when said part is positioned opposite said magnet.

1,897,363. LUMINOUS DISCHARGE DEVICE. LEE DE FOREST, New York, N. Y., assignor to De Forest Phonofilm Corporation, New York, N. Y., a Corporation of Delaware. Continuation of application Serial No. 76,470, filed Dec. 19, 1925. This application filed July 20, 1928. Serial No. 294,196. 11 Claims. (Cl. 176—122.)



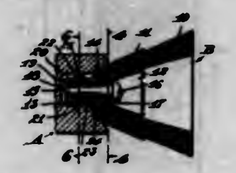
1. In a luminous discharge device, the combination comprising an evacuated vessel containing rarified gas, electrodes in said vessel having physically opposed polished surfaces and leads extending into said vessel and connected to said electrodes, said electrodes being so constructed as to produce illumination in a thin band.

1,897,364. SPOTLIGHT. GUSTAV DIETZ, West Hollywood, Calif., assignor of one-half to Walter Dietz, Long Island City, N. Y. Filed Feb. 10, 1930. Serial No. 427,187. 8 Claims. (Cl. 88—1.)



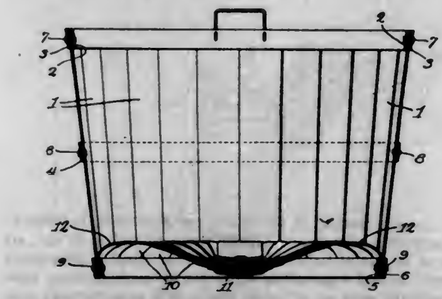
1. A reflector of the class described embodying: a hub; a plurality of curved radial arms extending outwardly from said hub; a plurality of concentric ring members secured to said radial arms and cooperating therewith to form a concave support; a plurality of metal reflecting segments radially mounted on said support with their backs engaging said concentric rings so as to form a substantially uninterrupted concave reflecting surface; and means for rigidly securing one end only of each segment to said support, the other ends of the segments being free to move along the support with expansion and contraction of the segments.

1,897,365. TOOTHBRUSH. HAROLD PALMER DUBY, Los Angeles, Calif. Filed Feb. 26, 1930. Serial No. 431,357. 7 Claims. (Cl. 15—176.)



1. A toothbrush comprising a handle formed with a tapered socket at one end thereof, a brush head including bristles disposed to impart to the brush end an annular formation, and a tapered stem on said brush head having a reduced outer end portion for insertion longitudinally into said socket; said stem and socket being formed to coact and effect wedge engagement between the stem and brush handle.

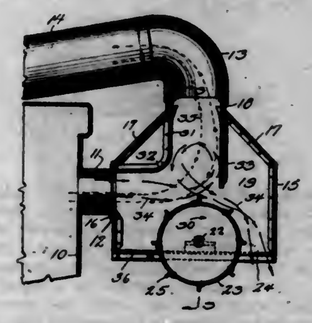
1,897,366. BASKET. ARTHUR F. DURAND, Ravinia, Ill., assignor, by mesne assignments, to Saranac Machine Company, Benton Harbor, Mich., a Corporation of Michigan. Filed Jan. 13, 1930. Serial No. 420,367. 3 Claims. (Cl. 147—48.)



1. The method of making a basket, comprising the formation of a round mat from staves, by crossing the staves at the center of the mat, fastening the staves together at said center, bending the ends of the staves in one direction, and depressing the middle portion of the mat in the same direction, whereby said middle portion is brought substantially into the plane of the depressed or bent end portions of the staves, forming curves in the staves between said end portions and the middle portion, and fastening said end portions between the side walls and an inside bottom hoop of the basket, whereby the mat forms a raised bottom for the basket, with the multiple-thickness middle portion of the bottom depressed into the plane of said hoop, and with the outer portions of the bottom elevated a distance above said hoop.

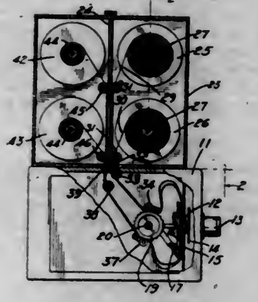
1,897,367. CORN SHELLER SEPARATOR. GEORGE EMMET ELDRIDGE, Sac City, Iowa. Filed June 16, 1931. Serial No. 544,779. 11 Claims. (Cl. 209—143.)

1. In a cob separator for a corn sheller having a cob discharge neck and a suction pipe positioned thereabove, a casing secured to said neck at one end and communicating therewith, said casing having a top opening, an elbow communicating with said top opening and with said suction pipe, a drum rotatably mounted in the casing below



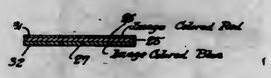
said top opening on an axis transverse to the axis of the neck, and a baffle wall in the casing extending downwardly from the forward side of said top opening to a position spaced from but near the periphery of the drum.

1,897,368. MOTION PICTURE CAMERA. HARRY K. FAIRALL, Los Angeles, Calif., assignor, by mesne assignments, to Multicolor Ltd., Los Angeles, Calif., a Corporation of California. Filed June 13, 1927. Serial No. 198,495. 4 Claims. (Cl. 88—164.)



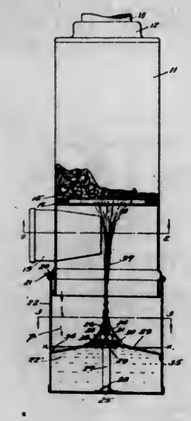
1. In a camera, the combination of: a lens; film advancing means adapted to engage superimposed films for advancing same in the focal plane of said lens; feed means for supplying said films to said film advancing means; a spindle having a crank for operating said film advancing means; a film receptacle connected to said camera a plurality of shafts mounted in said receptacle; magazines carried by said shafts on which said films are each wound when they pass from said advancing means; a drive pulley mounted on said spindle; a main pulley mounted on one of said receptacle shafts and having a series of grooves; pulleys mounted on the other of said receptacle shafts; a drive belt connecting said drive and main pulleys; friction belts connecting said main pulley with each of the other of said pulleys; and said main pulley adapted to drive the other of said pulleys in such manner that if high resistance is placed on either of said pulleys, said drive belt will permit a slippage of said belts.

1,897,369. METHOD OF PRODUCING A COLOR POSITIVE FOR USE IN A COLORED MOTION PICTURE. HARRY K. FAIRALL and WILLIAM T. CRESPINEL, Los Angeles, Calif., assignors, by mesne assignments, to Multicolor Ltd., Los Angeles, Calif., a Corporation of California. Filed Aug. 17, 1927. Serial No. 213,468. 11 Claims. (Cl. 95—2.)



10. A method of producing double coated color film, including the steps of: producing images on opposite sides of said film; treating the images on one side of said film which in a single step colors these images a bluish color and renders them impervious to a complementary color treatment; and immersing the film in a liquid color-producing agent which will not affect the already-treated images, to color the images on the opposite side of said film a reddish color.

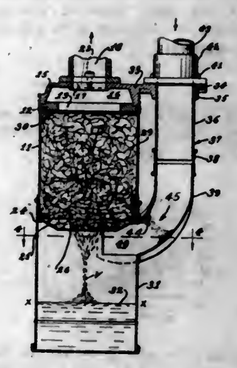
1,897,370. DEFLECTOR PLATE FOR AIR FILTERS. HERMAN H. GARNER, Claremont, Calif., assignor to Vortox Manufacturing Company, Claremont, Calif., a Corporation of California. Filed July 3, 1929. Serial No. 375,759. 13 Claims. (Cl. 183—10.)



1. An air filter comprising: a casing adapted to contain a body of liquid; a filter in said casing above said body of liquid; means for producing an air vortex in said casing of sufficient strength to draw said liquid into said filter; and means for controlling the action of the air on said body of liquid in a manner to govern the amount of liquid to be carried by the air.

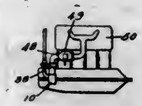
1,897,371. CLEANABLE INLET FOR AIR CLEANERS. HERMAN H. GARNER and FRED R. NOHAVEC, Claremont, and GEORGE HAROLD HOPKINS, Pasadena, Calif., assignors to Vortox Manufacturing Company, Claremont, Calif., a Corporation of California. Filed Aug. 5, 1929. Serial No. 383,631. 7 Claims. (Cl. 183—10.)

1. In an air cleaner the combination with a shell connected to an engine, a filter medium in said shell, a can detachably connected to said shell, of: an air inlet for said filter having a primary part and a secondary part detachably connected together, said primary part being supported by said shell and said secondary part being secured to the wall of said can so that the passage thereof is in communication with the interior of said can, said secondary



part being removable from said shell with said can, the mouth of said inlet being exposed when said can is detached.

1,897,372. AIR CLEANER. HERMAN H. GARNER and FRED R. NOHAVEC, Claremont, and GEORGE HAROLD HOPKINS, Pasadena, Calif., assignors to Vortox Manufacturing Company, Claremont, Calif., a Corporation of California. Filed Mar. 3, 1930. Serial No. 432,596. 8 Claims. (Cl. 183—10.)



1. An air cleaner of the character described, including: a supporting structure adapted for connection to the air inlet of an air utilizing device; a filter member detachably secured to said supporting structure in such position that air entering said air utilizing device will pass through said filter member; a cup for holding a liquid, detachably secured to said filter member, said cup having walls forming an air inlet member leading into said cup in a position spaced downwardly from the lower end of said filter member, said walls being so formed that the interior of said air inlet member will be exposed and accessible when said cup is detached from said filter member; and an air inlet pipe leading downwardly from said supporting structure so as to communicate with the entrance opening of said air inlet member.

1,897,373. WAVE ANTENNA. NICHOLAS GERTEN, Douglaston, N. Y., and RALPH LINDSAY JENNER, East Orange, N. J., assignors to Blaw Knox Company, Blawnox, Pa., a Corporation of New Jersey. Filed July 29, 1930. Serial No. 471,466. 16 Claims. (Cl. 250—33.)

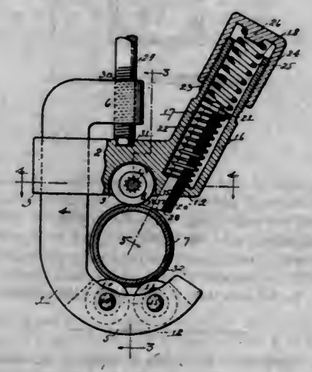
13. A wave antenna comprising a metallic tower, a metallic pole, means at the top of said tower for holding said pole in a vertical position and in electrical contact with said tower, means for supporting said tower at its base and at only one other portion, means for insulating

said antenna from ground, and means associated with said holding means for enabling said pole to be moved vertically with respect to said tower, whereby the effective



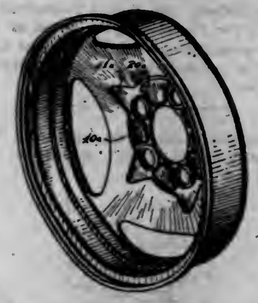
height of said antenna may be adjusted to the height required for maximum radiation of the wave impressed thereon.

1,897,374. PIPE CUTTER. MAX GOEBEL, Grand Rapids, Mich. Filed Feb. 8, 1932. Serial No. 591,611. 1 Claim. (Cl. 81—192.)



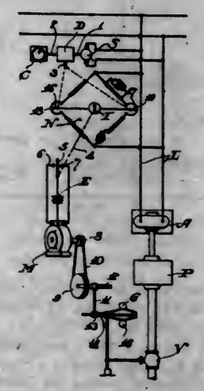
In an implement turnable about a cross-sectionally round work piece for severing the same into lengths; a body member; a member slidable on said body member toward the work piece held between said members and having a bore and a slide bearing extending toward the work piece; a tool carried by one of said members for cutting the work piece circumferentially; an elongated tool slidable in said bearing for removing burs formed by the cutting tool; a spring in the bore urging the second-mentioned tool outwardly; a hollow cap threaded around the second-mentioned member for moving the second-mentioned tool toward the work piece; a spring stiffer than the first-mentioned spring intermediate the cap and the second-mentioned tool for yieldingly moving the same against the pressure of the first-mentioned spring; threaded means for moving the second-mentioned member slidably on said body member toward the work piece.

1,897,375. WHEEL. HAROLD A. GREENWALD, River Rouge, Mich., assignor to Whitehead & Kales Company, River Rouge, Mich., a Corporation of Michigan. Filed May 12, 1931. Serial No. 536,802. 1 Claim. (Cl. 301—64.)



A disk wheel comprising a disk having an inner zone and an outer zone, the inner zone being substantially perpendicular to the axis, and the outer zone being of frusto-conical shape, the outer zone having apertures defining spokes, the metal of the disk being pressed out to form a bead of circumferential form at the juncture of the inner and outer zones, pressed out portions providing raised elements merging with the bead and on the bead side of the disk, said raised elements projecting radially outwardly from the bead into the outer zone, said raised elements each being substantially centered on a spoke and projecting only into the base of the spoke, the inner zone having a plurality of bolt-receiving apertures disposed in spaced annular form and the inner zone having a central aperture for disposition over a hub, the metal of the disk being fashioned to provide a bead like portion around each bolt aperture and around said central aperture, the last mentioned beads, the bead at the juncture of the zones, and the said raised elements being all on the same side of the disk, the metal of the disk between the bolt apertures being pressed to form raised pads projecting from the disk on the side opposite that having the beads and said raised elements leaving depressions on the opposite side thereof, said pads being adapted to abut flush against a hub flange.

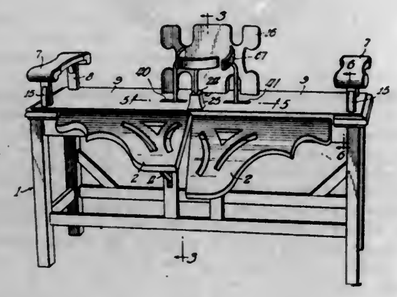
1,897,376. APPARATUS FOR SPEED CONTROL. LESLIE O. HEATH, Philadelphia, Pa., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 18, 1929. Serial No. 33,330. 14 Claims. (Cl. 290—40.)



14. A system comprising an alternator, a prime mover therefor, a governor for said prime mover, an electric motor for changing the governor setting, and means for changing

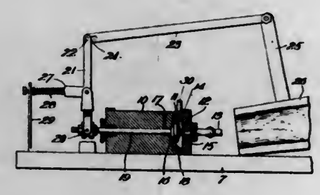
the governor setting by steps substantially proportional to the departure of the instantaneous and integrated frequency from standard comprising a reversing switch for effecting energization of said motor, means responsive to the departure of the instantaneous and integrated frequency from standard, and means controlled by said responsive means for controlling the sense of actuation of said switch in accordance with the sense of the departure and for periods whose duration is substantially proportional to the departure.

1,897,377. BENCH. LOUIS G. HELPLINO, Wapakoneta, Ohio. Filed Dec. 29, 1930. Serial No. 505,285. 9 Claims. (Cl. 155—36.)



5. A posing bench including a seat, a formation rising from the forward margin of said seat and defining a saddle thereon, a back rest carried by the bench and movable transversely of said seat toward and away from said formation, means for locking the back rest in selected positions with respect to said seat, said body supports carried by the bench, means for adjusting said supports longitudinally of the seat toward and away from each other, a front body support in said formation and movable vertically therein, and means for vertical adjustment of all said supports.

1,897,378. ANÆSTHETIC APPARATUS. JONATHAN G. E. HINKLE, Bethany, Mo., assignor to Hinkle Company, Inc., Kansas City, Mo., a Corporation of Missouri. Filed Aug. 26, 1929. Serial No. 388,503. 7 Claims. (Cl. 128—186.)

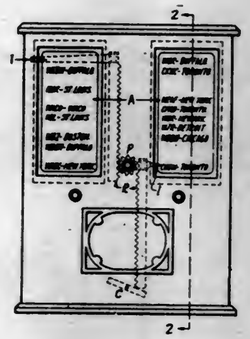


1. The combination of an atomizer, means to supply air under pressure to the atomizer, expansible means for receiving the vapor from the atomizer, an inhaler connected to the expansible means, a valve mechanism for controlling the action of the atomizer, means actuated by expanding action of the expansible means for starting operation of the valve mechanism, and yielding means for causing the valve mechanism to instantly arrest the action of the atomizer; there being a lost motion provided in the valve-actuating means permitting the instant arrest of the vapor producing action through the instrumentality of said yielding means, before the action of the valve-actuating means is completed, said valve mechanism having a port for the escape of air to the atmosphere, if the pressure of the supplied air effects opening action of the valve mechanism by overcoming the power of said yielding means.

1,897,379. METHOD OF REFINING ROSIN. IRVIN W. HUMPHREY, Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 11, 1928. Serial No. 299,128. 16 Claims. (Cl. 202—60.)

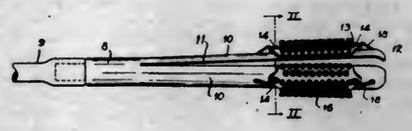
2. The method of refining rosin containing color bodies which includes subjecting rosin containing color bodies to treatment with methanol and color bodies dissolved thereby, separating the treated rosin from the methanol and distilling the rosin.

1,897,380. RADIO DIAL. JULIUS GEORGE YOUNGER, Hamilton, Ontario, Canada. Filed Aug. 22, 1931, Serial No. 558,740, and in Canada June 23, 1931. 1 Claim. (Cl. 116—124.1.)



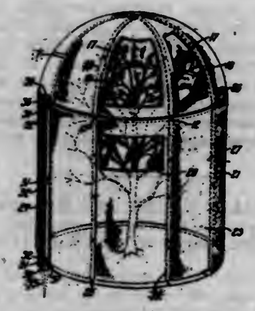
A radio dial of the character described comprising two stationary vertical panels having indicia thereon, a tuning knob having an axle with a pinion mounted thereon, two slidably mounted racks each carrying an indicator adapted to register with the respective panels, a pivotally mounted lever selectively engaging said racks and thereby causing said racks to alternately mesh with said pinion.

1,897,381. BRUSH. WILLIAM FREDRICK ALBRIGHT, Pittsburgh, Pa. Filed July 28, 1932. Serial No. 625,275. 8 Claims. (Cl. 15—104.20.)



1. Brush structure comprising a stock of generally tubular form split at one end to form integrally-connected segments, and bristle-carrying plates detachably connected to said segments.

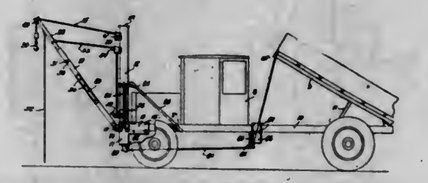
1,897,382. WEATHER SHIELD. JOHN T. BLAIR, Tulsa, Okla. Filed Jan. 22, 1932. Serial No. 588,128. 8 Claims. (Cl. 47—21.)



1. In a device of the character described, a frame including cooperating flexible base members, means for pivotally connecting said members adjacent their ends to permit folding of the members or formation of a circumferential base, flexible arch members pivotally connected at their approximate centers and having free ends, and means for securing said free ends to the base members.

8. A device of the character described including a shield having a closed top and free side edges, a support having a longitudinal slot forming spaced portions having rounded edges for receiving therebetween the free edges of the shield, and means for clamping the spaced portions of the support together to adjustably secure the free edges of the shield to the support.

1,897,383. POWER OPERATED HOIST. GEORGE W. BURGOYNE, Green Bay, Wis. Filed June 26, 1931. Serial No. 546,992. 3 Claims. (Cl. 212—59.)



1. In an apparatus of the character described, the combination with a motor driven truck having a tiltable dump body adapted to be raised and lowered by hoist mechanism receiving power from the propelling motor of the truck, of a hoist centrally mounted for rotative movement at the front of said truck, including a boom and a hoisting line running over said boom, and means for operatively connecting said hoisting line with the dump body of the truck to operate said hoisting line through raising and lowering movements of said dump body.

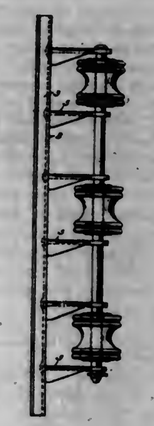
1,897,384. GAME DEVICE. CHRISTOPHER W. DEIBEL, Youngstown, Ohio. Filed Feb. 8, 1932. Serial No. 591,573. 4 Claims. (Cl. 273—123.)

1. In a device of the class described, an inclined playing board, a groove formed at an end of said inclined playing board, a captive ball normally seated in said groove, an elastic cord secured to said captive ball, a plurality of inclosures positioned on said inclined playing board, a manipulating arm, one end of said elastic cord secured to said manipulating arm, a pivot member, said manipulating arm secured to said pivot member, a propeller arm secured to said pivot member for the purpose



of propelling a ball when a violent jerk is exerted upon the elastic cord by striking the captive ball, substantially as described.

1,897,385. INSULATOR BRACKET AND METHOD OF MAKING THE SAME. CHARLES FABSINGER, Pittsburgh, Pa., assignor to Oliver Iron & Steel Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 4, 1930. Serial No. 473,117. 7 Claims. (Cl. 29—155.52.)

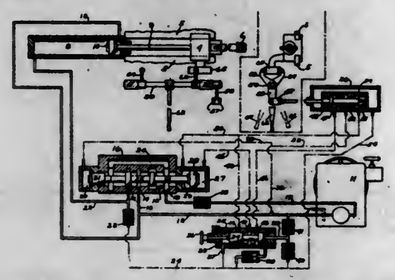


1. An article of the class described comprising a one-piece base plate having a sheet metal supporting arm secured thereto, said sheet metal arm having integral flanges thereon the ends of which bear against one face of the base plate, the middle portion of the arm having an extension thereon passing through an opening in the base plate, the inner end of the extension being riveted over whereby the base plate is rigidly clamped between the ends of said flanges and the riveted end of the extension.

2. The method of forming a sheet metal arm and attaching it to a one-piece base plate to form a device of the class described, which comprises forming a blank

from a piece of flat sheet metal, which blank has a hole at one end thereof and a tongue in the other end, heating the blank, inserting the tongue through an opening in the base plate adapted to receive it, thereafter folding the side portions of the blank inwardly to form flanges the ends of which extend over the base plate, and then applying pressure to the projecting end of the tongue of the blank to upset the metal and rivet it over, the blank being supported against endwise movement during the upsetting operation, the means which bend the flanges inwardly being utilized to clamp the blank and hold it against endwise movement during the upsetting operation.

1,897,386. BROACHING MACHINE. JOHN P. FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 31, 1930. Serial No. 457,714. 14 Claims. (Cl. 60—52.)



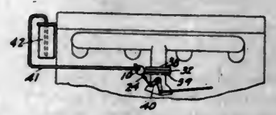
1. The combination, with a machine having a tool carriage, a hydraulic motor connected to said carriage and having a piston and a cylinder movable relatively to each other, and a variable delivery pump for delivering liquid at variable rates to the power end of said cylinder to move said carriage in one direction at various cutting speeds and to deliver liquid to the return end of said cylinder to return said carriage at high speed, of means for causing said carriage to be returned at a high speed which remains substantially constant throughout a wide variation in the rate of delivery of said pump, comprising valve means connected between said pump and said motor and operable to direct liquid from said pump to the power end of said cylinder and to return liquid from the return end of said cylinder directly to said pump and thereby cause said carriage to be moved at a cutting speed, and also operable to direct liquid from said pump to the return end of said cylinder and to direct the liquid discharged from the power end of said cylinder to said return end and thereby cause said carriage to be returned at high speed, and a relief valve communicating with the return end of said cylinder and allowing a portion of said liquid to return to said pump.

1,897,387. TUNNEL DRIER. TREUMUND WALTER GARVE, Columbus, Ohio. Filed Apr. 29, 1930. Serial No. 448,362. 7 Claims. (Cl. 34—46.)



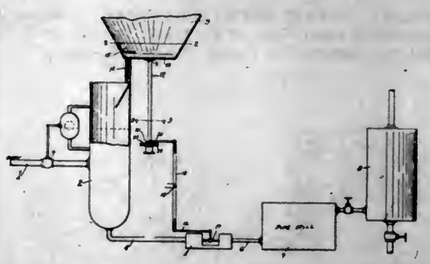
1. A drier for clay ware comprising a wall structure arranged to provide an elongated longitudinally extending tunnel, carriers for supporting the clay ware movable longitudinally through the tunnel from one end thereof to the other, a heat inlet conduit formed in the upper part of said tunnel and extending longitudinally of said tunnel through the greater portion of the length of the latter, said conduit being disposed above the ware settings contained on said carriers, means for delivering a heated gaseous fluid to one end of said conduit and adjacent to the carrier outlet end of the tunnel, said conduit being provided with spaced heat outlet passages which provide for the passage of the heated fluid substantially downwardly into the tunnel for direct contact with the ware being heated, exhaust conduits extending longitudinally of the tunnel and arranged on opposite sides of the heat delivering conduit, said exhaust conduits being provided with inlet portions arranged adjacent to the side walls of the tunnel and terminating below the inlet passages of said first named conduit, and an outlet communicating with the discharge ends of the exhaust conduits, said outlet being situated adjacent to the carrier inlet end of the tunnel.

1,897,388. VALVE OILING AND GAS DILUTING DEVICE. JAMES E. HALFORD, Sacramento, Calif. Filed May 12, 1931. Serial No. 536,820. 11 Claims. (Cl. 123—196.)



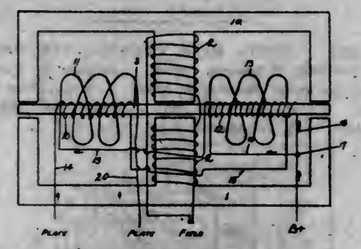
1. A valve oiling and gas diluting device, in combination, means for selectively admitting oil, oil and air or air to the intake manifold of an internal combustion motor and operable coincidently with the throttle of said motor.

1,897,389. APPARATUS FOR REFINING HYDROCARBON OIL. AUDLEY E. HARNSBERGER and ANKER L. CHRISTY, Chicago, Ill., assignors to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Mar. 12, 1929. Serial No. 346,396. 3 Claims. (Cl. 196—46.)



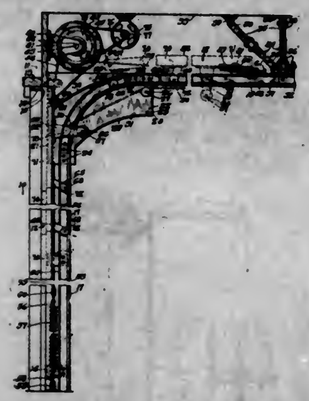
1. Apparatus for refining hydrocarbon oils, comprising a mixing vessel, means for introducing hydrocarbon oil to be treated into said vessel, a container for holding a finely divided solid treating material, a conduit connecting the lower portion of said container with said vessel, a rotatable disk positioned in the lower portion of said container and provided with a plurality of circularly disposed open ended pockets of uniform holding capacity, said pockets being positioned to receive said treating material and upon the rotation of said disk to register successively with said conduit to effect the discharge of the contents of said pockets into said conduit and thence by gravity into the oil contained in said vessel, an outlet pipe line for removing the oil-treating material mixture from the lower ends of said vessel, a pump arranged in said pipe line for positively passing the mixture therethrough, said pump being formed to include a reciprocating piston rod, a lever pivotally mounted intermediately of its ends, a link pivotally connecting the piston rod with the lower end of said lever, a rotatable shaft connected with said disk, and pawl and ratchet mechanism connected with said shaft and the upper end of said lever, whereby upon the operation of said pump, intermittent rotating movement is imparted to said disk.

1,897,390. LOUD SPEAKER OPERATION AND CIRCUIT. DORMAN D. ISRAEL, Cincinnati, Ohio, assignor to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 18, 1930. Serial No. 445,314. 9 Claims. (Cl. 179—1.)



1. In a loud speaker motor, an armature, armature windings comprising components, the said components interconnected and connected to the plate leads and the B supply of a push-pull amplification system in such a way that the alternating component of current in the circuit between plate leads flows in series through all components and the direct current between the center tap and the plate leads flows in a divided path through opposed components located upon the same magnetic portion of said armature.

1,897,391. ROLLING DOOR MECHANISM. HARRY G. KELLY, Omaha, Nebr. Filed Mar. 18, 1932. Serial No. 599,801. 2 Claims. (Cl. 20—20.)



1. A building having a door opening, a door comprising sections and having a roller on its upper section, and stops at the edge of said opening in combination with means for the manipulation of said sectional door comprising means for guiding said door from a horizontal open position to a vertical closed position, a counterbalancing means comprising drums of unequal diameter and adapted to rotate in unison, a spring having an end suitably anchored, a flexible connecting means between the unanchored end of said spring and the periphery of the smaller of the drums, a second flexible connecting means between the larger of the drums and said door, said second flexible connecting means being wound on the periphery of its respective drum in a manner to unwind as the first mentioned connecting means winds on the smaller of said drums, and a deflecting means comprising a bracket having a curved flange and a roller, said first mentioned connecting means being adapted to wind on said smaller drum pursuant to the closing movement of said door whereby the spring is distorted to increase its contractual urge against the rotation of the drums with the further closing movement of said door in proportion to the weight of said door effectively applied to said second mentioned cable, said roller being disposed upwardly and inwardly said door opening and being adapted to engage said second mentioned cable whereby the force applied to said door by said second mentioned cable is in an upward and inward direction.

1,897,392. WEAVING MECHANISM. RICHARD G. KNOWLAND, Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Mar. 8, 1932. Serial No. 597,446. 22 Claims. (Cl. 139—9.)



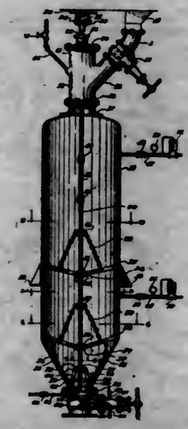
1. In a weaving mechanism, the combination of a series of tuft pile fabric looms, a carrier for presenting tuft forming yarns in succession to each of the looms of the series that a plurality of tuft pile fabrics may be woven from the same tuft yarn carrier, and means for moving the carrier.

1,897,393. IMPROVED COFFEE AND ITS MANUFACTURE. WILLIAM J. LIVINGSTON, Chicago, Ill., assignor to Livingston Coffee Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 19, 1930. Serial No. 445,829. 11 Claims. (Cl. 99—11.)

1. Roasted coffee in the form of dry coffee granules having desiccated egg albumen attached to portions of granules, the total weight of the albumen being approximately two and one-third percent of the weight of the coffee granules.

4. The method of manufacturing a solid ingredient for preparing a self-clarifying coffee, which consists in intermingling coarsely ground and dry roasted coffee beans with less than one-fortieth of their weight of desiccated egg albumen, and regrinding the resulting mixture.

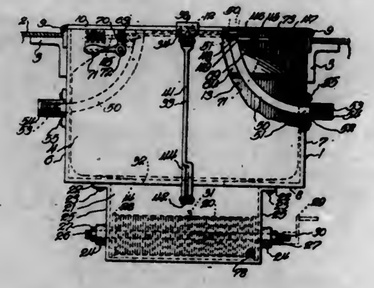
1,897,394. GYPSUM CALCINER. WILLIAM M. MCNEIL, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 17, 1930. Serial No. 496,074. 11 Claims. (Cl. 222—6.)



1. In an apparatus for calcining lump, earthy material, a vertically extending, elongated, cylindrical container, means for introducing the material into said container,

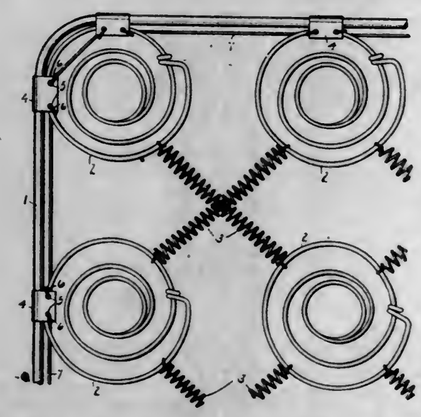
a pipe suitable for introducing steam under pressure into said container so as to accomplish the calcination of said gypsum, a closure adjacent the bottom of said container for permitting the discharge of calcined rock from said container after calcination, a rod extending longitudinally through said container, agitating means associated with said rod, and means for causing the rapid reciprocation of said rod in said container.

1,897,395. MEANS FOR INDICATING THE POSITION OF SUBMARINE CRAFT. FRIEDRICH MOWE, Melrose Park, Ill. Filed Apr. 4, 1932. Serial No. 603,124. 3 Claims. (Cl. 114—16.5.)



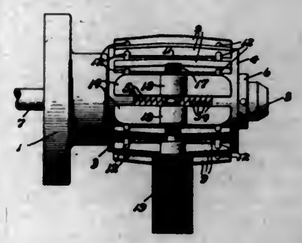
1. A submarine boat having, in combination, a compartment carried by its deck and projecting thereabove, a float loosely fitted in said compartment, said compartment having opposed hinged doors, slotted arcuate arms attached to said doors, spring urged plungers adapted to releasably engage said slots whereby to lock said doors in closed position, springs adapted to engage said arms whereby to urge said doors toward open position upon release of said plungers from said slots, said doors having overlapping connection, pivotal dogs adapted to engage the ends of said overlapping connection, and a hand lever having link connection to said dog whereby said dog may be moved to unlocked position.

1,897,396. SPRING STRUCTURE. JOHN M. OLDHAM, Detroit, Mich., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Filed Jan. 29, 1932. Serial No. 589,597. 3 Claims. (Cl. 5—260.)



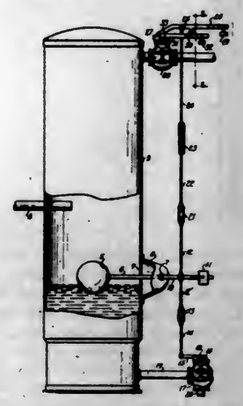
3. In a spring structure, the combination with a frame, a plurality of body springs disposed with coils thereof adjacent said frame, clips embracing said frame and said spring coils disposed adjacent thereto, the arms of the clips having alined holes therein lying within the confines of the end coil of the spring that the clip secures to the frame, and spacing members having their ends disposed through said holes to secure the springs to the frame and support them in spaced relation.

1,897,397. PISTON RING CLOSING FIXTURE. JAY E. PORTER, Muskegon, Mich., assignor to The Piston Ring Company, Muskegon, Mich., a Corporation of Michigan. Filed Dec. 28, 1931. Serial No. 583,592. 7 Claims. (Cl. 29—89.)



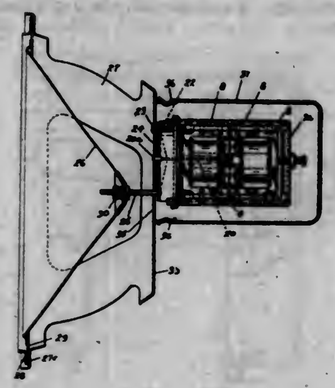
1. An equalizing piston ring fixture comprising, end bars located in parallel relation, each recessed longitudinally at its inner side to within a short distance from each end, a plurality of intermediate bars between the end bars spaced therefrom and from each other, flexible connecting means connecting all the bars together in spaced relation, said intermediate bars being likewise longitudinally recessed at their inner sides to within a short distance of each end, and having deeper recesses than in the end bars, and resilient facing strips secured in the recesses of said intermediate bars.

1,897,398. INVERSE VALVE CONTROL FOR LIQUID AND GAS SEPARATORS. GWYNNE RAYMOND, Kansas City, Mo. Filed Aug. 31, 1931. Serial No. 560,376. 7 Claims. (Cl. 183—2.7.)



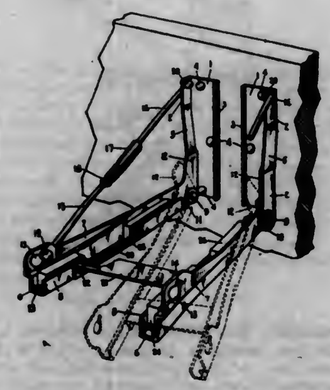
3. An inverse valve control for liquid and gas separators comprising the combination with a tank adapted to receive a gas charged liquid, a liquid valve and a float-controlled mechanism for operating said valve, of a gas valve connected with the tank, means for holding said gas valve in closed position until a predetermined minimum gas pressure in said tank has been reached, and means operable upon rise of liquid level in the tank adapted to be automatically brought into cooperation with said first mentioned means for holding said gas valve in closed position until a maximum gas pressure is reached.

1,897,399. CONSTRUCTION OF LOUD SPEAKER MOTORS. RONALD J. ROCKWELL and AUSTIN F. PARKHURST, Cincinnati, Ohio, assignors to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 31, 1930. Serial No. 505,880. 7 Claims. (Cl. 179—115.)



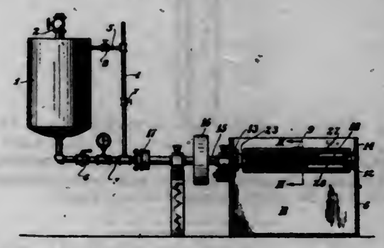
6. In a loud speaker motor construction, an assembly comprising field elements and an armature vibrating between said field elements, a support, a driven element mounted on said support, operatively connected to said armature for vibration therewith, and means whereby said assembly slides on said support for adjustment of the assembly toward and away from said driven element.

1,897,400. BRACKET FOR AUTOMOTIVE RADIO SETS. THEODORE J. SCOFIELD, Jackson, Mich., assignor to The Sparks-Withington Co., a Corporation of Ohio. Filed Feb. 4, 1931. Serial No. 513,260. 5 Claims. (Cl. 248—20.)



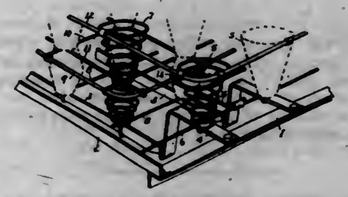
1. In supports for radio sets, a pair of channel bars each having one side flange extending above the other side flange, clamping plates hinged at one of their ends to one of the ends of said channel bars, tie rods connected at one of their ends to said sides of the channel bars and at their other ends to the other ends of the clamping plates, cushioning blocks in said channel bars extending slightly above the shorter side thereof.

1,897,401. CENTRIFUGAL MOLDING DEVICE. WILLIAM R. SEIGLE, Mamaroneck, N. Y., assignor to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 27, 1931. Serial No. 518,640. 9 Claims. (Cl. 92—58.)



1. In a device for centrifugally molding tubular shaped products, the combination of a perforated shell having inner dimensions corresponding to the outer dimensions of the desired tubular product, a rotatable hollow mandrel centrally mounted in said shell and provided with an aperture for the passage of stock therefrom into the space enclosed between the shell and mandrel, one of the marginal edges of said aperture being curved inwardly.

1,897,402. SPRING STRUCTURE. GEORGE A. STACKHOUSE, Oakland, Calif., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Filed June 27, 1930. Serial No. 464,207. 4 Claims. (Cl. 5—252.)



3. In a spring structure, the combination with a main frame provided with downwardly offset spring supporting bars, independently yieldable spring units each comprising a plurality of long inner and short marginal springs independently mounted on said bars, inner and marginal locking wires for said springs carried by said bars, and a center tie comprising a center tie frame and cross members connected to intermediate coils of the springs and disposed at the level of the bottom of the marginal springs, links pivotally connecting the center tie frames to each other, and links pivotally connecteding said center tie frames to the marginal locking wires, and top border frames for said spring units connected to the top coils of the outer springs thereof.

1,897,403. INHALING BOTTLE. THOMAS B. STEPHENSON, Springfield, Mass. Filed Mar. 2, 1931. Serial No. 519,822. 11 Claims. (Cl. 128—200.)

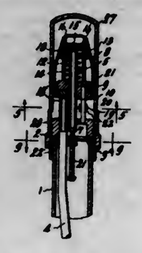
1. An aspirator bottle which comprises a liquid container having inlet and outlet pipes, a portion of the

outlet pipe being extended beyond the end of the container, both said pipes opening endwise of the container, and



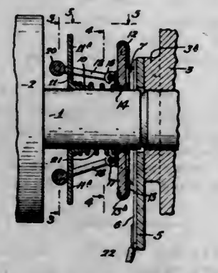
an inhaling head mounted on the extended portion of the outlet pipe for movement to and from sealing engagement with the outer openings of said pipes.

1,897,404. ASPIRATOR. THOMAS B. STEPHENSON, Springfield, Mass., assignor to Stephenson Manufacturing Company, Inc., Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 17, 1931. Serial No. 563,328. 6 Claims. (Cl. 128—200.)



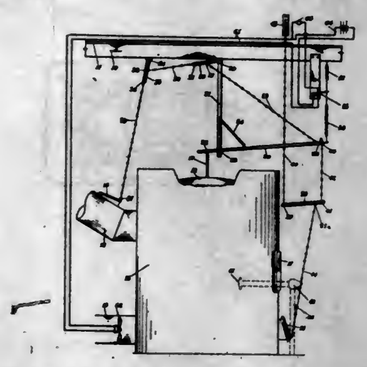
1. An aspirator bottle which comprises a liquid container having inlet and outlet pipes opening endwise of the container, a portion of the outlet pipe being extended beyond the end of the container, and an inhaling head slidably mounted on the extended portion of the outlet pipe for movement to and from sealing engagement with the outer ends of said pipes.

1,897,405. SPEED RESPONSIVE ELECTRIC SWITCH. CLIFFORD F. THOMPSON, Chicago, Ill., assignor to Bodine Electric Company, Chicago, Ill., a Corporation of Illinois. Filed May 20, 1931. Serial No. 538,777. 9 Claims. (Cl. 200—80.)



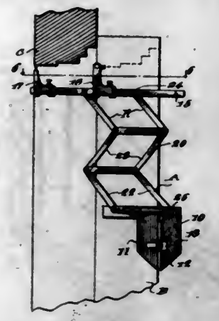
1. In combination with a rotatable shaft, of an outstanding arm mounted on the shaft, coacting contact members, one of which is axially movable along the shaft, a link yoke pivoted to the axially movable contact member and embracing the arm, and a roller journaled on the yoke and having a rolling contact with the arm on the side thereof opposite to the axially movable contact member.

1,897,406. FURNACE HEAT REGULATOR. PAUL C. TIMM and WILLIAM P. TIMM, Lincoln, Nebr. Filed Dec. 17, 1931. Serial No. 581,640. 7 Claims. (Cl. 236—16.)



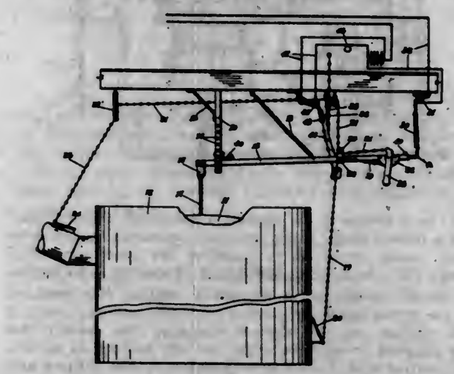
1. An attachment for a furnace having a check valve, a lever and a connection between said lever and the check valve, said connection being in alignment with said lever when the check valve is in closed position, means responsive to the movements of expansion and contraction of the furnace, and a connection between said means and said lever at a point intermediate said first named connection and the pivot of said lever whereby the opening movement of the check valve will be accelerated and whereby the speed of the closing movement of the check valve will decrease gradually from its open position to its closed position.

1,897,407. PROJECTING SCRIBE. PAUL C. TIMM, Lincoln, Nebr. Filed Oct. 12, 1929. Serial No. 399,274. 3 Claims. (Cl. 33—26.)



1. A carpenter's tool for scribing a board to be fitted against an object having an irregular surface, a plate for engaging one face of the work and adapted to extend across the work, means for clamping the plate on the board, the plate having a straight edge, a parallel bar also adapted to extend across the face of the work, a feeler point for engaging the irregular surface, carried by the bar, a marking point adjustably carried by the bar, a linkage connecting the bar to the plate for maintaining the bar in parallel relation to the straight edge of the plate at all times, the linkage including inner and outer sets of spaced parallel leads and an intermediate set of parallel leads, means pivotally connecting the outer ends of the inner and outer set of leads to the plate and bar respectively, means securing the ends of the sets of leads together, and strips pivotally connected to the sets of leads at their pivot points for maintaining the same in spaced relation.

1,897,408. FURNACE HEAT REGULATOR. PAUL C. TIMM and WILLIAM P. TIMM, Lincoln, Nebr. Filed June 15, 1932. Serial No. 617,408. 6 Claims. (Cl. 236—16.)



1. A furnace attachment including a lever for transmitting in amplified form the movements of expansion and contraction of the furnace to automatically control the opening and closing movements of the draft valve of the furnace, and a stationary fulcrum having an elongated curved bearing surface for progressively altering the amplitude of movement of said lever.

1,897,409. CIGARETTE HOLDER. WILLIAM B. WANSOR, Locust Valley, N. Y. Filed Feb. 13, 1932. Serial No. 592,802. 1 Claim. (Cl. 131—51.)



A device of the character described, comprising a body member having a recess to receive ashes, a grate for supporting a cigarette thereabove, a mouth piece adjacent said grate having a socket for receiving and retaining the cigarette supported by the grate, and an ejecting mechanism having a portion interposed between the body of the mouth piece and the grate, effective to abut the retained end of the cigarette and having a guiding member connected to said portion and disposed in angular relation to the axis of the cigarette supported in the grate, whereby said mechanism is effective to eject the cigarette from the socket and from the grate.

1,897,410. DIAZO SULFONATES OF THE DIARYLAMINE SERIES. ARTHUR ZITSCHER and WILHELM SEIDENFADEN, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 8, 1931, Serial No. 561,087, and in Germany Sept. 4, 1930. 5 Claims. (Cl. 260—69.)

1. As new compounds the diazo-sulfonates of the diarylamine series corresponding to the probable general formula:

$$X—NH—R—N=N—SO_3—\text{alkali metal}$$

wherein X means a naphthalene nucleus or a radical of the benzene series which may contain in the para-position to the NH-group a further —N=N—SO_3—alkali metal group and R means a radical of the benzene series, which compounds represent when dry yellowish to brownish powders and are valuable intermediates for the production of azo dyestuffs.

1,897,411. SPRING. ARTHUR H. ADAMS, La Grange, Ill., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y., a Corporation of Delaware. Filed June 12, 1928, Serial No. 284,722. Renewed July 2, 1932. 5 Claims. (Cl. 267—1.)



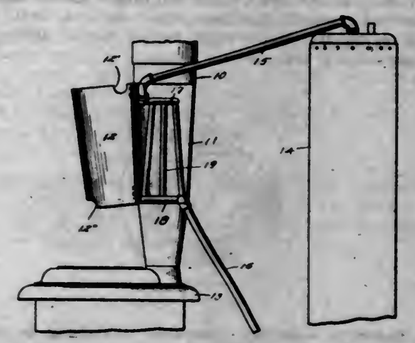
1. As a new article of manufacture, a spring having multi-sided convolutions skewed at an angle to the spring axis, the sides of adjacent convolutions providing a substantially uniform and continuous even supporting surface.

1,897,412. METHOD OF WINDING CONVOLUTED SPRINGS. ARTHUR H. ADAMS, Yonkers, N. Y., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y., a Corporation of Delaware. Original application filed June 12, 1928, Serial No. 284,722. Divided and this application filed Oct. 17, 1929. Serial No. 400,304. 6 Claims. (Cl. 153—64.)



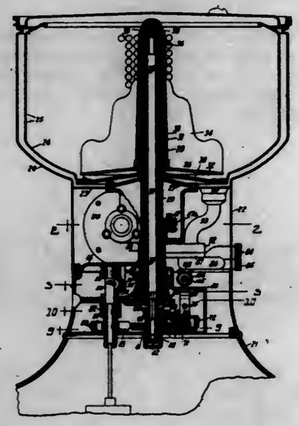
1. The method of winding a convoluted spring having an angle of skew, comprising forming a length of wire into convolutions, and providing opposite sides of some of said convolutions with different net heights with respect to a reference plane which is perpendicular to the planes of the convolutions and which forms an angle with an axis of said spring which is equal to the complement of the angle of skew, the opposite sides of the same dimension recurring on the same side of the spring.

1,897,413. WATER HEATER. GUST ANDERSON, Ashtabula, Ohio. Filed Mar. 12, 1932. Serial No. 598,451. 4 Claims. (Cl. 257—227.)



1. In a water heater, an upper manifold, a lower manifold of greater dimensions, and tubular elements having their end portions in communication with said manifolds, the manifolds providing ducts extending circumferentially, and comprising deflected portions of one continuous tube.

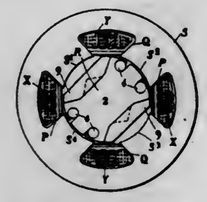
1,897,414. CLOTHES WASHING MACHINE. GEORGE H. BALDNER, Dayton, Ohio, assignor to L. T. Bohn, Dayton, Ohio. Filed Nov. 11, 1931. Serial No. 574,313. 23 Claims. (Cl. 68—15.)



1. In a clothes washing machine, a tub, a perforated clothes receptacle rotatably mounted in said tub, an agitator mounted in said clothes receptacle for rotatory movement with relation thereto, means for oscillating said agitator in said clothes receptacle, means for rotating said clothes receptacle, power operated driving mechanism, and means operated in time relation to said driving mechanism to cause said oscillating means to impart oscillatory movement to said agitator, to interrupt the oscillating movement of said agitator and to cause said rotating means to impart rotary movement to said clothes receptacle.

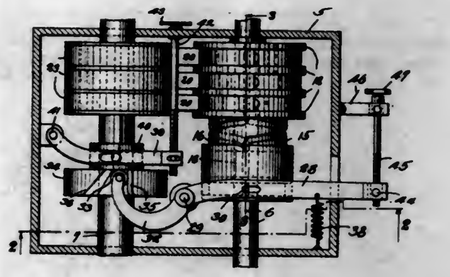
5. In a clothes washing machine, a tub, a perforated clothes receptacle rotatably mounted in said tub, an agitator mounted in said clothes receptacle for rotatory movement with relation thereto, separate shafts connected respectively with said agitator and said clothes receptacle, power operated driving mechanism, means for operatively connecting said driving mechanism with said shafts, and means operated by said driving mechanism for controlling the connections between said driving mechanism and said shafts.

1,897,415. INDUCTION CONTROLLER. RALPH HENRY BARBOUR, London, England. Filed Apr. 25, 1931, Serial No. 532,909, and in Great Britain May 17, 1930. 11 Claims. (Cl. 171—119.)



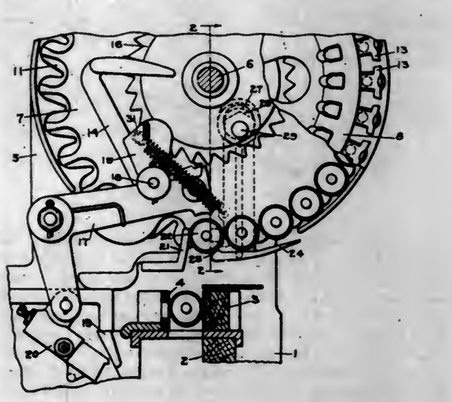
1. Induction controller apparatus, comprising in combination, a stationary magnetic structure, primary and secondary windings mounted thereon and a magnetic rotor mounted for movement relatively to said windings, said rotor including a plurality of low resistance paths for electric currents arranged so that magnetic flux linked with said secondary winding is linked either with said primary winding or with said closed paths.

1,897,416. AUTOMATIC VARIABLE SPEED DRIVE. JESSE M. BAUM, Warren, Ohio, assignor of one-fourth to Jesse J. Baum, Canton, Ohio. Filed Oct. 12, 1931. Serial No. 568,417. 3 Claims. (Cl. 74—54.)



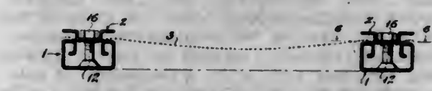
1. In a device of the character described, a drive shaft and a driven shaft, inner eccentrics mounted on the drive shaft, outer eccentrics surrounding the inner eccentrics, means for transmitting movement of the outer eccentrics to the driven shaft, an adjustable control disk mounted on the driven shaft and having a cut out portion, a control arm having one end thereof engaging the control disk and adapted to move into the cut out portion to operate the control arm, and means operated by the control arm for moving the outer eccentrics to their inactive positions.

1,897,417. ROTARY HOPPER FOR FILLING REPLENISHING LOOMS. HORACE H. BURDETT, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed May 17, 1932. Serial No. 611,867. 4 Claims. (Cl. 139—151.)



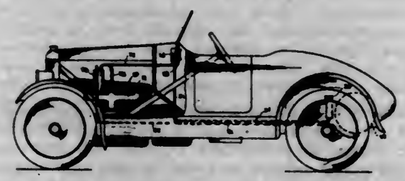
1. In a filling replenishing loom, the combination of a rotary hopper arranged to support a series of bobbins about its circumference, a hopper stand, means for rotating the hopper to successively present the bobbins for transfer, a combined stop and bobbin guide engaging the bobbin next to be transferred, a pin in said hopper stand extending parallel to the axis of the hopper, a bobbin support suspended from said pin by means of a vertically elongated slot at its upper end, whereby said bobbin support is capable of vertical sliding movement and pivotal movement circumferentially of the hopper on said pin, said bobbin support at its lower end having an offset head provided with a cam surface engaging the said bobbin below its center on the opposite side thereof from said stop, and a spring extending at an acute angle to the direction of said sliding movements and having one end connected to the bobbin support below said slot and the other end connected to the hopper stand, the said spring constituting the sole means of urging the said cam surface upwardly and laterally about said pin toward said stop.

1,897,418. SCREEN. GUY W. CARLSON, Van Dyke, Mich. Filed July 9, 1932. Serial No. 621,724. 6 Claims. (Cl. 156—14.)



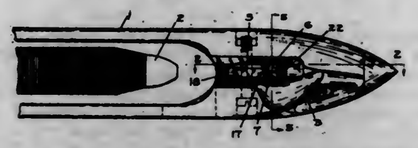
1. A screen comprising a female molding, a male molding having a depressed portion adapted for insertion in said female molding to stretch and clamp the screening therebetween, and a fastening element between said moldings and engaged within the depressed portion of the male molding for drawing the same with relation to the female molding.

1,897,419. GASOLINE GAUGE. NEPHI W. CUMMINGS, La Jolla, Calif. Filed Mar. 22, 1922. Serial No. 545,722. 7 Claims. (Cl. 73—54.)



5. In apparatus of the class described, a liquid holding tank, means forming an inclosed chamber, a connection for creating a partial vacuum in said chamber, means affording communication between said chamber and the liquid in said tank at the minimum level to be gauged whereby the liquid may be drawn into said chamber by the vacuum existing therein, said chamber having a valve controlled passage opening to the atmosphere for regulating the degree of vacuum in said chamber, and means responsive to the rise of liquid in said chamber for controlling the opening of said valve.

1,897,420. SHUTTLE TENSION. HARRY A. DAVIS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Feb. 23, 1932. Serial No. 594,549. 3 Claims. (Cl. 139—228.)



1. A shuttle for automatic bobbin changing looms, said shuttle including a body containing a filling carrier, and a threading block with which is associated a first pick friction device and a threading scroll, said friction device being comprised of a pair of laterally opposed friction members yieldingly urged together, said threading scroll being positioned between the friction device and the filling carrier and having its entrance positioned above the line the running filling assumes when it extends from the bottom of the filling carrier on the first pick following replenishment, said scroll also having its top positioned below a line extending from the top of the filling carrier to the entrance to the friction device, whereby the scroll will thread up when the first convolution of filling unwinds from the filling carrier and will thereafter deflect the running filling to a position between said friction members.

1,897,421. FURROW SEEDING MACHINE. CHARLES B. DEMPSTER and WILLIAM ELLIOTT, Beatrice, Nebr., assignors to Dempster Mill Manufacturing Company, Beatrice, Nebr., a Corporation of Nebraska. Filed Oct. 25, 1929. Serial No. 402,522. 2 Claims. (Cl. 111—52.)



1. A furrow seeding machine, comprising a rigid main frame adapted to be assembled in transverse alignment with other like frames, vertically pivoted steering wheels mounted on the forward end of the frame to support it, pairs of spaced apart press wheels disposed in transverse alignment beneath the rear end of the frame, a seed-box mounted across the frame between the front and rear ends thereof and having feed shafts with sprockets located at the opposite sides of the frame to register with corresponding shafts of adjacent frames, front and rear transverse rows of interchangeable furrow openers disposed respectively forwardly and rearwardly of the seed box on the frame and with the openers of one row staggered relatively to the openers of the other row and arranged in line with said press wheels, said furrow openers adapted for adjustment to equally space the same in aligned rows throughout adjacent frames when assembled, and seed conduits carried by the seed box for feeding seed through the furrow openers in both rows.

1,897,422. CAPSULE MADE OF CELLULOSE ESTERS AND PROCESS FOR PREPARING IT. ADOLF DULITZ, Wiesbaden, and JULIUS STAWITZ, Wiesbaden-Biebrich, Germany, assignors to Kalle & Co. Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Filed Sept. 19, 1929, Serial No. 393,840, and in Germany Sept. 27, 1928. 10 Claims. (Cl. 215—38.)

1. The process of preparing swollen capsules of cellulose esters, capable of being stored without shrinking, which comprises immersing water-swollen capsules of cellulose esters in a water-soluble, difficultly volatile liquid, which is chemically indifferent to cellulose esters and whose swelling action upon cellulose esters is at the most equal to that of water, thereby effecting an exchange of the impregnating liquid for the water contained in the water-swollen capsules.

1,897,423. DEVICE FOR PREVENTING GONORRHEA INFECTION. FILIBERTO FERRI, Milan, Italy. Filed Oct. 29, 1929, Serial No. 403,322, and in Italy Oct. 30, 1928. 1 Claim. (Cl. 128—270.)



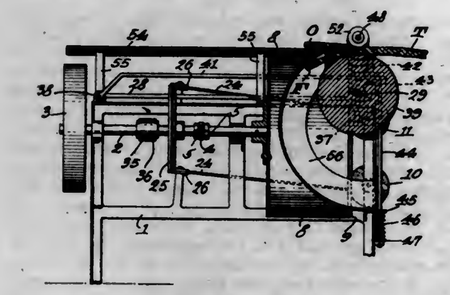
A device for preventing and treating infection consisting of a flexible plate member, one side of said plate being

coated with a rubber solution, a wedge-shaped medicament charged sponge projecting centrally from the same side of said plate and a sponge ring encircling said wedge-shaped sponge for the purpose specified.

1,897,424. PROCESS OF PURIFYING SUGAR JUICES. JOHN P. FOSTER, Paia, Territory of Hawaii. Filed Dec. 23, 1930. Serial No. 504,411. 6 Claims. (Cl. 127—51.)

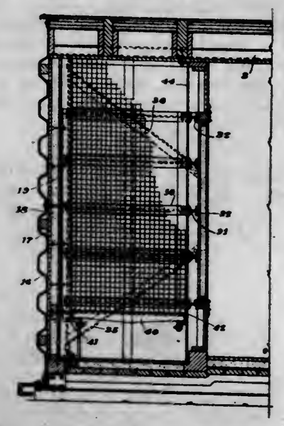
1. The process of freeing sugar juices from non-sugars therein which includes acidifying an unlimed raw sugar juice, which contains substantially all of the non-sugars of an unpurified raw juice, with sulfur dioxide to increase the hydrogen ion concentration thereof and to render non-sugars insoluble and then centrifugally separating the insoluble non-sugars from the unheated acidified juice.

1,897,425. TIRE CUTTING MACHINE. WILFRED GUY FRITTS, Lexington, N. C. Filed Aug. 27, 1930. Serial No. 478,239. 6 Claims. (Cl. 164—61.)



1. The combination with a cylindrical cutter, of a feed roller extending into the cutter close to the cutting edge thereof, an arcuate presser shaft substantially parallel with the adjacent portions of the cutter and roller, and a series of separately spring-actuated rollers on the shaft and cooperating with the feed roller to grip material and feed it against the cutter.

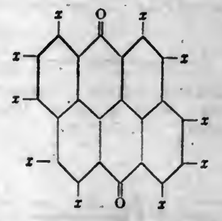
1,897,426. RAILWAY REFRIGERATOR CAR. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 5, 1930, Serial No. 500,158. Renewed July 5, 1932. 7 Claims. (Cl. 62—19.)



1. A bulkhead for a railway refrigerator car having spaced apart side walls comprising a plurality of horizontally disposed beams having their opposite ends secured to said side walls respectively, an insulation secured to said beams on one side thereof, and a netting secured to said beams on the other side thereof, said beams being provided with apertures to allow circulation of air between the insulation and the netting.

1,897,427. VAT DYESTUFFS OF THE ANTHANTHRONE SERIES AND PROCESS OF PREPARING THE SAME. RUDOLF M. HEIDENREICH, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1929, Serial No. 345,603, and in Germany Mar. 10, 1928. 4 Claims. (Cl. 260—61.)

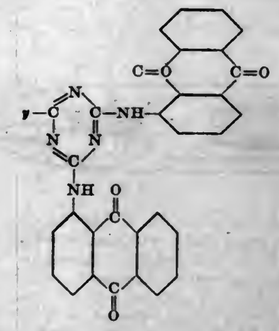
1. As new products vat dyestuffs of the anthanthrone series of the probable general formula:



wherein at least one *x* stands for a cyan group and the other *x*'s stand for hydrogen or monovalent substituents, being orange to bluish-black crystals, difficultly soluble in high-boiling organic solvents, soluble in concentrated sulfuric acid with various colorations, yielding generally violet vats, from which cotton is dyed orange to grey shades of excellent fastness to chlorine and bucking.

1,897,428. VAT DYESTUFFS OF THE ANTHRAQUINONE CYANURIC SERIES. WINFRID HENTRICH, Nuremberg, and FRANZ WIENBERG and RICHARD STROEBEL, Oppladen, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 17, 1931, Serial No. 516,512, and in Germany Feb. 19, 1930. 6 Claims. (Cl. 260—27.)

1. The new vat dyestuffs of the probable formula:—



wherein *y* means alkyl, cyclohexyl, benzyl- or phenyl, and wherein the anthraquinone nuclei may be substituted by aroylamino or alkoxy groups, said dyestuffs being powerful vat dyestuffs of various shades possessing satisfactory fastness properties especially to light and alkalies.

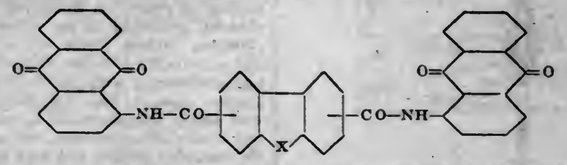
1,897,429. PROTECTING FILM ROLL FROM THE ENTRY OF LIGHT. KURT HIPKE, Dessau in Anhalt, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed July 16, 1931, Serial No. 551,225, and in Germany July 23, 1930. 2 Claims. (Cl. 95—9.)



1. A device for protecting film rolls wound on spools provided with flanges from the entry of light comprising a cylindrical open sided casing made of an elastic material and provided with a longitudinal slit extending from one end of the casing to the other, said casing and said slit being lined on the interior surface with velvet or a similar material, said casing being somewhat longer than the distance of the flanges of the spool and having approximately the same diameter as the flanges of the spool so that the flanges of the spool inserted in the casing ensure with the velvet light-tight closure.

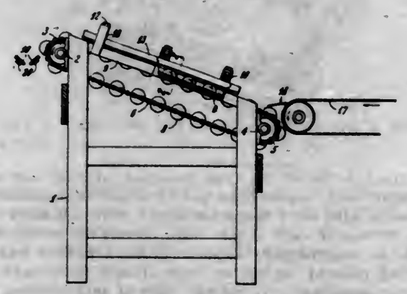
1,897,430. NEW VAT DYESTUFF OF THE ANTHRAQUINONE SERIES. ERNST HONOLD, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 11, 1932, Serial No. 586,082, and in Germany Jan. 13, 1931. 4 Claims. (Cl. 260—53.)

1. The new vat dyestuffs of the probable general formula:



wherein X means CH_2, CO, O, NH, N-alkyl or N=N and wherein the anthraquinone nuclei may be substituted by aroylamino- or alkoxy groups, said dyestuffs forming yellow to red powders, nearly insoluble in the usual organic solvents, soluble in strong sulfuric acid with a yellow coloration, dyeing cotton from a brown to blue alkaline hydrosulfite vat yellow to bluish-red shades of good fastness properties.

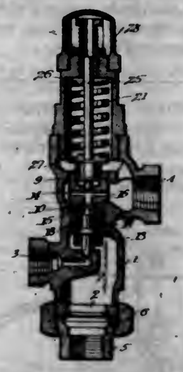
1,897,431. CONVEYER. LLOYD E. JONES, Santa Monica, Calif., assignor to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed Dec. 8, 1930. Serial No. 500,888. 11 Claims. (Cl. 198—183.)



1. An endless conveyer having its working run inclined upwardly towards its discharge end and comprising a series of transversely disposed supporting rollers spaced to support rollable articles between adjacent rollers, means for imparting endless longitudinal travel thereto, and means for imparting rotation to a plurality of adjacent rollers in the working run of the conveyer in a direction opposite to their path of travel.

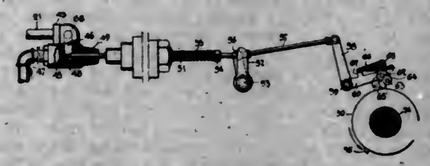
1,897,432. LIQUID FUEL FEEDING DEVICE. AARON KLOTZMAN, Baltimore, Md., assignor to May Oil Burner Corporation, Baltimore, Md., a Corporation of Maryland. Filed Nov. 2, 1929. Serial No. 404,492. 11 Claims. (Cl. 103—42.)

1. A liquid fuel feeding device comprising a casing having an inlet port adapted to be connected with a pump outlet, a burner supply port and an outlet port, a relief valve between the inlet and outlet ports, a valve controlling flow through the burner supply port, means acting to hold the last said valve in position to close the burner supply port, means providing a passage through the relief valve normally establishing communication between the



inlet and outlet ports, and a third valve controlling flow through said passage and adapted to be automatically moved toward closed position when the first said valve is moved to open the burner supply port.

1,897,433. DIE-CASTING MACHINE. TORBJORN C. KORSMO, Madison, Wis., assignor to Madison-Kipp Corporation, Madison, Wis., a Corporation of Wisconsin. Filed Dec. 30, 1930. Serial No. 505,650. 6 Claims. (Cl. 22—69.)



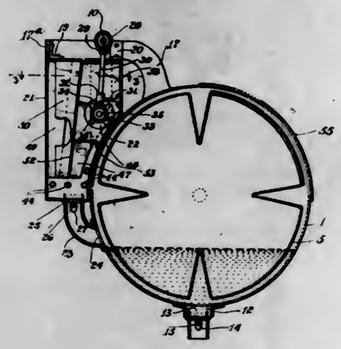
6. A force feed system for die casting machines comprising means to force molten metal from a pressure chamber into a die; and operating means for said forcing means serving to actuate the forcing means upon normal, forward movement of the operating means, said operating means being ineffective to actuate the forcing means upon reverse movement of the operating means.

1,897,434. TELESCOPING BORING BAR FOR EARTH BORING MACHINES. HERMAN M. LOEBER and ANDREW P. ELLIOTT, Beatrice, Nebr., assignors to Dempster Mill Manufacturing Company, Beatrice, Nebr., a Corporation of Nebraska. Filed Nov. 28, 1930. Serial No. 498,874. 7 Claims. (Cl. 255—28.)



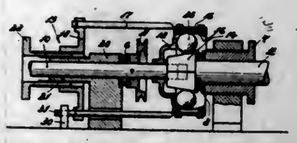
5. An earth boring machine including a rotatable boring bar consisting of relatively nonrotatable telescoping sections, and gravity operated latching means for latching said sections in expanded relation.

1,897,435. LAUNDRY APPARATUS. SAMUEL H. McKNIGHT, Jersey City, N. J., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 19, 1927. Serial No. 241,081. 3 Claims. (Cl. 68—18.)



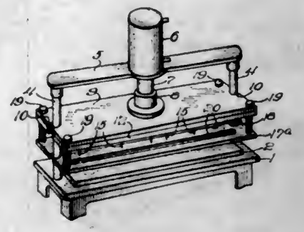
1. In a washing machine of the character described, in combination, a frame, a washing chamber formed upon said frame in which a washing operation is performed and which for each operation receives and holds a predetermined quantity of a washing mixture, a tank formed upon said frame in close juxtaposition to said washing chamber and elevated above the liquid level in said washing chamber, a washing agent receptacle, means to deliver from said receptacle to said tank a predetermined charge of the washing agent, means for delivering to and automatically limiting the supply of water to said washing agent to form the quantity of washing mixture required for a single washing operation in said washing chamber, means in said tank for thoroughly mixing together the washing agent and water within said tank, and means for rapidly emptying the whole of the mixture contained in said tank directly into said washing chamber.

1,897,436. TRANSMISSION BETWEEN TWO SHAFTS WITH REGULABLE GEAR RATIO. CORNELIS ANDRIES HEERO MULDER, Eindhoven, Netherlands, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Filed Aug. 4, 1930, Serial No. 472,915, and in the Netherlands Sept. 25, 1929. 29 Claims. (Cl. 74—34.)



1. An adjustable gear ratio transmission, comprising a driving shaft and a driven shaft, an element comprising a surface of revolution connected to one of said shafts, an element connected to the other snaft and comprising a clamping surface which is not a surface of revolution, and a plurality of solids of revolution interposed between and cooperating with the surfaces of said elements, and another element, also comprising a surface of revolution, with which last-mentioned surface the said solids of revolution may also cooperate, the said solids contacting with the clamping surface and with the surface of at least one of the elements of revolution in planes tangent to said solids, and which planes continuously converge in the direction of relative motion of the said solids of revolution.

1,897,437. PERFORATING DEVICE. THOMAS MUNRO, Philadelphia, Pa. Filed June 12, 1929. Serial No. 370,253. 3 Claims. (Cl. 164—111.)



1. In a device of the type described, in combination, a vertically reciprocable head having a pair of horizontally spaced parallel ways in the lower face thereof, a block slidably received in each of said ways, means for locking said blocks in longitudinally adjusted position in said ways, a piercing element carried by each of said blocks and extending downwardly therefrom, each of said piercing elements being laterally offset from the longitudinal center line of its respective block, and said blocks being endwise reversible in said ways whereby the lateral spacing of said elements may be varied by reversing said blocks in said ways.

1,897,438. THERMORESISTANT WATER BAG. JOSEPH F. MYKOL, White Bluffs, Wash. Filed July 9, 1930. Serial No. 466,853. 2 Claims. (Cl. 150—1.)

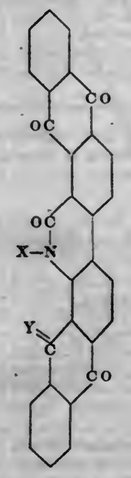


1. A collapsible thermo-resistant liquid-receptacle including an inner collapsible receptacle, an outer collapsible receptacle, and a collapsible intermediate spacing unit having relatively thick and relatively thin parts and extending entirely around the inner receptacle so as to hold the outer receptacle spaced from the inner receptacle and to provide air-spaces for confining air between said inner and outer receptacles.

CARNEGIE LIBRARY OF ATLANTA

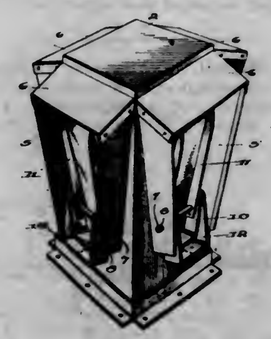
1,897,439. PRODUCTION OF VAT DYESTUFFS OF THE QUINOLINE-ANTHRAQUINONE SERIES AND THE PRODUCTS. HEINRICH NEREBHEIMER, Ludwigshafen-on-the-Rhine, and GEORG BOEHNER, Edingen, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 29, 1929, Serial No. 403,351, and in Germany Nov. 6, 1928. 6 Claims. (Cl. 260—40.)

1. As new articles of manufacture vat dyestuffs of the phenanthridone series dissolving in concentrated sulfuric acid to give yellow to olive green solutions and dyeing cotton from yellow to red shades from brown to violet vats, which dyestuffs probably contain the following ring system:



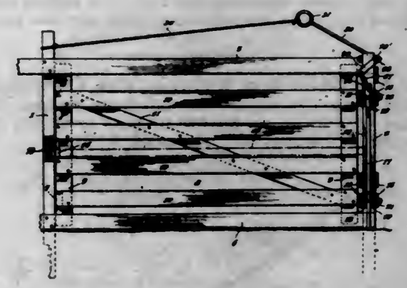
wherein X stands for hydrogen or methyl and Y stands for oxygen.

1,897,440. VENTILATOR. ARTHUR J. RICHARDSON, Catonsville, Md., assignor of one-half to William J. Borchers, Baltimore, Md. Filed July 24, 1929. Serial No. 380,701. 6 Claims. (Cl. 98—82.)



1. A ventilator including a casing having a plurality of openings therein, a damper for each of said openings and standing upright externally thereof, pivotal supporting means for each of the dampers connected with the lower ends thereof, and means connected with the pivotal supporting means and swingingly adjustable relative to the damper for adjusting the relative positions of the dampers to the openings.

1,897,441. ANIMAL PEN. ROBERT ROBERTSON, Goldthwaite, Tex. Filed Feb. 20, 1930. Serial No. 430,002. 6 Claims. (Cl. 119—98.)



1. A pen comprising a plurality of posts, side bars secured to the upper and lower ends of the posts to define the sides of the pen, means between the forward posts to secure the head of an animal, gates hinged to the rear posts and extending when closed to the forward posts, the corresponding forward and rear posts being provided with sockets in their confronting sides, and a locking bar engageable at its ends in said sockets whereby to extend from the rear post to the corresponding forward post and prevent side movement of an animal when a gate is open.

1,897,442. TOP PROP JOINT. WALTER S. SAUNDERS, Pontiac, Mich., assignor to The American Forging and Socket Company, Pontiac, Mich., a Corporation of Michigan. Filed Dec. 18, 1930. Serial No. 503,113. 1 Claim. (Cl. 287—101.)

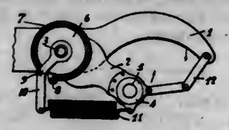


A top prop joint comprising a pair of arms, the inner extremities of which overlap each other and are provided with aligned apertures, the outer faces of the arms being countersunk adjacent the apertures, a tubular fastening member extending through the aperture and pivotally connecting said arms, the ends of said fastening member being flanged to fit within the countersunk faces of said arms, a pin passing through and projecting beyond the ends of said tubular member, and a pair of buttons secured to the ends of said pin, said buttons being formed with projecting bosses adapted to fit within and reenforce the tubular member, and additional projecting portions adapted to space the buttons from the arms, and protions of the arms beneath the buotons being spaced from each other to permit the entry of fluid matter from outside.

1,897,443. SHOCK ABSORBER. STUYVESANT C. SMITH, Chicago, Ill. Filed July 25, 1927. Serial No. 208,176. 1 Claim. (Cl. 267—9.)

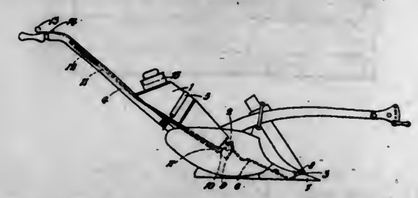
A shock absorber, comprising relatively stationary and movable parts, a drum rotatably mounted and fastened to

the movable part so as to rotate upon the movement of said movable part, a brake-band engaging said drum and



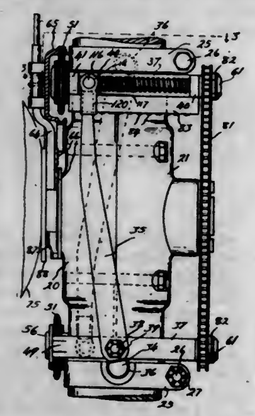
attached at one of its ends to the relatively stationary part, and a lever connecting the other end of said brake-band with a spring connected with said movable part.

1,897,444. PLOW FOR WETTING THE PLOWSHARE. KARL GUNNAR STARK, Skynnerstad, Lofta, Sweden. Filed Mar. 12, 1931, Serial No. 522,105, and in Sweden Mar. 14, 1930. 1 Claim. (Cl. 97—116.)



A device of the character described including in combination, a plowshare provided on its operative face with a sector shaped recess, a nozzle mounted on the plowshare and communicating with the recess, and means for supplying water to the nozzle.

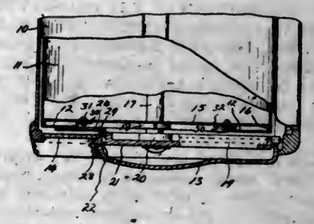
1,897,445. CONTROLLABLE PITCH PROPELLER. WALTER F. STIMPSON, Detroit, Mich., and MURRAY K. PATTEN, Dayton, Ohio; said Patten assignor to said Stimpson. Filed June 19, 1930. Serial No. 462,353. 14 Claims. (Cl. 170—163.)



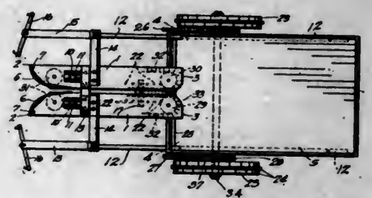
1. In a propeller having a hub and a blade rotatable on its longitudinal axis in the hub, a worm gear, a traveller motivated by the worm gear, and a reducing lever pivotally connected to both the traveller and blade for turning said blade.

1,897,446. WEIGHING SCALE. WALTER F. STIMPSON, Detroit, Mich. Filed July 6, 1931. Serial No. 548,773. 5 Claims. (Cl. 116—129.)

1. In combination with a weighing scale having a substantially cylindrical rotatable indicating chart, a fixed supporting spider at each end of the cylindrical chart in which the latter is journaled on a substantially horizontal axis, a housing enclosing such chart and supports having an aperture in its end, inturned edges carried by the cover surrounding the aperture and projecting inwardly through a portion of one of the spiders, additional indicating means comprising a substantially annular dial provided with weight-indicating graduations so secured to the end of the cylindrical chart as to be readable through the aperture in the housing, the inturned edges of the aperture terminating relatively close to the dial, and a fixed indicator for cooperation with the dial.

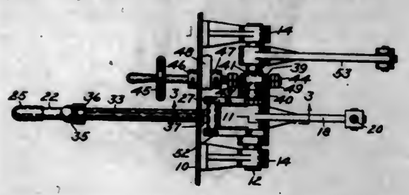


1,897,447. COTTON AND SORGHUM HEAD GATHERING DEVICE. ENOCH G. STONE, Yukon, Okla. Filed Jan. 16, 1929. Serial No. 332,864. 9 Claims. (Cl. 56—33.)



1. A device of the class described, having in combination, a vehicle having a box mounted on a pair of wheels adapted to be drawn, a pair of inclined parallel arms mounted on said wheels, a pair of endless chain conveyors operating in opposite directions and disposed on said parallel arms for gathering plant products from growing plants and conveying the gathered products to said box, said inclined arms having guards adjacent their lower ends for guiding plants therebetween, and having a knife adjacent and between said conveyors for severing from the gathered products any stems which may have been inadvertently gathered therewith, said wheels adapted to propel said conveyors.

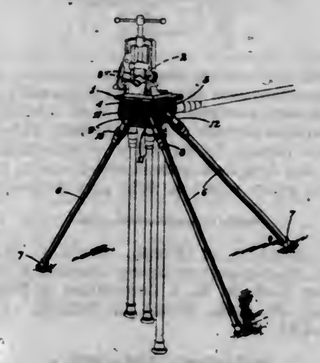
1,897,448. CONTROL APPARATUS. CHARLES M. TERRY, Decatur, Ill., assignor to A. W. Cash Company, Decatur, Ill., a Corporation of Delaware. Filed Apr. 8, 1932. Serial No. 604,047. 10 Claims. (Cl. 236—1.)



5. A control apparatus comprising a pivotally mounted member arranged to be connected to a movable element, a pair of plates pivotally mounted coaxially with the

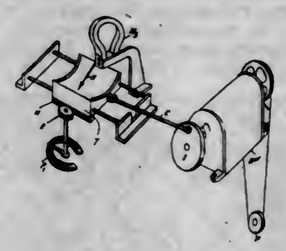
member, means to actuate one of the plates manually, means to actuate the other plate automatically, and manually operable means to connect the member to either of said plates as desired.

1,897,449. PORTABLE AND ADJUSTABLE VISE-STAND. FREDERICK A. TROWBRIDGE, Sacramento, Calif. Filed Jan. 8, 1932. Serial No. 585,424. 7 Claims. (Cl. 81—41.)



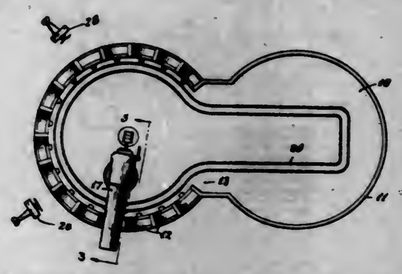
1. An adjustable pipe-vise stand comprising a vise-supporting bracket which comprises a top plate on which to mount a vise, a transversely extending plate depending from the top plate adjacent the front end of the same, and a longitudinally extending back plate depending from the top plate behind the transverse plate; a pair of legs swivelly mounted on and depending from the transverse plate in transversely spaced relation to each other, a third leg swivelly mounted on and depending from the back plate; and individual means for each leg to positively hold the same against swivel movement from any one of a number of predetermined different positions; the transverse plate and the corresponding legs being disposed with a forward slope toward their lower ends.

1,897,450. APPARATUS FOR TESTING DISCHARGE TUBES. GODEFRIDUS VAN BRUSEKOM, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 5, 1929, Serial No. 397,725, and in the Netherlands Oct. 13, 1928. 6 Claims. (Cl. 250—27.)



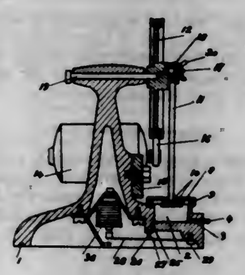
1. A discharge tube tester comprising a movable slide, driving means for moving said slide, an ammeter having a pivoted pointer and mounted to cause the free end of said pointer to move over said slide, electrical connections for the electrodes of a tube to be tested, and switching means controlled by said driving means to vary said connections to establish a voltage difference between said electrodes during movement of said slide in one direction and to cause current to flow through said ammeter and between electrodes of the tube to be tested during the return movement of said slide.

1,897,451. ROTARY MACHINE GUN FORT. VINCENT VARJU, Hunta, Ontario, Canada. Filed Apr. 11, 1932, Serial No. 604,524. 6 Claims. (Cl. 89—36.)



1. A rotary machine gun fort, comprising a continuous wall encircling an area and in plan view composed of adjacent circles overlapping and connected together, one of said circles comprising a plurality of adjacent bottom stationary sections, top telescopic sections on each of said bottom sections and depressible to form an opening for the pointing out of a gun, means for urging the top sections to their extended positions, and a catch adapted to latch each of the top sections in the raised or lowered positions and including a trip lever in the path of the gun to release the catch when the gun is withdrawn and allow said means to raise the telescopic section.

1,897,452. MACHINE FOR OPERATING RELOOPING TOOLS. MARCEL VITOUX, Troyes, France. Filed Jan. 29, 1932. Serial No. 589,593. 6 Claims. (Cl. 66—1.5.)

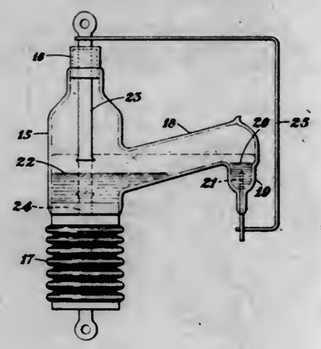


1. The machine for operating relooping tools, comprising in combination, a relooping tool having a pneumatically actuated member, a stand comprising a chamber containing a working fluid, means connecting said chamber with said member, a diaphragm forming a wall of said chamber, a rod connected with said diaphragm, means for reciprocating said rod, and means for adjusting the position of said rod for varying its length of travel.

1,897,453. LOW RESISTANCE FLUID FLOW SWITCH. WARREN R. WALKER, Short Hills, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Mar. 3, 1931. Serial No. 519,882. 3 Claims. (Cl. 200—152.)

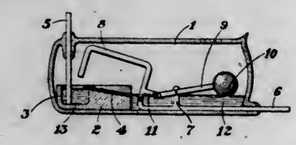
1. A mercury switch comprising a sealed envelope, a syphon bellows forming a cup sealed into the lower wall

thereof, an inlead extending within said cup, a second inlead sealed into another part of said envelope, and mercury in said cup by which said inleads may be con-



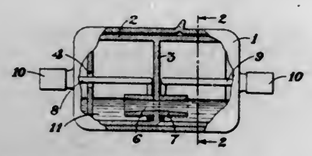
nected at will by flexing said bellows, said bellows being sufficiently flexible to permit further movement thereof to reduce the fluid path between said inleads.

1,897,454. LOW RESISTANCE FLUID FLOW SWITCH. WARREN R. WALKER, Short Hills, and FRANK MOOS, Hoboken, N. J., assignors to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Mar. 3, 1931. Serial No. 519,833. 7 Claims. (Cl. 200—152.)



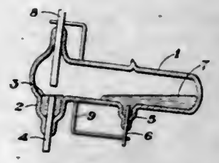
1. A fluid flow switch comprising a sealed envelope, two inleads sealed therein, a fluid conductor in said envelope, a movable solid conductor within said envelope, and means responsive to movement of said fluid conductor to move said movable conductor.

1,897,455. LOW RESISTANCE FLUID FLOW SWITCH. WARREN R. WALKER, Short Hills, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Mar. 3, 1931, Serial No. 519,835. Renewed Sept. 9, 1932. 7 Claims. (Cl. 200—152.)



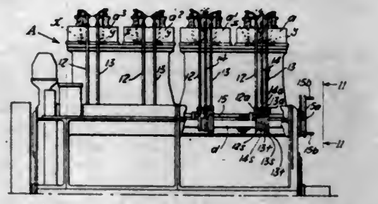
1. A fluid flow switch comprising a sealed envelope, an electrically conducting fluid therein, a transverse baffle separating said fluid into two pools, a relatively long opening through said baffle through which said pools can be united at will, inleads extending into said envelope and making contact with said fluid on opposite sides of said baffle, and means to establish a short fluid path between said inleads after said pools have been united through said long opening.

1,897,456. LOW RESISTANCE FLUID FLOW SWITCH. WARREN R. WALKER, Short Hills, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Mar. 3, 1931. Serial No. 519,834. 7 Claims. (Cl. 200—152.)



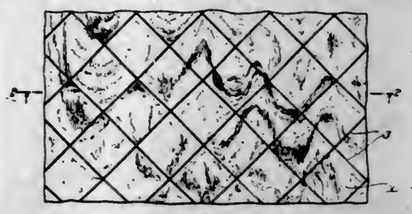
1. A fluid flow switch comprising a sealed envelope, inleads sealed into said envelope, an electrically conducting fluid in said envelope whereby said inleads may be connected at will through a long fluid path, and means to connect said inleads by way of a shorter path in said fluid after said long fluid path is closed and to open said shorter path before said long fluid path is interrupted.

1,897,457. ENGINE STARTER. NIELS E. WERNBERG, Franklin, Pa., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 28, 1928. Serial No. 302,506. 7 Claims. (Cl. 60—16.)



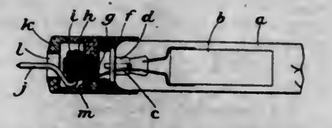
1. In combination, an internal-combustion engine having valves, a cam shaft, means interposed between said shaft and said valves for transmitting the cam impulses to said valves including cam levers, members movably mounted upon said levers for engagement with or disengagement from said shaft, angularly disposed arms in rigid fixed relation on each of said control levers, and a control shaft independent of said cam levers having cams for engaging said arms to hold said control levers in operative or in inoperative position relative to said cam shaft regardless of any normal movement of said cam levers.

1,897,458. MANUFACTURE OF LINOLEUM. WILLIAM E. WHITNEY, Philadelphia, Pa., assignor, by mesne assignments, to Sloane-Blabon Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 19, 1929. Serial No. 356,519. 3 Claims. (Cl. 154—26.)



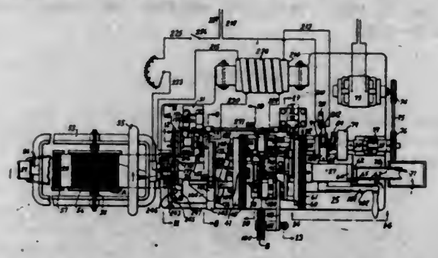
1. The method of decorating linoleum which comprises moving a cutter through a linoleum sheet having a fibrous backing to form a cut substantially down to said backing and having ridged edges, filling such cut with linoleum, and pressing such ridged edges substantially flush with the surface of said sheet and securing said filling.

1,897,459. TERMINAL FOR ELECTRIC DEVICES. KURT WIEGAND, Berlin, and JULIUS HABEL, Berlin-Tempelhof, Germany, assignors to General Electric Company, a Corporation of New York. Filed Feb. 14, 1930, Serial No. 428,530, and in Germany July 9, 1929. 2 Claims. (Cl. 176—126.)



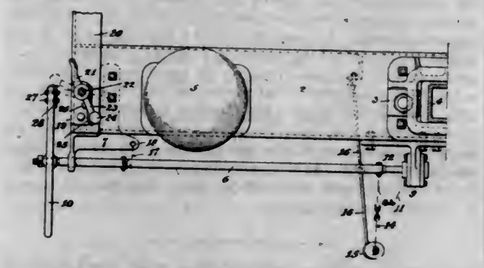
1. In combination an electric discharge device, a base therefor, said base being permanently attached to said device, a cap for said base adapted to cover the conducting parts thereof and to accommodate a current lead connected to said parts, said cap being of the same outside diameter as said base.

1,897,460. GRID MAKING MACHINE AND METHOD. VICTOR ANDERSON, Passaic, and DONALD G. TRUTNER, North Arlington, N. J., assignors to Alfred Hofmann & Company, West New York, N. J., a Corporation of New Jersey. Filed Nov. 16, 1929. Serial No. 407,707. 31 Claims. (Cl. 219—4.)



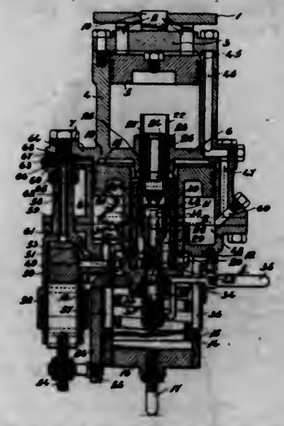
1. In a grid making machine a rotating winding arbor, a revoluble carrier or turret carrying the arbor, means carried on the carrier for advancing the post wire to the arbor, means for feeding helix wire to the rotating arbor and the advancing post wire, and means for uniting the wires at intersections.

1,897,461. UNCOUPLING MECHANISM FOR CAR COUPLERS. ARTHUR J. BAZELEY, Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 9, 1929. Serial No. 391,128. 1 Claim. (Cl. 213—219.)



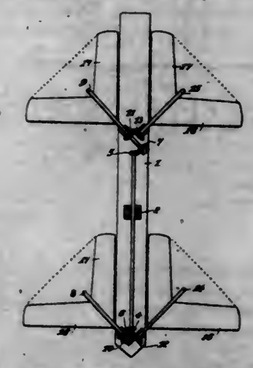
In combination, a coupler element operable to withdraw the lock of the coupler to uncoupling position, a manually operable member for actuating said element, a pivotally mounted latch engageable with and mounted on an axis extending transversely of the axis of said member, and an arm pivotally mounted on the same axis as said latch for controlling the engagement of the latter with said member, said arm being shiftable independently of said latch to hold the latter in either effective or ineffective position.

1,897,462. RETARDING OR PRESSURE CONTROLLING DEVICE. ARTHUR CARTER, Birmingham, England, assignor of one-half to John Lees, Birmingham, England. Filed May 21, 1931, Serial No. 539,000, and in Great Britain May 30, 1930. 21 Claims. (Cl. 267—1.)



1. A retarding device comprising a primary cylinder containing a fluid, a plunger therein adapted to be operatively connected to the part whose movement is to be resisted, a secondary chamber or cylinder into which fluid is displaced from the said primary cylinder by the said plunger during the working stroke of the plunger, the said secondary chamber or cylinder communicating with the primary cylinder by means of a passage or aperture through which the said fluid passes, a movable device controlled or regulated by the movement of the plunger in order progressively to vary the effective size of the passage or aperture as the plunger advances, and means within the secondary chamber or cylinder for acting upon the displaced fluid and returning the same into the primary cylinder, and thereby causing the plunger to return to its initial position, when the force applied to the said plunger is relieved.

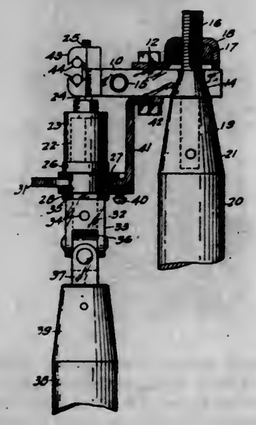
1,897,463. AIRCRAFT AND SCREW PROPELLER THEREFOR. RUDOLPH CHILLINGWORTH, Brooklyn, N. Y. Original application filed Apr. 6, 1926, Serial No. 100,100. Divided and this application filed Sept. 13, 1930. Serial No. 481,693. 8 Claims. (Cl. 244—25.)



1. An airship having a plurality of propellers with their axes of rotation diagonal to the longitudinal axis of the

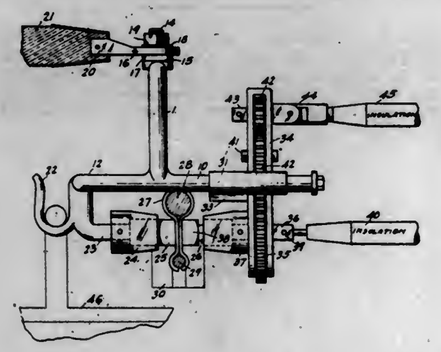
airship; said axes intersecting said longitudinal axis from opposite directions, the blades of each propeller being diagonal to the axis of rotation thereof, the blades of each propeller at times being parallel with said longitudinal axis and at times perpendicular thereto; the propeller on one side of the longitudinal axis thereof upon rotation being adapted to actuate the opposite propeller.

1,897,464. WIRE TAPPING TOOL. CHESTER C. COON, Oakland, Calif. Filed Apr. 10, 1931. Serial No. 529,133. 9 Claims. (Cl. 29—84.)



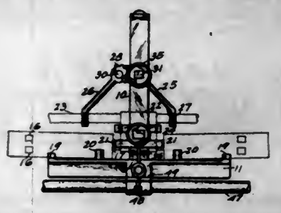
1. A wire tapping tool, comprising, in combination, a pair of handles of insulating material, a vise actuated by one of said handles and a wrench actuated by the other of said handles transversely to said vise, said wrench being floatably supported by a bracket fixed to said vise.

1,897,465. VIBRATION DAMPENER REMOVING TOOL. CHESTER C. COON, Oakland, Calif. Filed Aug. 21, 1931. Serial No. 558,496. 9 Claims. (Cl. 29—84.)



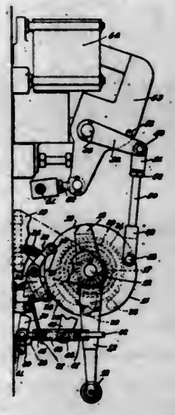
1. A vibration dampener removing tool comprising sockets adapted to cooperate with the head and nut of a clamp bolt, supporting means for said sockets adapted to be removably supported on the line from which the dampener is to be removed, means for operating one of said sockets from a remote point and a handle pivotally supporting said supporting means, and means for frictionally adjusting said pivotal support.

1,897,466. VIBRATION DAMPENER APPLICATOR. CHESTER C. COON, Oakland, Calif. Filed Aug. 21, 1931. Serial No. 558,497. 15 Claims. (Cl. 29—84.)



1. In combination, supporting means adapted to position and removably retain a vibration dampener having clamping means thereon, gear actuating lifting means for said supporting means cooperating with a transmission line for engaging the clamp of said dampener to said transmission line, and means for tightening said clamping means.

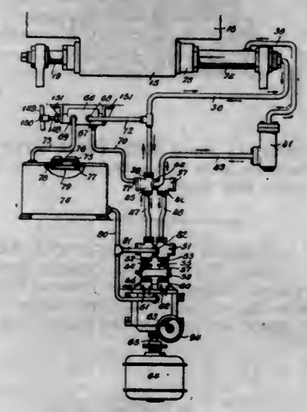
1,897,467. ELECTRIC SWITCH. WILLIAM DEANS, Ridgewood, N. J., assignor to Sundh Electric Company, Newark, N. J., a Corporation of New Jersey. Filed May 7, 1930. Serial No. 450,399. 10 Claims. (Cl. 200—106.)



1. In a device of the character described, the combination of a movably mounted member adapted to be operatively connected with the movable contact or contacts of an electric switch, means for releasably locking said member in positions corresponding when so operatively connected with the switch both to the open and to the closed positions by its contacts, a spring adapted to move said member from contact-open to contact-closed position, a hand-lever adapted when moved in one direction to tension said spring while said member is locked in contact-open position and then to release the member from the locking means and thereafter to drop back to its initial starting position, and means independent of the hand-lever for releasing the member from the means locking it in contact-closed position.

1,897,468. DRIVING MECHANISM FOR RECIPROCATING MACHINES. ARTHUR L. ELLIS, New Rochelle, N. Y., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed Oct. 28, 1931. Serial No. 571,570. 8 Claims. (Cl. 60—52.)

1. In a hydraulic drive for a reciprocating member, a stationary piston having an axial passage, stationary hollow piston rods extending in opposite directions from said piston in communication with the axial passage thereof, a stationary sleeve connected with said piston and surrounding one of said piston rods in spaced relation thereto to form an annular space exteriorly of said one piston rod, a cylinder connected with said reciprocating member slidably mounted on said piston and divided thereby into two independent end chambers communicating respectively with the interiors of said piston rods and piston passage, and with said annular space, a hydraulic pump connected with the interior of said pis-



ton rods and piston passage for delivering fluid under pressure to said cylinder chambers, end means controlling the flow of fluid through said connections and movable to direct said fluid successively through said piston rods and piston passages and through said annular space to said cylinder chambers to reciprocate said cylinder, and to direct said fluid concurrently through said piston rods and piston passage and said annular space to said cylinder chambers to develop differential opposing pressures for selectively varying the speed of travel of said cylinder in one direction.

1,897,469. ADHESIVE AND METHOD OF MAKING THE SAME. WILLIAM DAWES FAWTHROP, Seattle, Wash. Filed Feb. 5, 1930. Serial No. 425,989. 9 Claims. (Cl. 87—17.)

4. That process of making a vegetable protein glue which comprises mixing soya bean flour and a tannic acid agent up to 2%, then adding water in excess to dissolve said tannic acid, and then adding an alkaline solution in excess and agitating to produce a glue mass.

8. As an article of manufacture, an adhesive base composition comprising vegetable protein meal mixed with an acid agent in the dry state, said composition being soluble in water to render the acid agent active without glutenizing said vegetable protein meal but readily glutenized upon the addition of a strongly alkaline solution in excess.

1,897,470. SUSPENSION BRIDGE. CARL ABRAHAM FORSSELL, Stockholm, Sweden. Filed May 9, 1928, Serial No. 276,349, and in Sweden May 10, 1927. 9 Claims. (Cl. 14—22.)



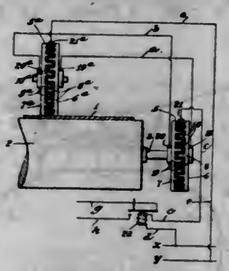
2. In a suspension bridge, the combination, with composite carrying cables comprising both stranded steel ropes and solid stays disposed along the same, of approximately straight and horizontal stiffening cables comprising solid stays, and means providing for cooperation of said carrying cables with said stiffening cables, including a plurality of vertical stays and connecting anchors.

1,897,471. REGULATOR. TED E. FOULKE, Nutley, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Sept. 11, 1926. Serial No. 134,936. 4 Claims. (Cl. 250—27.5.)



4. An electrical current valve of the one way flow type, comprising a sealed envelope, a gaseous atmosphere therein, a negative electrode of large area, a positive electrode of small area, a shield having a small opening therein about the latter electrode, an another positive electrode connected through a resistance to the first named positive electrode and positioned between said negative electrode and said shield.

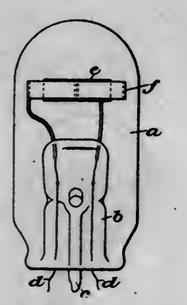
1,897,472. APPARATUS FOR MEASURING DIFFERENTIAL SPEED. GEORGE F. FRENCH, Stamford, Conn., assignor to Riegel Paper Corporation, Riegelsville, N. J., a Corporation of New Jersey. Filed Oct. 25, 1929. Serial No. 402,535. 20 Claims. (Cl. 177—311.)



2. Apparatus for measuring the thickness of sheet material and the like comprising as elements thereof means for causing the material to travel in the arc of a circle and means for measuring the differential speed of its inner and outer surfaces while traveling in such arcuate path.

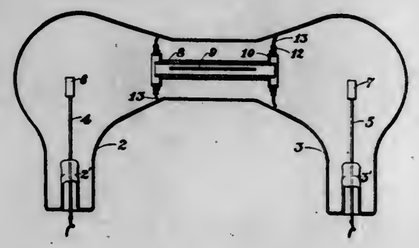
20. In apparatus for measuring the thickness of sheet and similar articles of manufacture, the combination of a roll over which the moving article is carried in the arc of a circle and travels therewith, a commutator driven at a speed proportional to the speed of said roll, a second commutator bearing against the outer surface of the moving article at a point within its arcuate path and rotated thereby, an electric circuit controlled by the two commutators jointly, and indicating means comprising a member driven at a speed proportional to the linear speed of travel of the moving article, a movably mounted indicating element, and a clutch connection between the indicating element and the driven member controlled by the electric circuit whereby the indicating element will be operatively connected with and disconnected from the driven member, alternately for time intervals inversely proportional to the thickness of said moving article.

1,897,473. ELECTRIC GLOW LAMP. HEINRICH FRIEDRICHSEN, Berlin-Treptow, Germany, assignor to General Electric Company, a Corporation of New York. Filed July 9, 1929, Serial No. 377,006, and in Germany July 23, 1928. 1 Claim. (Cl. 250—27.5.)



An electric current indicator device, comprising a gas filled glass chamber, electrodes sealed therein, one of said electrodes having a cross shape, and another of said electrodes having an annular shape, the electrodes being mounted concentric with each other, and located in the same plane, the annular shaped electrode surrounding the cross shaped electrode.

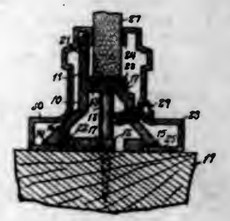
1,897,474. GASEOUS ELECTRIC DISCHARGE DEVICE. OTTO FRITZE, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed July 24, 1930, Serial No. 470,363, and in Germany Sept. 3, 1929. 1 Claim. (Cl. 176—122.)



In an electric discharge device, a container, electrodes sealed therein, a gaseous filling therein, a tubular body of conducting material surrounding the discharge path between said electrodes, flexible supporting members for said tubular body capable of retaining their flexed shape, said flexible support members being greater in diameter than the minimum bore of said container to restrain said tubular body from movement in said container and being adapted to fit said container to divide said container into electrical sections.

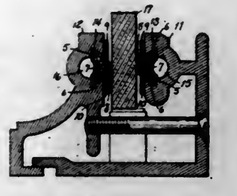
1,897,475. STORE-FRONT CONSTRUCTION. FRED HIMMEL and ISIDORE HIMMEL, New Haven, Conn., assignors to The Himmel Brothers Company, New Haven, Conn., a Corporation. Filed Oct. 31, 1931. Serial No. 572,306. 2 Claims. (Cl. 20—56.4.)

1. A store-front construction, comprising an anchoring-block having a wall and a shelf, means for securing the anchoring-block through the shelf to a casing, an outer strip engaged at its upper and lower edges with the said



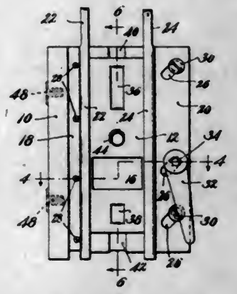
anchoring-block, an inner strip, and a screw extending through the inner strip into engagement with the anchoring-block below said shelf.

1,897,476. CUSHION FOR MOUNTING SHEETS OF GLASS. FRED HIMMEL and ISIDORE HIMMEL, New Haven, Conn., assignors to The Himmel Brothers Company, New Haven, Conn., a Corporation. Filed Jan. 7, 1932. Serial No. 585,288. 2 Claims. (Cl. 20—56.4.)



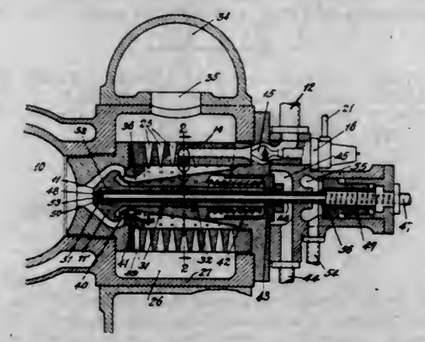
1. A cushion for sheets of glass comprising fins, a wedge-shaped block on one side of the fins and a longitudinally-arranged rib on the opposite side.

1,897,477. FRAMING PLATE HOLDER FOR MOTION PICTURE PROJECTORS. LESLIE A. HOLMAN, Waltham, Mass. Filed Nov. 7, 1929. Serial No. 405,424. 7 Claims. (Cl. 88—17.)



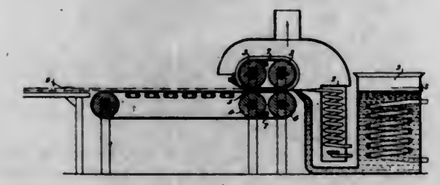
4. In a motion picture projecting machine, the combination of a holder plate having a relatively large aperture and fastened to a fixed part of the machine in position for the film to travel over its front face, a framing plate provided with an opening for framing the picture on the screen, said opening registering in the opening in said holder plate and a pair of vertical separated flanged retaining members for holding said framing plate against lateral movement, one of said members being fastened to said holder plate and the other being movable on said holder plate in order to permit the framing plate to be mounted on and removed therefrom.

1,897,478. APPARATUS FOR OPERATING EXPLOSION TURBINES WITH SOLID FUEL. HANS HOLZWARTH, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed May 11, 1929, Serial No. 362,232, and in Germany May 21, 1928. 19 Claims. (Cl. 60—41.)



1. In combination, an explosion chamber, a valve arranged at the charging end of such chamber, an annular member surrounding said valve and spaced therefrom to provide a space therebetween, a casing surrounding said member and spaced therefrom, said member being provided with a plurality of openings decreasing in cross-section toward said valve, a conduit for charging a coal dust suspension into the space between said member and said valve, means for charging air into said conduit to dilute such suspension, and a conduit connected to the space between the annular member and the casing and adapted to charge air through said openings into said first-mentioned space further to dilute said suspension.

1,897,479. MANUFACTURE OF FIBROUS SHEET MATERIAL. ERNEST HOPKINSON, New York, N. Y., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Oct. 5, 1928. Serial No. 310,533. 13 Claims. (Cl. 92—39.)

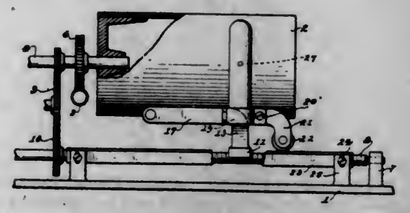


1. A process which comprises spraying an admixture containing fibrous pulp material, and compacting said admixture in sheet form substantially in the plane of travel of the spray in such manner that substantially all the fibres thereof are intermingled and matted together in all directions.

1,897,480. PROCESS OF MAKING ELECTRON DISCHARGE DEVICE. FREDERICK L. HUNTER, Jr., Towaco, N. J., assignor to De Forest Radio Telephone & Telegraph Co., Jersey City, N. J., a Corporation of Delaware. Filed Jan. 5, 1924. Serial No. 684,655. 10 Claims. (Cl. 250—27.5.)

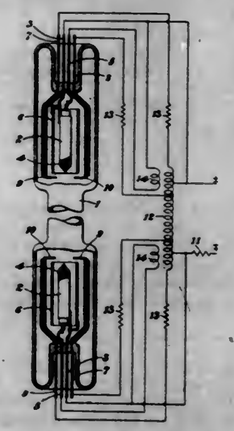
1. A process of manufacturing filaments comprising incorporation of an electron emissive substance partially oxidized therein, and coating said filament by depositing thereon by vaporization a quantity of magnesium for reducing the oxide of the electron emissive substance.

1,897,481. ELECTRIC TRANSMISSION OF VISUAL REPRESENTATIONS. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to Jenkins Laboratories, Washington, D. C., a Corporation of The District of Columbia. Filed Jan. 9, 1930. Serial No. 419,488. 6 Claims. (Cl. 178—13.)



1. In a mechanism of the class described the combination of a picture drum a threaded member, a follower pivotally mounted on said threaded member and adapted to move longitudinally with respect to the drum axis when said drum is rotated, a frame pivotally attached to said follower and means including a knife edge rail cooperating with said drum for maintaining said drum at a uniform distance from the drum axis regardless of irregularities in said threaded member.

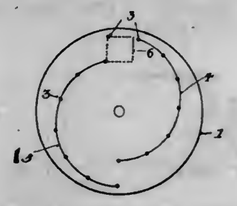
1,897,482. SELF-STARTING LOW VOLTAGE GASEOUS ELECTRIC DISCHARGE DEVICE AND METHOD OF OPERATING SAME. CARL ERIC KENTY, Jersey City, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed May 9, 1932. Serial No. 610,230. 6 Claims. (Cl. 176—124.)



1. In combination, an electric gaseous discharge device comprising a sealed envelope, a gaseous atmosphere within said envelope, said atmosphere comprising a major com-

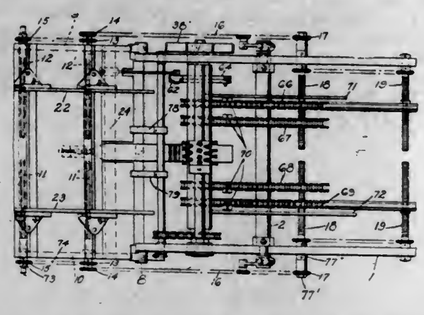
ponent and a minor component, a metastable potential of the major component being greater than the ionizing potential of the minor component, two main electrodes sealed into said envelope, and an auxiliary electrode adjacent to each of said main electrodes, and means to produce a simultaneous discharge between each of said auxiliary electrodes and the main electrode adjacent thereto to ionize the gas column between said main electrodes.

1,897,483. SCANNING METHOD AND APPARATUS. CHARLES J. KEOGAN, North Arlington, N. J., assignor to Jenkins Television Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Feb. 24, 1930. Serial No. 430,621. 3 Claims. (Cl. 178—6.)



2. The method of scanning an area for television which comprises analyzing said complete area in successive adjacent but non-overlapping linear strips, and then rescanning said complete area in other adjacent non-overlapping strips which overlap the first mentioned strips by one half of their width.

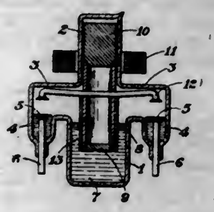
1,897,484. MECHANISM FOR FEEDING BLANKS. HAROLD S. LABOMBARDE, Nashua, N. H., assignor to The International Paper Box Machine Company, Nashua, N. H., a Corporation of Maine. Filed May 29, 1929. Serial No. 366,906. 30 Claims. (Cl. 271—39.)



1. A mechanism for feeding blanks from the top of a pile comprising a gauge to prevent the feeding of more than one blank at a time; a feed wheel to feed blanks successively past said gauge; a pressure to press each blank into feeding engagement with said wheel; means to adjust the presser; and means to oscillate the presser.

1,897,485. MAGNETICALLY OPERATED LOW RESISTANCE FLUID FLOW SWITCH. ROY D. MAILEY, East Orange, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Mar. 21, 1931. Serial No. 524,377. 8 Claims. (Cl. 200—112.)

1. A fluid flow switch comprising a sealed envelope, inleads sealed into said envelope, a conducting fluid in said envelope, the normal level of said fluid being insufficient to connect said inleads, a body floating on said fluid, a bridging conductor carried by said floating body, and means to



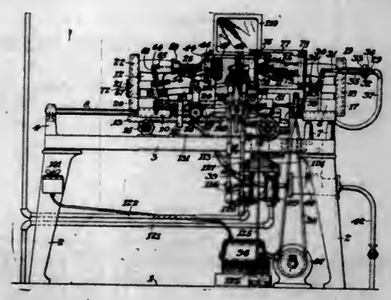
depress said body into said fluid at will to connect said inleads by way of a long fluid path and then to move said bridging conductor to diminish the length of said path.

1,897,486. COLLAR AND METHOD OF MAKING THE SAME. ROBERT W. MCCREERY, New York, N. Y. Filed Nov. 9, 1931. Serial No. 573,850. 5 Claims. (Cl. 2—131.)



5. A collar having a front member and a neckband, said front member having a fold portion at the top thereof which is connected to said neckband, said front member comprising a plurality of strips of fabric which are sewed to each other by stitches which are wholly spaced from the edges of said strips, said strips having their bottom edges and their lateral edges turned on said stitches, so as to present smooth edges, the inturned lateral edges being of less width in said fold portion than below said fold portion.

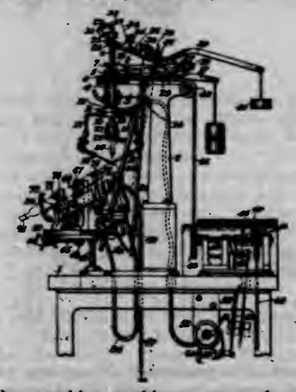
1,897,487. METHOD AND APPARATUS FOR WORKING FUSED SILICA. GEORGE A. MILLAR, Ridgefield Park, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Dec. 20, 1928. Serial No. 327,299. 12 Claims. (Cl. 49—78.1.)



1. The method of forming hollow vessels having offset portions of fused silica which comprises heating a portion of a closed tube of fused silica until softened, inserting the softened portion of the tube in a suitable mold and simultaneously therewith increasing the air pressure within said tube to force the said softened portion of said tube into contact with the wall of said mold, and offsetting said mold from the axis of said tube.

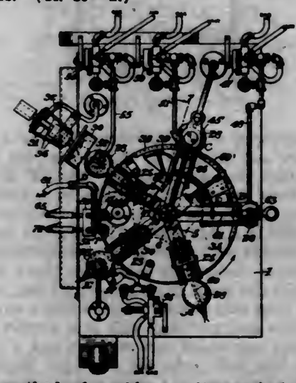
2. In a machine for working fused silica, in combination, a rotatable work holding means and a rotatable mold axially aligned therewith, means for synchronously rotating said holding means and said mold means for softening a portion of a hollow fused silica body held by said work holding means, means for inserting the softened portion of said fused silica body in said mold, and means for increasing the air pressure in said hollow body.

1,897,488. GLASS-WORKING MACHINERY. GEORGE A. MILLAR, Ridgefield Park, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Dec. 27, 1928. Serial No. 328,686. 2 Claims. (Cl. 49—1.)



1. In glass working machinery, means for holding each of two pieces of glass tubing at an angle to the horizontal, the end of one of said pieces of tubing being fused into the side of the other near the end thereof, means for varying the air pressure within said tubing, means for applying a fusing heat to the junction of said pieces of tubing comprising rotating gas jets, means for varying the position of said jets with respect to said tubing both vertically and horizontally, and means for removing the protruding end of said second tube to leave a smooth bend at said junction, comprising means for moving a piece of glass into contact with said end while said end is heated and then withdrawing said piece of glass after it has fused with said end and after said junction of said tubing has been fused.

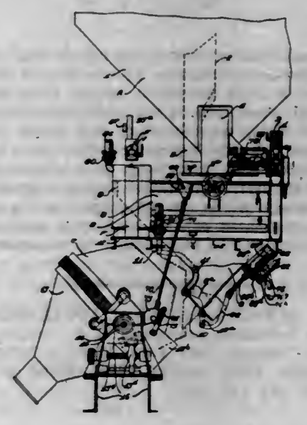
1,897,489. METHOD OF AND APPARATUS FOR PRODUCING VITREOUS ARTICLES. GEORGE A. MILLAR, Ridgefield Park, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Oct. 12, 1929. Serial No. 399,230. 6 Claims. (Cl. 49—1.)



1. The method of working a vitreous body which comprises applying a measured quantity of heat to predetermined portions thereof, distributing a granular substance over said portion of said body, and shaping said body while heated.

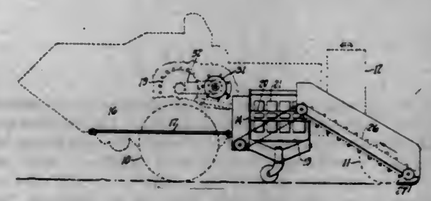
3. In apparatus for fusing a granular substance to a vitreous body, in combination, means to support said vitreous body, means to apply a measured quantity of heat to predetermined portions of said body, and intermittently operated means to distribute a granular substance over said portions at predetermined time intervals during the heating thereof.

1,897,490. AUTOMATIC CONCRETE AGGREGATE PROPORTIONING APPARATUS. BERT NOBLE and ROBERT J. NOBLE, Los Angeles, Calif., assignors to Roads Construction Company, Ltd., Los Angeles, Calif., a Corporation of California. Filed May 17, 1930, Serial No. 453,168. Renewed July 28, 1932. 16 Claims. (Cl. 83—73.)



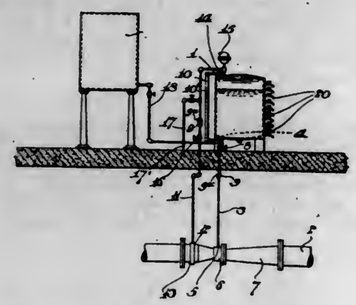
1. In a device of the class described, a material bin, an aggregate hopper, scale means for individually weighting separate materials deposited in said hopper, gate means for controlling the discharge of material from said bin, pneumatic rams for opening and closing said gates, valve means for controlling said rams, and means for electrically controlling said valves and causing said gates to operate sequentially in predetermined order.

1,897,491. PICK-UP FEEDER FOR HARVESTERS. NELSON D. PARKS, Pendleton, Oreg. Filed Sept. 26, 1927. Serial No. 222,037. 9 Claims. (Cl. 56—364.)



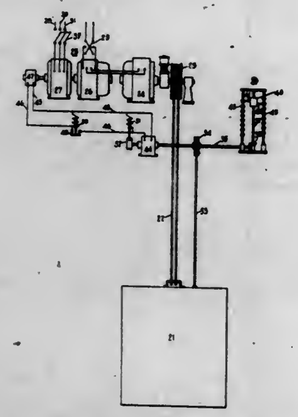
1. A pick-up feeder for harvesters having in combination a bundle pick-up conveyor, a main draper normal to said pick-up conveyor upon which said conveyor can deposit a shock of bundles, a retarding means opposing said main draper for placing the bundles in extended order, and means for cutting the bands from said bundles.

1,897,492. FLOW CONTROLLER. JOHN W. LEDOUX, Swarthmore, Pa., assignor to Simplex Valve & Meter Co., Philadelphia, Pa., a Corporation of New Jersey. Filed Aug. 3, 1927. Serial No. 210,274. 2 Claims. (Cl. 210—38.)



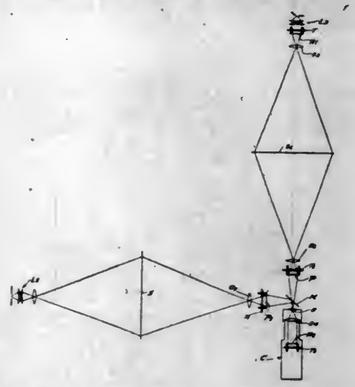
1. The combination with a conduit having means for causing differential pressures by the flow of fluid therethrough, of a fluid container, means comprising pipes having ports communicating with said differential pressure means and with said container, and means preventing flow through said pipe last named when there is no flow in said conduit and comprising fluid immersed member and a seat therefor, said member having a specific gravity so proportioned to the specific gravity of its immersing fluid as to be seated on said seat when said immersing fluid is at rest and to be unseated by movement of said fluid.

1,897,493. ELEVATOR CONTROL APPARATUS. DAVID LEONARD LINDQUIST, Hartsdale, N. Y., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 31, 1929. Serial No. 389,664. 5 Claims. (Cl. 187—29.)



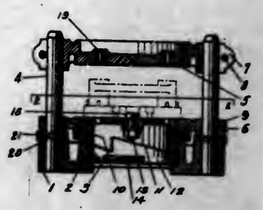
1. In an elevator system; a hatchway; a car movable therein; a selector operable to simulate the movement of said car in said hatchway; a shaft for operating said selector; a reversible reel on said shaft; a tape connected at one end to said car adapted to be wound and unwound on said reel, said tape being unwound from said reel upon movement of said car in one direction in said hatchway to drive said reel in one direction; an electric motor operatively connected to said reel to oppose the unwinding of said tape from said reel and to drive said reel in the opposite direction to wind said tape thereon upon movement of said car in the other direction in said hatchway; means for energizing said electric motor continuously during operation of the car; a brake for preventing unwinding of said tape; and means for causing the application of said brake upon deenergization of said motor.

1,897,494. METHOD OF MAKING COMPOSITE PICTURES. GEORGE A. MITCHELL, Huntington Park, and FRIEND F. BAKER, Sawtelle, Calif., assignors, by direct and mesne assignments, to Mitchell Camera Corporation, a Corporation of Delaware. Filed Jan. 17, 1927. Serial No. 161,639. 2 Claims. (Cl. 88—16.)



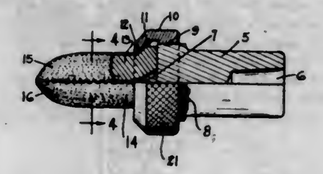
1. The method of producing a composite photograph, that includes forming two images of one component with complementary opaque parts, and thus forming complementary silhouettes of said component, projecting an image of one of said silhouettes in enlarged size upon an image-receiving surface, projecting and forming an image of said surface, together with an image of the other component, to form a real image at a given focal plane before a light composing device, placing a real image of the other complementary silhouette in another focal plane before said light composing device, and casting a real image from both the images in both said focal planes, through the light composing device onto a fresh actinic surface.

1,897,495. JIG. JOSEPH S. PECKER, Philadelphia, Pa. Filed Dec. 28, 1929. Serial No. 417,206. 1 Claim. (Cl. 77—62.)



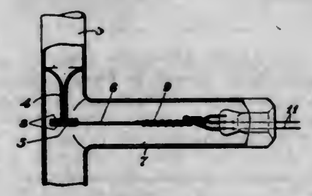
A jig comprising a base structure having a centrally arranged bore and an annular shoulder at the bottom of the bore which projects inwardly thereof, guide posts upstanding from the base structure, a work table slidably supported by said guide posts and having an annular collar arranged in a tight sliding fit with the wall of said bore and provided with underlying cam surfaces, a clamp plate adjustably clamped to said guide posts for adjustments towards and away from said work table, an annular cam resting from said shoulder and having a snug turning fit in said bore and provided with cam surfaces coacting with said first mentioned cam surfaces and a lever fixed to said cam ring and projecting exteriorly through a slot in said base structure, said lever being horizontally disposed.

1,897,496. TOOL OR CHUCK FOR THE FINISHING AND GRINDING OF WORK IN PROSTHETICS. ANTHONY ROGERS PERREIRA, Brooklyn, and JOSEPH ANTHONY PAONOZZI, Flushing, N. Y. Filed Sept. 19, 1930. Serial No. 483,032. 1 Claim. (Cl. 51—194.)



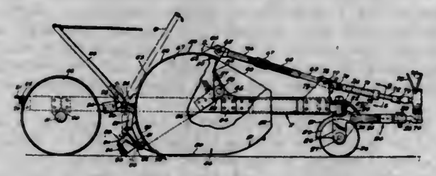
In a device of the character described, a socket having a centering cone at one end, a spindle opening at the opposite end and a threaded intermediate portion, a plurality of semi-cylindrical mandrel pieces having a cavity for the reception of said cone and a bevelled outer surface, a nut arranged for threaded engagement with the threaded portion of the socket and having a bevelled surface for engagement with the bevelled surface of said mandrel to hold therebetween a piece of polishing material.

1,897,497. GASEOUS ELECTRIC DISCHARGE DEVICE. MARCELLO PIRANI, Berlin-Wilmersdorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed Aug. 5, 1931, Serial No. 555,288, and in Germany Sept. 12, 1930. 3 Claims. (Cl. 176—125.)



1. A valve for feeding gas replenishments to the gaseous atmosphere of a gaseous electric discharge device comprising an element pervious to said gas, an element impervious to said gas and adapted to close said pervious element, a metal element carrying said gas impervious element and adapted to move when heated, and means to heat said metal element.

1,897,498. LEVELING DEVICE. HYRUM RICKS, Jr., Bell, Calif., assignor to Atlas Scraper Company, Bell Calif., a Corporation of Nevada. Filed Jan. 28, 1931. Serial No. 511,747. 5 Claims. (Cl. 37—165.)



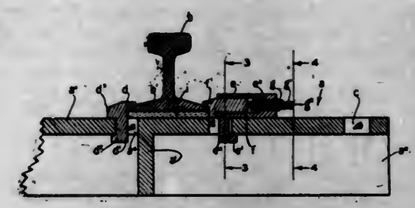
5. In a leveling device, the combination of: a frame adapted to be drawn by a tractive vehicle; a bowl pivotally attached to said frame, said bowl having openings through which said frame extends; power providing means operable by said tractive vehicle; and an extensible member attached to said bowl and said power providing means whereby said bowl may be rotated to operative or inoperative position.

1,897,499. FREE-REELING FISHING REEL. JOHN PIERSON SHAW, Portsmouth, Va. Filed Apr. 27, 1932. Serial No. 607,861. 16 Claims. (Cl. 242—84.5.)



1. In a reel of the character specified, a frame, a spool rotatably mounted therein, a pinion for rotating the spool; a movable plate carried by the frame; a gear journaled on the plate adapted to mesh with the pinion; manual means for rotating the gear; means yieldably maintaining the plate positioned to bring the gear and pinion into mesh; a brake for the spool operated by the plate; said brake being inactive when the gear and pinion are in mesh; and means whereby attempted movement of the manual means in one direction will shift the plate and initially unmesh the gear and pinion and upon further attempted movement will actuate the brake, the yieldable means disengaging the brake and remeshing the gear and pinion when the manual means is released.

1,897,500. METALLIC RAILROAD TIE. ALEXANDER C. SHIVES, Toledo, Wash. Filed June 29, 1931. Serial No. 547,627. 6 Claims. (Cl. 238—61.)

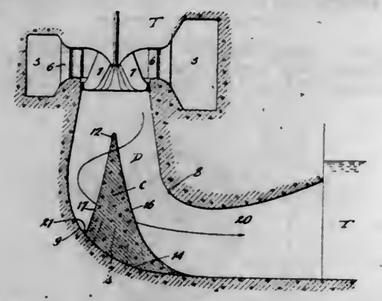


1. A metallic railroad tie comprising an elongated body including a relatively broad horizontal section, means for securing rails to said tie, said securing means comprising sets of elements, each set comprising a plurality of opposed lugs detachably secured to the horizontal section of said body, each of said lugs comprising a shank adapted to extend thru said horizontal section, a base projecting laterally from said shank and adapted to engage the under face of said section and a head adapted to engage and to overlie the base portion of a rail, one lug of each set being fixed laterally and the other provided with lateral adjusting means comprising a sleeve and a bolt movably mounted therein.

1,897,501. DRAFT TUBE STRUCTURE. HARVEY BIRCHARD TAYLOR, Philadelphia, Pa. Filed Jan. 14, 1922, Serial No. 529,172. Renewed May 6, 1929. 18 Claims. (Cl. 253—117.)

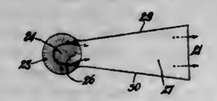
1. A hydraulic draft tube having a central core concave away from the turbine axis in sections containing said axis, and an outer surface unequally placed from said core

around the circumference thereof at points equally distant from the turbine axis, said outer surface flaring substantially from vertical to horizontal upon the side



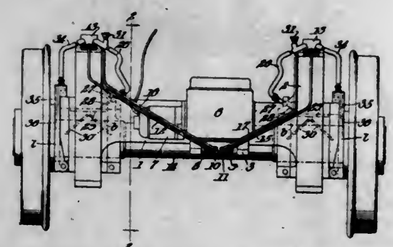
of the draft tube downstream from said turbine, and flaring outward to a less extent on the side upstream from the turbine axis.

1,897,502. DRAFT TUBE. HARVEY BINCHARD TAYLOR, Philadelphia, Pa. Filed Nov. 18, 1922. Serial No. 601,821. 53 Claims. (Cl. 253—117.)



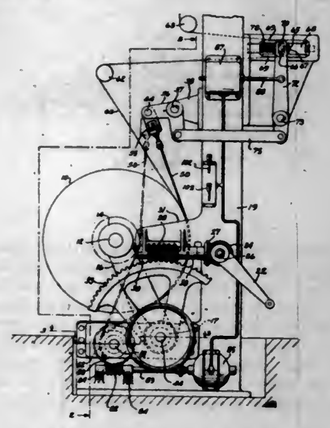
1. In apparatus for converting velocity head into pressure head, the combination of a primary conduit receiving said flow, of a secondary conduit diverting successive portions of the flow from said primary conduit so as to gradually and continuously reduce the quantity of the main flow and decelerating the velocity thereof.

1,897,503. LUBRICATING APPARATUS. FRANK WILLIAM EDWARDS, Chicago, Ill., assignor to The Ohio Injector Company of Illinois, Chicago, Ill., a Corporation of Illinois. Filed Oct. 26, 1929. Serial No. 402,719. 7 Claims. (Cl. 184—7.)



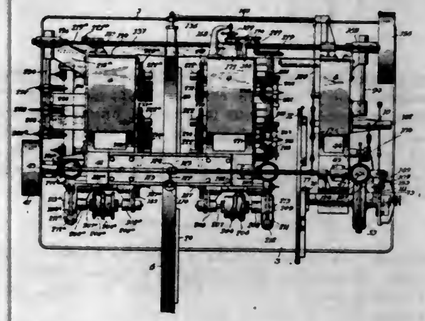
1. The combination with a truck having wheels and an axle, bearings for said axle provided with lubricant passages whereby lubricant may be supplied to said axle, and means arranged adjacent to the hubs of said wheels whereby lubricant may be supplied to said hubs, of a self-contained lubricator supported directly upon said truck and provided with a plurality of feeds and mechanically operated means for supplying lubricant to such feeds, a motor arranged in juxtaposition to said lubricator to form an individual drive therefor and connected with said mechanically operated means to operate the same, conduits including manifolds whereby the lubricant from each feed is divided, and flexible conduits affording communication between said manifolds and said bearings and hub lubricating means, so that lubricant may be fed from the lubricator directly to the axle and wheels of the truck upon which the lubricator is mounted.

1,897,504. WEB CONTROLLING MECHANISM. HARLAND FANKBONER, Chicago, Ill., assignor to The Goss Printing Press Company, a Corporation of Illinois. Filed Dec. 4, 1929. Serial No. 411,472. 25 Claims. (Cl. 242—75.)



2. In a mechanism for tensioning the web as it is drawn from a web roll, the combination of a stationary friction belt engageable with the periphery of the web roll, a pilot roller connected to one end of the friction member and means, connected to the other end of the friction member, controlled by the pilot roller for variably pressing the belt against the web roll to maintain the web tension constant.

1,897,505. RADIATOR REAMING, FACING, AND TAPPING MACHINE. VICTOR E. FLODIN, Oak Park, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 19, 1930. Serial No. 437,206. 36 Claims. (Cl. 29—38.)

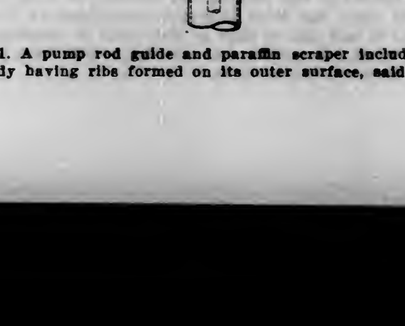


1. In a machine for finishing radiator sections, a rotary support for a plurality of radiator sections, a shaft for rotating said support, means for rotating said shaft continuously in one direction, a clutch on said shaft, control mechanism for engaging said clutch, a shaft for controlling said mechanism and means for rotating said latter shaft in alternate directions.

10. In a machine for finishing radiator sections, a support for a radiator section, clamping means for securing a radiator section to one side of said support, means for supporting operating tools upon both sides of said support including supporting sleeves for said tools, means for moving said tools relatively to said sleeves and means for advancing said sleeves periodically toward said support to cause said tools to operate upon said radiator section, said advancing means being constructed to advance the tools upon one side of said support a greater distance than the tools upon the other side.

20. In a machine for finishing radiator sections, an intermittently rotatable dial, releasable clamps for securing a plurality of radiator sections on one side of said dial, means for supporting tools in operative position upon both sides of the radiator sections, an electric motor for intermittently rotating said dial to present the radiator sections held thereby successively to the operating tools, means for simultaneously operating said tools while the radiator sections are held on said support and means for opening the circuit to said motor to interrupt the rotation of said dial upon abnormal resistance to rotation thereof.

1,897,506. ENGINE-DRIVEN DRIVING MECHANISM. FREDRIK LJUNGSTRÖM, Stockholm, Sweden, assignor, by mesne assignments, to Ped, Incorporated, a Corporation of Delaware. Filed June 29, 1929, Serial No. 374,830, and in Sweden July 8, 1928. 9 Claims. (Cl. 74—14.)



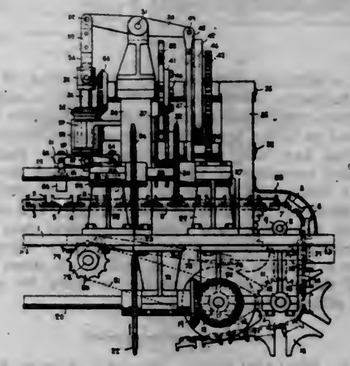
1. Apparatus of the character described comprising a power transmitting mechanism of the type alternately producing turning moments of opposite sense, a driving member for delivering power to said mechanism and means responsive to values of the turning moments of one sense for reducing the amount of power delivered by said member when the value of the turning moments of said one sense reaches a predetermined value.

1,897,507. DOUBLE CROSS CENTER GUIDE AND PARAFFIN SCRAPER. WILLIAM K. MORGAN, Sand Springs, Okla., assignor of one-fourth to George L. Miller, Sand Springs, Okla. Filed May 20, 1932. Serial No. 612,608. 13 Claims. (Cl. 166—18.)



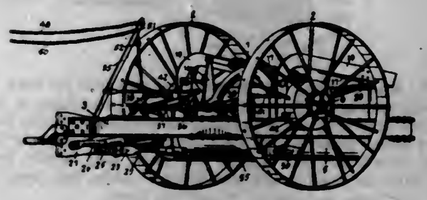
1. A pump rod guide and paraffin scraper including a body having ribs formed on its outer surface, said body being composed of complementary sections having interfitting shoulders securing the sections together against independent longitudinal movement.

1,897,508. TURNING MECHANISM FOR BOOK MATCH MACHINES. LUCIAN E. PARKER, Wadsworth, Ohio, assignor to The Ohio Match Company, Wadsworth, Ohio, a Corporation of Ohio. Filed Mar. 5, 1931. Serial No. 520,454. 15 Claims. (Cl. 226—4.)



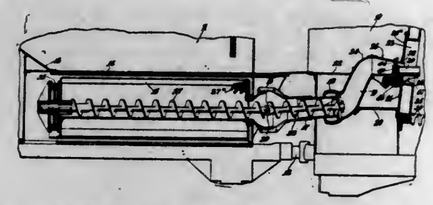
1. A turning mechanism for book match machines from which machines the books of matches are discharged in a uniform linear series and in similar endwise and face arrangement, including means for removing alternate books from said linear series, reversing them end for end, and returning them to their original positions in said linear series thus reversed and in the same face arrangement.

1,897,509. WHEELED SCOOP. JULIUS E. PATTERSON, Bucyrus, Ohio, assignor to Dunn-Patterson Company, Klamath Falls, Oreg., a Corporation of Oregon. Refile for abandoned application Serial No. 341,749, filed Feb. 21, 1929. This application filed Sept. 4, 1930. Serial No. 479,731. 2 Claims. (Cl. 37—132.)



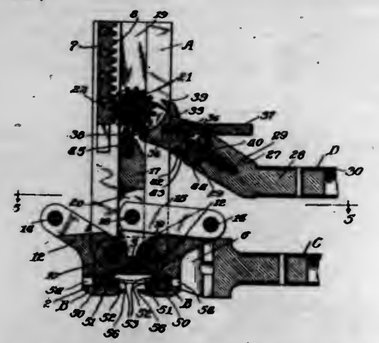
1. In a wheeled vehicular scoop, a frame, a rotatable member, a clutch member for connecting the rotatable member to one of the wheels of the vehicle, a scoop member connected to the rotatable member and operated by the rotatable member to lower the scoop member and to dump the scoop member, a link for determining the position of the scoop member relative to the frame as it is operated on by the rotatable member, means for connecting the link to the frame to selectively determine the operation of the scoop member as to lowering the scoop and as to dumping the scoop member by the rotation of the rotatable member, and a pull cord, for actuating the clutch members to connect the rotatable member to one of the wheels and for operating the said connecting means of the link.

1,897,510. LOCOMOTIVE STOKER. FRANK P. ROESCH, Chicago, Ill., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Aug. 22, 1928. Serial No. 301,226. 13 Claims. (Cl. 110—113.)



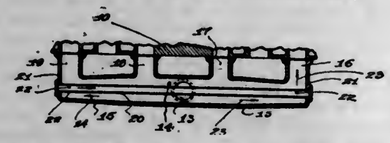
1. In a mechanical stoker, the combination of a fuel casing adapted to communicate with a firebox, a fuel throwing member comprising a single sweeper member pivoted at one end to swing horizontally in opposite directions in said casing and being arranged to discharge fuel therefrom when sweeping in either direction, feed means for feeding a continuous stream of fuel into said fuel casing in the plane of the path of said member, and a prime mover for actuating said feed means, said feed means being arranged with said prime mover to deliver and maintain a uniform quantity of fuel at all times in the plane of the path of said sweeper member for a given speed of said prime mover.

1,897,511. SEALING TOOL. MILTON C. TAYLOR, Chicago, Ill., assignor, by mesne assignments, to Signode Steel Strapping Company, a Corporation of Delaware. Filed June 25, 1928. Serial No. 287,933. 13 Claims. (Cl. 81—9.1.)



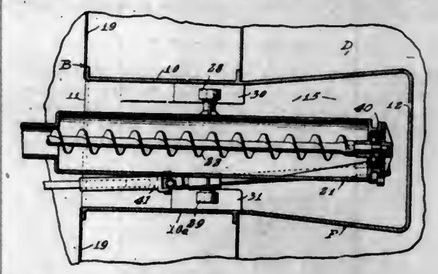
1. A sealing tool for producing a seal-joint between the overlapped ends of a strapping band, comprising a pair of movable jaws for deforming the overlapped strap ends, and power multiplying means including an actuating handle for closing and opening the jaws, said handle being operable by oscillatory movement to close the jaws and by rectilinear movement to open the jaws.

1,897,512. ENGINE. HAROLD H. TIMIAN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Mar. 2, 1931. Serial No. 519,635. 17 Claims. (Cl. 123—52.)



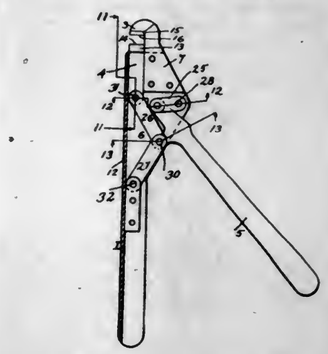
1. In a multi-cylinder internal combustion engine, an intake manifold structure having a plurality of branches communicating with the engine cylinders, and means within the manifold structure tending to balance pressures at the branch outlets during the suction stroke of the engine.

1,897,513. LOCOMOTIVE TENDER CONSTRUCTION. EDWIN ARCHEA TURNER, New York, and CHARLES J. SURDYKOWSKI, Tuckahoe, N. Y., assignors to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Dec. 4, 1930, Serial No. 499,894. Renewed Mar. 10, 1932. 20 Claims. (Cl. 105—234.)



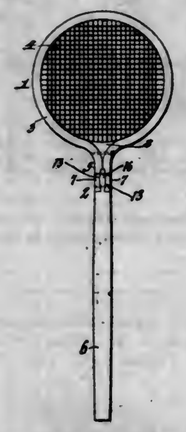
1. The combination in a locomotive tender having a base frame and a fuel section and a water section, of a compartment member formed in said water section centrally and longitudinally of and above said frame, said member forming a water tight compartment arranged to receive a movable stoker trough and said compartment having an open forward end, an apertured top wall permitting communication between said compartment and said fuel section, and imperforate rear end, bottom and side walls, said bottom wall being spaced above said frame to provide water space beneath said compartment and above said frame, said side walls at one end portion flaring laterally from the other end portion thereof, and said bottom wall at one end portion thereof extending downwardly from its other portion.

1,897,514. BOLT CUTTER AND PUNCH. CHARLES C. HANSEN, Los Angeles, Calif., assignor, by direct and mesne assignments, to Specialty Sales Corporation, Limited, Los Angeles, Calif., a Corporation. Filed Feb. 2, 1931. Serial No. 512,884. 1 Claim. (Cl. 81—204.)



In a device as disclosed, a frame, a fixed tool member on one end of the frame, a slidable tool member mounted in said frame to slide longitudinally thereof toward and away from said fixed tool member, a pair of links pivoted together at one end, the other end of one of said links being pivoted to said slidable tool member, the other end of said other link being pivoted to said frame, a lever pivoted to said pair of links at their point of connection, and a third link connected at one end to said lever and at its other end to said frame.

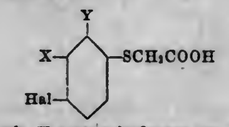
1,897,515. COUPLING FOR DETACHABLY CONNECTING THE HANDLE AND NECK OF TENNIS RACKET SHAFTS AND SIMILAR MEMBERS. ERIC L. HEDSTROM, Buffalo, N. Y. Filed Mar. 28, 1932. Serial No. 601,516. 2 Claims. (Cl. 287—103.)



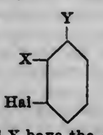
1. A coupling for detachably connecting two members, one of said members having a neck provided with two jaws which have their opposing sides constructed to form a socket comprising a plurality of branches, two of said branches having the form of grooves which are formed in the central parts of said jaws and two others of said branches having the form of slots arranged at right angles to said grooves and extending from opposite sides of the latter to the periphery of said jaws, the other member having a shank comprising a plurality of wings arranged to form a cross in transverse section, two diametrically opposite wings of said shank engaging said grooves and the other two diametrically opposite wings of said shank engaging said slots, the opposite sides of said slots between the jaws being V-shaped and the opposite sides of the wings of the shank engaging with said slots being correspondingly V-shaped.

1,897,516. PROCESS FOR MANUFACTURING PHENYLTHIOGLYCOLLIC ACIDS, CONTAINING HALOGEN AND ALKYL GROUPS IN THEIR MOLECULE. RICHARD HERZ, Frankfort-on-the-Main, EDUARD ALBRECHT, Fechenheim near Frankfort-on-the-Main, and RICHARD DERESER, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 3, 1927, Serial No. 230,921, and in Germany Nov. 24, 1926. 6 Claims. (Cl. 260—108.)

1. A process for manufacturing phenylthioglycollic acids of the general formula:

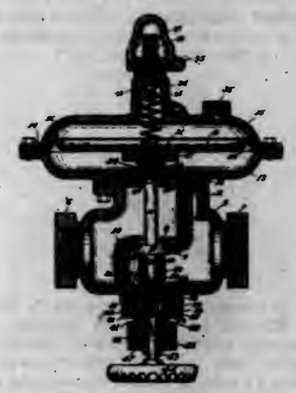


in which formula X means hydrogen or alkyl Y alkyl or aholgen, but either X or Y must be alkyl, which process comprises treating halogen-alkylbenzenes of the general formula:



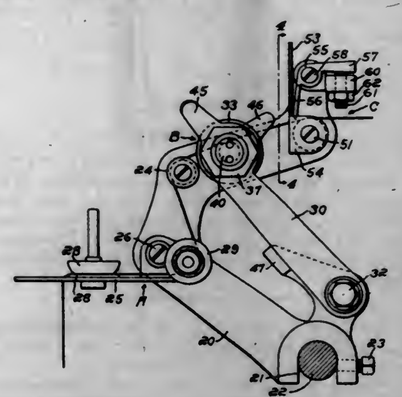
in which formula X and Y have the aforesaid signification, with chlorosulfonic acid at temperatures below 100°, reducing the halogenalkylbenzenesulfochlorides thus formed to the corresponding mercaptan compounds and condensing the latter with monochloroacetic acid.

1,897,517. PRESSURE REGULATOR. RALPH C. HUGHES, Anderson, Ind., assignor to Reynolds Gas Regulator Co., Anderson, Ind., a Corporation of Indiana. Filed Feb. 12, 1932. Serial No. 592,569. 7 Claims. (Cl. 50—23.)



1. A pressure regulator comprising a valve casing having opposite inlet and outlet openings and an internally threaded bottom opening, a downwardly opening valve for controlling the flow of fluid from inlet to outlet, a valve stem upon which said valve is mounted intermediate the ends of the stem, means connected with the upper end of the stem for urging said valve normally to open position, and a threaded and centrally apertured plug for detachable mounting in the said bottom opening, and a manually actuated stem adjustably mounted in the said plug aperture and having loose connection means carried on its inner end positioned in the path of movement of said valve, for limiting the downward movement of said valve.

1,897,518. SLUB CATCHER. OTIS L. HUMPHREY, Lowell, Mass. Filed Aug. 27, 1931. Serial No. 559,685. 8 Claims. (Cl. 28—64.)



1. In a slub catcher, a combination of a movably mounted detector element and a severing unit, the severing unit comprising normally spaced relatively movable parts between which the strand normally passes freely but which are operative by direct impact of a hard slub thereby to

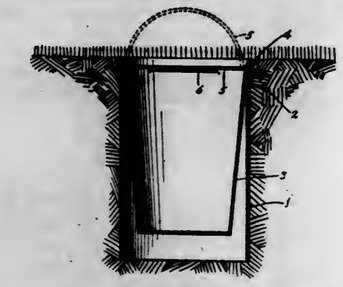
sever the strand, the detector element including members which present substantially parallel and unyielding surfaces of considerable length in the direction of yarn travel and rigidly spaced apart a distance slightly exceeding the normal strand diameter so that when engaged by a soft local enlargement in the strand it is moved thereby from its normal position, and means moving with the detector element for moving one of the parts of the severing unit relatively to the other to sever the strand.

1,897,519. GOLF TEE DEVICE. HENRY KERSHAW, Irvington, N. J. Filed Oct. 16, 1931. Serial No. 569,291. 3 Claims. (Cl. 273—33.)



1. A golf tee comprising a blank which is transversely foldable for affording two angularly disposed sides connected at the point of folding, said sides having free ends and provided at their tops with ball receiving recesses, one side having an opening formed therein, and a foldable locking tongue carried by the other side and extending longitudinally of the blank in a direction toward said opening, the arrangement being such that the tongue is adapted to interlock within the opening when the sides are shifted to an angular position, said tongue then forming with said sides a triangular structure.

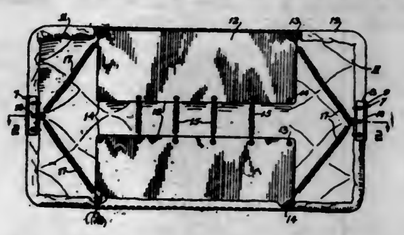
1,897,520. FLOWER RECEPTACLE FOR GRAVES. HERBERT WILLIAM KIMBER, Oakland, Calif. Filed Jan. 29, 1932. Serial No. 589,715. 4 Claims. (Cl. 47—41.)



1. A flower receptacle for graves comprising a cylindrical member adapted for insertion into the earth surface and a flower pot adapted for insertion into the cylindrical member, the flower pot being tapered to facilitate its insertion and removal and having a bail swingably mounted therein.

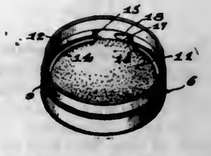
1,897,521. BED ACCESSORY. EUGENIE FOLSE LAGARDE, New Orleans, La. Filed Mar. 5, 1930. Serial No. 433,335. 3 Claims. (Cl. 5—354.)

3. The combination with a frame and a mattress thereon of a sheet of protective material extending across one face and around the opposite edges of said mattress and across the greater part of the other face of said mattress, tension springs connecting the ends of said sheet to each other for maintaining the sheet transversely stretched on said mattress, the sides of said sheet being provided with a plurality of apertures, a pair of springs secured to the frame at each end, said springs engaging the apertures formed at the opposite edges of said sheet on the other



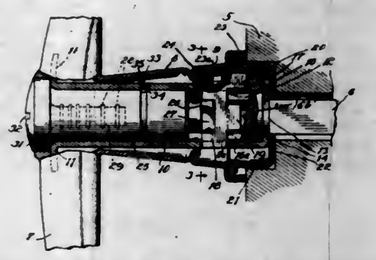
face of said mattress and adapted to engage other apertures on the respective edges upon the sheet being rotated on said mattress.

1,897,522. VANITY CASE OR COMPACT. THOMAS J. LEWIS, New York, N. Y. Filed Nov. 4, 1932. Serial No. 641,306. 3 Claims. (Cl. 132—82.)



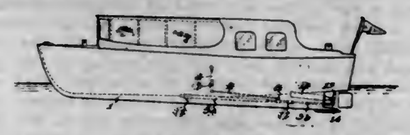
1. A cup-shaped vanity case body having an upstanding wall provided with an internal substantially annular shoulder, said body having a bottom upon which a cosmetic cake may rest, and a split resilient ring having its upper edge frictionally engaging and interlocked with said shoulder, the lower edge portion of the ring being provided with an inwardly extending flange projecting over and engaging the cake, one end of said ring being provided with a pointed nose to facilitate manipulation of the ring.

1,897,523. CONTROL HANDLE. ROLLO MARPLE, Jackson, Mich., assignor to Hancock Manufacturing Co., Jackson, Mich., a Corporation of Michigan. Filed Nov. 8, 1928. Serial No. 318,081. 17 Claims. (Cl. 70—91.)



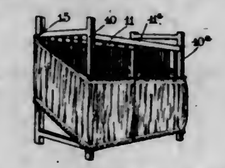
1. A control handle for latches and the like having, in combination with a rotatable spindle, a tubular casing having a pair of diametrically alined openings, an integral head on said spindle journaled internally of said casing and having a notch arranged to register with one of said openings to form a transverse groove, a locking member slidably guided in said openings and movable into either of two positions in either of which one end of the member projects beyond the periphery of said casing, and means rigid with said member and positioned in said notch and one of said openings when said member is in one position and positioned out of said notch when said member is in its other position.

1,897,524. MEANS FOR REMOVING WATER FROM BOATS. DOUGALD MCEACHERN, Duncans, British Columbia, Canada. Filed Dec. 16, 1931. Serial No. 581,427. 2 Claims. (Cl. 114—185.)



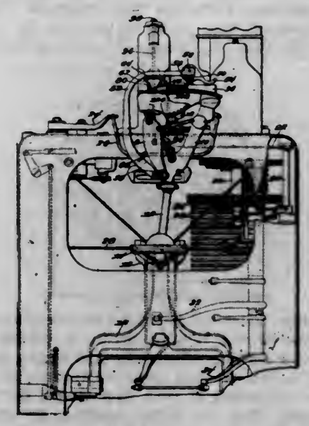
1. A boat having a pipe leading from the lowermost interior part of the boat to the exterior thereof, and means for creating a suction in the pipe for conveying water out of the boat, the pipe including a rear section adapted to telescope into the adjacent front section, means for actuating the rear section and means for limiting rearward movement of said section.

1,897,525. SHIELD FOR BASSINETS AND THE LIKE. EFFIE B. MCGILL, Columbus, Ohio. Filed Oct. 3, 1930 Serial No. 486,193. 4 Claims. (Cl. 5—93.)



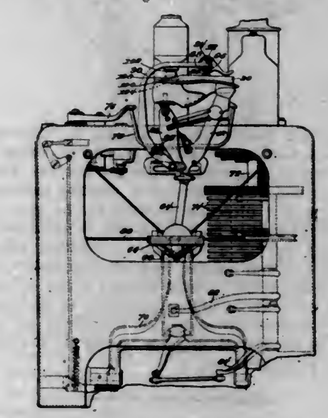
1. A shield for a bassinet having corner posts, said shield including a band of fabric open at its top and bottom and to surround the sides and ends of the bassinet and the corner posts thereof, said band containing a superabundance of material to surround said bassinet horizontally and an elastic means circumferentially embodied in the top and bottom margins of said fabric, said elastic material constituting a frictional means for yieldingly maintaining said shield or portion thereof in a desired position around said bassinet.

1,897,526. AUTOMATIC EDGE TRIMMER. ALFRED R. MORRILL, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 6, 1929. Serial No. 412,239. 23 Claims. (Cl. 12—17.)



1. An edge trimming machine having, in combination, an edge trimming tool, a shoe supporting jack movable to transfer the point of operation of the tool along the sole edge of a shoe containing a last supported on the jack and also movable transversely of the direction of feed to maintain the sole edge in contact with the tool, a templet, means for securing the templet in position on the sole of said shoe, and a guide fixed with relation to the tool and engaging the templet to determine the position of the shoe transversely of the direction of feed as the shoe is moved past said guide.

1,897,527. METHOD OF MAKING SHOES. ALFRED R. MORRILL, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 6, 1929. Serial No. 412,241. 12 Claims. (Cl. 12—142.)



1. A process of making shoes which comprises indenting the outsole of a shoe while supported upon a last at a predetermined point with relation to the last contour, and utilizing a positioning surface on a templet to engage with the indentation to locate the templet in predetermined position on the outsole.

1,897,528. PAINT. KARL OTT and HANNS BERNARD, Uerdingen, Germany, assignors to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Original application filed Aug. 28, 1928, Serial No. 301,703, and in Germany Sept. 10, 1927. Divided and this application filed Dec. 20, 1929. Serial No. 415,605. 5 Claims. (Cl. 134—39.)

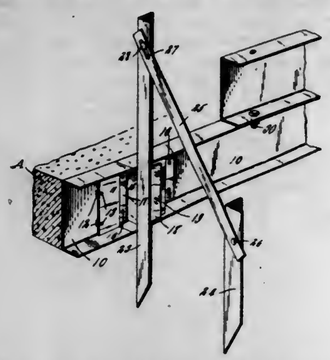
1. A drying oil paint composition containing an urethane.

1,897,529. FISHING LURE. RAY M. PALMER and LELA G. PALMER, Pasadena, Calif. Filed June 18, 1931. Serial No. 545,280. 1 Claim. (Cl. 43—45.)



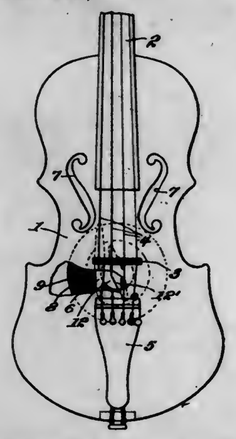
In a fishing lure, a hollow spinner having the shape of a frustum of a cone with a slight convexity on its outer surface, the apex end of the frustum having a perforation, the spinner having a pair of diametrically opposed V-shaped notches at the lower end or base portion of the frustum with skirt portions flared outwardly in opposite directions to form flared blades, said blades being sloped symmetrically as to the axis of the spinner and being warped to form a pitch to rotate the spinner when drawn through the water.

1,897,530. FORM FOR PLASTIC MATERIALS. PAOLO FRANCO PANDOLFI, Buffalo, N. Y. Filed Apr. 21, 1931. Serial No. 531,697. 8 Claims. (Cl. 25—118.)



7. A form for plastic materials, such as concrete, comprising a series of elongated wall members having releasable interlocking connections with one another when disposed end to end and separable by relative movement of said members in a direction parallel to the plane of the wall face of the plastic material which the members form, each member having a vertically extending guide slot open at its top and bottom and also through one side thereof in a direction parallel to said plane of the wall face, and a drive stake sliding vertically in each slot and engageable therein and separable therefrom by endwise movement of that wall member to which the stake is attached by said guide slot.

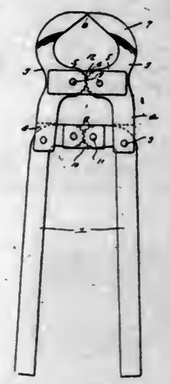
1,897,531. TONE MODIFIER. JOHN P. PASKO, Irvington, N. J. Filed Sept. 2, 1932. Serial No. 631,557. 6 Claims. (Cl. 84—277.)



1. A violin including a sound box carrying a finger board having strings connected to the sound box and supported by a bridge, said sound box having an opening in its bottom wall arranged in alinement with the bridge, fabric closing the opening, and a sound post supported between the fabric and the top wall of the sound box.

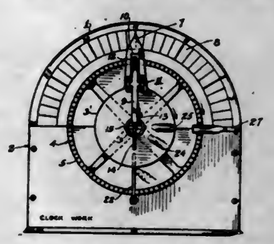
1,897,532. EMASCULATOR. DELBERT E. PILCHER, Mancos, Colo. Filed July 11, 1931. Serial No. 550,215. 1 Claim. (Cl. 128—306.)

An emasculator of the class described comprising a pair of handle members each of L-shape to provide a long arm and a short arm, the ends of the short arms being rounded and toothed, a pair of plates extending over the rounded ends, one on each side of the short arms, and pivoted to said short arms adjacent the rounded ends thereof, a pair of jaw members each composed of a jaw part, a shank having a forked extremity and an inwardly extending intermediate projection having its free end rounded and toothed, said jaw part having its free end laterally enlarged and its free edge rounded, with the inner wall of said jaw part bowed outwardly between the intermediate projection and the outer end of the jaw part with the inner wall of said outer end sloping outwardly and forwardly from the curved portion of the wall



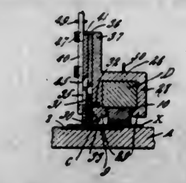
to said rounded free edge, whereby, when the jaw members are in closed position, a large space will be formed between the projection and parts which carry the rounded gripping edges to permit the entrance of the fingers of an operator, a pair of plates extending over the said projections one on each side thereof and pivoted thereto adjacent the rounded ends of the projections for holding the teeth of the rounded ends of the projections in mesh with each other, the prongs of each shank fitting over that part of a handle member where the short arm joins the long arm and a pivot pin passing through said prongs and the handle member for pivotally connecting the jaw members to the handle members.

1,897,533. TIME CONTROL SYSTEM FOR TELEPHONES. CHARLES V. RICHEY, Jamaica, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Feb. 21, 1931. Serial No. 517,623. 5 Claims. (Cl. 179—6.31.)



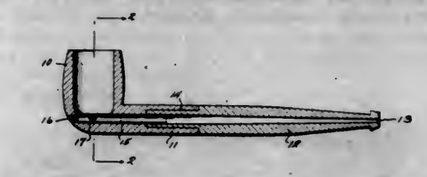
1. Duration meter for telephone conversations comprising a switch in the talking circuit, a timing device, a setting device movable relative to said timing device from a definite initial position, said setting device including means for connecting it with said timing device at any position away from its initial position, for returning it to its initial position thereby, said setting device including means for maintaining said switch open when in its initial position and closed while substantially in positions displaced from said initial position.

1,897,534. CUTTING APPARATUS. WILLIAM J. SIMPSON, Everett, Mass., assignor, by mesne assignments, to The Electric Smelting & Aluminum Co., Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 20, 1931. Serial No. 524,032. 8 Claims. (Cl. 164—73.)



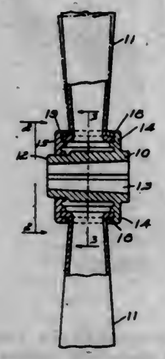
1. In a cutting apparatus, the combination of a table for supporting the work to be cut, a clamping bar extending crosswise of the table and movable toward the table for clamping a portion of the work to the table adjacent to the line of cut, a carriage mounted on and movable lengthwise of the clamping bar, a cutting blade mounted on the carriage to cut said work adjacent to said clamping bar, and means movable with said carriage for holding the work against shifting on the side of the cutting blade opposite to the clamping bar.

1,897,535. TOBACCO PIPE. BENJAMIN H. SINGLETARY, Baton Rouge, La. Filed Sept. 17, 1931. Serial No. 563,374. 2 Claims. (Cl. 131—12.)



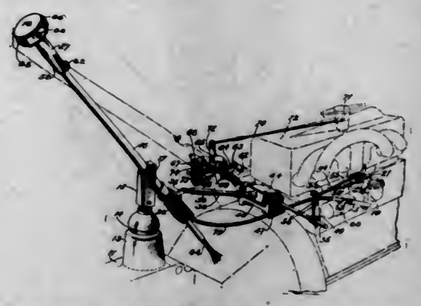
1. In a pipe construction including a bowl and stem, a draft member of the character described comprising a tubular body having a smoke port in the wall thereof within the bowl, and a restricted extension extending longitudinally of the member and having a restricted opening communicating with the atmosphere outwardly of the pipe, said extension forming a shoulder at one end of the member to hold the member against movement outwardly of the bowl, and said extension terminating at the outer surface of the bowl.

1,897,536. PROPELLER. JOHN SQUIRES, Hagerstown, Md. Filed Aug. 28, 1929. Serial No. 388,901. 13 Claims. (Cl. 170—160.)



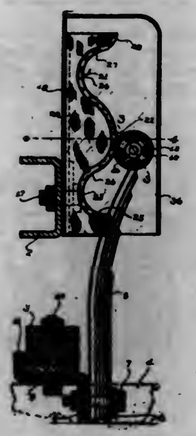
1. An airplane propeller comprising, in combination, a hub provided with a plurality of radially disposed sockets, and a hollow metal blade secured in each of said sockets, said blades each having a radially outwardly extending flange at its inner end forming the sole means for securing it in said socket.

1,897,537. VEHICLE CONTROL MECHANISM. EDWARD J. SULLIVAN and WILLIAM M. SULLIVAN, Los Angeles, Calif. Filed Aug. 2, 1929. Serial No. 383,129. 11 Claims. (Cl. 74—107.)



1. In a device for controlling the operation of a vehicle driven by an internal combustion engine, an arm movable by the hand of the operator to affect the motion of the vehicle, a control member supported on the arm and capable of being moved in either direction by the operator while the arm is grasped, means arranged to control a gas throttle for the engine in accordance with the movement of the member in one direction, and means arranged to control a starter mechanism for the engine in accordance with the movement of the member in the opposite direction.

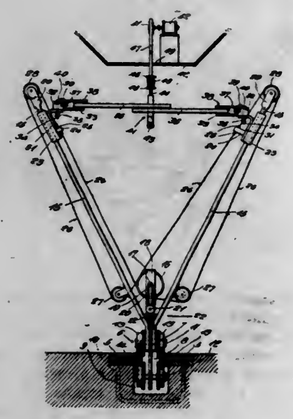
1,897,538. VEHICLE SPRING CONTROLLING MEANS. GEORGE H. TABER, Binghamton, N. Y. Filed Feb. 17, 1930. Serial No. 429,018. 4 Claims. (Cl. 267—8.)



1. The combination with a frame, an axle, and a spring arranged between the axle and the frame, of a spring and roller power element in which energy is stored, and a cam over which said roller travels on the relative movement between the frame and the axle, said cam having a high point below which the roller engages when the frame and axle are substantially at normal positions, and low points on opposite sides of the high point to which the roller moves upon relative movement of the frame and the axle in either direction from normal position,

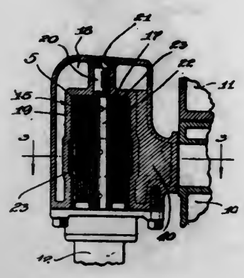
and high points beyond the lower points to which the roller moves after a desired relative movement is reached to cause energy to be stored in the power element to resist the further relative movement.

1,897,539. LANDING GEAR FOR DIRIGIBLES. RICHARD THORPE, Mays Landing, N. J. Filed Oct. 26, 1931. Serial No. 571,207. 17 Claims. (Cl. 244—2.)



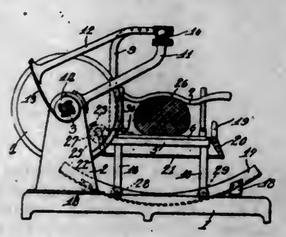
1. Landing gear for dirigibles comprising a carriage movable along a landing field, mountings above said carriage, grapple-engaging arms connected with said mountings and movable horizontally into and out of a grapple-engaging position, and means to yieldably hold the arms against movement towards a releasing position.

1,897,540. ENGINE. HAROLD H. TIMIAN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Mar. 2, 1931. Serial No. 519,634. 17 Claims. (Cl. 123—122.)



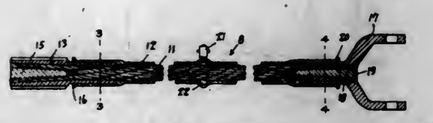
1. In combination with an internal combustion engine and a fuel mixture forming device, means for conducting said mixture to said engine, and means for applying heat substantially uniformly to the fuel mixture in said conducting means and including a porous heat conducting device within said conducting means, and a heat conducting fuel mixture conducting element within said porous heat conducting device.

1,897,541. SLICING MACHINE. CORNELIS FRANCISCUS MARIA VAN BERKEL, Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Jan. 20, 1926, Serial No. 82,405, and in Germany Sept. 18, 1925. Renewed Sept. 5, 1930. 13 Claims. (Cl. 146—102.)



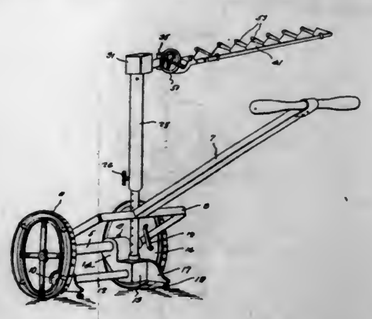
1. A slicing machine comprising a rotary circular knife, a table for supporting material to be sliced by said knife, said table being movable in an arcuate path with its edge moving in a plane parallel with the cutting plane of said knife, and means operated by said table when so moved to impart rotation to said knife.

1,897,542. TRANSMISSION SHAFT FOR VEHICLES. MAXWELL A. WEST, Oakland, Calif. Filed Apr. 27, 1929. Serial No. 358,598. 6 Claims. (Cl. 64—29.)



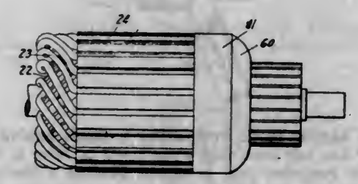
1. A flexible transmission shaft comprising a cable, driving and driven members secured to the two ends of the cable, spirally grooved conical-shaped wedges for rigidly securing the ends of the cable to the members, said grooves receiving the separate strands of the cable and a sleeve enclosing the cable and rotating therewith.

1,897,543. HEDGE CUTTER. CHARLES A. ALBRECHT, East Chicago, Ind. Filed Mar. 17, 1932. Serial No. 599,523. 15 Claims. (Cl. 56—233.)



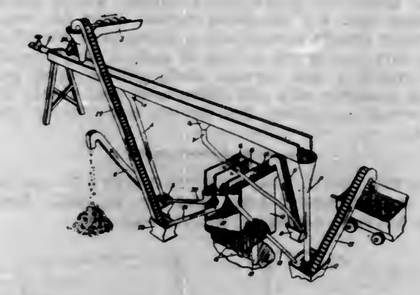
1. A hedge cutter comprising a wheeled carriage, a cutter bar supported in elevated position thereon, a drive connection for the cutter bar with the wheels of the carriage and auxiliary operating means for the cutter bar.

1,897,544. ARMATURE. VINCENT G. APPLE, Dayton, Ohio; Herbert F. Apple, Edward M. Apple, and Gourley Darroch executors of said Vincent G. Apple, deceased. Filed Nov. 21, 1928. Serial No. 320,902. 2 Claims. (Cl. 171—206.)



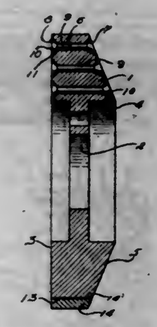
1. An armature comprising an apertured core, a plurality of winding loops in the apertures of said core having their open ends which extend from said apertures drawn together to cylindrical formation, of relatively small diameter and welded, an outer layer bar radially over an inner layer bar composing a longitudinally grooved commutator segment of each such pair, and molded insulation extending between and about said segments and into said grooves to bind said segments together to compose a commutator.

1,897,545. PROCESS OF SEPARATING COAL AND OTHER MINERALS. BYRON M. BIRD, Columbus, Ohio. Filed June 10, 1931. Serial No. 543,287. 10 Claims. (Cl. 209—18.)



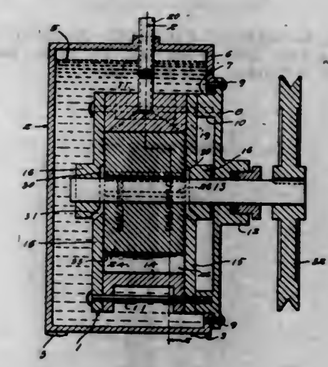
1. The process of separating composite minerals comprising subjecting said minerals to a substantially horizontal flow and thereby stratifying the components of said minerals according to densities, supplying to the stream of minerals a quantity of material whose particles are of specific gravity equaling that of the lower strata of the stream and are of a size smaller than the average particle size of the minerals sufficient to substantially fill the voids in the lower strata of the mineral stream, and separating the strata thereby formed.

1,897,546. CUTTING DEVICE. CONRAD F. BIRCHAUER, Detroit, Mich., assignor to Cemented Tungsten Tool Company, a Corporation of Michigan. Filed Mar. 15, 1930. Serial No. 436,188. 16 Claims. (Cl. 51—209.)



5. A composite cutting device comprising juxtapositioned metal members and a film-like layer of finely comminuted abrasive material empacked between adjacent surfaces of said members.

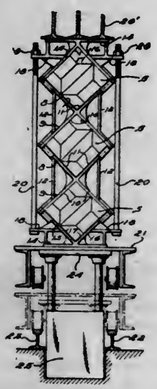
1,897,547. VACUUM PUMP. FREDERICK L. BUENGER, Chicago, Ill. Filed May 25, 1929. Serial No. 365,960. 2 Claims. (Cl. 230—152.)



1. A vacuum pump, comprising a cylinder provided in its annular wall with an inlet and an outlet port, a cylindrical rotor eccentrically supported within the cylinder and having its periphery constantly contacting with said wall in alinement with the front edge of the outlet port, vanes slidably arranged in the rotor and provided with curved outer edges having a radius similar to that of the rotor, the outer edges of the vanes and the periphery of the rotor alining and forming in effect a solid

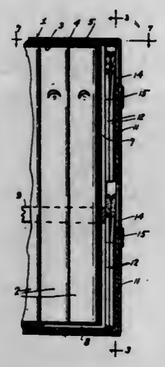
circle when said edges reach the point of contact between the rotor and cylinder to effect a perfect sealing of the outlet port, means yieldingly holding the vanes with said edges thereof in contact with said wall during the starting of the rotor, and means coacting with said yielding means to hold the vanes into contact with the cylinder wall when a substantial vacuum has been created within a member connected to the intake port.

1,897,548. METHOD OF CLAMPING AND MEANS THEREFOR. SAMUEL D. BUTTERWORTH, Detroit, Mich., assignor to Josephine M. Butterworth, Detroit, Mich., and C. P. Gable, Gable, S. C. Filed Nov. 28, 1930. Serial No. 498,704. 7 Claims. (Cl. 144—309.)



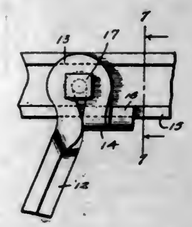
1. Clamping means comprising a stack of clamps having complementary angular clamping surfaces forming a tier of diagonally aligned squares, and means for compressing the stack from the ends thereof to compress all of the squares simultaneously.

1,897,549. CIGARETTE PACKAGE. GEORGE J. CALIVAS, Alabama City, Ala. Filed Jan. 15, 1932. Serial No. 586,830. 5 Claims. (Cl. 206—48.)



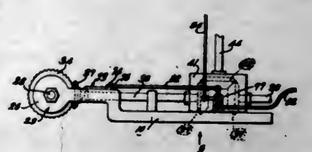
1. A cigarette package comprising inner and outer wrappers, a strip mounted between the inner and outer wrappers, a pocket on the strip for the reception of matches, and an angular extension on one end of the strip projecting between the bottoms of the inner and outer wrappers for preventing displacement of the strip when the matches are withdrawn,

1,897,550. HARROW TOOTH. JAMES E. COLEMAN, Allensville, Ky. Filed June 20, 1931. Serial No. 545,738. 8 Claims. (Cl. 55—95.)



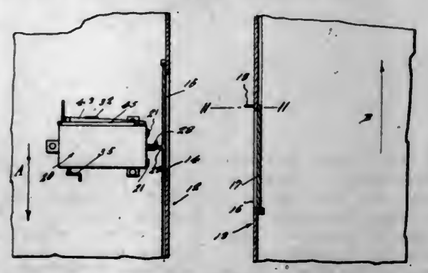
3. A harrow tooth, comprising a shank having a portion of one end bent back upon itself to form a supporting bolt receiving eye, a tongue forming a lateral continuation of one side of said eye, and an arm forming a continuation of said tongue and adapted to extend over a face of a supporting harrow bar, said arm being in the same plane as the eye.

1,897,551. REAR AXLE STEERING WITH FRONT WHEEL DRIVE. HENRY CREMER, Southgate, Calif. Filed Oct. 22, 1931. Serial No. 570,420. 2 Claims. (Cl. 280—93.)



1. In an automotive vehicle having dirigible rear wheels, a rear axle bifurcated at each end to provide a pair of vertically spaced prongs, a substantially vertical stationary shaft extending between the prongs of each pair, a steering knuckle associated with each end of said axle, a spindle on each of said knuckles, and a wheel journaled upon each of said spindles, the inner end of said knuckles being bifurcated to provide vertically spaced prongs mounted upon the associated vertical shaft for rotary movement about a vertical axis, a driven bevel gear wheel rigid with one of the prongs of each of said knuckles and encircling said vertical shaft, driving bevel gear wheels enmeshed with said driven bevel gear wheels, and a steering mechanism for turning said driving gear wheels.

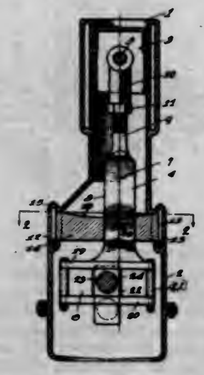
1,897,552. MAIL BAG EJECTING DEVICE. DANIEL B. DODSON, Benton, Ark. Filed Apr. 21, 1931. Serial No. 531,783. 5 Claims. (Cl. 258—5.)



1. In a mail bag transferring device of the class described, in combination, a car provided with a door opening and a door for closing said opening, a relatively

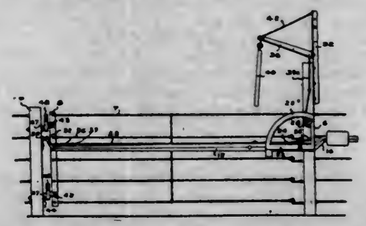
stationary member mounted within the interior of said car opposite the car door opening, a relatively movable mail bag holding member hinged to the first named member and adapted to assume a superposed position when not in use and an extended position when in use, said extended position permitting sail mail bag holding member to be projected through and beyond the doorway, and delivery means for ejecting the bag from the mail bag holding member.

1,897,553. ENGINE. EDGAR FRANKLIN DURNAN, San Francisco, Calif. Filed Mar. 21, 1930. Serial No. 437,842. 1 Claim. (Cl. 74—14.)



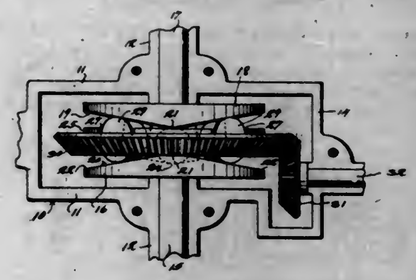
An engine comprising a cylinder, a piston mounted therein, a connecting rod secured to the piston and being rectangular in cross section, a guide for the rod, and a crank shaft disposed off center with respect to the axis of the rod, said rod having a slotted end for slidably receiving the off-set portion of the crank shaft, the width of the rod being equal to the swing of the off-set portion during the firing stroke.

1,897,554. GATE. MATHIAS FLECK, Torquay, Saskatchewan, Canada. Filed Nov. 19, 1930. Serial No. 496,732. 5 Claims. (Cl. 39—27.)



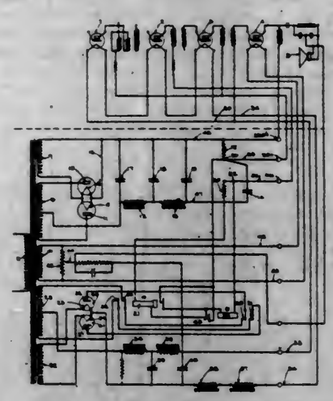
1. In a gate structure, the combination of a post, a gate pivoted at one end to said post, an elongated bar pivoted at one end to the free end of said gate, means for pivotally connecting said bar inwardly from its opposite end to said post, a weight on the last mentioned end of said bar, a rack frame including an arcuate member provided with teeth, said rack frame being pivotally mounted on said post, a horizontally disposed shaft mounted on said post extending laterally therefrom, a drum rotatably mounted on said shaft, a pinion formed integrally with said drum and meshing with the teeth of said arcuate frame member and a cable wound on said drum whereby when said cable is actuated said pinion will be rotated for actuating said rack frame and means operatively connecting said rack frame with said bar for rocking said bar about its pivot whereby said gate may be swung to an opened or closed position.

1,897,555. GEARLESS DIFFERENTIAL. ANDREW FRANCIS FORD, incompetent, Dayton, Wash., by Iva Walls, guardian, Dayton, Wash. Filed Jan. 21, 1932. Serial No. 588,016. 3 Claims. (Cl. 74—7.)



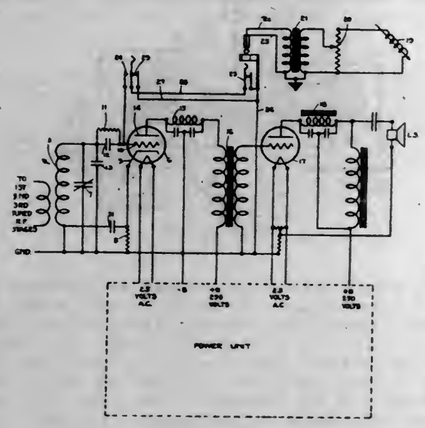
1. A gearless differential including two confronting rotary driven elements and an intermediate driving element, the driving element having an inner series of pockets and an outer series of pockets staggered with relation to the first-named series, one of the driven elements having its inner face formed to provide two series of concentric cams, the elevations of one series being staggered with relation to the elevations of the other series, the other driven element having a single series of cams, the series having a width equal to both series of cams on the other driven element, and wedging rollers disposed radially in said pockets and bearing against the confronting faces of the driven elements, said rollers being frusto-conical in form.

1,897,556. POWER SUPPLY SYSTEM FOR VACUUM TUBE AMPLIFYING DEVICES. VIRGIL M. GRAHAM and WINFRED T. POWELL, Rochester, N. Y., assignors to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 5, 1928. Serial No. 259,017. 7 Claims. (Cl. 175—363.)



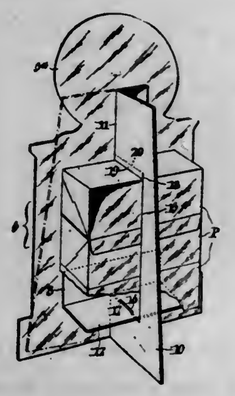
1. In combination, a circuit network, a source of alternating current, a rectifier unit for furnishing voltages of different values to said circuit network from said source, a second rectifier unit including a cathode and an anode, a cathode circuit including said cathode, an anode circuit including said anode for furnishing current to said circuit network, and means controlled by said first rectifier unit for disabling said anode circuit until said rectifier cathode is heated.

1,897,557. COMBINED RADIORECEIVER AND ELECTRICAL PHONOGRAPH. VIRGIL M. GRAHAM, Rochester, N. Y., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed July 9, 1929. Serial No. 376,880. 2 Claims. (Cl. 179—100.11.)



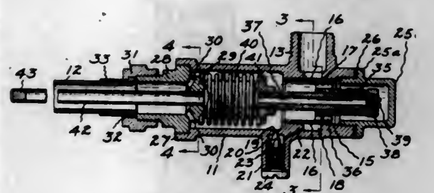
1. In a combined radio receiver and electrical reproducing phonograph, a source of radio frequency signals, a source of electrical phonograph signals at audio frequency, a vacuum tube, means for connecting said source of radio signals to the input of said vacuum tube whereby it functions as a detector or rectifier, means serving to render ineffective said source of radio frequency signals and to connect said phonograph signals to the input of said vacuum tube whereby it functions as an audio frequency amplifier, and means including a device in the input of said vacuum tube for eliminating certain of the high frequencies of said electric phonograph signals.

1,897,558. DISPLAY DEVICE. JAMES J. KAUFMANN, Bayside, N. Y., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 7, 1929. Serial No. 405,322. 2 Claims. (Cl. 211—72.)



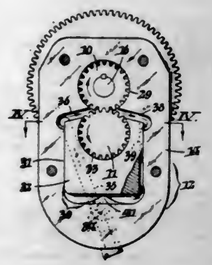
1. A collapsible display device made from sheet material and comprising a placard having vertically spaced display apertures therein, a flap foldable downwardly into horizontal position along the lower edge of the lowermost display aperture, an attached wing easel to sustain the device in upright position, said easel having an opening with an upstanding tongue engageable in a center slot in the foldable flap to afford even support for packages with faces thereof at the display apertures of the placard, and a flap set apart in the upper region of the easel opening by a vertical slit and horizontal crease to frictionally retain the packages against displacement.

1,897,559. LIQUID COOLING SYSTEM. HERBERT C. KELLOGG, Detroit, Mich., assignor to The Russ Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 27, 1928. Serial No. 278,248. 18 Claims. (Cl. 62—7.)



1. The combination with a liquid storage tank, of a liquid supply line delivering into the tank, means for cooling liquid during its passage through said supply line, and a thermally controlled valve in said liquid supply line sensitive to variations in the temperature of the liquid in the portion of said line between the cooling means and the discharge point for regulating the flow through said supply line to the tank.

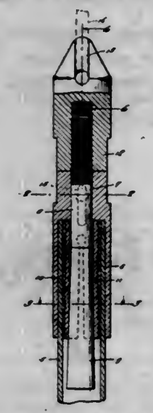
1,897,560. GEAR PUMP. CHARLES W. LAWSER, Bala, Pa., assignor to The Wicaco Machine Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 7, 1930. Serial No. 486,885. 2 Claims. (Cl. 103—126.)



1. In a gear pump, a casing; a pair of intermeshing gears, one of said gears being positionally fixed within the casing; and a rectangular piston member within the casing floatingly carrying the other gear in a circular bight therein, said piston member being responsive to the delivery pressure of the pump by way of a passage therein for capacity to maintain the last mentioned gear in intimate meshing relation with the positionally fixed gear.

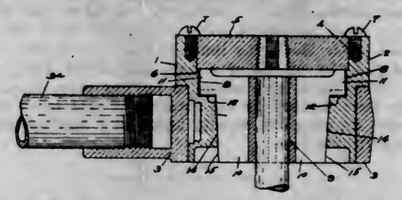
1,897,561. TUBE PULLER. DANIEL MANUCCI, Pasquale, Malatesta, and WILLIAM C. SAWTELLE, Erie, Pa. Filed Feb. 15, 1932. Serial No. 593,088. 4 Claims. (Cl. 294—94.)

1. A tube puller comprising a socket, having an opening extending axially through the closed end thereof, an expansible sleeve arranged in the socket, a shank extending through the opening in the socket, and having on one end a head adapted to be drawn axially through the sleeve for expanding it, and on its other end being provided with



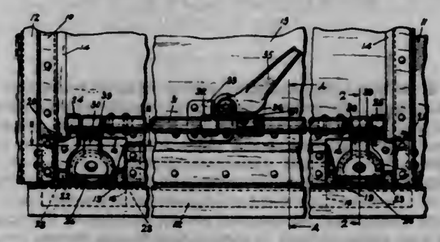
threads, a nut threadedly engaged with the last named end of the shank, and an eye provided on one end of said nut.

1,897,562. DIE STOCK. THORVALD PETERSEN, Erie, Pa., assignor to Reed Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Dec. 18, 1930. Serial No. 503,147. 4 Claims. (Cl. 10—127.)



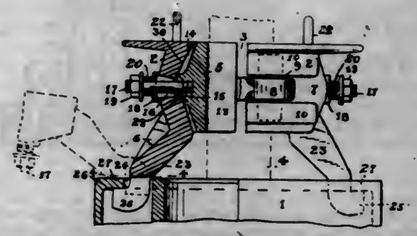
1. In a die stock, the combination of a body having a die-receiving socket and a guide-receiving socket opening through the die-receiving socket, the guide-receiving socket being tapered not to exceed 10° to the axis; a guide in the guide-receiving socket insertable through the die-receiving socket, said guide being tapered to correspond with the taper of the guide-receiving socket; a die in the die-receiving socket securing the guide in the guide-receiving socket; and means securing the die in the die-receiving socket.

1,897,563. DOOR ELEVATING CONSTRUCTION. AXEL WAGBERG, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 29, 1931. Serial No. 533,639. 6 Claims. (Cl. 16—99.)



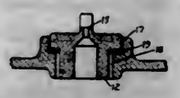
1. In door elevating construction, in combination, a plurality of inclined rollers, means for retaining said rollers in rolling engagement with a track, cam means mounted upon said door for transverse rotation relative thereto, said cam means having engagement with said roller retaining means and a lever for imparting movement to said cam means for the purpose set forth.

1,897,564. GRIPPING MECHANISM FOR ROTARY DRILLING MACHINES. LEWIS E. ZERBE, Moneta, Calif., assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 9, 1930. Serial No. 480,719. 8 Claims. (Cl. 24—248.)



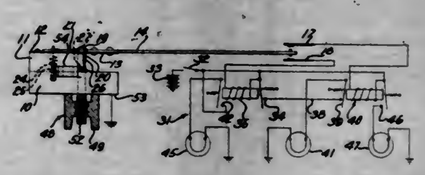
1. In a rotary drilling apparatus, a horizontal support, an upstanding body having swinging depending legs provided with hooks removably inserted through openings in the support and interlocked by the swinging of the legs with the said support to prevent upward movement of the body, and clamping means supported by the upper end of the body and adapted to engage and suspend a pipe.

1,897,565. STORAGE BATTERY CONSTRUCTION. JOHN L. RUFF, Edgewood, Pa., assignor to Wubco Battery Corporation, Swissvale, Pa., a Corporation of New York. Filed Dec. 22, 1928. Serial No. 327,876. 2 Claims. (Cl. 136—177.)



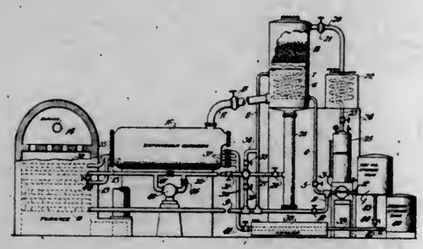
1. In combination with a storage battery cover having a recess and a hole eccentric to said recess extending from the bottom thereof to the interior of a storage battery, a vent plug having a top circular portion adapted to fit within said recess, and a portion eccentric thereto adapted to fit within said hole.

1,897,566. GAUGING APPARATUS. JOHN LESLIE ALDEN, La Grange, Ill., assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 2, 1929. Serial No. 329,912. 4 Claims. (Cl. 33—172.)



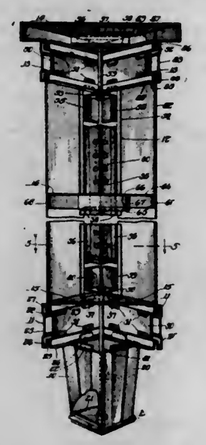
3. In a gauging apparatus, a support, an elongated indicating member, a resilient member securing said indicating member to said support, said members being substantially parallel, and a gauge member movable transversely to the axis of the indicating member and engaging the indicating member at one side of the point of flexure of said resilient member.

1,897,567. PROCESS AND APPARATUS FOR THE CONVERSION OF HYDROCARBON OILS. JOSEPH G. ALTHER, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 23, 1922. Serial No. 531,150. 6 Claims. (Cl. 196—59.)



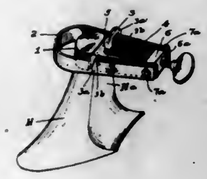
1. A process for converting hydrocarbon oil, consisting in utilizing regulated quantities of the oil charge as a cooling medium in a dephlegmating zone, combining the preheated and cool raw oil, and subjecting the mixture to a cracking temperature in a heating zone, passing the heated oil to an expansion stage and there permitting the separation of the vapors and unvaporized oil, subjecting the vapors to a dephlegmating and condensing action, returning a portion of the refluxed oil constituents to be retreated in a separate stage positioned in the hottest portion of the heating zone and combining a portion of the refluxed oil constituents with the oil charge stock for retreatment, passing the heated charging retreated products to the expansion stage, recirculating controlled quantities of the unvaporized oils from the expansion stage through the system, maintaining a regulated vapor pressure upon the respective zones of reaction.

1,897,568. MERCHANDISING TABLE. JAMES E. BALES, Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed July 15, 1929. Serial No. 378,393. 12 Claims. (Cl. 312—141.)



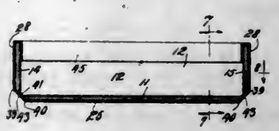
1. An article of the class described comprising a pair of frames, corner members interfitting with said frames, panels interfitting with said frames and with said corner members, a top interfitting with one of said frames, a foot interfitting with the other of said frames, tightening means cooperating with the top and the foot for holding said parts in rigid interlocked position.

1,897,569. SAFETY SHOE HEEL CLAMP. AMBROSE W. BELLAVANCE, South Portland, and HARRY LEVY, Portland, Me. Filed Aug. 14, 1931. Serial No. 557,118. 2 Claims. (Cl. 12—103.)



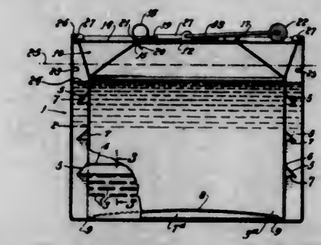
1. A safety shoe heel clamp adapted to operate on the wooden heel of a shoe, comprising a screw block, a screw-threaded hole therein, a headed trunnion on each side of said screw block, a plurality of flexible bands, their ends being pivotally mounted, respectively, on the two said trunnions, said bands adapted, singly, to encompass three sides of a wooden heel suited to its individual size, a clamp plate adapted to impinge on the fourth side of said heel, a screw having threaded engagement with the hole in said screw block, the inner end of said screw having connection, by means of a ball and socket joint, with said clamp plate, and means to prevent rotation of said clamp plate incident to the rotation of said screw therein when drawing one of said bands into binding engagement with said heel.

1,897,570. BOX AND METHOD OF MAKING THE SAME. HARVEY T. BOWMAN and WALTER L. GROH, Lebanon, Pa., assignors to The Guardian Trust Company, Cleveland, Ohio, a Corporation of Ohio, as trustee. Filed Aug. 13, 1931. Serial No. 556,784. 11 Claims. (Cl. 229—30.)



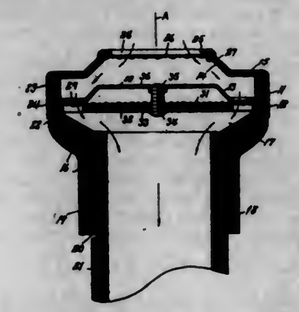
1. A box body, including major upward walls and a main wall, the walls arranged in angular relation, and at least some of the walls being formed of laminated board, of which board the inner lamination is bent between the laminated walls and extends in a continuous sheet to provide the inner surfaces of such laminated walls, and substantial combined thicknesses of the outer laminations being outwardly beveled correspondingly at the edges of the walls so that corresponding bevels extend away from each other in substantially the same planes, whereby to provide outer minor wall surfaces arranged at obtuse angles to the laminated walls.

1,897,571. BAIT BUCKET. ENEA CAMPORINI, Chicago, Ill. Filed Oct. 24, 1930. Serial No. 490,971. 10 Claims. (Cl. 43—56.)



1. In a live bait bucket, an outer water container, an inner bait container and means providing vertically spaced air pockets on one of said containers below the normal water level in said water container.

1,897,572. COMBINED CHECK-VALVE AND STRAINER. EDWARD S. CORNELL, Jr., Watertown, Conn., assignor to The Chase Companies, Inc., Waterbury, Conn., a Corporation. Filed Oct. 10, 1930. Serial No. 487,749. 6 Claims. (Cl. 210—170.)



1. In a combined check-valve and strainer, the combination with a housing; of a valve-seat in the said housing; a combined closure-and-strainer unit bodily slidable relatively to and within the said housing and formed centrally with a seat-engaging portion co-operating with the said valve-seat to prevent the flow of fluid in one direction and provided with a strainer outside of the said central seat-engaging portion acting to filter fluid flowing in an opposite direction.

1,897,573. DISINFECTANT AND DEODORIZER. FRANCIS J. CURRAN, Chicago, Ill. Filed Sept. 20, 1928. Serial No. 307,342. 5 Claims. (Cl. 167—13.)

1. A disinfecting and deodorizing device, comprising a porous block of balsa wood impregnated with a volatile disinfecting and deodorizing liquid.

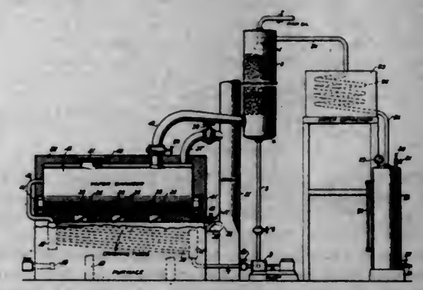
1,897,574. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, LOUIS T. MONSON, Maplewood, and ARTHUR F. WIRTEL, Webster Groves, Mo., assignors, by mesne assignments, to Tretolite Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,105. 16 Claims. (Cl. 196—4.)

16. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent containing a water-soluble substituted polycyclic aromatic sulfonic body of the type XRR^1SO_3Z, wherein X is an aromatic nucleus; RR^1 represents three propyl groups; SO_3 represents the conventional sulfonic acid residue; and Z represents an ammonium radical, said demulsifying agent being also characterized by the fact that in concentrations of not over 1%, it will produce a precipitate when diluted with an excess of an aqueous solution of alkaline earth salts.

1,897,575. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, LOUIS T. MONSON, Maplewood, and ARTHUR F. WIRTEL, Webster Groves, Mo., assignors, by mesne assignments, to Tretolite Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 334,106. 20 Claims. (Cl. 196—4.)

20. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent containing a water-soluble substituted bicyclic aromatic sulfonic body of the type XRR^1SO_3Z; wherein X is a bicyclic aromatic nucleus, RR^1 represents two dissimilar aliphatic alcohol residues, of which at least one is a propyl alcohol residue, derived from alcohols having fewer than twelve carbon atoms each; SO_3 represents the conventional sulfonic acid residue, and Z represents an ammonium radical, said demulsifying agent being also characterized by the fact that in concentrations of not over 1%, it will produce a precipitate when diluted with an excess of an aqueous solution of alkaline earth salts.

1,897,576. PROCESS FOR CONVERTING HYDROCARBON OILS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 1, 1925, Serial No. 34,131. Renewed June 12, 1929. 3 Claims. (Cl. 196—58.)

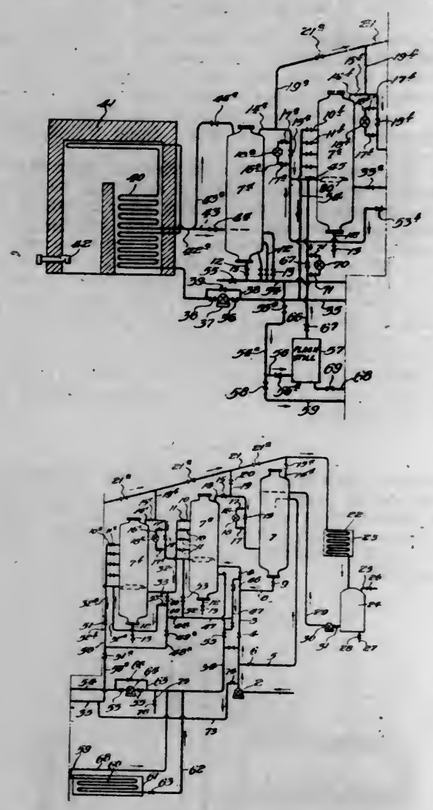


2. A process for converting hydrocarbon oils, consisting in heating the oil to a cracking temperature in a heating zone, conducting the cracked oil to an enlarged vapor chamber located outside of the heating zone, distilling the cracked oil to a practically dry residue in said vapor chamber, dephlegmating and condensing the condensible oil vapors released in said vapor chamber, controlling the temperature at which the reaction takes place in the vapor chamber by directing around said vapor chamber a regulated portion of the heating gases from said heating zone, and maintaining a regulated superatmospheric pressure of the generated vapors upon the system during distillation.

1,897,577. HYDROCARBON OIL CONVERSION. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed July 30, 1927. Serial No. 209,633. 1 Claim. (Cl. 196—47.)

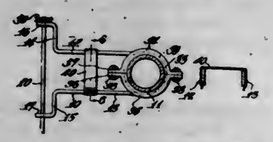
In an oil cracking process of the character in which the oil is subjected to pressure distillation in a pressure distillation zone, vapors and unvaporized oil separately removed from the pressure distillation zone, the unvaporized oil subjected to further distillation in a zone

of reduced pressure, the improvement which comprises maintaining a plurality of serially communicating bodies of charging oil for the process, supplying fresh charging oil to the body at one end of the series and supplying oil from the body at the other end of the series to the zone of pressure distillation, passing vapors released from the



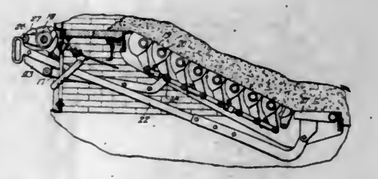
unvaporized oil in said zone of reduced pressure in physical contact with certain of said oil bodies and introducing liquid oil products unvaporized in said zone of reduced pressure into the liquid oil flowing through said serially communicating bodies to be again supplied to the zone of pressure distillation.

1,897,578. CLAMPING BRACKET. ROBERT HETHERINGTON, Sharon Hill, Pa. Filed Dec. 23, 1930. Serial No. 504,235. 2 Claims. (Cl. 248—20.)



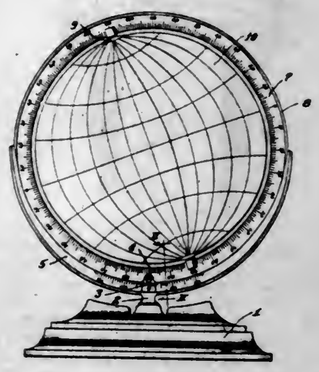
2. In a bracket support, a split clamping ring adapted to surround a pipe, a bracket having laterally extending arms, spaced further apart at their outer ends than at the ends near the pipe, mounted about the clamping ring and limited in upward and downward movement by the walls of the clamp, a horizontal bar slidable in the bracket and package supporting means carried by the bar.

1,897,579. GRATE CONTROL MECHANISM. GEORGE A. KOHOUT, Chicago, Ill. Filed Aug. 27, 1928. Serial No. 302,395. 2 Claims. (Cl. 110—39.)



1. Grate control mechanism for stokers of the rocking grate type comprising a rocking grate a member operatively connected to the grate for rocking the same, a rocking drive shaft, power means for continuously rocking said shaft, connecting means between said shaft and member for periodically causing said shaft to move said member and thereby rock said grate and return the same to normal position, and means associated with said power means and shaft insuring return of the grate to normal position when said power means is stopped.

1,897,580. GROOVED SUPPORTING FORK FOR GLOBES. ROBERT B. LAWTON, Chicago Heights, Ill., assignor to Weber Costello Co., Chicago Heights, Ill., a Corporation of Illinois. Filed July 8, 1931. Serial No. 549,398. 4 Claims. (Cl. 35—5.)

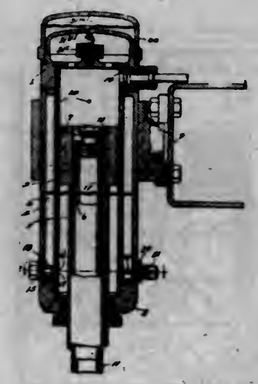


1. A globe device comprising a base, a fork supported thereon and having an inner peripheral groove therein extending continuously from end to end of said fork, degree graduations provided on said fork, a meridian rotatably supported in said groove, and a globe rotatably supported in said meridian, said meridian having graduations thereon in cooperative relation with the graduations on the fork to facilitate accurate adjustment of inclination of the axis of the globe.

1,897,581. COMBINED SHOCK ABSORBER AND JACK FOR VEHICLES. ALEXANDER MCNAB, Bridgeport, Conn., assignor to McNab Absorbolift, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 21, 1927. Serial No. 234,629. 7 Claims. (Cl. 254—93.)

1. In a jack construction for road vehicles, the combination of an outer enclosure for mounting on the vehicle; said outer enclosure having a cylinder therein; jacking piston means operative within said cylinder for movement from an inward position therein to an outward position for engaging the road surface; said outer enclosure having associated therewith a supply opening for

the supply to said cylinder of fluid under pressure and the withdrawal therefrom of said fluid, for effecting respectively inward and outward movement of said piston

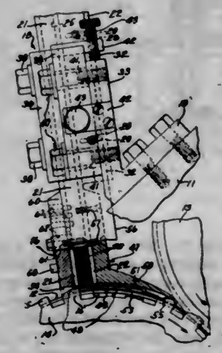


means; and a yielding catch device associated with said cylinder and piston means for normally retaining said piston means in the inward position.

1,897,582. TREATMENT OF HYDROCARBON OILS. JACQUE C. MORRELL and GUSTAV EGLOFF, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 29, 1931. Serial No. 512,210. 2 Claims. (Cl. 196—36.)

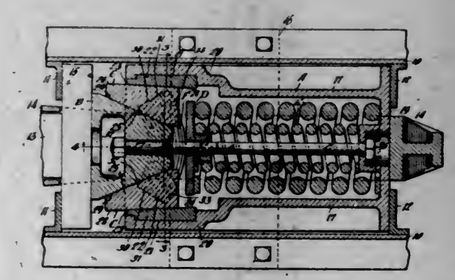
1. A step in a process of refining the normally liquid overhead product resulting from the cracking of petroleum oil, which comprises subjecting said product in heated vaporous condition to treatment with sulphur trioxide and steam in the presence of ferric sulphate.

1,897,583. BLANK HANDLING APPARATUS. CHARLES EDWIN NELSON, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 2, 1929. Serial No. 329,931. 12 Claims. (Cl. 153—28.)



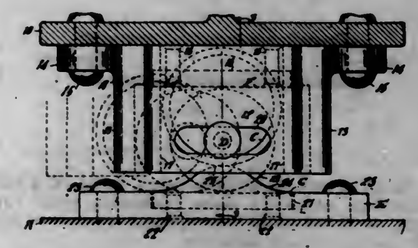
1. In a blank handling apparatus for article forming means, means for holding a supply of blanks, including a member adjustable thereon to a plurality of vertical positions to provide a discharge passage of predetermined dimensions in the holding means for accommodating blanks of varying dimensions, and upon which the supply of blanks rests, and clamping means for maintaining said member stationary in any of its adjusted positions to provide a fixed dimension for the discharge passage.

1,897,584. FRICTION SHOCK ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 31, 1928. Serial No. 281,768. 6 Claims. (Cl. 213—30.)



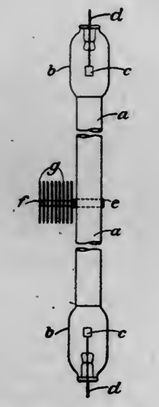
5. In a friction shock absorbing mechanism, the combination with a friction member; of a main spring resistance extending lengthwise of said member and being compressible in a lengthwise direction; a laminated plate spring at the forward end of said main spring resistance and extending across the latter, said laminated plate spring being curved from one end to the other and upon compression from opposite ends being bowed rearwardly and projected toward said main spring to compress the latter; and means movable inwardly lengthwise of the mechanism and having sliding frictional engagement with said member for moving said laminated plate spring inwardly of the mechanism and at the same time compressing said laminated plate spring from opposite ends to bow the same to project it toward said main spring resistance and compress the latter.

1,897,585. ANTIFRICTION BEARING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 24, 1928, Serial No. 301,834. Renewed July 9, 1932. 18 Claims. (Cl. 308—226.)



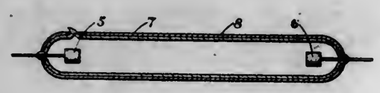
1. In an anti-friction bearing for railway cars provided with opposed body and truck bolsters, the combination with an anti-friction roller supported on one of the bolsters; of centering rings cooperating with the anti-friction roller element; a cam track on the last named bolster cooperating with the rings; and a housing secured to the other bolster enclosing said rings and roller element, said housing having means thereon engaging the rings to actuate the same when said bolsters are moved angularly with respect to each other.

1,897,586. GASEOUS ELECTRIC DISCHARGE DEVICE. MARCELLO PIRANI, Berlin-Wilmersdorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed May 30, 1930, Serial No. 457,666, and in Germany July 13, 1929. 3 Claims. (Cl. 176—122.)



1. In an electric discharge device, a container, electrodes sealed therein, a gaseous filling therein comprising a condensible vapor, and means for preferentially cooling a portion of said container along the discharge path to maintain the vapor throughout the length of the discharge path and keep the device free of undesired deposits.

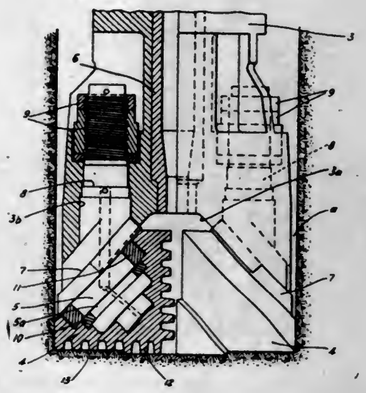
1,897,587. GASEOUS ELECTRIC DISCHARGE DEVICE. MARCELLO PIRANI, Berlin-Wilmersdorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed July 22, 1931, Serial No. 552,453, and in Germany Aug. 21, 1930. 4 Claims. (Cl. 176—122.)



1. In an electric discharge device, a container, a filling of discharge supporting easily condensible metal vapor therein, electrodes sealed therein, and a transparent noble metal coating on said container.

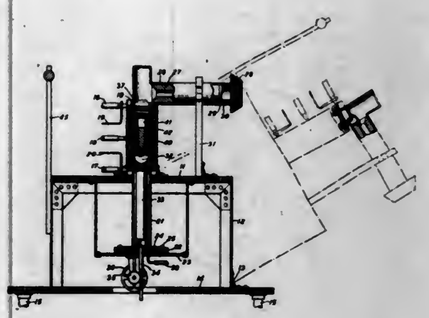
1,897,588. ROTARY DRILLING APPARATUS. CLARENCE E. REED, Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed July 9, 1929, Serial No. 376,893. Renewed July 12, 1932. 4 Claims. (Cl. 255—71.)

1. Earth boring apparatus having cone cutters mounted to cut simultaneously substantially the full area of the hole, said cutters providing two distinct zones of cutting teeth adjacent the base and adjacent the apex respectively, each zone comprising a plurality of spaced annular rows of teeth the teeth in the apex zone being of greater length than the teeth in



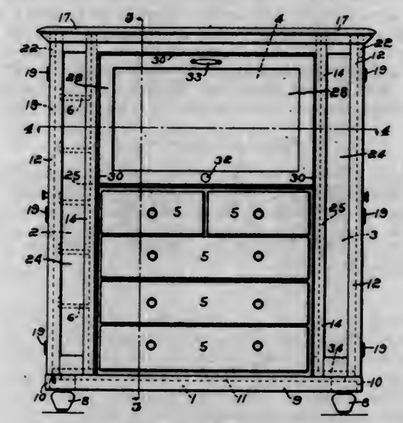
the base zone to increase the efficiency of the apparatus and to cut a central guide area to a lower horizontal level than that cut by said base zone of teeth.

1,897,589. MELTING AND CASTING OF METALS. HOWARD T. REEVE, Millburn, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1930. Serial No. 491,822. 3 Claims. (Cl. 22—57.)



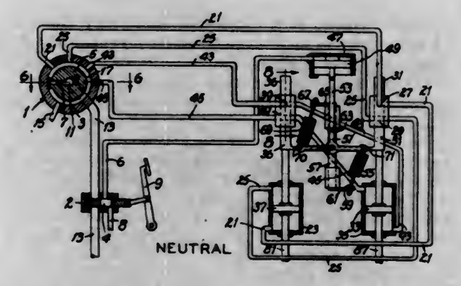
1. In apparatus for the casting of metals, a quartz tube adapted to receive a crucible in which the metal to be melted is placed, a substantially right-angled extension on said tube, a mold within said extension, means comprising an inductor coil positioned outside of and closely surrounding said tube for establishing a high frequency field to melt the metal in said crucible, means for positioning said crucible in the most intense part of said field during the melting operation and for raising said crucible to a position adjacent the mold after the metal is melted, means for tilting said quartz tube to cause the transfer of said melted metal to said mold, and means for maintaining a vacuum within said tube and extension during the process of melting, casting and cooling of said metal.

1,897,590. ARTICLE OF FURNITURE. ALBERT ROHAUT, Alfred, Me. Filed May 7, 1931. Serial No. 535,607. 1 Claim. (Cl. 312—146.)



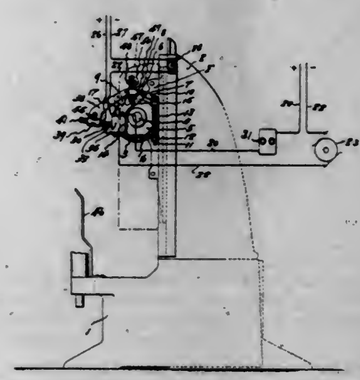
An article of furniture comprising spaced vertical frame members and top and bottom frames cooperatively associated therewith to define opposite end frames; a rear wall, front paneling, and transverse partitions secured to said frame members to define opposite end compartments, swinging doors for the opposite end compartments hinged respectively to rear vertical frame members, a horizontal dividing partition for the central compartment fixedly mounted between the transverse partitions which define the opposite end compartments, and a plurality of drawers and slidable mountings therefor in the central compartment below said dividing partition.

1,897,591. GEAR SHIFTING APPARATUS. BURTON POLLARD SCHOLZ, Webster Groves, Mo. Filed Jan. 11, 1932. Serial No. 585,962. 3 Claims. (Cl. 74—58.)



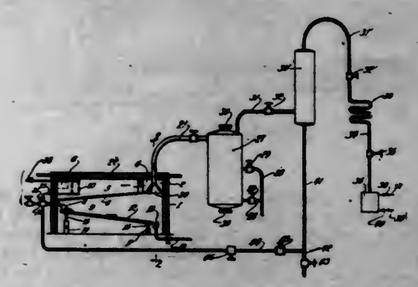
1. In apparatus of the class described, two pneumatic cylinders, two reciprocating pistons therein respectively adapted to selectively shift gears, vacuum lines connected to the ends of said cylinders, valves controlled by the respective pistons to be opened when the pistons are unaffected by any vacuum and to be closed when they are so affected, the lines from a given cylinder passing through the valve controlled by the other cylinder and means selectively communicating the respective lines with a vacuum, said last-named means having a relief port for relieving the vacuum in all other of said lines except the one which is in communication with said vacuum and means for placing the piston which is not presented to the vacuum at neutral position, said last-named means comprising a third piston and cooperating cylinder, a linkage connecting said third piston with said former two pistons and a line adapted to present said last-named piston to said vacuum.

1,897,592. POWER CIRCUIT CONTROL MEANS FOR VERTICAL PRINTING PRESSES. SOLOMON SCHWARTZMAN, Brooklyn, N. Y. Filed Jan. 5, 1932. Serial No. 584,764. 15 Claims. (Cl. 101—250.)



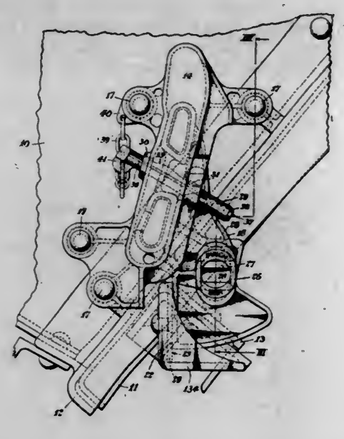
1. In a printing press operated by electric power having a cylinder mounted for rectilinear and rotary movements and means for driving the same, a cylinder stop mechanism for determining the normal operative timed relation of the cylinder and its driving means, a power circuit, a switch in said circuit, and means actuated by said stop mechanism for automatically opening said switch when the cylinder is moved out of operative timed relation to its driving means.

1,897,593. PROCESS FOR TREATING OIL. JEAN DELATTRE-SEGUY, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 4, 1927. Serial No. 180,690. 1 Claim. (Cl. 196—58.)



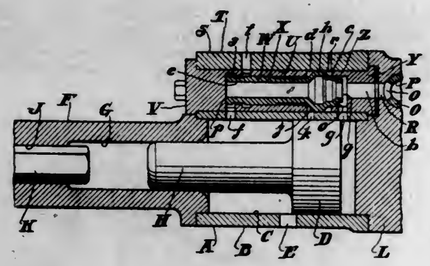
A process of cracking hydrocarbon oil which comprises preheating the oil at a temperature below the conversion point, filming said oil over an extended area, heating the resultant film of oil solely by means of radiant heat to a temperature sufficient to only initiate conversion, passing the evolved vapors into an enlarged reaction zone, carrying the conversion reaction to completion in said enlarged zone, removing resultant vapors, and subjecting the same to dephlegmation and condensation.

1,897,594. LOCK. JAMES A. SHAFER, East Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 23, 1930. Serial No. 490,562. 14 Claims. (Cl. 105—308.)



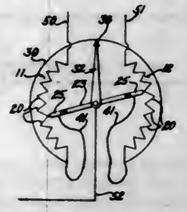
1. Locking mechanism for car hopper doors which comprises guide means secured to the hopper, door locking means slidable in said guide means to locking and releasing positions, and a pin adapted to cooperate with said guide and locking means to hold the latter in either locking or releasing position as desired.

1,897,595. VALVE FOR ROCK DRILLS. EDWARD F. TERRY, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 18, 1930. Serial No. 461,998. 1 Claim. (Cl. 121—19.)



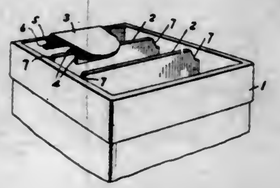
In a fluid actuated rock drill, the combination of a cylinder having an exhaust port and a reciprocatory piston in the cylinder, a free exhaust port for the cylinder, a valve chest having a valve chamber, front and rear inlet passages leading from the ends of the valve chamber to the cylinder, a distributing valve in the valve chamber having a bore in constant communication with a source of pressure fluid supply, the ends of the valve and valve chamber cooperating to control the admission of pressure fluid into the inlet passages, an actuating surface on the valve exposed to compression from the rear end of the cylinder to actuate the valve for admitting pressure fluid into the rear end of the cylinder and being exposed to pressure fluid flowing into the rear end of the cylinder to assist in holding the valve, a second actuating surface on the valve, a kicker passage in the cylinder for conveying pressure fluid from a point in the cylinder rearwardly of the exhaust port to the valve chamber to expose the second mentioned actuating surface to pressure fluid for actuating the valve to admit pressure fluid to the front end of the cylinder, holding surfaces on the ends of the valve alternately exposed to pressure fluid for holding the valve in the limiting positions, an exhaust port in the valve chest, and a neck on the valve to establish communication between the last said exhaust port and the front inlet passage to afford an outlet for compression in the front end of the cylinder.

1,897,596. INSTRUMENT FOR VARYING ELECTRICAL POTENTIAL. WILLIAM JOHN TIETZ, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 12, 1927. Serial No. 205,088. 2 Claims. (Cl. 201—48.)



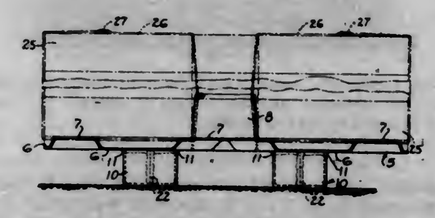
2. In a potentiometer, two groups of resistance elements each having one of their ends connected to lead wires of an electrical circuit, a multi-contact arm for establishing electrical connections with certain of the resistance elements of one of the groups and simultaneously therewith disconnecting an equal number of the resistance elements from the other group, a slide wire resistance element connected to the ends of the groups of resistance elements opposite their connections with the lead wires of the electrical circuit and connected with the multi-contact arm, and a single contact arm electrically connected to the electrical circuit for making a sliding contact with said slide wire resistance element.

1,897,597. SEAL FOR STORAGE BATTERY CONTAINERS. CURTIS C. WALLACE, Philadelphia, Pa. Filed Mar. 19, 1929. Serial No. 348,224. 8 Claims. (Cl. 136—170.)



1. In combination, a receptacle adapted to contain the cells of a storage battery, a cover for the receptacle having a marginal lip projecting into the mouth of the receptacle adjacent the inner side of the walls and providing a trough for sealing compound between the inner side of the walls of the receptacle and the outer walls of the cover, internal walls dividing the receptacle into separate compartments and provided with notches in unobstructed communication with the trough and adjoining the inner side of the walls of the receptacle, and compound extending continuously through said trough and said notches sealing said cover to said receptacle.

1,897,598. TRANSPORTING PLATFORM. THOMAS P. WYMAN, Jr., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 8, 1930. Serial No. 487,136. 3 Claims. (Cl. 248—41.)



1. A shipping unit comprising an annular corrugated disc for supporting a plurality of stacked annular objects, a hollow metal thimble welded to the disc and extending upwardly into the central apertures of the supported annular objects, metal skids welded to the lower side of the disc, and metal bands extending through the thimble, underneath the disc and around the stacked objects for securing them in place.

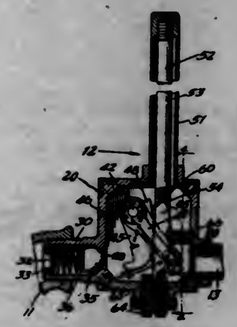
1,897,599. COFFEE BIN AND HOPPER. PETER M. YOUNG, Los Angeles, Calif. Filed June 2, 1931. Serial No. 541,621. 3 Claims. (Cl. 214—17.)



1. In an apparatus for handling ground coffee or other substances containing chaff, the combination of a bin operating as a holder for the coffee, and having means at its lower end for withdrawing the coffee, a dumping hopper mounted over the bin for receiving and holding a quantity of coffee, a dumping gate pivotally mounted in the hopper and having two gate plates cooperating respectively alternately with the opposite walls of the hopper so that in one position of the gate ground coffee will become dumped from one side of the gate into the bin, and in the other position of the gate the coffee will be dumped from the other side of the gate into the bin, thereby collecting the dumped coffee in different separated piles on the bin bottom and reducing the tendency of the chaff to separate itself from the mass of ground coffee.

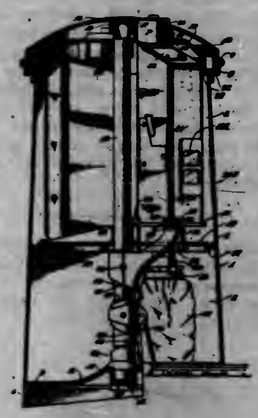
1,897,600. GAS BURNER CONTROL DEVICE. WILLIAM B. BASTIAN, Glendale, Calif. Filed Aug. 4, 1930. Serial No. 473,001. 8 Claims. (Cl. 158—117.1.)

1. In a gas burner control device the combination of: a casing; a valve contact member pivotally mounted therein, there being gas inlet and outlet openings in said casing; an inlet valve controlling said inlet opening and adapted to be contacted and held open by said valve contact member; spring means for urging said contact member away from said valve; manual means for actuating said contact member from the outside of said casing; means for yieldably urging said valve into closed position; a latch for holding said valve contact member against said valve to hold the latter in open position;



and a thermostat supporting said latch and acting directly thereon for disengaging same from said valve contact member upon a predetermined change of temperature of said thermostat taking place.

1,897,601. ADMISSION TOKEN DEPOSITARY AND ACCOUNTING DEVICE. HUGO J. BAUR, Chicago, Ill. Filed Oct. 9, 1930. Serial No. 487,464. 19 Claims. (Cl. 194—1.)

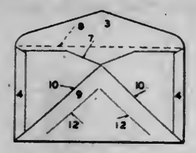


1. In a token depositary and accounting device, the combination of a housing, a plurality of depositary units normally enclosed within said housing, and means for selectively bodily moving said units to project their entrance ends to the exterior of said housing for the direct insertion thereinto of tokens.

1,897,602. ENVELOPE. ANDREW BAYER, Baltimore, Md. Filed June 26, 1931. Serial No. 546,987. 1 Claim. (Cl. 229—68.)

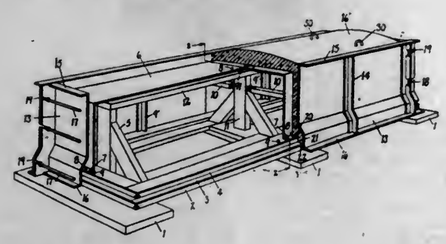
An envelope having a rear wall comprising a unitary sheet of material of substantially the size of the envelope,

said wall being provided with shoulders forming lines having the appearance of being the edges of an overlying



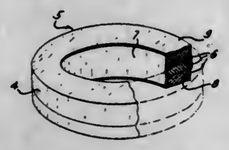
diagonal flap, and with additional shoulders forming lines simulating the appearance of the edges of underlying flaps as viewed through an overlying flap.

1,897,603. BURIAL VAULT MOLD. EARL J. BAUTSCHE, Battle Creek, Mich. Filed June 6, 1931. Serial No. 542,486. 2 Claims. (Cl. 25—130.)



1. A burial vault mold comprising a substantially horizontal rigid rectangular base frame having a shoulder surrounding its upper and outer edge, a saddle form mounted on the inside of said frame for supporting an inverted hollow core, spaced vertical relatively short studs on said saddle form and frame, a hollow inverted inner core consiting exclusively of four corner sections mounted on said saddle form and frame and having a base flange and holes receiving said studs, whereby the sections are held in place on said base and are collapsible by merely raising them clear of said studs, said sections being arranged to form smooth butt joints on the molding side thereof, and bracing arms hinged to said saddle form for engaging and supporting the sides of the core at their central vertical joint.

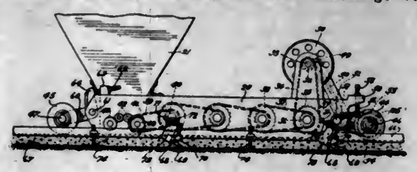
1,897,604. ELECTROMAGNETIC DEVICE. DALE R. CLEMONS, Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 23, 1930. Serial No. 483,783. 15 Claims. (Cl. 175—356.)



1. In an electromagnetic device, a core, molded paper collar sections and an annular member positiond between the sections for enclosing the core, and toroidal windings over the enclosed core.

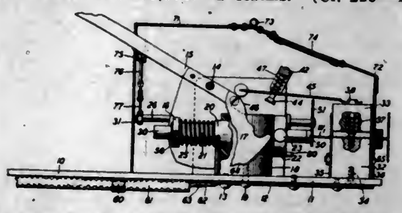
1,897,605. CONCRETE LAYING MACHINE. DELL G. CLIFFORD, Chicago, Ill. Filed Mar. 17, 1930. Serial No. 436,389. 12 Claims. (Cl. 94—44.)

1. A machine for laying concrete embodying a supporting structure, a hopper carried thereby and having a discharge outlet for the material, and co-operating eccentrics rotatably supported adjacent said discharge outlet



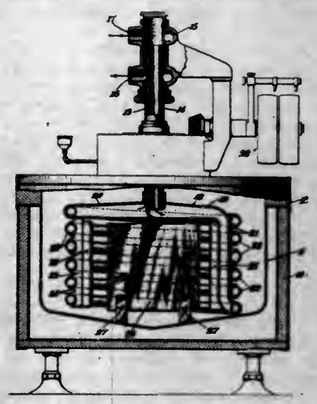
of the hopper and operating to assist in discharging the material therefrom and for forcing it against the surface to which it is to be applied.

1,897,606. HAND WELDING MACHINE. IRA E. COLE, Montclair, N. J., DAVID T. MAY, Port Washington, and ANTHONY A. WELLER, Ridgewood, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 27, 1930. Serial No. 478,072. 4 Claims. (Cl. 219—4.)



1. In a welding machine, a support, a handle lever arranged for movement thereon, a pair of jaw members carried by said support, one of said jaws being movable, guiding means for said movable jaw, an electrode, a yieldable device operatively connecting said movable handle to said movable jaw for closing it, a stop for positioning the parts to be welded in adjusted position with respect to said electrode and means carried by said handle lever for moving said electrode in contacting relation with the parts to be welded for effecting the weld.

1,897,607. LIQUID HEATER AND COOLER. FRITZ G. CORNELL, Jr., Mountain Lakes, N. J., assignor to Jensen Creamery Machinery Company, Inc., Bloomfield, N. J., a Corporation of New York. Filed Sept. 16, 1930. Serial No. 482,290. 26 Claims. (Cl. 257—104.)



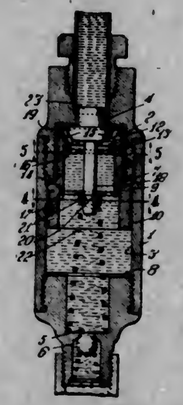
1. An apparatus of the character described comprising a vat, a helical coil supported in said vat, a vertical stationary baffle plate supported by said vat within said coil, means to rotate said coil around said baffle plate, and means to circulate fluid through said coil.

1,897,608. PRISM TELESCOPE. HARVEY S. COVER, South Bend, Ind. Filed May 15, 1930. Serial No. 452,718. 12 Claims. (Cl. 88—33.)



6. In a prism telescope of the character described, a single main tubular member having an optical system wherein light rays are carried rearwardly and thence forwardly, said system including an objective lens and a correlated reflecting prism; and a detachably mounted housing at the forward end of said tubular member having an ocular lens, a reflecting prism adapted to receive rays from the first said prism and reflect the same to said ocular lens, and focusing mechanism mounted therein.

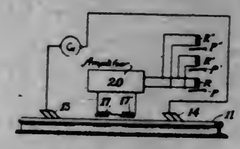
1,897,609. LUBRICANT DISCHARGE VALVE FOR FORCE FEED LUBRICATING SYSTEMS. IRVING COWLES, Detroit, Mich., assignor to Union Bank of Chicago, Chicago, Ill., a Corporation of Illinois, as trustee. Filed Aug. 26, 1929. Serial No. 388,322. 8 Claims. (Cl. 184—7.)



1. A valve structure including a casing provided at opposite ends with intake and discharge ports respectively, a piston reciprocable in said casing, a by-pass duct in said piston, a valve controlling the same, means for limiting the opening movement of said valve, a spring engaged with said valve for maintaining the same normally open and also maintaining the piston normally at the intake end portion of the casing, said piston presenting a greater area opposed to the discharge than to the intake end portion of the casing, and means associated with the piston and casing for retarding travel of said piston.

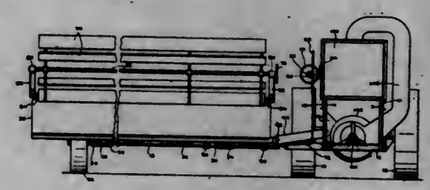
1,897,610. FLAW DETECTOR. HARCOURT C. DRAKE, Hempstead, N. Y., assignor to Sperry Products, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Dec. 30, 1931. Serial No. 583,854. 7 Claims. (Cl. 175—183.)

1. In a flaw detector mechanism for electrical conductors, said mechanism including means for sending current through the conductor to establish an electromagnetic field, a pair of detector coils adapted to traverse said field, said coils being so positioned relative to each other that the differential E. M. F. generated when one coil



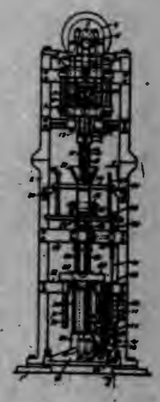
passes through a region of flaw reinforces and extends the differential E. M. F. generated when the other coil passes through said region.

1,897,611. COMBINE-HARVESTER FOR CUTTING AND THRESHING GRAIN. CARL A. GRASSWICK, Valley City, N. Dak. Filed Mar. 16, 1931. Serial No. 522,845. 7 Claims. (Cl. 56—20.)



1. In a combine-harvester, the combination of a main frame, a supplementary frame flexibly attached to one side of said main frame, a cylinder and concave carried by said main frame, a header platform and cutting mechanism tiltably carried by said supplementary frame, a depending stabiliser pivotally attached to the rear of said supplementary frame, and a conveyor for carrying the cut grain from said platform to said cylinder.

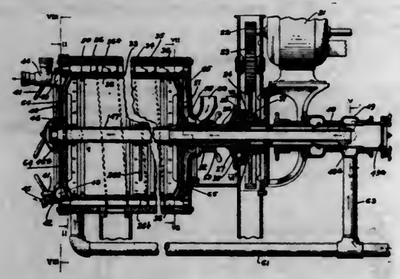
1,897,612. TAMPING MACHINE. AARON J. HELFRECHT, Madison, Wis., assignor to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed May 6, 1930. Serial No. 450,123. 17 Claims. (Cl. 18—5.)



16. In a tamping machine, a frame, tamping tools mounted on said frame, a tamping block movably mounted on said frame, a movable cylinder supporting said

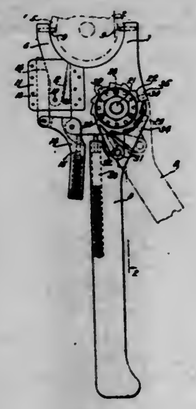
tamping block, means for delivering fluid to said cylinder to raise said tamping block to its initial tamping position, means for resisting with regulable pressure the discharge of fluid from said cylinder, whereby said cylinder and tamping block will be gradually lowered during the tamping operation, and means controlled by the lowering of said tamping block to rapidly exhaust the fluid from said cylinder and move said tamping block to its lowermost position.

1,897,613. APPARATUS FOR TREATING LIQUIDS. AAGE JENSEN, Los Angeles, Calif. Filed Mar. 12, 1930. Serial No. 435,288. 19 Claims. (Cl. 257—88.)



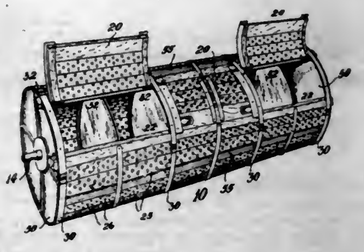
1. In an apparatus for treating liquids, a stationary casing, a rotating drum spaced therefrom, the space between being adapted to receive liquid to be treated, passageways for a heat exchange medium adjacent to the space through which the liquid undergoing treatment is passed, a cover plate through which the material undergoing treatment is discharged, and a joint between the cover plate and the surrounding casings, comprising a V-shaped ground seal.

1,897,614. WRENCH. JOEL R. JOHNSON, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 13, 1930. Serial No. 460,831. 5 Claims. (Cl. 81—53.)



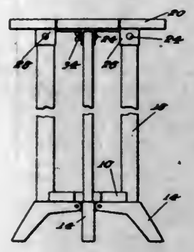
1. In a wrench, means for gripping a part to be tightened, a releasable member connected thereto comprising a ratchet wheel containing balls engaging recesses in the gripping means, resilient means for holding the balls in the recesses, and a handle connected to the releasable member and having a pawl for engaging the ratchet wheel.

1,897,615. CYLINDER FOR WASHING MACHINES. ROBERT L. LOGAN, Bayonne, N. J. Filed Mar. 19, 1932. Serial No. 599,863. 4 Claims. (Cl. 68—18.)



1. In a washing machine, a cylinder therefor, comprising a plurality of removable longitudinally extending sections each forming a part of the cylindrical wall of the cylinder, bands encircling said plurality of sections, said bands each having a plurality of joints, and means for unfastening the joints of said bands whereby band-sections may be displaced to permit replacement of said longitudinally extending sections.

1,897,616. COMBINATION TABLE AND CHRISTMAS TREE HOLDER. JAMES E. LYONS, Maywood, Calif. Filed Nov. 11, 1930. Serial No. 494,826. 6 Claims. (Cl. 45—31.)



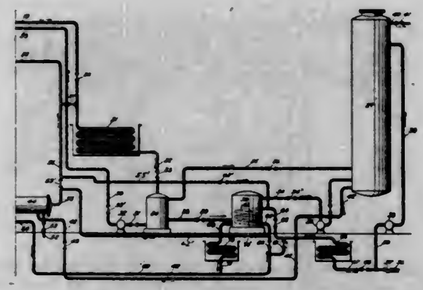
3. A combination stand, including a base, supporting legs pivotally mounted on the base, extensions for the legs, and a top removably mounted on the extensions, together with bracing means for rigidly positioning the combined supporting legs and extensions with respect to the base and to the top.

1,897,617. TREATMENT OF PETROLEUM DISTILLATES. LEV A. MEKLER, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Nov. 18, 1929. Serial No. 408,168. 3 Claims. (Cl. 196—144.)

1. A step in the refining of hydrocarbon distillates containing mercaptans which comprises subjecting the distillate to the action of X-rays.

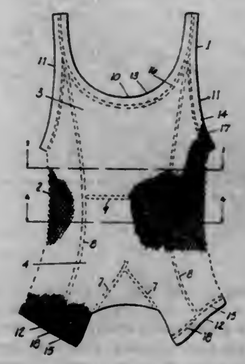
1,897,618. RECOVERING CONDENSABLE VAPORS FROM INCONDENSABLE GAS. JACQUE C. MORRELL, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Nov. 25, 1929. Serial No. 409,437. 4 Claims. (Cl. 196—8.)

2. The method of treating the incondensable gas and pressure distillate formed in the cracking of hydrocarbon oil which comprises scrubbing the gas with an absorption menstruum in a scrubbing zone, heating the menstruum to vaporize absorbed hydrocarbons therefrom, passing the heated and denuded menstruum in indirect heat exchange relation with the pressure distillate there-



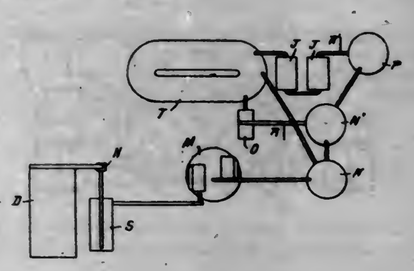
by distilling lighter fractions of the latter and cooling the menstruum, introducing the vaporized lighter fractions to said zone for contact with the menstruum therein and recycling the cooled menstruum to said zone.

1,897,619. BATHING SUIT. MYRON H. POWELL, Muskegon, Mich., assignor to Amazon Knitting Company, Muskegon, Mich. Filed Oct. 7, 1931. Serial No. 567,400. 2 Claims. (Cl. 2—67.)



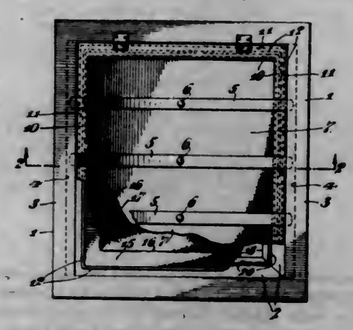
1. A bifurcated bathing or sun suit comprising open mesh side portions extending from top to bottom of the garment, front and back upper open mesh portions and front and back lower close mesh portions, said portions being joined at their adjacent edges by seams, the front and rear lower portions being conformed and joined to provide a crotch for the garment, reinforcing bindings for the upper edges of the front and back portions and the side portions providing neck and arm holes and shoulder straps, and reinforcing bindings for the legs secured to the lower ends of said side portions and said front and back lower portions, the longitudinal seams connecting the side portions to the upper and lower front and back portions being reinforced and extending from the shoulder straps to the leg bindings, the seams connecting the upper and lower front and back portions being reinforced and the reinforcing connected to the reinforcing of said longitudinal seams.

1,897,620. CONTINUOUS PROCESS OF REDUCING OR REFORMING WOOD OR OTHER FIBROUS MATERIAL. ROLAND B. RESPESS, Wickford, R. I., assignor to Respats, Inc., Providence, R. I., a Corporation of Rhode Island. Filed Jan. 15, 1932. Serial No. 586,729. 8 Claims. (Cl. 92—20.)



1. The continuous process of reducing moistened fibrous material without the presence of free water which consists of continuously feeding the material to a reducing mill, reducing the material therein, continuously withdrawing reduced material from said mill, selectively separating and grading said reduced material by air separation without the presence of free water, storing the sufficiently divided and reduced portion of material, further reducing the remaining separated portions of the material, and combining and intermixing the further reduced portions with said first reduced portion.

1,897,621. CASSETTE. FREDERIC W. REUTER, Towanda, Pa. Filed Dec. 23, 1929. Serial No. 415,886. 4 Claims. (Cl. 250—34.)



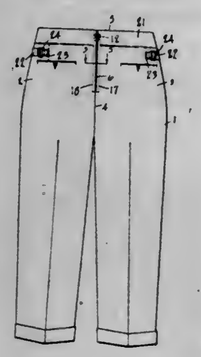
4. A cassette comprising an open frame, a front plate supported at its edges upon said frame, a cover-plate for the said front plate, which cover plate is supported by the said front plate, and means provided upon one of the said plates for engaging the other to prevent relative sliding movement between said plates.

1,897,622. GRAVITY SPRING LOCKING PAWL. ALLEN EDWIN RICE, Hermosa Beach, Calif., assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 13, 1930. Serial No. 481,730. 7 Claims. (Cl. 74—7.)

1. In a rotary machine, a rotary table having gear teeth carried thereby, a base upon which said table is supported, a pinion shaft, a pinion mounted on the shaft to engage the gear teeth carried by the rotary table, a pinion shaft rotation lock, including a lock ring secured to the shaft, a locking pawl pivotally supported in posi-

tion to engage said lock ring, a balancing weight connected with the locking pawl to rotate said pawl into position to engage said lock ring, an extension formed on the locking pawl, and a plunger yieldably urged into position to engage said extension and move said pawl to disengaging position.

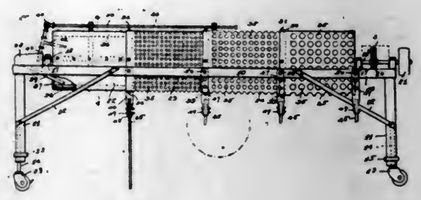
1,897,623. TROUSERS. LESTER F. ROSENBAUM, Kalamazoo, Mich. Filed May 14, 1932. Serial No. 611,252. 9 Claims. (Cl. 2—227.)



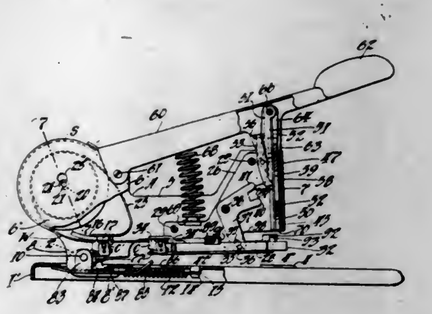
1. A pair of trousers or like garment having a continuous firm waistband across the front with a fly opening therebeneath, a waist placket opening at the rear, interlocking fastener elements secured to the edges of said placket opening, a coacting slide to actuate said interlocking fastener elements to unite the edges with a continuous fastener to form a close fitting band and garment that will be effectively supported on the body of the wearer, and adjusting straps and means at the sides of said garment.

1,897,624. MACHINE FOR WASHING AND SCREENING MATERIALS. HENRY CLINTON SEITZ, Niles, Ohio. Filed Jan. 14, 1930. Serial No. 420,648. 2 Claims. (Cl. 209—289.)

1. In a screening machine the combination with a frame, of a shaft extending lengthwise of the frame and having squared faces at spaced-apart intervals, a series of cylindric screen sections one in advance of another and about the shaft with the end of one section lapping the end of the next adjacent section and the lap being located in a plane that passes through a squared face on the shaft, a collar spaced from but surrounding the shaft at each squared face portion thereof, brace-bars having threaded inner ends which screw through said collars and butt against the squared faces of the shaft to hold the collars about but spaced from said shaft and to lock both the collars and the brace-bars to the shaft and means at the outer ends of the brace-bars for engaging the same with the screen-sections.



1,897,625. FASTENING MACHINE. VICTOR A. SVENSSON, Montclair, N. J., assignor to The Bates Manufacturing Company, West Orange, N. J., a Corporation of New Jersey. Filed Jan. 28, 1930. Serial No. 423,972. 21 Claims. (Cl. 1—2.2.)

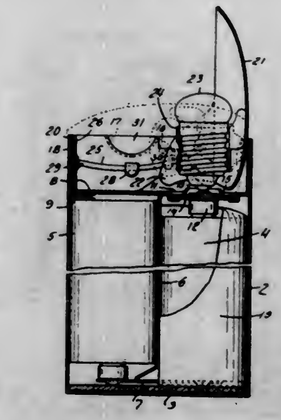


1. In a machine of the class described, a base member having an anvil, a frame member pivotally mounted on said base member at a point rearwardly of said anvil and carrying mechanism adapted to coact with said anvil to staple together material disposed between said members, the pivotal mounting for the frame member comprising pairs of lugs respectively provided on said members and a pivot pin mounted in one of said pairs of lugs and extending loosely through openings provided in the other pair, the said lugs on the frame member having forwardly extending arms disposed beneath the base member and coacting therewith to limit the upward pivotal movement of the frame member, and tensioned spring means connected to said arms and also to the base forwardly of such arms.

1,897,626. METHOD OF PRODUCING RUBBER ARTICLES. ARLEY H. VOSS, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 23, 1929. Serial No. 416,209. 4 Claims. (Cl. 18—52.)

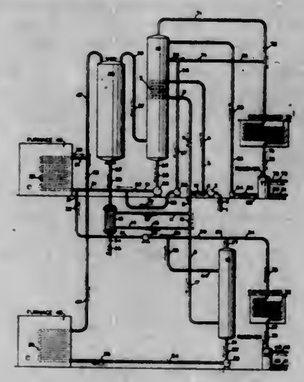
1. The method of producing hard rubber articles, which comprises heating finely comminuted hard vulcanized rubber in the presence of a powdered accelerator, and simultaneously compressing the rubber into the desired form.

1,897,627. BATTERY HAND LAMP. JOHN S. ZOOK, Madison, Wis., assignor to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed Apr. 23, 1931. Serial No. 532,207. 15 Claims. (Cl. 240—10.67.)



1. A separable head for a hand lamp battery comprising a holder, a lamp mounted within said holder, a spring pivotally connected thereto, said holder being adapted to pivot on said spring, and a stirrup device attached to said spring, said stirrup device having flexible leg portions and being removable with said spring and said holder from the battery.

1,897,628. TREATMENT OF HYDROCARBON OIL. CHARLES H. ANGELL, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Feb. 11, 1932. Serial No. 592,232. 3 Claims. (Cl. 196—49.)



1. A process of hydrocarbon oil conversion, which comprises subjecting a crude hydrocarbon oil containing fractions within the boiling range of motor fuel to fractional distillation to effect separation of the crude into components substantially within motor fuel boiling range and heavier fractions, subjecting said heavier fractions to conversion conditions of temperature and superatmospheric pressure in a heating coil, introducing the heated material into an enlarged reaction zone wherein vaporous and non-vaporous products are separated, subjecting the vapors to fractionation whereby their relatively light desirable components are separated from intermediate conversion products, subjecting said intermediate conversion products to further conversion in a separate heating coil, introducing the heated products from said separate heating coil into said reaction zone and simultaneously supplying to said separate heating coil motor fuel components of the crude whereby their anti-knock value is materially improved under the conditions employed in said second heating coil.

1,897,629. FLAMEPROOF ARTICLE. HENRIK BOVING, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 9, 1924. Serial No. 742,559. 6 Claims. (Cl. 178—264.)



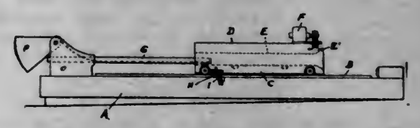
1. An electrical conductor having a flameproofing coating of selenium and sodium silicate applied thereover.

1,897,630. ELECTRICAL CONNECTION. GEORGE L. CHAMBERLAIN, Chicago, Ill. Filed Aug. 14, 1929. Serial No. 385,953. 2 Claims. (Cl. 247—27.)



1. In an electrical connection, the combination of a cable section, a tubular external connector member, a bushing fitted originally slidable on said cable section and inserted with relatively tight fit in the end portion of said tubular connector member, the outer end portions of said tubular connector member and bushing being countersunk to provide an annular flared pocket about the cable section, and a body of solder applied in said annular pocket whereby to join said tubular sheathing member and bushing and secure them to the adjacent circumferential portion of the cable section.

1,897,631. METHOD FOR CASTING PIPES. STUART B. CLARK, Riverton, N. J., assignor to United States Pipe & Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed May 9, 1931. Serial No. 536,159. 1 Claim. (Cl. 22—209.)

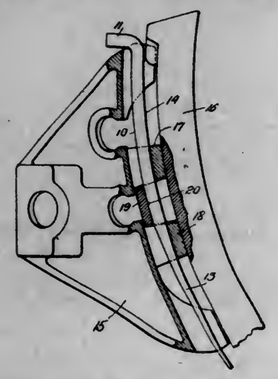


In the method of casting pipe in which molten metal is delivered to a rapidly rotating mold maintained at a fixed slight angle of inclination to a horizontal plane through a relatively retractable runner which delivers molten metal progressively toward and to the upper end of the inclined mold, the improvement which consists in increasing the rotative speed of the mold during the casting of the final end of the pipe so as to counteract to a large extent to the tendency to a gravital flow of the metal in the mold during this stage of the casting operation.

1,897,632. BRAKE-SHOE KEY. SETH A. CRONE, East Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y., a Corporation of New York. Filed Nov. 16, 1931. Serial No. 575,302. 4 Claims. (Cl. 188—243.)

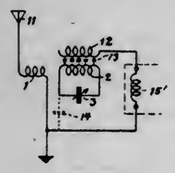
1. A brake-shoe key having a bearing surface extending for a relatively short distance intermediately of its length,

such surface being inclined relatively to those longitudinal surfaces of the key located at the same side therewith and



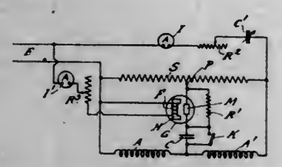
which are above and below such surface, the inclination of the bearing surface being inwardly with respect to the surface above it.

1,897,633. BAND-PASS FILTER. HENRI FRANÇOIS DALPAYRAT, New York, N. Y., assignor to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 19, 1929. Serial No. 408,304. 2 Claims. (Cl. 178—44.)



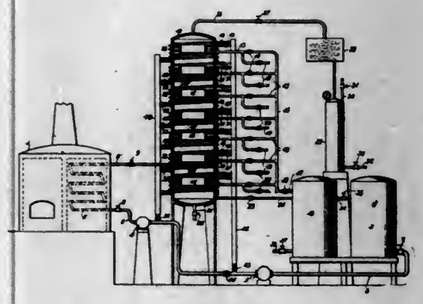
1. In a band-pass filter; an input circuit having an inductance, a tuned circuit having capacity and inductance, the inductance being coupled with said first mentioned inductance, a third inductance in close inductive relation with the inductance of the tuned circuit and having distributed capacity therewith, said third coil being open at one terminal thereof and circuit connections to the opposite terminal thereof, said capacity of the tuned circuit being in capacity relation with said circuit connections.

1,897,634. METHOD OF AND APPARATUS FOR ELECTROMAGNETIC TESTING. ALFRED V. DE FOREST, Southport, Conn., assignor to American Chain Company, Inc., a Corporation of New York. Filed July 24, 1923, Serial No. 653,455. Renewed Oct. 23, 1929. 30 Claims. (Cl. 175—183.)



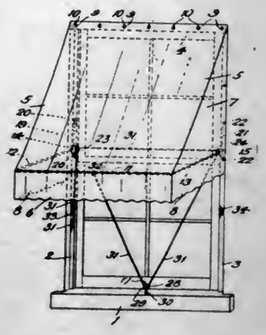
1. In the method of differentiating between the several mechanical properties of a metallic body, the steps which comprise the determination of the effects of said body on the reactance of a testing circuit at a plurality of different values of initial reactance.

1,897,635. PROCESS FOR CRACKING OILS. CARBON P. DUBBS, Wilmette, Ill., assignor to The Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Mar. 9, 1923, Serial No. 623,989. Renewed Dec. 19, 1929. 3 Claims. (Cl. 196—59.)



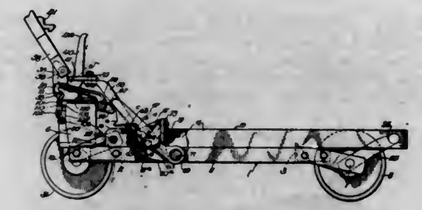
2. A process for cracking hydrocarbon oil comprising passing a stream of oil of restricted cross sectional area through a furnace wherein it is raised to a cracking temperature, causing such oil to flow directly and while in said restricted stream into an enlarged chamber, decreasing the temperature of the oil in said enlarged chamber by passing a cooling medium in heat interchange relationship therewith, condensing insufficiently cracked fractions from the vapors evolved from the oil in said chamber by passing additional quantities of cooling medium in heat interchange relationship with such vapors, separately removing from said chamber unvaporized constituents of the oil delivered thereto and insufficiently cracked fractions condensed from the vapors therein, uniting selected insufficiently cracked fractions removed from said chamber and unvaporized oil constituents removed from said chamber with charging oil for the process to be again passed through said furnace, and maintaining a lower super-atmospheric pressure in said chamber than is maintained upon the oil stream passing through said furnace.

1,897,636. AWNING. CHARLES H. J. DILG, New York, N. Y. Filed Nov. 13, 1931. Serial No. 574,798. 6 Claims. (Cl. 156—15.)



1. For window awnings including a U-shape frame having its ends pivoted to slides on vertical guides on the window frame, means for converting a lifting force on the cross piece of the frame to a depressing force on the inner ends thereof comprising a flexible connection between the inner ends and the cross piece of the frame slidable over a fixed guide on the window frame disposed below the awning frame.

1,897,637. LIFT TRUCK. JOHN O. FERNSTROM, Chicago, Ill., assignor to Barrett-Cravens Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 18, 1931. Serial No. 556,801. 13 Claims. (Cl. 254—2.)



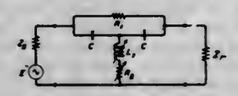
1. A lift truck comprising, in combination, main and lifting frames, lifting means carried by the main frame and operable to raise the lifting frame relatively thereto, and means for holding the lifting frame in a plurality of elevated positions comprising a pair of notched rack bars, means pivoting said bars to the main frame, a pair of pins, one cooperating with one of said rack bars and the other cooperating with the other of said rack bars, and means securing the pins to the lifting frame.

1,897,638. PURIFYING ART. IRVING D. HUBBELL, San Francisco, Calif., assignor to Silica Company of California, Ltd., San Francisco, Calif., a Corporation of California. Filed Mar. 4, 1930. Serial No. 433,184. 4 Claims. (Cl. 252—8.)

1. The process of removing contaminating iron from sand which comprises treating piled sand with an aqueous solution of sulphuric acid of not over 10% strength containing sulphur dioxide.

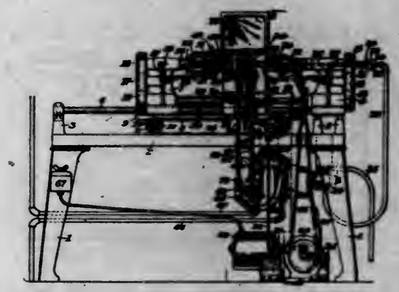
3. The process of treating silica sand contaminated with iron to remove the iron therefrom, which comprises arranging said sand in a series of stationary piles, pouring a weak solution of sulphur dioxide through one of said piles and then through another of said piles, and pouring another similar solution through said first-mentioned pile and then through said second-mentioned pile, whereby said sand is treated with said solution on the counter-current principle while the sand is stationary, and allowing a period of about six to twenty-four hours to elapse between the treatments applied to each pile.

1,897,639. TRANSMISSION NETWORK. JOHN G. KREER, Jr., Bloomfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 11, 1932. Serial No. 592,241. 11 Claims. (Cl. 178—44.)



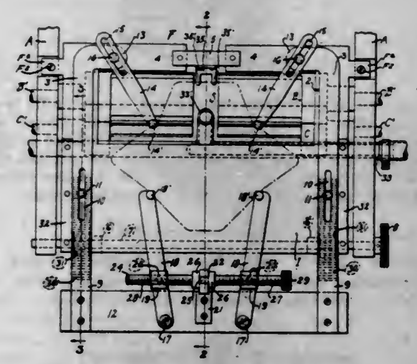
1. A wave transmission network having a pair of input terminals and a pair of output terminals, said network comprising an electrical path between each input terminal and a corresponding output terminal, a pair of equal reactances connected in series in one of said paths, a resistance connected in parallel with said pair of reactances between the outer terminals thereof and an impedance connected between the junction point of said pair of reactances and a point in the other of said paths, said impedance comprising a second resistance and a third reactance, connected in series relation, the sign of said third reactance being opposite to the sign of said pair of equal reactances.

1,897,640. APPARATUS FOR WORKING FUSED SILICA. GEORGE A. MILLAR, Ridgefield Park, N. J. assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Dec. 27, 1928. Serial No. 328,687. 4 Claims. (Cl. 49—7.)



1. In a machine for working fused silica, in combination, a work holding means and a mold axially aligned therewith, said mold being separable into a plurality of parts, means for synchronously rotating said work holding means and said mold, means for softening a portion of a hollow fused silica body held by said work holding means, means for inserting the softened portion of said fused silica body in said mold, means for increasing the air pressure in said hollow body, and means for separating the parts of said mold to allow removal of said fused silica body therefrom.

1,897,641. ADJUSTABLE FEED TABLE FOR ENVELOPE-MAKING AND LIKE MACHINES. CHARLES F. PFLANZE, Webster Groves, Mo. Filed June 1, 1931. Serial No. 541,195. 11 Claims. (Cl. 271—61.)

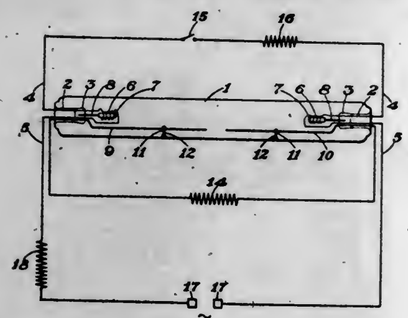


1. A feed table including a support for a stack of material being fed, a plurality of guiding members for maintaining the position of said stack of material on said support, means for adjusting said guiding members longitudinally with respect to said support, and a common means for simultaneously adjusting a plurality of said guiding members transversely of said support in opposite directions.

1,897,642. GASEOUS ELECTRIC DISCHARGE DEVICE. MARCELLO PIRANI, Berlin-Wilmersdorf, HANS EWEST-Berlin, and GEORG GAIDIES, Berlin-Pankow, Germany, assignors to General Electric Company, a Corporation of New York. Filed Apr. 7, 1932, Serial No. 603,862, and in Germany Apr. 16, 1931. 2 Claims. (Cl. 176—124.)

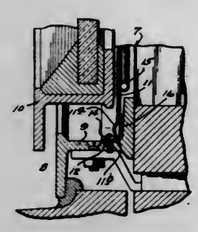
1. An electric discharge device comprising a container, electrodes sealed therein, a gaseous atmosphere therein,

and a plurality of electrically conducting members adjacent said electrodes and extending along the discharge



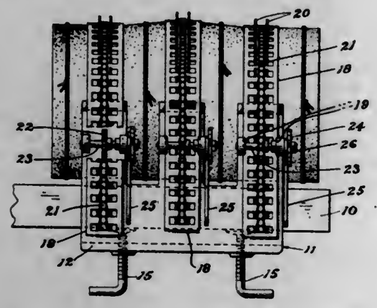
path between said electrodes, said members being connected together through an external resistance.

1,897,643. WEATHER STRIP FOR METALLIC WINDOW FRAMES AND SASHES. FRANK REESE, Minneapolis, Minn., assignor to Reese Metal Weather Strip Co., Minneapolis, Minn., a Corporation of Minnesota. Filed July 20, 1931. Serial No. 551,867. 4 Claims. (Cl. 189—65.)



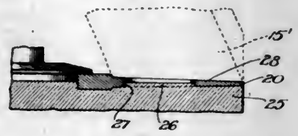
1. A metallic weather strip having at one of its longitudinal edges a substantially perpendicular flange, said weather strip adjacent to its flange being shaped to edgewise offset the flange from the plane of the weather strip to leave clearance for a fillet when the weather strip is applied to the angular member of the frame or sash.

1,897,644. MEAT ROLLING MACHINE. GUSTAV A. ROTHAMEL, Oakland, Calif. Filed Aug. 25, 1931. Serial No. 559,153. 5 Claims. (Cl. 100—57.)



1. A meat rolling machine comprising a bracket adapted to be secured to a table, a flexible member secured at one of its ends to the bracket to be wrapped around a piece of meat positioned adjacent the bracket, a chain overlying the flexible member and secured at one end to the bracket, and means for engaging and pulling on the chain to contact the flexible member about the meat.

1,897,645. APPARATUS FOR MAKING FORGED STEEL WHEELS. CLARENCE S. SWANSON, Chicago, Ill., assignor to Standard Forgings Company, Chicago, Ill., a Corporation of Illinois. Filed May 11, 1931. Serial No. 536,324. 2 Claims. (Cl. 80—16.)



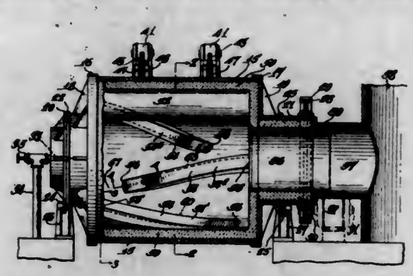
1. In apparatus for finishing rough forged steel discs for vehicle wheels, said discs comprising a hub center and a tapered, apertured web portion between the hub center and perimeter of the disc, mechanism for rendering the forged tapered disc smooth and for shaping the metal surrounding the apertures in the disc, said mechanism comprising a die complemental to one side of the disc and provided with upwardly projecting pads of less height than the thickness of the disc and registering with the apertures thereon, and rollers adapted to bear on the upper surface of the tapered disc for ironing the said surface and simultaneously shaping the metal surrounding the apertures on the opposite side of the disc supported upon said die.

1,897,646. PROCESS OF MAKING FORGED STEEL WHEELS. CLARENCE S. SWANSON, Chicago, Ill., assignor to Standard Forgings Company, Chicago, Ill., a Corporation of Illinois. Original application filed May 11, 1931, Serial No. 536,324. Divided and this application filed Jan. 25, 1932. Serial No. 588,623. 1 Claim. (Cl. 29—159.01.)

The method of finishing a rough forged wheel blank which has its web portion pierced from one side to the other at spaced points surrounding the wheel hub to form spoke-simulating portions, said piercing forming a projection or burr on said other side of the blank around the pierced portions, the method comprising ironing or burnishing said one side of the web and utilizing the pressure derived therefrom for simultaneously forging the projections or burrs into the material of the blank to shape and finish the edges of the spoke-simulating portions.

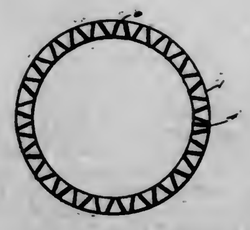
1,897,647. METHOD AND APPARATUS FOR MIXING A FURNACE CHARGE. CHARLES HART, Media, Pa., assignor, by mesne assignments, to William Steell Jackson, Philadelphia, Pa. Filed Dec. 6, 1930. Serial No. 500,555. 17 Claims. (263—33.)

17. The method of mixing a wrought iron puddling furnace charge in a cylindrical furnace, which consists in flowing a portion of the charge in a narrow stream around the internal circumference of the furnace and also endwise of the furnace, in reversing the direction



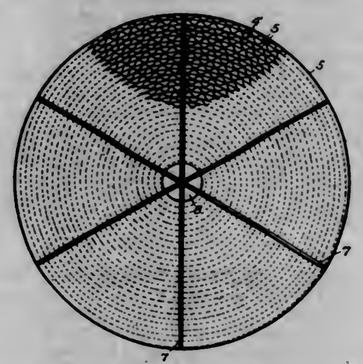
of endwise travel, a plurality of times for each rotation of the furnace and in reuniting the narrow stream to the remainder of the charge.

1,897,648. PISTON RING. LEO N. STEHR, San Diego, Calif., assignor to Stehr Piston Ring Company, San Diego, Calif., a Partnership composed of Fred W. Stehr and Leo N. Stehr. Filed Apr. 5, 1932. Serial No. 603,319. 3 Claims. (Cl. 74—109.)



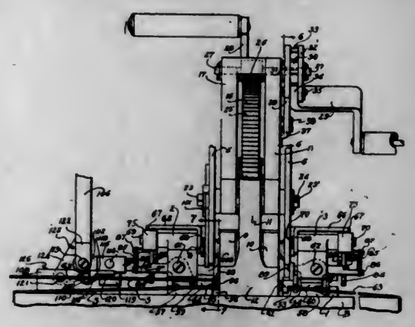
1. A piston ring of the class described formed of a plurality of small rings placed one upon another, each small ring being crimped with a greater amount of crimp adjacent its inner edge than at its adjacent outer edge.

1,897,649. METHOD AND APPARATUS FOR MINIMIZING SOUND. PAUL E. GOOD, Riverton, N. J., assignor to Elliott Company, Jeannette, Pa., a Corporation of Pennsylvania. Filed Dec. 27, 1929. Serial No. 416,866. 13 Claims. (Cl. 137—160.)



3. Silencing means for sound waves, comprising a unit including a corrugated strip-like body having corrugations extending at an angle of substantially 45° to its side edges.

1,897,650. STRAP TYING MACHINE. LEO M. HARVEY, Los Angeles, Calif. Filed Dec. 7, 1929. Serial No. 412,457. 27 Claims. (Cl. 81—9.1.)



1. A machine of the character described comprising a base, means for supporting the two ends of a binder in overlapping position on said machine preparatory to a tying operation, a pair of jaws pivotally connected together and together movable to and from operative position, a primary operating member connected to one of said jaws, a secondary operating member connected to the other of said jaws, means for locking said operating members together for moving the jaws into closing position, means for moving the primary operating and secondary operating members relative to each other for closing the jaws, and means operable on the retraction of said operating members for releasing the tied binder from the machine.

1,897,651. FLEXIBLE TREATED MATERIAL AND METHOD OF MAKING THE SAME. BARON HUBERT FREDERICK RICHARDS and ARTHUR H. HAROLDSON, Valparaiso, Ind., assignors, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed Mar. 17, 1930. Serial No. 436,268. 4 Claims. (Cl. 91—70.)



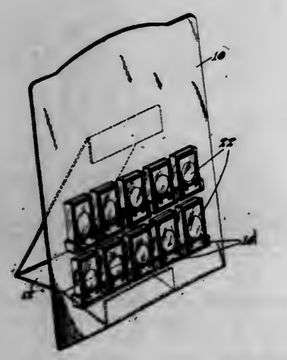
1. The method of providing a flexible, insoluble, non-fusible product, which consists in passing a piece of creped or crimped fibrous material through a bath of phenol and formaldehyde condensation product to impregnate the material, and then subjecting the impregnated material to a heat and pressure operation.

4. A flexible, insoluble, non-fusible, material comprising a sheet of creped or crimped fibrous material, and a phenol formaldehyde condensation product in its final infusible, insoluble state substantially uniformly distributed through the fibrous material.

1,897,652. DISPLAY DEVICE. ALBERT-GARFIELD DAVIS, Newton Center, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Mar. 22, 1929. Serial No. 349,245. 1 Claim. (Cl. 206—80.)

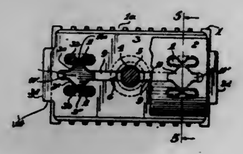
A display card having upper and lower rows of tongues cut in its body with their roots lying in straight parallel lines extending across the card, each tongue being resilient and adapted to be bent out of the plane of the card at its upper end, and a shallow open-ended double-walled

receptacle impaled upon each tongue and held positively in vertical position by being seated upon the root thereof, each receptacle being adapted to receive an elongated article and said article being maintained upright in sub-



stantial contact with the body of the card by the resiliency of the tongue, the tongues yielding outwardly to permit articles in the lower row to be withdrawn over articles in the upper row.

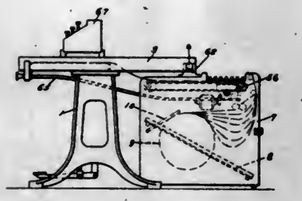
1,897,653. SAFETY RAZOR. NATHAN R. MAAS, Woodmere, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Dec. 26, 1929. Serial No. 416,864. 7 Claims. (Cl. 30—12.)



1. A safety razor comprising a head and a handle, said head including cap and guard members and a blade, said cap and guard members having opposed blade flexing and supporting portions, co-acting means on the cap and handle to secure the razor parts together and hold the blade in flexed position for shaving, said blade having an elongated slot provided with recesses or openings in the edge of its slot, some of said recesses terminating in longitudinal enlargements, said enlargements defining, in combination with said slot and recesses, ears which extend longitudinally of the blade, means on the guard to engage the slotted portion of the blade to align the guard and blade, and means on the cap in engagement with the ears aforesaid to align the cap and blade.

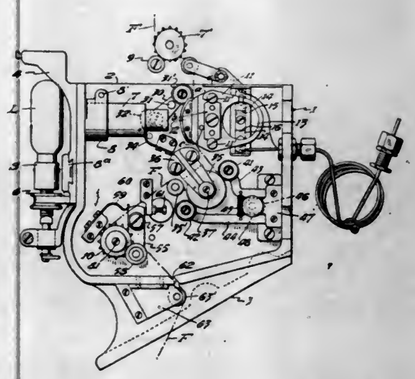
1,897,654. MECHANISM AND METHOD OF FEEDING A PLURALITY OF PAPER SHEETS. FRANK E. PFEIFFER and WILLIAM C. PFEIFFER, Dayton, Ohio, assignors to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 16, 1931. Serial No. 522,902. 26 Claims. (Cl. 271—2.6.)

1. In a paper-feeding machine for feeding a plurality of superimposed strips of paper, means for feeding said strips, means for maintaining said strips in a looped condition as they are being fed, said means consisting of a pair of co-acting rollers engaging one of said strips, power



means for operating said strip-feeding means, and a hand-operated means for disconnecting the power means from the strip-feeding means.

1,897,655. TALKING MOTION PICTURE APPARATUS. CHARLES HUGO SEAHOLM, New York, N. Y., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 8, 1929. Serial No. 405,743. 15 Claims. (Cl. 179—100.3.)



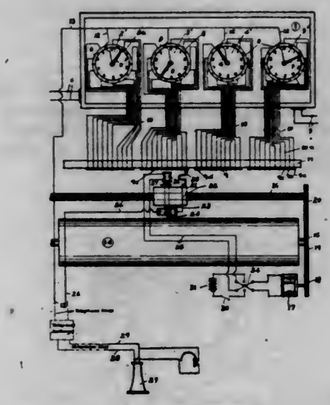
11. Apparatus of the character described comprising a photo-electric cell, a fixed member enclosing the cell and forming a film support, said member having continuous curved guide portions adapted to be engaged by the marginal portions of a sound record film and having an intermediate depressed portion, said member having a light aperture therein arranged between the guide portions thereof.

1,897,656. SAFETY RAZOR. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 17, 1930. Serial No. 496,171. 5 Claims. (Cl. 30—12.)



1. A safety razor blade having a central aperture and in addition thereto a pair of small internal positioning apertures and a pair of large clearance apertures immediately adjacent a shaving edge, the distance between the large apertures being greater than the distance between the small apertures.

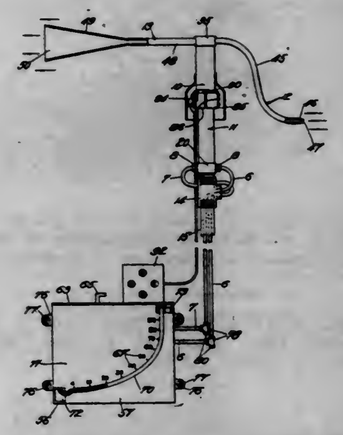
1,897,657. METERING SYSTEM. PAUL YATES, Pittsburgh, Pa., assignor, by mesne assignments, to The Oil City National Bank, Oil City, Pa., as trustee. Filed Dec. 26, 1929. Serial No. 416,373. 4 Claims. (Cl. 177—351.)



1. In a meter-reading system, the combination of a meter including an instrumentality movable progressively from one metering position to another, an incomplete electrical circuit associated with each of such metering positions, said metering instrumentality being adapted during its movement to complete one or another of said incomplete circuits, a cylinder provided with records impressed in a helical path in its face, which records correspond in significance and in sequence with the several positions which are successively taken by said metering instrumentality, a transmitter, a stylus carried by said transmitter and adapted to engage said cylinder, means for rotating said cylinder means for shifting said transmitter and causing said stylus to remain in the helical path recorded in said cylinder, contact means movable to connect, said transmitter to that particular incomplete electrical circuit which corresponds at a given instant to the position of said metering instrumentality, which contact means is movable in synchronism with the records upon said cylinder, whereby a particular record on the cylinder is engaged by said stylus during the interval of time in which said contact means connects said transmitter to the circuit which is associated with the corresponding position of the metering instrumentality, an electrical communication circuit, electrical connections from said incomplete ciruits to said communication circuit, electrical connections from said movable contact to said transmitter, electrical connections from said transmitter to said communication circuit, a receiver in said communication circuit, whereby, as the stylus moves over said cylinder the receiver is caused to signify the reading of the meter.

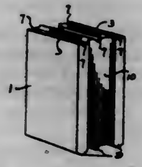
1,897,658. DEVICE FOR INDICATING WIND VELOCITY. ROBERT E. APTHORP, Salem, Mass. Filed June 4, 1930. Serial No. 459,191. 3 Claims. (Cl. 73—2.)

1. In a device for indicating wind velocity, the combination of a support, a vane movably carried by said support and having a nose and a tail, said vane having a pressure passage terminating in an opening facing in the same direction as the nose of the vane, said vane having an enlargement of conical form tapering towards the wind, said vane having a suction passage terminating in an opening in the base of said cone, said support having suction and pressure passages, said support and vane co-operating to connect the suction and pressure passages of



the former with the suction and pressure passages of the latter respectively, and means connected with the suction and pressure passages in said support for indicating the velocity of the wind.

1,897,659. METHOD OF FORMING SILO TILES. WALTER BRASSERT, Kalamazoo, Mich., and GLENN V. GLADVILLE, Bloomfield, Ind., assignors to Concrete Silo Company, Bloomfield, Ind., a Corporation of Indiana. Original application filed Apr. 9, 1929, Serial No. 358,848. Divided and this application filed July 22, 1931. Serial No. 552,344. 2 Claims. (Cl. 25—156.)



1. The method of forming silo tiles which consists of casting tiles to have vertical edges on approximate radial planes of the silo for which the tiles are intended, forming one or more vertical grooves in the vertical edges to reduce the area of the edges, burning and glazing the tiles, and grinding the vertical edges on each side of the grooves to exact common radial plane surfaces.

1,897,660. CONDUIT COUPLING AND LUBRICANT FLOW CONTROL DEVICE. CLYDE G. BUTLER, Cincinnati, Ohio, assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio, a Corporation of Ohio. Original application filed Jan. 18, 1930, Serial No. 420,315, now Patent No. 1,851,926, dated Mar. 29, 1932. Divided and this application filed Apr. 13, 1931. Serial No. 529,644. 3 Claims. (Cl. 284—18.)

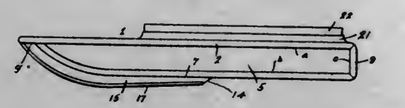
1. A coupling for filling a grease gun, the gun having a bore through the wall thereof adapted to receive the filling nipple of the coupling therein, comprising, a socket-like coupling member mounted in the bore in the wall of the gun, a filling device, a cooperating coupling nipple on the end of the filling device adapted to be inserted in said socket-like member, and a free floating

valve having a substantially centrally located flange therein adapted to seat against the end of said socket-like coupling member when the valve is in closed position,



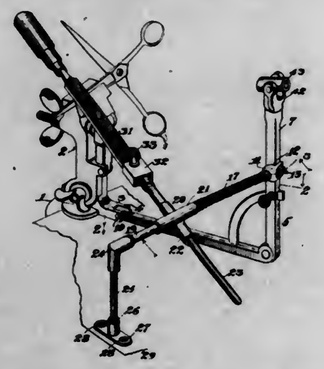
said valve adapted to be held in closed position by back pressure in the grease gun and adapted to be opened against back pressure by pressure in the filling nipple.

1,897,661. BOAT CONSTRUCTION. ROY A. ERSKINE, Cleveland, Ohio. Filed July 25, 1930. Serial No. 470,633. 5 Claims. (Cl. 9—6.)



5. In a boat construction, a hull formed entirely of sheet metal, including a series of combined frame and corner elements comprising elongated sheet metal members bent to provide marginal portions in different planes, and sheet metal plates having an outline corresponding to the openings between said frame members and overlapping said frame members on their inner surfaces and united at their marginal portions on the outside of said hull to the marginal portions of said sheet metal frame and corner elements by seams of continuous water-excluding welds.

1,897,662. COMBINED SHEAR SHARPENING AND CORRUGATING DEVICE. WALTER C. B. FARRAR, Huntington, Ind. Filed July 21, 1931. Serial No. 552,250. 3 Claims. (Cl. 51—69.)

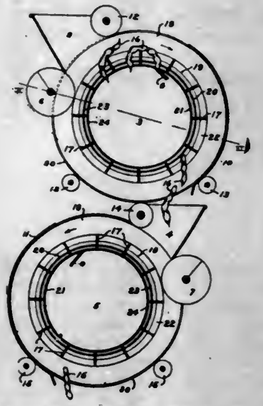


1. In a device of the class described, the combination with a support, of a clamp attached to said support, a rod attached to said clamp, a guiding device slidably mounted on said rod, a spring around said rod and having one end fastened to said clamp and its other end fastened to said guiding device, and sharpening means slidably mounted upon said guiding device.

1,897,663. COMPOUND BODY FOR THE PRODUCTION OF HOLLOW DRILL STEEL. FREDERICK FELIX GORDON, Sheffield, England. Filed Aug. 8, 1928, Serial No. 298,391, and in Great Britain Apr. 5, 1928. 3 Claims. (Cl. 22—203.)

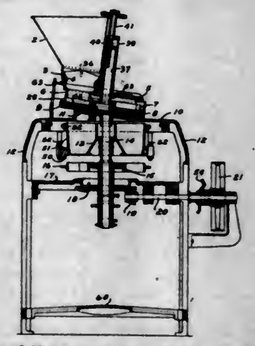
1. The method of making hollow drill steel, comprising covering a core of metal of the austenitic steel class with a layer of metal capable of separation from the core, pouring a mass of molten drill steel about the core in a mold, whereby the drill steel is united to the metallic layer, and subsequently removing the core from the casting by pulling the core from the composite casting whereby the core becomes elongated, stretched and reduced in cross section.

1,897,664. APPARATUS FOR TREATING BEANS. OSWALD H. HANSEN, Cedarburg, Wis., assignor to Hansen Canning Machinery Corporation, Cedarburg, Wis., a Corporation of Wisconsin. Filed Feb. 20, 1928. Serial No. 255,570. 8 Claims. (Cl. 146—86.)



1. A bean snipper comprising means for presenting an ungraded mass of beans to a rotor having a revolving surface and successive perforations of selected size formed to remove from the mass of mixed beans presented to said surface only beans of definite size, and means cooperating with said rotor to snip the ends of the beans as they are removed from the mass.

1,897,665. CAN FILLING MACHINE. OSWALD H. HANSEN, Cedarburg, Wis., assignor to Hansen Canning Machinery Corporation, Cedarburg, Wis., a Corporation of Wisconsin. Filed Feb. 1, 1929. Serial No. 336,724. 17 Claims. (Cl. 226—100.)

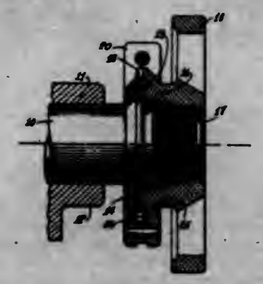


1. In a can filling machine, means forming a liquid receptacle, means forming an annular series of measuring

CARNEGIE LIBRARY OF ATLANTA

pockets revolvable about an inclined axis to successively enter and leave the liquid in said receptacle, means for delivering juice laden solid material into each of said pockets while advancing toward said liquid, a compression plate having an inclined surface formed to express surplus juice from the admitted solid material into said receptacle while each pocket enters said liquid, and means for effecting delivery of said material and juice admitted to said receptacle from each of said pockets after they leave said liquid.

1,897,666. MACHINE TOOL SPINDLE. FRANK O. HOAGLAND, West Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 5, 1930. Serial No. 479,942. 6 Claims. (Cl. 82—30.)



1. An attaching means for chucks and the like on driving spindles, comprising in combination, a spindle having a flange formed thereon, a conical bearing portion adjacent said flange, a threaded portion adjacent and extending beyond said conical bearing portion whereby a work supporting member may be threaded upon said spindle against said flange, centralized on said bearing surface and secured on said spindle in fixed position, and a ring adapted to surround said flange and a portion of said member when in position on said spindle to form a supplemental retaining means therefor.

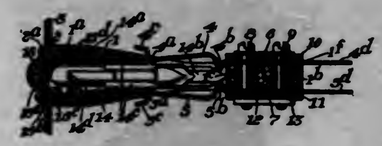
1,897,667. METHOD OF PRODUCING A CELLULAR CLAY BODY. TAJAMUL HUSAIN, Roseville, and GEORGE A. BOLE, Columbus, Ohio, assignors, by mesne assignments, to Cellular Clay Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed May 17, 1930. Serial No. 453,395. 14 Claims. (Cl. 25—156.)



1. In a process for producing a cellular fired clay product, the step which consists in generating and releasing a gas in a clay slip of fluid consistency by the interaction of an acid and a carbonate added to the slip.

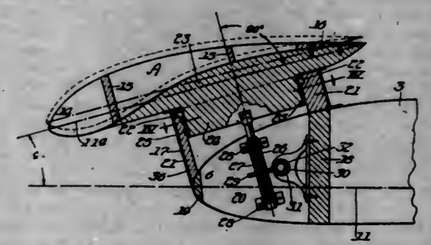
1,897,668. LAMP RECEPTACLE. LLOYD V. LEWIS, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1929. Serial No. 398,333. 4 Claims. (Cl. 177—329.)

3. A receptacle for a standard telephone switchboard lamp of the type comprising a tubular bulb secured between diametrically opposite spaced terminals carried by a wedge shaped base of insulating material, said receptacle comprising a body of insulating material provided with an opening for receiving said lamp, and two contact fingers attached to said body and each having a portion which is narrower than the distance between the terminals of said lamp and another portion which is substantially as wide as the base of said lamp, the narrow portions of said fingers being crimped to form one pair of projections and the wide portions being crimped to form another pair of projections, said one pair of projections being disposed opposite each other in a position to engage the terminals of said lamp and make electrical contact therewith, and said other pair of projections be-



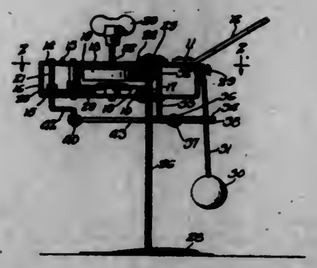
ing disposed opposite each other in such manner that when said lamp is inserted in said receptacle in approximately the correct position for said one pair of projections to engage the terminals of said lamp said other pair of projections will engage said wedge shaped base and will turn said lamp to the exact position for said projections to engage said terminals.

1,897,669. AIRPLANE. ALFRED C. LOEDDING, Baden, Pa., assignor of one-fourth to Frank C. Schroeder, Sewickley, Pa. Filed Oct. 23, 1930. Serial No. 490,602. 10 Claims. (Cl. 244—12.)



1. In an airplane, a main airfoil, an auxiliary airfoil, said auxiliary airfoil having its nose spaced above and in advance of the nose of the main airfoil and being movable in a direction perpendicular to its aerodynamic chord plane, means for moving the auxiliary airfoil, and means for limiting the movement of the auxiliary airfoil towards the main airfoil to always maintain an air passage therebetween.

1,897,670. MECHANICAL TOY. HERBERT J. MELVILLE, Chicago, Ill. Filed Oct. 22, 1929. Serial No. 401,401. 13 Claims. (Cl. 46—40.)



1. A mechanical toy comprising a body, a prime mover in said body, means actuated by said prime mover for tilting said body from side to side, and a supporting mem-

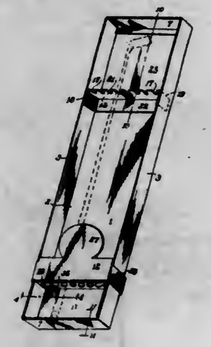
ber free from any operative connection with said prime mover and pivotally mounted upon each side of said body and adapted to advance longitudinally of said body coincidentally with each tilting movement of such side.

1,897,671. ARTIFICIAL REED FABRIC. JOHN E. MILLETT, Gardner, Mass., assignor to Millett Corporation, Gardner, Mass., a Corporation of Massachusetts. Filed Apr. 8, 1931. Serial No. 528,641. 3 Claims. (Cl. 139—420.)



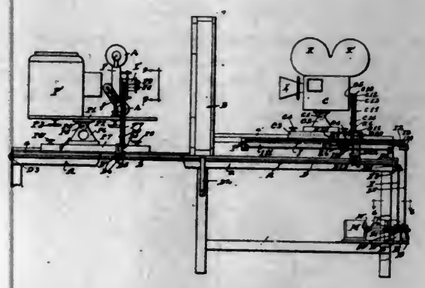
1. An artificial reed fabric consisting of tightly and immovably interwoven stiff and resilient, free warp and filler strands of artificial reed, the number of warp strands per unit of length and the number of filler strands per unit of length being so proportioned in the fabric that the fabric is approximately as flexible across the filler strands as across the warp strands and wherein the number of warp strands per unit of length is practically the same as the number of filler strands per unit of length, and the strands of one set, as the warp strands, are round and are spaced apart and the strands of the other set, as the filler strands, are close together.

1,897,672. PAPER BOX FOR ARTICLES HAVING SHAFTS AND HANDLES. THEODORE L. NEUMANN, Dayton, Ohio, assignor to The Dayton Paper Novelty Company, a Corporation of Ohio. Filed Oct. 4, 1930. Serial No. 486,401. 4 Claims. (Cl. 206—65.)



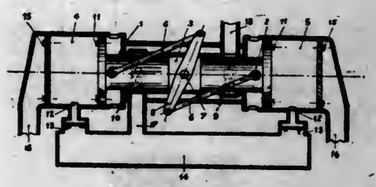
1. A paper box for articles having shafts and handles, comprising a bottom, side and end walls, a blank insertible in said box and doubled upon itself near one end thereof to form an erect portion formed with slots to receive said shafts or handles, and having a flat portion on each side of its erect portion to rest upon the bottom of said box, extensions on the ends of said erect portions of the blank, said side walls of the box formed with longitudinal slits, and tongues on said extensions adapted to enter slits for the purpose specified.

1,897,673. MEANS FOR PRODUCING MOTION PICTURES. WILLIS H. O'BRIEN, Los Angeles, Calif. Filed Apr. 16, 1928. Serial No. 270,836. 6 Claims. (Cl. 88—16.)



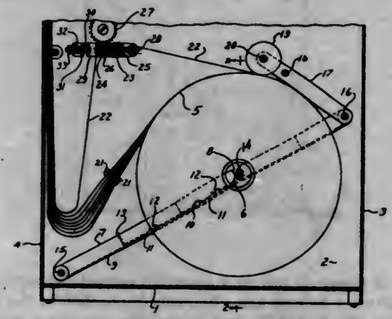
1. A photographic machine comprising a camera, means for movably supporting the camera relative to subjective matter to be photographed, a power operating mechanism, means for connecting the camera with the power mechanism for intermittently moving the sensitized film therethru, and means also connected with the power mechanism and arranged for connection at will with the camera for varying the distance of the camera relative to the subjective matter in a photographing operation.

1,897,674. DIRECT ACTING INTERNAL COMBUSTION AIR COMPRESSOR. RAUL PATERAS PESCARA, Paris, France. Filed Aug. 18, 1930, Serial No. 476,110, and in Germany Aug. 17, 1929. 3 Claims. (Cl. 230—56.)



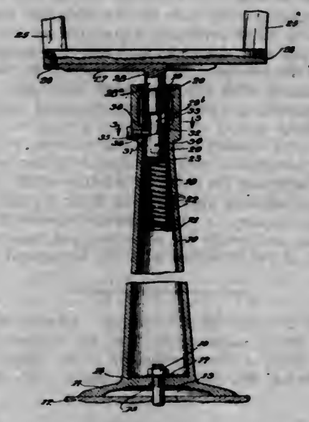
1. In a motor compressor of the type described, a plurality of compressing cylinders, a common motor cylinder coaxially disposed with respect thereto, a piston in each of said compressing cylinders, a second driving piston integral with each of said first-mentioned pistons and extending into said common motor cylinder, the compressing cylinders having outlets for compressed air at the ends thereof remote from the motor cylinder, and other outlets for compressed air in positions intermediate the ends thereof, a reservoir in connection with said other outlets, the motor cylinder having inlets towards one end thereof and exhaust openings towards the other end, a conduit connecting said inlets with said reservoir, the communication through the said conduit and inlets between the reservoir and the interior of the motor cylinder being maintained closed by one of the pistons in the motor cylinder until it attains the position towards the end of the power stroke, the exhaust openings being maintained closed by the other pision in the motor cylinder until it attains the position towards the end of the power stroke, for the purposes set forth.

1,897,675. WEB ROLL SUPPORTING DEVICE. FRANK E. PFEIFFER and WILLIAM C. PFEIFFER, Dayton, Ohio, assignors to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Original application filed Feb. 19, 1930, Serial No. 429,584. Divided and this application filed Feb. 24, 1931. Serial No. 517,688. 7 Claims. (Cl. 242—55.2.)



6. In a paper feeding machine, means to support a roll composed of a plurality of sheets, brake means restraining the rotation of said roll remotely pivoted therefrom, and tension means for drawing one of the sheets, said brake means engaging said roll at the point of departure of said sheet.

1,897,676. STOOL. EARLE R. RIES, Chicago, Ill. Filed Feb. 11, 1931. Serial No. 514,980. 3 Claims. (Cl. 155—95.)



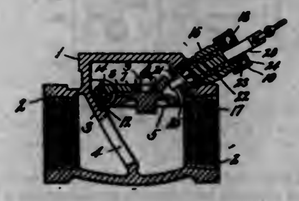
2. In a stool of the class described, a hollow standard provided with a top opening; a seat support and return mechanism insertable as a unit into said standard, said unit comprising a cylindrical sleeve formed at its lower end with an internal shoulder constituting a spring support, a spring within said sleeve abutting said internal shoulder, a seat post extending into said sleeve in contact with said spring, the said seat post provided with an upper cylindrical bearing surface capable of rotary and axial movement in said sleeve, said seat post having a portion of reduced diameter to define an annular cam surface therearound, means for retaining said cylindrical sleeve within the hollow standard, said means comprising a detent extending through said standard and sleeve into engagement with the aforesaid cam surface whereby the force exerted by said spring upon the seat post will tend to rotate said seat post to a position in which the detent engages the lower-most point of the cam surface.

1,897,677. TRACTOR DRAWN ROAD MAINTAINER. JESSE R. ROYER, Janesville, Iowa. Filed Jan. 12, 1931. Serial No. 508,076. 5 Claims. (Cl. 37—155.)



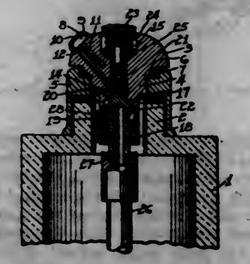
1. In apparatus of the character described, in combination, a wheel supported frame, a steering-member therefor, a pair of substantially horizontal superposed handwheels adjacent said steering-member, a grading implement supported on said frame for vertical and tilting adjustments, and connecting mechanisms between said handwheels respectively and opposite ends of said implement to independently raise and lower said ends.

1,897,678. VALVE. HAROLD W. SCHIORRING, Lexington, and FRANCIS P. FUHS, Boston, Mass. Filed Sept. 19, 1931. Serial No. 563,688. 4 Claims. (Cl. 137—162.)



3. In a valve of the character described, in combination, a valve casing adapted for instalment in a pipe line; a valve seat angularly disposed in the casing; a tube projected from the casing; a swinging arm disposed in the casing; a valve disc centrally freely engaged by the outer end of the swinging arm; a fusible pin supporting from below the outer end of the swinging arm in its raised position and extending into the tube; a spring controlled rod slidingly disposed in the tube, normally closing the inner entrance thereto, with its inner end affixed to the end of the fusible pin and with its outer end extending through the outer end of the tube; and a rod controlling spring disposed in the tube.

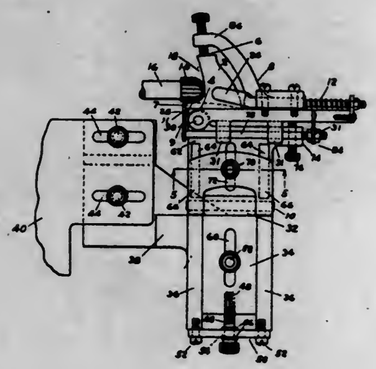
1,897,679. ATOMIZER CONTROL. JOY B. SCHMITT, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 26, 1931. Serial No. 571,020. 7 Claims. (Cl. 299—88.)



1. In a spraying device of the class described, a liquid receptacle having a discharge passage therefrom with an enlargement therein above the normal liquid level in the receptacle and in permanent communication with the

lower interior portion of the receptacle through said passage and having auxiliary communication with the upper portion of the receptacle, and a valve normally closing the discharge end of said passage at the outer side of said enlargement and operable when opened to effect a closing of said auxiliary communication.

1,897,680. WOOD-HEEL MACHINE. WESLEY J. SHAW, Haverhill, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 27, 1925. Serial No. 39,954. 20 Claims. (Cl. 12—47.1.)



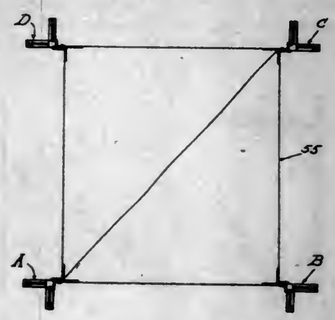
1. A machine for scouring heels having, in combination, a shank shaping tool, means for clamping a heel blank that has been grooved to provide a projecting lip, the clamping means being adapted to occupy a normal position such that the tool extends into the groove of the blank opposite an intermediately disposed portion of the lip, the tool being narrower than the lip, whereby the lip extends beyond the tool on each side of the tool when the tool occupies the normal position, and means for relatively pivotally actuating the clamping means and the tool on each side of the normal position to cause the tool to engage the extending portions of the lip on each side of the intermediately disposed portion, thereby to scour the lip.

1,897,681. CIRCUIT CONTROLLER. HENRY SMOYER, North Tonawanda, N. Y. Filed Dec. 20, 1929. Serial No. 415,530. 2 Claims. (Cl. 200—59.)



1. A foot rest for accelerator pedals, comprising a toe plate curved to fit the toe of a shoe, a pivoted bolt extending through the toe plate and pedal, the bolt extending an appreciable distance above the plate, a coiled spring mounted on the bolt and pressing against the plate to urge the plate into close engagement with the pedal to restrict movement of the plate under normal conditions, contact points on the pedal and extending above the pedal surface, said plate having depressions to accommodate the contact points to temporarily hold the plate against movement, and flanges rising from the inner edges of the plate to be engaged by the foot of the operator.

1,897,682. FOUNDATION GAUGE. BENJAMIN S. SOUDERS, Decatur, Ill. Filed Oct. 19, 1929. Serial No. 400,935. 3 Claims. (Cl. 33—85.)



1. A gauge of the class described comprising an upright standard, a pair of arms hingedly connected to the lower end of the standard, rods connecting the arms with the standard, means for adjusting the length of the rods, a bracket slidably arranged on the standard, hook means on the bracket for holding the bracket in adjusted position, the standard having slots to receive the hook means, a right angled guide on the bracket, a graduated bar connected for sliding on the standard means for clamping the bar in adjusted position, and a pointer on the bracket cooperating with said graduated bar.

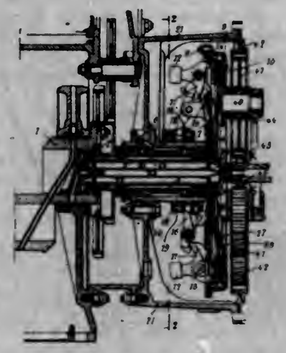
3. A gauge of the class described, comprising, a standard provided with vertical grooves in different sides thereof, a combined plumb-line and building cord support carried by the standard in vertically adjustable manner, a bracket engaging with sides of the standard and in said grooves so as to be vertically adjustable on the standard and carrying said combined support, a graduated slide carried by the standard, a pointer carried by the bracket for cooperation with the graduated slide, said combined support comprising a pair of right-angularly related arms, cord retaining means on each arm, a tape holding hook carried by the bracket close to the meeting point of the arms, and plumb-line retaining means on the bracket immediately adjacent the point of meeting of the arms with the bracket, whereby side building lines, a plumb-line and a diagonal line may be simultaneously carried in adjusted relationship, and means for adjusting and maintaining the angularity of the standard with the horizontal.

1,897,683. SPRAY GUN NOZZLE. ROBERT W. TRACY, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 22, 1930. Serial No. 503,934. 2 Claims. (Cl. 299—153.)



1. In a spray gun for spraying particles of solid material in a liquid medium, a discharge nozzle formed with a diametric ridge across its outer face and a cross slot at right angles to the plane of the ridge, the inner face being formed with a conical recess, the apex of said recess being within the center of said ridge and close to the oppositely disposed outer faces of the ridge, whereby the wall of the nozzle is relatively thin at the ends of the slot adjacent the apex of the conical recess to preclude any substantial deposition of the material being sprayed and relatively thick elsewhere.

1,897,684. MEANS FOR DRIVING ROTARY COMPRESSORS FOR THE SUPPLY OF INTERNAL COMBUSTION ENGINES. CHARLES RAYMOND WASBIGH, Rueil, France, assignor, by mesne assignments, to Eclipse Aviation Corporation, East Orange, N. J., a Corporation of New Jersey. Filed Mar. 21, 1928, Serial No. 268,519, and in France Apr. 2, 1927. 28 Claims. (Cl. 74—34.)



1. In a supercharger for an internal combustion engine, a housing, a driving shaft, a driving clutch member, means for rotatively connecting said driving clutch member with the driving shaft and permitting longitudinal movement thereof, a compressor shaft, a driven clutch member in fixed axial relation to the housing, means for rotatively connecting said driven clutch member with the compressor shaft, pressing means rotatable with said compressor shaft and freely responsive to centrifugal force for pressing one clutch member against the other, said pressing means being adapted to automatically increase the friction pressure as the speed of said compressor shaft increases and control means engaging the pressing means adapted to be moved by the operator for either holding said pressing means in an inoperative position or releasing the same independently of the driving clutch member.

1,897,685. DETONATOR SAFETY DEVICE. JOSEPH T. C. WILLIAMS and RUSSELL J. TOWNSEND, Arcadia, Pa. Filed July 12, 1932. Serial No. 622,166. 4 Claims. (Cl. 102—10.)

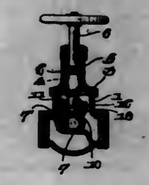


1. In a safety device for an electric detonator, a pair of insulated lead wires electrically connected to the detonator and having parallel exposed portions arranged adjacent to the detonator, a clip electrically and detachably connecting the exposed portions together to shunt a circuit to the detonator, flexible means adapted to be secured to the lead wires and to said clip respectively whereby upon pulling upon the lead wires at a safe distance from the detanator, the exposed portions are disconnected so that a circuit can be completed to the detonator.

1,897,686. LIQUID COATING COMPOSITION AND METHOD OF PREPARING THE SAME. JOHN A. WILSON, Elizabeth, N. J. Filed Dec. 28, 1929. Serial No. 417,264. 6 Claims. (Cl. 134—26.)

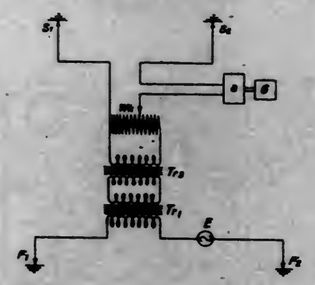
1. A liquid coating composition comprising a drying oil completely oxidized to a dry substantially solid state, combined with a gum of the group consisting of rosin and damar to form a true solution, and further dissolved in a suitable volatile solvent.

1,897,687. VALVE. DENZO YOSHIZAWA, Nakano Machi, Toyotama Gun, Tokyo Fu, Japan, assignor to Hisakichi Kubodera, Tokyo, Japan. Filed Apr. 29, 1931, Serial No. 533,822, and in Japan May 15, 1930. 2 Claims. (Cl. 251—46.)



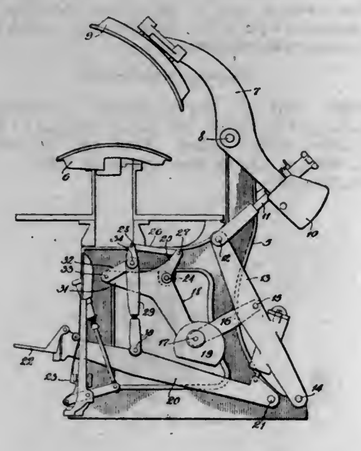
1. In a valve, the combination of a casing having a valve seat, a valve stem having a collar on its lower end, a supporting bearing; means for locking the bearing to the collar; a valve ball carried by the bearing adapted to engage the valve seat, and a series of balls interposed between the collar and the bearing.

1,897,688. METHOD OF AND APPARATUS FOR ELECTRIC EARTH EXPLORATION. RICHARD AMBRONN, Gottingen, Germany. Filed Mar. 13, 1929, Serial No. 346,768, and in Germany Mar. 20, 1928. 6 Claims. (Cl. 175—182.)



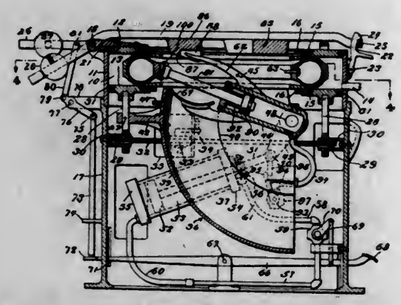
1. The method of electric earth exploration which comprises generating an alternating current within the range of very low frequencies that has a minimum value equal to the maximum frequency of natural earth currents and has a maximum value equal to the minimum frequency effective to produce elliptical polarization, transmitting said alternating current of very low frequency into the earth by means of a circuit comprising electrodes embedded in the ground at two spaced points, and observing the effect of said current in the earth by means of an electrical measuring instrument tuned to the low frequency of said current.

1,897,689. ACTUATING MECHANISM FOR GARMENT PRESSING MACHINES. HERBERT G. BEEDE, Pawtucket, R. I. Filed Apr. 30, 1932. Serial No. 608,506. 13 Claims. (Cl. 68—9.)



1. In a garment pressing machine including a frame and a fixed pressing element, a movable pressing element, a lever pivotally connected to the frame and supporting said movable pressing element, a toggle connected to said lever, a second lever pivotally connected to the frame, a connection between said second lever and toggle, an operating lever, a link pivotally connected to the operating lever and extending toward the said second lever, and a plurality of connections between said link and said second lever.

1,897,690. TIRE SHAPING AND AIR BAG INSERTING MACHINE. BARTHOLD DE MATTIA, Passaic, N. J., assignor to The Goodyear Tire & Rubber Company, a Corporation of Ohio. Filed Oct. 1, 1929. Serial No. 396,503. 23 Claims. (Cl. 18—2.)

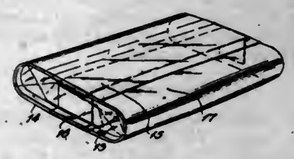


15. A machine of the class described comprising a substantially cylindrical casing, a pair of relatively spaced inwardly extending annular walls defining between them and within the casing an annular chamber open at its inner periphery, one of said annular walls being hinged with reference to the cylindrical casing so as to be movable to open and closed positions, means for creating a vacuum within said chamber, means for supporting a tire in pulley-band form adjacent the open inner periphery of the vacuum chamber so that the tread portion of the tire can be drawn into said vacuum chamber to shape the tire, a holder for an inflatable former disposed at one side of said vacuum chamber and of a width less than the bead diameter of the tire, a former-engaging member movable into and out of said holder and adapted on its inward stroke to move the former into said holder to elongate the same, and on its outward stroke to move the elongated former from said holder into the shaped tire, means including a pressure cylinder for actuating said former-engaging member, means for manually controlling the operation of said pressure cylinder to move the former-engaging member inwardly, and means actuated by the closing movement of the hinged annular wall of the vacuum chamber to reverse the operation of said pressure cylinder.

1,897,691. PARTIAL SAPONIFICATION OF MATERIAL CONTAINING ORGANIC ESTERS OF CELLULOSE. CAMILLE DREYFUS, New York, N. Y., and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Jan. 21, 1928. Serial No. 248,558. 1 Claim. (Cl. 8—20.)

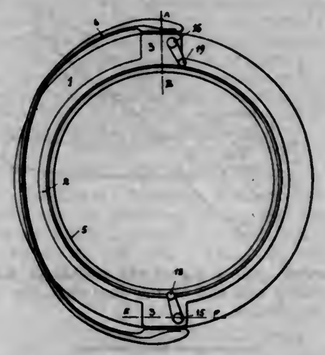
Method of increasing the ironing point of a mixed fabric containing cellulose acetate yarn and natural silk and simultaneously degumming the natural silk comprising immersing the same in a bath containing hydroxyl ions corresponding in concentration to that of an aqueous solution containing about 0.5 gram of sodium hydroxide per litre at a temperature of about 80° C., replenishing the supply of alkaline material as the same is consumed in the saponification process so as to maintain the alkalinity of the bath substantially constant and containing the treatment until the cellulose acetate is saponified not exceeding 11%.

1,897,692. COMMODITY PACKAGE. JOHN M. DE VOE, Greenwich, Conn., assignor to United States Tobacco Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 9, 1932. Serial No. 628,083. 2 Claims. (Cl. 206—46.)



1. A wrapped commodity package, including a quantity of the commodity enclosed within an inner wrapper, the opposite ends of which are folded inwardly at the ends of the package and said ends countersunk to provide an annular marginal ridge, a revenue stamp extending lengthwise of the package and having its opposite ends overlying and sealing the said infolded ends of the wrapper at the ends of the package, and an outer wrapper of transparent moisture-resistant material completely enclosing the outer wrapper including the revenue stamp which is visible therethrough, said outer wrapper having its ends infolded at the opposite ends of the package with the said infolded portions pressed into the countersunk ends and the overlapping folded portions of the countersunk ends of the outer wrapper being adhesively united except as to the free end of the outer fold at one end of the package which free end extends over the ridge surrounding the countersunk end and projects beyond the ridge providing a finger-grasping portion to assist in breaking the union between the adhesively united folded portions of the outer wrapper at said end of the package.

1,897,693. SHIP'S SCUTTLE. RENÉ DUCROUX, St. Nazaire, France. Filed Nov. 25, 1931, Serial No. 577,859, and in France Nov. 27, 1930. 8 Claims. (Cl. 114—178.)

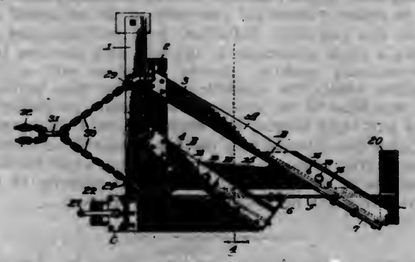


1. A ship's scuttle, comprising a glass-holder, pivoting means for said glass-holder, a slide engaging said pivoting means and having an elongated slot formed therein, and a rotatable member provided with an eccentrically disposed projection extending into the elongated slot of said slide.

1,897,694. PAPER COMPOSITION AND PROCESS OF MAKING SAME. CARLETON ELLIS, Montclair, N. J. Filed Apr. 12, 1926. Serial No. 101,580. 10 Claims. (Cl. 92—21.)

1. The process of making paper intended for use with food products, which comprises subjecting paper pulp of a fibrous character to a chemical treatment in which some hydrocellulose is formed, and incorporating with this fibrous pulp a wax dispersion comprising a wax and a light-colored petroleum oil.

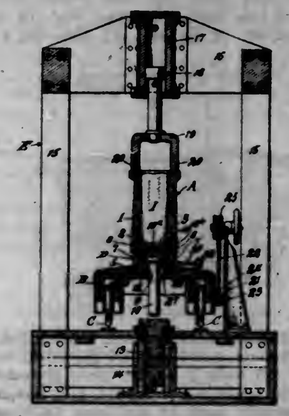
1,897,695. PLOW. EARL FRASER, Rock Island, Ill., assignor to McCarthy Improvement Company, Davenport, Iowa, a Corporation of Iowa. Filed Nov. 9, 1931. Serial No. 573,964. 16 Claims. (Cl. 37—108.)



1. In plow apparatus of the character set forth, a top frame adapted to be slidably supported upon the top of a pavement slab, a side support adapted to flank the edge of said slab, a plow blade carried by said support so as to under-cut said slab, and an adjustable shoe engaging said side support and adapted to rest upon the trench adjacent said slab.

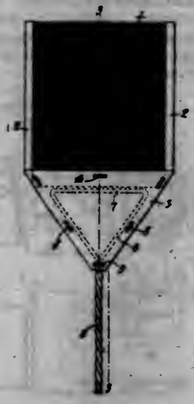
1,897,696. APPARATUS FOR STRIPPING INGOTS FROM INGOT MOLDS. EMIL GATHMANN, Baltimore, Md. Filed Oct. 6, 1931. Serial No. 567,281. 16 Claims. (Cl. 22—95.)

1. An apparatus for stripping an ingot from an ingot mold having an opening in its bottom and a movable closure for said opening, comprising a mold support, a frame above said support, a holding device mounted on said frame, means operatively connected to said holding device for moving the latter downwardly substantially coaxially with said mold and into positive engagement with



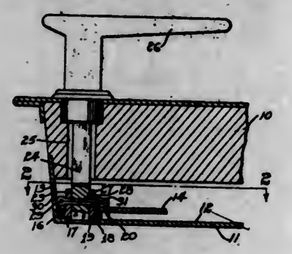
the upper face of the mold to prevent upward movement thereof, and vertically movable means mounted on said support and substantially coaxial with said holding device and adapted to engage said closure for moving the latter and the ingot upwardly with respect to said mold and holding device.

1,897,697. FLY SWATTER. WORTH M. GRAY, Elkin, N. C. Filed Apr. 11, 1931. Serial No. 529,476. 1 Claim. (Cl. 43—137.)



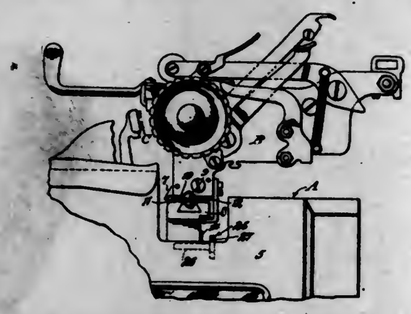
A fly swatter including a length of wire fabric, a protecting tape on each side edge of the fabric, said fabric having a single fold which is transversely thereof and provides a double thickness, separate thicknesses of flexible protecting material, extending throughout the width of the fabric, all portions of the transverse end edges of the fabric being extended between and concealed by said thicknesses, a handle having a triangular structure at one end seated between the protecting thicknesses of material and provided with a portion close to and parallel with the transverse ends of the fabric, staples joining said thicknesses at their edges to each other and to the wire fabric, and a staple connecting said thicknesses and straddling the handle, the staples and fabric cooperating to hold the triangular structure against movement relative to the wire fabric.

1,897,698. SPINDLE SECURING MEANS FOR DOOR-LATCHES. FLETCHER D. GRUND, deceased, Weston, Ohio, by William E. Singer, administrator, Weston, Ohio; said Grund assignor to The American Swiss Company, Toledo, Ohio, a Corporation of Ohio. Original application filed Aug. 28, 1930, Serial No. 478,869. Divided and this application filed Sept. 14, 1931. Serial No. 562,646. 2 Claims. (Cl. 292—352.)



1. In combination, a back plate, a latch bolt movable over said back plate, a roll back for retracting said bolt, a hub for said roll back, a bearing plate spaced from said back plate and apertured to receive said hub, means securing the bearing plate to said back plate, shouldered portions on said hub engaging said back and bearing plates respectively, a substantially tubular extension rigid with said hub and extending outside of said bearing plate, said extension and spindle having transverse openings adapted to register with each other, a detachable retainer element extending through said registering openings and having portions thereof disposed on opposite sides of said spindle, and means integral with and forming a part of the retainer element for releasably holding same in position.

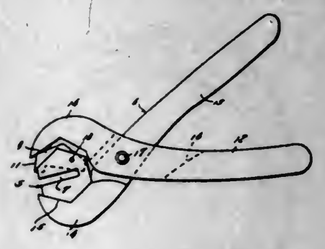
1,897,699. TYPEWRITING MACHINE. HENRY J. HART, West Hartford, Conn., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 13, 1931. Serial No. 529,839. 12 Claims. (Cl. 197—60.)



1. In a typewriter, the combination with a main frame, of means for supporting a carriage on said frame for letter space movements including upper and lower rails, means including self-aligning bearings for supporting the lower rail on the frame, and clamping bolts extending through the bearings and connecting the end portions of the lower rail and the frame.

1,897,700. TOOL. CLARENCE O. JONES, Norfolk, Va. Filed Nov. 10, 1931. Serial No. 574,184. 1 Claim. (Cl. 140—118.)

A twisting block for twisting tools comprising a polygonal-shaped body having a slot extending diametrically therein and opening at one end at the perimeter of the body, this body being provided with a slot therein on a plane at right angles to the first-mentioned slot, a swinging keeper in the second-mentioned slot, said keeper



being provided with a lug at the peripheral end of the slot for closing this end of the slot when the keeper is in retracted position.

1,897,701. PRODUCTION OF A SOAP PRODUCT. DALLAS R. LAMONT, Brooklyn, N. Y., assignor to Colgate-Palmolive-Peet Company, Chicago, Ill., a Corporation of Delaware and The Procter & Gamble Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 23, 1931. Serial No. 532,278. 8 Claims. (Cl. 87—16.)

1. The process of producing a soap product composed mainly of particles having a generally rounded outline, as distinguished from a sharp angular configuration, having an interior structure substantially enclosed by a protective but water permeable outer surface formed with myriads of minute cells distributed therein, and having the property of readily absorbing water and becoming wet throughout upon contact with water, and of dissolving readily and rapidly in water, which comprises incorporating a non-aqueous gas into heavy soap which is in a fluent state, effecting a thorough distribution of said gas throughout the entire body of the soap, the thorough distribution of the gas being effected while the soap is maintained under pressure substantially in excess of the atmosphere with its contained gas resultingly compressed, effecting formation of particles of generally rounded outline having the aforesaid water permeable outer surface and cellular internal structure by spraying said gas-containing soap into a region of reduced pressure sufficiently low to permit substantial expansion of the contained gas within the respective individual soap particles, and effecting a rapid conversion of the said soap particles into form-retaining condition thereby to retain said cellular structure within the respective individual soap particles and imparting to the product the aforesaid properties of ready and rapid wetting and dissolving, said non-aqueous gas being incorporated into the fluent soap in an amount in substantial excess of the quantity of gas which the soap is capable of containing at the reduced pressure of the region into which the soap particles are sprayed.

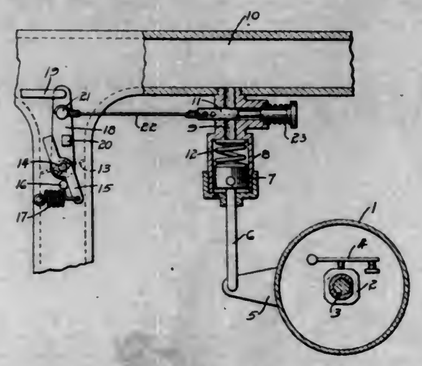
1,897,702. CIGARETTE CASE. WILLIAM LEWNES, Brooklyn, N. Y., assignor to Pota Chiguracos, Brooklyn, N. Y. Filed Jan. 24, 1930. Serial No. 423,146. 2 Claims. (Cl. 206—41.)



1. A device for holding cigarettes comprising a casing including a bottom wall, end walls, side walls, and a top wall hingedly carried by one of the side walls, said top

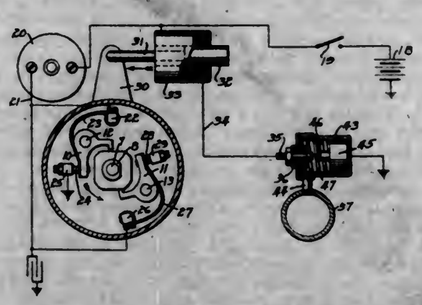
wall including a main cover section having the hinges connected therewith and a swinging section hingedly carried by the main section and forming a substantial continuation thereof, the swinging section forming an outlet for the delivery of the cigarettes from the casing, and means carried by the side walls of the casing for bunching the cigarettes in the casing and for urging the same toward one end wall of the casing adjacent to the hinge section, said means embodying a transversely extending coil spring having a terminal slidably carried by the side wall of the casing, and buttons mounted exteriorly of the side wall secured to the ends of the spring.

1,897,703. IGNITION TIMING DEVICE FOR LOW SPEEDS. MARION MALLORY, Toledo, Ohio, assignor to The Mallory Research Company, a Corporation of Delaware. Filed Oct. 26, 1931. Serial No. 571,005. 5 Claims. (Cl. 123—117.)



1. The combination with an ignition timer mechanism, of a member connected with said timer mechanism and movable back and forth to vary the timing, a throttle valve, an arm having a connection for controlling the throttle valve, with a lost motion between the idling position of said arm and the position where it begins to open the throttle, and means actuated by said arm as the throttle begins to open, to act on said member to advance the timing before there is any material increase in the engine speed.

1,897,704. SPARK RETARDING DEVICE. MARION MALLORY, Toledo, Ohio, assignor to The Mallory Research Company, a Corporation of Delaware. Filed Nov. 2, 1931. Serial No. 572,579. 15 Claims. (Cl. 123—117.)

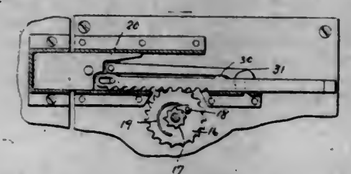


1. In an ignition timing device, a primary circuit including a circuit breaker for controlling the timing of the ignition, a solenoid operable, when energized, to cause an extreme retardation of the timing, and means shiftable under the influence of suction in the engine intake to energize the solenoid.

1,897,705. METHOD OF PRODUCING OR REGENERATING ALKALI-CARBONATES FROM ALKALINE PHOSPHATE-SOLUTIONS. HANS MÄNDLEN, Gaisenheim, and HANS HUBER, Wiesbaden-Biebrich, Germany, assignors to the Firm Chemische Werke Vorm- H. & E. Albert, Wiesbaden-Biebrich, Germany. Filed May 14, 1931, Serial No. 537,488, and in Germany May 14, 1930. 4 Claims. (Cl. 23—107.)

1. A process of treating alkaline solutions containing alumina and phosphate ions which comprises super-cooling the liquid whereupon tri-alkali phosphate separates out quantitatively and treating the residual aluminate liquor with carbon dioxide in known manner for the production of alumina and alkali carbonate.

1,897,706. DOORLOCK. KAY C. MCGEE, Laurel Hill, N. C. Filed May 19, 1932. Serial No. 612,354. 8 Claims. (Cl. 70—26.)



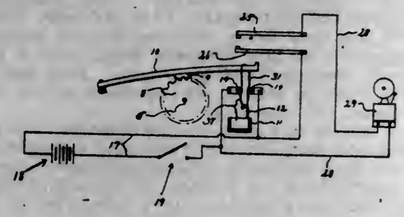
1. In a lock of the class described, a casing, a bolt constrained to shift longitudinally of the casing, a lever, pin and slot means connecting said lever with said bolt, time control means operatively connected with said lever for actuating the same to retract the bolt, means for normally locking said lever in protracted position operable upon initial movement of the lever relative to the bolt to release said bolt whereupon said bolt is free to be retracted upon continued movement of said lever.

1,897,707. SAFETY RAZOR. JOSEPH MUROS, New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed May 12, 1931. Serial No. 536,749. 6 Claims. (Cl. 30—12.)



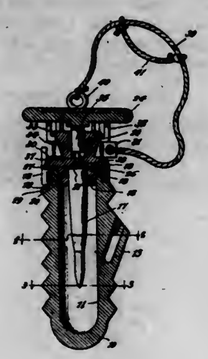
1. A safety razor comprising a guard member and a cap member to clamp a blade therebetween, the guard member being provided with a handle having an opening, a retainer rotatively supported in said handle and having graduations arranged to be read through said opening, said retainer having an interior recess and surrounding spaced rims having a space between their ends, said rims having inner eccentrically disposed surfaces, the cap having a stem adapted to pass through said space into the retainer, said stem having means to cooperate with the eccentric surfaces of the retainer for clamping the guard and cap against the blade and said graduations indicating the degree of such clamping pressure.

1,897,708. BANK PROTECTING DEVICE. BROR NASTROM, Holdrege, Nebr. Filed Nov. 25, 1930. Serial No. 498,193. 1 Claim. (Cl. 292—352.)



In a bank protecting device and in combination with a spring lever for normally holding a window guard in inoperative position and closing an alarm circuit when the lever is in position for releasing the guard, a fusible loop for holding the lever in position holding the guard in an inoperative position, said loop passing over the lever, a receptacle located under the loop, a hook on the receptacle engaging the loop and forming an anchor for the same, a pair of spaced bars between which the loop passes and which are contacted by the two side portions of the loop and a circuit, including a switch, connected to the bars.

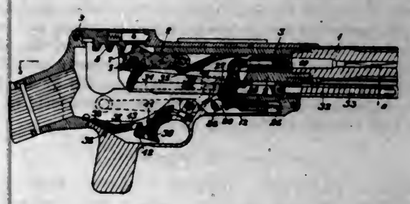
1,897,709. HAND GRENADE. VLADIMIR NIGERADSE, Mexico, Mexico, assignor of one-fourth to Alma Bessie Furness, Chicago, Ill. Filed June 8, 1931. Serial No. 542,923. 4 Claims. (Cl. 102—29.)



1. A grenade comprising a frangible shell, a cartridge holder in the shell, a base detonating exploder pivotally and slidably mounted on the shell, and means integral with the shell for receiving a ramrod.

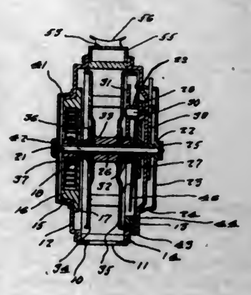
1,897,710. LIGHT MACHINE GUN. CARL PELO, Tavastehus, Finland. Filed Nov. 4, 1930, Serial No. 493,389, and in Finland Dec. 2, 1929. 5 Claims. (Cl. 42—4.)

1. Light machine gun with positive movement of the breech block relative to the breech sleeve together with the barrel, wherein the breech and slide are connected by a toggle mechanism wherein the link connected with the slide, at its pivot point on the latter, is formed as a



gear segment, and a stationary rack is provided in the breech housing, whereby the gear crown rolls along the rack during the movement of the rack relative to the slide.

1,897,711. FISHING REEL. GEORGE LOUIS PHILLIPPE, Harlowton, Mont. Filed May 23, 1931. Serial No. 539,570. 1 Claim. (Cl. 242—84.5.)

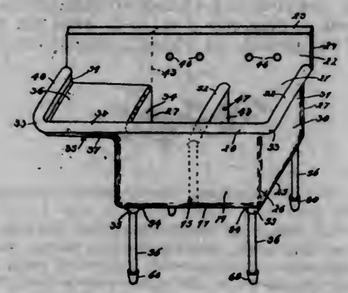


A fishing reel comprising a casing, a flanged disk connected to one side of the casing, a shaft journalled in the casing and in said disk, a ratchet wheel connected to the shaft and located in the chamber formed by the flanged disk, the flange of said disk having a slot therein, a spring pressed dog located in the chamber and having one end passing through the slot, and its other end engaging the ratchet wheel, a stub carried by that side of the casing which is enclosed by the disk, a hub rotatably arranged on the stub shaft and having a pinion and a gear thereon, a sleeve rotatably arranged on the shaft, a gear connected with the sleeve for meshing with the pinion, a spool having its hub rotatably arranged on the sleeve and having a pinion at one end thereof meshing with the gear, that side member of the spool adjacent the pinion on the hub thereof, having an outwardly extending flange forming a brake drum, an arcuate-shaped brake member for engaging the drum, manually operated means for actuating the brake member, a spring carried by that side of the casing which is opposite the side engaged by the flanged disk, a hub secured to the adjacent end of the shaft and to which the inner end of the spring is connected, clutch means between said hub and the sleeve for imparting a winding action to the spring when the line is being drawn from the spool and for rewinding the line on the spool by the unwinding action of the spring, and means whereby the spool will slip on the sleeve when the spring is fully wound and the line is being drawn from the spool.

1,897,712. FABRIC AND METHOD OF PRODUCING THE SAME. HERBERT PLATT and CYRIL MANSLEY CROFT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Oct. 21, 1927. Serial No. 227,856. 10 Claims. (Cl. 91—68.)

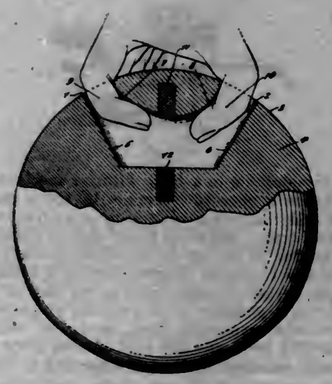
1. Method of treating fabric containing thermoplastic cellulose compounds, comprising treating the same with a solution containing a salt adapted to raise the "sticking" point of such fabric when subjected to a hot iron.

1,897,713. SCULLERY TANK AND TABLE. WILLIAM F. ROESCHER, Philadelphia, Pa. Filed June 25, 1932. Serial No. 619,227. 2 Claims. (Cl. 4—187.)



1. In a device of the kind described, the combination of a main body section fashioned from a sheet of stainless steel broken to provide a bottom, a front wall, an outturned roll flange at the upper edge of said front wall, inturned extensions at each end of said front wall, the upper ends of which terminate short of the upper edge of said front wall to form shoulders, a rear wall and splash board portion, an inclined outwardly projecting flange at the upper end thereof, inturned extensions at the ends of said rear wall, the upper ends of said extensions terminating short of the top line of said rear wall and forming shoulders and upturned extensions at the ends of the bottom wall, the ends of said last named extensions being welded to the contiguous ends of the extensions on the front and rear walls, an end wall produced from a sheet of material fashioned to provide a head and broken to produce a roll flange, said end wall fitted within the space between one set of extensions and welded thereto, a roll flange filler fitted between the adjacent ends of the roll flanges on said end wall and the front wall of the main body section and welded thereto, another end wall fitted within the space between the other set of extensions and welded thereto, and a table sections produced from a sheet of metal broken to provide a drain board, an upstanding front wall, a roll flange at the upper edge of said front wall, an end wall projecting upwardly from one end of the drain board with the meeting ends of said front and end walls welded together, a roll flange at the upper end of the end wall, a filler between and welded to the last mentioned roll flanges, a splash board portion extending upwardly from the rear edge of the drain board, an inclined rearwardly projecting flange at the upper end of the splash board section, and an end flange projecting rearwardly from one end of the splash board portion and welded to the adjacent end of the flange at the upper end of the splash board section, said table section fitted into the main body section above the second mentioned end wall with the splash board elements in endwise alignment and the front roll flanges also in endwise alignment, said table section being welded to the main body section along all meeting edges whereby an integral rigid unitary structure is provided.

1,897,714. BOWLING BALL. ELY M. T. RYDER, Yonkers, N. Y. Filed Feb. 11, 1932. Serial No. 592,246. 6 Claims. (Cl. 273—63.)



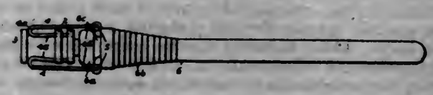
1. A bowling ball having a finger grip disposed adjacent the outer surface of the ball, said grip having a finger-engaging wall extending inwardly from the outer surface of the ball and of such configuration that the finger engaging the same will bend along it.

1,897,715. KNOCK-DOWN BOX MANUFACTURE. JOHN R. VAN WORMER, Toledo, Ohio, assignor, by mesne assignments, to The Guardian Trust Company, Cleveland, Ohio, a Corporation of Ohio, trustee. Filed June 16, 1924. Serial No. 720,307. 32 Claims. (Cl. 93—49.)



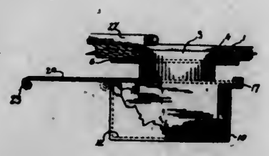
6. A machine for handling sheet material embodying a conveyor belt for moving sheet material, a plunger movable against the material during material shifting to flex a portion of said material, and stationary guides for directing the flexed portion into folded over position.

1,897,716. SPINDLE. GEORGE A. ADSIT, deceased, East Paterson, N. J., by Blanche W. Adsit, executrix, East Paterson, N. J. Filed Jan. 8, 1932. Serial No. 585,432. 5 Claims. (Cl. 242—46.6.)



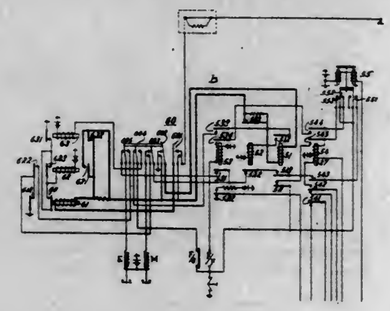
1. In combination, a spindle for receiving the core of a mass of windings and having a collar at its butt portion and a clip consisting of a piece of stiff elastic material rebent on itself and position with its legs substantially parallel with the spindle and having the terminal portion of one leg projecting toward the free end of the spindle and extending into the collar from the butt-side end thereof and the other leg forming a grip to grip the core.

1,897,717. TABLE ATTACHMENT. WILLIAM APPEL, Little Rock, Ark. Filed Aug. 10, 1931. Serial No. 556,233. 6 Claims. (Cl. 45—75.)



1. The combination in a table with an aperture in each of two diagonally opposed corners of its top, a connecting band, the said connecting band adapted to line the inner surfaces and extend below the lower edge of the said aperture and having at its top an outwardly extending flange and on its lower part an external thread, a holding plate with a downwardly extending slide in the edge of its sides its central part adapted to fit over the extending lower end of the said connecting band, means for holding the said connecting band and the said holding plate in fixed or removable relations with each other and to the upper and under surfaces of the top of the said table, and in removable relation with the said holding plate and underside of the said table, a container, the said container held in removable attachment to the said holding plate and underside of the said table.

1,897,718. REMOTE CONTROL SYSTEM. ROGER BATAILLE, Paris, France, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 7, 1926, Serial No. 133,858, and in France Sept. 9, 1925. 4 Claims. (Cl. 177—353.)



2. In a remote control system, a plurality of switching devices, synchronously operated selectors, a single conductor common to all said devices, a key individual to each device, each key having three positions, means including circuits controlled by said synchronously operated selectors through the individual key of each device in its first position for individually operating and supervising each device, means including circuits controlled over said single conductor through all the keys in their second positions for simultaneously operating and supervising all such devices, and means for isolating the operating circuits of each device from control over said single conductor and from control over said selector switches in case the individual keys are in their third positions.

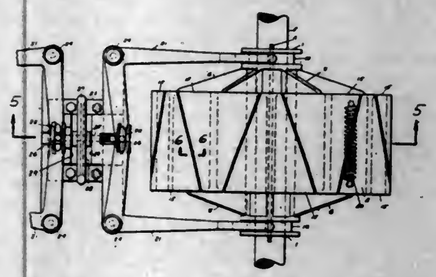
3. In a remote control system, a plurality of switching devices each having an open and a closed position, a series circuit including a relay individual to each device, said relays energized over said series circuit in case said devices are in their closed positions, means for automatically releasing any one of said devices to its open position, means individual to each device operated responsive to such device reaching its open position for opening a point in said series circuit to release all of said relays, means for simultaneously releasing all of the remaining devices to their open position responsive to the release of said relays, means individual to each device operated responsive to the operation of said individual circuit opening means for placing a shunt circuit around said points opened by said individual circuit opening means to prepare said relays for operation over said series circuit, a key common to all said devices, means responsive to an operation and a release of said key for completing said series circuit to simultaneously energize all said relays by way of said shunt circuits, and circuits completed by the energization of each of said relays for operating said devices to their closed positions.

1,897,719. DEVICE FOR TREATING THE EYELASHES. MARJORIE A. BIRK, New York, N. Y. Filed Aug. 9, 1932. Serial No. 628,052. 11 Claims. (Cl. 132—31.)



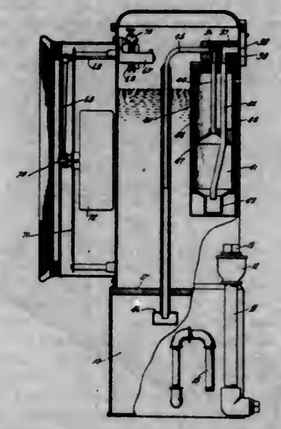
1. A device for treating the eyelashes comprising an outwardly projecting handle portion, and a thin inner end portion which is concavely curved flatwise to fit around the edge of the eyelid and which is also concavely curved edgewise to engage with the outer sides of the lashes and around which the lashes may be abruptly bent so as thereby to become set in a position which more effectively displays their length.

1,897,720. ADJUSTABLE BELT PULLEY. FREDERICK P. CONNORS, Detroit, Mich. Filed July 1, 1929. Serial No. 375,093. 4 Claims. (Cl. 64—8.)



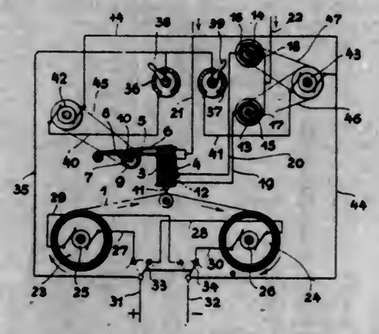
1. An adjustable pulley adapted for changing the pulley diameter and used in combination with a pulley shaft, comprising a double hub frame formed of two tapered hub sections having suitable central bearings for mounting on a pulley shaft and splined thereto, each of said tapered hub sections being formed with a series of radially positioned hub ribs uniformly spaced along the tapered wall elements, pulley rim segments slidably mounted along the edges of said hub ribs, movable thereon in a direction parallel to the rib edge only, the rim segments on each of the hub sections being positioned to alternately overlap and interweave with the rim segments on the opposite hub sections, clutch means suitably mounted for engaging the two hub sections in a manner for displacing said hubs along the supporting pulley shaft in opposite directions, said alternately interwoven rim segments engaging each other in a manner for causing a sliding displacement thereof along the hub rib slides in opposite directions as said hub sections are being displaced causing a change of the pulley diameter.

1,897,721. MECHANICALLY OPERATED GAS ANALYZER. ARTHUR B. CUNNINGHAM, Chicago, Ill., assignor to Republic Flow Meters Company, Chicago, Ill., a Corporation of Illinois. Filed June 18, 1926. Serial No. 116,777. 10 Claims. (Cl. 23—256.)



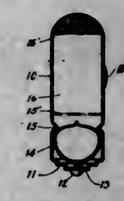
8. A gas analyzing apparatus comprising a measuring receptacle having an inlet adjacent the lower end thereof and an outlet adjacent the top, a vessel surrounding said measuring receptacle and having a liquid therein, means for causing the liquid in said vessel to fill and empty said measuring receptacle, a tank having an absorbent or a constituent of the gas measured, a conduit communicating with the outlet of said measuring receptacle and terminating in said tank, a second measuring vessel for receiving the unabsorbed gas from said tank, an outlet conduit from said second measuring vessel and sealed at its remote end by the liquid of said vessel whereby the second measuring chamber is vented to the atmosphere when the liquid in the measuring vessel is lowered and sealed when the liquid is raised.

1,897,722. SOUND RECORDING AND REPRODUCING MEANS. KARL DAHMEN, Dusseldorf, Germany. Filed Apr. 29, 1931, Serial No. 533,711, and in Germany Mar. 30, 1929. 4 Claims. (Cl. 179—100.2.)



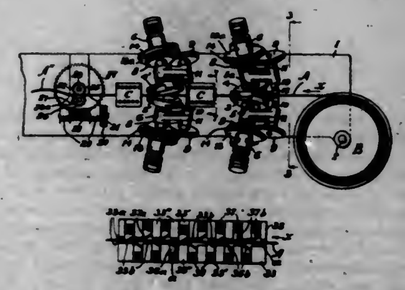
1. A method of recording acoustic signals, comprising the steps of producing two records for each acoustic signal, each of said records having a time period and intensity different from that of the other record produced by the same signal, the sum of the intensities of two records produced by the same signal having a constant value, and superimposing records having a different frequency of fluctuations of intensity.

1,897,723. REFRIGERATING DEVICE. WALTER H. FREE, New Rochelle, N. Y. Filed Apr. 29, 1927. Serial No. 187,562. 8 Claims. (Cl. 62—93.)



5. A refrigerating device comprising a container, and an ampule of liquefied gaseous refrigerant in said container, said ampule being adapted to be broken by impact on the container to permit the refrigerant to expand within the contsiner whereby a cooling action is produced.

1,897,724. SHARPENING MACHINE. HENRY J. GAISMAN, New York, and CONRAD SCHUMACHER, Lynnbrook, N. Y., assignors, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Original application filed Feb. 4, 1927, Serial No. 165,903. Divided and this application filed Jan. 2, 1931. Serial No. 506,148. 9 Claims. (Cl. 51—112.)

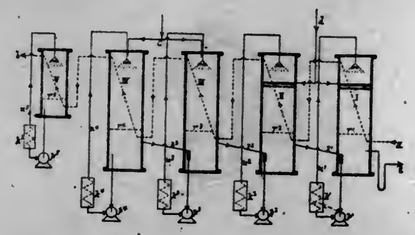


1. Means for supporting and aligning a perforated strip of metal while traveling comprising independently movably supported spaced fingers adapted to enter perforations in the strip, means to propel the strip, and means supporting said fingers and retaining them permanently from traveling with the strip to support the latter, said fingers having portions arranged to engage the strip at edges of its perforations during travel of the strip to cause the fingers to recede from the strip.

1,897,725. PROCESS FOR EXTRACTING CARBON DIOXID FROM GASEOUS MIXTURES AND FORMING ALKALINE CARBONATES. WILHELM GAUS, KARL HOCHSCHWENDER, and WALTER SCHUNCK, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 16, 1927, Serial No. 191,775, and in Germany May 28, 1926. 2 Claims. (Cl. 23—61.)

1. The process for extracting carbon dioxid from gases containing the same and forming alkaline carbonates, which comprises passing said gases through a succession of washing towers, in each of which a wash liquid is circulated with interposed cooling, while continuously admitting ammonia into one of the first towers, continuously admitting an aqueous nonalkaline liquid into the

last tower where the gas leaves, continuously withdrawing ammonium carbonate solution of a desired concentration from the first tower and continuously transferring a portion of the circulated liquid to each preceding tower of the series, considered in relation to the direction of the flow of gas.

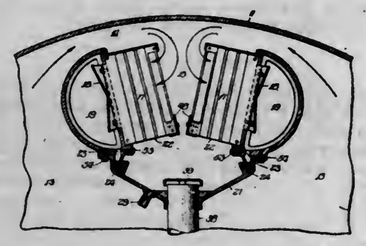


1,897,726. MOP. NEWTON S. HILLYARD, St. Joseph, Mo. Filed Nov. 13, 1930. Serial No. 495,400. 6 Claims. (Cl. 15—121.)



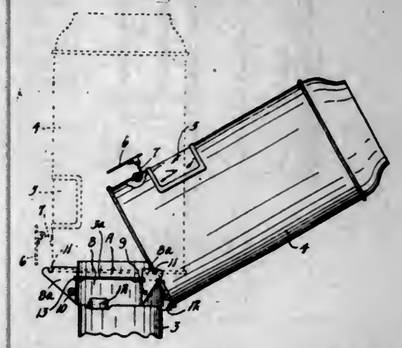
1. In a device of the character described, a rectangular shaped base member, upwardly and inwardly extending side flanges on the base member, squeegees fixed to the outer faces of said flanges in diverging relation to each other, a mop cloth extending across and over said squeegees, and rectangular loop shaped clamp members pivoted to said base member on its upper side and transversely of said squeegees and having side bars extending longitudinally and cooperating with said flanges to clamp the ends of the mop cloth to the base member.

1,897,727. VAPOR PURIFIER. WALTER J. HUGHES, WALTER H. GREEN, and ALBERT B. HODGES, Chicago, Ill., assignors to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Filed May 2, 1927. Serial No. 188,104. 25 Claims. (Cl. 122—491.)



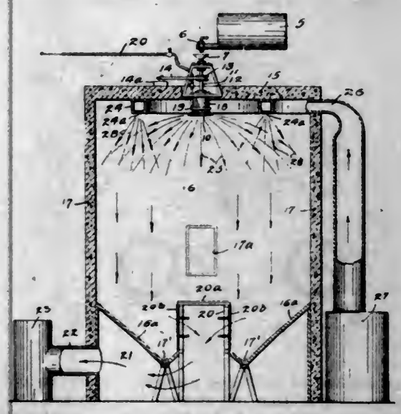
1. In a steam purifier-boiler combination, purifying elements within said purifier, means for admitting steam to said elements from the steam space of the boiler, a conduit for the purified steam from the said elements, a drain conduit from said purifier to a point exterior to the boiler and a vent to the drain conduit extending upwardly into the vapor spaces within the boiler until it is substantially above the highest liquid levels to permit of ready liberation of the displaced vapor from said drain conduit.

1,897,728. CHIMNEY HANGER FOR BURNERS. KENNETH S. JENSON, Albert Lea, Minn., assignor to American Gas Machine Company, Albert Lea, Minn., a Corporation of Delaware. Filed July 13, 1932. Serial No. 622,176. 5 Claims. (Cl. 158—94.)



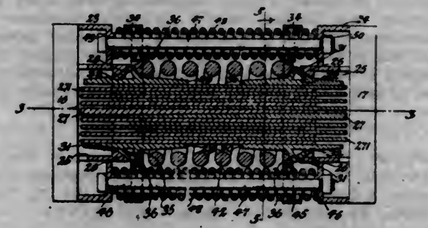
1. The combination with a kerosene burner and a chimney therefor, of a chimney hanger comprising a band encircling the burner adjacent its upper end, three arms attached to and projecting outwardly from said band at circumferentially spaced points, said arms having notches cut therein on their upper surfaces within which the lower edge of the chimney may be received and to permit tipping movement of the chimney on a line taken through any two notches as an axis, and stops secured to said band between said arms for limiting the tipping movement of the chimney and acting as third point supports for the chimney when tipped.

1,897,729. MOLASSES PRODUCT AND METHOD OF MAKING THE SAME. JOHN C. MACLACHLAN, Chicago, Ill., assignor, by mesne assignments, to Albert P. Hunt, Chicago, Ill. Filed Mar. 22, 1928. Serial No. 263,732. 4 Claims. (Cl. 99—11.)



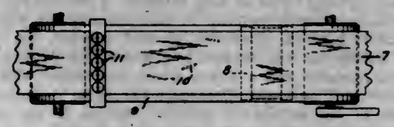
1. The process of producing a dried molasses material which consists in mixing liquid molasses with ground alfalfa meal, spraying and disintegrating said mixture in a drying chamber to form a shower, and passing heated air through said shower to quickly dry the material.

1,897,730. SHOCK ABSORBER. JOSEPH MARCHAND HALL, Hamilton, Ontario, Canada, assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed Feb. 24, 1925. Serial No. 11,001. 2 Claims. (Cl. 213—36.)



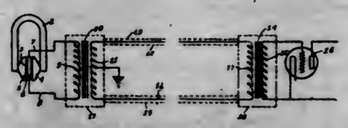
2. A friction shock absorber comprising opposed thrust heads adapted to be arranged in front of followers which are movable one toward and from another, a plurality of sets of intercalated friction plates mounted in said heads, and each provided at its outer end with an inwardly facing shoulder, outwardly facing shoulders arranged on said thrust heads and adapted to engage with the inwardly facing shoulders of said friction plates, intermediate cross heads having outwardly facing shoulders adapted to engage with the shoulders of said friction plates, shoes engaging with the outer sides of said plates and having wedging engagement with said thrust heads and cross heads, and spring means for yieldingly resisting inward movement of said thrust heads and cross heads.

1,897,731. METHOD OF DETECTING METAL PARTICLES IN SHEET MATERIAL. ROBERT A. MANEGOLD, Milwaukee, Wis. Filed Feb. 17, 1928. Serial No. 255,203. 2 Claims. (Cl. 175—183.)



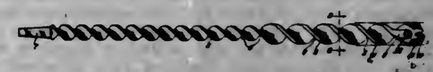
1. The method of ridding sheets of non-magnetic material of embedded metal particles, which comprises, subjecting all portions of each sheet of the material to the direct influence of a powerful magnetic field to permanently magnetize embedded magnetizable metal particles, utilizing the magnetization of said particles to definitely determine the location thereof both laterally and longitudinally of the sheet, and subsequently removing the detected particles.

1,897,732. SYSTEM FOR THE CONVERSION AND TRANSFER OF ENERGY. HARRY F. OLSON, New York, and BARTON KREUZER, Rockaway Park, N. Y., assignors to Radio Corporation of America, a Corporation of Delaware. Filed May 29, 1931. Serial No. 541,096. 12 Claims. (Cl. 179—1.)



1. A system for the interconversion and transfer of energy of audio frequencies comprising a low impedance device for converting energy variations in other than electrical form into electrical variations, a high impedance device, and an intermediate impedance transmission line for transferring said electrical variations from said low impedance device to said high impedance device.

1,897,733. DRILL FOR MINING PURPOSES. EARL ORMSBY and CALVIN P. BASCOM, St. Louis, Mo., assignors to Central Mine Equipment Company, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 19, 1928. Serial No. 326,926. 3 Claims. (Cl. 255—69.)



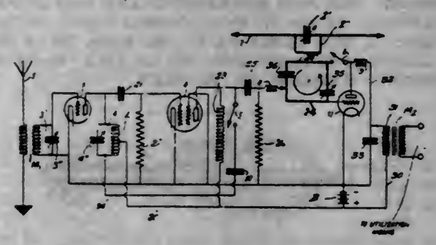
1. A bit for a mining drill comprising a plate having a notch in its front end and having sharp corners at the sides of said notch at the end of said plate, and a pair of spiral cutters spaced by said notch and having their front ends inclining laterally to the side edges of said plate and having the forward corners of their front marginal terminal portions in straight parallel planes and having the side edges of said terminal portions inclining inwardly from said corners.

1,897,734. NECKTIE RETAINER. ARTHUR ROSENER, New York, N. Y. Filed July 29, 1932. Serial No. 625,956. 3 Claims. (Cl. 2—145.)



1. An article of the class described comprising a necktie of the four-in-hand type having a large and a small end, an aperture provided in the small end near its termination, and a single loop of elastic cord sewed to the back of the large end, said loop being of sufficient length to enable it to be passed through the aperture in the small end to engage about a shirt button when the necktie is being worn.

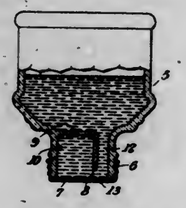
1,897,735. MULTIPLE RANGE RADIO RECEIVING SYSTEM. HANS OTTO ROOSENSTEIN, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Feb. 18, 1931, Serial No. 516,571, and in Germany Feb. 25, 1930. 5 Claims. (Cl. 250—20.)



1. In combination with a long wave multi-stage radio receiver having at least a radio frequency amplifier stage and a detector stage, a feed-back path between the out-

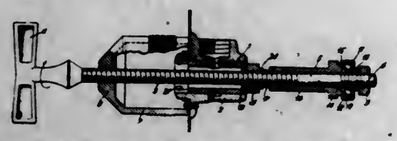
put and input of the amplifier stage, a resonant circuit in the input of the amplifier stage, a path for transmitting radio frequency energy from the amplifier output to the detector input, an oscillatory circuit, resonant to frequencies in the short wave range, connected to the detector input and including a portion of said transmitting path, means in the feed-back path for rendering the same inoperative when receiving long waves, and means for selectively connecting the said oscillatory circuit to the detector output when said feed-back path is operative.

1,897,736. BOTTLE. ANTHONY K. SHULTS, Saranac Lake, N. Y. Filed Mar. 15, 1932. Serial No. 598,909. 1 Claim. (Cl. 120—69.)



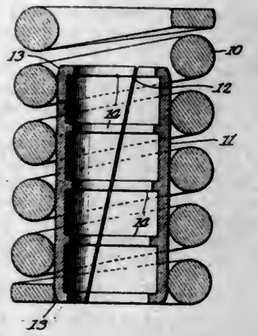
An ink bottle having a circular neck portion open at the top the full internal diameter of the neck and having a lip at the rim of said full-open top portion for sealing engagement by an overstanding cap, a partition wall extending, in the upright position of the bottle, substantially vertical across the interior of the bottle neck, below the full-open rim of the neck and dividing that portion of the interior of the neck below the rim into segmental spaces, one defined by a segmental portion of the internal wall of the neck and the opposing partition wall and clear and unobstructed to form a segmental pouring passage between the interior and the exterior of the bottle and located in one side of the bottle neck with part of the wall of the bottle neck forming a trough-like pouring spout, a generally horizontally extending and imperforate wall connected with the lower end of the generally vertical partition and projecting therefrom away from said pouring passage of the neck toward that segmental portion of the neck opposite thereto, there being a wall portion in the bottle neck connected with said generally horizontally extending wall, forming in conjunction therewith and with the partition wall, a raised well located within the bottle neck and entirely below the rim of the neck and protected by the surrounding rim of the neck above the same, with the upper edge of the partition providing a fully accessible pen wiping edge below and guarded by the surrounding rim of the bottle neck and a tight fitting circular cap removably secured in sealing engagement over the lip of the bottle neck, said cap having direct connection with the bottle structure and without obstructing either the well in the one side of the bottle neck or the straight through pouring passage in the other side of the bottle neck.

1,897,737. BEARING EXTRACTING AND INSTALLING DEVICE. GEORGE W. SNARR, Webster Groves, Mo., assignor to Geo. W. Snarr & Co., St. Louis, Mo., a Corporation of Missouri. Filed May 25, 1932. Serial No. 613,409. 9 Claims. (Cl. 29—88.2.)



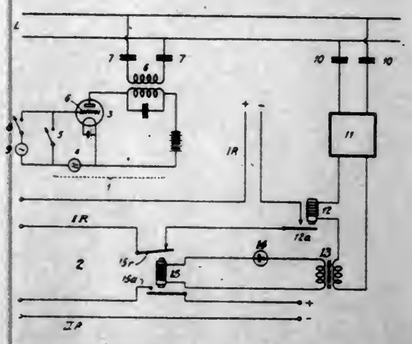
1. In a device of the character described, a shaft comprising two longitudinally spaced threaded portions, a hollow abutment member screwed on one of said threaded portions, a nut screwed on the other threaded portion, a formation of said shaft between said threaded portions preventing said abutment and said nut from being screwed beyond their respective threaded portions, an anti-friction thrust bearing mounted on said shaft and abutting said nut, a thrust member mounted on said shaft and abutting said bearing, and a cylindrical extension in connection with the end of said thrust member opposite said nut of less diameter than said thrust member and adapted to extend into a bushing while the adjacent portion of said thrust member abuts against said bushing.

1,897,738. CUSHIONING DEVICE. DONALD F. SPROUL, Chicago, Ill., assignor to Cardwell Westinghouse Company, a Corporation of Delaware. Filed Oct. 22, 1931. Serial No. 570,394. 1 Claim. (Cl. 267—9.)



In a cushioning device, in combination a hollow cylindrical member having a solid metal wall provided with a slot extending lengthwise of said member, a plurality of ribs extending circumferentially of said member for yieldingly resisting radial distortion of said member, the upper and lowermost ribs constituting abutments at the ends of said member and a spiral spring concentric with said member and normally distorting the same radially, the length of the cylindrical member relative to the spring being such as to limit the compression thereof.

1,897,739. CONTROL MEANS. WILHELM STÄBLEIN, Berlin, Germany, assignor to Allgemeine Elektricitats Gesellschaft, Friedrich Karl, Berlin, Germany, a Corporation of Germany. Filed Jan. 6, 1932. Serial No. 584,921, and in Germany Oct. 2, 1930. 3 Claims. (Cl. 178—2.)



1. Signalling apparatus comprising a transmission channel, transmitting apparatus including a high frequency thermionic generator having its output electrodes connected with said channel, a source of high frequency connected with the input electrodes of said generator, a source of modulating frequency in series with said input circuit, switching means in said circuit, said switching means being adapted to short-circuit said modulating frequency source, a receiver at the other end of said channel, said receiver having an output circuit including an alternating current relay and the primary of an alternating current transformer in series, detecting means in series with the secondary winding of said alternating current transformer, a direct current relay connected with said detecting means, a plurality of work circuits, contact means in one of said work circuits associated with each of said relays, and contact means in another of said circuits associated with one of said relays.

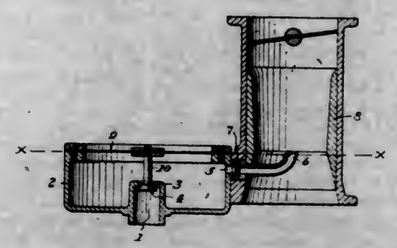
1,897,740. PURIFICATION OF ALUMINUM SULPHATE SOLUTIONS. FRITZ TELLER, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 11, 1932, Serial No. 586,087, and in Germany Jan. 13, 1931. 3 Claims. (Cl. 23—123.)

1. A process of removing iron salts from aluminum sulphate solutions, which comprises intimately mixing an aqueous aluminum sulphate solution in which the iron is present in the trivalent form, with an oxygen containing organic solvent boiling above 100° C. and difficultly soluble in water in the presence of an amount of a water-soluble chloride at least equivalent to the amount of iron present, and separating the organic solvent from the aluminium sulphate solution.

1,897,741. SULPHURIC ESTER OF GLYCOL ETHERS. HEINRICH ULRICH and KARL SAUERWEIN, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 2, 1931, Serial No. 534,690, and in Germany May 7, 1930. 10 Claims. (Cl. 260—98.)

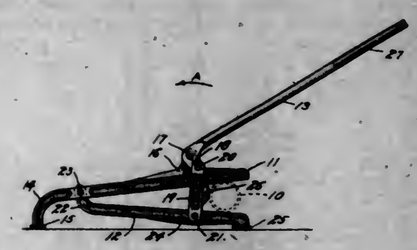
1. The process for the production of assistants for the textile and related industries, which comprises acting with a sulphonating agent on an ether of a glycol with an aliphatic alcohol.

1,897,742. REGULATOR FOR THE FUEL PRESSURE IN INTERNAL COMBUSTION ENGINES. LOUIS LÉON VIEL, Ville D'Avray, France, assignor to Societe Generale des Carburateurs Zenith, Levallois-Perret, France. Filed Apr. 28, 1931, Serial No. 533,456, and in Belgium May 1, 1930. 4 Claims. (Cl. 261—69.)



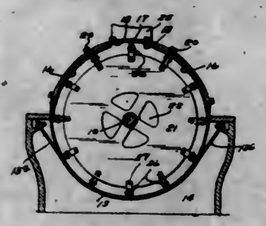
1. In a device for regulating the pressure of the fuel supplying an internal combustion engine, the combination of a fuel chamber, a fuel inlet and a fuel outlet connected with said fuel chamber, and a deformable unit which is adapted to be responsive only to fluid pressures and which comprises a valve controlling said fuel inlet, a membrane without elastic reaction forming part of the wall of the said fuel chamber and a connection between said valve and said membrane.

1,897,743. FIRE HOSE CLAMP. FREDERICK W. WARNER, Denver, Colo. Filed Sept. 4, 1931. Serial No. 561,294. 3 Claims. (Cl. 251—5.)



2. A hose clamp comprising: an upper jaw member, a downwardly disposed rearward extremity on the upper jaw member arranged to support the latter; a lower jaw member; an upwardly disposed rearward extremity on said lower jaw member, said latter extremity being pivoted to said upper jaw member intermediate the extremities of the latter, an operating lever pivoted on said upper jaw member; a short lever extending forwardly from the pivoted end of said operating lever, and a connecting link connecting the extremity of said short lever to said lower jaw member so that when the lever is swung rearwardly and downwardly, said jaws will be brought to a parallel closed position.

1,897,744. PULVERIZER. HERBERT L. WILKINS, Minneapolis, Minn., assignor to Archer Daniels Midland Company, Minneapolis, Minn., a Corporation of Delaware. Filed July 14, 1930. Serial No. 467,641. 2 Claims. (Cl. 83—11.)

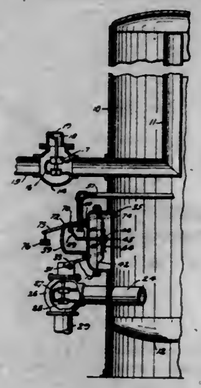


1. In a pulverizing machine, the combination with a rotary beater head arranged to rotate within a cylindrical surface, of a heater comprising a main body connected to swing from the peripherial portion of the beater head, and a pair of laterally spaced shoes rigidly carried by the free end portion of the main body with their longitudinal edges disposed parallel to the axis of the rotation of the beater head.

1,897,745. VALVE CONTROLLING MEANS. ELMER R. WILLIAMS, Tulsa, Okla., assignor to National Tank Company, Tulsa, Okla., a Corporation of Oklahoma. Filed May 15, 1931. Serial No. 537,559. 4 Claims. (Cl. 183—2.7.)

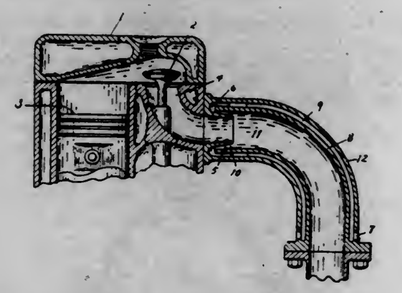
4. In a valve controlling device, an upright tank having a man-hole in its side portion, a collar surrounding said man-hole, a cover secured on the collar, a flexible diaphragm secured between the cover and the collar, a

bonnet on the cover open to the diaphragm, a rock shaft journaled in the bonnet, a crank arm on the shaft connected to the diaphragm, a liquid outlet valve connected



to the tank, a gas outlet valve connected to the tank, and valve operating connections connected with the liquid outlet valve and the rock shaft.

1,897,746. EXHAUSTING SYSTEM FOR HYDROCARBON ENGINES AND THE LIKE. CHARLES A. WINSLOW, Vallejo, Calif. Filed Nov. 28, 1927. Serial No. 236,284. 2 Claims. (Cl. 60—30.)



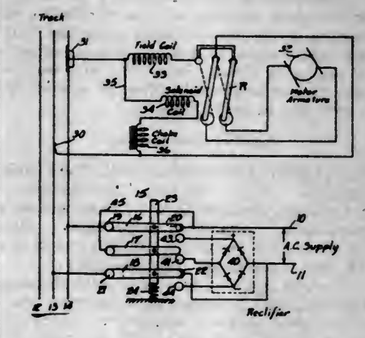
1. An exhausting system for hydro-carbon engines comprising an exhaust port, a nozzle surrounding said port and having its base in contact with said engine, a jacketed exhaust pipe surrounding the nozzle but spaced therefrom, said nozzle extending into said exhaust pipe and forming an aspirator pump during operation of an engine and adapted to draw an oxidizing agent through the exhaust pipe jacket around the nozzle and force the same out through the exhaust pipe with the exhaust gases.

1,897,747. DEVICE FOR SIMULATING NATURAL EYELASHES. MARJORIE A. BIRK, New York, N. Y. Filed Aug. 15, 1932. Serial No. 628,887. 8 Claims. (Cl. 132—53.)



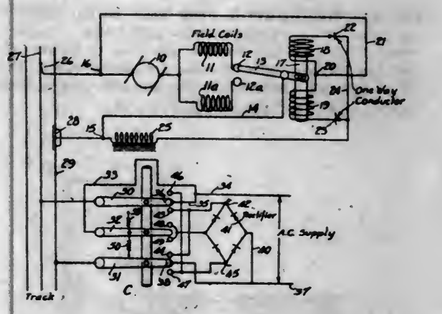
1. A device adapted to simulate natural eyelashes, comprising a base filament and a plurality of eyelash filaments attached thereto, and extending outwardly therefrom in a comparatively common plane.

1,897,748. REMOTE CONTROL SYSTEM. JOSEPH L. BONANNO, Forest Hills, N. Y., assignor to The Lionel Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 27, 1931. Serial No. 559,607. 8 Claims. (Cl. 104—151.)



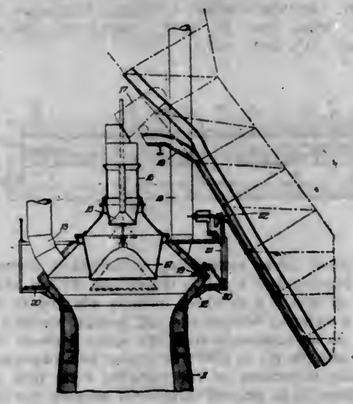
1. The combination with a reversible electric motor and a reversing switch in one of the circuits of the motor for reversing the motor, of a non-polarized electromagnetic reversing switch operating means responsive to rectified alternating current of sufficient voltage to operate the motor, comprising a solenoid coil connected in a shunt circuit of sufficient alternating current impedance to be ineffective when such alternating current is impressed.

1,897,749. REMOTE CONTROL SYSTEM. JOSEPH L. BONANNO, Forest Hills, N. Y., assignor to The Lionel Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 27, 1931. Serial No. 559,608. 6 Claims. (Cl. 104—151.)



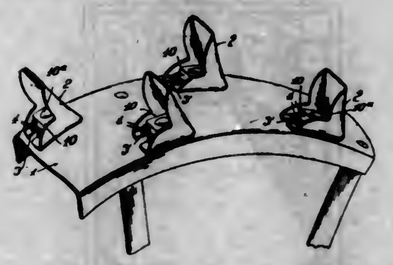
1. The combination with a reversible electrically operated motion translating device, of means for effecting reversal thereof, comprising a pair of opposed solenoid coils, a common armature therefor, two circuits selectively controlled by the armature and each connected with the motion translating device to cause it to operate in one direction or the other, a one-way conductor connected to each coil and to a circuit supply line so that current may pass through one coil or the other depending upon the polarity of the current, a source of direct current, and a reversing switch interposed between the direct current source and the current supply line whereby current may be supplied to one or the other of the coils.

1,897,750. METHOD OF BLAST FURNACE OPERATION. HERMAN A. BRASSERT, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 18, 1931. Serial No. 563,601. 2 Claims. (Cl. 75—17.)



1. The method of blast furnace operation which comprises injecting a cooling medium into the top of the furnace and controlling the injection of said medium by means responsive to the temperature of the gases at the top of the furnace.

1,897,751. TRACTOR. THEOPHILUS BROWN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed June 23, 1930. Serial No. 463,031. 8 Claims. (Cl. 301—44.)



4. A grouser structure for traction wheels having rims, comprising a spade lug having a base fitting the rim and provided with a slot extending in a peripheral direction relative to the rim, said slot having parallel upstanding flanges near one end thereof extending outwardly relative to said base, and bolt means having a head provided with a recess providing shoulders contacting with the sides and ends of said flanges and adapted to extend through said slot to clamp the lug to the wheel, the abutment of the ends of said flanges preventing endwise displacement of the lug, and the reception of the sides of said flange within the recess preventing spreading of the lug at the slot under traction stresses.

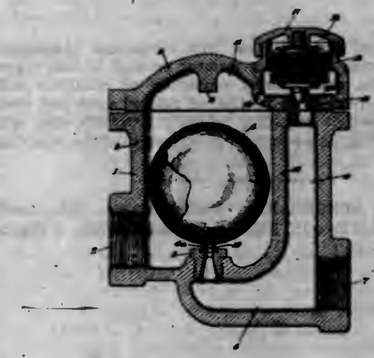
1,897,752. ANAMORPHOSER APPARATUS FOR CINEMATOGRAPHY IN COLORS AND IN RELIEF. GEORGES CHRETIEN, St.-Cloud, France, assignor to Societe Technique d'Optique et de Photographie S. T. O. P., St.-Ouen, Seine, France. Filed Nov. 28, 1927, Serial No. 236,330, and in France Dec. 9, 1926. 8 Claims. (Cl. 88—1.)

1. In an apparatus of the class described, the combination with a plurality of color screens of an optical unit comprising a diverging cylindrical lens followed by a converging cylindrical lens of lesser absolute power and a plurality of spherical objectives equal in number to the number of the color screens and positioned between said screens and said converging cylindrical lens, said cylindrical lenses having their generating lines parallel, and the axes of said objectives being parallel and in the same plane as the central cross section of said cylindrical lenses



whereby images optically compressed in one direction of objects in the plane of the virtual image formed by said cylindrical lenses may be reproduced upon a sensitive film positioned behind said screens and images from a positive film positioned behind said screens may be projected through said unit and screens upon a surface positioned in the plane of the virtual image formed by said cylindrical lenses.

1,897,753. STEAM TRAP. ALBERT A. CRYER, New York, N. Y.; Mathilde Helen Cryer, New York, N. Y., executrix of said Albert A. Cryer, deceased. Filed May 21, 1931. Serial No. 538,975. 4 Claims. (Cl. 236—53.)



1. A discharge trap adapted for use with steam heating or similar apparatus, consisting of a body portion and a cover, a main chamber in the body portion for the collection of the water of condensation, a discharge port leading from said chamber to the outlet, a valve to close said discharge port, a side passage in the body portion leading to the outlet, a cooling chamber inside of the cover adapted to register with the side passage, a port in the cover adapted to connect the main chamber with the cooling chamber, a port in the cover adapted to connect the cooling chamber with the side passage, and a thermostat in the cooling chamber adapted to close the port leading to the side passage, substantially as described.

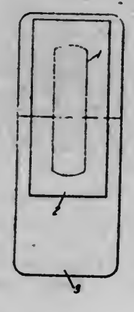
1,897,754. NAIL FILE HANDLE. CYNTHIA L. FARRIS, St. Louis, Mo. Filed Sept. 2, 1931. Serial No. 560,719. 2 Claims. (Cl. 30—23.)



1. A nail file handle of sheet metal consisting of a thin, flat plate handle having a longitudinal wall portion laterally offset in one face, and bands offset in the other

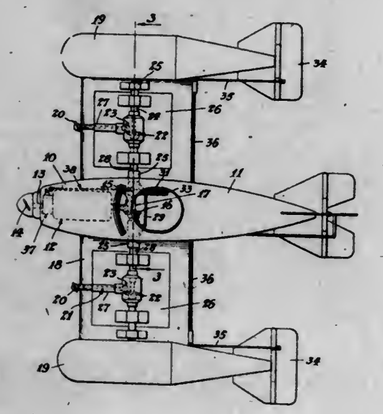
face disposed at the ends of the wall portion forming a tapering recess to receive a nail file, said wall portion near one band having a slit forming a spring tongue pointing to the rear disposed in the path of the nail file to frictionally engage the inserted file, substantially as described.

1,897,755. DOCUMENT RECORD DEVICE. EDWARD GREENE, Newark, N. J. Filed Apr. 27, 1932. Serial No. 607,743. 5 Claims. (Cl. 40—23.)



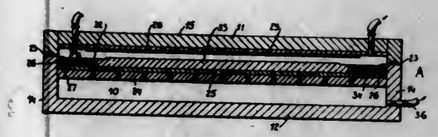
1. A record device for use with documents, comprising a folded spring clip and a member secured to and covering said clip, said member consisting of relatively stiff material adapted to be written or printed upon and comprising a portion extending laterally from the clip, said member having an unobstructed face exposed for receiving indicia.

1,897,756. AEROPLANE. HENRY HAHN, Cedarhurst, N. Y. Filed Feb. 18, 1932. Serial No. 593,750. 1 Claim. (Cl. 244—14.)



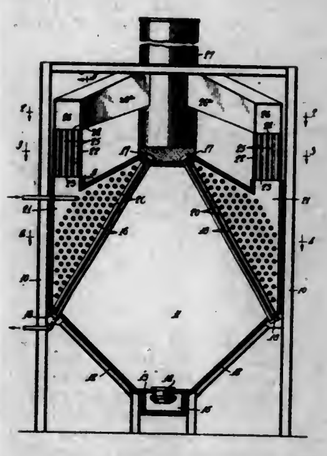
In an aeroplane, in combination with a fuselage, wings extending laterally from said fuselage and having openings within the perimeters of the respective wings, independent wing sections, sleeves journaled in the wings and secured to the sections to mount the same in the respective openings, said wing sections constituting continuations of the wings, propellers journaled on the sections, a power shaft journaled in certain of the sleeves, means in the fuselage to supply power to the power shaft, containers on the ends of the wings containing a lighter than air gas, and control mechanism on the containers.

1,897,757. PROOF PRESS. WILLIAM HEINECKE, Sabula, Iowa. Filed Dec. 26, 1930. Serial No. 504,680. 4 Claims. (Cl. 101—287.)



1. A proof press comprising a receptacle inclusive of a body portion and a lid, a diaphragm within said body portion on which a printing form is adapted to be supported, a tympan within the lid, means whereby air is adapted to be exhausted from the space between the diaphragm and the lid to effect flexure of the diaphragm and consequent movement of the printing form into contact with a sheet to be printed interposed between the printing form and the tympan and means for the supply of compressed air between the diaphragm and the bottom of the body portion.

1,897,758. LIQUID HEATER. NICOLAI H. HILLER, Carbondale, Pa. Filed May 7, 1930. Serial No. 450,411. 10 Claims. (Cl. 122—356.)

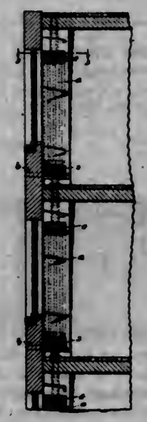


1. A heat transferring furnace including two series of oppositely disposed inclined and upwardly converging sets of serially interconnected tubes, and two series of serially interconnected horizontal tubes disposed at the outer sides of said first mentioned tubes and directly connected in series with said first mentioned tubes, all of said tubes being of substantially the same length.

1,897,759. HEATING SYSTEM. DWIGHT D. KIMBALL, New York, and VICTOR J. CUCCI, Brooklyn, N. Y., assignors to Columnar Heat, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 7, 1928. Serial No. 324,544. 5 Claims. (Cl. 237—67.)

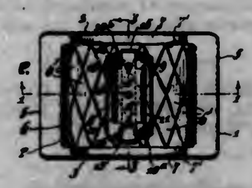
1. In a heating system for multi-story buildings, the combination of a plurality of superposed finned radiators,

an upright riser pipe in which said radiators are connected at top and bottom in series, at least one radiator being disposed at each of several of the story levels, and



casings for the flow of air enclosing said radiators, each of said casings being formed with intake and discharge openings communicating with the room served thereby.

1,897,760. SHARPENER FOR RAZOR BLADES. WALTER LE ROY MARSHALL, Merion, Pa. Filed Sept. 23, 1931. Serial No. 564,499. 8 Claims. (Cl. 51—211.)



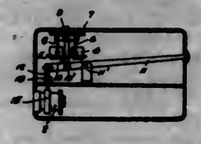
1. A sharpener for razor blades, comprising in combination a block having a concave substantially semicylindrical smooth glass sharpening surface in the top thereof, said sharpening surface comprising a plurality of circumferential series of relatively small similar substantially plane surfaces, all tangential to a common cylindrical surface, the surfaces of one series being in staggered relationship with respect to the surfaces of the adjacent series.

1,897,761. SEAL FOR VITREOUS ARTICLES. FREDERICK S. MCCULLOUGH, Edgewood, Pa. Filed Apr. 12, 1928. Serial No. 269,439. 6 Claims. (Cl. 250—27.5.)



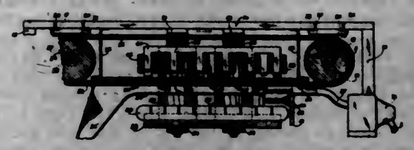
1. An article of the class described, comprising a vitreous element, a metallic element passing through the vitreous element and having an annular groove therein at the place where the metallic element passes through the vitreous element, and a member considerably thinner than said metallic element bridging said groove and also passing through the vitreous element, the vitreous element being fused to said member intermediate the ends of said member.

1,897,762. MOTION-PICTURE CAMERA. KURT MORSBACH, Berlin-Lichterfelde, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany, a Corporation of Germany. Filed June 18, 1930, Serial No. 461,881, and in Germany July 19, 1929. 4 Claims. (Cl. 88—16.)



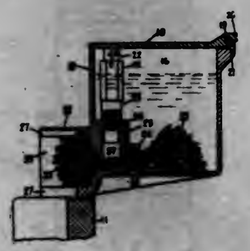
3. In a motion picture camera having time retarding and time accelerating equipment, a driven shaft, means for controlling the speed of said shaft comprising an adjustable brake drum and a brake disk secured to said shaft and slidable thereon toward and from said brake drum in accordance with the speed of rotation of said shaft, a lever for adjusting the position of said brake drum, an adjustable objective diaphragm and a second lever connected to said diaphragm and also to said first named lever to be operated thereby.

1,897,763. MAGNETIC SEPARATOR. CONSTANT E. NICOLET, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Jan. 18, 1932. Serial No. 587,317. 9 Claims. (Cl. 209—218.)



1. A magnetic separator which comprises spaced opposed pole pieces adapted and arranged to create a unidirectional magnetic field which periodically varies in intensity, a tubular non-magnetic trough disposed in the space between said pole pieces, a plurality of vibratile carrier members comprising paramagnetic material adapted and arranged to be moved through said trough, means for introducing material to be treated into said trough adjacent said carrier members, and means for producing a current of air in said trough.

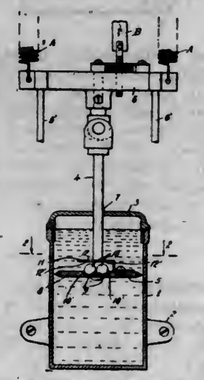
1,897,764. GUIDE RAIL LUBRICATOR. CLIFFORD NORTON, South Orange, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 31, 1931. Serial No. 526,596. 5 Claims. (Cl. 184—22.)



2. A lubricating device for a guide rail for a movable body of an elevator installation comprising, a lubricant container carried by said movable body, a cover for said container hinged to one side thereof, a wick for con-

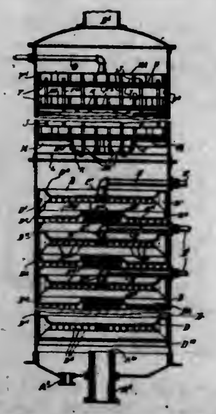
veying lubricant from the container to the guide rail, adjustable means within the container for regulating the amount of flow of lubricant through said wick, and means depending from said cover for cooperating with said regulating means to lock the regulating means in adjusted position.

1,897,765. DASHPOT FOR WEIGHING MACHINES. JOHN PEHLKE, Chicago, Ill., assignor to Rhodes-Hochriem Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 26, 1930. Serial No. 470,851. 1 Claim. (Cl. 188—96.)



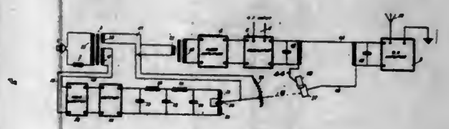
A dash-pot for weighing machines having a weighing head, comprising a piston rod, a liquid-containing cylinder having a port for the passage of the piston rod, a piston head working in the cylinder, said piston head having a cylindrical port therein, the uppermost end of said port being formed into a conical valve-seat opening directly on the top of said piston head, and a ball-valve in said port, the valve seating in the top of said port and contacting said piston head in a circle, and a plate attached by one end to the top of said piston head, the point of attachment thereof lying to one side of the opening, the rest of the plate being angled up over said port and having a port therein in registration with said opening.

1,897,766. MEANS FOR SEPARATING LIQUID FROM VAPORS AND GASES. JOHN PRIMROSE, Richmond, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 31, 1925. Serial No. 5,984. 16 Claims. (Cl. 196—139.)



1. In a liquid and vapor contact tower, the combination with the tower shell of a series of super-imposed trays mounted therein, and means for supporting the trays from the shell, including provisions for adjusting the trays relative to a horizontal plane to insure the proper flow distribution over the latter.

1,897,767. WIRELESS SIGNALING DEVICE. WALTER VAN B. ROBERTS, Princeton, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 2, 1929. Serial No. 352,037. 5 Claims. (Cl. 250—17.)



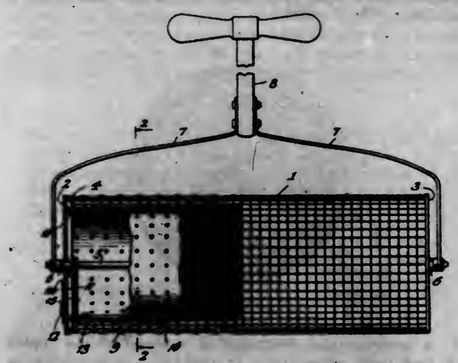
1. In a wireless signaling system in which a carrier frequency is modulated by a signal frequency, the combination with a modulator of a source of carrier frequency, a source of signal frequency, both said sources being operatively connected to the modulator, a transmitting antenna system variably coupled to said modulator, a link circuit for coupling said source of signal frequency to said modulator, a rectifying system, an amplifier circuit having its input coupled to said source of signal frequency and its output coupled to the input of said rectifying system, a smoothing out circuit having its input coupled to the output of said rectified system and its output coupled to a field coil device, a resistance shunted across said link circuit and means controlled by said field coil for varying said resistance, said means also being adapted to control the amount of modulated carrier frequency transferred between said modulator and said antenna.

1,897,768. MEANS FOR LIGHTING AIRPORTS. THOMAS J. ROGERS, Minneapolis, Minn. Filed Aug. 5, 1929. Serial No. 383,664. 2 Claims. (Cl. 240—1.2.)



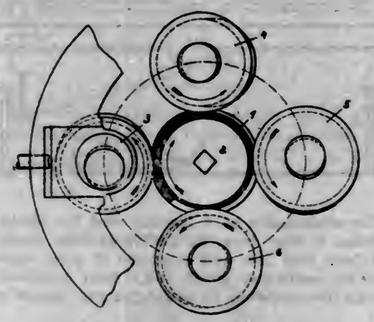
1. Means for lighting airports comprising a pit, a standard carrying a flood light mounted to move vertically in said pit so as to be projected therefrom, a brake for holding said standard in its projected position, means including a motor in said pit and an electric circuit for projecting said floodlight and lighting the same and thereafter rendering the brake effective, and means controlled by the direction of the wind for closing said circuit only when the wind is blowing in a predetermined direction.

1,897,769. SEEDER. JOSEPH PAUL SEIBEL, White Plains, N. Y. Filed Oct. 24, 1930. Serial No. 490,843. 8 Claims. (Cl. 111—74.)



1. A seeder comprising a foraminous member adapted to contact with the soil for turning over the soil and embedding seeds passing therethrough in the soil, and means for distributing seed over the foraminous member.

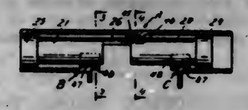
1,897,770. APPARATUS FOR ROLLING SEAMLESS TUBES. JOSEF SEVERIN, Mulheim-on-the-Ruhr, Germany. Filed July 6, 1928, Serial No. 290,863, and in Germany July 16, 1927. 5 Claims. (Cl. 80—13.)



1. In an apparatus for forming seamless tubes, a plurality of rolls equally spaced about the outer circumference of a hollow block to be reduced, a mandrel to support said block between the rolls, said rolls being positioned with their axes obliquely to the axis of said block so that the block will be fed forwardly, each roll having an enlarged reducing portion, such portions being arranged to successively act on said block, each successively acting reducing portion being set farther back in the direction of extension of the hollow block and having a larger diameter than the reducing portion preceding it and adapted to further reduce that portion of said block reduced by a previously acting reducing portion, thereby to gradually and simultaneously reduce and elongate said hollow block into a seamless tube.

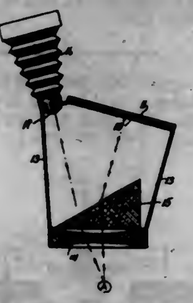
1,897,771. CRANKLESS ENGINE. THOMAS L. SHERMAN, New York, N. Y., assignor to Michell-Crankless Engines Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 14, 1929. Serial No. 339,950. 12 Claims. (Cl. 308—4.)

1. In combination, a reciprocating unit comprising a pair of oppositely acting pistons, means connecting said pistons, bearing means slidably engaging the outer surface of said connecting means on one side of the axis of reciprocation of said pistons and bearing means engaging



said piston connecting means at points spaced longitudinally of said axis and on the opposite side of the axis from said first named bearing means.

1,897,772. POSE-REFLECTING PHOTOGRAPHIC APPARATUS. LUTHER G. SIMJIAN, New Haven, Conn. Filed July 26, 1928. Serial No. 295,566. 8 Claims. (Cl. 88—1.)

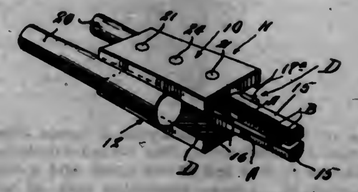


1. A pose-reflecting photographic apparatus, comprising a camera; a pose-reflecting surface; and a transparent light-deflecting member interposed in the light-path between the poser and both the said camera and the said pose-reflecting surface in position and of a character to deflect the light reflected from the poser to both the latter elements; the said pose-reflecting surface being positioned to reflect the image deflected to it by the said light-deflecting member back to the poser; whereby the image of the poser is deflected to both the said camera and to the said reflecting surface for recording by the former a reflection back to the poser by the latter.

1,897,773. COLLOIDAL SUSPENSION AND METHOD OF USE. IAN C. SOMERVILLE, Fox Chase, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa. Filed July 12, 1930. Serial No. 467,620. 12 Claims. (Cl. 149—5.)

1. The process of tanning which comprises treating skins with a colloidal suspension of a resinous product prepared by condensing equimolecular proportions of naphthalene sulphonic acid and dibenzyl-naphthalene by means of formaldehyde in presence of sulphuric acid of non-sulphonating strength.

1,897,774. WRIST PIN GAUGE. JOSEPH SUNNEN, St. Louis, Mo. Filed May 31, 1930. Serial No. 458,393. 12 Claims. (Cl. 33—178.)



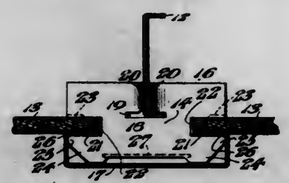
12. A pin hole gauge comprising two juxtaposed pin receiving elements mounted in parallel spaced relation and relatively movable to vary said spacing for receiving

pins of different diameters, said members each having an extended stem, said stems having opposite converging surfaces together comprising a pair of measuring calipers, the spacing of said converging surfaces at one point in their length being equal to the diameter of the pin determining the spacing of the pin receiving elements.

1,897,775. EGG PRODUCT. SAMUEL TRANIN, Kansas City, Mo., assignor to Tranin Egg Products Co., a Corporation of Missouri. Filed Apr. 22, 1929. Serial No. 357,346. 6 Claims. (Cl. 99—11.)

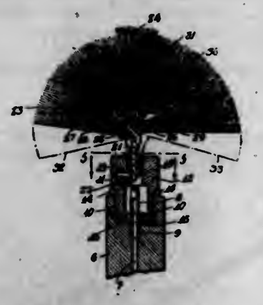
2. The process of preparing an egg product including adding a quantity of dried milk to a quantity of liquid egg yolk in unbeaten condition sufficient to dissolve the milk, agitating the milk and egg yolk to promote mixture thereof for dissolving the milk in the yolk, limiting the agitating step to avoid beating up the yolk, and drying the mixture containing unbeaten egg yolk to provide a product which may be beaten up.

1,897,776. BUILDING CONSTRUCTION. WALTER H. VENZIE, Philadelphia, Pa.. assignor to Frederick M. Venzie, Philadelphia, Pa. Filed Jan. 16, 1932. Serial No. 587,057. 8 Claims. (Cl. 72—118.)



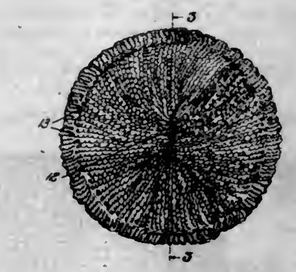
1. In a building construction spaced, parallel metal studs, metal clips engaging snap-fashion said metal studs, each clip being cut-awsy at opposite ends to receive the edges of opposed panels, panels arranged between adjacent metal studs and engaging in said cut-away portions, and a trough-like casing spanning the space between adjacent panels to form an interlock between said panels and clips and concealing the latter and said metal studs.

1,897,777. BOTTLE BRUSH AND MOUNTING THEREFOR. HENRY GEORGE VOLCKENING, Brooklyn, N. Y., assignor to Volckening, Inc., Brooklyn, N. Y., a Corporation of New York. Filed May 31, 1930. Serial No. 457,896. 11 Claims. (Cl. 15—128.)



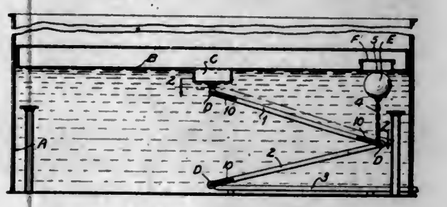
1. As an article of manufacture a bottle brush having a pair of substantially fan shaped bristle members disposed face to face and spaced apart, and a wire stem of substantially U-shape supporting both of said fan shaped bristle members, said stem having a toe portion extending laterally from the general plane of said wire stem.

1,897,778. SCOURING PAD. SAMUEL WALLACE, Windsor Locks, Conn., assignor to The Montgomery Company, Windsor Locks, Conn., a Corporation of Connecticut. Filed July 7, 1931. Serial No. 549,202. 4 Claims. (Cl. 15—209.)



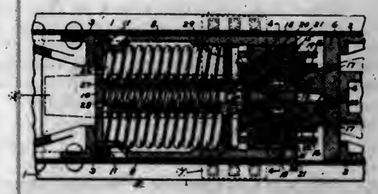
1. A scouring pad composed of a metal ribbon folded back and forth upon itself to provide a multiplicity of scraping edges, said ribbon being arranged in a plurality of loops radiating from the center of the pad, binding means at the center of the pad, and binding means at the marginal edge of the pad.

1,897,779. FLOATING ROOF DRAIN. JOHN H. WIGGINS, Tulsa, Okla. Filed Mar. 17, 1930. Serial No. 436,483. 6 Claims. (Cl. 220—26.)



1. The combination of a floating roof for liquid storage tanks, a lazy tong or pantograph-like drain suspended from said roof and composed of pipes connected together by oscillating joints, and a float combined with said drain for assisting in sustaining the weight of the drain.

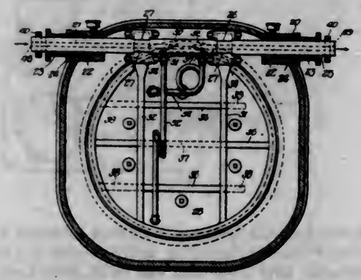
1,897,780. FRICTION SHOCK ABSORBING MECHANISM. GEORGE W. WILDIN, Pittsburgh, Pa., assignor, by mesne assignments, to Cardwell Westinghouse Company, Chicago, Ill., a Corporation of Delaware. Filed July 9, 1929. Serial No. 377,012. 1 Claim. (Cl. 213—33.)



In a friction shock absorbing mechanism, the combination with a casing, of a strut having friction faces and tapering toward its outer end, the strut being integral with the casing and dividing the forward end thereof into two compartments, a group of friction elements in each

compartment, each group comprising a wedge block engaging said strut, a wedge block engaged by the first mentioned wedge block, a wedge shoe cooperating with both of said wedge blocks, friction plates interposed between and engaging said wedge shoe and casing, said wedge blocks, wedge shoe and strut cooperating to exert lateral pressure on said plates, and spring means resisting movement of both groups of friction elements.

1,897,781. CHIMNEY VALVE. FRED. WILLE and JOHN PHILLIP GRILLI, Chicago, Ill., assignors to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed June 24, 1929. Serial No. 373,421. 5 Claims. (Cl. 251—126.)



1. A chimney valve for hot blast stoves comprising in combination a casing, a shaft extending therethrough, counterweights on said shaft, and a valve flap mounted on said shaft, the said flap being loosely connected to said shaft whereby a limited amount of horizontal movement is permitted between the said shaft and the said flap in closed position of the flap.

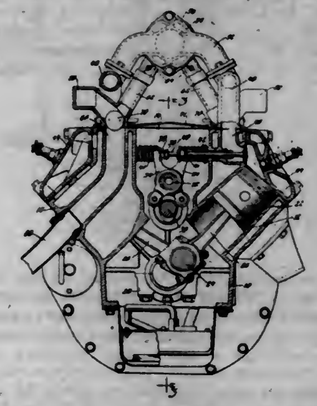
1,897,782. CARBURETOR. LEONARD M. WITTLINGER, Flint, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 28, 1928. Serial No. 289,032. 2 Claims. (Cl. 261—46.)



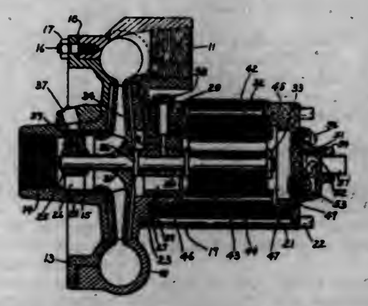
1. In a carburetor, a primary air passage, a secondary air passage, a choke valve in the secondary air passage to restrict the flow of air therethrough, means adapted to restrict the flow of air through the primary air passage upon operation of the valve to restrict the flow of air through the secondary air passage, and means to restrict the flow of air through the primary air passage independently of the first-mentioned means.

1,897,783. INTERNAL COMBUSTION ENGINE. BENJAMIN H. ANIBAL, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 24, 1929. Serial No. 334,653. 13 Claims. (Cl. 123—55.)

6. A V type engine comprising a unitary casting shaped to provide the upper part of an engine crankcase and a plurality of cylinders integrally joining the crankcase in alined groups, the groups being arranged in V formation, each of said groups being provided on their adjacent sides with substantially vertical extensions apertured to provide horizontal valve receiving passages and upwardly turned intake and exhaust conduits, the valve seat faces of the extensions meeting the ends of the cylinders along single dihedral angles, heads closing the ends of the cylinders having angular surfaces fitting the angular surfaces of the blocks, integral webs joining the ends of the groups of cylinders defining a valve compartment, valves in the valve passages having their ends projecting into the valve compartment, a shaft journaled in the webs, rockers on the shaft, a camshaft journalled in the webs and arranged to actuate the rockers, a crankshaft in the crankcase and means for driving the camshaft from the crankshaft.



1,897,784. MOTOR-DRIVEN PUMP. VINCENT G. APPLE, Dayton, Ohio; Herbert F. Apple, Edward M. Apple, and Gourley Darroch executors of said Vincent G. Apple, deceased. Filed Aug. 7, 1930. Serial No. 473,740. 1 Claim. (Cl. 103—87.)



In combination, a centrifugal pump body with axis vertical, enlarged bearing hubs at the top and bottom of said pump body, bearing members, each having a central axial opening surrounded by a circular row of other axial openings, within said enlarged hubs, the lower hub having a central pump-suction opening below its bearing member, a shaft rotatably supported in the said central axial openings and extending through and beyond the upper bearing member, a pump impeller secured to said shaft between said bearing members, an electric motor rotor secured to said shaft above the upper bearing member, and an electric motor stator in the form of an inverted cup surrounding the upper hub and secured thereto pressure-tight, said stator comprising a core having a central rotor opening, a plurality of winding slots around said central opening, coils of wire in said slots

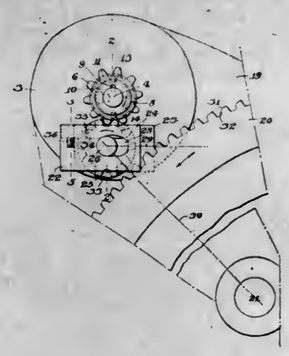
and a one-piece mass of molded insulation covering the coil heads at the ends of the core and the coil sides within the slots, leaving the core teeth between the core slots extending through the insulating mass immediately surrounding the motor rotor.

1,897,785. DRILL FOR MINING PURPOSES. CALVIN P. BASCOM, St. Louis, Mo., and HARRY A. KLUGE, Collinsville, Ill., assignors to Central Mine Equipment Co., St. Louis, Mo., a Corporation of Missouri. Filed June 24, 1929. Serial No. 373,111. 1 Claim. (Cl. 255—69.)



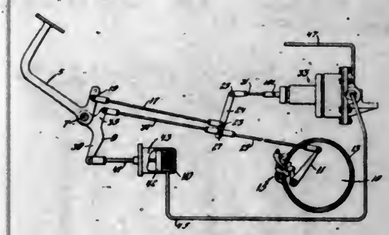
A bit for a mining drill comprising a plate, a prong at each side of the forward end of said plate and bent laterally on opposite sides of said plate and twisted spirally, and longitudinal forwardly extended and directed cutting edges on the outer edges of said prongs extending rearwardly from the front ends of said prongs in planes parallel with the longitudinal axis of the bit for relatively a considerable distance and about one-half of the length of said prongs.

1,897,786. STARTER FOR INTERNAL COMBUSTION ENGINES. WARREN J. BAUMAN, Lock Haven, Pa., assignor, by direct and mesne assignments, to The West Branch Corporation, Williamsport, Pa., a Corporation of Pennsylvania. Filed Sept. 25, 1931, Serial No. 565,131. Renewed July 11, 1932. 8 Claims. (Cl. 74—7.)



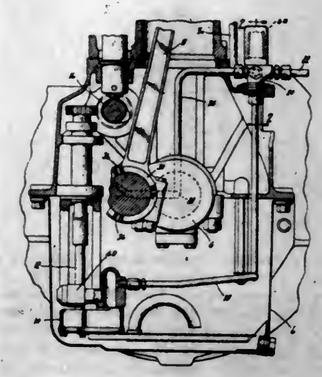
1. In a starting mechanism for internal combustion engines, the combination with an engine gear wheel, of a support, a starting shaft rotatable in the support, a primary driving pinion carried by the shaft, a secondary driving pinion in mesh with the primary pinion and movable under the influence of the starting shaft into mesh with the engine gear, and movable under the influence of the engine gear out of mesh therewith, a shaft carrying the secondary pinion, said support having two spaced parts located on the respective sides of the secondary pinion and having slots therein into which the last named shaft extends to be supported thereby and to guide the secondary pinion toward and from the engine gear wheel, one of said parts having a bore and an additional slot therein, a lever located within the last named slot and pivoted to said support and adapted to bear against the last named shaft in all positions thereof, and a spring within said bore pressing the lever against the last named shaft, said lever having a shoulder for engaging the last named shaft to prevent accidental movement thereof toward the engine gear when the starting shaft is idle.

1,897,787. BRAKE ACTUATING MECHANISM. GEORGE P. BERRY, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 19, 1928. Serial No. 262,823. 3 Claims. (Cl. 188—152.)



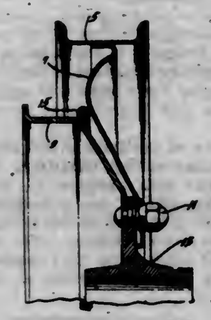
1. In combination, a pedal, a fulcrum therefor, a pivoted double arm lever mounted on said fulcrum, a ratio arm, links between said ratio arm and said pedal and an arm of said lever respectively, of a power cylinder, a link connection between said power cylinder and the second arm of said lever, a link between said ratio arm and said brake, a reaction valve for controlling the power cylinder and a rod connecting said valve and said ratio arm, whereby the valve causes a proportional reaction through the ratio arm on the pedal.

1,897,788. OIL PRESSURE REGULATOR. FERDINAND A. BOWER, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 29, 1926. Serial No. 157,858. 5 Claims. (Cl. 184—6.)



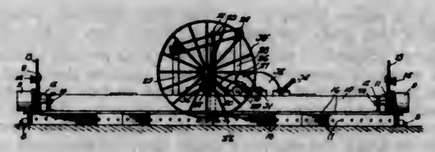
1. In a pressure lubricating system for internal combustion engines for automobiles adapted to be driven at relatively high speeds, a pump for supplying oil under pressure to the parts to be lubricated certain of said parts rotating at relatively high speeds and producing variations in the oil line pressure as the result of centrifugal action, whereby at certain speeds knocking tends to be produced in the pump and pressure equalizing chamber arranged on the discharge side of said pump for smoothing out said pressure variations and preventing such knocking.

1,897,789. WHEEL STRUCTURE. ARTHUR O. BROOKS, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 28, 1930. Serial No. 456,518. 2 Claims. (Cl. 301—6.)



1. In combination, a wheel comprising a hub, a disc and a brake drum secured thereto, a coil spring in the form of a circle, said spring being positioned between and engaging both drum and disc.

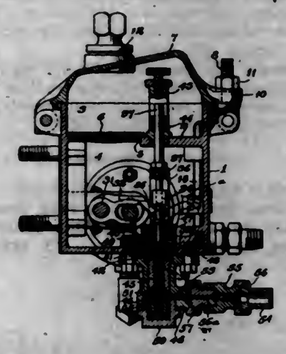
1,897,790. SUBGRADE SCRAPING MACHINE. EDWARD G. CARR, Chicago, Ill., assignor to Celeta Lewis Carr, Chicago, Ill. Filed Sept. 14, 1931. Serial No. 562,760. 16 Claims. (Cl. 37—108.)



1. The combination in a subgrade scraping machine of a frame supporting cutting blades, rollers supporting the frame on guide rails, transportation wheels near the center of the frame, a turntable shoe near the center of the frame, a single means for operating in unison the transportation wheels and the turntable shoe, and springs for aiding in the lifting of the frame, said operating means being adapted to lower the transportation wheels while lifting the machine on the turntable shoe, and lifting the turntable shoe while elevating the machine on the transportation wheels.

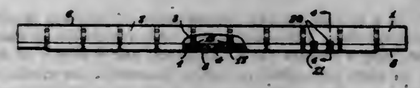
1,897,791. FORCE FEED LUBRICATOR. ELMER O. COREY, Norwood, Ohio, assignor to The Edna Brass Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 31, 1928. Serial No. 303,204. 5 Claims. (Cl. 184—27.)

1. In a lubricating device, a reservoir body, a cylinder having a conduit connection at one end thereof, a tubular plunger engaged into the opposite end of said cylinder, open at its head end to the reservoir lubricant supply, a yoke frame connecting with the head end of said plunger and guidingly sustained within said body, a valve member guidingly sustained by said yoke frame and engaged into the head end of the plunger providing a closure for the plunger and a head therefor during the pressure stroke of the plunger, and means for reciprocating said valve, yoke frame, and plunger, said valve unseating in a retreat



stroke for opening the plunger and cylinder to receive a lubricant charge and closing in a reverse stroke for forcing the lubricant from said cylinder.

1,897,792. BRICK MOLD. JOHN ADDISON CROWELL, Wallkill, N. Y., assignor to James B. Crowell & Son, Wallkill, N. Y., a Corporation of New York. Filed Nov. 1, 1928. Serial No. 316,436. 2 Claims. (Cl. 25—119.)



1. A brick mold comprising sides, partitions, and a plurality of bottom panels, said sides having notches formed therein at their bottom edges intermediate said partitions, and said panels having recesses therein in cooperative relation with said notches.

1,897,793. TEXTILE MATERIAL AND METHOD OF PREPARING THE SAME. CAMILLE DREYFUS, New York, N. Y., and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Apr. 2, 1929. Serial No. 352,046. 16 Claims. (Cl. 8—20.)

1. The method of producing textile materials such as yarns and fabrics containing organic derivatives of cellulose and having a reduced scorching temperature, comprising incorporating a substantially neutral substance adapted to lower the temperature at which said textile materials tend to scorch and permitting said substance to remain in the textile materials.

11. Textile materials such as yarns and fabrics containing organic derivatives of cellulose and also containing a substantially neutral substance that lowers the temperature at which the textile materials scorch.

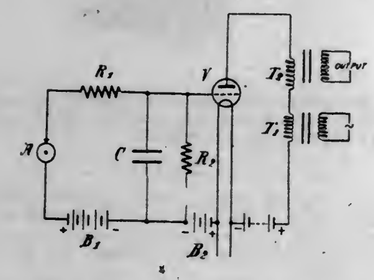
1,897,794. DYEING OR OTHERWISE COLORING OF MATERIALS MADE WITH OR CONTAINING CELLULOSE ESTERS OR ETHERS. GEORGE HOLLAND ELLIS and HENRY CHARLES OLPIN, Spondon near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed June 22, 1928, Serial No. 287,645, and in Great Britain July 19, 1927. 8 Claims. (Cl. 8—5.)

1. In a process for dyeing materials comprising organic substitution derivatives of cellulose by oxidizing amines on the material, the step of oxidizing by means of an aromatic sulphon-chloramide.

1,897,795. PRODUCTION OF C-ALKYL AND C-ARALKYL DERIVATIVES OF AROMATIC COMPOUNDS. ZOLTAN FÖLDI, Budapest, Hungary, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 12, 1929, Serial No. 392,251, and in Hungary Sept. 19, 1928. 11 Claims. (Cl. 260—64.)

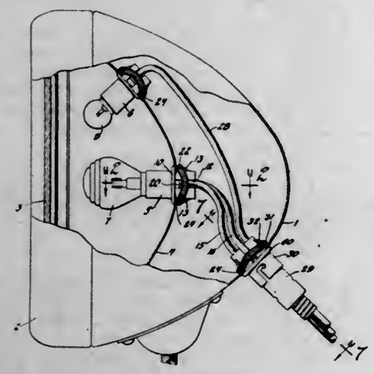
1. The process for producing C-alkyl derivatives of aromatic compounds which comprises reacting from neutral to acid aromatic compounds while heating with an alkyl ester of an aromatic sulphonic acid.

1,897,796. ELECTRICAL TRANSMISSION OF PICTURES. OTHO FULTON, Sundridge Park, Bromley, England. Filed Oct. 3, 1928, Serial No. 310,002, and in Austria Oct. 13, 1927. 4 Claims. (Cl. 178—5.)



1. In a system for the transmission of pictures or other representations, the combination of a transmitting circuit comprising a picture exploring means and a source of electric current connected in series therewith for producing current impulses having a sudden rise and fall and representing the tone values of the picture, and a condenser also electrically connected in said circuit so as to reduce the rate of change of said impulses.

1,897,797. LAMP SOCKET. CHARLES E. GODLEY, Ypsilanti, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 4, 1929. Serial No. 404,727. 10 Claims. (Cl. 173—339.)



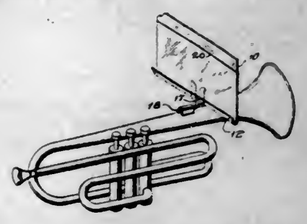
1. Electrical connector parts, including in combination with a support, of a socket, a movable contact element in said socket, and a single resilient means to hold the socket and support in assembled relation and to yieldingly resist movement of the contact element in the socket.

1,897,798. DESULPHURIZATION OF CRUDE AROMATIC HYDROCARBONS. FRIEDRICH WILHELM GUTHKE, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 28, 1928, Serial No. 281,365, and in Germany June 24, 1927. Renewed May 24, 1932. 12 Claims. (Cl. 260—168.)

1. The process of purifying crude aromatic hydrocarbons from sulphur-bearing impurities, which comprises treating the same with hydrogen in the presence of metallic sulphids at a temperature between about 100° and 300° C., the pressure applied being below that required for a hydrogenation of the said hydrocarbons at the temperatures stated.

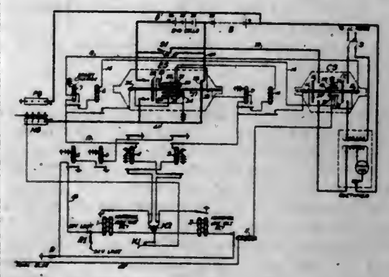
7. The process of purifying crude aromatic hydrocarbons from sulphur-bearing impurities, which comprises treating the same with hydrogen in the presence of a metallic sulphide and of an activator comprising an oxide of a metal of the 4th to 8th group of the periodic system at a temperature between 100° and 300° C., the pressure applied being below that required for a hydrogenation of the said hydrocarbons at the temperatures stated.

1,897,799. MUSIC HOLDER. JOHN T. HAIGHT, Rockford, Ill. Filed Feb. 1, 1930. Serial No. 425,115. 4 Claims. (Cl. 45—58.)



1. A music holder of the character described, comprising a base plate upturned at its lower edge to furnish a trough adapted to receive the lower edge portion of sheets of music, a removable transparent window sheet having its lower edge held within the trough, and an elastic band engaging the holder and extending across the front of the transparent window sheet at the upper portion thereof for clamping the sheets of music flatly between said window sheet and the holder.

1,897,800. AUTOMATIC CHARGING AND VOLTAGE REGULATING SYSTEM. HERMAN H. HARBECKE, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 19, 1930. Serial No. 445,555. 7 Claims. (Cl. 171—314.)



1. In a battery charging and voltage regulating system, a storage battery, a discharge circuit therefor, a group of end cells, charging means, a pair of connecting switches,

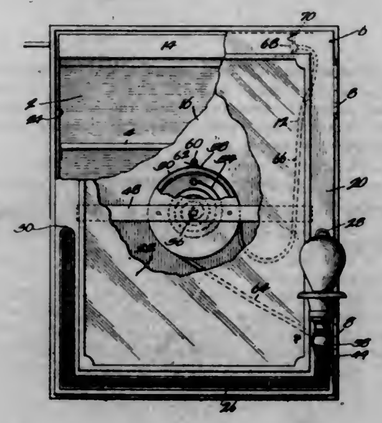
and means operating twice, responsive to a single drop in the battery voltage in said discharge circuit below a predetermined limit, for performing two operations with a definite time interval therebetween; first, the operation of one of said switches to connect said charging means to said battery to charge said battery, and second, the operation of the other of said switches to include said group of end cells in said discharge circuit.

1,897,801. COURT MARKING TAPE. RAYMOND HEALY, New York, N. Y. Filed May 18, 1932. Serial No. 612,052. 1 Claim. (Cl. 273—31.)



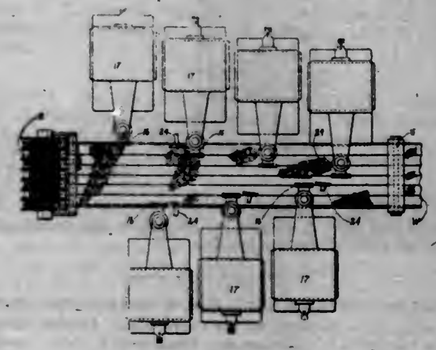
As an article of manufacture, a court marking tape comprising a flexible waterproof band of rubberized textile material having a low coefficient of contraction and expansion, said band being amply thick and heavy to lie flat upon the ground without tendency to curl upwardly at its edges, said band further being light in color and having smooth substantially non-porous washable surfaces, and tape protecting fastener accommodating elements carried by said tape.

1,897,802. ADJUSTABLE LAMP SUPPORT. ADOLPH A. HENKEL, Chicago, Ill., assignor, by mesne assignments, to Henkel Edge-Lite Corporation, a Corporation of Illinois. Filed May 11, 1927, Serial No. 190,538. Renewed Apr. 5, 1929. 17 Claims. (Cl. 240—4.1.)



1. A device of the class described comprising a wall frame having a mirror and a connection to a source of current, said frame having a track along a portion of its margin, a lamp mounted to slide in the track and an electrical connection from the source to the lamp and including a resilient slack wire take-up constructed and arranged to permit the lamp to be bodily shifted along the margin of the mirror from one side of the mirror across the adjacent side and thence along the side opposite the first named side without breaking the current connection.

1,897,803. METHOD OF AND APPARATUS FOR MANUFACTURING LATH. THOMAS R. HERBST, Jr., Wheeling, W. Va., assignor to The Consolidated Expanded Metal Companies, Wheeling, W. Va., a Corporation of West Virginia. Filed Apr. 14, 1930. Serial No. 444,173. 26 Claims. (Cl. 140—112.)



1. The method of reenforcing metallic fabric which includes continuously feeding a pair of wires past fixed welding means, flattening the adjacent surfaces of the wires, utilizing said means to weld the wires to each other and feeding sheets of the fabric between the wires.

9. Apparatus for manufacturing lath including means for feeding a pair of wires from sources of supply to and through a pair of rotatably mounted welding electrodes adapted to weld the wires of the pair to each other, said welding electrodes, and means for feeding sheets of metallic fabric through the said electrodes between the wires.

1,897,804. PACKING. BENJAMIN P. HOFFMAN, Tulsa, Okla., assignor of one-half to Charles S. Jones, Tulsa, Okla. Filed Apr. 2, 1930. Serial No. 441,050. 7 Claims. (Cl. 288—1.)

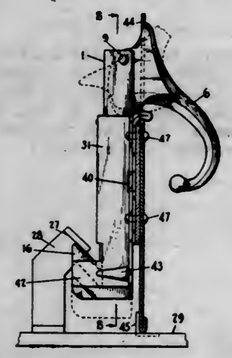


1. A rectangular packing element having a bearing face, and having a plurality of longitudinal openings and transverse ports communicating said openings with the bearing face.

1,897,805. HOOD LATCH. CHARLES HOLLERITH, Jackson, Mich., assignor, by mesne assignments, to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed July 8, 1930. Serial No. 466,484. 21 Claims. (Cl. 292—129.)

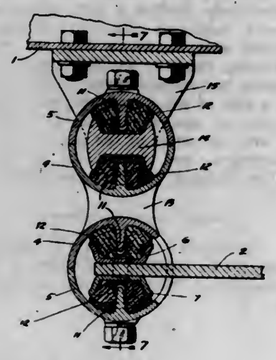
1. In hood latches, a shank having two spaced sides, a hook on one end of said shank, a slide aligned with said

shank and located between the planes of the outside surfaces of the sides thereof, means including a spring



for yieldingly resisting relative movement between the shank and slide, a housing for said slide, means for moving the slide within the housing.

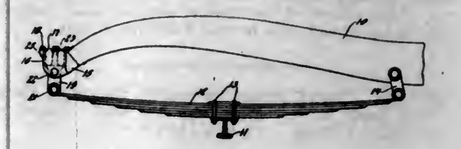
1,897,806. PIVOT JOINT. AXEL J. JANSSON, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 2, 1927. Serial No. 203,193. 7 Claims. (Cl. 267—30.)



1. A pivot joint including two members of approximately the same length disposed one within the other and capable of relative rotational movement and elastic material interposed between said members for deformation upon relative movement of the members, the inner member being provided with longitudinally extending closed end channels on opposite sides thereof in which said elastic material is located, the outer member comprising separable portions each having an axially extending web portion which projects into the elastic material located within one of the channels.

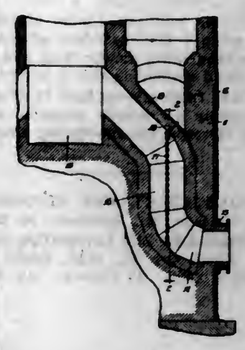
1,897,807. SPRING MOUNTING. WILLIAMSON D. KESSLER, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,704. 2 Claims. (Cl. 267—54.)

1. In a device of the class described, a housing, a link pivotally connected to the housing and having a portion extending thereinto and movable therewithin, shoulders on the link which substantially close the opening in said housing through which the link extends thereinto, and



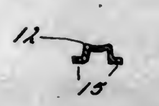
blocks of resilient material within the housing and bearing against the walls thereof, the portions of the link within the housing and the shoulders of the link.

1,897,808. COMBUSTION APPARATUS. SELWYNE P. KINNEY, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed July 1, 1929. Serial No. 375,197. 4 Claims. (Cl. 158—7.)



1. Combustion apparatus comprising a passage carrying a gaseous combustible mixture and a screen of heat resistant material extending across the passage area, said screen comprising metallic links and hanging vertically in the passageway.

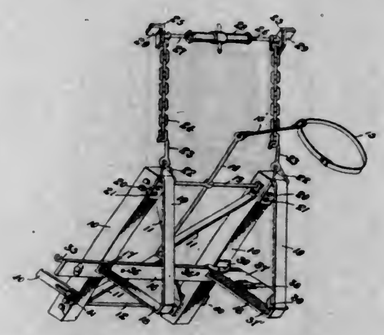
1,897,809. FIBER SPOON. EDNA R. LILLEY, Whitemarsh, Pa. Filed Aug. 28, 1929. Serial No. 388,931. 1 Claim. (Cl. 30—22.)



As a new article of manufacture, a fiber spoon having a bowl, a handle formed with the bowl, a central strengthening rib extending longitudinally throughout the length of said handle and into the bowl, said rib lying above the upper surface of the handle, the underside of said rib being hollow and having its top wall concaved from above to give added strength to the handle.

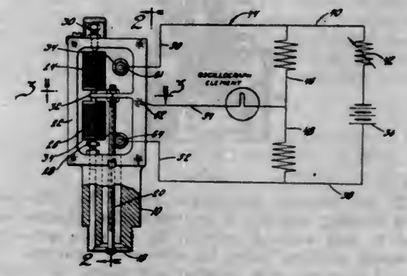
CARNEGIE LIBRARY OF ATLANTA

1,897,810. WINDOW SCAFFOLD. JUNIUS L. MALLORY and JOHN V. DANIEL, Boston, Mass. Filed Dec. 27, 1930. Serial No. 505,021. 11 Claims. (Cl. 304—27.)



1. A window scaffold comprising a frame having parallel bars, a bracket outstanding from each of said bars, a platform carried by said brackets, means for engaging window frame parts, and flexible means connecting the brackets with said engaging means.

1,897,811. INDICATOR. EDWARD J. MARTIN, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 28, 1928. Serial No. 265,452. 11 Claims. (Cl. 177—351.)



1. In pressure indicating apparatus the combination of a plug adapted to be secured in an opening in a pressure chamber with its lower end extending into the opening and exposed to pressures therein, said plug being provided with a central bore extending through the lower end of the plug, a diaphragm extending across the bore at its extreme lower end and sealing the bore, a rigid thrust member centrally secured to the diaphragm and projecting through the bore, a frame integrally united with said plug, a relatively rigid yieldable arm projecting from the frame and connected to the thrust member, and a pressure sensitive rheostat operated by movement of said arm.

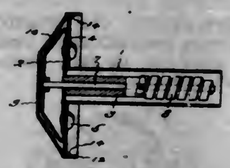
1,897,812. PROCESS OF FORMING ALKYL SULPHATES. SYLVAN R. MERLEY, Dover, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 11, 1926. Serial No. 128,698. 2 Claims. (Cl. 260—156.)

1. In the manufacture of alcohols by contacting cracked petroleum materials with sulphuric acid, the process which comprises contacting gaseous cracked petroleum material containing a mixture of propylene and normally gaseous substances which form sulphonic acids with sulphuric acid at normal room temperatures with sulphuric acid initially of 66° Bé. gravity, maintaining the temperature during said contacting at approximately and not above 5° F. whereby no substantial formation of sulphonic acids occurs, continuing said contacting for a time sufficient to cause the absorption of the major portion of the propylene and until the gravity of said sulphuric acid has been reduced below 35° Bé. by the formation of alkyl sulphates, thereafter contacting the resulting acid liquor with normaly liquid cracked petroleum products containing olefins and substances which form sulphonic acids with sulphuric acid at normal room temperatures, and maintaining the contacting materials during said latter contacting not above 5° F. whereby an acid liquor containing alkyl sulphates and substantially free of sulphonic acids is produced.

1,897,813. METAL CLEANING COMPOSITION. HARRY C. MOUGEY, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 1, 1929. Serial No. 382,846. 4 Claims. (Cl. 148—8.)

2. A composition for cleaning surfaces of ferrous metal comprising an acid adapted to remove rust, such as phosphoric acid, and a water-soluble oil solvent selected from the group of substances consisting of di-, tri- and tetra-ethylene glycol and their ethers, the methyl, ethyl and propyl ethers of propylene glycol, the acetates of glycol and of di-ethylene glycol and of the ethyl ethers of ethylene glycol.

1,897,814. SIDE-WALL THERMOMETER. FREDERICK A. NODINE, Terryville, Conn., assignor to The Cooper Oven Thermometer Company, Plymouth, Conn., a Corporation of Connecticut. Filed Jan. 5, 1932. Serial No. 584,792. 6 Claims. (Cl. 73—118.)

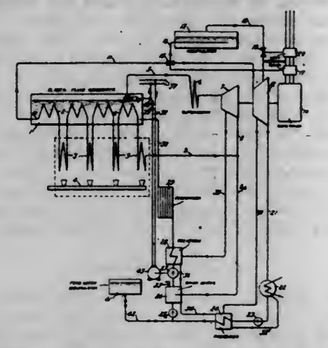


5. A thermometer comprising a tube, a disk fixed to said tube, a disk with a notched edge adjustably connected with the fixed disk, a spindle extending through the tube, a thermostatic coil with one end connected with the tube and the other end connected with the spindle, a dial on the spindle, said dial having two series of indicating numerals, and a cover having a window, said cover having studs, which in cooperation with the notches in the edge of said notched disks, permit the cover to be applied over and attached to the notched disk with the window exposing either one or the other of the indicating numeral series.

1,897,815. POWER PLANT. CARL OSENBERG, Berlin-Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 29, 1931, Serial No. 571,925, and in Germany Nov. 13, 1930. 3 Claims. (Cl. 60—73.)

1. In a power plant, an evaporator for generating elastic fluid, a superheating means for the elastic fluid generated in the evaporator, a high pressure consumer supplied with elastic fluid from the superheating means, heating elements for the evaporator and a plurality of superheaters, the first of which being arranged between the exhaust of the high pressure consumer and the first heating element, the other superheaters being arranged between adjacent heating elements, a low pressure elastic fluid consumer, a conduit for conveying elastic fluid from the heating elements

to the low pressure consumer, an accumulator arranged between the conduit and a lower stage of the low pressure elastic fluid consumer for maintaining the load on the high pressure consumer substantially constant, means

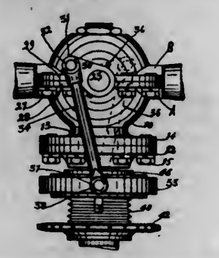


for regulating the supply of elastic fluid to the accumulator, and means independent of the last named means for regulating the supply of elastic fluid from the accumulator to the low pressure consumer.

1,897,816. PROCESS FOR THE DEHYDRATION OF ACETIC ACID. DONALD F. OTHMER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 19, 1931. Serial No. 509,877. 6 Claims. (Cl. 260—122.)

1. The process of dehydrating aqueous acetic acid which comprises neutralizing aqueous acetic acid with triethanolamine and then by means of heat driving off the water from the reaction mass.

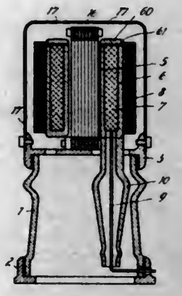
1,897,817. MECHANICAL COMBINATION FOR REVERSIBLE PITCH PROPELLERS. VITAL PAQUIT, New York, N. Y. Filed Dec. 11, 1929. Serial No. 413,275. 2 Claims. (Cl. 170—163.)



1. In a flying machine having a propeller shaft, a drive head of spherical form made of two parts split through the axis of the propeller blades, pinion gears with shafts radially mounted in said head, each pinion gear shaft having an arm connecting to a thrust collar, said collar moving longitudinally by means of a rotatable threaded sleeve, a stop thrust collar for said sleeve, and a demountable neck for supporting said sleeve.

1,897,818. INSULATING BODY. PAUL PASCHEN, HANS RITTER, GEORG STAUBER, WILHELM GEBHARDT, and KARL SCHMIEDEL, Nuremberg, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Apr. 9, 1931, Serial No. 528,846, and in Germany Apr. 14, 1930. 28 Claims. (Cl. 175—361.)

1. A body of electric insulating material, having a wall for separating two spaces containing objects of different electrical potentials, said wall comprising at least two component portions having a joint extending through the wall and having the contacting joint surfaces sufficiently finely finished to form substantially a uniformly close surface-to-surface contact throughout the extent of the joint, and to impart to said joint a dielectric strength of the order of that of the adjacent material.

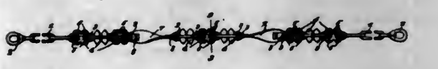


1,897,819. INTERNAL COMBUSTION ENGINE FOR LIQUID AND SOLID FUELS. RUDOLF PAWLIKOWSKI, Goerlitz, Germany. Filed Nov. 26, 1928, Serial No. 322,066, and in Germany May 19, 1927. 2 Claims. (Cl. 123—23.)



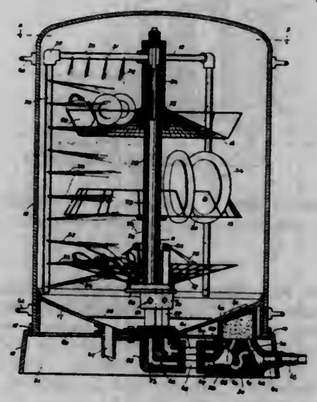
1. In an internal combustion engine for pulverized fuel, a working cylinder, a pre-combustion chamber connected to said working cylinder by an open pulverized fuel nozzle, a filling valve for admitting pulverized fuel into said precombustion chamber and means for blowing out the contents of said precombustion chamber into the working cylinder, a separate liquid fuel injecting nozzle near the said open pulverized fuel nozzle and a fuel injection pump for introducing the liquid fuel directly into the working cylinder.

1,897,820. GROWTH CLEARING DEVICE. JOSEPH L. PITCHFORD, Baudette, Minn. Filed July 27, 1932. Serial No. 625,118. 3 Claims. (Cl. 55—60.)



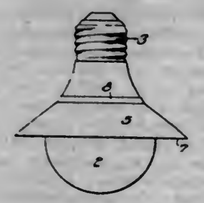
1. A growth clearing device for land, comprising a chain including end chain sections, burr sections having connection with each other and to the end sections respectively, means for swivelly connecting the ends of the chain to propelling means, and means for rotating said chain.

1,897,821. DISHWASHING DEVICE. GLAUCO POLI, New York, N. Y. Filed Aug. 22, 1931. Serial No. 558,709. 5 Claims. (Cl. 141—9.)



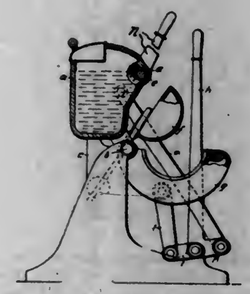
5. A dish washing machine comprising a base, a vertical upright extending therefrom, a tray supported on said upright between the ends thereof, and a rotatable fluid ejector mounted on said upright having a vertically extending portion provided with inwardly directed perforations on opposite sides of a vertical plane passing through said upright and vertically extending portion at different angles with respect to said plane, whereby jets of water issue from said perforations in diverging relation toward said upright in such relation as to produce an unbalanced force tending to rotate said vertically extending portion.

1,897,822. REFLECTOR FOR INCANDESCENT LAMP BULBS. CHARLES W. ROHRKASTE, Beaver Falls, Pa. Filed Dec. 3, 1931. Serial No. 578,654. 2 Claims. (Cl. 240—104.)



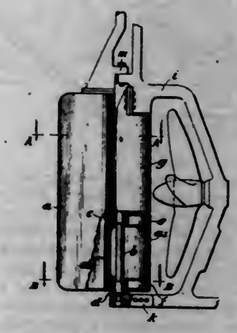
1. In combination with an incandescent lamp having a lower spherical bulb merging into an upper concaved neck, a coniform sheet metal reflecting skirt having a central opening surrounded by a continuously contacting inner annular coniform flange engaging the lamp bulb at junction of its spherical and concave surfaces and an outer annular confining edge terminating opposite the maximum diameter of the bulb adapted to reflect upwardly and outwardly divergent rays downwardly below the maximum diameter of the lamp.

1,897,823. CASTING APPARATUS FOR STEREOTYPE PLATES HAVING A MOLD ADAPTED TO BE PRESSED IMMEDIATELY AGAINST THE MELTING POT. KARL SCHÄFLEIN, Bern, Switzerland. Filed Sept. 17, 1931, Serial No. 563,326, and in Germany Sept. 29, 1930. 5 Claims. (Cl. 22—2.)



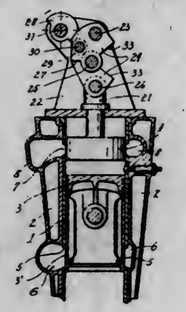
1. In a casting apparatus for stereotype plates, the combination of a melting pot adapted to be tilted downward about an axis located beneath said pot, a mold arranged to be swung upward about said axis, and operating means for tilting said pot and simultaneously swinging said mold upward into cooperative relationship with said pot.

1,897,824. RUDDER FOR SHIPS. WILLIAM SCHOLZ, Altona-Flottbek, Germany. Filed Jan. 8, 1932, Serial No. 585,529, and in Germany Aug. 17, 1931. 3 Claims. (Cl. 114—162.)



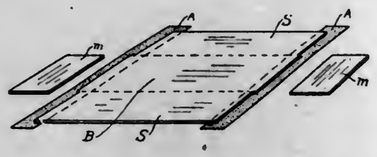
1. A ship's rudder system comprising a movable rudder body, consisting in vertical direction of a balanced portion of stream line shape and of a drop-profile unbalanced portion, and a rudder post fixed at its two ends to the ship's stern frame and heel, and serving as the pivotal axle for the balanced rudder portion, said post having a forwardly extending, plane stabilizing portion thinner than the leading end of the unbalanced rudder portion and being disposed in line with and forward of the unbalanced rudder portion.

1,897,825. INTERNAL COMBUSTION ENGINE. JACQUES EGIDE SERSTÉ, Laeken-Brussels, Belgium. Filed Jan. 2, 1932, Serial No. 584,375, and in Belgium Jan. 17, 1931. 6 Claims. (Cl. 123—79.)



1. In an internal combustion engine, the combination with a cylinder provided with exhaust and admission ports, a movable cylinder head, a toggle lever connected to said movable cylinder head and a fixed pin, and a cam serving to lock said toggle lever in its straightened position during the compression and explosion periods, of means cooperating with said locking cam in such a way that at the moment said cam releases the toggle lever for enabling the same to be folded and the cylinder head to be moved for the purpose of opening the exhaust ports, said means is caused to act positively on the toggle lever for folding the toggle lever and move the cylinder head even in the absence of any pressure of exhaust gases, substantially as set forth.

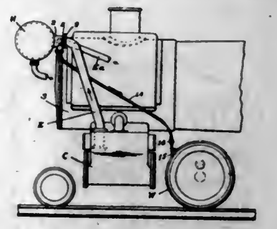
1,897,826. COMPOSITE BOX. JOHN S. STOKES, Huntingdon Valley, Pa., assignor to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 9, 1931. Serial No. 561,824. 4 Claims. (Cl. 229—23.)



1. A three-piece box having a component, of cardboard, comprising a bottom element integral with side wall elements, said bottom element having extensions projecting beyond the ends of said side wall elements, separate end components against whose inner faces abut the ends of said side wall elements of said first named component, and whose lower edges abut against said bottom extensions of said first named component, and sheet material holding said end components to said first named component.

1,897,827. OILING APPARATUS FOR LOCOMOTIVE DRIVING WHEEL FLANGES. EDWARD F. SULLIVAN, South Portland, Me. Filed Mar. 16, 1932. Serial No. 599,247. 4 Claims. (Cl. 184—3.)

1. In apparatus for oiling the flange of a locomotive drive wheel comprising in combination with the feedwater heater therefor, a cylindrical structure integral with said heater and disposed partly within and partly without the wall thereof, a flange on the outer portion of said structure to which the exhaust pipe from the driving cylinder of said locomotive is attached, a perforate plate secured within and transversely of said structure, an expansion chamber interjacent said flange and said perforate plate, and a discharge orifice opening out

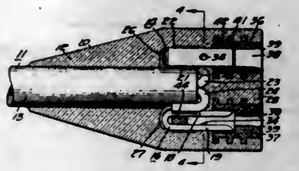


of the bottom side of said expansion chamber through which oil collecting in said chamber may pass outwardly thereof.

1,897,828. PROCESS FOR PHOTOCHEMICAL PRODUCTION OF ALUMINUM PRINTING FORMS. MAX THIMANN, Berlin-Wilmersdorf, Germany, assignor to the Firm Dr. Bekk & Kaulen Chemische Fabrik G. m. b. H., Berlin-Lichterfelde, Germany. Filed Mar. 12, 1931, Serial No. 522,186, and in Germany Mar. 17, 1930. 8 Claims. (Cl. 95—5.7.)

1. A process for the photochemical production of aluminum printing-forms, comprising treating the aluminum body with an acid-free solution of a salt of a tri-valent metal, coating a sensitized-colloid coating onto the plate, exposing, developing, and etching the plate, and then removing the hardened colloid-coating.

1,897,829. ELECTRICAL TERMINAL. NOBLE H. WATTS, Alameda, Calif., assignor, by mesne assignments, to General Electric Company, Schenectady, N. Y., a Corporation of New York. Filed Dec. 8, 1929. Serial No. 411,272. 3 Claims. (Cl. 173—361.)

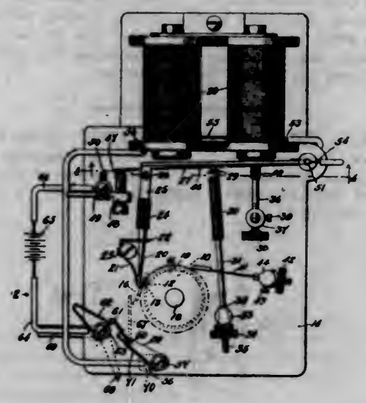


1. In a terminal, a body formed of resilient non-refractory insulating material, a contact member disposed within said body and accessible with respect to a complementary contact member thru one face of the body, and a member embedded in the resilient material of the body yieldably independent of said first-name contact member and presenting a substantially refractory surface adjacent the initial point of contact between said first named contact member and said complementary member.

3. In an electrical terminal, a body including resilient insulating material, a flexible electrical cable extending into said body, a purality of female contact members embedded in the insulating material of said body, and means for anchoring said members to the inner end of said cord, the conductors of said cord being electrically connected to said contact members independently of said anchoring means.

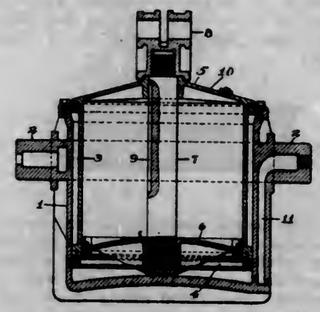
1,897,830. ELECTRIC WIND FOR CLOCKS. LOUIS AGOSTINI, Vineland, N. J. Filed Mar. 28, 1931. Serial No. 525,919. 3 Claims. (Cl. 185—40.)

2. The combination with a spring driven motor and a rotating member, an arm carried by the rotating member, a staff journalling the spring, a ratchet carried by the staff, an electro-magnet, an armature for the magnet, a make and break controlled by the armature, a pawl carried by the armature adapted to engage the ratchet,



and a lever oscillated by the arm carried by the rotating member for periodically closing the circuit to the electromagnet.

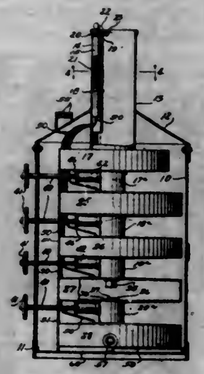
1,897,831. CAR CONSTRUCTION. JOHN P. ANDERSON, Koppel, Pa., assignor, by mesne assignments, to Koppel Industrial Car and Equipment Company, McKees Rocks, Pa., a Corporation of Pennsylvania. Filed Jan. 31, 1931. Serial No. 512,622. 4 Claims. (105—271.)



1. In a dump car a body tilting mechanism comprising a trunnioned outer cylinder, a movable inner cylinder, a piston mounted in said inner cylinder and having a stem projecting beyond the top of said inner cylinder, a slot in the periphery of said stem for a portion of the length thereof and an additional opening in the head of said inner cylinder.

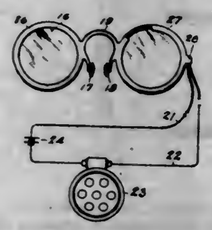
1,897,832. TESTING GAUGE. DANIEL BAUTZ, Milwaukee, Wis., assignor to Anna Mutsch, Milwaukee, Wis. Filed Dec. 14, 1929. Serial No. 413,962. 4 Claims. (Cl. 73—165.)

1. A testing gauge comprising the combination of a set of superposed communicating containers, each of predetermined individual capacity, means for shutting off communication between any two of the respective containers, an extension associated with the upper container and provided with a filling passage, and an indicator within said passage provided with visible means for indicating the level of the liquid in said passage, whereby to indicate the total quanlity of liquid in the upper chamber and any given number of other containers then in communication with the upper chamber.



4. In a portable testing gauge of the described class, the combination with a suitable housing, of a series of independently vented superposed measuring chambers within the housing, spaced from each other and from the outer wall thereof, an interior support connected with the measuring chambers at points distant from the outer walls, and adapted to hold the chambers in such spaced relation, said housing having a filling tube extending through its top wall and communicating with the upper measuring chamber, and said measuring chambers having valved connection with each other and valve actuating devices operable from the exterior of the housing.

1,897,833. AUDIPHONE. WILLIAM G. G. BENWAY, Seattle, Wash. Filed Jan. 26, 1931. Serial No. 511,829. 12 Claims. (Cl. 179—107.)

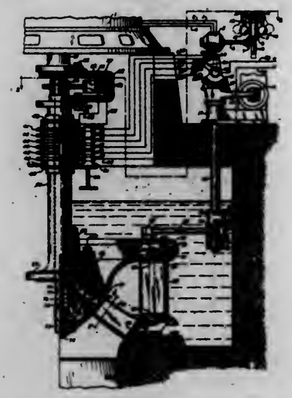


1. In a device of the character described, the combination of a spectacle frame; a vibrating member carried by said spectacle frame and held directly against a bone portion of the head by said spectacle frame; electromagnetic actuating means for said vibrating member carried by said receptacle frame; means affording a source of electrical energy; a microphone; and electrical conductor members connecting said microphone, said electro-magnetic actuating device and said means affording a source of electrical energy.

1,897,834. HYDRAULIC TURBINE. GEORGE A. BIGGS, Springfield, Ohio, assignor to The James Leffel & Company, Springfield, Ohio, a Corporation of Ohio. Filed Mar. 6, 1929. Serial No. 344,717. 11 Claims. (Cl. 253—148.)

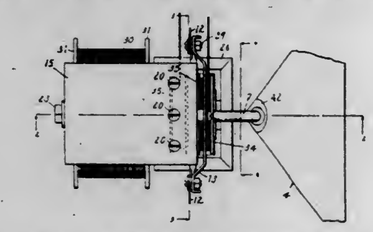
1. In a hydraulic turbine, a shaft, a drum-shaped housing suspended from said shaft, a runner and runner shaft suspended from the bottom of said housing, ad-

justable buckets on said runner, an interiorly disposed shaft in the runner projecting into said drum-shaped housing, gearing in the runner between said shaft and the buckets for adjusting the position of the buckets and electrical means selectively energized for rotating said bucket adjusting shaft, said means being carried in said drum housing, and comprising a plurality of spaced



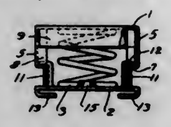
solenoids in said housing, a plurality of magnetized members adjacent thereto carried by said bucket adjusting shaft only one of said members in alignment with any solenoid at any time, means of conveying current selectively to any one of said solenoids, and means for determining said selection according to the speed of the driven shaft.

1,897,835. LOUD SPEAKER. CHARLES D. BOCK, Kalamazoo, Mich., assignor of one-half to William Shakespeare, jr., Kalamazoo, Mich. Filed Sept. 2, 1931. Serial No. 560,739. 11 Claims. (Cl. 179—115.5.)



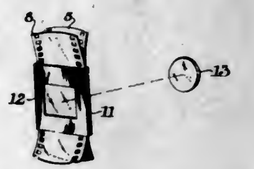
11. In a loud speaker, the combination with a conical diaphragm, a pair of oppositely disposed reinforcing cones secured to the apex of said diaphragm, a reinforcing cross bar connecting sides of said apex, a plurality of posts extending rearwardly from said diaphragm at said apex, an armature secured to said posts, and means for energizing said armature.

1,897,836. FLEXIBLE SPRING PAD. GEORGE W. BRISTOL, Meriden, Conn. Filed Jan. 27, 1932. Serial No. 589,086. 12 Claims. (Cl. 267—1.)



1. In a spring pad of the type having a cap and a base slidably attached and held apart by a spring, continuous engaging flanges extending downward from the edges of said cap, the flanges at the ends of said cap having projections extending inward at the centers thereof, flanged studs extending upward from said base with grooves corresponding with the projections of said flanges and stops in the ends of said grooves limiting the movement of said projections said base having spring holding projections at the sides, and clips on the under side of the ends of said base, said attaching means allowing the upper surface of said cap to slope in any direction.

1,897,837. COLOR CINEMATOGRAPHY. JOHN G. CAPSTAFF, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed July 21, 1930. Serial No. 469,507. 3 Claims. (Cl. 88—16.4.)



3. In a process for making motion pictures in color that includes passing two differentially sensitized film strips through an exposure gate with their emulsion faces in contact, the improved method of maintaining the surfaces intimately in contact that comprises forming each film strip with a permanent transverse bow convex to its emulsion surface and holding the borders of the strip in contact during such passage.

1,897,838. TINTED SOUND AND PICTURE FILM AND METHOD OF MAKING SAME. HENRY R. COUCH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 20, 1929. Serial No. 356,745. 1 Claim. (Cl. 88—16.2.)



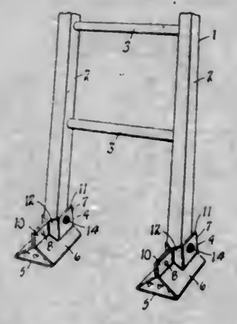
A film strip for the simultaneous reproduction of motion pictures in a single color and of sound comprising a support of cellulosic composition having a photographic layer on one surface only and having a series of motion picture exposure areas tinted with a single color, and an uncolored sound track, the support surface only opposite said sound track having been treated with water and a solvent above normal room temperatures.

1,897,839. METHOD OF MAKING BOOKS. CHARLES E. GALE, Quincy, Mass. Filed Mar. 17, 1932. Serial No. 599,373. 7 Claims. (Cl. 281—40.)



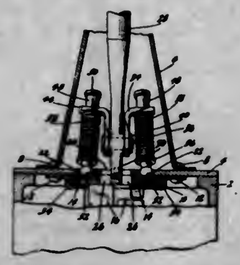
2. The method of making a book, which comprises weakening the leaves along lines parallel with and equally spaced from the binding edges, assembling the leaves to bring them to a position wherein the weakening lines are parallel and progressively spaced rearwardly from the center leaf toward the first and last leaves, and cutting one set of edges of the leaves, which edges are parallel to the weakening lines so that said edges shall occupy a plane perpendicular to the planes of the leaves.

1,897,840. LADDER FOOT. GEORGE H. GREENE, Kalamazoo, Mich. Filed Dec. 14, 1931. Serial No. 580,831. 8 Claims. (Cl. 228—61.)



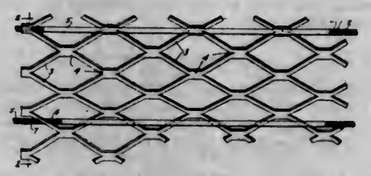
7. A shoe of the class described, comprising a substantially flat base having integral anti-skid lugs, and upwardly and inwardly inclined side walls terminating in vertical flanges which are in contact at the toe of the shoe and in spaced relation at the heel.

1,897,841. TRANSMISSION SHIFTING MECHANISM. ARTHUR W. HARRIS, Toledo, Ohio, assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 8, 1931. Serial No. 542,895. 7 Claims. (Cl. 74—39.)



1. In a shifting mechanism, a movable shift lever, a stationary plate having an opening in which the end of the lever is received, and means positively attached to the lever and constantly bearing on the plate in a single position to hold the lever in a given position.

1,897,842. METALLIC LATHING. THOMAS R. HERBEST, Jr., Wheeling, W. Va., assignor to The Consolidated Expanded Metal Companies, Wheeling, W. Va., a Corporation of West Virginia. Filed May 31, 1930. Serial No. 458,605. 17 Claims. (Cl. 72—117.)



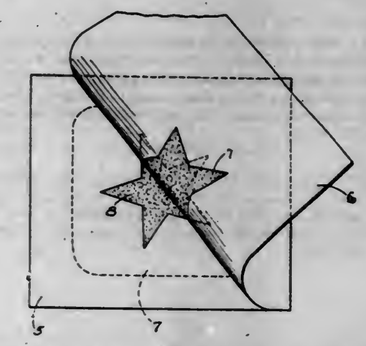
1. As a new article of manufacture, expanded metal having a pair of ribs in the form of wire welded through the meshwork of the metal, the ribs of the pair being arranged on opposite faces of the meshwork and parallel to each other.

1,897,843. LIGHT SENSITIVE TROPOCHROMIC COATING. KENNETH C. D. HICKMAN and LUDWIG A. STAIB, Jr., Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 7, 1930. Serial No. 473,785. 7 Claims. (Cl. 95—7.)

1. A photographic support having a coating containing a salt of a metal which in the presence of free sulphur ions forms a colored sulphide, an organic compound capable of yielding a sulphide ion, and including a compound which under the influence of light yields a substance capable of promoting the reaction between the first two compounds to form a visible image.

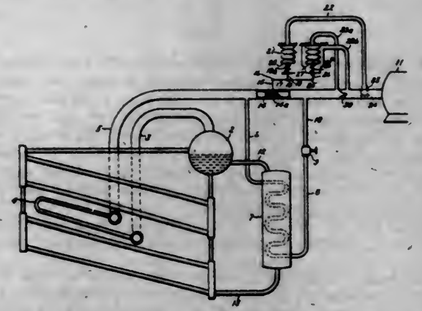
5. A light sensitive coating consisting of aquo pentamino cobaltic chloride, thioacetamide, and lead acetate.

1,897,844. PHOTOGRAPHIC PRINTING METHOD. KENNETH C. D. HICKMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 11, 1931. Serial No. 515,120. 6 Claims. (Cl. 41—41.5.)



1. The method of transferring a print of an image from a planographic photographic record to a layer of cellulose derivative, which comprises softening the surface of said layer and pressing said layer against said planographic record.

1,897,845. CONTROL SYSTEM. NINO HILGERS, Berlin-Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Sept. 16, 1930, Serial No. 482,245, and in Germany Nov. 9, 1929. 4 Claims. (Cl. 122—479.)



1. In combination, a vapor generator having a superheater, a conduit for the passage of superheated vapor therefrom, a by-pass to a portion of the conduit, fluid surrounding the by-pass in heat conducting relation with the vapor flowing therethrough, the fluid in thermal circulation with the vapor generator, a valve in the conduit between the exit and re-entrant points of the by-pass

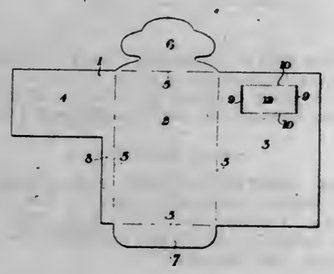
thereto, a pressure responsive device sensitive to vapor pressure beyond the by-pass and adapted to position the valve in a closing direction when the vapor pressure increases and in an opening direction when the vapor pressure decreases, and a temperature responsive device sensitive to vapor temperature beyond the by-pass and adapted to position the valve independently of the pressure responsive device.

1,897,846. FILM, PLATE, AND THE LIKE. WILLIAM V. D. KELLEY, Los Angeles, Calif., assignor to Du Chrome Film System Ltd., Los Angeles, Calif., a Corporation of California. Filed Apr. 8, 1930. Serial No. 442,557. 4 Claims. (Cl. 95—2.)



1. As a new article of manufacture, a photographic film or plate having a base, a pre-selected color therefor, a plurality of photo-sensitive emulsions carried by the base, and a separator having a color complementary to the pre-selected color interposed between contiguous emulsions.

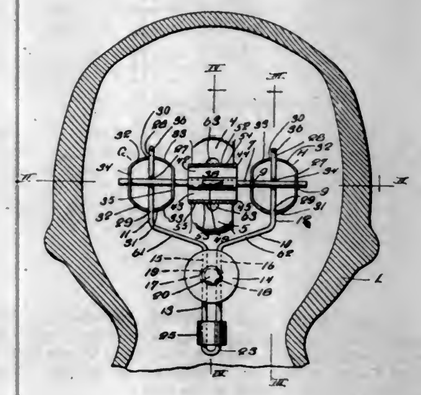
1,897,847. LOCKING COUPON ENVELOPE. DEWEY M. KENNEDY, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 23, 1930. Serial No. 504,286. 3 Claims. (Cl. 229—70.)



1. In an envelope, the combination with envelope walls having an opening, of a flap adapted to close the opening in the walls, locking ears on the flap, a locking pocket in the envelope including a removable tab defined by a pair of spaced slots and weakened lines connecting said slots, said tab being adapted to be removed by tearing along the weakened lines, whereby the locking ears of the flap may engage the opening thus formed and lock the envelope in a closed position.

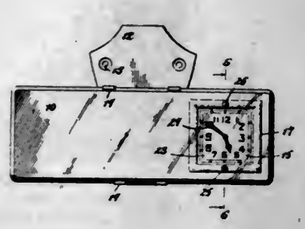
1,897,848. EYE SET. ALEXANDER KONOFF, New York, N. Y., assignor, by mesne assignments, to Margon Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 18, 1927. Serial No. 161,915. 17 Claims. (Cl. 46—40.)

1. An eye set comprising a pair of eyes, a cross rod upon which said eyes are mounted spaced apart, and an attaching member engaging the cross rod between said eyes, the portion of the cross rod intermediate the eyes having a lateral extension, the attaching member having an opening through which said extension projects to assist in connecting the attaching member with the cross rod, and having parts at opposite sides of said opening com-



prising spring portions for resiliently engaging against opposing portions of the doll head to retain the eye set within the doll head.

1,897,849. COMBINED MIRROR AND INSTRUMENT. WILLIAM LA HODNY, Buffalo, N. Y., assignor to Standard Mirror Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Nov. 26, 1929. Serial No. 409,965. 2 Claims. (Cl. 45—97.)

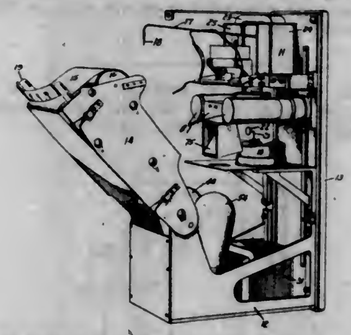


1. The combination with a transparent panel provided on its rear face with a depression to receive an open sided instrument case arranged behind said panel and having a laterally extending rim fitting in said depression, whereby an instrument in said instrument case is visible through said panel of means for supporting said instrument case from said panel, comprising screws arranged in openings provided in said panel, said openings leading to said depression and said screws being secured to the rim of said instrument case.

1,897,850. MEASURING INSTRUMENT. CRAMER W. LA PIERRE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 27, 1931. Serial No. 559,741. 11 Claims. (Cl. 234—5.5.)

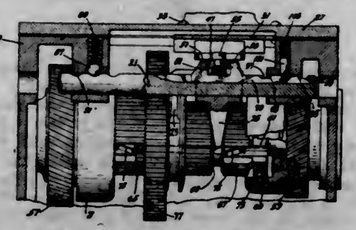
1. In a measuring instrument a basic deflecting element responsive to a quantity to be measured, a secondary element reproducing the deflections of said basic element without placing a load thereon, an auxiliary source of power energizing said secondary element, a thermionic discharge device controlling the energization of said sec-

ondary element to govern the magnitude of the deflection thereof, said discharge device including a grid, the potential of which regulates said discharge device, and a light sensitive electrical follow-up device comprising means to



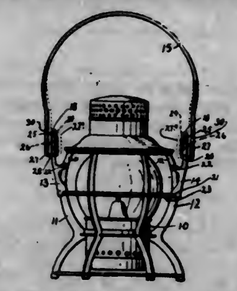
vary the potential of said grid in response to lack of agreement between the deflections of said basic and secondary elements to bring the deflections of the latter in accord with those of the former.

1,897,851. GEAR SHIFT LOCK. ALBERT E. LEACH, Royal Oak, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 12, 1932. Serial No. 610,797. 7 Claims. (Cl. 74—39.)



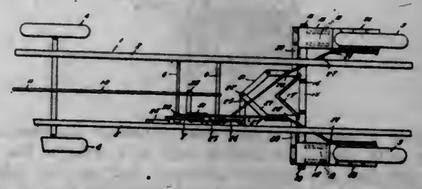
1. In combination, a casing, a first member movable to do work, a second member, operating means having a snug fit with the second member and a lost motion connection with the first member, spring-actuated means locked to lock said first member to said casing, said second member having angularly formed walls to dislodge said locking means from engagement with both casing and first member during the movement of the second member relative to the first member by the operating means.

1,897,852. BAIL EAR. CARL METZ, Philadelphia, Pa., assignor to Keystone Lantern Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Aug. 16, 1932. Serial No. 629,029. 5 Claims. (Cl. 240—52.3.)



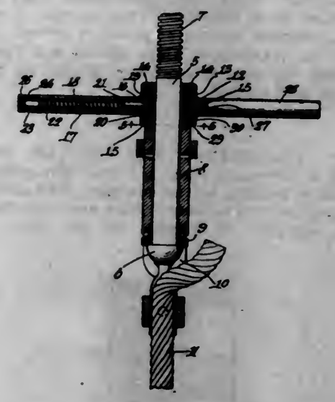
5. In a lantern having attached thereto a bail with hooks, upon which said lantern swings, a bail ear attached to said lantern and connected with said bail, comprising a body having a longitudinal slot therethrough, and a hole spaced from said slot, said slot and said hole being positioned for engagement with one of said hooks, to have the end of said hook engage said hole, during the engagement of a portion of said hook with said slot.

1,897,853. VEHICLE BRAKE. PAULINO MOSTAZA, Newark, N. J. Filed Apr. 17, 1930. Serial No. 445,022. 6 Claims. (Cl. 188—4.)



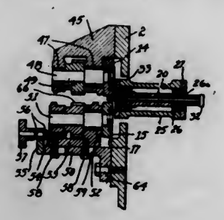
1. A vehicle brake of the character described comprising a supporting bar, a pair of angular plates slidably mounted for longitudinal and lateral movement on the supporting bar, a brake shoe mounted on each plate for movement therewith and adapted for disposition beneath one of the wheels of the vehicle and manually operable means for retaining the plates and the shoes in inoperative position on the supporting bar.

1,897,854. TEMPER-SCREW HANDLE BAR. MERL MYERS and CARLIN MYERS, Bremen, Ohio. Filed Apr. 17, 1929. Serial No. 355,822. 1 Claim. (Cl. 192—43.2.)



. The combination with a temper screw, a handle bar comprising a body portion of a diameter to fit over the temper screw, said body portion having an enlarged end portion formed with transversely disposed bores, securing screws positioned within the bores and engaging the temper screw securing the body portion to the temper screw, said body portion having longitudinal ribs, a supporting ring mounted for rotary movement on the body portion and having threaded openings, handle bars having threaded end portions fitted in the threaded openings, one of the handle bars being tubular in formation, a spring pressed rod disposed within the tubular handle bar and having an enlarged tapered end providing a tooth engaging the ribs of the body portion, a threaded member mounted on one end of the body portion and providing a rest against which the supporting ring engages, and said handle bars adapted to rotate the body portion in one direction.

1,897,855. SPRING COILING MACHINE. MICHEL NIGRO, Worcester, Mass., assignor to Sleeper & Hartley, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed May 31, 1930. Serial No. 458,333. 6 Claims. (Cl. 153—65.)

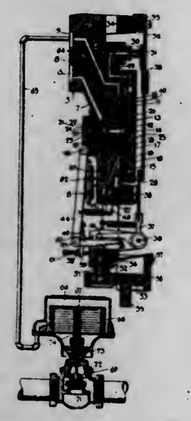


1. In a machine of the class described, the combination with means for feeding wire in a straight line in the direction of a rotatable abutment and rotatably driven coiling rolls arranged above and below the axis of said abutment, of means for separately varying the coiling relation of said abutment and at least one of said rolls in a direction parallel to the axis of rotation of said abutment to control the pitch of the helix into which the said wire is formed by the cooperation of said abutment, said rolls, and said feeding means.

1,897,856. MANUFACTURE OF POLYMERIZED VINYL ALCOHOL. CARL R. NOLLER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 6, 1929. Serial No. 338,046. 3 Claims. (Cl. 260—156.)

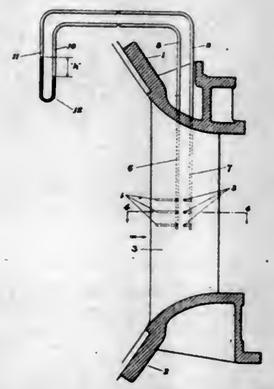
1. The process of preparing polymerized vinyl alcohol which comprises saponifying polymerized vinyl acetate with an alkali metal hydroxide in the presence of an alcohol and a sufficient amount of water to prevent precipitation of the polymerized vinyl alcohol and thereafter precipitating the polymerized vinyl alcohol by diluting the mixture with alcohol.

1,897,857. THERMOSTAT AND SIMILAR DEVICE. ARTHUR J. OTTO and CARL A. OTTO, Milwaukee, Wis., assignors to Johnson Service Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 16, 1930. Serial No. 461,447. 13 Claims. (Cl. 236—82.)



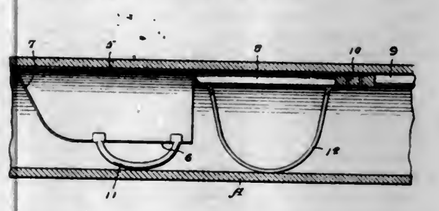
1. The combination of an element responsive to temperature; a heat regulating motor controlled thereby; means for adjusting said responsive element; and automatic means for shifting said adjusting means in such determined relation to the response of said motor, that in the heat-on position of said motor the thermostat is set to maintain a higher temperature than in the heat-off position of said motor.

1,897,858. HYDRAULIC METER. JOSEPH A. PECK, Worcester, Mass. Filed Mar. 24, 1930. Serial No. 438,509. 6 Claims. (Cl. 73—167.)



1. In apparatus of the class described, a pressure indicating apparatus, a plurality of stationary turbine vanes past which the water flows, one of said vanes having an orifice therein past which the stream velocity is relatively high and a passage connecting said orifice to one side of said pressure indicating apparatus, one of said vanes having an orifice therein past which the stream velocity is relatively low and a passage connecting said latter orifice to the other side of said indicating apparatus.

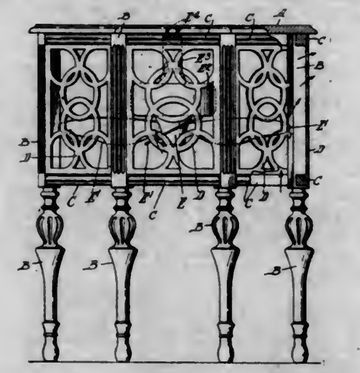
1,897,859. ROOT CUTTER. WILLIAM E. PENROSE, Clarksville, Iowa. Filed July 30, 1932. Serial No. 626,731. 1 Claim. (Cl. 15—104.30.)



An implement of the character described comprising a blade of arcuate form in cross section having a rearwardly inclined and curved toe cutting edge, runners carried by the blade, a socketed handle extension centrally of the heel of the blade, a handle engaged in said extension, and a trailer runner on said extension.

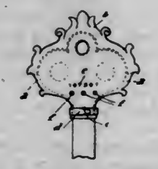
1,897,860. FAN. LAURENCE M. PERSONS, St. Louis, Mo., assignor to Emerson Electric Manufacturing Co., St. Louis, Mo., a Corporation of Missouri. Filed Aug. 4, 1930. Serial No. 472,850. 4 Claims. (Cl. 230—274.)

1. In an air distribution device, a table top and supports therefor, and air delivery means positioned beneath said top and within the confines of said supports, adapted to deliver air upwardly against the bottom of said table top whereby the air is deflected laterally, said supports



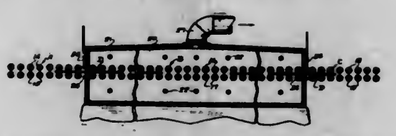
being adapted to concentrate said air laterally delivered by the table top into a plurality of more or less restricted columns.

1,897,861. CASING FOR KEY-BOWS. MARION PRYDE QUAY, Rome, Italy. Filed Aug. 25, 1931. Serial No. 559,287. 1 Claim. (Cl. 40—2.)



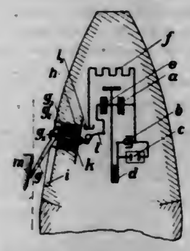
A key-bow casing comprising in combination a flat open-sided envelope-like hollow metal body having two sides forming one piece, the connecting part being solid, a ring for retaining the sides of the casing in position, said casing having hollows provided on one side adapted to receive a phosphorescent mass, substantially as described and illustrated.

1,897,862. APPARATUS FOR PRODUCING LAMINATED GLASS. JAMES W. H. RANDALL, New York, N. Y., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 8, 1928. Serial No. 324,730. 9 Claims. (Cl. 49—81.)



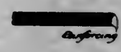
8. In apparatus for producing laminated glass, a roller section comprising a plurality of upper and lower rotatable members adapted to be received therebetween the assembled sheets of material to be joined, means for raising and lowering the upper members as a unit relative to the lower members to facilitate the positioning of the assembled sheets therebetween, means for driving said members to advance the sheets forwardly, a series of heated rotatable pressing members for receiving the sheets therebetween from the roller section, a housing for said members, means for creating a vacuum within the housing, and a series of cooled rotatable members for receiving the sheets therebetween as they issue from said housing.

1,897,863. CONTACT DEVICE FOR TRANSFERRING ELECTRICAL ENERGY INTO PROJECTILE IGNITERS. HERBERT RÖHLEMANN, Sommerda, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf, Germany, a Corporation of Germany. Filed June 30, 1932, Serial No. 620,236, and in Germany July 11, 1931. 26 Claims. (Cl. 102—38.)



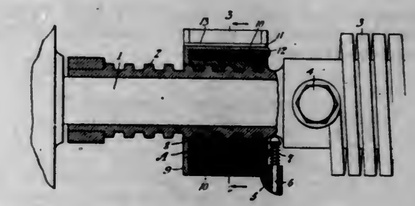
24. In a contact device for transferring electrical energy into projectile igniters from a charging arrangement having current-carrying means located laterally of the path of the projectile and which is transiently connected to the igniters, current-receiving means on the projectile movable thereon transversely to the axis of the projectile, said current-receiving means yieldably entering into the field of the current-carrying means of the charging arrangement.

1,897,864. PRINTER'S BLANKET. ELMER C. SCHACHT, Troy, N. Y., assignor to Behr-Manning Corporation, Troy, N. Y., a Corporation of Massachusetts. Filed Nov. 21, 1932. Serial No. 643,765. 39 Claims. (Cl. 154—54.5.)



1. A printing press blanket comprising a paper-like web of fibres and saturated with a flexible, ink and oil resistant binder, and combined with a reinforcing layer.

1,897,865. GEAR. CHARLES H. SEIFERT, Hempstead, N. Y. Filed June 27, 1932. Serial No. 619,557. 4 Claims. (Cl. 74—7.)



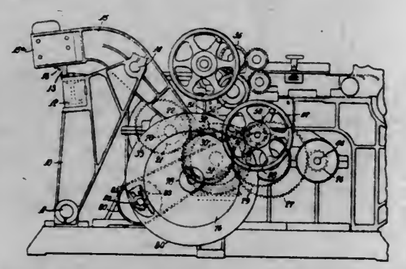
1. A gear wheel having teeth of non-metallic material, a metal protector for the teeth comprising a cap fitting against one face of the gear and conforming to the shape thereof and flush with the teeth of the gear, and strips on the protector extending between the teeth of the gear and secured against movement at their extremity.

1,897,866. COLOR PHOTOGRAPHIC PROCESS. MERRILL W. SEYMOUR, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 25, 1931. Serial No. 559,346. 17 Claims. (Cl. 95—2.)

1. A photographic reversal process which comprises optically sensitizing a silver halide emulsion layer with a

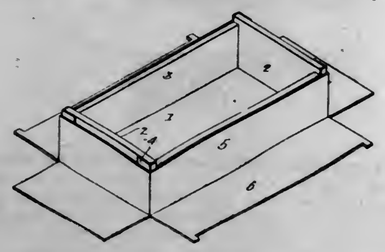
substance such that the silver halide remains differentially color sensitive after the successive actions of a photographic developer and of a chemical solvent for the silver image, exposing said layer to a light image, developing a silver image therein in an ordinary photographic developer, removing the silver image by means of a chemical solvent for said image, chemically sensitizing the remaining silver halide, thereafter exposing the layer to light of that color which renders said optically sensitized silver halide developable, and redeveloping in a second photographic developing bath to produce a positive image.

1,897,867. CUT-OFF MECHANISM. KARL SIEG, Philadelphia, Pa., assignor to Samuel M. Langston Co., Camden, N. J., a Corporation of New Jersey. Filed Aug. 29, 1931. Serial No. 560,125. 31 Claims. (Cl. 164—42.)



1. An apparatus for subdividing continuously advancing sheet material transversely into sections, including a cut-off mechanism movable substantially in the same direction as the material at the instant of cutting, a manually operable control member, means responsive to the manipulation of said control member for varying the frequency of operation of the cut-off mechanism and determining the length of the sections, and means also responsive to the manipulation of said control member for adjusting the timing of the cycle of operation of said cut-off mechanism, so that the speed of said cut-off mechanism at the instant of cutting will be maintained substantially the same as that of the sheet for any given speed of the sheet and irrespective of the length of the sections into which the sheet is cut.

1,897,868. CIGAR BOX. GEORGE H. SNYDER, Philadelphia, Pa. Filed Jan. 22, 1931. Serial No. 510,542. 3 Claims. (Cl. 229—6.)

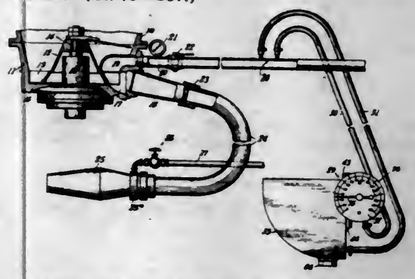


1. As a new article of manufacture, a box comprising a body, consisting of a foundation structure composed of cardboard and comprising a bottom having end and side walls extending therefrom, means for maintaining the foundation structure in a predetermined form, a sheet of paper substantially overlying the outer surface of said structure, and an outer covering composed of cardboard entirely overlying and attached to the outer surface of the said paper and structure.

1,897,869. PROCESS FOR MAKING CELLULOSE NITRO-ACETATE. CYRIL J. STAUD and JAMES T. FUESS, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,516. 9 Claims. (Cl. 260—101.)

1. In the process of making a partially esterified cellulose, treating cellulose in the presence of concentrated nitric acid, and subsequent to such treatment, partially acylating the pre-treated cellulose in a bath containing as the sole acylating agent a fatty acid having more than 1 and less than 8 carbon atoms, and a catalyst.

1,897,870. CONTROL FOR NOZZLE VELOCITY. ELON P. STEWART and LOUIS H. FROST, Syracuse, N. Y., assignors to Cement-Gun Company, Inc., a Corporation of New York. Filed May 9, 1931. Serial No. 536,233. 5 Claims. (Cl. 73—167.)



1. In apparatus of the class described, the combination with a duct, means to supply comminuted material thereto at one end and means including a compressed air supply line to blow the material through said duct and out of its discharge end, of means for producing a differential pressure in said air supply line in accordance with the rate of flow of air therethrough, and means responsive to such differential pressure including a movable index and a scale to cooperate with said index calibrated in terms of velocity at said discharge end of the duct.

1,897,871. APPARATUS FOR THE ORIENTATION OF DRILL CORES. ALPHONS GERARD HUBERT STRAATMAN, The Hague, Netherlands, assignor to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Filed Jan. 19, 1928, Serial No. 247,992, and in the Netherlands Feb. 14, 1927. 2 Claims. (Cl. 33—205.)



1. Apparatus for the orientation of drill cores comprising a system of couplings and rods with locking means

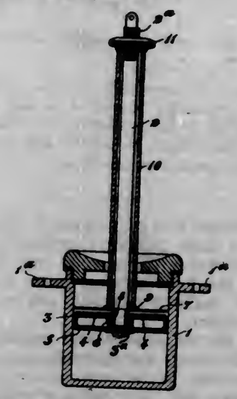
which are free from torsion, and a saw-shaped cutting tool fixedly connected to the lower end of the rods and having its cutting edge substantially parallel with the longitudinal axis of the rods, for making an incision forming a mark in the wall of a hole concentric with the desired core, when the rods are moved in axial direction.

1,897,872. METHOD OF OBTAINING ORIENTATED DRILL CORES. ALPHONS GERARD HUBERT STRAATMAN, The Hague, Netherlands, assignor to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Original application filed Jan. 19, 1928, Serial No. 247,992, and in the Netherlands Feb. 14, 1927. Divided and this application filed Apr. 22, 1931. Serial No. 532,109. 6 Claims. (Cl. 255—1.)



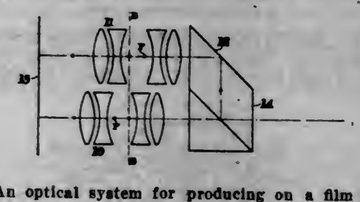
1. A method of obtaining orientated drill cores consisting in drilling a preliminary hole concentric with the desired core, inserting a direction marker within said hole during the drilling thereof, determining the position of said direction marker after its insertion in relation to the cardinal points of the compass and extracting the core together with said marker.

1,897,873. DASHPOT. WILLIAM TIMSON, Soho Foundry, Birmingham, England, assignor to W. & T. Avery Limited, Birmingham, England. Filed Sept. 9, 1931, Serial No. 561,889, and in Great Britain Oct. 29, 1930. 1 Claim. (Cl. 188—96.)



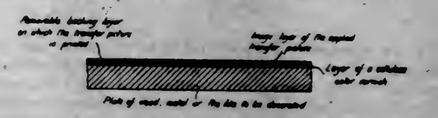
A dashpot comprising a cylinder, a fluid damping medium within the cylinder, a piston reciprocably mounted within the cylinder, a piston rod for connecting the piston to the member to be controlled by the dashpot, ports in the piston through which the damping medium may pass, a disc movably mounted on one side of the piston, means for limiting the movement of the said disc, spring means normally tending to move the disc away from the piston, a second disc movably mounted on the opposite side of the piston, a spring means tending to move the said second disc away from the piston, a member coaxially disposed relatively to the piston rod and adapted to bear on the second mentioned disc, said member being rigid and made from material having a different co-efficient of expansion from the material from which the piston rod is made and a fixed abutment for the other end of the said member, the difference in the co-efficient of expansion between the aforesaid member and piston rod resulting in the second mentioned disc being moved toward or away from the ports in the piston so as to regulate automatically the flow of the damping medium through the ports in accordance with the temperature conditions obtaining.

1,897,874. OPTICAL SYSTEM. FORDYCE E. TUTTLE and FRED E. ALTMAN, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 4, 1931. Serial No. 527,780. 3 Claims. (Cl. 88—1.)



1. An optical system for producing on a film complemental images of an object field from the same point of view comprising a direct lens and a side lens, a beam splitter having a light dividing surface and reflecting surface in optical alinement with the direct and side lenses respectively, the said lenses having their back Gauss planes in the same plane and having their front Gauss planes separated by a distance equal to the difference of the light paths through the beam splitter.

1,897,875. PROCESS FOR TRANSFERRING PRINTS ON TO SURFACES. JOHN WERNER, Swinemuende, Germany. Filed Jan. 16, 1930, Serial No. 421,816, and in Germany Sept. 17, 1929. 4 Claims. (Cl. 41—33.)

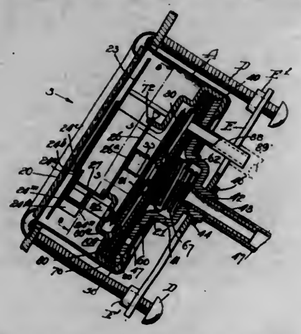


1. Process for the transference of transfer prints on to surfaces, in which the said surfaces are first provided in known manner with a coating of a cellulose ester lacquer and on this coating, after subsequent drying, the dry image to be transferred, printed with oil-free printing colours made by rubbing the colours with cellulose ester solutions, is hot pressed with employment of high pressure, as set forth.

1,897,876. DEPTH GAUGE AND PUMP. LEONARD H. WHEELER, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Sept. 17, 1930. Serial No. 482,478. 4 Claims. (Cl. 73—54.)

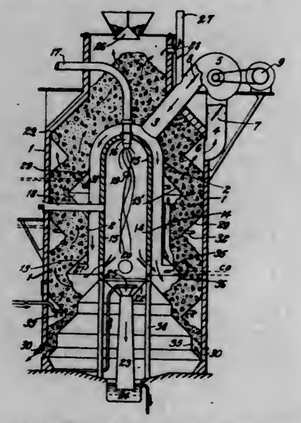
1. An apparatus for the purpose indicated comprising a pressure-developing unit consisting of a pump structure comprising a succession of disk members and thin spacers

interposed between the circumferential margins of consecutive disks and thereby forming thin sealed chambers between said consecutive disks, the latter having inlet and discharge ports to and from their respective chambers,



and valve means controlling said ports carried by said spacers respectively, one of said disks having an interruption in its area and a pumping member operatively associated therewith at said interruption.

1,897,877. DISTILLATION RETORT. GEORG ZOTOS, Berlin, Germany. Filed Mar. 14, 1929, Serial No. 347,070, and in France Sept. 15, 1928. 3 Claims. (Cl. 202—99.)

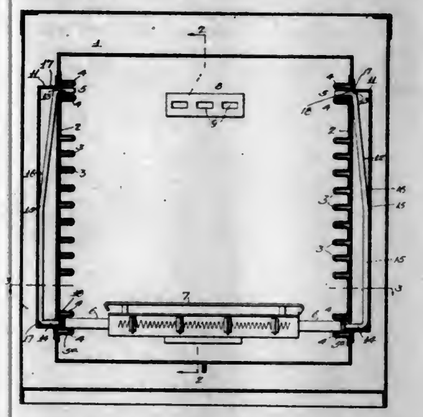


1. An apparatus for destructively distilling solid carbonizable fuel by treatment with CO gas, comprising a vertical shaft, means for feeding the fuel downwards through said shaft, a vertically elongated combustion chamber, means for feeding fuel dust and air into said combustion chamber through the top thereof, a bell surrounding said combustion chamber and spaced therefrom, said shaft, said bell and said combustion chamber being in communication with one another at the lower parts thereof, a gas offtake for said shaft communicating therewith at the upper part thereof, a blower communicating at the suction side thereof with the upper part of the shaft and at the pressure side thereof with the upper part of the bell, and means for regulating the flow of gas through said blower.

1,897,878. PROCESS FOR RECLAIMING FILM SCRAP. CHARLES E. ALLEN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 24, 1930. Serial No. 455,448. 5 Claims. (Cl. 252—1.)

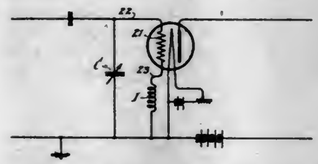
1. The process of reclaiming cellulose acetate from photographic film scrap comprising cellulose acetate, a hardened gelatin sub-layer and a superimposed coating of a silver halide emulsion which comprises removing the emulsion coating and then hydrolyzing the hardened gelatin sub-layer.

1,897,879. SAFETY DEVICE FOR ELECTRIC OVENS. WILLIAM D. ANTRIM, Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 29, 1931. Serial No. 547,730. 4 Claims. (Cl. 219—35.)



4. The combination of an electric oven having upper and lower grooves for an electric heater; a mechanical device having projections arranged to extend into the grooves; and an electric heater designed to be inserted in either the upper or lower grooves of the oven, so that when it is inserted in one of said grooves it will actuate the mechanical device so that said device will be projected into the other groove and prevent the insertion of another electric heater in said last-mentioned groove.

1,897,880. ELECTRICAL TUBE. HOWARD F. BARKLEY, Great Barrington, Mass. Filed Dec. 27, 1929. Serial No. 416,920. 9 Claims. (Cl. 250—27.)

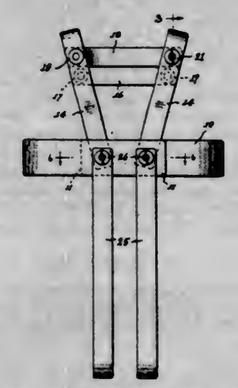


4. A radio circuit including a vacuum tube having an inductive grid, conductors connected to both ends of said grid for imparting thereto alternations from an input means, and an inductance in one of said conductors between said input means and the tube.

1,897,881. PROCESS FOR THE SIMULTANEOUS MANUFACTURE OF IRON OR ITS CARBIDE COMPOUNDS AND OF PORTLAND CEMENT OR HYDRAULIC LIMES. LUCIEN PAUL BASSET, Paris, France. Filed Sept. 29, 1930, Serial No. 485,326, and in France Sept. 28, 1929. 9 Claims. (Cl. 75—76.)

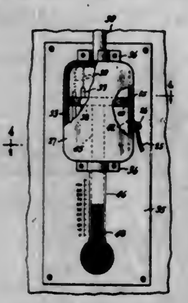
1. A process for the simultaneous production of iron and of Portland cements and hydraulic limes which comprises charging a kiln in the presence of alumina with a mixture of iron ore and the quantity of carbon necessary and sufficient for effecting the reduction of this ore, adding to this mixture in the kiln lime in the proportions that correspond to a slag satisfying the chemical analysis of Portland cement, said constituents having been previously crushed to a state of exceedingly fine powder, heating the mixture without fusing the slag by a flame produced by a fuel burning in the proportion of air suitable for obtaining the percentage of carbon monoxide necessary and sufficient to prevent the reoxidation of the ferrous product finally obtained.

1,897,882. BABY'S SAFETY STRAP AND HARNESS. JAMES BEAGAN, Brooklyn, N. Y. Filed Mar. 9, 1931. Serial No. 521,234. 1 Claim. (Cl. 155—189.)



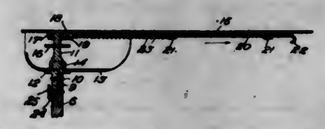
A harness of the character indicated comprising a waistband having overlapping extremities, eyelets disposed in both portions of the band in the area of the overlap, shoulder straps having one end fixed to the band diametrically opposite the overlap, eyelets in the free ends of said straps and adapted to be positioned in registration with the eyelets of the overlapped area, looped straps for connection with the arms or rungs of a chair, eyelets provided in said looped straps in the ends remote from the loops, and detachable fasteners passing through the eyelets of the looped straps, through the eyelets in the overlapped area of the band and through the eyelets in the shoulder straps, whereby the release of said fasteners will release the free end of the shoulder straps and overlapped ends of the band and disconnect the looped straps from the band.

1,897,883. ELECTRIC HEATING FURNACE. DAVID J. BIENENSTOCK, Brooklyn, N. Y. Filed Mar. 6, 1931. Serial No. 520,659. 2 Claims. (Cl. 200—140.)



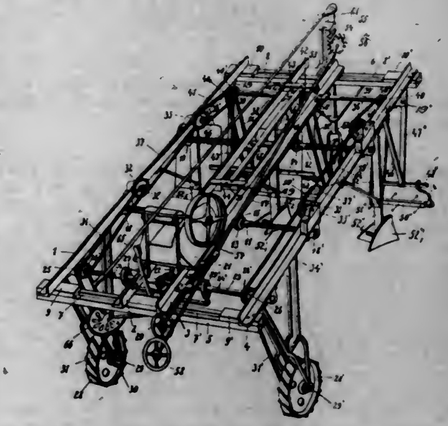
1. In combination, a tube, a rod slidably mounted in the tube, a column of mercury in the tube below the rod to elevate the latter on expansion as a result of temperature change, a circular conducting band secured to the top of said rod and movable therewith, a plurality of conducting bars of varying lengths arranged in a circular series with the axis of said rod as a center, the rods being so arranged that the same ends of all lie in a common plane transverse to the axis of the rod, a conducting roller mounted in said circular band, and a wiper fixed with relation to the movement of the rod and bearing upon said roller.

1,897,884. TABLE. LEWIS EDWARD BIERY, New Kensington, Pa. Filed May 16, 1932. Serial No. 611,670. 2 Claims. (Cl. 45—110.)



1. A table comprising a socket member, legs radiating from said socket member, a tabular standard rising from the socket member and secured thereto, a rod telescopically mounted in the standard, means for securing the rod at various heights therein, an upright pivotally secured to the rod and adjustable on its pivot, a bracket member swiveled to the upright, a table top secured to the bracket member, a latch member secured to the upright, a bolt mounted for slidable movement and received by the latch member for securing the table top above two of said legs, the said two legs being longer than the remaining legs and spring pressed means for said bolt and being operable for moving said bolt to normal position to allow for the swinging of the table top in a horizontal plane.

1,897,885. UNIVERSAL HOEING AND CULTIVATING MACHINE. GEORG BOROCKI, Vienna, Austria. Filed June 24, 1930. Serial No. 463,382. 2 Claims. (Cl. 97—40.)

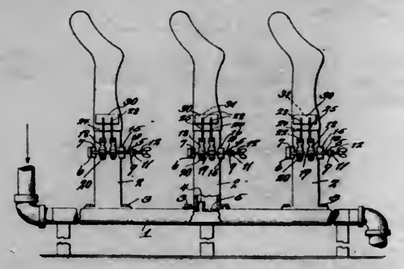


1. A hoeing and cultivating machine comprising a plurality of longitudinal members, drive wheels and driven weed cutters carried on the outer longitudinal members, a pair of lateral rotatable shafts carried on the inner longitudinal members and threaded through the outer longitudinal members and means for rotating the shafts.

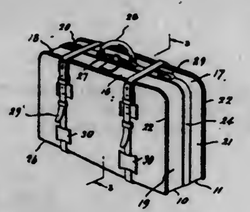
1,897,886. HOSIERY BOARDING FORM AND HOSE CLAMP THEREFOR. FRANK BRAND and GEORGE BRAND, Philadelphia, Pa. Filed Aug. 4, 1931. Serial No. 555,110. 4 Claims. (Cl. 223—17.)

1. The combination with a boarding form, of a frame mounted upon the form and having opposed clamps to engage the opposite edges of the form, and means for hold-

ing the frame fixed, arms carried by opposite sides of the frame, spring arms carried by the first arms on opposite sides of the form, means for fixedly adjusting the first arms, whereby the tension of the spring arms toward opposite sides of the form may be regulated, and felt face clamps fixed to the free ends of the spring arms, adapted to engage opposite sides of the hose adjacent opposite sides of the form.

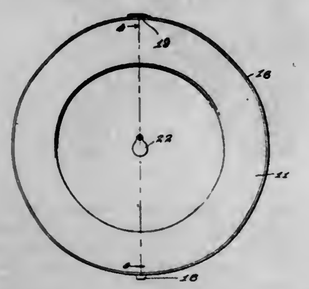


1,897,887. GLADSTONE BAG. LOUIS BRAVERMAN, Brooklyn, N. Y. Filed June 20, 1930. Serial No. 462,640. 2 Claims. (Cl. 190—53.)



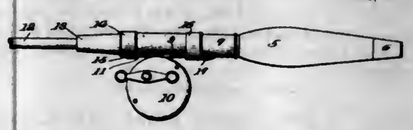
1. A luggage container comprising a top, a bottom, ends and sides, the sides extending beyond the top, the bottom and the ends.

1,897,888. TIRE TRUNK. KEITH C. BRIGHT and JOHN NELSON SWEENEY, Champion, Nebr. Filed May 31, 1930. Serial No. 458,408. 1 Claim. (Cl. 224—29.)



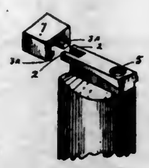
In a tire trunk, a two-part circular casing having the adjacent edges of the parts arranged in overlapped relation for interfitting engagement with each other, one of the parts having an opening, a tongue on the other part and extending through the opening and offset relative to the last named part, a tire rack secured within one of the parts, and a fastening medium carried by the other part of the casing and adapted to engage a portion of the rack interiorly of said casing to lock the casing parts together.

1,897,889. FISHING ROD. CHARLES J. CLARKE, Kingsburg, Calif. Filed Feb. 12, 1932. Serial No. 592,621. 2 Claims. (Cl. 43—22.)



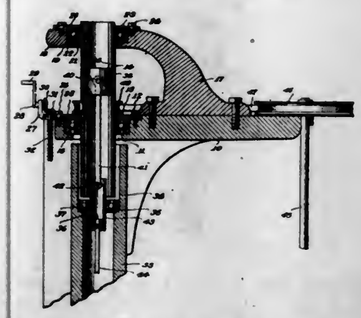
1. A reel fastening for fishing rods, comprising a slidable clamping ring provided at its rear edge with an outwardly and downwardly extending tongue, said rod provided with a plurality of aligned teeth arranged longitudinally of the rod and formed by slitting the material of which the rod is formed and bending the front edge of the slit downwardly and inwardly, and said ring tongue adapted upon movement forwardly on said rod to pass freely over said teeth and slits and when moved rearwardly on said rod to enter said slits and extend through the slits to a position under the tooth adjacent the rear edge of the slit, whereby when the tongue is in a slit the ring is locked against longitudinal movement in a rearward direction and against rotation upon the rod.

1,897,890. COVERING FOR CONTAINER OPENINGS. ERNEST HARWOOD COOK, Edmonton, Alberta, Canada. Filed Mar. 23, 1931. Serial No. 524,685. 2 Claims. (Cl. 221—60.)



1. The combination in a cover for an opening in a container of a flanged track or rail, an opening for said container extending outward through said track, rounded edges for said opening, a raised and rounded area surrounding said opening, tapers on the flanges of said track thickened toward the end adjacent to said opening, extensions of said flanges at the opposite end of said track into projecting tips.

1,897,891. GRINDING HEAD AND DRIVE. JOHN G. DICKSON, San Diego, Calif. Filed Jan. 7, 1931. Serial No. 507,250. 3 Claims. (Cl. 51—166.)

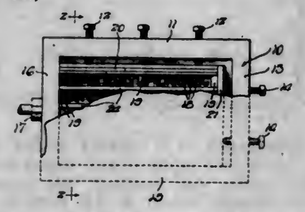


1. In a grinding machine, a frame, a rotatable tubular guide vertically arranged and extending through the frame, ball bearing structures supporting the guide where it passes through the frame, a block slidably and non-rotatably mounted in the tubular guide, a spindle for driving a grinding tool, intermediate connecting means between said block and spindle, a pulley on said tubular guide, a pulley journally mounted on the frame, and a belt trained about both pulleys for rotating the tubular guide.

1,897,892. METHOD OF PRODUCING CRUSTLESS CHEESE. FRITZ DRAISBACH, Ludwigshafen-on-the-Rhine, Germany, assignor to Chemische Fabrik Joh. A. Benckiser G. m. b. H., Ludwigshafen-on-the-Rhine, Germany. Filed July 29, 1931, Serial No. 553,890, and in Germany Sept. 25, 1930. 7 Claims. (Cl. 99—1.)

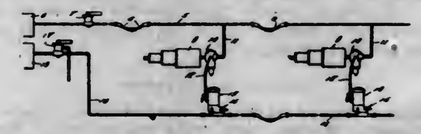
1. A method of making crustless cheese from hard or soft cheese consisting in finely grinding the hard or soft cheese, adding a fusion salt comprised of sodium metaphosphate to the ground cheese, and melting the resulting mixture at temperatures below 100° C.

1,897,893. MEANS FOR MOLDING RUBBER STAMPS AND THE LIKE. RICHARD EVANS, Highland Park, Ill. Filed June 4, 1929. Serial No. 368,319. 8 Claims. (Cl. 18—44.)



1. In combination with a set of type matrices having indicia sunken therein, adjustably associated members for clamping the type matrices in position to form a groove located above the indicia in the type, said type matrices having shoulders formed thereon whereby said adjustably associated members may engage said shoulders to force said type matrices into alignment.

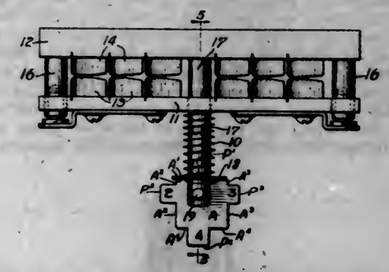
1,897,894. AIR BRAKE SYSTEM. MICHAEL J. FARRELL and LALLY STAFFARONI, Scranton, Pa. Filed Nov. 7, 1930. Serial No. 494,134. 4 Claims. (Cl. 303—76.)



1. A retaining valve for air brakes comprising a cylinder having, an upper and a lower exhaust air inlet therein, and an upper exhaust air outlet therein, a piston unit operative between the pair of exhaust air inlets, and provided with a duct extending therethrough, the top of the cylinder having an additional air outlet therein registrable with the duct in the unit, and a fluid operative needle valve engageable against the bottom of the unit for closing the duct at its lower end.

1,897,895. YARN CLEANER. GEORGE R. FASSETT, Atlanta, Ga., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y., a Corporation of New York. Original application filed Dec. 5, 1929, Serial No. 411,804. Divided and this application filed Feb. 5, 1931. Serial No. 513,493. 3 Claims. (Cl. 28—66.)

1. The combination with a yarn cleaner having a fixed side bar carrying cleaning elements, posts projecting from said side bar near its ends and a second side bar carrying cleaning elements slidably mounted on said posts, of a tension rod extending from the middle of the fixed side bar and passing through the movable side bar, a movable abutment on said rod, an adjustable element pivoted to said rod on an axis transverse to the axis of the rod and provided with a plurality of surfaces located at different distances from its axis and each adapted to engage said abutment, and a compression spring mounted on said rod between the movable side bar and said movable abutment.



1,897,896. OBJECTIVE. CHARLES W. FREDERICK and WILLIAM S. EICHELBERGER, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 13, 1931. Serial No. 537,016. 5 Claims. (Cl. 88—57.)



F/4.5: Focal length 100

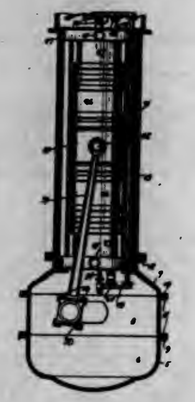
Lens.	Glass.	Radii	Thickness.
L_1	D: 1.51633 V: 64.15	R_1: 28.67	t_1: 6.39
		R_2: 53.67	
L_2	D: 1.62041 V: 60.3	R_3: ∞	t_2: 1.96
	D: 1.62041		
L_3	V: 60.3	R_4: 16.48	t_3: 1.96
	D: 1.51633	R_5: ∞	
L_4	V: 64.15	R_6: 27.49	t_4: 3.95

1. A telephoto objective for cine photography having a large relative aperture and narrow field corrected for spherical aberration, coma, chromatic aberration, astigmatism and curvature of field consisting of a collective element and a dispersive element of numerically equal focal lengths and substantially two-thirds the focal length of the whole objective and separated by an air space less than 4/9 and more than 1/3 of the focal length of the objective, and having a back focus substantially one-fourth of the focal length of the objective, the first element consisting of a double convex simple lens of index 1.516 for the D-line plus or minus 0.010 cemented to a plano-concave simple lens of index 1.617 for the D-line plus or minus 0.010, and a rear element consisting of a plano-concave simple lens of crown glass with the concave surface toward the air space and the plane surface cemented to a plano-convex simple lens of flint glass, the indices of the glasses being substantially the same for the two elements.

1,897,897. INTERNAL COMBUSTION ENGINE. FRANK FRITZ, Toronto, Ontario, Canada. Filed Oct. 16, 1930. Serial No. 489,159. 6 Claims. (Cl. 123—57.)

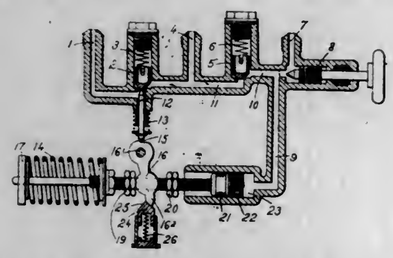
4. An internal combustion engine of the character described, comprising a crank case, a crank shaft extending longitudinally of the crank case having its ends journaled

therein, a cylinder block mounted on the crank case having a series of overlapping vertical bores, a separating partition extending across alternating vertically extending cylinder bores whereby adjoining housings are formed opposite each working cylinder, a piston reciprocably mounted within each working cylinder and having oppositely extending skirt portions, lubricant openings formed in the outer peripheral walls of the piston and piston skirt sections for lubricating the surface between the working cylinder and the piston, a wrist pin carried by the piston having its ends extending into the vertical housing adjacent the partition, each wrist pin having connected to its end a connecting rod adapted to lie in the same plane with the partition and in the housings, the opposite end



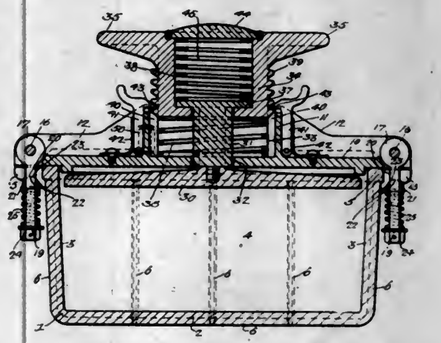
of the connecting rod being adapted to be secured to similar throws of the crank shaft, a removable cylinder head for each end of the working cylinder, an extension formed on each of the cylinder heads extending into the cylinder and into the skirted portion of the pistons, piston packing rings carried by the lower end of each of the extensions adapted to seal the lower end of the extension within the skirted portion of the pistons, intake and exhaust valves carried by the lower portion of the cylinder head extensions, ports and chambers for each of the valves communicating with the upper portion of the cylinder heads adapted to be associated with corresponding manifolds, and spark plugs mounted in the cylinder head extensions.

1,897,898. AUTOMATIC PRESSURE REGULATING DEVICE. LÉON GERARD, Sevres, France, assignor to Paul Viet, Billancourt, Seine, France. Filed Feb. 19, 1931. Serial No. 517,064, and in France Mar. 8, 1930. 6 Claims. (Cl. 230—1.)



1. In an automatic pressure regulating device of the type having a main conduit supplied by a compressor and having a tank communicating with one end of the conduit, a discharge valve at the other end of th main conduit, means for moving said discharge valve to an open or closed position, a retaining clack valve in said conduit in advance of the tank, a cylinder communicating on one hand with said tank and on the other hand with the main conduit through said retaining clack valve, a piston operating in said cylinder and including a resiliently actuating stem, and two members adjustably mounted on the stem of said piston and acting against the moving means of the discharge valve for controlling the position of the discharge valve.

1,897,899. COOKING UTENSIL. STANLEY F. GLEASON, Philadelphia, Pa. Filed June 13, 1931. Serial No. 544,172. 15 Claims. (Cl. 100—57.)

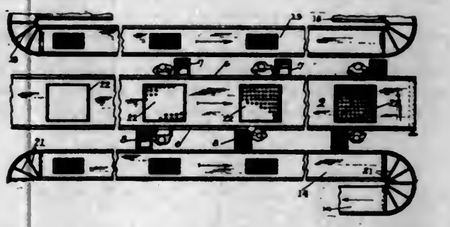


1. The combination in a cooking utensil of a container for the product to be cooked, means for pressing said product within said container, and means for increasing the pressure exerted by said pressing means as the temperature of the utensil and the contained product increases during a cooking period.

1,897,900. COMPOSITION OF MATTER WITH PROCESS FOR TREATING ARTIFICIAL GRASS. ERLING H. HAABESTAD, Springfield, Pa., assignor to Hydrol Chemical Company, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 12, 1930. Serial No. 495,294. 2 Claims. (Cl. 8—6.)

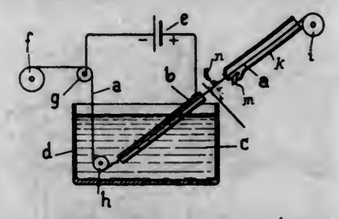
1. A composition for the restoration of the color to artificial grass and to give the same a natural lustre which comprises a concentrated solution of malachite green dye, magnesium chloride and methanol in which the methanol gives homogeneity to the composition and prevents precipitation of the dye.

1,897,901. FRUIT HANDLING EQUIPMENT. ALBERT D. HAGOPIAN, Modesto, Calif. Filed Dec. 18, 1931. Serial No. 581,944. 2 Claims. (Cl. 198—19.)



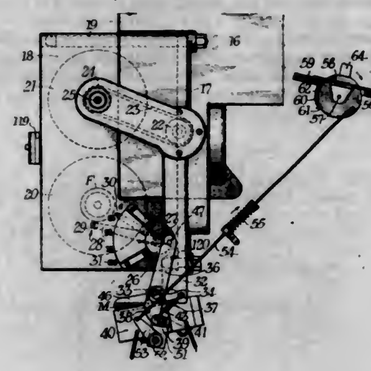
1. In a device of the character described, a table, a conveyor movable over said table, stands positioned on opposite sides of said table, a pair of parallel conveyors positioned on each side of said table and spaced therefrom, and rollers radially arranged at the ends of said parallel conveyors.

1,897,902. METHOD OF COATING RADIANT BODIES. EUGENE HARSÁNYI, Budapest, Hungary. Filed Mar. 14, 1928, Serial No. 261,707, and in Germany Mar. 14, 1927. 6 Claims. (Cl. 204—1.)



1. A method of coating bodies for use in radiant energy devices and the like, comprising the steps of dipping two metallic conductors into an aqueous liquid containing a colloidal dispersion of a metallic substance which is insoluble in such liquid; said conductors forming the terminals of an electric circuit, and one of them constituting the body to be coated; passing an electric current through said circuit to deposit the metallic substance in dispersion on the surface of said body electrophoretically; and preventing electrolytic decomposition of the liquid.

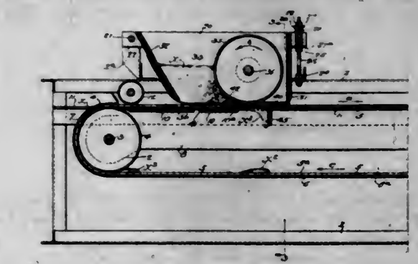
1,897,903. AUTOMATIC CONTROL FOR PHOTOGRAPHIC RECORDING MACHINES. ROY S. HOPKINS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 29, 1928. Serial No. 329,145. 8 Claims. (Cl. 88—17.)



1. In a camera including operative mechanism, a power drive for the operative mechanism, a removably mounted magazine adapted to carry film on supply and take-up spindles, connections between the power driven camera mechanism and the take-up spindle and means carried by the magazine and automatically cooperating with the camera through movement of the magazine into the camera for controlling the power drive.

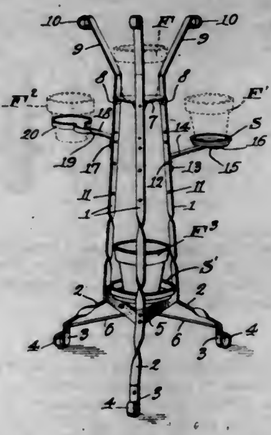
1,897,904. PASTING MECHANISM FOR CHEMICAL DRIERS. ALPHEUS O. HURXTHAL, Philadelphia, Pa., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 25, 1930. Serial No. 438,827. 18 Claims. (Cl. 34—12.)

1. A device, for pasting plastic materials in a foraminous conveyer, comprising a hopper disposed adjacent one face of the conveyer for holding the material in position to be pressed into and through openings in the conveyer, and means for shearing extruded material from the oppo-



site face of the conveyer upon relative movement being effected between the conveyer and the said shearing means.

1,897,905. FLOWER STAND. ALLEN S. JOHNSON, Bethlehem, Pa. Filed Aug. 4, 1931. Serial No. 555,102. 1 Claim. (Cl. 248—41.)

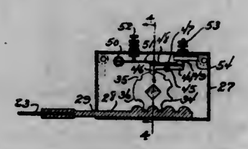


A flower stand including upwardly extending standards, upwardly diverging arms at the upper ends of the standards constituting guides, a flat, one-piece shelf secured to the standards close to and below the guides and constituting a connection between the standards, a frame secured to the lower portions of the standards and connecting them, legs diverging downwardly from the frame, said legs being integral with the standards, a brace connecting each leg with the remote side of the frame, and brackets adjustably connected to the standards, one of said brackets including an arm and a resilient open hook at the end of the arm for embracing and gripping a flower pot to support the same.

1,897,906. SIGNAL SWITCH FOR AUTOMOBILES. ARTHUR A. JONES, Chino, Calif. Filed May 17, 1930. Serial No. 453,424. 1 Claim. (Cl. 200—52.)

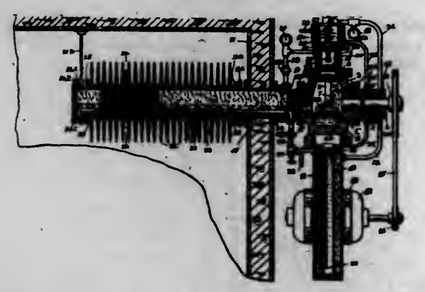
In a device of the character described, a disk mounted for turning movement and being provided upon its periphery with two sets of notches, the notches of one set being distinguished from the notches of the other set, a pawl pivotally mounted and adapted to engage in the notches of one set and ride upon the periphery of the disk between said notches, a terminal contacting with said pawl when the same is in one of the notches and spaced from the

pawl when the pawl is upon the periphery of the disk, a spring bearing upon the pawl and urging the same toward the disk, a terminal connected with the spring, a



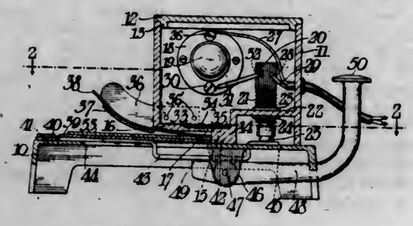
rack bar slidable transversely across the axis of the disk and having teeth adapted to enter the other set of notches upon the disk.

1,897,907. REFRIGERATING UNIT. MAXWELL R. KARGE, Brockport, N. Y. Filed Feb. 8, 1932. Serial No. 591,550. 25 Claims. (Cl. 62—115.)



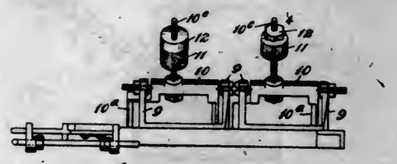
1. A refrigerating unit including a compressor and a condenser attached thereto, an evaporator projecting laterally from said combined compressor and condenser, and forming a supporting member therefor.

1,897,908. PHOTOGRAPHIC EDGE PRINTING APPARATUS. ROGER P. LEAVITT, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 19, 1932. Serial No. 599,992. 13 Claims. (Cl. 95—1.1.)



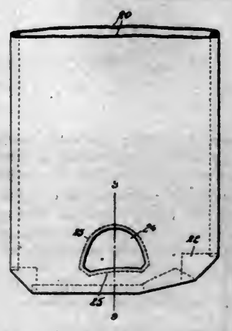
1. In a printer for creating latent images of identifying data on light sensitive material, the combination with a chamber provided with a slot and a platen normally in spaced relation to said slot, adapted to support the light sensitive material and adapted to move said light sensitive material into exposure position with respect to said slot, of a hopper adapted to receive translucent sheet material bearing identifying data and adapted to guide said translucent sheet material into a position between the slot and the light sensitive material with said identifying data in registry with said slot.

1,897,909. COIN TESTING DEVICE FOR USE MORE PARTICULARLY WITH COIN FREED VENDING MACHINES. ARCHIBALD LEESON, Birmingham, England, assignor to W. & T. Avery Limited, Birmingham, England. Filed June 13, 1931, Serial No. 544,105, and in Great Britain July 12, 1930. 1 Claim. (Cl. 194—103.)



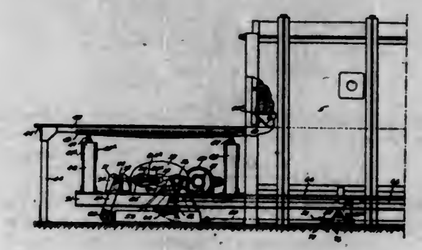
A coin testing device for use with coin freed vending machines comprising in combination a chute which is fixed in the machine so that it is inclined both along its longitudinal and transverse axes, an open portion formed in the underside of the chute, a gauging means adjustably mounted relatively to the chute and having the lower edge thereof disposed in front of the aforesaid open portion and with the outer face of the gauging means arranged in the same plane as the face of the chute against which the coins lean and contact with in their travel, a pair of levers pivotally mounted relatively to the said chute and each having an arm of a skeleton formation arranged in correspondence with the open portion of the chute, longitudinally disposed portions, of the arms of skeleton formation constituting part of the lower surface of the track of the chute, upstanding flanges at the rear ends of the said longitudinally disposed portions and counterbalancing means which normally maintain the track portions of the said arms of the levers in alignment with the remainder of the lower track or chute, the first of the aforesaid levers being counterbalanced so that it is depressed by coins too heavy in weight and the second lever so that it is depressed by coins of the correct weight, undersized coins or coins which effect the depression of the levers falling through gaps in the gapped arms of the levers into receptacles, the falling of the coins through the said gaps in the gapped arms of the levers being facilitated by the aforementioned upstanding flanges.

1,897,910. HANDLE FOR BAGS AND SACKS. EDMUND N. MALVERN, Quitman, and GUY C. CLARY, Clearmont, Mo., and WILLIAM W. JONES, Los Angeles, Calif. Filed May 29, 1931. Serial No. 541,086. 2 Claims. (Cl. 150—12.)



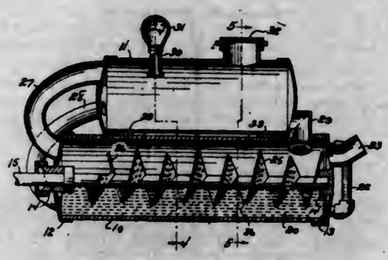
1. A hand hold for a sack or bag consisting of the material of the side walls of the sack or bag, said walls being secured together within the outline of the sack or bag to form the hand hold so that it will be of tubular construction and in communication with the interior of the sack or bag to be filled with some of the contents of the sack or bag.

1,897,911. HEAT TREATING FURNACE. HARRY P. MCCANN and HUBERT E. BAKER, Cleveland, Ohio, assignors, by mesne assignments, to The Foundry Equipment Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 7, 1930. Serial No. 473,724. 28 Claims. (Cl. 263—6.)



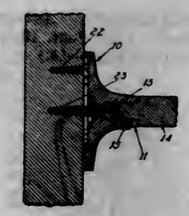
28. The combination, with a furnace having a stationary work support, of a plurality of transversely extending beams each having a plurality of laterally spaced rail-supporting members projecting upwardly therefrom, means for raising and lowering the said beams, and longitudinally extending rails supported by the said members and each comprising a plurality of rail sections, one end of each of said rail sections being longitudinally slotted and the other end of each such rail section being provided with a tongue adapted to enter and slide within the slot of the next adjacent rail section, each rail supporting member and one end of each rail section being provided the one with vertically extending slots located on opposite sides thereof and the other with means adapted to enter said slots.

1,897,912. EXHAUST GAS PURIFIER. STEVE F. PLACKO, Jr., Chicago, Ill. Filed Sept. 18, 1931. Serial No. 563,591. 2 Claims. (Cl. 183—27.)



2. A device of the character described comprising a pair of tanks arranged superposed relative to each other, the lowermost tank being provided with a removable head, bearings formed at opposite ends of the lowermost tank, a power shaft journaled in said bearings and having an agitator spiral, a liquid within the lowermost tank and of a depth to submerge a portion of said spiral, conveyor tubes establishing communication between the tanks, one tube providing communication between the portions of the tanks adjacent the tops thereof and another tube providing communication between the portions of the tanks adjacent the bottoms thereof, means on the lowermost tank for establishing communication with an exhaust pipe of an internal combustion engine, a reticulated outlet cap leading from the uppermost tank, and a return lead from the uppermost tank close to its bottom and through the top of the lowermost tank.

1,897,913. BRACKET AND METHOD OF APPLYING SAME. JOHN PUDLINER, Allentown, Pa., assignor to Brey & Krause Manufacturing Company, Allentown, Pa., a Corporation of Pennsylvania. Filed June 29, 1932. Serial No. 619,984. 2 Claims. (Cl. 248—20.)



1. In combination, a wall, a stop in the form of a screw threaded in said wall with a portion thereof protruding away from the surface thereof, a fixture bracket comprising a base part designed to lie against said wall and provided with a single fastener receiving opening and having spaced guide walls formed so as to be invisible from the exposed side of the bracket and to receive the protruding portion of said stop so that the bracket may be shifted with respect to said stop by adjustment thereof with respect to said protruding portion in the direction of the length of and between said guide walls, and a fastener passing through said opening and securing said fixture to the wall after adjustment of the bracket with respect to said stop to a position at which said fastener may satisfactorily engage said wall and at which said bracket will lie snugly against the wall.

1,897,914. JOINT. EDWARD G. SCHAEFFER, Brooklyn, N. Y., assignor to American Character Doll Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 11, 1932. Serial No. 598,241. 4 Claims. (Cl. 46—40.)



1. A joint between two main parts of a doll, one of said parts having an inwardly directed substantially annular section opening into the interior of said part, and said part also being hollow, and the other part having a section conforming to and fitting in said annular section and an annular flange on said second section disposed

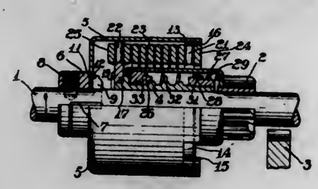
within said hollow part and having its marginal portion in engagement with said annular section, said annular flange being made of rubber in order to be temporarily deformed sufficiently to be passed through the annular section and engaged as aforesaid, to join said parts.

1,897,915. RUBBER STAMP. ARTHUR W. SCHMIDT, Spring Valley, N. Y. Filed Sept. 19, 1932. Serial No. 633,870. 1 Claim. (Cl. 40—16.)



As a new article of manufacture, a rubber stamp, a metal casing on body of the stamp, a metal label holder at one side of the metal casing, and a rubberized strip of cloth interposed between the casing and label holder and vulcanized to both.

1,897,916. ENGINE STARTER. YOUSTON SEKELLA, Elmira Heights, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Apr. 22, 1932. Serial No. 606,940. 12 Claims. (Cl. 74—7.)



1. In an engine starter, a power shaft, a driving member and an operating member slidably journalled thereon, connecting means for transmitting longitudinal and rotary movement from the operating member to the driving member and a yielding driving connection from the power shaft to the operating member including a spring surrounding the operating member and connected thereto at one end and a barrel inclosing said spring and connecting the free end of the spring to said power shaft.

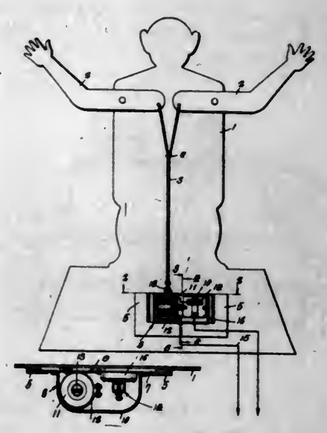
1,897,917. PROCESS OF KNITTING. FRANK STEVENSON, West Lawn, Pa., assignor to Howard Hosiery Company, Inc., Sinking Springs, Pa., a Corporation of Pennsylvania. Filed Aug. 11, 1932. Serial No. 628,387. 2 Claims. (Cl. 66—96.)

1. In a process for knitting nonrun hosiery fabric, the steps consisting in moving vertically from raised positions a bank of shifting points whose one wall and back are cut away to positions opposite a bank of needles momentarily at rest, moving the needles forward into cooperation and into engagement with the lower portions of the grooves of the shifting points to such positions as will allow the needle beards to remain open just sufficiently as to catch one half of each of the stitches and be so retained by the shifting points, the shifting points now momentarily pausing, needle motion carrying the banks of needles slightly downwardly, caused by advancing needle bar downwardly, allowing needle beards to open still further, eliminating possibility of needle beards missing the



stitches on the downward motion, retaining one half of each stitch under the needle beard, shifting points picking up the other half of the stitches, ready to be shifted to adjoining needles, the other one half of the stitches being retained by the needle beards, the shifting points and the needles subsequently moving downwardly.

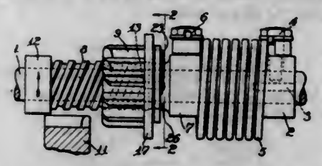
1,897,918. OPERATING DEVICE FOR ANIMATED DISPLAY SIGNS. WILLIAM G. WAGENHALS, Detroit, Mich. Filed Aug. 2, 1932. Serial No. 627,275. 4 Claims. (Cl. 40—52.)



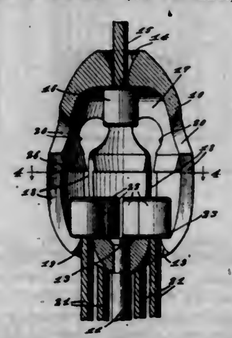
1. An animated display including a non-movable part and pivoted movable part, a flexible and elastic operating medium connected to the movable part, and a thermostatically controlled electrically operated unit connected to the flexible medium and removably secured to the non-movable part.

1,897,919. ENGINE STARTER. MAURICE P. WHITNEY, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Oct. 31, 1931. Serial No. 572,265. 6 Claims. (Cl. 74—7.)

1. A starter drive comprising a power member, a driving member mounted thereon for longitudinal movement into and out of engagement with a member of an engine to be started, and for rotary movement thereof and therewith, detent means for yieldably resisting traversal of the driving member away from idle position and locking means operable by centrifugal force to positively prevent such traversal.

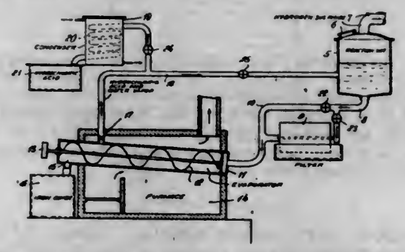


1,897,920. SWIVEL HOOK. JOHN E. WILSON and IVOR R. WILSON, McEwen, Oreg. Filed May 9, 1932. Serial No. 610,270. 2 Claims. (Cl. 24—123.)



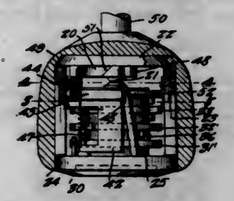
2. A hook of the kind described comprising a hollow substantially pear-shaped body having spaced longitudinally disposed slots extending close to the center of one end of the body and their opposite ends terminating considerably removed from the other end of the body with enlarged rounded entrances, the ends of the slots close to one end of the body being outwardly flared, said body being provided with apertures in opposite ends, a swiveled eye in one aperture, the other aperture being adapted to receive a center line and said flared ends of the slots being adapted to receive choke lines having knot-like ends positioned within the body and bulges on the body externally thereof between said slots.

1,897,921. PRODUCTION OF SULPHUR FROM SULPHIDES. RAYMOND F. BACON, Bronxville, N. Y. Filed Oct. 21, 1927. Serial No. 227,662. 1 Claim. (Cl. 23—200.)



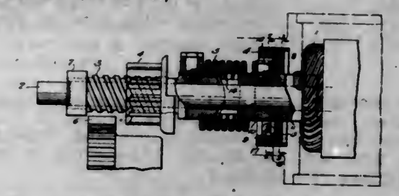
In the cyclic method of treating metallic sulphide, dissolving the metallic sulphide and hydrochloric acid with the formation of hydrogen sulphide and metallic chloride, converting the metallic chloride into gaseous hydrochloric acid and a metallic oxide, conducting the gaseous hydrochloric acid direct to the dissolving vessel and introducing it into said dissolving vessel below the liquid level therein, whereby at least a portion of said gaseous hydrochloric acid is dissolved and cause to react with more metallic sulphide.

1,897,922. LOCK. AUSTIN A. BRADSHAW, Hickory, N. C., assignor of one-half to J. A. Bradshaw, Buncombe County, N. C. Filed Feb. 23, 1932. Serial No. 594,715. 6 Claims. (Cl. 70—113.)



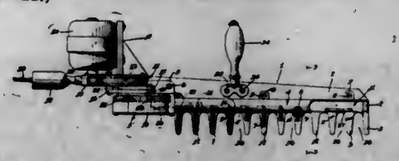
2. A key actuated combination lock comprising a latching bar, a rotatable barrel having a key slot therein, a plurality of rotatable disks of which one is connected with the barrel, members carried by the several disks in obstructing relation to each other, so that rotation of the one disk by the barrel will result in the eventual rotation of all, a dog spanning all of the disks except that connected with the barrel, said disks having notches for the reception of the nose of the dog, and a dog carried by the latching bar and having a nose engageable in the notch formed in the barrel actuated disk, the dogs having interlocking connection to prevent the one from engaging its notch without corresponding notch engagement by the other.

1,897,923. ENGINE STARTER. LEWIS K. BRUNNER, Hulmeville, Pa. Filed July 11, 1931. Serial No. 550,224. 4 Claims. (Cl. 74—7.)



1. In an engine starter provided with a pair of shafts connected by a yielding member, a readily detachable device having one portion attached to said member and another portion attached to one of said shafts, and means whereby said portions will be normally coupled together under all normal conditions of load and whereby said portions will become operatively disengaged by reverse rotation of the engine due to kicking back thereof.

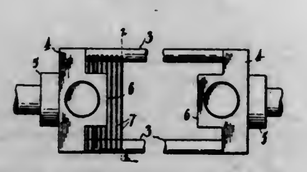
1,897,924. HEDGE TRIMMING DEVICE. SYDNEY GEORGE COLEMAN and FRANK B. HICKS, Streator, Ill. Filed Oct. 19, 1931. Serial No. 569,760. 2 Claims. (Cl. 30—11.)



1. In a hedge trimming device, the combination of an elongated body portion provided with a plurality of laterally extending tooth portions, a reciprocable cutting

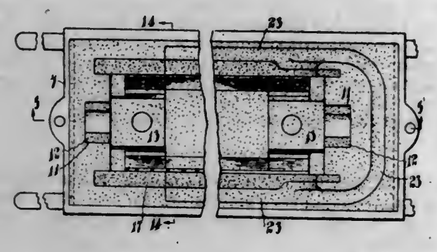
means mounted on the body portion and in shearing engagement with the tooth portions, a gear housing connected with an end of the body portion, gears rotatably mounted in the housing, means operatively connecting the cutting means with the gears whereby said cutting means may be reciprocated when the gears are rotated, a handle connected with the gear housing, power means operatively connected with the gears for rotating the same, said power means and tooth portions being oppositely positioned with respect to the handle for counterbalancing each other, and an auxiliary handle connected with the body portion at an intermediate position with respect thereto and transversely extending with respect to said first-named handle.

1,897,925. MOLD. MYRON L. DOELMAN, Toronto, Ontario, Canada, assignor, by mesne assignments, to United States Radiator Corporation, Detroit, Mich. Filed Mar. 2, 1931. Serial No. 519,708. 8 Claims. (Cl. 23—131.)



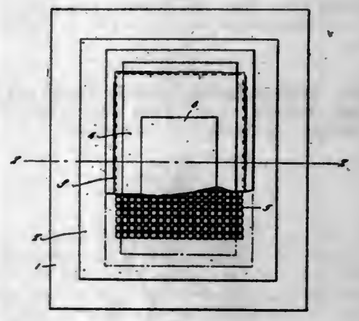
1. A mold for forming a longitudinal hollow member with transverse fins comprising a horizontally divided flask having a mold cavity formed therein; a longitudinally extending core for forming the hollow of the aforesaid member supported in the mold cavity and spaced from its walls; and a series of transverse parallel core sections positioned in the cavity aforesaid in spaced relation to one another and to the longitudinal core aforesaid, said core sections engaging the top and bottom of the mold cavity and forming spaced walls between which molten metal can flow to form the fins aforesaid.

1,897,926. MOLD. MYRON L. DOELMAN, Toronto, Ontario, Canada, assignor, by mesne assignments, to United States Radiator Corporation, Detroit, Mich. Filed Dec. 15, 1931, Serial No. 581,258. Renewed Oct. 31, 1932. 16 Claims. (Cl. 22—131.)



1. A mold for forming a longitudinal hollow member with transverse fins comprising a horizontally divided flask having a mold cavity formed therein with end core imprints, and a bottom longitudinal core imprint; a longitudinally extending core for forming the hollow of the aforesaid member positioned by the end core imprints and spaced from the walls of the mold cavity; and a core for forming the spaces between the transverse fins aforesaid spaced from the longitudinal core and comprising a core base fitted into the bottom longitudinal imprint, and a series of fin core sections assembled on the base and extending up from the base to the top of the mold cavity and forming spaced walls between which molten metal can flow to form the fins aforesaid.

1,897,927. BLOW-OUT PATCH. CASIMIR A. DOMZALSKI, Detroit, Mich. Filed Oct. 26, 1931. Serial No. 571,204. 1 Claim. (Cl. 152—26.)



A blow out patch of substantially pyramidal cross section and comprising a plurality of fabric laminations gradually decreasing in size from the bottom to the top, a reinforcing element comprising a plurality of flat, metallic linked together members interposed between certain of the laminations, said metallic element being of smaller size than the lamination directly above it whereby the edges of said lamination contact the lamination directly below the metallic lamination, a rubber compound enclosing the laminations with the exception of the free side of the lowermost lamination, for securing said laminations together and for securing the reinforcing element in position, and a layer of uncured rubber on the uppermost lamination.

1,897,928. UPHOLSTERING EDGE. HARRY FOX, Lowell, Mass., assignor to The Fox Edge Co. Inc., Lowell, Mass., a Corporation of Massachusetts. Filed June 17, 1931. Serial No. 545,014. 3 Claims. (Cl. 155—184.)

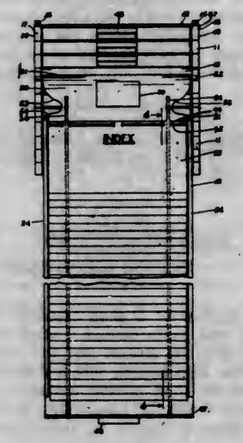


1. An upholstery edge comprising a core consisting of a strip of felted material having a fabric facing and folded laterally about a longitudinal axis, said core being covered by a layer of fabric having its margins folded inwardly and extended between the folded portion of said core, said cover layer margins being secured together inwardly of their folded edges.

1,897,929. CARD FILING DEVICE. STANLEY B. FREIBERG, Cincinnati, Ohio, assignor to International Visible Systems Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 15, 1927. Serial No. 226,490. 17 Claims. (Cl. 129—16.)

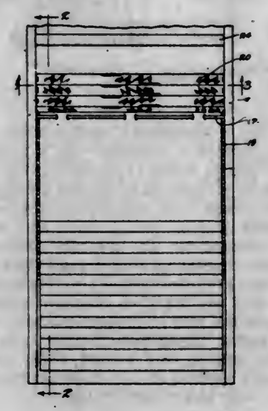
11. The combination of a tray having oppositely aligned pairs of fixed pockets, the pockets having outlets,

card holders having their opposite ends disposed in the pairs of pockets, and means for shifting the card holders



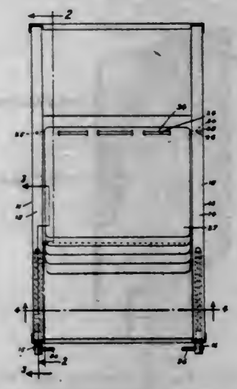
to and from selected pairs of pockets through the outlets of the latter.

1,897,930. CARD FILING DEVICE. STANLEY B. FREIBERG, Cincinnati, Ohio, assignor to International Visible Systems Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 9, 1928. Serial No. 245,406. 18 Claims. (Cl. 129—16.)



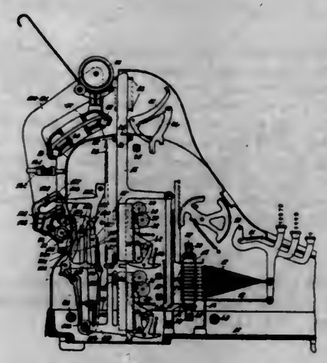
7. A filing device comprising a tray having fixed opposed ways, means adjustable along the ways and together with the tray forming pairs of opposed pockets, and record-supporting means having their opposed ends retained in opposed pockets of the pairs of pockets.

1,897,931. SHIFTING MECHANISM FOR CARD FILING DEVICES. STANLEY B. FREIBERG, Cincinnati, Ohio, assignor t International Visible Systems Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 21, 1928. Serial No. 271,860. 35 Claims. (Cl. 129—16.)



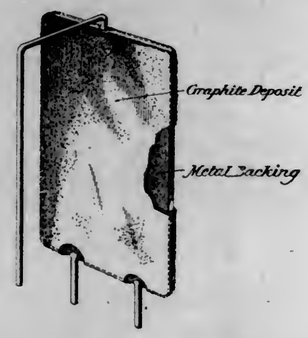
1. In a card-shifting device the combination of a tray, means associated with the tray for receiving and holding a plurality of card holders in spaced relationship with one another, and means comprising rotatable and longitudinally reciprocable rods for selectively shifting the card holders relative to one another along the tray.

1,897,932. ADDING AND CALCULATING MACHINE. JOHN EMIL WILLIAM GREVE, Chemnitz, Germany, assignor to the Firm Astrawerke Aktiengesellschaft, Chemnitz, Germany. Filed Sept. 25, 1928, Serial No. 308,175, and in Germany Apr. 24, 1928. 4 Claims. (Cl. 235—60.)



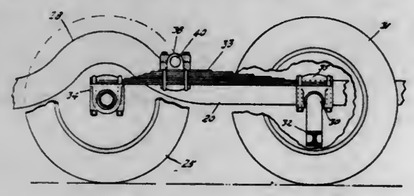
1. An adding and calculating machine comprising a set of counting wheels, a carriage for the said wheels, a handle to move the carriage transversely of the machine, a lock for the carriage adapted to be released by the operation of the said handle, a set of driving elements for the counting wheels and means to bring each counting wheel at will into and out of engagement with the driving elements when the lock is released.

1,897,933. ELECTRODE FOR ELECTRON DISCHARGE TUBES AND METHOD OF FORMING THE SAME. ROBERT G. GUTHRIE and OSCAR J. WOZASEK, Chicago, Ill.; said Oscar J. Wozasek now by judicial change of name Oscar Josef Wilbor, assignors to Peoples Gas By-Products Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 2, 1928. Serial No. 297,095. 5 Claims. (Cl. 250—27.5.)



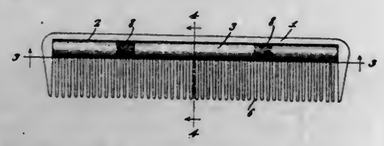
5. An electrode for an electron discharge device comprising nickel having non-absorbent graphite crystals adhering directly thereto.

1,897,934. REAR WHEEL ARRANGEMENT FOR MOTOR BUSSES. GEORGE E. A. HALLETT, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 5, 1926. Serial No. 99,880. 1 Claim. (Cl. 180—22.)



A motor vehicle chassis comprising a frame having side members, two parallel frame supporting axles at the rear, the forward of said two axles being a driving axle, and the rear one underslung and dead; leaf springs bridging the space between and having their ends attached to said axles; said side members extending over the depending part of the underslung dead axle and having arched portions over the driving axle; and supporting connections between the frame side members and the springs nearer to the driving than to the dead axle.

1,897,935. COMB CLEANER. JAMES E. HARRY, Augusta, Kans. Filed Apr. 1, 1932. Serial No. 602,581. 2 Claims. (Cl. 132—28.)



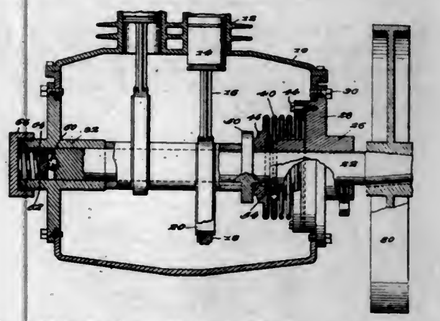
1. A comb cleaner comprising a base of a length to engage the inner surface of the end teeth of a comb and being provided with a plurality of apertures to snugly and slidably receive the remaining teeth, a relatively wide flange secured to one longitudinal edge of the base and being curved transversely upon itself to dispose its longitudinal free edge in frictional engagement with the body of the comb, a relatively narrow flange formed with the opposite longitudinal edge of the base and being curved transversely to dispose its longitudinal free edge in frictional engagement with the body for cooperation with the relatively wide flange to secure the cleaner to the body, and said flanges being co-extensive with the length of the base to terminate inwardly of the ends of the body.

1,897,936. SNAP FASTENER. BEN Z. HAUSNER, Yonkers, N. Y. Filed Dec. 5, 1931. Serial No. 579,274. 6 Claims. (Cl. 24—208.)



3. A stud member of a snap fastener comprising two parts, one of said parts having a stud section provided with resilient gripping means, and the other part having a tubular crown stud section which fits on the first stud section, the crown stud section having a material penetrating member which is engageable with said gripping means to be gripped thereby to attach said parts to the material.

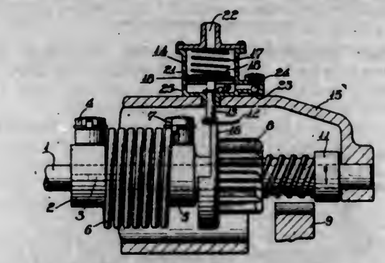
1,897,937. SEAL FOR COMPRESSORS. MAURICE E. JOYCE, Brentwood, Md., assignor of one-half to Edward L. Mahoney, Lanham, Md. Filed July 28, 1932. Serial No. 625,387. 14 Claims. (Cl. 286—11.)



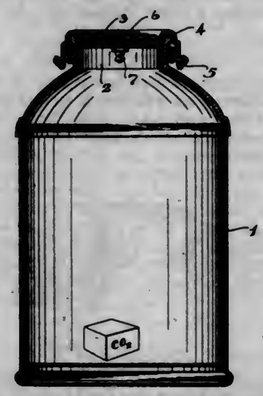
1. A seal for a compressor shaft wherein a relatively long bearing surface is obtained with a minimum length of the shaft, and in which the shaft bearing projects into the crank case, a corrugated tubular sealing bellows secured to the crank case and having the major portion thereof sleeved over the said bearing and the portion of the shaft embraced by the inwardly projecting portion of the bearing, a sealing ring secured to the inner end of said bellows, said shaft being provided with a shoulder engaged by said sealing ring, and mechanism for maintaining the sealing ring in engagement with said shoulder including a spring urging relative axial movement of said shoulder and sealing ring toward each other and seal aligning means sleeved on the shaft between the sealing ring and the inner end of the bearing.

1,897,938. ENGINE STARTING MECHANISM. DANIEL P. KEARNEY, Royal Oak, Mich., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed May 9, 1932. Serial No. 610,165. 7 Claims. (Cl. 74—7.)

1. In an engine starter, an operating member, a driving member, said members having connecting means whereby relative rotation causes translation of the driving member into or out of engagement with a member of an engine to be started, means for opposing rotary movement of the driving member to insure its traversal into engagement with the engine member, means for rendering said opposing means inoperative to oppose traversal of the driving member out of driving position when the engine starts, and means for delaying the restoration of the opposing means for a predetermined time.

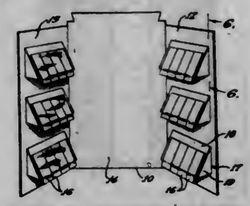


1,897,939. METHOD OF SHIPPING LIQUIDS. FRED N. MARTIN, Portland, Oreg. Filed Nov. 4, 1931. Serial No. 572,897. 1 Claim. (Cl. 62—91.5.)



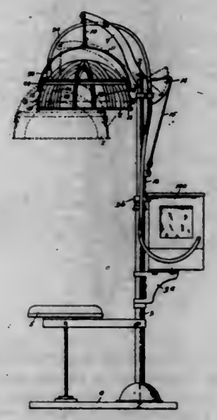
The method of storing and shipping a liquid in a closed and vented container, which consists in depositing a quantity of solid carbon dioxide in the container, filling the container with liquid to a level forming a gas chamber in the container, permitting the solid carbon dioxide to evaporate and form carbon dioxide gas, allowing the carbon dioxide gas to expand into and occupy the gas chamber, and ventilating said chamber to the atmosphere.

1,897,940. DISPLAY DEVICE. MORTON LEOPOLD, Chicago, Ill. Filed Apr. 15, 1931. Serial No. 530,326. 3 Claims. (Cl. 211—156.)



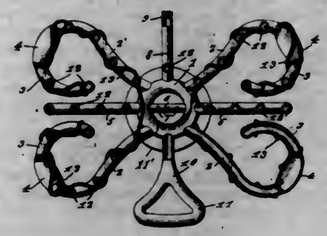
1. Collapsible display device, comprising a single sheet of material including an upright panel, wings integral with and hinged along fold lines to said panel and provided with slots, and article supporting racks including hook elements detachably mounted in said slots, said racks having faces tapered at an acute angle with respect to the horizontal and said wings.

1,897,941. ANATOMICAL MEASURING AND RECORDING MACHINE. HENRY C. LAVERY, Minneapolis, Minn. Filed Apr. 16, 1931. Serial No. 530,664. 22 Claims. (Cl. 234—1.5.)



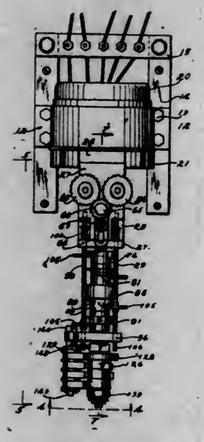
1. A measuring and printing apparatus for varying cranial sections, comprising a semi-spherical permanent frame, a plurality of swinging measuring members having hand operable portions outside the frame and contact portions inside, said members being pivoted to said frame at different points in the spherical lines, and arranged to measure and electrically transmit the physical developments of different sections and electro-magnetic printing means cooperating with said measuring members.

1,897,942. ORNAMENTAL DEVICE. ANTONNIO LA MARCA PIRRONE, Arnold, Pa., assignor of forty-per cent to Anthony C. Bonnatti, four per cent to Alfred Dixon, four per cent to Thomas Dixon and four per cent to Robert Dixon, New Kensington, Pa. Filed Apr. 18, 1932. Serial No. 605,997. 7 Claims. (Cl. 41—14.)



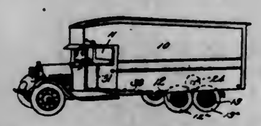
7. An ornamental device of the character described comprising a plurality of resilient tubular elements including a central ring portion, arms radiating from the central ring portion and disposed in communication therewith, apertured means bridging the central ring portion and communicating therewith, filling means for the device and communicating with the central ring portion, strands of ornamental wire arranged in frame formation and surrounding the arms supporting the same and fastening means for the device.

1,897,943. SWITCH MECHANISM. FRANK C. BALL and CLAUD C. SALISBURY, Jamestown, N. Y., assignors, by direct and mesne assignments, to Salisbury Signal Corporation, Jamestown, N. Y., a Corporation of Delaware. Filed Dec. 7, 1929. Serial No. 412,401. 13 Claims (Cl. 200—27.)



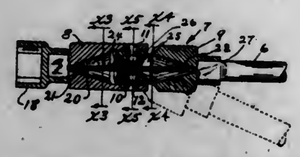
2. In a motor driven circuit control mechanism, a frame having compartments therein, a timing unit in one of said compartments, said timing unit having a plurality of cams mounted for rotation, a trigger in contact with each of said cams, means causing an upward pressure of said triggers on said cams and further means at regular intervals, permitting upward travel of said triggers whereby to open or close the circuits in a contact unit.

1,897,944. VEHICLE DRIVE. SAMUEL C. CARTER, Los Angeles, Calif. Filed Dec. 6, 1929. Serial No. 412,102. 13 Claims. (Cl. 180—22.)



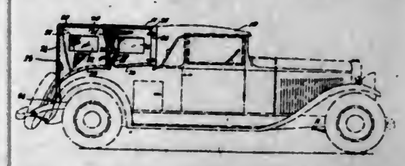
1. A vehicle drive of the character described including a drive wheel, an extension wheel, and an optional drive between the drive wheel and the extension wheel including an idler shiftable between a position free of both the wheels and a position in engagement with both of the wheels, and means for shifting the idler between said positions, including a support for the idler, a rod operable vertically to shift the support, and means for operating the rod.

1,897,945. UNIVERSAL JOINT. GEORGE W. DOOLEY, San Bernardino, Calif. Filed Dec. 26, 1929. Serial No. 416,694. 3 Claims. (Cl. 64—102.)



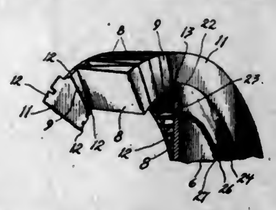
1. In a universal joint, a pivotal block having conical depressions on two of its faces, a passage way joining said depressions, end members of said universal joint being taperingly depressed to receive a spring stiffener fulcrumed within said passage and having its ends fitted to the bottom of said depressions in said end members.

1,897,946. DISAPPEARING CANOPY TOP FOR THE RUMBLE SEATS OF AUTOMOBILES. SAMUEL W. HARVEY, New Haven, Conn. Filed Jan. 28, 1931. Serial No. 511,743. 1 Claim. (Cl. 296—138.)



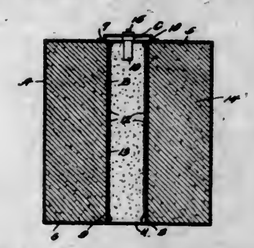
In a canopy top for the rumble seats of automobiles having a collapsible frame, windowed curtains carried thereby having inner overlapping ends, means to separately connect these overlapping ends, holders at the rear of the automobile fixed top, straps on the forward end of the forward curtain engaging in said holders to hold the curtains closed at this end, a recessed rubber strip on the automobile fixed top, the upper forward end of the forward of said curtains tucked into the recess of said rubber strip to produce a tight closure between curtain and automobile.

1,897,947. FAN STRUCTURE. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 10, 1928. Serial No. 318,460. 8 Claims. (Cl. 230—134.)



1. In a fan the combination of a strip of material bent at spaced intervals therealong substantially on radii of the axis of the fan to form impelling blades arranged about the axis of the fan, and means for securing said blades in assembly in their said arrangement.

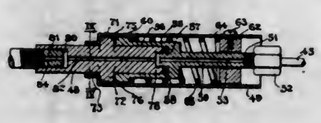
1,897,948. HAND GRENADE OR AERIAL BOMB. JOHN W. YOUNG, Pittsburgh, Pa., assignor to Federal Laboratories, Inc., Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 15, 1931. Serial No. 569,061. 4 Claims. (Cl. 102—29.)



1. A hand grenade comprising a container, a booster device comprising a foraminous tubular member, disposed centrally through said container and to the outer surfaces

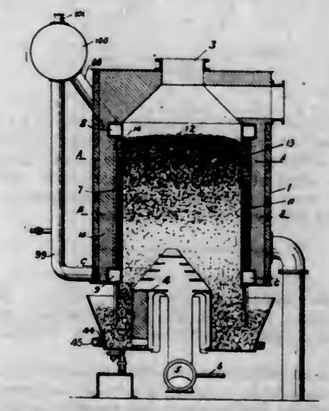
thereof, a mass of ignitible material in said container surrounding said tubular member, a coating of ignitible booster material applied to the inner surface of said tube and filling the foramina thereof for igniting said booster material, whereby said tubular member constitutes a draft medium to effect complete simultaneous ignition of the booster material and solidified mass and discharge of the gas from said container.

1,897,949. AIR BAG CONNECTION. RALPH C. BATEMAN, Akron, Ohio, assignor to Wingfoot Corporation, Wilmington, Del., a Corporation of Delaware. Filed July 21, 1928. Serial No. 294,560. 1 Claim. (Cl. 285—176.)



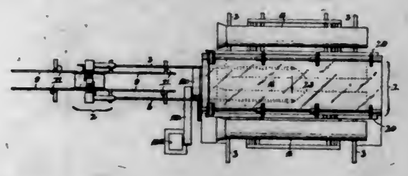
A releasable connection comprising a longitudinally apertured elongate member having an enlarged portion adjacent one end, said enlarged portion having a socket larger than the aperture, an apertured plug projecting outwardly from the base of the socket, a gasket encircling the plug, the free end of the enlarged portion having a shoulder on its outer surface, a cylindrical sleeve enclosing the apertured member and having a collar secured therein adjacent one end, the smaller portion of the apertured member slidably projecting through the collar, a spring encircling the apertured member and abutting at its ends the shoulder on the member and the collar secured in the end of the sleeve respectively, the end of the sleeve adjacent the enlarged portion of the apertured member having an elongate diametrically extending opening, a second longitudinally apertured member having diametrically opposed shoulders adapted to be projected through the opening in the end of the sleeve, and thereafter turned in order to secure the member in the sleeve against accidental removal, said last mentioned apertured member having a portion projecting into the socket of the first mentioned apertured member and abutting the gasket.

1,897,950. GAS GENERATOR. WILLIAM I. BATTIN, Philadelphia, and CHARLES S. CHRISMAN, West Chester, Pa., assignors to The U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed July 25, 1927. Serial No. 208,137. 9 Claims. (Cl. 48—67.)



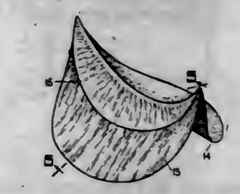
2. A generator for combustible gas adapted to contain a solid fuel bed and having means for passing steam and air into the fuel bed and having outlet means for combustible gas therein, a fuel chamber in said generator adapted to contain an ignited fuel bed forming a column, means for admitting fuel to said chamber to form said fuel bed, a layer of superimposed metallic blocks forming the lower part of the inner wall of said chamber in contact with said fuel bed to prevent the adhesion of clinker to said wall and being removable from the interior of said chamber, means for cooling said layer of metallic blocks, and refractory material forming the upper part of the inner wall of said chamber.

1,897,951. METHOD AND APPARATUS FOR BLASTING PIPE. LOUIS A. CAMEROTA, Burlington, N. J., assignor to Walter Wood, Philadelphia, Pa. Filed Feb. 2, 1932. Serial No. 590,851. 4 Claims. (Cl. 51—14.)



1. Apparatus for blasting pipe or like cylindrical objects comprising friction rollers for rotating the object to be treated, a dust collecting enclosure housing said friction rollers, rails leading to said enclosure, means for conveying the object along said rails to said enclosure, a carriage movable in the direction of the length of the object, and a blow pipe on said carriage adapted to project interiorly of the object, said blow pipe having a nozzle for delivering a blast against the surface of said object.

1,897,952. GARMENT SHIELD AND METHOD OF MAKING THE SAME. JEAN G. DUPONT, New York, N. Y., assignor of one-third to Henry J. Lucke, New York, N. Y. Filed Nov. 2, 1931. Serial No. 572,633. 10 Claims. (Cl. 2—58.)

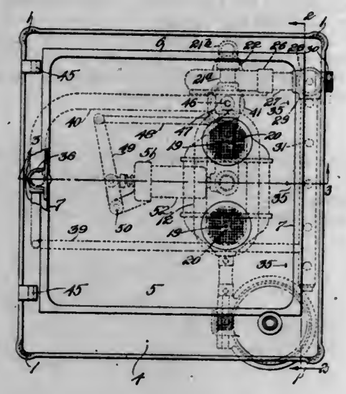


1. That improved method of making garment shields of distortable absorbent material which consists in preparing an initial blank of generally oval configuration, folding the oval blank upon itself initially diametrically, and refolding the diametrical edge portion upon itself, and dispacing the distortable material thereat to effect a final curvature and substantial smoothness at the resulting curved edge and flatness of the doubled-over fold.

1,897,958. WASHING MACHINE. OTTO T. DEHLE, Boston, Mass., assignor to Multi-Hydro Washing Machine Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 23, 1928. Serial No. 301,541. 10 Claims. (Cl. 259—95.)

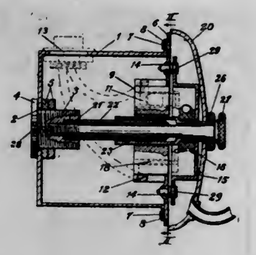
1. A washing machine comprising a receptacle adapted to receive a cleansing liquid and the articles to be cleaned, means for forcing said liquid into said receptacle and receiving it again, said receptacle having not less than

three ports for the introduction of said liquid into it, said ports being so positioned with relation to each other that the enfering streams of said liquid move the clothes



about the receptacle in a path, abruptly changing the direction of their movement at least three times in each cycle of travel about the receptacle.

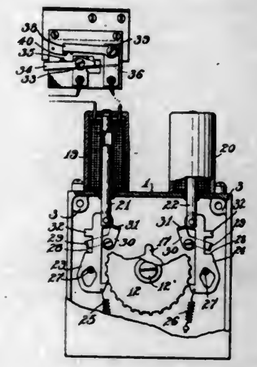
1,897,954. ELECTRICAL FIXTURE SUPPORTING DEVICE. HENRY D'OLIER, Jr., Bridgeport, Conn. Filed Feb. 16, 1927. Serial No. 168,689. 16 Claims. (Cl. 173—330.)



13. In combination with an outlet box, an electrical connector including separable contact-carrying members, means to support one of the members in the box, a fixture-carrying support formed to receive the electrical wires of the fixture so as to connect said wires to the other member, and means to secure the said support and the outlet box in predetermined relation, said means passing through openings in the contact-carrying members and engaging with the outlet box and the fixture-carrying support.

1,897,955. COIN CONTROLLED SWITCH. FRANK HOKE, Indianapolis, Ind., assignor to Holcomb & Hoke Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed Mar. 31, 1928. Serial No. 266,208. 8 Claims. (Cl. 200—105.)

4. Circuit-controlling mechanism comprising a pair of contact members insulated from each other, a brush adapted to bridge said contact members, and mechanism for moving said brush comprising a spur wheel operatively connected to said brush, a dog reciprocably mounted adjacent said wheel, means for moving said dog in one direction to effect movement of said wheel, a latch positively actuated by such movement of said dog to engage said

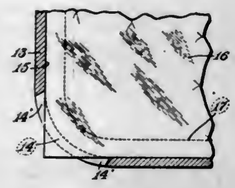


wheel, and means cooperative with said dog to move and hold said dog out of cooperative relation with said wheel at each extremity of the stroke of said dog.

1,897,956. PLASTER COMPOSITION. JAMES S. OFFUTT, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 13, 1930. Serial No. 435,652. 5 Claims. (Cl. 106—34.)

4. A plaster composition consisting of finely ground calcined gypsum and hydrated time in the ratio of 3:2, finely ground calcium carbonate, ground asbestos and retarder.

1,897,957. REFRIGERATOR ELEMENT AND METHOD OF PRODUCING SAME. GEORGE H. ROSSEBO and FRANK HOKE, Indianapolis, Ind., assignors to Holcomb & Hoke Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed Sept. 26, 1930. Serial No. 484,479. 1 Claim. (Cl. 20—56.5.)

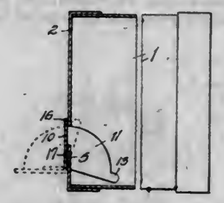


The combination with a polygonal plate, of an endless strip of resilient material, such strip being formed, upon its inner surface, with a continuous groove adapted to receive the edges of said plate, and said strip further being formed with a plurality of slots therethrough for the reception of the corners of said plate.

1,897,958. POURING SPOUT FOR CONTAINERS. WALTER L. RUTKOWSKI, St. Louis, Mo., assignor to R. C. Can Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 1, 1931. Serial No. 566,348. 1 Claim. (Cl. 221—11.)

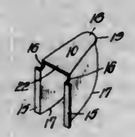
A fibrous pouring spout for containers having contents pouring opening and a hinge tongue of container material directed into said opening, said spout including a floor portion shaped to conform to the pouring opening of the container to which it is applied and having a finger pull

directed from one end thereof, a pair of arcuate wing members integral with the floor and divided therefrom by score lines, stops integral with the wings and the straight edges of said wings diverging outwardly from the rear edge of the floor so the spout floor will lie at a right angle



to the top of the container when in its pouring position, said spout being formed flat to be manually shaped for application to the container by suitable connecting means and said connecting means securing the rear portion of the floor to the hinge tongue of the container.

1,897,959. POURING SPOUT CONTAINER. WALTER L. RUTKOWSKI, St. Louis, Mo., assignor to R. C. Can Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 1, 1931. Serial No. 566,349. 5 Claims. (Cl. 221—11.)



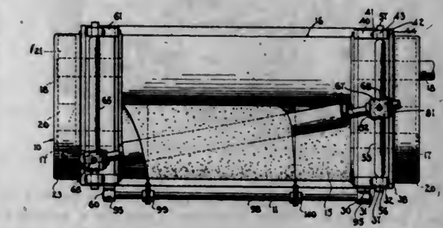
4. In combination with a container having an opening in one of the end closures thereof with a tongue portion of the closure extending into the opening, of a spout having a top portion of a size to close said closure opening and supported at one end on said tongue portion of the closure, pendent side walls directed at substantially right angles from the side edges of said top, the corners of said side walls adjacent the rear edge of the top being cut away to form vertically disposed right angular shoulders hingedly engageable with the rear edge of the closure opening on opposite sides of the tongue portion thereof and the edge of pendent side wall adjacent the rear edge of the top being bent outwardly at right angles to said walls to provide stops limiting opening movement of the spout by contacting with the inner face of the closure the full length of the side edges of the opening of the closure.

1,897,960. DISPENSING CONTAINER. WALTER L. RUTKOWSKI, St. Louis, Mo., assignor to R. C. Can Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 1, 1931. Serial No. 566,350. 5 Claims. (Cl. 221—11.)



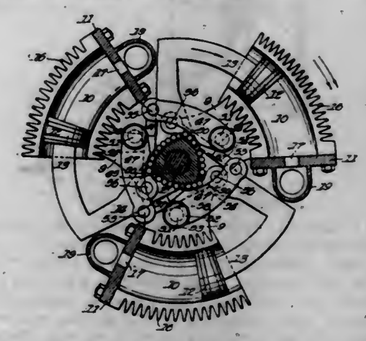
1. A non-detachable pouring spout for dispensing containers comprising a top section, a pair of wing sections, a finger pull directed from one end of the top section, stops integral with the wing sections and a foldable clamp section opposite the finger pull, in combination, with a container cover having an opening provided with end slots to form a hinge tongue integral with the cover and directed into the opening, said spout adapted to be inserted into the cover opening from the outside after a portion of the clamp section is first folded back, placing it back to back with the top section of the spout so as to lie upon the hinge tongue of the cover and after so positioning the spout, bending the remaining portion of the clamp section to engage the lower face of the hinge tongue for clamping the hinge tongue between the folded portions of the clamp section of the spout.

1,897,961. METHOD OF AND MACHINE FOR TREATING RUBBER COMPOUND. ROBERT W. SNYDER, Akron, Ohio, assignor to Wingfoot Corporation, Wilmington, Del., a Corporation of Delaware. Filed Aug. 1, 1929. Serial No. 382,609. 12 Claims. (Cl. 18—12.)



1. The combination with a machine for treating plastic material, including rollers upon which the material normally is disposed, of rotary means spaced from and disposed at an acute angle with respect to the axis of either of the rollers and over which a strip of the material from the rollers is looped, and means for adjusting the rotary means both vertically and horizontally to vary its angle with respect to said rollers.

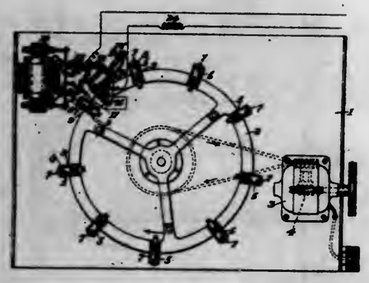
1,897,962. ROTARY INTERNAL COMBUSTION ENGINE. WERNER I. STAAF, Sr., Pittsburgh, Pa., assignor of fifty-one one-hundredths to William W. Martin, Pittsburgh, Pa.; Hannah Staaf, administratrix of said Werner I. Staaf, sr., deceased. Filed Mar. 20, 1929. Serial No. 348,460. 4 Claims. (Cl. 123—43.)



1. In an internal combustion rotary engine having a rotatable drive shaft, a surrounding rotatable frame fixed to said shaft having a series of curvilinear cylinders concentric with the shaft, and a rigid frame freely journalled around the shaft having a corresponding series of cylinder plungers and connecting arms therefor; mechanical movement means controlling relative movement of the cylinders and plungers consisting of a fixed cam surrounding the shaft having a series of arcuate roller bearing faces corresponding in number to the number of cylinders and plungers, a link pivotally connected with each plunger arm, and

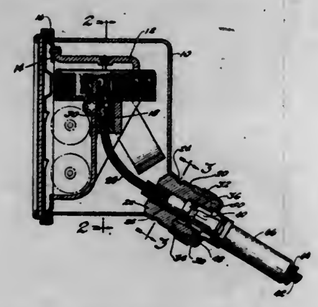
cam-engaging arms therefor pivoted on the cylinder frame and to each of said links, each arm having an arcuate face conforming to the arcuate roller bearing faces of the cam.

1,897,963. ELECTRIC SWITCH AND THE PRODUCTION THEREOF. WARREN R. WALKER, Short Hills, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed July 27, 1929. Serial No. 381,663. 2 Claims. (Cl. 200—152.)



1. The method of treating the oxide coated inleads of a fluid flow switch which comprises applying a potential of the order of 15,000 volts between said inleads and permitting a current of 10–20 milliamperes to flow therebetween to cause an ionic bombardment of the oxide coating on said inleads to remove said coating.

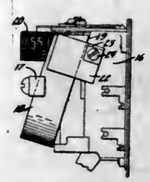
1,897,964. SPEEDOMETER. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Nov. 14, 1927. Serial No. 233,193. 4 Claims. (Cl. 64—30.)



1. An indicating instrument comprising, in combination, a casing, indicating mechanism, a frame adapted to support all of said indicating mechanism, said frame being secured in said casing, a driving member, a bearing member separate from said frame secured in said casing, said driving member being supported in said bearing member, and a flexible driving element secured in driving engagement with said driving member and said indicating mechanism.

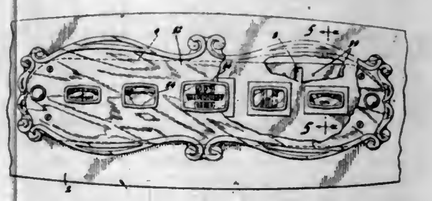
1,897,965. TEMPERATURE COMPENSATED SPEEDOMETER. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Feb. 11, 1928. Serial No. 253,655. 2 Claims. (Cl. 264—13.)

1. In a magnetic measuring instrument, a case, a frame within the case, a U-shaped magnet within the case and secured to the frame with its legs seated in rabbets in the frame in close proximity to but spaced from the case, a member in the magnetic field of the magnet and adapted to be influenced thereby to effect indications of the instrument, and means to vary the magnetic flux influencing said member including a U-shaped member of magnetic material having an appreciable temperature coefficient of magnetic permeability located between a pole



of the magnet and the case, with one leg of the member secured to the frame adjacent one of the rabbets therein and extending between the magnet and the case in substantially parallel, spaced relation to the adjacent leg of the magnet, and with the other leg of the member extending between the first leg thereof and the case in substantially parallel, spaced relation to the latter.

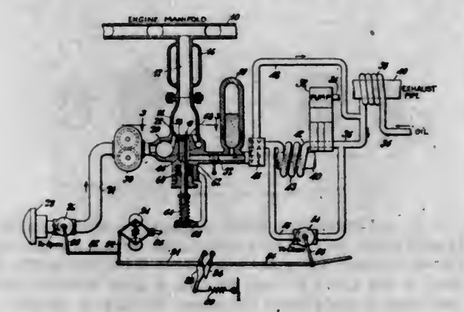
1,897,966. MOUNTING PLATE AND FACE ASSEMBLY. JOSEPH ZUBATY and DON E. KEENEY, Flint, Mich., assignors to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed June 27, 1931. Serial No. 547,230. 6 Claims. (Cl. 180—90.)



1. In an instrument panel, a plate having a plurality of openings arranged along its center line, a plurality of bezels, one for each opening, spot welded to the back of the panel and having projecting portions extending through the openings and projecting away from the panel, a glass in each bezel over the opening therein, a plurality of tongues pressed from the bezel and bent over said glass to hold it in position, a strengthening flange around the bezel, strengthening ribs between each pair of openings, an instrument board on which the panel is placed, said board having openings conforming to the openings in the panel, said bezels projecting through said openings to a substantially coplanar position.

1,897,967. FUEL FEEDING SYSTEM FOR OTTO ENGINES. ROBERT EARLL BRUCKNER, Hastings-on-Hudson, N. Y., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 24, 1926. Serial No. 137,421. 14 Claims. (Cl. 123—123.)

1. In a fuel feeding system for internal-combustion engines of the Otto type, a mixing-chamber into which fuel and air are received prior to their passage to the engine manifold, an air-conduit through which air may enter the mixing-chamber, means for regulating the amount of fuel supplied to said chamber, and means under the combined control of the engine speed and the fuel flow regulating

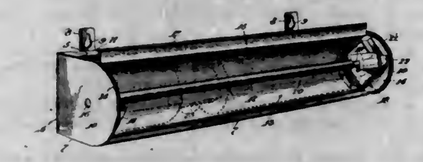


means for controlling the flow of air to the mixing-chamber, whereby to maintain a predetermined ratio of fuel to air in the mixing-chamber.

1,897,968. BRUSH MAKING MACHINE. HENRY CAVE, Hartford, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a Corporation of Connecticut. Filed Feb. 21, 1929. Serial No. 341,638. 15 Claims. (Cl. 300—2.)

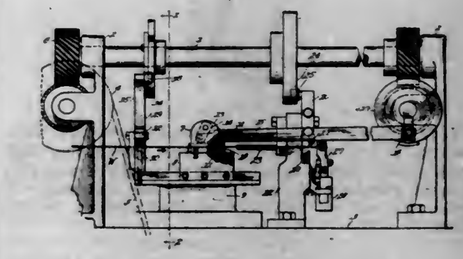
1. A brush making machine including means for twisting wires together with brush material between them, and a pair of eveners movably mounted to engage the ends of said brush material on opposite sides of said wires to project said material to a predetermined extent on opposite sides of said wires.

1,897,969. STORING AND DISPENSING SURGICAL ADHESIVE PLASTER. HERBERT R. GRAHAM, Miller, S. Dak., assignor to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed Jan. 16, 1932. Serial No. 587,110. 1 Claim. (Cl. 242—55.2.)



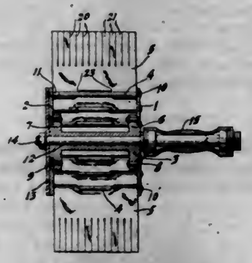
Means for storing and dispensing surgical adhesive plaster comprising the combination of a receptacle casing for alternative flatwise support on a wall or on a table and having a receiving and dispensing opening, a concavo-convex gate rotatively mounted in the casing with relation to its opening, and bearings within the gate for a plaster carrying mandrel, one of said bearings having a radial slot for the application and removal of the mandrel and a pivotal latch to open or close the slot.

1,897,970. WIRE-FEEDING AND CUTTING MACHINE. ALFRED HOFMANN, Palisade, and OSWIN KANIS, Lyndhurst, N. J., assignors to Alfred Hofmann Needle Works, Inc., Union City, N. J., a Corporation of New Jersey. Filed Sept. 18, 1930. Serial No. 482,817. 6 Claims. (Cl. 140—130.)



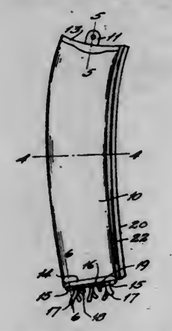
1. In wire-feeding and cutting machines, a wire-cutting mechanism, a wire-feeding mechanism, a feed-regulating mechanism adapted to periodically clamp and release the wire and regulate the length of wire presented to the cutting mechanism, the wire-feeding mechanism being disposed between the wire-cutting and feed-regulating mechanisms, and means actuating said mechanisms to present predetermind lengths of wire to the cutting mechanism.

1,897,971. POLISHING TOOL. DAVID R. JOHNSTON, Detroit, Mich., assignor to Fisher Body Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 10, 1930. Serial No. 434,686. 3 Claims. (Cl. 51—190.)



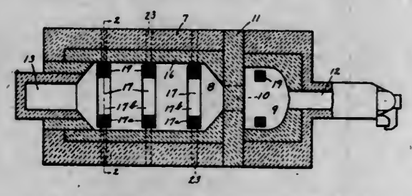
1. In a surface finishing tool, a rotary carrier, including a spacer hub, a plate secured to one side of the hub, a series of pins projecting laterally from said plate and being adapted to carry a series of finishing flaps and having tapered ends, a second plate detachably secured on the opposite side of the hub and having a series of locating apertures therein for the projection therethru of said pin ends, a drive shaft projecting thru said hub, and a keeper for securing the hub on the shaft and covering the points of the tapered ended pins.

1,897,972. GARMENT STRETCHER. LUKE S. STRIPLING, Amarillo, Tex., assignor, by mesne assignments, to National Garment Stretcher Corporation, Amarillo, Tex., a Corporation of Texas. Filed Nov. 25, 1931. Serial No. 577,324. 7 Claims. (Cl. 223—18.2.)



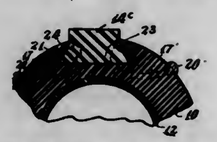
1. In a garment form, an inflatable body having a waist portion, a belt of inelastic material surrounding said waist portion, means for adjusting the length of said belt, garment attaching tabs carried by the belt, and means to secure the belt in vertically adjusted position on the form.

1,897,973. METHOD OF AND APPARATUS FOR MELTING GLASS. HAROLD A. WADMAN, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 6, 1930. Serial No. 450,071. 9 Claims. (Cl. 13—6.)



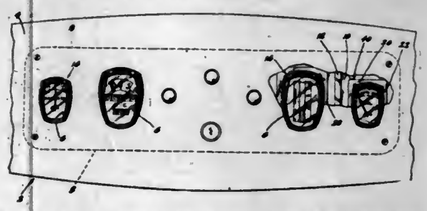
1. A glass melting furnace comprising a floor, wells in the floor for containing a relatively small amount of glass as compared with the capacity of the furnace, adjustable electrodes in alignment with said wells, means for lowering the electrodes into the wells, and means for supplying a current of electricity to the electrodes and through said glass while in said wells, whereby the starting of the furnace with a relatively small amount of molten glass is facilitated.

1,897,974. INTERCHANGEABLE RUBBER TIRE. GABRIEL WOLF, Bratislava, Czechoslovakia. Filed Nov. 19, 1931. Serial No. 576,094. 4 Claims. (Cl. 152—17.)



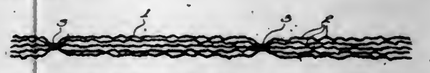
1. A tire for the wheels of vehicles, comprising a shoe having a peripheral groove, a tread member engaging within said groove and projecting therefrom, straps connected with said shoe and passing through apertures extending from the sides of the tread member to the bottom and further passing through passages extending to the sides of the shoe, and means for securing the free ends of said straps.

1,897,975. INSTRUMENT PANEL FACE ASSEMBLY. JOSEPH ZUBATY and DON E. KEENEY, Flint, Mich., assignors to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed June 27, 1931. Serial No. 547,231. 4 Claims. (Cl. 180—90.)



1. In an instrument panel, a plurality of depressions in said panel, each of said depressions having an opening therein through which the instrument faces are visible, a bezel in the panel at each opening, a glass window over the bezel, a plate over the glass, said panel having a plurality of openings, and tongues on said plate fitting into said openings in the panel to hold said bezel and glass to the panel.

1,897,976. FILTRATION MEDIUM. HANS E. BIRKHOLZ, Louisville, Ky., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed Nov. 25, 1927, Serial No. 235,509. Renewed Feb. 21, 1931. 7 Claims. (Cl. 183—69.)



1. A filtering medium for air and gas comprising a plurality of assembled sheets of pervious paper having a loose fibrous texture, said assembled sheets having spaced compressed portions wherein said sheets are united and uncompressed loose portions between said compressed portions wherein the sheets are in separable relatively movable relation to permit passage of air or gas through and between them, said compressed and uncompressed portions being so related that the assembled sheets present in effect a flexible non-resilient unitary filtering mat.

1,897,977. ARTIFICIAL RESIN FROM GLYCEROL AND THE LIKE. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Dec. 26, 1922. Serial No. 609,136. 12 Claims. (Cl. 260—8.)

1. In the production of ester resins from a carboxylic acid and a polyhydric alcohol, the step of adding an alkaline material during the formation of the resin, whereby a lowering of the solidification temperature is effected.

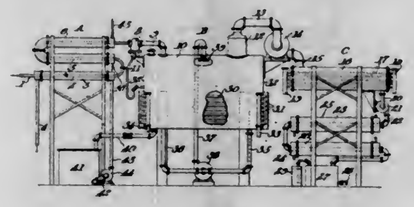
1,897,978. RESINOUS CONDENSATION PRODUCTS. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Dec. 1, 1928. Serial No. 323,215. 12 Claims. (Cl. 260—3.)

1. A resinous composite containing the resinous aldehyde reaction products of urea and thiourea produced by heat under more than atmospheric pressure.

4. A composite containing the aldehyde reaction products of urea and thiourea produced in the pressure of an acid catalyst.

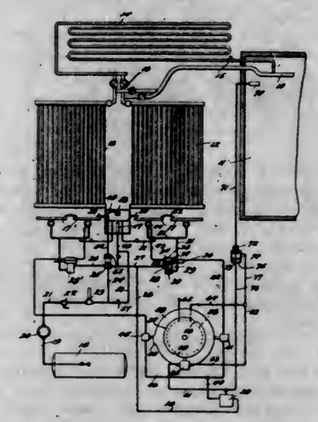
10. The process of forming resinous composites which comprises reacting urea and an aldehyde in the presence of resinifying sulphur-containing compound entering into the reaction product, and subjecting such reaction product to further condensation by heating under more than atmospheric pressure.

1,897,979. RECOVERY OF SOLVENTS FROM MIXTURES CONTAINING THE SAME. FRANCIS X. GOVERS, Vincennes, Ind., assignor to Indian Refining Company, Lawrenceville, Ill., a Corporation of Maine. Filed May 7, 1931. Serial No. 535,593. 2 Claims. (Cl. 202—39.)



1. The process of recovering acetone and benzol from a mixture of acetone and benzol with mineral lubricating oil which comprises heating the mixture in a flowing stream to a temperature of about 180° F., flashing off acetone and benzol vapors from the heated mixture, introducing the unvaporized liquid comprising lubricating oil and a small proportion of unvaporized acetone and benzol to a still maintained under slightly less than atmospheric pressure, further heating this liquid to a temperature of about 340° F. by rapid circulation over and spraying upon heating surfaces within the still to thereby strip out in vapor form the remaining acetone and benzol, delivering the acetone and benzol vapors evolved during flashing and stripping to a condenser under a pressure slightly greater than maintained in the still to effect substantially complete condensation, and then subjecting the resulting hot substantially vapor-free condensate to cooling under still higher pressure during countercurrent flow at high velocity in heat exchange relationship with a cooling liquid.

1,897,980. HEATER CONTROL SYSTEM. GEORGE E. HULSE, New Haven, Conn., assignor, by mesne assignments, to The Safety Car Heating and Lighting Company, New Haven, Conn., a Corporation of New Jersey. Filed Apr. 16, 1928. Serial No. 270,488. 21 Claims. (Cl. 62—5.)



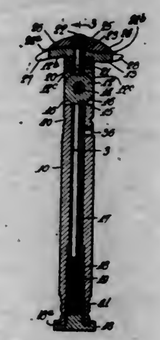
1. In a control system of the type described, in combination, a source of fuel, a fuel burner, a pipe from said source to said burner, a valve in said pipe and a separate fuel flow actuated means to directly and intermittently actuate said valve in direct relation to the speed of the said means.

1,897,981. POLISHING AND CLEANING DEVICE. AUSTIN C. JOHNSON, Chicago, Ill., assignor of one-half to Robert G. Crossley, Elmhurst, Ill., and one-half to George W. Durham, Chicago, Ill. Filed Aug. 26, 1932. Serial No. 630,526. 5 Claims. (Cl. 15—209.)



1. In a device of the kind described, the combination of a container for a scouring element, said container being formed of a piece of resilient material fashioned to provide a helically formed element, a member operable in said container adapted to engage a scouring element, said member having means extending between the coils of said container to thereby move said member longitudinaly of the container upon relative rotation of said member and container and having means providing finger pieces to effect relative rotation of said member and container.

1,897,982. SAFETY RAZOR. ARCHDALE J. JONES, New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Dec. 12, 1929. Serial No. 413,489. 9 Claims. (Cl. 30—12.)

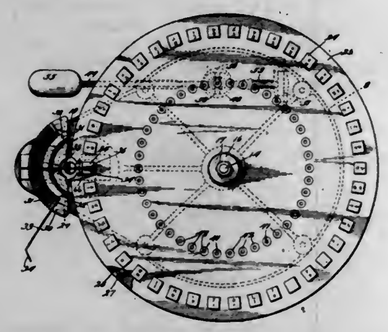


9. A safety razor including a backing plate, a guard and a thin double edged flexible blade clamped between them and flexed as an incident of its clamping to dispose its cutting edges in approximately parallel planes out of the normal plane of the body of the blade, the guard including teeth at each side, one set of such teeth curving in one direction to provide substantial blade clearance and permit a deep planing cut, the other set of teeth curving in the other direction to prevent substantial blade clearance and permit only a coarse mowing cut.

1,897,983. TYPESETTING MECHANISM FOR TYPEWRITERS. JAMES F. KOCA, Woodstock, Ill., assignor to Woodstock Typewriter Company, Woodstock, Ill., a Corporation of Illinois. Filed July 18, 1930. Serial No. 468,885. 21 Claims. (Cl. 118—59.)

1. In a machine for setting type on typewriter type-bars, the combination with a type-bar support, of a shiftable

matrix capable of alignment with respect to the support, means to secure the matrix in aligned position and mag-



netic means for holding a type-bar and a type-slug in a predetermined position relative to the aligned matrix and type-bar support.

1,897,984. MINING MACHINE. FRANK A. LINDGREN, Western Springs, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 3, 1929, Serial No. 367,851. Renewed May 28, 1932. 18 Claims. (Cl. 262—28.)

1. In combination with a truck mounted mining machine having a depending cutter head, a cutter bar projecting forwardly therefrom adapted to cut an arcuate kerf adjacent the mine bottom and having a cutter chain movable thereabout, and means operated independently of said cutter chain for clearing the cuttings from said cutter chain comprising a cuttings deflector reciprocably movable along said cutter bar.

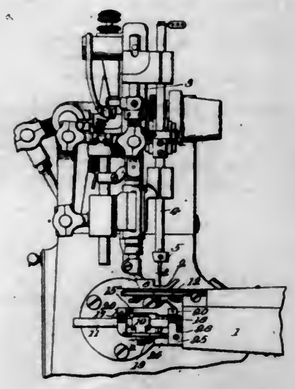
1,897,985. CHOKE FOR OIL WELLS. HERBERT C. OTIS, Shreveport, La. Filed Apr. 21, 1930. Serial No. 445,963. 9 Claims. (Cl. 166—2.)

5. A choke for oil wells comprising a cylinder smaller in exterior diameter than the well bore, a plurality of slips arranged about the cylinder, a mandrel between the cylinder and slips arranged when depressed to spread the



slips, and means on the mandrel for engaging tongs whereby the choke may be lowered to position.

1,897,986. MULTIPLE NEEDLE SEWING MACHINE. ALBERT S. RIVIERE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 5, 1931. Serial No. 506,796. 18 Claims. (Cl. 112—166.)

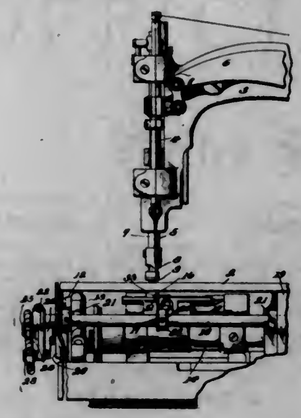


1. In a sewing machine, the combination of a needle, a looper cooperating with the needle, and means for engaging the needle thread loop for positioning said loop for the entrance of the looper, said means including a retainer movable in a path substantially at right angles to the path of movement of the looper, said retainer being shaped and timed so as to hold the needle thread loop well back on the looper when the needle point is entering its thread triangle.

1,897,987. CHAIN STITCH SEWING MACHINE. ALBERT S. RIVIERE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 9, 1931. Serial No. 514,624. 14 Claims. (Cl. 112—199.)

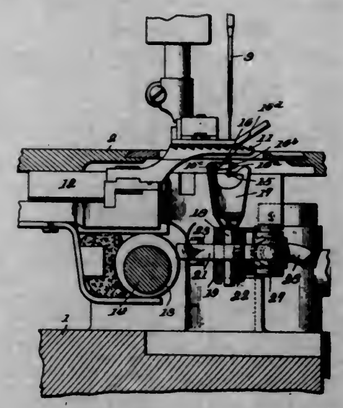
1. In a sewing machine, the combination of a feeding mechanism, a needle, a complemental stitch forming mechanism, including a loop retainer adapted to enter

and retain the needle loop and a threaded looper adapted to enter the retained needle thread loop on the retainer, said looper and retainer being opposed to each other and movable in a plane at one side of the needle and parallel



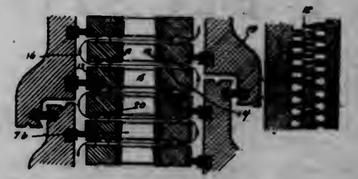
with the line of feed, the body of said looper between the thread eyes being curved away from the line of feed so as to insure the needle passing between the looper thread and the body of the looper.

1,897,988. CHAIN STITCH SEWING MACHINE. ALBERT S. RIVIERE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 9, 1931. Serial No. 514,625. 10 Claims. (Cl. 112—202.)



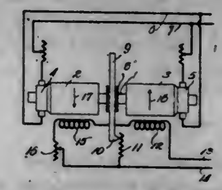
1. In a sewing machine, the combination of a feeding mechanism, a needle and a complemental stitch forming mechanism including a loop retainer adapted to enter and retain the needle loop, and a threaded looper adapted to subsequently enter the needle thread loop while said loop is on the retainer, said looper and retainer being opposed to each other and mounted on a common carrier with the looper above and overlying the retainer, means for oscillating said carrier about a vertical axis for causing said retainer to enter the needle thread loop and hold the same and for causing said thread carrying looper to enter the retained needle thread loop held on the retainer.

1,897,989. TIGHTENING DEVICE FOR RADIAL FLOW STEAM TURBINES. ALF LYSHOLM, Stockholm, Sweden, assignor to Aktiebolaget Ljungströms Ångturbin, Stockholm, Sweden, a Joint-Stock Company of Sweden. Filed Mar. 14, 1930, Serial No. 435,725, and in Germany Mar. 22, 1929. 6 Claims. (Cl. 253—16.5.)



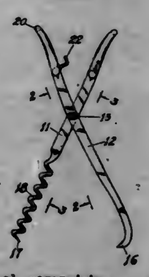
1. In a radial flow elastic fluid turbine, a plurality of radially spaced relatively rotatable ring bonds for carrying the turbine blades, tightening means comprising a plurality of axially spaced tightening edges extending in generally radial direction from one bond toward an adjacent bond and means for creating turbulence in the flow of fluid axially between said edges.

1,897,990. ELECTRICAL APPARATUS. JAMES S. SMYSER, Boston, Mass. Filed July 25, 1928, Serial No. 295,188. Renewed Sept. 29, 1932. 41 Claims. (Cl. 219—8.)



1. Apparatus of the class described comprising a rotatable shaft, an armature carried by the shaft, an electrical circuit including a movable resistance varying element, connections for transmitting movement from the shaft to the movable element, means supplying current to the armature at a substantially constant potential, means producing a magnetic field tending to turn the armature and shaft in one direction, means producing a second magnetic field tending to turn the armature and shaft in the opposite direction, and connections between said latter means and said movable element whereby the intensity of the second field varies with variations in current passing through said movable element.

1,897,991. TONGS. DAVID B. ARNOF, New York, N. Y. Filed July 17, 1931. Serial No. 551,335. 1 Claim. (Cl. 7—3.)



A combination tool comprising a pair of tongs comprised of cooperating article-gripping members, one of said members being a cork-screw, having a sharp tip, the other member having a cooperating gripping tip toward which said corkscrew sharp tip is directed.

Patents Nos. 1,897,992 to 1,898,993

BARNES[illegible] Library G. [illegible]ANTA

THE OFFICIAL GAZETTE

OF THE

United States Patent Office

Vol. 427—No. 3 TUESDAY, FEBRUARY 21, 1933 Price—$16 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscriptions, $16.00 per annum, including annual index, $18.25; single numbers, 35 cents each.

PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
Issue of February 21, 1933	517
Interference Notices	517
Notices of Cancellation	517
Applications Under Examination	518
Decisions of the U. S. Courts—	
In re Crambles	519
Patent Suits	520
Adjudicated Patents	522
Adverse Decisions in Interference	522
Disclaimers	522
Trade-Marks Canceled	522
Trade-Marks Published (179 Applications)	523
Trade-Mark Registrations Granted	546
Trade-Mark Registrations Renewed	552
Labels	554
Prints	555
Reissues	557
Designs	558
Patents Granted	565

February 21, 1933

Trade-Marks	181—No.	201,116 to No.	201,296, inclusive.
T. M. Renewals	56		
Labels	16—No.	41,769 to No.	41,784, inclusive.
Prints	5—No.	14,085 to No.	14,089, inclusive.
Reissues	6—No.	18,741 to No.	18,746, inclusive.
Designs	34—No.	89,293 to No.	89,326, inclusive.
Patents	1,002—No.	1,897,992 to No.	1,898,993, inclusive.
Total	1,300		

Interference Notices

U. S. Patent Office, *Washington, Jan. 25, 1933.*

Michel Hill, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the patent granted April 5, 1932, No. 1,852,240, to Michel Hill, 744 Bush St., San Francisco, California, and an application for patent filed by Charles T. Lyons, Medina, Washington, and a notice of such declaration sent by registered mail to said Hill at the said address having been returned by the post office undeliverable, notice is hereby given that unless said Hill, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. Patent Office, *Washington, Feb. 8, 1933.*

Harry Eggert, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the applications for patent of Daniel A. Brennan, of 10 South La Salle Street, Chicago, Ill., and Harry Eggert, care of A. G. Schneider, 10 South La Salle Street, Chicago, Ill., and a notice of such declaration sent to said Eggert at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Eggert, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notices of Cancellation

U. S. Patent Office, *Washington, Jan. 18, 1933.*

The Duo-Is Products Corp., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Simonis Company, 2101 Indiana Avenue, Chicago, Ill., to effect the cancellation of the trade-mark registration of The Duo-Is Products Corp., of 20 East Jackson Boulevard, Chicago, Ill., No. 247,602, dated October 2, 1928, and the notice of such proceeding sent by registered mail to the said The Duo-Is Products Corp. at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said The Duo-Is Products Corp., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. Patent Office, *Washington, Feb. 7, 1933.*

Motor Car Painting & Trimming Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Simonis Company, 2101 Indiana Avenue, Chicago, Ill., to effect the cancellation of the trade-mark registration of Motor Car Painting & Trimming Co., 1444 Michigan Avenue, Chicago, Ill., No. 179,521, dated February 12, 1924, and the notice of such proceeding sent by registered mail to the said Motor Car Painting & Trimming Co., at the said address, having been returned by the post office as undeliverable, notice is hereby given that unless said Motor Car Painting & Trimming Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business February 4, 1933

(Total number of applications awaiting action, excluding Trade-Mark Division, 56,066; Trade-Mark Division, 1,003. Oldest new case, Sept. 4, 1932; oldest amended, Sept. 5, 1932. The dates given are 1932 except where † indicates 1933.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Sept. 9	Sept. 12	659
6706	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Oct. 6	Oct. 6	938
4003	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Nov. 4	Nov. 4	697
7063	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Oct. 6	Oct. 10	468
3625	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Nov. 4	Nov. 5	476
4939C	6. LEWERS, A. M., Carbon Chemistry	Sept. 12	Sept. 14	1,196
5725	7. JARBOE, C. G., Optics; Photography	Oct. 5	Oct. 5	1,074
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Nov. 7	Nov. 12	615
4634	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Nov. 4	Nov. 23	570
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Oct. 14	Oct. 15	593
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Sept. 7	Sept. 7	610
7701	12. HENRY, C. C., Machine Elements	Sept. 15	Sept. 15	527
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Oct. 12	Oct. 13	820
5097	14. BRUMBAUGH, N. J., Farriery; Metal Banding; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Nov. 11	Nov. 10	595
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Sept. 26	Sept. 26	1,427
5612	16. SPENCER, C. J., Telegraphy; Telephony	Nov. 5	Nov. 5	600
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Sept. 7	Sept. 7	1,213
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Nov. 26	Nov. 25	429
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Sept. 7	Sept. 7	1,338
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Nov. 23	Nov. 29	335
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Oct. 5	Oct. 5	912
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Sept. 16	Sept. 16	763
7802	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Sept. 19	Sept. 16	711
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Dec. 7	Dec. 6	482
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Sept. 20	Sept. 20	1,249
5803	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Oct. 10	Oct. 11	562
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Nov. 9	Nov. 9	654
4628	28. BENSON, A. R., Internal-Combustion Engines	Sept. 4	Sept. 5	1,025
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Sept. 14	Sept. 14	516
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	Oct. 5	Nov. 7	662
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Sept. 15	Sept. 16	1,277
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Nov. 9	Nov. 8	695
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Sept. 14	Sept. 19	1,444
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	Sept. 14	Sept. 15	962
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Sept. 14	Sept. 12	875
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Sept. 6	Sept. 6	1,411
5899	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Oct. 12	Oct. 6	729
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Sept. 7	Sept. 7	738
6874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Sept. 13	Sept. 14	1,023
7880	40. OBERLIN, J. J., Receptacles	Sept. 29	Sept. 29	1,858
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Sept. 17	Sept. 22	666
5882	42. CUTTING, H. O., Electric Signaling	Sept. 6	Sept. 6	1,187
4896B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Sept. 14	Sept. 16	1,244
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Sept. 7	Sept. 10	865
7007	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Nov. 18	Nov. 19	568
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Sept. 17	Sept. 17	621
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Sept. 16	Sept. 17	1,489
5731	48. ROEPKE, O. B., Electricity, General Applications	Sept. 16	Sept. 16	756
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Sept. 6	Sept. 12	1,006
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Sept. 6	Sept. 9	1,328
5628	51. BACKUS, C. D., Radiant Energy	Oct. 24	Oct. 24	930
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Sept. 16	Sept. 17	580
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Nov. 23	Nov. 17	479
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Sept. 22	Sept. 22	942
6887	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	Nov. 7	Nov. 8	310
	Designs	†Jan. 3	†Jan. 18	374
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Sept. 26	Sept. 22	1,055
3625	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Oct. 4	Oct. 4	602
5605	58. DOWELL, E. F., Abrading; Typewriting	Sept. 20	Sept. 21	704
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Sept. 14	Sept. 14	804
5806	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Sept. 14	Sept. 14	1,174
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Sept. 24	Sept. 15	880
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Sept. 28	Sept. 23	1,275
4868	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Sept. 12	Sept. 12	1,251
4708	64. NABEL, P. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Sept. 14	Sept. 14	963
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Sept. 7	Sept. 7	1,374
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	†Jan. 5	†Jan. 20	864
	Labels and Prints	†Jan. 4	†Jan. 21	139

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Cramblet

No. 3,080. Decided December 27, 1933

Patentability—Mercury Switch.

Certain claims for a mercury switch *Held* patentable over the prior art.

Appeal from the Patent Office. Modified.

Lenroot, *J.*, dissents as to reversal.

Mr. John W. Michael for Cramblet.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

Graham, *P. J.*:

The appellant filed his application in the United States Patent Office for a patent on certain improvements in mercury switches. The Examiner rejected claims 1 to 6, inclusive, 8, 11, and 12, on reference to British patent to Hatfield, 17,286 of 1911, 200–152, and Kaisser, 1,517,636, December 2, 1924, 200–152. Claims 15, 16, and 17 were added by supplemental appeal. The Board of Appeals held that the decision of the Examiner should be reversed as to his rejection of said claims on the references Hatfield and Kaisser. The Board, however, cited a new reference, namely, Mailey, No. 1,688,123, of August 9, 1927, and, on this reference, rejected all of said appealed claims.

On appeal to this court, the appellant has dismissed his appeal as to claims numbered 2, 6, 15, and 16.

For the purposes of this decision, claim 1 is thought to be typical, and is as follows:

1. A switch of the character described comprising an envelope of soft glass, electrodes sealed therein, a body of mercury movable within said envelope, and means for producing a mercury to mercury make and break intermediate said electrodes upon oscillation of said envelopes including a hard glass mercury containing element separate from the envelope and fixedly supported upon the envelope in spaced relation thereto and confining the make and break area or arcing zone to a point removed from the walls of said envelope.

Appellant's mercury switch is fairly well described by the quoted claim. In his drawings and specification, the appellant shows various types of switches, but in all cases the electrodes are out of contact with the outer wall of the switch and one electrode is enclosed in a hard glass cup which is, in turn, suspended upon the electrode, entirely free from contact with the envelope wall of the switch at all points.

It is conceded by all parties that the invention, if any such exists in appellant's application, lies in the fact that the glass cup containing one electrode is out of contact with the envelope of the switch. By this method of construction, it is conceded that the soft glass envelope of the mercury switch will be better protected from the jars and shocks incident to the making and breaking of the electrical circuit over the edge of the cup.

The Board of Appeals as has been said, rests its rejection of these claims upon the Mailey patent. It is frankly conceded by the Solicitor for the Patent Office that no claim is made in the Mailey patent which is broad enough to include this particular feature of appellant's disclosure. An examination of these claims discloses that Mailey's idea, for which he was claiming a patent, was of a hard glass mercury cup held in place by one of the electrodes, in contact with the envelope wall.

In Mailey's drawings, also, it plainly appears that this cup is in all cases positioned against the envelope wall. The Board, however, rests its rejection upon the fact that Mailey, as it is claimed, discloses in his specification a construction such as is disclosed here and claimed as patentable by the appellant. This language, as quoted from the said specification, is as follows:

> • • • Further I am not limited to a switch in which the arc cup is positioned in a well for depression in the wall of the body of the switch. Such cup in some forms is positioned either on the wall of the envelope or is suspended from the wall as by mounting it to the electrode which terminates within it, or supported by the other electrode to which it is mounted as by embedding such electrode in the outside wall of the cup.

It is argued by the Solicitor that this language specifically reads upon appellant's present disclosure, and hence should be treated as an anticipation of it. In reply to this, appellant states that there is nothing in either Mailey's drawings or claims to indicate that he had any conception of the basic idea embodied in appellant's disclosure of a cup entirely out of contact with the envelope of the switch. He further argues that the language, "is suspended from the wall as by mounting it to the electrode," does not necessarily mean that the cup is out of contact with the wall. He further argues that every thought suggested by this language might be embodied in a mercury cup which is attached to the electrode and is in contact with the envelope wall. He, therefore, argues that while it might by some construction be contended that such cup was out of contact with the wall, the language does not necessarily so state, and inasmuch as it may be thus capable of a double meaning, or construction, his disclosure should not be held to be anticipated by such vague and indefinite language.

We are of opinion the point thus made by the appellant is well taken. If it could be plainly discerned from an inspection of Mailey's drawings and a reading of his claims, together with his specification, that he had this particular idea of appellant's in mind, even though it were not claimed, we might fairly agree that appellant's claims here were properly rejected. But when there is every reason to believe from his disclosure that Mailey had no conception of a cup entirely segregated from the switch envelope, it is, in our judgment, improper to reject appellant's clearly defined and limited claims, resting upon his definite disclosure of this feature.

This we believe has been the prevailing view of the courts when similar questions arose.

Statements in a prior application relied on to prove anticipation must be so clear and explicit that those

skilled in the art will have no difficulty in ascertaining their meaning. Where they are so vague, involved, intricate and contradictory that experts disagree radically as to their meaning and, following the instructions given, construct devices differing in fundamental features, it is safe to reject such a document as an anticipation. *Hillard v. Fisher, etc.*, 159 Fed. 439. See, also, *Topliff v. Topliff*, 145 U. S. 156, 59 O. G. 1297; *Atlantic G. & P. Co. v. Wood*, 288 Fed. 148; *Stead Lens Co. v. Kryptok Co.*, 214 Fed. 368; *Skelly Oil Co. v. Universal Oil Prod. Co.*, 31 F.(2d) 427; *In re Fageol*, 18 C. C. P. A. (Patents) 1347, 48 F.(2d) 944, 411 O. G. 824.

The decision of the Board of Appeals is reversed as to all claims except claims 2, 6, 15, and 16, and is, in other respects affirmed.

Modified.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,180,159, I. Langmuir, Incandescent electric lamp; 1,410,499, A. Pacz, Metals and their manufacture; 1,687,510, M. Pipkin, Electric lamp bulb, filed Dec. 16, 1932, D. C., N. D. Calif. (San Francisco), Doc. E 3467–L, *General Electric Co. v. M. Seller Co. et al.* Doc. E 3470–S, *General Electric Co. v. The Heyman Co., Inc.*

1,197,141, E. G. Mergenthaler, Machine for grinding, stropping and boxing razor blades, filed Dec. 16, 1932, D. C., E. D. N. Y., Doc. E 6733, *Gillette Safety Razor Co. v. Conrad Razor Blade Co., Inc.*

1,211,543, F. Chatfield, Label feeding machine, filed July 18, 1932, D. C. N. J., Doc. E 4465, *Ross Patch Label Co. v. C. Jordan.*

1,212,840, F. J. Straub, Building block and method of making same, D. C. N. J., Doc. E 4197, *Crosier-Straub, Inc., et al. v. J. Bokop (White Rock Concrete Products).* Injunction Dec. 5, 1932. Doc. E 4324, *Crosier-Straub, Inc., et al. v. Essex Falls Plumbing, Heating & Contracting Co., Inc.* Decree as above.

1,256,509, E. D. Belknap, Addressing machine, D. C., N. J., Doc. E 4461, *Elliott Addressing Machine Co. v. St. Anthony's Guild et al.* Discontinued Dec. 12, 1932.

1,266,747, R. Zahn, Automatic embroidering machine, filed Nov. 19, 1932, D. C. N. J., Doc. E 4533, *R. Zahn v. D. Paradis et al.*

1,277,229, B. E. Lloyd, Sound device for dolls; 1,507,826, L. J. Grubman, same, filed Dec. 19, 1932, D. C., E. D. N. Y., Doc. E 6738, *Voices, Inc., v. J. Kaufman et al.* Same, D. C., S. D. N. Y., Doc. E 73/190, *Voices, Inc., v. K. Ohlbaum & Son, Inc.*

1,293,974, W. L. Sullivan, Check issuing machine, appeal filed Dec. 13, 1932, C. C. A., 2d Cir., Doc. 12472, *General Register Corp. v. Lock-Stub Check Co.*

1,320,662, W. H. Tomlinson, Doughnut machine; 1,333,389, Comb & Peavey, Machine for cooking doughnuts; 1,414,713, Sherman & Morris, Cooking apparatus; 1,486,986, Morris & Bergner, Cooking apparatus and method; 1,492,541, 1,492,542, 1,665,017, J. C. Berger, same, C. C. A., 4th Cir., Doc. 3287, *Demco, Inc., et al. v. Doughnut Machine Corp.* Decree reversed (notice Dec. 21, 1932).

1,333,389. (See 1,320,662.)

1,334,787, O. F. Palmer, Machine for making metallic conduits, D. C. N. J., Doc. E 3967, *Triangle Conduit Co., Inc., v. Crescent Armored Wire Co., Inc.* Discontinued Oct. 18, 1932.

1,347,419, A. Swenson, Receptacle cover, filed Oct. 25, 1932, D. C. N. J., Doc. E 4521, *Utilities Specialties Co. v. M. Fellerman Soda Fountain Co.*

1,402,589, 1,828,401, H. A. Farrand, Resilient rule; 1,799,044, 1,799,094, same, Means for controlling resilient rules, filed Sept. 30, 1932, D. C., E. D. Pa., Doc. 7323, *H. A. Farrand, Inc., v. Metropolitan Chain Stores, Inc.*

1,410,499 (a), A. Pacz, Metals and their manufacture, filed Dec. 16, 1932, D. C., N. D. Calif. (San Francisco), Doc. E 3468–K, *General Electric Co. v. United Distributors, Ltd., et al.* Same, filed Dec. 12, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y–78–M, *General Electric Co. v. T. Anraku (Tokyo Lamp Co.).*

1,410,499 (b), A. Pacz, Metal and their manufacture; 1,423,956, Mitchell & White, Tipless incandescent lamp; 1,687,510, M. Pipkin, Electric lamp bulb, filed Dec. 16, 1932, D. C., N. D. Calif. (San Francisco), Doc. E 3469–L, *General Electric Co. v. The American Import Co.*

1,410,499. (See 1,180,159.) 1,414,713. (See 1,320,662.)

1,421,698, H. J. Lebherz, Hand crowner for applying crown caps to bottles; 1,835,990, same, Bottle capping throat, D. C., N. D. Ohio, W. Div., Doc. E 1238, *The Everedy Co. v. C. Greasley (Toledo Capper Co.).* Patent 1,421,698 held valid and infringed, Patent 1,835,900 held valid (notice Dec. 21, 1932).

1,423,956. (See 1,410,499 (b).)

1,469,305. (See 1,683,096.)

1,470 524, H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confection, D. C. N. J., Doc. E 4487, *Good Humor Corp. of America v. Penguin Ice Cream Corp. et al.* Injunction Sept. 21, 1932.

1,473,213, A. De Matteis, Automatic toaster, filed Nov. 16, 1932, D. C. N. J., Doc. E 4536, *A. De Matteis et al. v. Savory, Inc., et al.*

1,474,201, W. F. McMahon, Oil well slush pump piston and pump piston packing adjusting mechanism, D. C., S. D. Calif. (Los Angeles), Doc. E T–41–J, *W. F. McMahon v. Byron-Jackson Co.* Dismissed Nov. 15, 1932.

1,477,556, E. Grissinger, Sound projecting apparatus and method; 1,553,770, same, Apparatus for reproducing amplifying and projecting sound waves; 1,666,057, 1,666,058, 1,666,059, same, Sound projecting apparatus, filed Dec. 16, 1932, D. C. Md., Doc. E 2130, *E. Grissinger v. R. C. A. Victor Co., Inc.*

1,486,986. (See 1,320,662.) 1,492,541. (See 1,320,662.)

1,492,542. (See 1,320,662.) 1,507,826. (See1,277,229.)

1,517,811, O. C. Willis, Switching handles, filed Dec. 16 1932, D. C., E. D. Wis. (Milwaukee), Doc. 3875, *The P. A. Geiver Co. v. Hamilton Beach Mfg. Co.*

1,528,345, H. W. Russ, Heel and method of making; 1,536,691, same, Heel-blank breast-shaping machine; Re. 18,432, F. A. Day, Heel breasting machine, filed Nov. 9, 1932, D. C., E. D. Pa., Doc. 7371, *Union Shoe Machinery Corp. v. W. B. Coson, jr., et al.*

1,529,544. (See 1,683,096.) 1,536,691. (See 1,528,345.)

1,553,770. (See 1,477,556.)

1,564,378, H. Stein et al., Bleached and dyed furs; 1,573,200, same, Process of bleaching and dyeing furs, C. C. A., 2d Cir., Doc. 12058, *Steinfur Patents Corp. v. W. Beyer et al.* Decree modified (notice Dec. 19, 1932).

1,564,909, T. C. Steiner, Glass feeding mechanism; 1,573,742, 1,589,304, K. E. Peller, Feeding molten glass, D. C., S. D. Ohio, W. Div., Doc. E 413, *Hartford-Empire Co. v. The Nivison Weiskopf Co.* Dismissed as to 1,564,909 and 1,589,304, claims 2, 5, 8, and 9 of 1,573,742 held valid and infringed, claims 15 to 21, inclusive, 24, 25, 28, 29 of said patent held valid but no ruling made as to infringement, claims 1, 3, 4, 6, 7, 10, 22, 23, 26, 27, 30, 33, 34, 36, and 37 held invalid (notice Dec. 19, 1932).

1,570,297, F. L. Dyer, Art of recording and reproducing sounds; 1,628,658, same, Talking machine record; 1,726,546, same, Apparatus for making phonograph records; 1,783,498, same, Method of making phonograph records, filed Dec. 16, 1932, D. C. N. J., Doc. E 4547, *F. L. Dyer v. R. C. A. Victor Co., Inc.*

1,573,200. (See 1,564,378.) 1,573,742. (See 1,564,909.)

1,589,304. (See 1,564,909.)

1,593,445, Ferry & Miller, Method of installing mushroom piling, D. C. N. J. Doc. 3961, *James Ferry Co., Inc., v. Atlantic Construction Co. et al.* Decree for plaintiff Aug. 20, 1932.

1,599,916, J. R. Nye, Doughnut frying machine, C. C. A., 4th Cir., Doc. 3288, *Jos-Lowe Corp. et al. v. Doughnut Machine Corp.* Decree reversed Dec. 8, 1932.

1,605,895. (See Re. 16,584.)

1,614,136, M. C. Latour, Thermionic amplifying apparatus, D. C., S. D. Calif. (Los Angeles), Doc. E Y–57–H, *Latour Corp. v. El Rey Radio Mfg. Co.*, Injunction Dec. 10, 1932. Doc. E Y–54–H, *Latour Corp. v. Trans-Continental Radio, Inc.* Dismissed Dec. 10, 1932.

1,628,658. (See 1,570,297.)

1,633,739, H. J. Gaisman, Safety razor; 1,815,745, R. E. Thompson, same, filed Aug. 5, 1932, D. C. N. J., Doc. E 4482, *Gillette Safety Razor Co. v. Clark Blade & Razor Co.*

1,637,023, R. Herz, Reaction product of sulphur dichloride and primary arylamines, filed Oct. 8, 1932, D. C. N. Y., Doc. E 4516, *General Aniline Works, Inc., v. O. B. May, Inc.*

1,648,808, L. A. Haseltine, Wave signaling system, D. C., S. D. Calif. (Los Angeles), Doc. E Y–52–M, *Haseltine Corp. v. Trans-Continental Radio, Inc.* Dismissed without prejudice Dec. 8, 1932.

1,663,505, W. H. Mason, Hard grainless fiber product and process of making same, D. C. Del., Doc. E 871, *Masonite Corp. v. The Celotex Co.* Dismissed for want of equity Dec. 2, 1932.

1,665,017. (See 1,820,662.) 1,666,057. (See 1,477,556.)

1,666,058. (See 1,477,556.) 1,666,059. (See 1,477,556.)

1,670,543, E. E. Kellems, Cable grip, D. C. N. J., Doc. E 4039, *Kellems Products, Inc., v. Martin & Son Products Co., Inc.* Decree for plaintiff Dec. 9, 1932.

1,673,727, L. V. Aronson, Cigar lighter, filed Dec. 16, 1932, D. C., E. D. N. Y., Doc. E 6732, *Art Metal Works, Inc., Abraham & Straus, Inc.*

1,681,185. (See Re. 18,522.)

1,681,237. (See Re. 18,522.)

1,683,096, R. M. Pyles, Rotary jar; Re. 15,760 (of 1,469,305), 1,529,544, J. A. Kammerdiner, same, filed Dec. 14, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y–83–H, *J. A. Kammerdiner v. Baash-Ross Tool Co.*

1,685,511, W. E. Thomas, Process for preparing spinach and the like for canning, filed Dec. 6, 1932. D. C., S. D. Calif. (Los Angeles), Doc. E Y–69–H, *California Packing Corp. v. California Sanitary Co., Ltd.*

1,687,510. (See 1,410,499 and 1,180,159.)

1,697,653. (See Re. 18,522.)

1,700,985, C. H. Jasper, Process and device for joining, finishing and final insulating wire terminals of electrical conductors, D. C., S. D. N. Y., Doc. E 60/163, *Ideal Commutator Dresser Co. et al. v. Garfield-Elliott Electrical Supply Co., Inc.* Injunction (notice Dec. 13, 1932).

1,707,013. (See Re. 17,510.)

1,716,272. (See Re. 18,522.)

1,716,896, E. E. Miller, Mud pump valve, D. C., S. D. Calif. (Los Angeles), Doc. E S–42–J, *E. E. Miller v. Homer Oil Tool Corp. et al.* Patent held valid and infringed Nov. 17, 1932.

1,718,997. (See 1,470,524.)

1,725,500, V. P. Writer, Tam pressing machine, filed Aug. 23, 1932, D. C. N. J., Doc. E 4494, *Writer Headwear Corp. v. Waterproof Novelty Co. et al.*

1,726,546. (See 1,570,297.)

1,728,924, M. Buchsbaum, Hosiery, D. C. Del., Doc. E 890, *Gotham Silk Hosiery Co., Inc., v. Artcraft Silk Hosiery Mills, Inc.* Dismissed for want of equity Dec. 8, 1932.

1,739,280, M. B. Behrman, Razor and blade therefor; 1,773,614, G. Dalkowitz, Safety razor, C. C. A., 3d Cir., Doc. 4741, *American Safety Razor Corp. v. Fringe Bros. Co.* Decree affirmed Dec. 20, 1932.

1,748,335, Farley & Landon, Method of treating coal and product thereof, filed Sept. 29, 1932, D. C. N. J., Doc. E 4512, *Delaware, Lackawanna & Western Coal Co. v. Pattison & Browne, Inc.* Same, filed Nov. 19, 1932, D. C., E. D. Pa., Doc. 7391, *Delaware & Lackawanna & Western Coal Co. v. Philadelphia & Reading Coal & Iron Co.*

1,749,734, T. J. Kelly, Netted cord fabric bag, D. C., N. D. Ga., Rome Div., Doc. E 109, *Southern Brighton Mills v. Aragon Mills.* Patent held invalid Dec. 10, 1932.

1,759,620. (See Re. 18,522.)

1,769,836, W. G. Holmes, Water feed control, appeal filed Dec. 9, 1932, C. C. A., 2d Cir., Doc. 12467, *Kny-Scheerer Corp. v. American Sterilizer Co.*

1,773,614. (See 1,739,280.)

1,780,711, I. J. Lichter, Call system, D. C., S. D. N. Y., Doc. E 57/30, *Geige Signal Corp. et al. v. Rao Engineering Co., Inc.* Consent order of discontinuance (notice Dec. 13, 1932). Doc. E 57/31, *Geige Signal Corp. et al. v. J. L. Goodrich.* Decree as above.

1,782,963. (See Re. 18,522.) 1,783,498. (See 1,570,297.)

1,785,326, H. B. Rudd, Method of and apparatus for utilizing phase-changeable material; 1,864,475, same, Art of producing containers, filed Sept. 13, 1932, D. C., E. D. Pa., Doc. 7307, *Rudd Patents Corp. et al. v. W. Wharton, Jr., & Co., Inc.*

1,787,235, F. A. Donaldson, Air cleaner and coupling, D. C. Minn., 4th Div., Doc. 2544, *Donaldson Co., Inc., v. The Maytag Co. et al.* Dismissed Dec. 8, 1932.

1,790,517, Davis & Murray, Preparation of olefine derivatives; 1,790,522, same, Olefine containing product; 1,790,518, H. S. Davis, Preparation of alcoholic derivations of olefine-bearing substances, D. C. N. J., Doc. E 4196, *Petroleum Chemical Corp. v. Standard Oil Co.* Dismissed Dec. 12, 1932.

1,790,518. (See 1,790,517.) 1,790,522. (See 1,790,517.)

1,792,663, O. Strack, Heat-exchanging stone for air-heaters and the like, D. C., N. D. Ohio, E. Div., Doc. 4399, *Freyn Engineering Co. et al. v. A. G. McKee & Co.* Dismissed without prejudice Nov. 19, 1932.

1,799,044. (See 1,402,589.) 1,799,094. (See 1,402,589.)

1,815,745. (See 1,633,739.)

1,824,636, R. E. Tilles, Hosiery, D. C. Del., Doc. E 910, *Gotham Silk Hosiery Co., Inc., v. Artcraft Silk Hosiery Mills, Inc.* Patent held valid and infringed Dec. 8, 1932.

1,828,401. (See 1,402,589.) 1,835,990. (See 1,421,698.)

1,850,859, F. N. Woodman, Spiral conveyor belt, filed Dec. 20, 1932, D. C. Md., Doc. E 2135, *Wickwire Spencer Sales Corp. v. The Cambridge Wire Cloth Co.*

1,852,710, L. A. Haseltine, Antenna coupling system, filed Dec. 12, 1932, D. C., E. D. N. Y., Doc. E 6725, *Haseltine Corp. v. Abraham & Straus, Inc.* Same, filed Dec. 23, 1932, D. C., S. D. N. Y., Doc. E 73/249, *Haseltine Corp v. Simplex Radio Co.*

1,856,230, A. Silberstein, Cap, filed Dec. 14, 1932, D. C., S. D. N. Y., Doc. E 73/172, *New York Mfg. Corp. v. W. Gluckin et al.*

1,859,587. (See Re. 18,522.)

1,863,611, A. H. Zeledon, Display device, filed Dec. 20, 1932, D. C. Nebr. (Omaha), Doc. E 1241, *Scene-In-Action Corp. v. F. G. Tompsett (Ignition Co.).*

1,864,475. (See 1,785,326.)

1,866,860, F. Pareira, Rowing machine; 1,866,868, Thomson & Hardy, Exercising apparatus; Des. 87,059, Des. 87,153, P. S. Hardy, Front frame member for rowing machines; Des. 87,154, same, Rear frame member for rowing machine, D. C. N. J., Doc. E 4489, *Health Developing Apparatus Co., Inc., v. J. G. Korth, jr., et al.* Injunction Nov. 25, 1932.

1,866,868. (See 1,866,860.)

1,882,292, P. J. Moran, Corselette, filed Dec. 15, 1932, D. C., S. D. N. Y., Doc. E 73/173, *I. Rosner v. J. Finkelstein et al (Snug-Fit Brassière Co.).*

Re. 15,760. (See 1,683,096.)

Re. 16,584, R. H. Lawson, Reverse plating by action of casting off mechanism, D. C. N. J., Doc. E 3953, *Hemphill Co. v. F. J. Potter & Co., Inc.* Dismissed Nov. 19, 1932.

Re. 17,510, 1,707,013, J. A. Hoegger, Wall cabinet, filed Oct. 6, 1932, D. C., E. D. Pa., Doc. 7329, *J. A. Hoegger v. J. Wanamaker.*

Re. 17,803 (of Des. 78,167), G. N. Mas. Bottle, C. C. A., 4th Cir., Docs. 3284 and 3285, *G. N. Mas v. Nu-Grape Co. of America.* Decree affirmed Dec. 3, 1932.

Re. 18,151, H. P. Elliott, Stencil machine and stencil, filed Dec. 13, 1932, D. C., S. D. N. Y., Doc. E 78/156. *Elliott Addressing Machine Co. v. W. McParlan et al.*

Re. 18,432. (See 1,528,345.)

Re. 18,522 (of 1,697,653), J. H. James, Intermediate partial oxidation product and method of making same; 1,681,185, 1,859,587, same, Method of treating partial oxidation product; 1,681,237, same, Insoluble soap and method of making an insoluble soap from aldehyde fatty acid mixtures of mineral oil; 1,716,272, same, Composition of matter and method of making same; 1,759,620, same, Method of treating hydrocarbons including hydrocarbon derivatives; 1,782,963, same, Manufacture of solvents, filed Sept. 8, 1932, D. C. N. J., Doc. E 4498, *C. P. Byrnes v. Oxidation Products Co., Inc., et al.*

Des. 78,167. (See Re. 17,803.)

Des. 87,059. (See 1,866,860.)

Des. 87,097, J. L. Klecka, Finger ring, D. C. N. J., Doc. E 4531, *J. R. Wood & Sons, Inc., v. Stuarts Diamonds, Inc.* Consent decree Dec. 19, 1932.

Des. 87,153. (See 1,866,860.)

Des. 87,154. (See 1,866,860.)

T. M. 128,472. T. Noonan & Sons Co., Hair tonic, D. C. R. I., Doc. 437, *T. Noonan & Sons Co. v. Rhode Island Barbers Supply Co., Inc.* Injunction Dec. 13, 1932.

Adjudicated Patents

(C. C. A. Md.) Tomlinson patent, No. 1,320,662, for doughnut machine, claims 1 and 2 *Held* not infringed. *Demco. Inc. v. Doughnut Machine Corporation,* 62 F.(2d) 23.

(C. C. A. Md.) Bergner patent, No. 1,492,541, for cooking apparatus, *Held* not infringed. *Id.*

(C. C. A. Md.) Teigen patent, No. 1,554,898, for tobacco pipe, claim 1 *Held* not infringed. *Teigen v. United Cigar Stores Co. of America, of New Jersey,* 62 F.(2d) 5.

(C. C. A. Md.) Nye patent, No. 1,599,916, for doughnut frying machine, claim 4 *Held* not infringed. *Demco, Inc. v. Doughnut Mach. Corporation,* 62 F.(2d) 23.

(C. C. A. Md.) Bergner patent, No. 1,665,017, for cooking apparatus, *Held* not infringed. *Id.*

(C. C. A. Ohio) Rosenfeld patent, No. 1,741,118, for sign and method of manufacturing the same, claim 1 *Held* not infringed, claims 7 and 8 *Held* invalid. *Vacuum Oil Co. v. Grabler Mfg. Co.,* 62 F.(2d) 54.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,805,708, Kearney Mitchell, Drill pipe cutter, decided December 23, 1932, claims 1 and 2.

Pat. 1,808,031, J. A. Fried, Electrical condenser, decided January 20, 1933, claim 14.

Pat. 1,814,859, Julius Schwarz, Tipped laces, decided January 23, 1933, claim 1.

Pat. 1,847,714, Hugh Gillies, Brake drum, decided January 23, 1933, claims 7 and 9.

Pat. 1,857,114, C. S. Crafts, Folding mechanism, decided January 3, 1933, claims 3, 4, 6, 7, 20, 21, and 35.

Pat. 1,868,877, F. H. Brittain, Light sensitive device, decided January 26, 1933, claim 1.

Disclaimers

1,331,884.—*Gideon Sundback,* Meadville, Pa. SHEET-METAL FORMING AND SETTING MACHINE. Patent dated February 24, 1920. Disclaimer filed January 30, 1933, by the assignee, *Hookless Fastener Company.*

Therefore disclaims:

(*a*) From the scope of the claim numbered 34, any combination except one in which the member having jaws at its advancing end is a slide fastener member of the character described in Sundback patent No. 1,219,881, and which has means for automatically supplying such members to the feeding means.

(*b*) The claim numbered 38 in toto.

1,566,996.—*Gideon Sundback,* Meadville, Pa. SEPARABLE FASTENER SLIDER. Patent dated December 22, 1925. Disclaimer filed January 28, 1933, by the assignee, *Hookless Fastener Company.*

Therefore disclaims:

(*a*) From the scope of the said Letters Patent, the claims numbered 1, 2, 3, 4, 8, 14, 16, 19, and 20.

1,831,340.—*Walter Van B. Roberts,* Princeton, N. J. TUNED RADIO FREQUENCY COUPLING DEVICE. Patent dated November 10, 1931. Disclaimer filed February 3, 1933, by the assignee, *Radio Corporation of America.*

Therefore, enters the following disclaimer:

In claim 3, no claim is made to the combination recited except where the resonant frequency of the combination of the first-named reactance of unlike sign and that reactance of like sign which is coupled to the series combination of unlike reactances is higher than the lowest frequency of the range to be received.

Trade-Marks Canceled

199,374. Ready-mixed paints and varnishes. John W. Walker, doing business as Nu-Gloss Auto Painting System, Kansas City, Mo. Registered June 9, 1925. Canceled January 23, 1933.

211,398. Food sirup. Walter Blair Roddenbery, Cairo, Ga. Registered April 18, 1926. Canceled January 23, 1933.

273,296. Medicine for the treatment of certain-named ailments. C. Davilla, Los Angeles, Calif., assignor to The Rino Laboratories Company, Los Angeles, Calif. Registered July 29, 1930. Canceled January 23, 1933.

287,491. Handled axes, hatchets, and hammers. Evansville Tool Works, Inc., Evansville, Ind. Registered September 29, 1931. Canceled January 23, 1933.

287,733. Photographic papers, plates, films, cameras, and parts therefor, developing apparatus, and projectors. Gevaert Photo-Producten Naamlooze Vennootschap (Photo-Produits Gevaert Société Anonyme), Oude-God, near Antwerp, Belgium. Registered October 6, 1931. Canceled January 23, 1933.

288,113. Work clothes. Double Eagle Garment Co., Waco, Tex. Registered October 20, 1931. Canceled January 23, 1933.

TRADE-MARKS

OFFICIAL GAZETTE, FEBRUARY 21, 1933

[VOL. 427. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 333,207. FRANK R. SMITH INCORPORATED, Queens Village, Long Island, N. Y. Filed Dec. 19, 1932.



For Anthracite Coal.
Claims use since May 15, 1932.

Ser. No. 333,372. NORTHERN FIELD SEED COMPANY, Winona, Minn. Filed Dec. 24, 1932.



The lining applied to the drawing is for shading only.
For Alfalfa Seed.
Claims use since Oct. 17, 1931.

Ser. No. 333,489. WEDGE NURSERY, INCORPORATED, Albert Lea, Minn. Filed Dec. 29, 1932.

CERTI-FED

For Plants, Shrubs, and Vines.
Claims use since January, 1932.

CLASS 2

Receptacles

Ser. No. 333,357. THE INTERSTATE FOLDING BOX COMPANY, Middletown, Ohio. Filed Dec. 24, 1932.

HYGIEA-SEALED

No claim is made to the word "Sealed" apart from the mark as shown.
For Paper and Pasteboard Cartons.
Claims use since Nov. 15, 1932.

Ser. No. 333,780. THE ZYLOCASE COMPANY, Irvington, N. J. Filed Jan. 9, 1933.

"GILT EDGE"

For Eyeglass Cases.
Claims use since May, 1932.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 329,911. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa. Filed Aug. 27, 1932.

REDLEAF



For Articles Made Wholly or Partly of Leather—Namely, Ladies' Handbags, Suit Cases, Travelling Bags, Fitted Cases, Hat Boxes, Purses, Folios, Wallets, Bill Folds, Dressing Cases, Brief Cases, Key Cases, Pass Cases, Empty Manicure Cases, Card Cases, Powder and Vanity Cases, Memorandum Cases, Letter Cases, Novelty Cases, Such as Those Holding Brushes, Coat Hangers, and Travelling Accessories; Travelling Clock Cases, Travelling Slipper Cases, and Riding Saddles.

Claims use since 1925 upon Ladies' Handbags, Suit Cases, Hat Boxes, Fitted Cases, and Travelling Bags; since 1932 upon Riding Saddles, and since 1927 upon the remaining goods listed.

Ser. No. 333,302. SAKS AND COMPANY, New York, N. Y. Filed Dec. 22, 1932.

PATHFINDER

For Trunks, Handbags, Suitcases, and Other Forms of Luggage Consisting of Hat Boxes, Kit Bags, and Brief Cases.
Claims use since Nov. 4, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 332,435. JOHN P. CHRISTIE, doing business as Tidee Products and Tidee White Products, Dayton, Ohio. Filed Nov. 22, 1932.

TIDEE

For White Shoe Cleaner and a Latherless Shaving Cream.
Claims use since June 1, 1932.

Ser. No. 333,365. THE WARREN SOAP MANUFACTURING COMPANY, INC., Cambridge, Mass. Filed Dec. 24, 1932.

MUL-WASH

No claim is made to the word "Wash" apart from the mark as shown in the drawing.
For Emulsion Used in Laundering Comprising a Solvent, Emulsifying Agent and Water.
Claims use since Nov. 1, 1930.

Ser. No. 333,604. GEORGE R. POND, New York, N. Y. Filed Jan. 3, 1933.



No claim is made to the representation of the container and to the words "Trade Mark", "Superfine Shaving Cream" and "None Genuine Without This Signature" apart from the mark shown on the drawing. The signature appearing on the drawing is that of the applicant.
For Shaving Cream.
Claims use since Dec. 10, 1932.

Ser. No. 333,768. KIRKMAN & SON, INC., Brooklyn, N. Y. Filed Jan. 9, 1933.

Beauty Bubbles

For Toilet Soap.
Claims use since Oct. 4, 1932.

Ser. No. 333,789. H. TH. BÖHME, AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Jan. 10, 1933.

Oversap

Preparations of Soap for Use in the Treatment of Textile Fabrics and Leather in the Course of Their Manufacture.
Claims use since Aug. 9, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 276,793. THE LEWY CHEMICAL COMPANY, New York, N. Y. Filed Dec. 15, 1928.



Applicant disclaims the exclusive use in and to the lozenge representation of the goods and in and to the words "Moth Gas" except in connection with the use of the mark as illustrated herein.
For Insecticides.
Claims use since Nov. 8, 1927.

Ser. No. 323,187. BOERICKE & TAFEL, INC., Philadelphia, Pa. Filed Jan. 20, 1932.

SULFAX

For Antiseptic Cleaning and Deodorizing Tablets, Vaginal Suppositories, and Bacteriostatic Dusting Powders.
Claims use since May 1, 1930.

Ser. No. 329,693. TRUSLOW POULTRY FARM, INCORPORATED, Chestertown, Md. Filed Aug. 19, 1932.

Toxite

For Liquid Parasiticide for Treating Litter for use in Poultry Houses and Litter Carrying Said Liquid.
Claims use since Nov. 12, 1931.

Ser. No. 330,795. MARY MOSCICKI, Maspeth, N. Y. Filed Sept. 29, 1932.

ZERKO

For Preparation for the Treatment of Epilepsy or Falling Sickness and Nervous Disorders.
Claims use since Sept. 1, 1932.

Ser. No. 331,328. C. BRADY, Vienna, Austria. Filed Oct. 18, 1932.

LECICARBON

For Suppositories for the Treatment of Constipation.
Claims use since May 30, 1930.

Ser. No. 331,770. BRAUN'S ALMABRA PREPARATIONS, INC., Wilmington, Del., and New York, N. Y. Filed Nov. 1, 1932.

WAND

No claim is made to the words "Charm of Beauty" apart from the mark shown.
For Nail Polish, Cuticle Remover, Nicotine Remover, Hand Lotion, Hand Cream, Cuticle Oil, Cuticle Cream, Nail White, Cleansing Cream, Massage Cream, Vanishing Cream, Face Lotion, Hair Tonic, Soapless Shampoo, Waving Fluid, and Hairdress Cream.
Claims use since Sept. 30, 1932.

Ser. No. 331,773. CITY STORES MERCANTILE COMPANY, doing business as Maison Blanche, New York, N. Y., and New Orleans, La. Filed Nov. 1, 1932.

POINSETTIA MB

For Cleansing Cream.
Claims use since January, 1930.

Ser. No. 331,887. SARAH PERLE CLEAVER, St. Paul, Minn. Filed Nov. 4, 1932.

CLEAVER'S

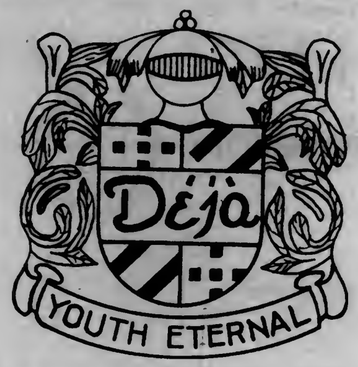
For Hand Jelly, Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener, in Liquid and Solid Form, Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyelashes and Eyebrows, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Body Powder, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Powders, Nail Polishes, Nail Creams, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, Toilet Waters, and Nourishing Creams.
Claims use since Apr. 27, 1932.

Ser. No. 332,021. HARRIETTE M. BASSLER, New York, N. Y. Filed Nov. 10, 1932.

INTESTONE

For Bacteriocidal Bowel Preparation.
Claims use since Nov. 8, 1932.

Ser. No. 332,329. BLANCHE A. BAKER, Wichita, Kans. Filed Nov. 21, 1932.



For Cleansing Cream, Cold Cream, and Tissue Builder Cream, Astringents, Skin Lotions, Face Powders, and Rouges.

Claims use since Sept. 15, 1932.

Ser. No. 332,380. SANTA MUSCO, doing business as Santa Musco Laboratory, Port Chester, N. Y. Filed Nov. 22, 1932.

Santa Musco

For Liniments, Ointments, and Salves, Namely, Pharmaceutical Preparations for External Application in the Treatment of Headaches, Rheumatic Inflammation, Lumbago, Neuralgia, Neuritis, Stiff Joints, Sprains, Swollen and Sore Muscles, Congestions, and Similar Ailments, and Sores, Cuts, and Inflammation of the Tissues.

Claims use since Nov. 1, 1932.

Ser. No. 332,522. ETHEL DANZIGER, Los Angeles, Calif. Filed Nov. 28, 1932.



The word "Avocado" is disclaimed apart from the mark as shown.

For Cleansing Cream, Beauty Clay Pack, Tissue Cream, Astringent, Make-Up (Greaseless), Brilliantine, Shampoo, Lemon Hand Crème, Lip Stick, Eye Shadow, Cheek Rouge, Face Powder, Mascara (Oil Base), Eye Brow Pencil, Lip Rouge.

Claims use since Apr. 25, 1930.

Ser. No. 332,664. SPOONER, INC., New York, N. Y. Filed Dec. 1, 1932.



Applicant disclaims the words "helen jay" apart from the mark shown in the drawing.

For Rouge, Talcum, Body Powder, Perfume, Toilet Water, Florida Water, Tooth Paste, Bay Rum, Bath Salts, Lemon Cream, Vanishing Cream, Massage Cream, Nail Polish, Shampoo, Hair Tonic, Sachet, Vegetal, Face Powder, Face Creams, Face Lotions, Astringent, Skin Tonic, Cold Cream, Lipsticks, Honey and Almond Cream, Brilliantine, Hair Pomade, Smelling Salts, After Shaving Lotions, Astringent Cream, Eye Shadow, Mascaro and Lip Rouge.

Claims use since Feb. 2, 1932.

Ser. No. 332,739. JAMES TRIMM, doing business as Veltore Products Co., Brooklyn, N. Y. Filed Dec. 3, 1932.

VELTORE

For Hair Pomade.

Claims use since November, 1932.

Ser. No. 332,759. THE DRACKETT CHEMICAL COMPANY, Cincinnati, Ohio. Filed Dec. 5, 1932.

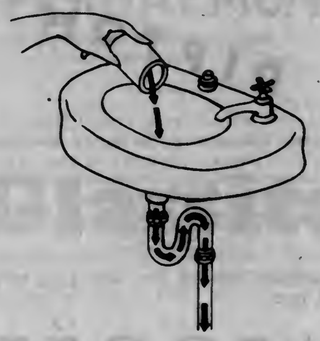


For Caustic Soda, Chlorinated Lime, Epsom Salt, Lye, and Chemical Preparations in the Nature of a Drain Pipe Solvent for Cleansing Drains, Sinks, Washbowls, Kitchen Utensils, Bath Room Fixtures, Garbage Receptacles, and the Like.

Claims use since Jan. 1, 1921.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 332,760. THE DRACKETT CHEMICAL COMPANY, Cincinnati, Ohio. Filed Dec. 5, 1932.



For Chemical Preparation in the Nature of a Drain Pipe Solvent for Cleansing Drains, Sinks, Washbowls, Kitchen Utensils, Bath Room Fixtures, Garbage Receptacles, and the Like.

Claims use since Apr. 3, 1923.

Ser. No. 332,761. THE DRACKETT CHEMICAL COMPANY, Cincinnati, Ohio. Filed Dec. 5, 1932.

Drāno



For Chemical Preparation in the Nature of a Drain Pipe Solvent for Cleansing Drains, Sinks, Washbowls, Kitchen Utensils, Bath Room Fixtures, Garbage Receptacles, and the Like.

Claims use since Apr. 3, 1923.

Ser. No. 332,862. JOHN A. SWEENEY, doing business as Hygora Laboratories, Cleveland, Ohio. Filed Dec. 7, 1932.

HYGORA

For Cleansing Mouth Wash and Tissue Stimulant.

Claims use since Nov. 15, 1932.

Ser. No. 332,884. JABURG BROTHERS, INC., New York, N. Y. Filed Dec. 8, 1932.



For Acetic Acid, Citric Acid, Tartaric Acid, Bicarbonate of Soda, Sal Soda, Insecticides, Lye, Borax, Castor Oil; Food Colors in Liquid, Paste, or Powdered Form; Laundry Starch, Bluing, Beeswax, Cream of Tartar, Cream of Tartar Substitutes; Ammonia in Liquid, Powdered, and Lump Form; Compound for Cleaning Waste Pipes.

Claims use since January, 1891.

Ser. No. 333,151. VALENTIN S. GALANG, Honolulu, Hawaii. Filed Dec. 17, 1932.

DHO-VITCH

For Medicinal Preparation to be Rubbed on Affected Parts for the Treatment of Dhobie Itch, Ringworm, Barber's Itch, Athlete's Foot, and Other Forms of Skin Irritations.

Claims use since July, 1932.

Ser. No. 333,157. JOHNSON & JOHNSON, New Brunswick, N. J. Filed Dec. 17, 1932.

MID-ORA

The trade-mark is shown in blue.

For Adhesive Denture Powder.

Claims use since Dec. 13, 1932.

Ser. No. 333,195. MEAD JOHNSON & COMPANY, Evansville, Ind. Filed Dec. 19, 1932.



For Viosterol—Namely, Activated Ergosterol, In Halibut Liver Oil.

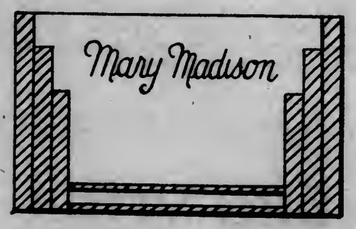
Claims use since Nov. 10, 1932.

Ser. No. 333,205. SITROUX IMPORTING CO., INC., Brooklyn, N. Y. Filed Dec. 19, 1932.

LOTIRIS

For Deodorants.
Claims use since Aug. 1, 1932.

Ser. No. 333,208. OSWALD N. STIER, doing business as Stier Drug Company and Mary Madison, New York, Oakland, Calif. Filed Dec. 19, 1932.



The drawing is lined for purple.
For Face Powder, Perfumery, Cleansing Tissue Cream for the Skin, Circulation Ointment for the Skin, Double-Whipped Cleansing Cream for the Skin, Eye Wrinkle Cream, Foundation Cream, Rejuvenating Cream, Nourishing Cream for the Skin, Astringent, Eye Wrinkle Lotion, Cucumber Lotion, Bath Crystals, Fingernail Enamel, Fingernail Enamel Remover, Acne Cream, Cleansing Cream for Skin, Cold Cream, Hand Cream, Massage Cream, Pore Paste, Vanishing Cream, Eye Water, Liquid Powder, Muscle Oil, Skin Tonic, Lemon Lotion, Wave Oil for the Hair, Deodorant, Mascaro, Cream Rouge, Bleaching Cream, Cleansing Oil Skin Cream, Lemon Cream, Skin Protection Cream, Tissue Cream, Acne Lotion, Tan Lotion, Cream Lotion, Rose Lotion, Brilliantine, Body Powder, Compact Refills, Cuticle Remover, Lip Rouge, Eye Shadow, Dry Rouge, Eye Lash Grower, Lip Sticks.
Claims use since October, 1932.

Ser. No. 333,268. MISSION LABORATORIES, Brooklyn, N. Y. Filed Dec. 21, 1932.

Uloxi

For Preparation Used in the Treatment of Stomach Disorders.
Claims use since Nov. 7, 1932.

Ser. No. 333,283. DIPTON LABORATORIES, Detroit, Mich. Filed Dec. 22, 1932.

DIPTON

For Organic Compound in the Nature of a Tonic Taken Internally for Dietary Disturbances and Malnutrition, Anemia, Lowered Vitality, Constipation, General Blood Impoverishment, and Atonic Conditions.
Claims use since Oct. 20, 1932.

Ser. No. 333,304. VEOLAY, INC., New York, N. Y. Filed Dec. 22, 1932.

APOGÉE

For Perfumes.
Claims use since Sept. 15, 1932.

Ser. No. 333,329. FRITZSCHE BROTHERS, INC., New York, N. Y. Filed Dec. 23, 1932.

JAVOLLAL

For Combination of Natural and Synthetic Aromatic Substances Which Develops the General Aroma of Citronella Oil and Which May be Used to Replace This Oil and Similar Oils in Their Various Applications.
Claims use since Nov. 16, 1932.

Ser. No. 333,342. VLO DISTRIBUTERS, Mount Vernon, N. Y. Filed Dec. 23, 1932.

VLO

For Preparation for Treatment of Diseases of the Skin.
Claims use since Oct. 29, 1932.

Ser. No. 333,363. SOLVENT PRODUCTS COMPANY, INC., Medford, Mass. Filed Dec. 24, 1932.

-TARSOL-

For Mixture of Solvents for Use in the Textile Industry for Removing Paints and Tar from Raw Wool, Cotton, or Fabrics Made Therefrom.
Claims use since May 25, 1932.

Ser. No. 333,399. N. V. ORGANON, Oss, Netherlands. Filed Dec. 27, 1932.

PERNAEMON

For Liver Extract for Medical Purposes.
Claims use since March, 1928.

Ser. No. 333,438. ROBERT HENRY ROARK, Waco, Tex. Filed Dec. 28, 1932.

Glassite

For Chemical Compound to be Added to Water for the Clarification and Toughening of Ice Made Therefrom.
Claims use since Apr. 1, 1931.

Ser. No. 333,765. HEALTH PRODUCTS CORPORATION, Newark, N. J. Filed Jan. 9, 1933.



The trade-mark is a literal translation of the trade-mark Feen-A-Mint into the French language. No exclusive claim is made to the words "Laxatif Chiquant" or to "Health Products Corp., Newark, N. J., U. S. A.". Applicant is the owner of Trade-Mark No. 170,434, registered July 17, 1928.
For Laxative Chewing Tablets.
Claims use since Jan. 3, 1933.

CLASS 7

Cordage

Ser. No. 333,881. BROWN COMPANY, Portland, Me., and Berlin, N. H. Filed Jan. 13, 1933.

X-EL-O

For Twine.
Claims use since Aug. 20, 1932.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 327,720. WANDS, INCORPORATED, New York, N. Y. Filed June 8, 1932.

Mentho-Wands

No claim is made to the exclusive use of the word "Wands" apart from the mark shown in the drawing.
For Cigarette Menthol Mint Flavoring Sticks of Sufficiently Small Size to be Inserted Between the Cigarettes in a Cigarette Package.
Claims use since March, 1932.

CLASS 10

Fertilizers

Ser. No. 332,118. FRANZ HANIEL & CIE, G. M. B. H. ZWEIGNIEDERLASSUNG MANNHEIM, Mannheim, Germany. Filed Nov. 14, 1932.

HUMINAL

For Fertilizers.
Claims use since Aug. 1, 1932.

CLASS 12

Construction Materials

Ser. No. 328,481. CREO-DIPT COMPANY INC., North Tonawanda, N. Y. Filed Jan. 27, 1932.

PLYMOUTH

For Shingles of Wood and Asphalt and Composition of Asphalt and Other Fire-Proof Material.
Claims use since May 1, 1931.

Ser. No. 329,006. THE EAGLE-PICHER LEAD COMPANY, Cincinnati, Ohio. Filed July 22, 1932.

EAGLE

For Insulation Cement, Asbestos Cement, Insulation Blankets, Wall Board, Insulated Pipe Coverings and Insulated Boiler Coverings.
Claims use since Feb. 27, 1930.

Ser. No. 329,007. THE EAGLE-PICHER LEAD COMPANY, Cincinnati, Ohio. Filed July 22, 1932.



The word "Products" as shown in the accompanying drawing is hereby disclaimed.
For Insulation Cement, Asbestos Cement, Insulation Blankets, Wall Board, Insulated Pipe Coverings, and Insulated Boiler Coverings.
Claims use since Feb. 27, 1930.

Ser. No. 329,008. THE EAGLE-PICHER LEAD COMPANY, Cincinnati, Ohio. Filed July 22, 1932.

"66"

For Insulation Cement, Asbestos Cement, Insulation Blankets, Wall Board, Insulated Pipe Coverings, and Insulated Boiler Coverings.
Claims use since Feb. 27, 1930.

Ser. No. 330,652. THE CROMAR COMPANY, Williamsport, Pa. Filed Sept. 26. 1932.

CHARTER OAK

No claim is made for the word "Oak" apart from the mark shown.
For Wood Flooring.
Claims use since Sept. 6, 1932.

Ser. No. 332,847. LE SOLIDITIT FRANÇAIS, Paris, France. Filed Dec. 7, 1932.

SOLIDIPLASTIC

For Preparations for Filling Up the Joints of Concrete Construction Work, Including Concrete Highways.
Claims use since July 26, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 297,541. REPUBLIC STAMPING & ENAMELING CO. Canton, Ohio. Filed Mar. 19, 1930.

Regal

For Enameled Steel Table and Cooking Hollowware.
Claims use since Jan. 11, 1930.

Ser. No. 332,547. PITTSBURGH EQUITABLE METER COMPANY, Pittsburgh and Homewood, Pittsburgh, Pa. Filed Nov. 28, 1932.

EMCO

For Adjuncts or Accessories for Fluid Distributing Systems—Namely, Plug Valves, Safety Seals, Gas Appliance Regulators, Balanced Valve Regulators, Domestic Service Regulators, High and Low Pressure Regulators, Automatic Differential Relief Valves, Vacuum Regulators, and Pressure Boosters and Flow Controllers.
Claims use since 1911.

Ser. No. 333,244. UNIVERSAL SANITARY MANUFACTURING CO., Taylor Township, Lawrence County, Pa. Filed Dec. 20, 1932.

CLIMAX

For Water Closets.
Claims use since Nov. 10, 1932.

Ser. No. 333,245. UNIVERSAL SANITARY MANUFACTURING CO., Taylor Township, Lawrence County, Pa. Filed Dec. 20, 1932.



For Water Closets.
Claims use since Aug. 1, 1930.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 332,301. KESTER SOLDER COMPANY, Chicago, Ill. Filed Nov. 19, 1932.



The representation of the label is disclaimed apart from the mark as shown on the drawing.
For Solder.
Claims use since Nov. 15, 1932.

CLASS 15

Oils and Greases

Ser. No. 332,804. WOLVERINE-EMPIRE REFINING CO., New York, N. Y. Filed Dec. 5, 1932.



In the drawing, the oblique lines denote the color green and the vertical lines the color red. The words "Oil," "Motor Oil," and "100% Super Quality Pennsylvania" are disclaimed apart from the mark shown in the drawing.
For Lubricating Oils and Greases.
Claims use since April, 1911.

Ser. No. 332,998. THE FREEDOM OIL WORKS COMPANY, Freedom, Pa. Filed Dec. 12, 1932.



For Lubricating Oils.
Claims use since Nov. 17, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 328,069. MOUNTAIN VARNISH & COLOR WORKS, INC., doing business as M V C Laboratories, Toledo, Ohio. Filed June 17, 1932.



The drawing is lined to indicate the colors black and orange, but applicant does not confine his claim to those specific colors.
For Paints in Ready Mixed Form, Paint Enamels, and Polishing Materials for Automobiles, Furniture, and Painted, Varnished, or Lacquered Surfaces.
Claims use since Apr. 2, 1932.

Ser. No. 328,564. PAN-AMERICAN WALL PAPER & PAINT CO., Chicago, Ill. Filed July 5, 1932.



Applicant hereby disclaims the word "Brand" and the geographical names "Chicago", "Philadelphia" and "San Francisco" appearing on the drawing.
For House Paint, Roof and Barn Paint, Shingle Stain, Asphaltum Paint, Stucco and Concrete Paint, Wood Oil Stains, Flat Wall Paint, Flat White Paint, Floor Paint, Paint Enamels, Enamel Undercoater and Screen Enamel, Outside Cold Water Paint, Paint Colors in Oil or Artists' Oil Colors, Paint and Varnish Remover, House Painters' Japan Drier, Paste Filler, Liquid Wood Filler, Crack Filler, Japan Color, Kalsomine, Varnish, Prepared Shellac, Paint-Pigment Primer, Dry Paste Bronzing Powder and Liquid, Floor Wax, Painters' Size.
Claims use since Jan. 27, 1932.

CLASS 17

Tobacco Products

Ser. No. 333,200. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 19, 1932.



For Tobacco—Namely, Cigar Clippings, Used for Both Chewing and Smoking.
Claims use since Nov. 15, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 333,267. MILTON BOAT YARDS, INC., Rye, N. Y. Filed Dec. 21, 1932.

WEE-SCOT

For Sail Boats.
Claims use since Apr. 27, 1925.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 322,057. MONARK BATTERY COMPANY, INC., Chicago, Ill. Filed Dec. 12, 1931.

"45"

For Storage Batteries.
Claims use since Dec. 9, 1931.

Ser. No. 322,180. MONARK BATTERY COMPANY, INC., Chicago, Ill. Filed Dec. 16, 1931.

"33"

For Storage Batteries.
Claims use since Dec. 9, 1931.

Ser. No. 322,181. MONARK BATTERY COMPANY, INC., Chicago, Ill. Filed Dec. 16, 1931.

"39"

For Storage Batteries.
Claims use since Dec. 9, 1931.

Ser. No. 322,182. MONARK BATTERY COMPANY, INC., Chicago, Ill. Filed Dec. 16, 1931.

"51"

For Storage Batteries.
Claims use since Dec. 9, 1931.

Ser. No. 322,183. MONARK BATTERY COMPANY, INC., Chicago, Ill. Filed Dec. 16, 1931.

"57"

For Storage Batteries.
Claims use since Dec. 9, 1931.

Ser. No. 322,184. MONARK BATTERY COMPANY, INC., Chicago, Ill. Filed Dec. 16, 1931.

"63"

For Storage Batteries.
Claims use since Dec. 9, 1931.

Ser. No. 322,185. MONARK BATTERY COMPANY, INC., Chicago, Ill. Filed Dec. 16, 1931.

"69"

For Storage Batteries.
Claims use since Dec. 9, 1931.

Ser. No. 329,667. AMERICAN ELECTRIC COMPANY, Chicago, Ill. Filed Aug. 19, 1932.

AJAX TAP-ON

No claim is made for the words "Tap-On" apart from the mark shown in the drawing.
For Attachment Plug Caps and Receptacles.
Claims use since Jan. 8, 1932.

Ser. No. 331,169. WESTERN ELECTRIC COMPANY, INCORPORATED, New York, N. Y. Filed Oct. 11, 1932.

Photomatic

For Light Responsive Electric Relay and Co-Operating Light Projecting Element, Consisting in an Electric Lamp or Similar Light Source.
Claims use since June 10, 1932.

Ser. No. 331,679. GARFIELD MANUFACTURING COMPANY, Wallington, N. J. Filed Oct. 29, 1932.

ELPAR

For Electrical Apparatus Consisting of Convenience Outlet Receptacles, Plug Receptacles, Socket Receptacles; Cord Connectors, Extension Connectors, Cable Connectors, Sad Iron Connectors; Attachment Plugs, Connector Plugs, Switch Plugs, Terminal Plugs; Wall Switches, Wall Switch Plates, Snap Switches, Pendant Switches, Fixture Switches, Rotary Switches, Knife Switches, Cut-Out Switches, Motor Control Switches, Disconnect Switches, Plug Switches; Sockets, Socket Adaptors; Relays, Remote Control Switches, Tank Switches, Toggle Switches.
Claims use since Jan. 1, 1932.

Ser. No. 332,298. INTERNATIONAL RADIO CORPORATION, Ann Arbor, Mich. Filed Nov. 19, 1932.

KADETTE

For Radio Apparatus, Consisting of Radio Receiving Sets, Television Receiving Sets and Parts Therefor Comprising Loud Speakers, Radio Amplification Units, Audio Amplification Units, Detector Units.
Claims use since Oct. 31, 1932.

Ser. No. 332,784. RITE-WA MANUFACTURING COMPANY, Pittsburgh, Pa. Filed Dec. 5, 1932.

RITE-WA

For Electric Broilers.
Claims use since Oct. 1, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 308,678. AMERICAN SAILPLANE COMPANY, Boston, Mass. Filed Dec. 6, 1930.

AMERICAN SAILPLANE

For Toy Airplanes.
Claims use since November, 1928.

Ser. No. 321,266. FREDERICK M. BERKLEY, New York, N. Y. Filed Nov. 19, 1931.

ROLLETTE

For Bowling Alleys Played with Mechanically Operated Targets.
Claims use since Oct. 1, 1931.

Ser. No. 321,267. FREDERICK M. BERKLEY, New York, N. Y. Filed Nov. 19, 1931.

BOWLETTE

For Bowling Alleys Played with Mechanically Operated Targets.
Claims use since Oct. 1, 1931.

Ser. No. 330,283. FLORENCE KAUFMAN, doing business as Stemcraft Company, New York, N. Y. Filed Sept. 10 1932.

STEMCRAFT
• PLASTIC • STEMS •

No claim is made to the words "Plastic Stems" apart from the other features of the mark.
For Toy Figures Made of Pipe Cleaners and Other Materials.
Claims use since July 30, 1932.

Ser. No. 332,252. DAYTONA-CITY RADIO STORES, INC., New York, N. Y. Filed Nov. 18, 1932.

FLEETWING

For Roller Skates, Tennis Rackets, and Handball Gloves.
Claims use since January, 1928.

Ser. No. 333,082. OTTO H. PETERS, Buffalo, N. Y. Filed Dec. 14, 1932.

PETERS' COCKATOUCHE

For Artificial Bait.
Claims use since Dec. 10, 1932.

Ser. No. 333,423. WILFRED F. BURKET, Tarentum, Pa. Filed Dec. 28, 1932.

Pony Boy

For Hobby Horses.
Claims use since July 7, 1932.

Ser. No. 333,443. THE TECHNICAL BRICK CO., Philadelphia, Pa. Filed Dec. 28, 1932.

TEKNI-BRIX

No claim being made to the word "Brix" apart from the mark as shown.
For Toy Building Bricks.
Claims use since Nov. 28, 1932.

Ser. No. 333,548. WM. L. DEMING, Salem, Ohio. Filed Dec. 31, 1932.

CENTROLA

For Table Game Board Played with Balls.
Claims use since Oct. 4, 1932.

Ser. No. 333,736. MOVIE CUT-UPS, Peabody, Mass. Filed Jan. 7, 1933.

MOVIE

STARS

For Jig-Saw Puzzles, Picture Puzzles, and Cut-Out Puzzles.
Claims use since Nov. 15, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 331,671. COMMERCIAL DISPLAY COMPANY, Chicago, Ill. Filed Oct. 29, 1932.

GASETERIA

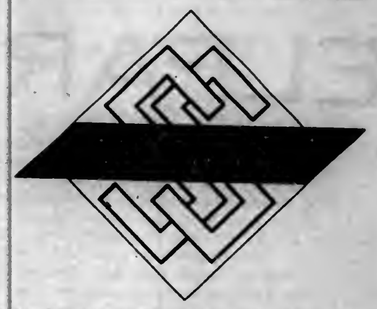
For Coin Controlled Apparatus and Equipment for Dispensing Cans, Containers, or the Like Filled with Gasoline.
Claims use since Oct. 11, 1932.

Ser. No. 332,610. BAKER PERKINS COMPANY, INC., Saginaw, Mich. Filed Nov. 30, 1932.

VISSOLVER

For Machines for Dissolving Cellulose Xanthate in Dilute Sodium Hydroxide Solution to Produce Viscose Used in the Manufacture of Artificial Silks, Films, and Other Cellulose Products.
Claims use since Sept. 15, 1932.

Ser. No. 332,929. SERVICE STATION EQUIPMENT COMPANY, Conshohocken, Pa. Filed Dec. 9, 1932.



The words "Service Station Equipment" are disclaimed apart from the mark as shown on the drawing.
For Air Compressors and Parts Thereof.
Claims use since Nov. 17, 1932.

Ser. No. 333,089. UNITED STATES EQUIPMENT CORPORATION, New Brighton, Pa. Filed Dec. 14, 1932.

WICONITE

For Automobile Oil Filters.
Claims use since Aug. 19, 1932.

Ser. No. 333,118. THE DORR COMPANY, INC., New York, N. Y. Filed Dec. 16, 1932.

HYDRAKER

For Apparatus for the Treatment of Solids Suspended in Liquids and More Particularly for Sedimentation Apparatus Such as Clarifiers and Thickeners.
Claims use since Sept. 15, 1932.

Ser. No. 333,119. THE DORR COMPANY, INC., New York, N. Y. Filed Dec. 16, 1932.

SIFEED

For Apparatus for the Treatment of Solids Suspended in Liquids and More Particularly for Sedimentation Apparatus Such as Thickeners and Clarifiers.
Claims use since Nov. 10, 1932.

Ser. No. 333,681. PRYBRANDS, INC., Long Island City, N. Y. Filed Jan. 5, 1933.

JOHNY WALKER

For Razors and Razor Blades.
Claims use since Aug. 24, 1932.

Ser. No. 333,683. PRYBRANDS, INC., Long Island City, N. Y. Filed Jan. 5, 1933.

MASCOT

For Razors and Razor Blades.
Claims use since Aug. 24, 1932.

Ser. No. 333,684. PRYBRANDS, INC., Long Island City, N. Y. Filed Jan. 5, 1933.

RED CAP

For Razors and Razor Blades.
Claims use since Aug. 24, 1932.

Ser. No. 333,686. PRYBRANDS, INC., Long Island City, N. Y. Filed Jan. 5, 1933.

WHITE HORSE

For Razors and Razor Blades.
Claims use since Aug. 24, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 332,843. ADAM HILGER, LIMITED, London, England. Filed Dec. 7, 1932.

SPEKKER

For Polarimeters, Spectroscopes, and Colorimeters.
Claims use since July 20, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 332,982. BETTY BROWN, New York, N. Y. Filed Dec. 12, 1932.



The name Betty Brown is a facsimile of the signature of the applicant. No rights are asserted to the exclusive use of the word "Band" apart from the mark as used in the drawing. The lines appearing in the drawing serve to indicate shading only.
For Monogram Bracelets.
Claims use since Nov. 15, 1932.

Ser. No. 333,410. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 27, 1932.



For Finger Rings and Sterling Silver Bracelets.
Claims use since Nov. 16, 1932.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 332,618. HANS EBBESEN THEODORE JENSEN, doing business as The Electric Tooth Brush Company, Los Angeles, Calif. Filed Nov. 30, 1932.

Roto-lee-tric

For Electrically Operated Tooth Brushes.
Claims use since Oct. 24, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 333,934. GRINNELL WASHING MACHINE CORP., Grinnell, Iowa. Filed Jan. 14, 1933.

Grinnell

For Refrigerators.
Claims use since Dec. 18, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 328,087. CHARLES FUCHS, Philadelphia, Pa. Filed Jan. 16, 1932.



The words "Custom Built" are herein disclaimed apart from the mark as shown.
For Bed Springs and Mattresses.
Claims use since middle of June, 1931.

Ser. No. 323,088. CHARLES FUCHS, Philadelphia, Pa. Filed Jan. 16, 1932.



The words "Custom Built" are herein disclaimed apart from the mark as shown.

For Bed Springs and Mattresses.

Claims use since middle of June, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 331,401. THE FREDERICK IRON & STEEL COMPANY, Frederick, Md. Filed Oct. 20, 1932.



No claim is made for the words "Stoker," "Mfd. and Sold by," and "Frederick, Md."

For Automatic Stokers for Feeding Coal to Furnaces.

Claims use since Sept. 26, 1932.

Ser. No. 331,501. HAMMEL OIL BURNING EQUIPMENT COMPANY, INCORPORATED, Providence, R. I. Filed Oct. 24, 1932.

HOBECO

For Oil Burners for Furnaces or Ranges and Parts Thereof.

Claims use since July, 1931.

Ser. No. 331,768. FREDERICK J. BECKER, Cincinnati, Ohio. Filed Nov. 1, 1932.



The word "Taper" is disclaimed apart from the mark as shown.

For Imitation Tapers Comprising a Casing Containing Inflammable Fluid, and a Wick Extending Into the Fluid and Through the Tip of the Taper, Which When Lit Gives the Appearance of a Lighted Wax Taper.

Claims use since Sept. 26, 1932.

Ser. No. 333,896. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Jan. 13, 1933.

CRAFTSMAN

For Acetylene Welding Outfits.

Claims use since Oct. 28, 1927.

CLASS 35

Belting, Hose, Machinery Packing, and Non-Metallic Tires

Ser. No. 329,862. LYON CORD COMPANY, Detroit, Mich. Filed Aug. 26, 1932.



The representation of the goods and the word "Lyon" is disclaimed apart from the mark as shown in the drawing.

For Metal Tire Covers.

Claims use since Jan. 15, 1931.

CLASS 36

Musical Instruments and Supplies

Ser. No. 333,314. THOMAS A. EDISON, INCORPORATED, West Orange, N. J. Filed Dec. 23, 1932. Under Section 5b of the Act of 1905 as amended in 1920.

EDISON

For Sound Recording and Reproducing Apparatus and Equipment Consisting of Dictating and Transcribing Machines, Especially Designed for Recording and Reproducing Dictation and the Like, and Sound Record Tablets.

Claims use since June, 1931, on dictating and transcribing machines, and March, 1930, on sound-record tablets.

CLASS 37

Paper and Stationery

Ser. No. 333,091. WESTERN PAPER CONVERTING COMPANY, Salem, Oreg., and San Francisco, Calif. Filed Dec. 14, 1932.



No claim is made to exclusive ownership of the word "Bond" apart from the trade-mark as shown.

For School Papers, Composition Books, Bond and Ledger Paper, Writing Paper, Typewriter Paper, Note Paper, Newsprint, and Cut Paper Stock, Calendered and Uncalendered.

Claims use since December, 1930.

Ser. No. 333,188. GOLDSMITH BROS., New York, N. Y. Filed Dec. 19, 1932.

PENFINE MIMEO
GOLDSMITH BROS. N.Y.

The words "Goldsmith Bros. N. Y." and "Mimeo" appearing on the drawing are hereby disclaimed apart from the mark as shown.

For Writing and Typewriting Paper.

Claims use since June 1, 1932.

Ser. No. 333,866. TRIPTALK, INC., Washington, D. C. Filed Jan. 12, 1933.

TRIPTALK

For Correspondence Sheets.

Claims use since Nov. 30, 1932.

Ser. No. 333,899. W. A. SHEAFFER PEN COMPANY, Fort Madison, Iowa. Filed Jan. 13, 1933.

FEATHERTOUCH

For Pens.

Claims use since June 12, 1931.

CLASS 38

Prints and Publications

Ser. No. 323,324. THE F-R PUBLISHING CORPORATION, New York, N. Y. Filed Dec. 28, 1932.

—GENET

For Magazine Section.

Claims use since Oct. 10, 1925.

Ser. No. 333,573. THE BEACON PRESS, INC., Boston, Mass. Filed Jan. 3, 1933.

THE WAYSIDE COMMUNITY PULPIT

For Educational Sheets or Posters.

Claims use since Dec. 15, 1932.

Ser. No. 333,805. LANE PUBLISHING CO., Chicago, Ill. Filed Jan. 10, 1933.

REAL AMERICA

For Periodical.

Claims use since Jan. 4, 1933.

Ser. No. 333,827. GERNSBACK PUBLICATIONS, INC., New York, N. Y. Filed Jan. 11, 1933.

TECHNOCRACY REVIEW

For Monthly Publication.

Claims use since Dec. 27, 1932.

Ser. No. 333,914. THE GEORGE BELSEY CO., LTD., Los Angeles, Calif. Filed Jan. 14, 1933.

Bess Meals

The trade-mark is the nom de plume of Fleeta Hoke, an employee of applicant, and is written in her handwriting.

For Pamphlet Containing Recipes Issued from Time to Time.

Claims use since Nov. 16, 1932.

CLASS 39

Clothing

Ser. No. 325,238. PANCO RUBBER COMPANY, Chelsea, MASS. Filed Mar. 17, 1932.



No claim is made to the exclusive right to the word "Genuine" apart from the mark shown. The drawing is lined for red.

For Whole Soles, Heels, and Taps.

Claims use since Jan. 1, 1932.

Ser. No. 326,918. SUSSBERG & FEINBERG, INC., New York, N. Y. Filed May 9, 1932.

Slip-and-a-Half

No claim being made to the exclusive use of the word "Slip", apart from the mark as shown in the drawing.

For Women's, Misses', and Children's Slips.

Claims use since Apr. 21, 1932.

Ser. No. 327,982. MCADOO & ALLEN WELTING COMPANY, Quakertown, Pa. Filed June 14, 1932.

"PEEKO"

For Welting for Shoes.

Claims use since May, 1931.

Ser. No. 332,058. THE WALKER T. DICKERSON COMPANY, Columbus, Ohio. Filed Nov. 11, 1932.

DICKERSON'S TARSAL-WEDGE ARCH-LOCK-SHOE

No claim is made to the word "Tarsal" and "Shoe" apart from their use in connection with the trade-mark shown.

For Shoes Made of Leather, Leather and Fabric, and the Combination of Leather, Rubber, and Fabric.

Claims use since Nov. 1, 1932.

Ser. No. 332,060. THE WALKER T. DICKERSON COMPANY, Columbus, Ohio. Filed Nov. 11, 1932.

TARSALOCK DICKERSON ARCH-RELIEF

For Shoes Made of Leather, Leather and Fabric, and the Combination of Leather, Rubber, and Fabric.

Claims use since Nov. 1, 1932.

Ser. No. 332,121. LENASONS SHOE COMPANY, INC., Farmington, N. H. Filed Nov. 14, 1932.

LADY BELLE LENASONS SHOES

Applicant disclaims the right to the exclusive use of the word "Shoes."

For Shoes Made of Leather, Rubber, and Fabric.

Claims use since Nov. 7, 1932.

Ser. No. 332,138. SHAFT-PIERCE SHOE COMPANY, Faribault, Minn. Filed Nov. 12, 1932.

NATURE STUDY

For Shoes, Boots, and Sandals Made of Leather, Cloth, and Rubber or Combinations of the Same.

Claims use since Sept. 29, 1932.

Ser. No. 332,576. THE WALTER T. DICKERSON COMPANY, Columbus, Ohio. Filed Nov. 29, 1932.

THE NULOCK SHOE WEDGE BALANCED

"Wedge Balanced" and "Shoe" are disclaimed apart from the mark shown in the drawing.

For Shoes Made of Leather, Leather and Fabric, and the Combination of Leather, Rubber, and Fabric.

Claims use since Nov. 1, 1932.

Ser. No. 332,942. WOHL SHOE COMPANY, St. Louis, Mo. Filed Dec. 9, 1932.

SHIELD ARCH PROTECTS AND CORRECTS

The words "Arch" and "Protects and Corrects" are disclaimed apart from the other features of the mark.

For Women's, Misses', and Children's Arch-Support Shoes.

Claims use since Apr. 6, 1931.

Ser. No. 332,956. FLORENCE HELEN LATIMER, Oakland, Calif. Filed Dec. 10, 1932.

BROWN BETTY SUN DRESS

The term "Sun Dress" is disclaimed apart from the mark as shown on the drawing. The drawing is lined for the colors brown and purple.

For Children's Dresses.

Claims use since Nov. 20, 1932.

Ser. No. 333,112. M. APPEL & BRO., INC., New York, N. Y. Filed Dec. 16, 1932.

"THE NEW DEAL"

For Ladies' Hats.

Claims use since Nov. 15, 1932.

Ser. No. 333,134. M. WILE & COMPANY, INC., Buffalo, N. Y. Filed Dec. 16, 1932.

Twenty Grand

No claim is made to the use of the dollar sign, or the numeral "20", except in the manner shown in the drawing.

For Men's Outer Garments—Namely, Suits and Overcoats.

Claims use since Nov. 14, 1931.

Ser. No. 333,194. MAIDWELL BRASSIERE COMPANY, New York, N. Y. Filed Dec. 19, 1932.

"Slendamor"

For Brassières, Corsets, Corselets, and Girdles.

Claims use since November, 1932.

Ser. No. 333,220. FRANC, STROHMENGER & COWAN, INC., Poughkeepsie, N. Y. Filed Dec. 20, 1932.

Loomart

For Neckties, Cravats, and Scarfs.

Claims use since 1927.

Ser. No. 333,265. MCCURDACH ORGANIZATION INCORPORATED, New York, N. Y. Filed Dec. 21, 1932.

SPUNGORA

For Neckties.

Claims use since Dec. 10, 1932.

Ser. No. 333,299. RELIANCE MANUFACTURING COMPANY, Chicago, Ill. Filed Dec. 22, 1932.

BIG YANK

WEARTESTED

For the purpose of this registration the application disclaims the word "Weartested" and the representation of the goods apart from the mark shown. The drawing is lined for black, gray and gold.

For Men's Underwear.

Claims use since June 1, 1931.

Ser. No. 333,879. CARSON PIRIE SCOTT AND COMPANY, Chicago, Ill. Filed Dec. 27, 1932.

GALA

For Children's Dresses.
Claims use since Dec. 7, 1932.

Ser. No. 333,856. LA SALLE GIRL COAT CORPORATION, New York, N. Y. Filed Jan. 12, 1933.

Lusty-Girl

For Girls' Coats.
Claims use since Oct. 5, 1932.

Ser. No. 333,858. LA SALLE GIRL COAT CORPORATION, New York, N. Y. Filed Jan. 12, 1933.

Robust-Girl

For Girls' Coats.
Claims use since Oct. 5, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 281,368. NEW YORK EXPORT CO., New York, N. Y. Filed Mar. 26, 1929.



For Ribbons in Bows or Cut Lengths.
Claims use since Jan. 1, 1928.

Ser. No. 321,449. KATHERINE B. SUNDERLAND, Danbury, Conn. Filed Nov. 23, 1931.

Vamp Ezers

For Cushions for Shoe Vamps.
Claims use since October, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 330,036. CARSON PIRIE SCOTT & CO., Chicago, Ill. Filed Sept. 1, 1932.



For Cotton Piece Goods.
Claims use since 1915.

Ser. No. 333,033. HAYTHORNTHWAITE & SONS, LIMITED, Brierfield, England. Filed Dec. 13, 1932.



Applicant disclaims all wording save "Grenfell" and its name except in the precise relation and association shown.

For Piece Goods Composed Wholly or Mainly of Cotton.
Claims use since Aug. 23, 1926.

Ser. No. 333,137. AMERICAN GLANZSTOFF CORPORATION, New York, N. Y. Filed Dec. 17, 1932.



The applicant disclaims the descriptive words "Rayon Yarns" apart from the mark as shown in the drawing.

For Knitted, Netted, and Textile Fabrics, Composed Wholly or in Part of Filaments of Artificial Origin.
Claims use since Aug. 15, 1931.

CLASS 43

Thread and Yarn

Ser. No. 333,418. THREADS-INCORPORATED, Gastonia and Arkray Village, N. C. Filed Dec. 27, 1932.

Mothers

For Sewing Thread.
Claims use since Dec. 10, 1932.

Ser. No. 333,503. CARTER & PARKER LIMITED, Guiseley, England. Filed Dec. 30, 1932.

WENDY

For Yarns of Wool, Worsted, or Hair.
Claims use since Apr. 20, 1928.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 331,772. CITY STORES MERCANTILE COMPANY, doing business as Maison Blanche Company, New York, N. Y., and New Orleans, La. Filed Nov. 1, 1932.

Poinsettia

For Sanitary Napkins.
Claims use since January, 1930.

Ser. No. 333,104. GEORGE KUHLMANN, New York, N. Y. Filed Dec. 15, 1932.



No claim is made to the word "Elastic" apart from the mark as shown on the drawing.

For Surgical Bandages.
Claims use since Jan. 1, 1929.

Ser. No. 333,471. THE COLUMBUS DENTAL MANUFACTURING CO., Columbus, Ohio. Filed Dec. 29, 1932.

H H

For Tooth Backings.
Claims use since Oct. 3, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 331,615. THE GREEN LANTERN BEVERAGE CO., doing business as The Lomax Co., Chicago, Ill. Filed Oct. 27, 1932.



The drawing is lined for shading. No claim is made to the words "Original," "Pepsin," and "Ginger Ale" for registration purposes apart from the mark shown in the drawing.

For Ginger Ale.
Claims use since Sept. 1, 1931.

Ser. No. 333,628. FRANK W. BIRELEY, doing business as Bireley's, Los Angeles, Calif. Filed Jan. 4, 1933.

bottoms up

For Nonalcoholic, Maltless Orange Juice Used in the Preparation of Soft Drinks.
Claims use since Dec. 1, 1932.

Ser. No. 333,835. HENRY LEWIS, 3d, doing business as Participating Sales Company, New York, N. Y. Filed Jan. 11, 1933.



For Nonalcoholic, Maltless Beverages Sold as Soft Drinks, Ginger Ale, and Natural Mineral Waters.
Claims use since Dec. 30, 1932.

CLASS 46

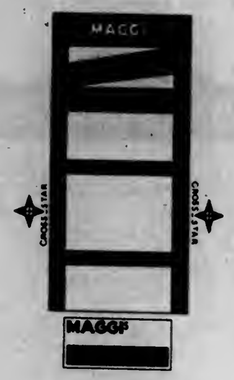
Foods and Ingredients of Foods

Ser. No. 325,525. L. M. McLAREN, Yuma, Ariz. Filed Mar. 26, 1932.

SUN-BLUSH

For Fresh Vegetables.
Claims use since Dec. 15, 1931.

Ser. No. 328,871. MAGGI CO., INC., New York, N. Y. Filed July 18, 1932.



For Soup Tablets.
Claims use since January, 1907.

Ser. No. 329,238. JOSEPH DELLA MONICA, Brooklyn, N. Y. Filed July 30, 1932.



The portrait forming the feature of the trade-mark represents no particular person.
For Canned Peeled Tomatoes, Tomato Paste, or Sauce and Cheese.
Claims use since July 10, 1932.

Ser. No. 330,801. VITAB PRODUCTS CO., San Francisco, Calif. Filed Sept. 29, 1932.

VITAB

For Bread, Brown Rice, Crisp Bread, Soya Bean Flour and Rice Polishings.
Claims use since April, 1930.

Ser. No. 331,456. DINGFELDER & BALISH, INC., Kimmell, Ind. Filed Oct. 22, 1932.



The words "Quality" and "Brand" are disclaimed apart from the mark as shown on the drawing. Applicant is the owner of registration No. 179,661.
For Onions.
Claims use since June, 1926.

Ser. No. 331,458. THE ENZA-VITA LABORATORIES, INC., Toledo, Ohio. Filed Oct. 22, 1932.

ENZA-VITA

For Fractional Ration or for Ration for Poultry and Live Stock.
Claims use since February, 1932.

Ser. No. 331,817. BROOK-MAID FOOD CO., INC., Brooklyn, N. Y. Filed Nov. 2, 1932.

BROOK-MAID

For Canned and Bottled Foods—Namely, Fruits, Vegetables, Apple Butter, Jellies, Jams, Fruit Preserves, Marmalades, Chili Sauce, Horseradish, Mayonnaise Dressing, Peanut Butter, and Cider Vinegar.
Claims use since October, 1926.

Ser. No. 331,845. DAVIS BROS. FISHERIES, INC., Gloucester, Mass. Filed Nov. 2, 1932.



No claim being made for the word "Pure" apart from the trade-mark shown in the drawing. Applicant is the owner of registration No. 39,151.
For Cured or Dried Fish.
Claims use since August, 1900.

Ser. No. 332,260. THE LEADWAY STORES CORPORATION, Wilmington, Del. Filed Nov. 18, 1932.

LEADWAY

For Salad Dressing, Vinegar, Canned Vegetables—Namely, Canned Corn, Canned Tomatoes, and Canned Peas; Canned Meats—Namely, Canned Tongue and Canned Pigs Feet; Tea, Coffee, Condiments—Namely, Table Salt and Pepper; Spices, Confectionery—Namely, Chocolate Bars and Packaged Hard Candies; Corn Starch, Canned Soup, Packaged Macaroni, Spaghetti, Noodles, Canned Spaghetti, Rice, Mince Meat, Jell Powder—Namely, Powdered Gelatine; Packaged Cod Fish, Evaporated and Dried Fruits, Prepared Cocoanut, Cake Flour, Pancake Flour, Canned Mushrooms, Canned Malt Syrup, Fruit Flavoring for Food Purposes, Chocolate, Cocoa, Syrup—Namely, Corn Syrup; Flavoring Extracts for Foods, Pickles, Canned Fish, Canned Olives; Canned Evaporated and Powdered Milk, Packaged Cereal—Namely, Cereal Breakfast Food; Packaged Sugar, Cheese, Fruit Jelly, Fruit Preserves, Butter, Oleomargarine, Eggs, Bread, Pastry Flour, Honey, Peanut Butter, Olive Oil, Salad Oil, Tapioca, Apple Butter, Bird Seed, Salted Peanuts, Prepared Mustard, Salad Mustard, Mayonnaise Dressing, Relish Spread.
Claims use since Nov. 10, 1932.

Ser. No. 332,461. CHAS. D. MESCHTER, INC., Long Island City, N. Y. Filed Nov. 25, 1932.



On the drawing the figure is fanciful.
For Mushroom Sauces and for a Combination Spaghetti Dinner, Consisting of Spaghetti, Mushroom Sauce, and Grated Cheese.
Claims use since Nov. 1, 1931.

Ser. No. 332,548. PROTECTIVE FOODS, INC., Los Angeles, Calif. Filed Nov. 28, 1932.

NEO-NUTRITION

The word "Nutrition" is disclaimed apart from the mark as shown on the drawing.
For Vegetable Food Concentrate.
Claims use since Feb. 5, 1931.

Ser. No. 332,914. JULIUS A. DELFS, doing business as Delfs Candy Company, Long Beach, Calif. Filed Dec. 9, 1932.



The descriptive word "Chocolate" and the notation "5¢" are disclaimed apart from the mark as shown on the drawing.
For Candy.
Claims use since Mar. 15, 1931.

Ser. No. 333,060. GEORGE DUDMAN, doing business as George Dudman Company, New York, N. Y. Filed Dec. 14, 1932.



For Pancake Flour and Patent Rye Flour, Farina, Corn Meal, and Barley, Hominy, and Semolina.
Claims use since Sept. 1, 1931.

Ser. No. 333,145. THE CEREAL MEAL CORPORATION, Providence, R. I. Filed Dec. 17, 1932.



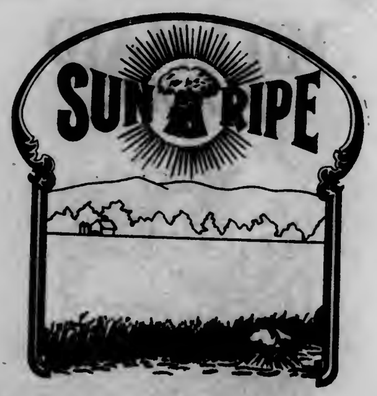
For Breakfast Foods Comprising a Combination of Cereal, Agar-Agar, Flaxseed Meal, and Bran.
Claims use since Oct. 6, 1931.

Ser. No. 333,163. MANEY MILLING COMPANY, Omaha, Nebr. Filed Dec. 17, 1932.

SUNKIST

Applicant is the owner of registration No. 92,809.
For Wheat Flour, Biscuit Flour, Self-Rising Flour, Pancake Flour, and Cake Flour.
Claims use since September, 1909.

Ser. No. 333,250. ALBERS BROS. MILLING COMPANY, Portland, Oreg. Filed Dec. 21, 1932.



The words "Sun Ripe" are disclaimed separate and apart from the mark as shown.
For Oatmeal.
Claims use since Sept. 22, 1924.

Ser. No. 333,328. LAKE WALES CITRUS GROWERS ASSOCIATION, Lake Wales, Fla. Filed Dec. 23, 1932.

Royal Guard

For Citrus Fruit.
Claims use since Oct. 1, 1932.

Ser. No. 333,346. THE PAGE MILLING COMPANY, Luray, Va. Filed Dec. 23, 1932.

FAVORITE

For Poultry, Turkey, and Stock Feeds.
Claims use since Jan. 1, 1925, in intrastate commerce; and since Aug. 10, 1931, in interstate commerce.

Ser. No. 333,429. ELIZABETH A. FRANCKE, New York, N. Y. Filed Dec. 28, 1932.

ARDELLA'S

For Food Products—Namely, Salad Dressing.
Claims use since July 7, 1932.

Ser. No. 333,436. THE NULOMOLINE COMPANY, New York, N. Y. Filed Dec. 28, 1932.

XPANDO

For Sugar.
Claims use since Oct. 13, 1932.

Ser. No. 333,485. JOHN C. STEINER, doing business as Pioneer Health Products, Milwaukee, Wis. Filed Dec. 29, 1932.

V-G-SAL

The word "Sal" is disclaimed apart from the mark as shown on the drawing.
For Vegetalized Table Salt.
Claims use since Dec. 22, 1932.

Ser. No. 333,530. OSCAR F. PORGES, Long Island City, N. Y. Filed Dec. 30, 1932.

POLA ROLL

No claim is made to the word "Roll" shown in the drawing apart from the other feature of the mark.
For Frozen Confections.
Claims use since Oct. 10, 1929.

CLASS 48

Malt Beverages and Liquors

Ser. No. 331,512. NUEVA FABRICA DE HIELO, S. A., Habana, Cuba. Filed Oct. 24, 1932.

"EXCELSIOR"

For Malt Beverages Containing Not More Than the Legal Alcoholic Content.
Claims use since July, 1928.

Ser. No. 333,482. POTOSI BREWING COMPANY, Potosi, Wis. Filed Dec. 29, 1932.



No claim is made to any of the words appearing on the drawing with the exception of the word "Supreme" apart from the association shown.
For Non-Intoxicating Malt Beverage Containing Not More Than One-Half of One Per Cent Alcohol by Volume.
Claims use since Mar. 4, 1931.

Ser. No. 333,483. POTOSI BREWING COMPANY, Potosi, Wis. Filed Dec. 29, 1932.



No claim is made to any of the words or notations appearing on the drawing except in the association shown.
For Non-Intoxicating Malt Beverage Containing Not More Than One-Half of One Per Cent Alcohol by Volume.
Claims use since 1912.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 331,492. COMPANIA RON BACARDI, S. A., Santiago de Cuba City, Cuba. Filed Oct. 24, 1932.



No claim is made to the words "Trade Mark" appearing on the drawing.
For Rum.
Claims use since January, 1915.

Ser. No. 333,480. THE FRANKFORT DISTILLERY, INC., Louisville, Ky. Filed Dec. 28, 1932.

℞
OLD VELVET

No claim is made to the prescription symbol shown on the drawing apart from the other features of the mark.
For Whiskey.
Claims use since 1884.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 333,877. ACME BACKING CORPORATION, Brooklyn, N. Y. Filed Jan. 13, 1933.

PERFRITE

For Processed Fabric Backing Material Used in the Manufacture of Laminated Fabrics.
Claims use since Nov. 1, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

FEBRUARY 21, 1933

301,116. BRISTLES, SPONGES, ORES, SAND, CRUDE MINERALS, RUBBER, WOOD, TIMBER, HIDES, SKINS, GUTS, LEATHER, PELTS, COAL, COKE, AND THE LIKE IN ALL FORMS; COMBUSTIBLES, SHAVINGS, RESINS, PULP, GRAVEL, PITCH, ASPHALT, TAR, CLAY AND POTTER'S EARTH, MICA; PARTLY PREPARED MATERIAL FOR THE FABRICATION OF PAPER; MOLDING MATERIALS, PACKING MATERIAL, SUCH AS SAWDUST, PACKING PADS AND MATERIAL AND THE LIKE, EXCELSIOR, WASTE. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,194. PUBLISHED AUGUST 30, 1932. Class 1.

301,117. COFFINS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,195. PUBLISHED OCTOBER 13, 1931. Class 2.

301,118. SOAPS, STEEL WOOL, WASHING COMPOUNDS, GLASS AND METAL POLISH, SHOE POLISH, PREPARATIONS FOR THE POLISHING AND CONSERVING OF LEATHERS, PREPARATIONS FOR THE REMOVAL OF STAINS, AND ABRASIVE MATERIALS IN ALL FORMS, SUCH AS BARS, DISCS, WHEELS, HONES, POWDERS, GRANULES, ETC. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,197. PUBLISHED NOVEMBER 15, 1932. Class 4.

301,119. ADHESIVES. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,198. PUBLISHED SEPTEMBER 6, 1932. Class 5.

301,120. ABSORBENTS, ALTERATIVES, ANTACIDS, ETC. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,199. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,121. WIRE ROPES AND CABLES. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,200. PUBLISHED SEPTEMBER 29, 1931. Class 7.

301,122. DYNAMITE AND BLASTING POWDERS AND THE LIKE, MATCHES, FIRE WORKS, SHELLS, AND AMMUNITION. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,201. PUBLISHED JULY 19, 1932. Class 9.

301,123. FERTILIZERS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort,on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,202. PUBLISHED OCTOBER 20, 1931. Class 10.

301,124. WRITING INK, PRINTERS' INK AND COLORS. DEUTSCHE GOLD- & SILBER-SCHEINDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,203. PUBLISHED JULY 26, 1932. Class 11.

301,125. CAULKING AND PACKING MATERIALS, PREPARED BUILDING STONES, ARTIFICIAL BUILDING STONES, LIME, PLASTER, PIPE INSULATING COVERINGS, ASPHALT ROOFING, PORTABLE HOUSES, AND ASBESTOS BUILDING MATERIALS—NAMELY, SHINGLES, WRAPPINGS, WALL BOARDS AND THE LIKE, BUILDING AND PORTLAND CEMENT, POROUS BUILDING STONES IN ALL FORMS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,204. PUBLISHED OCTOBER 11, 1932. Class 12.

301,126. NAILS FOR HORSE SHOES, CHAINS, HAND AND MECHANICALLY OPERATED BELLS, METALLIC WASHERS; METAL TRIMMINGS FOR DRAPERIES AND UPHOLSTERIES—NAMELY, CURTAIN RODS, CURTAIN RINGS, METAL CURTAIN HOOKS, AND HOLD-BACKS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,205. PUBLISHED NOVEMBER 15, 1932. Class 13.

301,127. PAPER—NAMELY, WRAPPING PAPER, MANILA PAPER, DOCUMENT, PRINT PAPER, BOOK PAPER, COVER PAPER, WRITING PAPER, BOND PAPER, TOILET-PAPER, AND THIN HIGH-FINISHED TRANSPARENT PAPER SUITABLE FOR PHOTOGRAPH COVERS, FLY-LEAVES, FANCY BOX COVERS, AND HALF-TONE PRINTING; BRISTOL BOARDS, CARD BOARDS, PASTE BOARDS, AND MILL BOARDS; WALL PAPER, RUBBER STAMPS, PENS, PENCILS, CRAYONS, RUBBER ERASERS, PAPER WEIGHTS, DESK SETS, AND WRITING CHALK. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,206. PUBLISHED AUGUST 23, 1932. Class 37.

301,128. PRINTED SIGN BOARDS, PRINTED ADVERTISING SIGNS, AND REPRODUCTIONS SUCH AS ARE USED IN SCHOOLS AND FACTORIES AS INSTRUCTION MATERIAL, AND PRINTED SIGN BOARDS CONTAINING STATISTICAL STATEMENTS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,207. PUBLISHED OCTOBER 11, 1932. Class 38.

301,129. COMBS, HOOKS AND EYES, TRIMMINGS, ETC. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,209. PUBLISHED NOVEMBER 22, 1932. Class 40.

301,130. UMBRELLAS AND CANES. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,210. PUBLISHED OCTOBER 20, 1931. Class 41.

301,131. EMBROIDERIES SOLD BY THE YARD, DRAPERIES OF COTTON, WOOL AND THE LIKE, RIBBONS AND LACES SOLD BY THE YARD. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,211. PUBLISHED JULY 19, 1932. Class 42.

301,132. SPUN YARN FIBRES. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,212. PUBLISHED SEPTEMBER 29, 1931. Class 43.

301,133. SURGICAL PLASTERS, ADHESIVE TAPE, BANDAGES, ETC. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,213. PUBLISHED NOVEMBER 15, 1932. Class 44.

CARNEGIE LIBRARY OF ATLANTA

301,134. MINERAL WATERS, NON-ALCOHOLIC, MALT-LESS BEVERAGES, SOLD AS SOFT DRINKS AND CONCENTRATES FOR MAKING THE SAME. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,214. PUBLISHED JULY 26, 1932. Class 45.

301,135. RUBBER BATH MATS, RUBBER BLANKETS, RUBBER BINDING FOR MATS, ETC., RUBBER BOTTLE STOPPERS, RUBBER PROTECTIVE COVERINGS IN SHEET FORM, RUBBER DESK LEG PROTECTORS, RUBBER FLOOR MATS, RUBBER MATTING, RUBBER SHEETING; RUBBER STAIR NOSINGS, PADS, AND THREADS; RUBBER SUPPORTING FOOT PADS FOR CABINETS AND OTHER ARTICLES, DUMMYS TO BE USED IN CLOTHING AND HAIR DRESSING SHOPS, MECHANICAL SIGNS, AND TENTS AND TARPAULINS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,215. PUBLISHED AUGUST 30, 1932. Class 50.

301,136. SPICES, DIETETICAL PATENT FOODS, MALD FOOD STARCHES AND SAUCES AND FEEDING PREPARATIONS—NAMELY, FLAVORINGS SOLD EITHER IN PURE FORM OR IN MIXTURES WITH VEGETABLE OR MEAT EXTRACTS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,216. PUBLISHED AUGUST 16, 1932. Class 46.

301,137. FISH HOOKS, ICE AND ROLLER SKATES, TENNIS AND FISH NETS, CHRISTMAS TREE ORNAMENTS, SUCH AS TOY BALLS, TOY FIGURES, DECORATIVE TOYS AND THE LIKE, PLAYING CARDS, AND BILLIARD CHALK. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,217. PUBLISHED JULY 19, 1932. Class 22.

301,138. APPARATUS FOR EXTINGUISHING FIRE—NAMELY, PORTABLE HAND FIRE EXTINGUISHERS, GLASS FIRE EXTINGUISHERS, AUTOMATIC AND MANUAL FIRE EXTINGUISHING SYSTEMS; CHEMICAL FIRE EXTINGUISHERS, ENGINE AND HAND DRAWN; BLEACHING MACHINERY OR APPARATUS, PRINTING MACHINES, PRINTING LEVERS, MACHINE NEEDLES, BALL BEARINGS, CRUSHERS, GRAIN GRINDERS, GRINDING AND MILLING MACHINES, TIRE VULCANIZERS AND KNIFE ERASERS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,218. PUBLISHED NOVEMBER 15, 1932. Class 23.

301,139. LAUNDRY DRIERS—NAMELY, LAUNDRY DRYING ROOMS, LAUNDRY DRYING RACKS, LAUNDRY DRYING MACHINES, AND LAUNDRY DRYING EXTRACTORS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,219. PUBLISHED AUGUST 9, 1932. Class 24.

301,140. DRAWING INSTRUMENTS, LABORATORY FITTINGS COMPRISING LABORATORY GLASSWARE AND PORCELAIN WARE AND LABORATORY RACKS, CLAMPS AND SUPPORTS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,220. PUBLISHED NOVEMBER 15, 1932. Class 26.

301,141. JEWELRY FOR PERSONAL WEAR MADE OF PRECIOUS METALS AND NON-PRECIOUS METALS PLATED WITH PRECIOUS METALS, NOT INCLUDING WATCHES, BUTTONS OF PRECIOUS METALS, PRECIOUS STONES, AND ARTICLES MADE OF WOOD, BONE, CORK, HORNY SUBSTANCES, TORTOISE SHELL, WHALE BONE, IVORY, MOTHER OF PEARL, AMBER, SEA-FOAM, CELLULOID, AND OTHER SUBSTANCES ALL ORNAMENTED WITH PRECIOUS METALS OR ALLOYS OF PRECIOUS METALS—NAMELY, FLAT AND HOLLOW TABLEWARE, TOILET ARTICLES, PERSONAL AND RELIGIOUS JEWELRY, DESK OR STATIONERY ARTICLES, STATUETTES, SHAVING STANDS AND PICTURE FRAMES. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,221. PUBLISHED JULY 19, 1932. Class 28.

301,142. WATCHES, CLOCKS, AND PARTS THEREOF. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,222. PUBLISHED OCTOBER 20, 1931. Class 27.

301,143. TOOTH BRUSHES, HAIR BRUSHES, SCRUBBING BRUSHES, TOILET BRUSHES, SHOE BRUSHES, CLOTHES BRUSHES, BROOMS, MOPS, AND PAINTERS' BRUSHES. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,223. PUBLISHED JULY 26, 1932. Class 29.

301,144. PORCELAIN OR REAL CHINA. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,224. PUBLISHED SEPTEMBER 29, 1931. Class 30.

301,145. HOUSE, OFFICE, STORE, SHOP, PORCH, AND LAWN FURNITURE—NAMELY, CABINETS, DAVENPORTS, BOOK CASES, DESKS, DRESSERS, CHESTS, BENCHES, CHAIRS, BEDS, MIRRORS, PICTURE FRAMES; AND UPHOLSTERY STUFFING AND FILLING MATERIALS, CUSHIONS, PILLOWS, AND MATTRESSES. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,225. PUBLISHED OCTOBER 18, 1932. Class 32.

301,146. GLASS IN ALL FORMS, TABLE AND FLAT GLASSWARE, GLASS IN BULK, GLASSWARE, PLATE GLASS, SHEET GLASS, AND REINFORCED GLASS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,226. PUBLISHED AUGUST 9, 1932. Class 33.

301,147. GAS AND OIL LIGHTING APPARATUS, GAS, OIL, WATER, STEAM, AND COAL HEATING AND COOKING APPARATUS, VENTILATING APPARATUS—NAMELY, DAMPERS, FANS, BLOWERS, LOUVERS, RANGES, BUILDING VENTILATORS, COWL, EXHAUST, INDUSTRIAL, ROOF, WINDOW, WIND-OPERATED CAR AND VESSEL VENTILATORS, CANDLESTICKS, WICKS, AND SMOKE STACKS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,227. PUBLISHED NOVEMBER 15, 1932. Class 34.

301,148. DRIVING BELTS, LEATHER AND RUBBER HOSE AND PACKING MATERIALS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.

Filed August 20, 1931. Serial No. 318,228. PUBLISHED NOVEMBER 22, 1932. Class 35.

301,149. STRINGS FOR VIOLINS AND SIMILAR INSTRUMENTS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.
Filed August 20, 1931. Serial No. 318,229. PUBLISHED JULY 19, 1932. Class 36.

301,150. PRECIOUS METALS, SUCH AS GOLD, SILVER, PLATINUM, AND NON-PRECIOUS METALS, SUCH AS COPPER, NICKEL, BRASS, GERMAN SILVER, AND THE LIKE, ANCHORS, AND SHEET METALS, MADE OF COPPER, NICKEL, BRASS, IRON, STEEL, AND ALLOYS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.
Filed August 20, 1931. Serial No. 318,230. PUBLISHED OCTOBER 25, 1932. Class 14.

301,151. FUEL OILS, LUBRICATING OILS, LUBRICATING GREASES, BENZENE, GASOLINE, KEROSENE, RUST PREVENTIVE OILS, PARAFFINE WAX, AND CANDLES. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.
Filed August 20, 1931. Serial No. 318,231. PUBLISHED JULY 19, 1932. Class 15.

301,152. CERTAIN NAMED PAINT PRODUCTS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.
Filed August 20, 1931. Serial No. 318,232. PUBLISHED AUGUST 9, 1932. Class 16.

301,153. AIRPLANES, MOTOR BOATS, SAIL BOATS, ROW BOATS, AND CANOES; AUTOMOBILES, BICYCLES, AND THEIR STRUCTURAL PARTS. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.
Filed August 20, 1931. Serial No. 318,233. PUBLISHED OCTOBER 11, 1932. Class 19.

301,154. ARMATURES, OUTFITS, AND APPARATUS FOR DOMESTIC AND INDUSTRIAL PURPOSES, ELECTRIC COOKING APPARATUS, ETC. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany.
Filed August 20, 1931. Serial No. 318,234. PUBLISHED NOVEMBER 29, 1932. Class 21.

301,155. RADIATOR SIPHON VALVES. THE DURST MANUFACTURING COMPANY, INC., New York, N. Y.
Filed December 19, 1931. Serial No. 322,282. PUBLISHED DECEMBER 6, 1932. Class 18.

301,156. LEATHER INNERSOLES AND LEATHER COUNTERS FOR SHOES AND OTHER FOOTWEAR. V. & F. W. FILOON COMPANY, Brockton, Mass.
Filed January 9, 1932. Serial No. 322,844. PUBLISHED DECEMBER 13, 1932. Class 39.

301,157. PHARMACEUTICAL PREPARATIONS AND PROPRIETARY MEDICINES. THE BLUE LINE CHEMICAL CO., St. Louis, Mo.
Filed January 11, 1932. Serial No. 322,875. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,158. CATSUP, PICKLES, PEANUT BUTTER, ETC. VAL-RAY FOOD PRODUCTS COMPANY, Spokane, Wash.
Filed February 2, 1932. Serial No. 323,758. PUBLISHED NOVEMBER 15, 1932. Class 46.

301,159. COSMETIC CREAM. BONKURA PRODUCTS CO., INC., Battle Creek, Mich., assignor to Bon Sontay Co., of Battle Creek, Mich.
Filed February 20, 1932. Serial No. 324,337. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,160. CANNED VEGETABLES. ANTHONY HEYNKIEWICZ, doing business as Polonia Coffee Co., Jersey City, N. J.
Filed February 27, 1932. Serial No. 324,560. PUBLISHED AUGUST 30, 1932. Class 46.

301,161. COTTON PIECE GOODS, DIAPERS, SHEETS, AND PILLOW CASES. RIEGEL TEXTILE CORPORATION, New York, N. Y.
Filed March 28, 1932. Serial No. 325,599. PUBLISHED NOVEMBER 29, 1932. Class 42.

301,162. SEASONING AND FLAVORING VEGETABLE COMPOUND IN THE FORM OF A SALT. THE GRIST MILL, Los Angeles, Calif.
Filed April 4, 1932. Serial No. 325,788. PUBLISHED DECEMBER 6, 1932. Class 46.

301,163. NONALCOHOLIC, MALTLESS FRUIT JUICES SOLD AS SOFT DRINKS, AND SYRUPS FOR MAKING SAME. HARRY E. GRIGSBY, doing business as Goody-Goody Manufacturing Company, Oklahoma City, Okla.
Filed April 8, 1932. Serial No. 325,909. PUBLISHED AUGUST 2, 1932. Class 45.

301,164. DENTRIFICE FOR TREATMENT OF TRENCH MOUTH AND PYORRHEA. MASTER LABORATORIES, INC., Omaha, Nebr.
Filed April 13, 1932. Serial No. 326,058. PUBLISHED DECEMBER 6, 1932. Class 6.

301,165. TOPS OF THE CHARACTER EMPLOYED IN PLAYING THE GAME OF DIABLO. LEO P. MCMANUS, doing business as Sky-Top Company, Philadelphia, Pa.
Filed April 22, 1932. Serial No. 326,384. PUBLISHED DECEMBER 13, 1932. Class 22.

301,166. GRAPE JUICE AND GRAPE CONCENTRATE USED FOR MAKING SOFT DRINKS. CALIFORNIA VINEYARDS COMPANY, INC., Chicago, Ill.
Filed May 2, 1932. Serial No. 326,669. PUBLISHED DECEMBER 13, 1932. Class 45.

301,167. CORSETS, GIRDLES, BRASSIÈRES, AND UNDERWEAR FOR GIRLS AND WOMEN. LILYAN MALMSTEAD, Worcester, Mass.
Filed April 30, 1932. Serial No. 326,728. PUBLISHED DECEMBER 13, 1932. Class 39.

301,168. FOUNDATION GARMENTS, GIRDLES AND ABDOMINAL UPLIFT BELTS. WOMAN'S WEAR SERVICE, INC., Huntington, Ind.
Filed May 5, 1932. Serial No. 326,796. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,169. METAL BUCKETS AND BULK DELIVERY CANS. THE DAVIS WELDING & MANUFACTURING COMPANY, Cincinnati, Ohio.
Filed May 6, 1932. Serial No. 326,806. PUBLISHED DECEMBER 13, 1932. Class 2.

301,170. ICE CREAM CONES. S. & S. CONE CORPORATION, New York, N. Y.
Filed May 19, 1932. Serial No. 327,261. PUBLISHED DECEMBER 6, 1932. Class 46.

301,171. DRESSED CHICKENS. MISSOURI STATE CHICKERIES, Jefferson City, Mo.
Filed October 16, 1931. Serial No. 320,129. PUBLISHED DECEMBER 6, 1932. Class 46.

301,172. GATE VALVES, FIRE HYDRANTS, AIR VALVES, ETC. THE LUDLOW VALVE MANUFACTURING COMPANY, Troy, N. Y.
Filed October 20, 1931. Serial No. 320,236. PUBLISHED DECEMBER 13, 1932. Class 13.

301,173. GATE VALVES, FIRE HYDRANTS, AIR VALVES, ETC. THE LUDLOW VALVE MANUFACTURING COMPANY, Troy, N. Y.
Filed October 20, 1931. Serial No. 320,237. PUBLISHED DECEMBER 13, 1932. Class 13.

301,174. WIRE FABRIC FOR FENCING. PAGE STEEL AND WIRE COMPANY, Adrian, Mich., and Bridgeport, Conn.
Filed October 27, 1931. Serial No. 320,507. PUBLISHED DECEMBER 13, 1932. Class 13.

301,175. FRESH FISH FILLETS. JOHN MANTIA & SONS, Boston, Mass.
Filed November 17, 1931. Serial No. 321,210. PUBLISHED DECEMBER 6, 1932. Class 46.

301,176. WOMEN'S AND GIRLS' BOOTS, SHOES AND SLIPPERS OF LEATHER, FABRIC AND COMBINATIONS THEREOF. AUGUSTIN D. BOURNEUF, Haverhill, Mass.
Filed November 20, 1931. Serial No. 321,326. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,177. COTTON PIECE GOODS OF THE TYPE USED IN THE MAKING OF CLOTHING AND DRAPERIES. DACOTAH COTTON MILLS, INC., Lexington, N. C.
Filed October 13, 1932. Serial No. 331,218. PUBLISHED NOVEMBER 29, 1932. Class 42.

301,178. WOMEN'S AND CHILDREN'S FELT HATS, UNTRIMMED. HENRY POLLAK, INC., New York, N. Y.
Filed October 14, 1932. Serial No. 331,265. PUBLISHED DECEMBER 13, 1932. Class 39.

301,179. RUBBER ERASERS. BLAISDELL PENCIL COMPANY, Philadelphia, Pa.
Filed October 15, 1932. Serial No. 331,279. PUBLISHED NOVEMBER 29, 1932. Class 37.

301,180. MAGAZINE. EVERY MONTH PUBLISHING CO., INC., New York, N. Y.
Filed October 17, 1932. Serial No. 331,303. PUBLISHED NOVEMBER 29, 1932. Class 38.

301,181. SAIL BOATS, ROW BOATS, ICE BOATS, AND CANOES. DEXTER BROTHERS BOAT COMPANY, South Manchester, Conn.
Filed October 19, 1932. Serial No. 331,367. PUBLISHED DECEMBER 13, 1932. Class 19.

301,182. LEAD PENCILS. HORDER'S INC., Chicago, Ill.
Filed October 19, 1932. Serial No. 331,374. PUBLISHED NOVEMBER 29, 1932. Class 37.

301,183. SILK GOODS IN THE PIECE. LOUIS ROESSEL & CO., INC., Hazleton, Pa., and New York, N. Y.
Filed October 19, 1932. Serial No. 331,383. PUBLISHED NOVEMBER 29, 1932. Class 42.

301,184. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed October 3, 1932. Serial No. 330,887. PUBLISHED NOVEMBER 29, 1932. Class 42.

301,185. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed October 3, 1932. Serial No. 330,886. PUBLISHED NOVEMBER 29, 1932. Class 42.

301,186. WALL AND FLOOR TILES. FRANKLIN POTTERY, INCORPORATED, Lansdale, Pa.
Filed October 7, 1931. Serial No. 319,816. PUBLISHED DECEMBER 6, 1932. Class 12.

301,187. WOMEN'S GARMENTS—NAMELY, SPORT SUITS, DRESSES, SKIRTS, BLOUSES. EAGLE KNITTING MILLS, INC., Philadelphia, Pa.
Filed October 9, 1931. Serial No. 319,885. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,188. BUILDING BLOCK MACHINES. NEPPENHAN CONCRETE PRODUCTS CORPORATION, Yonkers, N. Y., assignor to Joltcrete Inc., Yonkers, N. Y., a Corporation of New York.
Filed October 6, 1932. Serial No. 331,002. PUBLISHED DECEMBER 13, 1932. Class 28.

301,189. AUTOMATIC CLUTCHES FOR POWER TRANSMISSION PURPOSES. TWIN COACH COMPANY, Kent, Ohio, assignor to Automatic Drive & Transmission Company, New York, N. Y.
Filed October 6, 1932. Serial No. 331,015. PUBLISHED DECEMBER 6, 1932. Class 28.

301,190. MEAT TENDERING MACHINES. WAFFLED STEAK MACHINES, INC., Buffalo, N. Y.
Filed October 6, 1932. Serial No. 331,017. PUBLISHED DECEMBER 13, 1932. Class 28.

301,191. PERIODICAL. POPULAR FICTION PUBLISHING COMPANY, Indianapolis, Ind.
Filed October 7, 1932. Serial No. 331,062. PUBLISHED NOVEMBER 29, 1932. Class 38.

301,192. WATER STILLS. BARNSTEAD STILL AND STERILIZER CO. INC., Boston, Mass.
Filed October 7, 1932. Serial No. 331,085. PUBLISHED DECEMBER 13, 1932. Class 23.

301,193. COTTON PIECE GOODS. STONE MILL FABRICS CORP., New York, N. Y.
Filed October 8, 1932. Serial No. 331,093. PUBLISHED NOVEMBER 29, 1932. Class 42.

301,194. WOOLEN PIECE GOODS. STRONG HEWAT & CO., INC., New York, N. Y.
Filed October 8, 1932. Serial No. 331,094. PUBLISHED NOVEMBER 29, 1932. Class 42.

301,195. KNITTED WOOLEN SUITS FOR BOYS AND GIRLS, COMPRISING GLOVES, CAPS, COATS, AND LEGGINGS. B. ALTMAN & CO., New York, N. Y.
Filed October 10, 1932. Serial No. 331,097. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,196. MACHINISTS' CUTTING, ABRADING, AND FORMING TOOLS, AND WIRE DIES. BOSON ALLOY TOOL CORPORATION, New York, N. Y.
Filed October 10, 1932. Serial No. 331,099. PUBLISHED DECEMBER 13, 1932. Class 23.

301,197. SURGICAL BANDAGES. THE BAND-TEX COMPANY, Chicago, Ill.
Filed October 10, 1932. Serial No. 331,182. PUBLISHED DECEMBER 6, 1932. Class 44.

301,198. FRESH MELONS. JOHN JACOBS COMPANY, Canon City, Colo.
Filed October 11, 1932. Serial No. 331,154. PUBLISHED DECEMBER 6, 1932. Class 46.

301,199. WOMEN'S, MISSES', and CHILDREN'S SHOES. THE SELBY SHOE COMPANY, Portsmouth, Ohio.
Filed October 11, 1932. Serial No. 331,166. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,200. WOMEN'S HATS. HENRY POLLAK, INC., New York, N. Y.
Filed October 12, 1932. Serial No. 331,194. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,201. MEDICINAL COMPOUND FOR THE RELIEF OF COUGHS, ETC. WILLIAM B. FREEMAN, doing business as Haltiwanger-Taylor Drug Company, Atlanta, Ga.
Filed May 31, 1932. Serial No. 327,587. PUBLISHED DECEMBER 6, 1932. Class 6.

301,202. MOP CABINET. PETER WEISSWASSER, doing business as Sanitary Mop Cabinet Co., Detroit, Mich.
Filed June 10, 1932. Serial No. 327,956. PUBLISHED DECEMBER 6, 1932. Class 32.

301,203. SALAD DRESSING. BIRDSALL & WILCOX, New Haven, Conn.
Filed June 21, 1932. Serial No. 328,154. PUBLISHED DECEMBER 6, 1932. Class 46.

301,204. COSMETIC PREPARATIONS. JENNIE S. EICHENBERG, doing business as Mme. Jenné, New York, N. Y.
Filed June 25, 1932. Serial No. 328,301. PUBLISHED DECEMBER 6, 1932. Class 6.

301,205. PERIODICALS. GOOD HUMOR CORPORATION OF AMERICA, Cleveland, Ohio.
Filed June 29, 1932. Serial No. 328,397. PUBLISHED NOVEMBER 29, 1932. Class 38.

301,206. KNITTED BATHING SUITS, KNITTED SWEATERS, KNITTED DRESSES AND SKIRTS. GREENHILL & DANIEL, INC., Brooklyn, N. Y.
Filed July 6, 1932. Serial No. 328,580. PUBLISHED NOVEMBER 15, 1932. Class 39.

301,207. BOOK OR SERIES OF BOOKS. WALTER J. BLACK, INC., New York, N. Y.
Filed July 13, 1932. Serial No. 328,751. PUBLISHED NOVEMBER 29, 1932. Class 38.

301,208. LACES IN THE PIECE. THOMAS WILSON & CO., INC., New York, N. Y.
Filed July 19, 1932. Serial No. 328,897. PUBLISHED DECEMBER 6, 1932. Class 42.

301,209. WOOLEN PIECE GOODS. SUTTON'S MILLS, INCORPORATED, North Andover and Boston, Mass.
Filed July 22, 1932. Serial No. 328,999. PUBLISHED DECEMBER 6, 1932. Class 42.

301,210. TEXTILE BLANKETS MADE WHOLLY OR PARTLY OF WOOL. THE ESMOND MILLS, Esmond, R. I.
Filed July 27, 1932. Serial No. 329,111. PUBLISHED DECEMBER 6, 1932. Class 42.

301,211. PNEUMATIC TIRES AND CASINGS. EDGAR M. SHANER, Lynchburg, Va.
Filed July 30, 1932. Serial No. 329,274. PUBLISHED NOVEMBER 22, 1932. Class 35.

301,212. HOSIERY. NELSON KNITTING COMPANY, Rockford, Ill.
Filed August 8, 1932. Serial No. 329,404. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,213. GIRDLES, CORSETS, COMBINATION OF CORSET AND BRASSIÈRE. ASSOCIATED APPAREL INDUSTRIES, INC., Chicago, Ill.
Filed August 13, 1932. Serial No. 329,517. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,214. A GARGLE OR ANTISEPTIC. KATHRYN ELLSWORTH, New York, N. Y.
Filed August 17, 1932. Serial No. 329,598. PUBLISHED DECEMBER 6, 1932. Class 6.

301,215. TWINE AND CORDAGE MADE OF COTTON, HEMP, FLAX, JUTE, SISAL, MANILA, TINSEL, LINEN, AND COMBINATIONS THEREOF. EMPIRE TWINE AND YARN CO., INC., New York, N. Y.
Filed August 17, 1932. Serial No. 329,599. PUBLISHED DECEMBER 13, 1932. Class 7.

301,216. ALCOHOLIC COCKTAILS. TANQUERAY, GORDON & CO., LIMITED, London, England.
Filed August 18, 1932. Serial No. 329,658. PUBLISHED DECEMBER 13, 1932. Class 49.

301,217. TOOTH PICKS. MAC-DELL'S, Superior, Wis.
Filed August 22, 1932. Serial No. 329,749. PUBLISHED DECEMBER 6, 1932. Class 44.

301,218. ARTIFICIAL TEETH. THE COLUMBUS DENTAL MANUFACTURING CO., Columbus, Ohio.
Filed August 25, 1932. Serial No. 329,830. PUBLISHED DECEMBER 13, 1932. Class 44.

301,219. SEED LAXATIVES. M. J. KLUGER, INC., New York, N. Y.
Filed August 27, 1932. Serial No. 329,899. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,220. SPRINGS, MATTRESSES, BEDS, COUCH BEDS, STUDIO BEDS, GLIDERS, TABLES, AND CHAIRS USED FOR HOUSEHOLD, OFFICE, AND OUTDOOR PURPOSES. ENGLANDER SPRING BED CO., Brooklyn, N. Y.
Filed August 26, 1932. Serial No. 329,913. PUBLISHED DECEMBER 6, 1932. Class 32.

301,221. STEAM JET ASH CONVEYORS. THE BRADY CONVEYORS CORPORATION, Chicago, Ill.
Filed August 29, 1932. Serial No. 329,933. PUBLISHED DECEMBER 13, 1932. Class 23.

301,222. STEAM JET ASH CONVEYORS. THE BRADY CONVEYORS CORPORATION, Chicago, Ill.
Filed August 29, 1932. Serial No. 329,934. PUBLISHED DECEMBER 13, 1932. Class 23.

301,223. GAUZE CURTAINS AND CURTAINING. GLADDING'S INC., Providence, R. I.
Filed September 30, 1932. Serial No. 330,814. PUBLISHED DECEMBER 6, 1932. Class 42.

301,224. FINISHED SHEETS AND PILLOW CASES. MINOT, HOOPER & CO., New York, N. Y.
Filed October 1, 1932. Serial No. 330,861. PUBLISHED DECEMBER 6, 1932. Class 42.

301,225. MALTED MILK POWDER. NATIONAL DAIRY PRODUCTS COMPANY, INC., Baltimore, Md.
Filed September 2, 1932. Serial No. 330,069. PUBLISHED DECEMBER 6, 1932. Class 46.

301,226. MALTED MILK POWDER. NATIONAL DAIRY PRODUCTS COMPANY, INC., Baltimore, Md.
Filed September 2, 1932. Serial No. 330,070. PUBLISHED DECEMBER 6, 1932. Class 46.

301,227. CRIB SHEETS, CRIB SPREADS, PILLOW CASES, BOLSTER COVERS, BLANKETS, KNITTED AND WOVEN CRIB ACCESSORIES—NAMELY, COMFORTABLES AND AFGANS. SADWIN MANUFACTURING COMPANY, INC., Woonsocket, R. I.
Filed September 3, 1932. Serial No. 330,105. PUBLISHED NOVEMBER 29, 1932. Class 42.

301,228. SHOES MADE OF LEATHER. THE FLORSHEIM SHOE COMPANY, Chicago, Ill.
Filed September 8, 1932. Serial No. 330,177. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,229. CORKBOARD, CORK INSULATION FOR COLD STORAGE WORK, CORK PIPE COVERING, CORK TILE FLOORS, CORK BRICKS, CORK ISOLATION, CORK SEAM FILLERS; CORK INSULATIONS FOR SOUND, HEAT, AND MOISTURE, AS WELL AS VIBRATIONS. UNITED CORK COMPANIES OF DELAWARE, Lyndhurst, N. J.
Filed September 8, 1932. Serial No. 330,185. PUBLISHED DECEMBER 6, 1932. Class 12.

301,230. LEATHER SHOES. CRESCENT SHOE COMPANY, New York, N. Y.
Filed September 9, 1932. Serial No. 330,199. PUBLISHED NOVEMBER 22, 1932. Class 39.

301,231. CANDY. QUAKER CITY CHOCOLATE & CONFECTIONERY CO., INC., Philadelphia, Pa.
Filed September 9, 1932. Serial No. 330,218. PUBLISHED DECEMBER 6, 1932. Class 46.

301,232. LEATHER SHOES. JOSEPH A. JONAS, doing business as J. A. Jonas Shoe Co., Haverhill, Mass., and Manchester, N. H.
Filed September 13, 1932. Serial No. 330,300. PUBLISHED NOVEMBER 22, 1932. Class 39.

301,233. CLAY COATED PAPER. THE MARTIN CANTINE COMPANY, Saugerties, N. Y.
Filed September 13, 1932. Serial No. 330,304. PUBLISHED NOVEMBER 29, 1932. Class 37.

301,234. COATED PAPERS FOR PRINTING AND WRITING. WEST VIRGINIA PULP & PAPER COMPANY, New York, N. Y.
Filed September 12, 1932. Serial No. 330,322. PUBLISHED NOVEMBER 29, 1932. Class 37.

301,235. FROZEN CHOCOLATE-COVERED FRUITS. JACK KATZ, Los Angeles, Calif.
Filed September 13, 1932. Serial No. 330,326. PUBLISHED DECEMBER 6, 1932. Class 46.

301,236. LADIES' AND CHILDREN'S SHOES OF LEATHER, RUBBER, OR FABRIC CONSTRUCTION, OR A COMBINATION OF THESE MATERIALS. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y.
Filed September 16, 1932. Serial No. 330,409. PUBLISHED NOVEMBER 22, 1932. Class 39.

301,237. WOMEN'S AND CHILDREN'S KNITTED OR NETTED CAPS AND HATS. HENRY POLLAK, INC., New York, N. Y.
Filed September 17, 1932. Serial No. 330,430. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,238. SHOES MADE OF LEATHER, RUBBER OR FABRIC AND/OR A COMBINATION OF THOSE MATERIALS. GEORGE LAGANAS, Boston, Mass.
Filed September 19, 1932. Serial No. 330,481. PUBLISHED DECEMBER 6, 1932. Class 39.

301,239. HEATING BOILERS AND OIL BURNERS. WOOD HYDRAULIC HOIST AND BODY COMPANY, Detroit, Mich.
Filed September 19, 1932. Serial No. 330,503. PUBLISHED DECEMBER 6, 1932. Class 34.

301,240. UNDER SHIRTS, UNDER DRAWERS, UNION SUITS; STEP-INS—NAMELY, UNDER-DRAWERS AND CORSETS, CHEMISES, BRASSIÈRES, PANTIES, PETTICOATS, AND BLOOMERS FOR WOMEN AND CHILDREN. BEST & CO., INC., New York, N. Y.
Filed September 21, 1932. Serial No. 330,534. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,241. MONTHLY MAGAZINE. WOODMEN OF THE WORLD, Denver, Colo.
Filed September 22, 1932. Serial No. 330,590. PUBLISHED NOVEMBER 29, 1932. Class 38.

301,242. STEEL AND WIRE FENCES. EDWARD C. BOWERS and CHARLES L. FELDMAN, receivers for Wickwire Spencer Steel Company, New York, N. Y.
Filed September 23, 1932. Serial No. 330,592. PUBLISHED DECEMBER 6, 1932. Class 13.

301,243. FIBER PACKING FOR STEAM AND HYDRAULIC PURPOSES. HENRY CROSSLEY, Bolton, England.
Filed September 24, 1932. Serial No. 330,620. PUBLISHED DECEMBER 13, 1932. Class 35.

301,244. MACHINES AND TOOLS FOR MOISTENING, SERVING, ETC., ADHESIVE OR GUMMED TAPE, ETC. NASHUA PACKAGE SEALING CO. INC., Nashua, N. H.
Filed September 26, 1932. Serial No. 330,664. PUBLISHED DECEMBER 6, 1932. Class 28.

301,245. MACHINES AND TOOLS FOR MOISTENING, SERVING, OR APPLYING ADHESIVE OR GUMMED TAPE, WRAPPERS, LABELS, AND THE LIKE SHEET OR STRIP MATERIAL, AND PACKAGE AND CONTAINER SEALING, SECURING, WRAPPING, OR LABELLING, AND LIKE MACHINES AND DEVICES UTILIZING SUCH MATERIAL. NASHUA PACKAGE SEALING CO. INC., Nashua, N. H.
Filed September 26, 1932. Serial No. 330,665. PUBLISHED DECEMBER 6, 1932. Class 28.

301,246. PIECE GOODS OF SILK AND MIXTURES THEREOF. COMBES & CO. INC., New York, N. Y.
Filed September 27, 1932. Serial No. 330,695. PUBLISHED NOVEMBER 29, 1932. Class 42.

301,247. BOOTS, SHOES, AND SLIPPERS OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. JARMAN SHOE COMPANY, Nashville, Tenn.
Filed September 27, 1932. Serial No. 330,705. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,248. OIL BURNERS. FLOYD P. SCHULTZ, Des Moines, Iowa.
Filed September 26, 1932. Serial No. 330,726. PUBLISHED DECEMBER 13, 1932. Class 34.

301,249. BOOTS AND SHOES OF LEATHER, FABRIC, AND/OR COMBINATIONS THEREOF. INTERNATIONAL SHOE CO., St. Louis, Mo.
Filed September 28, 1932. Serial No. 330,748. PUBLISHED DECEMBER 13, 1932. Class 39.

301,250. ICE CREAM CONFECTION. WM. M. BELL COMPANY, Chicago, Ill.
Filed September 29, 1932. Serial No. 330,778. PUBLISHED DECEMBER 6, 1932. Class 46.

301,251. TOILET TISSUE AND FACIAL TISSUE. MODERN TISSUES CORPORATION, New York, N. Y.
Filed September 29, 1932. Serial No. 330,794. PUBLISHED NOVEMBER 29, 1932. Class 37.

301,252. PREPARED MUSTARD AND PREPARED HORSERADISH MUSTARD. AUGUST BAUER'S SONS, INC., New York, N. Y.
Filed September 30, 1932. Serial No. 330,807. PUBLISHED DECEMBER 6, 1932. Class 46.

301,253. WOMEN'S SHOES OF LEATHER AND OF FABRIC AND OF COMBINATIONS OF LEATHER AND FABRIC. ROBINSON-BYNON SHOE COMPANY, INCORPORATED, Auburn, N. Y.
Filed May 1, 1931. Serial No. 314,074. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,254. PUBLICATION ISSUED ANNUALLY. SIMMONS TOURS, INC., New York, N. Y.
Filed October 3, 1932. Serial No. 330,901. PUBLISHED NOVEMBER 29, 1932. Class 38.

301,255. SEAMLESS COPPER AND BRASS TUBES. THE AMERICAN BRASS COMPANY, Waterbury, Conn.
Filed October 3, 1932. Serial No. 330,879. PUBLISHED DECEMBER 6, 1932. Class 18.

301,256. POWDER COMPOUND IN VARIOUS FRUIT FLAVORS, PARTICULARLY ORANGE, GRAPE, STRAWBERRY, AND RASPBERRY USED FOR MAKING NON-ALCOHOLIC, MALTLESS BEVERAGES. F. B. CHAMBERLAIN COMPANY, East St. Louis, Ill., and St. Louis, Mo.
Filed September 2, 1931. Serial No. 318,643. PUBLISHED OCTOBER 18, 1931. Class 45.

301,257. NONALCOHOLIC MALTLESS ORANGE JUICE SOLD AS A SOFT DRINK. TOM HUSTON FROSTED FOODS, INC., Columbus, Ga.
Filed July 2, 1931. Serial No. 316,560. PUBLISHED FEBRUARY 2, 1932. Class 45.

301,258. GASOLINE, OIL, DIESEL AND MECHANICAL LOCOMOTIVES AND PARTS THEREFOR. THE WHITCOMB LOCOMOTIVE CO., Rochelle, Ill.
Filed June 27, 1931. Serial No. 316,897. PUBLISHED DECEMBER 6, 1932. Class 28.

301,259. GASOLINE, OIL, DIESEL AND MECHANICAL LOCOMOTIVES AND PARTS THEREFOR. THE WHITCOMB LOCOMOTIVE CO., Rochelle, Ill.
Filed June 27, 1931. Serial No. 316,896. PUBLISHED DECEMBER 6, 1932. Class 28.

301,260. WOMEN'S AND GIRLS' KNITTED SKIRTS. LOS ANGELES KNITTING COMPANY, Hollydale, Calif.
Filed June 15, 1931. Serial No. 315,886. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,261. LUBRICATOR FOR INTERNAL COMBUSTION ENGINES OF THE ACCESSORY TYPE. EMEROL MANUFACTURING CO., New York, N. Y.
Filed May 8, 1931. Serial No. 314,326. PUBLISHED DECEMBER 6, 1932. Class 28.

301,262. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND CONCENTRATES FOR MAKING THE SAME. CALIFORNIA FRUIT GROWERS EXCHANGE, Los Angeles, Calif.
Filed March 1, 1930. Serial No. 296,687. PUBLISHED SEPTEMBER 2, 1930. Class 45.

301,263. GASOLINE PASSENGER AUTOMOBILES. HUDSON MOTOR CAR COMPANY, Detroit, Mich.
Filed October 6, 1932. Serial No. 330,996. PUBLISHED DECEMBER 13, 1932. Class 19.

301,264. NECKTIES. THE WEISBAUM BROS. BROWER CO., Cincinnati, Ohio.
Filed October 5, 1932. Serial No. 330,981. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,265. HEADING FOR A MONTHLY NEWSPAPER. THE EDWIN ALGER PUBLISHING COMPANY, Washington, D. C.
Filed October 5, 1932. Serial No. 330,947. PUBLISHED NOVEMBER 29, 1932. Class 38.

301,266. BLEACHING SOLUTION. CHARLES F. SLADE CO., INC., Buffalo, N. Y.
Filed October 4, 1932. Serial No. 330,936. PUBLISHED NOVEMBER 29, 1932. Class 6.

301,267. NON-ALCOHOLIC MALTLESS BEVERAGES SOLD FOR SOFT DRINKS AND SYRUPS THEREFOR. ERWIN SIBLEY, Milledgeville, Ga., assignor to The Repeal Company, Milledgeville, Ga., a Corporation.
Filed October 4, 1932. Serial No. 330,934. PUBLISHED DECEMBER 13, 1932. Class 45.

301,268. MEN'S, WOMEN'S, AND CHILDREN'S KNITTED UNDERWEAR AND BATHING SUITS. RYFF & CO. LTD., doing business as Ryff & Co. Ltd., A. G. Strickwarenfabrik Bern and as Ryff & Co. S. A. Fabrique de Tricotages Berne, Bern, Switzerland.
Filed October 4, 1932. Serial No. 330,933. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,269. ANKLETS. RAMBO & REGAR, INCORPORATED, doing business as Globe Knitting Mills, Norristown, Pa.
Filed October 4, 1932. Serial No. 330,931. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,270. A CARD GAME. GEORGE F. ROHRSEN, Chicago, Ill.
Filed October 25, 1932. Serial No. 331,564. PUBLISHED DECEMBER 13, 1932. Class 22.

301,271. GARDEN AND AGRICULTURAL TOOLS—NAMELY, HOES AND PLATE HOES, PLANTERS, DIBBLES, CULTIVATORS, RAKES, PLOWS, WEEDING-CLAWS, GRUBBERS, AND SPADES. AUGUST WOLF, EISENWARENFABRIK GEB. M. BRSCHR. HAFTUNG, Betzdorf (Sieg), Germany.
Filed October 24, 1932. Serial No. 331,523. PUBLISHED DECEMBER 13, 1932. Class 23.

301,272. OIL BURNERS FOR DOMESTIC AND COMMERCIAL HEATING AND COOKING PURPOSES. QUEEN STOVE WORKS INCORPORATED, Albert Lea, Minn.
Filed October 24, 1932. Serial No. 331,514. PUBLISHED DECEMBER 13, 1932. Class 34.

301,273. MALT BEVERAGE WITH NOT MORE THAN THE LEGAL ALCOHOLIC CONTENT AND SYRUPS THEREFOR. ERWIN SIBLEY, Milledgeville, Ga.
Filed October 22, 1932. Serial No. 331,478. PUBLISHED DECEMBER 13, 1932. Class 48.

301,274. RAZORS AND BARBER SHEARS. F. A. KOCH & CO., INC., New York, N. Y.
Filed October 22, 1932. Serial No. 331,469. PUBLISHED DECEMBER 13, 1932. Class 23.

301,275. WORSTEDS AND WOOLENS IN THE PIECE. HOLDEN-LEONARD COMPANY INC., New York, N. Y.
Filed October 22, 1932. Serial No. 331,468. PUBLISHED DECEMBER 6, 1932. Class 42.

301,276. SHAVING CREAM. THE GALLAHER DRUG COMPANY, Dayton, Ohio.
Filed October 21, 1932. Serial No. 331,429. PUBLISHED DECEMBER 6, 1932. Class 4.

301,277. MINERAL SPRING WATER. HIRAM RICKER & SONS, Poland Springs, South Poland, Me.
Filed October 20, 1932. Serial No. 331,419. PUBLISHED DECEMBER 13, 1932. Class 45.

301,278. CANNED AND DRIED FRUIT, PRUNES, RAISINS, CANNED VEGETABLES, ETC. CALIFORNIA PACKING CORPORATION, San Francisco, Calif.
Filed October 28, 1930. Serial No. 307,264. PUBLISHED DECEMBER 6, 1932. Class 46.

301,279. COSMETIC PREPARATIONS, DEODORANTS, DISINFECTANTS, ETC. PARIS LABORATORIES, INC., New York, N. Y.
Filed July 19, 1930. Serial No. 303,654. PUBLISHED DECEMBER 6, 1932. Class 6.

301,280. COD LIVER OIL, EPHEDRINE HYDROCHLORIDE, MOUTH WASH, ETC. HANCE BROTHERS & WHITE, INC., Philadelphia, Pa.
Filed March 20, 1930. Serial No. 297,597. PUBLISHED DECEMBER 6, 1932. Class 6.

301,281. CITRUS-FLAVORED, NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND CONCENTRATES FOR MAKING THE SAME. CALIFORNIA FRUIT GROWERS EXCHANGE, Los Angeles, Calif.
Filed July 7, 1930. Serial No. 303,156. PUBLISHED NOVEMBER 4, 1930. Class 45.

301,282. COFFEE. JOHN ENGLISH, doing business as United Wholesale Grocery, Schenectady, N. Y.
Filed November 15, 1930. Serial No. 307,932. PUBLISHED MAY 24, 1932. Class 46.

301,283. TONIC FOR DIGESTION. E. FUCINI & CO. INC., New York, N. Y.
Filed December 31, 1930. Serial No. 309,518. PUBLISHED APRIL 21, 1931. Class 6.

301,284. KNITTED ARTICLES—NAMELY, HOSIERY. BEAR BRAND HOSIERY CO., Kankakee and Chicago, Ill.
Filed September 17, 1931. Serial No. 319,131. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,285. TRAILERS. HIGHWAY TRAILER COMPANY, Edgerton, Wis.
Filed September 5, 1931. Serial No. 318,783. PUBLISHED DECEMBER 15, 1931. Class 19.

301,286. WHISKEY. BLOCH BROS., Glasgow, Scotland.
Filed November 10, 1932. Serial No. 332,029. PUBLISHED DECEMBER 13, 1932. Class 49.

301,287. WHISKEY. BLOCH BROS., Glasgow, Scotland.
Filed November 10, 1932. Serial No. 332,027. PUBLISHED DECEMBER 13, 1932. Class 49.

301,288. WHISKEY. BLOCH BROS., Glasgow, Scotland.
Filed November 10, 1932. Serial No. 332,026. PUBLISHED DECEMBER 13, 1932. Class 49.

301,289. PORT WINE. BLOCH BROS., Glasgow, Scotland.
Filed November 10, 1932. Serial No. 332,024. PUBLISHED DECEMBER 13, 1932. Class 47.

301,290. WHISKEY. BLOCH BROS., Glasgow, Scotland.
Filed November 10, 1932. Serial No. 332,023. PUBLISHED DECEMBER 13, 1932. Class 49.

301,291. ROPE OF JUTE AND HEMP. BRITISH ROPES LIMITED, London, England.
Filed November 5, 1932. Serial No. 331,917. PUBLISHED DECEMBER 13, 1932. Class 7.

301,292. TOILET TISSUES, PAPER NAPKINS, WAX PAPER, WAX TISSUE PAPER, CLEANSING TISSUES, AND SHELF AND WRAPPING PAPER. THE SWEET MFG. & SALES CO., Phoenix, N. Y.
Filed October 28, 1932. Serial No. 331,716. PUBLISHED DECEMBER 6, 1932. Class 37.

301,293. BOOKS. WILLIAM M. GOLDSMITH, Wichita, Kans.
Filed October 28, 1932. Serial No. 331,640. PUBLISHED DECEMBER 6, 1932. Class 38.

301,294. CAMERAS. KATAGIRI CORPORATION, New York, N. Y.
Filed October 26, 1932. Serial No. 331,585. PUBLISHED DECEMBER 13, 1932. Class 26.

301,295. PORTABLE ELECTRICALLY OPERATED HUMIDIFIERS FOR CONDITIONING THE AIR IN ROOMS. THE A. C. GILBERT COMPANY, New Haven, Conn.
Filed October 26, 1932. Serial No. 331,579. PUBLISHED DECEMBER 13, 1932. Class 34.

301,296. PREPARED COCONUT. FRANKLIN BAKER COMPANY, New York, N. Y.
Filed February 14, 1930. Serial No. 295,992. PUBLISHED JULY 8, 1930. Class 46.

TRADE-MARK REGISTRATIONS RENEWED

39,209. GLASS-TUBES. Registered November 4, 1902. SCHOTT & GEN. Renewed November 4, 1932, to Jenaer Glaswerk Schott & Gen., Jena, Germany, a Corporation of Germany, by change of name.

39,850. FERROMANGANESE. Registered February 24, 1903. MIDVALE MINING & MANUFACTURING COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed February 24, 1933.

39,852. NEEDLES. Registered February 24, 1903. HENRY MILWARD & SON LIMITED, Redditch, England. Renewed February 24, 1933, to The English Needle & Fishing Tackle Co., Limited, Birmingham, England, a Corporation of Great Britain, assignee.

40,063. CIGARS. Registered April 7, 1903. RAFAEL ALVAREZ Y RIVAS, New York, N. Y. Renewed April 7, 1933, to Fernandes, Palicio y Compania, S. en C., Habana, Cuba, a firm, assignee by mesne assignments.

40,236. CERTAIN NAMED BOOTS, SHOES, AND SLIPPERS. Registered May 5, 1903. CHARLES W. STROHBECK, Brooklyn, N. Y. Renewed May 5, 1933.

40,321. PORTLAND CEMENT. Registered May 12, 1903. ILLINOIS STEEL COMPANY. Renewed May 12, 1933, to Universal Atlas Cement Company, Chicago, Ill., a Corporation of Indiana, assignee.

40,705. FATS AND MIXTURES THEREOF USED AS FOOD OR AS INGREDIENTS IN FOOD. Registered June 30, 1903. LODERS & NUCOLINE, LIMITED, Silvertown, near London, England. Renewed June 30, 1933, to The Best Foods, Inc., New York, N. Y., a Corporation of Delaware, successor.

86,711. HATS AND CAPS OF CERTAIN MATERIALS. Registered May 28, 1912. IRVING HAT CO. Renewed May 28, 1932, to Central Men's Stores, Inc., New York, N. Y., a Corporation of New York, assignee.

87,160. LEATHER BOOTS, SHOES, AND SLIPPERS. Registered July 2, 1912. EDWIN C. BURT COMPANY, New York, and Brooklyn, N. Y. Renewed July 2, 1932, to Orthopedic Shoes Inc., Wilmington, Del., a Corporation of Delaware, assignee by mesne assignments.

89,579. GASOLENE INTERNAL-COMBUSTION ENGINES. Registered December 24, 1912. REGAL GASOLINE ENGINE COMPANY. Renewed December 24, 1932, to Regal Marine Engine Co., Coldwater, Mich., a Corporation of Michigan, by change of name.

89,824. RUBBER BELTING, RUBBER VALVES, WOVEN AND COTTON RUBBER HOSE. Registered January 14, 1913. THE B. F. GOODRICH COMPANY, as assignee of The Diamond Rubber Company, Akron, Ohio. Renewed January 14, 1933, to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York, assignee.

89,829. RUBBER BELTING, RUBBER VALVES, COTTON AND RUBBER HOSE. Registered January 14, 1913. THE B. F. GOODRICH COMPANY, as assignee of The Diamond Rubber Company, Akron, Ohio. Renewed January 14, 1933, to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York, assignee.

89,830. RUBBER BELTING, RUBBER VALVES, WOVEN AND COTTON RUBBER HOSE. Registered January 14, 1913. THE B. F. GOODRICH COMPANY, as assignee of The Diamond Rubber Company, Akron, Ohio. Renewed January 14, 1933, to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York, assignee.

89,832. DRESS-SHIRTS, NEGLIGÉE SHIRTS, WORK-SHIRTS, ROMPERS, AND CHILDREN'S FROCKS. Registered January 14, 1913. CHARLES EISENMAN COMPANY. Renewed January 14, 1933, to The Kaynee Company, Cleveland, Ohio, a Corporation of Ohio, assignee.

89,878. METAL STAND-LAMPS. Registered January 14, 1913. SCOVILL MANUFACTURING COMPANY, Waterbury, Conn., a Corporation of Connecticut. Renewed January 14, 1933.

90,003. BLOUSES. Registered January 28, 1913. CHARLES EISENMAN COMPANY. Renewed January 28, 1933, to The Kaynee Company, Cleveland, Ohio, a Corporation of Ohio, assignee.

90,016. DUCKS. Registered January 28, 1913. ARTHUR J. HALLOCK. Renewed January 28, 1933, to Lewis A. Hallock, Speonk, N. Y., assignee.

90,206. CANNED SALMON. Registered February 11, 1913. HOONAH PACKING COMPANY, Port Townsend, Wash., and Hoonah, District of Alaska. Renewed February 11, 1933, to Hoonah Packing Company, South Bellingham, Wash., a Corporation of Washington.

90,207. CANNED SALMON. Registered February 11, 1913. HOONAH PACKING COMPANY, Port Townsend, Wash., and Hoonah, District of Alaska. Renewed February 11, 1933, to Hoonah Packing Company, South Bellingham, Wash., a Corporation of Washington.

90,208. CANNED SALMON. Registered February 11, 1913. HOONAH PACKING COMPANY, Port Townsend, Wash., and Hoonah, District of Alaska. Renewed February 11, 1933, to Hoonah Packing Company, South Bellingham, Wash., a Corporation of Washington.

90,209. CANNED SALMON. Registered February 11, 1913. HOONAH PACKING COMPANY, Port Townsend, Wash., and Hoonah, District of Alaska. Renewed February 11, 1933, to Hoonah Packing Company, South Bellingham, Wash., a Corporation of Washington.

90,210. CANNED SALMON. Registered February 11, 1913. HOONAH PACKING COMPANY, Port Townsend, Wash., and Hoonah, District of Alaska. Renewed February 11, 1933, to Hoonah Packing Company, South Bellingham, Wash., a Corporation of Washington.

90,211. CANNED SALMON. Registered February 11, 1913. HOONAH PACKING COMPANY, Port Townsend, Wash., and Hoonah, District of Alaska. Renewed February 11, 1933, to Hoonah Packing Company, South Bellingham, Wash., a Corporation of Washington.

90,228. COFFEE AND CHICORY COMPOUND. Registered February 11, 1913. MERCHANTS COFFEE CO. OF NEW ORLEANS, LTD., New Orleans, La., a Corporation of Louisiana. Renewed February 11, 1933.

90,312. DRESS-SHIRTS, NEGLIGÉE SHIRTS, WORK-SHIRTS, WAISTS, ROMPERS, BLOUSES, PAJAMAS, AND AND CHILDREN'S FROCKS. Registered February 18, 1913. CHARLES EISENMAN COMPANY. Renewed February 18, 1933, to The Kaynee Company, Cleveland, Ohio, a Corporation of Ohio, assignee.

90,372. COFFEE. Registered February 18, 1913. THE OUTRACKER COFFEE CO., Louisville, Ky., a Corporation of Kentucky. Renewed February 18, 1933.

90,426. SPICES AND FLAVORING EXTRACTS FOR FOODS. Registered February 25, 1913. F. E. FOWLER. Renewed February 25, 1933, to Davis & Hatch Spice Co. Inc., New Bedford, Mass., a Corporation of Massachusetts, assignee.

90,468. CREAMERY-BUTTER. Registered February 25, 1913. THE NISSLEY CREAMERY COMPANY, Fort Worth, Tex. Renewed February 25, 1933, to Mistletoe Creameries, Inc., Houston, Tex., a Corporation of Delaware, assignee by mesne assignments.

90,658. SYRINGES, WATER-BOTTLES, NASAL DOUCHES, AND CATHETERS. Registered March 11, 1913. PARKER, STEARNS & COMPANY, New York, and Brooklyn, N. Y. Renewed March 11, 1933, to Parker, Stearns & Company, Brooklyn, N. Y., a Corporation of New York.

90,713. CERTAIN PHARMACEUTICAL PREPARATIONS AND REMEDIES FOR CERTAIN NAMED DISPASES. Registered March 18, 1913. LANMAN & KEMP. Renewed March 18, 1933, to Lanman & Kemp-Barclay & Co., Incorporated, New York, N. Y., a Corporation of New York, assignee.

90,714. CERTAIN PHARMACEUTICAL PREPARATIONS AND REMEDIES FOR CERTAIN NAMED DISEASES. Registered March 18, 1913. LANMAN & KEMP. Renewed March 18, 1933, to Lanman & Kemp-Barclay & Co., Incorporated, New York, N. Y., a Corporation of New York, assignee.

90,725. CERTAIN NAMED CUTLERY AND TOOLS. Registered March 18, 1913. MORLEY BROTHERS, Saginaw, Mich., a Corporation of Michigan. Renewed March 18, 1933.

90,833. RUBBER BATHING-CAPS. Registered March 25, 1913. PARKER, STEARNS & COMPANY, New York and Brooklyn, N. Y. Renewed March 25, 1933, to Parker, Stearns & Company, Brooklyn, N. Y., a Corporation of New York.

91,058. CANNED SALMON. Registered April 15, 1913. ALASKA-PORTLAND PACKERS ASSOCIATION, Portland, Oreg. Renewed April 15, 1933, to Alaska-Portland Packers Association, South Bellingham, Wash., a Corporation of Oregon.

91,059. CANNED SALMON. Registered April 15, 1913. ALASKA-PORTLAND PACKERS ASSOCIATION, Portland, Oreg. Renewed April 15, 1933, to Alaska-Portland Packers Association, South Bellingham, Wash., a Corporation of Oregon.

91,060. CANNED SALMON. Registered April 15, 1913. ALASKA-PORTLAND PACKERS ASSOCIATION, Portland, Oreg. Renewed April 15, 1933, to Alaska-Portland Packers Association, South Bellingham, Wash., a Corporation of Oregon.

91,241. CERTAIN NAMED DENTAL, MEDICAL, AND SURGICAL APPLIANCES. Registered April 22, 1913. PARKER, STEARNS & COMPANY, New York and Brooklyn, N. Y. Renewed April 22, 1933, to Parker, Stearns & Company, Brooklyn, N. Y., a Corporation of New York.

91,522. ENGINE-OIL, TURBINE-OIL, TRANSFORMER-OIL, AND GAS-ENGINE OIL. Registered May 6, 1913. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill., a Corporation of Indiana. Renewed May 6, 1933.

91,601. WHEAT FLOUR. Registered May 13, 1913. THE PORTLAND FLOURING MILLS COMPANY, Portland, Oreg. Renewed May 13, 1933, to General Mills, Inc., Minneapolis, Minn., a Corporation of Delaware, assignee by mesne assignments.

91,616. CYLINDER-OIL, ENGINE-OIL, MACHINE-OIL, DYNAMO-OIL, TURBINE-OIL, AND TRANSFORMER-OIL. Registered May 13, 1913. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill., a Corporation of Indiana. Renewed May 13, 1933.

91,688. AN EYE-WASH. Registered May 20, 1913. GEORGE W. PEAVEY, Minneapolis, Minn. Renewed May 20, 1933, to Lavoptik Company, St. Paul, Minn, a Corporation of Minnesota, assignee by mesne assignments.

91,753. PORT AND SHERRY WINE. Registered May 27, 1913. BODEGA. Renewed May 27, 1933, to Societe Anonyme des Vins d'Origine Etrangers et Français, Paris, France, a Corporation of France, assignee.

91,802. A REMEDY FOR CONSTIPATION. Registered May 27, 1913. THE GEORGE H. KUNDLE COMPANY, Piqua, Ohio, a Corporation of Ohio. Renewed May 27, 1933.

91,894. CANNED SALMON. Registered June 3, 1913. PACIFIC FISHERIES & PACKING COMPANY, Aberdeen, Wash. Renewed June 3, 1933, to Pioneer Packing Company, Seattle, Wash., a Corporation of Washington, assignee.

91,954. SHOE-LACINGS, CORSET-LACINGS, UNDERWEAR-LACINGS, BLOUSE-LACINGS, AND BRAID. Registered June 10, 1913. ELMWOOD MILLS. Renewed June 10, 1933, to International Braid Company, Providence, R. I., a Corporation of Massachusetts, successor.

92,058. QUININ POMADE, LINIMENT, AND SKIN-LOTION. Registered June 17, 1913. EXELENTO MEDICINE CO. Renewed June 17, 1933, to Exelento Medicine Co., Atlanta, Ga., a Corporation of Georgia, assignee.

92,093. CERTAIN NAMED FANCY GOODS, FURNISHINGS, AND NOTIONS. Registered June 17, 1913. F. W. MAURER & SONS CO., Philadelphia, Pa., a Corporation of Pennsylvania. Renewed June 17, 1933.

92,121. CARBONATED BEVERAGES. Registered June 17, 1913. C. C. PORTER. Renewed June 17, 1933, to W. G. Huff, doing business as Holdrege Bottling Works, Holdrege, Nebr., assignee by mesne assignments.

92,139. CANNED VEGETABLES. Registered June 17, 1913. STETSON & ELLISON CO., Camden, Del., and New York, N. Y. Renewed June 17, 1933, to G. H. Hammond Company, Chicago, Ill., a Corporation of Michigan, assignee by mesne assignments.

92,189. OVERALLS, WORK-COATS, AND WORK-SHIRTS. Registered June 24, 1913. THE C. B. CONES & SON MANUFACTURING COMPANY, Indianapolis, Ind., a Corporation of Indiana. Renewed June 24, 1933.

92,308. BUTTER AND EGGS. Registered July 1, 1913. CHARLES ABRAMS, Astoria, N. Y. Renewed July 1, 1933, to Charles Abrams, Long Island City, N. Y.

92,376. A TONIC MEDICINAL PREPARATION FOR CERTAIN NAMED DISEASES. Registered July 1, 1913, to The Sydney Ross Co., New York, N. Y. Renewed July 1, 1933, to The Sydney Ross Co., Newark, N. J., a Corporation of New Jersey.

92,388. BOOK-PAPER. Registered July 8, 1913. AMERICAN WRITING PAPER CO. Renewed July 8, 1933, to American Writing Paper Company, Inc., Holyoke, Mass., a Corporation of Delaware, assignee.

92,393. CIGARS, CIGARETTES, AND MANUFACTURED TOBACCO. Registered July 8, 1913. BOBROW BROS. Renewed July 8, 1933, to Bobrow Bros. Inc., Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

92,573. PERFUME, TOILET WATER, SACHET, AND COMPLEXION POWDER. Registered July 15, 1913. SOLON PALMER, New York, N. Y., a Corporation of New York. Renewed July 15, 1933.

92,596. COTTON PIECE GOODS. Registered July 15, 1913. J. L. STIFEL & SONS. Renewed July 15, 1933, to J. L. Stifel & Sons, Inc., Wheeling, W. Va., a Corporation of West Virginia, assignee.

LABELS

REGISTERED FEBRUARY 21, 1933

41,769.—*Title:* THE ACME ROTARY MINCER. For Rotary Mincing Implement for Kitchen Use. ACME METAL GOODS MFG. CO., Newark, N. J. Published January 5, 1933.

41,770.—*Title:* SUPER WHOLE MILK BREAD. For Bread. DAIRY CORPORATION OF AMERICA, Wilmington, Del., Milwaukee, Wis., and Chicago, Ill. Published October 29, 1932.

41,771.—*Title:* BUYERS LEAGUE. For Automobile Accessories. ERIE METER SYSTEMS, INCORPORATED, Erie, Pa. Published December 29, 1932.

41,772.—*Title:* CASTOR OIL IN POWDER COMPOUND OF MAGNESIA. For Castor Oil in Powder. CARL ERMERT, doing business as C. Ermert Company, Cincinnati, Ohio. Published January 18, 1933.

41,773.—*Title:* DR. WHITE'S COD LIVER OIL CONCENTRATE. For Cod Liver Oil Concentrate Tablets. FIRST NATIONAL LABORATORIES INC., Lehighton, Pa. Published December 1, 1932.

41,774.—*Title:* BLUE RIBBON 4 POINT TURKEY. For Turkeys. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Published November 21, 1932.

41,775.—*Title:* KUHMARKER'S SANITARY "SHREDDOWAX" EASTER GRASS. For Easter Grass (Being a Shredded Waxed Paper). KUHMARKER WAXED PAPER CO. INC., New York, N. Y. Published January 14, 1933.

41,776.—*Title:* MARTIN'S BEST YET SHAMPOO. For Shampoo. SARAH E. MARTIN, Kansas City, Mo. Published November 2, 1931.

41,777.—*Title:* MARTIN'S BEST YET DANDRUFF REMOVER. For Dandruff Remover. SARAH E. MARTIN, Kansas City, Mo. Published December 14, 1932.

41,778.—*Title:* MARTIN'S BEST YET HAIR OIL. For Hair Oil. SARAH E. MARTIN, Kansas City, Mo. Published November 2, 1931.

41,779.—*Title:* REEL. For Cigars. J. G. MATKOVICH, Hammond, Ind. Published January 18, 1933.

41,780.—*Title:* 1900 REDI-TO-IRON DRYER. For Dryers. NINETEEN HUNDRED CORPORATION, Binghamton, N. Y. Published December 15, 1932.

41,781.—*Title:* PENTON PERFECT. For Bottled Beverages. PENTON PRODUCTS COMPANY, Detroit, Mich. Published December 22, 1932.

41,782.—*Title:* PRIDE OF RIDGEWOY. For Cantaloupes. THE "PRIDE OF RIDGEWAY" GROWERS ASSOCIATION, Ridgeway, N. C. Published August 6, 1932.

41,783.—*Title:* RESTORZIT. For Product for Imparting Color to Gray Hair and Invigorating the Scalp. REPUBLIC CHEMICAL CO. INC., New York, N. Y. Published February 17, 1932.

41,784.—*Title:* MUG. For Malt Extract. STERLING PRODUCTS COMPANY, Evansville, Ind. Published January 6, 1933.

PRINTS

REGISTERED FEBRUARY 21, 1933

14,055.—*Title:* THIS BREAKFAST PUTS "SPARKLE" IN ALL THE DAY. For Prunes. CALIFORNIA PRUNE & APRICOT GROWERS ASSOCIATION, San Jose, Calif. Published October 18, 1931.

14,056.—*Title:* NATURE'S WAY TO GOOD HEALTH. For Prunes. CALIFORNIA PRUNE & APRICOT GROWERS ASSOCIATION, San Jose, Calif. Published October 23, 1931.

14,057.—*Title:* HERE'S ENERGY HERE'S HEALTH. For Prunes. CALIFORNIA PRUNE & APRICOT GROWERS ASSOCIATION, San Jose, Calif. Published November 21, 1931.

14,058.—*Title:* MALTED MILK CHOCOLATE CAKE. For Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published January 15, 1933.

14,059.—*Title:* IDEAL RANGE OIL BURNERS. For Oil Burners. THE IDEAL OIL BURNER COMPANY, Hartford, Conn. Published December 15, 1932.

REISSUES

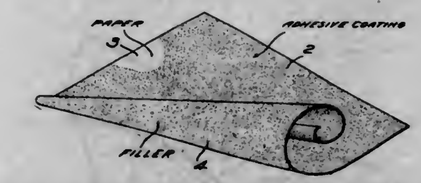
FEBRUARY 21, 1933

18,741. CENTRIFUGAL CLUTCH. ARTHUR LOWNDES, Toronto, Ontario, Canada. Original No. 1,745,681, dated Feb. 4, 1930, Serial No. 248,842, filed Dec. 29, 1927. Application for reissue filed Jan. 25, 1932. Serial No. 588,686. 12 Claims. (Cl. 192—105.)



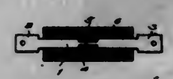
1. A centrifugal clutch comprising a driving member, a drum constituting a driven member, a complement of friction shoes carried by the driving member and having interfitting means to enable them to advance and recede in unison, and driving means borne by the driving member but not physically connected to the shoes.

18,742. COATED PAPER. FREDERICK W. FARRELL, Brookfield, Mass., assignor, by mesne assignments, to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a Corporation of Minnesota. Original No. 1,683,453, dated Sept. 4, 1928, Serial No. 44,358, filed July 17, 1925. Reissue No. 17,760, dated Aug. 5, 1930, Serial No. 335,677, filed Jan. 28, 1929. This application for reissue filed Aug. 30, 1930. Serial No. 478,934. 16 Claims. (Cl. 91—68.)



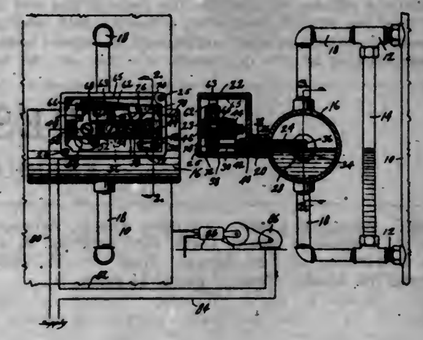
10. A normally removable and reusable adhesive tape comprising a paper backing having one side thereof coated with an adhesive which is tacky under normal atmospheric conditions, its opposite side coated with a protective filler.

18,743. FUSE. CLARENCE RINGWALD, North Hampton, Ohio, assignor, by mesne assignments, to Schweitzer & Conrad, Inc., Chicago, Ill., a Corporation of Delaware. Original No. 1,862,317, dated June 7, 1932, Serial No. 242,137, filed Dec. 23, 1927. Application for reissue filed Aug. 22, 1932. Serial No. 629,945. 39 Claims. (Cl. 200—120.)



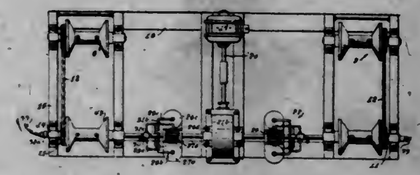
1. In a fuse device, the combination of a container comprising an outer sleeve of condensation product and an inner lining of fiber impregnated in a solid waxy halogen derivative of naphthalene, and a fusible link within said container.

18,744. FLOAT OPERATED SWITCH. ALBERT PENN, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Original No. 1,788,448, dated Dec. 2, 1930, Serial No. 279,328, filed May 21, 1928. Application for reissue filed Mar. 16, 1932. Serial No. 599,305. 10 Claims. (Cl. 200—84.)



1. An automatic water level controlling structure comprising a float housing, a rock shaft extending therefrom, a float within said housing and secured to said rock shaft, a switch mounted on said housing and including a switch arm, means constantly tending to maintain said switch arm in "on" position and an operative connection between said rock shaft and said switch arm whereby the switch arm may be resiliently moved against the action of said means.

18,745. BRAKE TESTING MACHINE. PAUL J. DONAVAN, Pomona, Calif., assignor, by mesne assignments, to Bendix-Cowdrey Brake Tester Inc., Fitchburg, Mass., a Corporation of Delaware. Original No. 1,755,287, dated Apr. 22, 1930, Serial No. 107,679, filed May 8, 1926. Application for reissue filed Apr. 13, 1931. Serial No. 529,863. 11 Claims. (Cl. 265—25.)

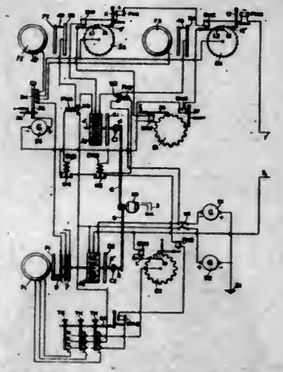


5. In a brake testing machine, means for supporting and rotating an automobile wheel under brake resistance,

a divided power transmitting shaft for operating said means, means acting upon a portion of the shaft to drive the shaft, a pair of spaced relatively movable vanes arranged to form a yielding driving connection between the divided sections of the shaft, a fluid confining receptacle between said vanes, and pressure responsive means constructed and arranged to be actuated by the pressure within the receptacle.

18,746. DEVICE FOR INDICATING MARKET QUOTATIONS. EMERY C. FURBER, Chicago, Ill., assignor, by mesne assignments, to The Teleregister Corporation, New York, N. Y., a Corporation of Delaware. Original No. 1,788,100, dated Jan. 6, 1931, Serial No. 744,793, filed Oct. 20, 1924. Application for reissue filed Mar. 8, 1932. Serial No. 597,605. 23 Claims. (Cl. 178—24.)

1. In a device for indicating market quotations, a transmitting station, a remote receiving station, a selector keyboard at said transmitting station, a plurality of tapes at said receiving station, a selector mechanism comprising selector elements at the transmitting and at the receiving station, means for actuating said selector elements to operate in synchronism, said last named means being actuated by the depression of a key on the selector keyboard, whereby one of the tapes at the receiving station is selected, a printing mechanism at the receiving station for printing a selected tape, and a type

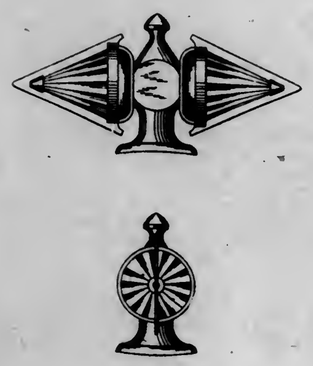


selecting keyboard at said transmitting station for selecting the type and for actuating the printing mechanism.

DESIGNS

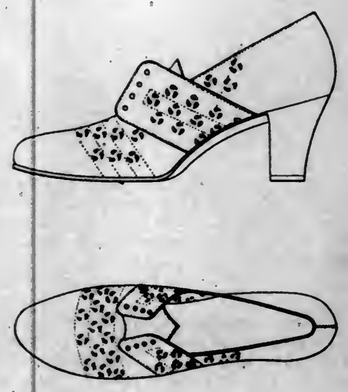
FEBRUARY 21, 1933

89,293. VEHICLE LAMP. ANTHONY ALESSI, Paterson, N. J., assignor to Selecto Light, Inc., Paterson, N. J., a Corporation of New Jersey. Filed Oct. 21, 1932. Serial No. 45,434. Term of patent 14 years.



The ornamental design for a vehicle lamp, as shown and described.

89,294. SHOE. THOMAS R. ATKINS, Cliftondale, Mass. Filed Jan. 11, 1933. Serial No. 46,783. Term of patent 3½ years.



The ornamental design for a shoe as shown and described.

89,295. SHOE. THOMAS R. ATKINS, Cliftondale, Mass. Filed Jan. 11, 1933. Serial No. 46,784. Term of patent 3½ years.



The ornamental design for a shoe as shown and described.

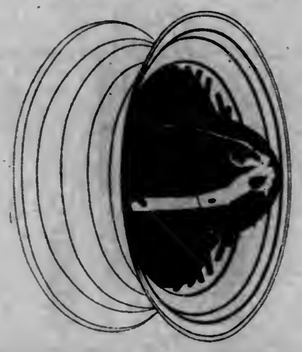
89,296. BUTTON. LOUIS DANIEL, Brooklyn, N. Y., assignor to B. Blumenthal & Co. Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,525. Term of patent 3½ years.





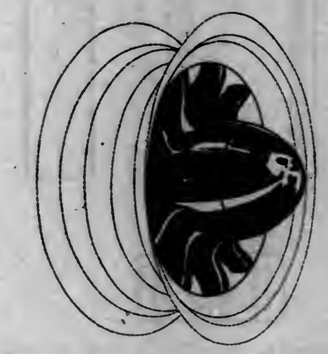
The ornamental design for a button, as shown.

89,297. VEHICLE WHEEL. CAROLUS L. EKSERGIAN and TALMON A. DAVENPORT, Detroit, Mich. Filed Dec. 7, 1932. Serial No. 46,321. Term of patent 7 years.



The ornamental design for a vehicle wheel, as shown.

89,298. VEHICLE WHEEL. CAROLUS L. EKSERGIAN and TALMON A. DAVENPORT, Detroit, Mich. Filed Dec. 7, 1932. Serial No. 46,322. Term of patent 7 years.



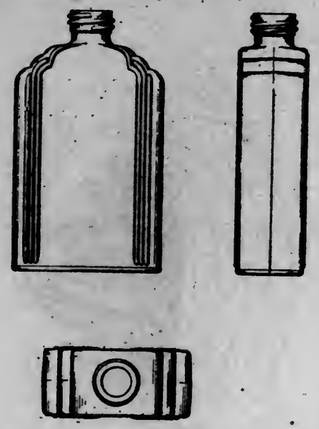
The ornamental design for a vehicle wheel, as shown.

89,299. TOILET BRUSH WITH FINGER GUIDE GROOVE. EDWARD J. FAY, New York, N. Y. Filed July 28, 1932. Serial No. 44,465. Term of patent 3½ years.



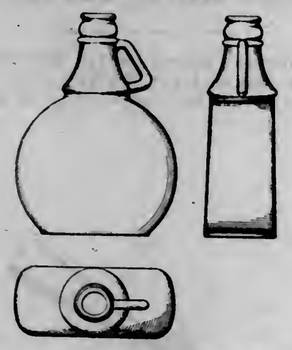
The ornamental design for a toilet brush with finger guide groove as shown.

89,300. BOTTLE. EDWIN W. FUERST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 13, 1932. Serial No. 46,449. Term of patent 14 years.



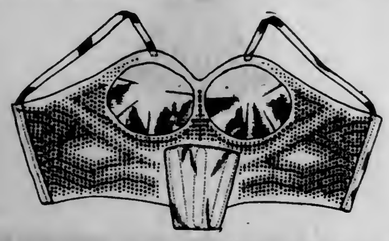
The ornamental design for a bottle substantially as shown.

89,301. JUG. EDWIN W. FUERST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 13, 1932. Serial No. 46,450. Term of patent 14 years.



The ornamental design for a jug substantially as shown.

89,302. BRASSIÈRE. JEANNE F. GREIG, London, England, assignor to The Charnaux Patent Corset Company Limited, London, England. Filed Dec. 17, 1932, Serial No. 46,470, and in Great Britain Sept. 14, 1932. Term of patent 14 years.



The ornamental design for a brassière, as shown.

89,303. BRASSIÈRE. JEANNE F. GREIG, London, England, assignor to The Charnaux Patent Corset Company Limited, London, England. Filed Dec. 17, 1932, Serial No. 46,471, and in Great Britain Sept. 14, 1932. Term of patent 14 years.



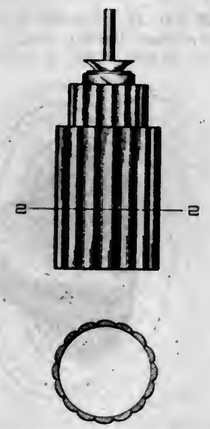
The ornamental design for a brassière, as shown.

89,304. LENS FOR AUTOMOBILE LAMPS. ANDREW GROSS, New York, N. Y. Filed Dec. 17, 1932. Serial No. 46,474. Term of patent 7 years.



The ornamental design for a lens for automobile lamps as shown.

89,305. LIGHTING FIXTURE. REUBEN B. HALE, San Francisco, Calif. Filed July 5, 1932. Serial No. 44,263. Term of patent 14 years.



The ornamental design for a lighting fixture, as shown.

89,306. GAME BOARD OR ANALOGOUS ARTICLE. RUSSELL K. HARSH, Dallas, Tex. Filed Apr. 30, 1932. Serial No. 43,673. Term of patent 3½ years.



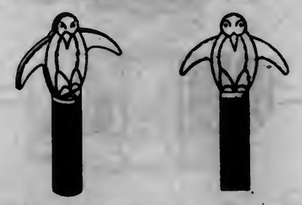
The ornamental design for a game board or analogous article as shown.

89,307. BOWL. DAVID A. JENKINS, Kokomo, Ind., assignor to D. C. Jenkins Glass Company, Kokomo, Ind., a Corporation. Filed Sept. 12, 1932. Serial No. 44,818. Term of patent 14 years.



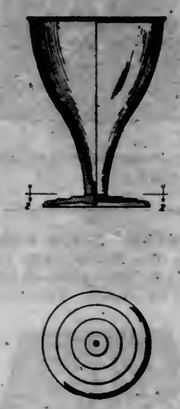
The ornamental design for a bowl substantially as shown and described.

89,308. COMBINED CORKSCREW AND GUARD. KURT RETTICH, Toledo, Ohio, assignor, by mesne assignments, to The Reynolds Spring Company, Jackson, Mich., a Corporation of Delaware. Filed May 31, 1932. Serial No. 43,943. Term of patent 3½ years.



The ornamental design for a combined cork screw and guard substantially as shown and described.

89,309. GOBLET. JOHN G. ROSSITER, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich., a Corporation of Delaware. Filed Aug. 8, 1932. Serial No. 44,543. Term of patent 3½ years.



The ornamental design for a goblet as shown.

89,310. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1932. Serial No. 46,549. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

89,311. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1932. Serial No. 46,550. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

89,312. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1932. Serial No. 46,553. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

89,313. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1932. Serial No. 46,555. Term of patent 3½ years.



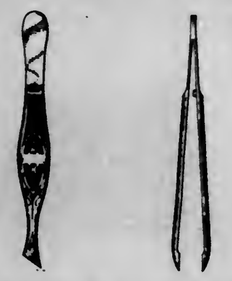
The ornamental design for a lamp shade, substantially as shown and described.

89,314. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1932. Serial No. 46,557. Term of patent 3½ years.



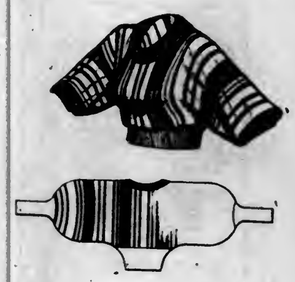
The ornamental design for a lamp shade, substantially as shown and described.

89,315. TWEEZER. SAMUEL SEGAL, New York, N. Y. Filed June 6, 1932. Serial No. 43,997. Term of patent 3½ years.



The ornamental design for a tweezer substantially as shown and described.

89,316. SWEATER OR SIMILAR ARTICLE. SAMUEL SHEINDELMAN, Lawrence, N. Y. Filed Jan. 3, 1933. Serial No. 46,697. Term of patent 3½ years.



The ornamental design for a sweater or similar article as shown and described.

89,317. SWEATER OR SIMILAR ARTICLE. SAMUEL SHEINDELMAN, Lawrence, N. Y. Filed Jan. 3, 1933. Serial No. 46,698. Term of patent 3½ years.



The ornamental design for a sweater or similar article as shown and described.

89,318. SWEATER OR SIMILAR ARTICLE. SAMUEL SHEINDELMAN, Lawrence, N. Y. Filed Jan. 9, 1933. Serial No. 46,773. Term of patent 3½ years.



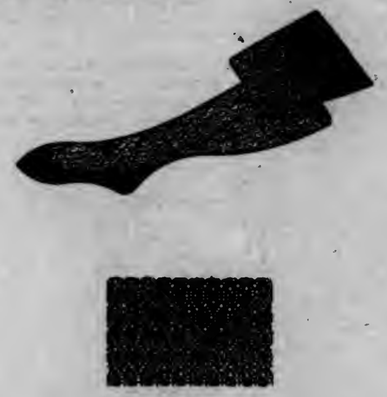
The ornamental design for a sweater or similar article as shown and described.

89,319. AVIATOR'S EMBLEM OR SIMILAR ARTICLE. ALBERT E. R. SPEIDEL, Edgewood, R. I., assignor to Speidel Corporation, a Corporation of Rhode Island. Filed Dec. 12, 1932. Serial No. 46,442. Term of patent 7 years.



The ornamental design for an aviator's emblem or similar article substantially as shown.

89,320. STOCKING. FREDERICK ELWOOD STRUVE, Philadelphia, Pa. Filed May 23, 1932. Serial No. 43,883. Term of patent 3½ years.



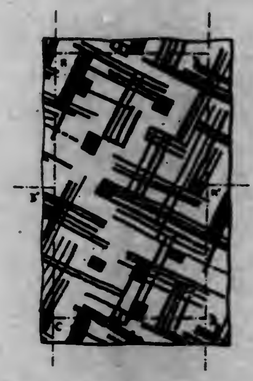
The ornamental design for a stocking as shown.

89,321. ASH TRAY OR SIMILAR ARTICLE. HENRY UNDERBERG, New York, N. Y., assignor to Frankart, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 17, 1932. Serial No. 46,475. Term of patent 3½ years.



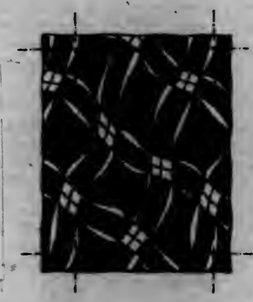
The ornamental design for an ash tray or similar article substantially as shown.

89,322. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 16, 1933. Serial No. 46,847. Term of patent 3½ years.



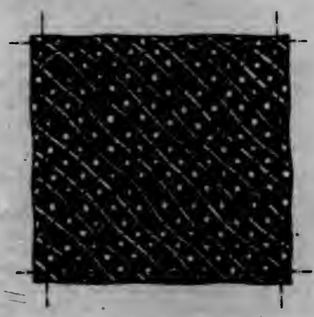
The ornamental design for a textile fabric or similar article as shown and described.

89,323. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 16, 1933. Serial No. 46,848. Term of patent 3½ years.



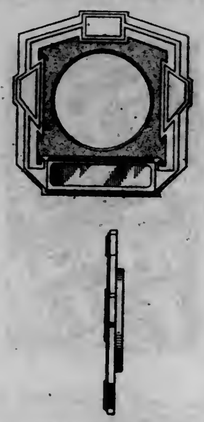
The ornamental design for a textile fabric or similar article as shown and described.

89,324. TEXTILE FABRIC OR SIMILAR ARTICLE. IRENE A. WEITZ, Brooklyn, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 16, 1933. Serial No. 46,851. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,325. DOOR PEEP HOLE FRAME. MARTIN WOLFMAN, Brooklyn, N. Y. Filed June 16, 1932. Serial No. 44,100. Term of patent 3½ years.



The ornamental design for a door peep hole frame as shown.

89,326. SAFETY RAZOR BLADE. JOHN L. KING, New York, N. Y. Filed Dec. 16, 1932. Serial No. 46,467. Term of patent 3½ years.



The ornamental design for a safety razor blade as shown.

PATENTS

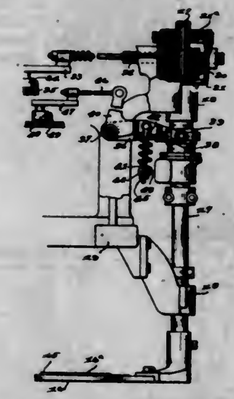
GRANTED FEBRUARY 21, 1933

1,897,992. DISABLING GAS FIRING WEAPON. ADRIAN S. AILES, Cleveland, Ohio, assignor to The Lake Erie Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 6, 1932. Serial No. 603,625. 2 Claims. (Cl. 42—1.)



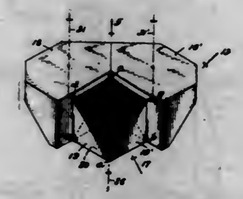
1. A disabling gas firing weapon comprising a handle portion, a barrel portion, a firing pin in said handle, a knob on said firing pin, a slot in said handle, said knob passing through said slot, an off-set safety recess to said slot, two notches in said recess, a first notch adapted to normally receive said knob when said knob is in the safety retracted position, a second notch constituting a detent opposite said first notch and adapted to receive and temporarily retain said knob when said knob is accidentally displaced from said first notch.

1,897,993. CHARGE SEVERING MECHANISM. RUSSELL G. ALLEN, Alton, Ill., assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Apr. 11, 1931. Serial No. 529,416. 18 Claims. (Cl. 49—5.)



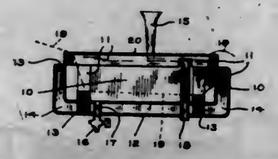
10. In combination, a suction blank mold having a downwardly opening cavity, charge severing means including a vertical rock shaft arranged alongside of the mold, a knife and holder therefor attached to the lower end of the shaft, said knife having its cutting edge disposed in a plane above the holder, rack and gear mechanism including a gear splined to the shaft for rocking the latter and thereby swinging the knife across the lower end of the mold and bringing the holder to a position spaced directly below the latter, means for holding the shaft against upward movement during swinging of the knife across the lower end of the mold and releasing the shaft for upward movement upon completion of said swinging of the knife, said means including a pair of plates arranged for relative movement about the axis of the rock shaft, means whereby rocking of the shaft causes said relative movement of the plates, tongues and grooves formed on the plates and arranged to hold the shaft against upward movement during swinging of the knife across the lower end of the mold and release the shaft for upward movement after the knife has completed its swinging movement, and mechanism including a spring device for causing said upward movement of the shaft.

1,897,994. LIGHT DIVIDING DEVICE. GEORGE A. ALTHOFF, Glendale, Calif. Filed June 30, 1928. Serial No. 289,408. 11 Claims. (Cl. 88—1.)



1. An optical device for converting an incidence beam of light into two similar reflected beams angularly disposed with each other and in a plane substantially perpendicular to the path of said incidence beam, which embodies a pair of similar intersecting sectional prisms forming in part a common prism having a common surface in a plane substantially perpendicular to the path of said incidence beam and intersecting in a line which extends obliquely with respect to said common surface.

1,897,995. CRANK CASE HEATER. JAMES HENRY BARRETT and JOHN KEENAN, Kingston, Ontario, Canada. Filed Nov. 23, 1931, Serial No. 576,932, and in Canada Oct. 13, 1931. 4 Claims. (Cl. 184—104.)

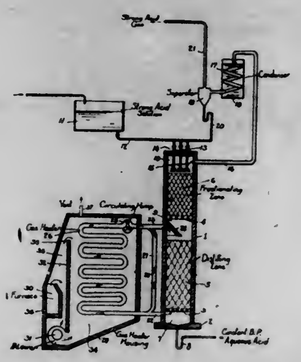


1. In an automobile engine warming device of the type described, a water container designed to fit to the outside surface of the bottom and four sides of the oil pan, an outer casing, spacing strips therebetween said casing closed all around to form a dead air space therein and means supporting the same in position.

1,897,996. PREPARATION OF STRONG HYDROGEN HALIDE GAS. EDWIN O. BARSTOW and SHELDON B. HEATH, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Oct. 4, 1929. Serial No. 397,198. 7 Claims. (Cl. 202—49.)

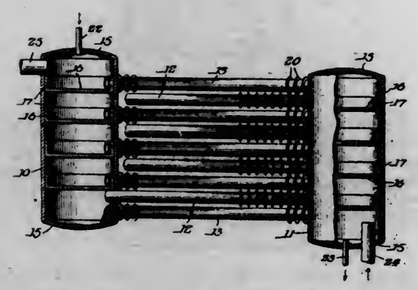
1. The method of preparing strong hydrochloric acid gas which comprises flowing a distributed stream of an aqueous solution thereof having a concentration in excess of the constant boiling point mixture in direct heat exchange relation with the saturated vapors of said mixture at the atmospheric boiling point thereof, whereby said excess of hydrochloric acid is liberated as gas and said vapors are condensed as liquid, removing said gas, contacting said condensed liquid with vapors of aqueous hydrochloric acid in a superheated condition, whereby a portion of the liquid is revaporized as a saturated vapor, while

a residual solution of like composition flows from the vaporization zone, withdrawing and reheating a portion of such saturated vapors, returning the reheated vapors to



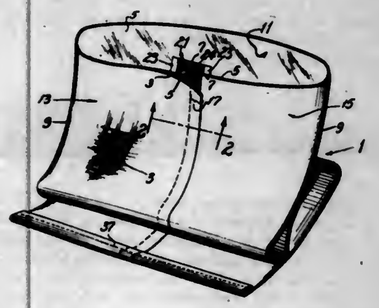
said revaporization step, and employing the remaining portion of saturated vapors for distilling the concentrated solution in the first step.

1,897,997. ABSORBER FOR REFRIGERATING SYSTEMS. EARL BABCOCK, Chicago, Ill., assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Apr. 2, 1931. Serial No. 527,073. 8 Claims. (Cl. 261—119.)



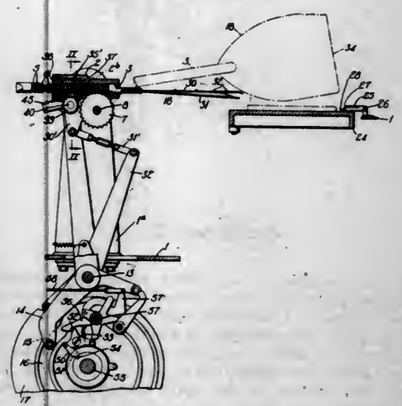
1. An absorber for refrigerating apparatus comprising a plurality of vertically disposed cylinders, spaced plates located in said cylinders and dividing the same into compartments, a plurality of pipes for connecting said compartments in series in staggered relation so that a compartment in one cylinder is connected to a compartment in another cylinder and a compartment in the last mentioned cylinder is connected to a compartment in the first mentioned cylinder and means for circulating gas through said compartments and pipes, the arrangement being such that the gas will pass through a compartment and then through a pipe into a compartment into another cylinder.

1,897,998. FASTENER. CHARLES V. BRADY and WILLIAM CASE, St. Louis, Mo., assignors to Bemis Bro. Bag Company, St. Louis, Mo., a Corporation of Missouri. Filed May 8, 1931. Serial No. 535,864. 3 Claims. (Cl. 150—1.)



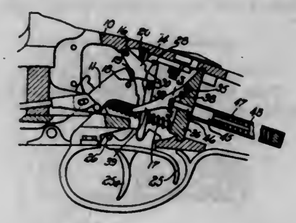
1. A seam for lined bags comprising a lap joint and an interior, flat cover strip attached to said seam, said cover strip having its longitudinal edges arranged free from attachment to said seam, an adhesive extending into said lapped joint and joining said cover strip to said seam.

1,897,999. AUTOMATIC COOKING MACHINERY. ERIC R. BROKVIST, Brooklyn, N. Y., and CHARLES A. FAUSEL, Glen Ridge, N. J., assignors to Harry Russell Brand, New York, N. Y. Filed June 11, 1932. Serial No. 616,598. 18 Claims. (Cl. 107—7.)



9. A peel including a member presenting a smooth surface to a cake in the direction of relative movement of the cake and having a griddle engaging portion and a second member having a roughened surface and means for supporting said second member in position to have its roughened surface extend above said smooth surface, said smooth surface member being resiliently mounted whereby as it engages the griddle, it may cause said smooth surface to extend above the level of said roughened surface.

1,898,000. TRIGGER MECHANISM. VAL A. BROWNING, Ogden, Utah. Filed May 2, 1931, Serial No. 534,469, and in Belgium Jan. 7, 1931. 22 Claims. (Cl. 42—42.)



17. In combination, a pair of hammers, sears respectively associated therewith, a pair of triggers, connectors respectively associated with said triggers, each connector being adapted to shift from engagement with one sear into engagement with the other sear when its respective trigger has been pulled and the gun fired, and a single inertia means for controlling the shifting of said connectors.

1,898,001. STOCKING. DANA M. CARMER, Philadelphia, Pa. Filed Apr. 10, 1931. Serial No. 529,159. 2 Claims. (Cl. 66—172.)

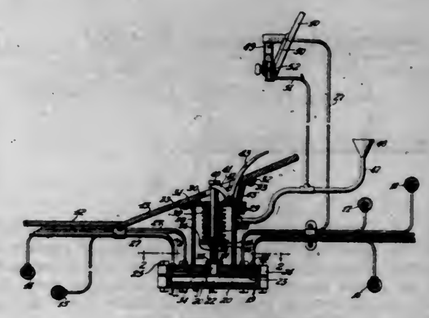


1. In a stocking, a non-reinforced leg portion, a welt formed at the top of said leg portion, said welt being reinforced throughout and doubled upon itself in such manner that the lower section thereof is of single thickness, and means formed in said lower section of the welt to lend elasticity thereto, said means comprising one or more spaced areas of relatively small extent and of lighter reinforcement than that of the section in which the same are included.

1,898,002. ANTIPYRETIC COMPOSITIONS CONTAINING AMIDOPYRIN. WALTER G. CHRISTIANSEN, Bloomfield, N. J., and ALFRED E. JURIST, Brooklyn, N. Y., assignors to E. R. Squibb & Sons, New York, N. Y., a Corporation of New York. Filed Sept. 13, 1930. Serial No. 481,799. 5 Claims. (Cl. 167—65.)

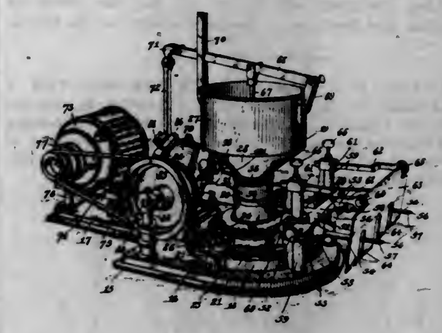
1. An antipyretic composition consisting of amidopyrin and boric acid.

1,898,003. LUBRICATING SYSTEM. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Original application filed Aug. 23, 1924, Serial No. 733,765. Divided and this application filed Jan. 24, 1930. Serial No. 423,039. 10 Claims. (Cl. 184—7.)



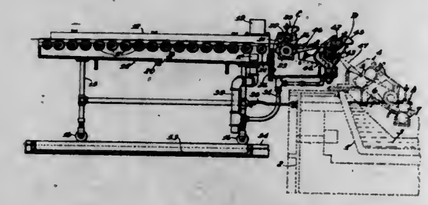
1. A lubricating system comprising a plurality of bearings to be lubricated, and a pump for supplying lubricant to said bearings, said pump comprising a base plate having a series of parallel grooves in one side thereof, said base plate being provided with a passageway for establishing communication between said grooves, a sheet of leather covering the open sides of said grooves, a cover plate disposed over said piece of leather and clamped to said base plate, said cover plate having a plurality of separated grooves disposed oppositely to the grooves in said base plate, a conduit leading from each of the grooves in said cover plate to one of said bearings, a cylinder communicating with said passageway, a reservoir for supplying lubricant to said cylinder, a plunger for displacing lubricant from said cylinder, a spring for actuating said plunger, and means for tensioning said spring.

1,898,004. PRESSURE FILLING MACHINE. ROBERT DEMKA and RAY KNAPP, Buffalo, N. Y. Filed Dec. 13, 1929. Serial No. 413,835. 13 Claims. (Cl. 107—1.)



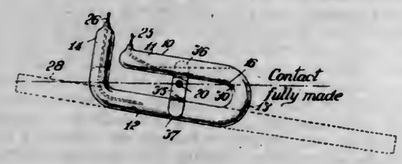
3. A machine of the character described, comprising a container, a manifold connected to said container and receiving a filling substance therefrom, and a plurality of ejector nozzles secured to said manifold and adapted to have baked articles thrust thereon to be filled, means for forcing the filling substance from said container through said manifold, and movable means synchronously timed according to the filling operation of said baked articles to remove said articles from said nozzles when filled.

1,898,005. TINPLATE FEEDING MECHANISM. SAMUEL E. DIESCHER, Pittsburgh, Pa., assignor to S. Diescher & Sons, Pittsburgh, Pa., a Partnership consisting of Samuel E. Diescher and August P. Diescher. Filed Apr. 29, 1931. Serial No. 533,697. 11 Claims. (Cl. 91—12.6.)



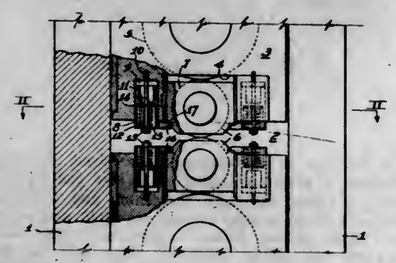
1. In a tinning machine, a tinning pot, an elongate table for receiving in an extended overlapped relation a plurality of plates of metal to be tinned, means for feeding the plates longitudinally of the table and from the table to the tinning machine, and means for applying water to the plates while on said table.

1,898,006. ELECTRIC SWITCH. ADIEL Y. DODGE, South Bend, Ind. Filed May 6, 1929. Serial No. 360,732. 15 Claims. (Cl. 200—152.)



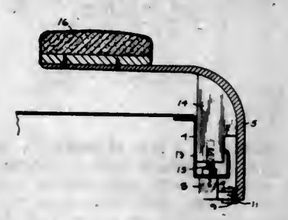
1. In a device of the class described, an envelope having a generally U-shaped portion with a rounded make and break connection and a pair of legs disposed generally horizontal in operation, one of said legs being in a plane above the plane of the other leg, a body of liquid disposed within said envelope and an upturned end on the lower leg for receiving the liquid from the lower leg in circuit opening movement of the switch and for returning liquid to said lower leg in closing movement of the switch.

1,898,007. WORKING ROLL BALANCE FOR A BACKED-UP ROLLING MILL. HUBERT E. EWART, Mount Lebanon, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 21, 1931. Serial No. 570,173. 3 Claims. (Cl. 80—38.)



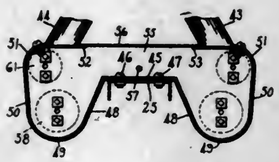
8. In a rolling mill, the combination with a housing provided with a vertically movable casing having a backing roll journalled therein, of a chock slidably mounted in said casing, a working roll journalled in said chock, a sleeve mounted for angular and vertical movements in said casing and provided with a lug which in one angular position of the sleeve engages said chock, and means for yieldingly connecting said sleeve to said casing for urging the working roll into driving contact with the backing roll.

1,898,008. ARM SUPPORT FOR AUTO RUMBLE SEATS. FRED G. FOX, Cortland, Ohio. Filed July 29, 1931. Serial No. 553,792. 4 Claims. (Cl. 155—198.)



2. In combination with an automobile having a rumble seat and a rain channel member therefor, a bracket member hinged to the said channel member, supporting means on said bracket member closely fitting said channel member for lateral support of said bracket member, when seated in said channel member and adjusting means on said supporting means for adjusting the height of said supporting means.

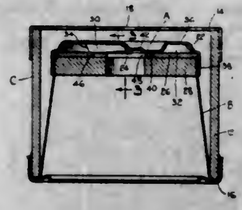
1,898,009. TOY LOCOMOTIVE. ALFRED C. GILBERT, North Haven, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed Aug. 29, 1931. Serial No. 560,058. 19 Claims. (Cl. 46—48.)



1. In a toy locomotive, steam chest and cylinder band unit comprising a plurality of detachable parts, including a strip of sheet metal formed to provide a casing body having a flat horizontally disposed portion, and a depending U-shaped portion at each end of said horizontally disposed portion, and a cover plate extending over both depending U-shaped portions at each side of said casing body.

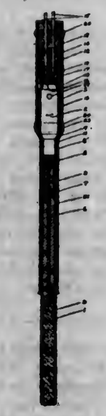
12. In a toy steam chest and cylinder band assembly, a casing body formed of a sheet metal strip having an intermediate portion of said strip horizontally disposed, said strip being downwardly directed at each end of said intermediate portion, turned and directed upwardly and then turned and directed inwardly, the ends of said strip being disposed and spaced apart substantially horizontally and spaced above and substantially parallel to said intermediate horizontally disposed portion, said horizontally disposed portion having openings provided therein adapted to receive fastening means to secure said casing body to a frame member, said fastening means being accessible through the space between the ends of the strip, end plates for said casing, said plates having flanges about their peripheries which extend about and over the ends of said casing body, and a single securing means passing through said plates below and between the spaced ends of the strip for clamping said plates against the ends of said casing body.

1,898,010. SOUND PRODUCING DEVICE. LEO J. GRUBMAN, Belle Harbor, N. Y., assignor to Voices, Incorporated, Newark, N. J., a Corporation of Delaware. Filed Oct. 8, 1931. Serial No. 567,558. 17 Claims. (Cl. 46—46.)



1. In a device of the class described, a sound producing head comprising a cap made of a piece of metal struck into a form including a sound channel leading into a sound chamber having sound discharge openings disposed remotely from the sound channel, a vibratory reed mounted adjacent the sound channel, and means closing the sound chamber.

1,898,011. BLASTING CAP. JOHN A. HAMMOND, Albany, Calif., assignor to California Cap Company, Oakland, Calif., a Corporation of California. Filed Mar. 24, 1930. Serial No. 438,304. 6 Claims. (Cl. 102—10.)



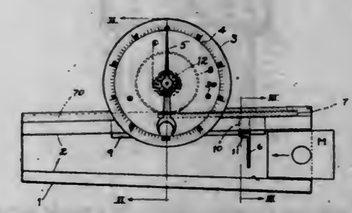
1. In a fuse device, a pair of concentrically spaced metal shells, a time fuse and blasting cap at the lower end of the shells, an electric ignition device within the inner shell with lead wires extending out of its upper end, the outer of the shells extending above the inner shell and ignition device and filled above the same with a sealing compound.

1,898,012. GLASS GRINDING MACHINE. HALBERT K. HITCHCOCK, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Feb. 11, 1930. Serial No. 427,583. 2 Claims. (Cl. 51—110.)



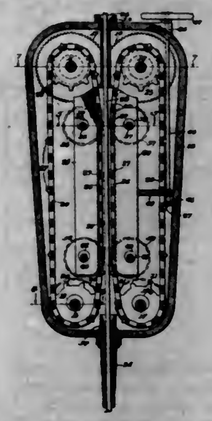
1. A grinding apparatus for plate glass comprising a series of tables mounted for right line movement in a continuous train and adapted to carry the glass sheets to be surfaced upon their upper sides, and a plurality of grinding machines arranged in series above the tables and each provided with a horizontal driven disc runner whose periphery projects ont past the side edges of the glass sheets, said runners having the diameter of their faces which contact with the glass progressively larger and larger from the front end of the series onward.

1,898,013. PYROMETER GAUGE. FREDERICK H. JOHNSON, Summitville, Ohio. Filed May 1, 1931. Serial No. 534,207. 3 Claims. (Cl. 33—174.)



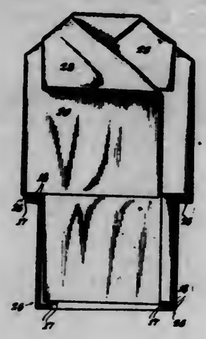
1. In a trial-mass pyrometer, the combination of a body provided with an elongate, tapering groove, forming with the remainder of said body a seat of a trial-mass, a graduated dial face, an index movable over said graduated face, a movable member extending transversely of and into said groove, a rack secured at an angle to said movable member, and a spring-backed gear in mesh with said rack, whereby a trial-mass, when shoved in seated position along said groove, effects a shifting of said movable member and a turning of said index.

1,898,014. FEEDING DEVICE FOR ELECTRIC WELD RODS OR WIRE. ALFRED F. KRUMHOLZ, Chicago, Ill. Filed July 17, 1931. Serial No. 551,450. 12 Claims. (Cl. 219—8.)



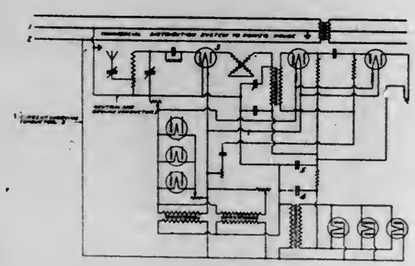
1. In an electric welding machine, means for feeding a coated fusible weld rod, said means embodying chains having an extended substantially parallel movement and between which members the rod to be fed is arranged, spaced drums over which the chains pass, means for actuating said drums, means carried by said members and operating to penetrate said coating to grip the rod for advancing the same, and stationary guides over which the adjacent portions of the chains intermediate the drums pass.

1,898,015. RAINCOAT. ROBERT K. LEAVITT, Greenburgh, N. Y. Filed Sept. 5, 1931. Serial No. 561,341. 9 Claims. (Cl. 2—87.)



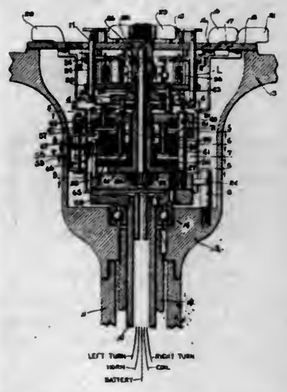
1. A seamless raincoat comprising a single rectangular sheet of suitable material, folded over on the back thereof along a transverse line at the upper portion of said sheet to divide said sheet into a cape-forming portion and a skirt-forming portion, portions of said sheet adjacent to each longitudinal edge being folded over on the front thereof to form the front and part of the sides of said cape and skirt, a triangular portion of each inner and upper corner of said folded sheet being turned down to form lapel portions, triangular portions at the upper outer edges of said folded sheet being folded over on the back thereof to form parts of a collar portion, the remaining triangular portion at the upper part of the back of said folded sheet between said lapel portions being folded over on the back of said sheet to form the second part of said collar.

1,898,016. ALTERNATING CURRENT CIRCUIT. ARTHUR J. LE MAY, Brooklyn, N. Y. Filed Feb. 12, 1931. Serial No. 515,316. 1 Claim. (Cl. 250—27.)



In a commercial distribution system for alternating current comprising a power transformer having primary and secondary windings, a plurality of distribution circuits connected to and extending from the transformer secondary, said distribution circuits having a common neutral conductor grounded at the power transformer, service lines extending from each one of the distribution circuits, the combination of a radio receiving system energized from said distribution system, means for energizing the power circuits of the radio receiving system from one of said service lines, means for grounding said service line at or near a point of connection to the power circuits of the radio receiving system, whereby disturbing effects produced in the other service lines of the distribution system will be minimized in the first-mentioned service line, and means for connecting the cathode circuit of the radio receiving system to the grounded conductor of said service line.

1,898,017. UNIVERSAL KEYLESS COMBINATION LOCK. GEORGE W. METAVALLAS, Muskegon Heights, Mich., assignor of one-half to Le Roy A. Krier, Muskegon Heights, Mich. Filed Dec. 8, 1931. Serial No. 579,710. 11 Claims. (Cl. 70—127.)



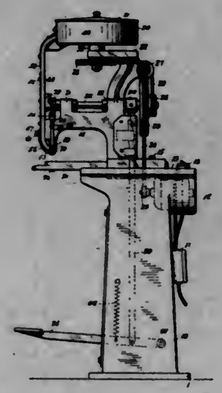
1. In combination, a steering wheel housing, means attached thereto, means to revolubly support said steering wheel housing, stationary means located inside of said housing, extensible means located on said stationary means and adapted to be moved outwardly into engagement with the said attached means by rotation of a shaft, said shaft being manually rotated by means of a control knob, a control disc rigid with said shaft, spring means connected between the stationary support and the control disc whereby the shaft is turned in one direction, a sliding disc adapted to slide axially of the said shaft, detent means between the sliding disc and the control disc to prevent rotative movement of these two members with respect to each other, and locking means adapted to prevent the sliding disc from moving axially.

1,898,018. PROCESS OF PREPARING ORE. RALPH FREDERICK MEYER, Freeport, Pa., assignor to Meyer Mineral Separation Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 7, 1931. Serial No. 567,473. 11 Claims. (Cl. 75—18.)

1. A process of treating oxidized ore containing reagent metal comprising heating the ore with a combustible reducing agent in an atmosphere containing sulfur dioxide in an amount from traces to major proportions, and cooling the thus treated ore with exclusion of free oxygen, and thereby producing reagent metal compound in a lower valent form which is highly active to acidic gases and stable toward moisture, and subsequently treating the material with acidic gases to convert metal values to extractable compounds.

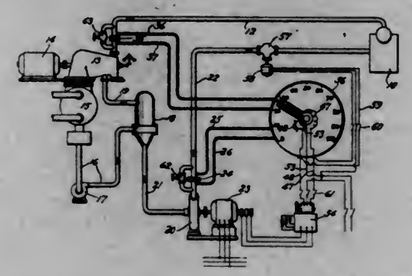
1,898,019. FASTENER SETTING MACHINE. DANIEL I. REITER, New York, N. Y. Filed Oct. 2, 1928. Serial No. 309,738. 4 Claims. (Cl. 1—3.1.)

1. In a machine of the character described, a hopper having a discharge opening therein, a triangular spur projecting downwardly from the upper edge of and into said opening for preventing the passage of articles, in other than the correct position for setting, through said passage, a flat plate continuously revoluble in one direction for agitating articles inserted into the hopper, and means in the hopper for directing said articles toward said discharge opening comprising a resilient bent plate secured at one end to the hopper and having the other bent end thereof free and arranged on one side of the opening and in the path of the articles agitated by the plate to deflect



said articles from their normal path toward said opening, and a resilient stop on the other side of and adjacent the opening to prevent overthrow of said articles past the opening.

1,898,020. REGULATION. RALPH C. ROE, Englewood, N. J., assignor of one-half to Stephen W. Borden, Summit, N. J. Filed Jan. 28, 1930. Serial No. 423,913. 6 Claims. (Cl. 60—106.)



1. Apparatus of the character described comprising a first conduit, a second conduit, a flow-measuring element in each of said conduits, a flow-controlling element in one of said conduits, a movable member responsive to variations of flow in the first conduit, a movable member responsive to variations of flow in the second conduit, said movable members having spaced and contactable relations and means operable on contact of the movable members to control said flow-controlling element to move the movable members out of contact.

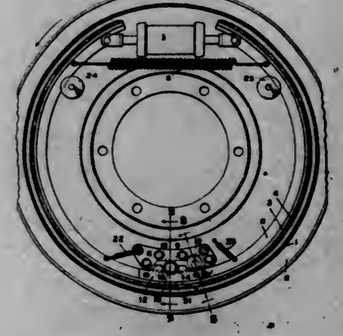
1,898,021. DISCHARGE CONTROL PROTECTING MEANS. EUGENE W. SCHELLENTRAGER, Shaker Heights, Ohio, assignor to Atlas Bolt & Screw Company, Cleveland, Ohio. Filed June 18, 1931. Serial No. 545,356. 5 Claims. (Cl. 214—41.)

1. A discharge controlling mechanism having an operating part, a driving mechanism including a member movable for connection thereof with and disconnection thereof from said operating part, means for moving said member, a protector for said member, and a strut between a stationary part and said member to automatically uncover



said member when the same is moved for connection with said operating part and to automatically cover said member when the same is moved for disconnection with said operating part.

1,898,022. BRAKE MECHANISM. STEVE SCHNELL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed June 1, 1931. Serial No. 541,355. 19 Claims. (Cl. 188—78.)

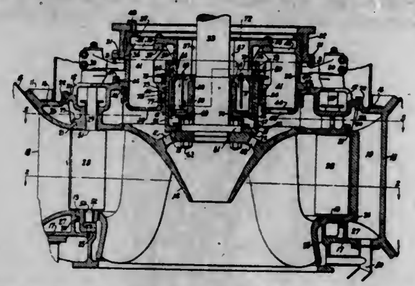


1. In braking apparatus, the combination of a rotatable drum, a friction member adapted to cooperate therewith, said member being capable of slight circumferential movement with the drum, and means for applying radial pressure to said member, said means comprising two abutment elements having inclined surfaces and an element in contact with both of said surfaces and adapted to roll thereon.

1,898,023. HYDRAULIC TURBINE. HARRY E. SMYSER, York, Pa., assignor to S. Morgan Smith Company, York, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1932. Serial No. 589,561. 13 Claims. (Cl. 253—117.)

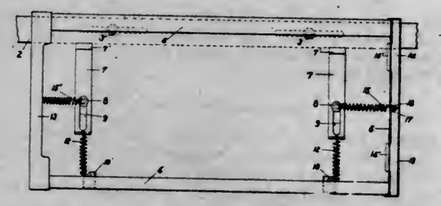
1. In a hydraulic turbine, the combination with a casing, of a runner, a shaft connected to the runner, a pack-

ing box supported by the casing, a bearing for the shaft carried by said packing box, and a packing gland inter-



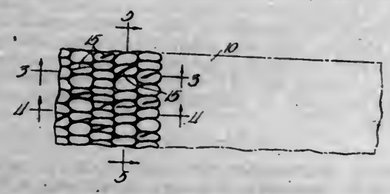
posed at a joint between said bearing and said packing box.

1,898,024. LICENSE PLATE HOLDER. WILLIAM H. VON HACHT, San Francisco, Calif. Filed July 10, 1931. Serial No. 549,061. 3 Claims. (Cl. 40—125.)



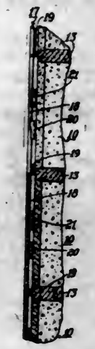
1. A license plate for automobiles comprising a substantially rectangular vertically disposed supporting plate completely covering the rear surface of a rectangular license plate adapted to be supported thereon in a plane substantially parallel therewith and opposed thereto, means carried by the supporting plate engaging over the top and bottom horizontal edges of the license plate securing the license plate thereto, the upper and lower edges of said supporting plate bent forwardly and inwardly toward each other to overbang the upper and lower front margins only of the license plate, a pair of vertical positioned strips vertically pivoted at an edge each to the opposite vertical ends of the supporting plate respectively to swing to a closed and open position, said strips adapted to overlie the front vertical end margins of the license plate when in closed position and to uncover the end margin when swung to open position, means resiliently holding said strips in closed position and means positively holding the strips in open position.

1,898,025. FRICTION MATERIAL. RUDOLF L. R. WILD, Chicago, Ill., assignor to Union Asbestos & Rubber Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 24, 1930. Serial No. 430,554. 9 Claims. (Cl. 189—425.)



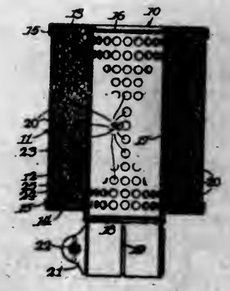
1. A friction material comprising asbestos fibers felted together and a plurality of electrolytic zinc bodies carried between said fibers and exposed at the surface of said material.

1,898,026. PANEL WALL. ARTHUR H. WILKINS, Pittsburgh, Pa. Filed May 5, 1932. Serial No. 609,394. 9 Claims. (Cl. 72—7.)



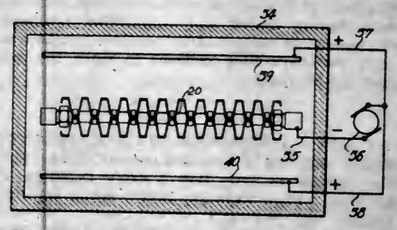
1. A wall structure comprising a plurality of horizontally disposed vertically spaced stationary supports, individual wall panels mounted on said supports, and means behind said panels adapted to releasably lock and retain said panels on the supports.

1,898,027. AIR FILTER. CHARLES A. WINSLOW, Vallejo, Calif. Filed Jan. 10, 1929. Serial No. 331,488. 6 Claims. (Cl. 183—45.)



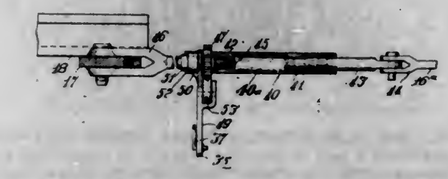
1. In an air filter, a casing formed by an outer endless foraminous wall, an inner endless foraminous wall spaced from said outer wall, and filter means in the space between said walls, said means comprising a backing of vegetable fiber adapted to be impregnated with oil with fibrous material of non-vegetable origin attached thereto.

1,898,028. SHEET METAL RADIATOR. IRVING T. BENNETT, Brooklyn, N. Y., assignor, by mesne assignments, to Metropolitan Engineering Company, Brooklyn, N. Y., a Corporation of New York. Filed June 20, 1929. Serial No. 372,298. 15 Claims. (Cl. 29—157.3.)



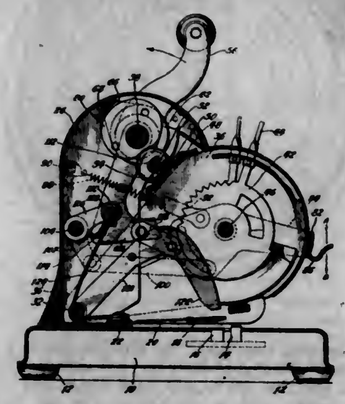
12. Heat radiating vanes for a heating element which comprises a thin backing of relatively poorly conducting metal having surfaces to fit said heating element and surfaces extending from said heating element, and a relatively thicker layer of metal of high conductivity on said backing, the thickness of said layer decreasing at increasing distances from said heating element.

1,898,029. SLACK ADJUSTER FOR RAILWAY CAR BRAKES. RICHARD W. BURNETT, Chicago, Ill. Filed Jan. 14, 1929. Serial No. 332,552. 2 Claims. (Cl. 188—197.)



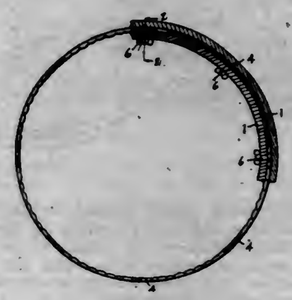
1. In a slack adjuster for the brake rigging of a railway car, the combination with the floating and cylinder levers of said rigging, of a sectional connector for connecting said levers comprising a rod pivotally attached to one lever, a rod pivotally attached at one end to the other lever and formed at the other end with a clevis, a shorter rod, of greater diameter than the last mentioned rod, pivotally attached to the last mentioned rod and provided at its other end with screw threads, a turn buckle connecting the threaded end of the last mentioned rod with the rod first above mentioned.

1,898,030. CHECK WRITER. JOHN W. CARLSON, Chicago, Ill., assignor to Hedman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 7, 1929. Serial No. 391,068. 14 Claims. (Cl. 101—20.)



1. In a check writer, the combination of a base, a serrated platen mounted on said base, a frame pivoted relative to said base, printing type mounted in said frame for selective cooperation with said platen, a pair of plates rigidly secured to said base, a bearing member rotatably mounted in each of said plates, an operating shaft eccentrically mounted for rotatable movement in said bearing members, a cam secured to said operating shaft, a roller mounted on said pivoted frame and engageable with said cam, and means for adjustably rotating said bearing members and holding them in adjusted position whereby the position of said cam relative to said roller may be adjusted so that upon rotation of said shaft the type in said frame will be moved a predetermined distance relative to said platen.

1,898,031. APPARATUS FOR MANUFACTURING BAND SAW WHEEL TIRES AND THE LIKE. ANDREW G. CARTER, Grand Rapids, Mich., assignor to The Carter Products Company, Inc., Grand Rapids, Mich. Filed July 20, 1929. Serial No. 379,688. 2 Claims. (Cl. 18—42.)



2. An apparatus for manufacturing a cushion tire for band saw wheels, which tire comprises a central reinforcing band having supporting plates with screw threaded apertures, comprising a ring mold divided into upper and lower members with recesses for forming the tire and with radial relief apertures and with depressed scallops in its inner surface, and having radially disposed set screws for engaging the screw plates and attaching and adjusting the reinforcing band in position within the mold to receive a body of rubber to be vulcanized.

1,898,032. IONIC BOMBARDMENT LIGHT SOURCE. RAYMOND T. CLOUD, Chicago, Ill., assignor, by mesne assignments, to General Theatres Equipment, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 4, 1930. Serial No. 499,898. 7 Claims. (Cl. 176—123.)

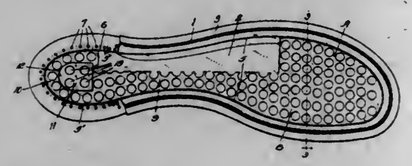


2. In an ionic bombardment light source device of the character described, the combination of an electrode comprising a holder for a cathode proper, said holder having a recess therein, a cathode proper comprising a material of substantially high ion-emissive properties and high heat-resisting properties and being in finely divided form tightly packed in said recess, and an anode electrode in the form of a ring surrounding the axis of said recess and being adjacent to said cathode proper, said electrodes being in a receptacle having a clear space for light at a place opposite the cathode proper, said receptacle containing inert gas.

1,898,033. SHOE AND THE METHOD OF MAKING SAME. ABRAHAM COHN, St. Louis, Mo. Filed June 23, 1930. Serial No. 463,214. 4 Claims. (Cl. 12—142.)

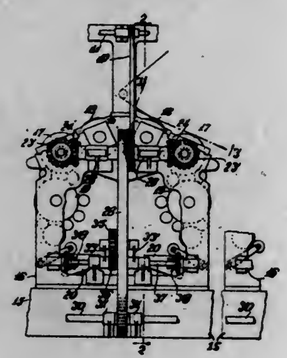
1. The method of manufacturing Goodyear welt shoes consisting in cementing a resilient rubber filler having a thickened central heel portion upon the lower face of the insole of the shoe and within the cavity formed by stitching the insole to the lower edge of the upper of the shoe, its lining and the welt and by turning under and tacking the lower edge portion of the heel section of the upper and its lining and counter to the heel section of the in-

sole which forms also the heel seat for the shoe, applying a shank stiffener having an integral heel plate section provided with a central aperture upon the rubber filler with the thickened central heel portion of the rubber filler receivable in the central aperture of the heel section of the shank stiffener, tacking the shank stiffener and



its heel plate section against displacement upon the resilient rubber filler, stitching an outsole to the welt and nailing the heel portion of the outsole to the heel seat of the shoe with the resilient rubber filler and the shank stiffener and its heel plate section interposed between the insole and outsole of the shoe.

1,898,034. PRINTING PRESS. CURTIS S. CRAFTS, Oak Park, Ill., assignor to The Goss Printing Press Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 6, 1930. Serial No. 433,749. 12 Claims. (Cl. 101—220.)



1. In a printing press, the combination of a frame, a press unit mounted thereon comprising a plurality of cooperating form and impression cylinders, a shaft journaled on said frame beneath said unit, a gear mounted on said shaft in parallel position with respect to the face of the frame, a second gear revolubly mounted on the press unit at right angles with respect to said cylinders, positively acting endless belt driving connections between said two gears, a third gear rotatable with said second gear in parallel position with respect thereto, and additional gears carried by the form cylinder of one printing couple and by the impression cylinder of the other printing couple and meshing with said third gear for driving said cylinders in cooperative relation.

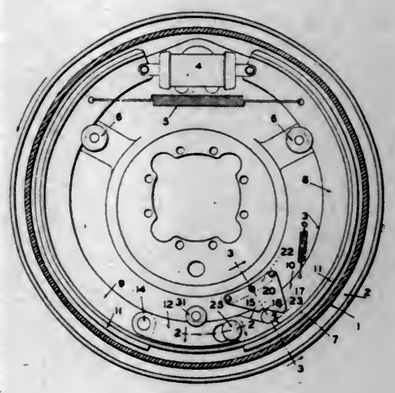
1,898,035. LINK BELT. JAMES K. DIAMOND, Grand Rapids, Mich., assignor to Clipper Belt Lacer Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Jan. 29, 1931. Serial No. 512,000. 6 Claims. (Cl. 74—64.)

1. In a link belt, the combination of a plurality of coacting links comprising block-like facing members of resilient material having inwardly converging faces, strap-like body members disposed about said facing members with their ends in overlapping relation and secured to said facing members by rivets arranged therethrough and through the overlapping ends of said body members, the ends of said body members being extended beyond said facing members to provide coupling loops, said coupling loops having converging arms and flat bight portions one of said coupling loops being slotted to receive the cou-



pling loop of an adjacent link, and coupling pins, each comprising a pair of coacting members in supporting engagement with the straight bight portions of said loops to swing therewith, said coupling members having rocking engagement and being provided with co-engaging parts whereby they are supported against relative lateral and longitudinal sliding movement upon each other.

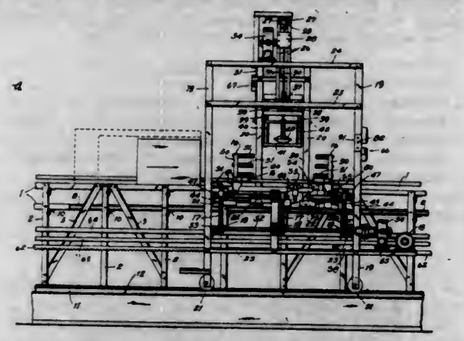
1,898,036. BRAKING APPARATUS. BURNS DICK, Ferguson, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed May 16, 1932. Serial No. 611,587. 13 Claims. (Cl. 188—78.)



1. In braking apparatus, the combination of a drum, a brake band adapted to have its ends expanded into engagement with the drum, said band comprising a lining carrying portion and a reinforcing web and said web comprising two portions having spaced apart ends intermediate the ends of the band, means connected to the end of one of said web portions and extending to a point adjacent the end of the other web portion, nd means for applying an outward pressure to the band, said pressure being transmitted through said first named means.

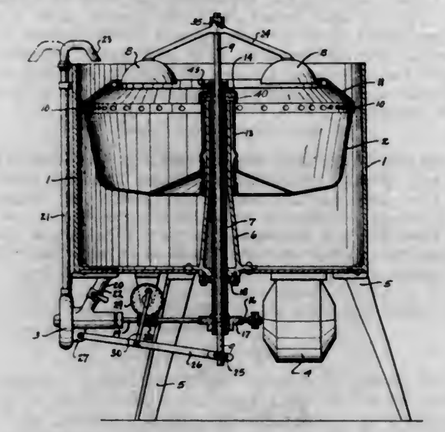
1,898,037. CONVEYING AND LOADING DEVICE. FRANK J. DIETZ, Baltimore, Md., assignor to Alvey Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed July 17, 1930. Serial No. 468,507. 17 Claims. (Cl. 198—21.)

1. A conveying and loading device comprising a conveyor, a framework associated therewith, means for moving said framework along said conveyor, shifting means provided on said framework for shifting an article from



said conveyor, a tilting platform adapted to receive an article shifted from said conveyor, and means under the control of said shifting means for tilting said platform.

1,898,038. WASHING MACHINE. GEORGE W. DUNHAM, Utica, N. Y., assignor, by mesne assignments, to The Whirldry Corporation, New Haven, Conn., a Corporation of Connecticut. Filed Aug. 22, 1924. Serial No. 733,482. 7 Claims. (Cl. 68—19.)



1. In a laundry machine, a tank, a hollow pedestal extending upwardly in said tank, a receptacle having a tubular upstanding hub, said hub telescoping with and having direct bearing on said pedestal, a tubular shaft within and having direct bearing relation with said pedestal, agitating means operating in said receptacle, a second shaft within and having direct bearing relation with said tubular shaft, and means whereby one of said shafts drives said receptacle for drying and the other of said shafts drives said agitating means for washing.

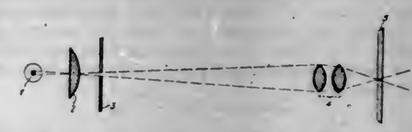
1,898,039. PROCESS FOR PRODUCING HOMOGENEOUS GLASS IN TANKS. FRITZ ECKERT, Berlin, Germany, assignor of one-fourth to William A. Morton and one-fourth to Paul L. Geer, Pittsburgh, Pa. Filed Mar. 1, 1928, Serial No. 258,268, and in Germany Mar. 4, 1927. 7 Claims. (Cl. 49—54.)

3. The method for the making of homogeneous glass consisting in refining the glass, thereafter vertically and laterally flowing and mechanically stirring the glass in a relatively small mass at a temperature higher than the working temperature of the glass into a homogeneous condition at a location between the zone of refining and the zone of working, and in rapidly discharging the glass from said mass directly to a working zone and at the



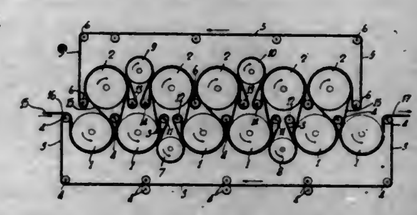
same time rapidly reducing the temperature of the glass from the said higher temperature to the working temperature.

1,898,040. PRODUCTION OF SOUND AND SOUND PICTURE RECORD. BYRON E. ELDRED, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 15, 1931. Serial No. 562,900. 5 Claims. (Cl. 274—5.)



1. The method of reducing ground noise during reproduction of sound from a photographic record located in an emulsion supported on a base which includes covering said emulsion with a protective layer of a thickness which is of appreciable magnitude as compared to the objective focal length of the lens system through which light is applied to said record.

1,898,041. FELT DRIER. WILLIAM P. FEENEY, Manistee, Mich. Filed Nov. 11, 1930. Serial No. 494,856. 2 Claims. (Cl. 34—48.)

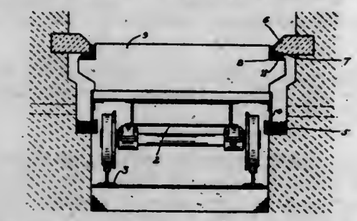


2. In a paper drying device, a plurality of cylinders comprising a series of heated paper cylinders, means for passing wet paper around said cylinders, said means including an endless felt band operating around said series of paper cylinders, a plurality of felt drier cylinders placed at intervals intermediate a series of paper drier cylinders, and adapted to be contacted solely by said felt band whereby the moisture is continuously and at progressively intermediate points in the series removed from a felt band of a series of paper cylinders, guides associated with said cylinder and said band adapted to hold the band in close contact with said paper and subsequently to direct the paper contacting surface of said drier band next to and about said felt drier cylinders.

1,898,042. SAND SEAL FOR TUNNEL KILNS. EDWIN B. FORSE and CHARLES F. GEIGER, Metuchen, N. J., assignors to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Oct. 24, 1930, Serial No. 490,939, and in Great Britain July 8, 1928. 2 Claims. (Cl. 25—142.)

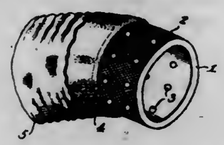
1. In a tunnel kiln a car track, a refractory platform mounted to run on said track between the side walls of

the tunnel, and means for reducing the transfer of heat from the chamber above the platform to the running gear underneath, said means comprising a projection from a side wall of the tunnel into a sand pocket included between the top of the platform and a projection extending laterally from the platform at a short distance below the top and into a recess below said wall projection to form



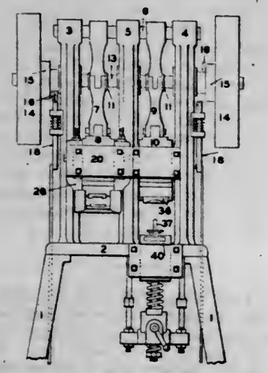
an overflow sand seal fed from said first-mentioned seal, the projection from the side wall being sloped downward toward the track to provide a gradually diminishing clearance in the first-mentioned sand seal, and a third seal formed by a thin plate extending down from the platform into a sand trough arranged to catch sand from said second sand seal.

1,898,043. FORM FOR MANUFACTURE OF RUBBER ARTICLES AND PROCESS OF MAKING SAME. BOUTWELL H. FOSTER, Maplewood, N. J., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Dec. 28, 1928. Serial No. 329,054. 12 Claims. (Cl. 18—41.)



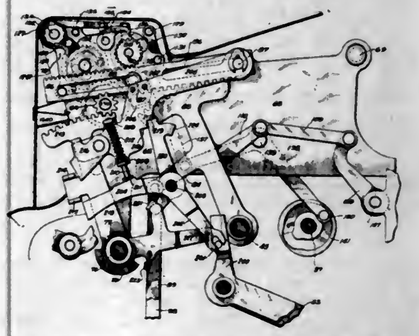
9. A form upon which rubber articles may be manufactured by filtration comprising a circular tubular mandrel having a channeled surface and apertures therethrough, a seamless sleeve of woven fabric disposed over the mandrel and conforming to the contours thereof so as to present a smooth surface, and a filtering medium thereover.

1,898,044. SHOE HEEL MACHINE. ALBERT F. FROUSSARD, St. Louis, Mo. Filed July 22, 1931. Serial No. 552,304. 5 Claims. (Cl. 12—31.5.)



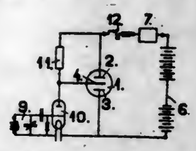
1. In a device of the class described, the combination with a plunger, of a die carried thereby, a pair of cheek pieces forming a guide way for said plunger, a yoke suspended from said cheek pieces, a die carried by said yoke and cooperating with the first named die, and means for vertically adjusting the yoke with respect to the cheek pieces, whereby the cooperation of the dies may be regulated without varying the stroke of the plunger.

1,898,045. CASH REGISTER. FREDERICK L. FULLER, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Apr. 1, 1926. Serial No. 99,021. 30 Claims. (Cl. 235—130.)



1. In a cash register, the combination with mechanism for printing upon issued checks or inserted slips, of a manipulative lever for issuing said checks, means for locking said manipulative lever, and means dependent upon the absence of an inserted slip for disabling the locking means whereby the manipulative lever is freed for operation.

1,898,046. ELECTRIC RELAY DEVICE FOR INDICATING WEAK CURRENTS. RUDOLF HERMANN HEINRICH GEFFCKEN and RUDOLF HANS RICHTER, Leipzig, Germany, assignors to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 12, 1924, Serial No. 749,573, and in Germany Nov. 15, 1923. 18 Claims. (Cl. 175—320.)



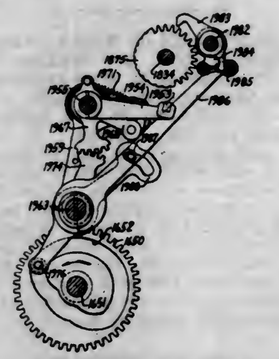
1. An electrical relay device for switching considerable current by extremely weak current, comprising a gas discharge tube, solid main electrodes and an auxiliary electrode situated therein, said main electrodes being connected to a source of controlled energy supply of too low a value normally to produce ionization and start a discharge means for imposing an auxiliary potential upon said auxiliary electrode, further means for imposing controlling potential upon said auxiliary electrodes, said auxiliary potential being of such value that upon the imposition of a low controlling potential the tube becomes ionized and a low voltage arc discharge is started between said main electrodes.

15. In an electrical relay device comprising a vessel filled with a uniform gaseous atmosphere, solid main electrodes within said vessel, an auxiliary electrode within said vessel, sources of operating potential and biasing potential for said main electrodes and for said auxiliary electrode, respectively, further means for applying controlling potential upon said auxiliary electrode, said operating and biasing potentials being of such value that normally substantially no ionization is produced of said atmosphere, and said biasing potential being further of such value, that with the imposition of a low additional controlling potential ionization is started and a low voltage arc discharge is initiated between said main electrodes.

1,898,047. BEER MANUFACTURE. MAX GLAUBITZ, Berlin, and HUGO HAEHN, Berlin-Finkenkrug, Germany, assignors to Versuchs- und Lehranstalt für Brauerei in Berlin, Berlin, Germany, a Corporation of Germany Filed June 4, 1930, Serial No. 459,413, and in Germany June 10, 1929. 7 Claims. (Cl. 195—1.)

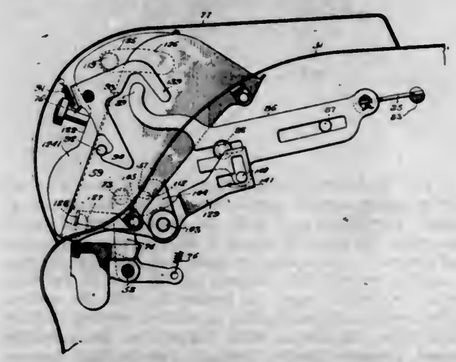
1. A process for the manufacture of beer which consists in adding to a wort sugars which will be fermented by yeast not attacking maltose, and then fermenting the wort with yeast which does not attack maltose.

1,898,048. AUDITING MACHINE. MAXIMILIAN M. GOLDBERG, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Sept. 7, 1926, Serial No. 134,025. Divided and this application filed Jan. 31, 1930. Serial No. 425,003. 10 Claims. (Cl. 101—93.)



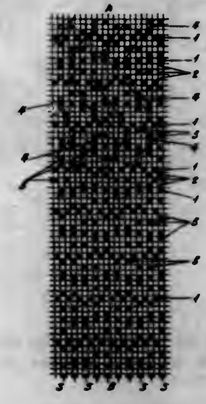
1. In a machine of the class described; the combination with an impression hammer; and type carriers; of means to impel the hammer against the type carriers; means to actuate the impelling means; and means carried by the actuating means and tripped by the actuating means to release the impelling means.

1,898,049. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed July 2, 1926. Serial No. 120,023. 15 Claims. (Cl. 235—130.)



1. In a machine of the class described, the combination of a printing totalizer, a printing mechanism for effecting total printing impressions from the printing totalizer upon a record bearing material, means for normally locking the printing mechanism, manual means normally inaccessible for disabling the locking mechanisms, means whereby the total printed upon the record strip is concealed from view, and a supplemental means capable of disabling the concealing devices and rendering said manual means accessible.

1,898,050. WEFT-PILE VELVET. LEVI HAYES, Pendleton, England, assignor of one-half to Richard Haworth & Company Limited, Manchester, England. Filed May 6, 1931, Serial No. 535,365, and in Great Britain May 29, 1930. 2 Claims. (Cl. 139—392.)



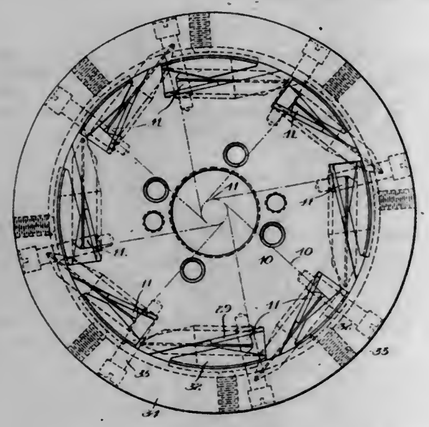
1. A fast-bound weft-pile velvet comprising floats of weft, bound in at extremes thereof by alternate warp ends passing over the weft at the face of the fabric, said alternate warp ends occurring at alternate picks of said weft, after the manner of a twill weave, then a group of binding picks, followed by further floats of weft, bound in at extremes thereof by alternate warp ends passing over the weft at the face of the fabric, said alternate warp ends occurring at alternate picks of said weft, after the manner of a twill weave, the direction of said twill weave being opposite to that of the former twill weave named, repetitions of all the foregoing down the length of the piece, whereby the directions of the twill weaves referred to take a zigzag course down said fabric, and whereby a twill-less velvet is produced after the cutting of the floats of weft and the finishing of the cloth, as herein set forth.

1,898,051. GEAR CUTTER. ERNEST C. HEAD, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Feb. 27, 1930. Serial No. 431,801. 26 Claims. (Cl. 29—105.)

1. A blade for a rotary face mill gear cutter which has converging side faces and is of uniform cross-section throughout its length and has one end face sharpened at other than a right angle to its base to provide a cutting face of generally trapezoidal shape, the shorter of the two parallel legs of the trapezoid constituting the tip cutting edge of the blades and one of the non-parallel legs of the trapezoid forming a side cutting edge.

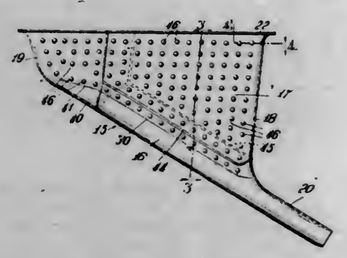
14. A gear cutter comprising a rotatable head having a plurality of V-shaped pockets formed therein and a plurality of cutting blades secured in said pockets with their cutting portions projecting beyond the adjacent face of the head in the direction of its axis, each of said blades being of prismoidal shape, the walls of each of said pockets

being inclined at an angle to one another equal to the angle between the adjacent side and the base of the blade secured therein and the inside wall of the pocket being



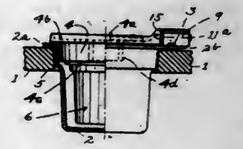
further inclined to the periphery of the head at an angle determined by the clearance required for the cutting edge of the blade secured therein.

1,898,052. THERMIC SIPHON AND METHOD OF MAKING THE SAME. WALTER H. HINSCH, Chicago, Ill., assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,146. 7 Claims. (Cl. 29—157.4.)



1. The method of making a thermic siphon which consists in providing a tubular portion having laterally spaced side walls and a transversely rounded bottom, providing at least two body sections each including laterally spaced side walls, trimming end and bottom portions of said side walls of each body section to fit the like walls of said tubular section and also to fit each other to make them match and then securing the matched edges of the several sections together.

1,898,053. INKWELL. AUGUSTUS O. HOOK, Boston, Mass. Filed Apr. 7, 1932. Serial No. 603,772. 6 Claims. (Cl. 120—58.)

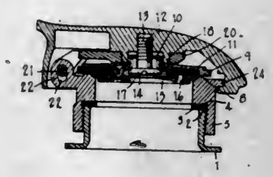


1. In an inkwell embodying a container and inkpot removably inserted therein, a device for locking said pot against removal from the container which consists of a spring-operated latch carried by the container and adapted to engage said pot in its locking position.

1,898,054. PRODUCTION OF WHITE LEAD. JOHN W. ILIFF, Wilmington, Del., and WILLIAM J. LINDSAY, Norwood, Pa., assignors, by mesne assignments, to National Lead Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 10, 1926, Serial No. 128,352. Renewed Feb. 20, 1929. 5 Claims. (Cl. 23—73.)

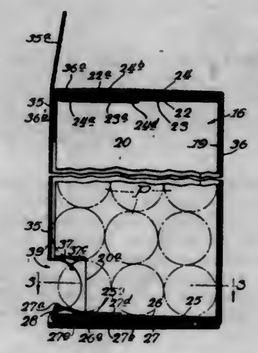
1. In the production of white lead by the corrosion of granular lead with liquid and gaseous corroding agents including uncombined water, CO_2, and acetic acid, the process which comprises agitating the lead mass and subjecting it to a continuous succession of moistening and drying cycles repeated at short intervals not exceeding two hours while maintaining the varying moisture content of the lead mass between a maximum of .7% and a minimum low enough to permit rubbing off of the corroded material without excessive dusting.

1,898,055. CAP FOR RADIATOR NECKS AND THE LIKE. LEWIS A. JARVIS, Grand Rapids, Mich., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Filed Mar. 14, 1932. Serial No. 598,747. 6 Claims. (Cl. 220—24.)



1. The combination with a body member having an upwardly facing annular gasket seat, of an annular hinge member pivoted to said body for limited vertical movement when the cover is closed, a cover having an annular stud disposed in said hinge member and rotatable therein, a resilient closure disk disposed on the end of the stud and having central openings registering with the opening in the stud, a gasket having a central opening therein larger than said closure disk disposed on the underside thereof, a support member having a central part disposed through said opening in said closure disk and engaged within said stud, said support being shouldered to engage said closure disk and said gasket, a screw threaded into said cover and having a head disposed within said support member, a retaining disk secured to said support member and having a tool opening of a less diameter than the head of the screw whereby the screw is rotatably retained within the support, and coacting latch lugs and keepers on said cover and body member adapted to be engaged and disengaged by a rotative movement of the cover relative to said body member.

1,898,056. DISPENSING CARTON. EDWARD W. JOHNSON, Chicago, Ill., assignor to Chicago Carton Company, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1930. Serial No. 470,068. 15 Claims. (Cl. 229—17.)

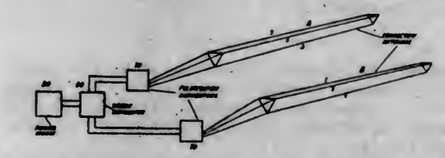


1. In a paper carton of the class described, the combination of front, side and back walls forming a tubular body, and top and bottom closures for said body, the front wall being provided with a dispensing opening adjacent the bottom closure, one of said side walls being cut away at the adjacent end of said dispensing opening to provide a finger recess to facilitate withdrawal of an article from the carton through said dispensing opening, and means overlying said bottom wall for yieldingly resisting withdrawal of articles from the carton through said dispensing opening.

1,898,057. YEAST COMPOSITION FOR USE IN CANDY MAKING. ZOLTAN J. KISH, Pittsburgh, Pa., assignor to Northwestern Yeast Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 3, 1929. Serial No. 397,153. 3 Claims. (Cl. 96—16.)

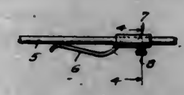
2. A new composition of matter for use in candy making, comprising glycerine, citric acid, magnesium sulphate and live yeast.

1,898,058. CORKSCREW RADIATION. NILS E. LINDENBLAD, Shoreham, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 17, 1927. Serial No. 213,566. 2 Claims. (Cl. 250—11.)



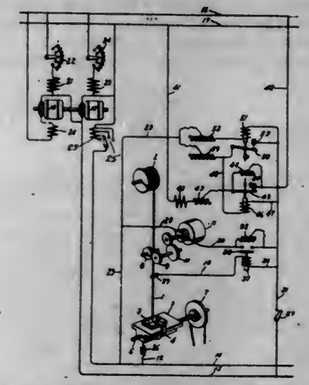
1. The method of propagating high frequency energy which includes rotating the plane of polarization of a directively emitted wave to obtain directive corkscrew radiation, and wobbling the directivity of the corkscrew radiation at a frequency lower than the rotative frequency.

1,898,059. SECURING MEANS FOR SPECTACLES. LELAND J. MCDONALD, Pawhuska, Okla. Filed Aug. 6, 1931. Serial No. 555,571. 2 Claims. (Cl. 24—3.)



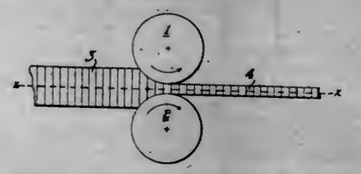
1. Securing means for a pair of spectacles, comprising a longitudinally split tubular body designed to receive a temple bar of the spectacles, an elongated resilient tongue extending from one end of the tubular body and bowed outwardly intermediate its ends away from longitudinal center of the body, the free end of the said tongue being designed to resiliently engage the temple bar extending through the tubular body, and a set screw threaded through the tubular body for engagement with the said temple bar.

1,898,060. METHOD AND APPARATUS FOR ELECTRIC ARC WELDING. PAUL O. NOBLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 11, 1919, Serial No. 323,170. Renewed July 15, 1932. 17 Claims. (Cl. 219—8.)



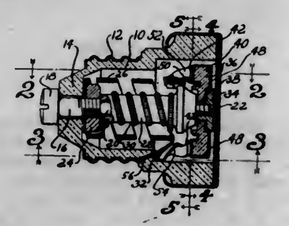
1. An arc welding device comprising an arc welding circuit for containing an electrode adapted to maintain a welding arc, a feed device for said electrode, an electric motor driving said device, a resistance in the field circuit of said motor, a vibratory electro-magnetic switch for making and breaking a circuit shunting said resistance and circuit connections between said switch and the terminals of the welding arc whereby said switch is responsive to voltage variations of the arc.

1,898,061. TREATMENT OF ELECTRICAL SHEET STEELS. OTHO M. OTTE, Tarentum, Pa., assignor to Allegheny Steel Company, a Corporation of Pennsylvania. Filed Sept. 27, 1929. Serial No. 395,751. 11 Claims. (Cl. 148—12.)



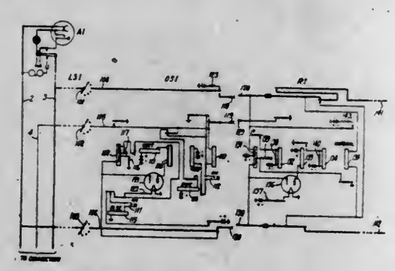
6. A process of treating silicon steel to reduce its watt loss including the steps of rolling the steel to gauge, reheating it, stressing its opposite sides unequally, and thereafter straightening and annealing.

1,898,062. **FUSE.** JOSHUA PATRICK, Detroit, Mich. Filed Aug. 10, 1929. Serial No. 384,996. 3 Claims. (Cl. 200—126.)



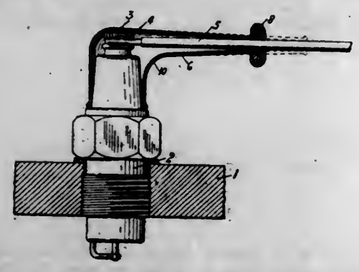
1. A fuse of the class described comprising a plurality of fusible elements, an electrical connection through one of said fusible elements, a heating coil shunted across the electrical connection through said element, and means responsive to the changes in the temperature of said heating coil for changing the electrical connection from one fusible element to another.

1,898,063. **TELEPHONE SYSTEM.** RODNEY G. RICHARDSON, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed June 27, 1930, Serial No. 464,156. Renewed Aug. 18, 1932. 84 Claims. (Cl. 179—16.)



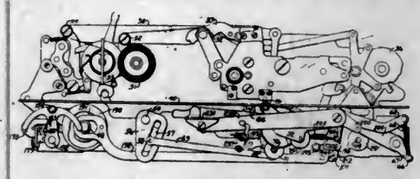
5. In combination, a selector switch, a line incoming thereto, a vacuum tube, a relay arranged to be energized in series with said line to close a filament-lighting circuit for said vacuum tube, the grid element of said vacuum tube being connected to a conductor of said incoming line, an operating magnet for said selector switch, and a circuit for said operating magnet including a current source and the filament and plate elements of the vacuum tube.

1,898,064. **INSULATOR FOR SPARK PLUGS.** WILLIAM F. RIDGE, Akron, Ohio. Filed Dec. 28, 1927. Serial No. 243,020. 2 Claims. (Cl. 173—259.)



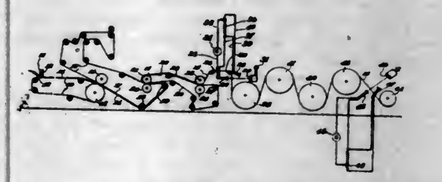
1. In combination an insulator and a spark plug having an electrical conductor leading thereto, said insulator comprising a flexible, resilient, rubber sleeve tapering from a diameter at its larger end adapted to fit snugly about the spark plug body gripping the same due to the inherent resilience of the rubber to a diameter at its smaller end to fit snugly about the electrical conductor, the smaller end of the insulator being rolled upon itself and thereby gripping the conductor.

1,898,065. **CASH REGISTER.** PASCAL SBURLINO and HARRY F. GAEKE, Dayton, Ohio, assignors to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Oct. 12, 1927. Serial No. 225,726. 14 Claims. (Cl. 101—67.)



1. In a machine of the class described, the combination of a driven roller, a tension roller adapted to contact the driven roller, operating means to withdraw the tension roller from the driven roller, operable during every operation of the machine, automatic means to determine the effectivity of the operating means, and a driving device adapted for adjustment by the automatic means, to cause the operating means to withdraw the tension roller from the driven roller.

1,898,066. **METHOD OF MEASURING WEB CHARACTERISTICS.** LOUIS P. SCHWEITZER and SAMUEL M. BAGNO, New York, N. Y., assignors to Peter J. Schweitzer, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 22, 1930. Serial No. 490,375. 3 Claims. (Cl. 73—51.)



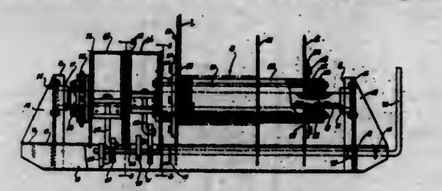
1. In a process of manufacturing a paper web, the herein-described method of measuring characteristics of said web, which consists in projecting a beam of radiant energy through said web from a source on one side of the web to a thermo-electric couple on the other side of the web, projecting a second beam from said source directly against a second thermo-electric couple, and causing the currents induced by said couples oppositely to actuate a current-measuring instrument so that the readings of said instrument will indicate the effect upon the first-named beam of its passage through the web irrespective of variations in the source itself.

1,898,067. **SAND REEL.** FREDERICK STONE, Los Angeles, Calif., assignor to Doheny-Stone Drill Co., Los Angeles, Calif., a Corporation of Delaware. Filed Dec. 15, 1930, Serial No. 502,381. Renewed July 5, 1932. 6 Claims. (Cl. 74—34.)

1. In a device of the character described, a shaft, a reeling drum keyed to said shaft, a driving sleeve keyed to said shaft, a ring gear fixed to said sleeve, a second ring gear mounted on said sleeve for rotation thereabout, said second ring gear being in spaced opposition to the first mentioned ring gear, a drive sprocket on the second ring

CARNEGIE LIBRARY OF ATLANTA

gear, a planet gear carrier having an external drum face and mounted on said sleeve for rotation thereabout, said carrier being positioned between said ring gears, planet



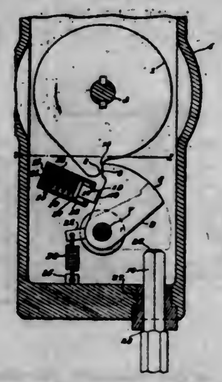
gears carried by said carrier and held thereby in mesh with said two ring gears, a constrictable brake band about said drum face, and means for constricting said band.

1,898,068. **WELDING ELECTRODE.** LUCIAN B. THOMPSON, Scotia, and VERNI J. CHAPMAN, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Jan. 28, 1932. Serial No. 589,388. 5 Claims. (Cl. 219—8.)



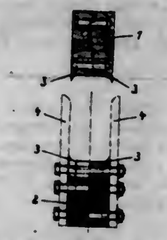
3. A welding electrode having a covering of cellulosic material impregnated with a material of substantially the following composition: low carbon ferro-manganese 10 parts by weight; talc 10 parts by weight; feldspar 30 parts by weight, and liquid sodium silicate 24 parts by weight.

1,898,069. **HAMMER.** ERWIN W. TSCHUDI, Baltimore, Md., assignor to The Black & Decker Manufacturing Company, Towson, Md., a Corporation of Maryland. Filed June 14, 1929. Serial No. 370,796. 3 Claims. (Cl. 78—38.)



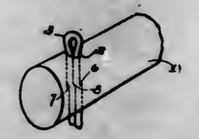
2. A power hammer including the combination of two parallel spaced axes, a rotary actuator on one axis and an oscillating hammer on the other axis constructed to travel on a predetermined path from a point substantially in line with the centers of the two axes to a point at which it delivers its blow, a stop for limiting said travel whereby a hammer portion is located substantially on said line between said axes, said actuator having a projecting abutment so constructed that it will project into the path of said portion only at and immediately beyond said limited position of the said hammer portion whereby said actuator through its abutment when rotated will deliver a tangential blow to said hammer, which hammer travels the remainder of its path under the momentum of such blow, the abutment immediately passing out of contact therewith and an anvil situated in the path of the hammer to receive the momentum from said hammer.

1,898,070. **APPARATUS FOR MAKING WATER DRUMS OF WATER-TUBE BOILERS.** MAX ULRICH, Stuttgart, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Nov. 11, 1930, Serial No. 494,848, and in Germany Nov. 16, 1929. 2 Claims. (Cl. 153—69.)



1. Apparatus for manufacturing water-drums for water-tube boilers with corrugated walls from straight tubes approximately rectangular in cross-section by the use of upper and lower dies and guide walls which support without gaps the sides of the tubes, which are left straight, and between which at least one of the dies slides, characterized in that the corrugated surfaces of the upper and lower dies which produce the corrugated form have on their longitudinal sides continuous projections, beak-shaped in cross-section, which form an arch between the working surfaces of the upper and lower dies and the contact surfaces of lateral guide walls.

1,898,071. **PIN LOCK.** GEORGE W. WILDIN, Pittsburgh, Pa. Filed Apr. 30, 1932. Serial No. 608,435. 1 Claim. (Cl. 85—7.)

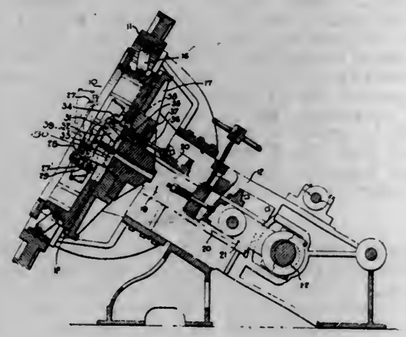


A pin lock, comprising a pin provided with a single passage formed by an unbroken wall extending transversely through the pin, said passage having straight offset end portions whose axes are parallel to each other, said end portions being joined by an angularly disposed intermediate straight portion, and a locking key of ductile metal in and bodily conformed to said passage to resist removal therefrom.

1,898,072. **RING FORMING MACHINE.** CHARLES L. WILES, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 8, 1928. Serial No. 244,359. 7 Claims. (Cl. 78—15.)

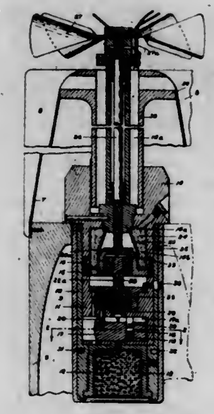
3. In a machine of the character described, a plurality of radially acting dies which receive and act upon the

work, a reciprocating head operatively connected to the dies to reciprocate the same, a work ejector movably con-



nected with the head, and means for reciprocating the head and for moving said work ejector with respect to the head to positively eject the work therefrom.

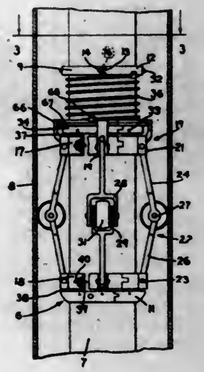
1,898,073. DELAY FUSE FOR DROP BOMBS. DAVID L. WOODBERRY, Baltimore, Md., assignor to Secretary of War of the United States of America. Filed Sept. 20, 1926. Serial No. 136,658. 12 Claims. (Cl. 102—36.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



2. A time fuse for bombs including a casing, a slidable bolt mounted transversely in the casing, a primer in said bolt, a plunger carrying means for normally holding the bolt in unarmed position, a soluble member for restraining the plunger against movement, a container adjacent the plunger and having a frangible wall, a solvent of predetermined strength in the container and means operable during flight for rupturing the wall and liberating the solvent, said means also serving when in place to assure retention of the plunger.

1,898,074. ANTIFRICTION BEARING. CLARENCE R. BAILEY, Los Angeles, Calif., assignor to Carol Supplies, Inc., Los Angeles, Calif., a Corporation of Arizona. Filed Aug. 21, 1930. Serial No. 476,735. 10 Claims. (Cl. 308—6.)

1. A spacer for a column movably disposed within a casing, comprising a plurality of jointed arms, means for mounting said arms in angularly spaced relationship about said column, means pressing one end of each arm toward



the other end thereof, and antifriction means carried by each of said arms at the joint therein.

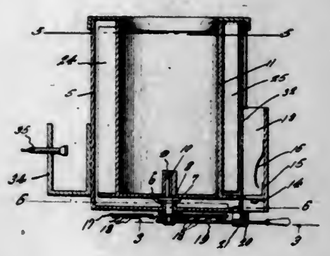
1,898,075. ALLYL CITRYLIDENE ACETONE AND PREPARATION OF SAME. HENRI BARBIER, Geneva, Switzerland, assignor to Givaudan-Delawanna, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 18, 1930. Serial No. 482,906. 8 Claims. (Cl. 260—132.)

1. As a new compound, allyl cyclo citrylidene acetone.

1,898,076. SULPHUR BLACK AND PREPARATION OF THE SAME. GEORGE BARNHART, Salem, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 25, 1926. Serial No. 144,177. 16 Claims. (Cl. 260—21.)

1. In the process of manufacturing dry sulphur black which involves thionation of nitrophenol intermediate precipitation of the black in a non-acid medium and drying the precipitate, the step of acidifying the precipitated black before drying to show in aqueous suspension a hydrogen ion concentration of at least 10^{-4}.

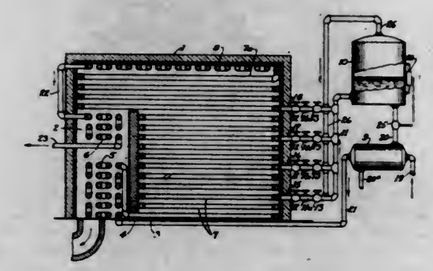
1,898,077. COMBINATION CIGARETTE HOLDER, ASH RECEIVER, AND IGNITER. GLENN W. BOWMAN, Haymarket, Va., assignor to Evoly L. Gough, Nokesville, Va. Filed Apr. 10, 1931. Serial No. 529,185. 4 Claims. (Cl. 312—86.)



1. A device of the character described comprising a shell, a cylinder in the shell, a cap for the shell, said cylinder and shell being spaced apart to provide a chamber for receiving articles to be dispensed, said shell being

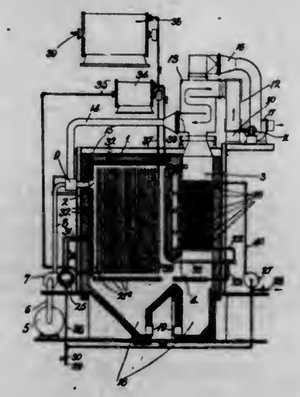
provided with an opening therein, means for rotating the cylinder, a single follower on the cylinder projecting into the article space, and a deflector plate on the cap depending into the article space adjacent the said opening in the said shell.

1,898,078. STEAM GENERATOR. WALTER M. CROSS, Kansas City, Mo., assignor to Babcock & Wilcox Co., New York, N. Y., a Corporation of New Jersey. Filed May 26, 1927. Serial No. 194,328. 13 Claims. (Cl. 122—1.)



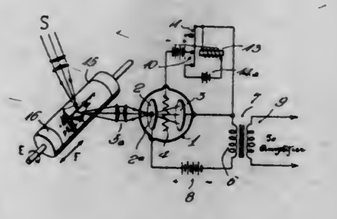
1. In a steam generator, the combination with a heating means, comprising an elongated sinuous coil, a water separator interposed in the heating coil and manifold connections between the coil and separator for diverting fluid and solids through the separator and back to the coil during continuous operation, at one of a plurality of selected points.

1,898,079. STEAM GENERATOR. WALTER M. CROSS, Kansas City, Mo., assignor to Babcock & Wilcox Co., New York, N. Y., a Corporation of New Jersey. Filed Apr. 16, 1928. Serial No. 270,457. 6 Claims. (Cl. 122—235.)



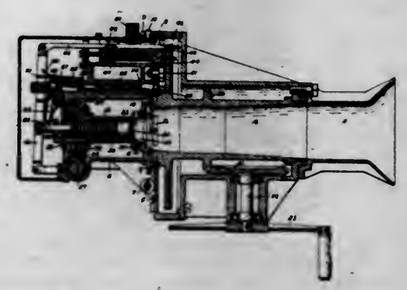
1. In a steam generator a convection tube section and radiant tube sections connected together to permit flow successively therethrough, the cross-sectional tube area of each section progressively diminished with the rise of temperature of the fluid, so that the fluid velocity in each tube section is increased over that in each preceding section, a vapor water separator interposed between the radiant tube sections, a connection between the separator and the convection tube section for returning the separated water thereto and generating steam therewith.

1,898,080. PICTURE TRANSMISSION. CHARLES A. CULVER, Northfield, Minn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed May 1, 1929. Serial No. 359,692. 6 Claims. (Cl. 179—171.)



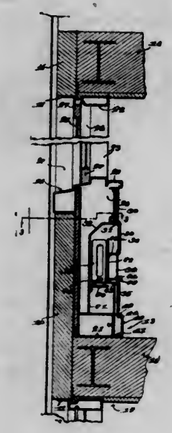
2. In a picture transmission system the combination of a photoelectric cell having an anode, cathode and control electrode, said cathode being energized by a source of luminous energy, an output circuit connected between said anode and cathode, a control circuit connected with said cathode and control electrode and a mechanically vibratile circuit maker and breaker for periodically interrupting said control circuit for intermittently energizing said output circuit.

1,898,081. FUSE SETTING MACHINE. AUGUST DABRASKY, Washington, D. C. Filed Jan. 4, 1932. Serial No. 584,611. 11 Claims. (Cl. 86—23.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



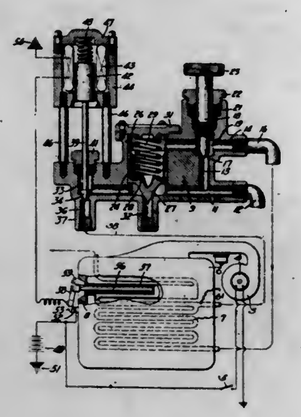
11. A fuse setter embodying a pair of rotatable adjusting members, means on one member for coupling it to a fixed element on a round of ammunition, means on the other member for coupling it to a movable element of a fuse, and means for rotating the member coupled to the fixed element through two revolutions in setting the fuse.

1,898,082. WINDOW BOX FRAME. GEORGE E. DEATHERAGE, Boston, Mass. Filed Feb. 28, 1931. Serial No. 519,165. 7 Claims. (Cl. 257—186.)



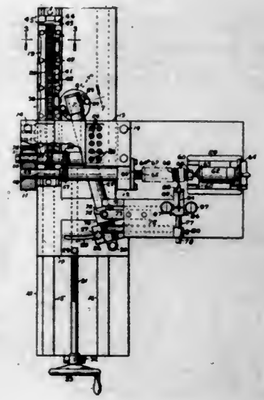
5. A window box frame formed of metal, said frame having a radiator chamber, the frame including a sill forming the top of the chamber, a base member providing a bottom for said chamber, and a radiator supported in the chamber between the sill and base member.

1,898,083. NORMALIZER. WARREN DOBLE, Oakland, Calif., assignor to Doble Steam Motors Corporation, Wilmington, Del., a Corporation of Delaware. Filed Sept. 22, 1927. Serial No. 221,262. 19 Claims. (Cl. 122—451.1.)



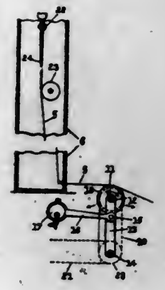
19. A normalizer comprising a relatively long tube having an inlet and an outlet at opposite ends thereof, a second inlet between the first mentioned inlet and said outlet, means for heating said tube, means for forcing into said tube through said inlet a quantity of water such that all of said water is discharged from said outlet as superheated steam, and means responsive to the temperature of the superheated steam for controlling the introduction of water through said second inlet.

1,898,084. LEAD TESTING MACHINE. JOSEPH C. DRADER, Detroit, Mich., assignor to Michigan Tool Company, a Corporation of Michigan. Filed Nov. 10, 1927. Serial No. 232,226. 9 Claims. (Cl. 73—51.)



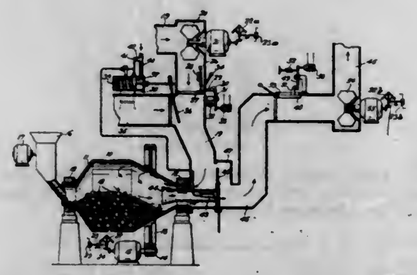
1. A lead testing machine having means for rotatably supporting a piece of work having a helical surface whose lead is to be tested, a carriage, means for producing relative longitudinal movement between said work and carriage in proportion to the rotation of the work, an arm pivoted on said carriage, said arm being positioned so that one of its ends will contact the helical surface of said work while it rotates, and a measuring means on said carriage acting to measure very slight movements of said arm relative to said carriage whereby inaccuracies in the helical surface of said work may be readily measured.

1,898,085. PRODUCTION OF ARTIFICIAL FILAMENTS, YARNS, OR THREADS. HENRY DREYFUS, London, and WILLIAM ALEXANDER DICKIE and WILLIAM IVAN TAYLOR, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Aug. 30, 1929, Serial No. 389,412, and in Great Britain Sept. 13, 1928. 15 Claims. (Cl. 18—8.)



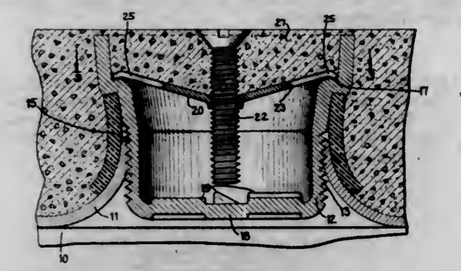
1. Process for the production of artificial filaments, said process comprising drawing the filaments at varying linear speeds in the course of their production, thereby imparting a systematic variation in denier to the filaments.

1,898,086. PULVERIZING APPARATUS. MARTIN FAISCH, Bronx, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed June 12, 1930. Serial No. 460,596. 19 Claims. (Cl. 83—9.)



1. Combustion apparatus comprising, in combination, a coal pulverizer, means to feed coal to said pulverizer, a conduit for admitting air to said pulverizer, a fan for causing flow of air through said conduit, a discharge conduit communicating with said pulverizer, a fan in said discharge conduit for causing flow therethrough of pulverized coal and air from said pulverizer, and means for stopping the first mentioned fan and substantially instantaneously closing both of said conduits while maintaining the second mentioned fan in operation.

1,898,087. PLUG FOR UNDERFLOOR CONDUIT SYSTEMS. JAMES M. G. FULLMAN, Sewickley, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 7, 1930. Serial No. 487,020. 9 Claims. (Cl. 247—28.)

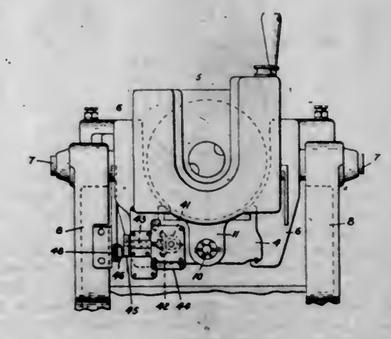


1. A plug for an underfloor conduit system comprising a cup-shaped plug member with a closed bottom and with a separate diaphragm carried within the plug and adapted to support cement above the diaphragm and within the plug, said diaphragm being of springy material and adapted to collapse upon striking a sharp blow upon the cement thereon whereby the cement in the plug cracks.

1,898,088. COATING COMPOSITION CONTAINING BETA-ELEOSTEARIN. CHESTER G. GAUERKE, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed May 18, 1928. Serial No. 278,921. 11 Claims. (Cl. 134—26.)

1. Heat-treated beta-eleostearin which is soluble in high boiling gasoline.

1,898,089. VARIABLE RECOIL MECHANISM FOR GUNS. ELMER C. GOEBERT, U. S. Army, Philadelphia, Pa., and THOMAS A. CONLON, Silver Spring, Md. Filed Jan. 4, 1932. Serial No. 584,610. 7 Claims. (Cl. 89—43.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



5. In a recoil mechanism, a cylinder, a head for the cylinder, a shaft passing through the head and having means for admitting a fluid into the cylinder, a tubular regulator secured to the shaft, a throttling bar movable in the regulator, and means for rotating the shaft and regulator.

6. In a recoil mechanism, a tubular regulator having ports and a throttling bar movable in the regulator and having a short groove decreasing in depth from front to rear and a long groove increasing in depth from front to rear.

1,898,090. SAFETY HARNESS FOR AERONAUTS AND THE LIKE. ALBERT ALEXANDER LETHERN, London, England, assignor to The Mills Equipment Company Limited, London, England, a Registered Company of Great Britain. Filed Sept. 8, 1931, Serial No. 561,801, and in Great Britain Oct. 10, 1930. 28 Claims. (Cl. 244—1.)



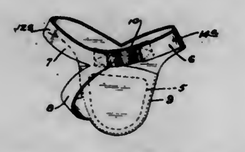
19. Safety harness for aeronauts including in combination side anchors, shoulder straps, quick release devices for connecting each shoulder strap to the wearer's chest, thigh-anchoring straps passing through the side anchors, detachable fastenings whereby the ends of the thigh-anchoring straps can be connected to the wearer's body adjacent to the thighs, and strapping so interconnecting each thigh-anchoring strap with a shoulder strap that the release of the shoulder straps automatically slackens the thigh-anchoring straps so that these thigh-anchoring straps can then slide through their anchors and permit the wearer to rise.

1,898,091. SYSTEM OF ACOUSTIC SIGNALING. WILLIAM ARTHUR LOTH, Paris, France, assignor to Société Industrielle des Procédés W. A. Loth, Paris, France. Filed Dec. 27, 1923, Serial No. 683,089, and in France Jan. 4, 1923. Renewed Dec. 12, 1931. 7 Claims. (Cl. 181—26.)



1. Apparatus for use in signaling between vessels comprising a dial provided with the points of the compass and three concentric scales respectively graduated in degrees, seconds, and distance, and two needles on a common pivot capable of independent angular displacement by a chronometric movement over said dial.

1,898,092. ARCH SUPPORT RETAINER. LEWIS M. MCCORMICK, Palo Alto, Calif. Filed Nov. 5, 1928. Serial No. 317,217. 12 Claims. (Cl. 128—166.5.)



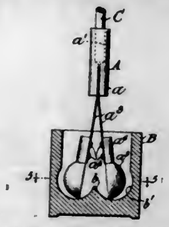
1. The combination with a pad adapted to support the metatarsal arch of the foot, and means to retain the pad beneath the arch, said means comprising a loop secured to the pad positioned beneath the arch and extending angularly to points on opposite sides of the foot, then upwardly and forwardly of the first and fifth metatarsophalangeal joints, and then over the dorsal surface of the foot rearwardly of the web of the toes.

1,898,093. UREA MANUFACTURE. FREDERICK W. MILLER, Jr., Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 31, 1931. Serial No. 526,769. 6 Claims. (Cl. 260—125.)

1. The process for the synthesis of urea by heating ammonia and carbon dioxide, which includes the steps of recovering unconverted ammonium carbamate from the synthesis melt by distilling the same, absorbing the distillate in water to form a relatively concentrated solution of ammonium carbamate and subjecting said solution together with additional ammonia and carbon dioxide to urea-forming temperature and pressure in the presence of a substantial excess of ammonia.

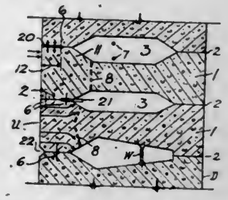
1,898,094. AMALGAM MIXER OR THE LIKE. FREDERICK H. NIES, Brooklyn, N. Y. Filed Apr, 27, 1931. Serial No. 533,162. 7 Claims. (Cl. 259—134.)

1. An amalgam mixer or the like, comprising a mortar having a wall which is circular on its inner face and which has a rounded surface between said wall and bottom and a rotatable pestle having a plurality of relatively movable members which are mounted to exert an outward pressure against the wall of the mortar when the pestle is rotated, the outer surface of the pestle members being rounded in the direction of their rotation and of complemental shape to the rounded surface between said wall and bottom of the mortar at their points of engagement there-



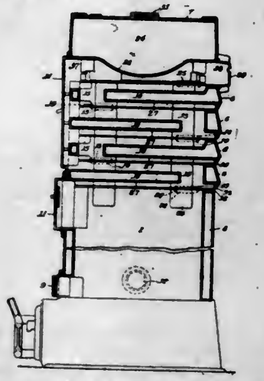
with when pressed thereagainst, whereby rotation of the pestle causes a wedging or smearing action of the material acted upon between the pestle and the mortar.

1,898,095. DAM. FRED A. NOETZLI, Los Angeles County, Calif. Filed Nov. 25, 1930. Serial No. 498,078. 12 Claims. (Cl. 61—32.)



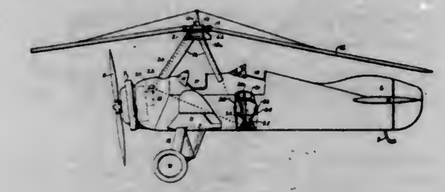
1. In a dam two walls each wall having a flat upstream face, certain portions of said walls near the upstream face extending laterally towards each other and being provided with a joint joining said portions, certain parts of said joint being open to water pressure from the reservoir, a water stop across said joint, the distance of said water stop from the upstream face bearing a definite relation to the lateral extension of said portions beyond the faces of said walls and to the pressure of the water acting thereon, substantially as described.

1,898,096. SECTIONAL BOILER. CHARLES A. OLSON, Geneva, and JOHN P. MAGOS, Chicago, Ill., assignors to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 6, 1930. Serial No. 426,205. 5 Claims. (Cl. 122—218.)



5. A boiler comprising a transverse flue passage of varying width and a water chamber above said passage, the common wall between said chamber and passage being depressed to decrease the depth of said passage intermediate its ends commensurately with the increase in width thereof.

1,898,097. ROTARY WINGED AIRCRAFT. JOSEPH S. PECKER, Philadelphia, Pa., assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Mar. 12, 1932. Serial No. 598,345. 19 Claims. (Cl. 244—19.)

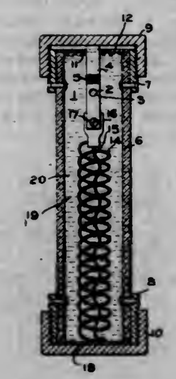


16. In an aircraft, the combination of a rotative-wing sustaining unit, a manually controllable brake for said unit, and means for preventing application of the brake when the aircraft is in flight.

1,898,098. PAPER MANUFACTURE. HAROLD ROBERT RAFTON, Andover, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Apr. 28, 1931. Serial No. 533,571. 24 Claims. (Cl. 92—21.)

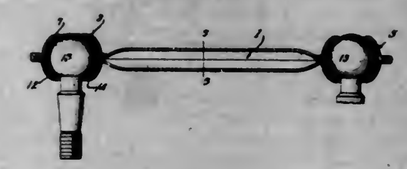
1. In the manufacture of paper filled with alkaline filler wherein alkaline filler is added to a paper mix under conditions favoring the minimizing of the time and/or intimacy of contact of the constituents of the mix, that step comprising effecting the precipitation in the presence of said alkaline filler of a precipitable material and a precipitant therefor prior to the addition of said alkaline filler to the paper mix.

1,898,099. FUSE. JEROME SANDIN, Wilkins Township, Allegheny County, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 12, 1927. Serial No. 190,670. 7 Claims. (Cl. 200—117.)



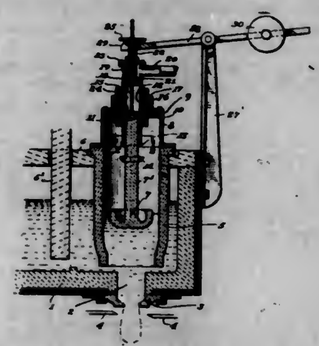
1. A fuse element for an electrical circuit comprising two members of metal more refractory than solder tensioned by a biasing spring and having a soldered section at substantially the center of the fuse element that can be melted by a small increase in current of long duration, one of said members having a reduced section that is ruptured before the solder can be melted when the current therethrough has rapidly increased to a large value.

1,898,100. PERMANENT CONNECTING UNIT AND METHOD OF FORMING SAME. NEWTON SKILLMAN, Detroit, Mich., assignor to O. & S. Bearing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 9, 1929. Serial No. 412,682. 12 Claims. (Cl. 29—149.5.)



1. The method of forming a permanent connecting unit for shock absorbers and the like, which comprises integrally forming a link and spaced bearing housings in two longitudinal halves, complementally positioning the halves together to complete the bearing housings and the link, positioning ball joints within each housing, surrounding the ball joints with compressible expansible material, and permanently securing said halves together to form an integral unit and compressing said material by distorting a portion of the housings and link of one of the halves into locking relation with the other.

1,898,101. PNEUMATIC GLASS FEEDER. THOMAS STENHOUSE, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West-Virginia. Filed Apr. 19, 1930. Serial No. 445,789. 6 Claims. (Cl. 49—55.)

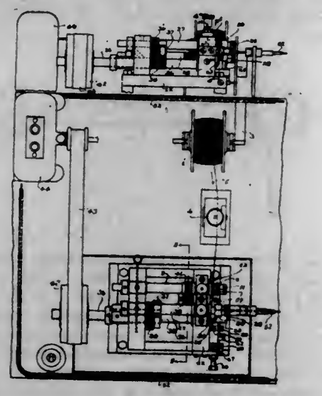


1. A pneumatic glass feeder including a flow spout having a flow orifice, a pressure and vacuum tube projecting downwardly into the glass and in substantial alignment with the flow orifice, a valve seat body mounted above the tube and communicating therewith, means for alternately connecting the interior of the valve seat body with pressure and vacuum, a valve seat adjacent each end of the valve seat body, a float resting on the glass in the tube, and valves operated by the movement of the float and adapted to cooperate with the valve seats to control the pressure and vacuum.

1,898,102. METHOD AND MACHINE FOR COILING SMALL WIRE. CHARLES B. STURGIS, Rochester, N. Y., assignor of one-half to Waddel P. Andrus, Rochester, N. Y. Filed Dec. 16, 1929. Serial No. 414,817. 19 Claims. (Cl. 153—65.)

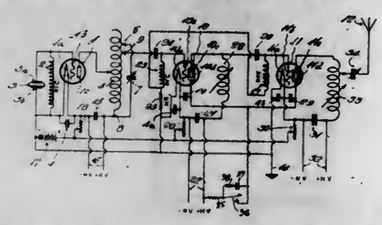
1. The method of coiling wire which consists in forcing straight wire over a concave surface while holding the portion engaging the surface against sidewise movement

and causing the convolutions thus formed thereafter to travel over a plurality of concave faces while holding the portions engaging such surfaces against sidewise movement.



3. The combination of a die for wire coiling machines having a plurality of separated concave faces arranged in a line and gradually decreasing in depth, and each concave face having sides for confining the convolutions of a coil against sidewise movement, with means for forcing a wire against one of said faces to produce convolutions in the wire, the remaining curved faces being arranged to be engaged successively by the convolutions after the initial coiling.

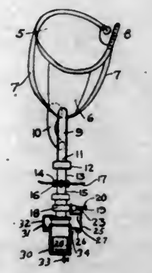
1,898,103. FREQUENCY MULTIPLICATION AND KEYING SYSTEM. ALBERT H. TAYLOR, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 30, 1929. Serial No. 389,496. 6 Claims. (Cl. 250—19.)



1. In a radio transmission system, a high frequency oscillator, a multiplicity of stages of electron tube amplification connected with said oscillator, each stage of amplification including an electron tube having a cathode, a control grid, an anode, and a shield grid therein, a cathode heating circuit, a source of potential for energizing said anode, the control grids of said tubes being connected together and the shield grids of said tubes being connected together, a keying circuit connected between the shield grids of said tubes and the positive side of said source of anode potential, and means for deriving a negative potential for biasing the control grids of said tubes from energy developed by said oscillator, said means comprising a high resistance connected between the control grids and the cathodes of said tubes.

1,898,104. BODY WASTE REMOVER. BERIAH M. THOMPSON, U. S. Navy. Filed Nov. 5, 1931. Serial No. 573,159. 6 Claims. (Cl. 128—283.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A device of the class described, comprising a portion adapted to be worn about the hips of a person, a feces tube and a urine tube suitably disposed and connected to the seat and front, respectively, of the said portion, a waste chamber comprising an inner portion and removable cap, a drain cock in the bottom of said cap, and a gate valve connected to said chamber, the stem of said valve having a threaded portion, an internally threaded collar

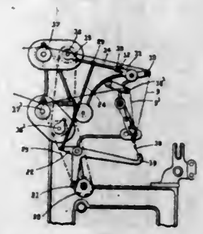


engageable with said threaded portion, a supporting member carried by said valve, a bar carried by said member, said bar having a yoke connected to said collar, a hook on the other end of said bar, a hook on said cap adapted to coact with said hook, and means to make a gas-tight connection through the fabric of a gas-impermeable garment between said valve and said tubes.

1,898,105. METHOD FOR WEIGHTING REGENERATED CELLULOSE. FRIEDRICH WILHELM WEBER, Hackensack, and EUGENE SCHAEFER, Englewood, N. J., assignors to Maywood Chemical Works, Maywood, N. J., a Corporation of New Jersey. Filed July 3, 1931. Serial No. 548,709. 8 Claims. (Cl. 8—13.)

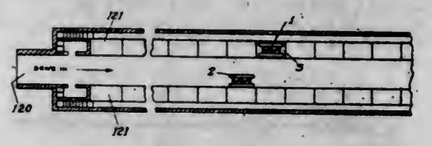
1. The method for weighting artificial silk fiber in the form of cellulose hydrate regenerated from solutions of cellulose, said method consisting in acting on the fiber with the aqueous solution, containing basic salts of tin and of zirconium, then washing the fiber with water, and subjecting the fiber, thus treated, to solution of a salt capable of forming an insoluble salt with tin and zirconium.

1,898,106. KNITTING MACHINE. SIDNEY ARTHUR WELCH, ALBERT FAIRHOLME GUYLER, JOHN THOMAS ASHBY, and WILLIAM HENRY BOALER, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed June 3, 1930, Serial No. 459,082, and in Great Britain July 17, 1929. 8 Claims. (Cl. 66—125.)



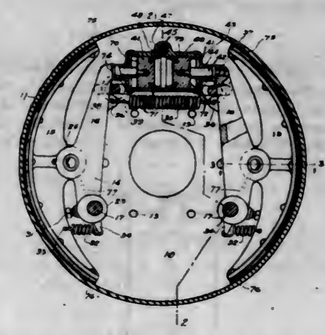
1. Thread feeding apparatus for warp knitting machines comprising thread feeding means, rotatable means adapted to drive the said feeding means, a clutch interposed between said feeding means and driving means, a tension bar adapted to engage said clutch under increase of tension in the threads passing over said bar so as to control the drive of the feeding means and additional control means adapted to render said clutch operative at a selected point in the knitting cycle to complete the drive to said feeding means under the control of the tension bar.

1,898,107. MEANS OF PARKING CARS IN GARAGES. HOLMAN K. WHEELER, Newton Center, Mass., assignor to Mechanical Transfer Car Corporation, St. Johnsbury, Vt., a Corporation of Vermont. Filed Nov. 26, 1928. Serial No. 322,024. 2 Claims. (Cl. 214—16.1.)



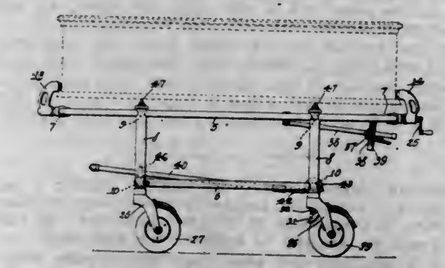
1. A system for efficiently parking cars, comprising a roadway, an underpass beneath said roadway having a central open drive and parking spaces on each side thereof, said drive having a width substantially equal to the width of the total parking space on both sides of said drive, a row of transfer cars positioned normally in said parking space, and a foot-path allowing access to said cars on the outer side of said parking space.

1,898,108. BRAKE MECHANISM. JOHN WILLIAM WHITE, Buffalo, N. Y. Filed Feb. 1, 1927. Serial No. 165,195. 5 Claims. (Cl. 188—152.)



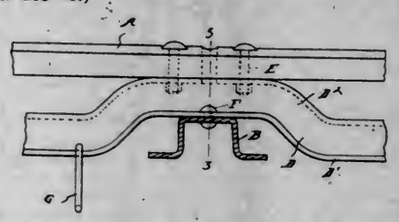
1. In a brake mechanism including a brake drum, brake levers each pivotally mounted at one end upon a support, brake shoes carried by said levers, a spring engaging the free ends of the levers for holding the shoes normally out of contact with the drum, studs against which the free ends of the levers are held by said spring, said studs being mounted in slots in the support and accessible from outside the brake drums for adjustment in the slots.

1,898,109. CASKET CARRIAGE. CECIL M. WICKSTRUM, Omaha, Nebr. Filed Dec. 23, 1930. Serial No. 504,378. 6 Claims. (Cl. 280—49.)



1. A casket carriage comprising a wheel supported frame, a tubular member extending throughout the length of the frame and disposed intermediate the side edges thereof, inner tubular members movable within the first mentioned tubular member, a rod extending into the inner tubular members, and having oppositely disposed threads, means carried by the inner tubular members and engaged by the oppositely threaded portions of the rod to move the inner tubular members within the first mentioned tubular member, clamping arms mounted on the outer ends of the inner tubular members, and means for operating the rod.

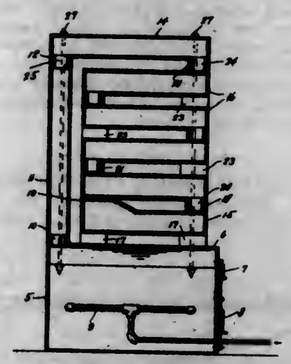
1,898,110. HOISTING ANCHORAGE FOR CAR ROOFS. ALFRED R. WILSON, Detroit, Mich., assignor, by mesne assignments to Hutchins Car Roofing Company, Detroit, Mich., a Corporation of Delaware. Filed July 30, 1928, Serial No. 296,289. Renewed Oct. 7, 1930. 14 Claims. (Cl. 108—5.)



1. The combination with a car roof having a ridge pole, of a beam engaging and secured to said ridge pole at a plurality of spaced points, said beam constituting a hoist anchorage.

13. The combination with a car roof having a ridge pole, of a beam constituting a hoist anchorage supported adjacent said ridge pole, said beam having a portion spaced from said ridge pole and a second portion engaging said ridge pole.

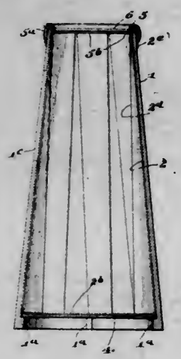
1,898,111. FURNACE UNIT. HANS WINGER, Murray, Utah. Filed June 9, 1931. Serial No. 543,204. 1 Claim. (Cl. 126—116.)



In a furnace unit of the class described, a fire box having a neck rising from one end thereof, a flue engaged with said neck and rising therefrom, a top section having a pair of depending necks one telescopically associated with the upper end of the flue, a plurality of intermediate sections of hollow construction each having a rising neck at one end and a depending neck at the other end, depending necks of some intermediate sections telescopically associated with rising necks of the other sections, the uppermost of the intermediate sections having its rising neck telescopically associated with the other depending neck of the top section, spacer blocks between the sections at ends remote from the telescopically connected necks, a bottom hollow section having an upwardly extending enlargement at its rear forming a seat for the rear end of the lower intermediate section and provided with

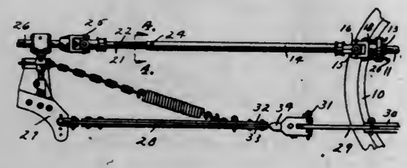
a rising neck to receive telescopically the depending neck of said lowermost intermediate section, spacer blocks between the bottom section and the fire box, said rear enlargement in the bottom section having an outlet opening in one side thereof, ears projecting laterally from the top section and the fire box, and tie bolts engaged therewith.

1,898,112. PAPER BOTTLE AND OTHER CONTAINERS. WILBUR L. WRIGHT, Fulton, N. Y., assignor to Oswego Falls Corporation, Fulton, N. Y., a Corporation of New York. Filed June 21, 1929. Serial No. 372,693. 3 Claims. (Cl. 279—4.5.)



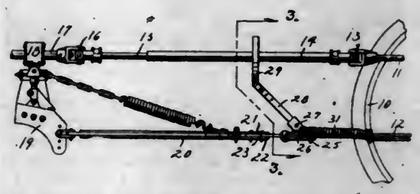
1. A transporting container, including a strong non-collapsible stiff tubular carrier of molded fibrous pulp and permanent form; having a separate resilient flat disk inset bottom; a flexible collapsible liquid carrying bag depending in said carrier with the bag bottom resting on said carrier bottom, whereby the bag is distended laterally within the carrier by the liquid contents of the bag, the upper end of the bag being permanently opened at the stiff upper end secured and sealed around the open bag mouth to the stiff permanently formed annular top of said carrier, means being provided to receive an independent closure for sealing and opening said bag mouth, said rigid tubular carrier, before assembly with the bag and bottom disk, being open at both ends and longitudinally conical for nesting.

1,898,113. SAFETY DEVICE FOR POWER-TAKE-OFF SHAFTS. WILLIAM L. ZINK, Aurora, Ill. Filed Jan. 25, 1932. Serial No. 588,801. 2 Claims. (Cl. 180—14.)



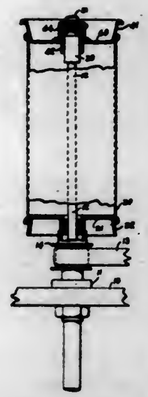
1. In a device of the class described, the combination of a power-take-off shaft, a slip tube and a slip shaft slidingly connected, means for limiting the movement of the slip shaft out of the slip tube, a universal joint at the forward end of the slip tube, and means operated by an excessive pull upon the slip tube to disconnect it from the power shaft, said means comprising a squared socket formed on the forward end of the universal joint, a squared rear end portion on the power-take-off shaft to enter said socket, a collar fixed to the power-take-off shaft, and spring retaining arms fixed to the universal joint to engage the said collar and normally hold it against separating movement relative to the spring arms, said spring arms being so shaped that excessive pull applied to the slip tube will permit the spring arms to separate and release the collar.

1,898,114. POWER-TAKE-OFF SAFETY DEVICE. WILLIAM L. ZINK, Aurora, Ill. Filed Jan. 25, 1932. Serial No. 588,802. 3 Claims. (Cl. 180—14.)



1. In a device of the class described, the combination of a power-take-off shaft, a universal joint therein, a slip tube connected with the universal joint, a draw bar pivotally connected with the tractor, a slip tube guide ring carried by the draw bar and encircling the slip tube, and a spring device for normally moving the portion of the draw bar that is connected to the tractor to a position extended approximately straight rearwardly from the tractor, for the purposes stated.

1,898,115. RETAINING DEVICE FOR TWISTER SPINDLES. WILLIAM O. ALDRICH, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Dec. 26, 1929. Serial No. 416,395. 9 Claims. (Cl. 242—130.)

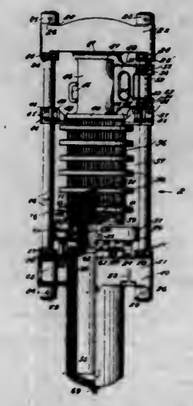


1. In a twister, a spindle having a blade, a cap mounted on the upper end of said blade and having an axial opening to receive said blade, and means carried by said cap and movable by centrifugal force into engagement with said blade to thereby lock said cap to said blade during rotation of said spindle, said cap engaging and centering said locking means in inoperative position when said locking means is manually pushed radially inward.

1,898,116. HYDRAULIC CURB PRESS. NORMAN J. ALLBRIGHT, Chicago, Ill., assignor to The Allbright-Nell Company, a Corporation of Illinois. Filed Jan. 29, 1929. Serial No. 335,945. 4 Claims. (Cl. 100—50.)

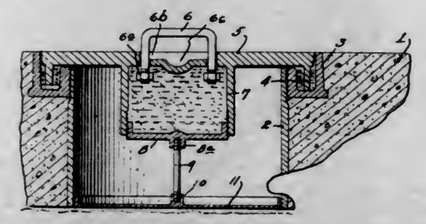
3. A hydraulic curb press comprising a press base, a cylinder formed in said base, a vertically operating plunger in said cylinder, a press head, a plurality of parallel supporting rods traversing alined openings in said base and

head and disposed around said cylinder, collars on said rods to position said base and head in spaced relation and to prevent separational movement of said head with respect to said base, a platen having a substantial lateral extension provided with means surrounding said rod to pivotally secure said platen thereto, sleeves clamped around said last named rod to position said platen with capability of swinging movement free of said head to the substantial



extent permitted by said extension, a freely floating curb constructed of spaced slats secured together by hoops and arranged in surrounding relation to said plunger and an adjustable sleeve-like clamp on each rod provided with a lateral extension projecting relatively close to said curb to approximately center it and in position to contact with one of said hoops when the curb is permitted to move away from said base by the shifting of said platen.

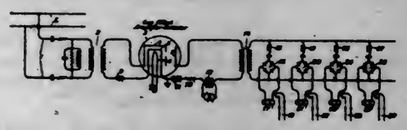
1,898,117. FIRE EXTINGUISHER HAND HOLE AND COVER. EDWARD W. N. BOOSEY, Detroit, Mich. Filed Aug. 25, 1930. Serial No. 477,574. 6 Claims. (Cl. 169—1.)



3. A fire extinguisher hand hole comprising an open ended tubular member insertible in the floor or the wall of a building and providing an aperture therethrough, said member having a circularly grooved portion at the upper end, a cover member having a portion positioned in the said groove, the groove providing a chamber for a waterproofing material to prevent flow of liquids beneath the cover into the tubular member, a handle for the said cover consisting of a U shaped member, the legs of which extend through apertures provided in the cover, means on the ends of the handle member to prevent their withdrawal through the apertures therefor, and a sealed receptacle on the under side of the cover into which the handle ends extend.

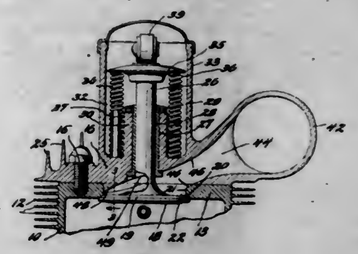
6. A fire extinguisher hand hole comprising a tubular member positioned in the floor or wall of a building providing an aperture therethrough, a cover member for closing the upper end, a plate attached to the cover member in spaced relation therewith and insertible in the tubular member by the placing of the cover thereon, said plate being positioned approximately flush with the surface of the floor or wall opposite that occupied by the cover also closing the aperture provided by the tubular member.

1,898,118. SIGNALING SYSTEM. CHARLES S. DEMAREST, Ridgewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 10, 1931. Serial No. 574,205. 6 Claims. (Cl. 179—87.)



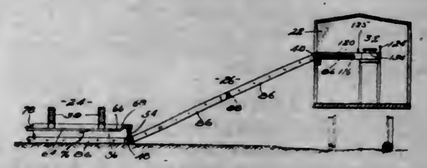
1. A transmission line over which signaling currents are transmitted, a signaling circuit connected to said line and turned to receive currents of said signaling frequency, a single gas filled thermionic tube in said signaling circuit operating as an amplifier-detector for said signaling currents, a plurality of individual signal circuits each including rectifying means and direct current signal cotrolling relays, and means for applying the output of said amplifier-detector tube to said individual signal circuits.

1,898,119. DIESEL ENGINE. HERBERT C. EDWARDS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 5, 1930. Serial No. 480,006. 4 Claims. (Cl. 123—177.)



1. In an internal combustion engine, in combination, a cylinder, an integral head portion having a port and valve seat, a valve cooperating with said seat, a cooling head secured to said integral head and having a valve stem guide, a passage through said cooling head communicating with said port at a large angle to the valve stem and a lip on said cooling head extending into said port to provide a smooth surface for the entering gases.

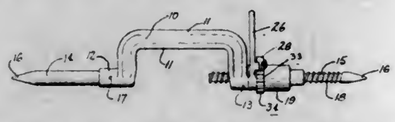
1,898,120. TIE LOADING DEVICE. THOMAS E. FARMER, Kansas City, Mo. Filed Jan. 19, 1931. Serial No. 509,659. 3 Claims. (Cl. 198—127.)



1. In a loading structure, a conveyor, comprising a plurality of sections; a plurality of conveyor rollers rotatably mounted on each section; a sprocket wheel associated

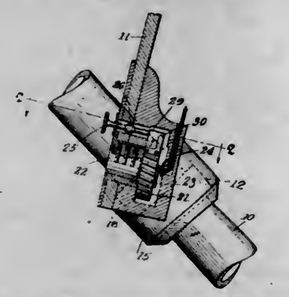
with each roller intermediate its ends; a sprocket chain interconnecting all sprocket wheels of each section; and power transmitting means between interconnecting the sprocket wheels at the adjoining ends of the sections whereby power is transmitted from one section to the next adjoining.

1,898,121. VEHICLE SPRING SPREADER. GIDEON R. GAYNE, Kenosha, Wis., assignor to Snap-On Tools, Inc., Kenosha, Wis., a Corporation of Delaware. Filed Sept. 19, 1931. Serial No. 563,760. 1 Claim. (Cl. 28—87.1.)



In a portable vehicle spring spreader, the combination with a rigid frame, of aligned bar members projecting in opposite directions from said frame, spring engaging extremities on said bar members, a tubular housing rotatively journalled on said frame, a ball bearing end thrust bearing disposed between said frame and tubular housing for confinement in the latter, a threaded shank on one of said bar members for adjustable extensible association with said tubular housing, lever means journalled on said frame for guiding confinement by said housing, a pawl pivoted to said lever means, and a ratchet wheel carried by said housing for cooperation with said pawl for operative connection with said threaded shank to effect the extension or retraction thereof relative to said frame.

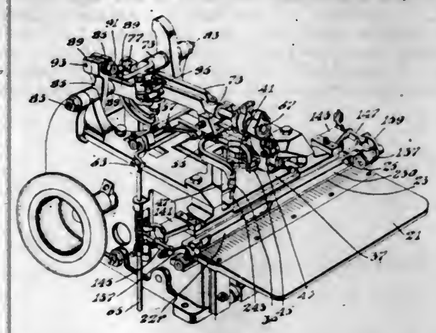
1,898,122. STEERING WHEEL LOCK. GEORGE A. GILLEN, Jersey City, N. J., assignor, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed Dec. 9, 1924. Serial No. 754,724. 7 Claims. (Cl. 70—127.)



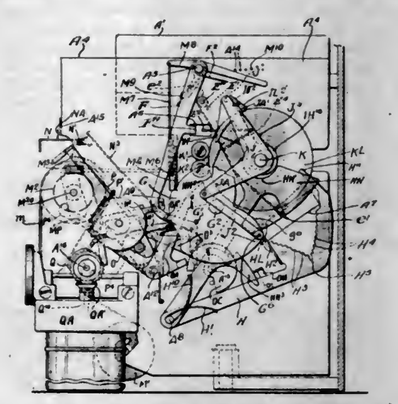
1. A lock for motor vehicles comprising a collar rigidly secured to the steering post of a vehicle, a housing inclosing said collar, locking bolts carried by the collar and normally urged into recesses in the housing to lock the post against turning, means to release said bolts, an ignition circuit controlling means associated with the bolt releasing means for rendering the ignition circuit of the vehicle inoperative when the post is locked, an auxiliary means for rendering the ignition circuit inoperative without locking the steering post, and means actuated upon moving the bolts to locked position for rendering the auxiliary means immovable.

1,898,123. BOOK COVER FOLDING MACHINE. PERLEY R. GLASS, Wayland, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 28, 1928. Serial No. 309,020. 21 Claims. (Cl. 154—41.)

1. A machine of the class described having, in combination, a support for the work, said support being normally at a predetermined level but capable of being depressed, means for depressing the work support, means for locking the support in its depressed position, means for folding the margin of the work while the support is so depressed, and means for thereafter unlocking the support.



1,898,124. MEASURING AND CONTROL APPARATUS. THOMAS R. HARRISON, Wyncote, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 27, 1928. Serial No. 322,269. 15 Claims. (Cl. 171—312.)

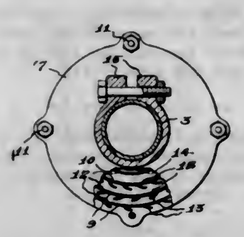


1. In a circuit for measuring and controlling instruments comprising a bridge having four resistance arms and four junction points, a meter, a source of E. M. F. and an adjustable resistance connected between an opposing pair of junction points, means for adjusting one of the last mentioned junction points to vary the relative resistance values of the adjacent resistance arms, and means for simultaneously varying said adjustable resistance, said resistances being so relatively proportioned that the sum of the bridge resistance between said opposing pair of junction points and the portion of said adjustable resistance in circuit with the meter is not materially altered by the said simultaneous resistance variations.

1,898,125. PROCESS FOR MANUFACTURING PIECE-DYED WOOLEN FABRICS CONTAINING EFFECTS OF SILK. RICHARD HAYNN, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 10, 1928, Serial No. 305,146, and in Germany Sept. 16, 1927. 3 Claims. (Cl. 8—5.)

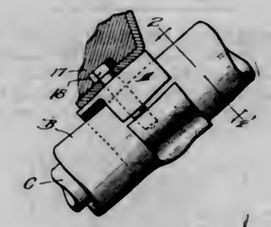
1. A process for obtaining clean effects of silk in piece-dyed woolen fabrics, which comprises dyeing woolen fabrics containing effects of silk with wool dyestuffs and adding organic sulfonic acid compounds of the group consisting of condensation products of formaldehyde with phenol-sulfonic acids or naphthalene-sulfonic acids and of sulfonation products prepared from sulfur trioxide and unsaturated fatty- or hydroxy fatty acids or their esters to the dye-bath.

1,898,126. FIRE TRAP FOR INTERNAL COMBUSTION ENGINES. MEAD HEDGLON, Syracuse, N. Y., assignor to M. L. Oberdorfer Brass Company, Syracuse, N. Y., a Corporation of New York. Filed Dec. 21, 1928. Serial No. 327,722. 4 Claims. (Cl. 123—142.)



1. In an internal combustion engine having a carburetor provided with the usual air intake, the combination of a fire trap comprising a plurality of screens mounted on the air intake one within the other forming compartments between them, the screens being formed with slots and inclined deflectors overhanging the slots, the deflectors of each screen inclining oppositely to those of the next screen.

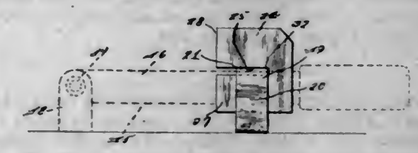
1,898,127. AUTOMOBILE LOCK. ORVILLE S. HERSHEY, Chicago, Ill., assignor, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed Oct. 27, 1926. Serial No. 144,480. 10 Claims. (Cl. 70—127.)



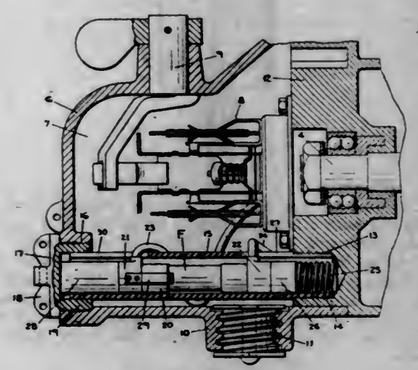
1. In combination with an electrical circuit, a lock including a member having a dual movement, a switch interposed in the circuit having an element which is connected for movement with said member, a detent associated with said member and adapted to guide the same normally through a single movement path, the detent being retractable to permit the said member to move otherwise, and the movable switch element being shifted with either movement of said member to open or close the electrical circuit, substantially as described.

1,898,128. ARC SUPPRESSOR. JOHN G. JACKSON and WALLACE T. ALLEN, Detroit, Mich., assignors to Square D Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 28, 1929. Serial No. 403,024. 24 Claims. (Cl. 200—144.)

1. A switch having in combination, a movable blade, a contact member having jaws for engaging a portion of the blade, and arc suppressing plates arranged to permit passage of the blade therebetween and having shoulders thereon engageable with portions of said jaws for securing the plates in assembled position upon the contact member.

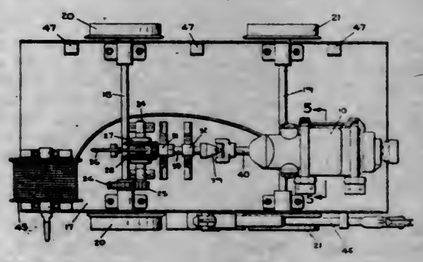


1,898,129. FUSE RECEPTACLE FOR COAL DRILLS. ROBERT K. JEFFREY, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 4, 1931. Serial No. 520,143. 12 Claims. (Cl. 200—133.)



1. A fuse mounting comprising a non-conductive receptacle, a fuse slidably mounted therein, and a pair of terminal connectors movably mounted in the receptacle and normally pressed into engagement with opposite ends of the fuse.

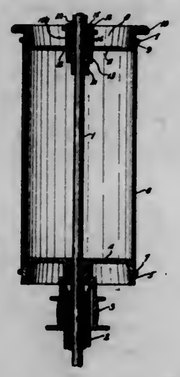
1,898,130. SELF-PROPELLING APPARATUS. ROBERT K. JEFFREY, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed May 5, 1931. Serial No. 535,280. 3 Claims. (Cl. 105—109.)



1. In combination, a portable unit comprising a frame, a motor on said frame, a vehicle comprising wheels and propulsion gearing therefor, an upwardly open cradle on

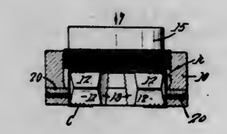
the vehicle for receiving said frame, releasable means for securing the frame in the cradle, driving and driven members associated with the motor and propulsion gearing respectively, and adapted to be telescoped when said frame is received in said cradle, one of said members being freely pivotal about a universal joint.

1,898,131. LOCKING DEVICE FOR BOBBIN CAPS. LAVERN J. JORDAN, Cleveland, Ohio, assignor, by mesne assignments to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Feb. 16, 1931. Serial No. 515,949. 9 Claims. (Cl. 242—130.)



1. In combination, a driving spindle provided inwardly of its end with a head for receiving one end of a tubular bobbin telescoped over the spindle, a cap adapted for application to the free end portion of the spindle and into holding relation with the other end of a bobbin on said head, and movable means adapted upon rotation of the spindle to interconnect the free end portion of said spindle and said cap for retaining the latter upon the spindle.

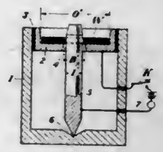
1,898,132. THREAD CUTTING DIE AND HOLDING CLIP THEREFOR. OSCAR E. KOEHLER and WILLIAM B. DU MONT, Greenfield, Mass., assignors to Greenfield Tap & Die Corporation, Greenfield, Mass., a Corporation of Massachusetts. Filed July 10, 1931. Serial No. 549,941. 10 Claims. (Cl. 10—123.)



1. A screw threading device comprising a die holder, a pair of separable die blocks mounted to slide in said holder, and an additional die-holding clip in which said die blocks may be detachably assembled before insertion in said die holder, said clip being formed of thin sheet metal and having portions engaging the tops, bottoms and outer ends of said die block, said clip also having provision for preventing lateral displacement of said blocks therefrom.

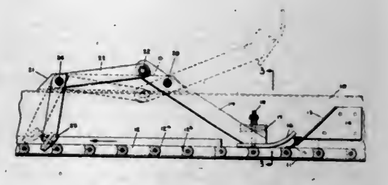
1,898,133. GAUGE FOR TESTING ECCENTRICITY OF INSULATORS. FRANK A. LEIBE, Dunellen, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 5, 1931. Serial No. 535,281. 12 Claims. (Cl. 177—311.)

3. A gauge for testing dimensions of ring-like objects, said gauge including a ring for gauging the external diameter of the object to be tested, a rod-like member for gauging the internal diameter of said object, a circular wall loosely surrounding the rod-like member, said rod-like member and said wall being eccentrically movable



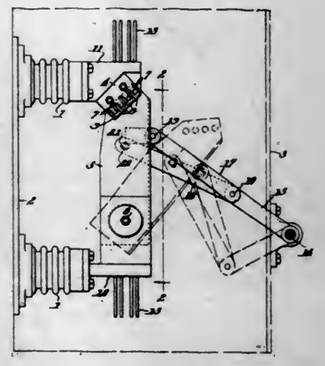
with respect to each other to gauge the eccentricity of said ring-like object, and an electrical circuit including an indicating device energized by contact between said rod-like member and said circular wall.

1,898,134. DRAG CHAIN CLEANER. PAUL C. LINDER, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 9, 1931. Serial No. 528,939. 9 Claims. (Cl. 198—229.)



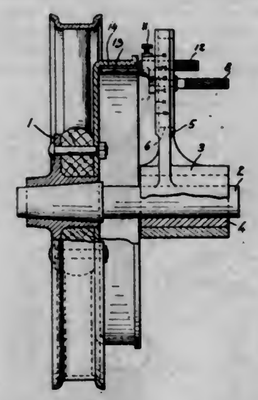
9. In a conveyor, an endless draft device having cross pieces, an automatically acting hammer adapted to deliver impacts to the endless draft device to dislodge material adhering thereto, and means arranged in the path of the cross pieces and actuated thereby to operate said hammer.

1,898,135. OPERATING MECHANISM FOR SWITCHES. HEMSLEY B. MASSEY, Greensburg, Pa., assignor to Railway and Industrial Engineering Company, Greensburg, Pa., a Corporation of Pennsylvania. Filed Feb. 4, 1932. Serial No. 590,951. 15 Claims. (Cl. 200—162.)



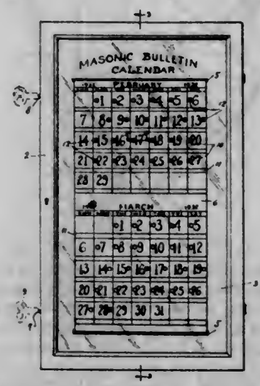
1. An operating mechanism for a multiple blade disconnecting switch comprising a shaft, a crank arm fixed to said shaft, and link means connected to the crank arm to progressively open blades of the switch.

1,898,136. BRAKE ADJUSTING TOOL. ALVIN L. MILLER and RUSSELL H. MILLER, Detroit, Mich. Filed Apr. 29, 1929. Serial No. 358,919. 1 Claim. (Cl. 33—180.)



A gauge device for the brakes of an automotive vehicle, comprising in combination, a body member adapted to be journaled upon a wheel axis, said body member having a radially extending portion provided with an elongated, radially extending slot, a holding device carried by said radially extending portion, a handle for the holding device screw threaded into the holding device, the holding device and handle being arranged to be clamped toward each other, with the said radially extending portion interposed to hold said device in a radially adjusted position, a gauging element journaled in the holding device having a part projecting axially and provided with a gauging edge located along its axis, said gauging element having another part projecting oppositely from the first and affording a handle, and means for holding the journaled gauging element with its gauging edge positioned inwardly or outwardly.

1,898,137. CALENDAR. GUY Y. NEELY, Lima, Ohio. Filed Mar. 18, 1932. Serial No. 599,784. 2 Claims. (Cl. 40—107.)

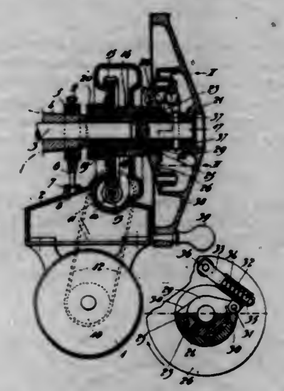


1. A structure of the class described comprising a cabinet, a panel mounted in the cabinet having spaced slots therein, spools journalled in the cabinet, pockets mounted on the panel, colored strips removably mounted in the pockets, and a web operable thru the slots and over the strips, and windable on one of the spools, from the other of said spools, said web having a monthly calendar thereon, the web further having openings therein adjacent certain of the calendar dates through which the colored strips are visible.

1,898,138. PRODUCTION OF COLORED RESISTING EFFECTS. JOSEF NEUMANN, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 24, 1930, Serial No. 463,584, and in Germany July 5, 1929. 4 Claims. (Cl. 8—5.)

1. Process which comprises impregnating textile goods with an azo coupling component, imprinting the impregnated goods with a printing paste containing an ester salt of a leuco-vat-dyestuff, an insoluble chromate which when acidified is capable of producing chromic acid and an alkali sulfite, drying the printed goods, developing them with any diazo-compound, acidifying and finishing them in the usual manner.

1,898,139. DRIVING AGGREGATE FOR MOTOR POWER AND HAND POWER. JOSEF AUGUST NORDIN, Stockholm, Sweden, assignor to Aktiebolaget Stille Werner, Stockholm, Sweden, a Corporation of Sweden. Filed Dec. 18, 1930, Serial No. 503,273, and in Sweden Apr. 5, 1930. 2 Claims. (Cl. 74—7.)

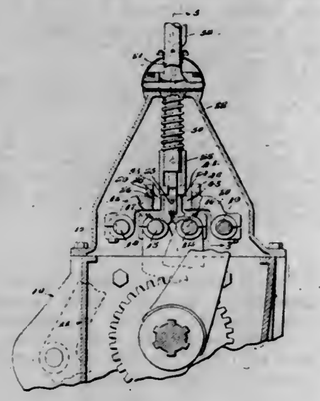


1. Driving aggregate comprising a shaft, means for detachably fixing said shaft to a shaft of a machine to be driven, a hand-wheel fixed to the first shaft, a hub rotatably mounted on the first shaft, a motor supported by a casing surrounding said hub, a gearing between the motor and the hub, an overrunning clutch between the hub and the hand-wheel, said clutch being operative as the gearing is driven by the motor in a certain direction but inoperative as the hand-wheel is turned in the same direction, and means for detachably supporting the driving aggregate as a whole on the shaft of the machine to be driven.

1,898,140. MAIN AND AUXILIARY GEAR SHIFTING MECHANISM. CARL D. PETERSON, Toledo, Ohio, assignor to Spicer Manufacturing Corporation, Toledo, Ohio, a Corporation of Virginia. Filed Dec. 24, 1931. Serial No. 583,021. 6 Claims. (Cl. 74—39.)

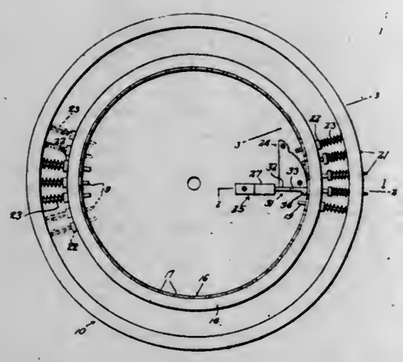
1. In a gear shifting mechanism for selective change speed transmission gearings, said mechanism including a main shift rod shiftable in opposite directions and having a fore and aft movement from neutral, an auxiliary rod shiftable endwise, the rods having blocks formed with notches, and the block of the auxiliary rod having a barrier for its notch, and shoulders located in front and in the rear of the notch of the auxiliary rod, and a selecting and gear shifting lever having a finger for selectively engaging one rod, and means for individually engaging the

auxiliary rod and shoulders located in front and in the rear of the finger, the shoulders being spaced apart a greater distance than the length of said finger, and so located that the finger is in juxtaposition to one shoulder when the auxiliary rod is in normal direct drive position, and the other rod in a shifted position, and the other



shoulder in juxtaposition to the finger when the auxiliary rod is in shifted position, and the other rod in neutral position, a shiftable lug on the gear shifting lever for entering the notch in the block of the auxiliary rod, and coacting with the barrier, and manually operable means for shifting the lug to move the same over the barrier.

1,898,141. MOTION PICTURE FILM PRINTING DEVICE. HOWARD ERNEST PIPER, Wichita, Kans. Filed Aug. 8, 1930. Serial No. 473,937. 8 Claims. (Cl. 88—18.5.)



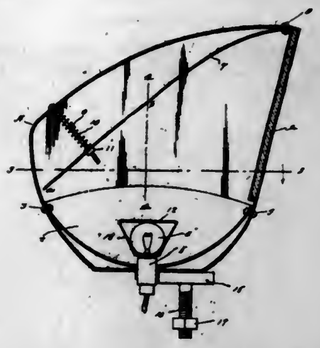
1. In a structure of the class described, a relatively stationary plate provided with a bearing, a shaft journaled in said bearing, a drive for said shaft, a drum attached to said shaft, said drum having a rim portion in rotary contact with a guide groove formed on said plate, the rim portion of the drum being formed with a film receiving groove, and intermittently operable successively acting sets of feed pins carried by said drum and projectible radially outwardly at predetermined intervals into said film groove, said sets of pins being normally spring retracted, and means on said plate for projecting the sets of pins outwardly whereby only one set of pins is in full film-feeding position at a time.

1,898,142. RESILIENT WHEEL. MARIO PONGILUPPI, Serravalle Po, Mantua, Italy. Filed Apr. 11, 1930, Serial No. 443,465, and in Italy Apr. 19, 1929. 5 Claims. (Cl. 152—38.)



1. A resilient vehicle wheel comprising a wheel body providing a peripheral space, radial flanges projecting from the periphery of said body and limiting an outwardly opening channel leading to said space, an air tube in said space, a casing encircling said flanges and engaged therewith, and a row of blocks in said channel between said flanges, each of said blocks bearing on said casing and on said air tube and being free for radial and lateral movements.

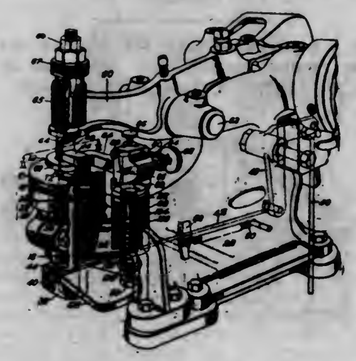
1,898,143. HEAD LAMP. ROY E. SCHENSTED, Bessemer, Mich. Filed Dec. 15, 1931. Serial No. 581,211. 1 Claim. (Cl. 240—41.1.)



A lamp of the class described comprising a casing, having its front sloping downwardly and rearwardly, with a large substantially rectangular shaped opening in the upper part of said front, a transparent member in said opening, a vertically arranged concave substantially elliptical shaped reflector arranged in the bottom of the casing for directing rays of light upwardly, said reflector having upwardly bowed side edges with its rear end somewhat pointed and its front end blunt and located directly under the lower end of the opening, a vertically arranged lamp bulb, carried by the central part of the reflector, an elongated plate-like reflector having its front end connected to the top of the casing at the front thereof, said reflector extending downwardly and rearwardly to a point adjacent

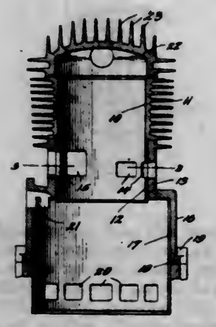
the rear of the casing, and having its front part slightly curved with its concavity facing downwardly, and the rear of the reflector being substantially straight, a bolt passing through the top of the casing and through the rear part of the plate like reflector, a nut on the bolt engaging the under face of said plate like reflector, and a spring on the bolt having one end bearing against the top of the casing and its lower end against the reflector.

1,898,144. MACHINE FOR OPERATING ON SHOE PARTS. ECKARD F. SCHMIDT, Milwaukee, Wis., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 27, 1930. Serial No. 505,107. 18 Claims. (Cl. 12—53.)



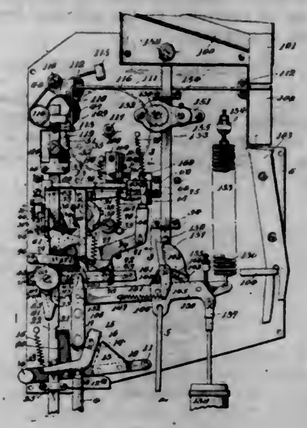
1. A machine for operating upon shoe parts, comprising a hammer having a striking face, an anvil, and a gage positioned upon the anvil adjacent to the striking face of the hammer for locating relatively to the striking face marginal portions of a blank positioned between the hammer and the anvil.

1,898,145. COMPOSITE CYLINDER FOR INTERNAL COMBUSTION ENGINES. JULIUS SCHUBERT, Lyndhurst, N. J. Original application filed Mar. 22, 1930, Serial No. 438,209. Divided and this application filed Mar. 7, 1931. Serial No. 520,965. 6 Claims. (Cl. 123—71.)



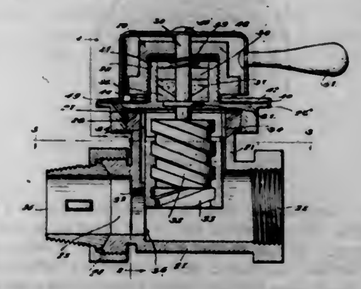
1. A composite, stepped cylinder assembly for internal combustion engines comprising, in combination, a power cylinder section; a stepped cylindrical jacket; an extension on the power cylinder section telescoped within the stepped cylindrical jacket; a cylindrical sleeve in the enlarged portion of the stepped cylindrical jacket constituting a pump cylinder; a head on the working cylinder section; and means removably to secure the working cylinder and head to said stepped cylindrical jacket.

1,898,146. WEIGHING SCALE. VINCENT F. SLEZAK, Jamaica, N. Y. Filed Nov. 8, 1929. Serial No. 405,815. 20 Claims. (Cl. 194—1.)



1. In a coin-controlled ticket-printing weighing scale having a supporting plate, a printing wheel mounted on one side of said plate and moved according to the weight being measured, and a printing hammer cooperating therewith, the combination of a hammer shaft to which said hammer is secured and located on the opposite side of said plate, and means for moving said shaft to accomplish the printing, said shaft being mounted in a plane at right angles to the axis of said printing wheel, a crank arm fastened to said shaft, a power-storing mechanism operated by the weight being measured, a detent for maintaining said mechanism in its operated position, means operated by a deposited coin for releasing said detent, and means actuated by said power-storing mechanism in its return movement after release for engaging said crank arm and thereby moving the hammer away from said printing wheel.

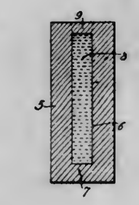
1,898,147. GATE VALVE. ELMER G. SMITH, College Station, Tex. Filed Aug. 19, 1930. Serial No. 476,281. 1 Claim. (Cl. 251—51.)



A valve of the class described comprising a hollow shell having inlet and outlet ports therein, a gate slidably mounted in said shell to control the opening and closing of said outlet port, said gate having a substantially straight edge cooperative with said outlet port which outlet port is substantially V-shaped with its vertex disposed substantially opposite to the direction of motion of said gate to open position, an operating member within said shell in screw threaded engagement with said gate, a stem rigidly fastened to said operating member and projecting outwardly of said shell, means for actuating said stem and operating member to move said gate relatively to said outlet port, and means cooperative with said actuat-

ing means for selectively limiting the maximum port area that can be uncovered by the opening movement of said gate and also means cooperative with said limiting means for giving accurate visual indication of the maximum port area that can be uncovered by the aforesaid limited opening movement of said gate.

1,898,148. ICE CREAM CONFECTION. EDWARD NORMAN SNODGRASS, Denver, Colo., assignor to Norman Confections Inc., Denver, Colo., a Corporation of Colorado. Filed Jan. 22, 1932. Serial No. 588,132. 2 Claims. (Cl. 99—16.)



1. A self-contained confection comprising an edible casing formed from a normally liquid material frozen to a substantially solid state, there being a cavity in said solid casing originally closed on all sides except one, a viscous liquid filler confined in said cavity, and an edible closure of similar normally liquid material frozen to a substantially solid state in said cavity for cohesion with the interior wall thereof to constitute a homogeneous part of said casing, said casing and closure being form-retaining and form-maintaining to totally confine the liquid filler therein and enable consumption of said self-contained confection from the fingers.

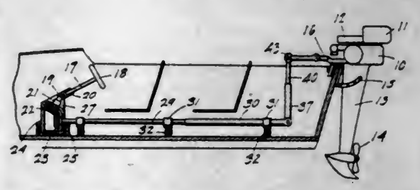
1,898,149. COMBINATION LOCK. RICHARD JOHN SOUTHCOTT, Toronto, Ontario, Canada. Filed Aug. 25, 1930. Serial No. 477,721. 8 Claims. (Cl. 70—53.)



1. In a combination lock, the combination with a shaft, of a casing through which the shaft extends, a dial turnably mounted on the casing, a plurality of locking means located within the casing and adapted to independently lock the shaft from rotation when turned clockwise, means actuated by the turning of the dial for releasing the locking means individually each at a separate predetermined point in the dial's rotation, and means for returning the locking means to the engaged position actuated by turning the dial counterclockwise past its normal position.

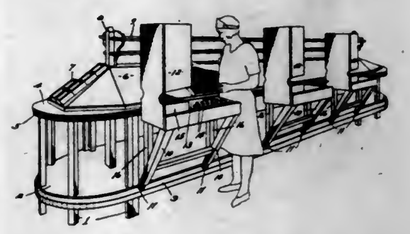
1,898,150. OUTBOARD MOTOR STEERING DEVICE. CARL M. STOVER and JACK W. WRIGHT, Oakland, Calif. Filed July 30, 1932. Serial No. 626,692. 3 Claims. (Cl. 115—18.)

1. In combination with a boat having an outboard motor: remotely controlled steering means having a telescopically adjustable shaft to compensate for variations in distance of control position from the motor, a control



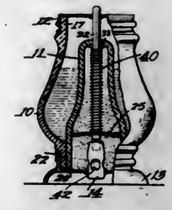
for said steering means, and pivotally mounted shaft bearings for permitting angular displacement of the control relative to the longitudinal axis of the boat.

1,898,151. PACKING TABLE FOR CANDY MAKERS. RUSSELL STOVER, Denver, Colo. Filed Feb. 23, 1929. Serial No. 342,279. 4 Claims. (Cl. 226—129.)



1. A packing table for candy manufacturers, comprising a stationary box supporting portion, and packing racks for carrying the goods to be packed attached to and movable around the box holding portion of the table, said packing racks extending normally from said box support portion to give the packers easy access to the goods and the boxes to be packed and to enable the supplies of goods to be replenished without interfering with the packers.

1,898,152. SALT AND PEPPER SHAKER. HENRY M. TAFT, Worcester, and ARTHUR E. TAFT, Grafton, Mass. Filed Apr. 10, 1931. Serial No. 529,150. 4 Claims. (Cl. 65—45.)

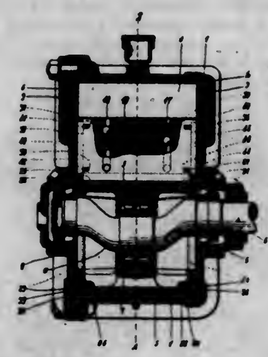


1. A combination salt and pepper shaker having an outer container, an inner container, a perforated top for the outer container, a base forming also a closure for the inner container and having an axial opening, and a valve slidable in said axial opening in said base and effective to deliver a measured quantity only of material from said inner container at each manual movement of said valve.

1,898,153. SUCKING AND COMPRESSING MACHINE. GENTARO TAMURA, Higashiyodokawa-Ku, Osaka, Japan. Filed Sept. 11, 1930. Serial No. 481 323. 2 Claims. (Cl. 103—132.)

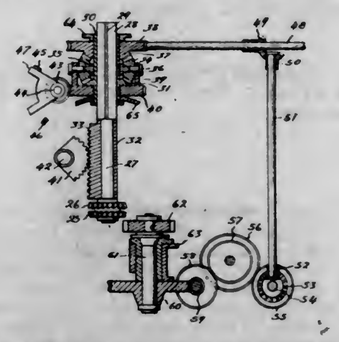
1. A machine of the class described comprising a casing, a rolling plunger mounted therein, a swinging plunger

mounted adjacent said rolling plunger, intake and exhaust valves carried by said casing, a partition plate carried by said rolling plunger, said swinging plunger provided with a slit formed therein for receiving said partition plate, said plate being slidably mounted within said slit, said intake and exhaust valves being independent of said partition plate, said partition plate dividing said casing into an intake compartment and a compression compartment, means



formed in said partition plate for controlling the flow of pressure from said intake compartment to the slit formed in said swinging plunger and preventing the return flow of pressure to said intake compartment, and means formed in said partition plate for controlling the flow of pressure from said slit in said swinging plunger to said compression compartment and preventing the return flow from said compression compartment to said slit.

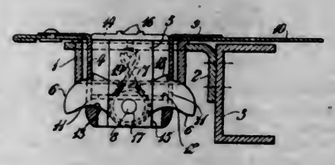
1,898,154. METHOD OF GEAR CUTTING. NIKOLA TRBOJEVICH, Detroit, Mich. Filed Apr. 16, 1930. Serial No. 444,823. 4 Claims. (Cl. 90—9.)



1. A method of generating gears in which two angularly offset cutters are reciprocated relatively to the work while both are rotating in a timed relation and in which the cutters are imparted an additional oscillating movement at the ends of their cutting stroke to cause the said cutters to cut first on one side of the tooth space and then the other.

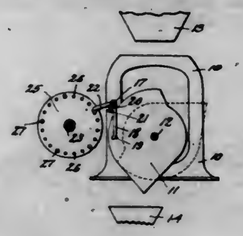
1,898,155. DETACHABLE FASTENER. EDWARD JAMES TRIPP, Hanham, near Bristol, England. Filed Aug. 24, 1931, Serial No. 559,071, and in Great Britain Aug. 28, 1930. 15 Claims. (Cl. 24—211.)

1. A fastening device for the removable connection of two elements including a socket carried by one element, a hollow plug carried by the other element, a plunger movable longitudinally in the hollow plug, cams pivotally carried by the plunger and operable through openings in the plug to engage beneath the lower edge of the socket to lock the plug and socket and thereby the elements



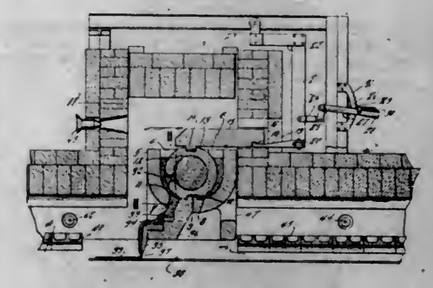
relative to each other, the cams and the edge of the socket being so formed and arranged with respect to each other as to permit the displacement of the cams from the socket by relative inward movement of the plunger.

1,898,156. CONTROLLED PLURAL BATCH WEIGHING MACHINE. PETRUS L. M. VAN DER LANDE, Deventer, Netherlands. Filed July 16, 1932, Serial No. 622,939, and in the Netherlands July 24, 1931. 5 Claims. (Cl. 249—22.)



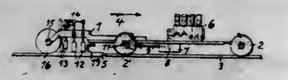
1. In a controlling mechanism for weighing machines having a weigh receptacle moving between filling and dumping positions, a latch means for latching the receptacle in dumping position, and a timing device operating to release the latch means at predetermined intervals.

1,898,157. SHEET GLASS MANUFACTURE. WILLARD L. VAN NESS, Toledo, Ohio. Filed Dec. 9, 1929. Serial No. 412,824. 12 Claims. (Cl. 49—55.)



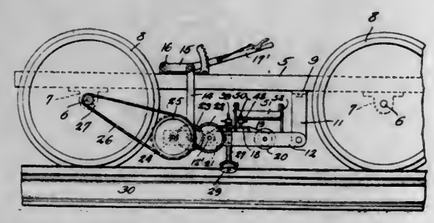
12. A molten glass flow-off control comprising a receptacle having delivery means, a member rollably supported upon its underside in said receptacle, and a reciprocable actuator for the member freely movable over and interengaging with the member remote from its support, said actuator being more remote from the delivery means than the support for the member.

1,898,158. MECHANICAL PAVIOR. KASPAR WINKLER, Zurich, Switzerland. Filed Sept. 17, 1930, Serial No. 482,556, and in Germany Sept. 24, 1929. 24 Claims. (Cl. 94—48.)



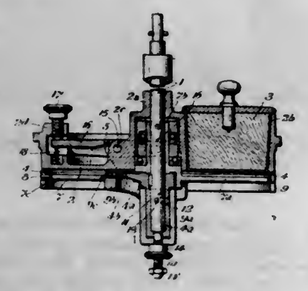
1. A machine for making roads of concrete and the like, comprising in combination a movable supporting frame, means on said supporting frame for tipping and lightly spreading concrete in a moist condition, kneading means comprising a great number of small kneaders having a small surface capable of penetrating the concrete mass, said kneaders being arranged close together on the frame behind the tipping and spreading means so as to act on the lightly spread concrete, a plurality of long rammers arranged on the frame behind said kneaders, having a small bottom surface for firmly ramming the concrete subsequent to the action thereon of the kneaders, and at least one heavy finishing member arranged behind said rammers for compressing the concrete to the required level of the road surface.

1,898,159. TRACK RECORDER. SAMUEL E. WISHARD, Ludlow, Calif. Filed Oct. 7, 1931. Serial No. 567,499. 3 Claims. (Cl. 234—1.)



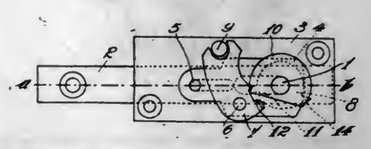
1. A track recorder comprising a body portion movable over the rails of a railway track, a frame mounted under the body portion, an arm mounted on the body portion, a wheel on the arm for moving over a railway rail, an arm extending laterally from the first mentioned arm, a movable arm, a wheel on the movable arm and engaging the rail over which the device is moving, a tubular arm extending from the movable arm, yieldable means for normally urging the arms towards each other, and a marker operated by the movable arm.

1,898,160. CUTTING MACHINE. FRIEDRICH AESCHBACH, Aarau, Switzerland. Filed Sept. 18, 1931, Serial No. 563,620, and in Switzerland May 22, 1931. 4 Claims. (Cl. 146—124.)



1. In a cutting machine of the type described, in combination, a casing, a vertical shaft mounted in said casing, a plurality of sickle-shaped cutting knives, a carrier to which said knives are fixed, a hub on said carrier and fixed to said shaft, a cutting table, means for raising and lowering said cutting table, which means include a two-armed lever having a fork-shaped end engaging said hub, and an adjusting screw cooperating with the other end of the lever, the latter being fulcrumed in the casing in which the female thread for said adjusting screw is provided, a plurality of knives shaped as portions of concentric cylindrical surfaces arranged like the teeth of a comb and at right angles to said cutting knives, and means adapted to angularly and axially displace said comb-knives to bring the latter into and out of cooperation with said cutting knives.

1,898,161. HINGE. JOSEPH MATHIAS ARNOLD, Ganshoren, Belgium. Filed May 28, 1931, Serial No. 540,593, and in Germany June 2, 1930. 4 Claims. (Cl. 16—128.)



1. A hinge comprising in combination a pivot pin, a flap fixed at right angles thereto, a second parallel flap rotatably engaging the pivot pin by a slotted portion, an upstanding pin on said second flap, a floating plate rotatably mounted on the pivot pin and having a slotted portion engaged by the aforesaid upstanding pin, a lever arm on said pivot pin, a swivel plate pivoted to said floating plate and operated by said lever arm, an abutment on said second flap for the swivel plate, whereby the swing movement of this plate is altered to impart a linear movement to the floating plate, the pivot pin and the first-mentioned flap, for the purpose set forth.

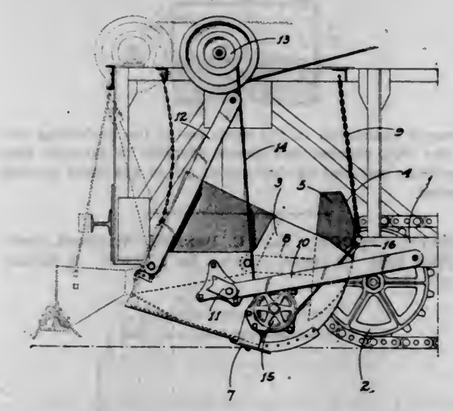
1,898,162. GRADOMETER. JOSEPH H. BAIR, Camp Hill, Pa. Filed Jan. 7, 1928. Serial No. 245,213. 3 Claims. (Cl. 33—212.)



1. In a gradometer a tube containing fluid to form a bubble said tube comprising a main channel in size beyond the virtual range of its capillarity for said fluid and an accessory canal; said channel and canal being substantially parallel and in open free communication substantially throughout their effective course.

1,898,163. CONTROL MECHANISM FOR SCRAPER BOWLS. CHARLES E. BALL, Chicago, Ill., assignor to Ball Wagon Grader Co., Stockton, Calif., a Corporation. Filed June 26, 1931. Serial No. 546,985. 7 Claims. (Cl. 37—118.)

1. In a scraper, a frame supported from the ground, a bowl, means suspending the bowl in the frame for upward tilting at its front end, a front gate for the bowl, means suspending the gate from the frame so that it hangs above the front end of the bowl when the latter is in a scraping position, and a common means exerting



a downward pull on the gate while tilting the bowl upwardly and so as to bring the gate and bowl into positive engagement with each other.

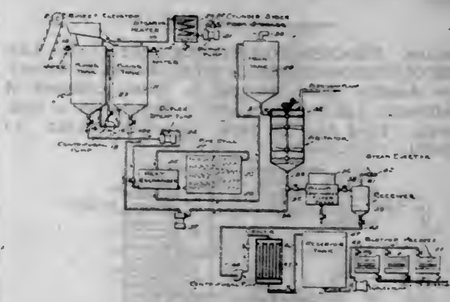
1,898,164. PLANT SUPPORT. JOHN W. BAUER, Naperville, Ill. Filed Dec. 11, 1930. Serial No. 501,543. 8 Claims. (Cl. 47—47.)



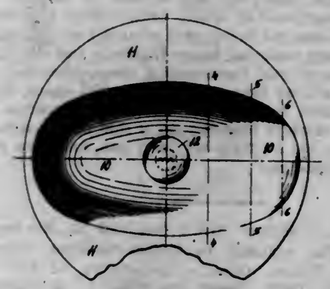
1. A plant support formed of a single piece of flexible material shaped to form a loop to encircle the plant and adapted to be freely varied in diameter, the ends of said loop being bent back and forth upon itself to form a series of adjacent recesses alternately opening in opposite directions, the recesses adapted to engage over a support having a continuous straight surface to frictionally and detachably secure the ends of the loop thereto at any point throughout the length of the support, and for separate detachment therefrom while the other end remains secured to the support.

1,898,165. PROCESS OF DECOLORIZING OILS WITH ACID-ACTIVATED EARTH AND WATER. WALTER S. BAYLIS and DANIEL S. BELDEN, Los Angeles, Calif., assignors to Filtrol Company of California, Los Angeles, Calif., a Corporation of California. Filed May 14, 1929. Serial No. 363,050. 2 Claims. (Cl. 196—147.)

1. A process of decolorizing oils which consists in wetting clay with water, adding said mixture of clay and water to the oil to be decolorized, allowing the entire mass to stand at rest until all of the water is practically absorbed into the pores of the clay, heating the mass to a temperature between and including 250° F. and 750° F., adding additional clay, heating the mixture to a temperature below that of the first heat treatment, and then agitating the mixture until the decolorisation of the oil is complete.

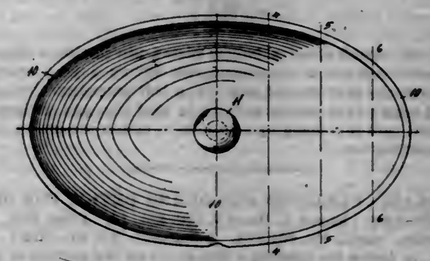


1,898,166. REFLECTOR. LOUIS A. BEAN, Denver, Colo., assignor to Ivan L. Bean, Denver, Colo. Filed May 6, 1930. Serial No. 450,151. 2 Claims. (Cl. 240—41.37.)



1. A light reflector comprising a reflecting surface generated by moving one of two unequal parabolic curves through successively parallel positions linearly along, perpendicular to and with its vertex in contact with the other parabolic curve, the constants of said curves being in the ratio of nineteen to forty-four.

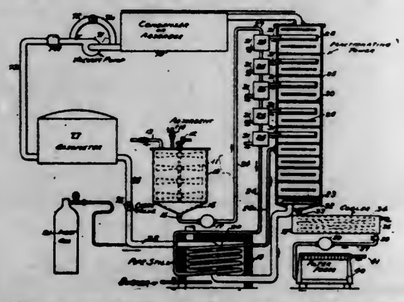
1,898,167. REFLECTOR. LOUIS A. BEAN, Denver, Colo., assignor to Ivan L. Bean, Denver, Colo. Filed May 6, 1930. Serial No. 450,152. 2 Claims. (Cl. 240—41.37.)



1. A light reflector comprising a reflecting surface generated by moving one of two parabolic curves having

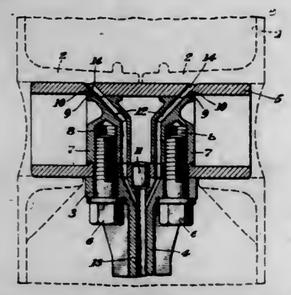
different constants through successively parallel positions linearly along, perpendicular to and with its vertex in contact with the other of said curves and marginally defined by a plane perpendicular to the coincident axes of said curves.

1,898,168. PROCESS FOR SAFELY DISTILLING AND DECOLORIZING MINERAL OILS. DANIEL S. BELDEN, Los Angeles, Calif., assignor to Filtrol Company of California, Los Angeles, Calif., a Corporation of California. Filed June 10, 1929. Serial No. 369,855. 10 Claims. (Cl. 196—79.)



1. The process which comprises heating a mixture of oil and adsorbent clay to a fractionating temperature in a flowing stream, emptying said stream of mixture directly into a fractionating space, continuously injecting inert fixed gas into the lower part of said fractionating space, continuously removing heavy fractions and oily clay from the bottom of said fractionating space, removing the condensed fractions from said fractionating space, withdrawing the fixed gas and the uncondensed portion of said stream of mixture from the top of said fractionating space, separating the oil from the inert gas, and then recycling the inert fixed gas.

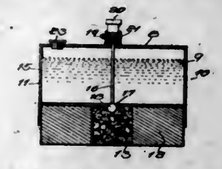
1,898,169. PISTON PIN. CHARLES M. BOVARD, Grove City, Pa., assignor to Cooper-Bessemer Corporation, Mount Vernon, Ohio, a Corporation of Ohio. Filed Mar. 26, 1932. Serial No. 601,317. 5 Claims. (Cl. 74—108.)



1. In combination, a hollow piston pin having a round exterior surface, a connecting rod having a head seated against the near side of said pin, a bolt extending through said head to the hollow interior of said pin, and an insert within said pin engaging said bolt to fasten the pin to the connecting rod.

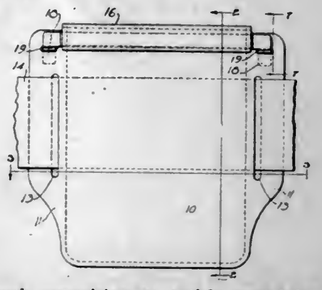
1,898,170. CLEANING AND OILING DEVICE FOR OIL STONES. EDELE J. BROWN, Chicago, Ill. Filed Nov. 4, 1929. Serial No. 404,778. 3 Claims. (Cl. 51—213.)

1. A device for forming a film of oil on the surface of an oil stone and for the removal of grit therefrom comprising an oil receptacle, a cork member projecting from the receptacle and in which grit particles are adapted to be embedded upon rubbing the cork over the surface of the stone, said cork member having an aperture extending therethrough, felt or similar oil absorbing and dispensing



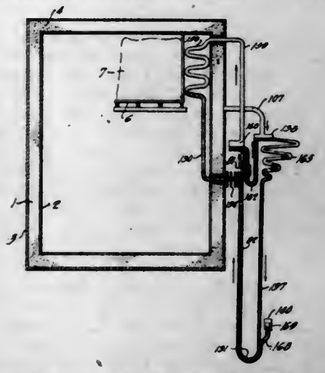
material positioned in the aperture at the projecting end of the cork member and means operable to saturate said absorbing material by delivery of oil to the inner portion thereof.

1,898,171. POUCH. EARL C. BUNNELL, Stratford, Conn. Filed Sept. 19, 1927. Serial No. 220,565. 8 Claims. (Cl. 150—3.)



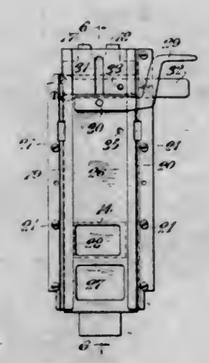
1. A pouch comprising an article containing body, a hollow, bendable neck, and webs at opposite sides of said body, all constituted by a single piece of waterproof material, said neck being adapted to be collapsed and turned upon itself to render the interior of said body watertight, a member slidable upon said neck to hold the neck collapsed, and devices upon said member and associated with said webs when said neck is turned upon itself to hold the neck in turned-upon-itself condition.

1,898,172. VACUUM INSULATION. DANIEL F. COMSTOCK, Boston, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc., a Corporation of Delaware. Original application filed Sept. 7, 1928, Serial No. 304,589. Divided and this application filed Mar. 30, 1932, Serial No. 602,008. 6 Claims. (Cl. 62—1.)



1. The combination of a heat insulating wall including a vacuum chamber and pumping means for maintaining a vacuum within the chamber, said pumping means being operable in response to the difference in temperatures existing at opposite sides of the wall.

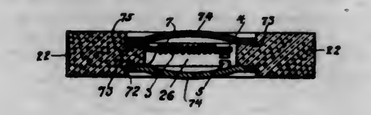
1,898,173. APERTURE PLATE FOR POWER'S PROJECTION MACHINES. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed July 25, 1929. Serial No. 380,833. 7 Claims. (Cl. 88—17.)



1. In a projector for motion pictures, a head, a partition thereon along which the film travels, an aperture plate thereon, said plate disposed in a recess in said partition, means for fastening the plate in the recess, a slide plate movably mounted on the aperture plate, and having a plurality of apertures thereon to be selectively registered with the aperture in the aperture plate, manual means for moving the slide plate to register one of its apertures, and means for latching it in this position.

6. In a projector for motion pictures, an aperture plate, a slide plate movable thereon, a handle at the top of the slide plate to be engaged by a finger of the operator, a spring latch member on the aperture plate and extending laterally just below the handle to be engaged by the thumb of the operator, to facilitate the release of the slideable plate.

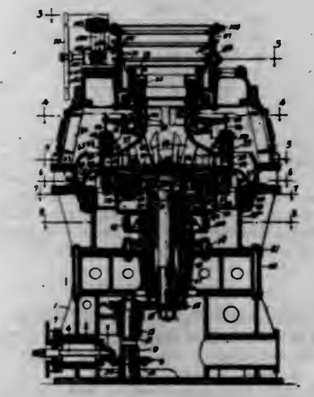
1,898,174. FLASHER DEVICE. WILLIAM DUBILIER, New Rochelle, N. Y. Filed Sept. 11, 1926. Serial No. 134,926. 12 Claims. (Cl. 200—122.)



1. A flasher device for an electrical circuit comprising an integral insulator body having an opening, a fixed contact projecting into the opening, a bimetallic member on the insulator body bearing a co-operating contact, a heater coil for said member, conducting terminal caps on the opposite faces of said opening enclosing said member, said contact and said coil, and electric connections between said caps, said member, said contact and said coil to cause periodic interruptions of said circuit.

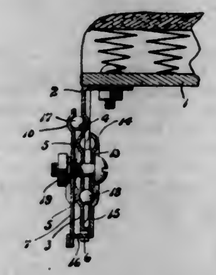
1,898,175. APPARATUS FOR DIVIDING DOUGH. JAMES GARVEY, Los Angeles, Calif. Filed Apr. 27, 1931, Serial No. 533,099. Renewed Dec. 27, 1932. 18 Claims. (Cl. 107—15.)

1. In a dough dividing apparatus, the combination of a centrifuging chamber of a plurality of measuring members rotatable with said centrifuging member and mounted to rotate relative to said centrifuging chamber to first receive dough from the centrifuging chamber and then to discharge dough, gear means for revolving said measuring members relative to said centrifuging chamber in operation, said measuring members comprising relatively movable members adapted to control the size of the measuring pockets of said members, a common means for controlling



the different relatively movable members of the different measuring pockets, and means connected with said latter means for actuating the same when the centrifuging chamber is in operation.

1,898,176. BALL BEARING SEAT HANGER. WILLIAM A. GEDRIS, Grand Rapids, Mich. Filed Sept. 17, 1930. Serial No. 482,473. 5 Claims. (Cl. 155—87.)



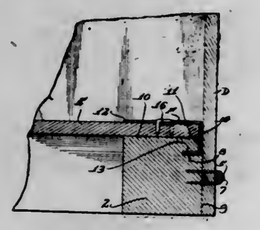
1. In a construction of the class described, a supporting bracket having an opening therethrough and a plurality of spaced apart outwardly extending arc shaped ball races in said bracket concentric with said opening, a seat, a bracket attached to the lower side of said seat and extending downwardly therefrom and inside the first bracket, at one end having an opening therethrough and a plurality of inwardly extending arc shaped ball races therein opposite the ball races in said supporting bracket, and having a second series of outwardly extending spaced apart arc shaped ball races nearer said opening in said bracket, both series of ball races in the second bracket being concentric with the opening therethrough, a member of metal located at the inner side of said second bracket and having an opening therethrough and a continuous ball race of circular form around said opening opposite the second series of ball races in the second bracket, a bolt passing through the openings in said brackets and member, and balls located in the races between said brackets and between the second bracket and said member whereby the seat may be turned through substantially 90° from a vertical to a horizontal position or vice versa, said balls in the cooperating series of ball races on the brackets coming to the ends of the ball races when the seat is in substantially horizontal position.

1,898,177. BOX. DONALD R. GOODING, Wausau, Wis., assignor to Wisconsin Box Company, Wausau, Wis., a Corporation of Wisconsin. Filed Feb. 1, 1932. Serial No. 590,140. 1 Claim. (Cl. 217—12.)



A wire-bound box comprising two wire-bound box blanks arranged in endwise abutting relationship, hook-like connectors applied over the juxtaposed cleats fastening together the juxtaposed ends of the blanks, and nails fastening said connectors to said cleats, the resulting blank so formed being folded into rectangular form and fastened in such form by the wire.

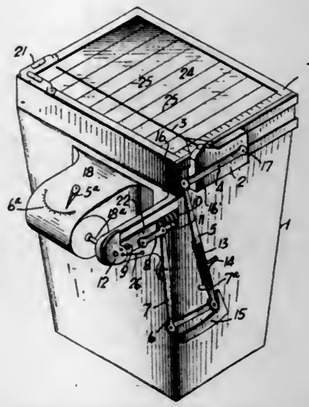
1,898,178. BOX. DONALD R. GOODING, Wausau, Wis., assignor to Wisconsin Box Company, Wausau, Wis., a Corporation of Wisconsin. Filed Feb. 15, 1932. Serial No. 592,963. 3 Claims. (Cl. 217—12.)



1. A wire-bound box comprising a plurality of individual sections, every section comprising end cleats and connecting material, binding wires attached to said sections to connect the same in foldable relation in rectangular form, separate end walls, said end walls having hook members permanently fastened to the ends of the same to prevent relative displacement when the box is accidentally dropped on an end, said hooks being substantially channel-shaped with one leg shorter than the other, the longer leg being in contact with and attached to one surface of the wall member and the shorter leg being spaced from and parallel to the opposite surface of the wall member, the cleats of the opposite sections having kerfs therein to receive the shorter legs of the hooks in interlocking relation, the kerfs being perpendicular to the adjacent box sides, the end walls and attached hooks being slid into position with the shorter legs of the hooks sliding in the kerfs, and the cleats being reduced in depth adjacent the kerfs to receive the connecting webs of the hooks with the webs of the hooks against the faces of the cleats between the kerfs and the end members.

1,898,179. AERIAL PHOTOGRAPHY. STUART GRAHAM, Ottawa, Ontario, Canada. Filed Feb. 28, 1929, Serial No. 343,518, and in Canada Mar. 16, 1928. 6 Claims. (Cl. 88—16.)

1. An apparatus for securing aerial photographs having a predetermined amount of overlap, comprising in combination an aerial camera with a shutter tripping device and a view finder, said view finder including a casing and a lens therein and a ground glass in the focal plane of the lens, a movable member extending across the ground glass, a prime mover for moving said member and for operating said camera shutter tripping device, means for adjusting the speed of travel of said member and with the aid of visual observation of the image of the terrain for synchronizing the apparent speed of travel thereof with that of said movable member, means for limiting the extent of travel of said movable member and for automatically returning the same to normal position after it has reached a predetermined point in its travel, means operated by the



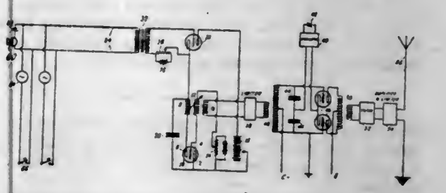
moving parts of said view finder for intermittently effecting an operation by said prime mover of said camera shutter tripping device so as to effect a synchronism of operation between the camera and view finder.

1,898,180. COUPLING ARRANGEMENT. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 21, 1927. Serial No. 221,091. 9 Claims. (Cl. 178—44.)



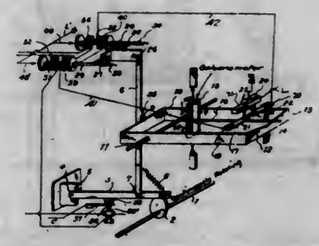
1. The method of obtaining a desired impedance ratio and a desired phase shift which includes changing the impedance successively by ratios the product of which equals the desired ratio, and accompanying the impedance changes with phase shifts the algebraic sum of which equals the desired phase shift.

1,898,181. OSCILLATION GENERATION. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 23, 1928. Serial No. 264,103. 12 Claims. (Cl. 250—36.)



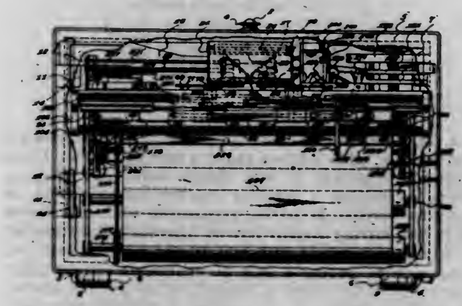
1. The method of generating oscillations with an electron emission valve having a control grid and a condenser, which includes relatively steadily feeding current unidirectionally to the condenser, utilizing a resulting charge on the condenser to make the valve conductive to discharge the condenser, and utilizing a discharge of the condenser to apply a biasing potential to said control grid to make the valve non-conductive to permit the steady current to again charge the condenser, in cyclic succession.

1,898,182. AUTOMATIC CONTROL SYSTEM AND APPARATUS THEREFOR. THOMAS RANDOLPH HARRISON, Philadelphia, Pa., assignor to Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 25, 1924. Serial No. 701,829. 23 Claims. (Cl. 177—351.)



1. In an automatic system of control, a deflectable member, a periodically operating device engaging said deflectable member when deflected, an electromagnetic means jointly controlled by said deflectable member and said periodically operating device, and means controlled by said electromagnetic means to free said deflectable member from engagement with said periodically operating device.

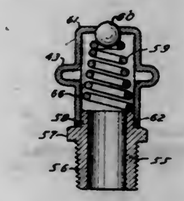
1,898,183. RECORDING AND CONTROL SYSTEM AND APPARATUS THEREFOR. THOMAS RANDOLPH HARRISON, Wyncote, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 4, 1926. Serial No. 146,141. 78 Claims. (Cl. 234—5.5.)



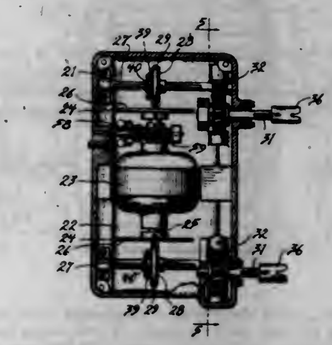
1. In a recording mechanism, a record sheet; an ink ribbon; a printing hammer adapted to impact said ink ribbon against said record sheet; a contacting galvanometer mechanism controlling the position of said printing hammer; and means controlling said galvanometer mechanism for operating said printing hammer.

1,898,184. LUBRICATING SYSTEM. JOSEPH HASS, New York, N. Y. Filed May 19, 1930. Serial No. 453,613. 4 Claims. (Cl. 184—105.)

1. As an article of manufacture, a fitting comprising a bushing including an annular flange and an uninterrupted nipple receiving portion, a nipple comprising a one piece member having a valve seat and integral disposed lugs, a valve and means yieldably holding said valve against said seat and operatively supported by said nipple receiving portion of said bushing, the nipple being detachable from said receiving portion due to excess pressure within the fitting, the nipple and uninterrupted nipple receiving portion of the bushing being solely connected by frictional engagement.



1,898,185. OPERATING MEANS FOR THE TRIPODS OF PHOTOGRAPHIC CAMERAS AND THE LIKE. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 15, 1928. Serial No. 306,272. 6 Claims. (Cl. 248—47.)

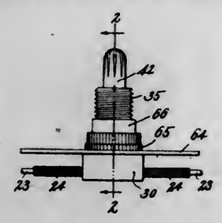


2. In a device of the character described the combination with an enclosing frame, of means on said frame for detachably securing the same on the turntable of a tripod head including a channel on the frame adapted to embrace a trunnion upright on the turntable and releasable means for clamping the trunnion upright in said channel, a pair of parallel shafts on said frame adapted for driving alined operating shafts of the tripod head, an electric motor within said frame, means within said frame for driving said first mentioned pair of shafts from said motor and adapted for adjustment to vary independently the driving of these shafts, and manually actuated means on said frame for adjusting said driving means to vary independently the driving of said first mentioned pair of shafts.

1,898,186. ELECTRIC SWITCH. GUSTAF A. JOHNSON, New Bedford, Mass. Filed Mar. 12, 1932. Serial No. 598,420. 14 Claims. (Cl. 200—63.)

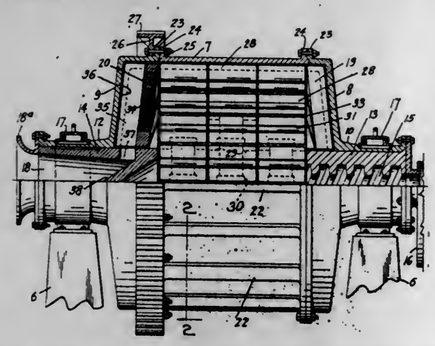
1. In an electric switch, an insulating body provided with a recess in its upper face having an annular series of ratchet teeth and provided with a pair of grooves in its lower face communicating with said recess, a pair of fixed contacts mounted in said recess on alternate teeth and having portions projecting into said grooves, lead wires in said grooves connected to said projecting portions, a movable contact mounted in said recess and having portions adapted to engage said fixed contacts to close the circuit, a pair of insulating disks for covering the top and bottom faces of said body, said top disk having a central aperture, a casing enclosing said body and said disks to

lock the same together, a sleeve centrally located on said casing, a rotatable operating member of insulating material mounted in the upper end of said sleeve and



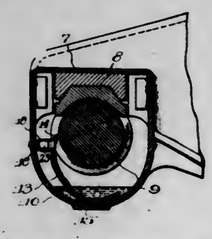
locked therein and means whereby the rotation of said operating member rotates said movable contact to operate said switch.

1,898,187. GRINDING MILL. RUDOLF P. JUGEL, Denver, Colo., assignor to American Ball Mill Company. Filed Mar. 31, 1930. Serial No. 440,404. 6 Claims. (Cl. 83—9.)



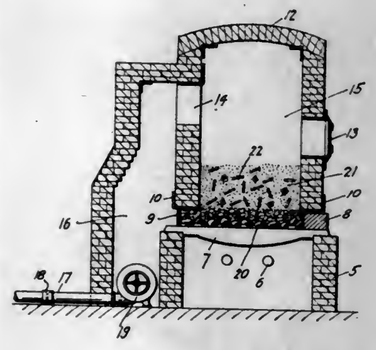
1. A grinding mill comprising a channeled shell, a sectional lining for the shell, sections of the lining having lugs in the channels, and fillers between the lugs and walls of the channels, holding the lugs in the channels.

1,898,188. LUBRICATING DEVICE. ROBERT C. KENDALL, Chicago, Ill. Filed Mar. 18, 1930. Serial No. 436,726. 8 Claims. (Cl. 308—88.)



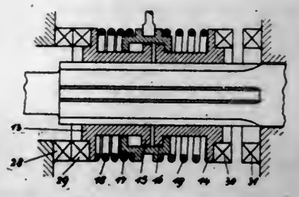
1. A lubricating device comprising in combination a supporting member having a rigid connection with a journal box, a pressure member, a wick suspended by said pressure member, supporting connections between said supporting member and pressure member pivotally mounted on one of said members and having a sliding connection with the other whereby the pressure member may move in a direction lengthwise of the object which is to be lubricated and may yield in a lateral direction, and a spring between said members acting to spread said members apart and therewith press the upper end portion of the wick against the object which is to be lubricated.

1,898,189. POISON AND METHOD OF PRODUCING SAME. WILLIAM D. KILBOURN, Denver, Colo., assignor to The White Iron Ores and Products Company. Filed May 25, 1928. Serial No. 280,488. 4 Claims. (Cl. 167—15.)



1. The herein described process comprising the mixing of sage-plants with arsenic-containing material, heating the mixture until volatile matter of the sage-plants is released and the material sublimated, and condensing the gases.

1,898,190. CLUTCH MECHANISM. OTTO KÖHLER, Stuttgart-Unterturkheim, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany, a Company of Germany. Filed Aug. 26, 1930, Serial No. 477,917, and in Germany May 3, 1929. 3 Claims. (Cl. 192—67.)

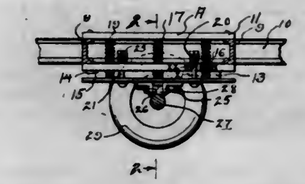


1. In a change speed gear for power driven vehicles the combination, with a driven shaft, a driving member freely rotatable relatively to said driven shaft and coupling means comprising a coupling member movable from an operative position in driving engagement with said driven shaft and driving member into an inoperative position out of driving engagement with said driving member, said coupling member having a pair of abutments spaced apart lengthwise of the coupling member, of an annular operating member slidable on the coupling member between said abutments and adapted to engage positively the abutment remote from the driving member, and resilient connecting means interposed between the annular operating member and the abutment adjacent the driving member, so that the disengagement of the coupling member is effected positively by the said annular actuating member and the engagement through the intermediary of the said resilient member.

1,898,191. SPRING MOUNTING FOR MOTOR VEHICLES AND TRAILERS. AUGUST F. KUESTER, Clintonville, Wis. Filed Mar. 23, 1932. Serial No. 600,712. 9 Claims. (Cl. 280—106.5.)

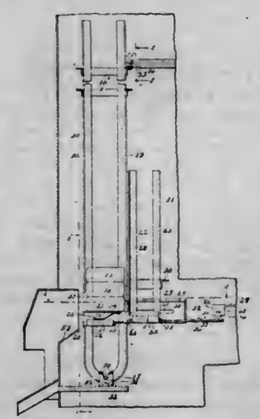
1. In a vehicle, body members having upper and lower spaced legs, slide brackets associated with the body members having a horizontally disposed flange underlying the

body member, the lower leg of the body member being provided with a plurality of openings, expansion coil springs disposed through the openings and interposed between the



top leg of the body member and the horizontal flange of the slide bracket, and a ground wheel associated with the slide bracket.

1,898,192. GOODS HOLDING AND DISPENSING UNIT. LOUIS H. LARSEN, Union City, N. J., assignor to Nixon Vending and Change Making Machines, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 2, 1928. Serial No. 266,680. 14 Claims. (Cl. 312—67.)



1. A package holding and dispensing device comprising, in combination, upright holders for containing adjacent stacks of packages, a channel-shaped structure fixed to the lower ends of the holders and having substantially horizontal outlet compartments individual to the holders for receiving therefrom the lowermost packages of the stacks, a movable member within the channel-shaped structure, and pushers individual to the compartments moved by said member, said pushers being effective to remove from the stacks the lowermost packages which are received in the compartments.

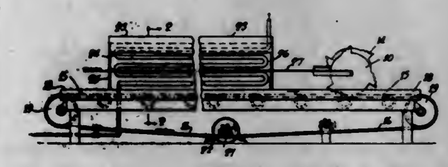
1,898,193. COMBINED CARDCASE AND SCORE RECORDER. WALTER M. LENNSTROM, Douglaston, N. Y. Filed Apr. 15, 1931. Serial No. 530,258. 3 Claims. (Cl. 281—6.)

1. A combined card case and score recorder, including a container having at one end walls forming a score sheet supply compartment, a drawer adapted to contain cards fitting slidably within said container, said container having an open face therein whereby said drawer may be removed, one of said container walls being interposed between said supply compartment and drawer and abutting the inner end of the drawer when the latter is within the container and said container also having a window in another of its sidewalls overlying said drawer, the wall of said drawer adjacent said window being spaced therefrom, and the space thereby afforded being utilized to



provide a score sheet receiving passageway interposed between the drawer and said last mentioned wall, said passageway communicating with said score sheet supply compartment and leading to the exterior of the container.

1,898,194. APPARATUS FOR THE FORMATION OF HOLLOW ARTICLES. LOUIS LIDSKY, Brooklyn, N. Y., assignor to Wigly Candy Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Aug. 1, 1930. Serial No. 472,297. 10 Claims. (Cl. 107—8.)

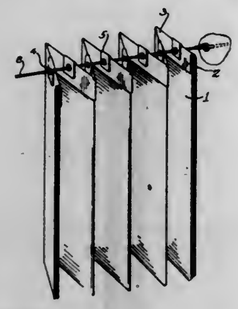


1. Apparatus for the formation of hollow articles in molds, comprising a hardening unit, a rollable unit, means to roll said rollable unit toward and through said hardening unit, means for alternately lifting opposite ends of said rollable unit to incline an axis thereof successively in opposite directions as it is rotated during such movement, and means to increase the rotative movement of said rollable unit during its movement toward and through said hardening unit.

1,898,195. CAR LINER. GUS OLIVER LORENZ, Shelbyville, Ind., assignor to The Kennedy Car Liner & Bag Co., Shelbyville, Ind., a Corporation of Indiana. Filed May 12, 1932. Serial No. 610,906. 1 Claim. (Cl. 105—423.)

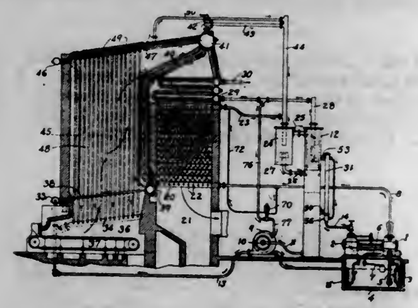
Car liner comprising a flexible sheet of material of sufficient stiffness to lie when folded in planar areas, said sheet being folded double longitudinally to form a single longitudinal mid-seam, the thus folded sheet being folded along lines perpendicular to the line of said longitudinal fold, in alternately reversed directions forming a series of pleats, grommets set in said pleats adjacent the line of said longitudinal fold, said grommets being located so as

to aline when said pleats are laid together for receiving a suspending element adapted to be stretched from end to end of a car, and the sides of said folded sheet being



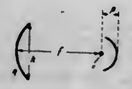
adapted when said mid-seam is extended, to be spread laterally in opposite directions and secured in spread position, forming a canopy.

1,898,196. DOUBLE CIRCUIT FORCED CIRCULATION WATER TUBE BOILER. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company. Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 3, 1927. Serial No. 158,470. 11 Claims. (Cl. 122—235.)



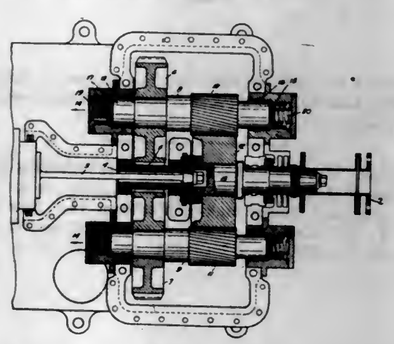
1. In a water tube boiler, water tubes heated by gases from a fire, a plurality of pumps arranged in two independent sets, one set for forcing feed water through tubes of said boiler, the other set for circulating water in excess through tubes of said boiler, means for separating steam from water discharged from said tubes and for returning said water to said set of circulating pumps, and means controlled by the flow of the feed water for varying the quantity of the circulating water so that it increases and decreases with the increase and decrease of the feed water.

1,898,197. REFLECTOR FOR VERY SHORT WAVES. WERNER LUDENIA, Berlin, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 11, 1931, Serial No. 514,987, and in Germany Feb. 25, 1930. 2 Claims. (Cl. 250—11.)



1. A reflecting system for very short Hertzian waves comprising a reflector whose focal distance is great relative to the wave length of energy to be radiated and with respect to the opening of the reflector, and, another reflector located on the focal line of said first mentioned reflector having a focal length equal to one-quarter of the wave length of energy to be radiated, said last mentioned reflector directing energy into said first mentioned reflector.

1,898,198. GEARING. ALF LYSHOLM, Stockholm, Sweden, assignor to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden, a Swedish Joint-Stock Company. Filed June 4, 1930, Serial No. 459,203, and in Germany Oct. 25, 1929. 11 Claims. (Cl. 74—7.)



1. A gearing comprising a driving shaft, a driven shaft, said shafts being axially fixed relative to each other, a plurality of axially movable intermediate shafts, a single helical gear fixed to the driving shaft, gears fixed to each of the intermediate shafts and meshing with the gear on the driving shaft, a single helical gear fixed to the driven shaft, said last mentioned gear having teeth twisted oppositely with respect to the teeth of the driving shaft gear, gears fixed to each of the intermediate shafts and meshing with the gear on the driven shaft, and yieldable means for permitting axial movement of the intermediate shafts to automatically equalize tooth engagement in the gearing and for limiting said axial movement.

1,898,199. CRYSTALLIZED DIGITALIS GLUCOSIDE AND METHOD OF PRODUCING THE SAME. CARL ULRICH FRANZ MANNICH, Berlin-Steglitz, Germany. Filed Sept. 23, 1929, Serial No. 394,741, and in Germany Oct. 4, 1928. 3 Claims. (Cl. 87—28.)

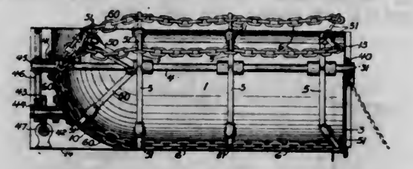
2. As a new article of manufacture, the isolated crystalline digitalis glucoside whose probable formula is $C_{41}H_{64}O_{17}$ which has an optic rotation in alcohol solution of about $\alpha D^{20} = 33.3°$, is readily soluble in acetone, difficultly soluble in chloroform, and is colored brown by concentrated sulphuric acid.

1,898,200. FISH LURE. WENZEL A. MEDLIN, Cleveland, Ohio. Filed July 3, 1931. Serial No. 548,488. 8 Claims. (Cl. 43—46.)



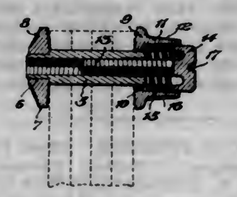
1. In a fish lure, the combination of a body part, and means for connecting a line to said body part constructed and arranged to permit the point of attachment of the line to move a substantial amount in relation to the body of the lure and thereby cause the draught of the line to move the lure in a different direction as the said point of attachment changes.

1,898,201. CONCRETE STIRRING DEVICE. CLYDE B. MORROW, Seattle, Wash. Filed May 5, 1931. Serial No. 535,136. 8 Claims. (Cl. 83—78.)



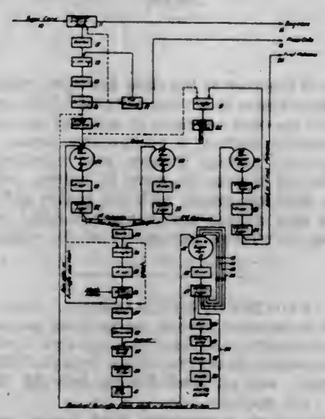
1. In combination with a part-cylindrical hopper truck body, longitudinally extending flexible members disposed about the axis of the hopper at substantially the distance of its radius, and rigid members for supporting and rotating said flexible members to scrape the hopper bottom, said supporting members including a portion directly supporting the flexible member and yieldable inwardly upon encountering abnormal resistance.

1,898,202. KEY HOLDER. HENRY H. MURRAY, Riverton, N. J., assignor to Mechanical Improvements Corporation, Camden, N. J., a Corporation of New Jersey. Filed Feb. 25, 1931. Serial No. 518,183. 9 Claims. (Cl. 59—96.)



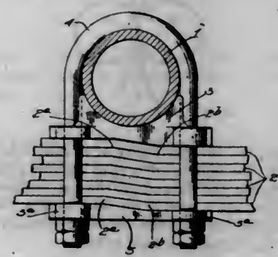
1. A key holder comprising a bar on which the keys are mounted, a head fixedly secured to said bar adjacent one end thereof, a second head slidably mounted on said bar, a screw passing freely through said slidable head and threaded into said bar, and a coil spring interposed between said slidable head and the head of said screw.

1,898,203. METHOD OF REFINING SUGAR AND THE LIKE. JOHN J. NAUGLE, Rye, N. Y. Filed July 28, 1928. Serial No. 295,880. Renewed June 24, 1932. 10 Claims. (Cl. 127—62.)



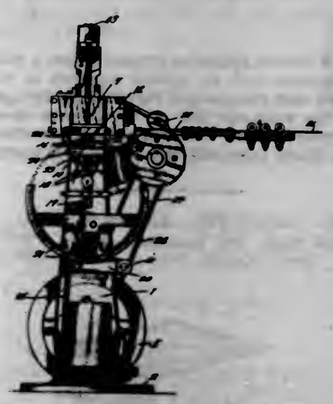
1. The process of manufacturing sugar, which comprises the steps of extracting a solution of sucrose from a sucrose-bearing plant, treating said solution of sucrose to obtain a raw sugar therefrom, treating said raw sugar to obtain a refined sugar and a syrup therefrom, and returning said syrup to the process for reconversion into raw sugar.

1,898,204. VEHICLE SPRING PERCH. DAVID NETTENSTROM, Chicago, Ill. Filed Nov. 12, 1928. Serial No. 318,706. 7 Claims. (Cl. 267—52.)



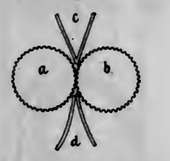
1. In combination with a support, a leaf spring having each of its leaves formed with parallel offset portions, connected by a straight inclined portion, said leaves being arranged in nested relation with the surface of the inclined portions cooperating with the inclined surfaces of the contiguous leaves for preventing shifting of one with respect to the other, and clamping means carried by the support, including an upper member and a lower member for engaging the top and bottom leaves respectively, said clamp members each having two parallel offset portions, connected by an inclined portion adapted for co-acting with corresponding surfaces of the upper and lower leaves for securing said spring against longitudinal movement.

1,898,205. BASKET HANDLE MACHINE. WALTER F. NEWHOUSE, Benton Harbor, Mich. Filed Nov. 13, 1931. Serial No. 574,738. 19 Claims. (Cl. 140—93.)



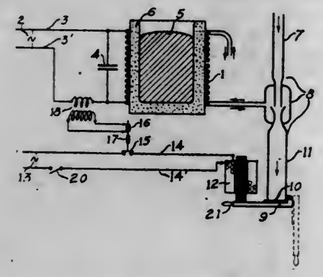
1. In a machine for bending wire into bail-shaped form, inserting the end portions of the bail through the rim of the basket, and clinching the ends of the bail, the combination of means for supporting the basket in position to receive the said handle, mechanism comprising clinch blocks for deflecting the end portions of the handle laterally in opposite directions against the rim of the basket, and instrumentalities for causing the operation of said mechanism in properly timed relation to the insertion of the handle through the rim of the basket.

1,898,206. RING SPINNING DEVICE FOR SPINNING CONTINUOUSLY-FED TEXTILE FIBERS. HENRI FRANÇOIS NIOGRET, Lyon, France, assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed July 15, 1927, Serial No. 205,876, and in Great Britain July 29, 1926. 7 Claims. (Cl. 118—69.)



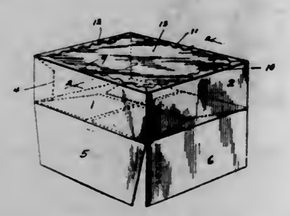
1. A process for the fastening of a continuously-fed textile thread on the bobbin of a ring spinning machine comprising traversing the thread on the motionless bobbin and causing it to engage a device on said bobbin whereby starting of the spindle bearing the bobbin secures an immediate fastening of the thread on said bobbin.

1,898,207. DEVICE FOR ELECTRIC INDUCTION FURNACES. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed Aug. 22, 1931. Serial No. 558,749. 5 Claims. (Cl. 13—26.)



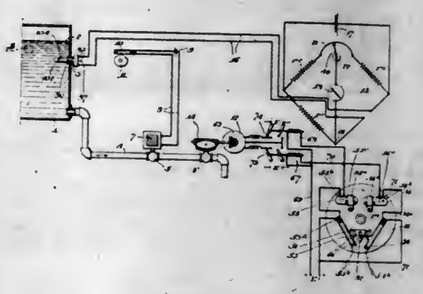
1. In a coreless induction furnace system a hollow water cooled inductor coil, an injector assembly in the cooling system of said furnace and valve means for opening and closing the discharge end of the injector assembly for forcing water through the inductor coil normally, or withdrawing water from said coil in event of trouble.

1,898,208. CANDY BOX. ANDREW OLSEN, Jr., and REED W. ROBINSON, San Francisco, Calif. Filed Mar. 23, 1931. Serial No. 524,554. 4 Claims. (Cl. 206—44.)



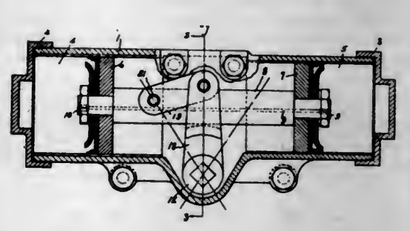
1. A folding box provided with four side walls, inwardly turned margins at the upper edges of the side walls, and closing flaps at the lower edges, the junctures of all parts being scored, and a sheet of glassine material glued across the top of the box to said margins.

1,898,209. CONTROL SYSTEM AND APPARATUS. HENRY C. PARKER, Philadelphia, Pa., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 19, 1928. Serial No. 313,416. 13 Claims. (Cl. 122—382.)



1. In a steam generating system, a boiler, blow-off structure including a valve for permitting discharge of boiler water at different rates therethrough, and means for controlling the degree of concentration of inorganic salts in the boiler water comprising a second valve in said structure, means for periodically opening said second valve, and means including balanceable electrical measuring network for controlling said first-named valve by and in accordance with variations in said concentration.

1,898,210. SHOCK ABSORBER. ABRAM F. PAUL, Llanerch, Pa., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed July 29, 1931. Serial No. 553,758. 6 Claims. (Cl. 188—88.)



1. A shock absorber of the class described, comprising a body for attachment to a vehicle frame which consists of two opposed air-tight cylinders of different diameters and an intermediate portion, a reciprocable piston in each cylinder, an air passage between said cylinders, means for causing the pistons to move in unison, and means connecting said last means with the vehicle axle for imparting to said pistons movements coincident with and proportional to relative movements of the vehicle frame and axle.

1,898,211. PROCESS OF DISCHARGING. JEAN GEORGES PENCHE, Roussillon, France, assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed June 25, 1928, Serial No. 288,297, and in Great Britain July 26, 1927. 10 Claims. (Cl. 8—5.)

1. A process for discharging dyed fabrics containing threads of an organic derivative of cellulose which comprises treating said fabrics with a composition containing charcoal.

1,898,212. CARRIER TERMINAL. RALPH POLCINI, New York, N. Y. Filed Aug. 17, 1931. Serial No. 557,517. 8 Claims. (Cl. 24—128.)

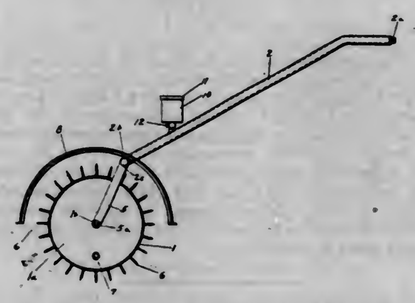


3. In a device of the class described, an integral stamping formed into a slotted cup and a loop, the latter extending from a solid edge point of the cup into the slot formed therein, said cup adapted to be squeezed so that its slotted edges approximate one another.

1,898,213. PROCESS OF RECOVERING ACETIC ACID FROM SOLUTIONS OBTAINED IN CELLULOSE DERIVATIVE MANUFACTURE. EDMOND PRINCE, Cassin-La Demi-Lune, France, assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 1, 1926, Serial No. 152,058, and in France Feb. 26, 1926. 5 Claims. (Cl. 260—122.)

1. The process of treating dilute acetic acid containing cellulose compounds remaining and resulting from the manufacture of cellulose derivatives after the removal of the cellulose derivatives, which comprises adding a strong acid capable of rendering the cellulose compounds soluble in water to said acetic acid, heating the mixture and extracting the acetic acid.

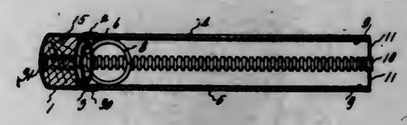
1,898,214. LAWN AERATOR. DONALD L. RICHARDS, Portland, Oreg. Filed July 25, 1932. Serial No. 624,444. 6 Claims. (Cl. 97—52.)



1. A lawn aerator defined in part as a drum member, spikes on the tread surface of said drum member, mountings for the drum member, a semi-housing for said drum member, a water distribution pipe lengthwise of the drum member and under the said semi-housing and a water supply connection for said distribution pipe.

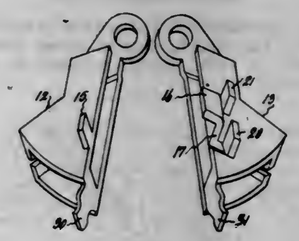
1,898,215. LOOSE LEAF BINDER. JOHN SCHADE and FRANK S. SCHADE, Holyoke, Mass., assignors to National Blank Book Company, Holyoke, Mass., a Corporation of Massachusetts. Filed June 24, 1932. Serial No. 619,040. 15 Claims. (Cl. 281—29.)

3. A loose leaf binder comprising a rigid back portion to which the loose leaf attaching means are fastened and to which covers are hinged so as to lie out in the same flat plane and hold any part of the contents in said plane, "hookless fastener" means having its strips attached to the edges of the covers and with its terminal portions at the closed end of the run attached to said rigid back



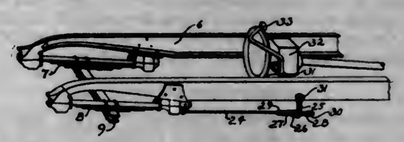
and extending far enough to the rear of the plane of the cover hinge lines to accommodate the slide of the fastener means.

1,898,216. SLIDE FASTENER CONSTRUCTION. JOHN SCHADE and FRANK S. SCHADE, Holyoke, Mass., assignors to National Blank Book Company, Holyoke, Mass., a Corporation of Massachusetts. Filed July 29, 1932. Serial No. 625,665. 6 Claims. (Cl. 24—205.)



3. A slide fastener construction comprising a prong strip fastening and unfastening slide having means to hold two prong strips in permanently assembled relation to the slide at all times in combination with means formed from parts of said slide to open the seam formed by the prong strips and thereafter separate the prong strips widely over the entire length of the slide that is directly held in the slide at any time without losing said permanently assembled relation.

1,898,217. SPRING MOUNTING. CARLYLE REDFORD, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 13, 1929. Serial No. 362,615. 16 Claims. (Cl. 280—124.)

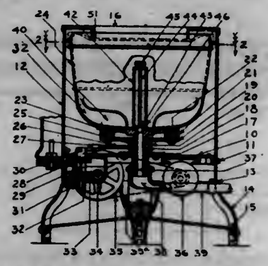


1. A spring mounting comprising a frame, yielding means on said frame for supporting the end of a leaf spring, said spring having longitudinal shifting with respect to said supporting means, and normally inoperative means for releasably resisting such longitudinal shifting.

1,898,218. WASHING MACHINE. SIMON E. SCHROEDER, Newton, Iowa, assignor to The Maytag Company, Newton, Iowa, a Corporation of Delaware. Filed Mar. 10, 1927. Serial No. 175,753. 4 Claims. (Cl. 259—75.)

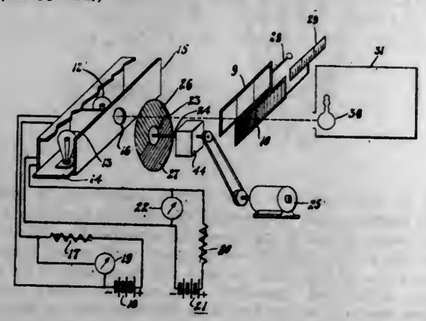
1. In a washing machine, a tub, a centrally located baffle member of relatively small diameter extending up-

wardly from the bottom of the tub, and a plurality of upstanding agitating blades extending upwardly from the bottom of the tub and disposed radially with respect to said baffle member, the outer extremities of the top edges



of said blades being curved upwardly and inwardly and gradually merged into the contiguous portions of the sides of the tub at positions below the plane of the upper end of said baffle member.

1,898,219. APPARATUS FOR THE MATCHING OF COLORS. CLAYTON H. SHARP, White Plains, N. Y. Filed Sept. 6, 1929. Serial No. 390,710. 9 Claims. (Cl. 88—14.)



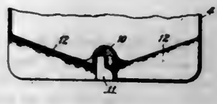
9. The method of matching the color of a luminous body to that of a body of known color characteristics which comprises alternately projecting upon a photoelectric cell those light waves from the opposite halves of the spectrum of the luminous body of known color characteristics which will produce equal electrical currents in the photoelectric cell circuit, substituting for said luminous body the luminous body whose color is to be matched to the body of known color characteristics, alternately projecting light waves from opposite halves of its spectrum upon the photoelectric cell and altering the color of said body until the light waves thus projected also produce in the photoelectric cell circuit two equal currents.

1,898,220. CIGARETTE HOLDER. MILAN BERTRAND SIMCOX, Minneapolis, Minn., assignor to Adolph G. Bemmels, Minneapolis, Minn. Filed Feb. 12, 1932. Serial No. 592,549. 6 Claims. (Cl. 131—51.)



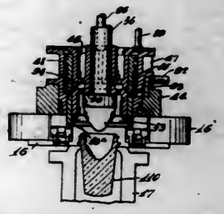
1. As an article of manufacture, a cigarette holder having a body formed with a depression in one end, a ring yieldingly maintained with a portion of its area in the depression, and means to partially remove the ring from the depression to permit of the insertion of a cigarette in said ring.

1,898,221. WASHING APPARATUS. HOWARD F. SNYDER, Newton, Iowa, assignor, by mesne assignments, to The Maytag Company, Newton, Iowa, a Corporation of Delaware. Filed June 26, 1925. Serial No. 39,871. 10 Claims. (Cl. 259—75.)



1. A washing machine tub having the inner face of its bottom formed with a central upstanding dome with liquid impelling ribs radiating in spaced relation therefrom, the exterior face of said bottom being formed with a socket for a power shaft and having ribs radiating therefrom, said latter ribs alternating with those on the inner face of the bottom.

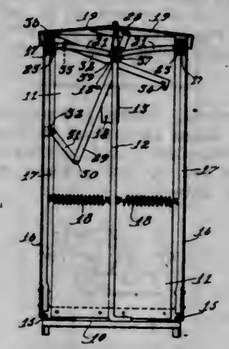
1,898,222. GLASS BLOWING MACHINE. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 2, 1929. Serial No. 411,018. 14 Claims. (Cl. 49—5.)



5. The combination of a blank mold, a neck mold in register therewith, a combined suction and blowing head in register with the neck mold, means for applying suction through said head and thereby exhausting the air from said molds, means for applying air under pressure through said head to the molds, means for withdrawing the blank mold, a finishing mold, means for bringing the finishing mold into register with the neck mold, means for withdrawing the neck mold, and means for applying air under pressure through said head to the finishing mold after the neck mold is withdrawn.

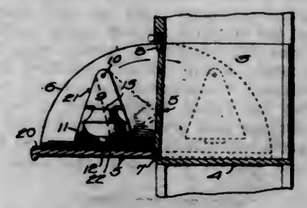
1,898,223. FILING CABINET. HERBERT B. SPERRY, Batavia, Ill. Filed June 15, 1929. Serial No. 371,196. 4 Claims. (Cl. 45—2.)

4. In a filing cabinet, the combination with a stationary portion of a portion relatively movable in relation to said stationary portion, a pair of holding pins secured to said fixed portion, and a co-operating pair of holding pins secured to said movable portion, each of the pins on the movable portion being offset in relation to the pins on the stationary portion, and being adapted to co-operate with perforated sheets to be filed thereon, having four separated perforations adapted to register synchronously with said holding pins, the said pair of spaced pins on the moving portion being differently spaced with relation to each other from the said spaced pins on the stationary portion whereby said perforated sheets to be placed upon either pair of said pins when the said portions and holding pins are separated for sheet insertion or detachment may be received only on either selected pair of holding pins in correct position to properly register with the spaced pins on the co-operating portion whereby to prevent mal-adjustment of sheets and undesired



perforations therein when it is desired to close the said portions of the cabinet toward each other and upon perforated sheets supported upon said pins.

1,898,224. RADIOCABINET. LUTHER G. STUBBS, Hamlet, N. C. Filed Feb. 23, 1932. Serial No. 594,720. 3 Claims. (Cl. 312—186.)



1. A radio cabinet having a chamber, a frame, means whereby the frame is mounted for movement into and out of said chamber, and a smoker's set carried by said frame and mounted in said frame to remain always in a vertical position when in and out of use, said smoker's set, consisting of a member made from a single piece of flat material and comprising a horizontal platform and a pair of end vertical portions pivoted to said frame, and said platform being further provided with struck up clamps at one end thereof providing spring arms to engage suitable receptacles and with a central opening to form a seat for an ash receptacle.

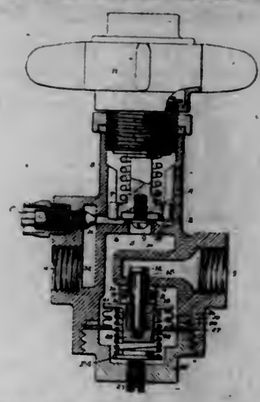
1,898,225. SHOE LACE. LEWIS GEORGE SZABO, Franklin, N. J. Filed Jan. 29, 1932. Serial No. 589,721. 1 Claim. (Cl. 24—73.)



A shoe lace I-shape in plan and comprising a flat solid rubber lace having at each end a transverse head, said head having oppositely tapering end portions.

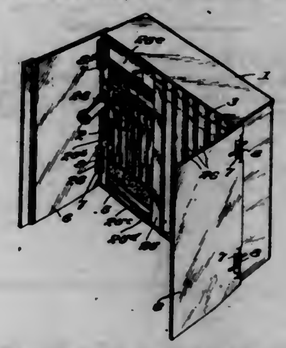
1,898,226. VALVE STRUCTURE. HALSEY W. TAYLOR, Warren, Ohio. Filed Apr. 27, 1928. Serial No. 273,240. 4 Claims. (Cl. 277—71.)

4. A valve structure, comprising a chambered body having a main valve seat and an intake passage, a main valve for said seat, an expansion chamber within said chambered body, and a pressure regulating valve unit embodying pressure actuated means confined within said ex-



pansion chamber and valve means coupled with said pressure actuated means and projected into said intake passage for controlling same.

1,898,227. CONTAINER FOR MATCHES. LUCY COTTON THOMAS, New York, N. Y. Original application filed May 2, 1929, Serial No. 359,952. Divided and this application filed Mar. 24, 1932. Serial No. 600,984. 4 Claims. (Cl. 206—38.)

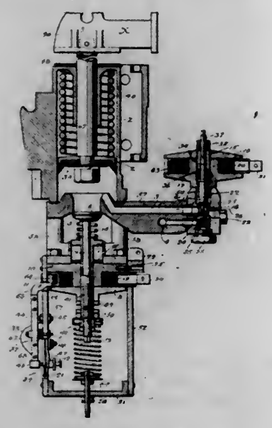


1. A container for a packet of matches, comprising a rear or back wall portion, an upstanding flange around the edge of said back portion, the edge of a portion of said flange extending inwardly and bent to provide a spring clamp for receiving the base of a match packet, the edge of another portion of said flange opposite to said spring clamp being extended inwardly and inclined to engage the said back portion to provide a smooth surface to serve as a guide or a direct access to the matches, the portions of said upstanding flange at the remaining sides of said back portion having retaining lugs struck therefrom and adapted to bear against and retain the backing wall of the match packet against said rear or back portion after the match packet has been snapped into place.

1,898,228. ELECTROMAGNETIC RELEASE VALVE. RALPH F. THOMPSON, East Liverpool, Ohio; Sarah MacGregor Thompson, administratrix of said Ralph F. Thompson, deceased, assignor to Sarah MacGregor Thompson, Sewickley, Pa. Filed Dec. 21, 1929, Serial No. 415,849. 5 Claims. (Cl. 137—139.)

1. An electromagnetic release valve adapted for use with a fluid-actuated device comprising a valve and valve

seat, a spring surrounding the valve stem for actuating said valve, an electromagnet, an armature having a sleeve portion extending slidably through the core of said magnet and abutting said spring, said valve stem extending



slidably through said sleeve, and means on the end of said valve stem for varying the pressure of said sleeve on said spring to impart initial compression thereto, said electromagnet being adapted to impart final compression to said spring to actuate said valve.

1,898,229. BUMPER. GEORGE W. VEALE, Cleveland Heights, Ohio, assignor to Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 13, 1931. Serial No. 529,627. 3 Claims. (Cl. 293—55.)



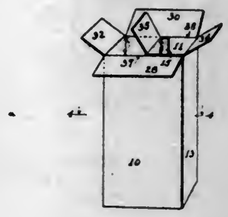
1. A bumper bar formed of spring steel and having a longitudinally extending channel in its rear face and said bar being sheathed in a covering of stainless steel the longitudinal edges of which are interlocked in said channel.

1,898,230. TAPE LOOM. ANDREW WEIMAR, Philadelphia, Pa., assignor to Weimar Brothers, Philadelphia, Pa., a Firm consisting of Andrew Weimar and William D. Weimar. Filed May 3, 1930. Serial No. 449,528. 11 Claims. (Cl. 139—22.)



1. In a narrow-ware loom, a lay comprising a lower shuttle deck extending substantially the full length thereof, a plurality of relatively short auxiliary decks disposed respectively at spaced intervals along the lay of the loom above the said lower deck, a series of shuttles operable in each deck, an operating finger for each shuttle, a lower bar carrying the operating fingers of the lower deck, a plurality of auxiliary bars carrying the operating fingers of the auxiliary decks, respectively, and supported from the said lower bar by certain of the said lower fingers thereon, and a single actuating mechanism for all of said fingers, cooperating solely with the said lower bar.

1,898,231. CARTON. ARTHUR J. WEISS, St. Albans, N. Y., assignor, by mesne assignments, to Robert Gair Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Dec. 4, 1931. Serial No. 578,855. 7 Claims. (Cl. 229—27.)



1. A container including opposite walls and intermediate walls joining said opposite walls; a partition the same size and shape as, and parallel to, said intermediate walls, secured to and between said opposite walls, to form compartments; inner flaps on said intermediate walls, at least one of which extends to said partition and forms a covering flap adapted to entirely cover the adjacent compartment; a flap on said partition disposable over said adjacent compartment and adapted to engage said cover flap and extend substantially to the intermediate wall carrying said cover flap; and outer flaps on said main walls respectively each adapted to be superposed over and entirely cover the other flaps.

1,898,232. BACKPIECE FOR FILM CAMERAS. WILHELM WIDMANN, Freudenstadt, Germany. Filed Jan. 3, 1930, Serial No. 418,216, and in Germany Jan. 2. 1929. 6 Claims. (Cl. 95—31.)



1. A back piece for film cameras comprising film supply means at one side, means for feeding a film from said supply means across the area of exposure, a dark slide inserted in said back piece below the path along which the film moves while being fed, a lid on said dark slide adapted to support the film, and cutting means at a point intermediate said film supply means and the area of exposure.

1,898,233. SHOWER BATH CURTAIN. HUGH J. WOODS, Jackson Heights, N. Y. Filed Aug. 21, 1931. Serial No. 558,512. 12 Claims. (Cl. 4—149.)



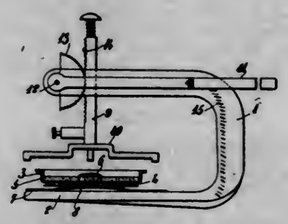
5. In a bath curtain having an interior shower connection, passages extending through the side walls of said curtain and adapted to inwardly receive the head and arms of a bather, and flexible flaps fastened on the inner surfaces of said curtain and adapted to close said passages against the outward escape of the shower.

1,898,234. SNOW SHOVEL. MAURICE ANDERSON, Negaunee, Mich. Filed Oct. 8, 1931. Serial No. 567,715. 5 Claims. (Cl. 294—54.)



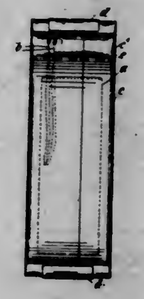
1. In a snow shovel, the combination with the blade thereof, of a re-inforcing shoe whose ends terminate at the side edges of the blade and whose top is flush with the upper face of the blade and whose bottom underlies the forward edge of the blade and is provided with ears or lugs on its underside which are connected to the bottom of the blade.

1,898,235. REPAIRING ELEMENT FOR VULCANIZERS. ROBERT HENRI MARIE LOUIS BINAY, Paris, France, assignor to Office General des Specialites Automobiles, La Garenne-Columbes, Seine, France, a Joint-Stock Company of France. Filed Sept. 29, 1930, Serial No. 485,200, and in France Sept. 30, 1929. 10 Claims. (Cl. 18—18.)



4. A repairing element for a vulcanizer comprising a metal basin, a rubber patch impregnated with sulphur and secured to the under face of said basin, and a combustible substance inside the basin comprising a mixture of trioxymethylene and a solution of fish glue in water.

1,898,236. STERILE PACKING FOR DRESSINGS. ERNST BLANK, Eltorf-on-the-Sieg, Germany. Filed Oct. 16, 1928, Serial No. 312,873, and in Germany Oct. 26, 1927. 1 Claim. (Cl. 206—63.2.)



A sterile packing for dressings, comprising in combination with a dressing for wounds, an envelope of paper enclosing said dressing and having a tear-off portion for the removal of said dressing, said dressing having a holding thread for spreading said dressing in the longitudinal centre of each side edge and being folded with these side edges inwards and the ends of the holding threads placed in the tear off portion of the envelope, knots on the ends of said holding threads, a metal strip adapted to press flat the tear off portion of said envelope to hold the ends of the holding threads and to release said threads when said tear off portion is removed.

1,898,237. REVOLVER RIFLE. JOHN BOCCO, Camden, N. J. Filed Mar. 22, 1932. Serial No. 600,540. 3 Claims. (Cl. 42—59.)

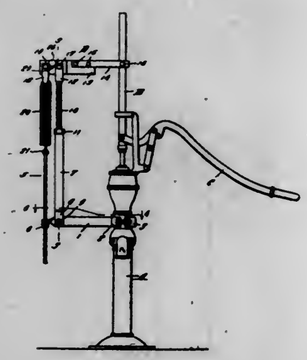


1. In a revolver rifle, a break-down rifle comprising a barrel and stock, a bottom tang carried by the stock and hinged to the barrel and a top tang hinged to the barrel and detachably engaged with the stock providing an open chamber between the stock and barrel and breech mechanism including a revolving cartridge chamber disposed in the aforesaid chamber and carried by the barrel and firing and trigger mechanism carried by the stock.

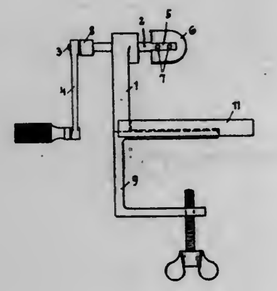
1,898 238. PUMP EQUALIZER. GEORGE F. BRAKHAGE, Watertown, S. Dak. Filed Mar. 30, 1932. Serial No. 602,050. 2 Claims. (Cl. 74—71.)

1. In combination with a pump and its rod, a horizontally arranged bar having one end connected to the pump, a post pivoted to the bar adjacent its other end, said post being of tubular form, a threaded bar passed into the top of the post, a nut on the threaded bar adapted to engage the top of the post, a walking beam pivotally connected intermediate its ends to the top of the bar, means for connecting one end of the walking beam to the pump rod, a clevis pivoted to the other end of the walking beam beyond the

threaded bar, a spring connected to the clevis, a threaded bar having one end connected to the other end of the spring and said bar passing through a hole in the supporting bar, and a nut threaded on the bar connected with the spring and engaging the supporting bar for providing adjustment for the spring.



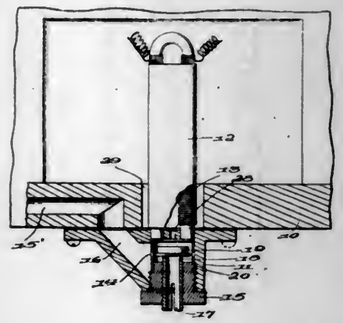
1,898,239. DEVICE FOR CLEANING PIPE BOWLS. KARL BRAUN, Vienna, Austria. Filed Aug. 29, 1930, Serial No. 478,683, and in Austria June 7, 1930. 2 Claims. (Cl. 131—13.)



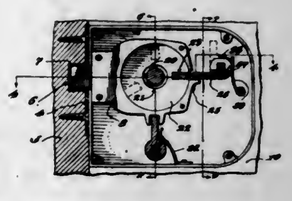
1. An apparatus for cleaning pipe bowls, comprising in combination a bracket, an axle journalled freely longitudinally shiftable and rotatable in said bracket, a crank handle on one end of said axle, a scraper at the other end of said axle and a sleeve slidably and exchangeably mounted on said axle between said crank handle and said bracket designed to limit the longitudinal movement of said axle to prevent damage to the bottom of the pipe bowl when the pipe bowl bears against said bracket.

1,898,240. ORGAN VALVE. HENRY E. BURTON, Hagerstown, Md., assignor to M. P. Moller, Inc., Hagerstown, Md., a Corporation of Maryland. Filed Mar. 17, 1931. Serial No. 523,371. 14 Claims. (Cl. 84—339.)

8. In an electro-magnetic organ valve, the combination with a valve casing having an opening formed in one side thereof, of an electro-magnet mounted in another side and opposite said opening, a rotatable closure member for the opening, a disc valve member located in said casing and arranged to be operated by said magnet, and a valve guide carried by the closure for limiting the lateral and vertical movement of said valve member



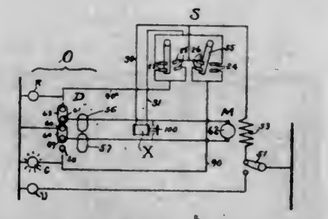
1,898,241. LOCK. JOHN I. W. CARLSON, Scottdale, Pa. Filed June 16, 1931. Serial No. 544,847. 5 Claims. (Cl. 70—53.)



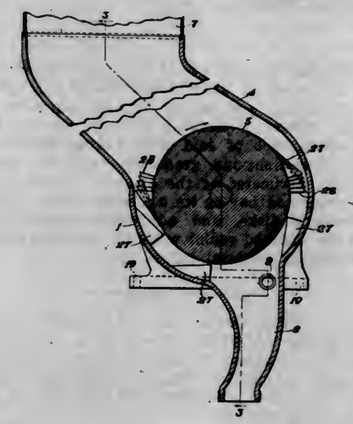
1. A lock for operation through the medium of a combination or a key comprising a casing, a slidably mounted bolt frame, a tumbler supporting shaft passing through said bolt frame, tumbler discs mounted upon said shaft, means formed upon said tumbler shaft for turning said tumbler discs to a predetermined position, said discs provided with registering notches, said bolt frame provided with a notch adapted to register with said notches, a key controlled bolt rotatably mounted within said casing and adapted to be brought into alignment with said notches, said key controlled bolt provided with a sleeve having flat surfaces upon the sides thereof, and a spring adapted to engage said flat surfaces for holding said key controlled bolt in a set adjusted position.

1,898,242. REMOTE CONTROL SYSTEM. EDWARD F. CHANDLER, Brooklyn, N. Y. Filed Sept. 27, 1922, Serial No. 590,854. Renewed Dec. 15, 1931. 11 Claims. (Cl. 172—239.)

1. In combination, a motor, a controller therefor, circuits for operatively associating the controller with the motor, means operative during an operation of the motor for holding the controller in an operative position, means for causing the controller to move to an inoperative position after the completion of an operation of the motor, and means operated by said controller during said movement for applying a short circuit to the motor armature, and means for producing a decrease in the field current during the period of short circuit.



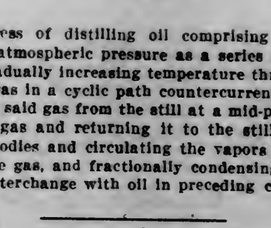
1,898,243. MEANS FOR DISPOSING OF GARBAGE. ERNEST L. COBLE and SALLIE L. COBLE, Alliance, Ohio. Filed July 7, 1930. Serial No. 466,210. 2 Claims. (Cl. 146—123.)



1. An apparatus for disposing of garbage and similar refuse comprising a horizontally disposed casing having a depending discharge nozzle for connection with a sewer and provided at its upper portion with an integral tubular extension projecting upwardly and laterally therefrom and constituting a hopper the interior walls of which are arranged at an angle to the vertical axis of the casing and disposed substantially parallel with each other, a cylindrical grinding rotor mounted for rotation within the casing, the throat of the hopper at its junction with the walls of the casing being of substantially the same width as the diameter of the rotor whereby refuse thrown outwardly by the centrifugal action of the rotor will impinge against the adjacent wall of the hopper and be deflected thereby onto said rotor, and a water inlet communicating with the interior of the discharge nozzle for flushing said discharge nozzle.

1,898,244. AUTOMATIC FLOW REGULATOR. DELBERT C. DODRILL, Booth, W. Va., assignor to Jay F. Hoover, Buffalo, N. Y. Filed Nov. 20, 1930. Serial No. 497,002. 6 Claims. (Cl. 137—152.)

1. A flow regulator including a fixed member having an opening therein, a member movable about a pivot through a part of a revolution and arranged in close proximity to said fixed member and having a shutter part adapted to move across said opening to restrict the flow of fluid therethrough, a vane on said movable member against which fluid passing through the regulator impinges to move said movable member in a direction to move said shutter part across said opening, a weight acting on said movable member in a direction to oppose the movement thereof by said vane, and means for securing said weight in different relations to said movable member to vary the extent to which said shutter part moves across said opening.



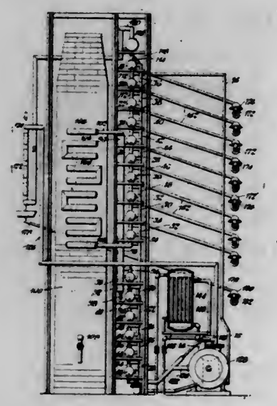
1,898,245. PROCESS OF DISTILLING OIL. HENRY L. DOHERTY, New York, N. Y., assignor, by mesne assignments, to Heat Treating Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 4, 1920. Serial No. 356,263. 27 Claims. (Cl. 196—66.)

1. A process of distilling oil comprising passing oil under superatmospheric pressure as a series of connected bodies of gradually increasing temperature through a still, conducting gas in a cyclic path countercurrent to said oil, withdrawing said gas from the still at a mid-point thereof, heating the gas and returning it to the still, vaporizing oil in said bodies and circulating the vapors through the still with the gas, and fractionally condensing the vapors by a heat interchange with oil in preceding cooler bodies.

1,898,246. APPARATUS FOR DISTILLING OILS. HENRY L. DOHERTY, New York, N. Y., assignor, by mesne assignments, to Heat Treating Company, New York, N. Y., a Corporation of Delaware. Original application filed Feb. 4, 1920, Serial No. 356,263. Divided and this application filed July 7, 1920. Serial No. 394,489. 29 Claims. (Cl. 196—106.)

5. A liquid refining apparatus having in combination, a series of fractionating chambers connected for gravity feed, a series of heat-transferring chambers connected for gravity feed, a liquid-transferring connection between the said fractionating series and said heat-transferring series, means to introduce liquid into the first chamber

of the fractionating series, means to withdraw liquid residuum from the last chamber of the heat-transferring series, means to circulate a gas through said chambers

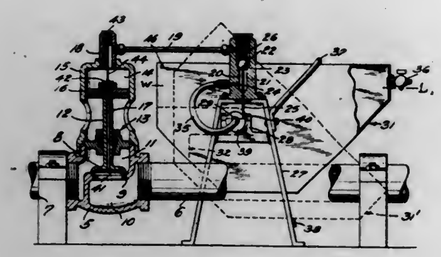


countercurrent to the liquid flow, and means to add heat to the gas as it flows from the heat-transferring series to the fractionating series.

1,898,247. DYE AND PROCESS OF MAKING SAME FROM CARBONACEOUS MATERIAL. LEONARD P. DOVE, Minot, N. Dak., assignor, by mesne assignments, to R. M. Stee, Minot, N. Dak., trustee. Filed Feb. 11, 1929. Serial No. 339,281. 5 Claims. (Cl. 8—6.)

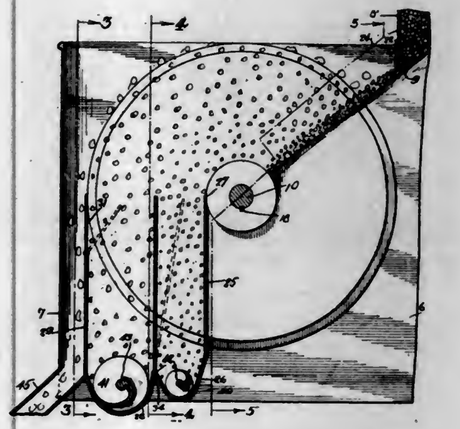
1. The process of producing a dye which comprises subjecting humic material to the action of one of the common commercial concentrated mineral acids and an alkyl ether of the ethylene glycols.

1,898,248. VALVE REGULATOR. ERNEST LAMAR GAINES, Seattle, Wash. Filed July 9, 1928. Serial No. 291,204. 14 Claims. (Cl. 137—145.)



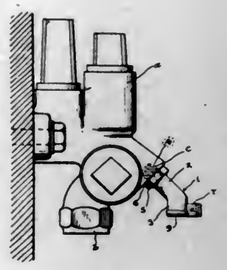
10. The combination of a water conduit, a hydraulically operated valve for opening and closing the same, a pilot valve for effecting said opening and closing movements, a restricted passage leading from said conduit, means whereby said restricted passage is maintained in operative condition by the periodic movement of an element in said passage, and means rendered operative by the flow of water therethrough for automatically opening and closing said pilot valve at regular predetermined intervals.

1,898,249. GRAIN OR FINE PARTICLE GRADER. JOHN W. HOEFLING, Chico, Calif., assignor to Hoefling Bros. Inc., Chico, Calif. Filed Mar. 18, 1931. Serial No. 523,557. 10 Claims. (Cl. 209—104.)



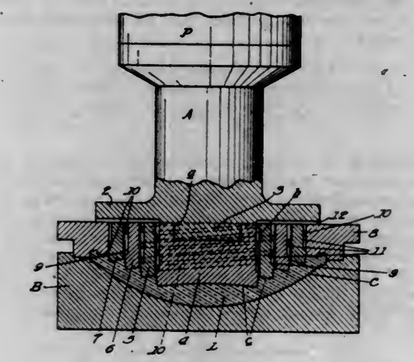
3. A grading machine of the character described, comprising a casing, a shaft transversely arranged relative to the casing and having its ends journalled in the side walls thereof, a plurality of disks closely arranged on said shaft, each of said disks having inclined radial faces, said inclinations gradually extending from the hubs to the perimeter of the disks, a hopper supported by the casing and having its discharge opening presented to the rotary disks, and adjustable fingers presented between the inclined radial walls of the disks for removing particles of material lodged therein.

1,898,250. ATTACHMENT TO AIR BRAKE PRESSURE RETAINING VALVES. SYLVESTER L. JOINER, Sweetwater, Tex., assignor of one-third to Alexander S. Kendrick and one-third to Walter W. Davis, Sweetwater, Tex. Filed Sept. 28, 1931. Serial No. 565,650. 8 Claims. (Cl. 303—1.)



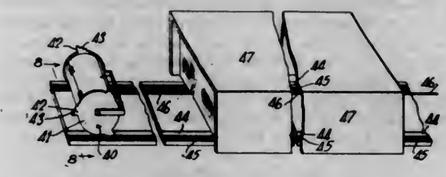
1. An attachment for air brake pressure retaining valves comprising a hollow nipple having an angular and vertical portion, said angular portion being adapted to be attached to the exhaust port of said valve, the said vertical portion being provided at its extreme open end with a pivoted spring pressed closure normally closed to prevent insects and the like from depositing solid matter in said exhaust port, but adapted to be opened by the exhaust of air and other foreign matter from said port.

1,898,251. MOLD FOR MAKING PRESSED GLASS ARTICLES. NICHOLAS KOPP, Pittsburgh, Pa. Filed Jan. 3, 1929. Serial No. 330,064. 4 Claims. (Cl. 49—72.)



1. In a mold of the character specified, a mold member including a plurality of concentrically assembled mold units of varying depths, threaded means formed for securing said units together, each of said units having air passages therein, said units additionally formed to provide a space between the units when assembled.

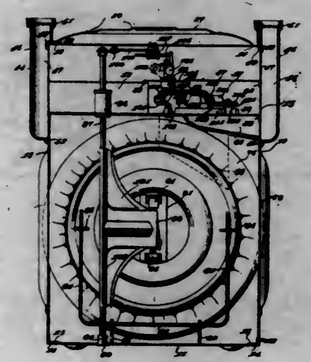
1,898,252. METHOD AND APPARATUS FOR THE FORMATION OF HOLLOW ARTICLES. DAVID LANTINBERG and FRANK STEFANDEL, Brooklyn, N. Y., assignors to Wigly Candy Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Aug. 1, 1930. Serial No. 472,330. 31 Claims. (Cl. 107—8.)



1. The method of making hollow articles, which comprises partially filling a mold with a fluid capable of hardening under changed heat conditions, rolling a unit carrying said mold first through a region having a temperature nearer the hardening temperature of said fluid than the temperature at which it is poured and alternately causing opposite ends of said unit to be temporarily lifted as it is rolled through said region, and thereupon rolling said unit through a region having a temperature further removed from the temperature at which it is poured, and alternately causing opposite ends of said unit to be temporarily lifted as it is rolled through the last-mentioned region.

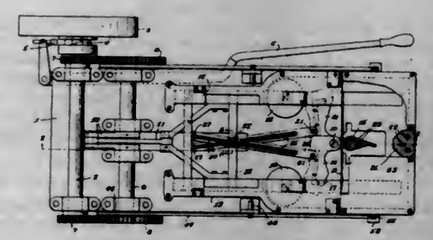
1,898,253. GAS METER. ALLEN D. MACLEAN and HARRY G. WEYMOUTH, Pittsburgh, Pa., assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 25, 1928. Serial No. 288,230. 5 Claims. (Cl. 73—1.)

5. In a gas meter, in combination, a crank shaft and a pair of slide valves; adjustable valve actuating links pivotally secured to said crank shaft and each of said valves; each of said links being attached to the ends of



said valves remote from said crank shaft; and an adjustable section provided in each of said links whereby each of said valves may be adjusted independently of the other.

1,898,254. BENDING MACHINE. GUY MAFERA, Revere, Mass. Filed Sept. 13, 1930. Serial No. 481,604. 4 Claims. (Cl. 153—44.)

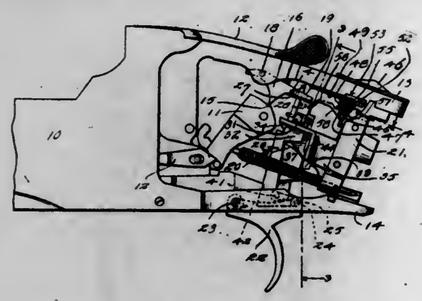


1. In combination, a reciprocable slide, a relatively fixed die, a pair of pivoted dies disposed one on either side of said fixed die, means carried by said slide and active on said die pair in one direction of travel of the slide to close the same, means operated by said slide in the opposite direction of travel thereof to open said die pair, said last-named means comprising a pair of longitudinally slotted crossed links fastened at one end to said die pair, a forked stud set through the slots of said links and attached to said slide, a pair of rods disposed between the forks of said stud, apertured collars loosely mounted on the forked head of said stud and mounting said rods for independent swiveling movement relative to each other, and coil springs about said rods.

1,898,255. SINGLE TRIGGER MECHANISM FOR DOUBLE BARREL GUNS. ELMER E. MILLER and HOWARD L. MILLER, Millersburg, Pa. Filed July 30, 1931. Serial No. 554,130. 12 Claims. (Cl. 42—42.)

10. A gun having two hammers, a single trigger, two sears, one for each hammer and located above the ham-

mers, a trigger post pivoted to the rear end of the trigger, the trigger post extending upward between the sears, a



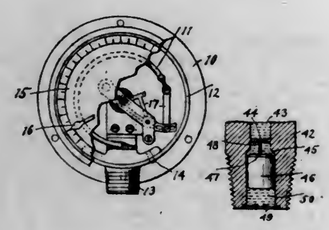
sear selecting trip mounted upon the trigger post, and manually operated means for shifting the trip to engage either sear upon the lifting of the trigger post.

1,898,256. VEHICLE BUMPER. JOHN C. MONTEITH, Cleveland, Ohio, assignor, by mesne assignments, to Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 10, 1930. Serial No. 460,254. 6 Claims. (Cl. 293—55.)



1. The method of producing a bumper bar which consists in providing a foundation bar having a channel in the rear surface and a covering therefor which is substantially U-shaped in cross-section, the bight of said U conforming substantially to the front surface of said channel bar, and rolling the legs of said U around the edges of said foundation bar and bending the ends thereof over channel edges in said foundation bar.

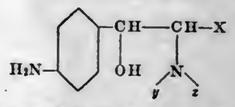
1,898,257. GAUGE. RALPH M. NELSON, Cleveland Heights, Ohio. Filed Jan. 4, 1930. Serial No. 418,519. 9 Claims. (Cl. 73—31.)



2. In an indicating device, the combination of a pressure responsive element, means for visibly indicating deflections of said element, a body having a passage communicating with said element, a body of liquid in said element and said passage for transmitting pressure to said element from an external medium, a plunger slidable axially in said passage and separating said body of liquid from said external medium, and means for limiting the movement of said plunger to protect said element against overload.

1,898,258. PROCESS FOR THE PRODUCTION OF PHENYL-AMINOALKYL-CARBINOLS, WHICH ARE SUBSTITUTED IN THE PHENYL NUCLEUS. MAX OBERLIN, Darmstadt, Germany. Filed Sept. 24, 1930, Serial No. 484,237, and in Germany Oct. 21, 1929. 6 Claims. (Cl. 260—128.5.)

1. Process for the production of products of the general formula:



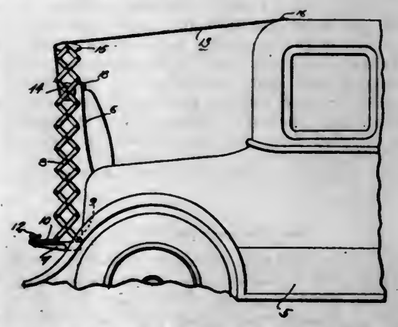
X=hydrogen or methyl, y=hydrogen or methyl, and z=hydrogen or methyl, except 1-(para-aminophenyl)-2-methylamino-propanol-1, consisting in the treatment of a salt with a strong acid of the corresponding products without amino-group with nitric acid of a specific gravity of 1.4, care being taken, that the temperature does not exceed 30° C. separating the so formed product by pouring the mixture on ice and separating, finally reducing the nitro-product by one of the well-known methods of reduction.

1,898,259. AIR CLEANER. FREDERICK STRATTNER OBEM, Baltimore, Md. Filed May 28, 1931. Serial No. 540,756. 11 Claims. (Cl. 183—73.)



1. In an air cleaner, a substantially tubular casing having an air inlet opening in its wall, a substantially tubular filter unit disposed within the casing with its axis spaced from the axis of the casing and having a wall pervious to air and provided with an air passage at a point remote from the air inlet in the casing, the interior of said filter unit communicating with an air outlet in one end of the casing, said air outlet being substantially free at all sides to receive and discharge air from within said filter unit.

1,898,260. RUMBLE SEAT TOP. SIDNEY OSTROFF, Lowell, Mass. Filed Sept. 15, 1932. Serial No. 633,348. 3 Claims. (Cl. 296—98.)



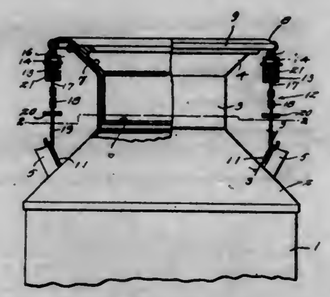
1. In a rumble seat top, brackets for attachment to an automobile, lazy-tong constructions mounted on the brackets, a roller journalled in the lazy-tong constructions, a rumble seat top carried by the roller and adapted to have its free outer end extended over the rumble seat and attached to the top of the automobile, and means carried by the lazy-tong constructions adapted to be engaged with the upper edge of the rumble seat cover when varied to brace the lazy-tong constructions when in extended operative positions.

1,898,261. SAFETY PULLING TOOL FOR WELL EQUIPMENT. HERBERT C. OTIS, Shreveport, La. Filed Nov. 24, 1931. Serial No. 577,087. 16 Claims. (Cl. 294—99.)



1. In a tool for removing an obstructive device from a well, the combination of means for engaging said obstructive device, means for supporting the engaging means, means for pulling said supporting means, releasable means operatively connecting said pulling and supporting means, and means for disconnecting the engaging means from the obstructive device upon relative movement between the said pulling means and said supporting means effective upon release of said releasable means.

1,898,262. DEVICE FOR SECURING MILK CAN COVERS. HARTLEY G. PACKER, Reno, Nev. Filed Nov. 24, 1931. Serial No. 577,090. 5 Claims. (Cl. 220—55.)



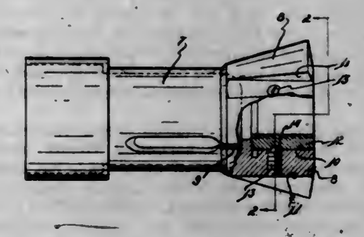
1. In a milk can having handles and a cover, holding means for said cover comprising an element adapted to be connected with the edge of the cover, a spring carried by said element, a hook connected to said spring, said spring being placed under tension upon drawing the hook away from the said element, and means for coupling said hook with a handle of the can at a selected one of a number of points on a line extending approximately lengthwise of the can.

1,898,263. FINGER RING. WINFIELD C. PATT, Cranston, R. I., assignor to L. G. Balfour Company, Attleboro, Mass., a Corporation of Massachusetts. Filed May 8, 1930. Serial No. 449,647. 4 Claims. (Cl. 63—15.)



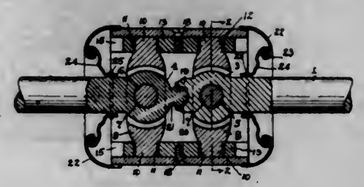
1. In a finger ring or the like, a crown, said crown comprising a platform and an upturned flange, a removable stone resting on said platform and fitting within said flange, an open frame surrounding the stone and also positioned within the flange, bendable lugs on the flange cooperating with recesses in the frame to detachably secure the frame to the flange, and an insignia bearing plate spanning and secured to the upper portion of the walls of said frame.

1,898,264. COLLET. OTTO PROEFKE, Detroit, Mich., assignor to Enterprise Tool and Gear Corporation, Detroit, Mich., a Corporation of Michigan. Filed Dec. 8, 1930. Serial No. 500,769. 2 Claims. (Cl. 279—46.)



1. In a collet of the class described, a spring head having a plurality of separated sections, each of said sections having a recess formed in its inner surface registering with a peripheral recess; a gripping member inserted in the recess in said inner surface and formed of a harder material than said head; and a set screw threaded inwardly from said peripheral recess for engaging said gripping member and locking it in position, said set screw being unattached to the gripping member.

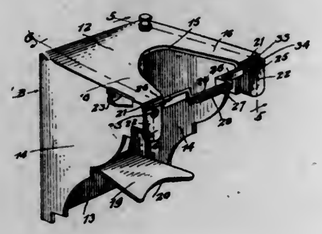
1,898,265. UNIVERSAL JOINT. FREDERICK H. RAGAN, Shaker Heights, Ohio, assignor to The Columbia Axle Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 12, 1930. Serial No. 435,163. 5 Claims. (Cl. 64—91.)



1. In a universal joint for shafts capable of relative angular displacement, the combination of a pair of shafts, a torque transmitting member having longitudinal splines, trunnion bearing means pivotally connected to the ter-

minals of said shafts, means oscillatably engaging said trunnions and engaged by said splines, and means for maintaining equal angular relations between said torque member and each of said shafts.

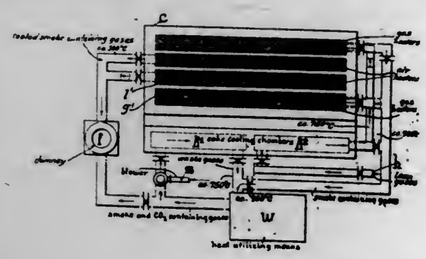
1,898,266. FIRE EXTINGUISHING GRENADE HOLDER. GEORGE O. RUFF, Paris, Ill. Filed Oct. 27, 1930. Serial No. 491,577. 7 Claims. (Cl. 169—26.)



1. A fire extinguishing grenade holder comprising a horizontally disposed U-shaped inherently rigid member to embrace the neck of the grenade but incapable of alone supporting the latter, two arms loosely pivoted to the arms of said U-shaped member respectively and jointly extending across the open end of said U-shaped member, and a fusible connection between said arms holding the latter across said open end of said U-shaped member, said arms and said fusible connection co-acting with said U-shaped member to support the grenade, both of said arms being adapted to swing downwardly by gravity upon melting of said fusible connection, thereby releasing the grenade.

4. A fire extinguishing grenade holder comprising an inherently rigid U-shaped horizontal rigidly supported member to embrace the neck of the grenade but incapable of alone supporting the latter, a brace member below said U-shaped member having a concave seat at its front end to engage the grenade neck, means holding said U-shaped member and said brace member in fixed relation, and a closure extending across the open end of said U-shaped member and connected with the ends of the U, said closure being cooperable with said U-shaped member in supporting a grenade, said closure having a fusible portion for rendering it inoperative when fused, whereby the grenade will be released.

1,898,267. UTILIZATION OF THE PERCEPTIBLE HEAT OF FINISHED COKE. JOSEF SCHAEFER, Dortmund, Germany. Filed Feb. 24, 1926, Serial No. 90,419. and in Germany Apr. 15, 1925. 10 Claims. (Cl. 202—31.)

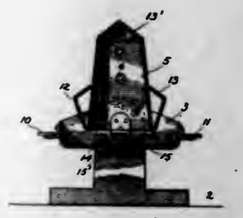


1. The process of treating fresh incandescent coke to recover the heat values thereof, which comprises dividing the supply of such coke into two portions, treating one portion by passing thereupon lean gases of low thermal value, passing gases rich in carbon-dioxid and of lower temperature than the coke into direct heat exchanging contact with the other portion, and mixing the gases, then leaving the two portions with each other.

1,898,268. VULCANIZATION OF RUBBER. ROBERT L. SIBLEY, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 19, 1931. Serial No. 509,878. 17 Claims. (Cl. 18—53.)

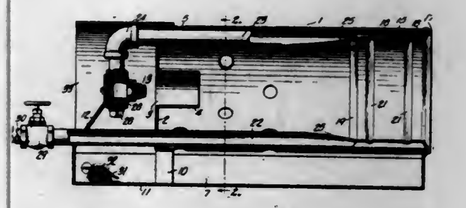
1. The process of vulcanizing rubber which comprises heating rubber and sulfur in the presence of an accelerator comprising a reaction product of an aromatic diamine-dioxydinaphthylmethane condensate and a mercaptobenzothiazole.

1,898,269. AUTOMATIC FEED HOPPER. JOHN M. SODERSTROM, Turlock, Calif. Filed Aug. 18, 1930. Serial No. 476,193. 2 Claims. (Cl. 119—55.)



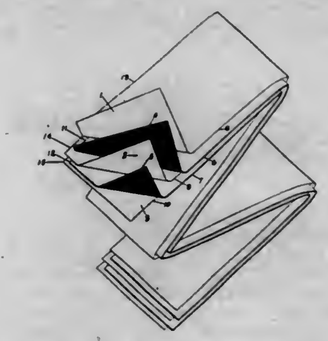
1. An automatic feeder for chickens comprising two standards arranged in spaced relation and having spacing bars on their inner faces, a hopper supported between the spacing bars, and a trough having end walls pivoted to the standards so as to form a swingable bottom for the hopper, the spacing bars forming a stop for the end walls to limit the swinging motion of the trough.

1,898,270. OIL BURNER. ROY M. SOPER, Kansas City, Mo. Filed Aug. 16, 1929. Serial No. 386,284. 1 Claim. (Cl. 158—53.)



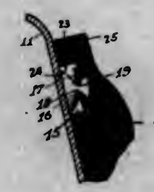
In an oil burner including a tubular housing, a vaporizing unit comprising an outer sleeve having a diameter to slidably engage the inner wall of the housing, an inner sleeve spaced concentrically within the outer sleeve to form an annular vaporizing chamber therebetween and having corrugations to compensate for difference in expansion and contraction between the outer and inner sleeves, means closing the spaces at the ends of the sleeves, inlet and outlet tubes fixed to the inner ends of the sleeves and communicating with said annular chamber, and a jet tip on the outlet pipe for discharging vaporized fuel concentrically of the inner sleeve forming the vaporizing chamber.

1,898,271. PAPER SUPPLIES. MILTON C. STERN, Dayton, Ohio, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 30, 1929. Serial No. 417,409. 4 Claims. (Cl. 282—12.)



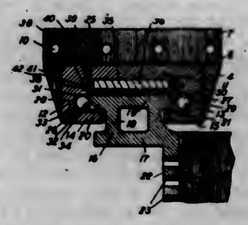
1. In combination, superimposed, laterally aligned paper strips and interleaved carbon strips projecting laterally thereof in a marginal strip, said carbon strips having the other side thereof spaced inwardly of the other edge of said superimposed paper strips.

1,898,272. BATHTUB BACK REST. MITCHEL STERN, Philadelphia, Pa. Filed Apr. 2, 1931. Serial No. 527,314. 4 Claims. (Cl. 4—185.)



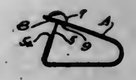
1. In a rest of the character described, a sponge rubber pad having a normally flexible back face, recesses formed in said back face and suction cup devices in respective recesses constructed and arranged that when engaged with a supporting surface their dimension from base to lip is less than the normal depth of the respective recesses, a reinforcement incorporated in the body of the pad connecting the suction cups and adjacent pad portions, and connecting the suction cups to each other.

1,898,273. FURNACE BEARER. HENRY V. STEVENS, Topeka, Kans. Filed May 5, 1930. Serial No. 450,001. 5 Claims. (Cl. 308—6.)



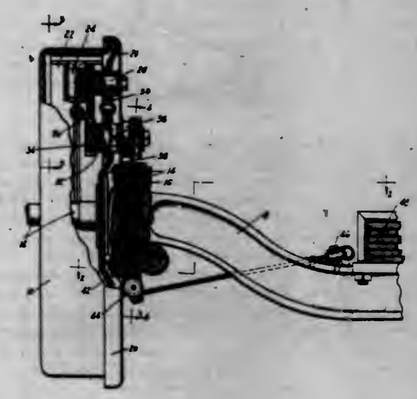
3. In combination with a locomotive boiler and its supporting frame, a bearer for the boiler comprising a rail member and a bracket member, one of said members being fixed to the frame and the other to the boiler, means for slidably interlocking said members relatively to each other, a plate having tongue and groove engagement with one of the members, and roller bearings carried by the plate having rolling engagement with said members to provide free rolling movement of the boiler during expansion and contraction movements relative to the frame.

1,898,274. MARKER OR TAG. CHARLES E. TIMSON, Deerfield, Ill., assignor to William Cooper & Nephews, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Feb. 29, 1932. Serial No. 595,689. 7 Claims. (Cl. 40—3.)



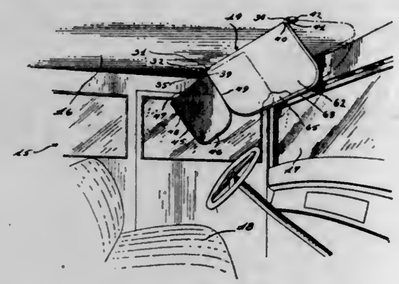
1. A sealing marker comprising a U-shaped body having an aperture in one end and slots one on each side of said aperture, a cap over said aperture, said cap having lugs extending through said slots and bent with the free ends of the lugs in said aperture to hold said cap in place, the other end of said body being bent at an angle to the same and extending toward the cap end of said body, the extremity of said bent portion being sharpened and reduced in thickness for cutting an article when applied thereto and for entering said cap, the inturned ends of said lugs forming guides for directing the sharpened end into the cap.

1,898,275. BRAKE OPERATING MEANS. ROBERT N. VAN BUSKIRK, Detroit, Mich., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 27, 1928. Serial No. 295,677. 10 Claims. (Cl. 188—194.)



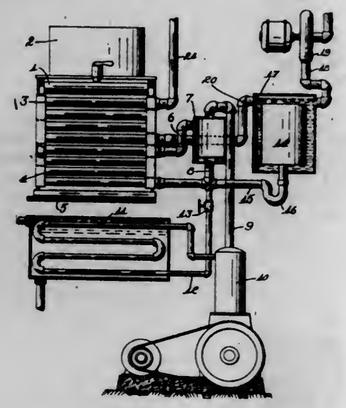
1. A brake having an operating device and a rotatable pulley geared to said device, in combination with a flexible tension element secured at one end to the pulley and wrapped around the pulley and pulled lengthwise in applying the brake to rotate the pulley.

1,898,276. VISOR. WILLIAM C. VAN DRESSER, Detroit, Mich., assignor to Van Dresser Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Sept. 8, 1931. Serial No. 561,773. 5 Claims. (Cl. 296—97.)



2. In a visor construction, an open frame, a sheet of substantially rigid material associated with said frame to close the opening through the same, and a covering enclosing the frame and sheet of material.

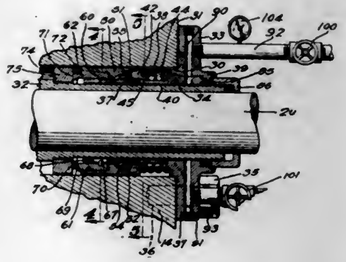
1,898,277. LIQUID REFRIGERANT CONTROL MEANS FOR REFRIGERATING SYSTEMS. ERNEST A. VON SEGGERN, Los Angeles, and HENRY E. VON SEGGERN, Escondido, Calif. Filed Oct. 6, 1930. Serial No. 486,574. 13 Claims. (Cl. 62—115.)



1. In a refrigeration system, an evaporator adapted to contain liquid refrigerant, means for receiving the evaporated refrigerant from the upper portion of the evaporator and for compressing and supplying the same to the lower portion of the evaporator, a liquid refrigerant storage chamber communicating with the lower portion of the evaporator and adapted to receive the liquid refrigerant therefrom when the pressure in the evaporator becomes excessive, a water jacket surrounding said chamber, means for supplying cooling water to the jacket, and a pre-cooling means in association with the evaporator and connected to and adapted to receive the water from the jacket.

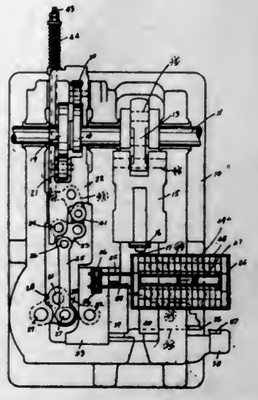
1,898,278. SEALING DEVICE. ARTHUR R. WEIS, Huntington Park, Calif., assignor of one-half to Pacific Pump Works, Los Angeles, Calif., a Corporation of California, and one-half to George E. Bigelow, Huntington Park, Calif. Filed Apr. 14, 1930. Serial No. 444,046. 6 Claims. (Cl. 286—9.)

4. In combination: a bore; a rotatable element extending through said bore but being of smaller diameter than the walls of said bore, said rotatable element providing a shoulder defining a sealing face; a sealing unit of annular shape and insertable into the annular space between said rotatable element and the walls of said bore and being of smaller diameter than said walls to move easily thereinto, said sealing unit including a sleeve member of larger diameter than said rotatable element to provide



an auxiliary space therebetween, said sealing unit also including a sealing means carried by said sleeve member and cooperating with said sealing face to form a sealing zone communicating with said auxiliary space between said rotatable element and said sleeve member; and sealing means around said rotatable element for sealing said auxiliary space.

1,898,279. BLANK FEEDER FOR FORGING MACHINES. CHARLES L. WEST, Tiffin, Ohio, assignor of forty per cent to D. R. Lindley, Indianapolis, Ind. Filed Dec. 26, 1929. Serial No. 416,532. 1 Claim. (Cl. 78—13.)



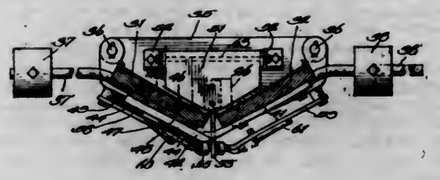
In a blank feeder for a forging machine having a die with a cavity therein shaped to form a forging to a desired shape and having a horizontal passageway connecting said cavity with the exterior of said die, the combination of a hopper for storing cylindrical forging blanks, a chute for conducting blanks by gravity from said hopper to a position adjacent the open end of said passageway, said chute having a rest at its lower end for receiving one of said blanks with its axis aligned with said passageway and said chute having openings in opposite walls thereof aligned with the ends of said blank when positioned upon said rest, a header movable through said openings to propel said blank from said rest through said passageway into said die for forging the same and means for feeding individual blanks from said hopper into said chute in timed relation with the movement of said header.

1,898,280. AUTOMATIC DECK SUPPORT. LESTER W. WINKELMANN, Milford, Iowa. Filed June 19, 1931. Serial No. 545,433. 6 Claims. (Cl. 217—60.)



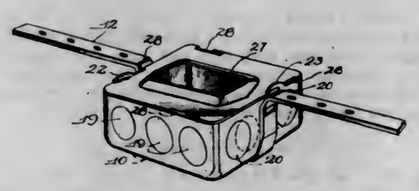
1. In a device of the class described, a primary bar having one end hinged to a receptacle, a secondary bar slidable and pivotal relative thereto, having one end hinged to a lid for said receptacle and means including a spring resisting pivotal movement of the primary bar relative to the receptacle for causing said bars to remain in rigid alinement when said lid is raised and then lowered and for causing their slidable and pivotal movement and movement from such rigid alinement when said lid is subsequently raised and lowered.

1,898,281. CONVEYING MECHANISM. WILLIAM E. WUNDERLICH, Muncie, Ind., assignor to The Moore Company, Muncie, Ind., a Corporation of Indiana. Filed May 28, 1930. Serial No. 456,564. 14 Claims. (Cl. 214—6.)



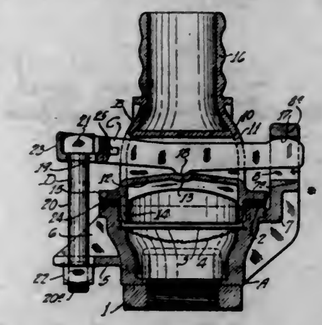
2. A hopper having two sections for supporting the load received by the hopper; two latching devices one individual to each hopper section, the latching device pertaining to each hopper section including a catch upon this hopper section and a latch complemental to such catch and carried by the other hopper section; and means actuated by the load, whereby either latching device may be open while the other is held closed.

1,898,282. OUTLET BOX. OSCAR G. ALMGRANTZ, Evanston Ill., assignor of one-half to Edward L. Kappelman, Evanston, Ill. Filed Jan. 4, 1929. Serial No. 330,192. 2 Claims. (Cl. 247—15.)



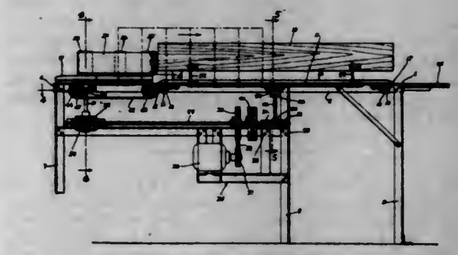
1. In a conduit outlet unit, a box including a bottom and four upright walls, a cover for said box, and securing means therefor comprising two upstanding lugs on opposite walls provided with laterally opening slots, adapted to receive marginal portions of said cover in interlocking engagement by lateral movement of said cover, and serrated means on the engaging surfaces of said cover securing means to assure a metal-to-metal contact between said box and its cover.

1,898,283. HOSE-COUPLING. WILLIAM BAWDEN, St. Louis, Mo., assignor of one-half to Cloice B. Baker, St. Louis, Mo. Filed May 14, 1930, Serial No. 452,230. Renewed Nov. 21, 1932. 1 Claim. (Cl. 285—161.)



A hose coupling including, in combination, a first shell having an outwardly presented annular end-flange, a second shell extended longitudinally to fit endwise within the first shell and having an outwardly presented annular end-flange for seating upon the end-flange of the first shell, the second shell being formed diametrically adjacent its flanged end with a walled way dividing the bore thereof, and means for separably securing the shells in communicating end to end relation, said means including a fixed radial abutment on the first shell, a second fixed abutment on the first shell in diametrically opposed relation to the first abutment, the second abutment having an apertured extension projecting longitudinally beyond the flanged end of the first shell, a lever loosely disposed endwise through said way and projecting at its forward end into the aperture of said abutment-extension, the lever being removably fulcrumed intermediate its ends on a wall of said way to impingingly bear at its forward end against the wall of said abutment-aperture and a device comprising a lever-pulling bolt having detachable engagement with said first abutment and with the rear end of the lever for removably fastening the lever at its forward end to the first shell.

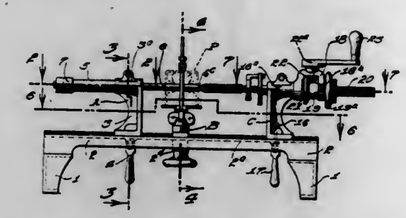
1,898,284. APPARATUS FOR SETTLING MATERIAL IN CONTAINERS. DANIEL BELCHER, Minneapolis, Minn., assignor to Bemis Bro. Bag Co., Minneapolis, Minn., a Corporation of Missouri. Filed June 25, 1931. Serial No. 546,796. 6 Claims. (Cl. 259—72.)



1. In a bag shaker, a frame, a plate supported at its ends therein, a horizontally disposed belt alined with said plate, a vertically disposed belt at each side of said

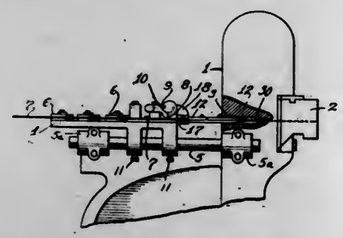
horizontally disposed belt, said vertically disposed belts being operatively connected with said horizontally disposed belt and cooperating therewith to feed filled containers onto and over said plate, and means for flexing an intermediate portion of said plate and thereby impart a vibratory movement thereto, whereby filled containers moving over said plate will be agitated to cause the material therein to become settled.

1,898,285. MACHINE TOOL. GEORGE R. BLAUVELT, San Diego, Calif. Filed Jan. 18, 1928. Serial No. 247,574. 3 Claims. (Cl. 77—3.)



1. In a machine tool of the class described, a shear, a vertically disposed sleeve and journal means shiftable longitudinally intermediate the ends of said shear, a stem shiftable vertically in said sleeve and journal means, a table positioned upon the upper end of said stem, a hand wheel including a hub portion rotatably mounted in said sleeve and journal means, a threaded reduced extension on said stem projecting through said hub whereby rotation of said hand wheel raises and lowers said table, a ratchet clamp associated with said table adapted to clamp a piston on said table, and means in connection with said clamp means for centering the piston on said table.

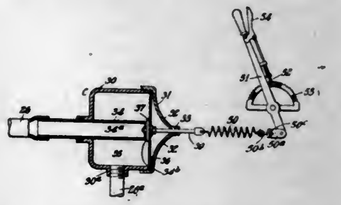
1,898,286. NAIL WIRE GUIDE. ALBERT BRADLEY, Sterling, Ill., assignor to Northwestern Barb Wire Company Sterling, Ill., a Corporation of Illinois. Filed June 25, 1931. Serial No. 546,734. 11 Claims. (Cl. 140—130.)



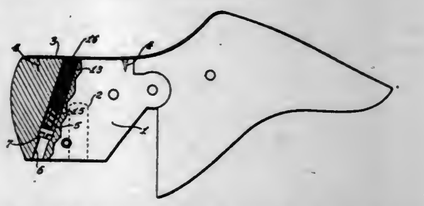
1. A nail wire guide comprising complemental sections having registering grooves forming together a closed groove, and means for clamping said sections together, said means including a bolt passing through said sections with its axis intersecting the axis of the closed groove, said bolt having an opening coaxial with and dimensioned so that it does not project inwardly beyond the contour of the closed groove.

1,898,287. BRAKE SYSTEM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Mar. 28, 1928. Serial No. 265,255. 3 Claims. (Cl. 188—152.)

1. In a brake system for automotive vehicles provided with an internal combustion engine for propelling the vehicle, said engine being provided with a throttle control suction passage, said brake system being further provided with a suction actuated power actuator connected with said aforementioned suction passage, a pressure regulating check valve interposed between said power actuator and said suction passage, comprising a casing provided with a chamber connected with the throttle controlled portion of said suction passage, and a chamber communicating with said power actuator, said chambers being open at their inner ends and provided with seating means, a pressure operated part having marginal portions in sealing engagement with said casing, and having its outer face subjected at all times to the pressure of a higher pressure fluid, said pressure operated part being subjected to yielding resistance tending to hold it in unseated position, and being adapted to be forced into seating engagement with said seating means, to disconnect said chambers from each other when the differential of fluid pressures on its opposite faces is sufficient to overcome said resistance, the area of the inner face of said pressure operated part exposed to the pressure in the chamber connected with the power actuator being sufficiently greated than the area exposed to the pressure in said chamber connected with the suction passage, to hold said pressure operated part in seated position when rarification exists in the chamber connected with said controlling valve mechanism, regardless of variations in the degree of rarification in the suction passage, whereby a substantially constant maximum differential of fluid pressures is maintained available for the operation of said actuator, and explosive mixture is prevented from passing beyond the seating means of said pressure regulating check valve.



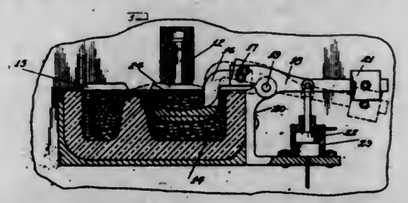
1,898,288. DEVICE FOR ATTACHING WOODEN HEELS. ARTHUR J. BRAUER and FREDERICK P. WAGNER, St. Louis, Mo. Filed Mar. 4, 1931. Serial No. 520,029. 10 Claims. (Cl. 12—141.)



1. A last adapted to receive a soled shoe for the application of a heel and having a heel part, and a device permanently associated with said heel part, said device having an operation anchoring element constructed and arranged to engage and become anchored in the heel so as to clamp the heel against the shoe while on the last.

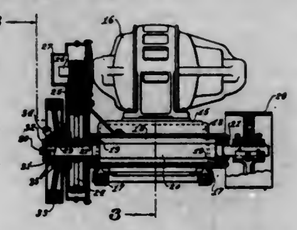
1,898,289. GLASS GATHERING TANK. EDWARD G. BRIDGES, Anderson, Ind., assignor to Lynch Corporation, a Corporation of Indiana. Filed Aug. 14, 1929. Serial No. 385,846. 10 Claims. (Cl. 49—56.)

1. Glass gathering apparatus comprising a gathering hearth in communication with a tank of molten glass through passages at its ends to permit circulation of glass into and out of the hearth, the passage at one end being below the level of the glass in the tank, a gathering device movable into cooperative charging relation in a predetermined plane above said hearth, means vertically movable in said hearth and below the level of the glass therein effective to lift an unconfined body of glass therein into contact with the bottom of the mold, and means for applying suction within said mold to fill it.



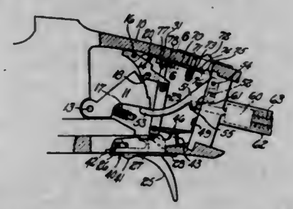
9. The method of feeding and circulating glass in a pool that comprises lifting an unconfined body of glass into charging contact with the gathering device, thereby causing a flow of glass toward the surface of said pool from beneath to the feeding point, and gathering away surplus glass through a channel at the surface of said pool.

1,898,290. POWER UNIT FOR OIL WELLS. DOUGLAS R. BROWN, Coffeyville, Kans., assignor to The Oil Country Specialties Mfg. Co., Coffeyville, Kans., a Corporation of Kansas. Filed Nov. 30, 1927. Serial No. 236,637. 1 Claim. (Cl. 74—28.)



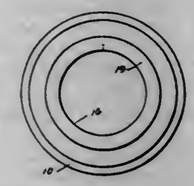
A power unit for oil wells, comprising, a motor, a driving wheel thereon, a countershaft, a driven wheel on one end of said countershaft, driving connections between said wheels, a flywheel free on said countershaft adjacent said driven wheel a second driving wheel on the other end of said countershaft, a driven shaft having a driven wheel thereon, driving connections between said second driving and driven wheels, the hub of said first driven wheel being projected and having a radially extending flange on said projection, and releasable driving connections between said flywheel and said flange independent of said countershaft.

1,898,291. TRIGGER MECHANISM. MARRINER A. BROWNING, Ogden, Utah, assignor to J. M. & M. S. Browning Company, Ogden, Utah, a Corporation of Utah. Filed Sept. 9, 1931. Serial No. 561,850. 14 Claims. (Cl. 42—42.)



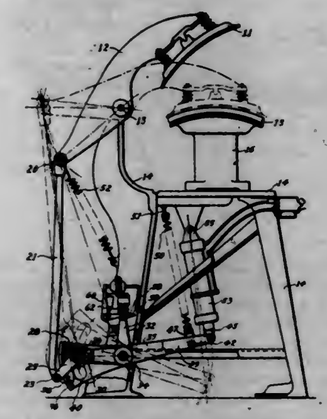
1. In combination, a pair of hammers, a sear for each hammer, a single trigger, a connector through which said sears are successively operated upon successive pulls of the trigger, said connector being adjustably supported whereby the same may be selectively set so that the sears will be operated in the desired order on repeated pulls of the trigger, means for selectively setting said connector, an inertia element having a relative rearward movement upon the rebound of the gun, a spring normally urging said inertia element forwardly, and means interposed between said inertia element and connector whereby said spring moves said connector from the fired to the unfired sear upon return of the inertia element to initial position.

1,898,292. FLEXIBLE SWAB BODY. CHARLES S. CRICKMER, Dallas, Tex., assignor to The Guiberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed Apr. 1, 1931. Serial No. 526,943. 5 Claims. (Cl. 74—109.)



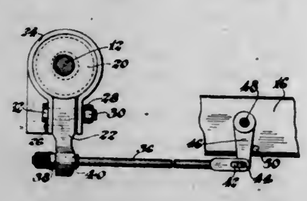
1. A swab body comprising a flexible body provided with an axial opening, a metallic reinforcing member at one end of the body having a portion exposed in the bore of said body and a portion embedded in the wall of the body, and a metallic thimble surrounding the end of the body at which the reinforcing member is located and having a portion embedded in the body for permanently attaching the thimble thereto.

1,898,293. PRESS WITH PINION LEVERAGE. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Aug. 29, 1930. Serial No. 478,753. 9 Claims. (Cl. 68—9.)



3. Actuating mechanism for a pressing machine including in combination, a driving lever, a driven link, gearing connected to said lever and link for transmitting power from the driving lever to the driven link a predetermined distance, means for preventing further operation of the gear drive, and means for moving the gearing as a unit after the link has moved said predetermined distance.

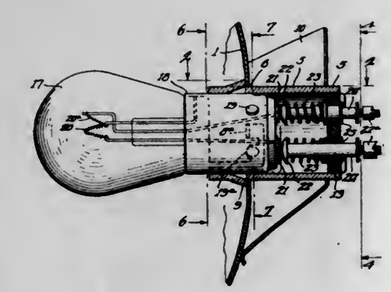
1,898,294. OPERATING CONNECTION. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 28, 1929. Serial No. 350,502. 10 Claims. (Cl. 188—196.)



1. An adjustable operating connection for a brake or the like comprising, in combination, a shaft, a lever having a one-way clutching connection to the shaft, and means for permitting the lever a predetermined movement with the shaft when the shaft is turned forcibly in a brake-applying direction and then holding the lever while the shaft is turned further into fully applied position.

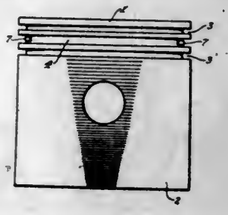
7. Operating mechanism for a brake or the like comprising, in combination, a shaft having a relatively large cylindrical part, and an operating lever having a strap embracing and having a one-way connection with said part, together with an operating member connected to said lever and means for arresting motion of said member and the lever after a predetermined degree of movement while the strap shifts with respect to the shaft as the shaft continues to turn.

1,898,295. LAMP ASSEMBLY MEANS. HARRY A. DOUGLAS, Bronson, Mich. Filed Jan. 30, 1931. Serial No. 512,372. 5 Claims. (Cl. 240—41.)



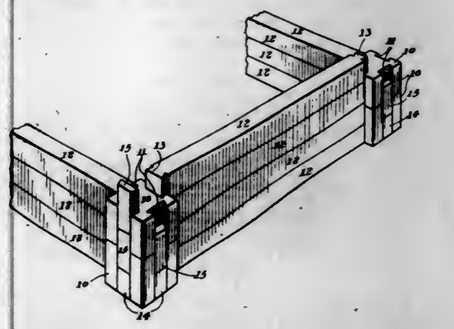
1. Lamp assembly means including a concave reflector having an opening therethrough, said opening being laterally enlarged at a plurality of spaced apart places; a cylindrical socket adapted to be passed through said opening, said reflector having a plurality of spaced apart inward extensions into said opening; bayonet slots in said socket receiving said extensions; seats in said slots for said extensions; tongues on said socket constructed and arranged to pass through the lateral enlargements of said opening and to bear against the reflecting surface of the reflector in a plane common to said seats, said plane being perpendicular to the axis of the socket; shoulder portions on said socket; a three legged leaf spring bearing against said shoulder portions in a plane perpendicular to the socket axis and tensioned against the rear surface of the reflector, said spring pressing said tongues and said seats into engagement with said reflector.

1,898,296. TRUNK PISTON. JOHN FLAMMANO, University City, and PERCY L. BOWSER, St. Louis, Mo., assignors to The Sterling Corporation, Wilmington, Del., a Corporation of Delaware. Filed Feb. 18, 1929. Serial No. 340,823. 5 Claims. (Cl. 74—108.)



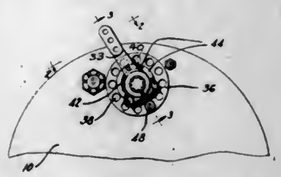
1. A trunk piston having a skirt formed to provide two pairs of diametrically disposed broad bands of contact with the cylinder walls extending the full length of the skirt, one pair of said bands being in line with the wrist pin axis, the portions of the skirt between said bands being relieved to clear the cylinder wall.

1,898,297. BUILDING BLOCKS. NED BARCLEY FOX, Norway, Mich. Filed Sept. 23, 1931. Serial No. 564,505. 4 Claims. (Cl. 46—35.)



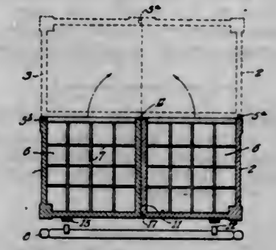
1. Building blocks comprising a plurality of corner blocks, each having on each of its four faces a dove-tail vertical groove; a plurality of side members each provided at each end with a dove-tail projection to fit said grooves; and combined filler and locking blocks shaped to fit and fill the grooves in said corner blocks.

1,898,298. BRAKE ADJUSTING MEANS. FREDERICK C. FRANK, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 28, 1930. Serial No. 471,136. 8 Claims. (Cl. 188—196.)



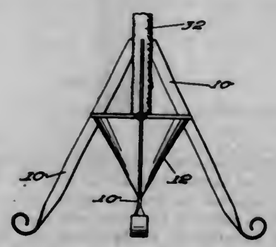
1. A brake comprising an operating shaft, a lever on the shaft, a lever-positioning member coaxial with the shaft, means for adjusting the position of the member and the lever and a yielding means connecting the member to the lever.

1,898,299. CONVERTIBLE SERVICE CABINET. WALTER J. GREENEBAUM, Chicago, Ill. Filed Dec. 15, 1930. Serial No. 502,324. 1 Claim. (Cl. 45—140.)



In a convertible service cabinet, two rectangular sections hinged together and adapted to have a relative movement of substantially one hundred and eighty degrees, said cabinet being closed in one extreme position of relative movement of said sections and in another extreme position of said sections presenting an open face, casters supporting the cabinet, a plurality of pairs of socket members on coinciding faces of said sections opposite said open face of said cabinet when said cabinet is in extreme open position, respective pairs of said socket members having opposed angularly related surfaces, a plurality of pairs of tapered tongues having opposed angularly related edges engaging respective pairs of said surfaces of said socket members, removable rails rigidly connecting said respective pairs of tapered tongues, said rails being vertically spaced apart substantially the height of the cabinet and holding the cabinet in extreme open position, a tongue and groove joint between said sections whereby pressure of the said tapered tongues into engagement with said sockets forces said sections together into extreme open position of said cabinet to provide a tight joint between said sections in said position and coinciding faces of said sections are maintained coplanar, means for storing said rails in said cabinet when in closed position; and means apart from the rails for locking the cabinet in extreme closed position.

1,898,300. CHRISTMAS TREE SUPPORT. FOLKE J. GUSTAFSON and HOLGER C. GUSTAFSON, Chicago, Ill. Filed Dec. 2, 1931. Serial No. 578,504. 2 Claims. (Cl. 248—38.)

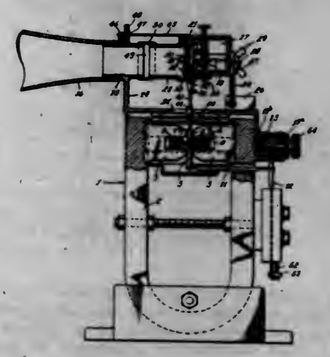


1. A Christmas tree holder, including a receptacle for the bottom of the tree trunk, and a plurality of supporting legs pivotally mounted on the receptacle, and a reinforcing bar in the upper rim of the receptacle, said reinforcing bar comprising a pivotal mounting for the supporting legs, a portion of the upper edge of the receptacle being cut away to allow of a connection between the leg and the bar, the bar being bent outwardly at said cut-away portion, thence looped to form an eye, and reversely upon itself, and again looped to form a parallel eye, and finally continuing into the said rolled-over edge of the receptacle.

1,898,301. PROCESS FOR THE PREPARATION OF UNSATURATED HYDROCARBONS. WILLY O. HERRMANN and ERICH BAUM, Munich, Germany, assignors to Consortium fur Elektrochemische Industrie, Munich, Bavaria, Germany. Filed July 30, 1927, Serial No. 209,639, and in Germany Aug. 2, 1926. 9 Claims. (Cl. 260—170.)

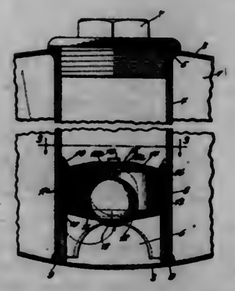
1. Process of preparing unsaturated hydrocarbons which comprises passing more highly saturated gaseous aliphatic hydrocarbons in contact with unreactive heated surfaces at temperatures between a red heat and 1000° C. and at space velocities of the order of 160 liters per liter of reaction space per hour, the reaction space being the volume of the reaction tube minus the volume of the filling material present.

1,898,302. PNEUMATIC LOUD SPEAKER. FRANK L. HETZEL, Hermosa Beach, Calif. Filed Sept. 26, 1930. Serial No. 484,608. 16 Claims. (Cl. 179—108.)



1. In a pneumatic loud speaker, the combination of an air valve with a relatively fixed grid and a movable grid opposite the relatively fixed grid, an electromagnetic vibrator device having a voice coil and an oscillator mounted for vibration by the said coil and connected with the movable grid to oscillate it toward and from the relatively fixed grid.

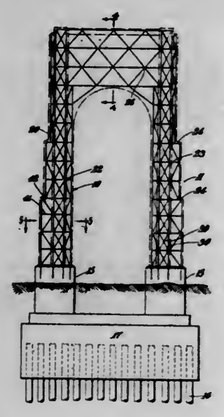
1,898,303. VALVE FOR LIQUID CONTAINERS. CHARLES L. HUNT and NETTIE J. HILL, St. Louis, Mo., assignors to Non-Refillable Container, Inc., St. Louis, Mo., a Corporation of Missouri. Filed Nov. 25, 1929, Serial No. 409,474. Renewed Dec. 27, 1932. 10 Claims. (Cl. 137—69.)



10. In a device of the character described, a pipe having an inner and outer end, a supporting element attached to the inner end of said pipe, a valve support

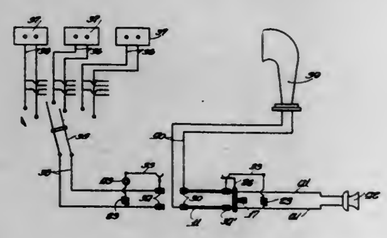
mounted within said supporting element, a valve cooperating with said support for controlling the passage of fluid therethrough, and means on said supporting element engaging said valve support and preventing movement thereof relative to said pipe.

1,898,304. REENFORCED CONCRETE CONSTRUCTION AND METHOD OF BUILDING SAME. SAMUEL KENT, Brooklyn, N. Y., assignor to Cornell Contracting Corporation, a Corporation of New York. Filed June 22, 1928. Serial No. 287,465. 6 Claims. (Cl. 25—154.)



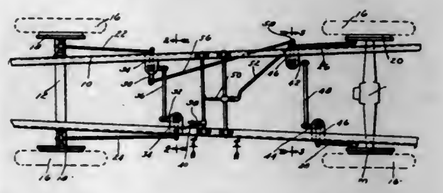
3. The method of building a reenforced concrete structure, which consists in erecting a tall self-sustaining rigid reenforcing structure consisting of a framework of a relatively light construction composed of metal bars rigidly connected together, erecting frames around the reenforcing structure so as to form a mold for concrete, connecting screw-threaded members to the frames and adjusting the frames to position in respect to said framework by means of said screw-threaded members and introducing concrete into the mold, said rigid structure forming the entire reenforcement for the concrete.

1,898,305. SELECTIVE SWITCHING SYSTEM. ALFRED J. MACY, Evanston, Ill., assignor to Baritone Radio Corporation, Chicago, Ill., a Corporation of Illinois. Original application filed Sept. 2, 1930, Serial No. 479,128. Divided and this application filed Aug. 28, 1931. Serial No. 559,842. 3 Claims. (Cl. 179—2.)



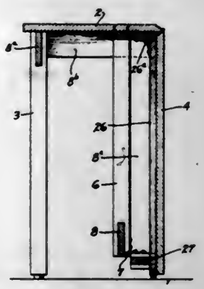
1. A program distributing system for hotels, and the like, comprising a plurality of sound sources, a reproducer in the room of a guest, circuits extending between each of said sound sources and the room of the guest, selector switch means in the room for connection at will to said sound sources through a selected circuit, a transmitter and switch means at a point remote from the room for control by the hotel staff, wires connecting said remote switch to said selector switch and said reproducer, said remote switch being operable to selectively connect the reproducer to said selector switch or to said transmitter at will without affecting the connection of other guests connected to the system, and means in circuit connection with said selector switch operable upon movement of said remote switch to indicate movement of said switch.

1,898,306. BRAKE-OPERATING MECHANISM. MONTGOMERY W. MCCONKEY, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 18, 1928. Serial No. 255,209. 17 Claims. (Cl. 188—106.)



9. A vehicle including a frame having, in combination, right and left rear brakes and interconnected right and left levers operating the corresponding rear brakes, right and left front brakes and interconnected right and left levers operating the corresponding front brakes, each of said levers being separately mounted on the vehicle frame and operating mechanism acting through said levers to apply the brakes.

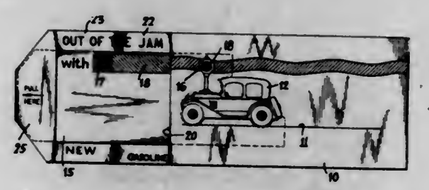
1,898,307. TABLE. CHARLES J. MILLER, Minneapolis, Minn. Filed Oct. 9, 1925, Serial No. 61,493. Renewed June 2, 1932. 16 Claims. (Cl. 45—116.)



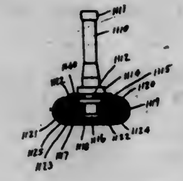
2. A table comprising sections hinged together for relative movement and having supporting legs, the legs of one section being adapted to fold to allow that section to turn down to a vertical position, and means normally retracted but adapted to be projected by the turning down of said section to contact with the floor and cooperate with said section to support that side of the table when folded.

1,898,308. ADVERTISING DEVICE. MAX V. MILLER, New York, N. Y. Filed Nov. 12, 1931. Serial No. 574,477. 10 Claims. (Cl. 40—65.)

1. A device of the character described comprising a background member having a slot therein, a slider carried by and in back of the background member and slidable relatively thereto, a movable member carried by the slider projecting through the slot and extending over the background, an indicator carried by the slider and movable therewith, the indicator extending over the background and movable relatively thereto, and indicia carried by the background member to which the indicator refers.



1,898,309. CUSHION ROCKING SLIDE. WILLIAM H. NOELTING, Evansville, Ind., assignor to Faultless Caster Company, Evansville, Ind., a Corporation. Filed May 24, 1930. Serial No. 455,182. 2 Claims. (Cl. 16—42.)



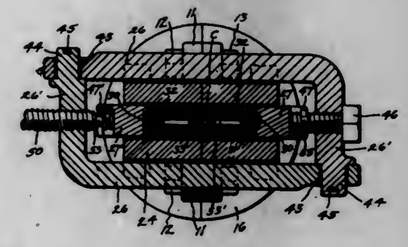
1. A rocking cushion slide including a relatively hard composition load sustaining shell having a bottom and a side wall forming a chamber with a central upwardly directed opening, a stem having a portion extending downwardly through the central opening and into the chamber, a softer cushioning composition within and substantially filling said chamber, and a load distributing plate carried by the chamber included portion of the stem and associated with the softer cushioning composition for distributing the load, said stem having universal possible rocking movement relative to the bottom, said side wall of the chamber having a groove therein and the plate having its outer peripheral edge seatable in said groove, said plate being apertured for lockingly associating all portions of the softer composition with said plate.

1,898,310. BRAKE SHOE. JOHN W. PETERSON, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 2, 1930. Serial No. 472,521. 3 Claims. (Cl. 188—250.)



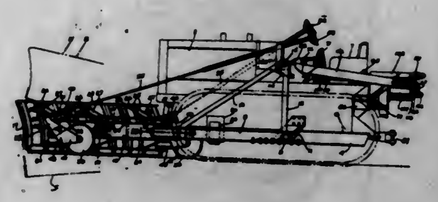
1. A brake shoe for internal expanding automobile brakes comprising a molded, convex portion adapted to engage the inner surface of a brake drum, and a web member extending radially inward from said drum-engaging portion and being provided with flanges permanently embedded in said drum-engaging portion, one end of said web member extending beyond said drum-engaging portion in substantially circumferential alignment therewith and being provided with means whereby said brake shoe may be anchored, and means at the other end of said web member for engagement by applying means.

1,898,311. OIL SAVER. FRANK C. PETTITT, Dallas, Tex., assignor to The Guiberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed Oct. 15, 1931. Serial No. 568,945. 3 Claims. (Cl. 286—16.)



1. In an oil saver, a housing having a vertical packing chamber, compressible packing members slidable transversely in the chamber of said housing, followers engaging said members, a pair of angular members connected together and mounted to slide transversely on the housing, a connection between one of the members and one of the followers, and an adjustable connection between the other member and the other follower.

1,898,312. TRACTOR SCRAPER. JOHN R. RITCHIE, Minneapolis, Minn. Filed Feb. 8, 1932. Serial No. 591,703. 23 Claims. (Cl. 37—144.)

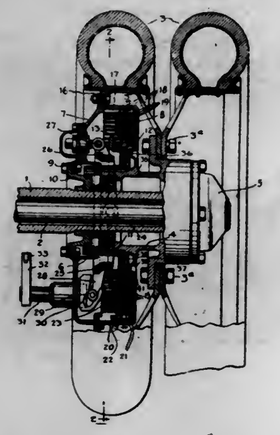


23. The combination with a tractor comprising an engine and a suitable frame, of a thrust frame having pivotal connections with the tractor frame and extending forwardly therefrom and carrying a scraper blade, an operating mechanism for said thrust frame connected with the tractor engine, a frame pivotally connected with said thrust frame at the sides of the tractor and having its rear portion connected to said operating mechanism, and means for controlling the operation of said mechanism to vertically adjust the scraper blade.

1,898,313. WHEEL AND BRAKE FOR MOTOR VEHICLES. AZOR D. ROBBINS, New York, N. Y., assignor, by mesne assignments, to Bendix Aviation Corporation, South Bend, Ind., a Corporation of Delaware. Filed July 14, 1928. Serial No. 292,727. 6 Claims. (Cl. 188—72.)

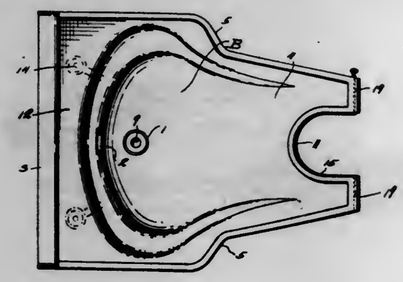
6. In combination with a vehicle wheel carrying a hub adapted to surround a live axle, said hub carrying a splined

member, a brake mechanism including said splined member, a housing inclosing said brake mechanism, oiling



means carried by the housing, and interacting with the hub, whereby the wheel may be removed without disturbing the brake mechanism or the oiling means.

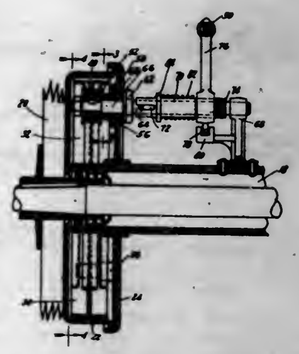
1,898,314. LAVATORY. CARL J. SANDHAGEN, Cedar Rapids, Iowa. Filed Dec. 2, 1930. Serial No. 499,570. 1 Claim. (Cl. 4—159.)



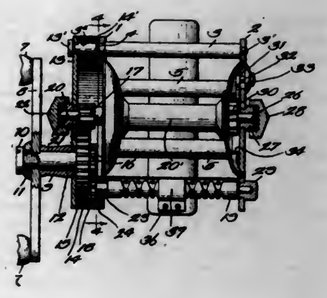
A lavatory comprising a basin the forward portion of which is continued by an upwardly and forwardly inclined drain board, the drain board being dished and provided with side flanges for strength, the depth of the dished portion and the width of the flanges increasing in inverse proportion to the distance from the bowl, the upper end of the drain board having a neck receiving recess and being provided with a flange for protecting the clothing of the person to be treated, and the drain board having a recess in at least one edge thereof to receive the hip of the operator.

1,898,315. BRAKE. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Dec. 27, 1926. Serial No. 157,097. 19 Claims. (Cl. 188—196.)

3. A brake-applying device comprising, in combination, a brake-operating shaft, means for predetermining the angular position of the shaft to give substantially constant brake-releasing movement, an arm on the shaft for operating it, and means for shifting the arm axially and angularly of the shaft to preserve its angular position as the brake-released position of the shaft is varied.



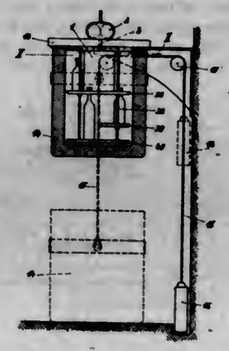
1,898,316. FISHERMAN'S REEL. JOHN V. SCHAFER, Bronson, Mich., assignor to Bronson Reel Company, Bronson, Mich., a Corporation of Michigan. Filed Jan. 13, 1930. Serial No. 420,411. 2 Claims. (Cl. 242—84.1.)



1. A reel structure including, in combination, end plates, one of said plates being annular; distance preserving rods interposed between the end plates, said rods having continuations extending through and continued beyond the annular end plate, said continuations being formed with grooves upon the outer side of the annular end plate; split spring rings received in said grooves and having engagement with the outer face of the annular end plate to maintain the said plate in assembly with the distance preserving rods; a gear carrier; and assembling screw screwed into engagement with said rod continuations and serving to assemble the gear carrier with said annular end plate.

1,898,317. REFRIGERATOR. RUDOLF SCHLENK, Vienna, Austria. Filed Sept. 16, 1930, Serial No. 482,322, and in Austria Sept. 17, 1929. 2 Claims. (Cl. 62—71.)

1. In a refrigerator the combination with a fixed immovable lid and a receptacle adapted to be lowered away from the said lid, and means for cooling the interior of the said receptacle, which means is attached to the



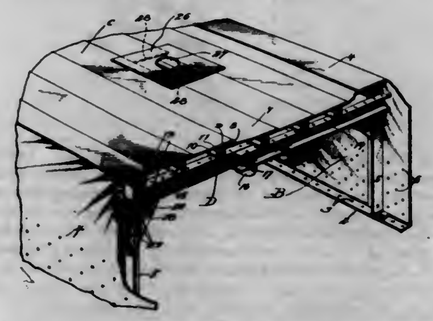
said lid and so located as to occupy a position in the interior of the said receptacle when closed against the said lid.

1,898,318. COMB ATTACHMENT FOR CARPET SWEEPERS. EARLE R. SMITH, Alhambra, Calif., assignor to Gillette Sweeper Corporation, Ltd., Los Angeles, Calif., a Corporation of Nevada. Filed July 18, 1931. Serial No. 550,304. 4 Claims. (Cl. 15—48.)



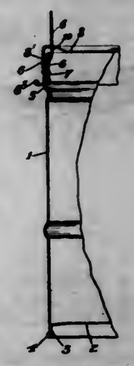
1. A sweeper comprising; a body; a brush rotatable in the body; a pan at one side of the brush; a comb movably mounted in the body at one side of the brush and above the pan and having its teeth projecting upward and towards the brush, and mounted so as to fall toward the brush with its teeth projecting into the brush, and means to limit movement of the teeth into the brush.

1,898,319. CONCRETE FORM. EDWARD L. SOULÉ, Berkeley, Calif. Filed Aug. 10, 1927. Serial No. 212,013. 5 Claims. (Cl. 25—131.5.)



4. A concrete mold comprising a pair of interspaced side plates; an inturned top flange on each side plate; a beam connecting the side plates and disposed a predetermined distance below the inturned flanges on the side plates; and a plurality of overlapping top plates supported by the beam and parallel to the side plates; the inturned top flanges on the side plates telescoping with relation to the adjacent top plates supported by the beam to form a tight joint.

1,898,320. ICE PACK RECEPTACLE. DAVID STEAN, Dorchester, Mass. Filed Sept. 7, 1929. Serial No. 390,994. 2 Claims. (Cl. 220—58.)



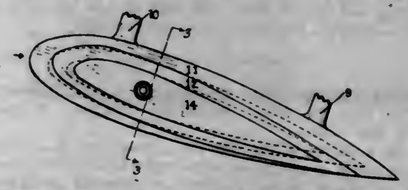
1. A shipping receptacle comprising a container, a pair of opposed lugs fastened to the interior surface of the container wall, a top having tab receiving slots, and a bail hole in said lugs above the container edges, and below said slots.

1,898,321. ELECTRICAL RECTIFIER. CHARLES K. STROBEL, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 10, 1931. Serial No. 562,048. 5 Claims. (Cl. 175—366.)



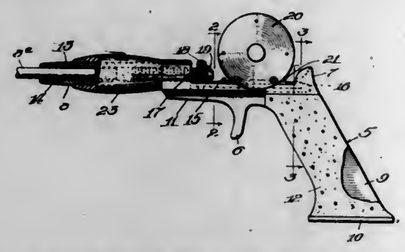
1. A rectifier comprising an inclosing member provided with a hole, a conducting plug secured to said member in said hole and provided with a threaded axial bore, a first conducting member in said hole spaced from said plug and secured to said inclosing member, an asymmetric unit in said hole interposed between said plug and said first conducting member, a second and a third conducting member in said hole between said plug and said asymmetric unit, a coiled spring in said hole between said second and third conducting members, and a screw screwed through the bore in said plug and cooperating with said second conducting member in such manner that when said screw is screwed inwardly said second conducting member compresses said spring to subject said asymmetric unit to a comparatively high pressure.

1,898,322. HULL. VICTOR W. STRODE, Portland, Oreg. Filed Dec. 11, 1931. Serial No. 580,287. 15 Claims. (Cl. 114—66.5.)



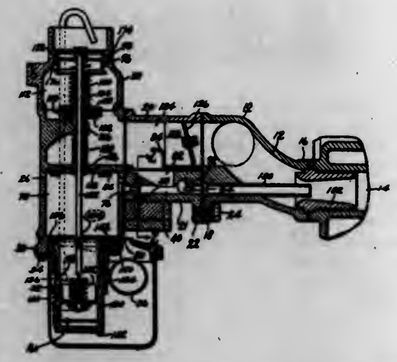
1. In a hull of the character described, stepped airfoil upper surfaces for said hull and dual purpose under surfaces for said hull adapted to function as wetted surface in water and wing under surface in air, said under surfaces being in respective symmetry upwardly stepped both ways from the center as specified.

1,898,323. HANDLE FOR FISHING RODS. RALPH R. TEETOR, Hagerstown, Ind. Filed Oct. 31, 1930. Serial No. 492,384. 5 Claims. (Cl. 43—23.)



1. In combination, a fishing pole handle shaped in the form of a pistol and having a deep depression in its upper side and provided with a downwardly inclined main handle grip, a thumb support projecting upwardly substantially above the bottom of said depression, and a fishing pole receiving end having a bore for receiving the end of the fishing pole, the axis of the bore being above the bottom of said depression which is to receive the base of a reel, and an adjustable member mounted in said bore for fastening the reel on the handle.

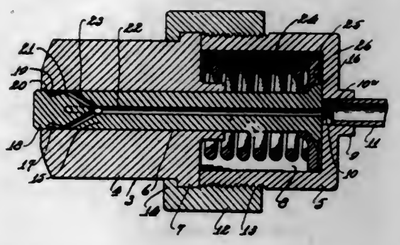
1,898,324. CHARGE FORMING DEVICE. WILFORD H. TEETER, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 2, 1929. Serial No. 396,703. 19 Claims. (Cl. 261—34.)



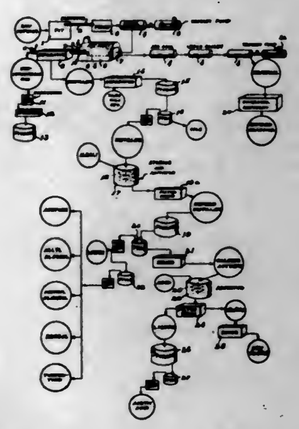
1. A charge forming device for internal combustion engines comprising a mixture passage, means for supplying fuel thereto, a throttle, an air inlet passage, and a valve controlling the flow through said air passage, said valve having a substantially cylindrical portion adapted to extend into the air inlet passage when the valve is in closed position, and spaced from the wall of said air inlet passage, to regulate the flow of air therethrough.

1,898,325. ATOMIZER. THEODORE H. VENN, Chicago, Ill. Filed Aug. 26, 1931. Serial No. 559,396. 2 Claims. (Cl. 299—125.)

1. In a device of the character described, the combination of a casing having an open-ended bore therein and an inlet for liquid under pressure, a stem or plunger-like valve-member for controlling the discharge of liquid from the casing via the bore mounted slidably in the bore and provided at its outer end with a cylindrical sealing element for the outer end of the duct and a circumferential groove disposed inwardly of the sealing element and connected to receive the liquid from the inlet, and means operated by the pressure of the liquid for shifting the valve-member from a closed position wherein the sealing element is disposed within and closes the outer end of the duct into an open position wherein the sealing element is disposed outwardly of the bore and the groove is positioned adjacent the outer end edge of the bore and permits the liquid to be discharged from the casing, the outer portion of the groove being shaped to form at the inner end of the element a comparatively sharp circumferential edge which, when the valve-member is in its open position, coacts with the aforesaid outer end edge of the bore, to form an atomizing or spraying orifice through which the fluid passes from the groove.



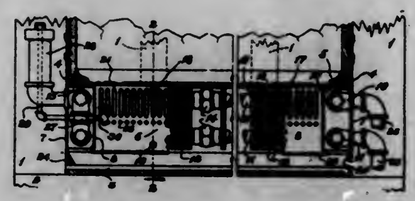
1,898,326. PROCESS OF DESTRUCTIVE DISTILLATION AND CARBONIZATION OF WASTE MATTER. OSCAR W. WAHLSTROM, Dallas, Tex. Filed Apr. 16, 1932. Serial No. 605,566. 5 Claims. (Cl. 202—26.)



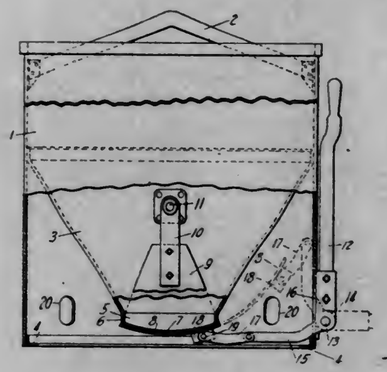
2. The hereindescribed method of obtaining various products from conglomerate vegetable and animal waste material, characterized by initially compressing the material into bales for confinement, in sealing the bales in a container, in introducing the container into a retort, in heating to effect decomposition of the material therein and destructive distillation of the volatile constituents, in withdrawing the sealed container from the retort, and finally in recovering charcoal from the residuum.

1,898,327. RADIATOR. EDGAR E. WAYLES, East Hartford, Conn. Filed Mar. 24, 1930. Serial No. 438,416. 15 Claims. (Cl. 257—133.)

5. In a radiator structure in combination, a heating element having an elongated core from which are transversely extended closely spaced sheet metal fins, a housing for the heating element including a back plate and a perforated front plate or grille, means for securing the back plate upon a wall adjacent the floor level, supporting members extending between and engaging in bent portions of adjacent fins for supporting the heating element and securing it against the back plate with the lower side thereof spaced from the floor, and means extending between said fins for securing said front plate against the fins of the heating element.



1,898,328. DUMPING RECEPTACLE. GLEN M. WILEY, Dayton, Ohio. Filed Apr. 27, 1931. Serial No. 533,009. 8 Claims. (Cl. 294—69.)

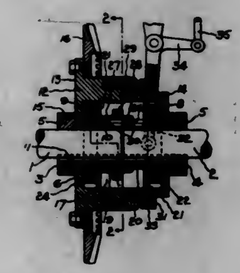


1. In a dumping receptacle, a casing, a hopper arranged within said casing, having its upper end secured to said casing on a line spaced from the top thereof and having its lower end above the lower edge of the casing and provided with a discharge opening, a swinging closure for said discharge opening, a lever mounted on said casing and arranged normally alongside of and close to the same, and a toggle having one arm rigidly secured to said lever and having its other arm pivotally connected with said closure.

1,898,329. PROPIONIC ACID FERMENTATION. PERRY W. WILSON, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Aug. 2, 1928. Serial No. 297,093. 10 Claims. (Cl. 260—120.)

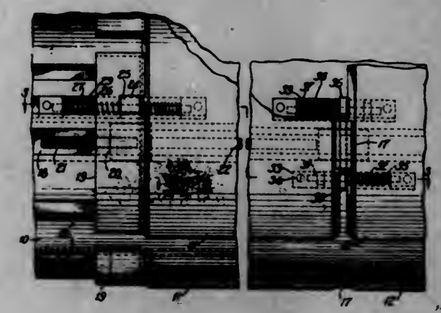
1. A process for the production of propionic acid from a mash containing protein-free carbohydrates which comprises subjecting such mash to the action of bacteria capable of producing propionic acid, controlling the acidity of the mash so that the hydrogen ion concentration is maintained preferably within the limits 10^{-7} and 10^{-5} measured in the bulk of the mash, and effecting the nutrient requirements of the said bacteria at least in part by the addition of a substantial proportion of a material selected from the group consisting of butyl-acetonic fermentation slop, ethyl alcohol fermentation slop, yeast fermentation residue and degraded yeast.

1,898,330. DIFFERENTIAL. WILLIAM CLIFFORD WITHERLY, Vancouver, British Columbia, Canada. Filed Feb. 20, 1932. Serial No. 594,352. 2 Claims. (Cl. 74—7.)



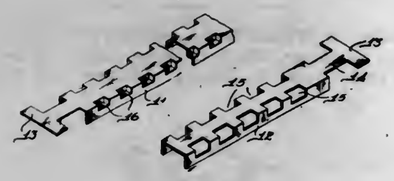
1. The combination with a pair of aligned shafts and a differential housing, a pair of reversable one way clutches within the housing, each clutch comprising a clutch ring integral with the housing, a bushing secured to each of the shafts, an enlargement integral with each bushing, and rotatable means between the enlargement and the clutch ring for imparting the drive from the housing to the enlargements and their shafts, a rocking sleeve on each of the bushings for selectively locating the rotatable means to impart the drive in opposite directions, a collar on each sleeve for rocking same, and means slidable upon the housing for imparting endwise movement to the collars.

1,898,331. PLATE-CLAMP FOR PRINTING PRESSES. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed July 3, 1931. Serial No. 548,551. 10 Claims. (Cl. 101—378.)



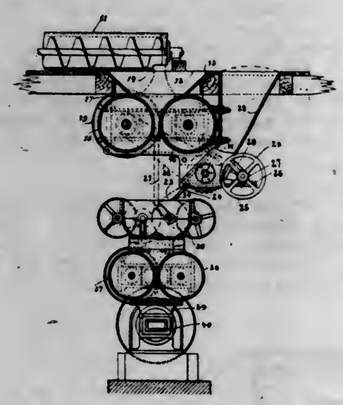
7. In a printing press having a rotary printing cylinder, the combination with positive clamping means for securing a stereotype plate to said cylinder, of a spring-pressed latch carried by the cylinder, and adapted to snap into plate holding position when the plate is pressed therengainst, the latch being formed with a bevelled clamping edge to permit of pulling the plate off the cylinder.

1,898,332. ADJUSTABLE TIE-ROD FOR CONCRETE WALL FORMS. TED D. ANDERSON, Battle Creek, Mich. Filed July 24, 1930. Serial No. 470,450. 4 Claims. (Cl. 25—131.)



3. An adjustable tie-rod comprising a channel member, a series of recesses formed in the corners of said channel member, a channel member adapted to be received on said first named channel member, and indentations formed in the corners of said last named channel members and adapted to nest in said recesses.

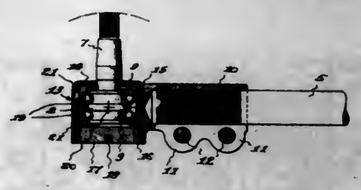
1,898,333. CLAY WORKING AND CONDITIONING. WALTER ASCHE, St. George, N. Y. Filed Nov. 19, 1931. Serial No. 576,086. 8 Claims. (Cl. 25—1.)



1. The method of dosing clay, comprising feeding the clay in a continuous band of predetermined cross-sections, feeding the material, which said clay is to be dosed with at a uniform flow, continuously spreading said material over said band, and mixing said spread material into the clay of said band.

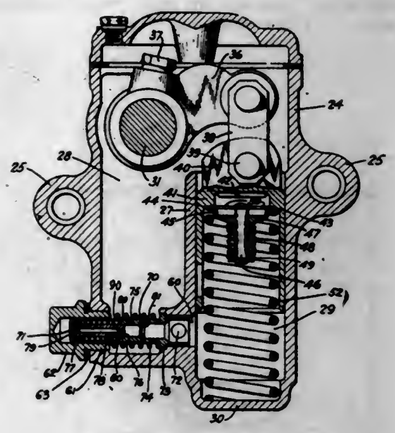
1,898,334. AUTOMOBILE ARM AND ROD CONNECTION. ERLE K. BAKER, Chicago, Ill. Filed Apr. 19, 1930. Serial No. 445,600. 1 Claim. (Cl. 287—90.)

In a tie rod construction a housing member having a bore therein with an inwardly extending flange at one end and a plug in the other end, a pair of ring members in said bore and engaged respectively with said flange and plug and which pair of rings provide a substantially spherical inner bearing surface, a stud having a substantially cylindrical head disposed in said rings concentric with said inner bearing surface and which head has concave annular grooves therein, one for each ring, and antifriction elements having substantially the same



radius of curvature as said grooves disposed in said grooves and engaged with said spherical inner bearing surface.

1,898,335. RELIEF VALVE FOR SHOCK ABSORBERS. RALPH I. BATES, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 29, 1929. Serial No. 358,898. 7 Claims. (Cl. 267—8.)

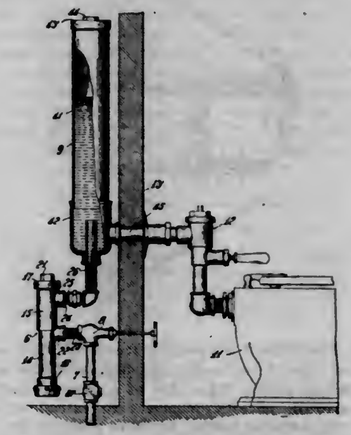


2. A hydraulic shock absorber comprising, in combination, a casing providing a fluid reservoir and a cylinder; a piston in said cylinder forming a compression chamber therein; piston operating means; a port connecting the compression chamber and fluid reservoir; a valve yieldably urged to close the port, said valve having a longitudinal passage and a transverse opening providing communicating between the compression chamber and fluid reservoir; a plunger valve slidably carried in the passage of the aforementioned valve and normally yieldably urged to maintain the transverse opening uncovered, said plunger valve being operable by fluid pressure progressively to close said transverse opening and thus progressively to restrict the flow of fluid therethrough, the first mentioned valve being operable by excessive fluid pressure within the compression chamber, to open the port and establish a flow of fluid therethrough.

1,898,336. FOOD JELLY. FRANK M. BOYLES, Brooklyn, N. Y. Filed Apr. 7, 1932, Serial No. 603,894, and in Canada Dec. 12, 1931. 2 Claims. (Cl. 99—11.)

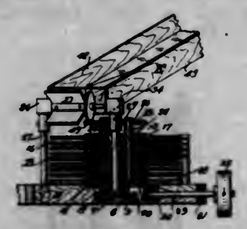
1. A composition in liquid form, adapted to make jelly upon the addition of syrup, consisting of an organic acid, a flavouring, a pectous concentrate in solution with said organic acid and flavouring and having a mineral content of base forming salts, and a minute quantity of hydrochloric acid to convert said salts into a non-hydrolizable compound, whereby a composition of substantially permanent jellifying ability is produced.

1,898,337. WATER COMPRESSION SYSTEM. ROBERT A. BROOKS, Chicago, Ill. Filed Sept. 3, 1929. Serial No. 389,919. 11 Claims. (Cl. 137—79.)



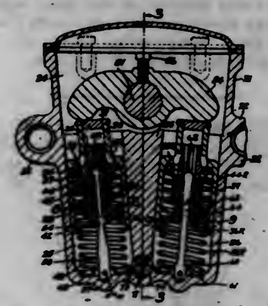
11. The combination with a water system comprising a compression tank having inlet and outlet connections, of means in said inlet connection for automatically supplying air to said tank, said means comprising a casing, an air inlet connection to said casing, and a plunger in said casing movable by the initial passage of water through the casing to open said air inlet connection to admit air to said casing.

1,898,338. SLICING MECHANISM. JOHN M. BULAICH, Watsonville, Calif. Filed July 8, 1931. Serial No. 549,489. 2 Claims. (Cl. 146—98.)



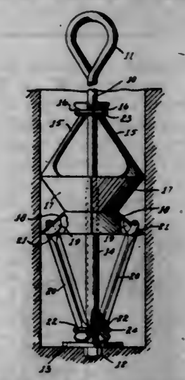
1. An apple slicing mechanism comprising a structural frame, a stationary base secured to the frame, a discharge gap in the base, a central stationary vertical shaft secured to the frame, a revoluble unit journaled on the shaft and comprising alternately disposed carrier elements and spacers, a spacer between said unit and said base, a bevel gear beneath the latter spacer, a clamping plate contacting with the upper surface of the upper element, a perforated gear plate disposed above the clamping plate in spaced relation thereto, bolts passing through the carrier elements, spacers and gears to form said revoluble unit, a cap bearing carried by said shaft, a cap bearing of equal height carried by said frame outwardly of the diameter of said unit, a horizontal shaft mounted in said cap bearing, a revoluble baffle element fast to said horizontal shaft and a pinion fast to said horizontal shaft and engaging said perforated gear.

1,898,339. DOUBLE ACTING SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 21, 1928. Serial No. 279,372. 13 Claims. (Cl. 267—8.)



11. An hydraulic shock absorber comprising, in combination, a casing providing a pair of cylinders each having a reciprocative piston forming a compression chamber therein, means for reciprocating said pistons; means adapted to establish a free flow of fluid from the reservoir into the compression chambers in response to the movement of the respective pistons in one direction; means adapted to provide a restricted flow of fluid from each compression chamber into the reservoir in response to the movement of the respective pistons in the other direction, said restriction varying in accordance with the position of the piston in its cylinder; a duct providing direct communication between said compression chambers only; and a valve normally closing said duct and adapted, at a predetermined fluid pressure in either cylinder, to establish a flow of fluid between said compression chambers only.

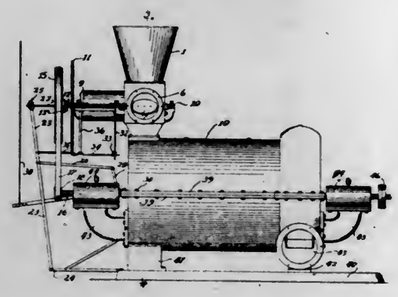
1,898,340. EARTH ANCHOR. ELMER K. COLE, Winterset, Iowa, assignor to Wej-Lock Manufacturing Company, Winterset, Iowa, a Corporation of Iowa. Filed Apr. 30, 1930. Serial No. 448,559. 1 Claim. (Cl. 189—92.)



An improved earth anchor comprising in combination a rod, two anchor sections, each anchor section being pivotally and slidingly connected at its upper end to the rod, an expanding member for each anchor section pivotally connected at its lower end to the rod and extended upwardly and outwardly and pivotally connected at its upper end to the anchor section, each anchor section being formed of a body portion of segmental cylindrical shape and a relatively narrow arm extended upwardly and pivotally and slidingly connected to said rod, whereby openings are formed between the arms to admit earth and tamping tools to the interior of the body, the lower portion of said body when in its collapsed position being inclined downwardly and outwardly, and the upper portion of said body being inclined outwardly and upwardly and whereby when the

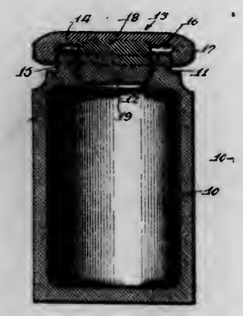
said body is expanded in earth by tamping upon the upper ends of the said arms the said lower portion of the body will move downwardly and outwardly in a direction substantially parallel with the incline of the lower portion of the body and readily and deeply penetrate the earth, and the said upper portion of the body will during its initial expanding movement co-operate with the lower body portion in tightly compressing earth and holding it between said inclined portions of the body.

1,898,341. PULVERIZED FUEL SYSTEM. GEORGE A. CONRATH, Chicago, Ill., assignor of one-half to Charles S. Denman. Filed Jan. 16, 1926, Serial No. 81,628. Renewed June 27, 1932. 21 Claims. (Cl. 83—11.)



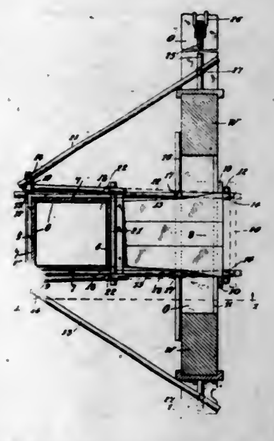
1. In a fuel pulverizing system, the combination with a feed hopper, of a pulverizing means, a bladed wheel for feeding the ore from said hopper to said pulverizing means, said blades being arranged to divide said wheel into a plurality of pockets, means cooperating with said wheel and blades for varying the size of said pockets, and means positively controlled by said pocket varying means for drying the fuel ore.

1,898,342. CONTAINER. WILLIAM R. CUTHBERT, Fort Madison, Iowa, assignor to W. A. Sheaffer Pen Co., Fort Madison, Iowa, a Corporation of Delaware. Filed July 22, 1929. Serial No. 379,957. 1 Claim. (Cl. 215—43.)



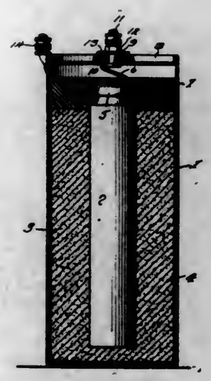
A receptacle for liquids having an open-ended neck portion, and removable closure means comprising a hard rubber portion for engagement with said neck and a soft rubber portion vulcanized thereto and extending into said neck to effect a seal therein.

1,898,343. DIRT CHUTE. FREDERIC A. DAVIDSON, Bayside, N. Y., assignor to American Safety Device Co., New York, N. Y., a Corporation of New York. Filed June 27, 1930. Serial No. 464,172. 2 Claims. (Cl. 248—30.)



2. In a knock-down supporting frame for dirt conducting chutes, spaced vertically disposed members adapted to be arranged at the inner side of a window opening in a building wall, parallel members to extend outwardly through said opening across opposite sides of the chute, means detachably connecting said members at one of their ends to the vertical members, a transverse connecting member extending between the other ends of said parallel members to engage another side of the conducting chute and means for detachably connecting the engaged ends of said members with each other, vertically oblique bracing members having one of their ends disposed in intersecting relation to said parallel members adapted to extend upwardly therefrom through the wall opening, and means for coupling said bracing members at their upper and lower ends to said first named vertical members and to said transverse member respectively.

1,898,344. DRY CELL. CYRIL P. DEIBEL, Lakewood, Ohio. Filed Mar. 15, 1930. Serial No. 436,059. 6 Claims. (Cl. 136—133.)



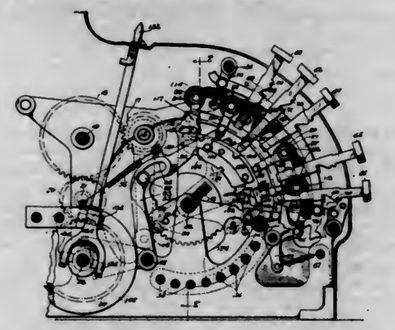
1. A dry cell comprising a zinc can, a carbon electrode and a mass of depolarizing mix arranged within said zinc can and insulated therefrom, a layer of plastic self-sealing material covering said mass of mix and bonded with the walls of said can, a cover closing the upper

end of said can and a terminal extending through said cover and connected with said carbon electrode, said carbon electrode terminating below the top of said layer of sealing material.

1,898,345. PROCESS OF COLORING GRANULAR AND OTHER MATERIAL. PAUL S. DENNING, Joliet, Ill., assignor to Frederic E. Schundler, Joliet, Ill. Filed May 31, 1929. Serial No. 367,625. 8 Claims. (Cl. 91—70.)

1. The process of coloring mineral granules which includes the steps of coating the granules while at substantially atmospheric temperature with a solution of a pigment and a soluble silicate, drying the material at a temperature materially above that of the atmosphere and below the fusing point of the silicate, and subjecting the coated granules to a solution of a metallic salt capable of chemical reaction with the silicate to produce an insoluble silicate.

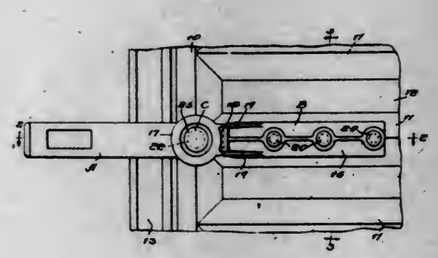
1,898,346. CASH REGISTER. HELGE C. DIESERUD, Montclair, N. J., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed May 2, 1927. Serial No. 188,193. 13 Claims. (Cl. 235—6.)



1. In a machine of the class described, the combination with a totalizer, of an item entering mechanism whereby items may be inserted in the totalizer, a control lever adapted to be adjusted for controlling total taking and resetting operations of the totalizer by means of said item entering mechanism, a plurality of shiftable cams adapted for joint operation, and means under control of the control lever for shifting the cams to determine the nature of the accounting operations to be effected.

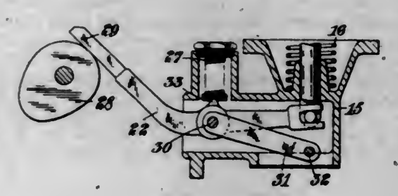
1,898,347. HASP FASTENER. FRANK DITCHFIELD, Cleveland, Ohio, assignor to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 17, 1931. Serial No. 544,946. 1 Claim. (Cl. 292—281.)

A hasp fastener for that type of fabricated sheet metal door having a horizontal corrugation merging at its end with a vertical corrugation, the latter being interiorly reinforced by an element of substantially U-section seated therewithin and provided with a bridging plate extending lengthwise of the vertical corrugation, the hasp fastener comprising: a fastener proper adapted to extend lengthwise of and be permanently secured to the crest of the horizontal corrugation and having its forward end outwardly offset in a position over the junction point of the vertical and horizontal corrugations; a rivet headed separate post, said offset end, vertical corrugation and reinforcing element having alined openings for snugly receiving the shank of said post, the inner headed end of the post being seated within said U-sectioned reinforcing element and the bridging plate having an opening alined with the post to permit insertion and withdrawal thereof after the door has been completely fabricated; and the hasp proper perforated at one end to loosely receive the



shank of the post therein and permit angling of the hasp with respect to the post, pulling and pushing stresses imposed on the hasp proper being transmitted initially direct to the shank of the post.

1,898,348. PUMP. PRIMUS OTTO DORER, London, England, assignor of one-half to Allan Gordon Smith, London, England. Filed Sept. 8, 1931, Serial No. 561,594, and in Great Britain Oct. 21, 1930. 1 Claim. (Cl. 103—38.)

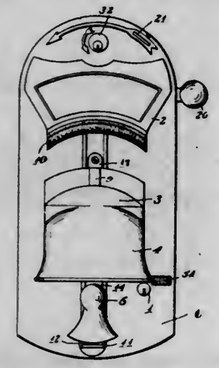


A liquid-pump comprising in combination a casing, a pump-chamber formed in the said casing, inlet and outlet valves for the chamber, a pump-diaphragm, compressible means on one side of the said diaphragm for producing a delivery stroke, a pump-rod, a lever, a pivot point for the lever intermediate the ends thereof, a pivotal connection between the said lever and the said pump-rod whereby the pump-rod supports one end of the said lever, a power-actuated part supporting the other end of said lever and operating on it to overcome the said compressible means and produce a suction stroke, a link, a pivotal connection between the said link and the pump-casing, a pivotal connection between the said link and the said lever to constitute a guide for the pivot of the lever, and a resilient member bearing on the said pivot point of the said lever, the resilience of the said member being such that when stressed to a predetermined limit it exerts such a force that an effective fulcrum is provided for the lever.

1,898,349. HOLDING DEVICE. ALBERT D. DRURY, Dorchester, Mass. Filed Aug. 24, 1929. Serial No. 388,059. 5 Claims. (Cl. 211—9.)

1. A holding device having in combination means to support an article of clothing, instrumentalities adapted to co-operate with said means to irremovably hold said clothing, and mechanism adapted to cause said means

and instrumentalities to co-operate to hold said clothing, said mechanism comprising a rotatable wheel, a handle to operate said wheel and a pitman pivotally connected

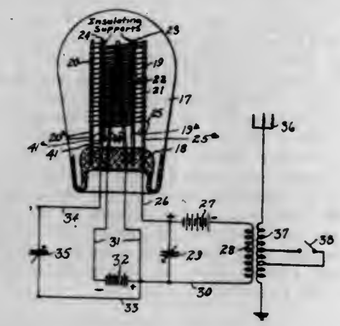


to said wheel at one end and connected to said means at the other end, and mechanism to lock said wheel in position to thereby irremovably hold said clothing.

1,898,350. PROCESS OF PREPARING SUPPLEMENTAL FOOD PRODUCT. TOM G. DYER, Des Moines, Iowa, assignor to Standard Products Company, Des Moines, Iowa, a Corporation of Iowa. Filed Sept. 30, 1929. Serial No. 396,410. 8 Claims. (Cl. 99—11.)

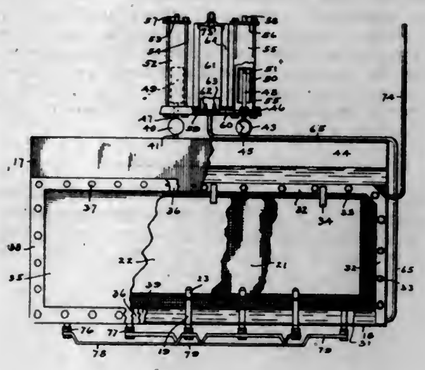
1. The process of preparing a dry supplemental food, which comprises mixing together a number of milled cereals rich in glutin, adding diastase and yeast starters, mixing with water to completely saturate the materials, then maintaining at a temperature of 70° F. to 131° F. for a period of 24 to 48 hours to permit fermentation to multiply the yeast plants and to form lactic acid, then separating and spreading the material in thin layers and drying it rapidly at a temperature between 70° F. and 131° F. to stop fermentation without killing the yeast plants.

1,898,351. RADIOTUBE. ALLEN B. DU MONT, Bloomfield, N. J., assignor to De Forest Radio Company, Jersey City, N. J., a Corporation of Delaware. Filed Nov. 26, 1928. Serial No. 321,846. 2 Claims. (Cl. 250—27.5.)



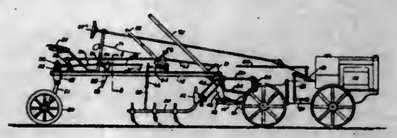
1. An electron discharge device comprising an evacuated vessel having a press, a cathode supported within said vessel, and two additional electrodes comprising wire coils mounted within said vessel to act as the plate and grid electrodes of the device, and also the plate and grid inductances by means of which the input and output circuits of the device are coupled, a pair of insulating supports around which said coils are wound, metal supports sealed into said press and supporting said insulating supports, and a lead-in wire for only one end of each of the coil electrodes whereby said electrodes act as open-end inductances.

1,898,352. MEANS FOR ELECTROLYTIC PRODUCTION OF GASES. ORA K. ENZOR, Indianapolis, assignor of one-fourth to Howard E. Dorsey, Indianapolis, Ind. Filed May 31, 1932. Serial No. 614,379. 8 Claims. Cl. 204—5.)



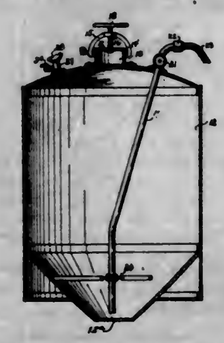
5. In an electrolytic unit for producing gases in combination with a box-like structure carrying an electrolyte, a plurality of electrodes therein with individual chambers within which the gases are produced, and a pair of manifolds collecting separate gases from said chambers, a pair of cylinders, one cylinder being interconnected to one manifold and the other cylinder being connected to the other manifold, an inverted cup in each cylinder under which gases are discharged in flowing from the manifolds, each cylinder having an upper gas outlet, a third cylinder interconnected at the bottom from the bottoms of the other two cylinders by passageways, an overflow tank, a drain pipe from the tank to said box-like structure, and an overflow pipe leading from a passage from the bottom of the third cylinder to discharge into the tank at a point spaced above the bottom thereof dependent upon the gas pressure to be maintained in said structure.

1,898,353. CULTIVATOR ATTACHMENT FOR TRACTORS. CHARLES EDWARD EVERETT and ROY ELDON SMITH, Racine, Wis., assignors to The Massey-Harris Company, Racine, Wis., a Corporation of Maryland. Filed June 13, 1932. Serial No. 616,892. 10 Claims. (Cl. 97—47.)



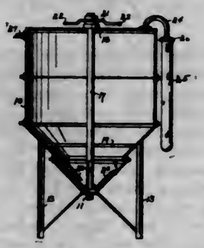
1. A cultivator attachment for tractors, comprising a unitary frame, shovel gangs attached to the forward end thereof, a centrally positioned carrying and guiding wheel at the rear end of said frame, a pair of draft links spaced apart and pivotally mounted to the forward end of said frame and adapted to be attached to the rear end of a tractor by means of vertical hinges whereby the forward end of said frame is carried and held in an upright position by said tractor, means for manually directing said guiding wheel cooperating with said draft links whereby said frame may be moved across the path of travel of said tractor.

1,898,354. MEANS FOR TRANSPORTING AND DELIVERING POWDERED MATERIAL. WARD L. FICKEY, Sioux City, Iowa. Filed July 28, 1930. Serial No. 471,253. 3 Claims. (Cl. 214—17.)



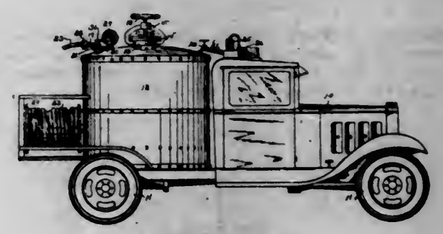
1. Means for handling and delivering packable but substantially impervious-to-air material such as powdered coal from a source of supply to a place of use without pollution of the surrounding atmosphere at any time and comprising,—a tank having a restricted horizontal bottom and a closure-controlled filling opening above the bottom, a valve-controlled material discharge pipe having its inlet adjacent and substantially perpendicular to said tank bottom, and means for applying a head of pressure to the top of the material within the tank whereby to flow the material out through said pipe without a carrying vehicle therefor.

1,898,355. POWDERED MATERIAL RECEIVING, STORAGE, AND DELIVERY CONTAINER. WARD L. FICKEY, Sioux City, Iowa. Filed Aug. 11, 1930. Serial No. 474,587. 1 Claim. (Cl. 221—120.)



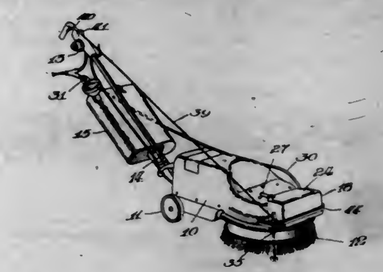
In a device of the class described, a powdered fuel container having straight sides and a downwardly tapered bottom terminating in an outlet opening, a shaft longitudinally rotatively mounted in said container and terminating adjacent said outlet opening, an air escape pipe having one end communicating with the inside top of said container, a fabric filtering bag inclosing the other end of said air escape pipe, a plurality of agitating arms secured to the lower end of said shaft; said arms each having their lengths extending first upwardly and outwardly parallel with said bottom of said container and then at a point a substantial distance from the highest elevation of said tapered bottom directly upwardly into the material in said container, a cross bar secured to the top of said shaft and located outside of said container, and a flexible member secured to each end of said cross bar for connecting said cross bar to suitable actuating mechanism.

1,898,356. APPARATUS FOR TRANSPORTING AND DELIVERING POWDERED MATERIAL. WARD L. FICKEY, Sioux City, Iowa. Filed Feb. 3, 1932. Serial No. 590,649. 3 Claims. (Cl. 302—53.)



1. In an apparatus for transporting and delivering powdered material substantially impervious to air, a tank, a wheeled vehicle for supporting said tank, a discharge pipe extending into said tank and terminating near the bottom thereof, a manually operated valve interimposed in said pipe and positioned outside of said tank, a second pipe extending into said tank and terminating near the bottom of said tank, a means for injecting air into and through said last mentioned pipe, a valve for closing said last mentioned pipe at times, a flexible conduit secured at one of its ends to the outer end of said discharge pipe, a third pipe having one end operatively communicating with the inside top of said tank and its other end communicating with the inside of said discharge pipe at a point beyond the said manually operated valve in said pipe, and a manually operated valve interimposed in said third pipe.

1,898,357. FLOOR WAXING MACHINE. WALTER S. FINNELL, Elkhart, Ind. Filed Oct. 22, 1930. Serial No. 490,372. 10 Claims. (Cl. 91—25.)

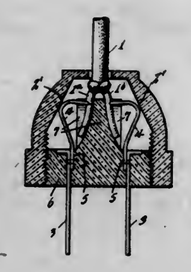


1. In a floor treating machine adapted for scrubbing operations as well as the handling of hard wax, the combination of a frame, wheel means supporting the rear of said frame, a rotary brush device supporting the front of said frame, a wax receptacle supported by the forward portion of said frame, a heater associated with said receptacle for heating initially-hard wax therein and reducing it to a highly fluid and floor penetrative form, and regulable means positively controlled during operation for delivering said wax in fluid form from said receptacle under predetermined flow conditions directly upon the floor surface immediately in front of said brush device, said receptacle, heater and regulable means being mounted upon said frame for detachment as a single unit.

1,898,358. METHOD OF HARDENING LIME MORTAR. ROYAL W. GELDER, Greeley, Colo. Filed Jan. 10, 1929. Serial No. 331,725. 2 Claims. (Cl. 106—27.)

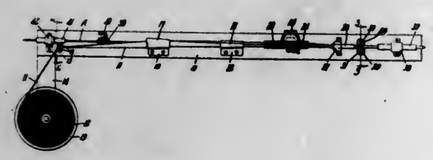
1. A composition of matter formed by the admixture of magnesium chloride, magnesium sulphite, hydrated lime, and plaster of Paris.

1,898,359. SAFETY PLUG. CHARLES E. GILBERT New York, N. Y., assignor to Gilbert & Hertz, Inc., a Corporation of New York. Filed Mar. 11, 1930. Serial No. 434,873. 4 Claims. (Cl. 173—361.)



4. In an electric safety plug, a body having a central extension thereon and provided with means for making electrical contact with an electrical outlet and also provided with resilient insulation piercing means for making electrical contact with insulated electric wires, and a cap for attachment to said body having a conical inner surface which cooperates with said extension to force said insulation piercing means into electrical contact with the wires within the insulation when the cap is attached to said body.

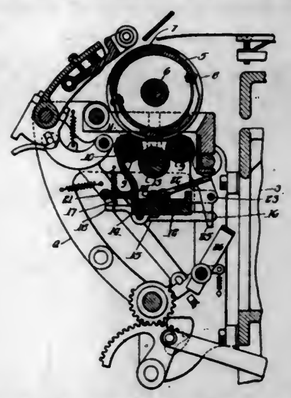
1,898,360. MACHINE FOR FORMING TUBING AROUND FIREWORK FUSE MATERIAL. JOSEPH GIOIOSA, Milton, Mass. Filed Mar. 28, 1931. Serial No. 526,108. 8 Claims. (Cl. 154—1.)



1. A machine of the character described having, in combination, a frusto-conical forming member, a spiral forming member, a hollow cylindrical forming member, and means to feed a strip of sheet material through said forming members whereby said strip is formed into a tube.

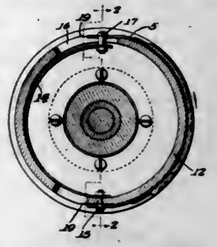
1,898,361. PRINTING MACHINE. WALTER T. GOLLWITZER, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Original application filed Oct. 26, 1927, Serial No. 228,729. Divided and this application filed May 2, 1929. Serial No. 359,775. 12 Claims. (Cl. 101—351.)

1. In a printing machine, the combination of a rotatable printing device including a printing form and having flanges thereon, a bodily movable ink receptacle, means in said ink receptacle engageable with said flanges to receive movement therefrom to apply ink to the form, and means



registering said ink receptacle and said inking means in operative relation with the form to engage said inking means with said flanges.

1,898,362. PRINTING MACHINE. WALTER T. GOLLWITZER, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Original application filed Apr. 30, 1929, Serial No. 359,197. Divided and this application filed May 31, 1930. Serial No. 457,834. 6 Claims. (Cl. 101—376.)

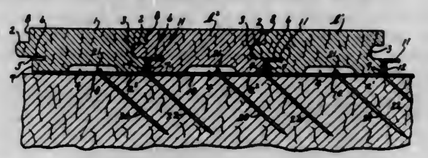


1. A printing device for use in a printing machine and comprising an elongated strip of rubber having a longitudinally extending group of printing characters embossed on one face thereof, and reenforcing means on the other face of said strip and adhesively joined thereto, said printing device having an enlarged opening at each end thereof, said openings being aligned with each other and the group of printing characters and being adapted to receive connecting means freely passed thereinto to be engaged with an outer edge of each opening to retain said printing device on the mounting therefor in a printing machine with the group of printing characters under tension to insure uniform printing thereby.

1,898,363. PROCESS OF INHIBITING OXIDATION OF UNSATURATED FATS, OILS, FATTY ACIDS, AND SUBSTANCES CONTAINING FATTY MATERIAL HAVING A TENDENCY TO BECOME RANCID. GEORGE R. GREENBANK, Washington, D. C.; dedicated to the free use of the Government and the People of the United States. Filed Sept. 16, 1932. Serial No. 633,467. 20 Claims. (Cl. 87—12.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

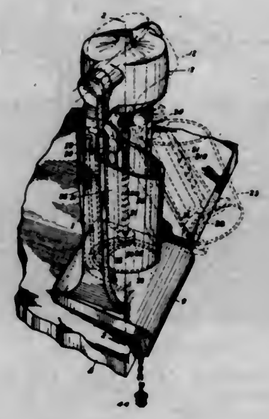
1. The process of retarding the development of rancidity in unsaturated fats, oils, and fatty acids which comprises mixing with such unsaturated fats, oils, and fatty acids, an unsaturated polybasic aliphatic acid.

1,898,364. FLOORING CONSTRUCTION. GEORGE S. GYNN, Cleveland, Ohio. Filed Feb. 24, 1930. Serial No. 430,751. 5 Claims. (Cl. 20—8.)



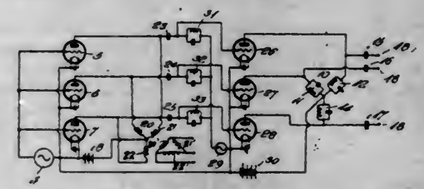
1. Flooring construction, comprising a plurality of floor boards each having one of its side edges provided with a full length tongue and the other of its side edges provided with a full length tongue-receiving groove, the tongued edge of each board being provided below its tongue and spaced above its bottom surface with a full length channel, and a plurality of metal clips for securing said boards, in floor forming arrangement, to a sub-base, each of said clips having a plate-like body portion designed to rest flatwise on and be fastened to said sub-base and also having a board-securing flange spaced upwardly from and generally parallel to said body portion and adapted to enter the channel of a board and thus secure said board to said sub-base, said clip body portion being provided with a nail-receiving aperture spaced an appreciable distance from the flange of said clip, whereby in driving a nail through said aperture into the sub-base, there is no liability of accidentally hitting and damaging a floor board.

1,898,365. DRINK MIXER WITH ULTRA-VIOLET RAY ATTACHMENTS. GLEN FOSTNER HARDING, Ogden, Utah. Filed Mar. 2, 1931. Serial No. 519,434. 9 Claims. (Cl. 259—108.)



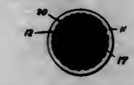
1. In a drink mixer, a base, supporting means upstanding from said base, a housing trunnionally supported by said means, a drink mixing receptacle support attached to and depending from said housing to swing to and from an inclination at one side of the vertical, a motor carried by said housing, said receptacle support being adapted to hold up a drink mixing receptacle which when filled with liquid will cause said receptacle support to gravitate from a normally inclined position to a substantially vertical position, an agitator for mixing the drinks, operating means for said agitator, a violet-ray tube holder juxtapositioned therewith whereby to direct the rays from a violet-ray tube contained therein to treat the contents of said receptacle, conductors to supply electric current to said motor and said violet-ray tube, a normally open electric switch for said conductors, and means whereby the movement from the inclined position to the vertical position closes said switch and thereby simultaneously energizes the tube and operates said agitator.

1,898,366. FREQUENCY TRANSFORMATION SYSTEM. HAROLD M. LEWIS, Douglaston, N. Y., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 21, 1927, Serial No. 200,496. Renewed June 29, 1931. 19 Claims. (Cl. 250—36.)



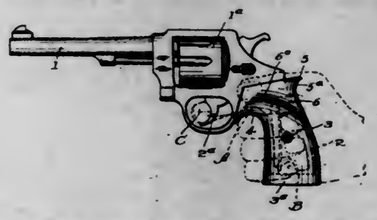
4. A frequency transformation system comprising a polyphase circuit, a source of polyphase current connected with said circuit, an independent source of single phase current connected with said circuit, said source of single phase current having a frequency greatly in excess of the frequency of said polyphase source and a plurality of means connected with said polyphase circuit for selecting and deriving a polyphase current having a frequency equal to the difference of the frequencies of said sources.

1,898,367. MULTIINDICATING LEVEL. OSCAR H. HEINZE, New Britain, Conn. Filed May 29, 1930. Serial No. 457,291. 3 Claims. (Cl. 33—212.)



1. In a multi-indicating device, a cup comprising a flat bottom and a cylindrical side wall rising therefrom, a cover cemented to the top of said side wall and having a convex form of glass, said cup being charged with an indicating liquid so as to provide an indicating bubble, said cup being made of white procelain so as to provide a white face to the inside of said side wall, and the top face of said bottom being coated so as to provide a dark effect.

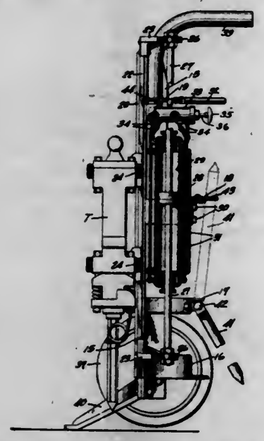
1,898,368. HANDGRIP FOR FIREARMS. EMIL E. HESS and HENRY J. FARRANT, Los Angeles, Calif. Filed May 26, 1930. Serial No. 455,497. 1 Claim. (Cl. 42—71.)



Small arms including a barrel, a handle, and a trigger in advance of the handle, the upper end of the front surface of the handle forming an upwardly concaved recess having its highest point in horizontal alinement with the medial portion of the vertical length of the trigger, whereby the barrel is adapted for alinement with the hand and forearm without bending the wrist when the forefinger and thumb project forwardly at opposite sides of the handle for engagement of the trigger by the forefinger and the remaining three fingers grip the handle with the

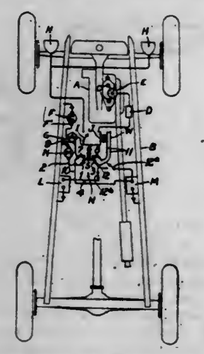
middle finger fitting snugly against the upper surface of said recess, the upper end of the rear surface of the handle having a rearward protuberance adapted for upward and forward abutment by the flesh of the hand at the junction of the forefinger and thumb, the upper end of one side of the handle forming a lateral protuberance adapted for upward abutment by the forefinger so as to guide said forefinger into alinement with the trigger, and the upper end of the opposite side of the handle forming a lateral protuberance adapted for downward abutment by the thumb.

1,898,369. VEHICLE FOR PNEUMATIC TOOLS. ANNA F. HOHMANN and PHILIP F. HOHMANN, Los Angeles, and MURRY M. CAMPBELL, Long Beach, Calif. Filed Feb. 12, 1932. Serial No. 592,566. 3 Claims. (Cl. 262—13.)



1. In combination, a vehicle having a frame, a carriage slidable on the frame, means on the carriage for attaching a pneumatic tool thereto to extend lengthwise of the carriage and to move therewith, pneumatic means connected to the carriage for moving the latter, and means for securing the pneumatic means to the frame so as to permit adjustment of the pneumatic means to vary the range of movement of the carriage and tool.

1,898,370. ELECTRIC IGNITION AND STARTING APPARATUS FOR INTERNAL COMBUSTION ENGINES. THOMAS B. HUGHES, Granite City, Ill., and WALTER ZELLWEGER, St. Louis, Mo. Filed Feb. 13, 1932. Serial No. 592,808. 2 Claims. (Cl. 290—37.)

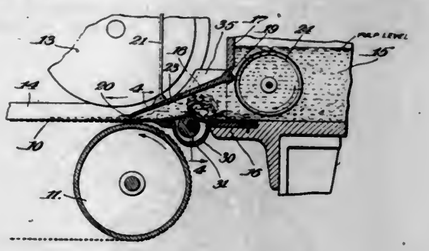


1. In an internal combustion engine, the combination of an electric ignition mechanism, an electrically-operated starting means, an electric lighting system, a storage battery for supplying current to said starting means, a separate and distinct storage battery for supplying current to said ignition mechanism and lighting system, means for supplying electrical energy to the two batteries, and means whereby the user may employ the starting battery to supply current to the ignition mechanism or may employ the ignition battery to supply current to the starting means, or use both storage batteries together to supply current to the starting means.

1,898,371. SEPARATION OF GRAIN PARTICLES FROM A BONDED MASS. OTIS HUTCHINS, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Oct. 7, 1930. Serial No. 487,092. 1 Claim. (Cl. 209—6.)

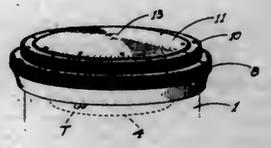
A method of recovering silicon carbide from refractory admixtures of silicon carbide and vitrified frangible bonding material of less toughness, which comprises mulling bonded masses of said refractory mixture to reduce the impurities to a fine state of subdivision, removing the finer fractions by screening, remulling the partially purified product, removing the finer material by washing, and subjecting the resultant product to a process of magnetic separation.

1,898,372. METHOD AND MEANS FOR FORMING SHEETS FROM PULP. WILLIAM J. HYDE, Cloquet, Minn., assignor to The Northwest Paper Company, Cloquet, Minn., a Corporation of Minnesota. Filed Mar. 18, 1931. Serial No. 523,410. 20 Claims. (Cl. 92—44.)



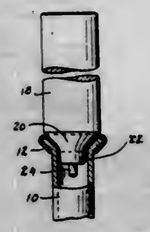
1. In a paper making machine having an outflow chamber with a discharge slot for a pulp suspension, in combination, an endless movable screen positioned to receive a discharge from said slot, an apron on the floor of said outflow chamber in part defining said slot and terminating over said screen, and means forming a hill-like obstruction in said apron.

1,898,373. CLOSURE CAP. WEBB JAY, Miami Beach, Fla. Filed Sept. 8, 1931. Serial No. 561,631. 8 Claims. (Cl. 70—90.)



1. A closure cap for a tube, molding means between the cap and tube requiring a rotation of the cap in one direction to effect the functioning of the holding means and a rotation of the cap in the other direction to permit of the removal of the same, members turnably mounted on and together covering the exposed portion of the cap, means between one of said members and the cap to cause the rotation of said member only in a cap placing direction to also rotate the cap, and means between the cap and a pair of the members and requiring a predetermined positioning of the same relative to each other to enable a rotation of said one member in a cap removing direction to also rotate the cap.

1,898,374. METHOD OF MANUFACTURING FLARE END TUBES. ALFRED T. KVARNSTROM, Detroit, Mich. Filed May 1, 1929. Serial No. 359,467. 1 Claim. (Cl. 29—156.)



That method of forming a flare end tube comprising placing a cup-shaped thimble over the portion of the tube to be flared extending downwardly along the outside of the tube and then forcing the top of the thimble into the tube and flaring the thimble covered end of the tube outwardly binding the thimble thereabout.

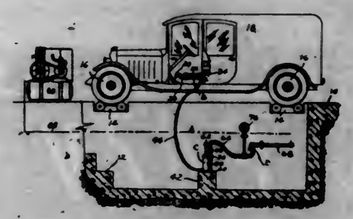
1,898,375. ORNAMENTED HARD SURFACE FLOOR COVERING. J CLARENCE MCCARTHY, Lancaster, Pa., assignor to Armstrong Cork Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 21, 1928. Serial No. 301,015. 11 Claims. (Cl. 41—24.)



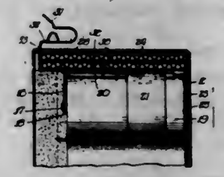
1. A hard surface flexible floor covering having a pattern thereon comprised of a plurality of pattern elements of contrasting color, different elements having different types of surface embossing thereon over substantially the entire area thereof.

1,898,376. BRAKE PEDAL DEPRESSOR MECHANISM. WILLIAM E. MCCULLOCH, KARL M. MCCULLOCH, and ROY LORENCE, Des Moines, Iowa; said Lorence assignor to James Ashley, Des Moines, Iowa. Filed Apr. 8, 1929. Serial No. 353,493. 2 Claims. (Cl. 265—47.)

1. For use with a brake testing apparatus, a brake pedal depressor mechanism comprising a pressure actuated device for engaging and depressing the brake pedal of an automobile being tested on said apparatus, a movable member located below an automobile when said automobile is on said apparatus, means for moving said movable member, indicating means associated with said movable member for indicating the extent of travel thereof and means for transmitting the movement of the movable member to the pressure actuated device in exact proportion to the movement of the movable member for moving said pressure actuated device upon movement of the movable member.

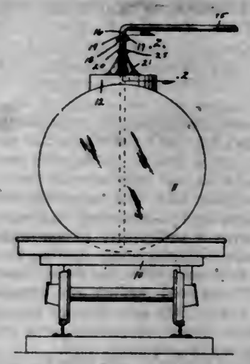


1,898,377. BATTERY CONSTRUCTION. EDGAR J. MCEACHRON and REGINALD S. JOHNSON, Wausau, Wis., assignors to Marathon Battery Company, Wausau, Wis., a Corporation of Wisconsin. Filed July 29, 1927. Serial No. 209,234. 10 Claims. (Cl. 136—175.)



1. The method of producing a battery which comprises providing an open top inner casing, inserting a plurality of cells in said inner casing and connecting the poles thereof, covering the exposed ends of said cells with a suitable sealing material, and subsequently removing at least a portion of one wall of said inner casing to expose a portion of one of said cells for providing a terminal contact for said battery, inserting said inner casing in an outer casing in such manner that said cells are horizontal and said exposed portion of one of said cells is uppermost, securing a terminal to said exposed portion and finally closing the upper side of said outer casing.

1,898,378. COVER FOR FUEL TANK OPENINGS. FRANCIS R. MCINTYRE, Ogden, Iowa. Filed Dec. 22, 1930. Serial No. 504,037. 4 Claims. (Cl. 221—100.)



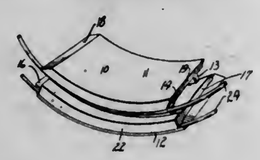
1. In a device of the class described, the combination of a pipe member, a cone shaped cover member formed of pliable fireproof material, and means for binding said cover in a collapsible condition adjacent to said pipe.

1,898,379. AUTOMOBILE LICENSE PLATE OR SIGN. JOHN P. MEEHAN, Los Angeles, Calif. Filed July 5, 1932. Serial No. 620,869. 2 Claims. (Cl. 40—136.)



2. A sign formed of a plate having a body of uncoated shiny metal, said body having elevated relatively small characters embossed in the plate from below and forming a legend, said plate further having a field elevated to the same level as the relatively small characters, said field having relatively large depressed characters forming a second legend; the elevated characters and the said field having a coating contrasting with the color of the metal.

1,898,380. SECTIONAL BLOCK CLAY TILE. FREDERICK H. MEIER, Sheffield, Ill. Filed May 28, 1930. Serial No. 456,553. 3 Claims. (Cl. 72—51.)

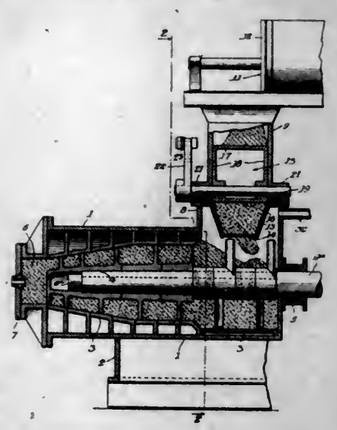


1. A clay tile comprising circumferential rows of curved, hollow blocks each having inner and outer walls and circumferentially arranged, connecting ribs, the side edges of the walls of each of the blocks of each row being beveled, the edges of the walls at one side of the block being beveled from the extreme portions of their faces and at the other side from the extreme edges of their farthest spaced faces to their adjacent faces.

1,898,381. METHOD AND MACHINE FOR EXTRUDING PLASTICS. THOMAS F. MOONEY, New Lexington, Ohio, assignor to Ludowici-Celadon Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 23, 1932. Serial No. 644,123. 12 Claims. (Cl. 25—11.)

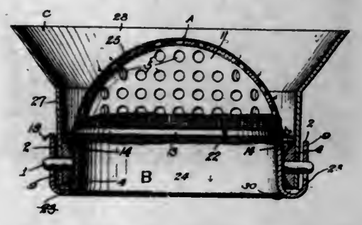
1. The combination with an auger machine comprising a barrel, an auger journaled for rotation therein and a suction connection into said auger machine for evacuating material therein, of a feeding mechanism arranged to receive plastic material and discharge it into the inlet of said auger machine, said feeding mechanism including means for feeding and compacting the material in the discharge side thereof sufficiently to maintain a hermetic seal by the plastic material while feeding the plastic material through said seal into the auger machine, means for positively driving said feeding and compacting means and means for controlling said driving means to prevent the material from being compacted to a density which cannot be evacuated in said auger mill.

9. The combination with a pug mill for working plastic material and an auger machine comprising a barrel having a die chamber at one end, an auger journaled for rotation therein and arranged to receive and extrude the plastic material pugged by said mill through said die chamber and a suction connection into said auger machine, of a positively driven intermediate feeding mechanism between said pug mill and auger machine, said pug mill discharging into said intermediate feeding means, said intermediate feeding mechanism discharging into said auger machine, and comprising a hopper positioned to receive the material worked by said pug mill, a mouthpiece



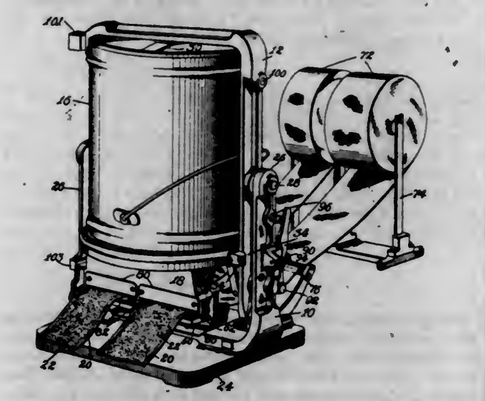
hermetically sealed to said auger machine and arranged to deliver the material into the auger machine, and an oscillating plunger pivoted at an edge within said hopper and arranged to compact the material in said mouthpiece sufficiently dense to form a hermetic seal thereby and to positively force the plastic material through said seal into the auger machine.

1,898,382. STRAINER OR FILTER FOR FLUIDS, AS FOR MILK OR WATER. JOHN F. MULLANEY, Colorado Springs, Colo. Filed May 29, 1930. Serial No. 456,970. 7 Claims. (Cl. 210—159.)



1. In a filter of the class described for liquids and adapted to be threadably secured to the outlet end of a faucet, the combination comprising a receptacle member, an annular abutment within said receptacle member adapted to hold a gasket to prevent leakage, a gasket on said abutment in contact with said faucet, a cone-shaped supporting member with a dome-shaped top adapted to support a fabric filtering member, and having a multiplicity of perforations from its top to near its base, extending up into said receptacle, an outwardly extending flange integral with said supporting member and extending past under the bottom edge of said receptacle and thence extending upwardly on the outside of said receptacle and thus forming an annular recess adapted to receive an annular gasket and to receive the bottom edge of said receptacle, an annular gasket in said recess, a fabric filtering member covering said supporting member and extending down into said annular recess, a thin outwardly-inclined shielding ring mounted outside of said filter member at the upper edge of said trap recess zone and extending to near the inner wall of said receptacle, and adapted to shield the contents of said trap recess from excessive agitation, and means adapted to secure said annular gasket tightly against the bottom edge of said receptacle.

1,898,383. DISPENSING APPARATUS. RUSSELL K. NASH, Brookline, Mass., assignor to Boston Blacking & Chemical Co., Boston, Mass., a Corporation of Massachusetts. Filed Apr. 28, 1931. Serial No. 533,479. 26 Claims. (Cl. 91—43.)



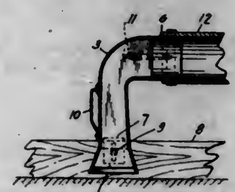
1. A coating apparatus comprising a normally stationary frame, a movable frame carried thereby and arranged to receive an open-ended container of coating material and a closure nozzle separate from the movable frame for the container having a delivery opening, said nozzle being adapted to be applied to the open end of the container after the container has been received by the movable frame, and means acting upon one of the parts received by the movable frame for pressing said parts into tight relation.

1,898,384. ADJUSTABLE LEG FOR WORKBENCHES AND THE LIKE. GEORGE C. NOAOS, Manheim, Pa., assignor to Bond Foundry and Machine Company, Manheim, Pa., a Corporation of Pennsylvania. Filed Oct. 5, 1931. Serial No. 566,999. 2 Claims. (Cl. 45—111.)



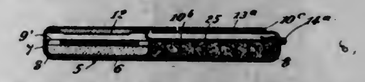
1. An adjustable leg of the class described, comprising a horizontal top rail, a pair of spaced parallel channel uprights depending therefrom, secured thereto and having a plurality of substantially horizontal corrugations adjacent their lower extremities, a pair of feet, each embracing exteriorly one of said uprights and having corrugations arranged to interlock with said first-mentioned corrugations, means operative to releasably maintain said uprights and said feet respectively in rigid adjusted relation to thereby support said top rail, and a horizontal angle iron rail connecting the lower portions of the uprights and having vertical and horizontal flanges, the vertical flange being secured to the uprights and the horizontal flange being of a width to extend across the space between the corrugated portions of the uprights to brace the same and support a shelf.

1,898,385. BUILDING INSULATION CONVEYER NOZZLE. JAMES H. NORTON, Denver, Colo. Original application filed Oct. 5, 1931, Serial No. 566,916. Divided and this application filed July 11, 1932. Serial No. 621,974. 5 Claims. (Cl. 302—63.)



1. A building insulation conveyer nozzle consisting of a casing having a horizontal cylindrical portion, the inlet orifice of which is adapted to be connected to a flexible hose, said horizontal portion merging into a vertical transversely expanding portion having a horizontal oblong outlet orifice with curved ends, each of said curved ends being provided with a vertically movable horizontal runner having vertical supports secured to said nozzle casing by adjustable thumbscrews, the interior vertical portion of said nozzle being divided into substantially equivalent volumetric uniformly and progressively expanding apertures by internal separators longitudinally disposed within the vertical portion of said casing, said apertures each being subdivided by medial longitudinal separators of varying length from the face of said outlet orifice, said nozzle being provided with handles, substantially as described.

1,898,386. VANITY CASE, CIGARETTE CASE, AND ANALOGOUS ARTICLE. NATHAN OTTINGER, New York, N. Y., and ROGER LHOMME, Paris, France; said Lhomme assignor to said Ottinger. Filed Jan. 23, 1932. Serial No. 588,286. 8 Claims. (Cl. 206—41.)

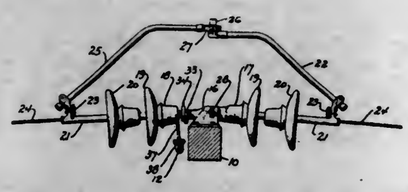


1. A case comprising a body, and closure means for the open side of the case body including members respectively hinged upon one end and one side of the case body for movement in directions at right angles to each other, one of said members extending over and in superimposed relation upon the other member when the closure members are in their closed positions, and means carried by the first named member coacting with the hinge of said other member for releasably latching said closure members against opening movement.

1,898,387. HIGH TENSION LINE SWITCH. AUGUST J. PAHL, Berkeley, Calif. Filed Dec. 28, 1929. Serial No. 415,929. 8 Claims. (Cl. 200—48.)

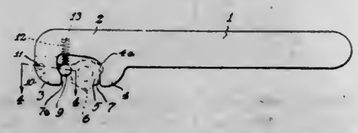
1. In a high tension disconnecting switch of the character described, the combination of a pair of oppositely disposed insulator supporting caps, a support for one of

said caps comprising a horizontally disposed member which will permit the cap to oscillate in a vertical plane, and means carried by the other of said caps adapted to en-



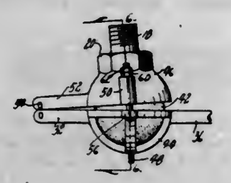
gage said horizontally disposed member and permit said latter cap to rotate about an axis extending substantially axially through said insulator supporting caps.

1,898,388. WRENCH. BURTON H. PARKER, Detroit, Mich. Filed Apr. 11, 1929. Serial No. 354,406. 7 Claims. (Cl. 81—179.)



1. A wrench comprising a bifurcated head with the space between said bifurcations permanently of greater width than the extreme distance across the nut, a member supported by the head and retractable by the engagement therewith of an angle of the nut, the retracting movement corresponding approximately to the direction of relative movement of nut and wrench when the latter is applied to the nut, and means for projecting said member into the space between a flat of the nut and an adjacent jaw to wedge therebetween and turn the nut when said wrench is turned in one direction, the wedging pressure of the member on the jaw being limited in application to a face of the jaw facing such space.

1,898,389. FLOAT VALVE. CLERMAN H. PENDLETON, Essex, Iowa. Filed Aug. 25, 1930. Serial No. 477,617. 2 Claims. (Cl. 137—104.)

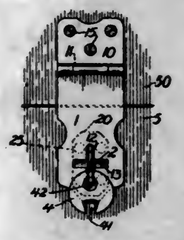


1. A float valve structure comprising a fitting formed with a valve seat of substantially hemi-spherical contour with an inlet opening centrally thereof, a valve support beneath and loosely pivoted at one side to said fitting, said support being formed with a cup-shaped cradle comprising a hub and spokes, a spherical valve member mounted in said cradle, said spokes being curved to substantially fit the contour of said valve member said valve member being of uniform diameter with said valve seat and adapted to fit therein for closing said inlet opening, and a float arm extending laterally from said valve support on the side opposite to its pivotal connection, said float arm being arranged for connection to a float.

1,898,390. CHILLED IRON ROLL. WALTER H. PFEIL, Reading, Pa., assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa., a Corporation of Pennsylvania. Filed Jan. 5, 1932. Serial No. 584,901. 5 Claims. (Cl. 80—58.)

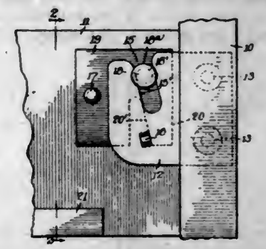
2. A chilled cast iron roll containing and comprising as essential ingredients in the composition of the material of which the roll consists chromium and copper, the percentage of chromium ranging from about .75% to not more than 2.00% and the percentage of copper ranging from about .25% to about 1.50% and containing less than .10% of molybdenum.

1,898,391. HASP RETAINER. WALTER H. PRESSENTIN, Seattle, Wash. Filed Apr. 23, 1931. Serial No. 532,266. 4 Claims. (Cl. 292—285.)



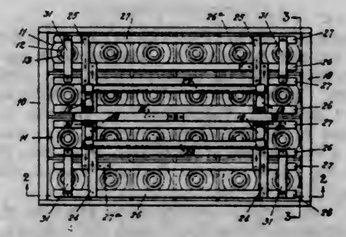
1. In combination with a staple and a hasp slotted to cooperate therewith, the hasp also having a cross slot intersecting the hasp slot, a retainer disc having an external notch, all diameters of said disc being greater than the length of the cross slot, the distance between the notch and diametrically opposite side of the disc being less than the length of the cross slot, a staple receiving aperture in said disc between the notch and its opposite side, to normally support the disc hanging by gravity with its notch lowermost, thereby presenting the wider portion of the disc to the cross slot to retain the hasp upon the staple, the disc upon its manual rotation upon the staple presenting the notch to the cross slot, permitting passage of the disc through the cross slot.

1,898,392. CORNER LOCK FOR WOODEN BEDSTEADS. HENRY RICHARDSON, Chicago, Ill. Filed July 20, 1929. Serial No. 379,650. 5 Claims. (Cl. 5—294.)



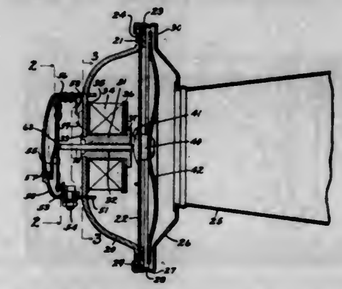
5. In a corner joint for bedsteads having a wooden bed end and a wooden side bar, a combination comprising a vertically disposed bracket plate, an end portion of which is secured to a bed end, a wooden side bar having a vertical end edge and an end portion thereof disposed along the outer side of said bracket plate, a metal plate secured to the inner side of said bar, one of said plates having an open-ended slot formed with an edge downwardly inclined toward said bed end, the other of said plates having a portion offset into said slot, said offset portion having an inclined edge co-acting with the inclined edge of said slot to wedge an end edge of said wooden bar against the surface of said bed end and also to maintain a pressure contact between said bar and bed end.

1,898,393. BOTTLE HANDLING APPARATUS. FRANK W. RICKERS, Brooklyn, N. Y., assignor to The F. & M. Schaefer Brewing Co., Brooklyn, N. Y., a Corporation of New York. Filed July 19, 1932. Serial No. 623,366. 7 Claims. (Cl. 294—87.)



1. In a bottle handling apparatus, a gripping means adapted to be raised and lowered and comprising a plurality of parallel gripping members arranged in co-operating pairs each adapted to grip a plurality of bottles, means connecting one member of each pair with the corresponding members of the other pairs whereby said members are adjusted in groups toward and away from each other into and out of gripping positions, and means for operating said gripping members.

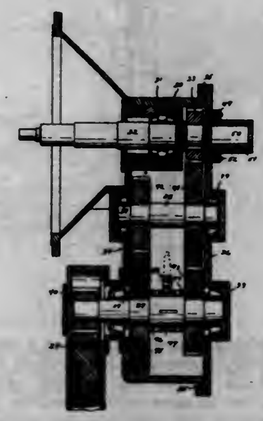
1,898,394. SOUND SIGNAL. WALTER W. RIEDEL, Dayton, Ohio, assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 27, 1928. Serial No. 257,141. 9 Claims. (Cl. 177—7.)



1. An electric sound signal comprising in combination, an electro-magnet having a magnetic circuit; a housing in which the electro-magnet is supported, said housing forming a part of the magnetic circuit; a diaphragm attached to the housing and adapted to be operated by the electro-magnet; and a magnetizable resonator disc carried by the diaphragm so that the edge of said disc lies in juxtaposition to a portion of the housing.

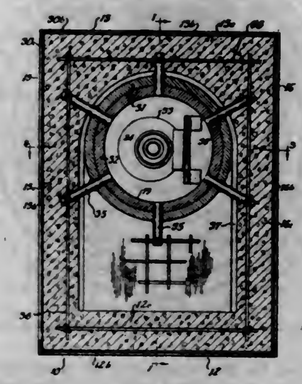
1,898,395. EXCAVATOR MECHANISM. GEORGE T. RONK, Cedar Rapids, Iowa. Filed Sept. 29, 1930. Serial No. 485,138. 1 Claim. (Cl. 74—59.)

A transmission gear comprising a rigid gear casing having a bell shaped flange at the side of the casing near one end and designed to be fixed to an internal combustion engine and to support the entire casing, the outer side of said casing terminating in a bearing housing, a bearing supported in said housing, a shaft extending through said bearing having one end extending through said bell and its opposite end extending beyond said bearing, a pinion fixed to said shaft adjacent to the outer end of said bearing, a shaft in the opposite end of said casing having one end projecting outwardly from the flanged side of said casing, an intermediate shaft, a pair of spaced gears fixed to said intermediate shaft, the outer one of said gears being larger in diameter than the other and in mesh with said pinion, a gear in mesh with each of the last said gears and rotatively mounted on the second shaft, and clutch devices for fixing either of the last said gears to



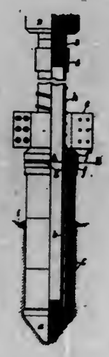
the second shaft, the smaller pinion of the third shaft and its coacting gear being supported in a plane perpendicular to the first shaft and opposite the inner end of said bearing housing.

1,898,396. PROTECTIVE STRUCTURE. ADOLPH J. ROOS, Canton, Ohio, assignor to The Diebold Safe & Lock Company, Canton, Ohio, a Corporation of Ohio. Filed Dec. 14, 1929. Serial No. 414,008. 6 Claims. (Cl. 109—1.)



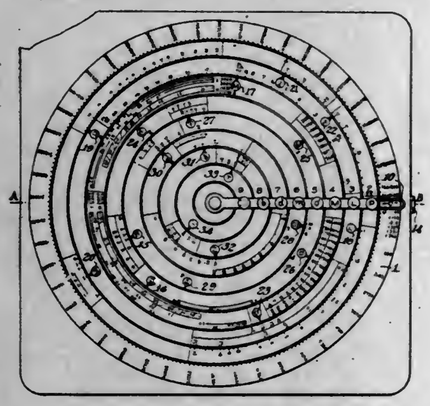
1. A protective structure including monolithic walls embodying a shell having a storage and protective compartment formed therein, one of the walls having an opening formed therein, a vestibule member extending through the opening, a door frame adapted for operatively mounting a door thereon, a member extending from the door frame and overlapping the vestibule member, means connecting the overlapping members to each other and anchoring in the monolithic shell, reinforcing means embedded in the monolithic shell, and the anchoring and connecting means being secured to the reinforcing means.

1,898,397. PILE AND PILE DRIVING. ALEXANDER GEORGE ROTINOFF, Kingsway, London, England. Filed June 24, 1930, Serial No. 463,507, and in Great Britain June 29, 1929. 5 Claims. (Cl. 61—57.)



1. A pile driving equipment including a mandrel, a preformed pile casing surrounding the mandrel, a collar above said casing loose around the mandrel, screw threaded means around the mandrel whereby rotation of the means around the mandrel will cause relative vertical movement between the means and the mandrel to cause the collar to press upon the top of the casing, and hammer means operative on the mandrel and through the mandrel, the screw-threaded means and collar on to the pile casing.

1,898,398. MACHINE FOR THE CALCULATION OF REENFORCED CONCRETE. WASHINGTON SABATINI, Genoa, Italy. Filed Apr. 2, 1929, Serial No. 351,888, and in Italy Apr. 4, 1928. 2 Claims. (Cl. 235—66.)

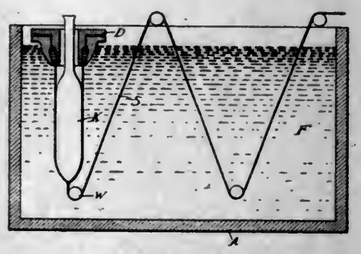


1. A device for the calculation of reenforced concrete including eight concentrical independent annuli rotatable within an outer fixed annulus, on which the figures relating to the weights to be supported by the construction are inscribed, while the rotatable annuli carry the remaining factors that are usually laid off for the calculations of concrete construction and one arrow for each set of values that are inscribed on the outwardly adjacent annulus, the innermost rotatable annulus being provided only with such arrows, a drum carrying a number of rows of results relating to the different calculations effected, each row aligning with a particular factor of the calculation coming into consideration, a rotatable crank arm integral with the drum carrying pivot, and means for selectively engaging and disengaging the said crank arm with any and all of the rotatable annuli, the drum showing all zeros at its reading point when the movable annuli are all engaged to the crank arm and the arrow on the first rotatable annulus points to the zero figure inscribed on the outer fixed annulus.

1,898,399. NEW CONDENSATION PRODUCTS OF FORMALDEHYDE AND 1-AMINO-ANTHRAQUINONE COMPOUNDS BEING SUBSTITUTED IN THE 4-POSITION. ROBERT EMANUEL SCHMIDT, Elberfeld, and ROBERT BERLINER, Vohwinkel near Cologne, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 28, 1925, Serial No. 72,031, and in Germany Dec. 9, 1924. 18 Claims. (Cl. 260—59.)

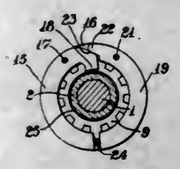
11. As new products, condensation products of one to two molecules of formaldehyde and one molecule of a 1-amino-anthraquinone compound substituted in 4-position by an amino- or hydroxy group, in which the radicle of one molecule of formaldehyde is linked in a stable linkage to one molecule of the 1-amino-anthraquinone compound, being in a dry state brownish to green to dark-violet crystalline powders, insoluble in water, soluble in concentrated sulfuric acid with intense coloration and dyeing animal fibers from alkaline hydrosulfite vats violet to grayish shades.

1,898,400. MEANS FOR MANUFACTURING TUBING FROM CELLULOSE. OTTO SCHNECKO and WALDEMAR SCHWALBE, Wiesbaden, Germany, assignors to The Visking Corporation, Chicago, Ill., a Corporation of Virginia. Filed Jan. 20, 1932, Serial No. 587,788, and in Germany Jan. 23, 1931. 6 Claims. (Cl. 18—15.)



1. Apparatus for forming seamless cellulose tubing, which apparatus comprises means for extruding viscose from an annular orifice into a bath, and a core over which said tubing is advanced after it leaves said orifice, the posterior end of the core being wedge-shaped to flatten the tubing.

1,898,401. ENGINE STARTER. ROBERT E. SLAYTON, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Mar. 31, 1932. Serial No. 602,299. 5 Claims. (Cl. 74—7.)



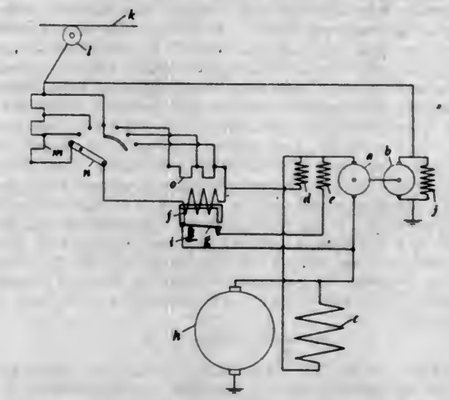
1. In an engine starter, a shaft, a driving member mounted for rotation thereon and therewith and for movement into and out of engagement with a member of an engine to be started, means responsive to rotation of the driving member for opposing relative rotation of the driving member and shaft, and means also responsive to rotation of the driving member for increasing the effect of said opposing means.

1,898,402. WRIST WATCH STRAP. FREDERICK C. SMITH, Sandusky, Ohio. Filed Mar. 31, 1932. Serial No. 602,342. 4 Claims. (Cl. 59—80.)



1. A wrist watch strap comprising a plurality of flexibly connected links, and resilient friction members fixedly supported upon the inner surfaces of said links.

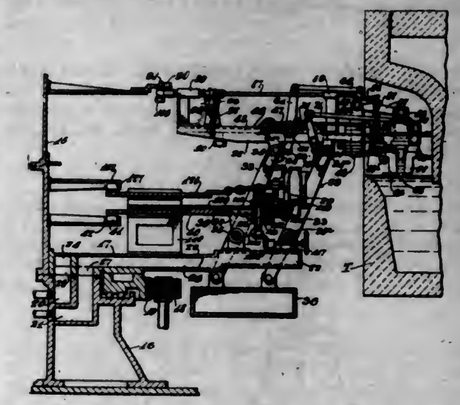
1,898,403. CONTROL OF ELECTRIC MOTORS. JOHN GOAD SMITHSON, Oakdale, Alvechurch, England, assignor of one-half to The Electro-Mechanical Brake Company Limited, West Bromwich, England. Filed Aug. 19, 1931. Serial No. 558,167. 3 Claims. (Cl. 172—179.)



1. In means for controlling series electric motors, the combination with the motor, of an alternative path for current in parallel with the motor field winding, a generator connected to said winding and arranged to enable current to be automatically diverted from said winding through said path when the current passing to the motor falls to a predetermined value, and current responsive means for regulating the action of the generator, the amonnt of current diverted from the field winding being dependent upon the voltage produced by the generator, substantially as described.

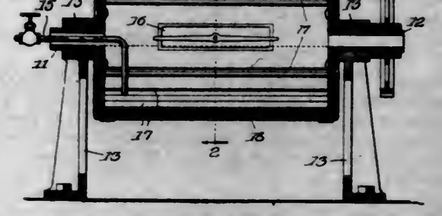
1,898,404. MACHINE FOR FORMING HOLLOW GLASSWARE. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 31, 1929. Serial No. 403,743. 4 Claims. (Cl. 49—5.)

1. In a glassware forming machine, the combination of a rotary mold carriage, a mold group including a partible finishing mold, a blank and neck mold carrier arranged in a plane above the finishing mold, partible co-operating blank and neck molds on said carrier, a set of vertically disposed parallel bars forming a pivotal connection between the blank and neck mold carrier and the mold carriage, a continuous stationary cam and rack and pinion mechanism operated thereby for moving said bars and thereby reciprocating said carrier along an arcuate path extending radially of the machine between charge gathering and blank transferring positions, means to deliver a mold charge of molten glass to the blank and neck molds while the latter occupy one position to form a parison in said molds, means for transferring the parison



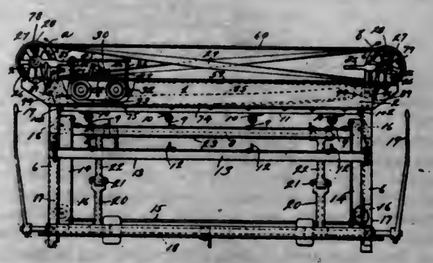
to the finishing mold, means for expanding the parison in said mold, and means for discharging the expanded parison from the finishing mold.

1,898,405. METHOD OF PREPARING A LEAD CARBONATE PRODUCT. SVEND S. SVENDSEN, Chicago, Ill., assignor of one-half to George Birkenstein. Filed Sept. 12, 1928. Serial No. 305,596. 5 Claims. (Cl. 23—71.)



1. The method of treating storage battery plates to remove the filling of the plates and to convert the lead sulfate of the filling into lead carbonate which consists in tumbling said plates upon each other in a solution of an alkali metal carbonate.

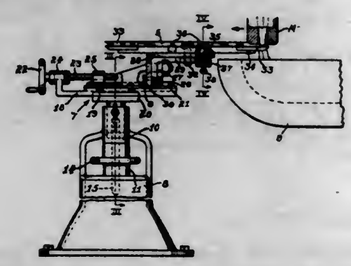
1,898,406. SILK SCREEN PRINTING MACHINE. LIONEL C. TATE, Louisville, Ky., and HAROLD L. TATE, Chicago, Ill. Filed Jan. 6, 1930. Serial No. 418,765. 26 Claims. (Cl. 101—123.)



1. The combination with a silk screen printing machine, of a vertically movable stock receiving bed plate carried

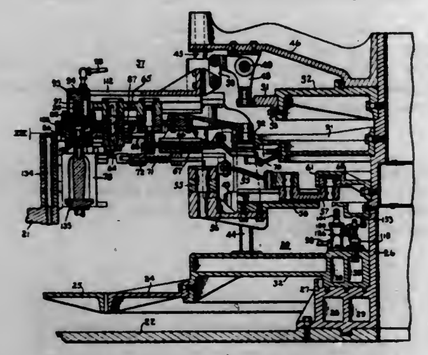
by said machine and a screen carrying frame above the bed plate and adapted to rockably cooperate with stock on the bed plate during a printing operation when the bed plate is in its upper position.

1,898,407. SHEAR MECHANISM FOR GLASSWARE FORMING MACHINES. JESSE H. TREECE, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Jan. 17, 1930. Serial No. 421,379. 7 Claims. (Cl. 49—14.)



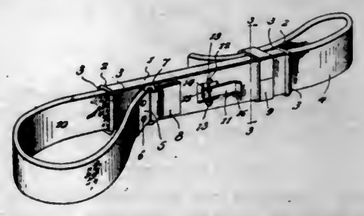
1. In a shear mechanism, the combination of a stationary blade holder, a cutting blade thereon, a stationary bearing plate, means providing an adjustable connection between the blade holder and said plate whereby the holder may be manually adjusted to place the cutting blade in a charge severing position, means for locking said holder in its adjusted position relative to the bearing plate, a support for the bearing plate and holder, means providing a horizontal pivotal connection between said support and bearing plate permitting rotative adjustment of the bearing plate and blade holder about a horizontal axis, and means for securing the bearing plate in its adjusted position.

1,898,408. MACHINE FOR FORMING HOLLOW GLASSWARE. JESSE H. TREECE, Toledo, Ohio, and JOHN E. MCLAUGHLIN, Alton, Ill., assignors to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Jan. 22, 1930. Serial No. 422,578. 17 Claims. (Cl. 49—5.)



1. A glassware forming machine comprising a pair of mold tables arranged side by side and rotatable continuously about different vertical axes, means for rotating the tables in opposite directions whereby adjacent portions move in substantially the same direction, a blank mold on one table, a partible neck mold associated with the blank mold, means for transferring blanks from the blank mold to the finishing mold comprising mechanism for projecting the neck mold to a position over and in register with the finishing mold, means for opening the neck mold, means for closing the finishing mold substantially simultaneously with opening of the neck mold, and suction means for supporting the blanks during opening of the neck mold and closing of the finishing mold.

1,898,409. CAN AND JAR WRENCH. LEO H. UNDERWOOD, Walhonding, Ohio. Filed Mar. 12, 1931. Serial No. 522,044. 4 Claims. (Cl. 81—31.)



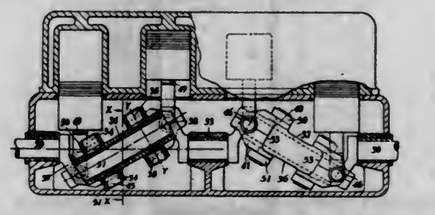
1. A wrench comprising a handle consisting of a flat open ended tube having an opening in one side wall thereof and communicating with the interior of the tube, the other side wall of the tube being imperforate, a yoke projecting from the other side of the tube and spaced from said opening, a strip of flexible material having one end connected with said handle in spaced relation to the front end thereof, said strip being extended rearwardly through said handle to form a loop at its forward portion normally and permanently disposed wholly on one side of the handle and having its rear end projecting from the rear end of the handle and folded upon itself and passed through the yoke to form a second loop normally disposed wholly on the other side of the handle, a pin extending transversely across the opening in the tube, and a clamping member pivotally mounted on said pin and provided with a bill extending through the opening in the tube for engagement with the strip of flexible material at a point opposite the imperforate side wall of the tube.

1,898,410. VACUUM CLEANER. NATHANIEL BRACKETT WALES, Paris, France. Filed Dec. 11, 1930, Serial No. 501,679, and in France Dec. 26, 1929. 3 Claims. (Cl. 183—51.)



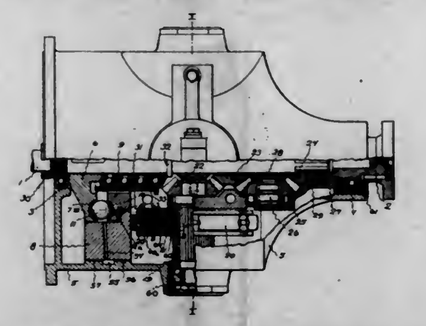
1. In a vacuum cleaner, the combination of an elongate handle stem, a filter element mounted within said handle stem, a frame device over which said filter element is slipped, and a ring on which one end of said frame device is mounted, said ring being mounted in tight fitting engagement with the inner wall of said handle stem to form an effective dust seal withdrawing dust from said stem as said filter element is pulled out from said stem.

1,898,411. DRIVING GEAR FOR ENGINES, COMPRESSORS, PUMPS, AND THE LIKE. RICHARD EDWARD WATTS, Stamford, England. Filed Jan. 13, 1931, Serial No. 508,508, and in Great Britain Jan. 17, 1930. 7 Claims. (Cl. 74—14.)



1. Engine, pump, compressor or the like including mechanism having an oblique crank pin, trunnions mounted for rocking movement on said pin, a lever or link articulated to said trunnions, for rocking about the axes thereof, in which the effective length of the lever or link is equal to the effective distance between the rocking axis of lever, and the point of intersection of the axis of the crank pin and its axis of rotation, said distance being taken along the axis of the crank pin.

1,898,412. CONTINUALLY VARIABLE CHANGE SPEED GEAR. OTTO GOTTFRIED WELLTON, Stockholm, Sweden. Filed Dec. 28, 1931, Serial No. 583,565, and in Sweden Sept. 16, 1931. 19 Claims. (Cl. 74—84.)



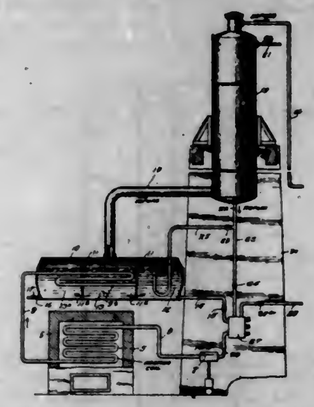
1. In a continually variable change speed gear, a driving shaft and a driven one, a differential gear the planet wheel support of which is connected with the driven shaft, a sun wheel belonging to said differential gear and connected with the driving shaft, a second sun wheel belonging to the same differential gear and connected with said shaft by the intermediary of a gear means consisting of a gear disc adapted to be set into rotation from the driving shaft, and a number of rollers or the like mounted axially displaceable on but non-rotatable in relation to shafts positioned radially to the axis of the gear disc, the gear disc and the rollers being produced from a very hard but somewhat elastic material so that said gear members when hardly pressed against each other will be subjected to a temporary deformation at the points of contact, means for exerting a great contact pressure between the gear disc and the rollers coacting therewith, and means adapted automatically to control said contact pressure according to the load on the driven shaft.

1,898,413. WINDING BAND TO BE WOUND ON ROLLS USED IN THE PAPER MAKING AND ALLIED TRADES. MAX WENZEL, Neidhardtstal, Germany. Filed Feb. 25, 1930, Serial No. 431,231, and in Germany Mar. 1, 1929. 6 Claims. (Cl. 92—47.)



1. Winding band of the character described comprising in combination a band-body, winding means, a slot provided in said body and extending over the whole length thereof and a cavity arranged at the bottom of said slot, adapted to receive said winding means.

1,898,414. ART OF PRESSURE DISTILLATION OF HYDROCARBON OILS. ROBERT E. WILSON, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Mar. 13, 1925. Serial No. 15,256. 7 Claims. (Cl. 196—59.)

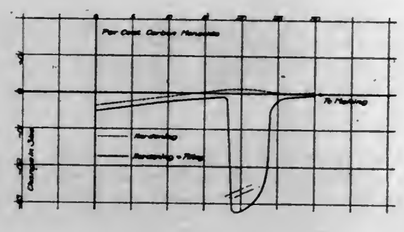


4. In the pressure distillation of oils heavier than gasoline for the production of gasoline-like products, maintaining a plurality of bodies of oil and causing oil to flow successively therethrough, withdrawing oil from the first of said oil bodies, passing it through a heating zone maintained at a cracking temperature, returning it in heated state to said first oil body after first passing it in heat conductive contact with the liquid contents of a later oil body, thereby maintaining all said oil bodies at cracking temperature, withdrawing evolved vapors from at least one of said oil bodies and cooling said vapors to condense therefrom products heavier than the desired gasoline-like products, and passing the said condensate to the oil undergoing cracking.

1,898,415. METHOD OF HEATING STEEL FOR HARDENING. MURRAY WINTER, Wrentham, Mass., assignor, by mesne assignments, to The Sentry Company, Taunton, Mass., a Corporation of Massachusetts. Filed Nov. 11, 1930. Serial No. 494,895. 10 Claims. (Cl. 148—16.)

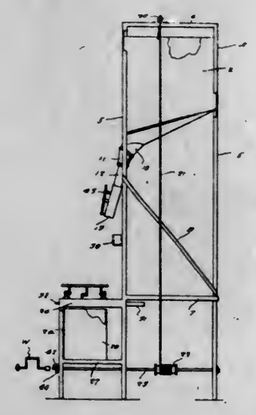
3. A method of heat-treating an article of high-speed steel which consists in heating it to a temperature in the neighborhood of substantially 2800° F. in the presence of carbon-bearing gases individually tending to carbonize and decarbonize the steel, they being present in relative proportions maintaining an equilibrium between the same

and the unoxidized steel, and any remaining gases being substantially ineffective to effect oxidization, carbonizing or decarbonizing of the steel whereby there is provided



a neutral atmosphere inhibiting carbonizing or decarbonizing of the steel independent of protective scaling of the same.

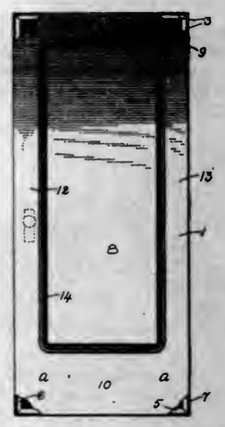
1,898,416. BIN. THOMAS A. WISEMAN, Tullahoma, Tenn. Filed July 25, 1930. Serial No. 470,728. 3 Claims. (Cl. 221—146.)



1. In a device of the character described, the combination of a counter, a supporting structure rising from said counter, a bin vertically slidable in the supporting structure, means for raising and lowering the bin and for securing the same in fixed adjustment, a container supported in the counter below the top of the counter, said counter having the top thereof open, and said bin provided with a discharge nozzle capable of discharging into said container.

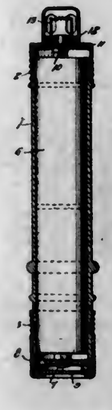
1,898,417. METHOD OF MANUFACTURING METALLIC DOORS. HENRY G. WOEHLER, St. Louis, Mo., assignor to Niedringhaus, Inc., St. Louis, Mo., a Corporation of Missouri. Filed Dec. 6, 1929. Serial No. 412,230. 2 Claims. (Cl. 29—148.)

1. The method of manufacturing a metallic door comprising cutting a pair of sheet metal members of substantially the area of said door, drawing panels in said members to thereby form moldings constituting reinforcing and decorative elements by placing the sheet metal members in a form, then positioning a securing member on each of the four corners thereof, then compressing the said sheet metal members so that the major portion of the metal constituting the molding is drawn from the interior of said members and then securing said sheet



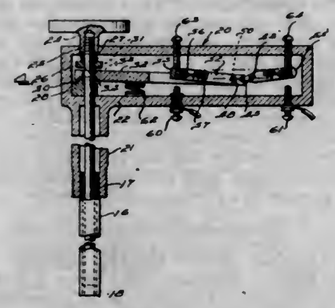
metal members to edging and spacing means by welding simultaneously oppositely disposed points upon said sheet metal members to said edging and spacing means.

1,898,418. ELECTRIC GAS LIGHTER. LUDWIG ZWILLING, Walldorf in Hessen, Germany. Filed Aug. 30, 1929, Serial No. 389,520, and in Germany Sept. 12, 1928. 6 Claims. (Cl. 219—32.)



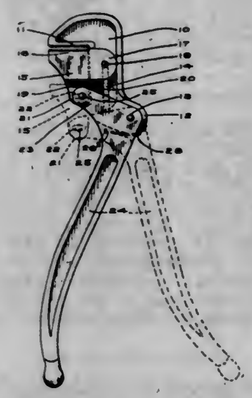
1. An electric gas lighter for operating with a weak current, comprising a metal casing, a battery enclosed in the metal casing, a lighting wire, a lighting wire holder, means for carrying the lighting wire holder at the upper end of the metal casing, a closing cap at the lower end of the casing adapted to press the battery against the lighting wire holder, a fibre insulating disc in the closing cap, a contact pin mounted in the fibre insulating disc and contacting with the zinc bottom of the battery and a resilient contact tongue in conductive connection with the closing cap adapted to be pressed into engagement with the contact pin.

1,898,419. THERMOSTATICALLY CONTROLLED HEATER. FRED W. BIRTCH, Lexington, Mich., assignor of one-half to Harry A. Shaw. Filed Mar. 4, 1932. Serial No. 596,708. 22 Claims. (Cl. 200—137.)



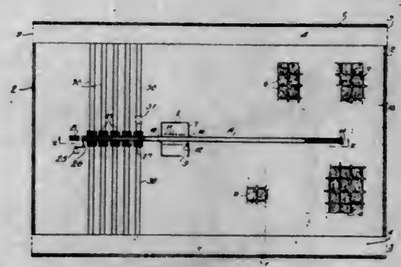
1. A thermostatic control for heat exchange units; comprising a support, an arm fulcrumed on the support, a heat exchange unit control member fulcrumed on the arm, a tensioned spring operatively connected to the arm and control member and means including a thermostat for fulcruming the arm, said spring being free of any connection with the support.

1,898,420. WRENCH. JOSEPH BOLTON, Windsor, Ontario, Canada. Filed Mar. 14, 1932. Serial No. 598,856. 1 Claim. (Cl. 81—126.)



A self-adjusting wrench comprising a stationary jaw having a depending shank, said shank having a central longitudinal slot and an extension at its lower end, extending laterally from its rear longitudinal edge, a handle having a bifurcated end, a pivot pin pivotally securing the extension of the jaw shank in the bifurcation of said handle, a movable jaw having spaced parallel extending lugs adapted to straddle the forward edge of the stationary jaw shank, a pin extending through said lugs adapted to pass through the slot of the stationary jaw shank, pivotally and slidably connecting said movable jaw to the shank of the stationary jaw, a depending portion of said movable jaw having a transverse slot, a pivot pin extending through the slot in the depending portion of the movable jaw pivotally securing the same between lateral extensions, extending from the bifurcation of said handle, and a flat spring having one end secured to the extension of the stationary jaw shank and its opposite end disposed in bearing relation to the bottom of the bifurcation of the handle.

1,898,421. AUCTION WAREHOUSE. DOUGLAS W. BRASHEAR, Richmond, Va. Filed May 23, 1930. Serial No. 454,092. 12 Claims. (Cl. 20—1.6.)



1. An auction warehouse comprising a main floor having a receiving station at one end with provision for storing a quantity of the commodity to be sold, a selling station intermediate the ends of the warehouse, a plurality of delivery stations at the other end of the warehouse, and an endless conveyor leading from the receiving station through the selling station and terminating at the delivery stations, the upper run of said conveyor being at substantially floor level at the receiving station.

1,898,422. FISHING KNIFE. TINT CHAMPLIN, Little Valley, N. Y. Filed June 30, 1931. Serial No. 547,961. 4 Claims. (Cl. 7—11.)



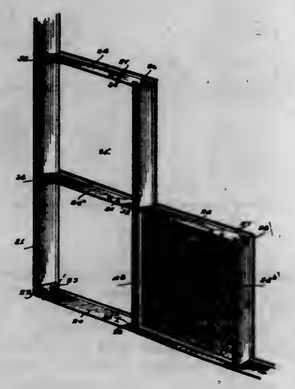
1. A cutting tool handle including a frame having a back wall recessed to form a seat extending longitudinally thereof, a spring bridging said seat, and a sharpening element engaged in said seat and resting upon said spring.

1,898,423. ENGINE STARTER. FRANK T. CHRISTIAN, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Mar. 30, 1932. Serial No. 602,085. 6 Claims. (Cl. 74—7.)



1. In an engine starter a shaft, a driving member mounted thereon for rotation thereof and therewith and movement into and out of engagement with a member of the engine to be started, cooperating means on said shaft and driving member for yieldingly restraining longitudinal movement of said driving member toward said engine member, and means responsive to rotation of the driving member for increasing the effectiveness of the restraining means.

1,898,424. FRAMEWORK FOR AIR FILTERS. HOWARD W. COLLINS, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Apr. 6, 1932. Serial No. 603,544. 13 Claims. (Cl. 183—49.)

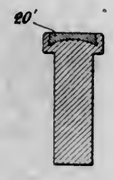


1. A framework for air filters providing rectangular cells arranged in horizontal and vertical rows, said framework comprising individual frame members, each forming two adjoining sides of a cell.

1,898,425. SURFACING MATERIAL. ROBERT COWEN and ARTHUR D. JORDAN, Franklin, Mass., assignors to Appleton Rubber Company, Franklin, Mass., a Corporation of Massachusetts. Filed Dec. 13, 1930. Serial No. 502,247. 6 Claims. (Cl. 94—7.)

1. A flexible, tough, resilient, soft, semi-elastic unvulcanized surfacing material consisting of a compact, strongly coherent mixture of ground devulcanized scrap rubber and a filler composed largely of particles of ligneous matter, said rubber and filler being mixed in approximately equal proportions.

1,898,426. METHOD OF FABRICATING COMPOSITE METAL ARTICLES. ARTHUR G. DANNELL, New York, N. Y., assignor, by mesne assignments, to Wilcox-Rich Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 26, 1927. Serial No. 186,611. 7 Claims. (Cl. 29—156.7.)

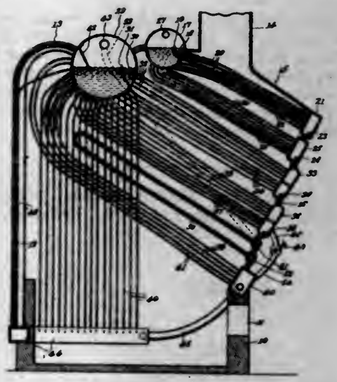


1. The method of fabricating a composite metal article which comprises providing a blank of soft steel with a cylindrical cavity at one end thereof, inserting into such cavity an insert of tool steel and thereafter simultaneously forging the portion of said blank containing said insert and the contained insert so as to form a head on said blank and to leave exposed a portion of said insert.

1,898,427. SALINE COATINGS AND PROCESS OF MAKING THE SAME. FERDINAND DE PAPE, Uccle, Belgium, assignor to La Soudure Electrique Autogène, Société Anonyme, Brussels, Belgium. Original application filed Nov. 12, 1928, Serial No. 319,028, now Patent No. 1,888,453, dated Nov. 22, 1932, and in France June 26, 1928. Divided and this application filed Sept. 18, 1930. Serial No. 482,916. 8 Claims. (Cl. 219—8.)

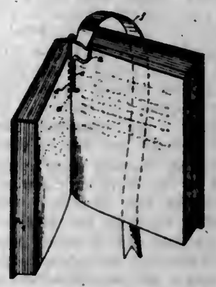
1. A method of making welding flux composition in the form of a paste containing water soluble flux forming compounds, to form a dry coating for welding rods and electrodes used for arc welding, comprising reacting on said water soluble flux forming compounds with a fluosilicic acid solution to produce a saline precipitate and adding a compound having a basic reaction to chemically combine with the reaction mixture and to disperse the same.

1,898,428. WATER TUBE STEAM BOILER. HENRY CHARLES DINGER, Annapolis, Md. Filed May 9, 1930. Serial No. 451,075. 4 Claims. (Cl. 122—235.)



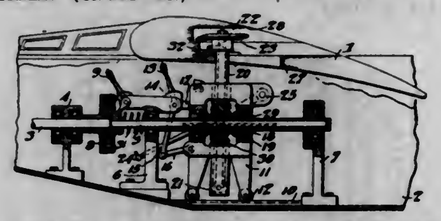
1. An improved water tube steam boiler, comprising a furnace, high and low pressure sections mounted in the furnace with an upper drum for each section, said drums arranged at the top of the furnace, a plurality of lower headers for each section, banks of downcomer and return tubes disposed between each drum and its respective set of lower headers for connecting the lower headers and banks of tubes in independent series between the respective drums of the sections, and means for independently collecting the steam generated in the independent high and low pressure sections from the upper parts of said drums.

1,898,429. BOOKMARK. MORIZ DOMENEGO, Vienna, Austria. Filed May 25, 1931, Serial No. 539,874, and in Austria May 31, 1930. 2 Claims. (Cl. 116—119.)



1. A bookmark comprising a clamp consisting of spring wire bent in one plane and having a straight shank, a loop, and a second shank, the said loop and the said second shank lying on the same side of the said straight shank, the said two shanks being substantially parallel to each other and adapted to exercise a clamping effect upon an object inserted therebetween along their common line of contact, and at least one flexible marker attached to the said loop and adapted to be inserted between the pages of a book.

1,898,430. AEROPLANE. DANA ALBERT DORSEY, Miami, Fla. Filed July 30, 1932. Serial No. 626,923. 7 Claims. (Cl. 244—15.)



1. With an aeroplane having usual wing structure, a recess in said wing having a covering conforming substantially to usual surfaces of the wing, and a propeller mounted to turn on a substantially vertical axis and movable to be retracted into the recess when not in use.

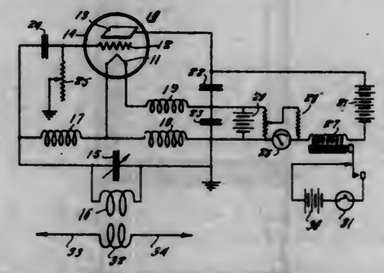
1,898,431. WATERSOLUBLE UREA COMPOUNDS CONTAINING HETEROCYCLIC NUCLEI IN THE MOLECULE. OSKAR DRESSEL and ANTON OSSENBECK, Cologne-Mulheim, and ERNST TIETZE, Cologne-on-the-Rhine, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 30, 1929, Serial No. 410,871, and in Germany Dec. 5, 1928. 7 Claims. (Cl. 260—32.)

1. As new products compounds of the probable general formula:

$$(Ar.NH.\alpha.NH.\alpha.NH—)_x—C.y$$

wherein "Ar" stands for a benzene or naphthalene nucleus containing at least one sulfonic acid group as substituent, one α stands for a heterocyclic nucleus attached to the adjacent nitrogen atoms by nuclear carbon atoms, the other α stands for a residue of the group consisting of a heterocyclic nucleus attached to the adjacent nitrogen atoms by nuclear carbon atoms, and the groups -Co-aryl- and -SO_2-aryl- of the benzene series, and y stands for one of the atoms oxygen sulfur, being generally yellowish crystalline substances, soluble in water and being valuable pharmaceutical substances, especialy against bood parasites.

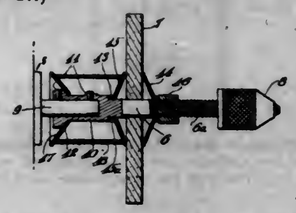
1,898,432. REACTANCE CONTROLLED RELAY. PAUL S. EDWARDS, Fort Mead, Md., and CONSTANTIN D. BARBULESCO, Dayton, Ohio. Filed Oct. 2, 1929. Serial No. 396,884. 6 Claims. (Cl. 175—320.)



1. A self-modulating high frequency oscillator having means for modulating the high frequency currents in combination with a relay operated by the output of said oscillator and vibrating at the frequency corresponding to the frequency of modulation when the output current is barely sufficient to actuate said relay.

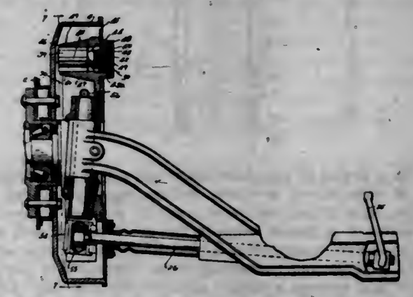
5. In combination with a self-modulated high frequency oscillator having means for modulating the high frequency currents, a mechanical relay connected in the plate circuit of the oscillator and having a natural period of vibration adapted to be actuated by the means value of the plate current of the oscillator, a secondary circuit controlled by the relay, said means for modulating the high frequency currents adapted to be adjusted so as to produce resonance in the armature of the relay at the point of closing or breaking the secondary circuit.

1,898,433. MOTOR PULLEY. CONRAD F. ELLE, Chicago, Ill. Filed Nov. 5, 1928. Serial No. 317,352. 5 Claims. (Cl. 64—17.)



1. A convertible pulley comprising a pair of axially alined conical disks with inwardly-facing peripheries, and a hub inwardly extended from one of the disks, the other disk being made with a central opening of a size to receive the hub, said disks being adapted when spaced to receive a tubular pulley rim suitable as a flat pulley and when joined by the disposal of the hub in said opening to form a peripheral channel suitable as a V-pulley.

1,898,434. VEHICLE BRAKE MECHANISM. EDWIN R. EVANS, Chicago, Ill. Original application filed Sept. 4, 1923, Serial No. 660,855. Divided and this application filed May 5, 1924. Serial No. 711,278. Renewed Sept. 25, 1929. 1 Claim. (Cl. 188—194.)

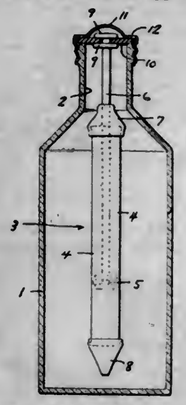


In a front wheel brake operating mechanism, in combination with a front wheel swiveled on the front axle, a brake drum carried by and swiveling with the front wheel, a pair of brake shoes interiorly expandable into engagement with said drum, a cam between the free ends of said brake shoes having its center substantially on the swiveling axis of said front wheel, said cam being bodily movable with said shoes relative to said drum, a cam shaft supported at one end by said cam and rotatably supported at its inner end of said axle.

1,898,435. MEDICINE DISPENSER. GEORGE W. FILLAUER, Chattanooga, Tenn. Filed Sept. 27, 1932. Serial No. 635,073. 1 Claim. (Cl. 128—234.)

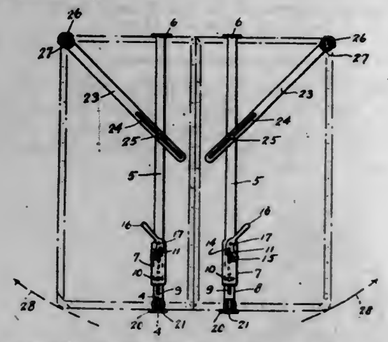
In a liquid dispenser, the combination with a liquid holding container including a neck, of a syringe compris-

ing a barrel, a rod extending slidably into the barrel, a piston on one end of the rod, a pair of spaced flanges on the other end of the rod, a disk mounted between the flanges and engageable in the neck for supporting the syringe in



suspended position in the container and providing a handle for operating the syringe, and a cap mounted on the neck and engaged with the disk for compressing said disk on the neck.

1,898,436. TRUNK SUPPORTING ATTACHMENT. NICHOLAS FRESCOTT, Sr., Inwood, N. Y., assignor of one-fourth to Charles Joseph Schwartz, Brooklyn, N. Y. Filed Oct. 30, 1931. Serial No. 572,188. 2 Claims. (Cl. 280—35.)

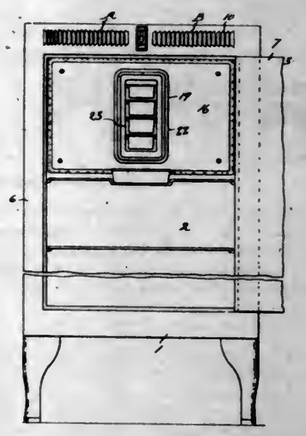


1. In a device of the class described, a bar comprising a pair of telescoping sections, article engaging claws on the free ends of said sections, a caster support for one of said sections, a caster support for the other of said sections including a member arranged diagonally to said other of said sections and connected to an intermediate portion thereof and having a caster secured thereto, and means for adjusting said sections with respect to each other to vary the length of said bar, including a pin on one of said sections and a lever pivoted upon the other section and having an arcuate slot for receiving said pin.

1,898,437. METHOD FOR CASTING READILY OXIDIZABLE METALS SUCH AS MAGNESIUM AND ALLOYS THEREOF. JOHN A. GANN, JAMES B. REID, and HANS A. REIMERS, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 4, 1932. Serial No. 609,262. 19 Claims. (Cl. 22—188.)

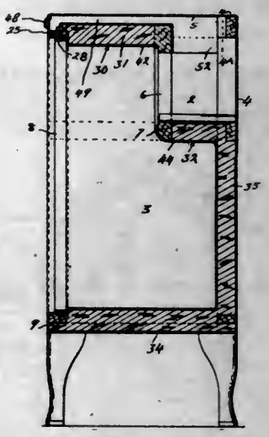
1. The method of casting magnesium and alloys thereof in sand molds which comprises forming an intimate mixture of foundry sand and a relatively small amount of a substance selected from the group consisting of aluminum fluoride, antimony fluoride, (SbF_3), calcium fluoride, chromium fluoride (CrF_3), iron fluoride (FeF_3), zinc fluoride, bismuth fluoride, hydrogen fluoride, forming said mixture into a mold, and casting magnesium therein.

1,898,438. REFRIGERATING APPARATUS AND CABINET THEREFOR. HAROLD A. GREENWALD, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Mar. 31, 1930. Serial No. 440,556. 18 Claims. (Cl. 62—116.)



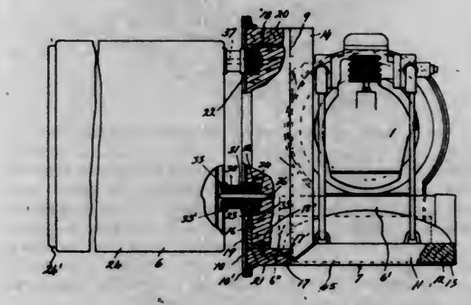
18. In combination, a refrigerator cabinet having a food compartment, and a machine compartment accessible from the food compartment, and being provided in advance of the food compartment with an opening, and completely assembled portable refrigerating apparatus having portions within each of the compartments aforesaid and bodily removable from the cabinet through said food compartment and said opening.

1,898,439. REFRIGERATOR CABINET CONSTRUCTION. HAROLD A. GREENWALD, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Mar. 31, 1930. Serial No. 440,557. 16 Claims. (Cl. 62—116.)



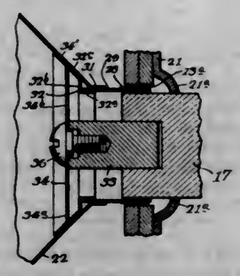
1. A refrigerator cabinet having as a rigid part thereof a food compartment opening and a chamber for refrigerating apparatus, the chamber having an opening in line with said opening, and means independent of the opening for conducting air from a suitable source to the chamber to cool refrigerating apparatus therein.

1,898,440. REFRIGERATING APPARATUS. HAROLD A. GREENWALD, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Mar. 31, 1930. Serial No. 440,558. 6 Claims. (Cl. 62—116.)



5. A portable refrigerating apparatus substantially T-shape in plan and having the refrigerant high and low sides thereof in a common horizontal plane, the high side including a compressor, motor and condenser arranged in line and forming the head of the T, and the low side including a cooling unit projecting forwardly from the line at a point substantially midway of its ends and forming the stem of the T.

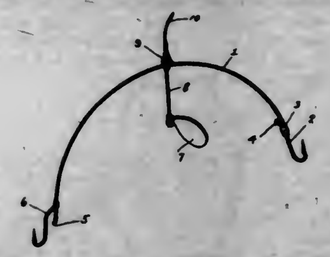
1,898,441. REPRODUCER. WILLIAM C. GRUNOW, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed June 8, 1928. Serial No. 283,762. 6 Claims. (Cl. 179—115.5.)



1. In a reproducer of the character described, a vibratory truncated cone, a cylindrical core secured to the cone having a moving coil wound thereon, and an insert disposed on the inside of the cone and on the inside of the cylindrical core for reinforcing the connection between the same.

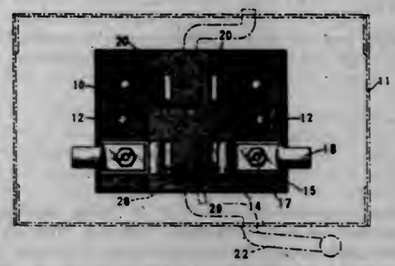
1,898,442. FISHHOOK. CARL V. GRUTSCH, Saginaw, Mich. Filed Apr. 23, 1932. Serial No. 607,192. 1 Claim. (Cl. 43—36.)

A device of the class described comprising a wire of spring material and having a fishhook rigidly connected to each end thereof with the hook portion extending outwardly, a keeper member adjacent one end of the spring member, the other end of the member being bent into hook shape to engage the keeper member whereby when a fish seizes the hooks the bent end of the member will



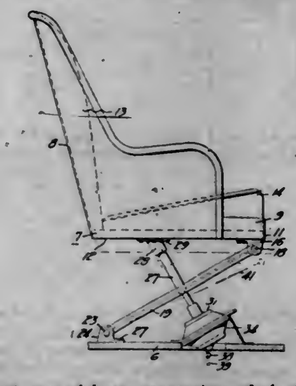
be forced out of the keeper member to permit the spring member to spread and thus cause the hooks to engage both sides of the fish's mouth.

1,898,443. ELECTRIC SWITCH. HERMAN J. HAMMERLY, Wallingford, Conn., assignor to Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Nov. 4, 1930. Serial No. 493,329. 3 Claims. (Cl. 200—144.)



1. In an electric switch an insulating base, stationary contacts carried thereby and spaced apart from each other, said base having perforations in which said contacts are located and a movable switch member having spaced apart contact arms guided in said perforation, said base having an insulating barrier interposed between said arms when the switch is in open circuit position, said arms being connected by a cross-bar and said base being closed over the cross bar between the stationary contacts.

1,898,444. SEAT. CHARLES A. HAWKINS, San Francisco, Calif. Filed Mar. 30, 1931. Serial No. 526,156. 8 Claims. (Cl. 155—55.)

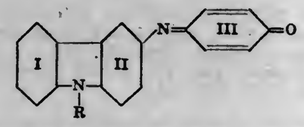


1. A seat comprising a support, a chair frame spaced from said support, a central plunger rigidly fixed to said

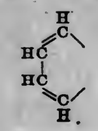
chair frame and extending forwardly therefrom at an inclination to said support, a guide for said plunger on said support, a pneumatic cushion for said plunger disposed between said guide and said support, and a single pair of links connecting said frame and said support, each of said links at one end being pivoted to a forward portion of said frame and at the other end being pivoted to a rearward portion of said support.

1,898,445. INDOPHENOLS OF THE BENZOCARBAZOLE SERIES AND PROCESS OF MAKING SAME. RICHARD HERZ, Frankfort-on-the-Main, and MAX SCHUBERT, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 1, 1932, Serial No. 590,309, and in Germany Mar. 23, 1931. 6 Claims. (Cl. 260—55.)

3. As new compounds the indophenols of the benzocarbazole series corresponding to the probable general formula



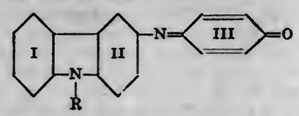
(wherein two adjacent hydrogen atoms of the nuclei I or II or I and II are replaced by the benzo nucleus.



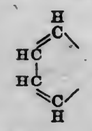
R means hydrogen or alkyl and all nuclei may contain as substituents methyl, methoxy, chlorine, hydroxy or a sulfonic acid group) which compounds represent bluish colored substances, yielding on reduction nearly colorless leuco-compounds of a definite melting point.

1,898,446. NEW DYESTUFFS CONTAINING SULPHUR. RICHARD HERZ, Frankfort-on-the-Main, and MAX SCHUBERT and WILHELM HECHTENBERG, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 1, 1932, Serial No. 590,310, and in Germany Mar. 23, 1931. 5 Claims. (Cl. 260—19.)

1. As new compounds the dyestuffs containing sulphur, prepared by treating an indophenol of the benzocarbazole series of the general formula

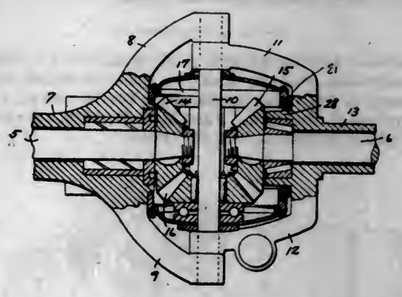


(wherein two adjacent hydrogen atoms of the nuclei I or II or I and II are replaced by the benzo nucleus



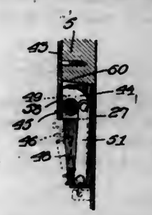
R means hydrogen or alkyl and all nuclei may contain as substituents methyl, methoxy, chlorine, hydroxy or a sulphonic acid group) with sulphurizing agents in the presence of copper, which compounds dye from the sodium sulphide bath or from the vat greenish blue to green shades of a good fastness.

1,898,447. FRONT WHEEL DRIVE HOUSING. MYNARD L. HOLLOWAY, La Porte, Ind. Filed Feb. 10, 1932. Serial No. 592,206. 3 Claims. (Cl. 74—101.)



1. In a swingable geared connection, a drive shaft, a driven shaft, a housing for the drive shaft, a housing for the driven shaft, a flexible housing interposed between opposite ends of the housing to encompass the geared connection, said housing comprising a pair of flexible slidable shutters and guide means for the said shutters, a pocket for each of the shutters, extending from the shutters, and spring means in the pocket for normally urging the shutters outwardly in the guide to tensionally engage at their outer ends against one of the housings.

1,898,448. CHAIR OR SEAT. CHARLES R. HULTGREN, Chicago, Ill., assignor to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed July 24, 1930. Serial No. 470,515. 1 Claim. (Cl. 155—33.)

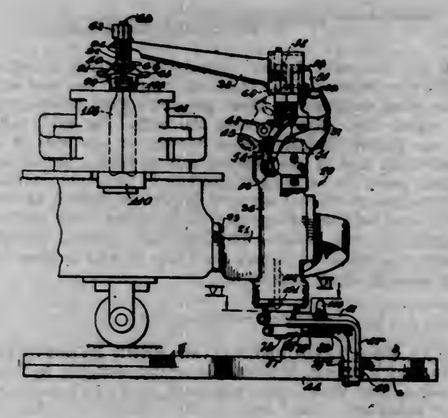


In combination with the side frame of a chair, a convertible arm-seat adapted to assume vertical and horizontal positions, a pivot member connected to said arm-seat, retaining flanges on said side member provided with slots adapted to receive said pivot member, and link means pivotally connected to said side frame and said arm-seat and adapted to raise the lower portion of said arm-seat to clear said side frame when said arm-seat is passed from vertical to horizontal positions.

1,898,449. ARTICLE TRANSFER MECHANISM. OLIVER C. K. HUTCHINSON and WILLARD C. GILLHAM, Alton, Ill., assignors to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 2, 1929. Serial No. 411,006. 19 Claims. (Cl. 49—14.)

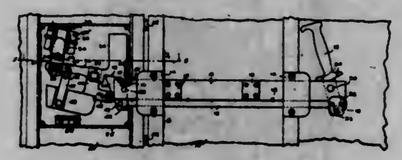
12. The combination of a travelling mold carriage and an article transfer mechanism mounted to travel therewith, said mechanism comprising a casing, a hollow rock shaft extending through the casing, a spindle extending through the rock shaft, rock arms connected respectively to said shaft and spindle, stationary cams for rocking said arms and thereby rocking the shaft and spindle, a transfer arm connected to the rock shaft, an article gripping device mounted on the transfer arm, mechanism for actuating the gripping device for gripping and releasing an article, operating connections between said spindle and said actuating mechanism, a spring connection between said rock shafts for holding said shafts in a predetermined relative

position while free from the influence of said cams, a torsion spring connected to the rock shaft and said casing for rocking said shaft, and a stop to limit the rotative



movement of the rock shaft in one direction when said shaft has been carried by the mold carriage beyond the influence of the cams.

1,898,450. ELEVATOR DOORLATCH. WILLIAM A. HUTTON, Seattle, Wash. Filed Oct, 3, 1929. Serial No. 397,043. 12 Claims. (Cl. 187—31.)



1. The combination with a sliding door movable horizontally to close against a relatively fixed frame, of a latch bolt slidably supported on said door for horisontal retractile movement within the limits of said door and inaccessable from the exterior of the door when fully retracted whereby the door may be closed leaving the latch bolt in retracted position, means connected with the latch bolt for normally moving said latch bolt into outwardly projected position beyond the edge of said door when force is exerted thereon tending to close said door said means being incapable of moving said latch bolt away from the retracted position in the absence of such closing force and latch means on the frame for engaging the latch bolt to hold the door in closed position, said latch means being clear of said latch bolt when the latch bolt is retracted and the door closed.

1,898,451. FISHING REEL. DENNIS KELLY, Marshall, Mich., assignor to Russel Sebring, Marshall, Mich. Filed Nov. 18, 1930. Serial No. 496,471. 1 Claim. (Cl. 242—84.1.)

A fishing reel including a base plate having a shank, a circular hub plate, a hub connected therewith and telescoping into the shank, line retainers carried by the hub plate and hub and extending radially therefrom, the inner end portions of said line retainers being anchored within the hub, and bowed straps carried by the circular hub plate and engaging the line retainers at points substantially intermediate their ends whereby said straps and circular

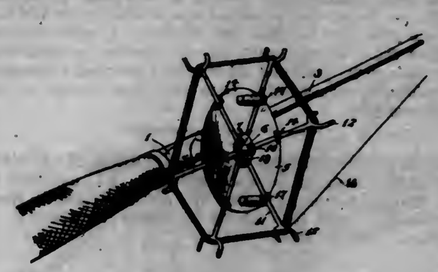
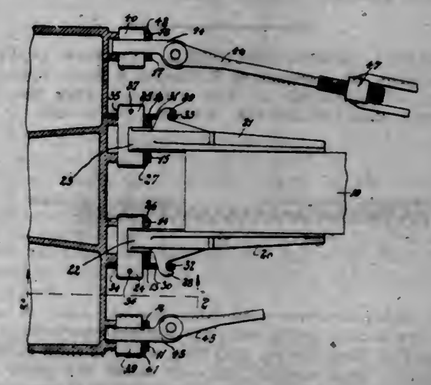


plate will cooperate with the hub and provide reinforcement for said line retainers throughout substantially half their length.

1,898,452. PRODUCTION OF VAT DYESTUFFS OF THE DIBENZANTHRONE SERIES. MAX ALBERT KUNZ and KARL KÖBERLE, Mannheim, and ERICH BERTHOLD, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 20, 1928, Serial No. 294,307, and in Germany Nov. 7, 1927. 8 Claims. (Cl. 260—61.)

1. As a new article of manufacture, nitrogenous vat dyestuffs of the dibenzanthrone series, giving from blue-grey and blue-green to grey and grey-black fast dyeings on cotton from a usually blue vat, dissolving to a green or red solution in concentrated sulfuric acid, which are obtainable by acting on a nitrogenous compound selected from the group consisting of nitro and amino compounds of dibenzanthrone, isodibenzanthrone and their halogen substitution products, with a non-reducing alkali metal salt of a weak acid.

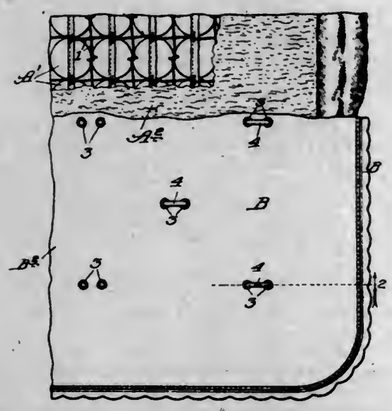
1,898,453. BOOM FEET FOR EXCAVATORS. WERNER LEHMAN and MITCHELL L. FYKSE, South Milwaukee, Wis., assignors to Bucyrus-Erie Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 8, 1928. Serial No. 317,088. 8 Claims. (Cl. 212—144.)



1. In a power excavator, the combination of: a main platform, with four pairs of forwardly projecting lugs; aligned holes through all eight lugs; four cylindrical pins, one being inserted in each pair of holes, and each pin being removably welded in place; a boom; two boom-foot

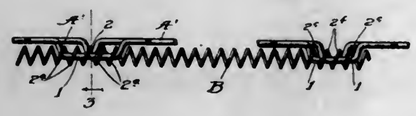
castings attached thereto, each having a rearwardly open projecting concave surface, of greater radius than that of the pin, for engagement with one of the aforementioned pins, each casting also having a forwardly projecting hook; two links, each engaging one of said hooks and one of said pins, for limiting the departure of said concave surface from contact with its pin; means for retaining each link on its pin; and sidewardly projecting adjustable boom-braces, each passing from the boom to one of the other two pins.

1,898,454. MATTRESS AND MATTRESS MANUFACTURE. CHARLES LOFMAN, Riverside, Ill., assignor to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed Mar. 23, 1931. Serial No. 524,717. 1 Claim. (Cl. 5—356.)



In the manufacture of mattresses, the steps which comprise: eyelet-stitching a fabric to provide, at selected points throughout the area of the fabric, pairs of stitched eyelets, thus providing a casing-top; constructing a mattress having said casing-top as a part of the casing; and tufting the mattress by passing a needle and tie carried thereby through the fabric within the circle of one stitched eyelet of a pair and returning the same through the fabric within the circle of the other stitched eyelet of the pair, and suitably anchoring the tie to the body of the mattress.

1,898,455. SPRING-STRUCTURE. CHARLES LOFMAN, Chicago, Ill., assignor to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed Nov. 2, 1931. Serial No. 572,646. 1 Claim. (Cl. 5—269.)



A spring-structure comprising parallel rows of upholstery springs, having end-rings disposed substantially in contact at lines between said rows, said end-rings having depressed hinge-members disposed below the plane of the end-rings and helical connectors arranged between said rows below the plane of the end-rings and having threaded engagement with said hinge-members, the hinge-members being of the same length and partially miss-matched and at least one convolution of the connector engaging both hinge-members of a pair and one or more convolutions engaging each individual hinge-member only.

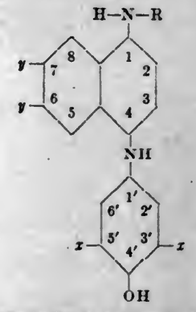
1,898,456. TUBULAR FRAME EXTENSION LADDER. JAMES F. MURPHY, Lansing, Mich., assignor of one-half to Joseph W. Gleason, Lansing, Mich. Filed Aug. 22, 1931. Serial No. 558,739. 2 Claims. (Cl. 228—18.)



1. An extension ladder comprising sections movable lengthwise relatively, the rails and rungs of the said sections being composed of tubes, grooved rollers constructed to engage the tubes forming the rails, the said rails of one section having secured thereto at one side of a diametrical line of the tubular rail upwardly projecting spindle posts for carrying the rollers in revoluble relation whereby the peripheral edges of the rollers carried by one section are held out of contact with the posts of the section engaged by such rollers, and releasable pivotal locking members arranged to engage the rungs of said sections to hold same in extended positions.

1,898,457. INDOPHENOL SULPHUR DYESTUFFS. FRIEDRICH MUTH, Elberfeld, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 6, 1930, Serial No. 418,998, and in Germany Jan. 11, 1929. 3 Claims. (Cl. 260—19.)

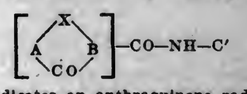
1. As new compounds sulphur dyestuffs which are substantially identical with the products obtainable by subjecting to an alkali metal polysulphide melt a compound of the probable general formula:



wherein one *y* stands for a sulphonic acid group and the other *y* stands for hydrogen, R stands for alkyl or aralkyl and *x* stands for hydrogen or chlorine, said products being greyish to dark blue powders having a copper lustre, dissolving easily in aqueous sodium sulphide solutions with bluish green colorations, dissolving in concentrated sulphuric acid with blue colorations and dyeing cotton from a sodium sulphide bath green shades of good fastness properties to washing and boiling.

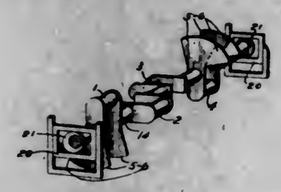
1,898,458. VAT DYESTUFFS OF THE ACRIDONE AND THIOXANTHONE SERIES AND THE PROCESS OF MAKING THEM. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, WILHELM BAUER, Leverkusen, and EMIL KRAUCH, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 3, 1931, Serial No. 506,490, and in Germany Jan. 18, 1930. 11 Claims. (Cl. 260—87.)

1. Vat dyestuffs corresponding to the general formula



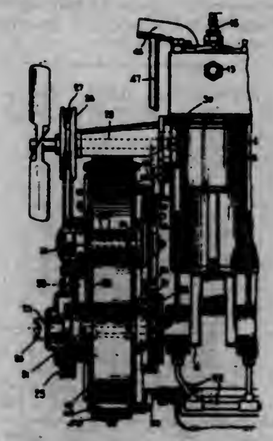
in which A indicates an anthraquinone radicle, B represents a benzene or naphthalene radicle and C′ an aromatic radicle and X represents NH or S, which dyestuffs are difficultly soluble in organic solvents, give brown to dark-blue vats and give colored solutions in concentrated sulphuric acid.

1,898,459. CRANK SHAFT BALANCING. EDWARD C. NEWCOMB, North Scituate, Mass. Filed Apr. 26, 1928. Serial No. 273,024. 5 Claims. (Cl. 74—38.)



1. Balancing means for multiple engine crank shafts comprising counter weights on said shaft for neutralizing the rotating force couples of the cranks thereof and means operatively connected with said shaft for neutralizing vertical primary inertia force couples comprising oppositely phased masses mounted for vertical reciprocation adjacent the opposite ends of said shaft.

1,898,460. TWO-CYCLE ENGINE. EDWARD C. NEWCOMB, North Scituate, Mass. Filed Apr. 26, 1928. Serial No. 273,096. 49 Claims. (Cl. 123—59.)

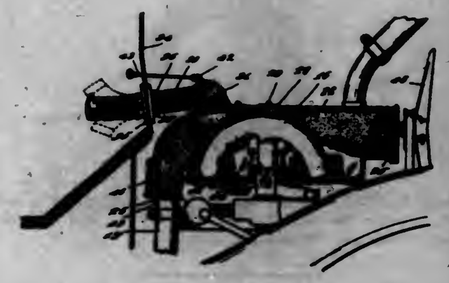


10. In a two-cycle engine, the combination of its lubrication and cooling systems, and a rotary blower for supplying charge mixture under pressure to the cylinders, the journal bearing of the rotor of said blower included in said lubrication system and the casing of said blower being included in the flow of the engine cooling medium.

1,898,461. PROCESS OF SEPARATING PRIMARY FROM SECONDARY ALIPHATIC AMINES. OTTO NICODEMUS and WALTER SCHMIDT, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 28, 1930, Serial No. 432,258, and in Germany Mar. 12, 1929. 3 Claims. (Cl. 260—127.)

1. The process which comprises causing an aromatic aldehyde to react upon a mixture of a primary and a secondary aliphatic amine, distilling the secondary amine off and decomposing the remaining compound of aldehyde and primary amine by boiling it with a strong mineral acid which has no oxidizing effect upon the amines.

1,898,462. HEATER. QUINTIN G. NOBLITT, Indianapolis, and EARL C. BOOTH, Columbus, Ind., assignors to Noblitt-Sparks Industries, Inc., Indianapolis, Ind., a Corporation of Indiana. Filed Oct. 27, 1930. Serial No. 491,398. 6 Claims. (Cl. 257—241.)



1. A heater for heating the interior of an automobile body by heat derived from the automobile engine, comprising an exhaust-manifold for said engine, said manifold being provided on the outside thereof with longitudinally extending heat-radiating fins, a casing formed to enclose said manifold partially and to fit against the outer edges of said fins, the front end of said casing being open and disposed in position to receive air from the fan of the engine cooling system, said casing being provided with two openings near its rear end for permitting the escape of air heated by contact with the manifold and its fins, said openings being spaced from each other longitudinally of said casing, and one or more of said fins extending rearwardly past the forward edge of the forwardmost of said openings to deflect heated air toward the rearwardmost opening.

1,898,463. ILLUMINATED HOUSE NUMBER. RICHARD E. NULSEN, Seattle, Wash. Filed Apr. 23, 1932. Serial No. 607,097. 2 Claims. (Cl. 40—132.)



1. In an illuminated house number, a housing having an interior of light diffusing material, an electric lamp disposed within said housing, circuit means connected with said lamp, a light distributor of reflecting material positioned directly behind said lamp, a reflector and shield provided on the front side of said lamp opposite said deflector, and a housing front disposed in close proximity to said lamp and provided with light conductive numerals.

1,898,464. ROTARY BRUSH. CHARLES S. OTT and JOSEPH R. LEWIS, San Francisco, Calif.; said Joseph R. Lewis, assignor, by mesne assignments, to Manuel Edward Lewis, San Francisco, Calif. Original application filed Apr. 27, 1929, Serial No. 358,547. Divided and this application filed Mar. 8, 1930. Serial No. 434,258. 2 Claims. (Cl. 15—198.)

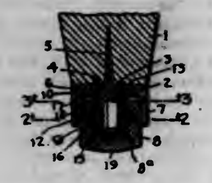
1. A brush of the character described, comprising an annular backing made in two sections, bristles looped

therethrough so as to radiate therefrom, a lining on the inside of each section for holding the bristle loops in place, means for interlocking the lining with the backing and



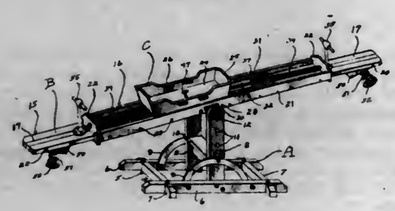
means for clamping the two sections upon a shaft, said latter means passing through the interlocking portions of the lining and the backing.

1,898,465. ADJUSTER FOR SUPPORTING LEGS. JOHN J. PETERS, New York, N. Y. Filed Dec. 6, 1930. Serial No. 500,479. 3 Claims. (Cl. 43—139.)



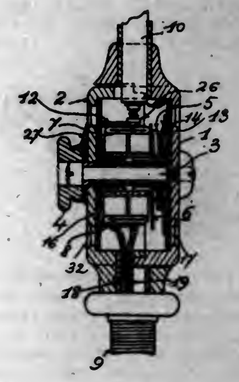
1. An adjuster for supporting legs comprising a cylindrical, exteriorly threaded member, a cooperating, interiorly threaded member rotatably engaging therewith for effecting relative vertical movement between the members, an exterior vertical groove in said exteriorly threaded member, said groove having a side wall increasing in depth toward the lower end of the member, a spring pressed plunger carried by said cooperating member adapted to engage said side wall and limit the relative vertical movement of said members, and means for securing the exteriorly threaded member to the bottom of a supporting leg.

1,898,466. AMUSEMENT DEVICE. HALLIE P. PIERSON, A. & M. College, Miss. Filed June 12, 1931. Serial No. 543,963. 10 Claims. (Cl. 272—54.)



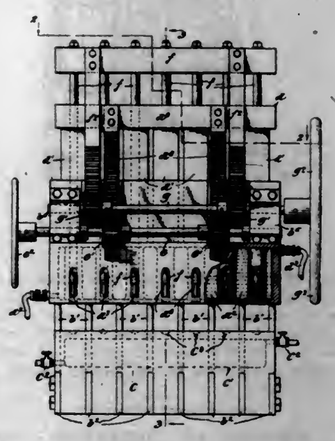
1. In an amusement device of the class described, a stand including a pair of uprights, a swing beam fulcrumed midway its ends upon the uprights, a carriage guided for limited longitudinal movement along the beam to opposite sides of the fulcrum point, cushioning means for the carriage upon its limit of movement in either direction, and a seat provided at each end of the beam beyond the limit of movement of the carriage.

1,898,467. ELECTRIC HAIR WAVING IRON. HENRI ROCHAT, Geneva, Switzerland. Filed June 18, 1930, Serial No. 462,077, and in Switzerland July 1, 1929. 4 Claims. (Cl. 219—24.)



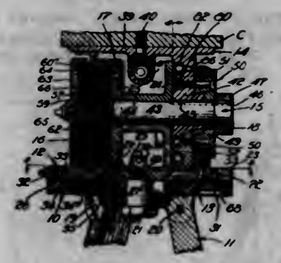
1. An electric hair-waving iron comprising a pair of legs; electrical heating units within said legs; a hollow cylindrical member fixed to each leg, said members being co-axial with each other and pivoted to each other about the common axis so as to form a box; and an adjustable resistance connected in series with said heating units, said resistance being housed within the box formed by said hollow members.

1,898,468. RIVETING MACHINE. SAMUEL F. TAPMAN, Jamaica, N. Y. Filed Feb. 27, 1929. Serial No. 343,085. 6 Claims. (Cl. 219—2.)



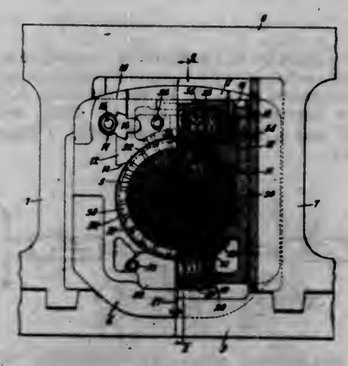
1. A device of the character described comprising a plurality of spaced yokes, a coil about the yokes to energize the same electrically, an anvil on the adjacent open ends of the yokes, a stationary head on the other adjacent open ends of the yokes, a movable head carried by the stationary head and formed with extensions lying between and engaging the yokes, rivet magazines formed in the movable head, and rivet driving means carried in each of the extensions on the movable head and communicating with the magazines.

1,898,469. CAMERA MOUNTING. LOUIS F. TONSOR, Los Angeles, Calif. Filed Apr. 18, 1931. Serial No. 531,165. 10 Claims. (Cl. 248—47.)



6. A camera mounting including, a body, a head, a tilting connection between the body and head including a shaft, and friction means for resisting tilting of the head including spaced plates carried by the shaft, plates held against rotation with and movable longitudinally of the shaft, the last-mentioned plates being interposed between the first-mentioned plates, and spring means between the last-mentioned plates.

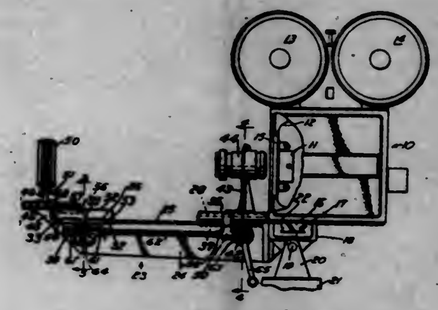
1,898,470. AXLE BOX. HARRY S. VINCENT, Ridgewood, N. J., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 20, 1927. Serial No. 214,238. 6 Claims. (Cl. 308—43.)



1. An axle bearing construction including an upright U-shaped box structure open at its upper end, a bearing member adapted to close said upper end, a sectional bushing floating in the box structure around the axle, the opening at the upper end of the box structure being of width sufficient to pass the axle but smaller than the outside diameter of said bushing, and said bushing being composed of sections having dimensions such as to permit removal thereof through the said open upper end of the box structure.

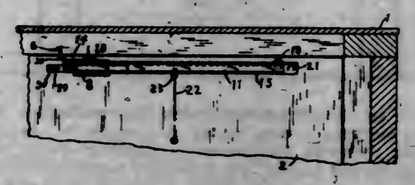
1,898,471. CAMERA. JOSEPH B. WALKER, Los Angeles, Calif. Filed Sept. 21, 1929. Serial No. 394,259. 2 Claims. (Cl. 95—45.)

1. In combination, a camera, primary lens means and secondary lens means movable along the focal axis of the camera, operating means for moving one lens, a cam guide disposed in a plane at an angle to the focal axis, a cam detachably carried by said guide, means for moving said



cam from said operating means, and an operating connection between said cam and the other lens for moving said other lens as the cam is moved on its guide.

1,898,472. DOORSTOP. HARRIS MORGAN WHITCOMB, Albany, Wis., assignor to Albany Hardware Specialty Manufacturing Company, Albany, Wis., a Corporation of Wisconsin. Filed Sept. 14, 1928. Serial No. 305,934. 2 Claims. (Cl. 292—263.)



2. A stop device comprising a pair of bars pivotally connected at their inner ends and adapted to be pivotally connected at their outer ends to a door and door casing, respectively, one of said bars having a flat face and a flange projecting from said face along one side at its inner end and an integral tapering projection extending from said flat face in the same direction as the flange on the side edge opposite the flange and adjacent the inner end of the bar, said bar having a pivot pin opening spaced from its inner end and laterally of said side flange, the other bar having an inner end portion of a width to be received between said projection and flange and having a pivot pin opening closely adjacent its inner end and spaced from the side edge thereof which engages said flange a distance sufficiently less than the distance of the pivot pin opening of the first mentioned bar from said flange to permit said bars to swing past their position of alinement, and a pivot pin fitting in said openings and having heads to hold the bars together, and a spring washer interposed between one of said pivot pin heads and one of said bars.

1,898,473. WELL SURVEYING DEVICE. SAMUEL H. WILLISTON and CHARLES R. NICHOLS, Dallas, Tex., assignors to Sperry-Sun Well Surveying Company, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 28, 1930. Serial No. 432,030. 8 Claims. (Cl. 234—1.)

1. A well surveying device comprising a casing adapted to enter a bore hole, and recording mechanism within

the casing, said mechanism including means for indicating the inclination of a bore hole, means for indicating



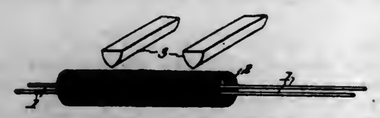
the pressure in the bore hole, and means for recording the indications of the inclination and pressure indicating means.

1,898,474. AIRCRAFT LANDING SYSTEM. JOHN A. WILLOUGHBY, Cambridge, Mass. Filed Jan. 19, 1929. Serial No. 333,703. 9 Claims. (Cl. 250—11.)



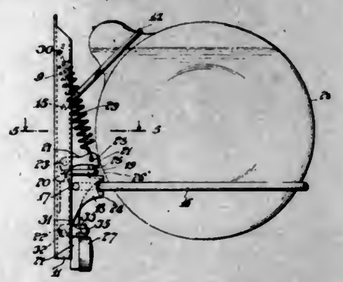
4. In an aircraft landing system the combination of a signal reception system having an antenna in electrical relation therewith for impressing signaling energy upon its circuits and having light responsive means in electrical relation therewith for governing the operation of said circuits in accordance with radiant energy intercepted thereby, said signal reception system being located in an aircraft, means located upon an airport for transmitting electromagnetic waves in a shaft vertically over said airport, said shaft of electromagnetic waves being characterized by having a neutral zone substantially over the center of said airport, a source of radiant energy positioned upon said airport for transmitting a diverging shaft of radiations in the visible or adjacent spectra vertically through said neutral zone, means for intermittently interrupting said last mentioned radiations whereby said aircraft equipped with said signal reception system may determine the precise location of said airport.

1,898,475. METHOD OF AND APPARATUS FOR FORMING GRID ELECTRODES. STUART BALLANTINE, Mountain Lakes, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 16, 1931. Serial No. 544,801. 9 Claims. (Cl. 140—71.)



1. The process of forming a vacuum tube grid which comprises the steps of first forming a helical winding and securing each winding thereof to supporting wires, and then forcing a spreading tool between adjacent turns of said winding to deflect portions thereof axially of the grid structure while maintaining the contacts between the grid wire and the supporting means fixed.

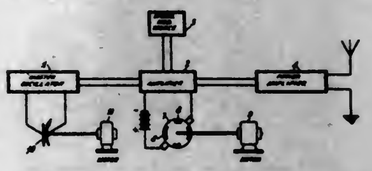
1,898,476. FIRE EXTINGUISHER. WALTER D. BANES, Chestnut Hill, Pa., assignor to Isaac L. Schwartz, Philadelphia, Pa. Filed Mar. 4, 1931. Serial No. 519,924. 14 Claims. (Cl. 196—26.)



1. A holder and a detent normally cooperating therewith releasably to support a grenade, said detent being movable to release the holder to release the grenade, a detent actuator and fusible means for normally controlling the actuator.

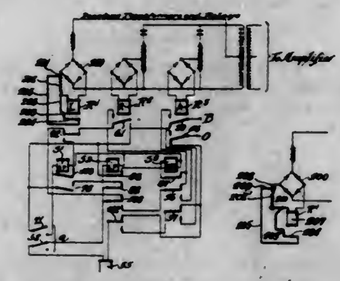
5. A pivotally supported element movable about a horizontal axis for releasably holding a grenade, a detent for normally restraining its pivotal movement, a device for locking the detent in restraining position and also for moving the detent from restraining position to permit movement of the holding element to release the grenade and means for normally controlling said locking and moving device, adapted to become ineffective upon predetermined temperature conditions.

1,898,477. FADING ELIMINATION. OTTO BÖHM, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Dec. 16, 1929, Serial No. 414,277, and in Germany Dec. 17, 1928. 1 Claim. (Cl. 250—8.)



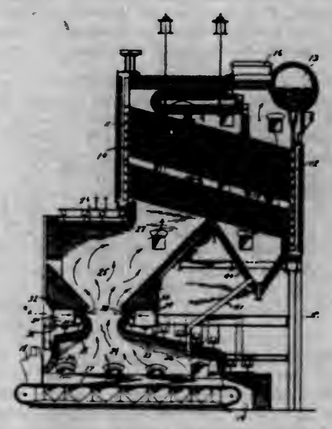
In a transmission system for eliminating fading of electromagnetic waves, in combination, a master oscillation generator, a variable condenser for changing the frequency of said oscillation generator, and motor driving means connected to said condenser, an amplifier associated with said oscillation generator for amplifying the currents generated thereby, an antenna connected to the output of said amplifier, a signal modulating element connected to said amplifier for modulating the energy received by said amplifier from said oscillation generator, a rotary commutator having unequal insulating length segments around its periphery, additional motor driving means for said commutator, connections from said commutator to said amplifier including a source of direct current potential, said commutator being arranged to bias said amplifier through said connections so as to interrupt the transmitted output energy to said antenna, said interruptions being of unequal time duration in accordance with the length of said unequal insulating segments on said rotary commutator.

1,898,478. METHOD AND APPARATUS FOR PREVENTING IMPROPER CUT-IN OF CAB SIGNALS. JOHN H. BROADBENT, Ridley Park, Pa. Filed Apr. 2, 1931. Serial No. 527,122. 15 Claims. (Cl. 246—63.)



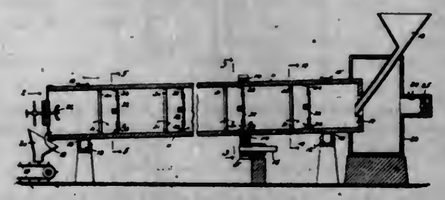
1. In a railway signal system, clear, approach restricting and approach relays responsive to energy at different frequencies of coding, which energy is transmitted at a given frequency of coding during one track condition and not during another track condition, connections by which the clear and approach restricting relays may receive energy at the proper frequencies of coding, an impedance having one of the electrical quantities resistance and inductance, a first circuit adapted to receive energy at a frequency of coding which will energize the approach relay and including the approach relay and cooperating contacts closed by the energization (pick-up) of the approach relay and opened by the release of the approach relay and a second circuit adapted to receive energy at a frequency of coding which will energize the approach relay and including the approach relay and the impedance, said second circuit being closed while the approach relay is released.

1,898,479. FURNACE. THOMAS G. COGHLAN, Elizabeth, and EINAR A. JOHNSEN, Mountain Lakes, N. J.; Sigrid A. Johnsen executrix of said Einar A. Johnsen, deceased. Filed July 21, 1925. Serial No. 44,957. 8 Claims. (Cl. 110—40.)



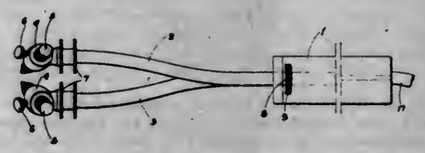
1. A furnace comprising a lower combustion chamber and an upper combustion and expansion chamber, said chambers being connected by a restricted throat, the upper chamber flaring upwardly from the throat, a boiler having heat absorbing surfaces disposed in a chamber communicating with said upper chamber, air ducts on opposite sides of said throat, nozzles communicating with said ducts and adapted to discharge air therefrom into the furnace adjacent said throat, a progressive feed grate in the bottom of said lower chamber, means to supply fuel to said grate, and means to supply air to said ducts, burning fuel from said grate passing through said lower combustion chamber and through said throat into and then through said upper combustion and expansion chamber into contact with said heat absorbing surfaces of the boiler, and said upper combustion and expansion chamber being designed to insure approximate completion of combustion of said burning fuel as it passes therethrough.

1,898,480. ROTARY KILN. FREDERICK W. CORKILL, Los Angeles, Calif, assignor to Pacific Coast Borax Company a Corporation of Nevada. Filed Aug. 12, 1929. Serial No. 385,274. 2 Claims. (Cl. 222—7.)



1. A rotary kiln comprising: an elongated tubular shell; means for rotating said shell; means for injecting a flame into one of said shell; means for introducing material to be calcined into the other end of said shell; a plurality of annular screens mounted in said shell, adapted to permit a substantially uninterrupted movement of fine material through said shell and at the same time retard the movement of the coarse material therethrough; and baffles mounted in the center of said shell adjacent said annular screens for directing the hot gases passing through said shell into contact with the material passing over said obstructions.

1,898,481. PORTABLE ELECTRIC METAL MELTER. ANGELO D'AMICO, MARK W. HILD, and WILLIAM H. WILCOX, Stockton, Calif. Filed Apr. 6, 1931. Serial No. 528,116. 2 Claims. (Cl. 219—14.)

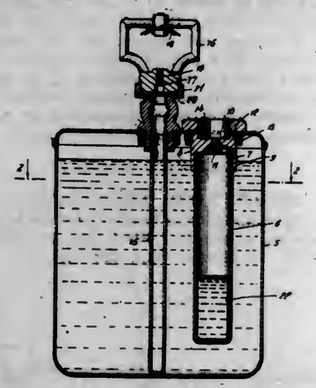


1. An electric metal-melting torch comprising a handle member, rods projecting in spaced relation from one end of the handle, circuit means connected to the handle ends of the rods, one of said rods being turnable in the handle, members on the rods at their outer ends for supporting carbons in converging relation to each other, and means applied to the turnable rod at the handle for turning the same to alter the angle of convergence of the carbons.

1,898,482. FIRE EXTINGUISHER. HOWARD WATERS DOUGHTY, Amherst, Mass. Filed Mar. 14, 1932. Serial No. 598,731. 7 Claims. (Cl. 169—26.)

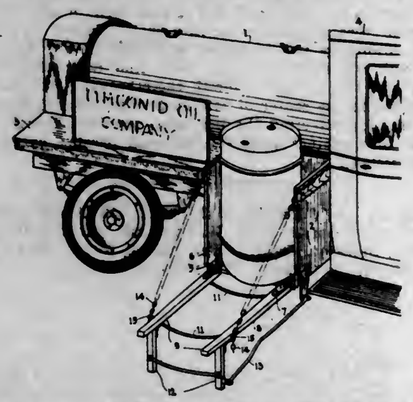
1. A fire extinguisher comprising a closed receptacle for fire-extinguishing liquid, outlet means constructed and positioned to normally prevent discharge of the liquid therethrough, said outlet means being open at predetermined fire temperature, a container within the receptacle

adapted to hold a fluid under pressure and having a passage communicating with the interior of the receptacle, and means fusible at said predetermined fire temperature



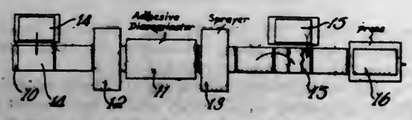
to normally close the passage, said fusible means being positioned to be affected by a rise of temperature adjacent the receptacle.

1,898,483. TANK WAGON CONSTRUCTION. PAUL EARNHEART, De Soto, Kans., and CLYDE W. SMITH, Hammond, Ind., assignors to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Oct. 22, 1931. Serial No. 570,356. 8 Claims. (Cl. 214—77.)



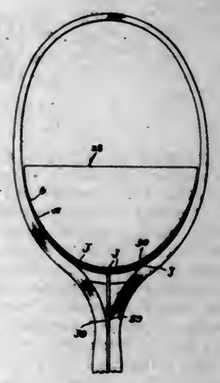
1. An improvement in tank wagon construction relating to the transportation of oil in barrels, comprising a barrel carrying stirrup located at the side of the wagon intemediate the ground and the tank level and parallel with the running board, and a rack cooperating with said carrying stirrup facilitating the loading of barrels thereon.

1,898,484. ART OF GLUING. HARRY GALBER, Lockport, N. Y., assignor, by mesne assignments, to Laminating Patents Corporation, Seattle, Wash., a Corporation of Delaware. Filed Feb. 24, 1932. Serial No. 594,857. 18 Claims. (Cl. 144—309.)



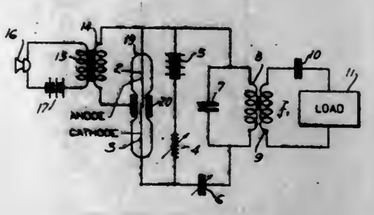
1. The process of uniting a wood member and another member, which comprises providing between said members adhesive-base material in discrete-particle form, applying heat and pressure for a period sufficient to form a preliminary bond between the members, discontinuing the application of heat and pressure while a layer of substantially independent particles remains between the members, and permitting the plasticization and setting of the adhesive material to continue.

1,898,485. TENNIS RACKET AND METHOD OF MANUFACTURING. HORACE W. HALL, Newton, Mass. Filed Feb. 26, 1931. Serial No. 518,382. 7 Claims. (Cl. 273—73.)



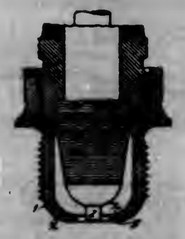
1. A racket comprising a plurality of wood laminations superimposed upon the inside surface of the shoulder and throat portions of the racket, the lower of said laminations being shorter in length than the maximum inside width of the head of the racket bow and the grain of which being substantially parallel with said length, the upper of said laminations being cross-grained and longer than said maximum inside width.

1,898,486. MODULATION SYSTEM. AUGUST HUND, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 2, 1931. Serial No. 572,551. 2 Claims. (Cl. 179—171.)



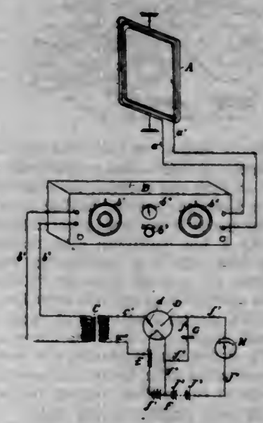
2. A modulation system comprising, means for producing high frequency oscillations including a gaseous discharge tube provided with a cold cathode and anode and an exterior control electrode, a plurality of condensers serially connected with respect to each other and to said cathode and anode, a source of ionizing potential and a series resistance therefor connected in parallel to said plurality of condensers and to said cathode and anode, a load circuit including an inductance connected in parallel with one of said plurality of condensers, a source of modulating potentials, an input circuit comprising an inductance connecting said source of modulating potentials to said exterior control electrode and said anode.

1,898,487. METHOD OF UNITING METAL PARTS AND ARTICLE PRODUCED THEREBY. ROY T. HURLEY, Dobbs Ferry, N. Y. Filed Mar. 28, 1932. Serial No. 600,687. 9 Claims. (Cl. 148—4.)



1. A composite article of manufacture comprising a plurality of metal elements brazed together by copper-beryllium binary alloy.

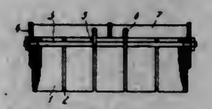
1,898,488. RADIO DIRECTION FINDER. LOUIS L. KAESS, New York, N. Y. Filed July 2, 1929. Serial No. 375,478. 1 Claim. (Cl. 250—11.)



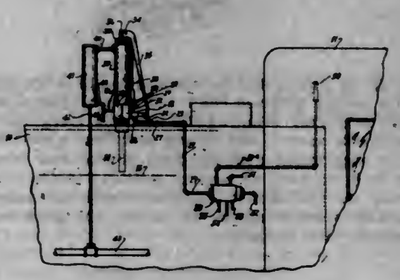
In a radio direction finder system, a rotatable loop antenna; means for grounding the outer turn of said loop antenna to shield it from undesirable electrostatic fields; a radio frequency receiver operatively connected to said loop antenna; an electron tube including anode, cathode, and control electrodes; input and output circuits for said electron tube; means for connecting said input circuit to the output of said receiver; means for applying a saturating negative potential to the control electrode to produce completely rectified current in said output circuit; and a direct current milliameter in said output circuit, whereby an indication proportional to the current received in the loop antenna is obtained in said milliameter.

1,898,489. ELECTRICAL APPARATUS. EMIL OTTO KIEFFER, Berlin-Schlachtensee, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Oct. 8, 1930, Serial No. 487,269, and in Germany Oct. 11, 1929. 4 Claims. (Cl. 171—252.)

1. A dynamo electric machine having a laminated armature, consisting of a self-supporting centered body composed of individual lamina and having radial ventilated ducts spaced along the armature length between the lamina, and means for clamping said lamina together, and straps located in said ventilating ducts and engaging said clamping means and protruding beyond the armature periphery near which they are located, the protruding ends of said strips being welded to the machine frame for supporting the armature on the frame throughout its entire length.

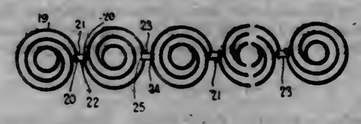


1,898,490. LOW WATER ACTUATED MEANS FOR STEAM GENERATORS. DAVID RAY KOONTZ, Salisbury, N. C., assignor of one-half to James D. Dorsett, Spencer, N. C. Filed Dec. 11, 1930. Serial No. 501,688. 7 Claims. (Cl. 122—451.1.)



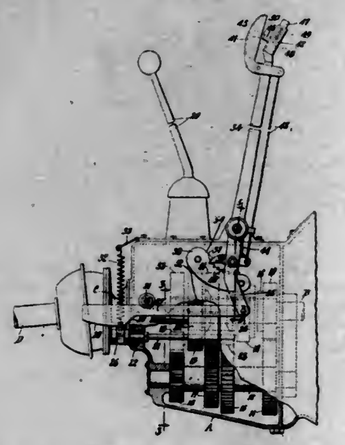
1. In a low water alarm for steam generators, an expansion member adapted to be in fluid communication with the interior of the generator, a valve having a passageway for communication with the interior of the generator and means for normally closing the valve, a bell crank lever having one end thereof conaected to the expansion member and the other end thereof normally in close proximity to but disconnected from said valve, means independent of the expansion member for pivotally supporting the bell crank lever intermediate its ends, a jacket surrounding the expansion member, means for supplying a cooling fluid between the expansion member and the jacket.

1,898,491. SPRING STRUCTURE. WILLIAM THOMAS KYLE, Southport, Conn., assignor to The Owen Automatic Spring and Machinery Company, a Corporation of Ohio. Filed July 3, 1929. Serial No. 375,608. 1 Claim. (Cl. 5—270.)



A spring unit comprising a row of coil springs each terminating at opposite ends thereof in free flexing extremities, the springs being arranged in pairs with the extremities of each pair adjacent one another, clips rigidly connecting each adjacent pair of extremities, and other clips hingedly connecting the ends coils of each pair of springs to the end coils of the next adjacent pair.

1,898,492. DEVICE FOR PREVENTING UNDESIRED BACKWARD MOTION OF AUTOMOBILES. FRANK L. MORSE, Ithaca, N. Y. Filed Apr. 3, 1931. Serial No. 527,446. 14 Claims. (Cl. 192—4.)



1. In an automobile, the combination of a transmission device having a driven shaft and a gear splined on said shaft, said gear being axially movable along the shaft to forward, neutral, and reverse positions; a pawl mounted for engagement with the teeth of said gear when the gear is in forward or neutral position; means normally holding the pawl out of engagement with said gear; and manually operable means for moving the pawl into engagement with the gear.

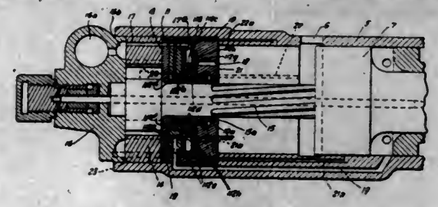
1,898,493. FLUID PRESSURE TOOL. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 1, 1929. Serial No. 336,880. 4 Claims. (Cl. 121—19.)



1. In a fluid pressure motor, a cylinder having an exhaust port intermediate its length, a piston reciprocable in said cylinder and controlling said port, a valve chest in line with the piston chamber and serving as a closure for the latter, said chest providing an annular valve chamber and having ports at the ends thereof leading to opposite ends of the piston chamber, an annular valve having end faces for controlling the ports in said valve chest and an intermediate reservoir for pressure fluid, and means comprising ports in the end faces of said valve restricting the movement of pressure fluid from said reservoir to each group of end ports in said valve chamber to an amount less than the capacity of each group.

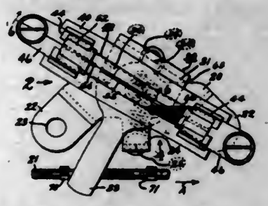
1,898,494. FLUID PRESSURE TOOL. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 6, 1929. Serial No. 353,207. 17 Claims. (Cl. 121—19.)

1. In a fluid pressure motor, a cylinder having an exhaust port intermediate its length, a piston reciprocable in said cylinder and controlling said port, a valve chest providing an annular valve chamber and ports leading to opposite ends of the piston chamber, a sleeve valve in said chamber having a flange for controlling said ports, means providing an atmospheric exhaust chamber adja-



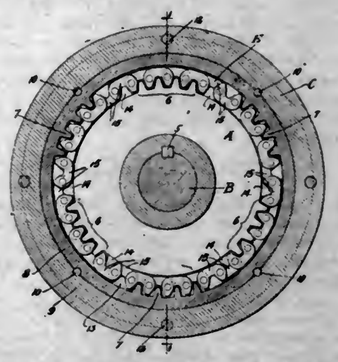
cent said valve, and means under control of said valve and utilizing said exhaust chamber to provide an auxiliary exhaust for one end of said piston chamber.

1,898,495. SWITCH AND MOUNTING THEREFOR. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 21, 1930. Serial No. 437,747 4 Claims. (Cl. 200—67.)



4. In a stop-light switch of the fluid conductive type having a removable circuit closing unit and means for supporting same at each end thereof, the combination comprising; a base; a mounting bracket having a lug depending therefrom; a lever carrying said base pivoted to said bracket said lever having a lug overlying said bracket; spring means engaging said lugs and tending to urge the lug on said lever into an angular position relative to said pivot; and means operable to move said lever into a position slightly beyond the medial position and cause said lever lug to engage said bracket to limit the movement of said lever, said spring means supplementing the moving means to complete the actuation of said lever and associated structure from one side of the medial position to open or close a circuit through said circuit closing unit.

1,898,496. INTERNAL-EXTERNAL FLEXIBLE COUPLING. DAVID BARNES PERRY, Ithaca, N. Y., assignor to Morse Chain Company, Ithaca, N. Y., a Corporation of New York. Filed Apr. 26, 1930. Serial No. 447,503. 17 Claims. (Cl. 64—97.)



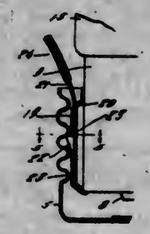
1. A driving connection for two rotatable members comprising in combination a coupling member secured at the end of each rotatable member, one of said coupling members having internal teeth and the other external teeth, and a chain connecting the coupling members and engaging the teeth thereof.

1,898,497. METHOD OF MAKING REENFORCED MATTRESSES. EDWARD ROBERTI, Los Angeles, Calif., assignor to Roberti Bros., a Corporation of California. Filed Jan. 18, 1928. Serial No. 247,547. 2 Claims. (Cl. 5—360.)



2. The method of making a mattress of the type in which the mattress consists of tick members having a filler therebetween and a boxing having openings therein and a fabric member stitched to the inside thereof behind the openings which comprises passing a threaded needle through one opening, then outwardly through another opening and inwardly through the same opening, and repeating such movement of the threaded needle to form a series of stitches in the fabric member extending into and engaging the filler.

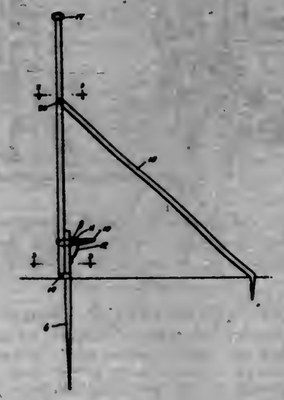
1,898,498. QUICK DETACHABLE LAMP. JOSEPH POKORNEY, Baltimore, Md. Filed May 1, 1931. Serial No. 534,380. 1 Claim. (Cl. 176—32.)



In an electric lamp, a base for the lamp, a leaf spring member secured at one end to the base and being diverged outwardly from the base at its remaining end, a tooth on the member, a bracket for the spring having an opening therethrough, through which the tooth is operative, said bracket serving as a stop to limit outward movement of the member.

1,898,499. POST. JOHN H. SCHUETT, Hull, Iowa: Filed Nov. 2, 1931. Serial No. 572,713. 1 Claim. (Cl. 189—23.)

A post of the class described comprising a lower section having its lower part tapered to permit said section to be driven into the ground, ears on an intermediate part of the lower section depending at right angles therefrom, an upper section having its lower end pivoted between said ears, the top part of the lower section having an opening therein, ears on said top part of the lower section between which the opening is located, a latch lever having an intermediate part pivoted between the last-mentioned ears with a part of the lever passing through the opening, an upwardly extending spring connected with the lower section and engaging the outer part of the latch to hold the same in latching position, the upper section having an opening therein in horizontal alinement with the first-mentioned opening when the top section is in raised position, the latch lever having a notch therein engaging a wall of the sec-



ond-mentioned opening to hold the upper section in raised position, and a brace having one end pivoted to an intermediate part of the upper section, and its other end bent and pointed to engage the ground.

1,898,500. ENAMEL DECORATING PROCESS. ARTHUR P. SCHULZ, Chicago, Ill., assignor, by mesne assignments, to Teller Stove Designing Corporation, a Corporation of New York. Filed May 19, 1930. Serial No. 453,871. 7 Claims. (Cl. 41—26.)

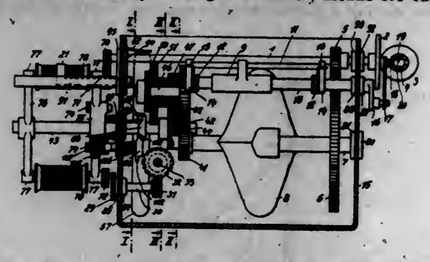


1. The process of applying a decorated enamel finish to a surface which consists in first applying a base coating of enamel to the surface, drying said enamel and then before firing this coating applying the coloring material thereto in dry form, fixing said dry coloring material, and then firing the coating to infuse the coloring material with said base coating.

1,898,501. AUTOMATIC BOBBIN-WINDING MACHINE IN COMBINATION WITH SPINNING FRAMES. ERNST SCHWEIZER, Zurich, Switzerland. Filed Jan. 20, 1931, Serial No. 510,021, and in Switzerland Dec. 19, 1929. 14 Claims. (Cl. 242—18.)

1. In a yarn winding machine for winding at a uniform rate as the diameter of the bobbin increases, the combination with friction drive gearing including a displaceable member, a rotatable bobbin drive shaft operatively connected with the friction gearing, a reciprocable thread guide, and means also opeatively connected with the friction gearing for reciprocating the thread guide, of ratchet mechanism connected with the friction gearing for positive operation with the rotation of the bobbin drive shaft and reciprocation of the thread guide, means operable by the ratchet mechanism for progressively shifting the displaceable member of the friction gearing, a rotatable bob-

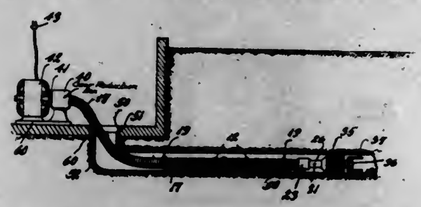
bin carrier, a plurality of bobbin spindles on the carrier capable of being operatively connected in turn with the bobbin drive shaft by turning the carrier, means for turning the carrier automatically on a predetermined movement of the ratchet mechanism, and means for simultaneously returning the friction gearing to its original position.



1,898,502. ARTIFICIAL THREAD. WALTER SEIDEL and ALBERT ERNECKE, Dormagen, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 5, 1929, Serial No. 352,906, and in Germany Apr. 12, 1928. 8 Claims. (Cl. 8—20.)

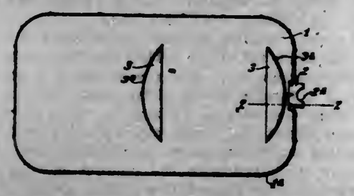
1. The process which comprises impregnating artificial silk which has been prepared from cellulose acetate according to the dry spinning process with an aqueous solution of a fatty acid of the group consisting of formic, acetic, and propionic acids of 30 to 45% strength and having a temperature from 14 to 30° C. and stretching the artificial silk from 50 to 400% its length, washing and drying the same.

1,898,503. SEWER CLEANING DEVICE. JULIUS SILBERGER, Cleveland, Ohio. Filed Apr. 15, 1931. Serial No. 530,356. 4 Claims. (Cl. 15—104.30.)



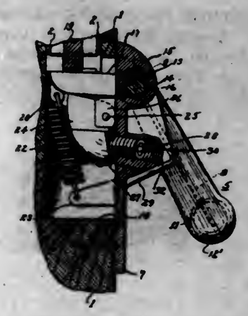
1. In a cleaning device of the character described, a cutting head, a flexible casing, a flexible shaft rotatably mounted within the casing and coextensive therewith, a cleaning element on one end of the shaft, means for rotating the shaft, and a flat straight guiding element secured to the casing exteriorly thereof and extending along the casing parallel to the longitudinal axis thereof for guiding the casing through a pipe to be cleaned and for preventing rotation of the casing during operation of the device.

1,898,504. DETACHABLE PLATFORM. HOWARD A. SILVERNAIL, Cleveland, Ohio. Filed May 28, 1931. Serial No. 540,568. 3 Claims. (Cl. 68—9.)



1. A detachable platform comprising a flat member, a forked tongue secured endwise thereto and seats laterally projecting from a face of said flat member.

1,898,505. LOCK PUSH PLATE DEVICE. JOHN OTTO SOEMER, Newark, N. J., assignor to The Steffens-Amberg Co., Newark, N. J., a Corporation of New Jersey. Filed Sept. 3, 1930. Serial No. 479,458. 1 Claim. (Cl. 292—92.)



In a lock push plate device for doors, plate members adapted to overlie a door, a push plate pivotally connected to said plate members, an operating finger carried by said push plate and extending into a door mortise for actuating a lock latch lift, a tension spring connected at one end to said operating finger and at its other end to one of said plate members for urging said operating finger away from the lock latch lift, while at the same time urging said push plate outwardly about its pivotal connections with said plate members, said operating finger being movable, upon pushing said push plate toward the door, to actuate the lock latch lift to released position, a dog arm pivoted on said one plate member below said operating finger, and a dogging screw threaded through said plate member for engaging said dog arm and adapted, when threaded inwardly of said plate member, to actuate said dog arm to cause said operating finger to move against the tension of said spring to actuate the lock latch lift to released position, said dogging screw when threaded outwardly of said plate member, serving to release said operating finger, which, acting under the tension of said spring, moves away from the lock latch lift to thereby effect the locking operation of the latter.

1,898,506. PROCESS FOR PRODUCING DOUBLE COMPOUNDS OF ALUMINUM FLUORIDE-ALKALI-FLUORIDE. HEINRICH SPECKETER, Frankfort-on-the-Main-Griesheim, and JULIUS SÖLL, Frankfort-on-the-Main-Schwanheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed July 7, 1931, Serial No. 549,292, and in Germany July 29, 1930. 4 Claims. (Cl. 23—88.)

1. A process for producing double compounds of aluminum fluoride-alkali metal fluoride which comprises causing alkali metal chromates to act upon aluminum compounds and hydrofluoric acid.

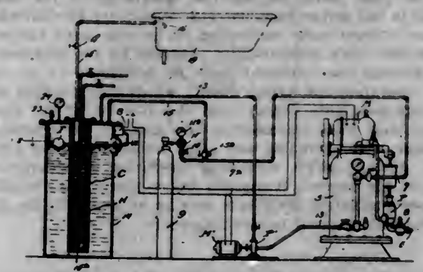
4. A process for producing double compounds of aluminum fluoride-alkali metal fluoride which comprises dissolving hydrate of alumina in aqueous hydrofluoric acid and causing this solution to act simultaneously upon an aqueous solution of sodium chromate and hydrofluoric acid.

1,898,507. PROCESS OF MANUFACTURING GELATIN CAPSULES. MICHAEL STEIN, Munchendorf, Austria, assignor of one-half to Jules Robert Keller, Lausanne, Switzerland. Filed June 15, 1931, Serial No. 544,677, and in Austria May 22, 1930. 3 Claims. (Cl. 18—58.)

1. The process of manufacturing gelatinous capsules consisting in forming capsules from a composition consisting of a basic mixture of about 400 parts of gelatin and 160 parts of glycerine to which is added a mixture of about 0.015 to 0.02 parts of petroleum and about 0.03 to 0.04 parts of benzoin-resin and in hardening the capsules with 3–5% formaldehyde to which are added glycerine and alcohol.

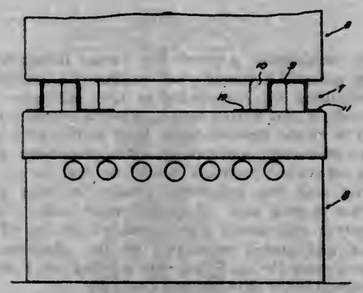
3. As a new article of manufacture, a hard gelatinous capsule for bottle tops having a sufficient degree of elasticity when in a dry state to stretch over a bottle top and cork and grip the bottle neck tightly.

1,898,508. BATH APPARATUS. EDWARD G. SULLIVAN, Amarillo, Tex., assignor to Joseph S. Belt, Amarillo, Tex. Filed Jan. 5, 1931. Serial No. 506,809. 4 Claims. (Cl. 261—20.)



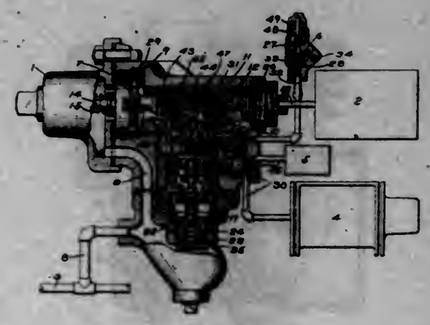
4. In a bath apparatus, the combination of a conventional carbonator having a tank to receive water as it is carbonated and provided with a source of gas supply and a motor-operated pump for forcing water under pressure into said tank so as to commingle with and be thoroughly carbonated by the gas as it enters said tank, a storage tank to receive the thoroughly carbonated water from the carbonator and to store the same under pressure, a motor-operated pump for merely forcing the thoroughly carbonated water from the carbonator into said storage tank, means to automatically throw said pumps into operation when the carbonated water in the storage tank lowers below a predetermined level and to automatically throw said pumps out of operation when it rises to such level, and a valve-controlled outlet for drawing the carbonated water from the bottom of the storage tank.

1,898,509. SPACING DEVICE FOR CONTAINERS. SIGEL TAYLOR, Little Rock, Ark. Filed July 16, 1931. Serial No. 551,268. 2 Claims. (Cl. 229—6.)



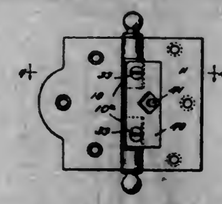
1. As a new product of manufacture, a spacing and ventilating device of the class described comprising a member of substantially inverted U-shape having a substantially flat bight for contacting a member which is to be spaced from another member, the extremities of the limbs of the U-shaped member being bent at substantially right angles and extending a relatively short distance to form feet and tongues punched from said feet for penetrating a part of said other member, after which the tongues are bent to fasten the feet to said other member.

1,898,510. QUICK SERVICE DEVICE. THOMAS H. THOMAS, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 14, 1929. Serial No. 346,952. 4 Claims. (Cl. 303—39.)



1. In a fluid pressure brake, the combination with a brake pipe, a brake cylinder and a reservoir, of a triple valve device, valve means included in the triple valve device, operative upon effecting a reduction in brake pipe pressure for supplying fluid under pressure to said brake cylinder and for venting fluid under pressure from said brake pipe to said reservoir and brake cylinder to effect a service application of the brakes and operative upon an increase in brake pipe pressure for connecting said brake cylinder and reservoir together and for venting both to the atmosphere to release the brakes.

1,898,511. HINGE DEVICE. MAGNUS TURNQUIST, Chicago, Ill. Filed Mar. 24, 1930. Serial No. 438,355. 1 Claim. (Cl. 16—140.)

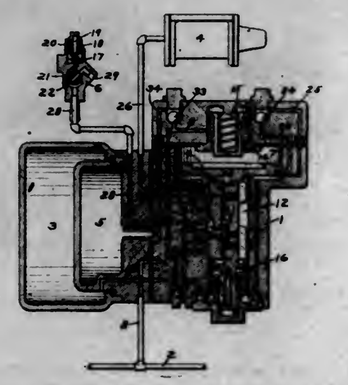


In a device of the character described including two hinge leaves and matched cylindrical portions, a pintle for operatively connecting the parts, and means for mounting a friction strip rigidly with respect to one leaf and arranged to adjustably oppose the swinging movement of the other leaf by being held against the exterior surface thereof.

1,898,512. PROCESS OF MANUFACTURING PHOTOGRAPHIC SILVER SALT EMULSIONS AND LIGHT-SENSITIVE MATERIAL. BRUNO WENDT, Dessau in Anhalt, Germany, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 5, 1928, Serial No. 244,782, and in Germany Jan. 7, 1927. 4 Claims. (Cl. 95—7.)

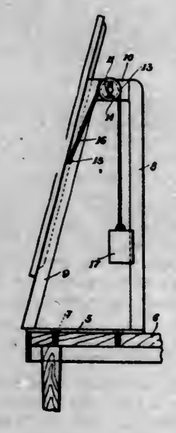
1. In the process of manufacturing photographic silver salt emulsions the step which comprises treating the protein serving as a carrier for the silver salt before incorporation of the latter with an agent sulfurizing the protein molecules.

1,898,513. QUICK SERVICE BRAKE DEVICE. UNCAS A. WHITAKER, Wilmerding, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 12, 1929. Serial No. 346,343. 2 Claims. (Cl. 303—39.)



1. In a fluid pressure brake, the combination with a brake pipe, a brake cylinder and a chamber, of a triple valve device, valve means included in the triple valve device having a release position in which said brake cylinder and chamber are connected together and to the atmosphere and operative to an application position in which fluid under pressure is locally vented from the brake pipe to said chamber and in which fluid under pressure is supplied to the brake cylinder to effect an application of the brakes, and a check valve preventing back flow of fluid under pressure from said chamber to the brake pipe.

1,898,514. DRAWING BOARD. FRANZ WALTER WILHELM, Chicago, Ill. Filed May 11, 1929. Serial No. 362,257. 5 Claims. (Cl. 45—131.)

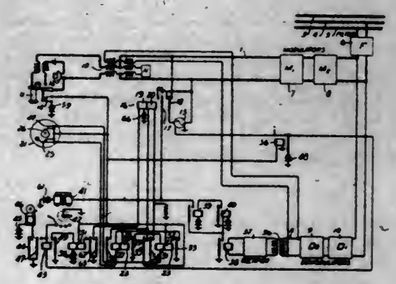


1. In combination, a desk or table having a working top surface, a drawing-board support attached to said desk or table, a drawing board mounted on said support for adjustable movement relative to said desk or table top at a fixed angle thereto from a position in which the bottom of said board is below said top to a position in which said bottom is sufficiently above said top to permit working on said desk, and means including a counterbalancing device for maintaining said board in adjusted position.

1,898,515. COLORED PLASTIC MATERIAL AND METHOD OF PRODUCING THE SAME. ANDREW ALBRIGHT, 31, Maplewood, N. J., assignor to Rubber & Celluloid Products Co., Newark, N. J., a Corporation of New Jersey. Filed Feb. 27, 1931. Serial No. 518,892. 5 Claims. (Cl. 18—48.8.)

5. A process for producing a variegated colored cellulosic plastic material from a plurality of cellulosic plastic masses of differing colors, comprising cutting said masses into small fragments, selecting the fragments of a certain color and placing the same in a mixer, adding a sufficient quantity of comparatively active solvent and mixing the fragments and solvent so as to cause the fragments to become quite soft, placing the remainder of the fragments in the mixer together with a quantity of somewhat weaker solvent and continuing the mixing until the solvents have been substantially absorbed by the fragments, transferring the combined mass of fragments to an air-tight container for aging, during which aging period the solvents penetrate deeper into the interior of the fragments, and then transferring the mass to an extruding machine and extruding the same under heat and pressure, during which extruding operation a differential flow of the several fragments takes place, the initially treated and softer fragments serving as a matrix for the subsequently treated harder fragments.

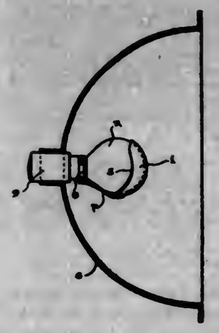
1,898,516. CALLING CIRCUIT. HENRY B. ARNOLD and LEIGHTON B. COOKE, New York, N. Y., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 17, 1930. Serial No. 445,077. 11 Claims. (Cl. 179—2.5.)



1. In combination, a power line having telephone signal stations connected thereto, an oscillator, a pulsing relay for controlling the connection of said oscillator to said line circuit, a dial switch having pulsing contacts initially in open or closed position upon start of the switch operation and off-normal contacts, an off-normal relay operated by said off-normal contacts when the dial switch starts operating with the pulsating contacts in open position, means for locking said off-normal relay under control of the receiver switchhook when operated by the off-normal contacts, and means controlled by the off-normal relay when energized for operating the pulsing relay according to the operation of said pulsing contacts.

1,898,517. AUTOMOBILE HEADLIGHT BULB CAP. FREDERICK C. ASTON, Pittsburgh, Pa. Filed Aug. 18, 1931. Serial No. 557,919. 2 Claims. (Cl. 240—48.6.)

1. An automobile headlight bulb cap consisting of a concavo-convex metallic reflecting shield constructed for co-operative arrangement with respect to and in front of a light bulb and means for holding said reflecting shield in operative position, which reflecting shield is in the shape of a segment of a spherical shell and has a wide top portion adapted to extend rearwardly over the bulb when in place but which terminates ahead of the transverse vertical plane through the lamp filament or central portion of the light bulb, the bottom portion of the reflecting shield being triangular and extending beneath the lamp filament or central portion of the light bulb and

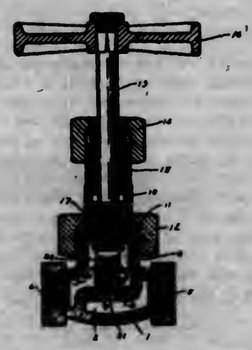


terminating at a point substantially beneath said central portion of said light bulb, the side edges of the reflecting shield being defined by substantially vertically extending planes which intersect each other approximately along a vertically extending line that passes through the lamp filament or center of the lamp.

1,898,518. COATING MATERIAL. FRANCIS CLARKE ATWOOD, Newton, Mass. Filed Oct. 25, 1928. Serial No. 315,104. 5 Claims. (Cl. 134—45.)

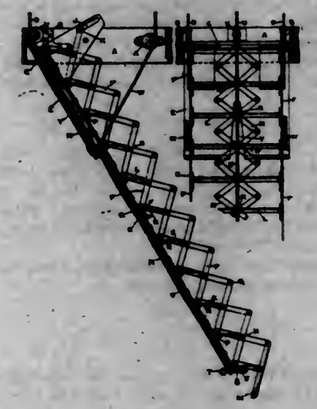
1. A coating composition of the character described comprising gum arabic and sodium silicate, the gum arabic being present in a major proportion.

1,898,519. DETACHABLE VALVE MEMBER. JEROME J. AULL, Cincinnati, Ohio, assignor to The Lunkenheimer Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 6, 1930. Serial No. 418,876. 9 Claims. (Cl. 251—46.)



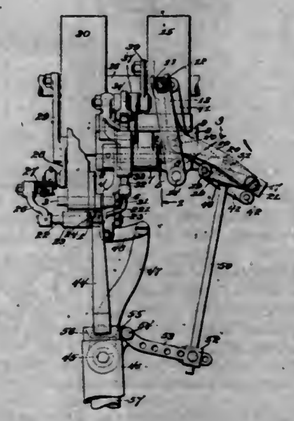
1. In a valve structure, a valve stem having a shouldered socket in one end, a valve member having a head thereon adapted to fit in said socket and rest upon said shoulder, and means cooperating with the stem to engage the head on its top and one side to hold said head on said shoulder and thereby detachably hold the valve member on said stem.

1,898,520. COLLAPSIBLE STAIRWAY OR THE LIKE. GEORGE HAROLD BARRACLOUGH, Shipley, near Bradford, England. Filed July 27, 1931, Serial No. 553,426, and in Great Britain June 4, 1931. 10 Claims. (Cl. 228—50.)



1. A collapsible stair of the class described having its back and sides formed of lazy-tong members, said back lazy-tong members extending between the side members, whereby to give stability to the stair, and steps connected to the lazy-tong members.

1,898,521. SHOE SEWING MACHINE. ARTHUR BATES, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 25, 1929, Serial No. 380,899, and in Great Britain July 27, 1928. 12 Claims. (Cl. 112—47.)



1. A shoe sewing machine for sewing an unlasted shoe having, in combination, stitch forming and work feeding devices including a curved hook needle, a shoe entering horn over which the shoe is moved in forming a seam around the shoe, a member for holding the upper against the sole, a feed member, and means for actuating these parts to impart a continuous feeding movement to the work.

1,898,522. POLYMERIZATION PRODUCT OF BUTADIENE-1.3 HYDROCARBONS AND PROCESS OF MAKING SAME. WALTER BOCK and EDUARD TSCHUNKUR, Cologne-Mulheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 5, 1931, Serial No. 506,833, and in Germany Jan. 15, 1930. 18 Claims. (Cl. 260—6.)

1. Process which comprises polymerizing a hydrocarbon of the butadiene series in emulsion with water and an agent possessing emulsifying properties, in the presence of a chlorinated aliphatic compound containing at least two chlorine atoms attached to one and the same carbon atom.

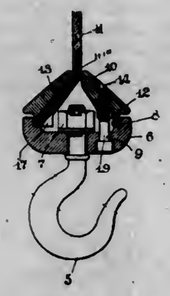
1,898,523. TRIARYLMETHANE DYES. OTTO BÖGER, Dessau in Anhalt, and WERNER MÜLLER, Leipzig, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 6, 1931, Serial No. 514,057, and in Germany Feb. 14, 1930. 9 Claims. (Cl. 260—67.)

1. Triarylmethane dyes containing in their molecule a basic group of the general formula



X meaning hydroxyalkyl, sulfonated hydroxyalkyl, Y meaning alkyl containing at least 3 carbon atoms.

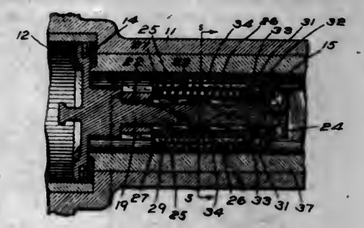
1,898,524. HOOK BLOCK FOR HOISTS. ALFRED COTESWORTH, Kenmore, and ERFORD E. ROBINS, Tonawanda, N. Y., assignors to Columbus McKinnon Chain Corporation, Tonawanda, N. Y., a Corporation of New York. Filed Nov. 4, 1931. Serial No. 573,026. 3 Claims. (Cl. 24—125.)



3. A line hook block for a hoist, said block including a substantially circular body member to the center of which a hook is connected, said body member provided with an annular seat for the coiled end of a cable and a conoidal cover member having a central opening for the passage of the cable and a cable restraining lug, and said cover member adapted to fit above said body member, and means for securing said cover member to the body member and confine a coil of cable therein.

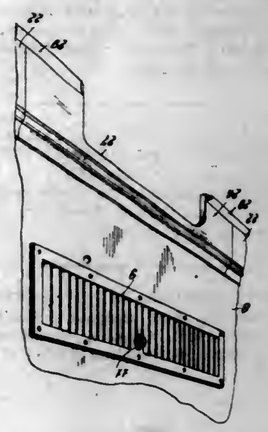
1,898,525. SPRING MECHANISM FOR FLUID PRESSURE BRAKES. SIDNEY G. DOWN, Edgewood, and CLYDE C. FARMER, Pittsburgh, Pa., assignors to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 31, 1932. Serial No. 602,174. 4 Claims. (Cl. 303—38.)

1. In a triple valve device, the combination with a piston having a stem, a main valve and a graduating valve operated by the stem and cooperating with said main valve, of a yielding resistance device carried by the main valve and comprising a plunger slidably mounted on the main valve and yieldingly biased in a direction of movement of the stem, the said plunger being adapted to be moved in the opposite direction by the stem and



into positive engagement with the main valve after the plunger has been moved a predetermined distance by the stem.

1,898,526. REMOVABLE BASEBOARD FOR CONCEALED RADIATORS. LAWRENCE P. DWYER, Winnetka, Ill., assignor to C. A. Dunham Company, Marshalltown, Iowa, a Corporation of Iowa. Filed June 12, 1931. Serial No. 543,873. 20 Claims. (Cl. 20—74.)

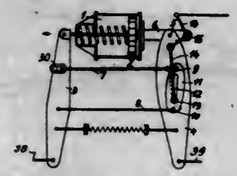


1. In combination with a concealed radiator assembly comprising a casing positioned within a wall recess there being an inlet opening leading to the recess through the inner wall sheathing of the room adjacent the floor, and a radiator mounted within the casing, a removable baseboard section forming a portion of the continuous baseboard of the room, said removable section covering the inlet opening and formed with a smaller opening for permitting air to enter the casing, and concealed means engaged with the rear of the baseboard section for holding the baseboard section in position over the inlet opening, said means being accessible through the opening in the removable section.

1,898,527. PRODUCTION OF HYDROGEN AND GAS MIXTURES CONTAINING THE SAME. OTTO EISENHUT, Heidelberg, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 9, 1927, Serial No. 239,004, and in Germany Dec. 14, 1926. 6 Claims. (Cl. 23—7.)

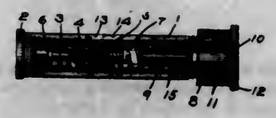
1. A process for producing gases containing hydrogen, which comprises exposing a mixture of carbonaceous material containing hydrogen with a gas capable of reacting with carbon with the exclusive formation of carbon oxides to the action of an electric arc, converting the carbon monoxid so formed with the aid of steam into carbon dioxid and hydrogen, and removing the carbon dioxid.

1,898,528. APPARATUS FOR VARYING THE LEVERAGE OF THE LINK AND LEVER GEARING OF VEHICLE BRAKES. ROBERT ENGELS and JOHANN RIHOSEK, Vienna, Austria. Filed Feb. 26, 1931, Serial No. 518,572, and in Austria Mar. 7, 1930. 7 Claims. (Cl. 188—195.)



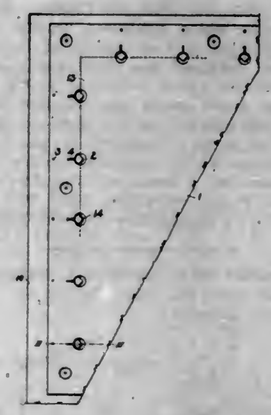
1. An apparatus for varying the leverage of the link and lever gearing of vehicle brakes comprising a source of power including two parts movable relatively to each other substantially rectilinearly, two brake levers, one being pivotally connected at one end to one part of the said source of power and the other being pivotally connected at one end to the other part of the said source of power, a pair of brake actuating link and lever gearings, each of the said brake levers being pivotally connected at their other ends, the one to one half and the other to the other half of the said pair of brake actuating link and lever gearings and adapted to move the said two halves in opposite directions, a link parallelogram connecting the said two brake levers with each other between their ends one side of the said link parallelogram being formed by part of one of the brake levers, a pivot pin connecting the opposite side of the said link parallelogram to the other of the said brake levers, and means for shifting the said pivot pin relatively to the ends of the lever with which it is associated.

1,898,529. SPRING TESTER. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 1, 1929. Serial No. 367,792. 2 Claims. (Cl. 73—51.)



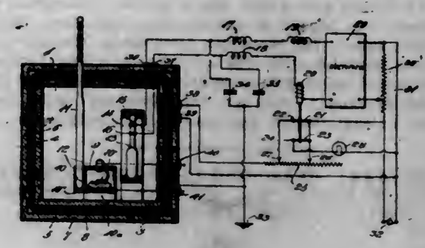
2. A spring testing device comprising a barrel having a chamber adapted to receive the spring to be tested, a calibrated spring mounted in said barrel, an indicating element mounted in said barrel and engaging one end of said calibrated spring, and means mounted in said barrel for applying pressure to compress both springs, the spring to be tested being disposed between said indicating element and said means, the barrel having an indicating mark so positioned that when the compressive value of the spring to be tested is equal to the compressive value of the calibrated spring, the indicating element will register with said indicating mark.

1,898,530. SHEET GAUGE. JAMES FLOCKHART, San Francisco, Calif., assignor to The Flockhart Co., San Francisco, Calif., a Corporation of California. Filed Mar. 17, 1930, Serial No. 436,502. Renewed May 24, 1932. 5 Claims. (Cl. 101—415.)



1. A sheet gauge comprising a plate having therein a throat and a socket joined by a slot, a guide movable in said throat and mounted upon a spring stem extending into said slot and engaging said socket.

1,898,531. TEMPERATURE CONTROL SYSTEM. LOUIS A. GEBHARD and RAYMOND B. MEYER, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 12, 1929. Serial No. 346,481. 3 Claims. (Cl. 219—20.)



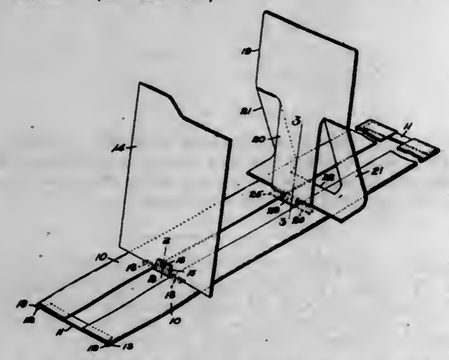
1. In a temperature control system, a constant temperature cabinet, a thermostat element mounted in said cabinet and provided with contact members adapted to open and close an electric circuit according to the temperature in said cabinet, a source of alternating current, a rectifier having its input terminals connected to said source of alternating current, a relay, the actuating winding of said relay being connected in series between the output terminals of said rectifier and the contact members of said thermostat element, an electric heating element mounted in said cabinet, a tapped variable resistor having two variable taps and having one terminal connected to one terminal of said heating element, the other terminal of said heating element being connected to one terminal of said source of alternating current, one tap of said resistor being connected to one contact of said relay and the other terminal of said source, and the other contact of said relay being connected to the other tap of said variable resistor.

1,898,532. PROCESS OF PREPARING BORON TRIFLUORIDE. MAX HARDTMANN, Wiesdorf-on-the-Rhine, WILHELM SCHEPSS, Leverkusen-on-the-Rhine, and ERNST TIETZE, Cologne-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 17, 1929, Serial No. 371,712, and in Germany June 22, 1928. 12 Claims. (Cl. 23—88.)

1. The process which comprises heating about equimolecular quantities of a compound of the group consisting of boric acid and the alkali metal and alkaline earth metal borates and a compound of the group consisting of the alkali metal and alkaline earth metal fluorides in concentrated sulfuric acid, in the presence of a dehydrating agent at temperatures above 100° C.

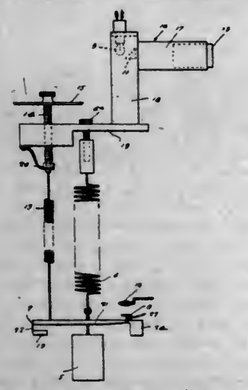
12. The process which comprises heating about equimolecular quantities of boric acid and fluorspar in concentrated sulfuric acid containing about 20% of sulfuric acid anhydride to a temperature of about 150°–200° C.

1,898,533. PAPER FILE. STANLEY R. HARRIMAN, Salem, Mass. Filed Mar. 12, 1931. Serial No. 521,927. 2 Claims. (Cl. 129—31.)



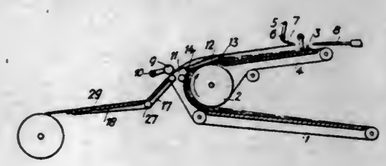
1. In a filing device, the combination of a horizontal guide provided with a slot, and a follower comprising an abutment for papers, a downwardly extending tongue provided with a tab extending downwardly through said slot and provided with two laterally extending portions beneath said guide, two arms extending downwardly and rearwardly, and a cross-bar connecting said arms rearwardly of said tongue and resting upon said guide.

1,898,534. MEASURING INSTRUMENT. KENNETH HARTLEY, Houston, Tex. Filed Oct. 3, 1931. Serial No. 566,773. 4 Claims. (Cl. 265—1.)



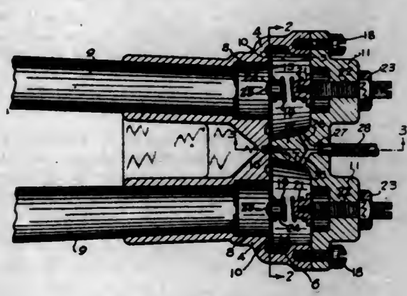
1. A measuring instrument of the character described comprising a pivoted beam, said pivoted beam including a weight, a supporting spring for the weight, a weighing spring for the beam, a light source, and a pair of mirrors on the beam with which the light source is focused, a reflecting medium, and an observation scope associated with the reflecting medium.

1,898,535. METHOD OF AND MEANS FOR FEEDING PAPER SHEETS. ARNO HAUPT, HEINRICH GÜMBEL, and JULIUS GIESECKE, Leipzig, Germany. Filed Jan. 30, 1930, Serial No. 424,647, and in Germany Mar. 9, 1929. 5 Claims. (Cl. 271—12.)



1. A method of feeding paper sheets from a pile to a printing machine, consisting in lifting the sheets by suction from the pile at the rear edge, carrying each sheet forwards horizontally under the preceding sheet into contact with the feeding elements to form a thin continuous layer of overlapping sheets, advancing said layer, at each operation of the machine, through part only of the distance between the machine and the feeding device, and adding one sheet to the layer for each sheet taken away therefrom by the printing machine.

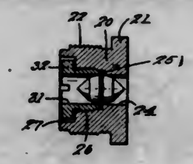
1,898,536. SOUNDING HORN. ELLIS E. HEWITT, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1932. Serial No. 589,633. 11 Claims. (Cl. 116—142.)



1. In a sound producing device, the combination with a pair of adjacently disposed vibrating discs and means for causing vibration of the discs by variations in fluid pressure acting thereon, of an integral connecting member extending between adjacent edge portions of the discs for supporting the respective discs at single points adjacent their periphery and permitting vibration of the said discs.

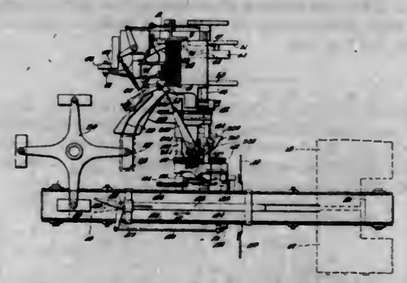
1,898,537. RESTRICTED ORIFICE DEVICE. CLIFTON P. HOWARD, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 16, 1931. Serial No. 575,357. 2 Claims. (Cl. 169—17.)

1. A device for effecting very slow air flow between chambers containing air at substantially different pressures which comprises a holder having an axial opening therethrough, a pair of orifice members reversely mounted within said holder and in said opening and each having an outwardly extended and substantially conical portion



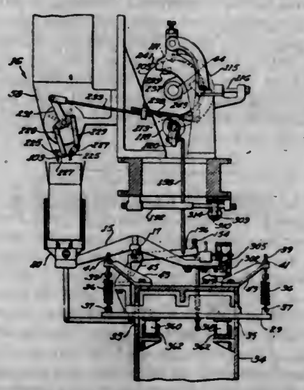
with a greatly restricted perforation through its extreme outer pointed end, and means to hold said members reversely mounted in said holder.

1,898,538. PACKAGING MACHINE. STANLEY R. HOWARD, East Milton, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed June 14, 1927. Serial No. 198,741. 11 Claims. (Cl. 192—125.)



2. In a packaging machine, in combination, article feeding means, means for discharging the articles from the machine in a plurality of paths, and control mechanism rendered operative upon the development of an abnormal condition in the discharge of the articles through one path, for rendering the said article feeding means inoperative to feed those articles which would be discharged through said path while permitting the feeding of articles through the remaining paths.

1,898,539. WEIGHING MACHINE. STANLEY R. HOWARD, Milton, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed May 31, 1930. Serial No. 458,240. 4 Claims. (Cl. 299—4.)

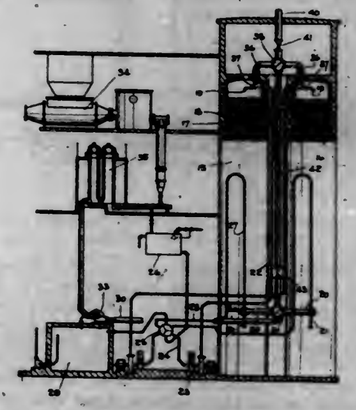


1. In a weighing machine, in combination, a frame, material delivery means mounted thereon, a scale beam, a supporting member separate from the frame and movable with relation thereto upon which the scale beam is mounted, a spring connection between the supporting member and the frame, and means for stabilizing the movements of the supporting member to prevent oscillation thereof.

1,898,540. COATING COMPOSITION. JAMES EDWIN HUTCHMAN, Newburgh, N. Y., assignor to L. E. Carpenter & Co., Inc., Newark, N. J., a Corporation of New Jersey. Filed May 13, 1931. Serial No. 537,207. 2 Claims. (Cl. 134—79.)

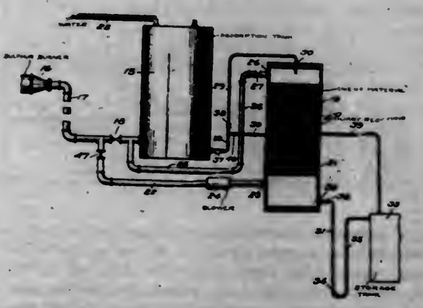
1. A coating composition for the purposes described comprising substantially equal parts of boiled linseed oil, and pyroxylin, a solvent mixture and gluten.

1,898,541. MEANS FOR PRODUCING ACID LIQUOR. JACOB DARRE JENSSEN, New York, N. Y., assignor to G. D. Jenssen Company, New York, N. Y. Filed June 17, 1929. Serial No. 371,485. 3 Claims. (Cl. 23—262.)



3. In means for producing acid liquor, a tower having a liquid inlet at the upper end and a gas inlet and liquor outlet at the lower end, a sulphur burner having connections therefrom directed to said gas inlet, and a riser tube extending upwardly from said liquor outlet to a predetermined distance and downwardly to the discharge.

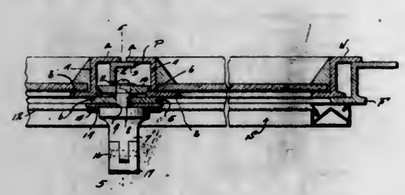
1,898,542. MANUFACTURE OF SULPHITE ACID LIQUOR. JACOB DARRE JENSSEN, New York, N. Y., assignor to G. D. Jenssen Company, New York, N. Y. Filed July 7, 1930. Serial No. 466,175. 1 Claim. (Cl. 23—261.)



In the manufacture of acid liquor, a main line gas feed pipe leading from a source of supply of SO_2 gas, a primary receptacle towards its lower end connected to said gas pipe

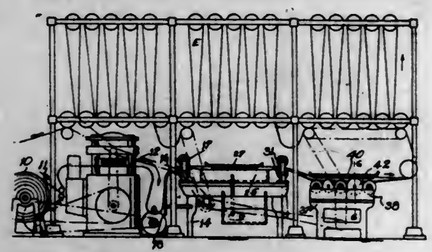
and at its upper end to a water supply and containing a lime element, an auxiliary receptacle connected at the upper end to the lower end of the aforesaid receptacle and containing acid resisting inert material in irregular pieces, a supplementary feed pipe tapping the main gas feed pipe and communicating with the lower portion of said auxiliary receptacle below said inert material and a pressure blower introduced therein, a gas exhaust pipe connecting the upper end portion of the auxiliary receptacle with the main feed pipe adjacent to the primary receptacle, a storage receptacle, a discharge pipe having a trap portion and connecting the lower end of the auxiliary receptacle to said storage tank, a discharge pipe from the liquid outlet of the primary receptacle to said storage tank and valves introduced in all of said pipes and connections for adjusting and regulating the flows.

1,898,543. CASEMENT WINDOW. THEODORE JOHNSON, Erie, Pa., assignor to Johnson Metal Products Co., Erie, Pa. Original application filed Feb. 11, 1928, Serial No. 253,744. Divided and this application filed July 28, 1928, Serial No. 296,014. Renewed Sept. 1, 1931. 3 Claims. (Cl. 292—241.)



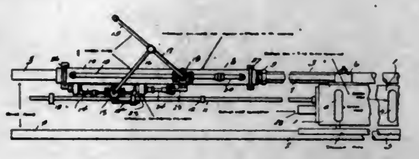
1. A latching means adapted for use with a frame and swinging members comprising an approximately semi-circular disc rotatably supported by the frame between the swinging members, said disc having one side portion substantially straight, said disc when in one position engaging the swinging members when closed to hold the same in said closed position, said disc when in a second position holding one of the members closed and permitting the other to be opened and when in a third position holding the last named member closed and permitting the first named member to swing open.

1,898,544. DEVICE FOR MANUFACTURING CARDBOARD STRIP MATCHES IN BOOK-FORM. FELIX KÄPPLER, Dresden, Germany. Filed Apr. 2, 1931, Serial No. 527,301, and in Germany Apr. 8, 1930. 4 Claims. Cl. 144—51.)



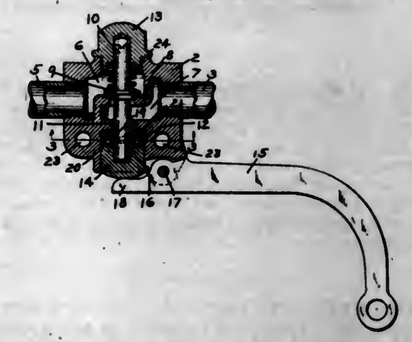
1. A device for paraffining strip matches comprising, in combination with a paraffining bath and guide rollers for moving the match strip over the bath, of a circular knife for scoring the strip longitudinally between the match splint rows, a supporting plate placed edgewise in said bath, and a guide element arranged over said plate and operative to bend the strip over the plate edge for dipping the match splint ends into the bath.

1,898,545. AUTOMATIC FELT WASHER FOR PAPER MACHINES. JOSEPH D. KASTER, Salem, Oreg., assignor to Oregon Pulp and Paper Company, Salem, Oreg. Filed June 30, 1931. Serial No. 547,966. 3 Claims. (Cl. 92—50.)



1. In combination with a paper making machine of the type having a continuous, moving felt carrying the wet paper stock, a washer for the felt comprising a suction box located beneath and in contact with the felt and having spray means in conjunction therewith, a hydraulic piston assembly, the pistoin rod of which is connected with the suction box to move the same beneath the felt, and hydraulic reversing mechanism for the piston assembly and actuated by movement of the suction box for controlling said piston assembly to give a reciprocating motion to the suction box.

1,898,546. SIGNAL CONTROLLING DEVICE. CECIL S. KELLEY, East McKeesport, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 8, 1931. Serial No. 535,901. 1 Claim. (Cl. 116—137.)



The combination with a pneumatically operated signal device and a source of fluid under pressure, of a manually operated valve device comprising a casing, a valve in said casing for controlling the supply of fluid under pressure from said source to said signal device, a pipe through which said valve supplies fluid to said signal device, a stem carried by said valve, a thimble mounted on said stem and controlling a vent from said pipe, and a lever for operating said thimble to unseat said valve and close the vent from said pipe.

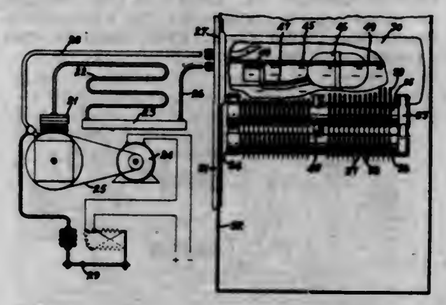
1,898,547. SLIDER FOR FASTENERS. MAX KIESSLING and ADOLPH J. KRIEGER, Waterbury, Conn., assignors to G. E. Prentice Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Dec. 17, 1929. Serial No. 414,668. 9 Claims. (Cl. 24—205.)

5. A slider for fasteners of the kind having stringers carrying series of interengaging fastener elements, said slide comprising front and rear wings, the front wing having an opening therethrough and an elongate guide loop extending longitudinally of the slider and spaced from the front wing, a friction member having a shoe portion extending through the opening in the wing for engagement with the fastener elements, and a pull movable along said guide loop, said pull having an offset part provided with spaced cam fingers engageable with the friction member for pressing the shoe portion of the latter against the fastener elements when the pull is in depending position,



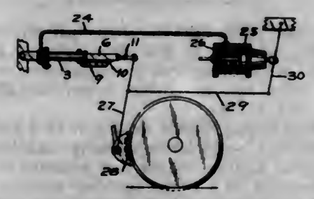
said cam fingers straddling the guide loop when the pull is positioned for use in moving the slider for closing the fastener whereby to avoid the application of locking pressure during such movement of the slider.

1,898,548. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 30, 1930. Serial No. 505,577. 9 Claims. (Cl. 62—126.)



1. An evaporator for refrigerating apparatus including a supply reservoir adapted to contain liquid refrigerant and a blanket of lubricant floating upon the liquid refrigerant, a refrigerant duct below the supply reservoir, means including a header connecting said refrigerant duct and said supply reservoir for concentrating the flow of gaseous refrigerant from the refrigerant duct to the supply reservoir for breaking the blanket of lubricant, and restricting means in the outlet of said header for increasing the velocity of the gaseous refrigerant discharged from the header.

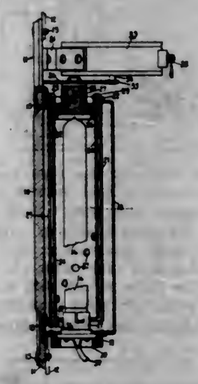
1,898,549. SLACK ADJUSTER. LOUIS J. LE CLAIR and ALOYSIUS G. BRACKENBURY, King's Cross, London, England, assignors to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 25, 1931, Serial No. 546,690, and in Great Britain Sept. 17, 1930. 1 Claim. (Cl. 188—202.)



The combination with a slack adjusting mechanism for taking up the slack in the brake rigging and including a casing, a brake rod, a member connected to said brake rod and operated by said slack adjuster to take up slack,

an arm pivotally mounted on said casing, and a link operatively connecting said member with said arm, to thereby move said arm so that the position of the arm indicates the extent to which the slack adjuster has operated to take up slack.

1,898,550. POSITION INDICATOR. WILLIAM BATES LUCAS, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 31, 1928. Serial No. 329,414. 9 Claims. (Cl. 177—336.)



1. A car position indicator for an elevator car comprising, a movable member having a plurality of indicating means corresponding to the various floors positioned thereon, means having a slot for displaying said indicating means, said indicating means being positioned on said member along a line at an angle oblique to said slot so as to be displayed individually and successively through said slot upon movement of said member, and means for causing movement of said member.

1,898,551. ELECTRIC MOTOR-DRIVEN ROLL. ALEXANDER M. MACCUTCHEON, Shaker Heights, Ohio, assignor to The Reliance Electric & Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 5, 1932. Serial No. 591,188. 3 Claims. (Cl. 198—127.)

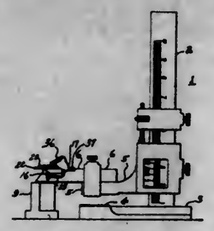


3. A device of the character described, comprising a roller, a driving motor therewithin, said motor including a stator and a rotor and a shaft connected to the roller, bearings in the motor for said shaft, bores extending from the ends of the shaft to the bearings, and a support for the motor projecting through a transverse interruption in the roller.

1,898,552. INDICATING GAUGE. JOHN MACLAREN, Hillside, N. J. Filed June 28, 1931. Serial No. 546,189. 2 Claims. (Cl. 33—172.)

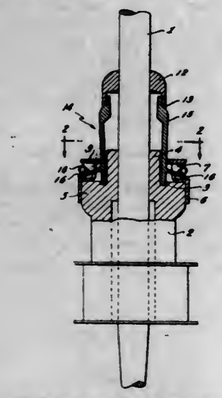
2. In combination, a supporting jaw extension having a recess therein and an indicating gauge carried by said jaw extension, said indicating gauge comprising a plunger movable within the recess of said jaw extension, said plunger having a contact point on the outer end thereof adapted to project exteriorly of said jaw extension, a stop projection provided on said plunger for limiting the outward movement of said contact point, a pointer pivotally

mounted on said jaw extension, said pointer having a boss on the side thereof, a link connected to said pointer, a lever pivotally mounted on said jaw extension and interconnecting said link with said plunger whereby movements of said plunger will cause amplified movements of said pointer, a sector plate having graduations thereon underlying said pointer, spring means carried by said jaw extension and engaging the boss on said pointer for urging the latter toward one side edge of said sector



plate, said sector plate having stop means thereon for limiting the movement of said pointer under the action of said spring means, said sector plate being angularly adjustable about the pivotal axis of said pointer, spring pressed friction means surrounding the pivotal axis of said pointer and engaging said sector plate for frictionally retaining said sector plate in adjusted position, and stops provided on said sector plate for engaging said jaw member to limit the angular adjustment of said sector plate.

1,898,553. BOBBIN CLUTCH. GEORGE H. MAGRATH, Whitinsville, Mass. Filed July 29, 1932. Serial No. 625,972. 9 Claims. (Cl. 242—46.8.)

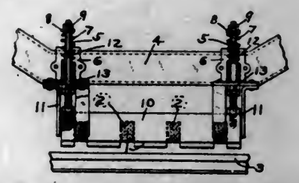


1. A bobbin clutch comprising a blade, a whirl secured to the blade, a cap fitting about the whirl, said cap having a plurality of spaced openings, bobbin contact means circumposed about said blade and fulcrumed to rock radially thereof, said contact means having offset portions projecting outwardly through the openings in said cap, and means circumposed about said cap for yieldingly engaging said offset portions to move said contact means outwardly from said blade.

1,898,554. AGENT FOR EXTERMINATING ANIMAL OR VEGETABLE PESTS. KARL MARX and KARL BRODERSEN, Dessau in Anhalt, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 21, 1928, Serial No. 327,741, and in Germany Feb. 24, 1927. 7 Claims. (Cl. 167—22.)

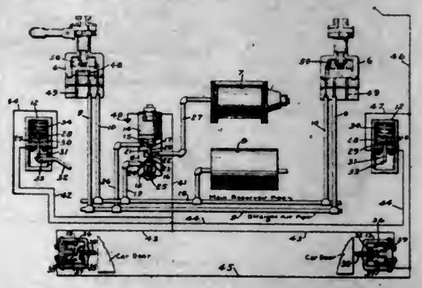
1. An insecticide consisting essentially of a water-soluble sulfonation product of a hydrocarbon fraction of brown coal tar oil.

1,898,555. TRACTION INCREASING DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 5, 1929. Serial No. 337,623. 6 Claims. (Cl. 105—77.)



1. In a traction increasing apparatus for rail vehicles, the combination with an electromagnet, of a member carried by the vehicle, rods secured to said magnet, brackets secured to said member in which said rods are slidably mounted, springs for yieldingly maintaining said magnet supported above the rail, and means for maintaining said springs under initial compression.

1,898,556. ELECTROPNEUMATIC BRAKE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 22, 1930. Serial No. 438,140. 5 Claims. (Cl. 303—6.1.)

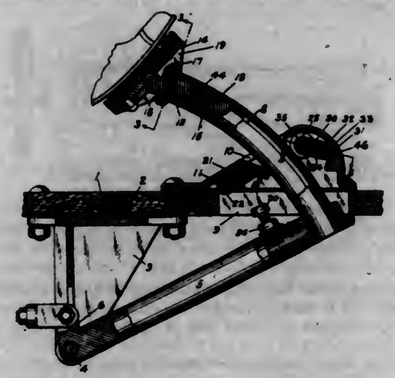


1. In a fluid pressure brake, the combination with a straight air pipe, brake cylinder, main reservoir and brake valve for controlling the supply of fluid from the main reservoir to the brake cylinder, of a valve device adapted in one position to provide a communication through which the brake cylinder is connected with the brake valve, and in another position to provide a communication through which the brake cylinder is connected to the main reservoir, an electromagnet for actuating said valve device, and a plurality of switch devices for controlling the operation of said magnet, one of said switch devices being operated upon the movement of a car door to open position for closing a circuit through which said magnet is energized and another of said switch devices being operated when manually released, to close the circuit through which said magnet is energized.

1,898,557. CONTROL PEDAL. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 22, 1930. Serial No. 454,550. 7 Claims. (Cl. 74—81.)

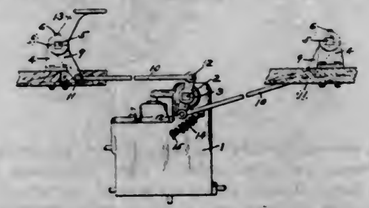
1. The combination with a fixed part of a vehicle, of a brake controlling pedal lever normally maintained in a brake releasing position by the foot pressure of an operator and movable to a brake applying position upon an increase in the operator's foot pressure and further movable to another brake applying position upon the entire relief of the operator's foot pressure, a member pivotally carried by said pedal lever through which the operator's foot pressure is transmitted to the pedal lever and which

is rotatable relative to said pedal lever into engagement with the fixed part of the vehicle when the pedal lever is in its first mentioned brake applying position for holding the pedal lever against movement toward its other



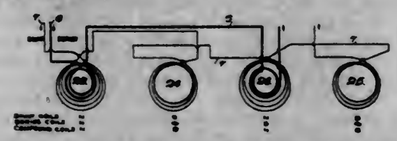
positions upon the relief of the operator's foot pressure, and means rotatably mounted in said fixed part of the vehicle for locking said member in its pedal lever holding position.

1,898,558. SAFETY CAR EQUIPMENT. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 30, 1930. Serial No. 464,803. 1 Claim. (Cl. 188—107.)



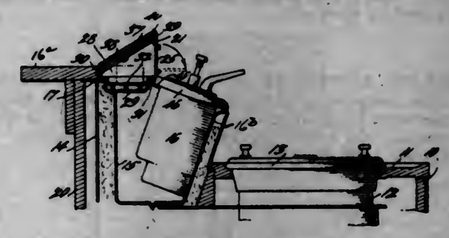
The combination with a brake valve device for controlling the brakes on a car, of a double ended lever for operating said device, rods connected to the opposite ends of said lever and extending to the opposite ends of the car, and operating mechanism at each end of the car comprising a bracket, a shaft mounted in said bracket, a lever carried by said shaft and operatively connected to each rod, and a pedal lever mounted on said shaft.

1,898,559. ELECTRICAL APPARATUS. CHARLES I. MCNEIL, Bloomfield, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Mar. 8, 1929. Serial No. 345,533. 10 Claims. (Cl. 171—313.)



1. In apparatus of the class described, the combination of a battery, a charging generator in circuit with said battery and having series and shunt field windings, a cut-out switch in said circuit adapted to open when the generator voltage falls below the battery voltage, and means responsive upon failure of the cut-out switch to open for preventing reversal of the magnetism of one of the poles of said generator due to reversal of current through said series winding comprising differentially wound and connected series and shunt field windings on one of said poles so connected that the differential series field flux is normally less than the shunt field flux during the entire battery charging period.

1,898,560. SODA WATER FOUNTAIN. STEPHEN MEZZAPESA, Brooklyn, N. Y. Filed Oct. 7, 1931. Serial No. 567,494. 10 Claims. (Cl. 62—89.5.)



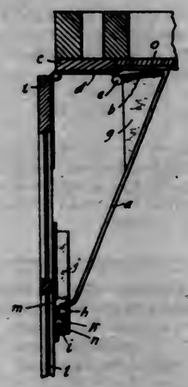
1. A soda water fountain having a foundation and a lining, the lining terminating below the top of the fountain, a refrigerating instrumentality occupying the space above the lining, a counter slab supported at the outer side of the fountain, and a display cabinet at the inner edge of the counter slab above the refrigerating instrumentality cooled thereby.

1,898,561. METHOD OF PRODUCING POTTERY WARE AND MOLDS FOR USE THEREWITH. WILLIAM J. MILLER, Swissvale, Pa. Filed Oct. 17, 1929. Serial No. 400,349. 11 Claims. (Cl. 25—129.)



1. In the manufacture of pottery ware, a system of production which consists in shaping the ware on porous molds having a cross-section limited to a thickness which will permit the molds to dry substantially simultaneously with the ware, temporarily reinforcing the molds during shaping and like fabricating operations to prevent breakage of the molds, advancing the molds and ware through a drier, and supporting the molds when placed in the dryer in such a manner that the under or outer surfaces of the molds are exposed to the drying atmosphere, to thereby reduce the cost of mold production and increase the drying efficiency of the molds and production of ware.

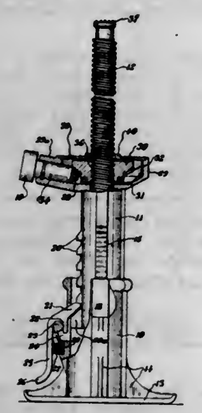
1,898,562. DOOR HOLDING DEVICE. ALBERT E. MOSE, Portland, Oreg. Filed Jan. 21, 1931. Serial No. 510,129. 2 Claims. (Cl. 292—272.)



1. A door holder comprising an arm of substantial length adapted to be secured at one end to a door frame,

said arm including an angular portion adapted to bear against the door frame when the door is in open position, a keeper adapted to be secured to the door for engagement by the free end of said arm, said keeper comprising an elongate body having a longitudinal slot, a spring-latch secured on the interior of said slot, the free end of said arm sliding in said slot and provided with means adapted to prevent said free end from leaving said slot and further adapted to engage with said latch when brought into contact therewith.

1,898,563. LIFTING JACK. JOHN A. MORRISON, Warren, Ohio, assignor, by mesne assignments, to Walker Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 18, 1929. Serial No. 340,930. 2 Claims. (Cl. 254—98.)



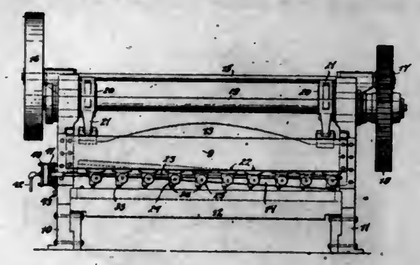
1. A lifting jack including a standard, a tubular member movable longitudinally within the standard, a lifting screw carried by the tubular member, a rack-engaging pinion mounted upon the standard, ratchet teeth upon the tubular member peripherally spaced from said rack teeth, a bifurcated pawl pivotally mounted on the standard and engaging the ratchet teeth to hold the tubular member in adjusted position, and an enlarged tooth upon the bottom of the tubular member below said ratchet teeth for coacting with said pawl to limit the upward movement of said tubular member.

1,898,564. HYDRAULIC BRAKE FLUID. EDUARD MUENCH and FRITZ NICOLAI, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 1, 1929, Serial No. 404,203, and in Germany Nov. 14, 1928. 12 Claims. (Cl. 252—5.)

1. As a composition of matter, a liquid, water-soluble preparation suitable for hydraulic machinery comprising a water-soluble glycol and a water-soluble sulphuric derivative of an organic compound containing at least six carbon atoms in its molecule.

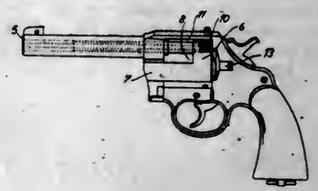
1,898,565. HOLDDOWN FOR PUNCH PRESSES, SHEARS, OR THE LIKE. FREDERICK E. MUNSCHAUER, Buffalo, N. Y., assignor to Niagara Machine & Tool Works, Buffalo, N. Y., a Corporation of New York. Filed Apr. 18, 1932. Serial No. 605,983. 10 Claims. (Cl. 164—51.)

1. A holddown mechanism for shears or the like, comprising a plurality of holddown feet movably mounted on the shear frame for movement toward and from the bed thereof, a movable bar arranged adjacent said feet, means



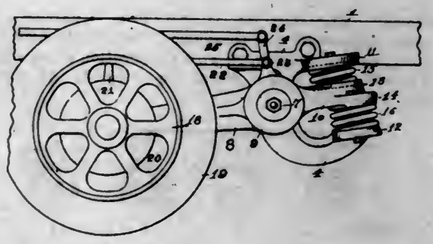
for moving said bar and means operatively connecting said bar and holddown feet for simultaneously moving each of said feet into and out of operative position.

1,898,566. DEVICE FOR APPLYING SUBCALIBER BARRELS TO REVOLVERS OF THE SOLID-FRAME SWING-OUT CYLINDER TYPE. ALBERT NOEL, Barcelona, Spain. Filed Jan. 26, 1932, Serial No. 588,901, and in Spain Dec. 16, 1931. 7 Claims. (Cl. 42—77.)



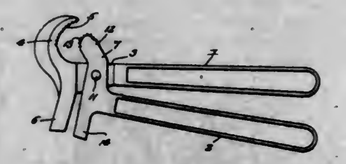
1. A sub-caliber barrel attachment for revolvers of the solid-frame, swing-out-cylinder type, comprising a sub-caliber barrel slidably fitting the bore of the revolver barrel and adapted for introduction therein from the muzzle end, and a swinging retaining block fixedly to engage with the rear end of the sub-caliber barrel and to occupy the revolver cylinder space in the absence of the cylinder.

1,898,567. VEHICLE. CLARA B. O'CONNOR, San Francisco, Calif. Filed June 20, 1930. Serial No. 462,592. 3 Claims. (Cl. 280—124.)



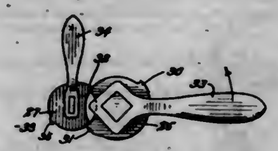
1. A vehicle having a main frame; a plurality of pivots on said frame; arms pivoted intermediate their lengths on said pivots; wheels mounted on one of the ends of said arms; opposed spring seats on the opposite ends of said arms, one of said seats being closer to said pivotal center; brackets on said frame having spring seats in opposed relation to said spring seats on said arms, respectively; and springs interposed between said spring seats.

1,898,568. TOOL. FREDERICK F. PAZZANO, Waltham, Mass. Filed Dec. 29, 1930. Serial No. 505,436. 1 Claim. (Cl. 7—3.)



A combination tool comprising in combination a pair of pivotally mounted levers, provided at their corresponding ends with cooperating work spreading fingers, one of said handle members having a transverse slot and the other of said handle members having a lateral projection operable within the slot, and terminating at its free end in a portion inclined to the axes of the handle members and provided with a convex toothed work engaging face, and said first-mentioned handle member adjacent the slot provided with a lateral projection having a concave toothed work engaging face confronting the work engaging face of said inclined portion, and said work spreading fingers confronting one another and adapted to engage one with the other when the handle members are spread apart to thereby limit relative swinging movement of the handle members.

1,898,569. INTERLOCKING VALVE CONSTRUCTION. CARL A. PEARSON, Denver, Colo. Filed Sept. 21, 1931. Serial No. 563,995. 3 Claims. (Cl. 277—1.)

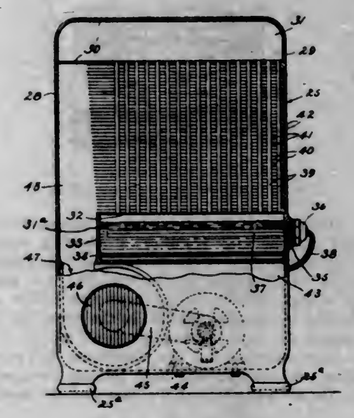


1. An interlocking disc construction for the stems of two associated valves comprising: a disc on each valve stem, said disc lying in a common plane and each provided with an arcuate notch for receiving the periphery of the other disc, a portion of each disc being eccentric so that one side of each notch will extend further from the axis of the disc than the other side thereof so as to stop the rotation of each disc when its notch is in proper position to receive the periphery of the other disc; and a projection on each disc positioned radially opposite to the further extending side of each notch so as to limit the movement of the periphery of each disc in the notch of the other disc.

1,898,570. PROCESS OF PREPARING RESERVES UNDER DYESTUFFS OBTAINABLE BY OXIDATION ON THE FIBER. ERNST PFEIFFER, Frankfort-on-the-Main-Schwanheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 7, 1929, Serial No. 361,261, and in Germany May 15, 1928. 9 Claims. (Cl. 8—5.)

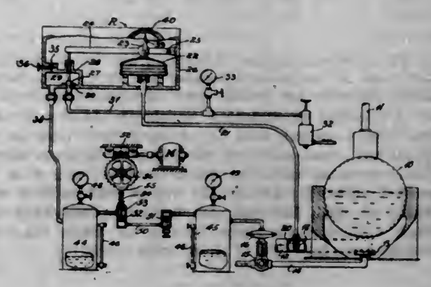
1. The process of producing reserves on aniline black grounds, which comprises applying as a printing reserve a composition comprising a vat dyestuff, a resist of the class consisting of sodium bisulfite, sodium acetate and zinc-oxide and a thickening agent capable of being precipitated by an alkali, developing the aniline black on the non-reserved ground by shortly steaming the material, and thereupon fixing the vat dyestuff on the reserved parts by treating the material in an alkaline hydrosulfite bath, and subsequently steaming and finishing the material thus treated.

1,898,571. AIR HEATING APPARATUS. CLARENCE K. PRINCE, Westfield, Mass.; Robert K. Prince, administrator of said Clarence K. Prince, deceased, assignor to The H. B. Smith Company, Westfield, Mass., a Corporation of Massachusetts. Filed Jan. 14, 1927. Serial No. 161,081. 8 Claims. (Cl. 257—187.)



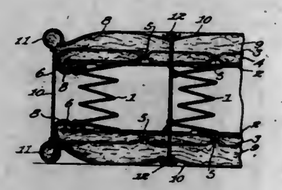
2. In a heat exchanger of the class described, the combination of upper and lower chambers, a nest of tubes extending between the chambers, fin members spaced longitudinally of the tubes and extending continuously therebetween across the tube nest, the fin members being disposed substantially perpendicular to the tubes, and means for delivering a forced draft of air to the tube nest in a direction substantially parallel to the tubes, the fin members being arranged to extend for progressively greater distances into the path of the draft for distributing the same longitudinally of the tubes.

1,898,572. METHOD AND APPARATUS FOR CONTROLLING TEMPERATURES. EDWARD G. RAGATZ, Berkley, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a Corporation of California. Filed Jan. 28, 1929. Serial No. 335,604. 16 Claims. (Cl. 236—86.)



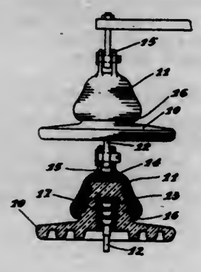
1. A temperature control mechanism comprising in combination a temperature sensitive regulator to pass control gas under pressure in varying amounts as temperature fluctuates, a valve to be controlled by such pressure gas, and an intermittently actuating device between the valve and the regulator to transmit by stages those pressure changes passed by the regulator, and means to transmit to the valve at each stage a pressure change materially less than the whole change.

1,898,573. MATTRESS. WILFRED G. SCHUBERT, Cincinnati, Ohio, assignor to The Stearns & Foster Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 18, 1931. Serial No. 531,179. 3 Claims. (Cl. 5—351.)



3. A spring mattress, comprising, a spring unit having a top and bottom edge framing, a covering respectively for the top and bottom of the spring unit, each marginally hemmed to the framing, a stuffing material upon said covering, a welt secured to the hemming of the covering and extended to marginally overlie the covering and provide a pocket for said stuffing material, and a tick forming an outer covering for the structure, roll-edged with the welting and stuffing, the welt joining the spring unit and covering with the tick at the edges of the mattress.

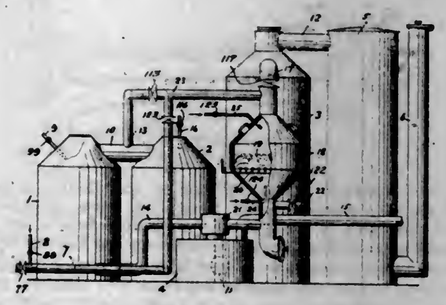
1,898,574. METHOD FOR FORGING INSULATOR CAPS. CHARLES S. CARD, Cortland, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y., a Corporation of New York. Filed May 12, 1930. Serial No. 451,581. 8 Claims. (Cl. 29—155.5.)



5. The method of hot forging from bar-stock, in a single heat, a one-piece insulator cap or the like, which method includes an initial step of gathering stock to form a planchet of distorted egg-shape whose mid-transverse cross-sectional area is enlarged over that of the original bar; thereupon, by the use of a separate supplementary swaging step, flattening a surface region of the aforesaid planchet; and by the use of still another step, blocking out such flattened planchet into a cup-shape comprising a supportable dome portion to which said supplementary swaged metal contributes stock.

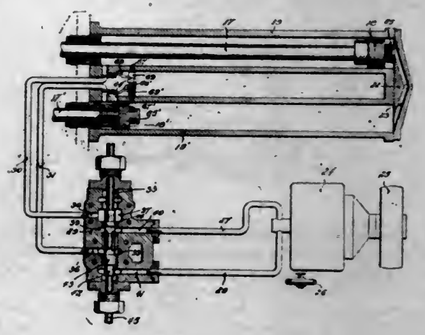
1,898,575. APPARATUS FOR MAKING CARBURETED WATER GAS. CHARLES S. CHRISMAN, West Chester, Pa., assignor to The U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 10, 1926. Serial No. 153,753. 4 Claims. (Cl. 48—80.)

1. A carbureted water gas set including a generator, a carburetor, a superheater and a washbox, and two conduits for gas leading off from the superheater, one conduit intended for blast gases including a waste heat boiler and a stack, and the other intended for carbureted water gas including a regenerator connected between the superheater and the washbox and adapted to store sensible



heat of the carbureted water gas with valves, and connections for introducing air through the regenerator on the way to the set.

1,898,576. BROACHING MACHINE. JOHN P. FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 21, 1927. Serial No. 234,621. 6 Claims. (Cl. 90—33.)

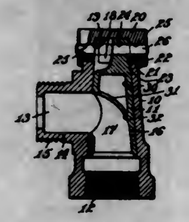


4. In a hydraulic broaching machine the combination of a tool driving member, a hydraulic motor for driving said member, a variable displacement hydraulic pump, means for delivering the entire discharge from said pump to said motor to drive said motor and member at a predetermined rate in one direction to effect a working stroke, a second tool driving member, a second hydraulic motor for driving said second member, means for delivering the entire discharge from said pump to said second motor to drive the same and said second member at a predetermined rate in one direction to effect a working stroke, and means automatically operable to drive each of said motors and its driven member in an opposite direction and to a predetermined point during operation of the other motor and its driven member in the direction first named.

1,898,577. VALVE. EDWIN H. FOAD, Wabash, Ind., assignor to Ford Meter Box Company, Wabash, Ind., a Corporation of Indiana. Filed Feb. 13, 1931. Serial No. 515,450. 1 Claim. (Cl. 251—95.)

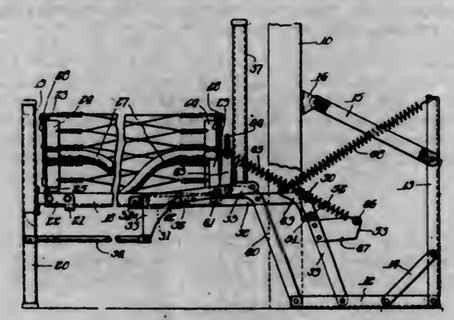
A valve comprising a main body having a tapered bore therethrough with a pipe-connection at its larger end, and a tubular lateral extension communicating at its

inner end with said tapered bore and having a pipe connection at its outer end, a tapered plug-valve journaled in said tapered bore across the inner end of said lateral extension and with its smaller end projecting from the main body, said plug having an internal chamber at its larger end extending across and beyond said lateral extension with an intermediate curved portion registering with the bore of the lateral extension and having a



relatively narrow medial slit affording outlet from the inner closed end of said chamber, said plug also having an open-ended chamber in its smaller end, said two chambers being separated by an imperforate partition intermediate the length of the plug, a cup-like cap sleeved over the smaller end of the plug and adjacent end of the main body and non-rotatively pinned to the plug, and a spring washer nested between said cap and main body.

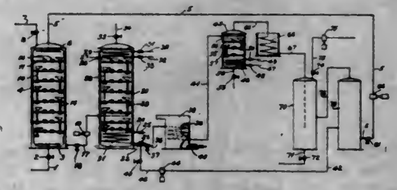
1,898,578. RECESS BED. MARTIN FOX, Chicago, Ill., assignor to The Seng Company, Chicago, Ill. Filed Mar. 22, 1929. Serial No. 349,061. 5 Claims. (Cl. 5—156.)



1. An up-ending bed having a sectional bed supporting frame foldable thereon, a recess mounting for pivoting the frame for up-ending movement, a swinging connection between the mounting and the frame including a pair of pivoted levers and a member by which they are connected to the frame, one of the levers having a supporting plate for engaging the recess mounting and holding the levers in an inclined position in the mounting and supporting the up-ended frame in an inclined position above the mounting.

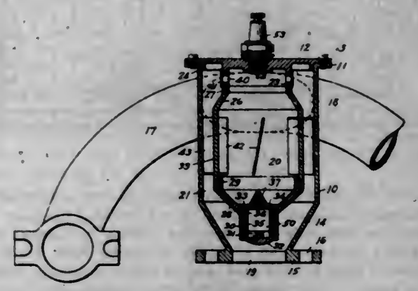
1,898,579. METHOD AND APPARATUS FOR ABSORPTION OF CONSTITUENTS FROM GASES AND VAPOROUS MIXTURES. CLARK D. GARD, Los Angeles, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a Corporation of California. Filed May 30, 1930. Serial No. 457,657. 10 Claims. (Cl. 196—8.)

1. A process of separating gases which comprises continuously absorbing a portion of said gases in an absorption menstruum, separating absorbed material from said menstruum and returning said menstruum to the cycle



to absorb more gases, and continuously purifying said returning menstruum by distillation thereof.

1,898,580. FUEL PREHEATER. GIUSEPPE GARIBALDI, Stamford, Conn., assignor to Fuel Oil Carburetion Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 6, 1930. Serial No. 418,739. 25 Claims. (Cl. 123—122.)

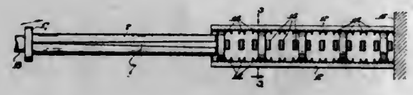


1. In apparatus of the character described, a casing having a fuel inlet at one end thereof and having a removable cover at the other end thereof, a perforated flange depending from said cover, a screen arranged about the perforations of said flange, an annular wall tapered at its upper end removably secured to said flange and dividing the casing into a fuel passage on the outside thereof, and a combustion chamber on the inside thereof, a tapered closure for the lower end of said wall, said closure having a fuel and air inlet opening therein, a hollow needle adjustably mounted in said casing for adjusting the effective size of said opening, an arcuate vane in the fuel passage about said hollow needle for diverting toward said opening, fuel entering said casing fuel inlet, an engine intake manifold associated with said casing and communicating with said fuel passage, inclined vanes projecting from said wall inwardly into said combustion chamber and outwardly into said fuel passage, an auxiliary air valve in said fuel passage, priming means for simultaneously injecting priming fluid into the combustion chamber and into the fuel passage, and electrical ignition means carried by said cover and extending into said combustion chamber.

1,898,581. APPARATUS FOR FORMING TAPERED COLUMNS AND THE LIKE. ARCHIBALD B. LINGO, Collingswood, N. J., assignor to John E. Lingo & Son, Inc., Camden, N. J., a Corporation of New Jersey. Filed Apr. 10, 1930. Serial No. 443,045. 3 Claims. (Cl. 153—32.)

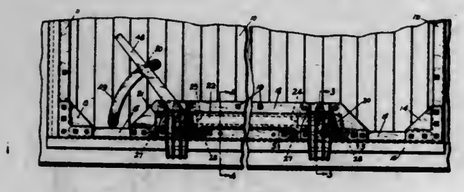
1. Apparatus for forming a tapered column or the like from a tube having an elongated V-shaped portion removed therefrom, said apparatus comprising a series of

forming rings of varying internal diameters, and a framework for supporting said rings during the forming operation, said framework being provided with means for selectively positioning the forming rings at desired



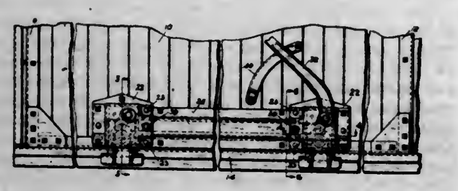
longitudinal locations with respect to each other, and means for pushing the tube within the rings to a definite end position with respect to said framework whereby the tube will be formed into a tapered shape.

1,898,582. DOOR ELEVATING CONSTRUCTION. THORVALD MADLAND, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed May 23, 1931. Serial No. 539,539. 8 Claims. (Cl. 16—99.)



1. In combination, a sliding door, a track adapted to frictionally support said door in its lowered position and means for elevating said door for sliding movement comprising a plurality of supports provided with eccentric trunnions journaled to said door, a roller rotatably mounted in each of said supports in offset relationship to said trunnions in engagement with said track and an operating lever secured to one of said supports in offset relation to the axis of rotation of the roller, said supports being connected for simultaneous movement.

1,898,583. CAR DOOR ELEVATING MECHANISM. THORVALD MADLAND, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed June 11, 1931. Serial No. 543,551. 2 Claims. (Cl. 16—99.)



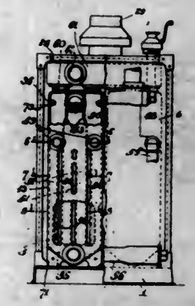
1. In combination, a sliding door, a track adapted to frictionally support said door, a pair of spaced roller supporting members adapted to have relative vertical movement with respect to said door, a roller rotatably supported by each of said members in engagement with said track, a cover plate for each of said supporting members secured to said door, pins extending between and journaled in said door and the respective cover plates, a finger extending from each of said pins and having abutment upon a roller supporting member, a flange depending from each of said pins, a bar connecting said flanges and means for operating one of said pins.

1,898,584. SPRING SASH BALANCE. ALOYSIUS F. MANTZ, Los Angeles, Calif. Filed Nov. 12, 1929. Serial No. 406,582. 8 Claims. (Cl. 16—198.)



1. In a spring sash balance, a housing, a rotatably adjustable axle mounted within said housing, a drum mounted on said axle, a spiral spring arranged within said drum and having its ends connected respectively to said drum and said axle and a circumferential bead projecting inwardly from the rear wall of the housing and surrounding the periphery of said drum for preventing the cable that winds on said drum from passing off the inner end of said drum.

1,898,585. GAS BOILER. ALEXANDER A. MARKS, Philadelphia, Pa. Filed Oct. 24, 1928. Serial No. 314,568. 14 Claims. (Cl. 122—224.)



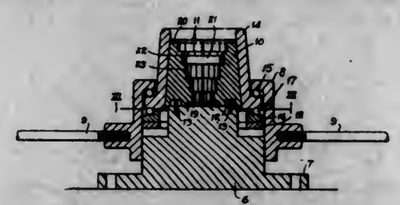
1. A boiler comprising a battery of circulating and heat absorbing sections, one of said sections having a return inlet port above the bottom thereof and adjacent to the normal water line of the boiler said last named section having a passage discharging fluid admitted through said port to the bottom of said section and a vertical passage communicating with the bottom of said section and with the upper part of an adjacent section.

1,898,586. RING CONTRACTOR. JOSEPH MAZER, New York, N. Y. Filed Sept. 21, 1929. Serial No. 394,347. 4 Claims. (Cl. 29—8.)

2. A contracting device for finger rings, comprising a base, a hollow die supported on said base, and being exteriorly tapered and composed of radially-movable segments, the interior of the die intermediate the ends thereof having stepped ring-supporting seats of various diameters, an interiorly-tapered sleeve surrounding said die

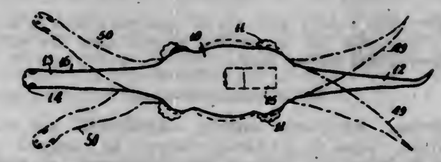
CARNEGIE LIBRARY OF ATLANTA

and slidably movable axially thereof, to effect contraction of said segments through equal distances, a screw plug secured to said base and axially positioned interiorly of



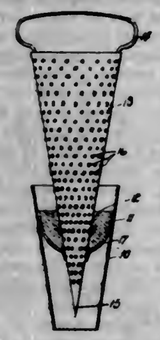
said die, and means carried by said plug in position directly above one of said seats, for clamping the sides of a ring therebetween.

1,898,587. HEAD MOVEMENT FOR A DEVICE SIMULATING A DINOSAUR OR OTHER ANIMAL. GEORGE H. MESSMORE, New York, N. Y. Filed July 24, 1931. Serial No. 552,885. 12 Claims. (Cl. 272—25.)



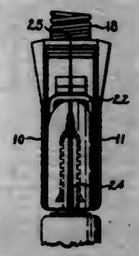
1. A head movement for a device simulating a dinosaur or other animal, comprising a hollow body with a hollow neck having flexible material and connected with a head, a plurality of substantially transverse ring-shaped ribs attached within the flexible material of the neck, a rigid shaft extending through the neck and attached at one end upon the head of the animal and at the other end being universally supported, means for universally supporting the last mentioned end of said shaft, a sleeve on said shaft, radial arms projecting from said sleeve, brackets pivotally connected within said ring-shaped ribs and having projecting portions terminating adjacent other portions of said ribs, and said brackets being pivotally connected with said radial arms.

1,898,588. DEVICE FOR EXTRACTING FRUIT JUICES. FRITZ METZGER, Chicago, Ill. Filed Sept. 19, 1932. Serial No. 633,793. 1 Claim. (Cl. 146—3.)



In a device of the character specified, a frusto-conical fruit holder open at the top and bottom, a conical member adapted to enter said holder and protrude therefrom when in nested relation therewith, the generatrices of said holder and said member being substantially straight lines and having substantially equal angular slope.

1,898,589. ELECTRICAL CONNECTER. GEORGE J. MEDER, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Continuation of application Serial No. 607,977, filed Apr. 28, 1932. This application filed Dec. 2, 1932. Serial No. 645,423. 23 Claims. (Cl. 173—332.)



13. As an article of manufacture, an internally recessed longitudinally divided insulating casing for electrical appliance connecters, the opposed sections of said casing having alined grooves formed therein and extending downwardly in spaced relationship to each other upon the outer surfaces thereof, and a pair of one-piece U-shaped spring wire clips forcibly insertable into said grooves to straddle the respective casing sections whereby the latter are retained in assembled relationship to each other.

1,898,590. SHOVEL. ARCHIBALD MILLIGAN, Fredonia, N. Y., assignor of one-half to Edward W. McCarty. Filed June 19, 1931. Serial No. 545,400. 3 Claims. (Cl. 294—49.)

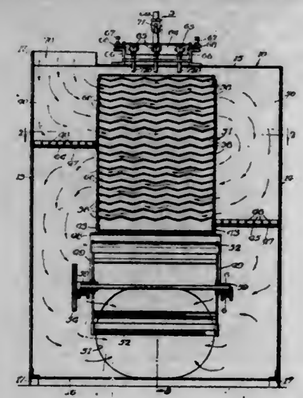


1. A hollow back shovel consisting of a single piece of plate metal comprising a blade and a tubular shank and socket, the blade having two portions of different thickness, the thicker portion including the frog and the junction with the shank and surrounded except at the back edge by the portion of lesser thickness.

1,898,591. AIR CONDITIONING APPARATUS. PAUL MOHLER, Chicago, and PETER FRANTZ, Sterling, Ill., assignors to Watt Manufacturing Company, a Corporation of Illinois. Filed Oct. 17, 1927. Serial No. 226,545. 9 Claims. (Cl. 261—103.)

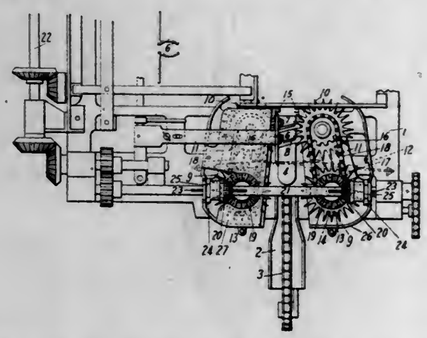
1. In an air conditioning device, an inclosure, corrugated baffle plates secured to opposite walls of said inclosure and extending inwardly and downwardly in overlapping relation, said corrugations extending longitudinally of said plates, a layer of moisture absorbent material on each plate, partition means for forming a tortuous passage across said corrugations, means for automatically supplying moisture to the uppermost layer of absorbent

material, paper sufficient to saturate all of said layers, said partition means providing dust collecting means below and contiguous to each turn of said passage along said



plates, and a fan for causing air to flow through said passage across said corrugations and for discharging the same from said inclosure.

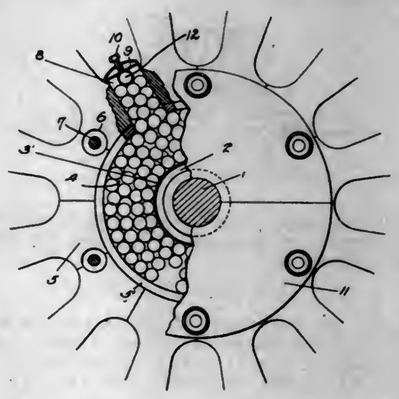
1,898,592. CORN CUTTING MACHINE. WILLIAM W. MORRAL, Morral, Ohio, assignor of one-half to Samuel E. Morral, Morral, Ohio. Filed Mar. 5, 1928, Serial No. 259,007. Renewed Dec. 27, 1930. 34 Claims. (Cl. 130—9.)



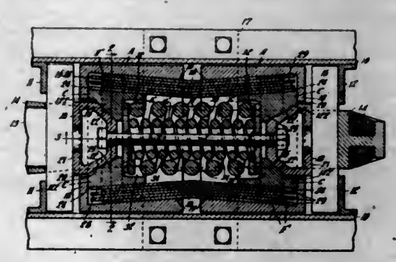
30. In a corn cutting machine, cutters spaced apart, a plurality of rotatable toothed feeding members arranged on each side of the path traversed by an ear of corn delivered to said cutters, means for so supporting said feeding members that each feeding member of each pair will be bodily movable separately from the other feeding member of that pair toward and from the adjacent feeding member of the other pair, under the control of an ear of corn, and the teeth of a part of said feeding members caused to pass between said cutters, means to yieldably press the feeding members toward the path of said ear, and means for rotating said feeding members.

1,898,593. SHOCK SHIFTER HUB. JOHN MUIR, Beith, Scotland. Filed Nov. 11, 1927, Serial No. 232,556, and in Great Britain Nov. 11, 1926. Renewed July 20, 1932. 4 Claims. (Cl. 152—45.)

1. An improved wheel mechanism comprising a hub formed with an annular vacant chamber around the axis thereof and with means permitting relative radial movement between the side walls and other parts of said hub, an axle, a tubular liner supported entirely by said hub in spaced relation to said axle and forming a wall of said chamber, said tubular liner being mounted for free movement on the interior of the side walls of said hub, within fixed limits and a plurality of superposed balls mounted within said hub in position to bear upon the outer surface of said tubular liner.

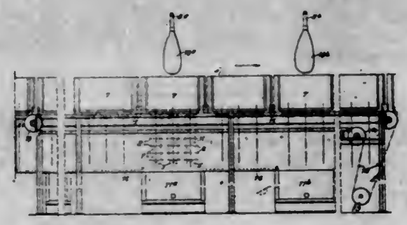


1,898,594. FRICTION SHOCK ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 12, 1928, Serial No. 292,042, and in Canada July 26, 1924. 6 Claims. (Cl. 213—33.)



5. In a friction shock absorbing mechanism, the combination with intercalated friction plates comprising two sets, the plates of one set being alternated with the plates of the other and said sets of plates being relatively movable with respect to each other; of a main spring resistance; means for laterally compressing said intercalated plates, including a lateral pressure-transmitting wedge friction system engaging one side of said intercalated plates, a member held against lateral movement engaging said intercalated plates on the opposite side, said member maintaining the engaged portion of said plates inclined with reference to the longitudinal axis of the mechanism, and means opposing lateral movement of said friction wedge system in a direction away from said plates, said wedge friction system including wedge means and friction shoes having interengaging wedge faces inclined to the longitudinal axis of the mechanism, said system and member being relatively movable with respect to each other in a direction longitudinally of the mechanism during a predetermined initial action of the same, thereby effecting a differential wedge action, and said member directly receiving the actuating pressure subsequent to said predetermined initial action to be moved longitudinally in unison with said wedge friction system; and means movable in unison with said member and engageable with one set of plates for effecting movement thereof with respect to the other set.

1,898,595. APPARATUS FOR TREATING SPUN CAKES OF ARTIFICIAL SILK OR THE LIKE. FRITZ PASCHKE, Cologne, Germany, assignor to Firm: Glanzstoff-Courtaulds G. m. b. H., Cologne-Merheim, Germany. Filed Apr. 23, 1931, Serial No. 532,226, and in Germany May 7, 1930. 15 Claims. (Cl. 18—8.)



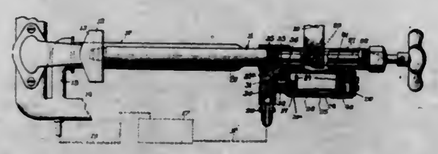
1. In apparatus for treating cakes of artificial silk and cake-like coils of thread with different liquids in continuous succession, a series of liquid supply devices severally supplying the various treating liquids, a series of liquid containers adapted to be passed in succession beneath said liquid supply devices so as to receive liquids therefrom, liquid discharge pipes dependent from said containers, a plurality of apertured cake holders adapted for threading on to said discharge pipes and releasable means for retaining said cake holders on said pipes.

1,898,596. FLUE CLEANING DEVICE. HOWARD I. PIATT, Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed June 25, 1931. Serial No. 546,836. 6 Claims. (Cl. 122—379.)



1. The combination with a heater including flues, of means for cleaning said flues comprising a flexible element suspended loosely in each of the flues to be cleaned, and means exteriorly operable to agitate the said cleaning elements both longitudinally and laterally whereby to cause the same to strike and rub against the flue walls.

1,898,597. GENERATOR DEVICE FOR LIQUID FUEL STOVES. GEORGE E. PICKUP, Newark, Ohio, assignor to The Wehrle Company, Newark, Ohio, a Corporation of Ohio. Filed July 9, 1931. Serial No. 549,669. 9 Claims. (Cl. 158—42.4.)



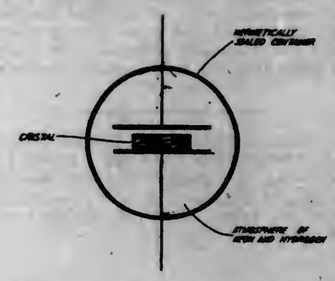
1. A gas generator for liquid fuel stoves comprising, in combination, a generator tube, a casing formed on one side of said tube adjacent the forward end thereof to provide a chamber opening forwardly of said tube, a removable plug closing the forward end of the chamber, a passageway connecting the rear end of said chamber with a source of liquid fuel, a valve in said chamber controlling said passageway, a thermostatic element in said chamber controlling said valve, and an adjustable member in the forward end of said chamber against which said element acts, said casing having an opening into said tube from said chamber located just rearwardly of said adjustable member.

1,898,598. MAGAZINE PENCIL. JACK ROSENTHAL, Brooklyn, N. Y. Filed Nov. 30, 1929. Serial No. 410,662. 9 Claims. (Cl. 120—17.)



8. A lead feeding and lead holding chuck member for push feed pencils having a hollow stem and chuck elements, said chuck elements having inner lead engaging surfaces for gripping the lead to hold the same in writing position, a sleeve, a stop member, and outer upper and lower conical surfaces, the upper conical surface engaging with a stop member to close the lead holding surfaces upon a lead for feeding the lead forward and the lower conical surface arranged to engage a floating sleeve, and means for retarding said floating sleeve.

1,898,599. PIEZO-ELECTRIC OSCILLATING CRYSTAL IN A VACUUM VESSEL. FRITZ SCHRÖTER, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Dec. 28, 1929, Serial No. 417,266, and in Germany Feb. 19, 1929. 3 Claims. (Cl. 171—327.)

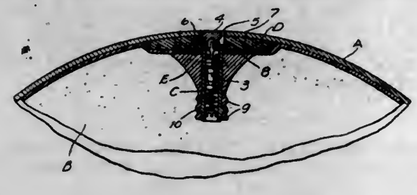


1. A piezo-electric device comprising in combination, a hermetically sealed vessels, a body of piezo-electric material and electrodes to excite the same mounted within said vessel, said vessel being provided with an atmosphere of a mixture comprising 95–98 per cent neon and 2–5 per cent hydrogen.

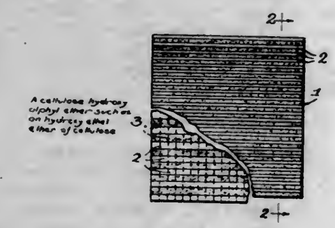
1,898,600. FOOTBALL, BASKET BALL, AND THE LIKE. MASON SCUDDER, Clayton, Mo., assignor to Rawlings Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 5, 1930. Serial No. 426,080. 2 Claims. (Cl. 273—65.)

1. A ball of the kind described, comprising a bladder, a casing for said bladder provided with an opening through which the bladder can be introduced into the casing, the casing having a hole separate and distinct from said opening, an inflating valve provided with a stem that is arranged on the interior of the casing in alignment

with said hole, an attaching member vulcanized onto a part of said stem, means for permanently connecting said attaching member to the casing, and an inwardly-projecting tubular portion on the bladder surrounding said stem and provided with a constriction band that tends to cause said tubular portion to tightly surround said stem.

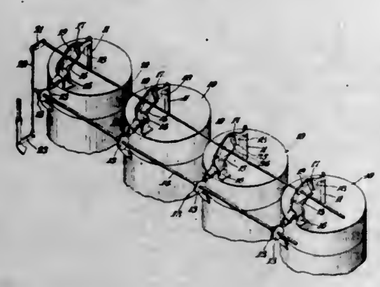


1,898,601. CLOTHLIKE FABRIC. MILTON J. SHOEMAKER, Madison, Wis., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Filed Aug. 18, 1930. Serial No. 476,017. 6 Claims. (Cl. 154—46.)



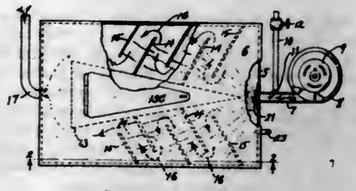
1. A reinforced, water-absorbent sheet of unwoven fibers, the reinforcing material comprising a water insoluble hydroxy-alphyl ether of cellulose distributed discontinuously throughout said sheet forming fibrous areas substantially free from said ether, most of the fibers in said areas being anchored by contiguous portions of said ether.

1,898,602. FUEL CONTROLLING MECHANISM FOR INTERNAL COMBUSTION ENGINES. ALFRED L. STAMSVIK, Grove City, Pa., assignor to Cooper-Bessemer Corporation, Mount Vernon, Ohio, a Corporation of Ohio. Filed Nov. 30, 1929. Serial No. 410,693. 2 Claims. (Cl. 123—101.)



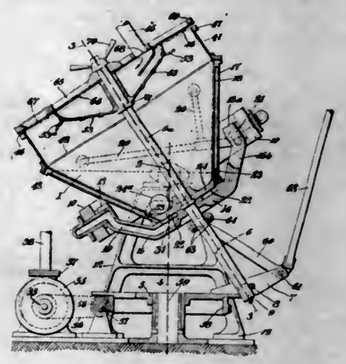
1. In a multiple cylinder engine of the class described, a fuel supply valve for each cylinder, an actuating member for each valve, an adjustable fuel controlling mechanism having movable cam members associated with the respective valve actuating members, to regulate the amount of opening of the respective valves, certain of said cam members being constructed to maintain substantially equal fuel distribution between the corresponding cylinders throughout adjustments of said mechanism, and others of said cam members being constructed to maintain similar fuel distribution during adjustments of said mechanism wherein relatively large amounts of fuel are supplied, and to cause the fuel supply to be cut off from said last mentioned cylinders during other adjustments of said mechanism.

1,898,603. COOLING APPARATUS. JOSEPH A. STUBKJARE, Bigtimber, Mont., assignor of one-half to Elnor O. Overland, Clarence Flattum, and Oscar A. Nepstad, Bigtimber, Mont. Filed Dec. 21, 1931. Serial No. 582,478. 3 Claims. (Cl. 62—90.)



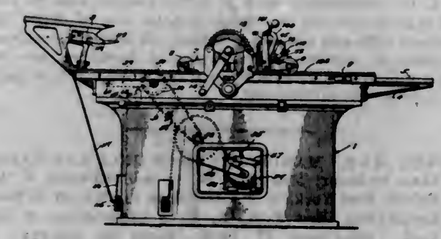
1. In a dual cooling apparatus of the class described including an elongated quadrangular main chamber with a forced air intake in one end and a cold air outlet at the opposite end, a storage chamber within said main chamber and provided with means for access through the top of the main chamber, and a liquid supply pipe connected to said air intake; said storage chamber of triangular form and fixed with its apex in proximity to said intake of the main chamber, upright wicks in said main chamber and fixed in parallel spaced relation, in two groups, one group at each side of the storage chamber and extending from near the intake end of the main chamber toward the wider and rear end of the storage chamber.

1,898,604. METHOD AND APPARATUS FOR CONCENTRATING LIQUIDS. DOUGLAS FRANK TWISS and EDWARD ARTHUR MURPHY, Fort Dunlop, Erdington, Birmingham, England, assignors to Dunlop Rubber Company, Limited, Birmingham, England, a British Corporation. Filed Nov. 2, 1928, Serial No. 316,722, and in Great Britain Nov. 3, 1927. 15 Claims. (Cl. 18—2.)



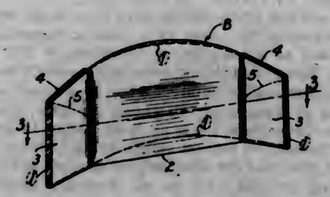
7. An apparatus for treating liquid rubber latex and the like comprising a vessel, a supporting structure therefor including a gimbal ring having a trunnion pivotally supported on a horizontal axis, a yoke secured to said vessel and having a pivotal connection with said gimbal ring at a point substantially ninety degrees from said trunnion, and power driven means operatively connected with said vessel arranged to tilt it in toward different points of the compass in combination with a jacket surrounding part of said vessel, and in which said yoke has a duct formed therein which connects with the jacket, and said gimbal ring having ducts therein connecting with said yoke ducts, and means for circulating a heating or cooling medium through aid ducts and the said jacket.

1,898,605. PROOF PRESS AND INKING MECHANISM THEREFOR. ROBERT O. VANDERCOOK, EDWARD O. VANDERCOOK, FREDERICK R. VANDERCOOK, and DAVID D. VANDERCOOK, Chicago, Ill. Original application filed Oct. 10, 1927, Serial No. 225,287. Divided and this application filed June 21, 1929. Serial No. 372,576. 44 Claims. (Cl. 101—355.)



1. A machine of the class specified having a traveling carriage provided with a printing element and also provided with inking rolls and inking devices, means for continuously driving said rolls when the carriage is in position at one of the ends of its strokes and means for moving the inking devices in contact with the inking rolls.

1,898,606. ATHLETIC SHIELD OR GUARD. WILLIAM P. WHITLEY, Clayton, Mo., assignor to Rawlings Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 7, 1932. Serial No. 597,290. 5 Claims. (Cl. 2—2.)



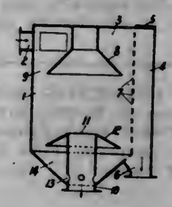
1. An athletic shield or guard composed of a protecting element of substantially concavo-convex shape, a shock absorbing device arranged transversely across the inner side of said protecting element, and a means for combining said shock absorbing device with the protecting element and holding said device taut, consisting of pockets attached to the ends of said device and having the terminal portions of said protecting element positioned in same.

1,898,607. BRAKE CHAIN ATTACHING DEVICE. JACK WILSON, Chicago, Ill., assignor to Universal Draft Gear Attachment Co., Chicago, Ill., a Corporation of Illinois. Refiled for abandoned application Serial No. 501,281, filed Dec. 10, 1930. This application filed Jan. 22, 1932. Serial No. 588,093. 3 Claims. (Cl. 254—149.)



1. A winding drum for car brakes having a pocket entering from its periphery for receiving an end link of a chain, and a slotted shoulder at the base of the pocket for resisting strain on the named link and accommodating the next adjacent chain link.

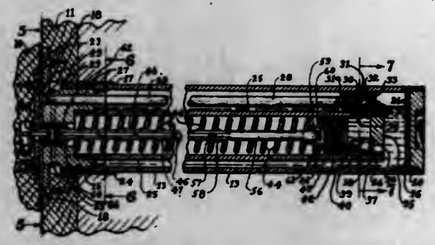
1,898,608. CENTRIFUGAL SEPARATOR. WILLIAM ALEXANDER, Glasgow, Scotland. Filed Jan. 22, 1932, Serial No. 588,144, and in Great Britain Dec. 31, 1931. 4 Claims. (Cl. 183—81.)



1. A centrifugal dust separator comprising an upright cylindrical casing including a gas admission chamber, a pipe supplying gas to said admission chamber, a vertical separating chamber coaxial with said admission chamber, a gas discharge pipe coaxial with both said chambers and projecting into said separating chamber, a partition partially isolating said separating chamber and affording an annular gas passage leading from said admission chamber to said separating chamber whereby there is set up in the gas entering said separating chamber through said passage a free vortex motion about a vertical axis, said separating chamber being bounded by a smooth vertical cylindrical wall and wholly free from internal obstructions from the axis to the periphery for that part of said separating chamber between said passage and said discharge pipe, said discharge pipe being shaped and positioned so that there is no gas flow along its outer surface towards its inner end, said discharge pipe discharg-

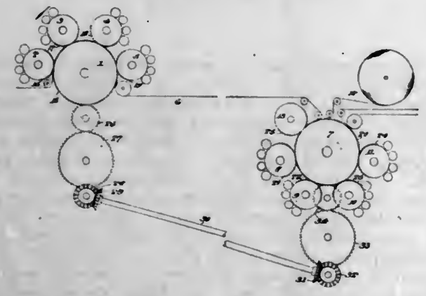
ing all the gas admitted to the separator, at least one external dust channel located alongside and extending the entire vertical length of said separating chamber, said channel extending over only a part of the circumference of said separating chamber, said channel communicating with said separating chamber by at least one small dimensioned aperture in the side of said channel, said aperture permitting passage of dust expelled from said separating chamber by centrifugal force, said channel having no gas current therethrough, and having no direct gaseous communication with said first mentioned pipe, said channel having a dust outlet at its lower end spaced in a direction parallel to the axis of the vortex and away from said aperture.

1,898,609. CONCEALED DOOR CLOSER AND CHECK. GUSTAV H. ANDERSON, New Britain, Conn., assignor to The Hart & Hutchinson Company, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 18, 1931. Serial No. 516,641. 1 Claim. (Cl. 16—61.)



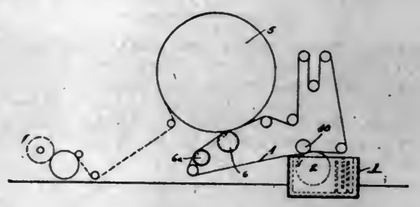
In a door closer and check, an outer casing, an inner chamber located therewithin, the space between said casing and chamber comprising a reservoir for a checking liquid, a door-checking piston fitting within said chamber, a spring within said piston chamber for urging said piston to door-closing position, means to permit a free flow of liquid from said reservoir into said chamber when the door is being opened, a bypass of restricted area connecting said chamber with said casing to check the closing of said door, and a needle valve rod located in the outer part of said casing and operable from the exterior of said casing for adjusting the effective area of said bypass, said needle valve rod being removable from said casing to permit replenishment of the checking liquid in said reservoir.

1,898,610. WEB PERFECTING ROTARY PRINTING PRESS. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed July 1, 1931. Serial No. 548,138. 6 Claims. (Cl. 101—417.)



6. In a web perfecting rotary printing press, first and second printing units, an offset web passing around the impression cylinder of the second printing unit, and a non-printing pressure cylinder built up at predetermined points to exert blotting pressure on the non-perfected web at those portions of its impression which will not be subjected to pressure by the form cylinder or cylinders of the second printing unit.

1,898,611. METHOD OF AND APPARATUS FOR MAKING PAPER. EARL E. BERRY and THEODORE C. ROBERTS, Beloit, Wis., assignors to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed June 27, 1931. Serial No. 547,215. 17 Claims. (Cl. 92—38.)



1. In combination with a metal surface roll, a pick-up type of felt for conveying a moist web of paper into contact with said roll and a suction roll having a cushioned surface in pressure relation to said metal surface roll with said felt therebetween to transfer said web of paper to said metal surface roll.

1,898,612. MANUFACTURE OF PULP AND PAPER. LINN BRADLEY, Montclair, N. J., and EDWARD P. McKEEFE, New York, N. Y., assignors to Bradley-McKeefe Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 27, 1923. Serial No. 665,224. 18 Claims. (Cl. 92—11.)

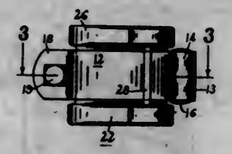
1. The method of producing wood pulp from heavy, hard wood which comprises subjecting the wood to a cooking operation under pressure and at an elevated temperature with a sodium sulfite cooking liquor containing an amount of sulfurous acid or sulfite radical greater than that corresponding to normal sodium sulfite and less than that corresponding to sodium bisulfite, said cooking liquor being alkaline to litmus when charged into the digester, and the amount of sodium sulfite in the cooking liquor being sufficient to give a residual liquor alkaline to litmus.

1,898,613. MANUFACTURE OF PULP, ETC. LINN BRADLEY, Montclair, N. J., and EDWARD P. McKEEFE, Plattsburg, N. Y., assignors to Bradley-McKeefe Corporation, New York, N. Y., a Corporation of New York. Filed May 14, 1924, Serial No. 713,257. Renewed July 13, 1932. 23 Claims. (Cl. 92—9.)

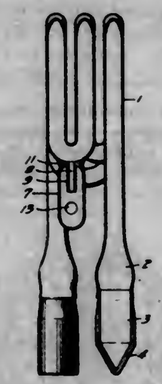
1. The method of producing pulp from wood which comprises subjecting the same to a cooking operation under pressure and at a temperature in excess of 175° C. with a cooking liquor containing essentially caustic soda, sodium thiosulfate, and sodium sulfide, the amount of caustic soda being at least about 40 grams per litre, the amount of sodium thiosulfate being at least about 10 grams per litre, the amount of sodium sulfide being at least about 15 grams per litre, and the total sodium content of the cooking liquor being at least 12% on the bone-dry weight of the wood cooked.

1,898,614. LAMP LEAD BRACKET. EDMUND W. BRADY, New Britain, Conn., assignor to The Brady Electric & Manufacturing Company, New Britain, Conn. Filed Jan. 20, 1931. Serial No. 509,930. 5 Claims. (Cl. 173—314.)

5. In a lamp lead bracket, a generally cylindrical insulator having annular flanges at its ends and an axially directed aperture, said insulator being divided axially into semi-cylindrical parts, a pair of semi-circular strap members mounted one on each insulator part, said straps embracing the parts between the flanges thereon, means for clamping the straps together with the insulator parts therebetween, and means on said insulator parts extending between said flanges and forming in conjunction therewith apertures through which the straps may be threaded for detachably securing the straps on the insulator parts.

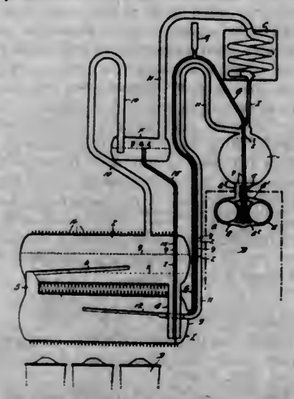


1,898,615. LUMINOUS TUBE. JAMES H. BYRNES, San Francisco, Calif., assignor to Electron Lights, Inc., San Francisco, Calif., a Corporation of California. Filed Aug. 13, 1928. Serial No. 299,288. 8 Claims. (Cl. 176—126.)



1. A luminous tube of the character described sealed at one end with a hollow tubular cathode having a closed conical end, said cathode having a substantial portion of its surface external to said tube.

1,898,616. GENERATOR-ABSORBER FOR INTERMITTENT ABSORPTION REFRIGERATORS. LEE S. CHADWICK, Shaker Heights Village, and MARC RESEK, Cleveland Heights, Ohio, assignors to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 12, 1929. Serial No. 413,456. 11 Claims. (Cl. 62—118.)



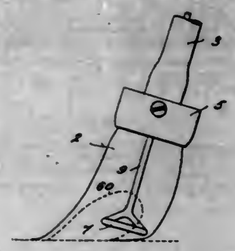
1. A generator-absorber for intermittent absorption refrigeration apparatus comprising a structure enclosing an upper chamber and a lower chamber, means through which the top portion of the lower chamber communicates with the bottom portion of the upper chamber, means spaced therefrom through which the lower portion of the upper chamber communicates with the bottom portion of the lower chamber, and means within the upper chamber for directing the flow of liquid from the first mentioned communicating means toward the second mentioned communicating means, the upper chamber having a vapor outlet and the lower chamber a gas inlet.

1,898,617. UNION. LEWIS H. CHURCH, Westfield, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 30, 1930. Serial No. 492,202. 8 Claims. (Cl. 285—120.)



1. A coupler comprising a threaded bushing having means to receive the end of a member, a flanged bushing having threads to receive the threaded end of a member, an operating nut freely rotatable upon the flanged bushing and having threads to engage the threaded bushing, an internal shoulder on the operating nut to engage the flanged bushing, and interengaging means upon the operating nut and the flanged bushing to rotate the bushing by rotating the operating nut and retaining the operating nut upon the flanged bushing in all positions thereof.

1,898,618. PROCESS AND APPARATUS FOR ELECTROPLATING. FREDERICK CONLIN, New York, N. Y. Filed Oct. 24, 1929. Serial No. 401,994. 4 Claims. (Cl. 204—5.)

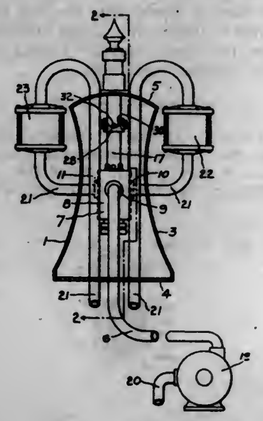


1. An electroplating implement comprising a bristle-head having a flexible mass of bristles adapted to carry a liquid or viscous electrolytic solution, and an electrode located amongst the flexible mass of bristles, said electrode having external portions running substantially transversely of the bristles which are concave with relation to a portion of said bristles pressed toward the same when the bristle-head is flexed.

1,898,619. DRINK DISPENSING MACHINE. SAMUEL TILDEN DARE, New Westminster, British Columbia, Canada, assignor of one-fourth to Matthew J. Phillips, one-fourth to James Henry Edwards, and one-fourth to John C. Popham, New Westminster, British Columbia, Canada. Filed Jan. 30, 1932. Serial No. 589,940. 4 Claims. (Cl. 225—21.)

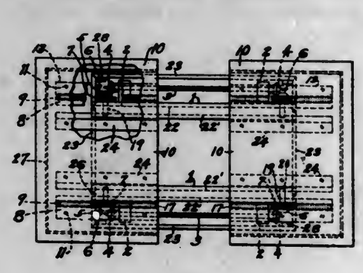
1. A drink dispensing device comprising a circulating circuit divided into two portions and leading from and

to a source of supply, a pump within the circuit for circulating liquid through both portions of the circuit, and a valve communication with both portions by the opera-



tion of which the flow through one portion is unimpeded and the liquid contained in the other portion of the circuit may be withdrawn.

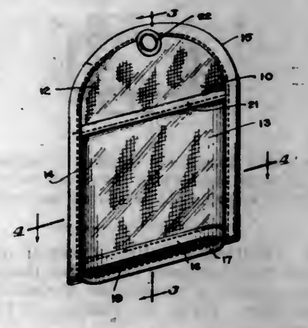
1,898,620. TRUE RUNNING TABLE SLIDE. EDWARD DAUB, Los Angeles, Calif., assignor to Edna A. Sander, Los Angeles, Calif. Filed Oct. 12, 1929. Serial No. 399,310. 7 Claims. (Cl. 45—115.)



1. A table slide comprising a guide bar having a groove along one side thereof and adapted to be fixed to a support; a bearing fixed to the bar and projecting from the grooved side thereof; a pair of combined spur and bevel gear wheels in journalled relation to the bar, mounted adjacent to said bearings respectively; a shaft journalled in the bearings parallel to the bar; bevel gears fixed to the shaft and meshing with the bevel gear wheels respectively; and combination runner racks adapted to be fixed to the table top sections, respectively, with their runners in the groove of the bar, and their racks meshed with the spur gears respectively.

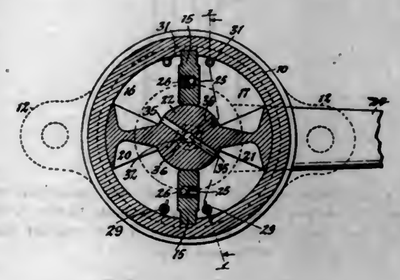
1,898,621. MOTH REPELLENT. HERMAN B. FERGUSON, Philadelphia, Pa. Filed June 29, 1931. Serial No. 547,553. 6 Claims. (Cl. 299—24.)

6. An article of the class described comprising a bag-like container for a moth or other insect repelling material capable of evaporating to produce a gas or vapor, said container including a pair of panels the side and top edges of which are secured together, said panels being impervious to the free passage therethrough of said gas or vapor, and



an expansible bottom for said bag extending between the bottom edges of said panels, said bottom being pervious to said gas or vapor.

1,898,622. SHOCK ABSORBER. MERRITT L. FOX, Buffalo, N. Y., assignor to Houde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed Apr. 9, 1931. Serial No. 528,773. 5 Claims. (Cl. 188—89.)

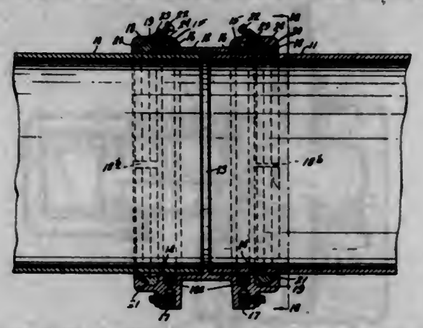


1. A hydraulic shock absorber comprising a working chamber adapted to contain a resistance liquid, a replenishing chamber adapted to contain a reserve supply of resistance liquid for use in said working chamber, a wall between said working and replenishing chambers and having a bearing, a piston oscillating in said working chamber and having a hub, an operating shaft rocking in said bearing and connected with said piston, said hub and shaft being provided with an axial valve chamber, said hub being provided with controlling passages leading from said valve chamber to said working chamber on opposite sides of said piston and a port between said passages, a controlling valve arranged in said valve chamber and adapted to move relatively to said port, a thermostatic element arranged in said valve chamber and operatively associated with said valve for moving the same in response to variations in temperature, a liquid passage extending from the bore of said valve chamber to the periphery thereof, and a liquid passage extending from the bore of said bearing to said replenishing chamber, said passages being adapted to come into and out of communication during relative movement of said shaft and bearing.

1,898,623. PIPE COUPLING. JOHN R. GAMMETER, Akron, Ohio. Filed June 22, 1929. Serial No. 372,886. 5 Claims. (Cl. 285—193.)

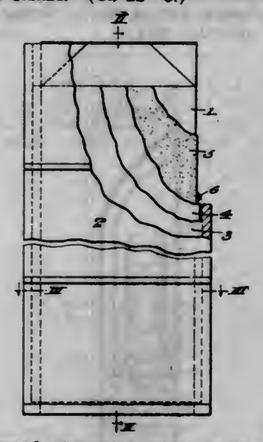
1. A pipe joint comprising a coupling member, a pressure actuated gasket housed therein, and means for retaining a pipe end in said coupling comprising a transversely split

contractile ring housed so as to be shiftable in an annular channel in the coupling member and embracing the pipe end, means on the coupling member cooperating with said split ring whereby any tendency for movement of the pipe



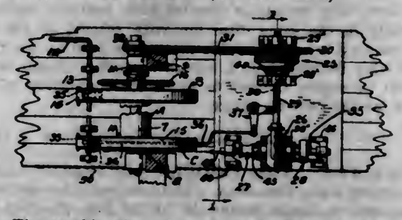
end out of the coupling member will cause said element to be wedged tightly between the coupling member and the pipe end to resist such movement, and adjustable means for contracting said ring.

1,898,624. STEREOTYPE PLATE CASTING MACHINE. RICHARD J. GREENWAY, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Apr. 25, 1932. Serial No. 607,407. 4 Claims. (Cl. 22—5.)



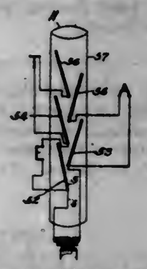
1. In a curved stereotype plate casting machine, a male member provided with a smooth non-porous heat resisting facing.

1,898,625. BRAKE CONTROL MEANS. ARTHUR L. HARPER, Altadena, Calif. Filed Nov. 25, 1929. Serial No. 409,731. 12 Claims. (Cl. 254—187.)



11. The combination of a rotary shaft; means to apply a braking power to said shaft; and means whereby additional braking power is applied automatically to said rotary shaft when braking power is applied thereto.

1,898,626. ELECTRICAL SWITCH. WESLEY P. HEALY, Waukegan, Ill., assignor, by mesne assignments, to Healy-Davidson Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 26, 1930. Serial No. 504,961. 14 Claims. (Cl. 177—346.)



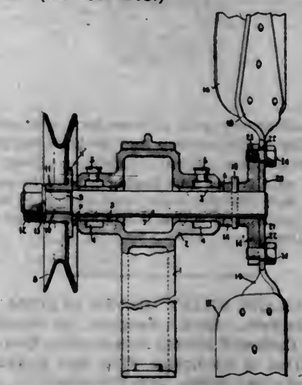
1. An arc switch comprising an insulating support, a series of electrodes passing therethrough at successive points thereon and a common electrode also carried by said support, arranged adjacent said first electrodes and diverging therefrom, said first electrodes being adjustable with respect to said common electrode.

10. A flashing device, comprising a plurality of illuminating units, a source of high voltage current, an individual circuit connecting each unit to said source, a pair of electrodes in series in each circuit, and an ascending passage in which said pairs of electrodes are arranged end to end with a slight space between adjacent ends of the pairs of electrodes, whereby a spark jumping the gap between the electrodes of the lowermost pair will ascend in said passage from pair to pair and close said circuits in succession.

1,898,627. ALKYLATION OF ORGANIC HYDROXY-COMPOUNDS. FRITZ HOFMANN, Breslau, and CARL WULFF, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 29, 1929, Serial No. 367,118, and in Germany June 6, 1928. 12 Claims. (Cl. 260—150.)

1. A process for the alkylation of organic hydroxy-compounds, which comprises treating these at a temperature which is higher than ordinary temperature and which ranges up to 300° C. with an olefine in the presence of a halide of boron.

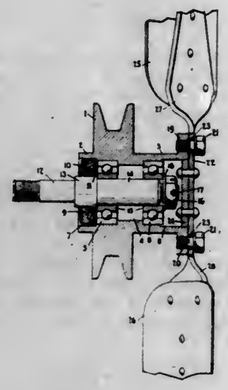
1,898,628. POSITIONING AND SECURING FAN BLADES. CHARLES HOLLERITH, Jackson, Mich., assignor to Automotive Fan & Bearing Co., a Corporation of Michigan. Filed June 27, 1931. Serial No. 547,253. 2 Claims. (Cl. 170—173.)



2. In fans, a bearing member, a hub member having a central bore, a shaft rotatably mounted in said bearing

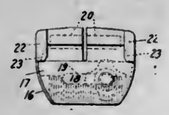
member and extending through said bore, means to secure the shaft to the hub member, a fan spider having a central bore snugly fitting the protruding end of said shaft, fan blades fastened to said spider in balanced position around the bore therein, holes in said spider, and screws of lesser diameter than said holes passing therethrough to secure the spider to the hub member.

1,898,629. MEANS FOR POSITIONING FAN BLADES WITH ACCURATE BALANCE. CHARLES HOLLERITH, Jackson, Mich., assignor to Automotive Fan & Bearing Co., a Corporation of Michigan. Filed June 27, 1931. Serial No. 547,254. 2 Claims. (Cl. 170—173.)



1. In fans, a rotatable pulley member having a central bore, a bearing and shaft assembly positioned centrally in said bore, a spider having a collar positioned centrally thereof and located in said bore, and fan blades attached to said spider and balanced in respect to the periphery of said collar.

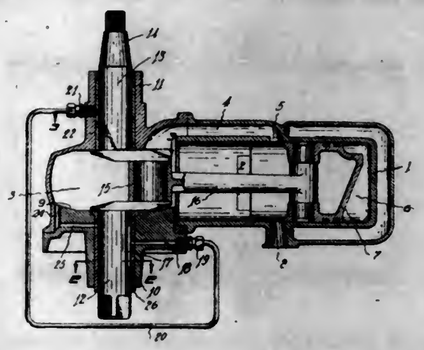
1,898,630. JOURNAL BOX JACK. ION VON KERT HOTT, Dayton, Ohio, assignor to The Joyce-Cridland Company, Dayton, Ohio, a Corporation of Ohio. Filed Jan. 6, 1930. Serial No. 418,731. 11 Claims. (Cl. 254—34.)



1. In a journal box jack, a frame having a part adapted to extend into a journal box and to have supporting engagement with the journal therein, a lever pivotally mounted on said frame and having a part to engage said journal box and lift the same, and means to retain said lever in the position to which it has been moved with relation to said frame.

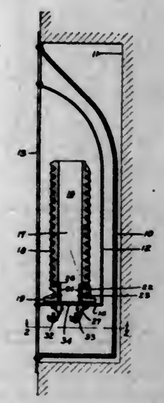
1,898,631. CRANK SHAFT OILING SYSTEM. FINN T. IRGENS, Jackson, Mich., assignor, by mesne assignments, to Outboard Motors Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 5, 1928. Serial No. 290,314. 18 Claims. (Cl. 184—6.)

1. In a lubricating system, a crank case, a crank shaft journaled in said crank case, means in said crank shaft for receiving a quantity of oil at time of pressure in said crank case and means on the other side of said crank shaft



and connected with said first named means to draw oil from said first named means at time of suction in said crank case.

1,898,632. ELECTRICAL HEATING ELEMENT. ARTHUR J. KERCHER, Berkeley, and WILLIAM WESLEY HICKS, San Francisco, Calif., assignors to Wesix National Company, San Francisco, Calif., a Corporation of Delaware. Filed Apr. 4, 1927. Serial No. 180,681. 2 Claims. (Cl. 219—19.)

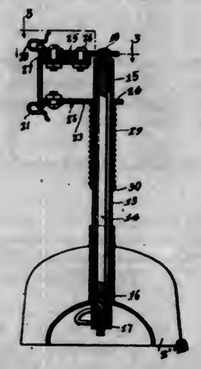


1. A heating device comprising a hollow ceramic core, a resistance wire disposed on said core, L-shaped double binding terminals secured to the lower edge of said core against the inner face of the same and extending below the core, said terminals having bent portions extending laterally in the same direction with respect to the core, said binding terminal having means for binding the resistance wire thereto, and a separate binding clamp on the lateral extension thereof to facilitate connection of feed wires for the heating device.

1,898,633. TOY VEHICLE APPARATUS. JAMES FRANCIS KEY, Pasadena, Calif., assignor to sixty-eight per cent to James Irvine, jr. Filed Feb. 25, 1931. Serial No. 518,101. 3 Claims. (Cl. 46—48.)

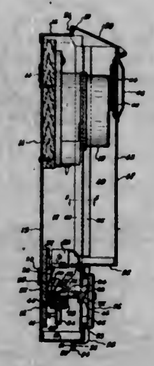
1. A toy vehicle having a contact post comprising an outer tubular member and an inner member, one of said members being grounded to the frame of the vehicle and

the other having a lead line which may be attached to the motor of the vehicle, a swivel contact having one member engaging the outer tube and the other member



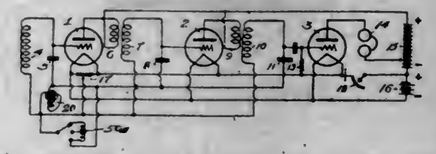
swivelly engaging the inner rod, and means for connecting electric lead lines separately to said members of said swivel contact.

1,898,634. SERVICE BOX. MORGAN J. LEWIS, Massillon, Ohio, assignor to The M. J. Lewis Products Company, Philadelphia, Pa., a Corporation of Ohio. Filed Jan. 28, 1929. Serial No. 335,605. 4 Claims. (Cl. 247—2.)



1. A weatherproof entrance box, a meter and a magnetic circuit breaker enclosed in the box, said circuit breaker being arranged to automatically break the circuit upon the occurrence of an overload, means comprising a handle completely housed within said box for manually operating the circuit breaker, means for preventing unauthorized access to the meter and circuit breaker, and separate means for preventing unauthorized access to said means for manually-operating the circuit breaker.

1,898,635. MEANS FOR TUNING ELECTRIC CIRCUITS. JOHN FREDERICK LINDBERG, Chicago, Ill. Filed Mar. 28, 1928. Serial No. 265,346. 1 Claim. (Cl. 250—40.)

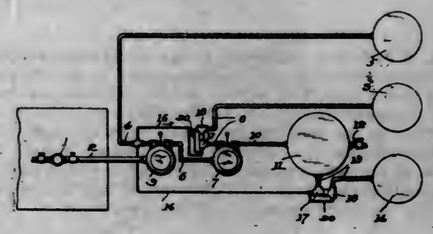


In an electric signalling system, the combination with two or more audions each having an input and an output circuit coupled to form a cascade amplifier, of a separate fixed reactance in each input circuit, a variable reactance common to all the input circuits and another adjustable loading reactance common to said input circuits.

1,898,636. ANHYDRITE PLASTIC MATERIAL. HARRY K. LINZELL, La Grange, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1931. Serial No. 516,220. 19 Claims. (Cl. 25—155.)

1. The method of hydrating natural anhydrite, which includes ball mill grinding said anhydrite in the presence of a dilute solution of a hydration accelerating chemical.

1,898,637. METHOD OF SEPARATING AND DELIVERING CASING HEAD GAS. DAVID G. LORRAINE, Los Angeles, Calif., assignor to Lorraine Corporation, Los Angeles, Calif., a Corporation of Nevada. Filed June 18, 1929. Serial No. 371,908. 2 Claims. (Cl. 183—2.7.)

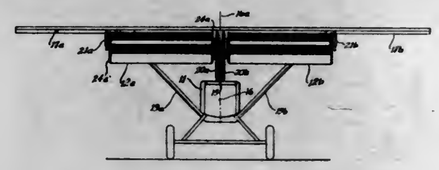


1. The method of separating and delivering casing head gas from a mixture of gas and oil discharged under relatively high pressure from a well, which comprises separating the gas and oil while maintaining a relatively high pressure, collecting and settling the separated oil, and withdrawing a relatively large volume of lighter hydrocarbons from the collected oil by a jet comprising a relatively small volume of the initially separated and relatively high pressure gas.

1,898,638. AIRCRAFT. WILLIAM C. MARTIN, Waynesburg, Ohio. Filed Oct. 30, 1930. Serial No. 492,150. 9 Claims. (Cl. 244—16.)

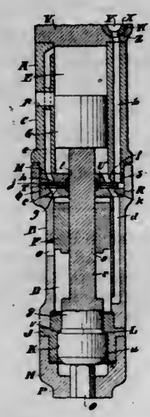
1. An aircraft including an air reacting rotor operatively mounted thereon for rotating about an axis extending laterally of the longitudinal axis of the aircraft, and

the rotor including a rotating mounting member, a shell on the mounting member, and a plurality of airfoils normally spaced substantially flat against the shell and



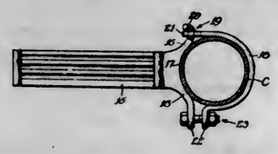
mounted on the mounting member for movement away from the shell and extending parallel with the axis of rotation of the rotor.

1,898,639. ROCK DRILL. WILLIAM H. MOSHER, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 19, 1930. Serial No. 476,314. 5 Claims. (Cl. 121—15.)



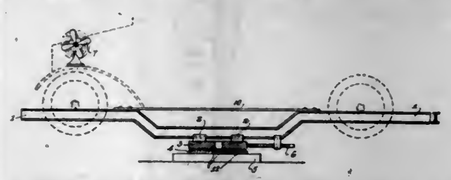
1. A rock drill comprising a pair of coaxially arranged cylinders, reciprocatory hammer pistons in the cylinders and each piston lying wholly within its cylinder, a working implement, means for transmitting the blows of the pistons to the working implement, a valve chest interposed between the cylinders and forming a head for each of the cylinders, and a valve in the valve chest for controlling the distribution of pressure fluid to the ends of the cylinders for actuating the pistons.

1,898,640. FOOT REST. H. P. MOSS, Detroit, Mich., assignor to General Spring Bumper Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 17, 1930. Serial No. 453,366. 1 Claim. (Cl. 155—172.)



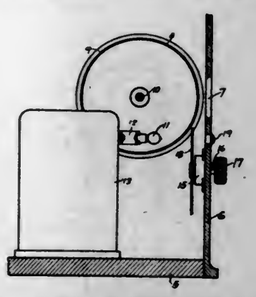
A foot rest comprising a substantially symmetrical T-shaped member including a stem and a head, said stem having a rough upper surface, said head including laterally and oppositely extending arms, and having an arcuate recess between the arms for engagement with a supporting column, a complementary resilient strap including an end portion having interlocking cooperation with one of said arms and an intermediate portion arcuately formed for clamping engagement with the supporting column, and means adjustably anchoring the other end of said strap to the other said arm for adjustably mounting the foot rest on the supporting column.

1,898,641. DISPLAY DEVICE FOR MOTOR VEHICLES. ITALO MUONANI, Pehuajo, Argentina. Filed Feb. 14, 1929, Serial No. 339,998, and in Argentina May 2, 1928. 1 Claim. (Cl. 211—1.6.)



A display device for motor vehicles comprising a base and a turntable rotatably mounted on the base, said turntable comprising a frame-supporting member, supports on the member, a vehicle-supporting frame slidably supported on said supports, a hanger secured to and depending from said frame, said hanger being provided with a screw, whereby rotation of the screw for engagement with the member effects a balancing of the turntable on the base, and a propeller adapted to be mounted on the motor vehicle for rotating the turntable and frame with the motor vehicle thereon for displaying all sides of the same.

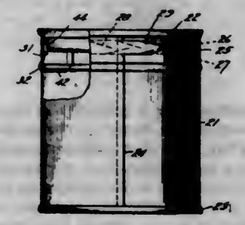
1,898,642. MEANS FOR INDICATING TONES BY COLOR. CHARLES R. OGLE, Belleville, Ill., assignor to Trav-Ler Manufacturing Corp., St. Louis, Mo., a Corporation of Illinois. Filed Oct. 2, 1930. Serial No. 485,905. 3 Claims. (Cl. 116—124.4.)



1. In a radio receiving apparatus including a control panel having a light displaying area thereon, a control device operable over a portion of its range of movement to effect tonal modulations of the sounds reproduced, a source of light, a movable screen operatively connected with said tone controlling device, and adapted to transmit light from said source to said display area, said screen having a fractional portion thereof colored in accordance with the spectrum.

1,898,643. INTERIOR COLLAR CAN. JOHN F. PETERS, Leonia, N. J., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 14, 1930. Serial No. 475,182. 4 Claims. (Cl. 220—53.)

1. A container, comprising a body scored circumferentially to provide a side tearing strip, a top secured to said body, and a collar secured to the body beneath said tearing strip and extending thereabove, said collar having its ends interlocked in a double seam to form a continuous member fitting snugly within the body of the



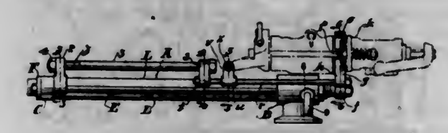
container, the ends of the collar being narrower than its middle portion and the top edge of the collar being formed into a curl the body being one piece of metal extending down, past and below said collar.

1,898,644. AERIAL VEHICLE. IGOR SIKORSKY, College Point, N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del., a Corporation of Delaware. Filed Jan. 19, 1929. Serial No. 333,603. 4 Claims. (Cl. 244—30.)



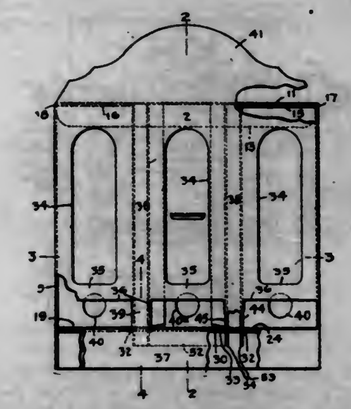
1. In a land-water-air vehicle, the combination comprising a vehicle body, retractable landing gear attached to said vehicle body, a pilot's compartment formed by parts of said body, a window in said pilot's compartment, a sliding seat within said pilot's compartment adjacent said window, hand controls, foot controls and control means for extending and retracting said landing gear adjacent said sliding seat, connecting means for raising and lowering said landing gear, said connecting means connecting said landing gear control means and said retractable landing gear and seat adjusting means whereby said pilot may adjust the height of said seat and the distance of said seat from said window in said pilot's compartment.

1,898,645. AIR FEED MOUNTING FOR ROCK DRILLS. FRED M. SLATER, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 10, 1931. Serial No. 580,012. 3 Claims. (Cl. 121—9.)



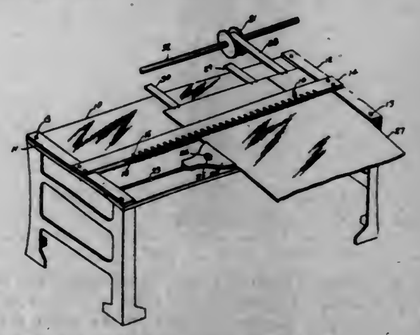
1. An air feed mounting for rock drills, comprising a pair of heads, standards for holding the heads in rigid spaced relationship, a feeding cylinder supported by the heads, a piston in the cylinder having a rod extending through one head, a saddle affixed with one end to the rod and being slidable with its other end on the standards, means for clamping a rock drill to the saddle, and means for supplying pressure fluid to the ends of the feeding cylinder.

1,898,646. DISPLAY BOX. ROBERT A. TAYLOR, Cincinnati, Ohio, assignor, by mesne assignments, to The Richardson Taylor-Globe Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 10, 1929, Serial No. 413,003. Renewed July 27, 1932. 16 Claims. (Cl. 206—44.)



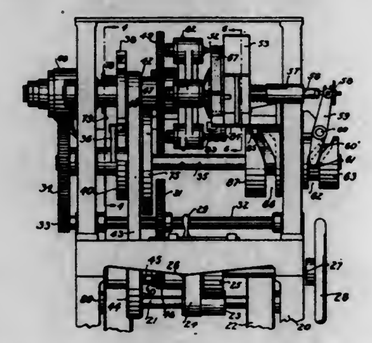
1. A cardboard counter display and sales device comprising a box having front and rear walls and end walls, said front wall having cut therein a plurality of vertical windows and beneath each of said windows a delivery opening, said delivery openings being wider than said windows, said front wall having a continuous basal portion joining the end walls beneath said delivery openings and connecting portions joining said basal portion with the areas of the front wall between the windows, a platform bottom, and partitions disposed behind said areas and connecting portions.

1,898,647. CUTTING MACHINE. EDWARD C. TEUSCHER, Webster Groves, Mo., assignor to Teuscher Pulley & Belting Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 24, 1930. Serial No. 497,820. 3 Claims. (Cl. 164—38.)



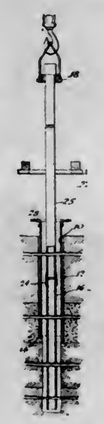
3. In a device for cutting pliable sheet material into predetermined widths, a frame for the material under treatment, including a table portion, a stationary knife projecting from said table portion transversely of the material under treatment, a plurality of seats for selectively receiving said knife, guides associated with the table portion, for the material thereon, a rotatable shaft disposed adjacent the table portion, a winding member carried by said shaft, and a pull-in member secured to said winding member and to the material to be cut, said winding member and pull-in member coacting to draw the material under treatment across said table portion and transversely to said knife.

1,898,648. AUTOMATIC GRINDING MACHINE. PETER THORSEN, North Bergen, N. J., and GEORGE WILLIAM VON HOFE, Forest Hills, N. Y., said von Hofe assignor to said Thorsen. Filed Mar. 22, 1928. Serial No. 263,657. 12 Claims. (Cl. 51—108.)



1. In a grinding machine, the combination of a grinding wheel, a rotary mandrel having a free end, means for feeding said grinding wheel toward said mandrel, and means to support the free end of said mandrel during the feeding of said grinding wheel to said mandrel.

1,898,649. METHOD OF LANDING OIL WELL CASINGS. FLOYD JAMES WHEELER, Long Beach, and BURT STANLEY MINOR, San Pedro, Calif. Filed Mar. 28, 1930, Serial No. 439,843. Renewed July 14, 1932. 7 Claims. (Cl. 166—21.)



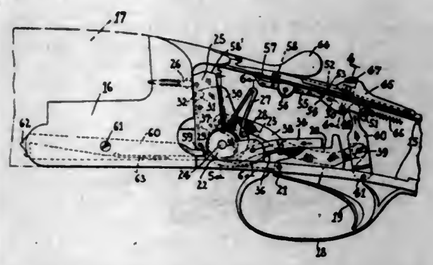
1. A method of landing a well casing comprising making up a string of casing as the same is lowered in the well, applying a coupling member to the upper end of one of the joints of said casing, making up the remainder of the string with additional joints of casing as it is lowered in the well, said coupling member being interposed in said string of casing at such point that when said casing has reached the desired depth it will be below the upper end of the well, providing a casing supporting member at the upper end of the well, measuring the distance between said coupling and the supporting member, making up a section of casing corresponding to the measurement taken, connecting the lower end of said section of casing to said coupling member and the upper end thereof to said supporting member, and finally removing that portion of the string of casing extending above said coupling member.

1,898,650. BUCKLE OR FASTENER. BOSQUE M. WHITEKER, Haskell, Tex. Filed Dec. 12, 1930. Serial No. 501,753. 9 Claims. (Cl. 24—197.)



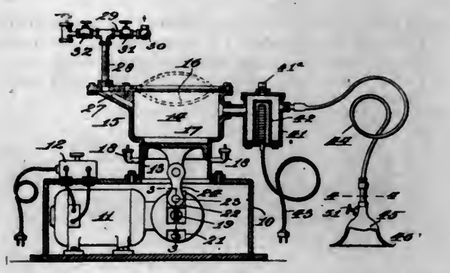
1. In combination with a plurality of layers of flexible material, a fastener for securing the same together in overlapped relation, the said fastener comprising a lock pin for enfolding in a number of the layers of material less than the whole, and a frame having a slot through which the said pin and enfolding material may be snugly passed, but which will not permit the repassage of the pin enfolded in all of the said layers of material.

1,898,651. FIREARM. OTTO WILK, Newark, N. J. Filed July 19, 1932. Serial No. 623,339. 3 Claims. (Cl. 42—41.)



1. In a breech loading gun the combination with a firing mechanism including a firing pin, a striker therefor and means actuated by the breeching of the gun to cock said striker, of a detent pivoted alongside said striker, a striker spring anchored in said detent, a lever link connected to said detent, a spring drawn slide engaging the free end of said lever, a catch to retain said slide when its spring is tensioned, and means actuated by said striker while being cocked to release said catch.

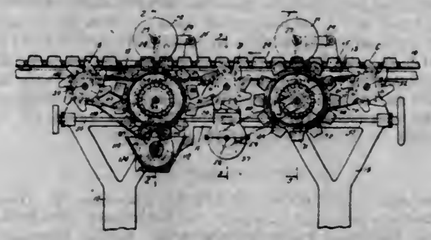
1,898,652. DIRECT AIR PULSATOR. GEORGE A. WILLIAMS, Los Angeles, Calif. Filed July 8, 1930. Serial No. 466,373. 4 Claims. (Cl. 128—38.)



1. In an air pulsator, the combination with a duct and means for producing pulsations of the air column that passes through said duct, of an applicator carried by said duct, an elastic weighted diaphragm carried by said applicator and an elastic contact ring carried by said applicator and surrounding and arranged in front of said weighted diaphragm.

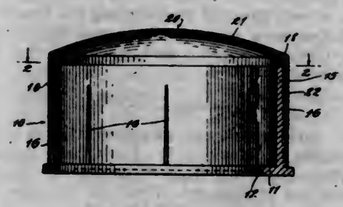
3. In an air pulsator, the combination with a supporting structure, a motor arranged within said structure, a cylinder on top of said structure, said cylinder having an air inlet and an air outlet, an elastic member closing the head of said cylinder so as to produce variable yielding pressure on the entire body of air within said cylinder as said air is pulsated, a piston arranged for reciprocatory movement within said cylinder, a housing connected to said air outlet of said cylinder and a flexible tube leading from said housing and adapted for connection to an applicator.

1,898,653. TIN CLEANING AND GREASING MACHINE. WILLIAM D. BLEIER, New York, N. Y., assignor to Continental Baking Company, New York, N. Y., a Corporation of Delaware. Filed June 7, 1930. Serial No. 459,636. 14 Claims. (Cl. 15—56.)



1. In a machine of the character described, means for feeding baking tins having pockets therein, said tins being fed in a substantially straight path, a plurality of brushes, means for moving said brushes in a predetermined path into coaction with said tins and into and out of said pockets during the feeding movement of the tins, and means for axially rotating said brushes during their coaction with said tins.

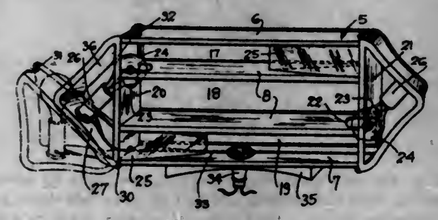
1,898,654. BOX. MILTON K. BRESLAUER, New York, N. Y. Filed July 12, 1930. Serial No. 467,414. 8 Claims. (Cl. 229—43.)



1. A box comprising a container and cover having substantially cylindrical, telescoping walls of substantially equal height, and a plurality of spaced longitudinal ribs formed on one of said walls, only, adapted to contact said other wall to press said walls out of contact from one another, and permit flow of air into said box, said ribs tapering gradually longitudinally thereof.

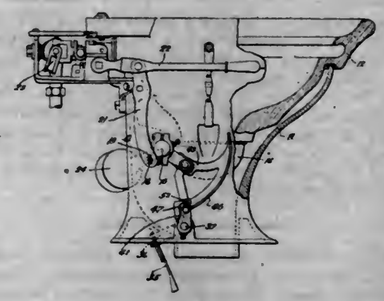
1,898,655. DIRECTION INDICATING SAFETY LIGHT. OLIVER D. CHAUVET, North Bergen, N. J. Filed May 31, 1930. Serial No. 458,637. 2 Claims. (Cl. 177—327.)

1. In a device of the character described, an open faced signal casing, horizontal partitions dividing said casing to provide an upper, a lower and an intermediate compartment, end walls in the casing, an open faced end casing providing a compartment at each end of the signal casing, one of said end walls and said upper compartment forming partition, having adjoining openings, an illuminating means in one end casing but partially extending through said adjoining openings into the upper and intermediate compartments whereby said end casing and said upper and intermediate compartments may be simultaneously illuminated, said other end wall and lower compartment forming partition having adjoining openings, an illuminating means in said other end casing and partially extending through the openings into the lower and intermediate compartments whereby said end casing and the lower and



intermediate compartments may be simultaneously illuminated, transparent closures for the open faces of all of the compartments and end casings, those in the end casings being in the shape of oppositely pointing arrow heads, the closure of the intermediate compartment forming a common shaft for said arrow heads, and the closures of the upper and lower compartments bearing direction turn indicia of a sense corresponding respectively with the arrow head with which it is illuminated.

1,898,656. WATER CLOSET. SVEN DUNER, Wheaton, Ill. Filed May 26, 1930. Serial No. 455,686. 4 Claims. (Cl. 4—85.)

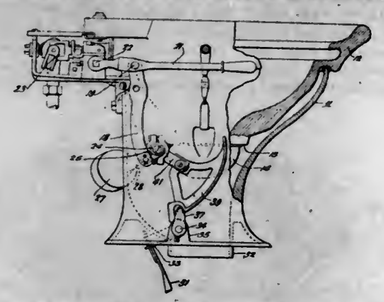


2. A water closet, comprising a closet bowl supported above its outlet, a dump pan positioned beneath said bowl and pivoted to swing from a sealing position downwardly to a dumping position, a draft member located beneath said dump pan and pivoted to move into a position for sealing the toilet outlet and means connected respectively to said dump pan and said draft member and optionally arrangeable for interengagement to cause conjointed opposite movement of said dump pan and said draft member, and to cause separate and sole movement of said dump pan from receiving position.

1,898,657. WATER CLOSET. SVEN DUNER, Wheaton, Ill. Filed May 26, 1930. Serial No. 455,687. 4 Claims. (Cl. 4—85.)

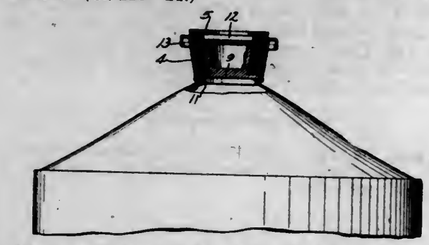
2. A water closet, comprising a closet bowl supported above its outlet, a dump pan positioned beneath said bowl and adapted to swing from a sealing position downwardly to a dumping position, a draft member located beneath said dump pan and conjointly operable with the opening

movement of said dump pan for sealing the closet outlet, means for conjointly moving said dump pan and said draft member to dump said dump pan and close said draft mem-



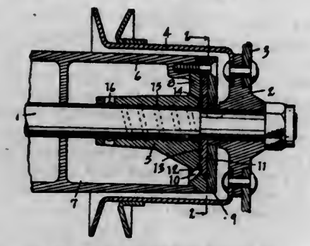
ber, a separate means for returning the parts to normal position, said means being adapted to move said dump pan to dumping position independently of said draft member.

1,898,658. STOPPER PLUG. OTTO FITTERER, Milwaukee, Wis. Filed May 21, 1932. Serial No. 612,667. 1 Claim. (Cl. 220—24.)



A stopper plug comprising a hollow tapered core, closed at its lower and smaller end, a cross bar diametrically fixed in said core adjacent its upper end, an annular flange outwardly disposed of said lower end and perpendicular to the axis of said core, and a rubber sheath moulded on said core flush with the upper end thereof and abutting said flange with its lower end and overlapping the same so as to form a retaining means for said plug when it is placed in the mouth of a receptacle for the purpose of sealing the same.

1,898,659. PUMP. ARCHIBALD D. GARDNER, Jackson, Mich., assignor to Automotive Fan & Bearing Company, Jackson, Mich. Filed Mar. 20, 1929. Serial No. 348,385. 5 Claims. (Cl. 308—122.)



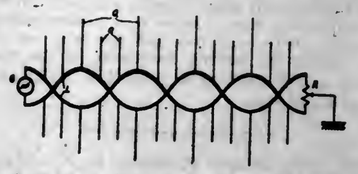
1. The combination of a bearing provided with a chambered head, a lubricant receptacle surrounding said bearing, the chamber of said head having an inlet opening to said lubricant receptacle, a shaft disposed in said bearing, and a disc-like impeller on said shaft having an annular groove to which said inlet opens and a spiral groove leading from said annular groove to the bearing, said bearing having a helical lubricant distributing groove therein with a lead from said impeller.

1,898,660. CLOCK. JOHN J. GATESY, Torrington, Conn. Filed July 7, 1930. Serial No. 465,935. 4 Claims. (Cl. 58—125.)



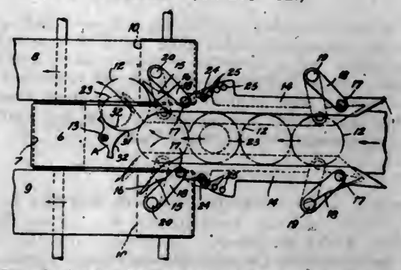
1. In a clock, a frame, a continuously driven shaft, a minute-indicating band rotatable with said shaft, an hour-indicating band loosely mounted on said shaft and carrying a ratchet, a spring-pressed slide on said frame carrying a pin, said slide having an elongated closed central slot enclosing said shaft, a detent arm pivoted on said slide for engaging said ratchet, and means rotatable with said shaft for intermittently engaging said pin to move said slide longitudinally, and cause the next tooth on said ratchet to be engaged by said detent arm.

1,898,661. ANTENNA SYSTEM. GERHARD B. HAGEN, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Oct. 29, 1931, Serial No. 571,771, and in Germany Oct. 13, 1930. 5 Claims. (Cl. 250—33.)



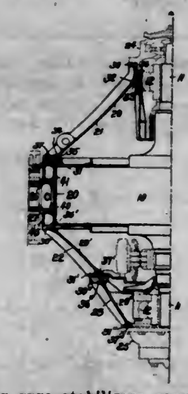
1. A short wave directional antenna system comprising a double wire line wound helically around the central longitudinal axis, transverse radiators connected to the wires of said line and spaced along the length of said line, high frequency apparatus connected to the wires at one end of said line, and a load connecting the wires at the other end of said line.

1,898,662. DISTRIBUTING FEEDER. JAMES L. HEROLD and JOSEPH W. DAWSON, St. Louis, Mo., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 13, 1930. Serial No. 488,274. 7 Claims. (Cl. 198—31.)



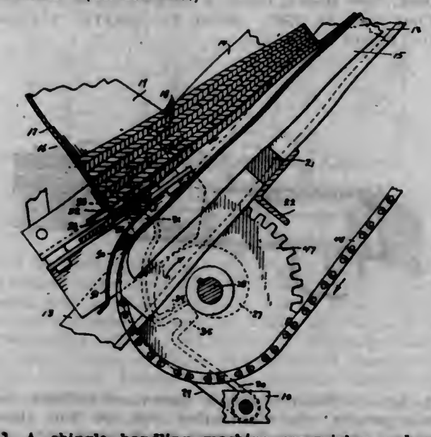
1. In a device for feeding bottles from a source of supply into separate paths, a separator movable from one position to another to divert the bottles into said separate paths, said separator having a projecting portion movable from one path to the other so as to open and close said paths, and oppositely disposed abutments extending from said projecting portion to direct the bottles into the respective paths, said abutments being located at the junction of said paths and engaged by the moving bottles to shift the separator from one of said positions to the other, oppositely disposed guide members whereby the bottles are directed to said separator, and retaining members cooperating with said separator to confine the bottles at the entrances to said paths, said guide members being adjustable toward and away from each other to receive bottles of different diameters, and said retaining members being adjustable toward and away from said abutments to provide for the transmission of movement from the different bottles to the separator.

1,898,663. WELDED CASING. FRANCIS P. HODGKINSON, New York, N. Y., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 25, 1930. Serial No. 447,402. 4 Claims. (Cl. 74—56.)



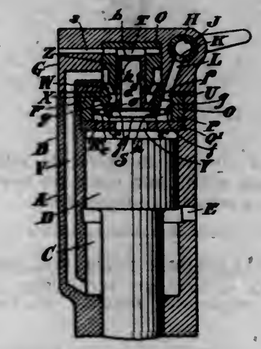
3. A casing for gyro stabilizers comprising a plurality of sheet metal sections having parts welded together by butt joints including a central ring having flanges, gudgeons welded on said ring, and a plate supported between the flanges on said ring and spaced from said gudgeon welds for providing support for said gudgeons independent of said welds.

1,898,664. SHINGLE HANDLING MACHINE. SMITH B. HOWE, Buffalo, and SHERWOOD C. BLISS, Kenmore, N. Y., assignors to Weatherbest Stained Shingle Company, North Tonawanda, N. Y., a Corporation of New York. Filed Oct. 16, 1930. Serial No. 489,106. 8 Claims. (Cl. 198—35.)



1. A shingle handling machine comprising a hopper for supporting the shingles being fed, said hopper being formed with an open front and provided with a back wall, such back wall being so inclined that when the lowermost shingle is being fed, the remaining shingles will be held therein by gravity, a rest plate arranged under the feed hopper, the forward edge of the plate being arranged a short distance in front of the back of the hopper for supporting the butt ends only of the shingles, a feeder bar movable in an inclined plane upon the rest plate and under the hopper for engaging the lowermost shingle therein, and means for quickly operating the feed bar on its forward stroke.

1,898,665. VALVE FOR ROCK DRILLS. GEORGE W. HULSHIZER, Stewartsville, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 15, 1930. Serial No. 428,759. 1 Claim. (Cl. 121—19.)

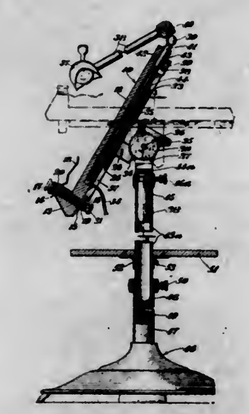


In a fluid actuated rock drill, the combination of a cylinder having a piston chamber and a piston in the piston chamber, an exhaust port in the cylinder, a valve chest having a valve chamber, inlet passages leading from the valve chamber to the piston chamber, a distributing valve in the valve chamber comprising a stem and a flange guided by the wall of the valve chamber, passages in the flange through which pressure fluid flows to the rear end of the piston chamber, a pressure area on the rear end of the flange against which pressure fluid constantly acts tending to throw the valve for admitting pressure fluid to the front end of the cylinder, a pressure area at the front end of the flange of larger area than the first mentioned pressure area and being constantly exposed to pressure fluid tending to throw the valve for admitting pressure fluid to the rear end of the piston chamber, an actuating surface on the valve intermittently exposed to compression to augment the pressure acting against the first mentioned pressure area for throwing the valve, a holding surface on the rear end of the flange intermittently exposed to pressure fluid to assist the pressure fluid acting against the first mentioned pressure area and the actuating surface in holding the valve momentarily stationary, an actuating surface on the front end of the valve intermittently exposed to compression to augment the pressure fluid acting against the second mentioned pressure area for throwing the valve, and a shoulder on the valve to cut-off the admission of pressure fluid to the front end of the piston chamber before the piston uncovers the exhaust port.

1,898,666. COMBINATION BOOK REST AND STAND. MORRIS ISAACSON, Brooklyn, N. Y. Filed Dec. 8, 1931. Serial No. 579,674. 7 Claims. (Cl. 45—82.)

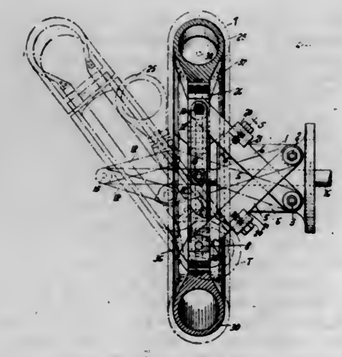
1. In a book supporting device, the combination of a back rest, a flanged bottom rest attached to said back rest, page holding means extending through and supported by said bottom rest, two parallel horizontally disposed rails secured to the rear of said back rest, a

base plate in slidable engagement with said rails, a supporting rod pivotally secured to said base plate, a recess at the rear of said back rest and underlying and



extending in a direction transverse to said rails, and means positioned within said recess for housing electric conductors for a suitably positioned lamp.

1,898,667. COLLAPSIBLE FORM FOR TIRE BUILDING. FRANK L. JOHNSON, Akron, Ohio. Filed Sept. 10, 1930. Serial No. 480,956. 13 Claims. (Cl. 154—9.)



2. A collapsible core comprising a key section and a group of interconnected sections, a pivot for the group of sections about which the group may be rocked, and means for moving the key section and the pivotal mounting of the group of sections simultaneously toward the axis of the core.

9. In a collapsible core, a central support, an arm movable upon the support, a key section on the arm, a second arm movable on the support, a group of core sections pivotally supported by the second arm, and means to cause joint movement of said arms.

1,898,668. FLOOR CONSTRUCTION OR THE LIKE. JONATHAN JONES and STERLING JOHNSTON, Bethlehem, Pa., assignors to McClintic-Marshall Corporation, a Corporation of Pennsylvania. Filed June 25, 1931. Serial No. 546,692. 23 Claims. (Cl. 72—71.)

1. A metal structure adapted to serve as a reenforcement in concrete floor slabs or the like, comprising spaced joists, tie-bars rigidly connecting one of the edges of the joists together at spaced intervals, and means secured



to and extending over the opposite edges of the joists to those engaged by the tie-bars and adapted to continuously connect the joists together.

1,898,669. ADJUSTABLE HOLDER. JOHN L. KNUDSON, Cleveland, Ohio, assignor of one-third to Frank A. Johnson, Cleveland, Ohio. Filed Sept. 12, 1931. Serial No. 562,445. 7 Claims. (Cl. 248—38.)



1. An adjustable holder comprising supports pivoted on connecting means, a plurality of jaws mounted on said connecting means, pins on said connecting means and slots in said jaws adapted to slide on said pins.

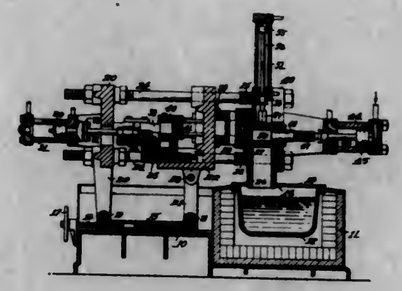
1,898,670. MANUALLY-OPERATED BOLT-ACTION FIREARM. ALBERT F. LAUDENSACK, New Haven, Conn., assignor to Winchester Repeating Arms Company, New Haven, Conn., a Corporation of Maryland. Filed Apr. 15, 1932. Serial No. 605,417. 8 Claims. (Cl. 42—18.)



1. In a manually-operated, upturn-and-pullback, bolt-action firearm, the combination with the bolt thereof having a slot opening through its forward end; of a retirable cartridge-pusher pivotally mounted in the slot

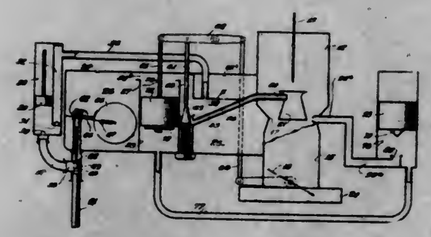
in the said bolt and having a slotted forward end engageable with a cartridge for feeding the same into the cartridge-chamber of the firearm upon a forward movement of the said bolt; and guide-means carried by the said bolt and projecting into the slot in the forward end of the said cartridge-pusher for guiding the same.

1,898,671. DIE CASTING MACHINE. WILLIAM M. LESTER, Shaker Heights, Ohio. Filed Sept. 8, 1931. Serial No. 561,676. 7 Claims. (Cl. 22—68.)



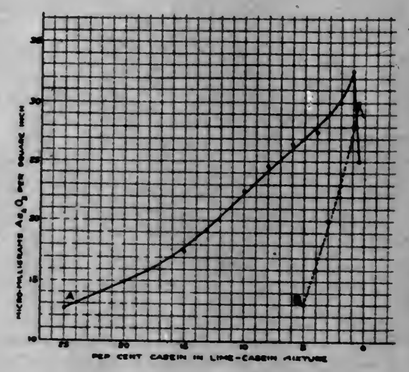
6. In a die casting machine, the combination of a separable mold, a melting pot, a reservoir movable from said melting pot to a point of registry with said mold, and a plunger insertable in said reservoir and adapted to force the metal therefrom into said mold.

1,898,672. CARBURETOR. HOWARD W. LINKERT and RAYMOND M. ANDERSON, Indianapolis, Ind., assignors, by mesne assignments, to Marvel Carbureter Company, Flint, Mich., a Corporation of Illinois. Filed May 26, 1930. Serial No. 455,553. 8 Claims. (Cl. 261—51.)



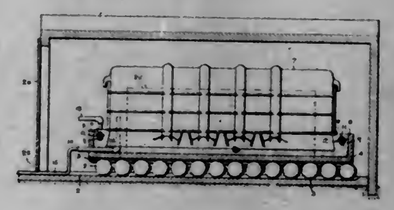
1. A carburetor having an aligned air inlet and mixture outlet, a concentric double Venturi structure formed between said inlet and outlet, a non-air bleed type of fuel nozzle discharging into the throat of the inner of the concentric venturis, and means for supplying fuel to said nozzle under a static pressure head, comprising a fuel chamber having elevated overflow outlets, an accelerating pump receiving the overflow from said chamber, fuel pumping means delivering an excess of fuel to said chamber, and means for returning excess fuel from said accelerating pump to said fuel pumping means.

1,898,673. SPREADER FOR SPRAY COMPOSITIONS. JOHN F. LITTOOY, San Francisco, Calif., assignor to Hercules Glue Company, San Francisco, Calif., a Corporation of California. Filed Sept. 23, 1929. Serial No. 394,490. 3 Claims. (Cl. 167—42.)



1. A spreader for sprays comprising a protein and lime, the quantity of protein being less than 20% of the total quantity of protein and lime calculated on the basis of calcium hydroxide.

1,898,674. ANNEALING ART. LESTER L. LEWIS, New Castle, Pa., assignor of two-thirds to Blair Strip Steel Company, New Castle, Pa., a Corporation of Pennsylvania. Filed Sept. 3, 1930. Serial No. 479,537. 4 Claims. (Cl. 148—16.)

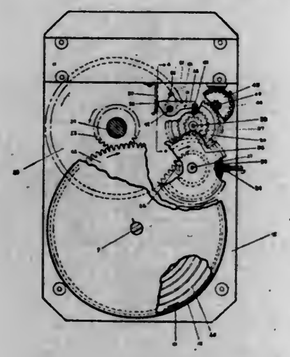


1. The art of bright annealing metal work, comprising raising the work to annealing temperature in a container and maintaining the work at such temperature for a sufficient period for annealing, exhausting fumes from the container during the heating and maintenance of the heated condition of the work, sealing the work with a comminuted seal, gas treating the seal for preserving the container against access by discoloration-producing agents, and cooling the work while maintained thus sealed.

1,898,675. SPEED CONTROL FOR MOTION PICTURE CAMERAS. GUNNE LOWKRANTZ, Binghamton, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Feb. 1, 1929. Serial No. 336,830. 5 Claims. (Cl. 88—17.)

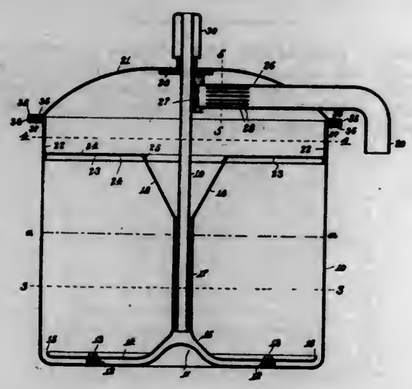
1. A speed changing mechanism for motion picture cameras comprising a driving element and a driven ele-

ment, shiftable speed change gears providing an operative connection therebetween, means for shifting said gears comprising a rotatable and slidable shaft having en-



gagement with said gears, a and a stop and release device on said shaft for said mechanism operable by rotation of said shaft.

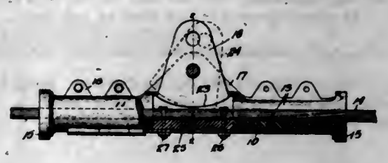
1,898,676. WASHING MACHINE. HENRY C. MAGNUS, Jamaica Plain, Mass. Filed Apr. 7, 1932. Serial No. 603,707. 11 Claims. (Cl. 68—37.)



1. In a washing machine, the combination of a cylindrical receptacle adapted to contain a washing fluid; a discal support therein positioned slightly above the bottom thereof and having a central tubular extension extending upwardly therefrom and having a funnel shaped upper end, the lower end of said extension opening into the fluid beneath said support; a horizontal slotted baffle plate surrounding the upper end of said extension having an annular flange fitted to said funnel shaped end; and an air inlet tube within said tubular extension and extending nearly to the bottom thereof.

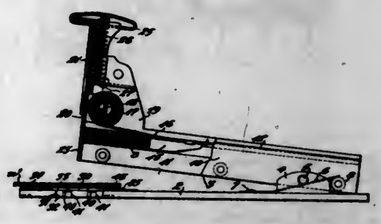
1,898,677. SUPPORTING AND SECURING MEANS FOR ELECTRIC CABLES. ADOLPH W. MALONE, Fillmore, Utah, assignor of one-half to Albert H. Vestal, Anderson, Ind. Filed Nov. 14, 1931. Serial No. 575,128. 4 Claims. (Cl. 248—31.)

1. Means for supporting a high tension cable comprising a pair of hinged sections, a resilient casing within said sections, said casing being disposed about the cable to be supported, a plate adapted to be pivoted to a fixed support, said plate being pivotally attached to the said



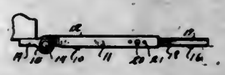
support and having a cam edge adapted to engage the cable to lock it and prevent its slipping out of its support in case the cable is broken, substantially as set forth.

1,898,678. CLINCHER-DEVICE FOR STAPLING MACHINES. ARTHUR H. MAYNARD, Warwick, R. I., assignor to Boston Wire Stitcher Company, Portland, Me., a Corporation of Maine. Filed Apr. 30, 1929. Serial No. 359,279. 10 Claims. (Cl. 1—3.)



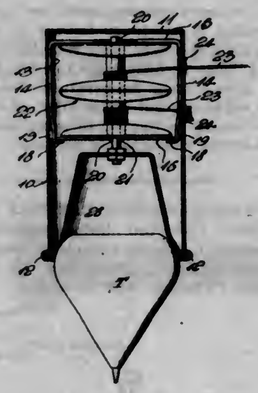
1. In a stapling machine, the combination of means for driving the staple through the work, and a clincher-anvil rotatably adjustable on an axis parallel with the direction in which the staples are driven and provided with a plurality of clincher-faces of dissimilar arrangement adapted to bend the legs of the staples in different directions in accordance with the different positions of adjustment of the anvil, said clincher-faces extending radially of the axis of the anvil with one end of one of them disposed at a greater distance from said axis than its opposite end.

1,898,679. LOADING RAMP FOR VEHICLES. EDWIN MILLER, Fort Smith, Ark. Filed Apr. 2, 1932. Serial No. 602,800. 3 Claims. (Cl. 193—41.)



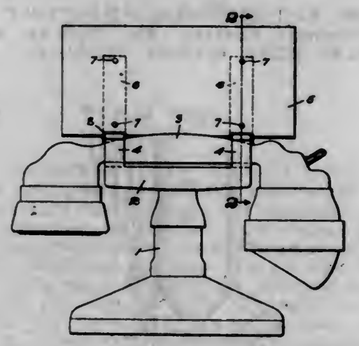
1. A ramp for vehicles, the ramp being formed of two sections, one of these sections having a sheet metal floor and laterally disposed channel iron reinforcing members, the channel irons at their rear ends being curved to form hooks, a bolt passing through said hooks and adapted to pass through ears on the vehicle, a second section having a sheet metal floor disposed beneath the floor of the first section and having laterally disposed channel irons having sliding engagement within the channel irons of the first-named section, a pair of inwardly projecting stops carried by the channel irons of the first-named section, and a pair of outwardly projecting stops carried by the channel irons of the second named section and coacting with the first named stops to limit the outward movement of the two sections.

1,898,680. TOP-SPINNING DEVICE. ALLIE FONZO MORGAN, Newport News, Va. Filed Nov. 8, 1932. Serial No. 641,795. 1 Claim. (Cl. 46—32.)



A top spinning device comprising a sheet metal frame having vertical side bars disposed in parallel planes, and horizontal end bars disposed in parallel planes, said end bars having central bearing openings, a vertical shaft passing through said bearing openings and having a reel between said end bars, a downwardly opening top spinning cup secured at its upper end to the lower end of said shaft, the diameter of said cup being slightly less than the distance between the outer sides of said frame side bars, a cylindrical sheet metal casing whose side wall surrounds said frame and said cup and frictionally engages said outer sides of said frame side bars, said casing having an open beaded lower end surrounding the rim of said cup and having an upper end wall overlying said frame and the upper end of said shaft, and a cord wound on said reel and extending to the exterior of the casing.

1,898,681. ATTACHMENT FOR TELEPHONES. SAMUEL NEITERMAN, Roxbury, Mass. Filed Jan. 2, 1932. Serial No. 584,356. 3 Claims. (Cl. 40—10.5.)

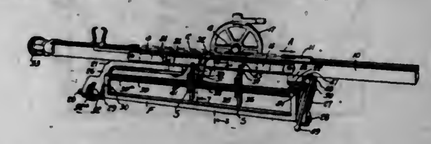


1. A device for attachment to a telephone instrument of the class described which comprises a member having a substantially tubular portion open at its lower end and constructed to make substantially rigid engagement with a projection of the telephone instrument, a prolongation of a wall of said socket portion and a utility device attached to said prolongation.

1,898,682. PAPER-MAKING PROCESS. DONALD K. PATTILLO, Dover-Foxcroft, Me.; George E. Corson, Clinton, Iowa, and Herbert L. Thompson, Norwood, Mass., assignors to Clinton Corn Syrup Refining Company, Clinton, Iowa, a Corporation of Iowa. Filed Apr. 25, 1931. Serial No. 532,990. 4 Claims. (Cl. 92—21.)

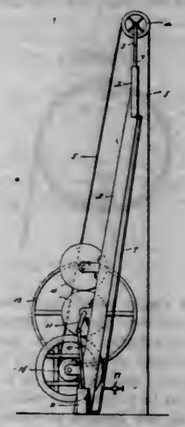
1. That improvement in the process of making paper to improve its physical characteristics which consists in mechanically hydrating the fibres by a beater operation, flowing the mixture to a paper making machine and adding an amylaceous bonding material to the mixture at a point between the beater and the paper making machine thereby securing an increased retention of the bonding material in the finished paper over that obtained by adding the bonding material to the beater.

1,898,683. TABULATING DEVICE FOR TYPE COMPOSING MACHINES. THOMAS A. PAYNE, Los Angeles, Calif. Filed Sept. 30, 1929. Serial No. 396,881. 18 Claims. (Cl. 164—112.)



1. In a type composing machine having an em rack, a stop member carried by the em rack for movement therewith, a support, a stop on the support positioned in the path of movement of said stop member, for coaction with the latter in arresting return movement of the em rack at a predetermined position, and means for rendering the stop member free to pass said stop during advancing movement of the em rack, the last means comprising means for mounting the support for movement to occupy an active position wherein the stop is disposed in the path of movement of the stop member and an inactive position wherein the stop is clear of the path of movement of the stop member, means for normally urging the support to the first mentioned position, and cam means on the stop member engaging the stop during advancing movement of the em rack to move the support to its second mentioned position.

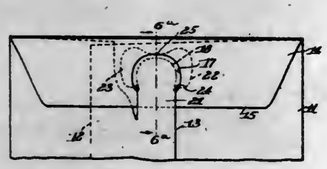
1,898,684. HYDRAULIC SPUDDER. HAROLD PEARSALL, Keating Summit, Pa. Filed Mar. 30, 1932. Serial No. 602,036. 1 Claim. (Cl. 255—10.)



In a device of the class described, a mast, a cylinder supported at the upper end thereof, said cylinder having its upper end open and its lower end closed, a sleeve

slidably arranged in the cylinder having its upper end open and its lower end closed, a piston having its lower part fitting in the sleeve and its upper end forked, a pulley carried by the forked end of the piston, a spring in the lower part of the sleeve on which the lower end of the piston rests, a pump, a conduit connecting the pump with the lower end of the cylinder, a drum rotatably supported by the lower part of the mast, a cable having one end connected with the drum and said cable passing over the pulley and actuating means for the drum and the pump.

1,898,685. ENVELOPE. HOWARD H. REINEMAN, Brighton, N. Y., assignor to Rochester Envelope Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Dec. 26, 1930. Serial No. 504,860. 9 Claims. (Cl. 229—84.)



1. An envelope having in one side thereof adjacent its mouth a generally semi-circular slit forming an enclosed flexible tongue extending toward the mouth of the envelope and also a finger opening, a closure flap on said side portion provided with a slit similar to said slit in said side portion and located to register with said side portion slit in the closed position of said flap, a securing tongue on the opposite side portion of the envelope arranged to overlie said flap in the closed position of the latter and to be pressed through the finger openings in said flap and said portion, said securing tongue being guarded by the tongues formed in said first side portion and said flap by said slits, and locking lugs extended laterally from said securing tongue beyond said slits and formed with curved edges adapting the same to be pressed through said finger openings and to lock said securing tongue in or unlock it from said opening.

1,898,686. ROLLER FOR SHADES AND THE LIKE. CHARLES WESLEY RICE, Union City, Ind. Filed Aug. 28, 1931. Serial No. 559,974. 4 Claims. (Cl. 126—25.)

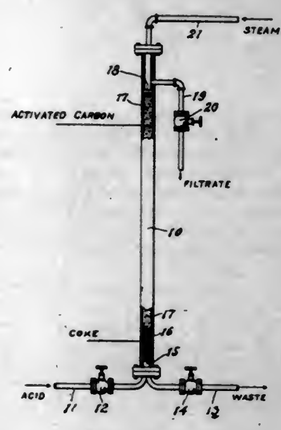


2. An extensible shade roller including a tubular metallic member of uniform diameter throughout its entire length, and another tubular metallic member having one end of a diameter equal to that of the first member, both of said members being provided with a longitudinal surface channel adapted to receive the beaded edge of a shade web, the channel in the second member being formed of increased depth along a portion of the member adjacent its other end whereby the diameter of said portion is reduced and is adapted to be telescopically received in an end of the first member.

1,898,687. ACETYLATION PROCESS. FRANCIS O. RICE, Baltimore, Md., assignor to Rohm & Haas Company, Philadelphia, Pa., a Corporation of Delaware. Filed Oct. 24, 1931. Serial No. 570,905. 13 Claims. (Cl. 260—123.)

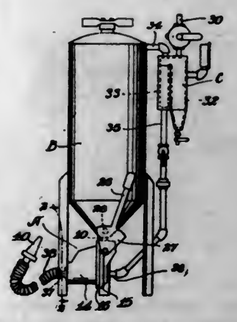
1. The process for preparing acetylated products which comprises causing a substance known to be capable of forming acetylated products upon reaction with a ketene, in a dispersed state to intimately commingle with a gas containing a ketene at a temperature above the boiling point of said substance but below that of the acetylated product to be formed to thereby form an acetylated product in substantially quantitative amounts.

1,898,688. PURIFICATION OF BATTERY ACID. CLARENCE C. ROSE, Cleveland, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed Sept. 16, 1931. Serial No. 563,036. 7 Claims. (Cl. 23—172.)



1. The method of separating wood acid impurities from sulphuric acid, which consists in bringing the impure acid into contact with activated carbon.

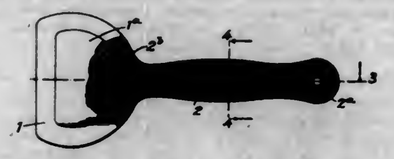
1,898,689. SAND REGULATOR AND SHUT-OFF. RICHARD RUEMELIN, Milwaukee, Wis. Filed Apr. 4, 1929. Serial No. 352,400. 9 Claims. (Cl. 51—12.)



1. A sand regulator and shut-off including a casing having a sand inlet therein, a hollow sand flexible feed member secured at one end adjacent said inlet, means for curving said member into different positions, and means

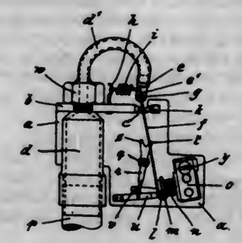
providing a straight line air passage extending through said casing to pick up the flow of sand from the free unsecured end of said flexible member and carry it direct to a sand blast nozzle.

1,898,690. DISH SCRAPER. CLIFFORD A. SCHACHT, Huntington, Ind. Filed Aug. 27, 1932. Serial No. 630,727. 3 Claims. (Cl. 15—245.)



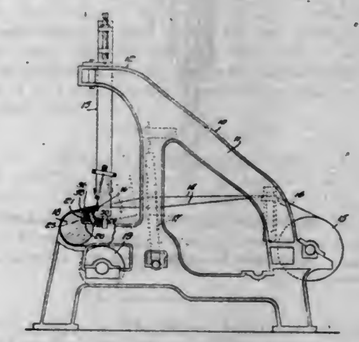
1. A scraper comprising a flexible rubber blade, and an integral handle of non-flexible rubber.

1,898,691. ELECTRIC SWITCH. GUSTAV SCHÄFER, Stuttgart, Germany. Filed Dec. 3, 1930, Serial No. 499,787, and in Germany Dec. 2, 1929. 3 Claims. (Cl. 200—140.)



1. An automatic switch for electrically heatable implements, comprising, in combination with a closed receptacle enclosing a liquid substance and being composed of a rigid vessel and of a practically semi-circular tubular spring, firmly connected, and communicating at one of its ends, with said vessel, this latter having a large diameter and being short in comparison with said tubular spring, and vice versa, an elastic switching lever coupled with the other end of said tubular spring and being formed of a leaf spring so arranged as to be adapted to be moved when the curvature of said tubular spring is changed; a contact piece at the free end of said leaf-spring; another contact piece opposite said first-mentioned one; two smaller leaf springs so arranged relatively to the first-mentioned leaf spring that one thereof is adapted to check this latter spring in one of its end positions, and the other thereof is adapted to check the said first-mentioned leaf spring in the other of its end positions; and a lever coupled with the first-mentioned leaf spring and adapted to depress the other two leaf springs alternately according to the position of the first leaf spring as determined by the said tubular spring, substantially as set forth.

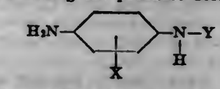
1,898,692. APPARATUS FOR PRODUCING WOVEN WIRE CLOTH. FRANK F. SCHMIEGE, Kalamazoo, Mich. Filed July 11, 1931. Serial No. 550,220. 20 Claims. (Cl. 139—291.)



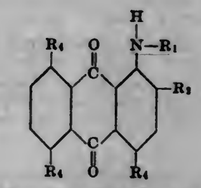
1. In a wire weaving loom having a slay adapted to drive each filler wire into woven relation with warp wires, a relatively stationary member having its upper face arranged slightly above the normal plane of the woven cloth and engageable therewith to elevate it adjacent the weaving point where the slay moves to operative position to drive each filler wire into woven relation with the warp wires.

1,898,693. DYES OF THE ANTHRAQUINONE SERIES. ARNOLD SHEPHERDSON and WILLIAM WYNDHAM TATUM, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England. Filed Apr. 13, 1929, Serial No. 354,978, and in Great Britain Apr. 19, 1928. 22 Claims. (Cl. 260—60.)

1. In the manufacture of new anthraquinone dyestuffs, the process which comprises condensing a phenylenediamine compound having the probable formula

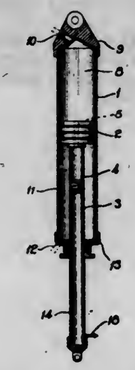


wherein X represents hydrogen or a sulphonic group and Y represents hydrogen or an acyl group, with a halogenated anthraquinone compound having the probable formula



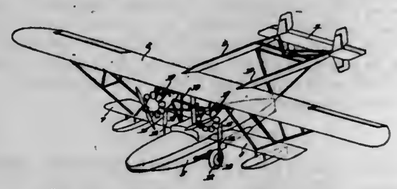
wherein R_1 represents hydrogen on an alkyl group, R_2 represents hydrogen, a halogen or a sulphonic group, and R_4 represents hydrogen or a halogen, and in which only one R_4 is a halogen, said condensation being effected in an alkalin aqueous medium.

1,898,694. SHOCK ABSORBER. IGOR SIKORSKY, College Point, N. Y., assignor to Sikorsky Aviation Corporation, a Corporation of Delaware. Filed Oct. 24, 1928. Serial No. 314,585. 43 Claims. (Cl. 244—2.)



38. In an airplane, a fuselage, landing means therefor, liquid damping means for absorbing the shock of landing and a pump connected to said means for retracting the landing means.

1,898,695. AIRCRAFT, ESPECIALLY AIRCRAFT OF THE AMPHIBIAN TYPE AND BODY BOAT STRUCTURE FOR SAME. IGOR SIKORSKY, Stratford, Conn., assignor to Sikorsky Aviation Corporation, Wilmington, Del., a Corporation of Delaware. Filed Dec. 30, 1929. Serial No. 417,563. 7 Claims. (Cl. 244—2.)



1. In an amphibian, a body boat, a plane above said body boat, landing gear at one side of said body boat, a compression member connecting the landing gear with said plane, a strut attached at one end to the plane at the point of connection of said compression member and at its other end to the body boat, the body boat structure including a plurality of ribs upwardly convergent toward the end of said strut in connection with the body boat.

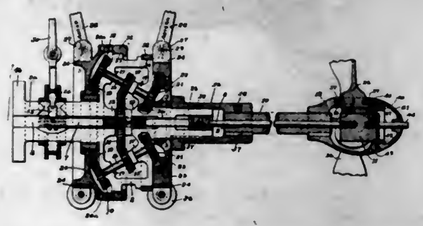
7. In an amphibian, a hull, landing gear, a plane above said hull adapted to support a motor and to receive and transmit shocks transmitted by the landing gear, fittings spaced longitudinally of the hull, struts connecting the fittings with the plane and means for distributing the load transmitted to the hull by said fittings.

1,898,696. METHOD OF MANUFACTURING COMMUTATOR SEGMENTS. CHARLES E. SORENSEN, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Jan. 19, 1931. Serial No. 509,577. 5 Claims. (Cl. 29—155.54.)



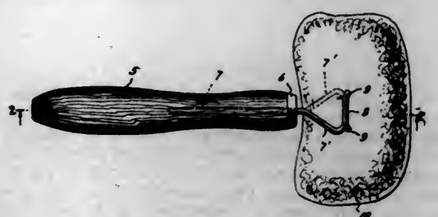
1. The method of simultaneously forming a pair of commutator segments of wedge shaped cross section throughout their lengths each having a dovetailed retaining portion at its thin edge and a terminal lug extending oppositely from its thick edge, consisting of transversely shearing a strip of metal into lengths, said strip being thin at its center and thick at its edges, the line of shear forming one end of each of said dovetails, then upsetting the opposite end of said blank to form a pair of oppositely extending terminal lugs projecting from the sides of said blank, then forming the remaining ends of the dovetails, and then shearing the blank along its center line to form said pair of segments.

1,898,697. APPARATUS FOR CHANGING THE PITCH ANGLE OF REVERSIBLE-BLADE SCREW PROPELLERS. MILTON D. THOMPSON, Fairhaven, Mass. Filed Nov. 9, 1931. Serial No. 573,868. 5 Claims. (Cl. 170—163.)



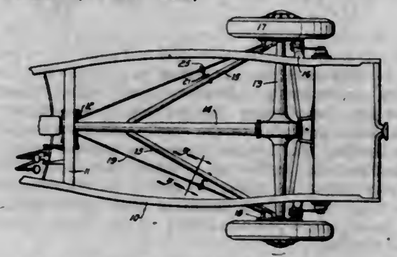
1. In apparatus of the class described adapted for use on shafts for screw propellers having detachable blades, comprising a housing secured to and revoluble with said propeller shaft, a feed screw in said housing extending through a bore in said propeller shaft to said propeller, a gear having a threaded bore mounted on said feed screw, a drum revoluble on said housing, a gear fixed to said drum, a shaft, the axis of which is inclined from the axis of said propeller shaft, journalled in said housing, two gears fixedly mounted on said inclined shaft adapted to engage, respectively, the two first mentioned gears, and means whereby, when said propeller shaft and said housing are revolving, said drum may be held against rotation, causing a differential gear action to be had between respective gears, the first gear mentioned rotating on said feed screw and moving it longitudinally in one direction in the bore of said propeller shaft.

1,898,698. STEEL WOOL HOLDER. DAVID TROMPETER, Amityville, N. Y., assignor to Miriam Sugarman, Baldwin, N. Y. Filed Nov. 19, 1930. Serial No. 496,789. 1 Claim. (Cl. 15—154.)



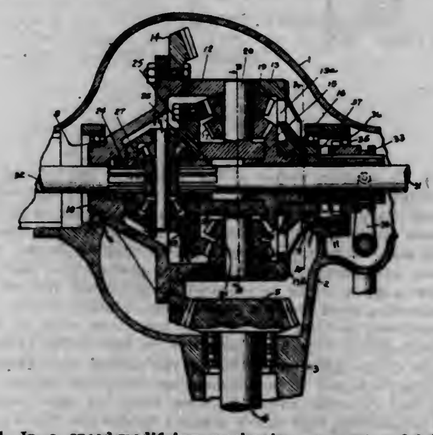
In a device of the character described, the combination with a handle having a bore therein, of a tool formed completely from a single length of stiff spring wire, said wire being reversely bent at an intermediate portion to provide an elongate shank including a pair of legs, said shank being slidable into and out of said bore but said legs being urged to a greater separation at the outer end of said shank than the diameter of said bore by the inherent resiliency of said wire, thereby to cause said legs to be frictionally seized by the bore when said shank is inserted therein, said legs adjacent their free ends and beyond the handle when the shank is fully inserted in the bore of the handle being divergingly bent away from opposite sides of the plane of resilient spread of said shank, each said leg then being bent laterally of the length of the shank to provide elongate portions adapted to squeeze therebetween an interposed fibrous mass, such squeezing portions being substantially parallel and opposite each other but oppositely extended along a line substantially perpendicular to said plane, each of said legs beyond its squeezing portion carrying a terminally offset portion, said offset portions being oppositely bent so that both project substantially perpendicularly to said line, thereby to constitute spurs to pierce said fibrous mass and so prevent the latter when squeezed between the squeezing portions from shifting relatively thereto.

1,898,699. BRAKE ROD SUPPORTING MEANS. CHARLES E. WELLMAN, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed May 27, 1932. Serial No. 613,985. 6 Claims. (Cl. 188—205.)



1. In a device of the character described, a comparatively rigid bracket having means associated with one end thereof whereby it may be secured in position on the vehicle chassis, said bracket having an opening formed in the opposite end thereof, and a cup-shaped member of resilient material secured around said opening, said cup-shaped member having means associated with the center portion thereof whereby a brake rod may extend therethrough and be frictionally gripped thereby.

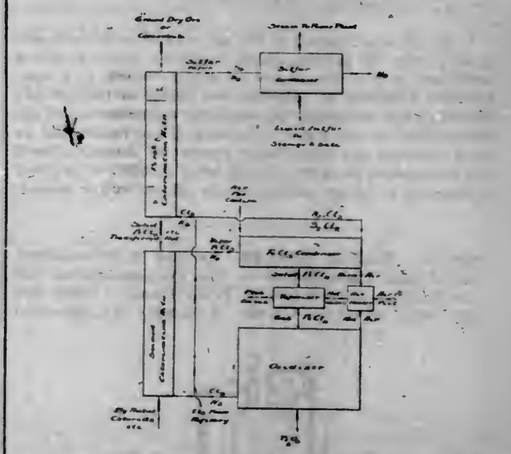
1,898,700. TWO-SPEED MECHANISM. CHARLES M. WEST, Cleveland, Ohio, assignor of one-third to Frank F. Petznick, Cleveland Heights, Ohio, and one-third to Clarence H. Dray, Lakewood, Ohio. Filed Apr. 20, 1932. Serial No. 606,487. 8 Claims. (Cl. 74—99.)



1. In a speed-modifying mechanism, an outer driving casing, axle shafts extended thereinto, differential gears operatively connected to said axle shafts, a differential

casing journaled upon hub portions of said differential gears, differential pinions and an arm therefor serving to connect said differential gears to said differential casing, speed-modifying bevel gears, one of said speed-modifying bevel gears being fixedly connected to said differential casing, mechanism for establishing operative drive connection between said outer casing and said one speed-modifying bevel gear, said mechanism including means for establishing operative connection between said speed-modifying bevel gears, and comprising a spider having its arms fixedly mounted at diametrically opposite points in the wall of said outer casing, compound bevel pinions journaled upon said arms and having operative engage-modifying bevel gear, said mechanism including means adapted to connect the other of said speed-modifying bevel gears to said outer casing for one speed, and a stationary part into engagement with which said other speed-modifying bevel gear may be adjusted by manipulation of said clutch mechanism for the establishment of increased speed.

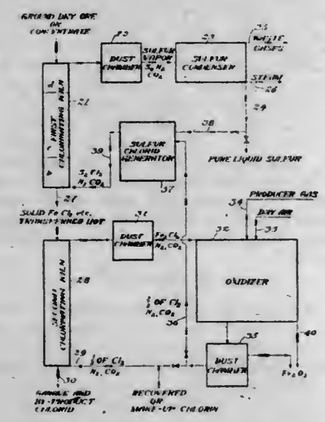
1,898,701. TREATING SULPHIDE ORES. ERNEST W. WESCOTT, Niagara Falls, N. Y., assignor, by mesne assignments, to Sulphide Corporation, a Corporation of Delaware. Filed Apr. 6, 1927. Serial No. 181,497. 16 Claims. (Cl. 23—87.)



4. The process which comprises treating a sulphide ore containing iron with a dilute gaseous chlorinating agent in the amount required to convert the iron into chlorid and to form free sulphur but insufficient to form sulphur chlorid in the exit gases, while maintaining a temperature sufficient to cause the reaction of the chlorinating agent with the ore and successively removing free sulphur and ferric chlorid as vapors.

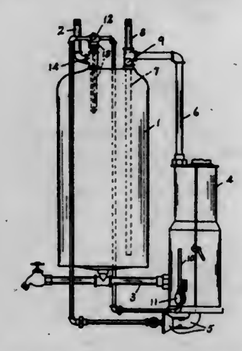
7. In the beneficiation of sulphide ores by chlorination with recovered chlorinating materials, the process which comprises treating a sulphide ore containing iron at a reacting temperature with the amount of a gaseous chlorinating agent necessary to displace sulphur as such with formation of ferrous chlorid, the said chlorinating agent coming from a later operation and being sufficiently dilute so that a substantial temperature range exists within which ferrous chlorid in the presence of the diluent gases introduced with said chlorinating agent will not exist in vapor form to any appreciable extent but within which all the sulphur will remain in vapor form, vaporising the displaced sulphur and removing the vapors from contact with ferrous chlorid and like chlorids at a temperature at the point of removal that is within said temperature range, preparing ferric chlorid vapors from the ferrous chlorid formed in the action and converting the ferric chlorid into a gaseous chlorinating agent and iron oxid.

1,898,702. PROCESS OF TREATING IRON ORES. ERNEST W. WESCOTT, Niagara Falls, N. Y., assignor, by mesne assignments, to Sulphide Corporation, a Corporation of Delaware. Filed Feb. 16, 1928. Serial No. 254,805. 21 Claims. (Cl. 23—200.)



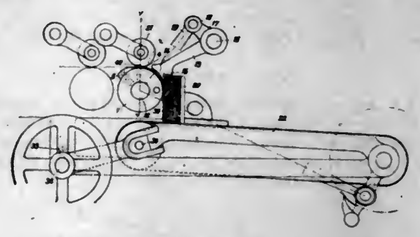
1. In the beneficiation in the dry way of sulfid ores containing iron the process which comprises treating such a sulfid ore with dilute vapors of sulfur chlorid at a temperature sufficient to volatilize the sulfur of the ore and collecting and removing the displaced sulfur as vapor, the temperature at the point of removal being insufficient to carry forward any appreciable amount of ferrous chlorid and the amount of sulfur chlorid being insufficient to allow appearance of sulfur chlorid in the effluent sulfur vapors.

1,898,703. WATER HEATER. DONALD B. WILLIAMSON, Pittsburgh, Pa., assignor to The Peoples Natural Gas Company, a Corporation of Pennsylvania. Filed July 30, 1932. Serial No. 626,460. 4 Claims. (Cl. 236—33.)



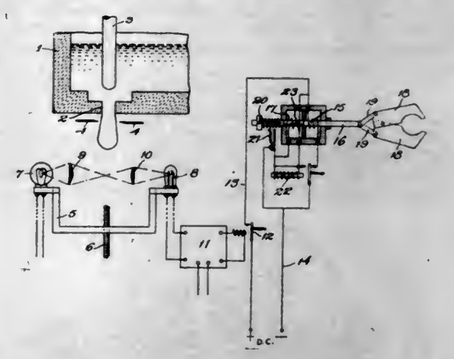
1. In a water heater having a circulation system comprising a storage tank, a heating element, a cold water line entering at the upper end of the storage tank, an outflow line at the lower end of the storage tank leading to the inlet end of the heating element, a branched discharge pipe from the outlet end of the heating element having one branch thereof leading to service and another branch thereof discharging intermediate the height of the tank and having therein means preventing substantial return flow through that branch to the heating element or to service; the combination of a burner for the heating element, a gas supply line to said burner, and a control thermostat subjected by its position of mounting to the direct chilling effect of the cold water line to the tank upon and during service withdrawals of water from the circulating system and subjected to the effect of tank water temperature in the extreme upper region of the tank in periods between service withdrawals of water.

1,898,704. METHOD AND APPARATUS FOR STACKING FLAT ARTICLES. ALFRED WINKLER and MAX DÜNNEBIER, Neuwied, Germany, assignors to Baltimore Paper Company, Kansas City, Mo., a Corporation of Missouri. Filed Apr. 22, 1931, Serial No. 532,062, and in Germany Apr. 22, 1930. 12 Claims. (Cl. 271—87.)



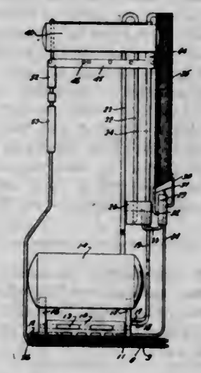
1. In apparatus for arranging in a stack flat flexible articles continuously delivered by a feeding apparatus, means for transferring the articles in succession from the feeding apparatus to the stack, means for simultaneously bending the articles in such a manner that, when the leading edge arrives in position, the trailing edge is bent away from the stack, and means for releasing the articles from the bending means so that the trailing edge then springs into position owing to the tension produced by the bending.

1,898,705. APPARATUS FOR FEEDING MOLTEN GLASS. EDMUND P. WOOD and WILLIAM CARL OSTERBROCK, Cincinnati, Ohio. Filed Oct. 1, 1930. Serial No. 485,730. 6 Claims. (Cl. 49—55.)



1. In a glass feeder of the suspended charge type, a self-timing shear for cutting-off successively depending mold charges, said self-timing shear, comprising, a pair of shear blades positioned below the support for the depending mold charges, a pair of magnets adapted to open and close said shear blades, means for producing a beam of light adapted to be intercepted by the lower tips of the depending mold charges successively, a photo-electric cell positioned so that the beam of light falls upon it, said photo-electric cell more sensitive to said beam of light than to the light emanating by the molten mold charges, a relay adapted to be operated by the photo-electric cell so that the relay switch is closed when the beam of light is intercepted, said switch adapted to energise the magnet adapted to close the shears, and means for deenergizing said magnet and energizing the second magnet adapted to open the shears after the shears have been closed.

1,898,706. REFRIGERATING APPARATUS. EDMUND E. ALLYNE, Cleveland Heights, Ohio. Filed Aug. 16, 1930. Serial No. 475,666. 8 Claims. (Cl. 62—118.)



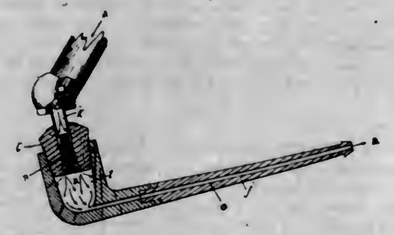
8. Refrigerating apparatus of the absorption type including a still-absorber, condenser, evaporator, a liquid seal trap for changing the flow of the gaseous refrigerant in the heating and refrigerating cycles, and means for dissipating any globules of liquid refrigerant returning to the trap during the refrigerating cycle, and comprising a receiving chamber in liquid and gaseous communication with the trap for collecting said liquid refrigerant and holding the same therein for dissipation by expansion prior to delivery to the trap.

1,898,707. CRYSTALLINE HYDRATES OF ALKALI METAL SILICATES AND METHOD OF PRODUCING THEM. CHESTER L. BAKER, Berkeley, Calif., assignor to Philadelphia Quartz Company of California, Ltd., Berkeley, Calif., a Corporation of California. Filed July 1, 1930. Serial No. 465,245. 45 Claims. (Cl. 23—110.)

1. The method of making crystalline sodium metasilicate which includes preparing a solution calculated to satisfy the water requirements of a predetermined crystal composition and effecting crystallization thereof while maintaining the temperature between the melting temperature of the predetermined crystal composition and that of the crystal of next lower melting point.

12. As a new article of manufacture, crystalline sodium metasilicate in a stable hydrous form.

1,898,708. TOBACCO-PIPE CLEANER. SAMUEL W. BARNES, Jackson, Mich. Filed Mar. 8, 1932. Serial No. 597,541. 1 Claim. (Cl. 131—13.)

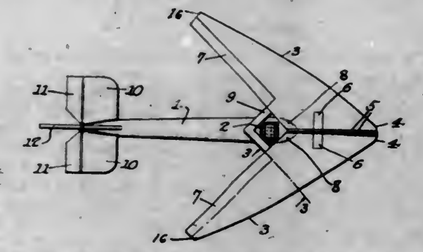


A tobacco-pipe cleaner comprising an ovate plug having a vertical bore centrally located therethrough, adapted to be received within the bowl of a tobacco-pipe, a rigid stem adapted to be inserted into said bore with an air-tight fit and extending through said bore and outwardly thereof from and above the upper aperture of the bore, said stem having a flange member integral therewith at the place where said stem protrudes from the bore, said stem having a channel extending from the upper end and longitudinally thereof substantially one half the length of the stem, and having a recess in the outward surface of a portion of the lower half of the said stem, and one or more air passageways extending from the lower end of the aforesaid channel into the said recess; the upper protruding end of said stem being adapted for insertion within the discharge end of an air hose associated with a mechanical device for supplying air under pressure, so as to unseat the valve therein and permit the flow of the air through the said pipe cleaner.

1,898,709. ALDEHYDE-AMINO RESINOUS COMPOUNDS AND PROCESSES. ROBERT W. BELFIT, Watertown, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 25, 1927. Serial No. 201,555. 28 Claims. (Cl. 106—22.)

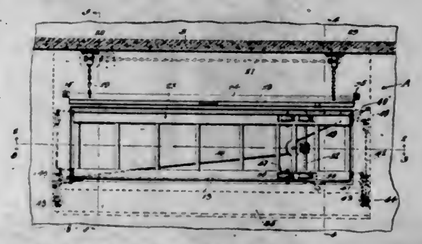
1. The process of producing a composition which is convertible by heat to substantially insoluble condition, which comprises mixing: a urea-aldehyde condensation product; and a compound adapted to combine therewith under the action of heat to form a substantially insoluble product, said compound being selected from a group consisting of the following compounds, namely, salicylic acids, ammonium salicylate, acetyl salicylic acid, hydroxynaphthoic acids, gallic acid, strontium salicylate, salicylamide, and magnesium salicylate.

1,898,710. AEROPLANE WITH V-SHAPED WINGS. WILLIAM ERNEST BELL, Charlotte, N. C. Filed June 22, 1931. Serial No. 546,082. 1 Claim. (Cl. 244—12.)



In combination with an aeroplane, substantially V-shaped wings disposed at an angle of approximately 50 degrees to each other, said wings terminating in substantially pointed ends, said ends being disposed in the same plane as the main body of the wings and the wings being disposed in an upwardly slanting direction of between approximately 8 to 10 degrees from the point where they are attached to the fuselage to increase lateral stability.

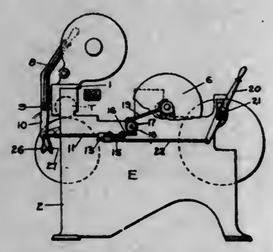
1,898,711. ELEVATING DEVICE. OLAI BORGEN, Renner, S. Dak. Filed Aug. 15, 1929. Serial No. 386,071. 2 Claims. (Cl. 187—17.)



1. In an underground garage for automobiles, a vertically movable platform, said garage comprising side walls, a top wall having an entrance and exit opening therein, and a

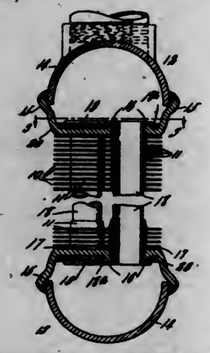
floor, said platform provided with transversely extending supporting members located at the ends thereof and adapted to rest upon the floor for supporting said platform above the floor when the platform is in its lowered position, means for raising and owering the platform including a drum located below the platform and supported out of contact with the floor through the medium of said transverse members of said platform, cables wound on said drum in opposite directions, said cables being secured to the opposite walls of the garage adjacent the top thereof, guiding rods interposed between said top wall and said floor, means for anchoring said platform upon said guiding rods whereby said platform will be held against lateral and longitudinal shifting movement and at the same time will be permitted to have a raising and lowering movement, and traction wheels carried by said platform for driving said drum for winding and unwinding said cables upon the drum.

1,898,712. LOOM CONTROL. CARL D. BROWN, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed June 10, 1932. Serial No. 616,538. 4 Claims. (Cl. 139—336.)



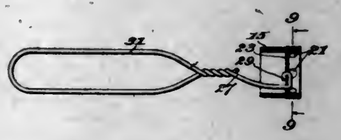
1. A loom including a frame carrying a warp let-off at the back and a cloth take-up at the front thereof, a drive shaft carried by the said frame, means including a clutch for applying power to the said driving shaft, shipper handles disposed respectively at the front and back of the loom, rigid connections between said shipper handles, and connections from one of the latter to the said clutch, and a manually operable latch carried by one of the shipper handles for engagement with the loom frame to lock all of the shipper handles in off position.

1,898,713. HEAT EXCHANGE DEVICE AND METHOD OF MAKING THE SAME. WILLIS H. CARRIER, Essex Fells, N. J., and EDWARD S. LEA, Morrisville, Pa., assignors, by mesne assignments, to Carrier Research Corporation, Newark, N. J., a Corporation of New Jersey. Filed Dec. 26, 1930. Serial No. 504,678. 9 Claims. (Cl. 29—157.3.)



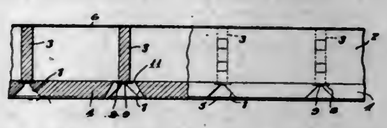
9. The method of making a heat exchange device formed with a radiating body having spaced thin plates of metal and fluid passages formed by connected integral parts of said plates, and headers having relatively thicker walls and communicating with the opposite ends of said fluid passages, said method consisting in forming holes in the walls of said headers surrounded by integral wall flanges, brazing the passage-forming parts at one end of said body in the flanged holes of one header, brazing ferrules in the flanged holes of the other header and in the adjacent ends of said fluid passages, inserting seamless lining tubes of a corrosion-resisting metal in said fluid passages, extruding said lining tubes into close contact with the walls of said fluid passages, turning the ends of said lining tubes over the ends of said hole flanges of the headers, and forming bodies of solder in said headers fused to the ends of said lining tubes and to said headers to seal the joints between the lining tubes and the walls of said fluid passages.

1,898,714. PIPE CLOSURE. GALEN H. CLEVENGER, Brookline, Mass., assignor to United States Smelting, Refining & Mining Company, Portland, Me., a Corporation of Maine. Filed July 23, 1929. Serial No. 380,310. 5 Claims. (Cl. 137—76.)



3. The combination with an impervious partition adapted to be secured in one end of a pipe and provided with hook engaging means, of a hook member comprising a head having a chisel-like extremity to guide the member, a double hook pivoted in the head, and springs normally closing the hooks to permit yielding movement of the hook and to close the hook to prevent disconnection from said hook engaging means.

1,898,715. BRICK MOLD. JOHN ADDISON CROWELL, Wallkill, N. Y., assignor to James B. Crowell & Son, Wallkill, N. Y., a Corporation of New York. Filed July 14, 1930. Serial No. 467,781. 3 Claims. (Cl. 25—119.)

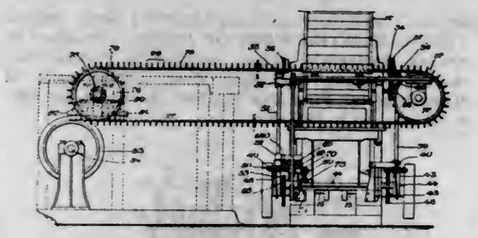


3. In a multi-brick mold, a wooden bottom panel completely covering the bottom of each individual mold, said panel having vents therein adjacent to the sides thereof at predetermined spaced intervals, a plurality of partitions, and a metallic strap fixed to the bottom of each partition and constituting spacing means for said panels.

1,898,716. MATCH MACHINE. JOSEPH C. DONNELLY, Barberton, Ohio, assignor, by mesne assignments, to The Diamond Match Company, a Corporation of Maryland. Filed Apr. 23, 1930, Serial No. 446,714. Renewed Feb. 2, 1932. 8 Claims. (Cl. 144—55.)

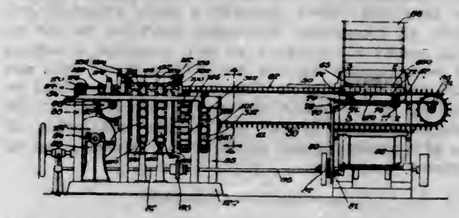
1. The combination with a match carrier, splint setting mechanism at one location in the course of the carrier, match discharge mechanism at another location in said course, and means for moving the splint receiving portion of the carrier in timed relation to the setting mechanism whereby succeeding rows of splints are inserted in the carrier, of means for actuating the discharge mechanism at a relatively higher speed than the setting mechanism, and means for actuating the carrier adjacent

the discharge mechanism in timed relation to the operation of the discharge mechanism in such manner that after each succeeding discharge from the carrier of a plurality of rows of matches corresponding with a plurality of rows



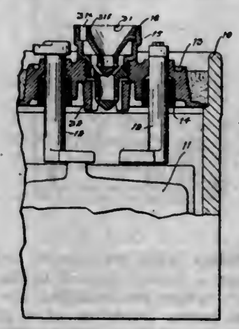
of splints inserted in the carrier in a given time by the setting head, the movement of the carrier adjacent the discharge mechanism is temporarily halted to compensate for the lag of the carrier at the setting head.

1,898,717. MACHINE FOR PACKING MATCHES. JOSEPH C. DONNELLY, Barberton, Ohio, assignor, by mesne assignments, to The Diamond Match Company, a Corporation of Maryland. Filed Apr. 23, 1930. Serial No. 446,715. 35 Claims. (Cl. 226—10.)



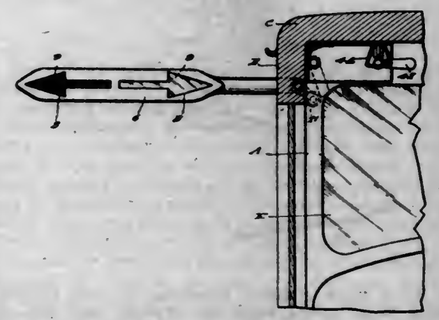
1. In a machine for packing matches, the combination of means for advancing a succession of segregated groups of matches in a horizontal path, means for advancing box trays from one side to the other side of said path, and means for moving succeeding groups of matches beyond the respective sides of said path in alternation, whereby the said matches are delivered alternately to the trays positioned at the respective sides of said path.

1,898,718. VENT PLUG FOR STORAGE BATTERIES. CARL J. DUNZWEILER, Cleveland, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed Aug. 15, 1928. Seriel No. 299,776. 3 Claims. (Cl. 136—177.)



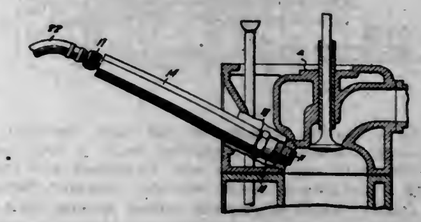
1. A combined vent and filler plug for storage batteries comprising a hollow outer element, and a hollow inner element telescoping into said outer element so as to provide a chamber intermediate said elements, said inner element having a passage therethrough with a funnel-shaped portion adjacent the upper end thereof, said outer element being formed with an enlarged upper end and a reduced lower end and a portion intermediate said ends adapted for engagement in the cover opening of a storage battery, said outer element also being provided with a plurality of passages extending through the wall thereof and communicating with said chamber, one of said passages being in said reduced lower end and another in said intermediate portion, and one of said elements being provided with a vent passage at the top thereof leading to atmosphere from the upper portion of said chamber, said vent passage extending through the enlarged open end of the outer element and by-passing the funnel-shaped passage in said inner element.

1,898,719. DIRECTION SIGNAL. JOSEPH EICHNER, West Orange, N. J. Filed Apr. 8, 1929. Serial No. 353,547. 3 Claims. (Cl. 177—329.)



1. In a vehicle direction indicator an indicator arm, lights on said arm, indicating means cooperating with said lights for indicating a "right" or "left" turn, means pivoting said arm for movement from a normal substantially vertical position to a substantially horizontal position, an operating lever, having a normal central position, connecting means between said lever and said signal for moving the latter to its horizontal position on movement of said operating lever to one side or the other of its central position and means cooperating with the operating mechanism and including circuits for said lamps for lighting the "right" signal light on movement of the operating member to one side and the "left" signal light on movement of the operating member to the other side of the normal central position.

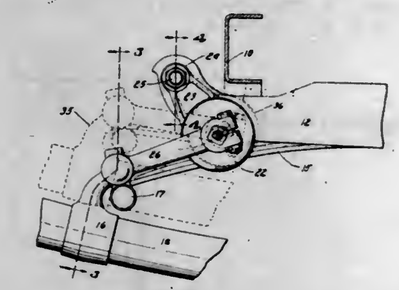
1,898,720. VALVE HOLDER. REUBEN DRUE ELDER, Macon, Ga. Filed Sept. 18, 1930. Serial No. 482,825. 2 Claims. (Cl. 29—87.1.)



1. A valve holder comprising an adaptor body arranged for secured engagement with a usual spark plug opening of an overhead type of internal combustion motor and having a bore therethrough, a straight extension of polygonal form projecting from said body and having detachable connection therewith, a nipple at the outer end

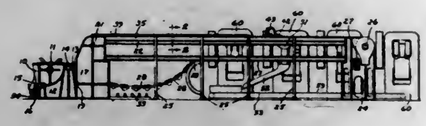
of said extension, a valve chamber arranged for detachable engagement with said nipple, said extension nipple having a common bore to connect the first named bore with said valve chamber when the parts are in assembly, an inwardly opening check valve housed within said chamber, and a conduit leading from said chamber outwardly of the valve therein for connection with a source of compressed air whereby an amount of the latter will be admitted to the engine to effectively hold a valve in a manner to facilitate the removal and replacement of the valve spring.

1,898,721. VEHICLE SHOCK ABSORBER MOUNTING. EUGENE J. FARKAS, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Nov. 19, 1930. Serial No. 496,684. 8 Claims. (Cl. 188—89.)



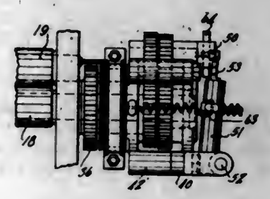
1. In a shock absorber mounting, an axle having a vehicle frame spring suspended thereon, said axle pivoting in a vertical path about a fixed point on said frame, a shock absorber body portion having an arm extending radially therefrom, the outer end of which is pivotally connected to said frame so that said body portion may swing in a transverse plane, a ball member connected to said axle, and means for securing said ball member in the free end of said arm so as to permit both universal pivoting movement and transverse movement of the ball relative to the arm to thereby compensate for the non-coinciding paths of said ball and arm.

1,898,722. CASTING MACHINE. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Nov. 20, 1929. Serial No. 408,637. 10 Claims. (Cl. 22—62.)



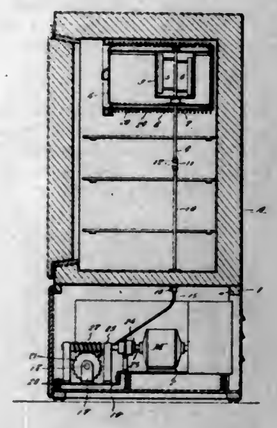
1. In a casting machine of the class described, a framework comprising a horizontal track, a continuous conveyor chain supported by said framework and track having a plurality of molds rotatably mounted thereon each mold of which is normally carried by said chain in an upright position, a mold-inverting device mounted upon said framework, whereby movement of the molds against said device causes the molds to be quickly inverted, and a bar supported by said framework in position substantially parallel to said track adapted to coact with the underfaces of said molds when inverted and support same independently of the conveyor chain, whereby the molds when in said inverted position may be rapped to remove the contents thereof without stressing their connections with said conveyor chain.

1,898,723. METHOD AND APPARATUS FOR REGISTERING PRINTED WEBS OF PAPER. FREDERIC B. FULLER, Springfield, Mass., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed May 15, 1930. Serial No. 452,691. 9 Claims. (Cl. 271—2.6.)



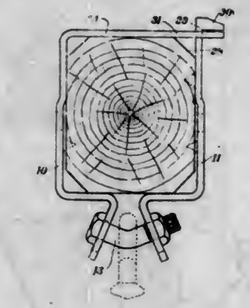
1. Mechanism for controlling the register of an indicia bearing web relative to a web treating machine, comprising a pair of web feeding rolls in constant engagement with the web and rotating continuously in a single direction, means for rotating the rolls at such a speed that they will deliver normally a slight excess of web length, an escapement mechanism operative on the rotating means to introduce at each actuation a definite and predetermined lag into the rotation of the rolls, and mechanism responsive to deviations in the positional relationship of the indicia on the web with respect to the operative elements of the web treating machine in excess of a predetermined minimum for actuating the escapement mechanism.

1,898,724. MEANS FOR MAKING ICE CREAM IN AN ELECTRIC REFRIGERATOR. ALBERT R. GIFFORD, Los Angeles, Calif. Filed Sept. 23, 1931. Serial No. 564,677. 3 Claims. (Cl. 62—114.)



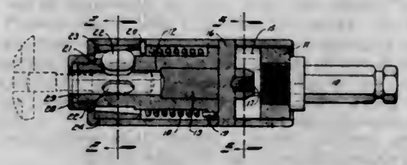
1. In combination with an electric refrigerator including its motor, a freezer located in the refrigerating chamber thereof, means for operating the freezer from the motor, said means consisting of a pair of shafts, gears connecting the shafts together, clutch means for connecting one of the shafts to the motor shaft, a flexible shaft connected to the other one of said shafts, and a shafting connecting the flexible shaft with the freezer.

1,898,725. CROSS ARM CLAMP. GEORGE WELLINGTON HAMILTON, Evanston, Ill. Filed Dec. 2, 1930. Serial No. 499,550. 12 Claims. (Cl. 173—321.)



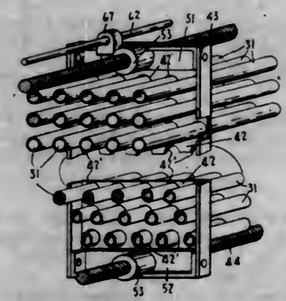
2. A cross arm fitting for supporting an insulator, and wedging means actuated by the weight of an insulator supported by said fitting for clamping said fitting upon a cross arm.

1,898,726. STUD DRIVER. CLAUDE I. HESS, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed June 20, 1932. Serial No. 618,288. 10 Claims. (Cl. 81—53.)



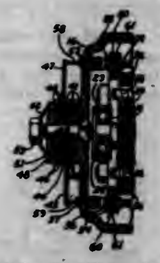
1. In a stud driver of the character described, a driving member, a clutch mechanism associated with said driving member, said clutch mechanism being actuated by relative axial movement of the stud and driving member in one direction to cause initial frictional engagement of said stud and clutch mechanism and in the opposite direction to release said clutch mechanism from said stud, said clutch being actuated by relative rotation of said stud and driving member to lock said clutch member into nonrotative engagement with said stud.

1,898,727. TUBE CLEANER. JOHN J. HOPPES, Springfield, Ohio. Filed Feb. 14, 1931. Serial No. 515,808. 5 Claims. (Cl. 15—104.04.)



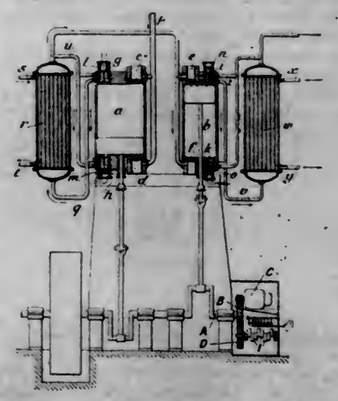
5. In a cleaning mechanism for the exterior of tubes arranged in a bank, a member arranged transversely of the series of tubes and having surfaces surrounding the exterior of the tubes, power-operated means for moving said member longitudinally of the tubes and means for automatically stopping the power-operated means at a predetermined point in the movement of said member.

1,898,728. TACHOMETER GENERATOR. EDWARD S. HUFF, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed June 8, 1929. Serial No. 369,500. 1 Claim. (Cl. 171—252.)



In a direct current generator adapted to be secured directly to the body of an internal-combustion engine and to produce a substantially uniform output for each speed thereof irrespective of the varying temperature of said engine, a housing, a permanent magnetic field core in said housing forming an open magnetic circuit, an induced winding on said core, an inductor element rotatably mounted in said housing, the rotation of which alternately opens and closes said magnetic circuit thereby inducing alternating current into said winding, a dry disc-type rectifier secured to the exterior of said housing, one terminal of which is grounded and the other terminal of which is connected to one end of said induced winding whereby the other end of said winding will form the output terminal of the generator, a ring disposed within said housing, and a length of nickel resistance wire wound around said ring and connected in series with said output terminal, the resistance of said nickel wire when hot being computed so that the increased resistance of said wire will exactly compensate for the increase in rectification of said rectifiers when not over the decreased output of said generator when at the same temperature.

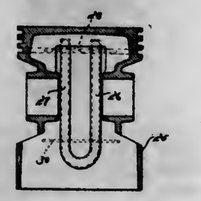
1,898,729. DEVICE FOR THE COOLING OF COMPRESSORS WITH PISTONS. ALBERT HUGUENIN, Paris, France. Filed Sept. 14, 1926, Serial No. 135,460, and in France Nov. 6, 1925. 5 Claims. (Cl. 230—222.)



1. In a piston compressor with intermediate and after-cooler, the combination of a cylinder with compression piston, a cooler, a box on said cylinder and two pipes

connecting said box, the one with the inlet of the said cooler and the other with the outlet of the same cooler, an inlet valve for the admission of the gas to be compressed in the cylinder, an exhaust valve connecting the cylinder with the said box and a valve provided for alternatively closing one of the two mentioned pipes, means for controlling the last two valves and adapted to open the communication of the said chamber with the outlet of the cooler at the end of the exhaust stroke during the admission stroke, and at its end the closing of the exhaust valve.

1,898,730. PISTON. HARRY KAW and JOHN G. COLLINS, Detroit, Mich., assignors to National Alloy Co., a Corporation of Michigan. Filed Feb. 2, 1929. Serial No. 336,942. 3 Claims. (Cl. 74—108.)

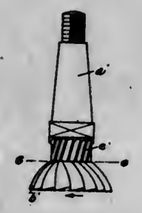


1. A piston of the class described comprising: a skirt; a lubricant container positioned on the inner surface of said skirt and separate therefrom and communicating through said skirt with the periphery thereof adjacent its upper end and at a point intermediate its ends.

1,898,731. MANUFACTURE OF MODELS OF JAWS. LUDWIG KÖHLER, Cologne-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 19, 1931, Serial No. 517,122, and in Germany Mar. 3, 1930. 5 Claims. (Cl. 18—47.)

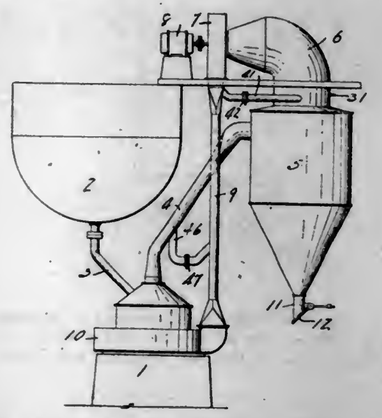
4. Process for the manufacture of dental models, comprising coating a plaster of Paris impression taken in the mouth of the patient with an aqueous emulsion of vulcanized rubber, filling a plaster of Paris modelling mass into the rubber coated impression, removing the impression after hardening of the modelling mass and pulling off the rubber membrane.

1,898,732. MILLING CUTTER. GUSTAV KRÖHNE, Rosenberg-Oberpfalz, Germany. Filed Apr. 23, 1930, Serial No. 446,703, and in Czechoslovakia, July 20, 1929. 1 Claim. (Cl. 29—104.)



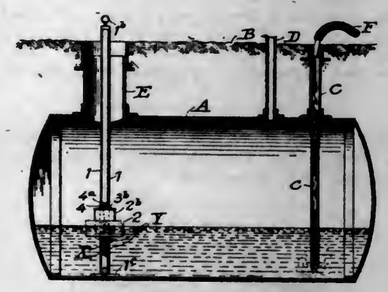
A milling cutter for dovetailed grooves, comprising a shank, a tapered cutter unit mounted on said shank for machining the trapezoidal portion of the groove, a cylindrical cutter unit for machining the rectangular portion of said groove, said cutter units being equipped with inclined teeth forming an angle, the apex of which points in the direction of rotation of the cutter.

1,898,733. SEPARATING SYSTEM. JOSEPH M. LE GRAND, Newark, N. J., assignor to Carrier Engineering Corporation, Newark, N. J. Filed July 27, 1928. Serial No. 295,716. 8 Claims. (Cl. 209—143.)



1. In a pneumatic separating system, a source of finely divided particles, a delivery duct leaving said source, a single air supply duct leading to said source and directing jets of air to said source in a manner to agitate the particles therein and place them in suspension in the supplied air, means for causing a flow of air through said ducts and source by pressure differences to carry off particles placed in suspension in the air at said source, and means for by-passing a selected portion of air around said source from the air supply duct into said delivery duct adjacent the inlet end thereof to vary the fineness of the particles removed thereby, and maintain a constant velocity of the air in said delivery duct.

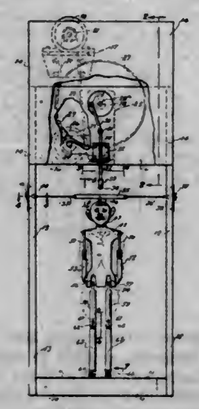
1,898,734. CALIBRATING APPARATUS FOR LIQUID TANKS. EARL BRYANT LINTON, Rio De Janeiro, Brazil. Filed Nov. 25, 1931. Serial No. 577,360. 9 Claims. (Cl. 234—1.)



1. A liquid level calibrating apparatus comprising a gauge stick, a float adjacent the stick, and an oscillating scriber carried by the float adapted to mark upon the stick.

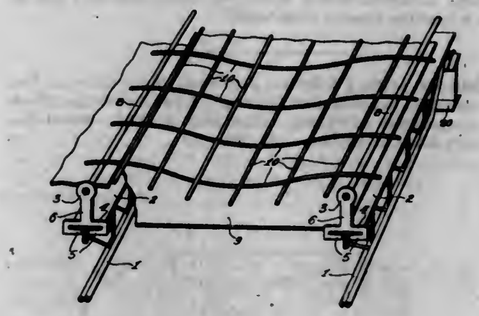
1,898,735. DANCING TOY. KAY CONEY MCGEE, Laurel Hill, N. C., assignor of one-fourth to Paul B. Eaton, Charlotte, N. C. Filed Sept. 16, 1931. Serial No. 563,083. 1 Claim. (Cl. 46—40.)

In an amusement device, a framework having a platform, a resilient, flexible member having its ends adjustably secured to the framework at a point above the platform, a loose-jointed toy in the form of a human being, means for securing the head of the toy to the central portion of said resilient flexible member so as to cause the feet of the toy to lightly engage said platform, a vertically reciprocating member mounted in said framework for



intermittently striking said resilient flexible member and means for imparting movement to said vertically reciprocating member.

1,898,736. BUILDING CONSTRUCTION. JOHN A. MELVIN, St. Louis, Mo. Filed Feb. 26, 1930. Serial No. 431,353. 7 Claims. (Cl. 72—71.)

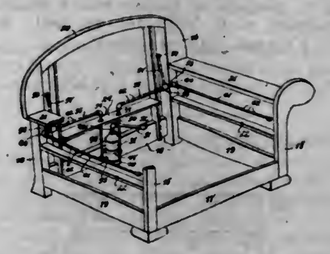


6. In a floor or roof construction having main girders and a plurality of joists spanning the space between said girders, supporting rods extending along the tops of the joists, means spaced along said joists for supporting said rods at a distance above said joists; re-enforcing material supported by and extending between said rods, and a monolithic concrete slab carried by said joists in which said rods and re-enforcing material are imbedded and providing an insulating layer of concrete between the upper surface of said slab and said joists.

1,898,737. ESTER PURIFICATION. SYLVAN R. MERLEY, Dover, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed June 18, 1928. Serial No. 285,219. 13 Claims. (Cl. 260—106.)

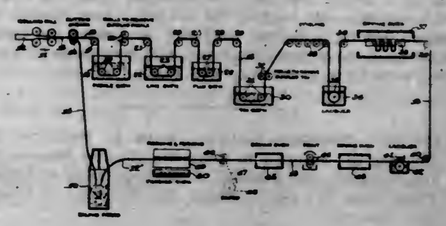
1. In the production of esters from olefin gases, the process of purifying a relatively stable organic ester of a carboxylic acid containing an unstable organic impurity, which comprises contacting a quantity of the ester with an aqueous solution of an organic acid corresponding to the acid radical of the ester together with sulfuric acid, subjecting the ester and aqueous solution to reflux distillation in a still provided with a reflux column to decompose said impurity, rectifying the liquid mixture to separate the ester from said solution and decomposed impurity, and introducing water into the upper portion of said column during the rectification of said ester.

1,898,738. DEVICE FOR SPRAYING UPHOLSTERY. CHARLES C. MEDITSCH, Buffalo, N. Y. Filed May 24, 1928. Serial No. 280,197. 9 Claims. (Cl. 155—1.)



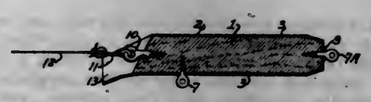
1. In combination with an upholstered piece of furniture, a device of the character described comprising a U-shaped system of pipes extending along the back and arms of the piece of furniture and means for forcing liquid insecticide into said pipes, said pipes being provided with a series of ports through which the liquid insecticide is sprayed against the upholstering.

1,898,739. STRIP METAL PROCESSING. GEORGE J. MEYER, Milwaukee, Wis. Filed Feb. 11, 1929. Serial No. 339,174. 7 Claims. (Cl. 113—80.)



1. The method of minimizing handling operations in the manufacture of sheet metal closures which comprises securing to a long continuous strip of metal a web which carries plates of non-metallic material thereon, and then fabricating from the combined strip successive finished articles which include said plates.

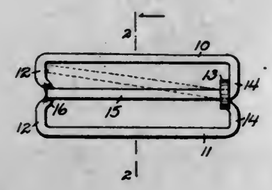
1,898,740. FISH LURE. EMIL NOVITZKY, Detroit, Mich. Filed Oct. 16, 1931. Serial No. 569,259. 1 Claim. (Cl. 43—46.)



A fish lure having an elongated body comprising a metallic tubular shell, one end of the said shell being
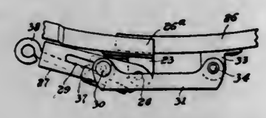
conically formed to lessen water resistance, the opposite end of the said shell forming a mouth and the said mouth having a deflected semi-circular flange projecting outwardly therefrom, and this mouth portion of the device constituting means for a dip control for the same, which directs the device to penetrate the water at a given depth and to further dip in accordance to the speed the same is drawn through the water; a core within the aforesaid shell and solidly filling the same, the end of the said core adjacent the aforesaid mouth sloping from the top of the shell to a point near the inner portion of the aforesaid deflected semi-circular flange, and this formation being adapted to lessen water resistance as aforesaid.

1,898,741. SLIDE. CARL E. PETERSON, Upper Montclair, N. J., assignor to Eastern Tool & Manufacturing Co., Bloomfield, N. J. Filed Apr. 24, 1931. Serial No. 532,461. 4 Claims. (Cl. 24—200.)



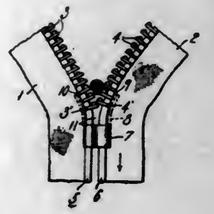
3. A slide made from a single piece of wire bent into closed loop at one end and then formed into a rectangular frame back to the loop and then passing through said loop to form a tongue extending to the opposite side of the frame, said opposite side having an inset portion bent inwardly to form a seat for the end of the tongue, the tongue having a length less than the distance from the loop to said opposite side beyond the inwardly bent portion the tongue having sufficient resiliency to permit the tongue to swing in the plane of the frame, and to be passed through the frame when so swung.

1,898,742. TOGGLE LATCH. PAUL D. PHILLIPS, Des Plaines, Ill., assignor to Benjamin Electric Manufacturing Company, Des Plaines, Ill., a Corporation of Illinois. Filed June 27, 1931. Serial No. 547,229. 5 Claims. (Cl. 292—66.)



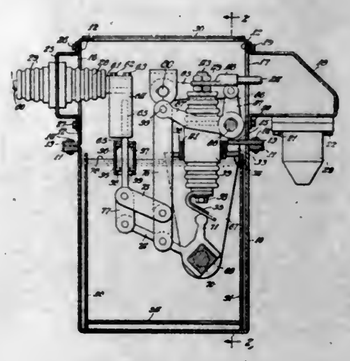
1. A clamping construction for drawing two members together and holding them in position comprising a link pivotally connected with one of said members, a link pivotally connected with the other of said members, means for pivotally connecting said links together, and means whereby the pivotal connection between the links may be shifted rectilinearly along one of the links to vary the effective length thereof.

1,898,743. SEPARABLE FASTENER. WALTER L. PIPES, Elizabeth, N. J., assignor to The Shoe Hardware Company, New Haven, Conn., a Corporation of Connecticut. Filed Oct. 28, 1931. Serial No. 570,526. 3 Claims. (Cl. 24—205.)



1. The combination with a separable fastener comprising interlocking elements secured to enlarged margins of opposed flexible stringers and a slider for operating the same, of a connecting member fixed to the enlarged margin of one stringer and loosely engaging the enlarged margin of the other stringer, said connecting member halting movement of the slider in a predetermined position, the lowermost interlocking element on the stringer to which said connecting member is fixed being located at such a distance from the connecting member as to obstruct passage through the slider (when the latter is in contact with the connecting member) of the lowermost interlocking element on the other stringer and thereby permitting the interlocking elements on the two stringers to be engaged by movement of the slider from a position in contact with said connecting member, and said connecting member being adapted to prevent disengagement of the interlocking elements adjacent thereto after the slider has been moved to a position remote therefrom.

1,898,744. OIL SWITCH. JOSEPH C. RAH, Chicago, Ill., assignor to Delta Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 6, 1932. Serial No. 591,302. 12 Claims. (Cl. 200—5.)



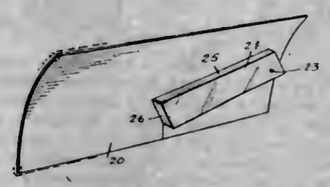
1. A combined oil and air break disconnect switch comprising a housing containing an insulating medium, a pair of conductors entering said housing, a pair of connector means disposed on the same level on opposite sides of said housing for receiving said conductors, terminal means connected to each of said connectors, one of said terminal means being disposed within said medium and the other being disposed above the level of said medium within said housing, a movable contact slidably disposed within the terminal above said level of said medium, a movable contact engaging said terminal within said medium, link means for simultaneously moving said contacts, and operating means projecting from said housing for actuating said link means to move said contacts successively out of engagement with said terminal means.

1,898,745. METHOD OF APPLYING DECORATION TO GLASS AND THE RESULTING PRODUCT. EDWARD D. REINHOLD, Closter, N. J. Filed May 4, 1931. Serial No. 534,930. 7 Claims. (Cl. 41—26.)



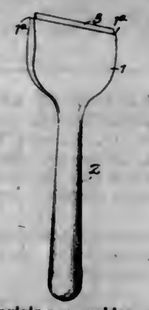
1. As a new article of manufacture, a sheet of glass, one face of which is covered by a film-like coating of soap powder whereby said protective coating is readily removable, and decorative matter applied in film form to the protective coating, said film of decorative matter embodying as a constituent the same material embodied in the protective coating.

1,898,746. DISPLAY DEVICE. ALEXANDER RICE, Brooklyn, N. Y. Filed Nov. 25, 1932. Serial No. 644,158. 6 Claims. (Cl. 40—126.)



1. A display device formed from a single blank of material cut and scored to define normally spaced end sections which are movable to positions adjacent to each other to provide a base for the device, and an intermediate section located between said end sections and bendable, when said end sections are moved toward each other, to form a three-dimensional figure extending laterally from said base and simulating an article of merchandise or the like.

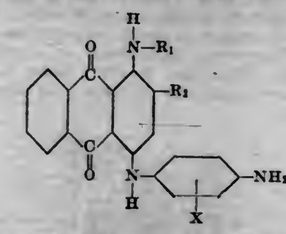
1,898,747. SCRAPER. CLIFFORD A. SCHACHT, Huntington, Ind. Filed Feb. 10, 1932. Serial No. 592,090. 10 Claims. (Cl. 15—236.)



1. A scraper, comprising a rubber blade and integral handle and a metallic blade in the rubber blade spaced from the handle and extending from an edge of the rubber blade.

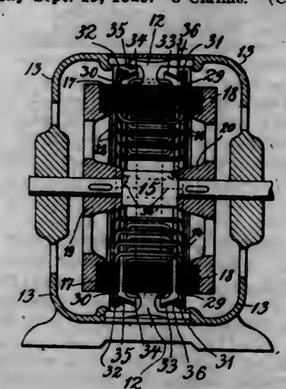
1,898,748. DYES OF THE ANTHRAQUINONE SERIES. ARNOLD SHEPHERDSON and WILLIAM WYNDHAM TATUM, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England. Original application filed Apr. 13, 1929, Serial No. 354,978, and in Great Britain Apr. 19, 1928. Divided and this application filed Oct. 10, 1929. Serial No. 398,808. 14 Claims. (Cl. 260—60.)

11. As new products, sulphonated anthraquinone compounds suitable as dyestuffs and having the probable formula



wherein R_1 represents hydrogen or an alkyl group and R_2 and X represent hydrogen or a sulphonic group and in which when X represents a sulphonic group R_1 represents an alkyl group, the said compounds containing only one sulphonic group.

1,898,749. INDUCTION MOTOR WITH SHORT CIRCUITED SECONDARY. JOHAN WALFRED SWENDSEN, Oslo, Norway. Filed Aug. 11, 1930, Serial No. 474,598, and in Germany Sept. 19, 1929. 3 Claims. (Cl. 172—280.)

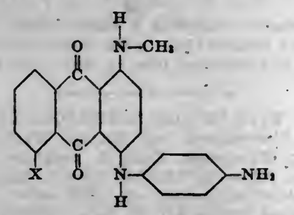


1. Induction motor with short-circuited secondary, comprising strip wound magnetic elements arranged with one

stator between two rotor elements, substantially U-shaped secondary conductor bars, arranged with one leg on each side of the stator with the free ends projecting out of the periphery of the rotor elements and short-circuiting rings connecting the said bars with each other on each side of the stator.

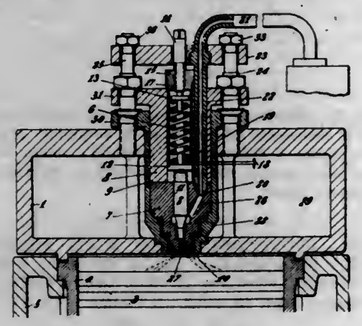
1,898,750. MANUFACTURE OF ANTHRAQUINONE DERIVATIVES. ROBERT FRASER THOMSON and WILLIAM WYNDHAM TATUM, Grangemouth, Scotland, assignors to Imperial Chemical Industries, Limited, a Corporation of Great Britain. Filed July 22, 1931, Serial No. 552,543, and in Great Britain July 28, 1930. 13 Claims. (Cl. 260—60.)

11. As new products, anthraquinone compounds useful as dyestuff intermediates and dyes, said anthraquinone compounds having the formula



wherein X represents an amino or nitro group.

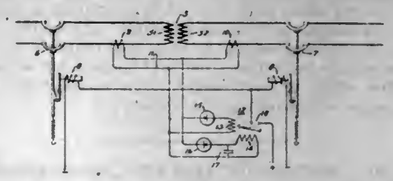
1,898,751. FUEL-INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES. HANS VONBÜTI, Winterthur, Switzerland, assignor to Swiss Locomotive and Machine Works, Winterthur, Switzerland, a Corporation of Switzerland. Filed Mar. 2, 1931, Serial No. 519,529, and in Switserland Mar. 4, 1930. 12 Claims. (Cl. 299—107.1?)



1. A fuel-injection valve for internal combustion engines, comprising in combination a hollow valve body divided into a lower part and an upper part seated thereon, which lower part has a valve seat, a valve member on the latter, a spring tending to seat the valve member, and a fuel-supply tube that extends through the said upper part, leads towards the valve seat and is jointed fluid-tight with said lower part.

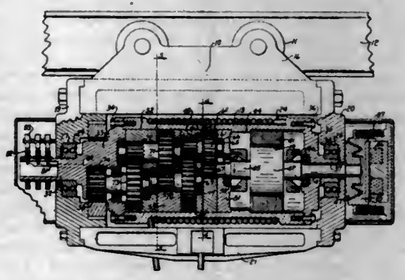
1,898,752. PROTECTIVE ARRANGEMENT. JOHN G. WELLINGS, CHARLES G. MAYO, and PAUL MATHEWS, Rugby, England, assignors to General Electric Company, a Corporation of New York. Filed Sept. 6, 1932, Serial No. 631,916, and in Great Britain Sept. 2, 1931. 5 Claims. (Cl. 175—294.)

1. In combination with alternating current apparatus having a winding subject to transient magnetizing currents, means for controlling the circuit of said apparatus including means for deriving from said apparatus an alternating current dependent on the difference between the current input and the current output of said apparatus, means for rectifying the positive and negative loops



of said difference current and relay means having two cooperating windings respectively connected to be energized in accordance with the rectified currents.

1,898,753. SPEED CHANGING GEARING. LESLIE H. WENTE, Hamilton, Ohio. Filed Oct. 12, 1931. Serial No. 568,381. 14 Claims. (Cl. 74—34.)



1. A speed changing gear unit of the character described comprising a gear housing, a motor having relatively rotatable elements one of which is connected to said housing, speed changing gearing connected to the other of said elements, said speed changing gearing comprising a series of gear units each embodying a pair of axially aligned relatively fixed gears of different diameters, a longitudinal series of bearing plates fixed in said housing between the ends thereof, and antifriction bearings mounted in said plates and cooperating with said gear units.

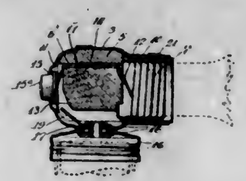
1,898,754. CONDENSATION PRODUCT AND PROCESS. ROBERT W. BELFIT, Watertown, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Original application filed June 25, 1927, Serial No. 201,555. Divided and this application filed Apr. 12, 1929. Serial No. 354,690. 4 Claims. (Cl. 134—26.)

1. The process of producing a composition which is convertible by heat to substantially insoluble condition, which comprises mixing: a solution of a urea-aldehyde condensation product; a compound adapted to combine with said condensation product under the action of heat to form a substantially insoluble product, said compound being selected from a group consisting of the following compounds, namely, salicylic acids, ammonium salicylate, acetyl salicylic acid, hydroxynaphthoic acids, gallic acid, strontium salicylate, salicylamide, and magnesium salicylate; a solution of a cellulose ester; and a common solvent for said condensation product, said compound, and said cellulose ester, comprising an organic solvent having a high boiling point adapted to improve the spreading qualities of and persist in the mixture until it nears the final stage of reaction, the solvent being taken in proportions adapted to produce a clear lacquer.

1,898,755. UREA CONDENSATION PRODUCT AND PROCESS. ROBERT W. BELFIT, Watertown, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Original application filed June 25, 1927, Serial No. 201,555. Divided and this application filed Apr. 12, 1929. Serial No. 354,691. 7 Claims. (Cl. 134—26.)

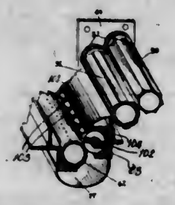
1. The process of producing a composition which is convertible by heat to substantially insoluble condition, which comprises mixing: a solution of a urea-aldehyde condensation product; a compound adapted to combine with said condensation product under the action of heat to form a substantially insoluble product, said compound being selected from a group consisting of salicylic acids, ammonium salicylate, acetyl salicylic acid, hydroxy-naphthoic acids, gallic acid, trontirm salicylate, salicylamide, and magnesium salicylate; a solution of a natural resin; and a common solvent for the substances mentioned, taken in proportions adapted to give a clear solution, said common solvent including a solvent having a high boiling point adapted to improve the spreading qualities of and persist in the mixture until it nears the final stage of reaction.

1,898,756. FLASH LIGHT. REUBEN B. BENJAMIN, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Des Plaines, Ill., a Corporation of Illinois. Filed May 27, 1931. Serial No. 540,324. 9 Claims. (Cl. 67—31.)



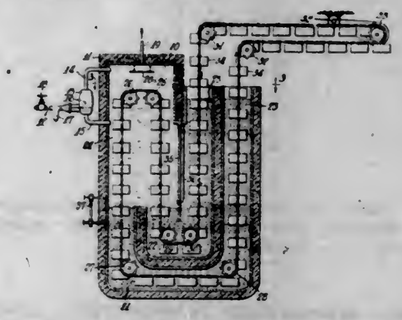
2. A flashlight construction comprising a socket unit including a receptacle having contact for engaging a bulb contact, means for detachably securing said receptacle means to a battery casing, a contact for engaging the contact of the battery, and means for closing the circuit between the bulb engaging contact and the battery engaging contact, said securing means comprising a cap to be secured to the end of the battery casing, said receptacle comprising a casing for the contacts and circuit closing means, said casing being of cylindrical formation, and having its side secured to the cap, said circuit-closing means comprising an axially located, axially movable push button.

1,898,757. VACUUM CORN PICKER. JOHN E. BOCKMANN, St. Edward, Nebr., assignor of fifty-two per cent to W. C. Foster, York, Nebr. Filed May 7, 1929. Serial No. 361,071. 2 Claims. (Cl. 130—5.)



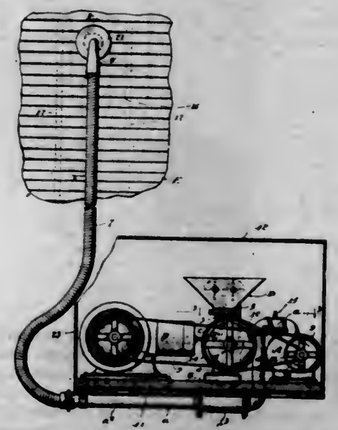
2. A husking mechanism including a pair of husking rolls, suction means underneath said rolls for inducing a suction therebetween to remove the husks from ears of corn, and means on said husking rolls for intermittently shutting off the suction between said rolls.

1,898,758. REFRIGERATING APPARATUS FOR PACKAGED GOODS. ROBERT ROGER BOTTOMS, Louisville, Ky., assignor, by mesne assignments, to Vogt Instant Freezers Incorporated, Louisville, Ky., a Corporation of Delaware. Filed Sept. 11, 1930. Serial No. 481,133. 20 Claims. (Cl. 62—104.)



1. A process of refrigerating material, which includes maintaining a body of volatile liquid refrigerant under a pressure permitting rapid evaporation, sealing said liquid from the outside atmosphere, and passing the material to be refrigerated into and out of the refrigerant without permitting escape of the latter to the atmosphere.

1,898,759. APPARATUS FOR HANDLING COMMINUTED MATERIAL. HENRY J. BURT, Jr., Wheaton, Ill., assignor to The Wallidl Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 15, 1928. Serial No. 312,706. 4 Claims. (Cl. 302—36.)

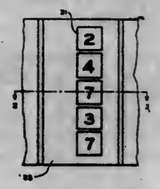


1. Apparatus for filling a substantially enclosed space of a building comprising a blower; a discharge conduit leading from said blower; means for delivering insulating material to said conduit; a pressure relief valve located in said conduit between said blower and the point of delivery of the insulating material; and a discharge section for said conduit arranged to deliver the material into spaces of buildings or the like.

1,898,760. MEANS FOR INCREASING VISIBILITY OF STOCK QUOTATION BOARDS. ALLISON A. CLOKEY, Rutherford, N. J., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 4, 1931. Serial No. 520,026. 4 Claims. (Cl. 40—68.)

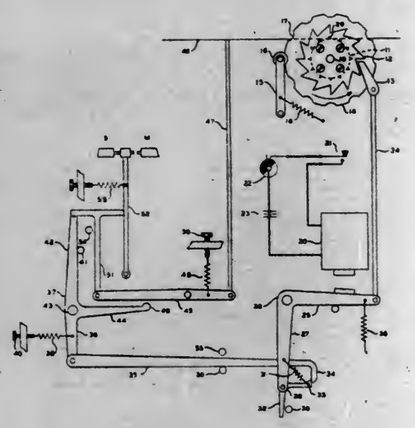
1. A stock quotation board comprising a plurality of visual signals arranged in a horizontal row, the signals

toward the ends of the row angularly positioned to incline toward the center of the board, a shield provided



with a window for each signal, said windows occupying angular positions in accordance with the angular positions of their respective signals.

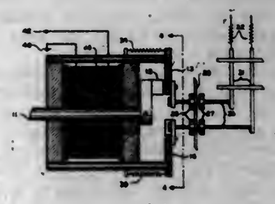
1,898,761. STEP-BY-STEP TRANSMITTER. ALLISON A. CLOKEY, Rutherford, N. J., assignor to International Communications Laboratories, Inc., Newark, N. J., a Corporation of New York. Filed Oct. 23, 1931. Serial No. 570,616. 7 Claims. (Cl. 178—17.)



1. In a step-by-step transmitter, the combination of a tape and feeding means therefor, a pecker rod, means for normally biasing said pecker rod into engagement with said tape, an electromagnet having a reciprocatory armature, means including a latch and controlled by said armature upon the energization of said electromagnet to disengage said pecker rod from said tape, means controlled by said armature and effective during the energization of said electromagnet and after said pecker rod has disengaged said tape for operating said feeding means to advance said tape, and means for tripping said latch at the conclusion of the advance movement of said tape to render said biasing means effective to cause said pecker rod again to engage said tape.

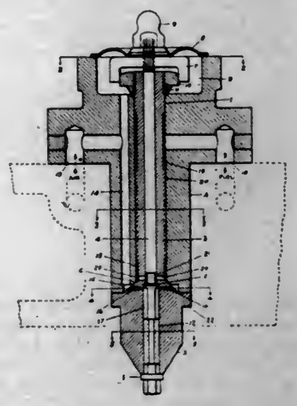
1,898,762. SELECTING SYSTEM USING A SINGLE MAGNET. ALLISON A. CLOKEY, Rutherford, N. J., assignor to International Communications Laboratories, Inc., Newark, N. J., a Corporation of New York. Filed Oct. 31, 1931. Serial No. 572,363. 6 Claims. (Cl. 178—52.)

1. In a magnetic distributor, the combination of an electromagnet having a stationary winding and a movable pole piece, a plurality of armatures for said magnet and a shaft forming a portion of the magnetic circuit of



said magnet for rotating said pole piece into operative positions relative to said armatures for successively controlling their operation.

1,898,763. ATOMIZER. SAMUEL P. COWARDIN and HARRY A. COWARDIN, Richmond, Va. Filed Sept. 28, 1929. Serial No. 395,907. 5 Claims. (Cl. 299—107.7.)



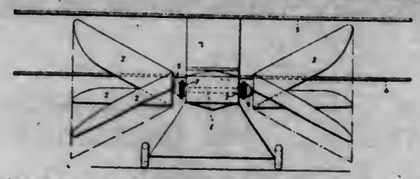
1. In an atomizer, a body member having a hole therethrough, a sleeve in said hole, said sleeve having a tip on one end engaging said body member, a nut on the other end of said sleeve, and an annular aligning member surrounding said sleeve and located between said nut and the body member and serving to prevent passage of oil and air around the upper end of the sleeve.

5. In a method of injection into an internal combustion engine, delivering fuel to a point outside of a cylinder in a diverging longitudinally directed stream, delivering air under pressure at right angles thereto and tangentially of the longitudinal direction of the fuel permitting the combined air and fuel to mix by whirling, straightening into a longitudinal direction the mixture and delivering to a cylinder at a point remote from the initial point of mixture.

1,898,764. FLYING MACHINE. THOMAS AUGUSTUS DEING, Ringwood, England. Filed June 6, 1929, Serial No. 368,841, and in Great Britain June 14, 1928. 3 Claims. (Cl. 244—23.)

1. Apparatus for lifting or sustaining a flying machine by the expansive forces produced by mutual impact of opposing streams of compressed air, comprising non-feathering propellers arranged well towards one end of the body, mountings therefor, each propeller consisting of a plurality of blades rotating about a fixed axis with the inner and outer edges of the blades sweeping through

conical paths so as to produce streams of compressed air, which streams are opposed in pairs and create ex-

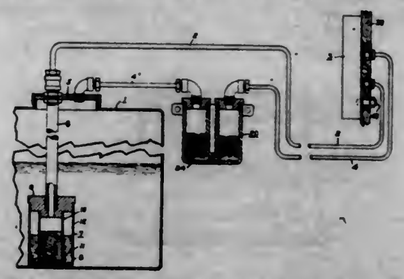


pansive forces by mutual impact beneath the fuselage of the machine, means for rotating said propellers, and means for altering the axis of rotation of the propellers.

1,898,765. ELECTROCLEANING PROCESS. THOMAS E. DUNN, Bridgeport, Conn., assignor to The Bullard Company, a Corporation of Connecticut. Filed June 20, 1932. Serial No. 618,403. 6 Claims. (Cl. 204—7.)

1. A method of cleaning surfaces which includes the step of removing surface foreign matter by the cathodic production of hydrogen at the work and simultaneously protecting the cleaned surface by the deposit thereon of tin in an acid electrolyte in which there are soluble and insoluble anodes.

1,898,766. LIQUID LEVEL INDICATOR. JOSEPH C. FEDERLE, Dayton, Ohio. Filed Apr. 17, 1922. Serial No. 554,058. 11 Claims. (Cl. 73—54.)



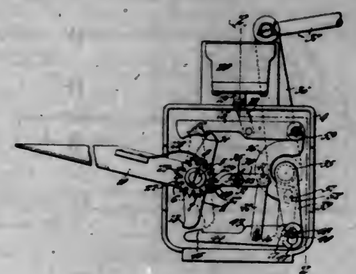
6. The combination with a tank adapted to contain a liquid, of a pressure indicating device, a tube connected at one end with said indicating device and communicating with the liquid in said tank adjacent its bottom at its opposite end, a body of air being enclosed therein, a second tube connected at one end to said indicating device so as to act in opposition to said first tube and having its opposite end open to the atmosphere, said second tube having a liquid seal therein at its said opposite end and a body of air of substantially the same volume as the body of air in the first tube between the liquid seal and said indicating device, said tubes being arranged side by side.

1,898,767. WELDED LOCK JOINT FOR SHEET PILING. ARTHUR FRICKE, Dortmund, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Feb. 24, 1932, Serial No. 594,854, and in Germany June 20, 1931. 8 Claims. (Cl. 61—60.)



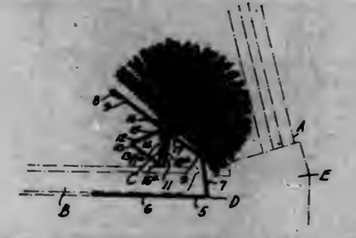
1. A rigid lock-joint of sheet piles, consisting of engaged lock-parts, additional pieces positioned in the natural space-room between the lock-parts, and welded seams connecting the additional pieces to the lock-parts.

1,898,768. STOPPING DEVICE FOR LOOMS OR THE LIKE. FRANK B. GIBBS, Providence, R. I., assignor to Rhode Island Warp Stop Equipment Company, Portland, Me., a Corporation of Maine. Filed July 29, 1932. Serial No. 625,712. 12 Claims. (Cl. 192—125.)



1. In a deferred action stopping apparatus, the combination with a member to be moved with stopping effect, a movable member, means to reciprocate the movable member, and a detent to withhold it from reciprocation, of a coupling device for connecting the two members, a wheel having teeth and other projections of different number than said teeth, a pawl on the movable member adapted to engage the teeth to advance the wheel, connections through which the projections on the wheel shift the coupling device to engage and disengage the two members, and means to release the movable member to permit it to engage the reciprocating means and act upon the member to be moved for the purpose specified.

1,898,769. DISPLAY DEVICE. JOHN P. GLEASON, Los Angeles, Calif. Filed June 6, 1932. Serial No. 615,685 11 Claims. (Cl. 40—126.)

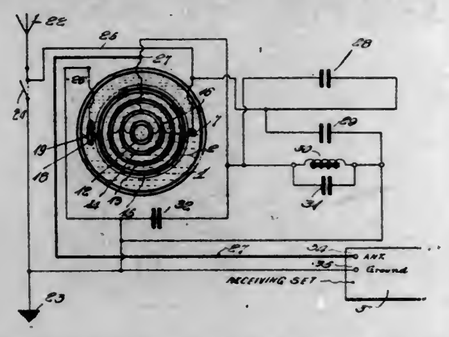


1. A device for garnishing display trays for articles of food comprising an elongated member having a longitudinal groove defined by mating springy walls adapted to extend along an adjacent side wall of a display tray, a clip freely insertable in the groove and having a display portion adapted to be exposed therefrom, and a parsley-like substance carried by said clip and exposed from said member at the said display portion of the clip.

1,898,770. STATIC ELIMINATOR. JOSEPH GOMERY, Los Angeles, Calif. Filed June 24, 1931. Serial No. 546,659. 6 Claims. (Cl. 250—20.)

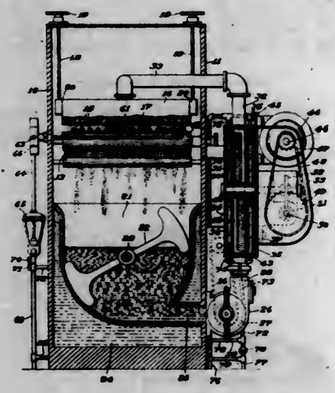
1. In a static eliminator to be connected between a source of received oscillations and a signal responsive device, a glass receptacle, a metallic cap member fitting on the top of said receptacle, a plurality of concentric metallic cylinders positioned in said receptacle, a conducting base plate in the bottom of said receptacle, alternate metallic cylinders depending from said metallic cap member in conductive relation and the remaining metallic cylinders being conductively carried by said base plate, and an auxiliary metallic plate positioned in said receptacle

outside the outer one of said cylinders, said receptacle being filled with a liquid dielectric, a connection from the center of said base plate to said source of received



radio waves, a connection from said metallic cap member to said signal responsive device, and a connection from said auxiliary plate to ground.

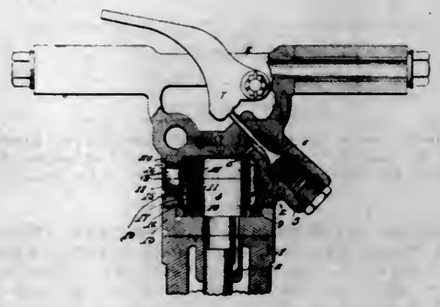
1,898,771. APPARATUS FOR TEMPERING CHOCOLATE. FREDERICK W. GREER, Cambridge, Mass. Filed Feb. 28, 1931. Serial No. 519,163. 7 Claims. (Cl. 91—3.)



1. In a coating machine, in combination, a confection conveyor, a main chocolate supply tank, means above the conveyor for depositing chocolate upon the confections, pump means for delivering chocolate in a continuous stream from the supply tank to the depositing means, and a compact tempering device of large surface area connected between the pump and depositing means for a pressure feed therebetween and comprising a closed- drum-like receptacle provided with jacketed disks disposed in close proximity to each other and connected to form a narrow chocolate tempering chamber between the disks.

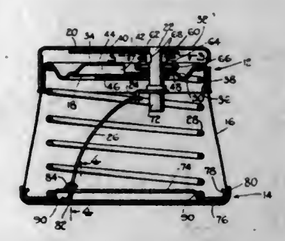
1,898,772. ROCK DRILL. LOUIS W. GREVE, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Filed Aug. 21, 1928. Serial No. 301,055. 3 Claims. (Cl. 60—59.)

1. In combination with a drill cylinder having a hammer piston reciprocatively mounted therein, a back head, a heating chamber disposed within said back head having heat insulating walls, a heating unit disposed within said heating chamber, said unit being coextensive with said chamber and having walls parallel and spaced from said chamber walls, a spacer disposed between said back head and said drill cylinder, said spacer adapted to maintain said heating unit in position within said heating chamber with its ends in engagement with said back head and



said spacer, and means for conducting motive fluid from a source of supply through said heating chamber and unit to said drill cylinder.

1,898,773. SOUND PRODUCING DEVICE. LEO J. GRUBMAN, Belle Harbor, N. Y., assignor to Voices, Incorporated, Newark, N. J., a Corporation of Delaware. Filed Mar. 5, 1932. Serial No. 597,006. 27 Claims. (Cl. 46—46.)



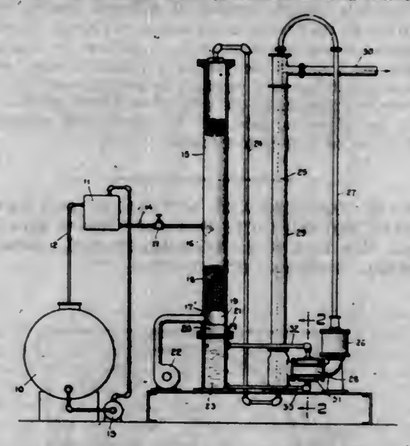
1. An articulative sound producing device comprising relatively movable heads, modulating means including a reciprocable valve mounted on one of the heads, and a resilient strip of metal extending between and interconnecting said valve and the other head, whereby the valve is reciprocated when the heads are moved relative to one another, said resilient strip being so disposed relative to the heads that it tends to bend and yield upon meeting excessive resistance.

1,898,774. TREATMENT OF VERMICULITE AND THE LIKE. ROBERT G. GUTHRIE and OSCAR J. WILBOR, Chicago, Ill., assignors to William J. Mohr, Chicago, Ill. Filed Jan. 26, 1931. Serial No. 511,436. 5 Claims. (Cl. 252—2.)

1. A highly-adsorptive medium composed of a body of substantially-pure silica in the form of practically-flat plates or flakes.

1,898,775. AMMONIA OXIDIZING APPARATUS. INGENUIN HECHENBLEIKNER and NICOLAY TITLESTAD, Charlotte, N. C., assignors, by mesne assignments, to Chemical Construction Corporation, Charlotte, N. C., a Corporation of Delaware. Original application filed May 18, 1927, Serial No. 192,462, now Patent No. 1,748,646. Divided and this application filed Apr. 3, 1929. Serial No. 352,095. 15 Claims. (Cl. 23—288.)

1. In an apparatus for oxidation of ammonia, comprising a vaporizing tower, a catalytic converter, means associated with said catalytic converter adapted to be heated by the reaction heat generated in said converter,



and a heater for said vaporizing tower connected to said means and deriving its heat therefrom.

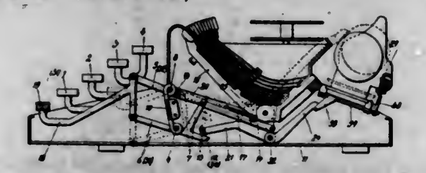
1,898,776. METHOD AND APPARATUS FOR BURNING CEMENT. ROBERT W. P. HORN, Allentown, and JACOB H. NISSLEY, Manheim, Pa. Filed Sept. 22, 1927. Serial No. 221,332. 11 Claims. (Cl. 222—7.)



1. A kiln comprising a tubular body arranged to rotate about an inclined axis composed of a main section and a coiling section connected by a throat section of reduced diameter, as compared to said sections, said main section adjacent said throat being formed of gradually reduced internal diameter, means to supply fuel to said main section adjacent its reduced diameter and means to supply air to said body.

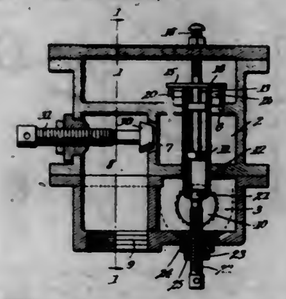
10. The method of burning cement which consists in feeding the raw material into an enclosed elongated chamber, causing said material to move end-wise of said chamber at varying rates of movement end-wise thereof, supplying fuel at points where the material moves relatively slow and supplying air to the main section of the kiln under the control of an operator in sufficient quantities to insure substantially complete combustion in said main section of the kiln.

1,898,777. CARRIAGE SHIFT TYPEWRITER. PAUL KÄPPLER, Dresden, Germany. Filed Oct. 20, 1927, Serial No. 227,394, and in Germany Dec. 1, 1926. 5 Claims. (Cl. 197—73.)



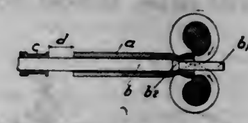
1. In a carriage shift typewriter having carriage escapement, ribbon-shift and key-lock actions, together with a key-mechanism including type-bar, escapement and ribbon-shift actuating keys, a shiftable support for a part of the printing means, contact arms on said shiftable support for respectively actuating said escapement, ribbon-shift and key-lock actions, and contact arms on the machine frame actuated by the keys for operating the first-named arms, the coacting arms on the support and frame having contact faces inclined in the direction of the carriage case shifting movement and free for shifting movements over each other, without interfering with their normal working relationship, in a carriage case shifting action.

1,898,778. AIR AND GAS MIXING APPARATUS. WILLIAM WALLACE KEMP and WILLIAM H. VAN HORN, Baltimore, Md., assignors to The C. M. Kemp Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed Apr. 23, 1930. Serial No. 446,690. 14 Claims. (Cl. 48—180.)



1. In an air and gas mixing apparatus, the combination of three superposed chambers, the upper, mixing, chamber having a mixture outlet and the other chambers having, respectively, gas and air inlets, a port being provided in the bottom of the mixing chamber and connecting said chamber with the next lower chamber, a tubular member extending through the intermediate chamber, in coaxial relation with the last said port, into the lowest chamber, and a valve adapted to close both the last said port and the upper end of said tubular member.

1,898,779. METHOD OF ROLLING TUBES WITH INTERNALLY THICKENED ENDS. LUDWIG KLEIN, Dusseldorf, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Sept. 22, 1930, Serial No. 483,630, and in Germany Feb. 8, 1930. 2 Claims. (Cl. 80—62.)



1. A method of pilgering tubes with internally thickened ends, consisting in forming in the tubular blank near the end an annular constriction at a distance corresponding to the desired length of the thickened portion and thereupon subjecting the blank to the pilgering operation proper, as and for the purpose set forth.

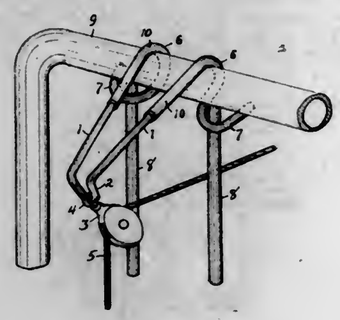
1,898,780. FOUNTAIN PEN. MICHAEL J. KWARTZ, Detroit, Mich. Filed July 14, 1930. Serial No. 467,807. 1 Claim. (Cl. 120—43.)



A fountain pen including a barrel having a nib including a conical element having a duct therethru leading

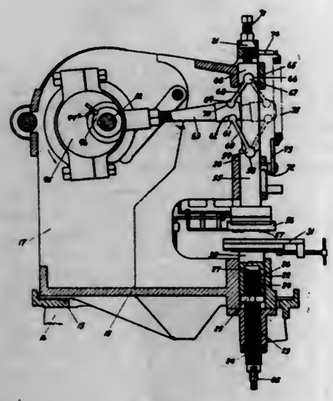
to the apex of the element, a writing element in the said apex and consisting of a pair of hemispherical portions with their flat sides adjacent each other and rotatably mounted upon and retained in said apex by a common axle element, said writing element being in position to receive ink from said duct.

1,898,781. SURGICAL EXTENSION ATTACHMENT. HARRY HERSCHEL LEITER, Warsaw, Ind. Filed Sept. 29, 1930. Serial No. 485,233. 1 Claim. (Cl. 128—84.)



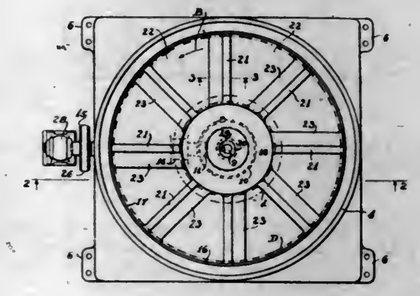
An attachment of the class described consisting of a spring frame formed of a single length of rod having a bent middle portion and divergent members, the outer ends of which members are shaped respectively to provide contiguous primary and secondary hooks disposed in planes substantially at right angles to each other, said members being adapted to be adjustably sprung toward and from each other whereby when applied to a bed the frame is clasped into connection with the top rail and filling rods thereof, and a pulley having supported connection with the bent middle portion of said frame adapted to receive a cable.

1,898,782. MACHINE FOR APPLYING METALLIC LEAF. GEORGE E. LITTLEFIELD, Providence, R. I., assignor to American Roll Gold Leaf Company, Providence, R. I., a Corporation of Rhode Island. Filed June 15, 1931. Serial No. 544,445. 13 Claims. (Cl. 41—7.)



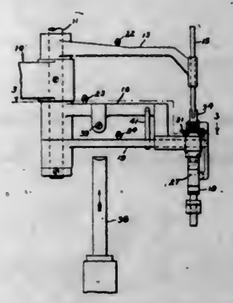
11. In a machine of the character described, a frame, a resiliently mounted work support on said frame, a plunger mounted for reciprocating movement in said frame, means for reciprocating said plunger in an operating cycle having two separate plunger strokes of different length, means for adjusting the reciprocating means to reverse the plunger strokes of the operating cycle, a carriage for supplying metallic leaf, means comprising a rotatable cam for periodically shifting said carriage to position said carriage beneath said plunger on one only of said cycle strokes, and means for adjusting said cam to change said positioning to the other of said cycle strokes.

1,898,783. PROCESS AND APPARATUS FOR DEVELOPING MOVING PICTURE FILM. JOSEPH RICE MALCOLM, New York, N. Y. Filed May 29, 1929. Serial No. 366,951. 9 Claims. (Cl. 95—100.)



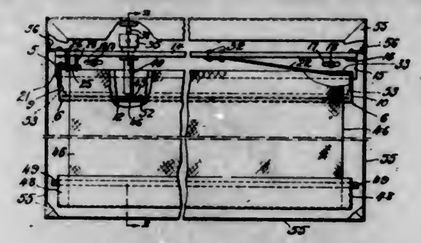
1. In a process of treating moving picture films the part process consisting in winding a film on a shroud in a way to keep both sides of said shroud and said film spaced from each other, then consecutively immersing and revolving said enshrouded rolled film in a sequence of solutions, for developing, fixing and rinsing said film, and simultaneously circulating said solutions through the spaces enclosed by the convolutions of said shroud and film, then drying the enshrouded rolled film, and then separating said shroud and dried film.

1,898,784. STEM MAKING MACHINE. KARL MEY, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Feb. 9, 1931, Serial No. 514,481, and in Germany Mar. 25, 1930. 2 Claims. (Cl. 250—275.)



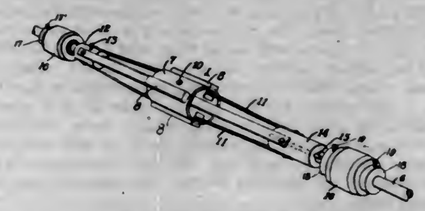
1. A stem machine comprising a removable holder having passages therein for the reception of leading-in wires and support wires, a pair of jaws adapted to engage and support said holder in said machine, and means whereby said jaws may be released or closed to allow the removal or insertion of said holder as desired.

1,898,785. HUMIDIFIER. ALEXANDER MURDOCH and ALEXANDER MURDOCH, Jr., Philadelphia, Pa. Filed Sept. 28, 1932. Serial No. 635,191. 14 Claims. (Cl. 299—20.)



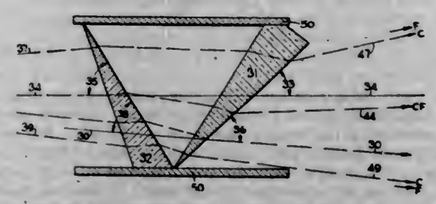
1. In a humidifier, a frame, a valve upon the frame, a container for holding water, a curtain formed of pervious material having a portion thereof secured in the container, means yieldingly supporting the container upon the frame whereby the relative position of the container to the frame will be varied by the total weight of the water in the container, and on the curtain, an outlet nozzle upon the valve and extending within the container, and a valve stem operatively associated with the valve and positioned to be engaged by the container for controlling the flow of water through the valve.

1,898,786. GRINDING APPARATUS. FRED G. MUSHENO, Schuylkill Haven, Pa., assignor to Allegheny Steel Company, a Corporation of Pennsylvania. Filed Aug. 27, 1931. Serial No. 559,623. 11 Claims. (Cl. 51—184.2.)



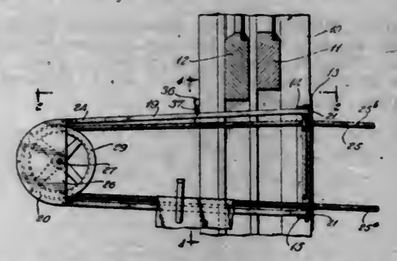
10. An internal grinder comprising a shaft, a holder on said shaft and having at least one guideway therein, a member secured to the shaft at one end of the holder, a member movably mounted on said shaft at the other end of the holder, a resilient strip extending through said guideway, said strip being secured to said members, and an abrasive element mounted in said guideway and bearing on said strip.

1,898,787. PRISM ANAMORPHOSER. HARRY SIDNEY NEWCOMER, New York, N. Y. Filed Feb. 25, 1932. Serial No. 595,038. 27 Claims. (Cl. 88—1.)



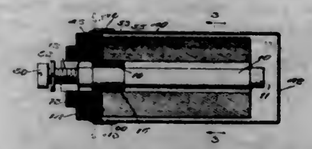
1. An anamorphosing prim objective comprising a pair of prisms of different strengths having their bases oppositely arranged and in the form of a V, the stronger prism being at the front or expansion end of the objective and having its front face inclined to the optical axial plane of the objective at a predetermined angle in one direction, the weaker or back prism having its front face inclined to the optical axial plane of the objective at an angle in the other direction, the prism objective being mounted with the optical axial plane inclined to the axis of the mounting in a direction such that the angle between the optical axial plane and the front face of the front prism is greater than the angle between the axis of the mounting and said front face whereby marginal pillow case distortion at one margin of the projected image is reduced, substantially as described.

1,898,788. CLOTHESLINE SUPPORTING DEVICE. EWALD B. OLSEN, Brooklyn, N. Y. Filed Apr. 23, 1932. Serial No. 607,086. 4 Claims. (Cl. 68—3.)



1. A clothesline supporting and operating device of the class described comprising an elongated, angle iron bracket mounted on and secured to one edge portion of the side of the window frame outwardly of the sashes therein, the ends of said bracket being turned in one direction to form spaced upper and lower bearings, a pin passed through apertures in said bearings and extending from one bearing to the other, a yoke-shaped arm, the free ends of the side members of which are mounted on said pin adjacent said bearings, a tube on the pin intermediate the side members of said arms to support the same in spaced relation, a clothesline guide and supporting unit rotatably mounted on said tube and including spaced line engaging elements, one of which constitutes an anti-frictional bearing and the other a hook with the latter of which, part of the clothesline is detachably coupled, and a pulley at the crosshead end of said yoke-shaped arm around which the clothesline is passed, and the clothesline engaging said hook to support the line taut when said line is swung outwardly with respect to the window opening.

1,898,789. CONDENSER. CLARENCE RINGWALD, South Bend, Ind. Filed Nov. 3, 1927. Serial No. 230,724. 9 Claims. (Cl. 175—41.)



1. In a condenser, the combination of a metallic core, a pair of conducting strips wound upon said core with interposed layers of insulation between them and with one strip connected with said core, a terminal connection at one end of said core, the opposite end of said core having connection with the edges of the turns of said conducting strip at one end, a surrounding casing, and means connecting the turns of the other conducting strip with said casing at the opposite end.

7. In a condenser having conducting and insulating layers wound into cylindrical form, the combination of a lead having a hooked end laid between the windings of the condenser and connected with a conducting layer of the condenser.

1,898,790. METHOD OF PREPARING RESINOUS COMPOSITIONS. PAUL F. SCHLINGMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 6, 1929. Serial No. 412,295. 7 Claims. (Cl. 260—8.)

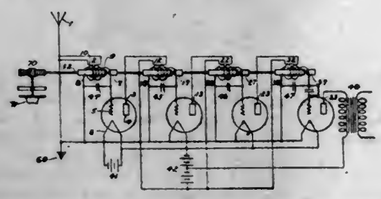
1. The method of incorporating into an alkyd resin unlimited chemically combining proportions of oil glyceride, the resulting product containing no appreciable amount of free oil therein, which consists in heating under reflux conditions a polybasic organic acid to a temperature at which it will react with the oil glyceride employed, adding thereto the oil glyceride at such a rate that chemical combination therewith will be effected, the acid always being in chemical excess of the oil glyceride, slowly adding a polyhydric alcohol and completing the esterification.

1,898,791. MIRROR. PETER SCHLUMBOHM, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed Feb. 25, 1930, Serial No. 431,141, and in Germany Mar. 2, 1929. 8 Claims. (Cl. 88—1.)



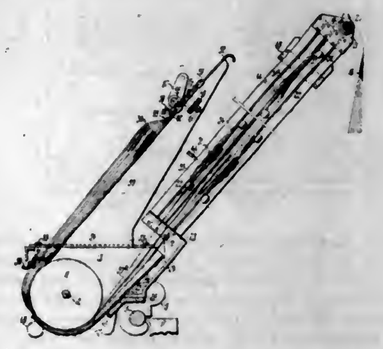
1. A hand mirror mechanically disconnected from any source of light and provided substantially at the center with a lens for converging light rays coming from a suitable source behind the mirror, which is freely movable with respect to the light so that the latter is brought outside the focus of the lens to produce convergent light, said central lens being surrounded by an unobstructed mirror surface of requisite width.

1,898,792. RADIORECEIVER. RALPH C. SHERMUND, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Oct. 26, 1929. Serial No. 402,616. 7 Claims. (Cl. 179—171.)



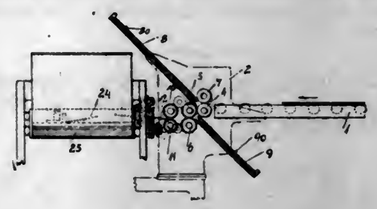
2. In an amplifier, a plurality of stages of amplification, each stage comprising a tuned circuit containing a winding, all of said windings being positioned about a common axis, a magnetic shield and a core for each winding and means for securing said cores together whereby they can be shifted simultaneously along the axis of said windings.

1,898,793. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 16, 1927. Serial No. 240,374. 20 Claims. (Cl. 197—126.)



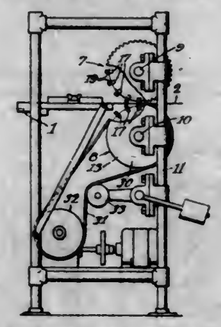
1. In a typewriting machine, the combination with a revoluble platen and a web-course for conducting a multiple-ply web from a source behind said machine downwardly and forwardly to the rear side of said platen, of a set of superposed rails mounted on each side of said web-course parallel thereto, each of the rails of one set being positioned in a plane above and parallel to the plane of the corresponding rail of the other set, providing a staggered arrangement for said rails, a stripper for sliding on each of said rails, an inreaching carbon-holding blade fastened to each stripper for holding carbons interleaved between the plies of said web, the staggered arrangement of said rails being effective to permit each of said blades to be moved rearwardly away from said platen for stripping its carbon without striking any of the remaining blades, means effective for moving said blades in parallelism, a paper-table at the delivery side of said platen, a cutting-off gage on said table, and a clamp for clamping the leading edges of the first form of said web clear of said carbons to hold the web-plies stationary while said strippers are operated to strip said carbons from said leading form.

1,898,794. CROSS FOLDING MACHINE. GEORG SPIESS, Leipzig, Germany. Filed Jan. 26, 1932, Serial No. 588,861, and in Germany Jan. 31, 1931. 6 Claims. (Cl. 270—62.)



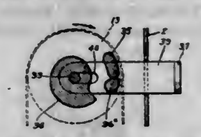
5. In a cross folding machine of the type referred to, the combination of: a folder; a second folder; means for delivering the folded sheets from the first folder to the second folder, said means comprising a corner feed table provided with feed rollers arranged at an angle other than 90° to the direction of the feed; means for partly superposing the folded sheets during their delivery upon the corner feed table; and means for pressing the deposited sheets against inclined feed rollers, said means comprising brush rollers, adapted to rotate about axes parallel to the inclined feed rollers, substantially as described.

1,898,795. MECHANISM FOR INTERLEAVING CARBON STRIPS IN CONNECTED MANIFOLD FORMS. WILLIAM J. STEENROD, Kalamazoo, Mich., assignor to Bonnar-Vawter Fanform Company, Inc., Benton Harbor, Mich., a Corporation of Delaware. Filed Dec. 5, 1930. Serial No. 500,187. 7 Claims. (Cl. 271—2.1.)



1. Mechanism for imparting a pulling feeding movement to a continuous strip of assembled forms or the like including a pair of synchronously driven roller frames, a cylindrically-arranged series of outwardly movable gripping bars mounted in each frame, the bars of one frame being arranged to meet the bars of the other frame and means for stressing said bars outwardly.

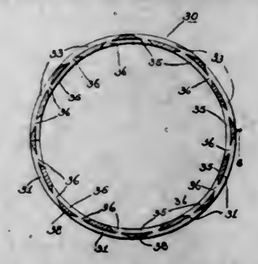
1,898,796. TOWEL CABINET. FRANK M. STEINER, Minneapolis, Minn., and WALTER S. GRAVES, Kansas City, Mo., assignors to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Original application filed June 5, 1922, Serial No. 565,802. Divided and this application filed Mar. 25, 1929. Serial No. 349,831. 6 Claims. (Cl. 312—38.)



1. A towel cabinet having a towel roll and a cam element rotatable therewith, a lug also rotatable with the feed roll, a locking bar having a stop thereon provided with an upper face normally contacting said lug, said bar being longitudinally and bodily movable relatively to said lug to unlock said element, said stop having an inner face cooperative with the periphery of said cam element to restore the bar to its locking position.

1,898,797. PISTON RING. EMIL TYDEN, Hastings, Mich. Filed Feb. 26, 1932. Serial No. 595,258. 5 Claims. (Cl. 74—109.)

1. A piston ring having an external circumferential series of recesses circumferentially spaced apart, each extending inwardly from the outer circumference of the ring to a depth substantially less than the radial width of the ring, and a second internal series of recesses extending from the inner circumference of the ring outwardly to a depth at least equal to the difference between the depth of the first mentioned recesses and the radial width of the ring, the individuals of said second series of recesses being circumferentially spaced apart successively and being each radially opposite the interval between two consecutive individual recesses of the first series and having their end portions lapping the end portions of said individuals of the first series, the recesses of both series having their bottoms at the opposite end portions thereof sloped and having the laps exceeding the length of the sloped portions and including a portion of the co-axially curved intermediate part of the bottoms of both series of recesses, whereby said lapping portions constitute apertures through which the lapping recesses open into each other, and the ends of said apertures are rendered acute-



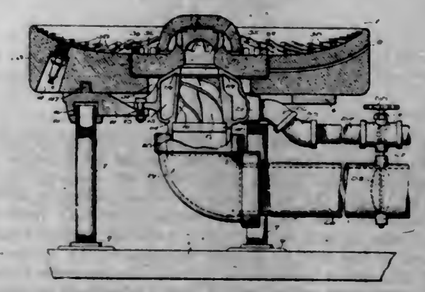
edged and the radial extent of the apertures constituting flow passages intermediate the inner and outer circumferences of the ring is made substantially zero.

1,898,798. ART OF PHOTO-ENGRAVING. PAUL H. W. WERNER, Wellesley, Mass. Filed Mar. 22, 1932. Serial No. 600,573. 1 Claim. (Cl. 41—29.)



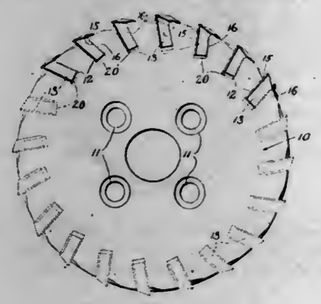
The method of preparing tinted lithographic prints which comprises applying to the portion of the surface to be tinted a coating which is readily removable with a solvent, then applying to the other portions of the surface and also to at least the marginal portions of the first applied coating a coating which by a solvent is readily removable with the first applied coating where it overlies the same but which is not readily removable by the solvent from the print where it directly contacts therewith, subjecting the coatings to a solvent to remove the first coating and such of the second coating as may be superimposed thereon while allowing the second coating, where it directly contacts with the print, to remain on the print, applying tinting material to the print so as to completely tint the exposed surface therepf, and removing the remaining part of the second coating and such of the tinting material as may be carried thereby.

1,898,799. GAS BURNER. ASHUR U. WETHERBEE, Evanston, Ill., assignor to Autogas Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 21, 1927. Serial No. 207,399. 15 Claims. (Cl. 158—99.)



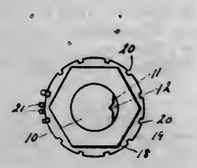
1. In combination, a dished plate of refractory and insulating material, a layer of relatively thin flat refractory bodies supported on the dished plate with their flat sides generally upwarly disposed, and a central nozzle projecting a sheet of quick burning mixture radially into the layer of refractory bodies.

1,898,800. ROTARY CUTTER. GEORGE F. WHITMAN, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Filed Dec. 12, 1931. Serial No. 580,644. 3 Claims. (Cl. 29—105.)



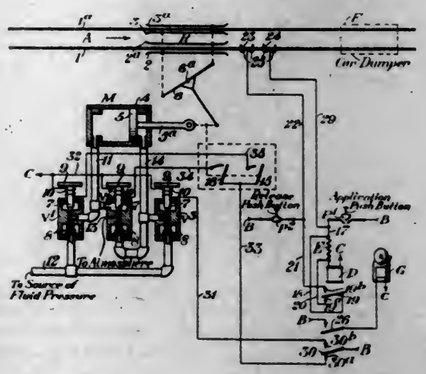
2. A rotary cutter comprising, in combination, a body having an outwardly opening slot extending substantially longitudinally of the axis of rotation and defined by opposed side surfaces and a root surface, one of said side surfaces being flat and the other being formed with serrations of uniform shape and spacing extending generally longitudinally of said axis, certain of said serrations extending from end to end of said other surface, a cutting element positioned in said slot with its inner surface disposed at an angle to and spaced from said root surface, a plurality of generally longitudinally serrations formed in one side of said element and complemental to and slidably interfitting with said first mentioned serrations, the other side of said element having a snug sliding fit against said flat surface, said element being adapted for insertion in different intermediate positions in said slot through different selective engagements of said coacting serrations to effect radial adjustments thereof, and an elongated wedge removably interposed between the inner surface of said element and said root surface for clamping said element in adjusted position and backing up said element in said position.

1,898,801. NUT LOCK. IRVINE WILKINSON, Philadelphia, Pa. Filed Aug. 28, 1929. Serial No. 388,886. 1 Claim. (Cl. 151—3.)



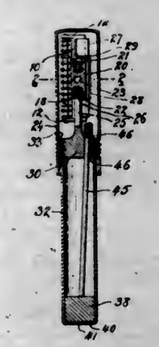
In a nut lock, a bolt having a longitudinal spline groove, a nut threaded thereon, a flange carried by the base end of said nut and having a plurality of regularly spaced notches about the entire circumference thereof, a washer mounted on the bolt, a projection extending from the inner edge of said washer and registering with the spline groove in the bolt to prevent rotation of the washer on said bolt, and a plurality of locking tongues formed about the exterior circumference of said washer and within an angular space equal to that between a pair of notches on the nut flange, the angular distance between the first and second tongues being an even multiple of that between the second and third, and the distance between the third and fourth being an odd multiple of that between the first and second tongues.

1,898,802. APPARATUS FOR THE CONTROL OF RAILWAY CAR RETARDERS. WILLARD A. WOOD, Swissvale, and ARTHUR R. MACHESNEY, Pittsburgh, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 5, 1932. Serial No. 596,984. 16 Claims. (Cl. 303—21.)



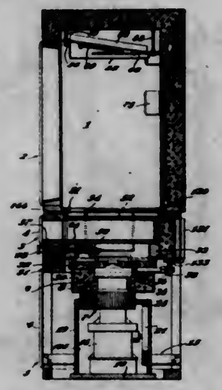
1. In combination, a stretch of railway track, a braking bar located adjacent one track rail of said stretch and movable toward and away from the rail into braking and non-braking positions, two spaced insulated rail sections formed in one rail of said stretch, and means controlled by a car and including said rail sections for controlling said braking bar.

1,898,803. DISPENSING DEVICE. HARRY BENTON YOUNG, Buena, N. J. Filed Aug. 8, 1929. Serial No. 384,253. 3 Claims. (Cl. 221—78.)



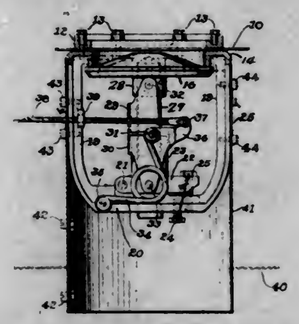
1. A dispensing device comprising a handle of tubular formation having end openings forming a receiving and discharging opening at one end thereof and a vent opening at its opposite end, a piston slidably mounted in the handle, a rod for moving the piston within the handle, said handle having said end openings located in axial alignment for the free entrance of the rod for engaging and moving the piston in either direction, a shank, a plug on said shank, means for detachably securing the plug in the discharge end of the handle, and means for mounting the rod upon said plug with the body of the rod extending within the handle when the piston is positioned adjacent to the vent opening of the handle.

1,898,804. REFRIGERATING APPARATUS. MUSTAFA J. AJAM, Waltham, Mass., assignor to Devon Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed June 27, 1931. Serial No. 547,201. 16 Claims. (Cl. 62—116.)



1. Refrigerating apparatus comprising a rectangular food compartment with vertical side walls and a horizontal top wall, a coolant circuit including a cooler tank, said tank having upper and lower surfaces with areas each equal to the major portion of the area of the top wall, said tank having a relatively shallow depth between said surfaces, and means supporting the tank with its upper surface entirely spaced from the top of the compartment to afford space for air circulation therebetween.

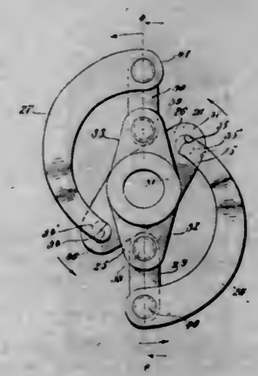
1,898,805. VALVE. ANDREW A. ANDRAKE, Cleveland, Ohio, assignor to The Glenn L. Martin Company, Baltimore, Md., a Corporation of Ohio. Filed Sept. 16, 1927. Serial No. 219,890. 14 Claims. (Cl. 137—21.)



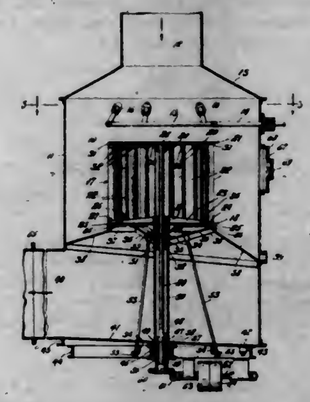
1. In an airplane, the combination of a fuel tank having an opening in the bottom thereof, an upwardly closable valve head adapted to normally close said opening from below said bottom, means for restraining said head to said opening, a shell surrounding said opening and adapted to confine the discharge therefrom to a path extending downwardly below the adjacent parts of the plane, and means extending outside of said shell for releasing said restraining means of said valve.

1,898,806. CENTRIFUGAL FLEXIBLE COUPLING. JAMES N. BAKER, Towson, Md., assignor to The Black & Decker Manufacturing Company, Towson, Md., a Corporation of Maryland. Filed Dec. 19, 1929. Serial No. 415,153. 10 Claims. (Cl. 64—97.)

1. The combination in a centrifugal coupling of a driven member adapted to be connected to the load, a driving member adapted to be connected to the source of power, elongated centrifugal members each pivotally connected at one end to the driving member on opposite sides of the center of rotation, and links shorter than said centrifugal members connecting the opposite ends of the centrifugal members to the driven member at points thereon on opposite sides of the center of rotation.



1,898,807. AIR CLEANING. JOHN STETSON BARNES, White Plains, N. Y., assignor, by mesne assignments, to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 22, 1930. Serial No. 490,358. 10 Claims. (Cl. 183—27.)

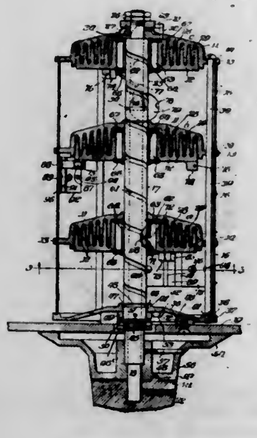


1. The method of removing fine particles from air containing the same, which consists in spraying the air with liquid to moisten the particles carried by the air, and then passing the air with the moistened particles radially inwardly between vertically arranged blades acting centrifugally about a vertical axis to oppose the inward passage of air and throw the moistened particles outwardly and moving in timed relation with the flow of air so that the moistened particles will be removed from the air by the blades.

1,898,808. CONDENSER. REUBEN B. BENJAMIN, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Des Plaines, Ill., a Corporation of Illinois. Filed Dec. 18, 1926. Serial No. 154,334. 4 Claims. (Cl. 175—41.5.)

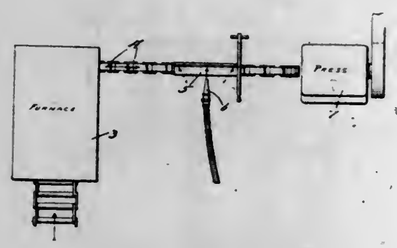
1. A condenser comprising a stator and a slider each composed of integrally formed concentric plates, a shaft

for operating said slider, and means for adjusting the capacity of said condenser independent of said shaft, said



means comprising a guide member operated by an eccentric member for imparting a slight rotation to said slider.

1,898,809. PROCESS FOR CLEANING METAL OBJECTS. ROBERT B. BERG, Aurora, Ill., assignor to National Rail Joint Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 16, 1929. Serial No. 392,897. 1 Claim. (Cl. 141—1.)



The method or process of cleaning surfaces, preliminary to re-forming or re-shaping used metal objects that have become coated with dirt or rust, or other substances, caked on the surface of the metal objects to be re-formed or re-shaped, comprising the heating of said objects to a high temperature, with said coating thereon, thereafter directing a strong jet of water upon the highly heated objects, thereby cracking up and forcing off and washing away the said coating on said objects, thereby to facilitate the subsequent re-forming or re-shaping of said objects in the desired manner.

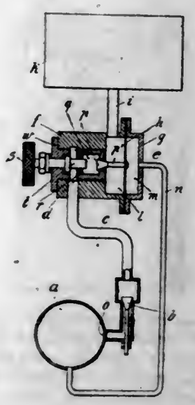
1,898,810. EXCAVATOR. REINHARD BERGMANN, West Allis, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 9, 1930. Serial No. 450,927. 7 Claims. (Cl. 254—188.)

1. A sheave assembly for use with an excavating machine of the type having a boom and comprising a housing, a sheave rotatable in the housing, a supporting pin mounted on the boom and extending through the housing and through the hub of the sheave for supporting



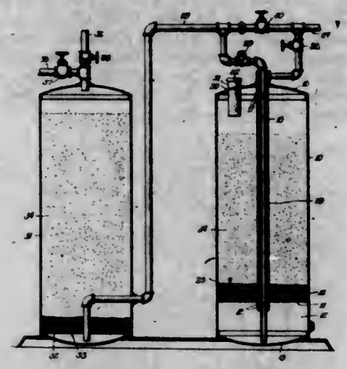
the sheave and housing for rotation and means for releasably securing the housing to the boom to preclude rotation thereof.

1,898,811. APPARATUS FOR SUPPLYING FUEL TO FLOATLESS CARBURETORS. KARL BOSSHARDT, Berlin, Germany, assignor to Hermann Uteg, Metallwaren G. m. b. H., Berlin, Germany. Filed Oct. 29, 1930, Serial No. 491,909, and in Germany Nov. 2, 1929. 2 Claims. (Cl. 261—69.)



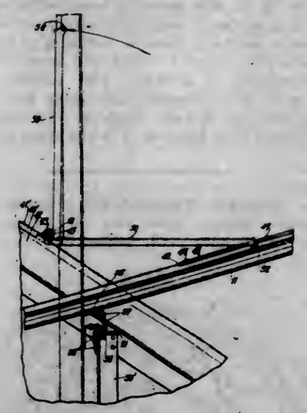
1. An apparatus for supplying fuel to floatless carburetors comprising a fuel tank, a pipe line extending from said fuel tank to the suction pipe of said carburetor, a movable control member, one side of said control member being under the pressure of the fuel and its other side being under the suction in said suction pipe, means for regulating the flow of fuel in said pipe line under the control of said member, means for by-passing a portion of the fuel past said regulating means and means for maintaining a constant head at opposite sides of said fuel valve.

1,898,812. SALT CONTAINER FOR ZEOLITE REGENERATION. ROBERT E. BRESSLER, Hammond, and DOUGLAS V. MOSES, East Chicago, Ind., assignors to Graver Corporation, East Chicago, Ind., a Corporation of Illinois. Filed Aug. 10, 1929. Serial No. 385,017. 6 Claims. (Cl. 210—24.)



1. In a salt container for zeolite regeneration, in combination, a container having a salt chamber and a brine chamber, means for admitting brine to said brine chamber from said salt chamber, an inlet pipe opening separately into each of said chambers, an outlet pipe leading from said brine chamber, and means to control the flow of water to said chambers and the flow of brine from said brine chamber.

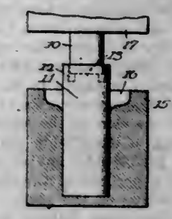
1,898,813. SKYLIGHT. OSCAR CARLSON, Brooklyn, N. Y. Filed July 8, 1930. Serial No. 466,554. 14 Claims. (Cl. 108—16.)



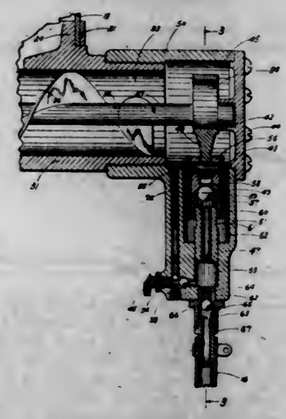
1. A skylight construction comprising a stationary sash support, a sash pivotally mounted in said support, and means for excluding weather from the joint between the sash support and the sash, said means comprising a member pivotally connected to the sash support, and having sliding engagement with the sash frame.

1,898,814. PROCESS OF MAKING TAPPETS. GEORGE CHARLTON, Detroit, Mich., assignor to Rich Tool Company, Detroit, Mich., a Corporation of Maine. Filed July 9, 1927. Serial No. 204,628. 3 Claims. (Cl. 29—156.7.)

1. The process of making tappets which includes forming a pocket in one end face of a rod blank with a central projection rising from the bottom of the pocket, inserting in the pocket a block of facing metal of less cross section than the pocket, welding the bottom of the block to the top of the projection and acting upon the assembly with endwise pressure to embed the block in the blank and spread the block and the adjacent portion of the blank to form a head.

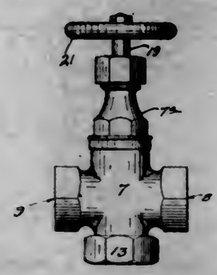


1,898,815. LUBRICATOR PUMP. KENNETH S. CLAPP and THEODORE H. EICKHOFF, Cleveland, Ohio. Filed Oct. 26, 1929. Serial No. 402,768. 9 Claims. (Cl. 221—47.1.)



1. In a lubricating device, a container, means to remove lubricant therefrom including a screw conveyor and a booster operated by the end of the conveyor, the booster including a piston pump, a cam and connecting rod supported by said conveyor to operate said pump.

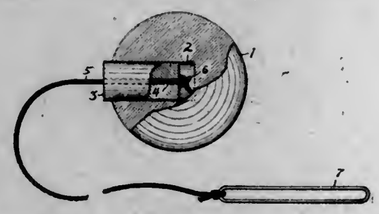
1,898,816. VALVE. GEORGE M. CROSSEN, Minneapolis, Minn. Filed Dec. 18, 1929. Serial No. 414,902. 3 Claims. (Cl. 210—166.)



1. A valve comprising a casing having inlet and outlet ports, a partition in said casing between said ports, a port opening in said partition for connecting the inlet

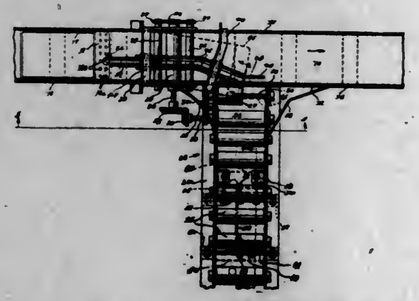
and outlet ports, an opening in said casing on one side of said partition that is co-axially aligned with the port opening in the casing partition, a stem extending into said casing on the other side of the partition and being co-axially aligned with the port in said partition and having screw-threaded engagement with the casing, a port closing disk carried by said stem at its inner end and movable toward and away from the port in the partition when said stem is turned, a sleeve in the port in the partition and having an external shoulder at its intermediate portion that engages the side of the partition facing said opening in the casing, a detachable cap for closing the said opening in the casing and having threaded engagement therewith, and a perforated tubular member seated against the lower portion of the sleeve at its inner end portion and against the inside bottom portion of the cap at its outer end portion to hold said sleeve against movement out of the port opening, said sleeve in the partition port opening being alike at each end so that either end thereof may be inserted through the port and the end that is inserted through the port extending beyond the partition and adapted to have said disk seated thereon to close the valve so that when the valve seat on one end becomes worn said sleeve may be turned end for end, and a new seat presented.

1,898,817. TOY. RAYMOND C. DOLE, Ashley, Ind. Filed June 14, 1932. Serial No. 617,081. 4 Claims. (Cl. 46—46.)



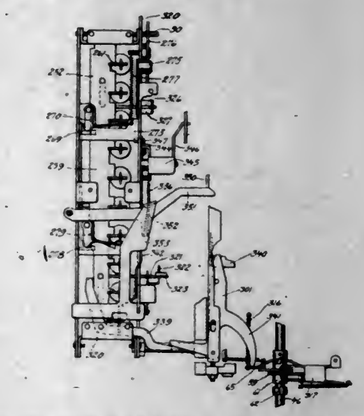
1. A toy consisting of an object having a socket closed at one end thereof and open at its opposite end, a plug having an axial bore and adapted to be frictionally held in said socket, a cord strung through the bore of the plug and having a valve at one end adapted to completely close the inner end of the bore when the cord is under tension, and an elastic member attached to the opposite end of the cord.

1,898,818. CONVEYER SYSTEM WITH DIVERTERS. SMITH EGGLESTON, St. Paul, Minn., assignor to Standard Conveyor Company, North St. Paul, Minn., a Corporation of Minnesota. Filed Jan. 10, 1931. Serial No. 507,873. 20 Claims. (Cl. 198—38.)



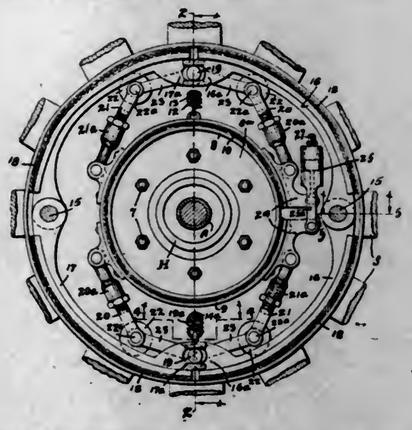
1. A conveyer system having in combination a main conveyer, a siding, a carrier movable along the conveyer, an extensible switch engaging member on said carrier adapted to be placed in different positions transverse the carrier, a stationary switch disposed to coact with said member in a selected position of the latter to divert the carrier to said siding and means associated with said switch for extending said member to render the switch operative.

1,898,819. ATTACHMENT FOR CALCULATING MACHINES. HUGO E. ENDERS, Belleville, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Original application filed Aug. 17, 1927, Serial No. 213,570. Divided and this application filed Nov. 15, 1930. Serial No. 495,916. 8 Claims. (Cl. 235—63.)



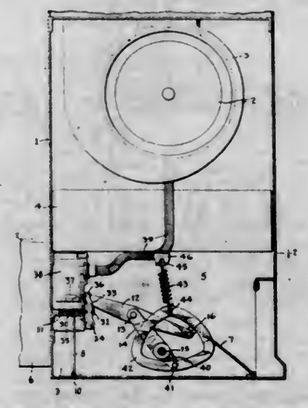
1. A multiplier attachment unit for a calculating machine having a transversely shiftable carriage, numeral wheels thereon, a main frame, selecting mechanism thereon, means for registering upon said numeral wheels amounts set up in said selecting mechanism, and carriage shifting devices, said unit comprising a supplemental frame, means mounted thereon including a cyclically advanced multiplier control device and keys for automatically determining a product, and cooperating means mounted upon said supplemental frame for determining automatic shifting of said carriage, said unit being attachable to and detachable as a whole from said machine.

1,898,820. BRAKE MECHANISM. AMOS J. EVANS, Minneapolis, Minn. Filed Oct. 13, 1930. Serial No. 488,345. 2 Claims. (Cl. 188—140.)



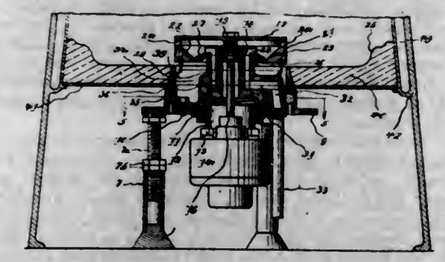
1. In brake mechanism, an inner drum connected with a rotary member, such as a wheel, an outer drum surrounding said inner drum and spaced therefrom and also connected with said rotary member, a stationary support at one end of said outer drum, a brake band surrounding said inner drum and loosely supported from means on said stationary member, a plurality of arcuate brake shoes supported from said stationary member and positioned end to end for operating on substantially the entire inner periphery of said outer drum and a series of toggle devices interposed between said brake band and the respective ends of said brake shoes, said toggle devices including thrust elements which are adapted to force said shoes outwardly when said band is drawn about said inner drum.

1,898,821. FIRE PROTECTION MECHANISM FOR HEATING AND VENTILATING UNITS. WARREN EWALD, Ardsley, Pa., assignor, by mesne assignments, to John J. Nesbitt, Inc., Holmesburg-Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 2, 1930. Serial No. 472,710. 2 Claims. (Cl. 98—33.)



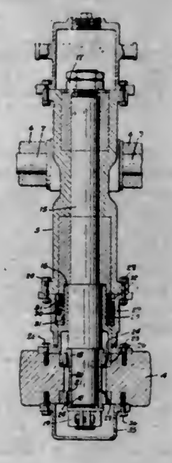
1. A heating and ventilating unit having a fresh air chamber having openings at its opposite ends, a damper pivotally mounted adjacent each of said openings, means connecting the two dampers whereby they may be shifted simultaneously, means for actuating the shifting, means including a fusible link suspended at one of the entrances to said chamber, whereby when the link is melted the actuating means will be set in operation to close one of the dampers and open the other one.

1,898,822. OIL BURNER. PAUL FALZ, St. Paul, Minn., assignor of one-half to Minnie Helwig, St. Paul, Minn. Filed June 29, 1931. Serial No. 547,535. 3 Claims. (Cl. 158—77.)



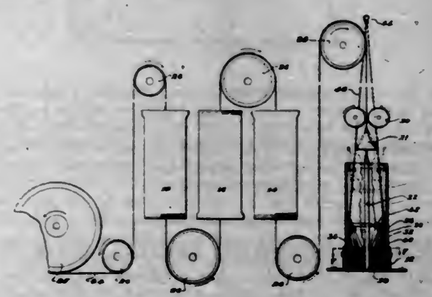
3. An oil burner comprising, a supporting frame, a motor adjustable vertically on said frame and having a vertical drive shaft extending upward, a rotary head fixed on the upper end of said shaft, an oil cup formed in said head and having a central, bottom opening around said shaft, a fixed projection on said frame extending upward in said opening and formed with a plurality of passages to deliver oil to said cup and a distributing plate fixed on the upper end of said projection and overlapping the inner periphery of said cup to distribute oil from said passages within said cup.

1,898,823. PULVERIZING MILL. GORDON B. FORBES, Garfield, Utah, assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 5, 1928. Serial No. 244,575. 5 Claims. (Cl. 83—45.)



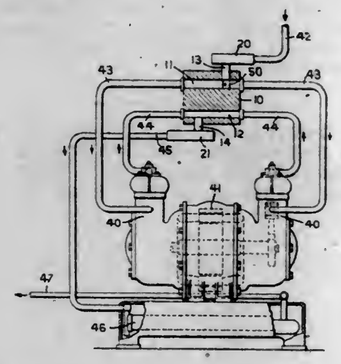
1. In combination, a shaft, a rotating member, a bearing supporting said member on said shaft, a shield possessing a partially recessed outer surface carried by said member and extending along said shaft in running engagement therewith, a second shield partially recessed along its inner surface secured by suitable means to said shaft and extending over said first shield to form a closed packing chamber, and packing means in said chamber forming a dust seal for said bearing and the lubricant therein.

1,898,824. METHOD AND APPARATUS FOR TURNING TUBULAR FABRIC. ARMAND W. FORSTALL, Denver, Colo. Filed Dec. 6, 1930. Serial No. 500,599. 18 Claims. (Cl. 223—20.)



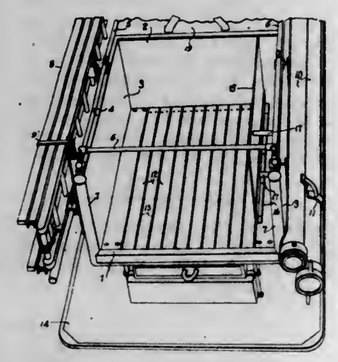
1. In a machine for turning tubular fabric, the combination of a tube, a tamping device for packing fabric into the tube, and means for guiding the fabric off over the outside of the tube to reverse the fabric.

1,898,825. MANIFOLD. THOMAS J. FOWLER, Chicago, Ill. Filed May 28, 1930. Serial No. 456,403. 4 Claims. (Cl. 62—115.)



1. A combination intake and exhaust manifold comprising a metallic member having a pair of longitudinal passages extending therethrough in close proximity whereby heat transfer therebetween may be obtained, a transverse bore communicating with each of said passages and a valve mechanism mounted in communication with each of said transverse bores, said valve mechanism including a valve plunger adapted to seat in open and closed positions whereby pressure is removed from the valve stem when said valve is open.

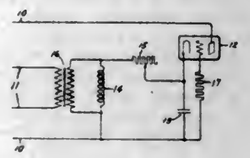
1,898,826. FIRE ENGINE. CHARLES H. FOX, Cincinnati, Ohio, assignor to The Ahrens-Fox Fire Engine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 26, 1931. Serial No. 571,024. 8 Claims. (Cl. 280—4.)



2. In a fire engine body, a floor therein composed of slats having slots between each adjacent slat, a partition adapted to be inserted in any one of said slots, means attached to said partition and adapted to support it in the slot on one of said slats, and means for holding the partition in upright position.

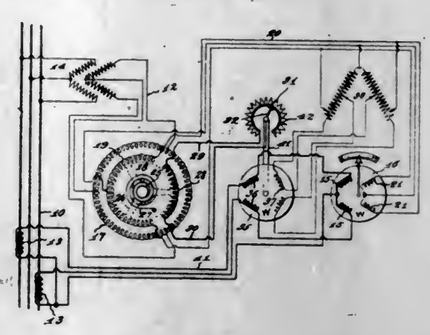
1,898,827. ALTERNATING CURRENT GENERATOR. CHARLES S. FRANKLIN, Los Angeles, and DENZIL A. CUTLER, Hollywood, Calif., assignors to General Electric Company, a Corporation of New York. Filed Jan. 28, 1931. Serial No. 511,810. 8 Claims. (Cl. 175—373.)

6. Apparatus for generating a periodic current comprising a source of current, a capacitor, a discharging circuit for said capacitor including a vapor electric valve and a circuit for charging said capacitor from said source



including a resistance of such a value as to draw a current from said source less than the critical value of the valve current.

1,898,828. PHASE CONTROL. STANLEY S. GREEN, La Fayette, Ind. Filed Mar. 2, 1931. Serial No. 519,640. 22 Claims. (Cl. 172—246.)



1. A system for measuring the volt-amperes of a polyphase circuit, comprising a polyphase measuring wattmeter having current and potential coils, a separate polyphase wattmeter-type motor device also having current and potential coils, the current coils of said wattmeter and of said motor device being connected to be responsive to the current in the polyphase circuit to be measured, a polyphase phase-shifter having relatively movable primary and secondary windings, the primary windings of said phase-shifter being connected to be responsive to the potential of said polyphase circuit and the secondary windings thereof being connected to the potential coils of said wattmeter and of said motor device, and resistance loading means operated by said motor device for controlling the relative positions of the primary and secondary windings of said phase-shifter by varying the load on the phase-shifter secondary.

5. A phase-shifter, comprising two relatively movable members, one of which has primary windings and the other secondary windings, biasing means tending to produce relative movement between said two members in one direction, a motor winding on said phase-shifter tending to produce relative movement of the members thereof in the direction opposite to that which the biasing means tends to produce, and means for varying the pull of said motor winding.

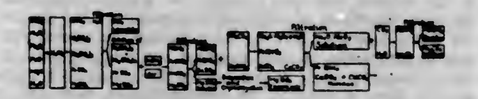
9. A system responsive to the volt-amperes of an alternating-current circuit, comprising an instrument responsive to the in-phase component of the product of current and potential secured from such circuit, a motor-device responsive to the quadrature time-phase component of such product, and phase-shifting means to vary the mutual time-phase relationship between said current and potential, said phase-shifting means including a circuit which contains a resistance that is varied by said motor-device and being operable to change the aforesaid mutual time-phase relationship by varying said resistance.

1,898,829. TEMPERING DEVICE. FREDERICK W. GREBE, Cambridge, Mass. Filed Apr. 25, 1930. Serial No. 447,134. 3 Claims. (Cl. 257—85.)



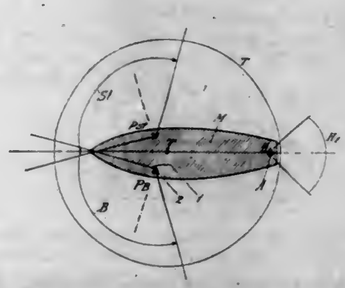
1. A device for controlling the temperature of a continuous stream of chocolate, comprising in combination, a closed narrow drum-like receptacle having jacketed disks spaced a short distance apart and a jacketed cylindrical wall connecting said disks to form a narrow circular chamber between the disks for the chocolate, pipes leading to and from the chamber through said jacketed cylindrical wall, means for forcing the chocolate through one pipe into the chamber and out through the other pipe in a continuous stream, means for supplying a heat exchange fluid to the jacketed disks and jacketed cylindrical wall, and rotating scrapers for scraping the inner walls of the jacketed receptacle.

1,898,830. TREATMENT OF LIQUOR RESULTING FROM RECOVERY OF LAMISILITE FROM VERMICULITE ORE. ROBERT G. GUTHRIE and OSCAR J. WILDER, Chicago, Ill., assignors to William J. Mohr, Chicago, Ill. Filed Dec. 14, 1931. Serial No. 581,056. 12 Claims. (Cl. 23—117.)



1. The process of treating a vermiculite with sulphuric acid thereby producing substantially-pure silica in the form of flat plates or flakes in a solution containing principally ferrous and ferric sulphates, aluminum sulphate and magnesium sulphate, filtering out the silica, substantially neutralizing the solution with an alkaline base capable of producing an insoluble sulphate thereby causing a precipitation of iron and aluminum hydroxides, separating such precipitate from the solution, and recovering the magnesium sulphate from the solution.

1,898,831. ARRANGEMENT FOR INDICATING THE POSITION OF VESSELS. WALTER HAHNEMANN, Berlin-Marienfelde, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Jan. 6, 1930, Serial No. 418,743, and in Germany Jan. 24, 1929. 6 Claims. (Cl. 250—11.)



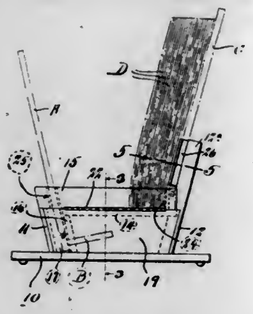
1. In an arrangement for indicating the position of ships, the combination of a short wave wireless transmitter and a wireless receiver mounted one above the other on a ship, and an electromagnetic screen formed by metallic surfaces of the ship's structure separating the transmitter and the receiver.

1,898,832. FLUID DELIVERY MEANS FOR COOKING AND BREWING UTENSILS. STACEY A. HAINES, Kansas City, Mo., assignor of one-half to Harold F. Spencer, Kansas City, Mo. Filed Apr. 14, 1930. Serial No. 444,156. 18 Claims. (Cl. 53—3.)



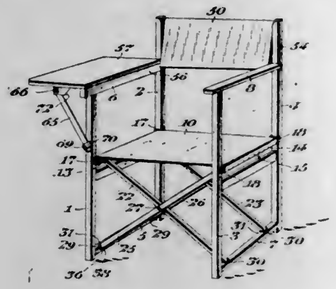
1. In a utensil for the purpose indicated, in combination with two chambers constituting a unitary structure, fluid delivery means for transferring variable quantities of fluid from one of said chambers to the other, said means comprising a duct element having intake in one of said chambers and discharge in the other and comprising a fixed portion and a telescoping extension in the first mentioned chamber affording the intake; resilient means reacting on said extension for telescoping it with the fixed portion, and a stop member co-axially associated with the fixed member for limiting telescoping of the extension with respect to the fixed member for determining the distance to which the duct element extends into the second mentioned chamber for fluid intake.

1,898,833. RACK FOR LOOSE LEAF LEDGERS. CORBON L. HARVEY, Cleveland, Ohio. Filed Mar. 11, 1932. Serial No. 598,123. 8 Claims. (Cl. 45—57.)



1. A rack for loose leaf ledgers comprising a raised platform for supporting the ledger leaves, a rear wall extending from said platform for supporting the rear cover of said ledger in substantially upright position, and a front wall spaced forwardly from said platform and extending below the latter for supporting the front cover in substantially upright position and on a horizontal plane a suitable distance below said platform.

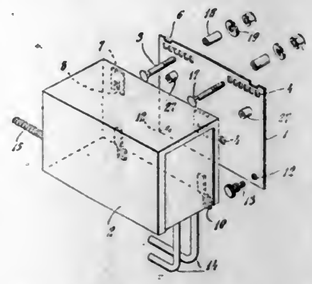
1,898,834. CHAIR. THOMAS R. HAYES, Monrovia, Calif. Filed Dec. 2, 1930. Serial No. 499,420. 8 Claims. (Cl. 155—140.)



1. A collapsible chair comprising relatively movable frames each having leg stiles connected by rungs provided with recesses, a seat-supporting rail having end fittings slidably engaging the leg stiles of each of said frames and having trellis struts hingedly engaged in the recesses of the rung of the opposite frame, and a seat of flexible material connecting said seat-supporting rails.

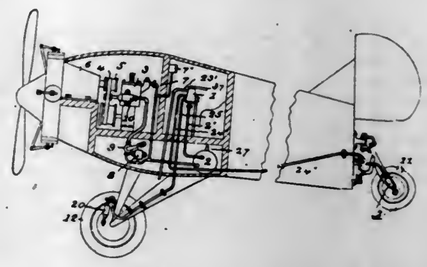
1,898,835. SUPPORTING DEVICE FOR RADIO APPARATUS. KEN L. HENDERSON, Springfield, Mass., assignor to United American Bosch Corporation, Springfield, Mass., a Corporation of New York. Filed May 12, 1932. Serial No. 610,852. 1 Claim. (Cl. 248—30.)

A supporting device for a casing comprising a plate having notches in its upper edge with transverse rows of apertures below said notches to be selectively used in combination with bolts to secure the plate in position, the apertures being polygonal and the bolts having correspondingly shaped portions to fit the apertures, spacing sleeves to envelop the bolts between the plate and the support to which it is attached, the casing having elements secured thereto and comprising downward extending tongues to engage the notches in the upper edge of the plate to enable the casing to be hung thereon, studs on the plate below the notches to space said casing from the plate and keep said elements in tight engagement



with the plate, and detachable means for securing the lower part of the casing to the plate adjacent the bottom edge thereof.

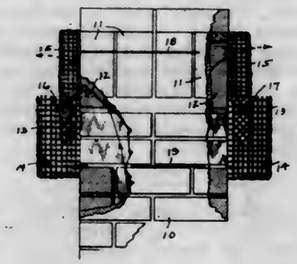
1,898,836. TRIPLE CONTROL MEANS FOR LANDING GEAR WHEEL BRAKES OF AIRPLANES. JOHN T. HUGHES, Chicago, Ill. Filed July 22, 1930. Serial No. 469,738. 9 Claims. (Cl. 303—6.)



1. In a triple control means for the air brake system of the landing gear of airplanes having a rear ground wheel and right and left front ground wheels, said means comprising a stationary valve member having inlet-outlet passages adapted for individual connection with the brake mechanisms of the ground wheels of a landing gear and with an exhaust passage, and an adjustable valve member associated with the stationary valve member and formed with a passage in its contact face adapted for simultaneous registry with the inlet-outlet passages and exhaust passage of the stationary valve member, with a series of inlet passages in lateral relation to the aforesaid passage in its contact face and adapted for simultaneous registry with the series of inlet-outlet passages of the stationary valve member, with an inlet passage in lateral relation to said series of inlet passages and adapted for individual registry with a passage in the stationary valve member that is adapted for communication with one of the front wheel brake mechanisms, and an inlet passage in lateral relation to the last mentioned inlet passage and adapted for individual registry with a passage in the stationary valve member that is adapted for communication with the brake mechanism of the other front wheel.

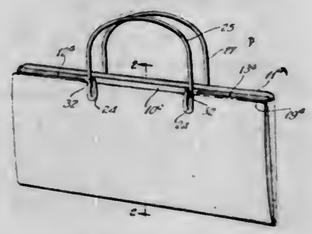
1,898,837. ADJUSTABLE SPARK SCREEN. JOHN A. JOHNSON, Crawfordsville, Ind., assignor to National Supply & Service Corporation, Crawfordsville, Ind., a Corporation. Filed Oct. 19, 1932. Serial No. 638,520. 8 Claims. (Cl. 183—97.)

1. In a spark screen for a flue side-outlet, a perforate basket open at the top and inner side, and an upper member telescoping with the basket and having inturned flanges less in width than that of the basket, a wall ex-



tending from the outer side of the member well down within the basket to form a partition thereacross with an opening thereunder.

1,898,838. SHOPPING BAG. MORRIS KATZ, New York, N. Y. Filed Nov. 24, 1931. Serial No. 576,986. 10 Claims. (Cl. 229—54.)



1. A shopping bag of the class described comprising a plurality of foldable sections adapted to be extended to form a relatively large bag and compactly folded into a thin, elongated package, means for retaining the bag in folded position to form said package, a handle member extending from one side of the package, said package having a chamber or pocket opening outwardly therethrough and means for supporting the folded sections of the bag so as to give access to said chamber or pocket, said last named means comprising a handle member and retaining clips fashioned from the material of said handle member.

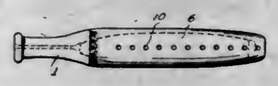
1,898,839. PROCESS OF MANUFACTURING POROUS SILICA WARE. LUDWIG KERN, Webster Groves, Mo. Filed June 18, 1930. Serial No. 462,120. 5 Claims. (Cl. 25—156.)

1. The process of manufacturing porous silica ware which comprises disintegrating naturally occurring crystalline silica materials to an amorphous condition, said disintegration being accomplished by heating said natural silica material and suddenly cooling the same, mixing said amorphous silica with solid combustible material, plasticizing the mixture, shaping the plasticized mixture, and burning the combustible material from the shapes.

1,898,840. RESINOUS COMPOSITIONS AND METHOD OF PREPARING THE SAME. ROY H. KIENLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 10, 1930. Serial No. 460,302. 15 Claims. (Cl. 260—8.)

1. The method which comprises the steps of heating a drying oil and a polyhydric alcohol-polybasic organic acid resin in an enclosed space to a temperature sufficiently high to form a resinous composition which is capable of being hardened by heating in thin films only, adding thereto a polyhydric alcohol having more than two hydroxyl groups in the molecule and heating to form another resinous composition which is capable of being air-hardened.

1,898,841. CIGAR AND CIGARETTE HOLDER AND ASH RECEIVER. GEORGE KLENK, Santa Ana, Calif. Filed Oct. 25, 1930. Serial No. 491,239. 1 Claim. (Cl. 131—51.)



A holder comprising a mouthpiece, a tubular body applied thereto and having an end wall provided with an opening located upon the axis of the body, said body being of greater internal diameter at one end than at the other, said body having at its side a series of openings extending in a row along the body, said openings having their axes disposed toward the axis of the body and the axes of the last mentioned openings being inclined toward that end of the body having greater internal diameter.

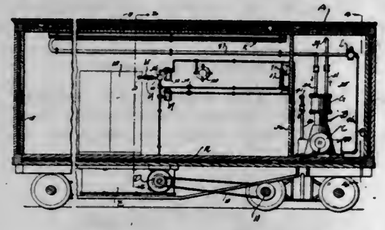
1,898,842. LIGHTING DEVICE. SAHN K. LOWE, Honolulu, Territory of Hawaii. Filed Apr. 10, 1931. Serial No. 529,199. 1 Claim. (Cl. 240—8.2.)

In means for illuminating the side of a vehicle body and the hand of the operator of the vehicle when projected outwardly and laterally for signalling purposes, comprising reflectors in the form of pockets set in the fenders on the said side of the vehicle with the upper edges of the pockets arranged flush with the upper surfaces of the fenders respectively, light bulbs arranged in the pockets, one pocket being disposed at an upward and rearward angle adjacent to the juncture of the front fender with the running board and having its lower wall longer than its upper wall and the other pocket being disposed at an upward and forward angle at the juncture of the rear fender with the running board and having its upper wall longer than its lower wall whereby two beams of light will be directed in converging relation to illuminate the side of the vehicle body and to intersect in a plane substantially in the path in which the operator will move his hand outwardly for signalling purposes.

1,898,843. REFRIGERATOR CAR. CLIFFORD MARTIN, Interlachen, Fla. Filed May 6, 1929. Serial No. 360,950. 4 Claims. (Cl. 62—117.)

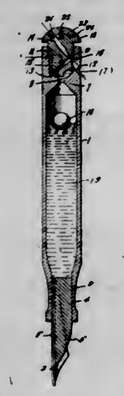
1. In refrigerating apparatus for refrigerator cars the combination of a refrigerator car having a compartment therein, a refrigerant receiving unit in the car, means to discharge a cooled refrigerant to said unit, a condensing coil having a circulating connection with the last mentioned means and said unit for passage of the refrigerant therethrough, mounted exteriorly upon a side

of said car, means for directing a circulation of atmospheric air along said condenser in a predetermined direction, said last mentioned means including a housing for



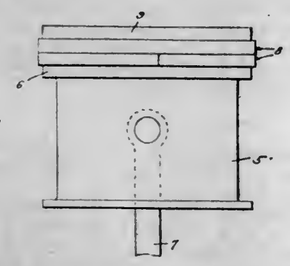
the condenser having an opening at an end thereof, with means adjacent one end for positively forcing air through the side housing wall.

1,898,844. FOUNTAIN PEN. FRANKLIN CLAY MCGAUGHY, Tupelo, Miss. Filed Apr. 15, 1932. Serial No. 605,533. 7 Claims. (Cl. 120—46.)



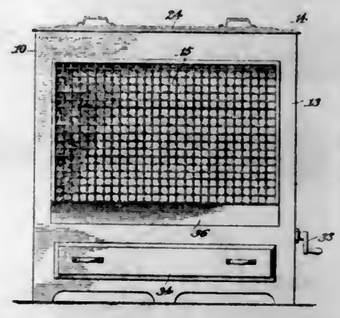
1. A fountain pen comprising a barrel, an ink reservoir formed by the major portion of the barrel and having an aperture therein and a plug having diagonal communicating apertures therein forming an aspirating pump, one of the aperture openings being adapted to register with an aperture in the wall of the barrel, mounted in the barrel and communicating with the reservoir aperture.

1,898,845. PISTON CONSTRUCTION. STEPHEN ERNEST MEYER, Hayden, Ariz. Filed Mar. 30, 1931, Serial No. 526,466. Renewed July 12, 1932. 2 Claims. (Cl. 74—108.)



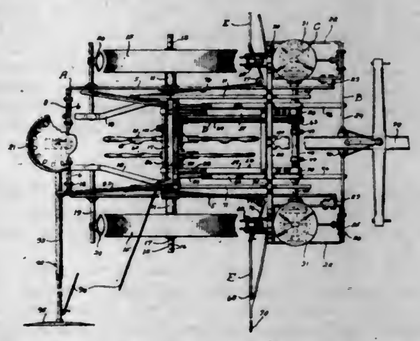
1. A piston construction comprising a cylindrical body having an opening through the top thereof, a disk constructed of a pair of semi-circular sections each section provided at its straight edge portion with indentures, compressible springs interposed between the sections and bearing into the indentures, said sections each being provided with projections in the indentures to engage into the corresponding end convolutions of the springs to prevent displacement thereof, the straight edge portions of the sections being provided with inwardly extending polygonal shaped openings which register when the sections are assembled, and securing means provided with a polygonal portion for disposition through the polygonal shaped openings in the sections and through the said opening in the top of the piston body.

1,898,846. SELF-CONTAINED CHARCOAL HEATER. RICHARD O. MIDDLETON, Palm Beach, Fla. Filed Mar. 24, 1931. Serial No. 524,955. 4 Claims. (Cl. 126—63.)



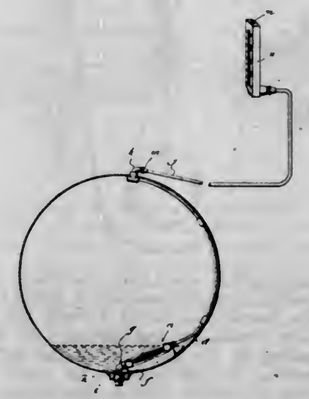
1. In a heater of the class described, a fuel chamber having a grille forming a perforate wall for the chamber, an ash receptacle below said chamber, and a deflector at the bottom of said grille and above said receptacle for deflecting products of combustion precipitated through said grille into said receptacle.

1,898,847. CORN PLANTER. RALPH ORLIN NEWELL, Brunswick, Nebr. Filed Mar. 20, 1930. Serial No. 437,442. 4 Claims. (Cl. 111—28.)



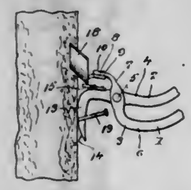
1. In a corn planter the combination of a main supporting frame, ground wheels supporting the frame, a cross frame supported at the forward end of the main frame, a planter mounted in each end of the cross frame in alignment forwardly of the ground wheels, an indicating arm for each planter, a carrier frame pivotally mounted at its forward end upon the cross frame and extending rearwardly between the ground wheels, a drive shaft rotatably mounted in the rear end of the carrier frame, a marking spur wheel fixed on the drive shaft and provided with evenly spaced apart marking spurs and disposed at the longitudinal center of the planter, an auxiliary spur wheel fixed on the shaft in spaced relation to the marking spur wheel and having the spurs thereof offset with respect to the spurs of the marking spur wheel, and drive means for operating the planters from the drive snaft.

1,898,848. LIQUID GAUGE. JOHN J. O'BRIEN, Detroit, Mich., assignor to Auto and Plane Engineering Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 5, 1929. Serial No. 383,706. 2 Claims. (Cl. 73—54.)



1. In a liquid volume indicator, a pressure sensitive unit for insertion in a chamber containing liquid, and comprising one or more relatively thin flexible disks, a tube having a registering column and connected to one of the disks and communicating with the interior of said unit, and a thermostat connected with one of said disks to raise and lower the same to alter the capacity of the unit and thereby compensate for temperature changes.

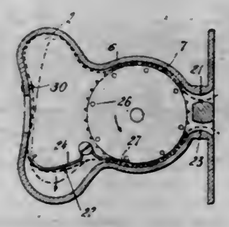
1,898,849. TURPENTINE TIN AND NAIL PULLER. BURRELL FRED ODOM, Hazelhurst, Ga. Filed July 28, 1930. Serial No. 471,291. 2 Claims. (Cl. 254—22.)



1. A tool of the character described comprising a pair of crossed pivoted levers, the corresponding extremities of said levers adjacent their pivot being disposed in superimposed relation, horizontally arranged relatively wide gripping plates secured to the confronting faces of said extremities and projecting beyond the sides thereof, and an abutment extension projecting downwardly from one of said extremities at a right angle thereto and having its outer surface curved to provide a fulcrum for the tool.

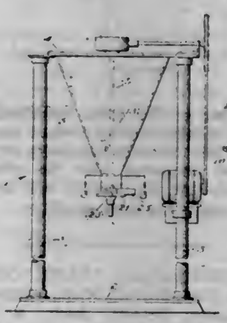
1,898,850. MOVING PICTURE MACHINE. ARMANDO PAPÒ and AUGUSTO GENTILINI, Rome, Italy. Filed Nov. 12, 1924, Serial No. 749,409, and in Italy Nov. 23, 1923. Renewed July 14, 1932. 18 Claims. (Cl. 88—18.)

8. In a moving picture machine, a film compartment having a projection wall, a film inlet, a film outlet, a filmgate, means for entraining the film therethrough in continuous movement, means for giving the entrained film an intermittent feeding motion, and means for enabling the inherent elasticity of the film to aid the movement of the pictures intermittently past said film-gate, comprising an inward curve on said projection wall near its medial portion.



12. In a motion picture projecting machine, the combination of a member containing a projection aperture, and a film-feeder for feeding the film against the face of said member, said member being bent inwardly at the point of contact of the film therewith, said feeder and said aperture-containing member being so spaced apart longitudinally, relatively to that length of the film at which said film will begin to bend, that the inherent elasticity of the shape the film is forced into alone holds the film stationary against said aperture during the projection intervals.

1,898,851. CONTINUOUS FEEDING MECHANISM. GEORGE PIERETTI, San Francisco, Calif., assignor to Delray Corporation, San Francisco, Calif., a Corporation of Delaware. Filed Feb. 18, 1931. Serial No. 516,810. 6 Claims. (Cl. 221—118.)

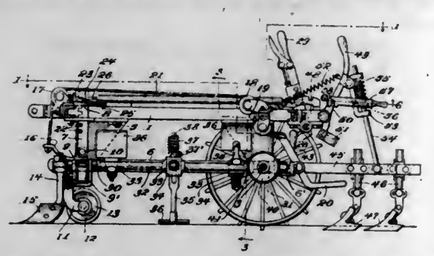


1. A continuous feeding mechanism comprising a conical-shaped receptacle having a cylindrical lower portion, a partition disposed in the cylindrical portion and above the lower end, said partition having an opening therein, a rotatable shaft extending through the receptacle and partition, a disc secured to the shaft and closing the bottom of the cylindrical portion, said cylindrical portion having an opening in its side, a scraper extending from the shaft and through the opening and resting on the disc, and a closure member for the partition opening and being supported by the scraper.

1,898,852. COMBINED COTTON CULTIVATOR. LESLIE HARRY POWELL, Bluejacket, Okla. Filed Apr. 4, 1931. Serial No. 527,761. 6 Claims. (Cl. 97—15.)

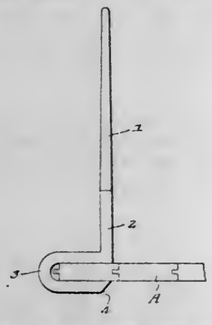
1. A combined cotton cultivator comprising a rectangular frame, standards depending from the rear portion thereof, an axle journaled in the standards and having ground engaging wheels, supporting standards depending from the forward portion of the frame and adjustable transversely thereof, a crossbar carried by the last mentioned standards, means for raising and lowering the cross-

bar and the last mentioned standards, ground engaging elements carried by the crossbar and a shaft journaled at one end with relation to the axle and journaled at its



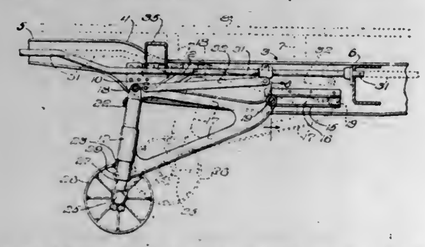
opposite ends upon said crossbar and disposed along the median longitudinal dimension of the frame and chopping blades carried by said shaft.

1,898,853. WRECKING BAR. OLE E. RAAEN, Fargo, N. Dak. Filed Dec. 22, 1930. Serial No. 504,117. 1 Claim. (Cl. 254—131.)



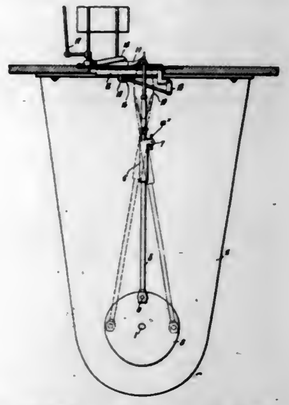
A wrecking bar of the class described comprising a single U-shaped member having a right angular extension extending outwardly from the extremity of one limb thereof and a handle connected with the extension forming a continuation thereof, the limbs of said U-shaped member being of substantially the same length.

1,898,854. SEMITRAILER FRAME CONSTRUCTION. FREDERICK M. REID, Detroit, Mich., assignor to Fruehauf Trailer Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 15, 1930. Serial No. 436,173. 2 Claims. (Cl. 280—33.1.)



1. In a semi-trailer, a frame comprising inwardly facing channel members an offset in the members between their forward ends and central portions, said members having greater width in their central portions than at their forward ends, a support, and inclined guideways in which the support is movable, said guideways being located within the channel formations and disposed against the backs of the channels and immediately to the rear of the offset in the channel members.

1,898,855. SEWING MACHINE. CLAUD E. SPIVEY and JOHN C. RODEN, Scottsboro, Ala. Filed Apr. 14, 1930. Serial No. 444,215. 1 Claim. (Cl. 112—79.)



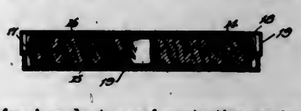
A sewing machine attachment including a vertical hanger depending from the machine, a power shaft journaled in the hanger and having a crank pin, a needle supporting bar having one end journaled on the pin, a needle supported by the upper end of the bar, a sleeve slidably receiving the bar adjacent its upper end, said hanger having a vertical slot, a transversely disposed pivot pin having one end adjustable in said slot, means for holding the pin fixed relatively to the hanger, and an ear formed on one end of the sleeve and receiving said pivot pin, whereby said bar and needle are caused to move in an elliptical path during the reciprocation of the bar.

1,898,856. SYRINGE. CHARLES H. SPRAGUE, Des Moines, Iowa. Filed Oct. 6, 1931. Serial No. 567,323. 4 Claims. (Cl. 128—241.)



1. In a syringe, a body portion including inner and outer walls forming a medicament-containing compartment, a plurality of perforated tubes carried by said body portion and having communication with said compartment, and means carried by said body portion for applying heat to and securing distension of parts to be treated.

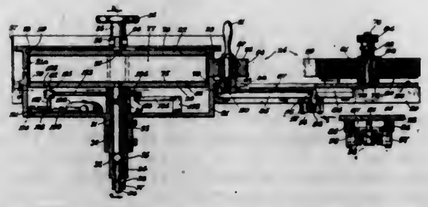
1,898,857. PROTECTING PHOTOGRAPHIC ELEMENT. JOHN H. THEISS, Metuchen, N. J. Filed Oct. 29, 1930. Serial No. 491,991. 1 Claim. (Cl. 106—46.)



An anti-fogging dust proof protective package comprising a roll of light sensitive cinema film enveloped and

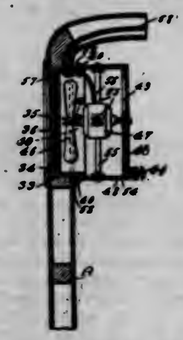
sealed in an air-tight overlapping covering of waterproofed regenerated cellulose, an overlying wrapper of ordinary light-proof paper and a sealed air-tight metal shipping container encasing said thus protected roll.

1,898,858. WRAPPING APPARATUS. JOHN H. THEISS, Metuchen, N. J. Filed Jan. 30, 1931. Serial No. 512,295. 10 Claims. (Cl. 93—2.)



1. An apparatus for applying and sealing sheets of protective covering for an object, comprising in combination; a base; a support rotatably mounted thereon and adapted to receive said object between two of said sheets; a stop actuated by the rotation of said support for limiting the revolutions thereof; resilient means for automatically resetting said stop; an annular crimping member surrounding said support and associated therewith, so as to coact with a reciprocable annular crimping member to crimp said sheets over the periphery of said object; and means actuated by the rotation of said support for affixing sealing tape around the thus wrapped periphery of said object.

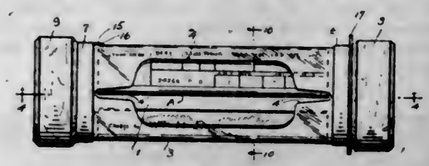
1,898,859. VENTILATING SYSTEM FOR INCLOSED CARS. WILLIAM T. THORP, Hillsboro, Ill. Filed May 10, 1930. Serial No. 451,369. 2 Claims. (Cl. 98—2.)



1. In a ventilator for closed vehicles, a cylindrical casing adapted to be positioned within an opening provided in the body of the vehicle and open at opposite ends, a screen fitted within the outermost end of said casing, a cap telescoped upon the innermost end of said casing and having vent openings, said cap having peripheral bayonet-shaped slots, lugs on the casing and received in said slots for detachably locking the cap upon the casing, a shutter pivoted to the cap to regulate vent openings therein, and a latch carried by the shutter and engageable at selective points with the cap to hold the shutter in adjusted position.

1,898,860. CLEAR VISION TUBE FOR PNEUMATIC SYSTEMS. WALTER L. UNDERWOOD and CECIL F. STONE, Glendale, Calif. Filed Jan. 28, 1932. Serial No. 589,474. 4 Claims. (Cl. 243—34.)

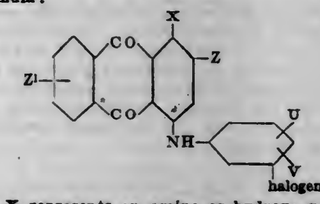
1. A carrier tube for a pneumatic tube system comprising inner and outer cylinders having openings therein, the outer cylinder being formed of transparent material, rings placed between the end portions of the cylinders for slightly spacing them apart, means for rotating one cylinder in relation to the other, and means for attach-



ing a part of a sales slip or the like to the inner cylinder whereby the slip will be wrapped on the inner cylinder and under the outer cylinder, when one cylinder is rotated with respect to the other.

1,898,861. MANUFACTURE OF DYESTUFFS OF THE ANTHRAQUINONE SERIES. SAMUEL VON ALLMEN, Basel, Switzerland, assignor to Firm "Chemical Works Formerly Sandos", Basel, Switzerland. Filed July 8, 1930, Serial No. 466,610, and in Germany July 12, 1929. 4 Claims. (Cl. 260—60.)

1. The dyestuffs of the anthraquinone series of the general formula:



wherein X represents an amino or hydroxy group, Z and Z^1 represent a hydrogen, a halogen or a sulphonic group, U represents a hydrogen or a sulphonic group, and V represents a hydrogen or sulphonic group, which dyestuffs constitute in dry state dark blue powders, soluble in water with blue to violet coloration, yielding on animal fibres fast dyeings of reddish-blue to red-violet shades.

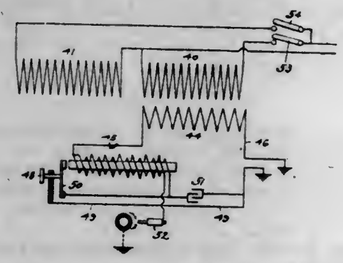
1,898,862. BID INDICATOR FOR CARD GAMES. JOHN S. WALKER, Pittsburgh, Pa. Filed Jan. 4, 1932. Serial No. 584,700. 2 Claims. (Cl. 273—148.)



1. In a device of the kind described, a casing adapted to be countersunk in a card table top to have its top flush therewith, the top having a plurality of rows of openings, bearings formed on the top and in the casing and over-

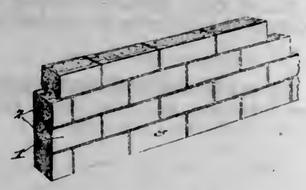
lapping each other, a shaft supported by the bearings and interlocked therewith, rocking levers supported by the shaft between the overlaps of said bearings and having their ends confronting said openings in the top, buttons carried by the ends of said levers and movable alternately into the openings in the tops to be received thereby substantially in the plane of said top, said buttons having indicia indicative of card game bidding and player identification.

1,898,863. AUTOMATIC LIGHTER. JAMES BERNARD WILLIAMS, Minden, La. Filed June 27, 1930. Serial No. 464,361. 1 Claim. (Cl. 175—115.)



An igniter for producing a continuous fire comprising a gas burner, a sparking terminal having its extremity disposed toward the burner, a cut-off valve for the burner, solenoid coils electrically connected together, an armature adapted to be moved by the coils and operatively connected with the valve, an induction circuit adapted to be energized by one of the coils and electrically connected with the sparking terminal.

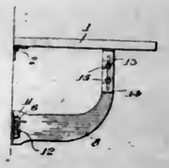
1,898,864. METALLIC FACED BUILDING UNIT. HORACE G. YOUNG, Ocean City, N. J., assignor, by mesne assignments, to Katinka W. Young, Ocean City, N. J. Filed Jan. 12, 1931. Serial No. 508,201. 2 Claims. (Cl. 72—35.)



1. A building unit comprising a cementitious body section and a metal facing section, the latter having side and end flanges sunk into the cementitious material sufficient that the outer face of the material is flush with the outer faces of the side and end flanges, and adhesive of asphaltum on the interior surface of the metal face section to insure a tight bonding between the body section and the face section, said side and end flanges having laterally bent portions extending inwardly and toward the inner surface of the metal face section to lock the face section to the body section, said side and end flanges at points beyond the inwardly bent portions merging integrally into corner pieces, which also assist in locking the face section to the body section.

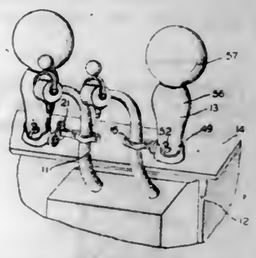
1,898,865. SUPPORT. HARRY BALCH, Baltimore, Md. Filed Aug. 17, 1931. Serial No. 557,635. 1 Claim. (Cl. 211—93.)

In a device of the character set forth, a hinged shelf, a bracket for said shelf and including an angle arm, an enlarged portion formed with the lower end of the arm, apertured ears extending from the enlarged portion, lugs extending from the enlarged portion in a direction opposite to that of the ears, a plate provided with openings to receive securing means, apertured ears formed with the plate and cooperating with the ears first mentioned, a pin pivotally securing the cooperating ears together, a coil



spring carried by the pin for urging the bracket in operative position, fingers formed with the plate and arranged in the path of the lugs to provide stop means for the bracket, and means adjustably secured to the upper end of the arm and engageable with the shelf to support the latter in a true horizontal plane in its operative position.

1,898,866. DISPENSING APPARATUS. WILLIAM J. BRAGGER, Los Angeles, Calif., assignor of one-half to Olde Homestead Products Co., Los Angeles, Calif., a Partnership composed of U. A. Fields and F. E. Fields, United States, and F. B. Bragger, Great Britain. Filed Oct. 9, 1929. Serial No. 398,418. 1 Claim. (Cl. 248—20.)

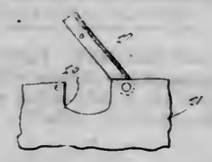


As a soda fountain accessory, a bracket for supporting a syrup dispensing receptacle upon a delivery tube, comprising a clamp rigidly securable to said tube, an arm comprising a pair of sections, one of said sections being rigid with said clamp and having a cylindrical head at its outer end with opposed notches on the sides of the head and extending longitudinally thereof, the inner end of the other of said sections being optionally engageable within either of said notches and having lugs securable over the ends of the head, said lugs having holes therethrough in register with an axial bore in said head when the inner end of said other section is seated within one of the notches, a pin extending through said holes, a socket adapted to receive a portion of said receptacle, a pin pivotally joining said socket to said other section, and a nut threaded on said pin, the adjacent portions of said other section and socket having complementady radial beads and depressions to retain the socket in adjusted position in respect to the arms.

1,898,867. UTILITY CABINET FOR BEAUTY PARLORS. DYCKA S. BROWN, Madison, Wis. Filed Sept. 2, 1931. Serial No. 560,817. 3 Claims. (Cl. 312—146.)

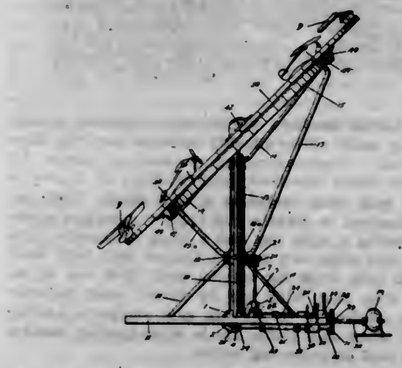
1. In a structure of the class described, an adjustable portable stand, and a cabinet structure mounted on the upper end of said stand comprising a hollow box-like casing including a bottom, spaced parallel front and back walls, and outwardly curved end walls, the upper portions of the end walls extending beyond the corresponding portions of the front and back walls and being joined by

transverse vertical partition members defining compartments, a top wall included in said casing disposed on a plane below the upper edge portions of the front, back



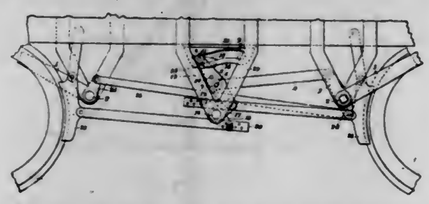
and end walls, a cellular tray removably confined on said top wall between said vertical partitions and front and back wall upper end extensions.

1,898,868. AMUSEMENT DEVICE. ALEXANDER COWIE, Salt Lake City, Utah, assignor of one-half to George R. Roberts, Redondo Beach, Calif. Filed Sept. 9, 1929. Serial No. 391,205. 4 Claims. (Cl. 275—51.)



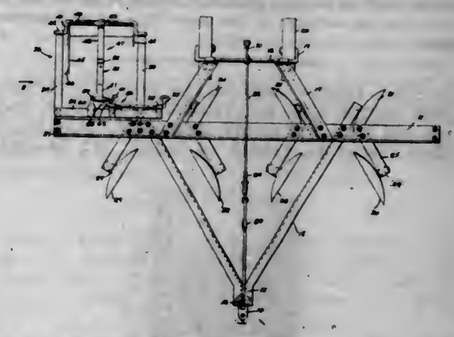
1. In a device of the class described the combination of spaced apart planes mounted for rotation at an oblique angle to a vertical axis to rotate therearound; a track on which said planes rotate, said track set at an angle to the horizontal plane; and means to rotate said planes or said track as desired.

1,898,869. BRAKE MECHANISM. FRANK ERIC DADD, Bedford, England, assignor of one-half to Joseph Thomas Shevlin, London, England. Filed Jan. 30, 1929, Serial No. 336,170, and in Great Britain Jan. 30, 1928. 2 Claims. (Cl. 188—55.)



1. Brake mechanism for vehicles comprising brake shoes, an operating lever, a series of levers and connecting rods connecting the shoes and operating lever, a fixed cam, a link engaging the cam to increase the leverage of the mechanism, a rack, a pawl or detent carried by the link and adapted to engage the rack to lock the link against movement in one direction, a connecting rod having a lost motion connection with the link, and adapted to release the pawl or detent on initial movement of the operating lever in the reverse direction.

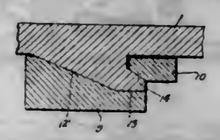
1,898,870. DISK FURROWING AND BLOCKING MACHINE. OTTO DOMRIES, Santa Ana, and OTIS PIEPENBRINK, Garden Grove, Calif.; said Piepenbrink assignor to said Domries. Filed Feb. 5, 1930. Serial No. 426,058. 6 Claims. (Cl. 97—55.)



1. A disk furrowing machine having a frame with the forward end adapted for attachment to a tractor, wheels connected to the rear end with means operable to regulate the elevation of the frame in regard to the ground level, a transverse beam connected to the frame, a leading set of disks, each mounted on a strap attached to the said beam and extending forwardly at an inclination thereto, there being an inner pair of disks positioned to cut two furrows and to turn the soil outwardly, and a pair of outer disks positioned to cut two furrows and to turn the soil outwardly, and a pair of outer disks positioned to cut two furrows and to turn the soil inwardly forming four furrows and two ridges, a trailing set of disks each mounted on a strap extending at an inclination rearwardly from the beam, there being an inner pair of disks positioned to operate in the furrow formed by the inner pair of leading disks and turn the soil inwardly to form a center ridge and a pair of outer disks operating in the furrow formed by the outer disks of the leading set and positioned to turn the soil outwardly forming a ridge, any one or more of the trailing set of disks being adapted for detachment from the said beam.

2. A disk furrowing machine having a frame with a cross beam connected thereto, a leading set of disks, each disk having a shank member connected between the disk and the beam and extending forwardly thereof at an inclination to the beam, and a trailing set of disks, each disk having a shank-like member extending rearwardly from the beam and at an inclination thereto, any one or more of the disks of the trailing sets with the attaching shank or shanks being removable.

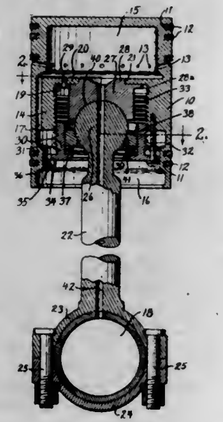
1,898,871. MANHOLE COVER. HENRY CHARLWOOD ELLIS, Memphis, Tenn., assignor to Wm. C. Ellis & Sons Iron Works, Memphis, Tenn. Filed Apr. 7, 1930. Serial No. 442,428. 1 Claim. (Cl. 94—35.)



In a manhole cover, an annular frame member provided internally with a circular series of relatively spaced pairs of lugs, each pair of lugs including an upper lug and a lower lug, the lower lug having an inclined upper bearing surface merging into a horizontal bearing surface, and the upper lug having an end thereof provided with an inclined bearing surface, and also having said end disposed in overlapping relation with the forward end of the lower lug; and a cover plate supported on said annular

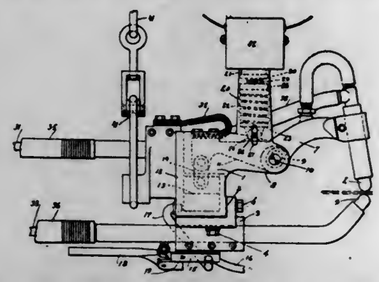
frame and provided with a circular series of spaced lugs each of which has inclined and horizontal bearing surfaces corresponding to the inclined and horizontal bearing surfaces of the aforementioned lower lugs on said annular frame, each lug on said cover also having at its free end an inclined bearing surface corresponding to the inclined bearing surfaces of the upper lugs on said annular frame.

1,898,872. PISTON AND MEANS FOR CONNECTING THE CONNECTING ROD THERETO. NESTOR S. EVANOFF and STEVE DOICHINOFF, Chicago, Ill. Filed Feb. 7, 1930. Serial No. 426,648. 4 Claims. (Cl. 74—108.)



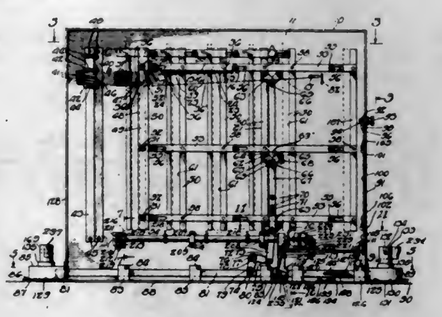
1. Means for providing universal connection between a connecting rod and a piston comprising a ball formed on the connecting rod, a block formed in the piston, a bearing cap confined in the block and providing a seat for the upper portion of the ball, a take-up ring adjustably carried by the block and including an internal annular shoulder, a bearing collar confined in the take-up ring and providing a seat for the lower portion of the ball, and yieldable means arranged between the bearing collar and said shoulder for holding the ball in bearing engagement in the seats provided by the bearing cap and the bearing collar.

1,898,873. PORTABLE WELDER. PETER W. FASSLER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 28, 1929. Serial No. 417,070. 7 Claims. (Cl. 219—4.)



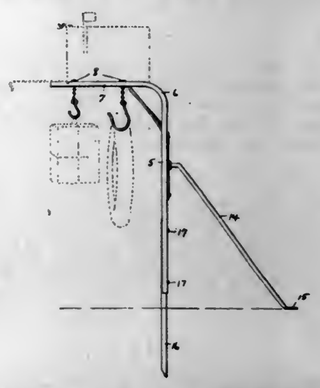
1. In a portable welder, a body member having a welding point, a second welding point opposing the first, a rocker arm carrying the second welding point, a fulcrum construction for the rocker arm comprising a fulcrum pin in an elongated slot, a spring normally holding the pin at one end of the slot, and means for rocking the rocker arm to bring the welding points together, said means being capable of movement so as to move the rocker arm after the welding points contact with the work whereby the said pin and elongated slot move relative to each other against the action of said spring.

1,898,874. VOTING MACHINE. JOSEPH M. GARR, Calumet City, Ill., assignor to Peoples Voting Machine Corporation, Knox, Ind., a Corporation of Indiana. Filed July 3, 1930. Serial No. 465,671. 4 Claims. (Cl. 235—54.)



1. In a voting machine, registering mechanism including counting dials, plates slidably mounted over the faces of said dials, register-operating mechanism, means for moving said plates selectively into position to expose or to conceal said dials including a rock shaft, booth entrance mechanism to operate said register-operating mechanism including a slide bar and a block engageable with an end of said slide bar, and an arm on said rock shaft attached to said block for moving said block out of engagement with said slide bar to render said entrance mechanism ineffective to operate said register-operating mechanism when said plates are in dial-exposing position relative to said plate-moving means.

1,898,875. MAIL BOX SUPPORT. JOSEPH C. GOULD, Farmer City, Ill. Filed Mar. 17, 1931. Serial No. 523,319. 2 Claims. (Cl. 232—39.)



1. A mail box support of the class described comprising a number of uprights having their upper ends bent to form integral horizontal extensions, spikes connected with the lower ends of the uprights for penetrating the ground, cross pieces connecting together the horizontal extensions for supporting a mail box, cross pieces connecting the uprights together, a diagonal arranged brace having its upper end connected with a cross piece of the uprights, the lower end of the brace being bent to horizontal position and having a hole therein for receiving a spike for fastening the brace to the ground, chains depending from the extensions and hooks on the chains and bolts for detachably connecting the cross pieces to those parts of the uprights to which they are connected.

1,898,876. BOAT. ANDREW E. HELJESSON, Brooklyn, N. Y. Filed July 3, 1930, Serial No. 467,427. Renewed Apr. 12, 1932. 2 Claims. (Cl. 114—66.5.)

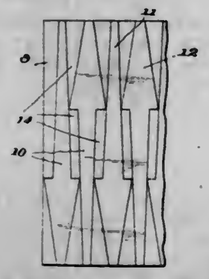


1. A boat comprising a hull having sides and having a keel line rising from a point in the forepart of the keel to the rear end of the boat, the rear end of the keel line and the rear end of the upper surface of the hull converging toward each other and meeting and forming a stream-lined centre, the rear ends of the sides being curved and converging toward each other and meeting substantially at the same point as the keel line and the upper surface of the hull and forming a rounded stern which is stream-lined in the centre; and having a rear concavity produced by the converging and meeting of the rising keel line and upper surface of the hull, whereby to produce a boat with three point glide and easy slip.

1,898,877. METHOD OF TREATING RAMIE AND ALLIED FIBERS. CHARLES F. KENYON, Shannock, R. I., assignor to Alfred A. Gobeille, Shannock, R. I., Percy W. Noble, jr., Rumford, R. I., and himself. Filed Mar. 1, 1932. Serial No. 596,149. 6 Claims. (Cl. 92—10.)

1. The method of treating ramie and allied fibers which consists in subjecting the fibers enclosed in the naturally occurring resin sheath in a hot oil bath for a sufficient period to physically convert the sheath into a hard, inflexible envelope, and thereafter treating the sheathed fibers with a hot soap solution capable of emulsifying the oil for the purpose of disintegrating the resin sheath.

1,898,878. METHOD OF MAKING PIPE HANGERS. WILLIAM H. KLAUER, Dubuque, Iowa. Filed July 18, 1927. Serial No. 206,709. 3 Claims. (Cl. 29—7.)

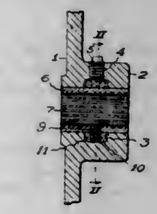


1. A method of making pipe hangers, comprising stamping from sheet metal a double blank having a head portion and a shank portion and driving head shoulders on the edges of the blank separating said head and shank portions, said shoulders being located at a distance from the transverse axis of the blank, said blank being symmetrical about its longitudinal axis, splitting said blank along its longitudinal axis to form two single blanks having head and shank portions, and bending the shank portions of the blanks in the planes of the sheet metal and away from said shoulders to pipe engaging form.

1,898,879. PROCESS FOR THE MANUFACTURE OF CHLOROSULPHONIC ACID. EDUARD KRUMMENACHER, Riehen, near Basel, Switzerland, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Aug. 1, 1932, Serial No. 627,224, and in Switzerland and Germany Aug. 17, 1931. 6 Claims. (Cl. 23—139.)

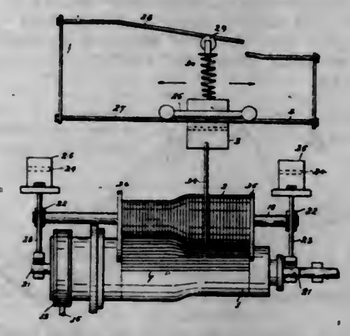
1. Process for the manufacture of chlorosulphonic acid, consisting in causing to act on a solution of approximately 2 moles SO_3 in approximately 1 mole H_2SO_4 approximately 1 equivalent weight of a metal chloride, or by causing to act on a solution of approximately 3 moles SO_3 in approximately 1 mole H_2SO_4 approximately 2 equivalent weights of a metal chloride, and separating the formed chlorosulphonic acid from the reaction mixture.

1,898,880. BEARING DEVICE. CARL H. LEIS, New Castle, Pa., assignor to Johnson Bronze Company, New Castle, Pa., a Corporation of Pennsylvania. Filed Oct. 2, 1931. Serial No. 566,413. 3 Claims. (Cl. 308—132.)



1. A bearing device comprising a vertically disposed stationary member having a laterally projecting bub with a grease reservoir formed therein and provided with oppositely disposed bearing openings in the walls thereof, a sleeve bearing extending through said reservoir and rigidly fitted in said openings there being an opening in the wall of said sleeve communicating with the reservoir, a plurality of graphite lubricating bodies embedded longitudinally within said sleeve bearing and extending through the ends thereof, and an absorbent member fitted within said sleeve opening and extending from the bearing surface into the reservoir, said absorbent member adapted to feed grease to the bearing surface at such intervals only as when the bearing becomes heated sufficient to thin the grease to its feed consistency.

1,898,881. MANUFACTURE OF TUBES FROM FIBROUS PULPS. ALESSANDRO MAGNANI, Casale Monferrato, Italy. Filed Oct. 24, 1930, Serial No. 491,056, and in Italy Dec. 9, 1929. 16 Claims. (Cl. 92—54.)

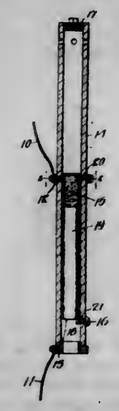


1. In a machine for manufacturing tubes from fibrous pulps, a rotating matrix roller consisting of an internal

hollow core having permeable walls and shaped substantially as the internal surface of the tubes to be formed, and an external cage of longitudinally stretched wires.

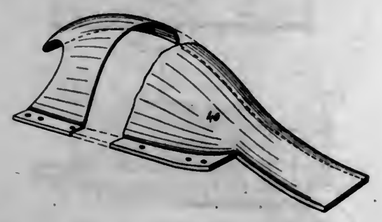
4. The method of forming tubes of fibrous material, which comprises forming a dense mortar of said fibrous material with water and a suitable binder, moulding by rolling said mortar to form a leaf, winding said leaf helically in successive layers one on the other, and forcing by suction part of the water content from the latest superposed layer thereof to and through the preceding layers.

1,898,882. LIGHTNING ARRESTER. ADOLPH W. MALONE, Fillmore, Utah, assignor of one-third to Albert H. Vestal, Anderson, Ind., and one-third to W. R. Bullard, New York, N. Y. Filed Jan. 18, 1932. Serial No. 587,387. 2 Claims. (Cl. 175—30.)



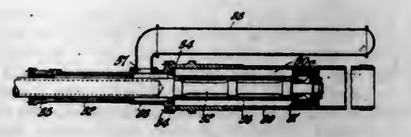
1. A device of the kind described comprising a tube of insulating material, a pair of metallic electrodes on said tube and spaced apart from each other, current conducting wires attached one to each of said electrodes, a plunger positioned in said tube contacting the upper of said electrodes and spaced apart from the lower electrode to form a spark gap therebetween, said plunger being movable upward when a high surge of electricity creates a pressure against the end thereof thereby lengthening and breaking any arc which may be formed across the gap between the plunger and the lower electrode, said tube having an open lower end to allow the gaseous pressure to be dissipated and the plunger to quickly return to its original position, substantially as set forth.

1,898,883. METHOD OF STAMPING FRONT ONE-PIECE AUTOMOBILE FENDERS. MARTIN H. MATHESON, Detroit, Mich.; Union Guardian Trust Company executor of said Martin H. Matheson, deceased. Filed July 26, 1930. Serial No. 470,917. 9 Claims. (Cl. 113—51.)



1. That method of forming a front one piece automobile fender having a crown portion integral with an apron portion which includes stamping the same in complementary pairs from a sheet metal blank held during the stamping operation along opposite edges arranged in substantially the same horizontal plane to form corresponding apron portions adjacent the held edges and corresponding crown portions adjacent and on opposite sides of the intermediate linear line of the blank, and normal to the line of draw of the stamping operation whereby the metal draw is equalized throughout the entire blank during the stamping operation.

1,898,884. RETARDING GEAR FOR CATAPULTS. COLIN CAMPBELL MITCHELL, Corstorphine, Edinburgh, Scotland. Filed Sept. 30, 1931, Serial No. 566,145, and in Sweden Mar. 31, 1931. 4 Claims. (Cl. 244—2.)

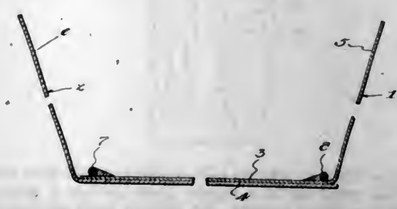


1. Impelling apparatus for an aircraft launching device, comprising a power cylinder, an aircraft impelling piston rod having a piston operating in the power cylinder, a fluid cushioning chamber, a cylindrical extension on the front end of the cylinder provided at its outer end with a stuffing box for the piston rod of the impelling piston and at its inner end with a neck ring through which passes freely the piston rod, the fluid cushioning chamber being formed in the front end of the power cylinder, and the neck ring being of such a size as to leave between it and the piston rod a restricted opening for the escape of fluid from the front end of the power cylinder into the cylindrical extension of the cylinder.

1,898,885. FOOD. JOHN A. MORAN, New York, N. Y. Filed Apr. 19, 1929, Serial No. 356,606. Renewed Oct. 13, 1932. 2 Claims. (Cl. 99—11.)

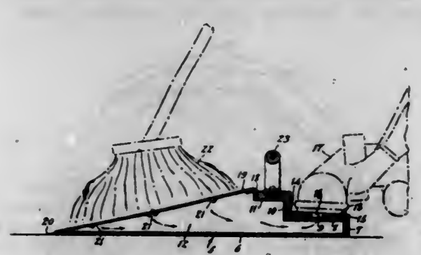
1. A process of preparing food beverages comprising forming a solution of a fermentable carbohydrate in milk, heating the solution to 60° C. for 45 minutes, cooling to 40° C., introducing yeast into the solution, immediately placing the mixture in a closed container and maintaining said mixture in the closed container for 18 hours at 87½° C.

1,898,886. PNEUMATIC TIRE AND METHOD OF FABRICATING SAME. ROY C. MURPHY, Grand Rapids, Mich. Filed Apr. 22, 1929. Serial No. 356,906. 8 Claims. (Cl. 154—14.)



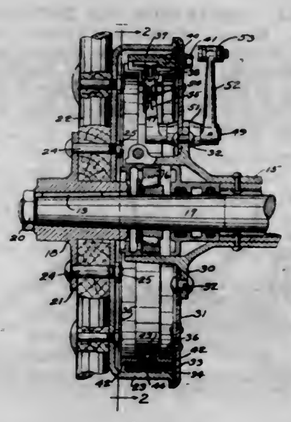
1. The steps in the forming of a tire casing which comprise, the placing of a plurality of strips of cord fabric on a form, each strip of fabric being substantially twice the effective width of the form, applying beads and folding over each strip of fabric whereby each bead will be positioned circumferentially adjacent each outer edge of the form and centrally of a folded over strip of fabric.

1,898,887. MOP CLEANER AND DUST PAN. ARTHUR P. S. NAUL, Bronxville, N. Y. Filed July 1, 1931. Serial No. 548,191. 8 Claims. (Cl. 15—142.)



1. A pan having a hollow body with a bottom and being open at its front and top, the body having an outlet at which it may be connected with a vacuum cleaner, and a lid hinged to the top of the body at a point spaced from the front of the body and normally extending forwardly and downwardly to the front of the bottom of the body, the lid having one or more inlet openings.

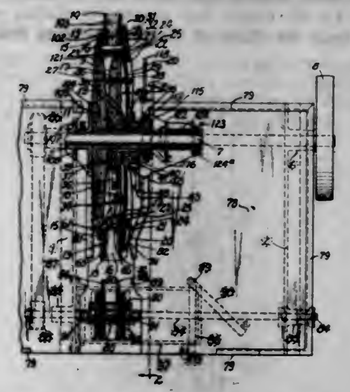
1,898,888. BRAKE. EDWARD C. NEWCOMB, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Sept. 29, 1927. Serial No. 222,791. 28 Claims. (Cl. 188—78.)



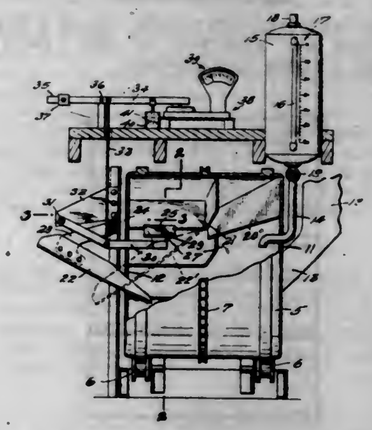
1. In a brake mechanism, a rotatable drum, a backing plate adjacent thereto, a brake element engageable with said drum, means movable to exert a plurality of radial forces against said brake element to engage said brake element with said drum, a circular support on said backing plate for said means also normally supporting said brake element, and means for moving said first mentioned means circumferentially of said support.

1,898,889. HEEL BUILDING MACHINE. DENNIS PARKS, St. Louis, Mo. Filed Jan. 9, 1931. Serial No. 507,570. 20 Claims. (Cl. 12—50.)

1. In a machine of the class described, in combination with a carrier rotatable in a vertical plane, a series of heel compressing devices mounted thereon, a support for the heels to be compressed, means for rotating said carrier in stages to bring the compressing devices in order to rest at said support, and means controlled by the operator for causing each compressing device to grip a heel placed on the support and while in position thereon prior to the movement of the carrier.



1,898,890. CONCRETE MIXOMETER. LEWIS A. PEARY, Seattle, Wash. Filed Mar. 12, 1929. Serial No. 346,353. 18 Claims. (Cl. 265—11.)

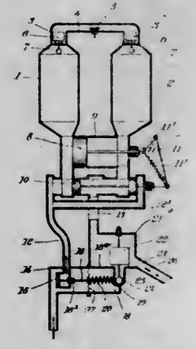


1. A plastic-concrete testing apparatus for use in connection with a mixing machine provided with a rotary drum having therein a plurality of buckets, said apparatus comprising a force measuring-and-indicating means disposed exteriorly of said drum, a device provided interiorly of the drum and adapted to be influenced by concrete material falling thereupon from said buckets, and means operatively connecting said device to said measuring-and-indicating means.

1,898,891. LIQUID MEASURING DEVICE. RENÉ PORTE, Levallois-Perret, France, assignor to Société Hardoll (Etablissements Hariveau & Dolimier, et René Porte & Cie Reunis), Levallois-Perret, France. Filed Feb. 10, 1928, Serial No. 253,477, and in Belgium Feb. 10, 1927. 10 Claims. (Cl. 73—28.)

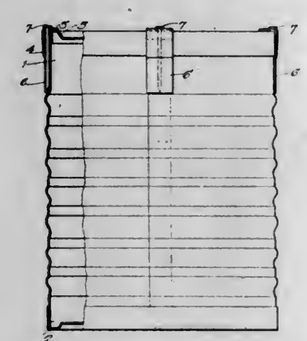
5. A liquid dispensing device comprising a plurality of reservoirs, a filling conduit and a discharge conduit connected to said reservoirs, a reversing element interposed between said reservoirs and conduits, and means for op-

erating said reversing element for controlling the supply of liquid to said reservoirs and the discharge of liquid out of said reservoirs, a float in the discharge conduit, an abutment fixed to said float, each of said reservoirs having an air escape and means for closing said air escape upon the filling of the corresponding reservoir so



that a super-pressure may be built up, a diaphragm having one of its faces subjected to the pressure of the liquid in the filling conduit, and means for controlling the supply of liquid in the filling conduit, the said means being controlled by the said diaphragm and by said abutment.

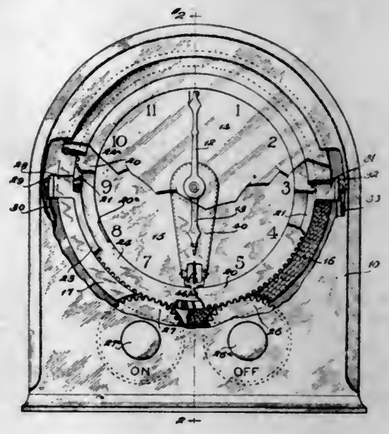
1,898,892. SHIPPING CONTAINER. RALPH B. PORTER, Johnstown, Pa. Filed Sept. 16, 1931. Serial No. 563,201. 3 Claims. (Cl. 220—55.)



1. In a container of the all metal type, end closure means comprising an end closure member provided with an annular flange adapted to enclose the container end, a clip member welded at one end to the container and adapted at the other to extend over the container end to overlap the end closure member and a wedge element adapted to be driven through the clip and end closure member and between the contacting faces of the flange and container wall.

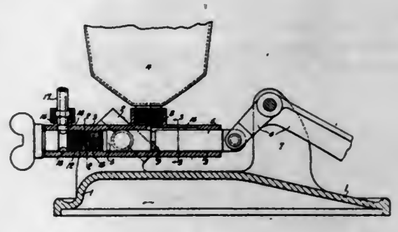
1,898,893. ELECTRIC TIME CLOCK. LUDWIG REICHOLD, Winsted, Conn., assignor to The Fitzgerald Manufacturing Company, Winsted, Conn., a Corporation of Connecticut. Filed May 28, 1931. Serial No. 540,747. 4 Claims. (Cl. 200—38.)

1. An electric circuit making and breaking structure for connection to a clock movement, comprising a conductive ring mounted substantially concentric with the hand staff of the clock movement, a member fixed to a clock hand and moving in rotation therewith, a rocker carried by the end of said member and adapted to be engaged with said ring when in one rocked position and to be freed of said ring when in another rocked position, means



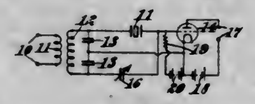
to hold said rocker in either rocked position, and a conductive cam piece on said ring for moving said rocker from its position in engagement with said ring to its position out of engagement with said ring.

1,898,894. APPARATUS FOR EMULSIFICATION. LAURENCE SLOANE RICHARDS, London, and EVAN MATTHEW RICHARDS, Birmingham, England, assignors to Cremac Marketing Company, Limited, London, England, a Company of Great Britain. Filed Apr. 3, 1930, Serial No. 441,415, and in Great Britain Apr. 4, 1929. 6 Claims. Cl. 99—2.)



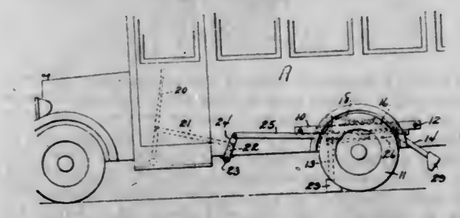
5. A self-contained valveless emulsifying apparatus in which an emulsifying element and a pumping element are combined into a single piece of apparatus adapted to pass the substance to be emulsified only once through the emulsifying element and in which the number of moving parts is reduced to a minimum, comprising the combination of a supply reservoir for the mixture to be emulsified, a pump cylinder having a port towards its outer end in valveless communication with the supply reservoir, a piston fitting tightly in the cylinder, a stationary emulsifying element in the form of a plug screw threaded into the inner end of the cylinder and having at least one groove cut across the threads to form such a fine passage as substantially to prevent return of emulsion therethrough, and means for reciprocating the piston between a position near the emulsifying element and a position in which it uncovers the port, said piston constituting the sole means for forcing the material through said groove.

1,898,895. ELECTRICAL APPARATUS EMPLOYING PIEZO-ELECTRIC DEVICES. JAMES ROBINSON, London, England, assignor, by mesne assignments, to British Radiostat Corporation, Limited, a Corporation of Canada. Filed June 9, 1930, Serial No. 460,054, and in Great Britain July 26, 1929. 4 Claims. (Cl. 250—20.)



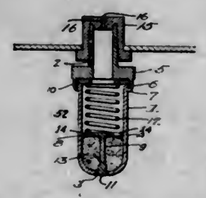
1. In the art of receiving wave form signals the method of eliminating a heterodyne note resulting from interference between two signals of closely adjacent frequencies, which comprises selecting, from the received signal energy, the energy which is mainly of the frequency of one of said signals, separating a relatively small amount of the total received signal energy and combining said small amount of energy in phase opposition with the said selected signal energy.

1,898,896. VEHICLE WHEEL CHOCK OR BLOCK. HENRY A. ROTHAN, Greensburg, Pa. Filed Dec. 28, 1931. Serial No. 583,523. 1 Claim. (Cl. 188—4.)



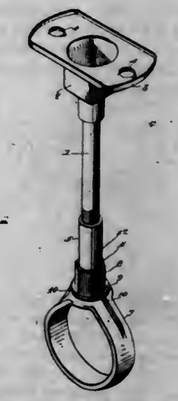
A vehicle wheel chock comprising a support adapted for mounting upon a body of a vehicle, a pair of arms pivotally connected with said support and located fore and aft of a vehicle wheel, wedge blocks carried by said arms for engagement with a foundation and the tread of the wheel, a lever within the body, connections between the lever and said arms to alternately move the same for engagement of the wedge blocks between the foundation and the tread of the wheel, and springs connected with the support and said arms to normally hold the same in position for elevation of the wedge blocks thereof.

1,898,897. FUSIBLE FIXED TEMPERATURE RELEASE UNIT. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 26, 1930. Serial No. 477,901. 6 Claims. (Cl. 137—161.)



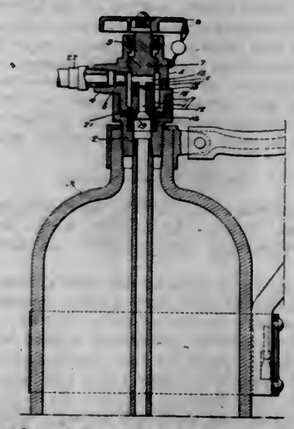
2. In a fusible release unit, the combination with a casing open at one end and having a restricted port at the other, of a plunger movably mounted in the casing and having a stem projecting into said port, said stem being of substantially lesser cross sectional area than the port and being enlarged in part to afford a substantial closure for said port, a spring tending to shift the plunger in the casing to a position in which said enlarged section clears the port thereby opening the latter, said plunger being adapted to be supported in the port-closing position by a fusible compound in the solid state, and being released for actuation by the spring when the compound is fused.

1,898,898. PIPE HANGER. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 13, 1931. Serial No. 522,850. 1 Claim. (Cl. 248—31.)



In a pipe hanger, the combination with a support member including a non-rotatable threaded stem, of a sleeve threaded to said stem and having a longitudinal recess in the side thereof, a pipe cradle rotatably secured to said sleeve and having a projecting lug, and a locking member embracing the sleeve and adjustable longitudinally thereof and having a lug projecting into said longitudinal recess, and a recess for reception of said cradle lug whereby said locking member may be interlocked both with the sleeve and with the cradle, said locking member being adjustable longitudinally of the sleeve to a position releasing said lug to permit rotation of the sleeve with respect both to the said stem and the cradle.

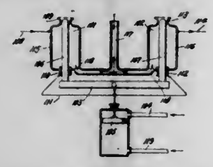
1,898,899. VALVE FOR CARBON DIOXIDE FIRE-EXTINGUISHING APPARATUS. ARTHUR C. ROWLEY, Drexel Hill, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 30, 1932. Serial No. 620,217. 3 Claims. (Cl. 251—27.)



3. In a valve of the stated character, the combination with a casing having independent ports communicating

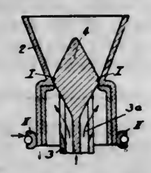
with a common chamber, said casing comprising separable sections, a flexible rubber valve seat element confined between said sections and embracing one of said ports, a valve element adjustably mounted in said chamber and cooperative with said seat element to close the associated port, and means for limiting the movement of said valve element in the direction of said seat to thereby prevent undue flexure of said flexible seat element under pressure of said valve element.

1,898,900. METHOD AND APPARATUS FOR INTERRUPTING HIGH TENSION CIRCUITS. SIGWART RUPPEL, Frankfort-on-the-Main, Germany. Filed Sept. 3, 1927, Serial No. 217,438, and in Germany May 18, 1925. 6 Claims. (Cl. 200—148.)



1. A high tension circuit interrupter comprising a pair of electrodes, one of said electrodes having a passage defined by a diverging exhaust portion, the other electrode arranged to engage the first-named electrode within said passage and at the restricted portion thereof, and means for directing a gas at high pressure through said restricted portion to traverse the arc formed therein and exhaust through said diverging portion upon separation of said electrodes.

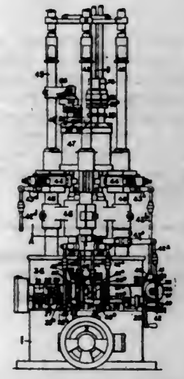
1,898,901. HIGH TENSION CIRCUIT INTERRUPTER. SIGWART RUPPEL, Frankfort-on-the-Main, Germany. Filed Aug. 27, 1928, Serial No. 302,368, and in Germany Aug. 30, 1927. 11 Claims. (Cl. 200—148.)



1. A high tension circuit interrupter comprising a pair of electrodes, one of said electrodes having a nozzle-like expanding passage within which the other electrode is disposed in the closed circuit position of the interrupter, the main contact surfaces of said electrodes coacting adjacent the throat of said passage, arcing means extending within the exhaust expanding portion of said passage, and means for directing gas at high velocity between said electrodes and through said nozzle-like passage so that the arc formed upon separation of said main contact surfaces is extinguished at said arcing means within said exhaust portion.

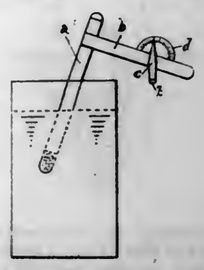
1,898,902. AUTOMATIC LATHE. OTTO SCHAERER, Basel, Switzerland. Filed July 9, 1931, Serial No. 549,734, and in Switzerland Aug. 8, 1930. 14 Claims. (Cl. 29—37.)

1. In an automatic lathe of the vertical type, the combination of a central main driving shaft, automatic means for driving same, a number of rotary vertical work piece holding hollow spindles distributed around said central shaft, a number of operative tools distributed around said central shaft and located beneath said work piece spindles, a holder for said tools, a revolver drum coaxially arranged to said driving shaft and having bearings for said work piece spindles, a number of vertical frame columns distributed around said central shaft and arranged to support said revolver drum and said tool holder, means for rotating said revolver drum step by step to bring the work piece spindles successively into different working positions with respect to the tools, automatic feeding means on said work piece holding spindles to vertically feed the work pieces by a downward movement to the operative tools, and driving means between said central shaft and the work piece holding spindles so arranged as to rapidly rotate same upon their own axes at such a speed as to simultaneously produce an accurate axial setting of the work pieces within their holding spindles.



12. In an automatic lathe of the vertical type, the combination of a central main driving shaft, automatic means for driving same, a number of rotary vertical work piece holding hollow spindles distributed around said central shaft, a number of operative tools distributed around said central shaft and located beneath said work piece spindles, automatic feeding means on said work piece holding spindles to vertically feed the work pieces by a downward movement to the operative tools, said feeding means comprising a tubular body, a slidable clamp sleeve therein for the working piece, hinged levers arranged to support said clamp sleeve and capable of swinging out under the action of the centrifugal force, a slidable control sleeve arranged to hold said levers in supporting position, means to periodically displace said control sleeve so as to allow said levers to swing out and consequently said clamp sleeve to free the working piece for its sinking down, and driving means between said central shaft and the work piece holding spindles so arranged as to rotate same upon their own axes at a high speed for accurate axial setting of the work pieces within their holding spindles.

1,898,903. HYDROMETER. RICHARD SCHRÖDER, Berlin, Germany. Filed Sept. 5, 1929, Serial No. 390,484, and in Germany Feb. 27, 1928. 4 Claims. (Cl. 265—45.)



1. A hydrometer comprising a float of elongated form adapted to float freely without support in a liquid and weighted at its bottom and of such length that the immersed portion is always of greater weight than the portion above the level of the liquid to be tested, an arm

attached to said float near the upper end of the latter and arranged to cause said float to be inclined to the vertical when immersed in a liquid, a scale carried by said arm and a weighted pointer pivoted on said arm and cooperating with said scale.

4. A hydrometer comprising a float of elongated form adapted to float freely without support in a liquid and weighted at its bottom and of such length that the immersed portion is always of greater weight than the portion above the level of the liquid to be tested, such float being eccentrically weighted so that it assumes an inclined position when immersed in a liquid, and means for indicating the degree of inclination of said float, and including an element movable relatively to the float and adapted to assume different positions relatively thereto as the inclination of said float varies.

1,898,904. METHOD OF MAKING SETS FOR MOVING PICTURES. JOHN F. SEITZ, Hollywood, Calif. Filed Nov. 10, 1926. Serial No. 147,526. 8 Claims. (Cl. 88—16.)



1. The method of making the fixed scenery for moving picture sets, comprising projecting a picture on a first screen, making a first portion of the fixed scenery on the first screen while the picture is being projected on such screen, said portion corresponding to part of the projected picture, projecting at least part of the picture on a second screen in proper perspective relation to the whole picture, and to the first screen, and making a second portion of the fixed scenery on said second screen while the picture is being projected on the second screen, said second portion corresponding to another part of the projected picture.

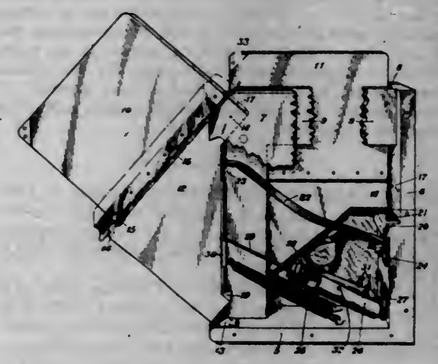
1,898,905. METHOD AND APPARATUS FOR MAKING MOTION PICTURES. JOHN F. SEITZ, Los Angeles, Calif. Filed Dec. 15, 1927. Serial No. 240,154. 16 Claims. (Cl. 88—16.)



1. The method of making a sequence of motion pictures comprising using a film having a basic picture, projecting the basic picture on a screen on one scale, photographing on another scale an action or actions of the basic picture from the projection on the screen on a film or films and in such photography following the particular action or actions depicted in the basic projected picture to the exclusion of the other portions of such basic picture, printing the photographs, and using the film having the basic picture and the films having the photograph or photographs taken therefrom in a sequence.

10. An apparatus for making motion pictures comprising a screen, a projector and a camera having lenses, means to effect a motion of the screen in relation to the camera and projector, a lens shifting means controlled by such relative motion to vary the focus of the lens of either or both the projector or camera to keep such lens in constant sharp focus relative to the screen, regardless of movement and position of such screen and projector camera.

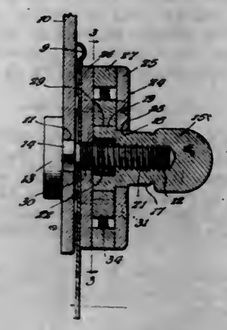
1,898,906. BOOKHOLDER. EDWARD J. SITHENS, Cynwyd, Pa. Filed Oct. 29, 1930. Serial No. 492 075. 9 Claims. (Cl. 45—85.)



1. A book-holder including a casing for housing books or the like, said books being adapted to move between definite outward and inward positions with respect to the casing, pivotal means including a carrier by which the books are rotated to an outward position on the casing, retractile means directly connected to the carrier for restoring the books to the casing, and compression means for controlling the speed of the retractile action.

4. A book-holder including a casing having a plurality of partitions forming compartments to house books or the like, a hook-carrier pivotally associated with the casing and adapted to move between definite outward and inward positions, and tension and compression means directly connected to the carrier for continually controlling the movement of said book carrier during its outward and inward travel.

1,898,907. SELF LOCKING BOLT AND NUT. WILLIAM P. SMITH, Baker, Oreg. Filed May 27, 1932. Serial No. 613,957. 4 Claims. (Cl. 151—48.)



2. A self locking bolt and nut device comprising a bolt, a nut adapted to be threaded on to the bolt and having a ratchet tooth, an annular base surrounding the nut, a spring pressed dog carried by the base engaging the ratchet tooth and preventing retrograde movement of

the nut on the bolt, and a spring carried by the nut and adapted to be tightened on the bolt and prevent retrograde movement of the base and nut as a unit on the bolt.

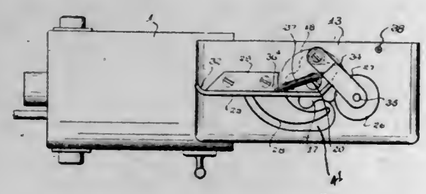
1,898,908. WELDING ROD. GEORGE T. SOUTHGATE, Forest Hills, N. Y., assignor to Union Carbide & Carbon Research Labs. Inc., a Corporation of New York. Filed Feb. 10, 1931. Serial No. 514,911. 11 Claims. (Cl. 219—8.)

4. A welding rod comprising a core predominantly of iron and a coating thereon comprising an oxygen-containing compound of an alkaline earth metal and a nitrogen-combining ferro-alloy-forming metal, a slag-forming material and carbon, the carbon being present in an amount sufficient to reduce to the metallic state the second-named metal, and the slag-forming material being present in an amount greater than the carbon and less than said oxygen-containing compound.

1,898,909. WELDING ELECTRODE. GEORGE T. SOUTHGATE, Forest Hills, N. Y., assignor to Union Carbide & Carbon Research Laboratories, Inc., a Corporation of New York. Filed Feb. 10, 1931. Serial No. 514,912. 8 Claims. (Cl. 219—8.)

1. A welding rod consisting of a ferrous base having thereon a coating comprising an alkaline earth 1 part and a nitrogen-combining ferro-alloy-forming metal in metallic form substantially from 1 to 3½ parts.

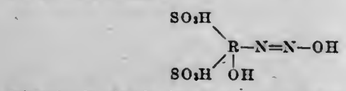
1,898,910. PAPER BOX OPENING MACHINE. WILLIAM P. STEIN, Rochester, N. Y. Filed Aug. 27, 1931. Serial No. 559,780. 7 Claims. (Cl. 30—3.)



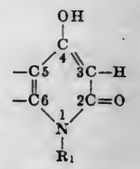
1. A box opener of the class described including a motor, a rotary cutter actuated by the motor and a fixed guard extending from a point in rear of the cutter around the effective portion thereof to a point in advance of the same, whereby the guard in the operation of cutting and opening a carton will project through the kerf made by the cutter and will extend along the wall of the carton being cut to a point in advance of the kerf and contact at its terminal with an uncut portion of the said wall to space the contents of the carton completely from the cutter.

1,898,911. METALLIFEROUS AZO-DYESTUFFS AND PROCESS OF MAKING SAME. FRITZ STRAUB and WILLI WIDMER, Basel, Switzerland, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Nov. 30, 1931, Serial No. 578,202, and in Switzerland Dec. 16, 1930. 20 Claims. (Cl. 260—12.)

1. In the manufacture of metalliferous azo-dyestuffs, the step which comprises coupling a diazo-compound of the general formula

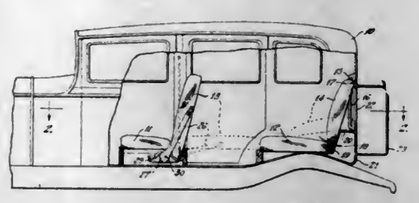


wherein R stands for a phenyl or naphthyl radicle, and the hydroxy group directly attached to R stands in ortho-position to the azo-group, with a coupling component of the general formula



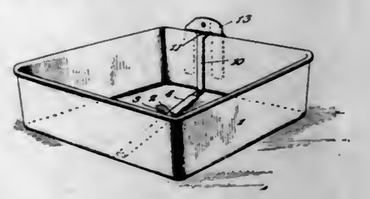
wherein R_1 stands for hydrogen, alkyl, benzyl or aryl radicles of the benzene and naphthalene series, and the carbon atoms numbered 5 and 6 belong to a phenyl or naphthyl residue.

1,898,912. CONVERTIBLE VEHICLE SEAT. PETER TURK, Chicago, Ill. Filed Nov. 16, 1931. Serial No. 575,364. 1 Claim. (Cl. 155—7.)



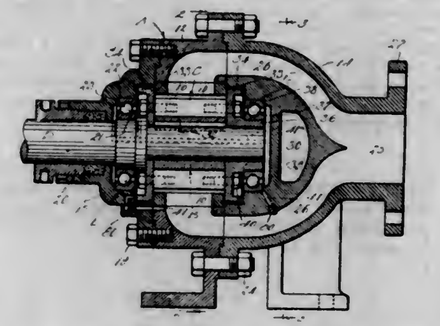
A convertible seat construction comprising relatively stationary front and rear seats having a space therebetween, panels or back-rests for said seats and movable relative thereto, means for lowering the front panel into horizontal position in, and raising it from, said space, and means for guiding the rear panel downwardly into, and upwardly from, a position in which it reclines at a slight angle upon the rear seat with its front edge projected well forwardly of and resting upon the rear seat, whereby said front and rear panels when in lowered position will cooperate with said seats to form a bed.

1,898,913. BAKE PAN. BRADLEY VAN KIRK, Louisville, Ohio, assignor of one-half to George Kell, Louisville, Ohio. Filed Dec. 2, 1931. Serial No. 578,549. 7 Claims. (Cl. 53—6.)



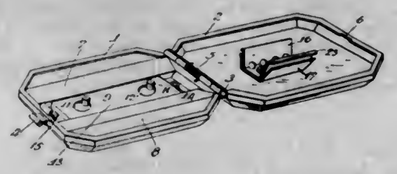
2. The combination with a bake pan, of an extensible cutter pivotally mounted upon the bottom of the pan at the center of the same, a side cutter conforming to the side of the pan and pivoted at its lower end to a projecting end of the extensible cutter, the upper end of the side cutter being extended upwardly from the same, and a bifurcated handle secured to the projecting upper end of the side cutter and having its arms at the opposite sides of the cutter and depending below the upper edge of the pan and fitting closely thereto and provided with intermediate arcuate portions conforming to the cross sectional contour of the edge of the pan and locking the handle and cutter thereto.

1,898,914. VANE PUMP OR MOTOR. HARRY F. VICKERS, Los Angeles, Calif. Filed Feb. 25, 1929. Serial No. 342,602. 1 Claim. (Cl. 103—136.)



A mechanism of the character described including, a rotor, a shaft carrying the rotor, a housing having an opening carrying the rotor, parts on the rotor projecting radially therefrom and in to recesses in the housing, vanes carried by the rotor between said parts and cooperating with the outer wall of the opening, there being spaced inlet and outlet ports in the outer wall of the opening, and means for relieving pressure from the recesses, including a passage in the shaft connecting the recesses and a passage in the housing connecting the recesses and the inlet port.

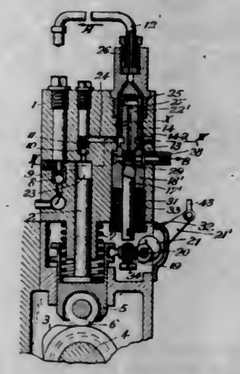
1,898,915. RAZOR BLADE SHARPENER. ALEXANDER S. VOLPIN, Houston, Tex. Filed Dec. 15, 1932. Serial No. 647,462. 11 Claims. (Cl. 51—161.)



1. A razor blade sharpener comprising abrading means providing inclined sharpening surfaces, two spaced lugs disposed centrally of said sharpening surfaces to hold positively a safety razor blade whereby the cutting edges of the latter are placed in juxtaposition to said sharpening surfaces at a uniform angle, and means for imparting similar individual revolvable movements to said lugs.

1,898,916. FUEL PUMP FOR INTERNAL COMBUSTION ENGINES. HANS VONRÜTI, Winterthur, Switzerland, assignor to Firm Schweizerische Lokomotiv- und Maschinenfabrik, Winterthur, Switzerland. Filed Oct. 30, 1931, Serial No. 572,139, and in Switzerland Nov. 12, 1930. 1 Claim. (Cl. 103—41.)

In a fuel piston pump for internal combustion engines of the fuel injection type, in combination, a pressure relief valve for the pump, the effective diameter of said relief valve for effecting a sudden pressure relief approximating the diameter of the pump piston, control means for actuating the relief valve at the end of the injection period, a pressure balancing plunger connected to the side of the relief valve opposite the valve seat, the diameter of the plunger being substantially equal to the effective diameter of the relief valve, a bushing with a sliding fit around said pressure balancing plunger, said bushing being radially movable in the discharge line and subjected to the discharge pressure on its outer surface, one end of said bushing enclosing the free end of the plunger and the other end having an extension abutting against a part rigidly connected to the fuel pump casing to prevent discharge pressure from being transmitted to said relief valve, a space between said plunger and the closed end

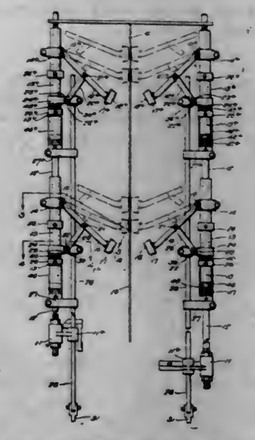


of said bushing, a connection from said space to a low pressure chamber, and means to apply the discharge pressure to said relief valve between its seat and said balancing plunger.

1,898,917. PROCESS OF WELDING ALUMINIUM OR ALLOYS THEREOF TO OTHER METALS. HEINRICH WACHWITZ, Nuremberg, Germany, assignor to Vereinigte Silberhammerwerke Hetzel & Co., Nuremberg, Germany, a Joint-Stock Company of Germany. Filed Sept. 28, 1929, Serial No. 395,998, and in Germany Oct. 3, 1928. 1 Claim. (Cl. 29—189.)

The herein described process of combining aluminium with other metals, which consists in first coating the basic metal with aluminium oxide, heating the oxide coated metal and the aluminium to welding temperature, and combining the metals by pressure sufficient to break up the layer of aluminium oxide and to weld the metals together.

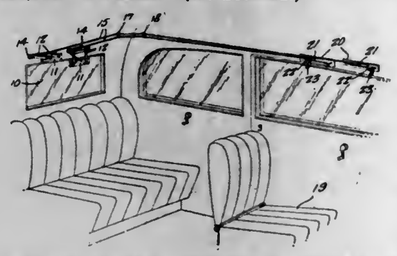
1,898,918. STRIPPING MECHANISM FOR HOSIERY DRIERS. HARRY F. WANAMAKER and JOSEPH N. PATTISON, Philadelphia, Pa., assignors to Proctor & Schwartz, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 3, 1931. Serial No. 566,736. 13 Claims. (Cl. 223—20.3.)



1. In a device for loosening a stock from a form on which the stocking has been dried, means for gripping the

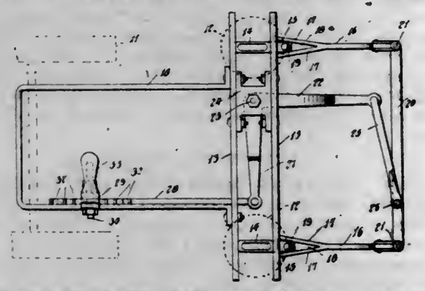
stocking at a plurality of points throughout the leg portion of the stocking on opposite sides of the form respectively, and means for effecting relative movement between the form and said gripping means.

1,898,919. DIRECTION INDICATOR. JOHN E. WAASER, Sr., East Mauch Chunk, Pa. Filed Aug. 4, 1932. Serial No. 627,516. 2 Claims. (Cl. 116—51.)



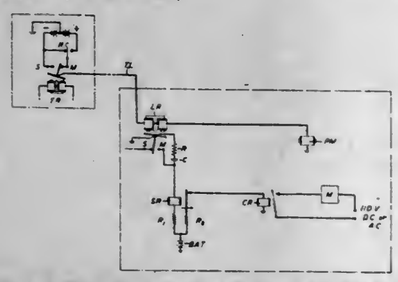
1. A direction indicator comprising a signalling member shiftable into and out of signalling position, a pull member for effecting such movement, and an actuating member comprising a base plate, a guide mounted thereon, a member movable longitudinally of the guide and connected with the pull member and having a laterally projecting element, the base plate having an abutment engageable with said laterally projecting element and formed with an inclined edge to deflect said element behind said abutment when said member is moved longitudinally of said guide.

1,898,920. STEERING DEVICE FOR PLANTERS. FRED WATERMAN, Winnebago, Nebr. Filed May 26, 1932. Serial No. 613,729. 5 Claims. (Cl. 111—52.)



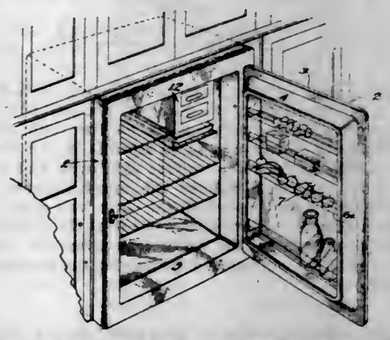
1. In a seed planter having seed dropping tubes, shoes pivotally connected to said tubes, and means to adjust said shoes on their pivots.

1,898,921. REMOTE CONTROL SYSTEM. EDWARD F. WATSON, Larchmont, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 24, 1930. Serial No. 484,130. 3 Claims. (Cl. 178—4.1.)



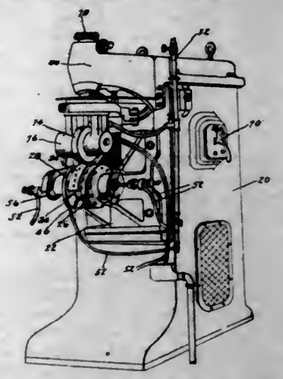
1. Means for controlling the motor mechanism of a printing telegraph set from a remote transmitting station comprising a printer set, a control circuit extending from said set to the transmitting station, a polar line relay in said control circuit responsive to impulses of current over said circuit, a slow-releasing relay under control of said polar line relay, an additional relay for applying power to the motor mechanism of said printer set, said additional relay being normally energized from a contact on said slow-releasing relay and adapted to supply power to said motor mechanism subsequent to the operation of said slow release relay and consequent to the release of said additional relay.

1,898,922. REFRIGERATING UNIT. CONSTANCE LANE WEST, Detroit, Mich., assignor to Frank R. West, Detroit, Mich. Filed Mar. 9, 1932. Serial No. 597,714. 9 Claims. (Cl. 62—89.)



1. In combination with a refrigerator cabinet having insulated walls, and having a breaker strip adjacent the opening thereof, a cooling unit setting up circulation of air in said cabinet, a door having a bulged out portion extending forwardly of the front of the cabinet to provide an additional storage space substantially in alignment with the breaker strip and subject to said air circulation within the cabinet.

1,898,923. WELDING. STANLEY WHITWORTH, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 17, 1928. Serial No. 254,942. 9 Claims. (Cl. 219—4.)



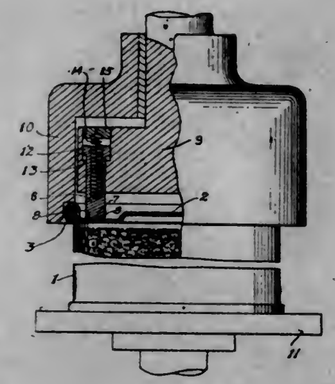
1. Welding apparatus comprising, in combination, a movable work carrier, a fixture adapted to carry parts to be welded together and which is interengaged with said carrier in such a manner as to determine its position with respect to said carrier, mechanism for driving said carrier, and means for passing a welding current through said parts while the carrier is being driven by said mechanism.

1,898,924. DRUM FOR ADVERTISING CLOCKS. GEORGE WILLENS, Chicago, Ill. Original application filed Aug. 27, 1932, Serial No. 630,649. Divided and this application filed Sept. 30, 1932. Serial No. 635,649. 2 Claims. (Cl. 40—68.)



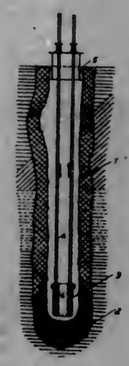
1. In an advertising clock, a cylinder formed of light weight fibre board, a plurality of paper strips of fibre disposed longitudinally of said cylinder on the outside surface thereof, means extending through the center of the strips and cylinder to hold the strips on the cylinder and leave the side edges thereof projecting substantially tangentially, a pair of end plates each comprising a relatively thin metal plate formed with annular flanges against which the ends of the cylinder project, and means for holding the ends of the cylinder against said flanges.

1,898,925. METHOD OF FORMING EASY OPENING CONTAINERS. ERNEST D. ANDERSON, Passaic, N. J., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed July 3, 1929. Serial No. 375,857. 1 Claim. (Cl. 99—8.)



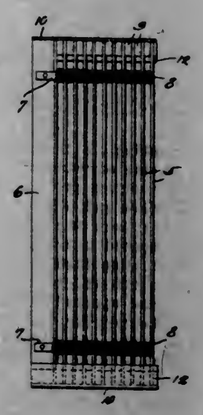
The method of forming an easy opening hermetically sealed metal container comprising hermetically sealing the metal container with the food product therein, processing the food product in the container after it is sealed and after processing cutting a score line in the outer face of the end wall of the container to define a section which may be easily removed by rupturing the metal along the score line.

1,898,926. METHOD OF MAKING BORE HOLES. CHRISTIANUS JOSEPHUS GODEFRIDUS AARTS, Voorburg, and JOHANNES ANTONIUS ALPHONSUS MEKEL, Delft, Netherlands; said Aarts assignor to Walter Franciscus Cornelis Baars, Rotterdam, Netherlands. Filed Dec. 19, 1931, Serial No. 582,144, and in the Netherlands Feb. 2, 1931. 6 Claims. (Cl. 255—1.)



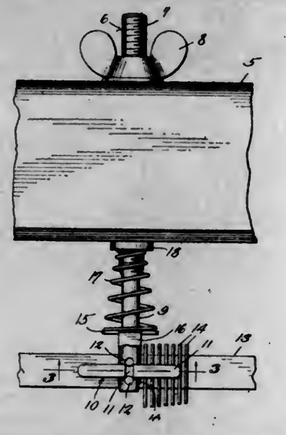
1. A method of making vertical bore holes of considerable depth in the ground, comprising converting the material, in which the boring takes place, into a non-solid condition by heating under a pressure superior to the pressure in the strata surrounding the bore hole.

1,898,927. LOOM REED CONSTRUCTION. ISAAC ANDREWS, Spartanburg, S. C. Filed Jan. 26, 1931. Serial No. 511,883. 4 Claims. (Cl. 139—192.)



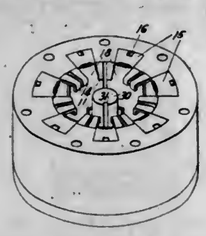
1. In a loom reed, dents, ribs disposed on opposite sides of the dents, cushioning means between the dents for restricting lateral movement of the dents, elongated caps having parallel flanges, embracing the side edges of the dents near the ends thereof and providing pockets, solder disposed within the pockets for securing the dents together, and backing members positioned over the caps.

1,898,928. ATTACHMENT FOR HEDDLE BARS. ISAAC ANDREWS, Spartanburg, S. C. Filed Dec. 12, 1931. Serial No. 580,702. 10 Claims. (Cl. 139—92.)



1. In a heddle supporting frame, heddle bar supporting means, comprising a securing bolt extended through the frame, heddle bar securing members on the bolt and fitted in openings formed in the heddle bars, and the sides of the heddle bar securing members being flush with the sides of the heddle bars to permit the heddles to slide thereover.

1,898,929. COMMUTATOR AND METHOD OF MAKING IT. VINCENT G. APPLE, Dayton, Ohio; Herbert F. Apple, Edward M. Apple and Gourley Darroch executors of said Vincent G. Apple, deceased. Filed May 16, 1929. Serial No. 363,460. 3 Claims. (Cl. 171—321.)



1. The method of making a commutator from a series of separate segments having outwardly turned risers at the one end and inwardly turned prongs with spacing holes therethrough at the other end, which consists in arranging the segments in the form of a cylinder, keeping them in circumferentially spaced apart position and against radial movement by holding them at the one end by the risers and at the other end within the spacing holes, thus leaving a series of vacant spaces between the segments at the outer surface of the cylinder, and molding a one piece core of insulation into the said cylinder and into all of the said vacant spaces between the said segments while they are so held.

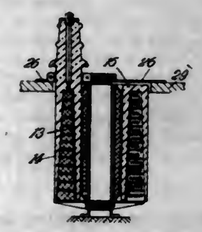
1,898,930. APPARATUS FOR SWEATING OR TREATING PARAFFIN WAX OR THE LIKE. ALBERT DOUGLAS ARMSTRONG and GAVIN CHAPMAN GORDON DOBBIE, Rangoon, India, assignors to The Indo-Burma Petroleum Company Limited. Rangoon, Burma. Filed July 6, 1928, Serial No. 290,785, and in Great Britain July 8, 1927. 3 Claims. (Cl. 196—20.)

1. An apparatus for sweating or purifying paraffin wax mixture, scale or the like, comprising a sweating pan or vat, a horizontal foraminous shelf in said pan or vat, a multiplicity of layers or horizontal pipes constituted by a series of vertical coils each consisting of a sepentinous pipe within the pan above said shelf, said layers of horizontal pipes serving to support a cake of wax or the like



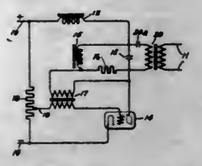
and to prevent it from forming a compact mass, means for introducing heating and cooling fluids into the said pipes, means for introducing wax mixture or the like into the pan, and means for withdrawing oil from said pan.

1,898,931. HIGH TENSION TRANSFORMER. KARL BAHRMANN, Dresden, Germany, assignor to Koch & Sterzel Aktiengesellschaft, Dresden, Germany, a Company of Germany. Filed July 14, 1930, Serial No. 467,900, and in Germany July 27, 1929. 8 Claims. (Cl. 175—356.)



1. In a high potential transformer having an insulated body provided with spaced outer and inner annular walls connected at one end and open at the other, a secondary winding positioned within the inner wall and a disc-shaped high potential winding mounted within the opening between the inner and outer walls.

1,898,932. ALTERNATING CURRENT GENERATOR. BURNICE D. BEDFORD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 28, 1931, Serial No. 511,914. Renewed Sept. 10, 1932. 17 Claims. (Cl. 250—36.)

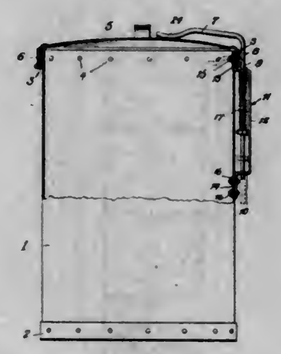


1. Apparatus for generating a periodic current approximating a sine wave form comprising a source of current, a capacitor, an oscillatory charging circuit for said capacitor including an electric valve, an oscillatory discharging circuit for said capacitor, and means for maintaining said valve non-conducting during a predetermined portion of the oscillatory discharge of said capacitor.

1,898,933. WELDING ROD. HOWARD WILLIAM R. BIERS, Forest Hills, N. Y., assignor to Oxweld Acetylene Company, a Corporation of West Virginia. Filed Mar. 14, 1931. Serial No. 522,785. 11 Claims. (Cl. 219—8.)

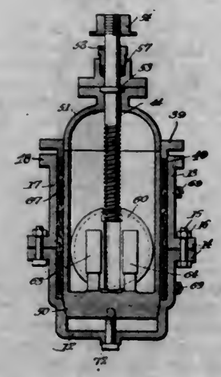
1. A metal welding rod having an electrically conductive coating which comprises about 2.0% to 10% carbon, about 25% to 65% zirconium, about 20% to 60% of a metal which forms an avidic oxide, and about 2.0% to 15% of an alkaline earth metal.

1,898,934. LID CLAMP FOR CONTAINERS. GEORGE I. BOHMAN, New York, N. Y. Filed Apr. 6, 1932. Serial No. 603,588. 5 Claims. (Cl. 220—55.)



1. A lid clamp for containers comprising a bracket adapted to be connected to the container at spaced points, said bracket having spaced aligned apertures, a rod extending through said aligned apertures pivotally supported by the bracket, an arm carried by said rod at one end, said bracket being positioned with the upper end below the upper edge of said container so that the arm may swing over the cover when in an operative position and when in an inoperative position lowered and swung against the side of the container, and means acting on the bracket and arm for causing the arm to lock the cover on the container when in an operative position and pressed against the side of the container when in an inoperative position.

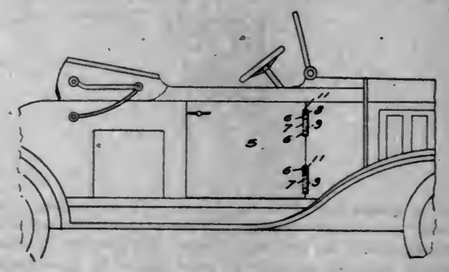
1,898,935. PIPE CUTTER AND VALVE INSERTING MACHINE. ALFRED BRANDRIFF, Millville, N. J., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed Mar. 3, 1928. Serial No. 258,958. 5 Claims. (Cl. 251—59.)



1. In combination with a casing adapted to be clamped to a main, a valve unit insertable in said casing, said casing having opposed vertically disposed grooves coacting with complementary projections on the valve unit for guiding the latter into position, a packing in each of said grooves and engaging said valve unit for providing a tight joint between the parts, and manually operable means extending outwardly from said casing for maintaining the packing in engagement with said valve unit.

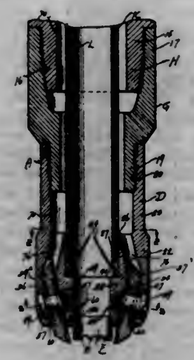
2. In combination with a sectional valve casing adapted to be clamped to a main, a valve unit insertable in said casing, the lower section of said casing having a tapered inner wall portion arranged to co-act with complementary means on the valve unit for seating the valve unit in the casing.

1,898,936. LUBRICATED HINGE. DAVID A. BRAWLEY, Flint, Mich. Filed June 2, 1932. Serial No. 615,004. 2 Claims. (Cl. 16—161.)



1. In a hinge, a pintle having head and shank portions, an oil cup receiving cavity in the top portion of said head, a well in the bottom of the cavity, a horizontal passage through the upper portion of the shank portion, said passage bisecting the well at a point above its bottom, and slots on the shank portion extending downwardly from the ends of the said horizontal passage, said slots ending at a point adjacent to the bottom of the shank.

1,898,937. DRILLING APPARATUS. HARRY C. BREWSTER, Shreveport, La., assignor to Oil City Iron Works, Shreveport, La., a Corporation of Louisiana. Filed Jan. 30, 1928. Serial No. 350,538. 1 Claim. (Cl. 255—72.)



In a drill bit the combination of a drill head having a core receiving passageway therethrough, rotary disc cutters carried by the head with the axes of the cutters disposed non-radial to the axis of the drill head and with the axes of the cutters inclined to a plane normal to the axis of the head so that the cutters converge downwardly and project at their lower ends beyond the lower end of the drill head into core cutting formation, and a de-

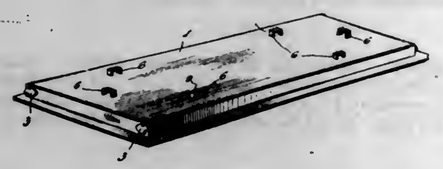
tachable ring-shaped core cutter projecting below and mounted upon the drill head between the lower cutting portions of the cutters and providing a passageway through which the core cut thereby may enter the passageway of the drill head, the lower cutting edge of the core cutter being disposed in a plane above the plane in which the lowermost cutting edges of the disc cutters lie.

1,898,938. CORD ATTACHING DEVICE FOR CURTAIN AND PORTIÈRE TRAVERSERS. SANTI T. CARUSO, Ardmore, Pa. Filed Dec. 28, 1931. Serial No. 583,569. 6 Claims. (Cl. 156—21.)



1. A means for attaching a pull cord to drapery, consisting of a body member having a transverse opening through which the pull cord passes, and a screw threaded through the body member at right angles to the opening for impinging on the cord to attach the cord in the opening.

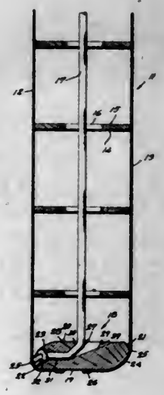
1,898,939. BURIAL VAULT. RALPH COHEN, Galion, Ohio, assignor to Perfection Steel Body Company, Galion, Ohio, a Corporation of Ohio. Filed May 19, 1932. Serial No. 612,340. 1 Claim. (Cl. 27—35.)



In a burial vault, the combination of a pedestal formed to mate with a cover, arched loops permanently and rigidly fixed to the upper side of the pedestal, the loops being adapted to engage and support a casket, and tongues upstanding from said loops to penetrate the bottom of a casket resting on and supported by the loops and hold the casket against sliding movement off the loops, the tongues being relatively short and pointed to sink into the bottom of the casket and permit the bottom of the casket to rest directly on said loops whereby the weight of the casket will be sustained by the loops and fracture of the bottom of the casket will be avoided, said loops being adapted to receive straps for fastening the casket to the pedestal, the inner surfaces of said loops opposite said tongues being smooth to provide non-abrasive bearing surfaces for the straps whereby the straps may be slid through the loops without mutilation of the straps.

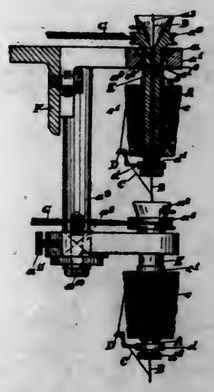
1,898,940. VENETIAN BLIND BOTTOM RAIL CONSTRUCTION AND HANGING. JESSE E. COOPER, Los Angeles, Calif., assignor to Western Venetian Blind Co., Los Angeles, Calif., a Corporation of Delaware. Filed Oct. 12, 1932. Serial No. 637,455. 17 Claims. (Cl. 156—17.)

1. In a Venetian blind, a bottom rail having curved corners positioned diagonally opposite, one corner merging into the lower surface and the other corner merging into the upper surface of the rail, tapes connected to the bottom of the rail, said tapes being adapted to contact



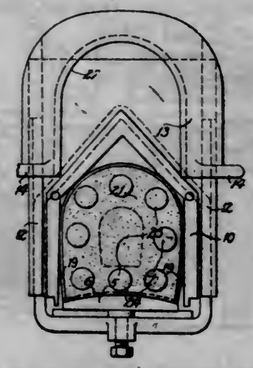
with the curved corners during the horizontal position and tilting of the rail, and means to raise and lower the rail.

1,898,941. MANUFACTURE OF YARNS OR THREADS. NORMAN CROSSLEY, Huddersfield, England. Filed June 13, 1932, Serial No. 616,975, and in Great Britain Mar. 4, 1931. 2 Claims. (Cl. 117—34.)



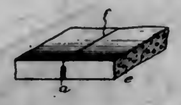
1. In spindle apparatus for winding a binding thread around a core of fibrous substance, the combination of a positively driven tubular spindle, a sleeve rotatably mounted on the spindle and driven by frictional contact with the spindle, means for retaining the sleeve in position on the spindle the said means comprising an annular groove formed in the spindle holes formed in the sleeve, balls situated in the holes and a spring retaining ring encircling an annular groove on the sleeve and arranged to exert pressure on the balls, a yarn carrier detachably mounted on the sleeve and a thread guide rotatably and detachably mounted on the spindle and pulled around by the binding yarn as the latter is pulled off the spool.

1,898,942. HEEL-BUILDING PLATE. JOHN F. DONAHUE and JOHN A. MCMAHON, St. Louis, Mo., assignors to John E. Mitchell Company, St. Louis, Mo., a Corporation. Filed Mar. 5, 1930. Serial No. 433,236. 9 Claims. (Cl. 12—50.)



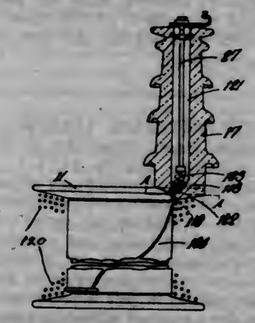
1. A portable, unitary heel-building plate comprising a body portion of the shape of a heel and having a smooth unobstructed upper surface, and a heel gage projecting upwardly from the breast end of the plate and of less height than the height of the heel to be assembled on the plate.

1,898,943. EXPANSION AND CONTRACTION JOINT. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Oct. 19, 1925. Serial No. 63,362. 12 Claims. (Cl. 94—18.)



1. A paving structure comprising a monolithic layer of paving material, and a bituminous expansion joint embedded beneath the paving surface to provide a weakened area in the paving structure over which cracks are caused subsequently to develop, said joint being adapted to flow to fill the cracks as they develop.

1,898,944. HIGH TENSION TRANSFORMER. FRANZ JOSEPH FISCHER and KURT AUGUST STERZEL, Dresden, Germany, assignors to Koch & Sterzel Aktiengesellschaft, Dresden, Germany, a Company of Germany. Filed June 4, 1930, Serial No. 459,280, and in Germany June 5, 1929. 10 Claims. (Cl. 175—356.)



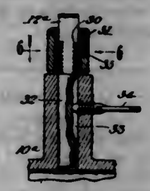
1. A high potential measuring transformer of the class described, having a single piece flanged spool of insulating material, said spool provided with a high potential winding formed in layers whereby its potential increases from the outer lying initial potential towards the core surrounded thereby, the ends of the layers being wound close to the inner side of the flanges of the spool, so that each surface element of the inside of the flange has imparted thereto the potential of the last winding of the adjacent layer, the innermost high potential winding layer being formed by a slit conductive plate placed around the centerpart of the spool.

1,898,945. ELECTRIC UTILITY DEVICE AND MOTOR ASSEMBLY. PATRICK J. FITZGERALD, Torrington, Conn., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn., a Corporation of Connecticut. Filed June 12, 1931. Serial No. 543,921. 3 Claims. (Cl. 279—22.)



1. An electrical utility device including the combination of a fixed structure and a tool sleeve having a hole in the wall thereof, said hole being of lesser diameter at the inner surface of said sleeve than at the outer surface, a ball located in said hole and of lesser diameter than the outer portion of said hole and of greater diameter than the inner portion of said hole so that said ball may extend into the inner space of said sleeve but is held against passage from the hole into the sleeve, a tool stem having an annular recess adapted to receive the inwardly projection portion of the ball when said stem is located in said sleeve, means surrounding said stem for urging the ball inwardly, and a spring surrounding said stem and located between said structure and urging means.

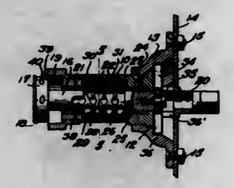
1,898,946. STAND ADJUSTMENT FOR ELECTRICAL UTILITY DEVICES. PATRICK J. FITZGERALD, Torrington, Conn., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn., a Corporation of Connecticut. Filed June 9, 1931. Serial No. 542,218. 3 Claims. (Cl. 248—15.)



1. An electrical utility device including a stand, a supporting column, and a bracket securable to said column for supporting a motor and a tool, said column being vertically movable in said stand, in combination with an internally threaded sleeve engaged with screw threads

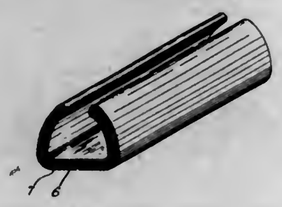
on said column, said sleeve resting on top of said stand, whereby the threaded adjustment of said sleeve on said column will determine the vertical position of said column with respect to said stand, and means for securing said sleeve in adjusted position on said column.

1,898,947. COMBINATION LOCK. JOHN E. FREY, Pittsburgh, Pa. Filed June 28, 1932. Serial No. 619,809. 4 Claims. (Cl. 70—53.)



1. In a lock of the character described, a barrel, a plurality of numeral rings arranged therein and having internal channels, a rotatable and slidable member fitted within the barrel and having a plurality of channels for registration with the channels in the rings, a cylinder surrounding the said member and having holes therein for registration with the channels in the rings and member, a plurality of balls movably fitted in the holes in the cylinder and adapted to travel in the channels in said rings and member, said member having a way establishing communication between the channels therein, a handle formed on the barrel, and a bearing rotatably supporting the barrel.

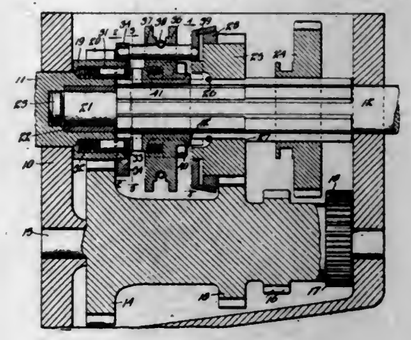
1,898,948. CHANNEL. WALTER S. GAINES, Jr., East Cleveland, Ohio, assignor to The Reid Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 2, 1930. Serial No. 479,282. 5 Claims. (Cl. 296—44.5.)



1. A window channel comprising an inner flexible sheet metal core of channel form having slits extending transversely from points adjacent one edge to points adjacent the opposite edge, whereby the channel may be bent in various forms and whereby it may be twisted in the application to the window frame.

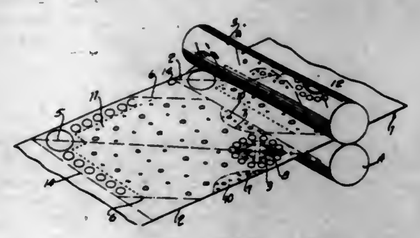
1,898,949. CLUTCH MECHANISM. JOHN FLETCHER GAYLORD, Muncie, Ind., assignor, by direct and mesne assignments, to The Gaylord Company, Inc., Homer, La., a Corporation of Louisiana. Filed Feb. 24, 1930. Serial No. 430,943. 4 Claims. (Cl. 192—53.)

1. In a transmission gear for motor vehicles having a driving and a driven shaft in alinement one with the other, a clutch comprising a gear having spaced lugs on one face and having a cone shaped periphery, a ring axially slidable on the driven shaft, pins axially slidable in the ring, said pins carrying on their outer ends a dish shaped member adapted to engage the cone surface on the said gear, and a plurality of short spaced pins mounted in the said ring and adapted to engage certain of the



lugs on the face of the said gear, resilient means tending to urge said last-named pins outwardly, substantially as set forth.

1,898,950. PRINTED TEXTILE FOR MAKING ONE-PIECE CUT-OUT APRONS. HUGO GOLDBERGER, New York, N. Y., assignor to Noveltex, Inc., a Corporation of New York. Filed May 12, 1932. Serial No. 610,773. 6 Claims. (Cl. 41—17.)

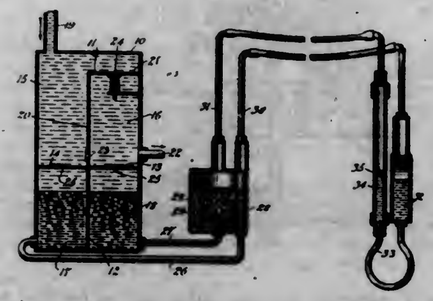


3. As a new article of manufacture, a web of textile fabric divided into square areas extending the entire width of said web, each of said squares having the figure design ornamentation of the body portion of an apron with attached bib and neck band printed thereon within the border outlines of such a garment, with the medial vertical line of the apron and bib so outlined running diagonally of said square; whereby, when any such square of fabric is cut along the borders of said figure ornamentation, an apron with attached bib and neck bands all in one piece will be produced.

1,898,951. FLUID METERING SYSTEM. GEORGE R. GOODWIN, Melrose, Mass. Filed Dec. 7, 1928. Serial No. 324,404. 4 Claims. (Cl. 73—167.)

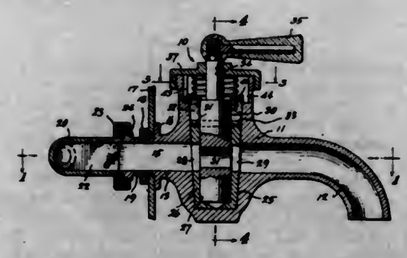
1. A fluid metering system including a casing having an inlet at the top, a divisional wall cross-shaped in cross section dividing the interior of the casing into a supply chamber, a discharge chamber, a first actuating chamber, and a second actuating chamber, said divisional wall being provided with apertures positioned so that the first actuating chamber will be in free communication with the supply chamber, the secondary actuating chamber will be in free communication with the discharge chamber, and the discharge chamber will be in free communication with the supply chamber, said discharge chamber having an

outlet whereby when fluid is flowing through said outlet there will be a difference in pressure between the supply chamber and the discharge chamber, and a difference of pressure between the respective actuating chambers and the supply and discharge chambers, a pressure responsive indicator, tubular means for connecting the second actu-



ating chamber to the indicator, tubular means for connecting the first actuating chamber to the indicator so that the pressure conveyed by the first named tubular means will oppose the pressure conveyed by the second named tubular means, and means interposed in both of said tubular members for presenting expansion chambers.

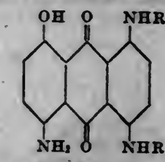
1,898,952. VALVE. FRANKLIN A. GRAY, West New Brighton, N. Y. Filed Mar. 10, 1930. Serial No. 434,643. 3 Claims. (Cl. 277—32.)



1. In a valve of the character described, a body having a bore, with a plurality of inlet passages and an outlet passage in communication with said bore, a rotatable plug in said bore, said plug having a central chamber and an inlet and an outlet port adapted to communicate with said central chamber, said inlet port adapted to communicate with one of said inlet passages in one position of said rotatable plug and with said plurality of inlet passages during another position of said plug, a stem in said central chamber, said stem having a transverse passage adapted to afford communication between said ports, said stem and said plug having cooperative means to prevent relative rotation thereof, a manipulating handle secured to said stem, a cap for the upper part of said valve body, a coiled spring acting between said cap and the upper part of said plug to hold the latter to its seat in said bore, said plug and said valve body including cooperative devices to limit the rotative movement of said plug to define fully "on" and "off" positions of the valve said stem adapted to transmit rotative movement from said handle to said plug to move said plug to operative position whereby in one position of said plug one of said inlets communicates with said outlet and in another position a plurality of inlets communicate with said outlet, and said stem being vertically movable relative to said plug to restrict the passage through said plug and transverse stem-passage, whereby to alter the velocity or volume of flow through the valve.

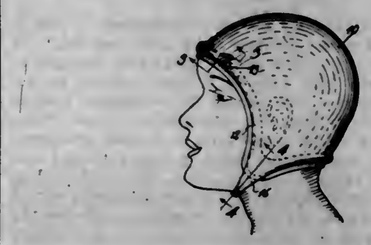
1,898,953. PROCESS OF MAKING USEFUL CONDENSATION PRODUCTS OF THE ANTHRACENE SERIES AND NEW ANTHRAQUINONE DERIVATIVES. PAUL GROSSMANN, Basel, Switzerland, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Jan. 30, 1931, Serial No. 512,503, and in Switzerland Feb. 1, 1930. 10 Claims. (Cl. 260—59.)

8. As new products the anthraquinone derivatives corresponding with the general formula



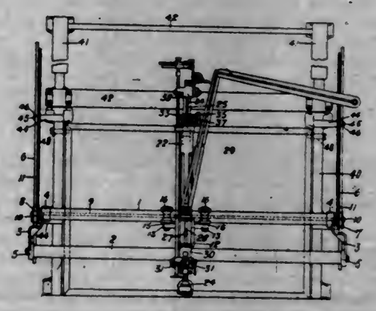
wherein one of the R's stands for a hydrogen atom and the other for alkyl or aralkyl which products form dark powders which dissolve in sulfuric acid to yellow solutions and in ethyl acetate to blue to blue-green solutions, dyeing acetate silk similar tints.

1,898,954. BATHING CAP. EDWIN PHILIP GUSTAFSON, Forestville, Conn., assignor of one-fourth to Jan P. Clary, Hartford, Conn. Filed July 23, 1931. Serial No. 552,763. 4 Claims. (Cl. 2—68.)



1. A bathing cap comprising a head enclosing portion, a pneumatic band at the marginal edge thereof and a head engaging strip having one edge carried by the pneumatic band at the outer side edge thereof, with the other edge of the strip freely disposed, said strip being located at the head contacting surface of the band and extending completely around the band.

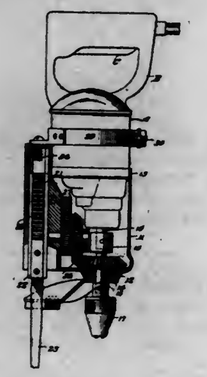
1,898,955. FLAME CUTTING BURNER APPARATUS. LESLIE JOHN HANCOCK, Sutton, England. Filed Mar. 15, 1932, Serial No. 599,021, and in Great Britain Dec. 29, 1931. 13 Claims. (Cl. 226—23.)



1. In flame cutting burner apparatus, longitudinal track rails, toothed racks adjacent the longitudinal rails, and a traveling carriage with track wheels that bear upon

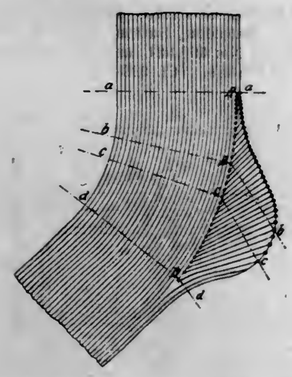
the track rails and with toothed wheels that have a rigid connection between them and mesh with the toothed racks for the purpose of preventing relatively independent traveling movements of the track wheels on the track rails.

1,898,956. SAW ATTACHMENT FOR ELECTRIC DRILLS. WALTER ELDRIDGE HARVIE, Portland, Me. Filed Mar. 22, 1932. Serial No. 600,504. 1 Claim. (Cl. 29—73.)



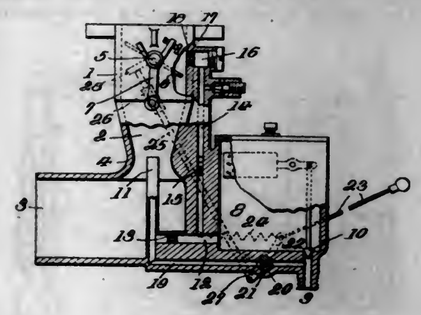
The combination with a power mechanism having a housing with a motor provided with a driving shaft, of a casing open at one end and telescopically engaged at its open end with said housing, a clamp carried by the casing and embracing the housing for detachably uniting said casing and housing, an enlargement formed longitudinally of the casing and having a central guideway, a reciprocating rack plunger fitted in said guideway and having toothed racks at opposite sides, the plunger being formed with a furcated outer end, a tool detachably seated in said furcated end, and driven connections between the toothed racks and the driving shaft for the continuous reciprocation of the plunger.

1,898,957. STOCKING AND METHOD OF KNITTING SAME ON FLAT KNITTING MACHINES. WOLDEMAR HEINITZ, Chemnitz, Germany, assignor to Schubert & Salzer Maschinenfabrik, Aktiengesellschaft, Chemnitz, Germany. Filed Aug. 1, 1931. Serial No. 554,548, and in Germany Aug. 5, 1930. 4 Claims. (Cl. 66—187.)



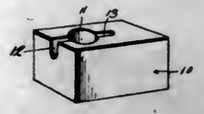
2. A stocking having a pair of widened rows of selvedge loops to be sewed at the widening of the heel, and narrowing lines beginning at the rear upper end of the heel and descending to a point below the ankle on the same wale at an inclined angle like those of a pointed high heel.

1,898,958. CARBURETOR. FRANK H. HEITGER, Flint, Mich.; Mattie G. Heitger, Flint, Mich., administratrix of said Frank H. Heitger, deceased. Filed Dec. 5, 1928. Serial No. 324,003. 8 Claims. (Cl. 261—51.)



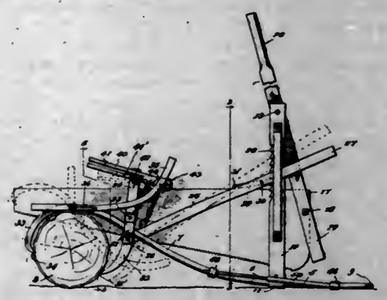
1. A carburetor having a mixing chamber provided with a fuel nozzle in communication with a source of fuel supply, a throttle valve mounted therein, manually controlled means for supplying an additional amount of fuel to said nozzle under pressure above atmospheric and means for operating said throttle valve by the movement of said manually controlled means.

1,898,959. PIN REMOVING TOOL. CLARENCE HILLIARD, Port Henry, N. Y. Filed Apr. 5, 1932. Serial No. 603,849. 4 Claims. (Cl. 29—86.1.)



1. A tool as set forth comprising a block having an enlarged socket opening through one face thereof, said block also having opposed recesses on each side of the socket and opening through said one face of the block, one of said recesses also having an opening through one end of the block, said block also having a passage therein communicating with the other of the recesses adjacent the inner end thereof and opening through the opposite end of the block.

1,898,960. LOG SAWING MACHINE. JOHN R. HOUTS, McLean, Va. Filed Sept. 19, 1932. Serial No. 633,906. 12 Claims. (Cl. 143—64.)



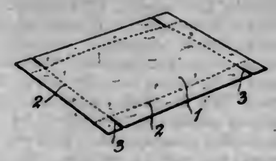
1. A log sawing machine comprising a frame having upwardly deflected side bars, a standard interposed between said side bars, forward log gripping members mounted on the deflected side bars of the frame, a guide yoke pivotally mounted between said deflected side bars and provided with rear log gripping members, means for forcing the rear gripping members in engagement with a log, a saw mounted for reciprocation in the guide yoke, an operating lever pivotally mounted on the standard and operatively connected with the saw, and means carried by the guide yoke for exerting a yieldable downward pressure on the upper edge of the saw.

CARNEGIE LIBRARY OF ATLANTA

1,898,961. PRODUCTION OF BUTYL ALCOHOL AND ACETONE BY FERMENTATION. HENRY BROUGHAM HUTCHINSON, Harpenden, England, assignor to The Distillers Company Limited, Edinburgh, Scotland, a British Company. Filed Apr. 20, 1929, Serial No. 356,882, and in Great Britain June 25, 1928. 7 Claims. (Cl. 195—20.)

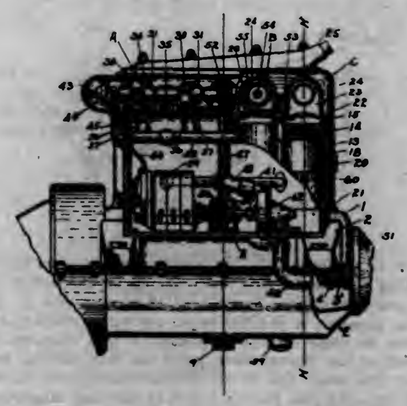
1. In the production of butyl alcohol and acetone, subjecting to butyl alcohol-acetone fermentation a mash of starchy material, and adding thereto an ammonium salt of an organic acid capable of producing an increase above the normal yield of one of said products relatively to the other.

1,898,962. DIVIDING CARD FOR CIGARETTE BOXES. GEORG HVISTENDAHL, Tonsberg, Norway. Filed Feb. 24. 1932, Serial No. 594,899, and in Norway Mar. 2, 1931. 2 Claims. (Cl. 206—41.)



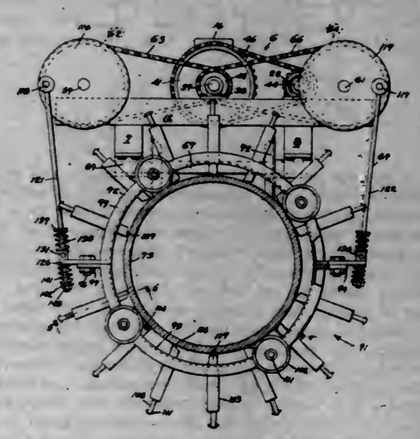
1. A dividing card for cigarette boxes comprising a disc of flexible, fireproof material provided with suitable weakened lines at a certain distance from the edges in order that the card or disc may easily be formed into a shallow ash tray by bending the material along the weakened lines.

1,898,963. INTERNAL COMBUSTION ENGINE. LUCIAN C. JACKSON, Buffalo, N. Y. Original application filed Nov. 9, 1914, Serial No. 871,042, now Patent No. 1,314,487, dated Aug. 26, 1919. Divided and this application filed July 30, 1919. Serial No. 314,279. 13 Claims. (Cl. 123—195.)



1. In an internal combustion engine, having a cylinder with a combustion chamber, in combination with a source of fuel supply, a crank shaft and means for rotating said crankshaft, electrical generating apparatus for furnishing ignition for the fuel in said combustion chamber, means to operate said electrical generating apparatus from said crank shaft and means formed from said cylinder to entirely enclose said electrical generating apparatus on said engine.

1,898,964. PIPE CLEANING MACHINE. FRANCIS E. JINNETT, Ventura, Calif. Filed May 14, 1930. Serial No. 452,274. 10 Claims. (Cl. 15—104.04.)



1. In a pipe-cleaning machine, a frame, rollers journalled thereon in position to support said frame upon the pipe to be cleaned, a motor carried by said frame, a cutter head, scraping means carried by said head and engaging said pipe, a shaft journalled on said frame and coupled to said motor to be rotated thereby, a crank pin rigid with said shaft, a connecting rod journalled on said pin, and resilient means coupling said rod to said head whereby rotation of said shaft effects reciprocatory rotary motion of said head about said pipe.

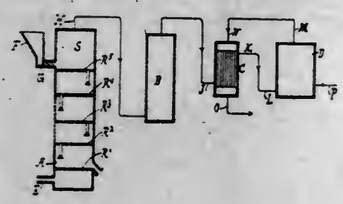
1,898,965. PROCESS FOR HYDROGENATING ORGANIC SUBSTANCES. ADOLF SPILKER and CARL ZERBE, Duisburg-Meiderich, Germany, assignors to Gesellschaft fur Teerverwertung, m. b. H., Duisburg-Meiderich, Germany. Filed Sept. 16, 1927, Serial No. 220,057, and in Germany Sept. 23, 1926. 14 Claims. (Cl. 196—54.)

1. The process for hydrogenating and splitting bituminous material, which comprises bringing a hydrogen-bearing gas, the material and elemental halogen having the catalytic properties of iodine into contact with one another in the presence of a metallic surface having the effect of iron, and effecting a reaction therebetween at a pressure above 50 atmospheres and at a temperature above 200 degrees C.

1,898,966. HYDROGENATION OF HYDROCARBONS. ADOLF SPILKER, Duisburg-Meiderich, Germany. Filed May 4, 1931, Serial No. 535,089, and in Germany June 25, 1928. 11 Claims. (Cl. 196—53.)

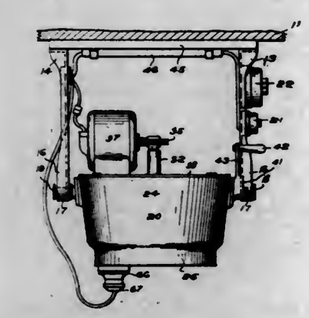
1. The method of hydrogenating and splitting bituminous materials which comprises subjecting a metallic surface having the effect of iron to heat and pressure in the presence of iodine, and thereafter bringing a bituminous material substantially free of iodine into contact with said activated surface at a temperature in excess of 250 degrees C. and under high pressure and in the presence of a hydrogen-containing gas.

1,898,967. PRODUCTION OF MIXTURES OF NITROGEN AND HYDROGEN FROM BITUMINOUS FUELS. CHRISTIAN SCHNEIDER and HEINRICH BUETEFISCH, Neuroessen, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Apr. 9, 1931, Serial No. 528,826, and in Germany May 1, 1930. 5 Claims. (Cl. 23—7.)



1. A process for the production of a mixture of hydrogen and nitrogen from bituminous fuel which comprises subjecting said fuel while arranged in layers to a low temperature carbonization, subjecting the residues from said carbonization, also arranged in layers, to a gasification by blowing upwardly through said layers of residue, a gasifying agent in an amount sufficient to bring said layers of residue into vigorous motion on their beds, the low temperature carbonization of said fuel being effected by leading the gases arising from said gasification still hot through the layers of fuel to be carbonized, separating by condensation the condensable compounds contained in the gases and vapors issuing from the low temperature carbonization, subjecting the non-condensed gases to incomplete combustion, carbon monoxide thereby being formed, treating the incompletely burned gases with steam at a temperature between 380° and 620° C., the carbon monoxide thus being converted into carbon dioxide, removing said carbon dioxide from the gases and effecting at least one of the steps of gasification and incomplete combustion by means of a gas containing nitrogen.

1,898,968. COMBINED COOKER AND STIRRER FOR POP CORN AND THE LIKE. FRANK E. WYLAND, Newport, Ky. Filed May 16, 1929. Serial No. 363,560. 1 Claim. (Cl. 53—4.)



A cooker comprising a support, a kettle unit pivoted thereon to rock from an initial cooking position to discharge position inverted, a strike on the kettle to engage the support at respective limits of tilting movement, the center of gravity of the kettle unit being located to hold the kettle in initial position with the strike engaged, and movable with the kettle across dead center, whereby to hold the kettle in discharge position.

1,898,969. METHOD OF PROTECTING MAGNESIUM AND ITS ALLOYS AT ELEVATED TEMPERATURES. EDWIN O. BARSTOW, Midland, Mich., assignor to Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 21, 1932. Serial No. 600,381. 16 Claims. (Cl. 75—17.)

1. The method of protecting magnesium or its alloys while in heated condition, which comprises maintaining in contact with the surface of the metal a gaseous mixture of carbon bisulphide vapor and at least one of the gases selected from the group consisting of nitrogen, carbon monoxide, carbon dioxide, sulphur dioxide.

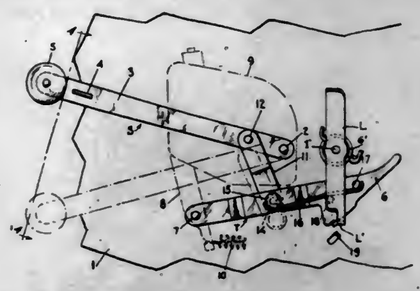
1,898,970. METHOD OF HEATING COKE OVENS AND THE LIKE. JOSEPH BECKER, Pittsburgh, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Jan. 22, 1927. Serial No. 162,931. 4 Claims. (Cl. 202—2.)

1. In the method of heating a coking retort oven structure containing heating flues and apparatus for distributing gaseous fuel to said flues, by supplying coal gas to said structure for combustion therein, the step which comprises supplying said coal gas heated to a temperature of from about 30° C. to about 60° C. to said flues from outside of said structure.

1,898,971. PRODUCTION OF FERTILIZER SALTS. ERNST JAENECKE, Heidelberg, and FRITZ MUELLER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 25, 1929, Serial No. 402,537, and in Germany Nov. 24, 1928. 9 Claims. (Cl. 71—9.)

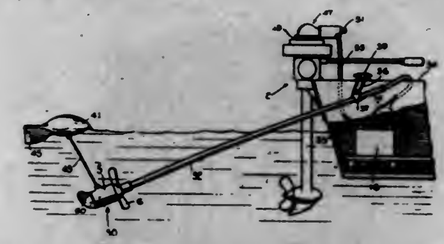
1. The process of producing fertilizer salts which comprises effecting double decomposition between ammonium nitrate and a metal salt which is soluble in liquid ammonia at least to a slight extent, in contact with substantially anhydrous ammonia.

1,898,972. TIME SETTING AND TIME CONTROL MECHANISM FOR AUTOMATIC TOASTERS AND THE LIKE. CLAUDE T. JOHNSON, East Orange, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Nov. 4, 1929. Serial No. 404,547. 5 Claims. (Cl. 161—1.)



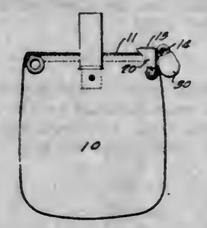
5. In apparatus of the class described, in combination, a driving member, a trip lever having at one end a cam face, and pivotally connected at the other end to said driving member, a setting lever pivotally connected at one end for time control movement, a link connected at one end to an intermediate point on said setting lever and at the other end to an intermediate point on said trip lever, said link having a pin at one end, engaging a slot in one of said levers, and resilient and yielding means for maintaining said pin in said slot, said means comprising a spring extending longitudinally of the slotted lever and secured thereto.

1,898,973. GENERATOR EQUIPMENT. RAYMOND P. LANSING, Montclair, N. J., assignor to Eclipse Aviation Corporation, East Orange, N. J., a Corporation of New Jersey. Filed Mar. 3, 1931. Serial No. 519,883. 10 Claims. (Cl. 115—34.)



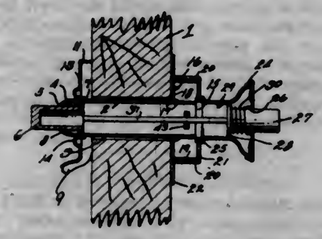
1. In combination with a boat, a generator unit substantially submerged in water adjacent the hull and including a hydraulic motor, and means adapted to support the unit in either of two relatively reversed positions in relation to the hull.

1,898,974. LOCKING MEANS. ROBERT C. LEGAT, New Britain, Conn., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Aug. 6, 1931. Serial No. 555,416. 10 Claims. (Cl. 70—2.)



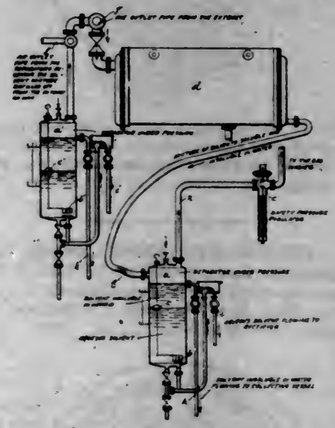
1. In a receptacle having an opening adapted to be closed by separable fastener units brought into engagement by a slider, means for locking the slider when the opening is closed comprising a hood, having a top wall, an end wall and side walls, fixed upon the receptacle independent of the slider, said end wall having a slot therein through which a portion of the slider projects, and means for engaging the portion of the slider projecting through the slot beyond the hood and preventing the retraction of the slider and the consequent disengagement of the fastener units.

1,898,975. DOORLATCH. IVAN T. QUARNSTROM, Detroit, Mich., assignor to Wayne Manufacturing Co., Detroit, Mich., a Corporation of Michigan. Filed Jan. 26, 1931. Serial No. 511,205. 7 Claims. (Cl. 292—170.)



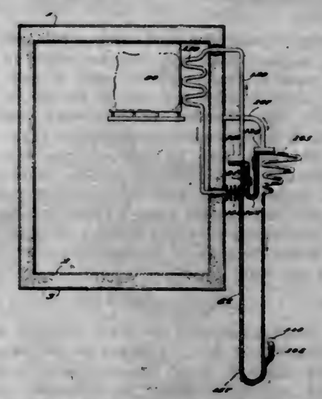
1. A door latch comprising a tube like member, a pair of spring-pressed plungers positioned at opposite ends respectively of the tube member, an actuator element slidable in the tube, said actuator element being unconnected with the plungers and having its respective opposite ends engaged thereby, the actuator element having a V notch in one edge thereof, a bolt extending through the tube like member and provided with an aperture, the end wall of the aperture in the bolt engaging in the V notch in the actuator whereby movement will be imparted to the bolt upon movement of either of the plungers.

1,898,976. EXTRACTION OF MONTAN WAX. ERICH ROECKNER, Halle-on-the-Saale, and FRITZ ZSCHOCH, Unterroblingen, Germany, assignors to A. Riebeck'sche Montanwerke Aktiengesellschaft, Halle-on-the-Saale, Germany. Filed Mar. 13, 1928, Serial No. 261,329, and in Germany Apr. 4, 1927. 2 Claims. (Cl. 196—14.)



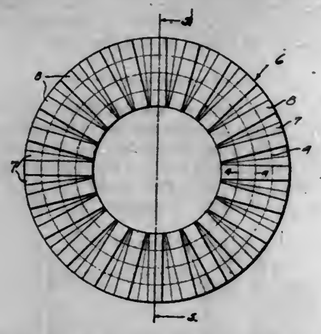
2. In a method of recovering Montan wax by extracting brown coal with solvents in a hot state, the improvement which comprises extracting the brown coal as wet as it comes from the pit in a closed vessel under a total pressure exceeding one, but not exceeding 1.5 atmospheres produced by correspondingly increasing the temperature of the solvent.

1,898,977. VACUUM INSULATION. DANIEL F. COMSTOCK, Boston, Mass., assignor, by mesne assignments, to Stator Refrigeration, Inc., a Corporation of Delaware. Filed Sept. 7, 1928. Serial No. 304,589. 17 Claims. (Cl. 62—1.)



7. The method herein described which comprises maintaining a difference in temperature between two regions separated by a vacuum and maintaining the vacuum by the energy of the difference in temperature between the regions.

1,898,978. GROOVED PLATE FOR CLUTCHES AND BRAKES. GEORGE S. LANE, San Anselmo, Calif. Filed Apr. 21, 1931. Serial No. 531,699. 6 Claims. (Cl. 192—107.)



1. A friction disc having a series of spaced, radial, substantially V shaped depressions on a plane face thereof, the wider end of all of the depressions being at the outer periphery of the disc.

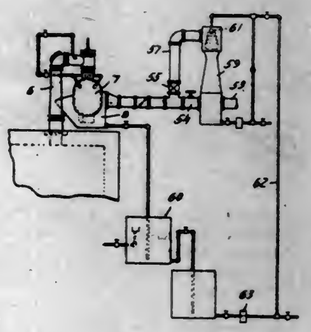
1,898,979. FEEDING MECHANISM. GEORGE F. MATTESON, Rockyhill, Conn., assignor to The Abbott Ball Company, Elmwood, Conn., a Corporation of Connecticut. Filed Dec. 20, 1928. Serial No. 327,376. 12 Claims. (Cl. 51—130.)



1. A feeding mechanism comprising a rotatably mounted feeding member having a chamber with an opening therefrom, pockets located in the wall of said chamber to pick up articles from the bottom thereof, a way extending into said chamber through said opening and supported in a fixed position independent of the feeding member to receive articles as they fall from said pockets, said way having grooves forming paths, a table supported to receive articles from said pockets and guide them into said way, and grooves formed in the surface of said table and registering with the grooves in said way and said table being shiftable to a position out of communication with the way.

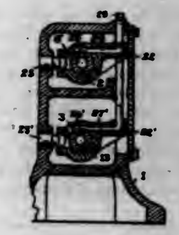
1,898,980. DISTILLATION OF TAR. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 2, 1928. Serial No. 316,866. 7 Claims. (Cl. 202—64.)

1. The method of distilling off volatile constituents from a material of the group consisting of tars, pitches, and oils by contact with hot fresh coal distillation gases which comprises introducing into a restricted passage the coal distillation gases at a temperature substantially above the dew point of the gases for such constituents, injecting into said passage said material in liquid phase and under pressure whereby a zone of reduced pressure is maintained in the passage and thorough and intimate



contact of the gas and liquid is obtained therein, and regulating the volume of liquid introduced with respect to the volume and temperature of the ingoing gases in such a manner that the gases are cooled to a temperature above said dew point.

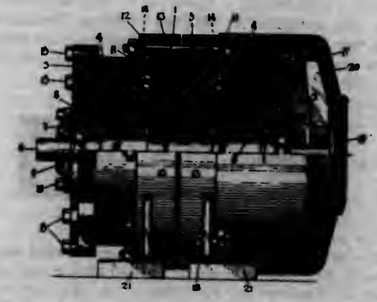
1,898,981. LUBRICATING MECHANISM. JOHN B. PICARD, Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 30, 1931. Serial No. 565,992. 3 Claims. (Cl. 184—6.)



1. A rocking shaft, a passage longitudinally thereof, a lateral port communicating with the passage, a lever pivoted at one end and bearing on the shaft for an area surrounding the port and having a passageway to lead lubricant to the port at all times while the shaft is rocking, and an element to feed lubricant under pressure to the passageway and movable to increase the pressure of the lever on the shaft and thereby tighten the seal of the lever for the said area.

1,898,982. DYNAMO-ELECTRIC MACHINE. HAROLD L. SMITH, Milwaukee, Wis., assignor to The Louis Allis Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 28, 1931. Serial No. 526,054. 12 Claims. (Cl. 172—36.)

2. A dynamo electric machine, comprising a stator provided with a laminated core having its outside exposed to external air and an end ring arranged upon each end thereof to bind its laminations together, a closed end plate arranged upon each end ring and forming therewith and with said core a closed inner casing, a rotor arranged within said stator and having its shaft



bearing in said end plates, an outer casing constituted by a flange formed integral with each of said end rings to provide a passage for external air over said core, and means to cause external air to flow through said outer casing.

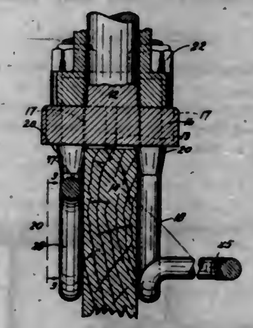
1,898,983. TOWEL CABINET. SETH WHEELER, Jr., Albany, N. Y., assignor to A. P. W. Paper Co., a Corporation of New York. Filed Apr. 11, 1930. Serial No. 443,652. 2 Claims. (Cl. 312—60.)



1. A cabinet for paper towels or the like comprising a vertical box adapted to receive the towels in a stack and having a slot in the bottom through which the towels may be removed individually, two opposite sides of such box having curved portions which are substantially concentric at least one of which extends a substantial distance into the normal box area to receive a part of the thrust of the towels which are above such curved portion, while the other curved portion of longer radius extends outwardly a substantial distance from the normal box area whereby the stack of interfolded towels will fan out at the bend with an increase of pressure in the zone of the curved portion of shorter radius, thereby opening and separating the towels along the curved portion of longer radius.

1,898,984. SHEATHING DRIVER. JOHN C. CURTIS, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 28, 1931. Serial No. 559,875. 8 Claims. (Cl. 61—71.)

1. In combination, an anvil frame adapted to be secured to a sheathing driver, members of looped rod stock having their ends secured to said frame, said members providing a plurality of elements extending substantially parallel in a direction substantially that of the direction of the reciprocation of the anvil, said members being

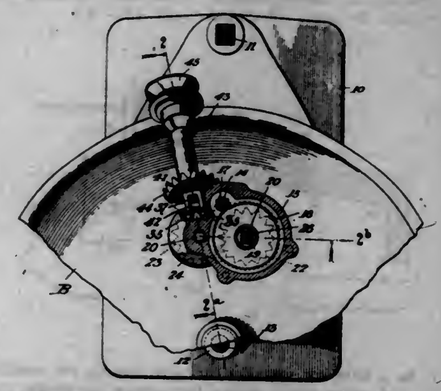


spaced apart to receive the end of the sheathing, an anvil carried in said frame and provided with lateral portions adapted to engage and be guided by the elements of said members.

1,898,985. RUBBER BONDED ASBESTOS AND METHOD OF MAKING. ROBERT M. DAY, Cambridge, Mass., assignor to Dewey and Almy Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed June 10, 1930. Serial No. 460,294. 3 Claims. (Cl. 92—21.)

1. The process of forming articles of rubber bonded asbestos fibers which comprises heating a mutual dispersion of asbestos fibers and colloidal rubber particles in aqueous suspension with a colloid protective without agitation thereof, whereby said rubber is coagulated about said fibers while the relative position of said fibers is maintained substantially unchanged and thereafter removing the aqueous dispersing medium without substantially changing, in one plane at least, the relative position of said fibers and subsequently compacting the so-formed mass to effect the rubber bonding of the asbestos fibers thereof.

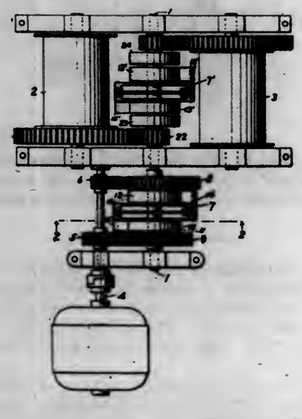
1,898,986. DRIVING ATTACHMENT FOR MIXING BOWLS. PATRICK J. FITZGERALD, Torrington, Conn., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn., a Corporation of Connecticut. Filed July 28, 1931. Serial No. 553,629. 5 Claims. (Cl. 259—84.)



1. A mixer including a revolubly supported bowl, a beating device comprising a fixed member having a horizontal plate, a beater supported by said member and a

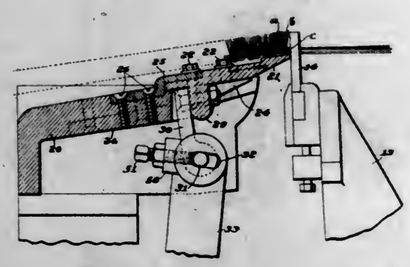
first gear rotated with said beater, spaced upturned ears on said plate, a pivot member supported between said ears, a revoluble shaft mounted on said pivot member, a second gear on said shaft in mesh with said first gear, and a driving member on said shaft resting on the edge of said bowl.

1,898,987. WINDING MACHINE. WILLIAM E. HALE, Fort Washington, Pa., assignor to R. H. Beaumont Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 17, 1931. Serial No. 516,343. 8 Claims. (Cl. 254—185.)



4. In a winding machine the combination of winding drums, a driving member, a reversible motor shaft, two sets of gearing, and a pair of clutches automatically responsive to a reversal of direction of rotation of the motor shaft and of which one is adapted to automatically select and connect either the one or the other gearing and the driving member upon change of direction of rotation of the motor shaft and of which the other is adapted to clutch one and declutch the other of the drums upon change of direction of rotation of the motor shaft.

1,898,988. TUFT PILE FABRIC LOOM. THOMAS J. HOLLAND, Amsterdam, N. Y., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Apr. 8, 1932. Serial No. 604,018. 12 Claims. (Cl. 139—8.)



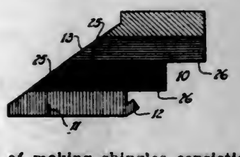
1. In a loom for weaving tuft pile fabrics, the combination of a breast plate, means for moving the breast plate rearwardly to support the loops of the pile forming tufts about the holding weft shot and freeing the breast plate in its rearward position, the lay having movements towards and from the front of the loom, and means carried by the lay for moving the breast plate frontwardly on the beat up.

1,898,989. SHINGLE. NORMAN P. HARSHBERGER, Chicago, Ill., assignor to Bakelite Building Products Company, Inc., New York, N. Y., a Corporation of Delaware. Filed May 11, 1928. Serial No. 277,074. 3 Claims. (Cl. 108—7.)



1. The method of making shingles, comprising the steps of forming continuous longitudinal parallel strips of short sections of contrasting appearance on the surface of a web of shingle material, cutting said web at substantially the junction of said sections to form a plurality of shingles, each having figures thereon of varied appearance from one another and from correspondingly positioned figures of other shingles in said web.

1,898,990. STRIP OF ROOFING MATERIAL. NORMAN P. HARSHBERGER, Chicago, Ill., assignor to Bakelite Building Products Company, Inc., New York, N. Y., a Corporation of Delaware. Filed May 12, 1928. Serial No. 277,157. 13 Claims. (Cl. 108—7.)



1. A method of making shingles consisting in forming on a sheet of shingle material bands of unlike color effects, in forming on one pair of opposite edges of the sheet lugs and slots, and in cutting across said sheets so as to form strip shingles, each having a lug on one end adapted to interlock with a slot on the other end of an adjacent shingle of the parent sheet when assembled on the roof to cause registration of unlike bands with one another.

1,898,991. IGNITER. ALBERT F. COX, Warsaw, Ill. Filed Apr. 11, 1931. Serial No. 529,327. 6 Claims. (Cl. 67—7.1.)



1. A tubular body member having a closed end, the thickness of the material of said body at said end being of a greater dimension than the material at the other end so as to provide an inside taper, a plug treated with a perfume forcibly arranged in said body against said end and held by reason of the taper, a wick and a striker supported by said plug, caps provided for said body, and pyrophoric means carried by one of said caps in a manner whereby a stop is formed in spaced relation at either end of said pyrophoric means.

1,898,992. CHEESE AND MANUFACTURE OF HOLES THEREIN. MIRIAM I. GUEST, Chicago, Ill.; Ward E. Guest, administrator of said Miriam I. Guest, deceased, assignor to W. Bartlett Jones, as trustee, Chicago, Ill. Filed Aug. 27, 1929. Serial No. 388,855. 4 Claims. (Cl. 99—11.)

1. The method of forming holes or "eyes" in reformed cheese which comprises softening the cheese to a plastic stage, and introducing into the plastic cheese a non-gaseous particle containing inert gas in latent form capable of being released into gaseous form when embodied in the plastic cheese.

1,898,993. NONREUSABLE DECALCOMANIA. GEORGE R. MEYERCORD, Chicago, Ill., assignor to The Meyercord Co., a Corporation of Illinois. Filed June 15, 1932. Serial No. 617,314. 6 Claims. (Cl. 41—33.)



6. A decalcomania comprising a carrying sheet provided with a gum coating, a transferable film adhering to said coating, said film consisting of a backing layer embodying the subject or design, and the backing layer being perforated in such a manner that the film will hang together in transferring the same but is weakened to such an extent that it will be visibly marred upon separation thereof from a surface to which it has been transferred.

CARNEGIE LIBRARY OF ATLANTA

Patents Nos. 1,898,994 to 1,899,920

THE OFFICIAL GAZETTE OF THE United States Patent Office

Vol. 427—No. 4 TUESDAY, FEBRUARY 28, 1933 Price—$16 per year

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscriptions, $16.00 per annum, including annual index; $18.25; single numbers, 35 cents each.

PRINTED COPIES OF PATENTS are furnished by the Patent Office at 10 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

CIRCULARS OF GENERAL INFORMATION concerning PATENTS or concerning TRADE-MARKS, PRINTS, and LABELS will be sent without cost on request to the Commissioner of Patents, Washington, D. C.

CONTENTS

	Page
Issue of February 28, 1933	777
Trade-Mark Rules—Amendment (Order No. 3,234)	777
International Convention—Adhesion	777
Interference Notice	777
Notice of Cancellation	777
Applications Under Examination	778
Decisions of the U. S. Courts—	
In re Thompson	779
In re Langmuir	780
Patent Suits	782
Adjudicated Patents	784
Adverse Decisions in Interference	784
Trade-Marks Canceled	784
Trade-Marks Published (190 Applications)	785
Trade-Mark Registrations Granted	812
Labels	820
Prints	820
Reissues	821
Plant Patent	823
Designs	823
Patents Granted	824

February 28, 1933

Trade-Marks	177—No.	301,297 to No.	301,473,	inclusive.
Labels	20—No.	41,785 to No.	41,804,	inclusive.
Prints	6—No.	14,060 to No.	14,065,	inclusive.
Reissues	9—No.	18,747 to No.	18,755,	inclusive.
Plant Patent	1—No.	55		
Designs	56—No.	89,327 to No.	89,382,	inclusive.
Patents	927—No.	1,898,994 to No.	1,899,920,	inclusive.
Total	1,196			

TRADE-MARK RULES—AMENDMENT

Order No. 3,234

U. S. Patent Office, *Washington, Feb. 11, 1933.*

Acting under the provisions of section 487 of the Revised Statutes (U. S. C. Title 35, sec. 11), and with the approval of the Secretary of Commerce, the rules of the Patent Office governing the registration of trade-marks are amended as follows:

Rule 11, add at the end thereof the following paragraphs:

Every attorney prosecuting applications for registration of trade-marks shall submit to the Commissioner of Patents for approval copies of all proposed advertising matter, circulars, letters, cards, etc., intended to solicit trade-mark business, and if it be not disapproved by him and the attorney so notified within 10 days after submission, it may be considered approved.

Any such attorney sending out or using any such matter, a copy of which has not been submitted to the Commissioner of Patents in accordance with this rule, or which has been disapproved by the Commissioner of Patents, shall be subject to suspension or exclusion from practice before the Patent Office, or any division thereof.

THOMAS E. ROBERTSON,
Commissioner.

International Convention—Adhesion

Australia, Territory of Papua, and Territory of New Guinea

This Office has been notified by the State Department of the receipt of a notice from the Swiss Legation that Australia has adhered to the Convention of the Union for the Protection of Industrial Property, as revised at The Hague on November 6, 1925, and has also adhered to that convention for the Territory of Papua and for the New Guinea Territory under mandate, the adherences to take effect February 12, 1933.

THOMAS E. ROBERTSON,
Commissioner of Patents.

Interference Notice

U. S. Patent Office, *Washington, Feb. 8, 1933.*

Harry Eggert, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the applications for patent of Daniel A. Brennan, of 10 South La Salle Street, Chicago, Ill., and Harry Eggert, care of A. G. Schneider, 10 South La Salle Street, Chicago, Ill., and a notice of such declaration sent to said Eggert at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Eggert, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notice of Cancellation

U. S. Patent Office, *Washington, Feb. 7, 1933.*

Motor Car Painting & Trimming Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Simonis Company, 2101 Indiana Avenue, Chicago, Ill., to effect the cancellation of the trade-mark registration of Motor Car Painting & Trimming Co., 1444 Michigan Avenue, Chicago, Ill., No. 179,521, dated February 12, 1924, and the notice of such proceeding sent by registered mail to the said Motor Car Painting & Trimming Co., at the said address, having been returned by the post office as undeliverable, notice is hereby given that unless said Motor Car Painting & Trimming Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business February 11, 1933

(Total number of applications awaiting action, excluding Trade-Mark Division, 56,228; Trade-Mark Division, 978. Oldest new case, Sept. 11, 1932; oldest amended, Sept. 12, 1932. The dates given are 1932 except where † indicates 1933.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting action	Oldest amended application awaiting action	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Sept. 14	Sept. 20	661
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Oct. 12	Oct. 12	933
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Nov. 12	Nov. 17	661
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Oct. 21	Oct. 28	462
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Nov. 12	Nov. 14	476
4936C	6. LEWERS, A. M., Carbon Chemistry	Sept. 19	Sept. 21	1,158
5725	7. JARBOE, C. G., Optics; Photography	Oct. 12	Oct. 12	1,070
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Nov. 15	Nov. 16	622
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Nov. 12	Dec. 1	583
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Oct. 22	Oct. 22	583
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Sept. 12	Oct. 7	619
7701	12. HENRY, C. C., Machine Elements	Sept. 28	Sept. 28	541
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Oct. 22	Oct. 22	804
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Nov. 19	Nov. 18	578
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Oct. 4	Oct. 5	1,378
5612	16. SPENCER, C. J., Telegraphy; Telephony	Nov. 12	Nov. 12	583
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Sept. 19	Sept. 19	1,208
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Nov. 29	Nov. 29	407
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Sept. 15	Sept. 15	1,288
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Dec. 5	Dec. 6	321
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Oct. 11	Oct. 11	928
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Sept. 28	Sept. 28	776
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Sept. 19	Sept. 27	702
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Dec. 12	Dec. 12	481
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Sept. 30	Sept. 30	1,232
5893	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Oct. 19	Oct. 27	537
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Nov. 17	Nov. 17	662
4628	28. BENSON, A. R., Internal-Combustion Engines	Sept. 11	Sept. 12	1,024
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Sept. 22	Sept. 24	501
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	Oct. 14	Nov. 18	652
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Sept. 24	Sept. 26	1,262
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Nov. 14	Nov. 14	686
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Sept. 17	Sept. 23	1,415
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	Sept. 14	Sept. 16	967
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Sept. 21	Sept. 22	874
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Sept. 14	Sept. 14	1,405
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Oct. 14	Oct. 27	725
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Sept. 15	Sept. 15	725
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Sept. 20	Sept. 20	1,004
7880	40. OBERLIN, J. J., Receptacles	Oct. 8	Oct. 8	1,634
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Sept. 26	Sept. 30	674
5882	42. CUTTING, H. O., Electric Signaling	Sept. 12	Sept. 13	1,170
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Sept. 23	Sept. 23	1,213
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Sept. 14	Sept. 15	855
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Nov. 30	Nov. 30	532
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Sept. 25	Sept. 28	612
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Sept. 22	Sept. 24	1,455
5731	48. ROEPKE, O. B., Electricity, General Applications	Oct. 4	Oct. 3	746
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Sept. 15	Sept. 14	1,000
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Sept. 17	Sept. 17	1,305
5628	51. BACKUS, C. D., Radiant Energy	Nov. 1	Nov. 1	927
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Sept. 29	Sept. 29	565
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Dec. 1	Dec. 3	457
5674	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Sept. 30	Sept. 30	945
6887	55. BOWEN, S. T. {Bread, Pastry, and Confection Making; Cutlery / Designs	Nov. 19 / †Jan. 10	Nov. 11 / †Jan. 25	319 / 413
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Oct. 2	Sept. 29	1,015
3625	57. NICOLSON, G. D. G., Cutting and Punching: Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Oct. 11	Oct. 11	579
5605	58. DOWELL, E. F., Abrading; Typewriting	Oct. 1	Oct. 1	650
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Sept. 26	Sept. 26	704
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Sept. 20	Sept. 20	1,159
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Sept. 29	Sept. 29	866
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Oct. 4	Oct. 6	1,248
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Sept. 19	Sept. 19	1,246
4708	64. NASH, P. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Oct. 3	Oct. 1	980
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Sept. 16	Sept. 14	1,346
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND. {Trade-Marks / Labels and Prints	†Jan. 14 / †Jan. 11	†Jan. 30 / †Jan. 28	857 / 121

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Thompson

Nos. 3,003 and 3,004. Decided December 19, 1932

Patentability—Double Patenting.

Claims for an apparatus *Held* unpatentable as covering nothing inventively different from what is claimed in applicant's process patent.

Appeal from the Patent Office. Affirmed.

Messrs. Alexander & Dowell and *Mr. Arthur E. Dowell* for Thompson.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

Garrett, *J.*:

On March 21, 1927, appellant filed in the United States Patent Office an application which, on July 23, 1929, matured into Patent No. 1,721,751, bearing the general title, "Process of treating milk." In said application there were disclosed, but not claimed, two forms of apparatus for use in performing the method for which the patent was granted.

On April 6, 1927, appellant filed two applications on the respective forms of apparatus, plus some other features. A division was required in each application and this resulted in the filing, on September 27, 1927, of the two applications which are at issue in cases Nos. 3,003 and 3,004, respectively, being Serial No. 222,374 and Serial No. 222,375, respectively.

Case No. 3,003, Serial No. 222,374

As first finally acted upon by the Examiner the application in case No. 3,003 presented four claims which were by him rejected "as vague and indefinite, and as not patentable over the prior art." Upon appeal the Board of Appeals, on November 30, 1930, affirmed the rejection upon the "vague and indefinite" ground, but recommended that they might be amended, and if so amended, in a manner "deemed satisfactory to the Examiner," the rejection on said ground might be withdrawn, and also added a second ground of rejection, saying:

All of the claims are rejected as not covering subject-matter patentable over appellant's Patent No. 1,721,751, particularly in view of the patent to Fooks. Since the last ground of rejection is a new one, appellant may elect as to procedure under the provisions of rule 189.

Appellant thereupon cancelled the claims which had been disallowed, and substituted four others, numbered, respectively, 5, 6, 7, and 8. The Examiner rejected these, not for vagueness and indefiniteness, but as presenting the same subject matter as certain of the former claims rejected by the Board, reciting the last ground of the Board's rejection as quoted by us, supra. The Examiner's decision being affirmed by the Board in an opinion rendered January 30, 1931, the instant appeal to this court was taken.

Claims 5 and 6 are quoted as representative:

5. The herein described apparatus for processing milk in cans; comprising means for preheating the milk filled cans gradually to a point below that required for sterilization; means for holding the milk filled cans at a temperature below that required for sterilization but sufficient to increase the viscosity of the milk; means for subjecting the so treated milk filled cans to a temperature sufficient to sterilize their contents and to an exterior pressure above atmospheric; means for cooling the sterilized milk filled cans under an external pressure sufficient to prevent internal pressure injuring the cans; and means for passing such sterilized milk filled cans successively through the said preheating, holding, sterilising and cooling means.

6. In an apparatus as set forth in claim 5, the holding means having a plurality of inlets and a single discharge whereby the time of holding the cans may be varied; and means whereby the cans may be fed from the preheating means into the holding means at any one of the openings therein.

The references are appellant's process patent, already alluded to, and a Patent No. 1,575,199 of March 2, 1926, to Nelson H. Fooks for a "combined cooker and cooler."

In its second decision the Board of Appeals said:

* * * in our opinion there is only one question before us for consideration, that is, whether the appealed claims are of substantially the same scope as corresponding claims of appellant's patent.

In this decision no specific reference to the Fooks' patent was made, but the Examiner had referred to it by quoting from the Board's prior opinion, and the concluding paragraph of the Board's second opinion, reads:

We are of the opinion, therefore, that our holding in the prior decision was proper and the decision of the Examiner is affirmed.

These recitals, we think, establish the Fooks' patent as a part of the record, and as a reference considered by the tribunals of the Patent Office and, therefore, as one to be considered by us.

As we understand the decisions of the Board of Appeals, the Fooks patent is cited with particular reference to the subject matter expressed in claims 6 and 8 relating to the feature of a "plurality of inlets and a single discharge," while the Thompson process patent is held to cover whatever of subject matter there is involved in claims 5 and 7 that might, if not so covered, have been patentable.

Much of appellant's argument is devoted to the contention that since his applications were co-pending, applicant's prior process patent is "not a legal reference" against his apparatus application, and numerous authorities are cited which are claimed to support the argument, such as *In re Lawrence Byck*, 18 C. C. P. A. (Patents) 1208, 48 F.(2d) 665, 410 O. G. 284; *Miller* v. *Eagle Mfg. Co.*, 151 U. S. 186, 66 O. G. 845; *Kaplan* v. *Robertson*, 50 F.(2d) 617, and others.

The purport of the holdings in all those cases, sought to be made here applicable, is expressed, according to appellant's brief, in the Miller case, supra, in the following language:

* * * where the second patent covers matter described in the prior patent, essentially distinct and separable from the invention covered thereby and claims made thereunder its validity may be sustained.

That this principle of law is sound and that it is generally followed by the courts is, we think, beyond dispute, provided always that the claims of the second patent or application show an inventive

advance over the claims already granted in the first patent. The rule announced by the Court of Appeals of the District of Columbia in the case of *In re Isherwood*, 46 App. D. C. 507, 245 O. G. 847, has been referred to and applied by this court in many cases. *In re Fischer*, 19 C. C. P. A. (Patents) 1077, 47 F.(2d) 794, 409 O. G. 563; and cases cited therein. A declaration of the court in the Isherwood case, supra, reads:

The patentability of the present claims may be decided on appellant's patent by the same rules which would be applied to test their anticipation by a patent to another.

While, therefore, appellant's process patent may not be a "legal reference" in the technical sense that a patent timely granted to another would be, the same rule is to be followed, and if appellant has been already granted a process patent which legitimately covers the subject matter of the claims at issue, he is not, under the authorities, entitled to a second patent thereon, even though it be expressed in terms of apparatus claims.

There are many cases in which patents issue upon separate applications for both a process and an apparatus for carrying out the process, but in all such cases, the claims must be for separate and distinct inventions. If all that is inventive be expressed in either the process application or the apparatus application, then a grant of two patents is not proper, since the result would be double patenting. *In re Fischer*, supra.

The sole question, therefore, as to appellant's claims 5 and 7 is whether they present anything inventive over his patent claims. The tribunals of the Patent Office hold that they do not, and the Board of Appeals specifically compares them with claim 3 of the patent, which reads as follows:

3. The herein described method of processing milk in cans; consisting in passing the cans successively through a preheating chamber in which the temperature of their contents is raised to a point below that required for sterilization; then passing said cans through a preheat-holding chamber in which the cans are held at a temperature below that required for sterilization; then passing said cans into and through a sterilising chamber in which the cans are subjected to a temperature sufficient to sterilize their contents and to an exterior pressure above atmospheric; then passing said cans from said sterilising chamber into and through a cooling chamber wherein the cans are cooled under an external pressure sufficient to prevent the internal pressure injuring the cans; and finally discharging the cans from the cooling chamber.

Commenting, the board says:

It is evident that the only difference is that in claim 3 of the patent appellant has set forth a series of steps for doing certain things in succession while in this application the claim merely calls for a series of means for doing the same things in the same successive order. In our opinion there is no substantial difference in the scope of subject-matter covered by the two claims.

We agree with the Board that while there is a difference, there is not a patentable distinction.

An examination of claims 5 and 7 discloses that they are quite broad. They contain repeatedly the words "means for" applied in carrying out the steps of the patent, but do not claim any specific means.

As to the "plurality of inlets and a single discharge" feature of claims 6 and 8, this seems to us to be clearly shown by the Fooks patent in the following recital of its specifications:

It is also an object of the invention to provide an apparatus which will permit the cans to be transferred from the path in the cooking zone to the path in the cooling zone at different points along the first named path to the end that the length of time the cans are in the cooking zone may be varied to suit the substances being processed. In carrying out this feature of the invention a plurality of passages are provided in adjacent sections of the paths, the passages being opened or closed by suitable gates or slides as will more fully appear by reference to the drawings and detailed description thereof.

We find no error in the decision of the Board of Appeals in case No. 3,003.

Case No. 3,004, Serial No. 222,375

As recited at the outset of this opinion two applications for apparatus patents were filed by appellant on September 27, 1927. That involved in Serial No. 222,374 has been disposed of in case No. 3,003, supra. The other, Serial No. 222,375, is involved in case No. 3,004, and relates to the particular form of apparatus shown in Figure 2, disclosed but not claimed in appellant's original application of March 21, 1927, which eventuated in the process patent, No. 1,721,751, of July 23, 1929.

Serial No. 222,375 embraces four claims, all of which were rejected by the Examiner and the Board of Appeals. Claims 10 and 11 are quoted as typical:

10. The herein described apparatus for processing milk in cans; comprising means including a plurality of successive compartments for preheating the milk filled cans gradually to a point below that required for sterilization; means for holding the milk filled cans at a substantially uniform temperature below that required for sterilization but sufficient to increase the viscosity of the milk; means for subjecting the so treated milk filled cans to a temperature sufficient to sterilize their contents and to an exterior pressure above atmospheric; means for cooling the sterilized milk filled cans under an external pressure sufficient to prevent the internal pressure injuring the cans; and means for passing such sterilized milk filled cans successively through the said preheating compartments and the holding, sterilizing, and cooling means.

11. In an apparatus as set forth in claim 10, the holding means having a single inlet and a plurality of outlets at any one of which outlets the cans may be discharged.

The references cited are the same as those cited in case No. 3,003, supra; the case followed much the same course in the Patent Office as did that case, and the rejections were based upon the same grounds in both cases.

We agree with the conclusions in the latter, as well as in the former case, and there appears to be no necessity for repeating the reasons already given.

The decisions of the Board of Appeals in both cases No. 3,003 and No. 3,004 are affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE LANGMUIR

No. 3,867. Decided December 19, 1932.

1. CLAIMS—UNDUE BREADTH.

"The principle that an inventor is entitled to protection against others who make use of his invention with means different from his own is, generally speaking, sound and is supported by the authorities cited, but this principle, like practically all other general rules of patent law, has limitations, * * * and that rule does not apply in chemical cases and cases where the properties of materials are concerned."

2. SAME—SAME—HEATING APPARATUS AND METHOD OF FUSING METALS.

Certain claims for a heating apparatus and certain claims for a method of fusing metals *Held* unpatentable as being broader than applicant's invention.

3. PATENTABILITY—SAME.

Certain claims for a heating apparatus and certain claims for a method of fusing metals *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Charles E. Tullar and *Mr. Fairfax Bayard* for Langmuir.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

Sixteen claims of appellant's application for patent upon claimed "Improvements in heating process and apparatus" were rejected by the Examiner whose decision was affirmed by the Board of Appeals of the United States Patent Office. From the decision of the latter the instant appeal was taken.

Seven claims stand allowed and the appeal as to claim No. 6 is "no longer urged."

Of the apparatus claims at issue, No. 10 is quoted as representative:

10. A heating apparatus comprising the combination of means for thermally dissociating hydrogen and means for directing a blast of molecular hydrogen across said means into thermal relation with a medium to be heated under such conditions as to cause recombination of the atomic hydrogen generated by said dissociating means into molecular hydrogen with the evolution of heat.

Claim No. 17 is representative of the process claims:

17. The method of fusing metals which comprises maintaining an arc, supplying a non-oxydising gaseous medium comprising hydrogen to said arc to produce a flame containing atomic hydrogen and subjecting the metals to be used to the action of said flame.

It is stated that the invention has been extensively used for electric welding. By suitably raising the temperature, it is claimed that:

* * * a substantial part of the ordinary hydrogen, called molecular hydrogen, which is supplied to the arc, is changed at the arc into an entirely different kind or form of hydrogen known as atomic hydrogen.

The following are the references cited in the brief of the Solicitor for the Patent Office as being relied upon: Drösse, 641,767, January 23, 1900; Whitney, 902,354, October 27, 1908; Tommasini, 1,048,603, December 31, 1912; DeRouvre, 1,529,943, March 17, 1925; Doan, 1,535,365, April 28, 1925.

In the first decision of the Board of Appeals reference was made to a patent which, at the time of said decision, stood allowed to one Robert Palmer and which was assigned to the assignee of applicant in the instant case. This Palmer patent was, in that decision, made a ground of rejection of claims 20, 24, and 26. Such preceedings were had, however, as that, in a decision later rendered, the Board modified its former decision as to the rejection upon Palmer, and we are not here concerned therewith.

All the apparatus claims on appeal, to wit, Nos. 10, 14, 24, and 26, were rejected upon Drösse supplemented by Tommasini, and three of them were also held to be too broad, as hereinafter more particularly stated.

In the Drösse patent an electric arc is formed between carbons or electrodes, a blast pipe with a nozzle being provided for discharging air or gas against the arc, which gas, according to the Drösse specifications, may include hydrogen. De Rouvre, Whitney and Doan each discloses refractory metal electrodes.

The Tommasini patent relates to a hydro-electric smelting furnace in which the hearth thereof communicates with the crucible or reheater, and the heating furnace. The arc is formed between a fixed electrode and a movable electrode situated in the heating furnace. A tube is connected to a pipe for supplying hydrogen gas, which, according to the specification,

should be superheated, the prefix "super" serving to indicate that the hydrogen gas is heated above the melting point of the metal used in the smelting operation * * *.

Appellant states that there is no suggestion in Drösse that the blast gas hydrogen should be changed from molecular to atomic hydrogen; that there is "in fact no suggestion that this gas shall be depended upon to take up heat from the arc and deliver it to the metal"; that the reasons given in Drösse for its use "are of a different character"; that "so far as appears, the metal [in Drösse] is to be placed so close to the arc as to receive all the necessary heat directly from the arc," and adds:

Nor is there anything in the Tommasini patent to suggest that such devices as that of the Drösse patent should be changed in any way whatever, or used in any other way than that in which they had previously been used, i. e. with the arc applying its heat directly to the weld.

It is further argued that the Drösse patent does not disclose the apparatus defined in appellant's apparatus claims, and that Tommasini does not "teach that the Drösse device should be so constructed as to contain any such means."

The rejection of the process claims was based principally upon Tommasini, it being also held that certain of these (Nos. 16, 18, and 20) as well as three of the apparatus claims (Nos. 14, 24, and 26) are broader than appellant's invention, in that the claims are not limited to hydrogen as the gaseous medium while there is no disclosure in the specification of any other gas or medium than hydrogen. The Board also held as to these claims 14, 16, 18, 20, 24, and 26, that:

It may well be that some of the gaseous mediums contemplated by Drösse would pass through this dissociating action.

Appellant insists that the claims are not subject to rejection "merely because they do not restrict the invention to the use of hydrogen and thereby exclude other gases which might be similarly employed," and cites numerous authorities alleged to support his contention that:

Nothing is better settled in the law of patents than that an inventor is entitled to protection against others who make use of his invention with other specific means than those which he disclosed in his patent, whether or not these were known when his patent was granted.

As to the rejection of all the process claims, now at issue, upon the Tommasini patent, appellant contends that said patent does not disclose the process, and that the apparatus patent of Tommasini is incapable of carrying out the process of appellant. The reasons for these contentions are given in detail.

An affidavit of Dr. Langmuir, who is well known as an eminent scientist, was filed following an early decision of the Examiner in support of the contentions above recited. The Examiner held himself unauthorized to consider the affidavit, citing rule

76 of the Patent Office. The Board of Appeals, however, did consider it, saying:

We * * * fully recognise him [Dr. Langmuir] as an authority upon matters of this kind.

Our conclusions will be stated without attempting any elaborate analysis of the argument of appellant, or of the authorities cited in his quite comprehensive brief.

We are clearly of the opinion that the rejection of claims 14, 16, 18, 20, 24, and 26, upon the ground that they are broader than the disclosure of the specification, is correct upon both reason and the weight of authority. The particular point at issue is that relating to the change of a particular chemical, to wit, hydrogen, from a molecular state or form to an atomic state of form. The specification discloses no other chemical than hydrogen.

[1] The principle that an inventor is entitled to protection against others who make use of his invention with means different from his own is, generally speaking, sound and is supported by the authorities cited, but this principle, like practically all other general rules of patent law, has limitations, and the cases of *In re Dosselman*, 37 App. D. C. 211, 167 O. G. 983, *Union Switch & Signal Co.* v. *Kodel Electric & Mnfg. Co.*, 55 F.(2d) 173, and *In re Marshall*, 19 C. C. P. A. (Patents) 832, 54 F.(2d) 421, 416 O. G. 538, with their respective citations, support the contention of the Solicitor for the Patent Office that the rule "does not apply in chemical cases and cases where the properties of materials are concerned."

In the Dosselman case, supra, the specification disclosed only one ketone, to wit, acetone. It was held that claims broad enough to cover other ketones were not allowable in that application.

In the Marshall case, supra, this court held that where the disclosure of the specification was limited to a specific element, viz., "steel of at least 0.5 per centum carbon," and did not disclose other "metals claimed to have the general physical characteristics of steel of at least 0.5 per cent carbon," a claim for the latter was properly rejected by the Patent Office on account of its breadth.

The foregoing ground of rejection applies to apparatus claims 14, 24, and 26 which are also, along with apparatus claim No. 10, rejected upon Drösse and Tommasini.

Taking claim No. 10, appellant, in his brief, points out two elements claimed to be lacking in the references, to wit:

means for thermally dissociating hydrogen

and

means for directing a blast of molecular hydrogen across said means into thermal relation with a medium to be heated under such conditions as to cause recombination of the atomic hydrogen generated by said dissociating means into molecular hydrogen with the evolution of heat.

However, the Examiner points out that the claims are "drawn to structure" and that in the structure of Drösse there are certain features which "will produce" the function of the claims with no modification of "the structure or its mode of use." The Drösse structure is specifically in the welding art.

We are not convinced that there was error in the Board's affirmation of the Examiner's decision upon this ground.

[2] As to the process claims. It has been heretofore stated that the rejections of Nos. 16, 18, and 20 were based both upon the reference Tommasini, and upon their breadth. As in the case of the apparatus claims, we feel the rejection based upon breadth is clearly correct. The reasons are the same in both instances and the same authorities are applicable. The claims are for more than the specification discloses.

[3] Also appellant fails to convince us that there was error in the rejections based alone upon Tommasini.

The affidavit has been carefully examined by us, and measured by what the experts of the Patent Office have held after they had weighed it fully. The claim as to the inoperativeness of Tommasini may be well founded as to the complete result which is sought, but we are unable to escape the force of the Board's reasoning as to the production of atomic hydrogen being inherent in Tommasini's process when the superheating there taught takes place. The process claims are for "the method of heating," or "the method of heating an object," as described.

If by reason of the arrangement of the Tommasini structure parts of it might be melted away when the superheating takes place, this fact would not negative a showing that Tommasini does disclose a "method of heating an object" which, in its nature, it seems to us, anticipates appellant's method.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,089,405, W. S. Ferguson, Reinforced concrete dock or pier, D. C., W. D. N. Y., Doc. 506, *Dock & Terminal Engineering Co. et al.* v. *Saskatchewan Pool Elevators, Ltd., et al.* Dismissed Dec. 27, 1932.

1,125,476, G. Claude, System of illuminating by luminescent tubes, D. C., W. D. Wash., N. Div., Doc. 882, *Claude Neon Electrical Products, Inc., et al.* v. *Eath Cigar Co. et al.* Dismissed with prejudice Dec. 22, 1932. Same, D. C., W. D. Wash., S. Div., Doc. E 364, *Claude Neon Electrical Products, Inc.*, v. *C. Eckstein (Eckstein & Sharpe Co.)*. Patent held infringed Dec. 27, 1932. Doc. E 448, Claude *Neon Electrical Products, Inc., et al.* v. *Eckstein Neon Displays, Inc.* Decree as above. Doc. E 469, *Claude Neon Electrical Products, Inc., et al.* v. *Caveness & Caveness (New York Dept. Store)*. Dismissed with prejudice Dec. 23, 1932. Doc. E 470, *Claude Neon Electrical Products, Inc., et al.* v. *K. M. O., Inc., et al.* Decree as above. Same, D. C., S. D. Calif., S. Div., Doc. A–7–H, *Claude Neon Electrical Products, Inc.*, v. *A. W. Harper et al. (San Diego Electric Sign Co.)*. Dismissed Dec. 29, 1932. Doc. E U–77–H, *Claude Neon Electrical Products, Inc.*, v. *F. K. Humphreys et al. (Neon-Glo-Lite Co.)*. Decree for plaintiff Jan. 4, 1933. Doc. E U-79-H, *Claude Neon Electrical Products Co., Inc.*, v. *Western Neon Light Co. et al.* Decree as above. Doc. E U-81-H, *Claude Neon Electrical Products, Inc.*, v. *L. A. Galt (Galt Neon Light Co.)*. Decree as above.

1,131,460. (See 1,276,484.)

1,171,982, L. Rosenman, Garment fastener holder, filed Nov. 29, 1932, D. C., E. D. Pa., Doc. 7401, *Yale Hook & Eye Co.* v. *De Long Hook & Eye Co.*

1,203,553. (See 1,276,484.)

1,231,764, F. Lowenstein, Telephone relay, filed Dec. 27, 1932, D. C. Minn., 4th Div., Doc. 2598, *Western Electric Co., Inc., et al.* v. *Ultraphone Sound System, Inc., et al.*

1,276,484, N. E. Brown, Machine for use in making metal bound packages; 1,371,595, O. M. Babcock, Crate making machine; 1,453,446, B. J. Davidson, Wire joining tool; 1,453,447, same, Wire joining method; Re. 14,670 (of 1,131,460), S. F. Bauwens, Box blank machine; 1,313,854, 1,313,855, 1,408,336, same, Wire bound box machine; 1,469,711, same, Wire joining tool; 1,410,422, 1,539,922, 1,406,105, 1,595,033, 1,669,383, 1,738,806, O. C. Thompson, Machine for use in making box parts or boxes; 1,601,225, A. K. Smith, same; 1,365,471, C. Eikler, same; 1,461,014, D. A. Landers, same; 1,332,728, 1,371,487, 1,425,774, R. G. Inwood, same; 1,203,553, C. H. Bombardie, Staple forming and feeding mechanism; 1,371,598, same, Box making machine; 1,371,599, same, Wirebound box machine; 1,485,953, same, Machine for use in making boxes; 1,454,518, 1,457,529, H. J. Koch, Wirebound box machine; 1,454,517, same, Method of making wirebound boxes; 1,432,019, E. Emerson, Machine for use in making boxes, filed Dec. 17, 1932, D. C. N. J., Doc. E 4548, *Wirebounds Patents Co.* v. *4-One Box Machine Makers et al.*

1,277,431, P. R. Kuehnrich, Steel, D. C., E. D. Wis. (Milwaukee), Doc. 2889, *Darwin & Milner, Inc.*, v. *Kintie Corp. et al.* Dismissed for want of equity Dec. 30, 1932. Same, C. C. A., 10th Cir., Doc. 647, *The Stearns-Roger Mfg. Co.* v. *J. P. Ruth, jr.* Decree affirmed Dec. 19, 1932.

1,313,854. (See 1,276,484.) 1,313,855. (See 1,276,484.)

1,332,728. (See 1,276,484.)

1,353,485, A. McGall, Safety razor blade sharpener, filed Sept. 30, 1932, D. C., E. D. Pa., Doc. 7321, *Ace Hardware Mfg. Corp.* v. *S. S. Kresge Co.*

1,365,471. (See 1,276,484.) 1,371,487. (See 1,276,484.)

1,371,595. (See 1,276,484.)

1,371,598. (See 1,276,484.) 1,371,599. (See 1,276,484.)

1,406,105. (See 1,276,484.) 1,408,336. (See 1,276,484.)

1,410,422. (See 1,276,484.) 1,425,774. (See 1,276,484.)

1,432,019. (See 1,276,484.) 1,453,446. (See 1,276,484.)

1,453,447. (See 1,276,484.) 1,454,517. (See 1,276,484.)

1,454,518. (See 1,276,484.) 1,457,529. (See 1,276,484.)

1,461,014. (See 1,276,484.) 1,469,711. (See 1,276,484.)

1,483,087, F. Zallinger, Means of manufacturing space covering structures such as roofs, frame walls, etc., filed Dec. 30, 1932, D. C., E. D. Wis. (Milwaukee), Doc. 3903, *Lamella Roof Syndicate, Inc., et al.* v. *M. Hanish, sr., et al.*

1,485,953. (See 1,276,484.)

1,511,114, R. R. Downie, Excavating machine, C. C. A., 6th Cir., Doc. 6065, *General Excavator Co.* v. *Keystone Driller Co.* Doc. 6066, *Keystone Driller Co.* v. *General Excavator Co.* Doc. 6067, *The Osgood Co.* v. *Keystone Driller Co.* Doc. 6068, *Keystone Driller Co.* v. *The Osgood Co.* Decree reversed Dec. 6, 1932, in each case.

1,526,982, E. W. Hill, Stencil sheet, filed Aug. 22, 1932, D. C., E. D. Pa., Doc. 7247, *A. B. Dick Co.* v. *S. B. Goldsmith.* Same, filed Nov. 9, 1932, D. C., E. D. Pa. Doc. 7365, *A. B. Dick Co.* v. *Safe Guard Corp.*

1,537,063, B. Briody, Railway joint, filed Dec. 30, 1932, D. C., Ill. (Springfield), Doc. E 1862, *Truscon Steel Co.* v. *Laclede Steel Co.*

1,539,922. (See 1,276,484.)

1,594,356, A. B. Davis, Inking roll and method of and apparatus for renewing surface of same, filed Dec. 29, 1932, D. C., W. D. Mich., S. Div., Doc. E 2610, *Ideal Roller & Mfg. Co.* v. *Sutherland Paper Co.*

1,595,033. (See 1,276,484.) 1,601,225. (See 1,276,484.)

1,629,870, P. J. Horgan, Press, appeal filed Dec. 26, 1932, C. C. A., 2d Cir., Doc. 12491, *United Shoe Machinery Corp.* v. *E. H. Ferree Co. et al.*

1,648,808, L. A. Hazeltine, Wave signaling system, filed Dec. 23, 1932, D. C., S. D. N. Y., Doc. E 73/251, *Hazeltine Corp.* v. *Simplex Radio Co.* Doc. E 73/145, *Hazeltine Corp.* v. *Emerson Radio & Phonograph Corp.* Consent order of discontinuance (notice Dec. 29, 1932). Same, filed Dec. 10, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y–76–H, *Hazeltine Corp.* v. *Trans-Continental Radio, Inc., et al.* Same, D. C., S. D. N. Y., Doc. E 6726, *Hazeltine Corp.* v. *Michaels Bros., Inc.* Consent decree for plaintiff Jan. 3, 1933.

1,658,323, L. Blackmore, Refrigerator control, D. C., S. D. Iowa. (Des Moines), Doc. E 4461, *Frigidaire Corp. et al.* v. *S. Davidson & Bros., Inc.* Dismissed Dec. 28, 1932.

1,667,680, A. Sammartino, Ring, D. C., R. I., Doc. 364, *A. Sammartino et al.* v. *P. Sammartino et al.* Dismissed without prejudice Nov. 14, 1932.

1,669,383. (See 1,276,484.)

1,673,177, W. J. Besler, Brake mechanism for motor vehicles, filed Dec. 22, 1932, D. C., S. D. N. Y., Doc. E 73/235, *Lathan Co., Inc., et al.* v. *Bragg-Kliesrath Corp.*

1,687,510, M. Pipkin, Electric lamp bulb, D. C., S. D. Calif. (Los Angeles), Doc. E Y–106–M, *General Electric Co.* v. *Young's Market Co., Inc.* Consent decree for injunction Dec. 31, 1932.

1,694,205, R. N. Chipman, Weed killer and method of killing weeds, C. C. A., 3d Cir., Doc. 4905, *Chipman Chemical Engineering Co.* v. *Reade Mfg. Co.* Decree affirmed Dec. 20, 1932.

1,718,025, R. Bishinger, Hair curling appliance, D. C., N. D. Ohio, E. Div., Doc. E 3370, *R. Bishinger et al.* v. *Naivette, Inc.* Dismissed Dec. 30, 1932.

1,736,533, Irwin & Bekius, End extension table, filed Dec. 30, 1932, D. C., W. D. Mich., S. Div., Doc. E 26611, *R. W. Irwin Co.* v. *Luce Furniture Shops.*

1,738,806. (See 1,276,484.)

1,741,118, Rosenfeld & McCabe, Sign, and method of manufacturing same, C. C. A., 6th Cir., Doc. 6009, *Vacuum Oil Co.* v. *The Grabler Mfg. Co.* Claim 1 held not infringed, claims 7 and 8 held invalid Dec. 6, 1932.

1,752,331, F. C. Fantz, Return bend, filed Dec. 9, 1932, D. C., E. D. Pa., Doc. 7441, *Stockham Pipe & Fittings Co.* v. *Sinclair Refining Co.* Doc. 7383, *Stockham Pipe & Fittings Co. et al.* v. *Consolidated Oil Corp.* Bill withdrawn Dec. 13, 1932. Same, filed Dec. 28, 1932, D. C., E. D. Ill. (East St. Louis), Doc. 4596, *Stockham Pipe & Fittings Co. et al.* v. *J. P. Devine Mfg. Co., Inc.* Same, filed Dec. 16, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y–87–C, *Stockham Pipe & Fittings Co. et al.* v. *B. A. Key Co.*

1,757,758, J. R. Junkin, Running gear, filed Oct. 28, 1931, D. C., S. D. Calif. (Los Angeles), Doc. V–26–C, *Sie Wheel Corp.* v. *Fager Hydraulic Hoist & Body Co.*

1,763,768, A. H. Fager, Vehicle running gear, D. C., S. D. Calif. (Los Angeles), Doc. E U–65–M, *Fager Hydraulic Hoist & Body Co.* v. *T. Weber (Weber Trailer & Mfg. Co.)*. Dismissed for want of prosecution Dec. 26, 1932. Doc. E U–67–J, *Fager Hydraulic Hoist & Body Co.* v. *E. E. Clayton (New Comer Trailer Mfg. Co.)*. Decree as above.

1,778,196, W. S. Nutter, Pile fabric and method of making same, D. C., E. D. Pa., Doc. 6579, *Sanford Mills* v. *Collins & Aikman Corp.* Consent decree for plaintiff Dec. 22, 1932.

1,803,875, W. F. Stoody, et al., Method of facing tools and resulting product, filed Dec. 29, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y–101–J, *Stoody Co.* v. *Mills Alloys, Inc., et al.*

1,808,967, S. Plumley, Cutting torch, filed Dec. 30, 1932, D. C., E. D. N. Y., Doc. E 6748, *Smith Welding Equipment Corp. et al.* v. *C. H. McKinney.*

1,830,768, I. M. Rod, Art of making garments, filed Nov. 30, 1932, D. C., E. D. Pa., Doc. 7403, *Rokap Corp.* v. *M. Steinberg Co., Inc., et al.*

1,865,037, A. Novick, Method of making window envelopes, filed Nov. 17, 1932, D. C., E. D. Pa., Doc. 7385, *Continental Paper & Bag Corp. et al.* v. *T. M. Royal & Co.*

1,872,456, W. W. Kelly, Process of preparing and distributing nuts, filed Dec. 23, 1932, D. C., E. D. N. Y., Doc. E 6742, *The Nut Products Co.* v. *The General Nut Co. et al.*

1,881,324, H. E. Metcalf, Signal reproducer, filed Dec. 22, 1932, D. C., N. D. Ohio, W. Div., Doc. E 1318, *The Magnavox Co.* v. *The Simplex Radio Co.* Same, filed Dec. 23, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y-98-J, *The Magnavox Co.* v. *Jackson-Bell Co., Ltd., et al.*

Re. 14,670. (See 1,276,484.)

Des. 88,464, C. R. Hellman, Textile fabric, filed Dec. 29, 1932, D. C., S. D. N. Y., Doc. E 73/309, *W. Willheim Co., Inc.* v. *Willrose Garment Co., Inc., et al.* Doc. E 77/308, *W. Willheim Co., Inc.*, v. *S. Klein.*

Des. 88,652, C. R. Hellman, Textile fabric, filed Dec. 29, 1932, D. C., S. D. N. Y., Doc. E 73/306, *W. Willheim Co., Inc.*, v. *Kirshbaum Silks, Inc., et al.* Doc E 73/307, *W. Willheim & Co., Inc.*, v. *J. Rosenthal, Inc.*

Adjudicated Patents

(D. C. N. J.) Horni patent, No. 1,728,762, for traffic signal, claim 3 *Held* invalid. *Horni* v. *Mayor and Alderman of Jersey City, N. J.*, 1 F. Supp. 991.

(D. C. N. J.) Bester patent, No. 1,780,516, for locomotive power plant, *Held* invalid. *Industrial Ry. & Locomotive Works* v. *Cagney Bros.*, 1 F. Supp. 970.

(D. C. N. J.) Horni reissue patent, No. 17,642, for traffic signal, claim 3 *Held* invalid. *Horni* v. *Mayor and Alderman of Jersey City, N. J.*, 1 F. Supp. 991.

(D. C. N. J.) Horni design patent, No. 81,694, for traffic signal, *Held* invalid. *Id.*

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,774,137, John Good and E. O. Seaver, Oil burner, decided January 28, 1933, claims 3 and 25.

Pat. 1,789,247, W. J. Miller, Release spear, decided January 27, 1933, claim 7.

Pat. 1,813,459, W. J. Miller, Rotating spear, decided January 27, 1933, claims 1, 2, 3, and 8.

Pat. 1,822,645, G. G. Crane, Remote pressure control system for gas plants, decided January 31, 1933, claims 3 and 4.

Pat. 1,847,783, E. J. Pieper, Resinous products and process of making, decided February 2, 1933, claims 4, 7, and 11.

Pat. 1,862,850, Hans Fritschi, Grinding machinery, decided February 1, 1933, claims 14, 15, and 16.

Trade-Marks Canceled

136,652. Lubricating oils and greases. Sterns, Limited, London, England. Registered November 2, 1920. Canceled February 3, 1933.

164,513. Lubricating preparations. Sterns, Limited, London, England. Registered February 20, 1923. Canceled February 3, 1933.

218,686. Fish food and bird food. Heger Products Company, St. Paul, Minn. Registered September 28, 1926. Canceled February 3, 1933.

251,511. Fish, bird, cat, and dog foods. The Heger Products Company, St. Paul, Minn. Registered January 8, 1929. Canceled February 3, 1933.

257,450. Certain named articles of clothing. Stern & Stern & Co., M. B. H., Stuttgart, Germany, assignor to "Alrowa" Deutsche Strickerei Aktiengesellschaft, Chemnitz, Germany. Registered June 11, 1929. Canceled February 3, 1933.

262,064. Chemical product for cleaning and flushing radiators and motor blocks. Hoffman Chemical Company, Fort Wayne, Ind. Registered September 24, 1929. Canceled February 3, 1933.

282,925. Ham. Millar Brothers & Company, Philadelphia, Pa. Registered May 5, 1931. Canceled February 3, 1933.

294,735. Talcum powder. McKesson & Robbins, Incorporated, Bridgeport and Fairfield, Conn. Registered June 7, 1932. Canceled February 3, 1933.

296,575. Pencils of all kinds. Koh-I-Noor Bleistiftfabrik L. and C. Hardtmuth, Budweis, Czechoslovakia. Registered August 9, 1932. Canceled February 3, 1933.

TRADE-MARKS

OFFICIAL GAZETTE, FEBRUARY 28, 1933

[VOL. 427. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 332,007. HERCULES POWDER COMPANY, Wilmington, Del. Filed Nov. 9, 1932.

VINSOL

For Resin.
Claims use since Oct. 31, 1932.

Ser. No. 333,996. THE EAGLE-PICHER LEAD COMPANY, Cincinnati, Ohio. Filed Jan. 14, 1933.

EAGLE

For Slag Wool.
Claims use since Feb. 27, 1930.

Ser. No. 333,998. THE EAGLE-PICHER LEAD COMPANY, Cincinnati, Ohio. Filed Jan. 14, 1933.

"66"

For Slag Wool.
Claims use since Feb. 27, 1930.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 321,607. NOCONA LEATHER GOODS CO., Nocona, Tex. Filed Nov. 30, 1931.

NOCONA

For Leather Goods—Namely, Handbags, Purses, Billfolds, Key Cases, and Letter Cases.
Claims use since Oct. 16, 1931.

Ser. No. 333,590. THE HARLIC BAG COMPANY, South Norwalk, Conn. Filed Jan. 3, 1933.

Clocalf

For Ladies' Hand Bags.
Claims use since July 25, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 332,282. JOHN D. LEE, Denver Colo. Filed Nov. 17, 1932.



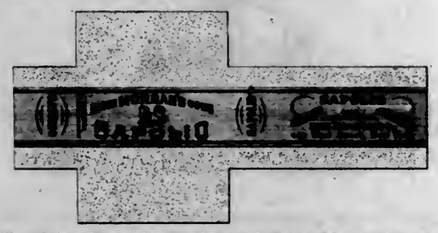
For Washing Powders.
Claims use since July, 1928.

Ser. No. 332,883. BLESANT LABORATORIES, INC., New York, N. Y. Filed Dec. 7, 1932.

dirtoway

For Cleaning Compounds for Painted, Varnished, or Lacquered Surface and for Rubber, Tile, Linoleum, and the Like.
Claims use since Nov. 7, 1932.

Ser. No. 332,850. ENOCH MORGAN'S SONS COMPANY, New York, N. Y. Filed Dec. 7, 1932.



No claim is made to the exclusive use of the words "Marcas de Fabrica Registradas", "Net Weight 10 Oz.", "For Cleaning and Polishing", "Sole Manufacturers", "439 West Street, New York", "Made in U. S. A.", apart from the mark as shown. No claim is made to the representation of a label or wrapper per se. The shading on the drawing indicates the color blue. The stippled portion of the drawing indicates the color silver. The solid blank on the drawing indicates the color gold.
For Cleansing, Scouring, and Polishing Compound.
Claims use since Nov. 18, 1912.

Ser. No. 333,094. WILKEY LABORATORIES, INC., doing business as Dressene Laboratories, Chicago, Ill. Filed Dec. 14, 1932.

Dressene

For Shoe Cleaner, Fabric Cleaning Compound, Shoe Polish, and Polishing and Cleaning Dressings for Fabric and Leather Goods.
Claims use since Nov. 15, 1932.

Ser. No. 333,246. EDWARD A. LA FOUNTAIN, doing business as La Fontaine, Ltd., Glendale, Calif. Filed Dec. 20, 1932.



The representation of the girl's head included in the mark is fanciful.
For Shampoos.
Claims use since Dec. 26, 1929.

Ser. No. 333,338. SHINE-SAC CORPORATION, Chicago, Ill. Filed Dec. 23, 1932.

SHINE SAC
QUICK AS A FLASH

All the wording appearing on the drawing is disclaimed apart from the other features of the mark as shown.
For Chemically Treated Polishing Cloths and Bags.
Claims use since October, 1932.

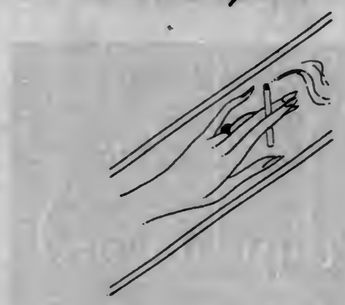
Ser. No. 333,574. THE BLESK CORPORATION, New York, N. Y. Filed Jan. 3, 1933.



No claim is made to the representation of the goods and to the exclusive use of the wording appearing on the drawing except to the word "Blesk". The representation of the woman appearing in the drawing is merely fanciful. The drawing is lined to represent blue color behind the woman figure, yellow color background at top and bottom and red color letters on the yellow background.
For Abrasive Soap, Abrasive Soap Powder, and Steel Wool.
Claims use since Aug. 4, 1932.

Ser. No. 333,728. DITBRO RESEARCH LABORATORIES, INC., New York, N. Y. Filed Jan. 7, 1933.

KUMSOF



For Cream Hand Soap.
Claims use since Dec. 15, 1932.

Ser. No. 333,999. ADA BALDWIN, Philadelphia, Pa. Filed Jan. 17, 1933.

"Turkish-Bath"

For Silver Polish.
Claims use since November, 1931.

Ser. No. 334,145. DEFIANCE SOAP CO., Los Angeles, Calif. Filed Jan. 20, 1933.

LADY FINGER

For Soap Flakes.
Claims use since June 6, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 315,881. DAD'S SALVE COMPANY, Atchison, Kans. Filed June 15, 1931.

SALVE



The portrait is that of Henry J. Lentz, deceased. No claim is made to the word "Salve" apart from the mark as shown on the drawing.
For Preparation in the Form of a Salve for the Treatment of Boils, Infections, Irritations, Sunburn, Cold Sores, Burns, Scalds, Insect Bites, Corns, Bunions, Lacerations, Ulcerations, Bruises, Callouses, Proud Flesh, Prickly Heat, Diaper Rash, Water Blisters, and Chafing.
Claims use since Jan. 1, 1930.

Ser. No. 320,609. SOCIETE WORTH, Paris, France. Filed Oct. 29, 1931.



The representation of the container appearing on the drawing is disclaimed apart from the mark as shown.
For Perfume.
Claims use since June 30, 1931.

Ser. No. 322,794. L. HEUMANN & COMPANY, INC., New York, N. Y. Filed Jan. 7, 1932.

Rovale

For Herbs and Mixtures of Herbs, Extracts, Compounds, Preparations, Tablets, Pills, Designed for Use as Laxa-

tives, for Treating Bilious Disorders, Headaches, Coughs, Colds, Catarrhal-Jaundice; for Use as Blood and Nerve Tonics, for the Treatment of General Disorders of the Stomach, Colic, Cramps in the Stomach, Costiveness, Dyspepsia, Dropsy, Sour Stomach, Toothache, Earache; Medicated Plasters, Medicinal Liniments, Medicinal Ointments, and Preparations Designed for the Treatment of Superficial Wounds, Sores, Cuts, Burns, Bruises, Boils, Muscular Pain, Rheumatism, Gout, Skin Sores, to Remove Corns, Warts, Hair, and Other Undesirable Growths; Toilet Articles—Namely, Face Creams, Massage Creams, Vanishing Creams, Face Powder, Face Packs and Pastes, Face Bleaches and Colors, Face and Hand Lotions, Preparations for Scenting the Breath and Bath, Smelling Salts, Hair Oils, Foot Powders; Preparations for Washing, Cleansing, and Polishing the Teeth; Disinfecting Preparations for Washing the Mouth, Nose, and Throat; Astringents, and Hair Restoratives.

Claims use since Sept. 7, 1931.

Ser. No. 323,574. EUGENE, LTD., New York, N. Y. Filed Jan. 29, 1932.

EZ SET

Applicant disclaims the use of the word "Set" apart from the mark as shown.

For Hair-Waving Solution.

Claims use since Aug. 1, 1931.

Ser. No. 327,398. J. M. HUBER, INC., New York, N. Y. Filed May 24, 1932.

SPEC BLACK

Applicant disclaims the exclusive right to use the word "Black" except as a part of the mark as shown.

For Carbon Black Having a Combination of Uses in the Industrial Arts.

Claims use since May 17, 1932.

Ser. No. 327,837. DR. ERNST SILTEN, Berlin, Germany. Filed June 8, 1932.

Chlorenan

For Medicinal Preparations for Inhalation Purposes for the Treatment of Diseases of the Respiratory Organs.

Claims use since Apr. 20, 1932.

Ser. No. 329,528. LOYOLA J. FAY, Spokane, Wash. Filed Aug. 18, 1932.

DERM Amour

For Cleansing and Massage Cream, Skin Astringent, Tissue Cream, Bleach and Wrinkle Cream.

Claims use since June 1, 1932.

Ser. No. 330,259. INDEPENDENT DRUGGISTS' ALLIANCE DISTRIBUTING CO., Chicago, Ill. Filed Sept. 12, 1932.

evelyn howard

The drawing of the mark is lined to indicate the colors red and blue.

For Cosmetics—Namely, Astringent, Brilliantine, Cold Cream, Hand Lotion, Liquefying Cleansing Cream, Nail Polish, Nail Polish Remover, and Vanishing Cream.

Claims use since Sept. 1, 1930.

Ser. No. 331,539. PARESHNATH BANERJI, Mihijam, British India. Filed Oct. 25, 1932.



For Substance for Treating Snakebite, Opium Poisoning, Sleeping Sickness, Generally Being in the Form of an Inhalation.

Claims use since 1925.

Ser. No. 332,078. RICHARD A. MOONEY, doing business as Stork Chemical Company, Pittsburgh, Pa. Filed Nov. 8, 1932.

STORK WASHING FLUID



The descriptive words "Washing Fluid" are hereby disclaimed apart from the mark as shown on the drawing.

For Bleaching and Water Softening Compound Having Incidental Deodorant, Disinfectant, and Germicidal Properties.

Claims use since Apr. 4, 1921.

Ser. No. 332,320. KARL MOEDL, Salt Lake City, Utah. Filed Nov. 17, 1932.



For Skin Lotions, After Shave Lotions, and Hand Lotions.

Claims use since Jan. 2, 1922.

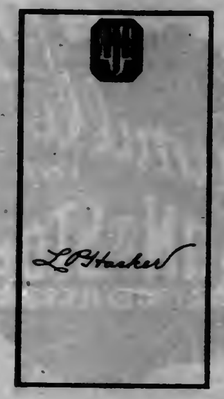
Ser. No. 332,339. FILTROL COMPANY OF CALIFORNIA, Los Angeles, Calif. Filed Nov. 21, 1932.

NEUTROL

For Chemically Treated Colloidal Clay Adapted for Use as a Decolorizing, Bleaching, Filtering, Purifying, and Absorbing Medium.

Claims use since Nov. 2, 1932.

Ser. No. 332,919. LOUIS P. HACKER, Los Angeles, Calif. Filed Dec. 9, 1932.



The signature appearing in the drawing is a facsimile of applicant's signature.

For Stomach Tablets.

Claims use since Nov. 19, 1932.

Ser. No. 332,924. ELI LILLY AND COMPANY, Indianapolis, Ind. Filed Dec. 9, 1932.

PIPERCAIN

For Local Anesthetic in Both Solid and Solution Form.

Claims use since Nov. 22, 1932.

Ser. No. 333,018. CHARLES F. STORY, doing business as Story & Robinson, Brooklyn, N. Y. Filed Dec. 12, 1932.

PURE-A-FAC

No claim is made to the word "Pure" apart from the mark as shown on the drawing. The drawing is lined for the color red.

For Sterilizing Cleansing and Deodorizing Chemical Agent.

Claims use since Feb. 15, 1932.

Ser. No. 333,035. WM. B. HOOPER & SONS CO., Baltimore, Md. Filed Dec. 13, 1932.

AQUALITE

For Waterproofing Agent for Textile Fabrics.

Claims use since Apr. 20, 1927.

Ser. No. 333,044. VELODEX, INCORPORATED, New York, N. Y. Filed Dec. 13, 1932.

VEL-ODO

For Cosmetics—Namely, Deodorants.

Claims use since Nov. 29, 1932.

Ser. No. 333,183. CAMILLE, INC., Chicago, Ill. Filed Dec. 19, 1932.



Applicant disclaims the words "Run-R-Stop" and "For Hosiery" appearing in the drawing apart from the mark as shown.

For Semi-Liquid Material for Mending Wool, Cotton, Silk, Linens, Curtains, Hosiery, Rubber, and Leather Goods.

Claims use since October, 1932.

Ser. No. 333,247. EMPIRE BOTTLING WORKS, Newark, N. J. Filed Dec. 2, 1932.



For Bluing, Ammonia, and Javelle Water.

Claims use since Jan. 1, 1912.

Ser. No. 333,335. QUIGG'S DIABETIC REMEDY COMPANY, Detroit, Mich. Filed Dec. 23, 1932.



A portrait appearing in the drawings is that of Benedict P. Quigley, now living at 5457 Parker Avenue, Detroit, Mich.

For Preparation Used in the Treatment of Diabetes, a Mouthwash and Throat Gargle.

Claims use since Nov. 29, 1932.

Ser. No. 333,449. MAYNARD, INC., Chicago, Ill. Filed Dec. 27, 1932.

Tissu-Charme

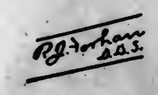
Applicant disclaims the word "Tissu" apart from the mark as shown on the drawing.

For Cold Cream, Vanishing Cream, and Nourishing Cream.

Claims use since Dec. 1, 1932.

Ser. No. 333,462. FORHAN COMPANY, INC., New York, N. Y. Filed Dec. 29, 1932.

Forhan's



The signature appearing on the drawing is a facsimile signature of Dr. R. J. Forhan, D. D. S.

For Antiseptic Solution, Pyorrhea Preparation, and Dentifrice.

Claims use since Sept. 1, 1915, on pyorrhea preparation and dentifrice; since 1916 on antiseptic solution.

Ser. No. 333,473. ADOLFO GRIMWOOD, Mexico, Mexico. Filed Dec. 29, 1932.

BUCCALINE

For Preparation for the Prevention and Treatment of Influenza, Lagrippe, Etc.

Claims use since Nov. 28, 1931.

Ser. No. 333,561. FRANK C. REILLY, New York, N. Y. Filed Dec. 31, 1932.

L'heure du Thé
(Teatime)

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Obesity Astringents, Cleansing Creams, Obesity Creams, Refreshing Creams, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs; Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes and Toilet Waters.

Claims use since Jan. 5, 1931.

Ser. No. 333,564. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Jan. 3, 1933.



For Alcohol Anti-Freeze.

Claims use since Nov. 16, 1932.

Ser. No. 333,614. LUTHER C. SMITH, doing business as L. C. Smith Laboratory, Canton, Ohio. Filed Jan. 3, 1933.



For Antiseptic.

Claims use since May 11, 1931.

Ser. No. 333,699. CLYDE KREIDER BAER, doing business as Baer's Pharmacy, Philadelphia, Pa. Filed Jan. 6, 1933.



For Gout and Rheumatic Tablets, Rheumatism Compound Elixir, Preparation in Capsules for Treatment of Colds and Neuralgia, Laxative Pills, Iron Tablets, Diuretic Tablets, Diuretic Compound Pills, Anti-Asthmatic Elixir, Antiseptic Astringent Lotion, Antiseptic Powder, Eczema Ointment, Blood Purifier, Sunburn Lotion, Ivy Poison Lotion; Brain, Blood and Nerve Tonic; Dyspepsia Tablets, Preparation for Treatment of Indigestion, Pile Suppositories, Nasal Oil Spray, Corn Solvent, Corn-Bunion-Callous Plasters, Toothache Drops, Preparation for Treatment of Sore Throat, Liniment for the Treatment of Rheumatism, Stiff Joints, Sprains, Sore Throat, Stiff Neck, Sore Muscles, and Tender Feet; Preparation for the Treatment of Dandruff, Preparation for Exterminating Body Vermin, Pine Tar Compound, Cramp and Diarrhoea Mixture, Nerve Tablets, Worm Syrup, Worm Lozenges, Quinine Hair Tonic, Peroxide Cream, Croup No. 1 Compound, Croup No. 2 Compound, Beef-Wine and Iron Tonic, Eye Lotion, Shaving Lotion for Use After Shaving, Kidney Plasters, Bug Killer Liquid, Bug Powder Cod Liver Oil; Preparation of Cod Liver Oil, Wild Cherry, and Malt; Compound for the Treatment of Female Complaints, Antacid Powder, Cod Liver Oil Emulsion, Preparation for the Treatment of Whooping Cough, Dyspepsia Capsules, Intestinal and Diarrhoea Capsules, Headache Powders, Water Softening Compound, Cold Cream, Vanishing Cream, Massage Cream, Lemon Cream, Hair Dressing Preparation; Medicine for the Treatment of Sexual, Kidney, and Bladder Diseases; Mosquito Lotion, Cream Camphor Liniment.

Claims use since Nov. 4, 1918.

Ser. No. 333,782. PRO-KER LABORATORIES, INC., New York, N. Y. Filed Jan. 3, 1933.

PRO-KER

For Preparations and Substances for Treating the Hair and Scalp.

Claims use since Nov. 16, 1932.

Ser. No. 333,816. E. & N. ALHADATH, Trinidad, Colo. Filed Jan. 11, 1933.



For Preparation for the Relief of Cancer.

Claims use since July 1, 1932.

Ser. No. 333,874. WILLIAM A. PERSOLL, Irvington, N. J. Filed Jan. 12, 1933.

Pertonic

For Eye Lotions.
Claims use since Dec. 19, 1932.

Ser. No. 334,044. CALIFORNIA SPRAY-CHEMICAL CORPORATION, Wilmington, Del., and Berkeley, Calif. Filed Jan. 18, 1933.

ORTHO



SCIENTIFIC PEST CONTROL

No claim is made to the term "Scientific Pest Control" apart from the mark as shown in the drawing. The representation of the scientist appearing on the drawing and forming a feature of the mark is fanciful.
For Insecticides, Germicides, and Fungicides.
Claims use since April, 1930.

Ser. No. 334,061. CLIFFORD LEO IORNS, doing business as The Thorocide Co., St. Louis, Mo. Filed Jan. 18, 1933.

REPELOCIDE

For Insecticide and Disinfectant.
Claims use since Nov. 18, 1932.

Ser. No. 334,222. LOUANGEL CORPORATION, New York, N. Y. Filed Jan. 21, 1933.

CAMPHIODINE

The term "Iodine" is disclaimed apart from the mark as shown.
For Ointment for the External Treatment of Pains, Inflammations, Wounds, Bruises, Etc.
Claims use since Nov. 19, 1932.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 327,740. WAFFENFABRIK SOLOTHURN AKTIENGESELLSCHAFT, Zuchwil, Switzerland. Filed June 4, 1932.



For Siege Guns, Sea-Coast Guns, Mountain Guns, Field Guns, Horse Guns, Trench Guns, Ship Guns, Anti-Aircraft Guns, Howitzers, Siege Mortars, Field Mortars, Trench Mortars, Machine Guns, Rifles, Shot Guns, Non-Automatic Pistols, Automatic Pistols, Revolvers, Gun Sighting Devices, Phosphor Shells, Ranging Shells, Detonators and Bombs, and Parts Thereof, High Explosive Shells, Schrapnel Shells, Armour-Piercing Shells, Gas Shells, Smoke Shells, Incendiary Shells, Rifle and Machine Gun Cartridges, Pistol and Revolver Cartridges. Shot Gun Cartridges, and Parts Thereof.
Claims use since Feb. 1, 1930.

Ser. No. 327,742. WAFFENFABRIK SOLOTHURN AKTIENGESELLSCHAFT, Zuchwil, Switzerland. Filed June 4, 1932.



For Siege Guns, Sea-Coast Guns, Mountain Guns, Field Guns, Horse Guns, Trench Guns, Ship Guns, Anti-Aircraft Guns, Howitzers, Siege Mortars, Field Mortars, Trench Mortars, Machine Guns, Rifles, Shot Guns, Non-Automatic Pistols, Automatic Pistols, Revolvers, Gun Sighting Devices, Phosphor Shells, Ranging Shells, Detonators and Bombs, and Parts Thereof, High Explosive Shells, Schrapnel Shells, Armour-Piercing Shells, Gas Shells, Smoke Shells, Incendiary Shells, Rifle and Machine Gun Cartridges, Pistol and Revolver Cartridges, Shot Gun Cartridges, and Parts Thereof.
Claims use since Feb. 1, 1930.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 327,744. WAFFENFABRIK SOLOTHURN AKTIENGESELLSCHAFT, Zuchwil, Switzerland. Filed June 4, 1932.



For Siege Guns, Sea-Coast Guns, Mountain Guns, Field Guns, Horse Guns, Trench Guns, Ship Guns, Anti-Aircraft Guns, Howitzers, Siege Mortars, Field Mortars, Trench Mortars, Machine Guns, Rifles, Shot Guns, Non-Automatic Pistols, Automatic Pistols, Revolvers, Gun Sighting Devices, Phosphor Shells, Ranging Shells, Detonators and Bombs, and Parts Thereof, High Explosive Shells, Schrapnel Shells, Armour-Piercing Shells, Gas Shells, Smoke Shells, Incendiary Shells, Rifle and Machine Gun Cartridges, Pistol and Revolver Cartridges, Shot Gun Cartridges, and Parts Thereof.
Claims use since Feb. 1, 1930.

CLASS 11

Inks and Inking Materials

Ser. No. 325,001. THE INTERNATIONAL PRINTING INK CORPORATION, New York, N. Y. Filed Mar. 10, 1932.

Princess

For Printing Ink.
Claims use since Sept. 15, 1910.

Ser. No. 334,022. MITTAG & VOLGER, INCORPORATED, Park Ridge, N. J. Filed Jan. 17, 1933.

ROUND BOX

For Typewriter Ribbons.
Claims use since 1890.

CLASS 12

Construction Materials

Ser. No. 305,211. E. L. BRUCE COMPANY, Memphis, Tenn. Filed Sept. 2, 1930.

DELTA

For Oak Flooring.
Claim use since March, 1929.

Ser. No. 313,508. QUIGLEY COMPANY, INC., New York, N. Y. Filed Apr. 18, 1931.

MONO-BOND

No claim is made to the use of the word "Bond" apart from the mark shown.
For Refractory Cement for Uniting Crushed Brick or Other Refractory Aggregate to Form Furnace Linings.
Claims use since Mar. 25, 1931.

Ser. No. 332,216. ARMSTRONG CORK & INSULATION COMPANY, Lancaster, Pa. Filed Nov. 17, 1932.

Armstrong's
EF

For Heat Insulating Material.
Claims use since Sept. 22, 1932.

Ser. No. 333,554. R. W. HILLCOAT COMPANY, New Orleans, La. Filed Dec. 31, 1932.



BLACK CAT

For Lumber.
Claims use since 1927.

Ser. No. 333,832. KEASBEY & MATTISON COMPANY, Ambler, Pa. Filed Jan. 11, 1933.

DUPLEX

For Insulation Products Especially Adapted as a Pipe Covering.
Claims use since September, 1932.

Ser. No. 333,833. KEASBEY & MATTISON COMPANY, Ambler, Pa. Filed Jan. 11, 1933.

SIMPLEX

For Insulation Products Especially Adapted as a Pipe Covering.
Claims use since September, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 332,749. AMERICAN RUBBER PRODUCTS COMPANY, Detroit, Mich. Filed Dec. 5, 1932.

BONALITE

For Durable Composition Toilet Seat.
Claims use since Feb. 17, 1932.

CLASS 15

Oils and Greases

Ser. No. 324,184. NATIONAL REFINING COMPANY, Seattle, Wash. Filed Feb. 15, 1932.

EVERGREEN

For Motor Lubricating Oils and Greases.
Claims use since May 8, 1928.

Ser. No. 333,743. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed Jan. 7, 1933.

FRESSO

For Lubricating Oils.
Claims use since Dec. 13, 1932.

Ser. No. 333,974. MARSHALL-WELLS COMPANY, Duluth, Minn. Filed Jan. 16, 1933.

Auto-King

For Lubricating Oil.
Claims use since Jan. 10, 1933.

CLASS 16

Paints and Painters' Materials

Ser. No. 330,867. MARTIN SALZMAN, doing business as Hudson Paint Co., Brooklyn, N. Y. Filed Oct. 1, 1932.

Ye Olde Mariner

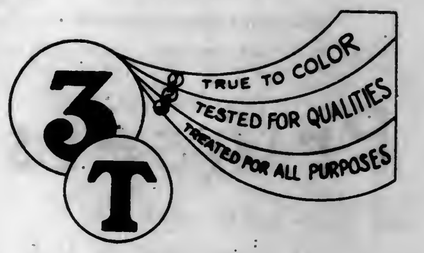
For Ready Mixed Paints and Paint Enamels.
Claims use since December, 1931.

Ser. No. 330,869. MARTIN SALZMAN, doing business as Hudson Paint Co., Brooklyn, N. Y. Filed Oct. 1, 1932.

Coat Of Arms

For Ready Mixed Paints and Paint Enamels.
Claims use since December, 1931.

Ser. No. 331,491. COLOR CRAFT ENAMELS, INC., Chicago, Ill. Filed Oct. 24, 1932.



The words and figures "(1) True to Color" "(2) Tested for Qualities"; and "(3) Treated for All Purposes"; on the three streamers appended to the circle containing the numeral "3", are disclaimed apart from the mark shown.
For Paint Enamel, Varnish Remover, and Thinner.
Claims use since Sept. 13, 1932.

Ser. No. 333,522. THE MARIETTA PAINT & COLOR CO., Marietta, Ohio. Filed Dec. 30, 1932.

ARTWALL

For Interior Wall Paint in Paste and Liquid Form.
Claims use since June 27, 1916.

Ser. No. 333,621. THE WILBUR WHITE CHEMICAL COMPANY, INC., Owego, N. Y. Filed Jan. 3, 1933.

Speed Glos

Applicant disclaims exclusive rights in the word "Glos" apart from the other features of the mark shown in the drawing.
For Polishing Wax for Automobiles, Floors, and Furniture.
Claims use since Dec. 3, 1932.

Ser. No. 334,073. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed Jan. 18, 1933.

TRISEAL

For Paints in Paste, Semi-Liquid, or Ready-Mixed Form; Varnishes, Lacquers, Paint Enamels, Japans, Stains, and Paint Fillers.
Claims use since Dec. 22, 1932.

Ser. No. 334,234. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif. Filed Jan. 21, 1933.

TUX

For Automobile Polish and Automobile Wax.
Claims use since Nov. 1, 1932.

CLASS 17

Tobacco Products

Ser. No. 329,076. ALHAMBRA CIGAR & CIGARETTE MFG. CO., Manila, P. I. Filed July 26, 1932.



The picture of a feminine head shown in the drawing is merely fanciful. No exclusive right to the word "Reno" is claimed apart from the mark as shown.
For Cigars and Cigarettes.
Claims use since Mar. 25, 1932.

Ser. No. 333,492.. R. J. ALLEN & SONS, Fort Worth, Tex. Filed Dec. 30, 1932.



The drawing is lined for red. No claim is made to the representation of the goods, the words "Havana", "Sumatra Wrapper", "Hand Made", "Havana Filler", and "From Cuba", apart from the mark as shown. The picture of the cigar maker is fanciful.
For Cigars.
Claims use since Nov. 1, 1922.

Ser. No. 333,903. WEBSTER EISENLOHR, INC., New York, N. Y. Filed Jan. 13, 1933. Under 10-year proviso.

GIRARD

For Cigars.
Claims use since 1885.

Ser. No. 333,904. WEBSTER EISENLOHR, INC., New York, N. Y. Filed Jan. 13, 1933. Under 10-year proviso.

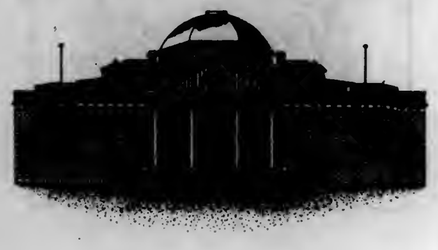
FLOR DE GIRARD



The picture forming a part of the mark sought to be registered is that of Stephen Girard, who died prior to the making of this application.
For Cigars.
Claims use since 1885.

Ser. No. 333,955. JOHN WAGNER & SONS, Philadelphia, Pa. Filed Jan. 14, 1933.

MONTICELLO



For Cigars, Smoking Tobacco, and Cigarettes.
Claims use since Oct. 28, 1929, on cigars; November, 1932, on smoking tobacco; and December, 1932, on cigarettes.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 333,007. THE OKONITE-CALLENDER CABLE COMPANY, INCORPORATED, Paterson, N. J. Filed Dec. 12, 1932.

OILOSTATIC

For Electric Cables and for Electric Cable Systems, Comprising Cables, Joints, Terminals, Lugs, Clamps, Sleeves, Conduits, and Other Accessories.
Claims use since July 15, 1932.

Ser. No. 333,749. AMERICAN GYRO COMPANY, Denver, Colo. Filed Jan. 9, 1933.



For Spark Plugs.
Claims use since September, 1931.

Ser. No. 333,898. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Jan. 13, 1933.



For Electric Storage Batteries and Spark Plugs.
Claims use since Oct. 4, 1932, on electric storage batteries; since Nov. 18, 1932, on spark plugs.

Ser. No. 334,043. BURGESS BATTERY COMPANY, Madison, Wis. Filed Jan. 18, 1933.

Whirlwind

For Dry Cell Batteries.
Claims use since Sept. 19, 1932.

Ser. No. 334,160. THE RICHARDSON COMPANY, Lockland, Ohio. Filed Jan. 20, 1933.

GENUINE HARD LUKOL

No claim is made for the words "Genuine Hard" apart from the mark as shown in the drawing.
For Storage Battery Cases Made of Bituminous Composition.
Claims use since Jan. 12, 1933.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 333,165. MOVIE CUT-UPS, Peabody, Mass. Filed Dec. 17, 1932.

MOVIE CUT-UPS

For Jig-Saw Puzzles, Picture Puzzles, and Cut-Out Puzzles.
Claims use since Nov. 15, 1932.

Ser. No. 333,463. POSTER PRODUCTS, INC., Chicago, Ill. Filed Dec. 29, 1932.

FELT-O-PLAY

For Novelty Games, Comprising Felt Pieces Assemblable to Form Puzzles, Pictures, Words, and Objects.
Claims use since Dec. 20, 1932.

Ser. No. 333,635. WILLIAM R. CLUFF, New York, N. Y. Filed Jan. 4, 1933.

AERO-DARTS

No claim is made to the word "Darts" apart from the association shown on the drawing.
For Indoor and Outdoor Game Played with a Target and Darts.
Claims use since Dec. 8, 1932.

Ser. No. 333,826. ERO MANUFACTURING COMPANY, Chicago, Ill. Filed Jan. 11, 1933.

Pro-Bag

No claim is made to the word "Bag" apart from the association shown on the drawing.
For Golf Bags.
Claims use since January, 1932.

Ser. No. 334,082. BRONSON REEL COMPANY, Bronson, Mich. Filed Jan. 18, 1933.



For Fishing Reels.
Claims use since Aug. 10, 1932.

Ser. No. 334,248. COMMANDAY-ROTH CO. INC., New York, N. Y. Filed Jan. 23, 1933.

CROSS-JIG

For Boxed Puzzle Sets.
Claims use since Jan. 9, 1933.

Ser. No. 334,293. UNIVERSITY DISTRIBUTING COMPANY, Cambridge, Mass. Filed Jan. 24, 1933.



For Puzzles.
Claims use since Nov. 23, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 320,556. THE SILVER KING HYDRAULIC JACK COMPANY, Cleveland, Ohio. Filed Oct. 28, 1931.

SILVER KING

For Hydraulic Jacks.
Claims use since Jan. 1, 1927.

Ser. No. 323,086. J. W. FIELD MANUFACTURING CORPORATION, Peoria, Ill. Filed Jan. 16, 1932.

THE DINGER

For Coin-Controlled Vending Machines.
Claims use since Dec. 15, 1931.

Ser. No. 327,451. REYNOLDS SPRING CO., Jackson, Mich. Filed May 25, 1932.

BONNY WARE

No claim is made to the word "Ware" apart from the mark as shown.

For Molded Plastic Cookie, Doughnut, Biscuit, and Dough Cutters.

Claims use since Mar. 22, 1932.

Ser. No. 332,425. F. L. SMIDTH & CO., New York, N. Y. Filed Nov. 23, 1932.

FLUXO

For Machines for Packing Pulverous Material in Containers.

Claims use since Jan. 1, 1932.

Ser. No. 332,684. THE J. M. CARPENTER TAP & DIE CO., Pawtucket, R. I. Filed Dec. 2, 1932.

SUPER CREST

For Thread Cutting Tools Such as Taps and Dies.

Claims use since Nov. 12, 1932.

Ser. No. 332,967. SOCIETE ANONYME DES ANCIENS ETABLISSEMENTS PANHARD & LEVASSOR, Paris, France. Filed Dec. 10, 1932.

PL

For Tractors and Internal Combustion Engines.

Claims use since Apr. 1, 1909.

Ser. No. 333,039. LANG CLAYDEN LIMITED, London, England. Filed Dec. 13, 1932.

LANGAPRES

For Printing Machinery.

Claims use since Feb. 1, 1932.

Ser. No. 333,175. ADVANCE MACHINE CO., Chicago, Ill. Filed Dec. 19, 1932.

SELECTERIA

For Vending Machines.

Claims use since September, 1932.

Ser. No. 333,284. HENRY DISSTON & SONS, INCORPORATED, Philadelphia, Pa. Filed Dec. 22, 1932.

CHAMPION

For Saws.

Claims use since June, 1869.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 329,154. THE SANDS MANUFACTURING COMPANY, Cleveland, Ohio. Filed July 28, 1932.

PROTECT-O-STAT

For Thermostatic Automatic Cut-Off Valves for Heaters.

Claims use since July 7, 1932.

Ser. No. 332,452. SAMUEL A. HERMAN, doing business as Guide X-Ray Film Company, New York, N. Y. Filed Nov. 25, 1932.

Guide

For X-Ray Films.

Claims use since June 7, 1932.

Ser. No. 332,930. SERVICE STATION EQUIPMENT COMPANY, Conshohocken, Pa. Filed Dec. 9, 1932.

The words "Service Station Equipment" are disclaimed apart from the mark as shown on the drawing.

For Pressure Gages and Parts Thereof.

Claims use since Nov. 19, 1932.

Ser. No. 332,931. SERVICE STATION EQUIPMENT COMPANY, Conshohocken, Pa. Filed Dec. 9, 1932.

The words "Service Station Equipment" are disclaimed apart from the mark as shown on the drawing.

For Metering Pumps and Parts Thereof.

Claims use since Nov. 10, 1932.

Ser. No. 333,125. KALLE & CO. AKTIENGESELLSCHAFT, Wiesbaden-Biebrich, Germany. Filed Dec. 16, 1932.

Aluna

For Light-Sensitive Copying and Photographic Paper.

Claims use since Nov. 15, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 328,398. GRAND RAPIDS FURNITURE MAKERS GUILD, Grand Rapids, Mich. Filed June 29, 1932.

AUTHENTIC GRAND RAPIDS FURNITURE

REGISTERED

GRAND RAPIDS FURNITURE MAKERS GUILD

Applicant disclaims the words "Authentic Grand Rapids Furniture Registered" except in connection with the mark shown.

For Wooden and Upholstered Household and Office Furniture—Namely, Beds, Dressers, Chiffoniers, Chifforobes, Toilet Tables, Vanities, Candle Stands, Benches, Portable

Mirrors, Dressing Tables, Stools, Dresser Mirrors, Dressing Table Mirrors, Vanity Mirrors, Chests, Chest of Drawers, Night Stands, Night Tables, Desk Chairs, Princess Dressers, Vanity Dressers, Somnoes, Highboys, Lowboys, Tallboys, Mirrors with Wooden Frames, Bed Chests, Slipper Chairs, Welch Dressers, Bedroom Chairs, Upholstered Beds, Sideboards, Buffets, Servers, China Cabinets, Extension Tables, Refectory Tables, Serving Tables, Corner Servers, Side Tables, Corner Cabinets, Side Chairs, Arm Chairs, Console Tables, Console Chests, Pedestal Tables, Silver Cabinets, Table Servers, Dinette Chairs, Dinette Tables, Davenports, Love Seats, Sofas, Chaise Lounges, Boudoir Chairs, Couches, End Tables, Rockers, Spinet Desks, Ladies' Desks, House Desks, Bookcases, Cabinets, Trousseau Chests, Magazine Racks, Coffee Tables, Cellarets, Consoles, Commodes, Book Tables, Davenport Tables, Tea Tables, Drop Leaf Tables, Secretaires, French Chests, Window Seats, Easy Chairs, Highback Chairs, Hall Chairs, Occasional Chairs, Pull-Up Chairs, Hassocks, Wing Chairs, Fireside Chairs, Office Chairs, Book End Cabinets, Office Cabinets, Pier Cabinets, Costumers, Nest of Tables, Library Desks, Kidney Desks, Office Desks, Butterfly Tables, Chairside Tables, Gateleg Tables, Folding Top Tables, Magazine Tables, Office Tables, Radio Tables, Sewing Tables, Ivy Stands, Lamp Stands, Tea Carts, Living Room Tables, Settees, Gateleg Desks, Table Desks, Directors' Desks, Library Tables, Tilt Top Tables, Settles, Cabinet Desks, Octagon Tables, Drum Tables, Occasional Tables, Piano Stools, Card Tables, Telephone Cabinets, Make-Up Tables, Radio Cabinets, Sewing Cabinets, Dressing Screens, Draw-Top Tables, Revolving Bookstands, Book Cabinets, Magazine Stands, Wall Desks, Cigarette Tables, Revolving Drum Tables, Daybeds, Telephone Stands, Refreshment Cabinets, Boucher Desks, Console Mirrors, Cedar Lined Hope Chests.

Claims use since February, 1932.

Ser. No. 328,399. GRAND RAPIDS FURNITURE MAKERS GUILD, Grand Rapids, Mich. Filed June 29, 1932.



Applicant disclaims the words "True Grand Rapids Cabinet Making Certified" except in connection with the mark shown.

For Wooden and Upholstered Household and Office Furniture—Namely, Beds, Dressers, Chiffoniers, Chiffonobes, Toilet Tables, Vanities, Candle Stands, Benches, Portable Mirrors, Dressing Tables, Stools, Dresser Mirrors, Dressing Table Mirrors, Vanity Mirrors, Chests, Chest of Drawers, Night Stands, Night Tables, Desk Chairs, Princess Dressers, Vanity Dressers, Somnoes, Highboys, Lowboys, Tallboys, Mirrors with Wooden Frames, Bed Chests, Slipper Chairs, Welch Dressers, Bedroom Chairs, Upholstered Beds, Sideboards, Buffets, Servers, China Cabinets, Extension Tables, Refectory Tables, Serving Tables, Corner Servers, Side Tables, Corner Cabinets, Side Chairs, Arm Chairs, Console Tables, Console Chests, Pedestal Tables, Silver Cabinets, Table Servers, Dinette Chairs, Dinette Tables, Davenports, Love Seats, Sofas, Chaise Lounges, Boudoir Chairs, Couches, End Tables, Rockers, Spinet Desks, Ladies' Desks, House Desks, Bookcases, Cabinets, Trousseau Chests, Magazine Racks, Coffee Tables, Cellarets, Consoles, Commodes, Book Tables, Davenport Tables, Tea Tables, Drop Leaf Tables, Secretaires, French Chests, Window Seats, Easy Chairs, Highback Chairs, Hall Chairs, Occasional Chairs, Pull-Up Chairs, Hassocks, Wing Chairs, Fireside Chairs, Office Chairs, Book-End Cabinets, Office Cabinets, Pier Cabinets, Costumers, Nest of Tables, Library Desks, Kidney Desks, Office Desks, Butterfly Tables, Chairside Tables, Gateleg Tables, Folding Top Tables, Magazine Tables, Office Tables, Radio Tables, Sewing Tables, Ivy Stands, Lamp Stands, Tea Carts, Living Room Tables, Settees, Gateleg Desks, Table Desks, Directors' Desks, Library Tables, Tilt Top Tables, Settles, Cabinet Desks, Octagon Tables, Drum Tables, Occasional Tables, Piano Stools, Card Tables, Telephone Cabinets, Make-Up Tables, Radio Cabinets, Sewing Cabinets, Dressing Screens, Draw-Top Tables, Revolving Bookstands, Book Cabinets, Magazine Stands, Wall Desks, Cigarette Tables, Revolving Drum Tables, Daybeds, Telephone Stands, Refreshment Cabinets, Boucher Desks, Console Mirrors, Cedar Lined Hope Chests.

Claims use since February, 1932.

Ser. No. 329,520. ALFRED WILLIAM BEUTTELL, London, England. Filed Aug. 13, 1932.

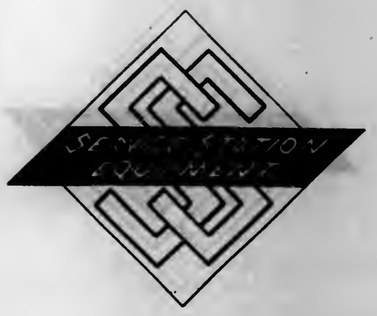
K-RAY

Applicant disclaims the letter "K" apart from the mark as shown in the drawing.

For Display Cases and Display Cabinets.

Claims use since July 1, 1928.

Ser. No. 332,932. SERVICE STATION EQUIPMENT COMPANY, Conshohocken, Pa. Filed Dec. 9, 1932.



The words "Service Station Equipment" are disclaimed apart from the mark as shown on the drawing.

For Cabinets and Parts Thereof for the Display of Merchandise for Sale.

Claims use since Nov. 3, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 327,210. JAMES SPEAR STOVE AND HEATING COMPANY, Philadelphia, Pa. Filed May 17, 1932.

SPEAR

For Wood, Coal, Coke, Oil, Vapor, and Gas Cooking and Heating Stoves, All Kinds of Domestic and Industrial Furnaces, Air Conditioning and Ventilating Apparatus Comprising Fans or Blowers to Circulate Air, Humidifiers and De-Humidifiers; Filters, Washers, Ionizers, Etc., to Purify Circulated Air; Ducts or Piping for Units to Accomplish Distribution of Conditioned Air.

Claims use since Aug. 25, 1931.

Ser. No. 333,553. HART, COOLEY, HIGHTON COMPANY, New Britain, Conn. Filed Dec. 31, 1932.

HCH

The lining on the drawing indicates the color red.

For Convection Heaters (Concealed and Cabinet); Heating Grilles, Humidifier and Air-Conditioning Units, Registers for Heating, Ventilating, and Air Conditioning; Heating Radiators, Radiator Shields, and Enclosures.

Claims use since Dec. 13, 1932.

Ser. No. 333,657. ANTHONY PERON, New York, N. Y. Filed Jan. 4, 1933.

FLAVORITE

For Gas Broilers.

Claims use since Dec. 1, 1932.

Ser. No. 333,981. THE SCHROEDER BROS. MFG. CO., Torrington, Conn. Filed Jan. 16, 1933.

Cozy-Glo

For Oil Burners for Stoves.

Claims use since October, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 333,204. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 19, 1932.

CANVATEX

For Canvas Belting.

Claims use since Nov. 1, 1931.

CLASS 37

Paper and Stationery

Ser. No. 324,540. SHELLMAR PRODUCTS COMPANY, Chicago, Ill. Filed Feb. 26, 1932.

SHELLMAR



For Labels.

Claims use since Aug. 5, 1931.

Ser. No. 332,044. LOUIS MARX & COMPANY, New York, N. Y. Filed Nov. 10, 1932.

MIRACLE

For Painting Pencils.

Claims use since Oct. 31, 1932.

Ser. No. 332,617. INKPAK MANUFACTURING COMPANY, INC., New York, N. Y., assignor to Inkpak Pen Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1932.

KROMITE

For Pens, Pen Points, and Fountain Pens.

Claims use since Sept. 1, 1932.

Ser. No. 332,662. JOSEPH A. SILBER, doing business as Advance Blank Book Co., New York, N. Y. Filed Dec. 1, 1932.

ADVANCO

The representation of the goods appearing on the drawing is hereby disclaimed apart from the mark shown.
For Blank Books—Namely, Sales Order Books.
Claims use since Dec. 15, 1931.

Ser. No. 333,663. BARNETT AND SCHULMAN CO. INC., New York, N. Y. Filed Jan. 5, 1933.

ROCKEFELLER CENTER BOND

No claim to the word "Bond" is made except in combination with the trade-mark as shown on the drawing.
For Printing, Typewriting, and Writing Paper, Envelopes, Bristol Board, Vellum, Parchment, Onion Skin Paper, and Manifold Paper.
Claims use since June 21, 1932.

CLASS 38

Prints and Publications

Ser. No. 326,455. HENRY P. BURG, doing business as Daily Racing Program Publishing Company, Chicago, Ill. Filed Apr. 25, 1932.

DAILY RACING PROGRAM

The wording appearing on the drawing is hereby disclaimed apart from the mark as shown.
For a Program of Racing Schedules with Scratches and Track Conditions and Information Regarding Horses, Jockeys, and the Like Published Daily.
Claims use since Apr. 11, 1932.

Ser. No. 333,651. KENNETH ALBERT FRIEDMAN, Jacksonville, Fla. Filed Jan. 3, 1933.

DIXIE HIGHLIGHTS by Kenneth Friedman

For a Series of Newspaper Articles and Illustrations.
Claims use since Dec. 23, 1932.

Ser. No. 333,744. STAR-CHRONICLE PUBLISHING COMPANY, St. Louis, Mo. Filed Jan. 7, 1933.

GREEN STREAK EDITION NIGHT SPORTS

No claim is made to the words "Edition Night Sports" apart from the mark as shown in the drawing.
For Daily Newspapers.
Claims use since Nov. 1, 1932.

Ser. No. 334,207. THE BONNET-BROWN CORPORATION, Chicago, Ill. Filed Jan. 21, 1933.

Odd—but TRUE

For Series of Cartoons for Syndicated Publications.
Claims use since May, 1931.

CLASS 39

Clothing

Ser. No. 319,920. NORMAN M. WILSON, Philadelphia, Pa. Filed Oct. 9, 1931.



MAITEX

For Ladies' and Men's Hosiery.
Claims use since Aug. 1, 1931.

Ser. No. 330,531. WELLS-LAMONT-SMITH CORPORATION, Minneapolis, Minn. Filed Sept. 20, 1932.

BUCK-TAN MULE-HIDE



IT'S TOUGH

Applicant disclaims exclusive right to the use of the words "Buck-Tan" and "Mule-Hide" and "It's Tough", except in the combination shown.
For Work Gloves of Fabric and Combined Fabric and Leather.
Claims use since Nov. 15, 1931.

Ser. No. 332,148. JULIUS GROSSMAN, INC., Brooklyn, N. Y. Filed Nov. 15, 1932.

VITA-SOLE

"It's the impression you make"
"Your Sole's Your Own!"

Applicant disclaims the right to the exclusive use of the outline of the sole and to the word "Sole", apart from the mark shown.
For Insoles for Shoes.
Claims use since Nov. 3, 1932.

Ser. No. 332,453. SAM W. HERZLINGER, INC., New York, N. Y. Filed Nov. 25, 1932.

Herzmoor

For Coats for Use by Women.
Claims use since Feb. 1, 1932.

Ser. No. 332,516. CARSON PIRIE SCOTT AND COMPANY, Chicago, Ill. Filed Nov. 28, 1932.

MISTI SHEER

No exclusive rights to the word "Sheer" standing alone are claimed by the applicant.
For Women's and Misses' Hosiery.
Claims use since May 25, 1932.

Ser. No. 332,821. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y. Filed Dec. 6, 1932.

OX HIDE

For Men's and Boys' Work Shirts, Work Pants, Work Suits, and Play Suits.
Claims use since Oct. 19, 1932.

Ser. No. 333,041. MILFORD SHOE COMPANY, Milford, Mass. Filed Dec. 13, 1932.

MILFORD ARTISANS
ART IN SHOES

No registration rights are claimed for the words "Art in Shoes" apart from the mark shown in the drawing.
For Boots and Shoes of Leather, Rubber, Fabric, and Combinations Thereof.
Claims use since Nov. 15, 1932.

Ser. No. 333,170. THE SELBY SHOE COMPANY, Portsmouth, Ohio. Filed Dec. 17, 1932.

LOKOSHU

The exclusive use of the word "Shu" is disclaimed.
For Shoes of Leather and/or Fabric.
Claims use since Oct. 20, 1932.

Ser. No. 333,277. APEX HOSIERY COMPANY, Philadelphia, Pa. Filed Dec. 22, 1932.

APEX NON-RUN

The mark "Non-Run" is disclaimed apart from the mark as shown in the drawing.
For Hosiery.
Claims use since Sept. 1, 1932.

Ser. No. 333,331. INTERNATIONAL SHOE CO., St. Louis, Mo. Filed Dec. 23, 1932.



For Boots and Shoes of Leather, Fabric, and/or Combinations Thereof.
Claims use since Dec. 8, 1932.

Ser. No. 333,543. THE WARNER BROTHERS COMPANY, Bridgeport, Conn. Filed Dec. 30, 1932.

A'Lure

For Brassières.
Claims use since Dec. 16, 1932.

Ser. No. 333,626. COHEN, GOLDMAN & CO., INC., New York, N. Y. Filed Jan. 3, 1933.

DRESS-TEX

No claim is made to the exclusive use of the word "Dress" separate and apart from the mark shown in the drawing.
For Men's Full Dress Suits and Dress Overcoats Made of Either Wool or Worsted Material.
Claims use since Nov. 1, 1932.

Ser. No. 333,755. BLOOMINGDALE BROS., INC., New York, N. Y. Filed Jan. 9, 1933.

BLOOMINGDALE'S
ALLJACK

For Lumberjackets.
Claims use since Nov. 25, 1932.

Ser. No. 333,857. LA SALLE GIRL COAT CORPORATION, New York, N. Y. Filed Jan. 12, 1933.

Plump Girl

For Girls' Coats.
Claims use since Oct. 5, 1932.

Ser. No. 334,149. JOSEPH LIBERMAN, New York, N. Y. Filed Jan. 20, 1933.

VIKING MAID

For Ladies' and Children's Underwear, Comprising, Slips, Panties, Bloomers, Step-Ins, Pyjamas, Shirt Waists, Dresses, Nightshirts, Bath Robes, and Bathing Suits.
Claims use since July 1, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 333,214. KARL MATHEUS, Chicago, Ill. Filed Dec. 19, 1932.

Elasto

For Belt Buckles Made of Metal, Except Buckles Made of Precious Metal Like Platinum, Gold, and Silver.
Claims use since Jan. 1, 1932.

CLASS 41

Canes, Parasols, and Umbrellas

Ser. No. 333,740. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Jan. 7, 1933.



For Umbrellas and Canes.
Claims use since Nov. 16, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 327,427. LOUIS H. COHEN, New York, N. Y. Filed May 25, 1932.



The trade-mark consists of a pair of spaced parallel broken lines arranged parallel to and adjacent an edge of the fabric, in association with a series of spaced diamond shaped areas interposed between said broken lines, said broken lines and diamond shaped areas being of a contrasting color to said fabric.
For Piece Goods—Namely, Silk, Cotton, and a Combination of Silk and Cotton.
Claims use since Mar. 15, 1932.

Ser. No. 332,105. WILLIAM J. STUEBE, New York, N. Y. Filed Nov. 12, 1932.

Studio Net

No claim being made to the exclusive use of the word "Net," apart from the mark as shown in the drawing.
For Cotton and Rayon Piece Goods.
Claims use since June 21, 1932.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 332,687. COHEN, GOLDMAN & CO. INC., New York, N. Y. Filed Dec. 2, 1932.

Tropi-tex

For Piece Goods, Fabrics Made from Combinations of Wool, Worsted, Cotton, or Mohair Used for Clothing.
Claims use since June 1, 1932.

Ser. No. 332,878. A. D. ELLIS MILLS INCORPORATED, Monson, Mass. Filed Dec. 8, 1932.



The trade-mark consists of a selvage made up with four narrow and spaced yellow bands separated by blue bands of substantially the same width. The representation of the goods per se apart from the mark is disclaimed.
For Blue Woolen Piece Goods, Particularly Used for Making Men's Blue Uniforms for Military and Other Uniform Requirements.
Claims use since November, 1915.

Ser. No. 333,478. HARDWICK & MAGEE COMPANY, Philadelphia, Pa. Filed Dec. 29, 1932.

SHIRVANA
LUSTRA RUG

No claim being made to the words "Shirvana" and "Rug" apart from the mark as shown.
For Textile Rugs.
Claims use since June 1, 1932.

Ser. No. 333,664. WILLIAM L. BARRELL CO. INC., New York, N. Y. Filed Jan. 5, 1933.

PRINTEX

For Cotton Fabrics in the Piece.
Claims use since May 31, 1923.

Ser. No. 334,142. CONTINENTAL MILLS, INC., Philadelphia, Pa. Filed Jan. 20, 1933.

ANCUNA

For Woven and Knitted Woolen, and Woven and Knitted Worsted Fabric, and Special Woven and Knitted Fabrics Having a Fleecy Pile or Surface in the Piece.
Claims use since Jan. 1, 1929.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 333,513. GENERAL ELECTRIC COMPANY, Schenectady, N. Y. Filed Dec. 30, 1932.

Sanoflex

For Electric Heating Pads.
Claims use since June 6, 1932.

Ser. No. 333,583. EVERLASTIK, INC., Chelsea, Mass. Filed Jan. 3, 1933.

Snug-Ette

For Sanitary Belts.
Claims use since Dec. 24, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 314,767. MINNEHAHA WATER COMPANY, Cleveland, Ohio. Filed May 19, 1931.

Minnehaha

For Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks.
Claims use since June, 1896.

Ser. No. 333,169. JACOB S. POLEFSKY, New York, N. Y. Filed Dec. 17, 1932.



For Nonalcoholic, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts for Making the Same.
Claims use since July, 1930.

Ser. No. 333,751. JOHN AQUINO SONS, INC., New York, N. Y. Filed Jan. 9, 1933.

CORALLO

For Nonalcoholic, Maltless Beverages and Syrups Therefor, and Natural Mineral Water.
Claims use since 1928.

Ser. No. 334,077. SOCIETE GENERALE COMMERCIALE D'EAUX MINERALS DU BASSIN DE VICHY, SOCIETE ANONYME, Paris, France. Filed Jan. 18, 1933.



For Mineral Waters.
Claims use since July 1, 1928.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 321,257. RELIANCE PRODUCTS CO. INC., Chicago, Ill. Filed Nov. 18, 1931.



No claim is made to the words "Brands," "Mfg. By," and "Chicago" apart from the mark as shown in the drawing.
For Mayonnaise, French Dressing, Thousand Island Dressing, Salad Oils, Pickles, Vinegar, and Honey.
Claims use since January, 1931.

Ser. No. 321,582. ALLGÄUER KÄSESCHMELZWERK G. M. B. H., Kempten/Allgau, Germany. Filed Nov. 30, 1931.



The word "Alpenkäse" is disclaimed apart from the mark as shown on the drawing.
For Milk, Cream, Butter, and Cheese.
Claims use since Mar. 27, 1931.

Ser. No. 322,954. EARL FRUIT COMPANY, San Francisco, Calif. Filed Jan. 13, 1932.



For Fresh Fruits—Namely, Pears and Grapes.
Claims use since Aug. 7, 1931.

Ser. No. 324,779. M. & B. CONE COMPANY, Brooklyn, N. Y. Filed Mar. 4, 1932.



The geographical word "Manhattan" is disclaimed apart from the mark as shown on the drawing.
For Ice Cream Waffles or Wafers.
Claims use since Feb. 24, 1932.

Ser. No. 328,419. EMPRESA MATE LARANGEIRA SOCIEDAD ANONIMA, Buenos Aires, Argentina. Filed June 30, 1932.



The representation of the goods are disclaimed. All of the wording except "L" and "Cruz De Malta" is disclaimed apart from the mark as shown on the drawing.
For Yerba Mate (Paraguayan Tea).
Claims use since Apr. 22, 1926.

Ser. No. 329,409. S. A. PASTIFICIO NICOLA DELFINO & FIGLI, Pescara-Riviera di Castellamare, Italy. Filed Aug. 8, 1932.



For Alimentary Pastes (Macaroni, Spaghetti, and the Like).
Claims use since June 15, 1931.

Ser. No. 330,310. ALFRED SCHRATTER, New York, N. Y. Filed Sept. 13, 1932.



For Cheese.
Claims use since March, 1931.

Ser. No. 330,567. AKTIESELSKAPET NORSE CROWN COMPANY LTD., Oslo, Norway. Filed Sept. 22, 1932.



Applicant disclaims the word "Oat" apart from the mark as shown on the drawing.
For Puffed Oats and Rolled Oats.
Claims use since October, 1931.

Ser. No. 331,390. MOUNT VERNON MILLING COMPANY, Mount Vernon, Ind. Filed Oct. 17, 1932.



For Flake Hominy.
Claims use since Sept. 25, 1932.

Ser. No. 331,488. BLOOMINGDALE BROS., INC., New York. N. Y. Filed Oct. 24, 1932.



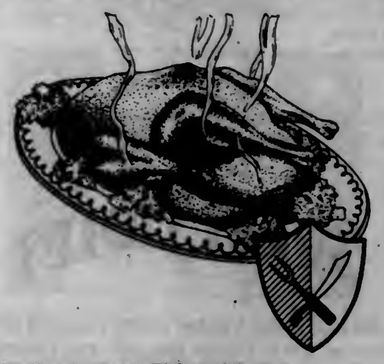
For Peanut Butter, Mayonnaise, and Tomato Juice.
Claims use since Sept. 1, 1932.

Ser. No. 331,569. STANDARD FLAVORS, INC., Kansas City, Mo. Filed Oct. 24, 1932.



No claim is made to the word "Flavors" except in the association shown in the drawing.
For Food Flavors and Food Flavoring Extracts.
Claims use since Sept. 14, 1932.

Ser. No. 331,756. STICKNEY & POOR SPICE CO., Boston, Mass. Filed Oct. 31, 1932.



For Stuffing for Meat, Fish, and Peppers.
Claims use since July 21, 1932.

Ser. No. 331,880. NICHOLAS WAPLER COMPANY, New York, N. Y. Filed Nov. 3, 1932.

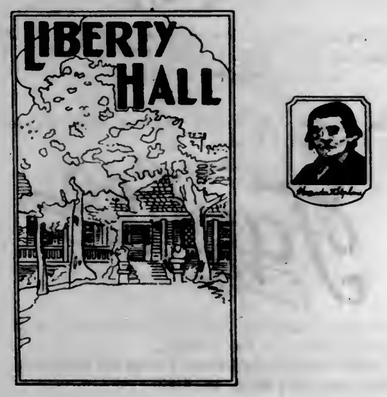


The word "Fischfutter" is herewith disclaimed apart from the mark as shown on the drawing, being descriptive and not capable of exclusive appropriation, nor is such exclusive appropriation sought by the applicant.

For Feed for Fish.

Claims use since 1925.

Ser. No. 332,413. MCCORD-STEWART COMPANY, INC., Atlanta, Ga. Filed Nov. 23, 1932.



The portrait and facsimile signature forming a part of the mark is that of Alexander H. Stephens, an American statesman, who was a member of the Georgia State Legislature, then a member of Congress from Georgia.

For Coffee.

Claims use since Apr. 1, 1932.

Ser. No. 332,653. FINGER LAKES CANNING CO., INC., Penn Yan, N. Y. Filed Dec. 1, 1932.

SWEET VIOLET

For Canned Fruits, Canned Jellies, Canned Vegetables, Canned Sauer Kraut, Canned Succotash, and Canned Apple Sauce.

Claims use since 1888.

Ser. No. 332,703. UPLAND MUTUAL GROVES, INC., Upland, Calif. Filed Dec. 2, 1932.

Upland Silver

For Fresh Citrus Fruits.

Claims use since Oct. 21, 1930.

Ser. No. 332,751. CADMAN PACKING COMPANY, Phoenix, Ariz. Filed Dec. 5, 1932.

HI-VITA

For Fresh Deciduous Fruits, Fresh Vegetables, Fresh Cantaloupes, Fresh Grapes, Fresh Citrus Fruits.

Claims use since July 1, 1932.

Ser. No. 332,753. CALIFORNIA PRUNE & APRICOT GROWERS ASSOCIATION, San Jose, Calif. Filed Dec. 5, 1932.

SUNSWEET

For Dried Fruit.

Claims use since July 19, 1932.

Ser. No. 333,199. SAXONY MILLS, St. Louis, Mo. Filed Dec. 19, 1932.

IXL

For Wheat Flour.

Claims use since 1856.

Ser. No. 333,529. OSCAR F. POGGES, Long Island City, N. Y. Filed Dec. 30, 1932.

POLA ROLL

No claim is made to the words "Roll" and "The Cream That Takes the Cake" shown in the drawing, apart from the other feature of the mark.

For Frozen Confections.

Claims use since Oct. 10, 1929.

Ser. No. 333,531. RIVERSIDE PRODUCTS COMPANY, Cincinnati, Ohio. Filed Dec. 30, 1932.



The horizontal and vertical lining on the drawing indicate respectively the colors blue and red which are particularly claimed.

For Malt Syrup.

Claims use since Nov. 20, 1932.

Ser. No. 333,567. RUSSELL-MILLER MILLING CO., Minneapolis, Minn. Filed Jan. 3, 1933.

KYROL

For Wheat Flour.

Claims use since Nov. 30, 1932.

Ser. No. 333,737. ORBIT GUM COMPANY, Chicago, Ill. Filed Jan. 7, 1933.

Tattoo

For Chewing Gum.

Claims use since Dec. 28, 1932.

Ser. No. 333,911. DORAL FOOD PRODUCTS CO., INC., New York, N. Y. Filed Jan. 11, 1933.



For Canned, Bottled, and Boxed Gelatine, Desserts, and Puddings in Dry or Powdered Form; Powdered Malted Milk, and Concentrated Food Flavoring Compounds.

Claims use since Jan. 11, 1927.

Ser. No. 333,942. NORTH AMERICAN MERCANTILE COMPANY, San Francisco, Calif. Filed Jan. 14, 1933.

SEA LUXE

For Canned Fish.

Claims use since May 2, 1932.

Ser. No. 333,961. CLIFFORD L. IOENS, doing business as Hi-Vi Sales Corporation, St. Louis, Mo. Filed Jan. 16, 1933.

Hi-Vi

For Soy Bean Oil for Use in Foods and Ingredients of Foods.

Claims use since Aug. 1, 1932.

CLASS 48

Malt Beverages and Liquors

Ser. No. 333,512. FIRST PRIZE BREWERS, INC., New York, N. Y. Filed Dec. 30, 1932.



The drawing is lined to indicate the colors red and blue.

For Malt Beverage with Not More Than the Legal Alcoholic Content.

Claims use since Dec. 17, 1932.

Ser. No. 333,571. ANHEUSER-BUSCH, INCORPORATED, St. Louis, Mo. Filed Jan. 3, 1933.



The drawing is lined for red.

For Malt Beverage with Not More Than the Legal Alcoholic Content.

Claims use since Oct. 23, 1903.

Ser. No. 333,658. ARNOLD BREWING CORPORATION, Canajoharie, N. Y. Filed Jan. 5, 1933.

ARNOLD'S



No claim is made to the name "Arnold's" except in the display and association shown on the drawing.

For Malt Beverage with Not More Than the Legal Alcoholic Content.

Claims use since Dec. 27, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 331,787. THE GLENFYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland. Filed Nov. 1, 1932.

Specially Selected
Rare Old Highland Whisky
Foulds'
"SCOTTISH CREAM"
William Foulds & Co Limited
DISTILLERS.

No claim is made to any of the words appearing on the drawing with the exception of the names "Fould's" and the name of the applicant company.

For Whisky.

Claims use since Apr. 28, 1908.

Ser. No. 331,800. ROBERTSON & BAXTER LIMITED, Glasgow, Scotland. Filed Nov. 1, 1932.



No claim is made to the words "Highland Whisky" except in the association shown on the drawing.

For Whisky.

Claims use since Oct. 23, 1888.

Ser. No. 331,802. ROBERTSON & COMPANY, Glasgow, Scotland. Filed Nov. 1, 1932.

STRATHMAYAR
A Blend of the Finest Highland Whiskies.

No claim is made to the words "A Blend of the Finest Whiskies".

For Whisky.

Claims use since May 28, 1886.

Ser. No. 331,804. ROBERTSON & BAXTER LIMITED, Glasgow, Scotland. Filed Nov. 1, 1932.



No claim is made to the words "Blend" and "Fine Old Scotch Whisky" apart from the mark shown.

For Whisky.

Claims use since Feb. 7, 1884.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 331,805. ROBERTSON & BAXTER LIMITED, Glasgow, Scotland. Filed Nov. 1, 1932.



No claim is made to the words "Blend" and "Whisky" apart from the mark shown.

For Whisky.

Claims use since Oct. 28, 1881.

Ser. No. 331,973. THE DRAMBUIE LIQUEUR COY (1927) LIMITED, Edinburgh, Scotland. Filed Nov. 5, 1932.

DRAMBUIE

For Distilled Alcoholic Liqueur.

Claims use since August, 1871.

Ser. No. 334,213. JOS. S. FINCH & COMPANY, New York, N. Y. Filed Jan. 21, 1933.

LITTLE TUB

For Whiskey and Other Potable Spirits.

Claims use since Dec. 17, 1929.

Ser. No. 334,336. GEO. G. SANDEMAN SONS & CO. LIMITED, London, England. Filed Jan. 25, 1933.



For Spirits, Comprising Whisky, Gin, Rum, and Brandy.

Claims use since Nov. 27, 1930.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 325,390. ALLEN INDUSTRIES, INC., Detroit, Mich. Filed Mar. 23, 1932.

Airytread

For Floor Coverings of Felt, Fur, and Rubber, and Rug Cushions.

Claims use since Dec. 1, 1930.

Ser. No. 325,392. ALLEN INDUSTRIES, INC., Detroit, Mich. Filed Mar. 23, 1932.



For Floor Coverings of Felt, Fur, and Rubber, and Rug Cushions.

Claims use since July 15, 1931.

Ser. No. 325,393. ALLEN INDUSTRIES, INC., Detroit, Mich. Filed Mar. 23, 1932.

ALTEX

For Floor Coverings of Felt, Fur, and Rubber, and Rug Cushions.

Claims use since July 15, 1931.

Ser. No. 332,669. THOMAS WOOD & SONS, INC., Montclair, N. J. Filed Nov. 30, 1932.

WOODGRO

For Fertilizers.

Claims use since Mar. 1, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

FEBRUARY 28, 1933

301,297. WHISKEY AND POTABLE SPIRITS. JOSEPH E. SEAGRAM & SONS LIMITED, Waterloo, Ontario, Canada.
Filed November 12, 1932. Serial No. 332,104. PUBLISHED DECEMBER 20, 1932. Class 49.

301,298. WHISKEY. BLOCH BROS., Glasgow, Scotland.
Filed November 10, 1932. Serial No. 332,028. PUBLISHED DECEMBER 20, 1932. Class 49.

301,299. MALT BEVERAGES WITH NOT MORE THAN THE LEGAL ALCOHOLIC CONTENT, AND EXTRACTS THEREFOR. CHRISTIE & HOOVER, Houston, Tex.
Filed October 31, 1932. Serial No. 331,723. PUBLISHED DECEMBER 20, 1932. Class 48.

301,300. DOOR CLOSERS AND DOOR HANGERS. OTIS ELEVATOR COMPANY, Jersey City, N. J., and New York, N. Y.
Filed October 29, 1932. Serial No. 331,698. PUBLISHED DECEMBER 20, 1932. Class 13.

301,301. DOOR CLOSERS. OTIS ELEVATOR COMPANY, Jersey City, N. J., and New York, N. Y.
Filed October 29, 1932. Serial No. 331,695. PUBLISHED DECEMBER 20, 1932. Class 13.

301,302. INSULATING BUILDING BOARD. THERMAX CORPORATION, Chewelah, Wash.
Filed October 28, 1932. Serial No. 331,656. PUBLISHED DECEMBER 13, 1932. Class 12.

301,303. OIL BURNERS FOR STOVES AND RANGES AND PARTS THEREOF. THE ALASCO OIL BURNER CO. INC., Winchendon, Mass.
Filed October 24, 1932. Serial No. 331,486. PUBLISHED DECEMBER 20, 1932. Class 34.

301,304. ASBESTOS-CEMENT SHINGLES. THE RUBEROID CO., Bound Brook, N. J., and New York, N. Y.
Filed October 18, 1932. Serial No. 331,346. PUBLISHED DECEMBER 13, 1932. Class 12.

301,305. STOKERS. DETROIT STOKER COMPANY, Monroe and Detroit, Mich.
Filed October 17, 1932. Serial No. 331,299. PUBLISHED DECEMBER 20, 1932. Class 34.

301,306. SUB-SURFACE IRRIGATION APPARATUS CONSISTING OF WATER PIPES, VALVES, CONTROLS, AND PIPE FITTINGS. NORTHERN INDIANA BRASS COMPANY, Elkhart Ind.
Filed October 10, 1932. Serial No. 331,116. PUBLISHED DECEMBER 20, 1932. Class 13.

301,307. CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND FOR SYRUPS AND EXTRACTS USED IN MAKING THE SAME. ABE KANNER, doing business as The Globe Bottling Co., Los Angeles, Calif.
Filed October 10, 1932. Serial No. 331,112. PUBLISHED DECEMBER 20, 1932. Class 45.

301,308. RADIANT GAS HEATERS. CONTINENTAL STOVE CORPORATION, Ironton, Ohio.
Filed October 5, 1932. Serial No. 330,948. PUBLISHED DECEMBER 20, 1932. Class 34.

301,309. EXERCISING MACHINES. THEODORE WILLIAMS, Syracuse, N. Y.
Filed September 27, 1932. Serial No. 330,718. PUBLISHED DECEMBER 20, 1932. Class 22.

301,310. MATERIAL FOR DUST PROOFING, HARDENING, ETC., CONCRETE FLOORS OR OTHER CONCRETE SURFACES. CONCRETE TREATMENT MATERIALS, INC., Philadelphia, Pa.
Filed September 21, 1932. Serial No. 330,539. PUBLISHED DECEMBER 13, 1932. Class 12.

301,311. MATERIAL FOR DUST PROOFING, HARDENING, ETC., CONCRETE FLOORS OR OTHER CONCRETE SURFACES. CONCRETE TREATMENT MATERIALS, INC., Philadelphia, Pa.
Filed September 21, 1932. Serial No. 330,538. PUBLISHED DECEMBER 13, 1932. Class 12.

301,312. MATERIAL FOR DUST PROOFING, HARDENING, ETC., CONCRETE FLOORS OR OTHER CONCRETE SURFACES. CONCRETE TREATMENT MATERIALS, INC., Philadelphia, Pa.
Filed September 21, 1932. Serial No. 330,587. PUBLISHED DECEMBER 13, 1932. Class 12.

301,313. CLEANSING TISSUES. VELDOWN COMPANY, INC., New York, N. Y.
Filed August 27, 1932. Serial No. 329,910. PUBLISHED OCTOBER 27, 1932. Class 37.

301,314. PAPER NAPKINS, TOILET PAPER, AND PAPER TOWELS. FORT HOWARD PAPER COMPANY, Green Bay, Wis.
Filed August 22, 1932. Serial No. 329,745. PUBLISHED SEPTEMBER 27, 1932. Class 37.

301,315. STORAGE BATTERIES. VALENTINE J. MOLZBERGER, doing business as Molzberger Battery Company, Antigo, Wis.
Filed October 19, 1932. Serial No. 331,381. PUBLISHED DECEMBER 13, 1932. Class 21.

301,316. BATTERIES, ELECTRIC LIGHT BULBS, SPARK PLUGS, CABLES FOR ELECTRIC CIRCUITS, AND PARTS THEREOF. HICKOK OIL CORPORATION, doing business as Hi-Speed Tire and Accessory Co., Toledo, Ohio.
Filed October 20, 1932. Serial No. 331,403. PUBLISHED DECEMBER 13, 1932. Class 21.

301,317. THERMAL INSULATING MATERIAL MADE OUT OF INSULATING MINERALS AND WOOD PULP. DOMINION STUCCO CO. LIMITED, St. Boniface, Manitoba, Canada.
Filed August 8, 1931. Serial No. 317,912. PUBLISHED DECEMBER 13, 1932. Class 12.

301,318. NON-ALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. THOS. S. MAGNANI, Bakersfield, Calif.
Filed September 25, 1931. Serial No. 319,384. PUBLISHED MARCH 29, 1932. Class 45.

301,319. POLISHING WAX FOR COATING AND POLISHING WOOD, METAL, AND OTHER SURFACES. S. C. JOHNSON & SON, Racine, Wis.
Filed September 26, 1931. Serial No. 319,449. PUBLISHED DECEMBER 13, 1932. Class 16.

301,320. CHOP SUEY. AMERICAN KITCHENS, INC., Chicago, Ill.
Filed October 5, 1931. Serial No. 319,713. PUBLISHED DECEMBER 13, 1932. Class 46.

301,321. LUBRICATING EQUIPMENT, APPARATUS, AND MACHINERY. GRAY COMPANY INCORPORATED, Minneapolis, Minn.
Filed August 5, 1932. Serial No. 329,342. Class 23.

301,322. MEN'S TIES. THE MAY DEPARTMENT STORES COMPANY, St. Louis, Mo.
Filed October 12, 1931. Serial No. 320,093. PUBLISHED DECEMBER 6, 1932. Class 39.

301,323. SPORT GOODS CONSISTING OF RAINCOATS OF CALENDERED RUBBER. MARATHON RUBBER PRODUCTS, INC., Wausau, Wis.
Filed October 15, 1931. Serial No. 320,096. PUBLISHED DECEMBER 6, 1932. Class 39.

301,324. FRAMED PRINTS AND PICTURES. PAUL DIETERLE, doing business as Museums Supplies Company, Binghamton, N. Y.
Filed October 17, 1931. Serial No. 320,160. PUBLISHED DECEMBER 13, 1932. Class 38.

301,325. PINS, KEYS, AND MEDALS MADE OF OR PLATED WITH PRECIOUS METAL. SUPREME COUNCIL OF SCARAB, Lawrence, Kans.
Filed November 16, 1931. Serial No. 321,176. PUBLISHED DECEMBER 13, 1932. Class 28.

301,326. MALT SYRUP. SOLO PRODUCTS CO., Chicago, Ill.
Filed February 8, 1932. Serial No. 323,964. PUBLISHED DECEMBER 13, 1932. Class 46.

301,327. PAPER TOWELS AND TOILET PAPER. BLAKE, MOFFITT & TOWNE, San Francisco, Calif.
Filed February 9, 1932. Serial No. 323,984. PUBLISHED MARCH 15, 1932. Class 37.

301,328. INCANDESCENT ELECTRIC BULBS. TUNGSOL LAMP WORKS, INC., Newark, N. J.
Filed August 13, 1932. Serial No. 329,541. PUBLISHED DECEMBER 13, 1932. Class 21.

301,329. CANNED FRUITS. THE LEADWAY STORES CORPORATION, Wilmington, Del.
Filed September 3, 1932. Serial No. 330,095. PUBLISHED DECEMBER 13, 1932. Class 46.

301,330. COCOA. NAAMLOOZE VENNOOTSCHAP DROSTE'S CACAO- EN CHOCOLADEFABRIEKEN, Haarlem, Netherlands.
Filed September 13, 1932. Serial No. 330,307. PUBLISHED DECEMBER 13, 1932. Class 46.

301,331. OLEOMARGARINE. STANDARD NUT MARGARINE CO., Indianapolis, Ind.
Filed September 20, 1932. Serial No. 330,525. PUBLISHED DECEMBER 13, 1932. Class 46.

301,332. OLEOMARGARINE. STANDARD NUT MARGARINE CO., Indianapolis, Ind.
Filed September 20, 1932. Serial No. 330,527. PUBLISHED DECEMBER 13, 1932. Class 46.

301,333. HARD BREAD, ESPECIALLY HARD RYE BREAD IN FLAT CAKES. AKTIEBOLAGET SKÅNSKA SPISBRÖDSFABRIKEN, Kristianstad, Sweden.
Filed September 28, 1932. Serial No. 330,736. PUBLISHED DECEMBER 13, 1932. Class 46.

301,334. FROZEN CONFECTIONS. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y.
Filed September 30, 1932. Serial No. 330,833. PUBLISHED NOVEMBER 22, 1932. Class 46.

301,335. FROZEN CONFECTIONS. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y.
Filed September 30, 1932. Serial No. 330,834. PUBLISHED NOVEMBER 22, 1932. Class 46.

301,336. MAYONNAISE, SANDWICH SPREAD, RUSSIAN DRESSING AND TABLE VEGETABLE OIL FOR USE IN SUBSTITUTION FOR OLIVE OIL. HYMAN J. AROESTY, doing business as Aroesty Products, Rochester, N. Y.
Filed October 13, 1932. Serial No. 331,215. PUBLISHED DECEMBER 13, 1932. Class 46.

301,337. SELF-RISING PANCAKE FLOUR. THE LIGHT GRAIN & MILLING CO., Liberal, Kans.
Filed October 17, 1932. Serial No. 331,310. PUBLISHED DECEMBER 13, 1932. Class 46.

301,338. ANCHORS; WIRE, INCLUDING ROLLED WIRE, BRIGHT ANNEALED WIRE, BLACK ANNEALED WIRE, AND DRAWN WIRE; PERMANENT WAY MATERIAL FOR RAILWAYS—NAMELY, RAILS, METAL TIES, FISH PLATES, SLEEPERS AND SLEEPER PLATES, METAL BRACES USED AT SWITCHES AND CURBS, TIE PLATES; TROUGH IRON TO PROTECT CONDUIT AND METAL SHEETS FOR DRAFT FLUES, ALL SAID GOODS BEING MADE OF IRON OR STEEL. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.
Filed June 28, 1930. Serial No. 302,976. PUBLISHED DECEMBER 13, 1932. Class 14.

301,339. WIRE GOODS—NAMELY, WIRE GAUZE, WIRE NETTING, AND OTHER WIRE FENCING MATERIALS, WIRE LACE, WIRE PINS, WIRE NAILS, WIRE RINGS, BARBED WIRE, ANCHOR STRIP IRON WIRE; CHAINS; SMALL IRON WARE—NAMELY, CLIPS, SCREWS, TIE RODS, SPIKES; KETTLES OF SHEET METAL, STEEL CONDUITS, METAL COAL CHANNELS, WATER DUCTS FOR MINING PURPOSES; STEAM, GAS, AND WATER PIPES; ANCHOR CHAINS, WOVEN WIRE, FENCE WIRE, SLEEPER SCREWS, BOLTS AND NUTS, RIVETS, AND HEAVY METAL CHAINS—ALL SAID GOODS BEING MADE OF IRON OR STEEL. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.
Filed June 28, 1930. Serial No. 302,975. PUBLISHED DECEMBER 20, 1932. Class 13.

301,340. FABRICATED STRUCTURAL SHAPES. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.
Filed June 28, 1930. Serial No. 302,974. PUBLISHED DECEMBER 13, 1932. Class 12.

301,341. CIGARS. BAYUK CIGARS INCORPORATED, Philadelphia, Pa.
Filed November 29, 1929. Serial No. 293,023. PUBLISHED FEBRUARY 4, 1930. Class 17.

301,342. DRY CLEANING ABSORBEFACIENT. EMERY INDUSTRIES, INC., Cincinnati, Ohio.
Filed August 26, 1932. Serial No. 329,853. PUBLISHED DECEMBER 13, 1932. Class 6.

301,343. AUTOMATIC ENDLESS-CHAIN IMPINGEMENT OR OPEN BAFFLE TYPE OF VENTILATING UNITS. AMERICAN AIR FILTER COMPANY, INC., Louisville, Ky.
Filed May 26, 1932. Serial No. 327,460. PUBLISHED DECEMBER 20, 1932. Class 34.

301,344. CIGARS. LILIENFIELD BROS. & CO., Chicago, Ill.
Filed September 22, 1932. Serial No. 330,576. PUBLISHED DECEMBER 20, 1932. Class 17.

301,345. CIGARS. JOSE ESCALANTE & CO., Chicago, Ill.
Filed September 22, 1932. Serial No. 330,572. PUBLISHED DECEMBER 20, 1932. Class 17.

301,346. GLOVES, CORSETS, BRASSIÈRES, ETC. WEILL & HARTMANN, New York, N. Y.
Filed September 21, 1932. Serial No. 330,559. PUBLISHED NOVEMBER 29, 1932. Class 39.

301,347. MEN'S COATS, VEST COATS, SLEEVELESS VEST COATS, SPORT COATS, AND NORFOLK COATS. THE CROWN OVERALL MFG. CO., Cincinnati, Ohio.
Filed September 15, 1932. Serial No. 330,365. PUBLISHED DECEMBER 6, 1932. Class 39.

301,348. BOYS' AND GIRLS' ROMPERS, DRESSES, PLAY SUITS, AND GYMNASIUM SUITS. GRETZ & SCHWARTZ, Philadelphia, Pa.
Filed August 27, 1932. Serial No. 329,918. PUBLISHED DECEMBER 6, 1932. Class 39.

301,349. HOSIERY. HARRINGTON & WARING, New York, N. Y.
Filed August 25, 1932. Serial No. 329,832. PUBLISHED DECEMBER 13, 1932. Class 39.

301,350. ARTICLES OF CLOTHING—NAMELY, FROCKS, DRESSES, UNDERWEAR, AND NIGHTWEAR, ALL BEING FOR LADIES; AND PYJAMAS AND SHIRTS FOR MEN. WILLIAM HOLLINS AND COMPANY, LIMITED, Nottingham, England.
Filed August 18, 1932. Serial No. 329,637. PUBLISHED DECEMBER 6, 1932. Class 39.

301,351. EYE-LASH CURLERS. C. A. FUTTER, Chicago, Ill.
Filed July 23, 1932. Serial No. 329,017. PUBLISHED NOVEMBER 22, 1932. Class 40.

301,352. KNITTED BATHING SUITS. GREENHILL & DANIEL, INC., Brooklyn, N. Y.
Filed July 6, 1932. Serial No. 328,579. PUBLISHED DECEMBER 6, 1932. Class 39.

301,353. CERTAIN NAMED WEARING APPAREL. SCRUGGS-VANDERVOORT-BARNEY DRY GOODS COMPANY, St. Louis, Mo.
Filed June 25, 1932. Serial No. 328,310. PUBLISHED DECEMBER 20, 1932. Class 39.

301,354. FERTILIZERS. UNIÓN ESPAÑOLA DE EXPLOSIVOS, SOCIEDAD ANÓNIMA, Bilbao, Spain.
Filed June 20, 1932. Serial No. 328,146. PUBLISHED DECEMBER 13, 1932. Class 10.

301,355. DRESS AND NEGLIGEE SHIRTS, PAJAMAS, UNDERWEAR, AND NECKTIES. WILSON BROTHERS, Chicago, Ill.
Filed May 4, 1932. Serial No. 326,766. PUBLISHED DECEMBER 13, 1932. Class 39.

301,356. ICE CREAM. FOREMOST DAIRY PRODUCTS INCORPORATED, Jacksonville, Fla.
Filed May 17, 1930. Serial No. 300,714. PUBLISHED DECEMBER 13, 1932. Class 46.

301,357. RADIO AND TELEVISION RECEIVING SETS AND PARTS THEREOF. ZENITH RADIO CORPORATION, Chicago, Ill.
Filed May 4, 1931. Serial No. 314,186. PUBLISHED SEPTEMBER 1, 1931. Class 21.

301,358. RADIO AND TELEVISION RECEIVING SETS AND PARTS THEREOF. ZENITH RADIO CORPORATION, Chicago, Ill.
Filed May 4, 1931. Serial No. 314,187. PUBLISHED SEPTEMBER 1, 1931. Class 21.

301,359. FRAMES FOR ELECTRIC SWITCHES, TELEGRAPH WIRE, INSULATOR BRACKETS, CABLE ARMOR FOR ELECTRIC CABLES, LIGHTNING CONDUCTORS—ALL SAID GOODS BEING MADE OF IRON OR STEEL. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.
Filed May 29, 1931. Serial No. 315,219. PUBLISHED DECEMBER 13, 1932. Class 21.

301,360. DOG FOOD. PLEE-ZING, INC., Chicago, Ill.
Filed August 6, 1932. Serial No. 329,384. PUBLISHED DECEMBER 13, 1932. Class 46.

301,361. LUBRICATING OILS. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill.
Filed July 25, 1932. Serial No. 329,065. PUBLISHED DECEMBER 13, 1932. Class 15.

301,362. PEARL BARLEY, WHOLE AND SPLIT DRIED PEAS, DRIED BEANS, AND DRIED LENTILS. ALLEN V. SMITH, INC., Marcellus Falls, N. Y.
Filed July 5, 1932. Serial No. 328,565. PUBLISHED DECEMBER 13, 1932. Class 46.

301,363. CANNED FRUIT JUICES WITH PULP FOR FOOD PURPOSES. NELSON ASSOCIATES, LTD., Los Angeles, Calif.
Filed June 4, 1932. Serial No. 327,735. PUBLISHED DECEMBER 13, 1932. Class 46.

301,364. BREAD, CAKES, BISCUITS, RUSKS, WHEAT FLOUR, MALTED WHEAT FLOUR, MALTED BARLEY FLOUR, INFANTS' AND INVALIDS' FOODS, AND FLAVOURING MATERIALS FOR USE AS INGREDIENTS IN FOOD. MONTGOMERIE & CO. LTD., Glasgow, Scotland.
Filed April 21, 1932. Serial No. 326,334. PUBLISHED DECEMBER 13, 1932. Class 46.

301,365. INVERTASE PREPARATION SUITABLE FOR USE IN THE CONVERSION OF SUCROSE IN THE PREPARATION OF FOODS AND INGREDIENTS OF FOODS. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed November 3, 1932. Serial No. 331,877. PUBLISHED DECEMBER 13, 1932. Class 46.

301,366. MILD ADHESIVE PREPARATION FOR APPLICATION TO THE HANDS TO ASSURE SECURE GRIPPING OF TOOLS, GOLF CLUBS, TENNIS RACQUETS, AND OTHER HAND MANIPULATED IMPLEMENTS. MARTIN DENNIS COMPANY, Newark, N. J.
Filed October 31, 1932. Serial No. 331,727. PUBLISHED DECEMBER 20, 1932. Class 5.

301,367. ICE CREAM CAKE. ICE CREAM CAKE COMPANY, Philadelphia, Pa.
Filed October 6, 1932. Serial No. 330,997. PUBLISHED DECEMBER 20, 1932. Class 46.

301,368. WHEAT FLOUR. LIBERTY MILLS, San Antonio, Tex.
Filed November 7, 1932. Serial No. 331,958. PUBLISHED DECEMBER 20, 1932. Class 46.

301,369. CHOCOLATE FLAVORED EVAPORATED MILK. JOHN F. JELKE COMPANY, Chicago, Ill.
Filed October 29, 1932. Serial No. 331,688. PUBLISHED DECEMBER 18, 1932. Class 46.

301,370. PREPARATION FOR COAGULATING OR CONGEALING MILK. SAMUEL B. KIRK, Philadelphia, Pa.
Filed October 28, 1932. Serial No. 331,643. PUBLISHED DECEMBER 13, 1932. Class 46.

301,371. SOLE LEATHER. THE AMERICAN-OAK LEATHER COMPANY, Cincinnati, Ohio.
Filed October 26, 1932. Serial No. 331,570. PUBLISHED DECEMBER 20, 1932. Class 1.

301,372. FOODS FOR DOGS, CATS, FOXES, AND ALL CARNIVOROUS ANIMALS, AND FOR HUMAN CONSUMPTION. SCHLESSER BROTHERS, Portland, Oreg.
Filed October 25, 1932. Serial No. 331,565. PUBLISHED DECEMBER 20, 1932. Class 46.

301,373. WHEAT FLOUR. MILLERS PRODUCTS CORP., New York, N. Y.
Filed October 21, 1932. Serial No. 331,436. PUBLISHED DECEMBER 13, 1932. Class 46.

301,374. CANNED FRUITS AND VEGETABLES. GOLDBERG, BOWEN & CO., San Francisco, Calif.
Filed October 17, 1932. Serial No. 331,307. PUBLISHED DECEMBER 20, 1932. Class 46.

301,375. CANNED FISH AND CANNED FISH ROE. CONSERVERIES EMILE CHEMIN, SOCIETE A RESPONSABILITE LIMITEE, Paris, France.
Filed October 10, 1932. Serial No. 331,101. PUBLISHED DECEMBER 13, 1932. Class 46.

301,376. CANDIES, CHOCOLATES, AND COCOA. EUROPA SALES CORPORATION, New York, N. Y.
Filed October 7, 1932. Serial No. 331,044. PUBLISHED DECEMBER 13, 1932. Class 46.

301,377. CAKES. BRAUN BAKING COMPANY, Pittsburgh, Pa.
Filed September 27, 1932. Serial No. 330,692. PUBLISHED DECEMBER 13, 1932. Class 46.

301,378. CONDENSED BRICK CHILI. JAMES AUGUSTUS HOWARD, JR., Dallas, Tex.
Filed September 22, 1932. Serial No. 330,575. PUBLISHED DECEMBER 20, 1932. Class 46.

301,379. READY MIXED PAINTS, PAINT ENAMELS, STAINS, VARNISHES, AND LACQUERS. THE CINCINNATI VARNISH COMPANY, Cincinnati, Ohio.
Filed October 6, 1932. Serial No. 330,991. PUBLISHED DECEMBER 20, 1932. Class 16.

301,380. POLISHING MATERIAL AND MORE PARTICULARLY FOR A POLISHING PREPARATION FOR FURNITURE AND THE LIKE. FURNITURE CITY POLISH COMPANY, Grand Rapids, Mich.
Filed October 17, 1932. Serial No. 331,806. PUBLISHED DECEMBER 20, 1932. Class 16.

301,381. PERIODICAL OR NEWSPAPER COLUMN. JOHN L. HOFF, Chicago, Ill.
Filed October 17, 1932. Serial No. 331,359. PUBLISHED DECEMBER 13, 1932. Class 38.

301,382. BOND PAPER. THE PARKER-YOUNG COMPANY, Boston, Mass.
Filed October 24, 1932. Serial No. 331,513. PUBLISHED DECEMBER 20, 1932. Class 37.

301,383. PRINTED LABELS SOLD TO THE TRADE AS SUCH. NEHER-WHITEHEAD & COMPANY, St. Louis, Mo.
Filed October 31, 1932. Serial No. 331,748. PUBLISHED DECEMBER 20, 1932. Class 37.

301,384. PICTURE VARNISH AND PAINTING MEDIUM TO BE MIXED WITH PAINTS. TALENS & SON, INC., Irvington, N. J.
Filed October 31, 1932. Serial No. 331,760. PUBLISHED DECEMBER 13, 1932. Class 16.

301,385. WRITING AND PRINTING PAPER. HAMPSHIRE PAPER COMPANY, South Hadley Falls, Mass.
Filed November 4, 1932. Serial No. 331,895. PUBLISHED DECEMBER 13, 1932. Class 37.

301,386. PERIODICAL. M. KONNIGSBERG, New York, N. Y.
Filed November 1, 1932. Serial No. 331,794. PUBLISHED DECEMBER 13, 1932. Class 38.

301,387. WRITING AND PRINTING PAPER. HAMPSHIRE PAPER COMPANY, South Hadley Falls, Mass.
Filed November 4, 1932. Serial No. 331,896. PUBLISHED DECEMBER 13, 1932. Class 37.

301,388. PACKETS OF CLEANSING TISSUE. JOSEPH & ANDERSCH, Auburn, Calif.
Filed November 5, 1932. Serial No. 331,975. PUBLISHED DECEMBER 13, 1932. Class 37.

301,389. LIQUID FILTER SOAPS FOR DRY CLEANERS. E. F. HOUGHTON & CO., Philadelphia, Pa.
Filed February 17, 1932. Serial No. 324,257. PUBLISHED APRIL 12, 1932. Class 4.

301,390. CONTAINERS OF PAPER OR CARDBOARD-LIKE MATERIAL FOR FROZEN CONFECTIONS. PAC-KUPS INCORPORATED, Easton, Pa.
Filed February 20, 1932. Serial No. 324,353. PUBLISHED DECEMBER 20, 1932. Class 2.

301,391. CLOVER SEEDS, TIMOTHY SEEDS, LAWN GRASS SEED, AND FIELD OR FARM SEEDS. SAUL'S SEED STORE, INC., Syracuse, N. Y.
Filed April 23, 1932. Serial No. 326,509. PUBLISHED DECEMBER 13, 1932. Class 1.

301,392. STEEL WOOL PUT UP IN SMALL CLOTH COVERED BLOCKS. JAMES H. RHODES & COMPANY, Chicago, Ill.
Filed July 11, 1932. Serial No. 328,704. PUBLISHED DECEMBER 13, 1932. Class 4.

301,393. COTTON BATTING. KAHN'S PICKERY, New Orleans, La.
Filed June 18, 1932. Serial No. 329,165. PUBLISHED DECEMBER 13, 1932. Class 1.

301,394. RECTANGULAR ENAMELED DISH PANS. COLUMBIAN ENAMELING & STAMPING CO., Terre Haute, Ind.
Filed June 23, 1932. Serial No. 328,383. PUBLISHED DECEMBER 20, 1932. Class 13.

301,395. BUILDING BLOCK, BUILDING BRICK, AND OTHER UNIT SHAPES AND ARTICLES MANUFACTURED IN WHOLE OR IN PART FROM SLAG; FOR MASONRY CEMENT AND MORTAR AND AGGREGATE FOR CONCRETE OF ALL TYPES WHEN MADE IN WHOLE OR IN PART OF FURNACE SLAG. DANVILLE BRICK COMPANY, Danville, Ill.
Filed April 15, 1932. Serial No. 326,127. PUBLISHED DECEMBER 13, 1932. Class 12.

301,396. WHEAT FLOUR. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn.
Filed November 4, 1932. Serial No. 331,903. PUBLISHED DECEMBER 13, 1932. Class 46.

301,397. TIRE CASING DUSTING POWDERS—NAMELY, MICA, TALC, AND SOAPSTONE. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio.
Filed October 29, 1932. Serial No. 331,676. PUBLISHED DECEMBER 13, 1932. Class 1.

301,398. TIRE CASING DUSTING POWDERS—NAMELY, MICA, TALC, AND SOAPSTONE. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio.
Filed October 29, 1932. Serial No. 331,675. PUBLISHED DECEMBER 13, 1932. Class 1.

301,399. SPONGES AND CHAMOIS. AMERICAN SPONGE & CHAMOIS CO. INC., New York, N. Y.
Filed October 12, 1932. Serial No. 331,172. PUBLISHED DECEMBER 13, 1932. Class 1.

301,400. FUR SKINS. A. HOLLANDER & SON, INC., Newark, N. J.
Filed October 10, 1932. Serial No. 331,108. PUBLISHED DECEMBER 13, 1932. Class 1.

301,401. BIRD GRAVEL. THE R. T. FRENCH COMPANY, Rochester, N. Y.
Filed October 10, 1932. Serial No. 331,105. PUBLISHED DECEMBER 13, 1932. Class 1.

301,402. CERTAIN NAMED COSMETIC PREPARATIONS, HAIR TONIC, ETC. D'ORSAY PERFUMERIES CORPORATION, New York, N. Y.
Filed October 7, 1932. Serial No. 331,043. PUBLISHED DECEMBER 13, 1932. Class 6.

301,403. DYED FOX FURS, WOLF FURS, AND LYNX FURS. FEDERAL STAR DYERS CORP., New York, N. Y.
Filed October 8, 1932. Serial No. 331,079. PUBLISHED DECEMBER 13, 1932. Class 1.

301,404. FUR SKINS, PARTICULARLY MUSKRAT SKINS DYED IN IMITATION OF SEAL. A. HOLLANDER & SON, INC., Newark, N. J.
Filed October 5, 1932. Serial No. 330,954. PUBLISHED DECEMBER 13, 1932. Class 1.

301,405. FIELD SEEDS, GRASS SEED MIXTURES, AND LAWN SEED MIXTURES. THE ATLANTIC SEED COMPANY, INC., Philadelphia, Pa.
Filed September 20, 1932. Serial No. 330,735. PUBLISHED DECEMBER 13, 1932. Class 1.

301,406. [WITHDRAWN.]

301,407. FRIT. INGRAM-RICHARDSON MANUFACTURING COMPANY, Beaver Falls, Pa., and Frankfort, Ind.
Filed September 27, 1932. Serial No. 330,704. PUBLISHED DECEMBER 13, 1932. Class 1.

301,408. FURS AND PELTS, DRESSED AND/OR DYED. DAVID GOLDNER, New York, N. Y.
Filed September 23, 1932. Serial No. 330,596. PUBLISHED DECEMBER 13, 1932. Class 1.

301,409. BLUING. BRILLO MANUFACTURING COMPANY, Brooklyn, N. Y.
Filed September 22, 1932. Serial No. 330,568. PUBLISHED DECEMBER 13, 1932. Class 6.

301,410. PREPARATION FOR THE RELIEF OF RHEUMATISM, LUMBAGO, ETC. ROBERT KERN, doing business as American Noxpain Laboratories, Baltimore, Md.
Filed September 19, 1932. Serial No. 330,479. PUBLISHED DECEMBER 13, 1932. Class 6.

301,411. BLOOD LANCETS, INHALERS AND MASKS, CURETTES, ETC. PENN SURGICAL MFG. CO. INC., Philadelphia, Pa.
Filed September 17, 1932. Serial No. 330,439. PUBLISHED DECEMBER 20, 1932. Class 44.

301,412. MEDICAL CRYSTALS FOR MAKING MINERAL WATER. WILLIAM R. DRAPER, doing business as Ozalts Company, Sulphur Springs, Ark.
Filed August 25, 1932. Serial No. 329,831. PUBLISHED DECEMBER 13, 1932. Class 6.

301,413. PEAT MOSS FOR POULTRY BEDDING AND MULCHING FOR TREES AND PLANTS. READING POULTRY FOOD COMPANY, Reading, Pa.
Filed August 10, 1932. Serial No. 329,464. PUBLISHED DECEMBER 13, 1932. Class 1.

301,414. COTTON BATTING. KAHN'S PICKERY, New Orleans, La.
Filed June 18, 1932. Serial No. 329,166. PUBLISHED DECEMBER 13, 1932. Class 1.

301,415. FERTILIZERS AND SOIL CONDITIONERS. TENNESSEE CORPORATION, New York, N. Y.
Filed October 29, 1932. Serial No. 331,711. PUBLISHED DECEMBER 13, 1932. Class 10.

301,416. MEN'S AND BOYS' OUTER WEARING APPAREL, CONSISTING OF COATS, PANTS, KNICKERBOCKERS, AND VESTS. GOODALL WORSTED CO., Sanford, Me.
Filed October 31, 1932. Serial No. 331,738. PUBLISHED DECEMBER 13, 1932. Class 39.

301,417. WOMEN'S, MISSES', AND JUNIOR COATS. FUNK & KLEIN, INC., New York, N. Y.
Filed October 28, 1932. Serial No. 331,638. PUBLISHED DECEMBER 13, 1932. Class 39.

301,418. SMOKING TOBACCO AND CIGARETTES. LARUS & BROTHER COMPANY, INCORPORATED, Richmond, Va.
Filed October 25, 1932. Serial No. 331,558. PUBLISHED DECEMBER 13, 1932. Class 17.

301,419. HOSIERY. HOLEPROOF HOSIERY CO., Milwaukee, Wis.
Filed October 27, 1932. Serial No. 331,617. PUBLISHED DECEMBER 13, 1932. Class 39.

301,420. FROCKS AND APRONS FOR WOMEN AND MISSES. LOUIS SOPKIN COMPANY, Chicago, Ill.
Filed October 10, 1932. Serial No. 331,127. PUBLISHED DECEMBER 6, 1932. Class 39.

301,421. CORSETS AND BRASSIÈRES. I. NEWMAN & SONS, INC., New Haven, Conn., and New York, N. Y.
Filed October 11, 1932. Serial No. 331,163. PUBLISHED DECEMBER 20, 1932. Class 39.

301,422. COATS, VESTS, PANTS, ETC. COHEN, GOLDMAN & CO., INC., New York, N. Y.
Filed October 14, 1932. Serial No. 331,388. PUBLISHED DECEMBER 13, 1932. Class 39.

301,423. PLANT FOODS. A. C. ROBERTS, Kimberton, Pa.
Filed October 24, 1932. Serial No. 331,530. PUBLISHED DECEMBER 13, 1932. Class 10.

301,424. UNDERWEAR OF KNITTED AND TEXTILE FABRICS FOR MEN, WOMEN, AND CHILDREN. CLUETT, PEABODY & CO., INC., Troy, N. Y.
Filed October 25, 1932. Serial No. 331,544. PUBLISHED DECEMBER 6, 1932. Class 39.

301,425. NECKTIE FASTENERS OF THE HOOK AND EYE TYPE. EARL H. RESSEGUIE, Flint, Mich.
Filed October 10, 1932. Serial No. 331,118. PUBLISHED DECEMBER 20, 1932. Class 40.

301,426. MEN'S, WOMEN'S AND CHILDREN'S GARMENTS—NAMELY, SKIRTS AND PANTS. THE ROYAL NOVELTY CO., New York, N. Y.
Filed October 10, 1932. Serial No. 331,123. PUBLISHED DECEMBER 13, 1932. Class 39.

301,427. EXCELSIOR PACKING PADS. PIONEER PAPER STOCK COMPANY, Chicago, Ill.
Filed September 30, 1932. Serial No. 330,830. PUBLISHED DECEMBER 13, 1932. Class 50.

301,428. LADIES' AND MISSES' SHOES MADE OF LEATHER, RUBBER AND FABRIC AND/OR COMBINATIONS THEREOF. KRESGE DEPARTMENT STORE CORP., Newark, N. J.
Filed October 5, 1932. Serial No. 330,956. PUBLISHED DECEMBER 20, 1932. Class 39.

301,429. WOMEN'S HATS. HARRY ROBERTS & CO. INC., New York, N. Y.
Filed September 24, 1932. Serial No. 330,637. PUBLISHED DECEMBER 20, 1932. Class 39.

301,430. CIGARETTES. ISIDOR I. ZEEMAN, New York, N. Y.
Filed September 26, 1932. Serial No. 330,675. PUBLISHED DECEMBER 20, 1932. Class 17.

301,431. PAJAMAS FOR MEN, WOMEN, AND CHILDREN. THE ENRO SHIRT COMPANY, INC., Louisville, Ky.
Filed September 29, 1932. Serial No. 330,784. PUBLISHED DECEMBER 13, 1932. Class 39.

301,432. BUTTONS OF NON-PRECIOUS MATERIAL. UNIVERSAL BUTTON FASTENING & BUTTON COMPANY, Detroit, Mich.
Filed September 22, 1932. Serial No. 330,585. PUBLISHED DECEMBER 6, 1932. Class 40.

301,433. COATS, VESTS, AND TROUSERS FOR MEN AND BOYS; INFANTS' OUTER WEAR, AND SPORT COATS AND SPORT DRESSES FOR WOMEN AND GIRLS. THE MOYER MANUFACTURING COMPANY, Youngstown, Ohio.
Filed September 22, 1932. Serial No. 330,579. PUBLISHED DECEMBER 6, 1932. Class 39.

301,434. PAPER WHICH IS ESPECIALLY SUITABLE FOR TAG AND/OR FOLDER STOCK. THE CHAMPION FIBRE COMPANY, Canton, N. C.
Filed September 30, 1932. Serial No. 330,809. PUBLISHED DECEMBER 13, 1932. Class 37.

301,435. PICTURE OR SHEET MOUNTING CORNERS. ALBERT W. ENGEL, doing business as Engel Art Corners Mfg. Co., Chicago, Ill.
Filed September 6, 1932. Serial No. 330,123. PUBLISHED DECEMBER 13, 1932. Class 37.

301,436. SCHOOL AND CORRESPONDENCE WRITING TABLETS, COMPOSITION AND NOTE BOOKS, LOOSE LEAF NOTE BOOK FILLERS, LOOSE LEAF NOTE BOOK BINDERS, PAPETERIES. EDWARD G. SOEBBING, Kansas City, Mo.
Filed August 22, 1932. Serial No. 329,755. PUBLISHED DECEMBER 13, 1932. Class 37.

301,437. CANNED SARDINES. ROSTHLISBERGER & CO. INC., New York, N. Y.
Filed September 10, 1932. Serial No. 330,232. PUBLISHED DECEMBER 20, 1932. Class 46.

301,438. DEVICE IN THE FORM OF A FLEXIBLE STRAP OR BAND TO FACILITATE THE CARRYING OF ARTICLES. H. G. MILES LIMITED, London, England.
Filed August 4, 1932. Serial No. 329,385. PUBLISHED DECEMBER 20, 1932. Class 3.

301,439. POULTRY AND DAIRY FEEDS, MIXED GRAINS, HORSE AND HOG FEEDS, MEAT SCRAP FOR POULTRY AND ANIMAL FOODS, A BY-PRODUCT MADE FROM THE MANUFACTURE OF GREASE, TALLOW, AND OILS; FISH MEAL, LINSEED OIL MEAL, GLUTEN MEAL, AND FEED, COTTON SEED MEAL, ALL WHOLE GROUND AND CRUSHED GRAINS; ALFALFA HAY AND GROUND ALFALFA; GRAIN BY-PRODUCTS, CONSISTING OF BRAN, MIDDLINGS, OAT FEED, AND HOMINY FEED; DRIED SKIM MILK AND DRIED BUTTER MILK FOR POULTRY AND ANIMAL FEEDING, SOYA BEAN MEAL. EZL. DUNWOODY CO., Philadelphia, Pa.
Filed July 19, 1932. Serial No. 328,887. PUBLISHED DECEMBER 13, 1932. Class 46.

301,440. CANDY. MRS. WILLIAM F. BEIER, Kenmore, N. Y.
Filed June 15, 1932. Serial No. 328,287. PUBLISHED DECEMBER 13, 1932. Class 46.

301,441. BREAKFAST FOOD MADE OF WHEAT. ALBERS BROS. MILLING CO., Portland, Oreg.
Filed June 1, 1932. Serial No. 327,622. PUBLISHED DECEMBER 13, 1932. Class 46.

301,442. CLEANSING TISSUE. VELDOWN COMPANY, INC., New York, N. Y.
Filed July 28, 1932. Serial No. 329,163. PUBLISHED SEPTEMBER 6, 1932. Class 37.

301,443. LETTER HEADS, LOANING APPLICATIONS, AND BLANK FORMS SOLD TO THE TRADE AS SUCH. EQUITABLE SERVICE CORPORATION, Providence, R. I., now by change of name Esco Service Corporation.
Filed April 4, 1932. Serial No. 325,966. PUBLISHED DECEMBER 20, 1932. Class 37.

301,444. BROCHURES, CIRCULARS, AND NEWSPAPER ADVERTISING SOLD TO THE TRADE AS SUCH. EQUITABLE SERVICE CORPORATION, Providence, R. I., now by change of name Esco Service Corporation.
Filed April 4, 1932. Serial No. 325,965. PUBLISHED DECEMBER 20, 1932. Class 38.

301,445. LETTER HEADS, AND BLANK FORMS SOLD TO THE TRADE AS SUCH. EQUITABLE SERVICE CORPORATION, Providence, R. I., now by change of name Esco Service Corporation.
Filed April 4, 1932. Serial No. 325,964. PUBLISHED DECEMBER 20, 1932. Class 37.

301,446. HOSIERY. LAKEWOOD SILK HOSIERY MILLS, INC., Charlotte, N. C.
Filed November 4, 1932. Serial No. 331,899. PUBLISHED DECEMBER 13, 1932. Class 39.

301,447. LADIES' UNDERGARMENTS — NAMELY, HOSE SUPPORTERS, BRASSIÈRES, CORSELETS, SLIPS, ATHLETIC SHORTS, AND UNDERDRAWERS. MIRIAM NEEDLES, Atlantic City, N. J.
Filed September 29, 1932. Serial No. 330,796. PUBLISHED DECEMBER 13, 1932. Class 39.

301,448. MEN'S AND BOYS' OUTER WEARING APPAREL, CONSISTING OF COATS, PANTS, KNICKERBOCKERS, AND VESTS. GOODALL WORSTED CO., Sanford, Me.
Filed October 31, 1932. Serial No. 331,739. PUBLISHED DECEMBER 13, 1932. Class 39.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

301,449. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) KRESGE DEPARTMENT STORE CORP., Newark, N. J. Filed Feb. 16, 1932. Serial No. 324,227.

ALL-WATER BRAND

For Soap.
Claims use since Dec. 26, 1931.

301,450. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) G. B. LEWIS COMPANY, Watertown, Wis. Filed Feb. 3, 1932. Serial No. 323,785.

TRU-TO-LIFE

For Pull Toys.
Claims use since Jan. 1, 1932.

301,451. (CLASS 45. BEVERAGES, NONALCOHOLIC.) WILLARD D. MILLER, doing business as Frsh Frut Products Company, El Paso, Tex. Filed Jan. 28, 1932. Serial No. 323,539.

FRSH FRUT

For Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks, Viz., Drinks Made With Fresh Fruit Juices.
Claims use since Dec. 22, 1931.

301,452. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILBER J. MENKE, Jr., doing business as Natural Tone Co., Paris, Ill. Filed Jan. 5, 1932. Serial No. 322,742.

NATURAL TONE

For Hair Color Restorer.
Claims use since Aug. 1, 1931.

301,453. (CLASS 37. PAPER AND STATIONERY.) THE UNION SELLING COMPANY, Cincinnati, Ohio. Filed Nov. 30, 1931. Serial No. 321,623.

ROCKWOOD BOND

For Bond and Writing Papers.
Claims use since Nov. 5, 1931.

304,454. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE CHANTILLY KOOKIS INC., New York, N. Y. Filed Nov. 7, 1931. Serial No. 320,889.



For Crackers.
Claims use since Nov. 2, 1931.

301,455. (CLASS 39. CLOTHING.) J. SCHOENEMAN, INCORPORATED, Baltimore, Md. Filed Dec. 8, 1932. Serial No. 332,898.

Rockland

For Coats, Vests, Trousers, Knickerbockers, Topcoats, and Overcoats for Men, Youths, and Boys.
Claims use since September, 1930.

301,456. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE LUCKEY'S, Azusa, Calif. Filed Dec. 3, 1932. Serial No. 332,724.

The Luckey's

For Fresh Fruits—Namely, Fresh Citrus Fruits, Jams, Jellies, Fruit Preserves, Honey, and Dried Fruits.
Claims use since June 1, 1927.

301,457. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) C. C. SMITH, doing business as C. C. Smith Fruit Company, Yakima, Wash. Filed Nov. 5, 1932. Serial No. 331,980.

WESTPORT

For Fresh Deciduous Fruits.
Claims use since Sept. 1, 1931.

301,458. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Oct. 7, 1932. Serial No. 331,065.

ELGIN

For Butter Churns.
Claims use since Feb. 5, 1925.

301,459. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) RAYBESTOS-MANHATTAN, INCORPORATED, Passaic, N. J., and Bridgeport, Conn. Filed Aug. 31, 1932. Serial No. 330,029.

CABLED SUSPENSION

For Automobile Fan Belts.
Claims use since Jan. 1, 1932.

301,460. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE WILBERT PRODUCTS CO. INC., New York, N. Y. Filed June 17, 1932. Serial No. 328,081.

NO-RUB

For Floor Wax.
Claims use since October, 1930.

301,461. (CLASS 45. BEVERAGES, NONALCOHOLIC.) FRANK ROTELLA, doing business as Rotella's Beverages, Newark, N. J. Filed Apr. 27, 1932. Serial No. 326,555.

Champagne Sparkling Dry Ginger-Ale

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks.
Claims use since Nov. 15, 1931.

301,462. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) PAUL P. RUSSO, doing business as Grand Rapids Furniture Polish Co., New York, N. Y. Filed Dec. 15, 1932. Serial No. 333,109.

GRAND RAPIDS

For Furniture Polish.
Claims use since November, 1930.

301,463. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ALFRED L. LASEK, doing business as Peter Schneider's Sons & Co., New York, N. Y. Filed Nov. 29, 1932. Serial No. 332,587.

BONN VOILE

For Upholstery and Drapery Fabrics, Made of Bemberg Yarn.
Claims use since Nov. 15, 1926.

301,464. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) BERNARD GREENBERGER, New York, N. Y. Filed Nov. 11, 1932. Serial No. 332,064.

MIKE-LITE

For Electric Table Lamps, Microphones, Electric Cigarette and Cigar Lighters.
Claims use since Dec. 15, 1931.

301,465. (CLASS 39. CLOTHING.) BLOOMINGDALE BROS., INC., New York, N. Y. Filed Oct. 27, 1932. Serial No. 331,609.

bob burton

For Men's Wearing Apparel—Namely, Overcoats, Hats, Negligee Shirts, Necktles for Men and Boys; Shoes Made of Leather, as Well as Leather with Rubber Soles and Heels for Men and Boys; Underwear, Hosiery, Sweaters, Pajamas, Mufflers, Scarfs, and Suits.
Claims use since Oct. 23, 1931.

301,466. (CLASS 32. FURNITURE AND UPHOLSTERY.) W. F. WHITNEY COMPANY, South Ashburnham, Mass. Filed July 7, 1932. Serial No. 328,625.

★WHITNEY★

For Wooden Furniture—Namely, Chairs, Benches, Tables, Buffets, Servers, Corner Cabinets, Bookcases, Desks, Wall Racks, Mirrors, Beds, Chests of Drawers, Dressing Tables, and Settees.
Claims use since Jan. 1, 1932.

301,467. (CLASS 48. MALT BEVERAGES AND LIQUORS.) FOSS SCHNEIDER COMPANY, Cincinnati, Ohio. Filed May 16, 1932. Serial No. 327,138.

MR. GOOD

For a Malt Beverage Containing Less Than One-Half of One Per Cent Alcohol by Volume.
Claims use since Apr. 5, 1930.

301,468. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) PFEIFF BROTHERS, Brooklyn, N. Y. Filed Apr. 25, 1932. Serial No. 326,493.



For Solid Round Belt.
Claims use since December, 1931.

301,469. (CLASS 39. CLOTHING.) THE CINCINNATI SHOE CO., Cincinnati, Ohio. Filed Apr. 19, 1932. Serial No. 326,251.



For Women's Leather and Fabric Shoes.
Claims use since Aug. 7, 1930.

301,470. (CLASS 17. TOBACCO PRODUCTS.) PHILIP MORRIS & CO. LTD., INCORPORATED, New York, N. Y. Filed Jan. 8, 1932. Serial No. 322,829.

IVORY TIPPED

For Cigarettes.
Claims use since Feb. 15, 1930.

301,471. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FLORENTINE PACKERS, INC., Vineland, N. J. Filed Nov. 24, 1931. Serial No. 321,463.

Florentine Brand

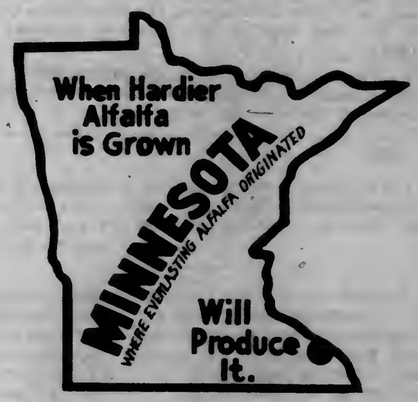
For Spaghetti Sauce.
Claims use since Oct. 20, 1931.

301,472. (CLASS 39. CLOTHING.) DEY BROTHERS & CO., Syracuse, N. Y. Filed Sept. 14, 1931. Serial No. 319,020.

Roberta McDonald

For Hosiery, Shoes Made of Leather, Women's Coats, Dresses, Hats for Women, and Gloves Made of Leather and Fabric.
Claims use since June 17, 1931.

301,473. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) NORTHERN FIELD SEED COMPANY, Winona, Minn. Filed Dec. 24, 1932. Serial No. 333,373.



For Alfalfa Seed.
Claims use since Oct. 17, 1931.

LABELS

REGISTERED FEBRUARY 28, 1933

41,785.—*Title:* MIAMI DELIGHT. For Beverages and Food Products. HARRY K. ALLEN, Miami, Fla. Published September 27, 1932.

41,786.—*Title:* FLAWLESS BRAND. For Apples. APPLE GROWERS ASSOCIATION, Hood River, Oreg. Published December 1, 1929.

41,787.—*Title:* BARBASOL RAZOR AND BLADES FOR MODERN SHAVING. For Safety Razors and Blades. THE BARBASOL COMPANY, Indianapolis, Ind. Published December 2, 1932.

41,788.—*Title:* INSOLES. For Innersole Made for Shoes. ALBERT L. BERRY LEATHER COMPANY, Boston, Mass. Published December 27, 1932.

41,789.—*Title:* CALIFORNIA PADRES. For Medicinal Wines. CALIFORNIA MEDICINAL WINE CO., Los Angeles, Calif. Published September 10, 1932.

41,790.—*Title:* BULLDOG. For Carbon Papers. THE M. B. COOK COMPANY, Chicago, Ill. Published January 26, 1933.

41,791.—*Title:* ALLIGATOR PERMANENT-GRIP. For Bevel-Cut Patches. N. C. FERGUSON & CO., Amarillo, Tex. Published June 1, 1932.

41,792.—*Title:* EMMET. For Paints. THOS. H. GIBSON, Newark, N. J. Published November 18, 1932.

41,793.—*Title:* HOLLYWOOD HONEYS. For Confection. WESLEY G. LAKE, doing business as Martha Jannings Candy Specialties Co., Los Angeles, Calif. Published April 4, 1931.

41,794.—*Title:* FOOT JOY. For a Powder for Stopping Excessive Perspiration of the Feet and Armpits and for Use as an Instant Perspiration Deodorizer. M. JESS LIEF, doing business as Lion Drug Company, Brooklyn, N. Y. Published July 13, 1930.

41,795.—*Title:* LYON'S CALIFORNIA SPRING BLOSSOM FRUITS. For Fruits. LYONS-MAGNUS, INC., San Francisco, Calif. Published September 1, 1932.

41,796.—*Title:* MAMA'S MALTED MILK DESSERT. For Malted Milk Desserts. MAMA COOKIE BAKERIES, INC., Chicago, Ill. Published December 1, 1932.

41,797.—*Title:* LIVLAX. For Laxative and cathartic. C. F. PEARSON, Jr., Montgomery, Ala. Published November 20, 1931.

41,798.—*Title:* KELFOOD. For Kelp Tablets. PROTECTIVE DIET LEAGUE OF CALIFORNIA, Los Angeles, Calif. Published November 10, 1932.

41,799.—*Title:* ACQUA LINA WASHING LIQUID. For Washing Liquid. VINCENT QUARTARARO, doing business as Acqua Lina Manufacturing Co., Brooklyn, N. Y. Published November 30, 1932.

41,800.—*Title:* CHAUTAUQUA—NEW YORK STATE—CONCORDS. For Concord Grapes. RIPLEY C & E GRAPE GROWERS COOPERATIVE ASSOCIATION, INC., Ripley, N. Y. Published September 1, 1932.

41,801.—*Title:* REX-TON FALSE TEETH CLEANSER. For Preparation to Clean, Deodorize, and Remove Smoke Stains on False Teeth. HAROLD C. RIX, doing business as Rex-Ton Laboratories, Dallas, Tex. Published July 1, 1931.

41,802.—*Title:* CAMPFIRE INCENSE. For Incense. B. P. RYAN, Riverton, Wyo. Published November 26, 1932.

41,803.—*Title:* VIM. For Cereal Bread. MORRIS SHUMOFSKY, doing business as Morris Bakery Products, Bridgeport, Conn. Published November 1, 1932.

41,804.—*Title:* V-M CEREAL. For Cereal. V-M COMPANY, Baltimore, Md. Published Nov. 1, 1932.

PRINTS

REGISTERED FEBRUARY 28, 1933

14,060.—*Title:* THIS OIL BRINGS CUSTOMERS IN - - - THEN BRINGS THEM BACK. For Motor Oil. CALUMET REFINING COMPANY, Chicago, Ill. Published November 28, 1932.

14,061.—*Title:* ANESTOZAL SURFACE ANESTHETIC. For Surface Anesthetic. DAVID CURTIS, doing business as Anestex Laboratories (De-Ce Products Co. of N. Y.), New York, N. Y. Published December 20, 1932.

14,062.—*Title:* THE WONDER COOKIE CUTTERS. For Cookie Cutters. DIXON-PROSSER INC., Seattle, Wash. Published December 12, 1932.

14,063.—*Title:* UNIFORM ALWAYS - - ADFORM 132A. For Coffee. HILLS BROS., San Francisco, Calif. Published January 10, 1933.

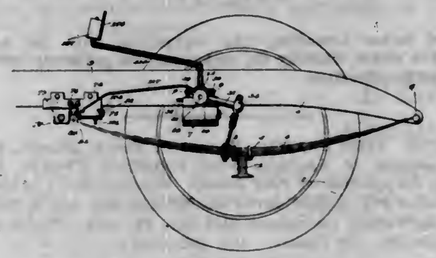
14,064.—*Title:* FRESH ALWAYS - - ADFORM 133A. For Coffee. HILLS BROS., San Francisco, Calif. Published January 10, 1933.

14,065.—*Title:* PROOF. For Lubricating Gasoline. F. W. THAISON, doing business as Lubricating Gasoline Company, Houston, Tex. Published February 8, 1932.

REISSUES

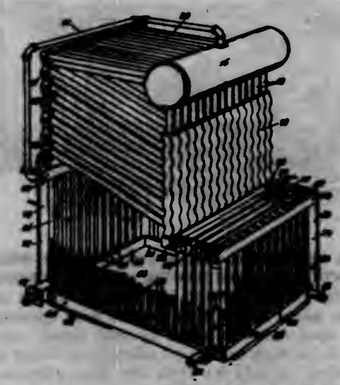
FEBRUARY 28, 1933

18,747. SHOCK ABSORBER MECHANISM. JOHN W. GRAY, Chattanooga, Tenn., assignor of one-half to Bernard V. Curnen, Chattanooga, Tenn. Original No. 1,799,013, dated Mar. 31, 1931, Serial No. 312,847, filed Oct. 16, 1928. Application for reissue filed Oct. 24, 1931. Serial No. 570,989. 25 Claims. (Cl. 188—88.)



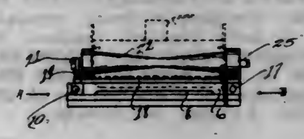
1. A shock absorber comprising a cylinder block mounted upon one of two relatively movable parts, a piston mounted in said cylinder block for reciprocation, a fluid passage communicating with the cylinder block at opposite ends of the travel of said piston, means for reciprocating the piston including a rotor housed in the cylinder block and operatively connected with the piston, a crank arm exteriorly of the cylinder block connected with said rotor and a lever connecting said crank arm with the other of said relatively movable parts, and means for restricting said fluid passage including a seat, a valving element loose and freely movable in said passage toward and from said seat, and an actuator therefor movable through and proportionately to relative movement of said parts to engage and position said element relatively to said seat progressively and increasingly to restrict and reversely to enlarge said fluid passage in proportion to the amplitude of relative movement of said parts, said element being maintained in positioned contact with said actuator through skin friction of fluid thereagainst.

18,748. BOILER AND THE LIKE. THOMAS E. MURRAY, deceased, Brooklyn, N. Y., by Thomas E. Murray, jr., Joseph B. Murray, and John F. Murray, executors, Brooklyn, N. Y., assignors to Metropolitan Engineering Company, a Corporation of New York. Original No. 1,746,711, dated Feb. 11, 1930, Serial No. 642,725, filed June 1, 1923. Application for reissue filed May 19, 1930. Serial No. 453,838. 34 Claims. (Cl. 122—235.)



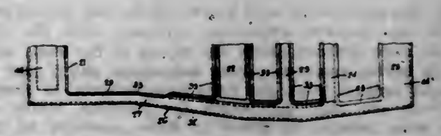
1. In a boiler or the like, a wall comprising a multiplicity of pipes arranged in spaced relationship alongside one another and each pipe having a longitudinally extending plate secured thereto which overlaps the plate of the adjacent pipe, said plates being arranged to substantially or approximately close the space between the adjacent pipes and to conduct heat thereto, the pipes with their attached plates being free to move with relation to one another.

18,749. HAIR WAVING DEVICE. ROBERT D'ORLEANS, San Francisco, Calif., assignor to William H. H. Davis, San Francisco, Calif. Original No. 1,835,936, dated Dec. 8, 1931, Serial No. 354,025, filed Apr. 10, 1929. Application for reissue filed Oct. 29, 1932. Serial No. 640,301. 5 Claims. (Cl. 132—36.1.)



5. In a hair waving device, a pair of elongated clamping members, a rubber seal adapted to receive a strand of hair and to be removably disposed between said members, and means for forcing said members together upon opposite sides of the seal, said seal being formed of two elongated side portions of rubber having their ends joined together, thereby forming a hair receiving slot terminating short of both ends of the seal and of a length substantially less than the length of said clamping members.

18,750. AUTOMOBILE CHASSIS OF SHEET METAL STAMPINGS. JOHN P. TARBOX, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Original No. 1,737,810, dated Dec. 3, 1929, Serial No. 241,685, filed Dec. 21, 1927. Application for reissue filed Dec. 2, 1931. Serial No. 578,567. 16 Claims. (Cl. 280—106.)

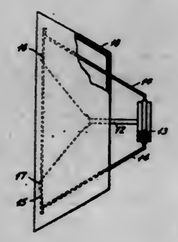


1. An automobile chassis of hollow cross section comprised of supper and lower sheet metal stampings constituting its upper and lower surfaces and joined together in their margins.

18,751. LOUD SPEAKER. JULIUS WEINBERGER, Haddonfield, and IRVING WOLFF, Merchantville, N. J., assignors to Radio Corporation of America, a Corporation of Delaware. Original No. 1,760,862, dated May 27, 1930, Serial No. 179,742, filed Mar. 31, 1927. Application for reissue filed May 25, 1932. Serial No. 613,582. 29 Claims. (Cl. 181—31.)

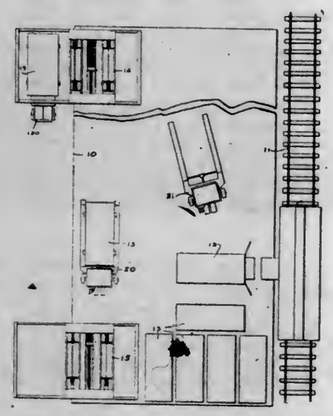
1. The combination of a loud speaker device having a vibratile diaphragm, with a frame member, a plate se-

cured to the front of said frame, a driving unit secured to said frame rearwardly of said plate, said vibratile dia-



phragm being connected to said plate and to said driving unit, and a casing embracing said vibratile diaphragm and a portion only of said frame.

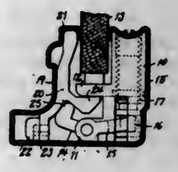
18,752. SYSTEM AND APPARATUS FOR HANDLING FREIGHT. BENJAMIN F. FITCH, Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Original No. 1,802,010, dated Apr. 21, 1931, Serial No. 122,310, filed July 14, 1926. Application for reissue filed Jan. 28, 1932. Serial No. 589,518. 8 Claims. (Cl. 214—38.)



8. The combination with an automobile body having side walls and brackets projecting outwardly from the side walls some distance above the bottom of the body, of a truck having power-propelling mechanism and a pair of spaced parallel arms, the arms being adapted to closely embrace the body underneath the brackets, means on the arms raisable by power to shove upwardly on the brackets, the body extending below the arms in the raised position, and swiveled wheels supporting said arms, said wheels lying substantially within the width of the arms in all positions, whereby the wheels will not contact with the body depending from the brackets.

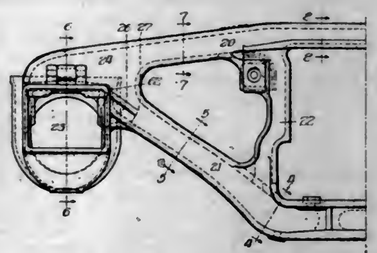
18,753. STORE-FRONT CONSTRUCTION. FRED HIMMEL and ISIDORE HIMMEL, New Haven, Conn., assignors to The Himmel Brothers Company, New Haven, Conn., a Corporation. Original No. 1,849,525, dated Mar. 15, 1932, Serial No. 527,210, filed Apr. 2, 1931. Application for reissue filed Jan. 19, 1933. Serial No. 652,540. 8 Claims. (Cl. 20—56.4.)

3. A store-front construction comprising inner and outer members, a housing-block mounted in the inner member, a screw extending downward through said block, said screw formed with a neck, a pivotal rocker adapted to draw the two members together, the inner end of the



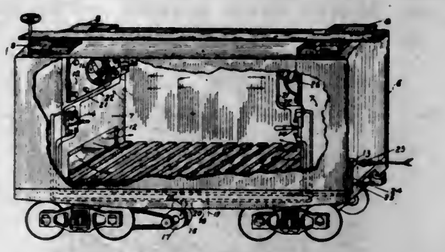
said rocker extending into engagement with the neck of the screw, whereby the rocker may be positively moved in either direction.

18,754. SIDE FRAME. GEORGE G. FLOYD, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Original No. 1,745,847, dated Feb. 4, 1930, Serial No. 297,820, filed Aug. 6, 1928. Application for reissue filed Oct. 24, 1931. Serial No. 570,990. 57 Claims. (Cl. 105—205.)



1. A cast side frame for railway car trucks having an upper compression member and a lower tension member, said members being of varied section and merging at journal boxes integral therewith, a portion of the walls of said members overlying and adjacent to said journal boxes being thicker than the walls of said compression and said tension members.

18,755. AIR CONDITIONING MEANS. FRED JOHN DAY, Los Angeles, Calif. Original No. 1,842,660, dated Jan. 26, 1932, Serial No. 384,134, filed Aug. 7, 1929. Application for reissue filed Aug. 9, 1932. Serial No. 628,099. 6 Claims. (Cl. 62—24.)



1. In a refrigerator car, the combination with an ice bunker having an upper opening affording communication between the ice bunker and the interior of the car; of a detachable panel adapted to overlie said opening, a fan mounted upon and supported by said panel, there being an aperture through said panel adapted to direct a current of air created by said fan from the upper interior portion of the car through said panel into said bunker.

PLANT PATENTS

GRANTED FEBRUARY 28, 1933

55. WATER LILY. GEORGE HARRY PRING, St. Louis, Mo., assignor to The Missouri Botanical Garden, St. Louis, Mo., a Charitable Trust of Missouri. Filed Sept. 22, 1932. Serial No. 634,427. 1 Claim. (Cl. 47—1.)

The variety of tropical day-blooming water lily herein shown and described, characterized particularly by the yellow color of its blossoms.

DESIGNS

FEBRUARY 28, 1933

89,327. GLASS BOWL FOR SEMIINDIRECT ILLUMINATION. GEORGE AINSWORTH, New Hyde Park, N. Y. Filed Feb. 27, 1932. Serial No. 43,024. Term of patent 7 years.



The ornamental design for a glass bowl for semi-indirect illumination as shown and described.

89,328. LENS STRAP. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed July 30, 1932. Serial No. 44,487. Term of patent 14 years.



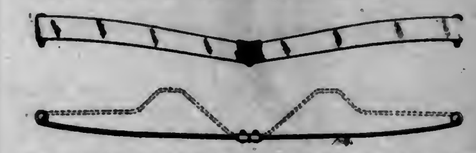
The ornamental design for a lens strap substantially as shown and described.

89,329. LENS STRAP. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Aug. 1, 1932. Serial No. 44,506. Term of patent 14 years.



The ornamental design for a lens strap substantially as shown and described.

89,330. VEHICLE BUMPER. ARTHUR J. BAKER, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 30, 1932. Serial No. 46,659. Term of patent 14 years.



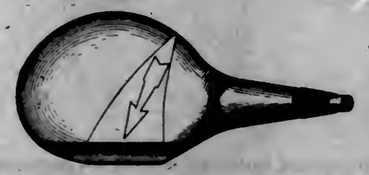
The ornamental design for a vehicle bumper substantially as shown and described.

89,331. PEDESTAL. MCCLELLAND BARCLAY, New York, N. Y. Filed Aug. 24, 1931. Serial No. 40,917. Term of patent 3½ years.



The ornamental design for a pedestal, as shown.

89,332. GOLF CLUB HEAD. FRANK R. BARTSCH, Chicago, Ill., assignor to James L. McManus, Chicago, Ill., Trustee. Filed Oct. 30, 1930. Serial No. 37,441. Term of patent 14 years.



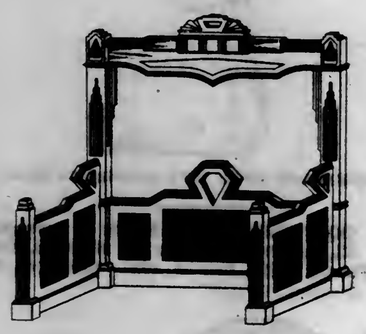
The ornamental design for a golf club head, as shown.

89,333. HOSIERY. EMIL J. BERGER, Hatfield, Pa. Filed Mar. 3, 1932. Serial No. 43,055. Term of patent 3½ years.



The ornamental design for hosiery, as shown and described.

89,334. BOOTH FOR RESTAURANTS. HYMAN CHARNIN, New York, N. Y. Filed Aug. 27, 1931. Serial No. 40,941. Term of patent 14 years.



The ornamental design for a booth for restaurants, as shown and described.

89,335. WATER SOFTENER CASING. CHARLES J. FUNK, Chicago, Ill., assignor to Soreng-Manegold Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 11, 1932. Serial No. 45,884. Term of patent 3½ years.



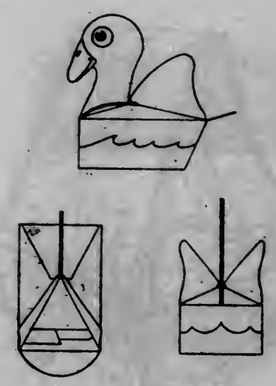
The ornamental design for a water softener casing, as shown.

89,336. TEXTILE FABRIC. ROBERT GEORGE, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Sept. 16, 1932. Serial No. 44,860. Term of patent 3½ years.



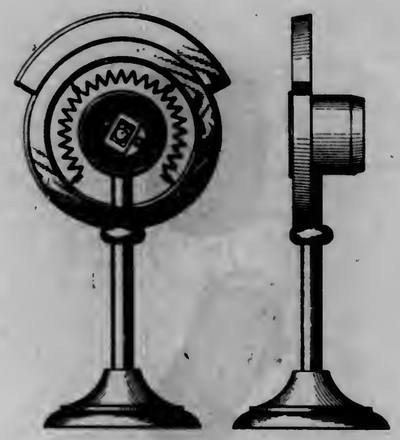
The ornamental design for a textile fabric, substantially as shown and described.

89,337. CONTAINER. THOMAS S. GORTON, Jr., Chicago, Ill. Filed Nov. 25, 1932. Serial No. 46,147. Term of patent 14 years.



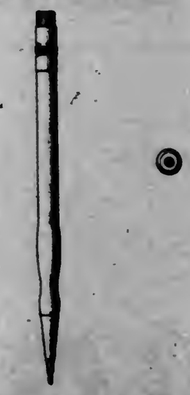
The ornamental design for a container, as shown.

89,338. CIGAR LIGHTER OR SIMILAR ARTICLE. BERNARD GREENBERGER, New York, N. Y. Filed Nov. 11, 1932. Serial No. 45,883. Term of patent 3½ years.



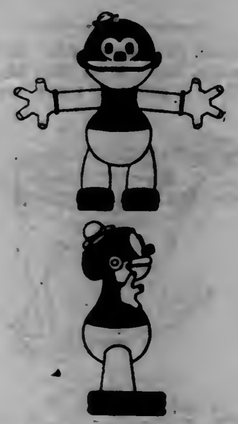
The ornamental design for a cigar lighter or similar article, as shown.

89,339. PENCIL. JOE D. HALE, Brattleboro, Vt., assignor to Rite-Rite Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 27, 1932. Serial No. 46,648. Term of patent 7 years.



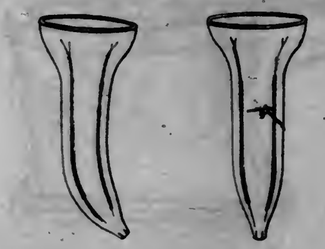
The ornamental design for a pencil as shown.

89,340. DOLL. HUGH HARMAN and RUDOLPH C. ISING, Los Angeles, Calif. Filed Dec. 6, 1932. Serial No. 46,314. Term of patent 14 years.



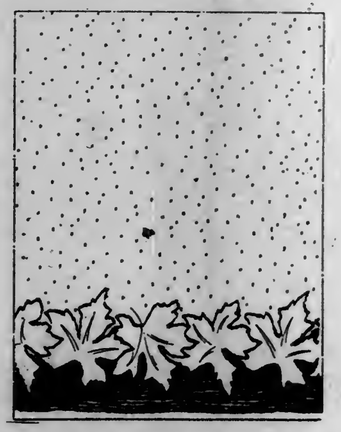
The ornamental design for a doll, as shown.

89,341. ICE CREAM CONE OR SIMILAR ARTICLE. JOHN L. HARMSEN, Flint, Mich. Filed Nov. 16, 1932. Serial No. 46,011. Term of patent 3½ years.



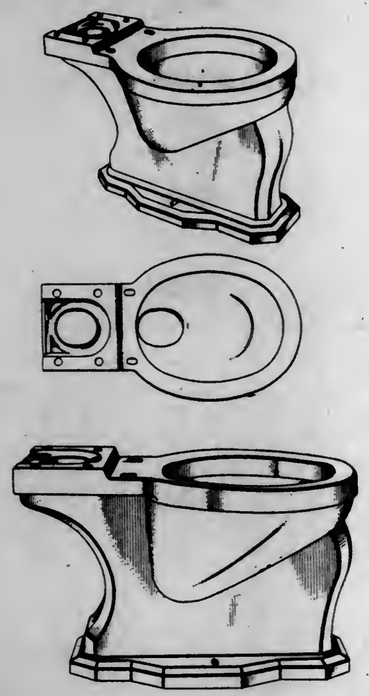
The ornamental design for an ice cream cone or similar article, as shown.

89,342. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J., assignor to H. R. Mallinson & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 28, 1932. Serial No. 45,604. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

89,343. SPUDLESS CLOSET BOWL. MICHAEL D. HELFRICH, Evansville, Ind. Filed May 25, 1932. Serial No. 43,897. Term of patent 14 years.



The ornamental design for a spudless closet bowl, as shown.

89,344. SERVICE STATION CART. HARRY W. HOLLAND, Elizabeth, N. J., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 12, 1931. Serial No. 41,706. Term of patent 14 years.



The ornamental design for a service station cart, as shown and described.

89,345. RADIATOR. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. N. Y., a Corporation of New York. Filed Dec. 17, 1932. Serial No. 46,477. Term of patent 14 years.



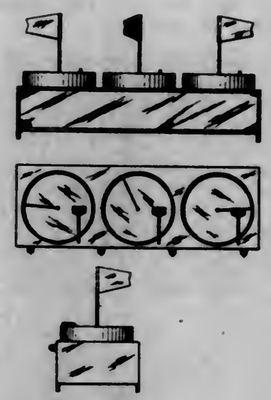
The ornamental design for a radiator substantially as shown.

89,346. AUTOMOBILE BODY. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Dec. 27, 1932. Serial No. 46,631. Term of patent 14 years.



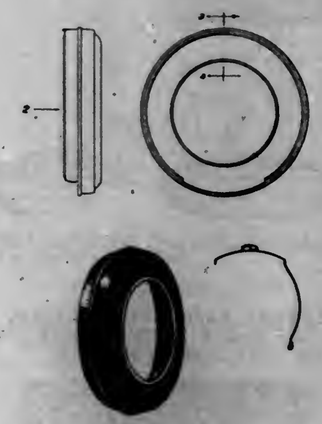
The ornamental design for an automobile body substantially as shown.

89,347. NUT BUTTERING MACHINE. MICHAEL J. KOHLER, Oakland, Calif., assignor to The National Nut Company, Oakland, Calif., a Corporation of California. Filed Dec. 2, 1932. Serial No. 46,284. Term of patent 14 years.



The ornamental design for a nut buttering machine as shown.

89,348. TIRE COVER. THOMAS J. MCCORMICK and ROBERT E. LINN, Detroit, Mich.; said Linn assignor to said Thomas J. McCormick. Filed Sept. 23, 1931. Serial No. 41,195. Term of patent 14 years.



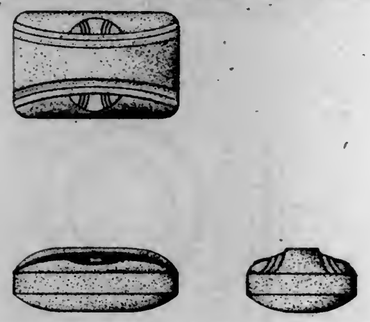
The ornamental design for a tire cover, substantially as shown and described.

89,349. MERCHANDISING DISPLAY STAND. HUBERT S. MORGAN, Scarsdale, N. Y. Filed Nov. 25, 1932. Serial No. 46,154. Term of patent 3½ years.



The ornamental design for a merchandising display stand, as shown.

89,350. CAKE OF SOAP. ALBERT MOSHEIM, New York, N. Y., assignor to House of Tre-Jur, New York, N. Y., a Corporation of New York. Filed Dec. 27, 1932. Serial No. 46,633. Term of patent 7 years.



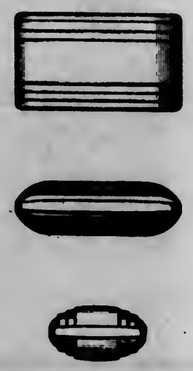
The ornamental design for a cake of soap substantially as shown.

89,351. TEXTILE FABRIC OR THE LIKE. HANS J. NERGER, New York, N. Y. Filed Jan. 12, 1933. Serial No. 46,799. Term of patent 3½ years.



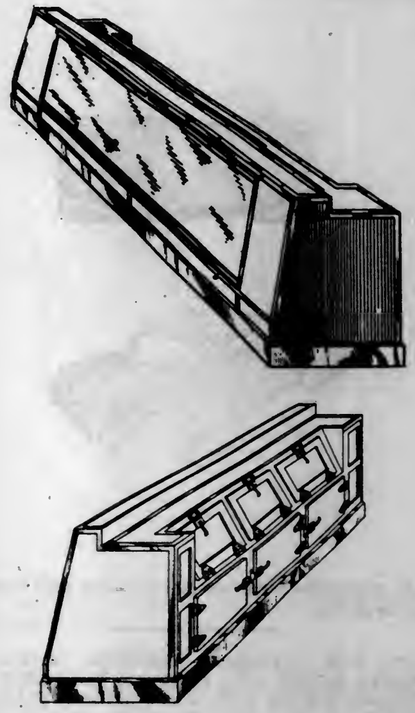
The ornamental design for a textile fabric or the like as shown.

89,352. SOAP CAKE. WRISLEY B. OLESON, Glen Ellyn, Ill., assignor to Allen B. Wrisley Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 16, 1932. Serial No. 46,468. Term of patent 7 years.



The ornamental design for a soap cake, as shown.

89,353. REFRIGERATOR DISPLAY CASE. FAY T. RODGERS, Memphis, Tenn. Filed Feb. 6, 1932. Serial No. 42,761. Term of patent 14 years.



The ornamental design for a refrigerator display case, as shown and described.

89,354. CEILING FIXTURE. CEPHAS B. ROGERS, Danbury, Conn. Filed Nov. 26, 1932. Serial No. 46,184. Term of patent 3½ years.



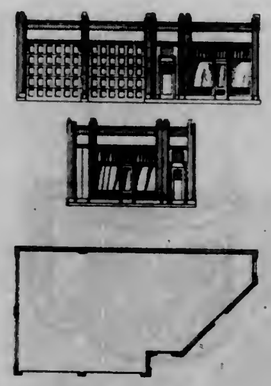
The ornamental design for a ceiling fixture substantially as shown.

89,355. SERVICE BUILDING. GUY LYNN ROSEBROOK, Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 13, 1931. Serial No. 40,191. Term of patent 3½ years.



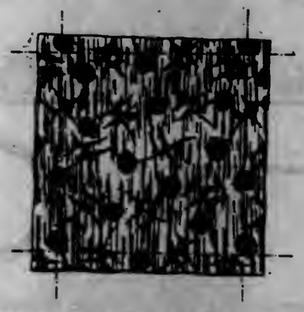
The ornamental design for a service building, substantially as shown and described.

89,356. SERVICE BUILDING. GUY LYNN ROSEBROOK, Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 13, 1931. Serial No. 40,198. Term of patent 3½ years.



The ornamental design for a service building, substantially as shown and described.

89,357. TEXTILE FABRIC OR SIMILAR ARTICLE. LOUIS RUBINGER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 23, 1933. Serial No. 46,934. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,358. ESCUTCHEON FOR BRACELETS OR THE LIKE. SAMUEL SCHNELLING, Chicago, Ill. Filed Oct. 17, 1932. Serial No. 45,879. Term of patent 3½ years.



The ornamental design for an escutcheon for bracelets or the like, as shown and described.

89,359. RAG DOLL. DOROTHY SHERRILL, Marshfield, Mass. Filed June 22, 1932. Serial No. 44,163. Term of patent 14 years.



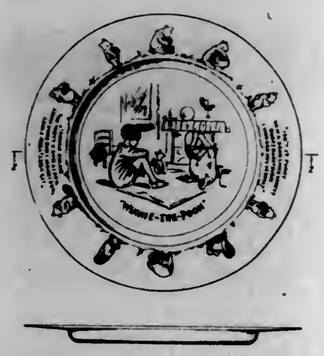
The ornamental design for a rag doll, as shown and described.

89,360. BOWL OR SIMILAR ARTICLE. STEPHEN SLESINGER, New York, N. Y., assignor to Stephen Slesinger, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 25, 1932. Serial No. 42,993. Term of patent 3½ years.



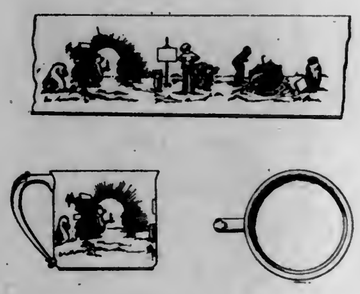
The ornamental design for a bowl or similar article as shown and described.

89,361. DISH OR SIMILAR ARTICLE. STEPHEN SLESINGER, New York, N. Y., assignor to Stephen Slesinger, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 25, 1932. Serial No. 42,994. Term of patent 3½ years.



The ornamental design for a dish or similar article as shown.

89,362. CUP OR SIMILAR ARTICLE. STEPHEN SLESINGER, New York, N. Y., assignor to Stephen Slesinger, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 25, 1932. Serial No. 42,996. Term of patent 3½ years.



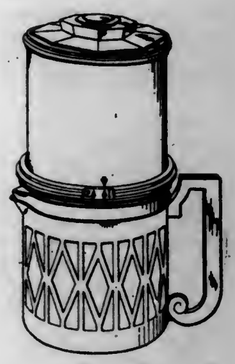
The ornamental design for a cup or similar article as shown and described.

89,363. FRUIT JUICE EXTRACTOR. ELMER G. STRECKFUSS, Cincinnati, Ohio, assignor to The Cincinnati Time Recorder Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 19, 1932. Serial No. 46,529. Term of patent 14 years.



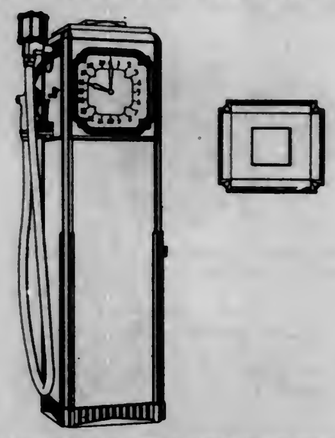
The ornamental design for a fruit juice extractor substantially as shown.

89,364. COMBINED COFFEE MAKER AND SERVER. WALTER D. TEAGUE, Forest Hills, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Dec. 21, 1932. Serial No. 46,543. Term of patent 14 years.



The ornamental design for a combined coffee maker and server as shown.

89,365. GASOLINE DISPENSING PUMP. CARL ULTES, Springfield, Ohio, assignor to The O. S. Kelly Company, Springfield, Ohio, a Corporation of Ohio. Filed Dec. 24, 1932. Serial No. 46,580. Term of patent 7 years.



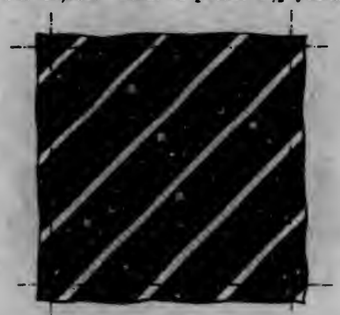
The ornamental design for a gasoline dispensing pump, as shown.

89,366. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,706. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,367. TEXTILE FABRIC OR SIMILAR ARTICLE. FERNAND BRIDIER, Paris, France. Filed Jan. 23, 1933. Serial No. 46,939. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,368. TEXTILE FABRIC OR THE LIKE. MICHEL BRODSKY, Paris, France. Filed Jan. 25, 1933. Serial No. 46,966. Term of patent 3½ years.



The ornamental design for a textile fabric or the like as shown.

89,369. TEXTILE FABRIC OR THE LIKE. MICHEL BRODSKY, Paris, France. Filed Jan. 25, 1933. Serial No. 46,970. Term of patent 3½ years.



The ornamental design for a textile fabric or the like as shown.

89,370. TEXTILE FABRIC OR THE LIKE. MICHEL BRODSKY, Paris, France. Filed Jan. 25, 1933. Serial No. 46,969. Term of patent 3½ years.



The ornamental design for a textile fabric or the like as shown.

89,371. TEXTILE FABRIC OR THE LIKE. MICHEL BRODSKY, Paris, France. Filed Jan. 25, 1933. Serial No. 46,968. Term of patent 3½ years.



The ornamental design for a textile fabric or the like as shown.

89,372. TEXTILE FABRIC OR THE LIKE. MICHEL BRODSKY, Paris, France. Filed Jan. 25, 1933. Serial No. 46,967. Term of patent 3½ years.



The ornamental design for a textile fabric or the like as shown.

89,373. TOY MACHINE GUN. CATHERINE W. BROWN, Pasadena, Calif. Filed Dec. 9, 1932. Serial No. 46,416. Term of patent 3½ years.



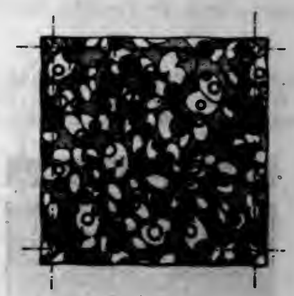
The ornamental design for a toy machine gun, as shown.

89,374. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 23, 1933. Serial No. 46,936. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,375. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 23, 1933. Serial No. 46,935. Term of patent 3½ years.



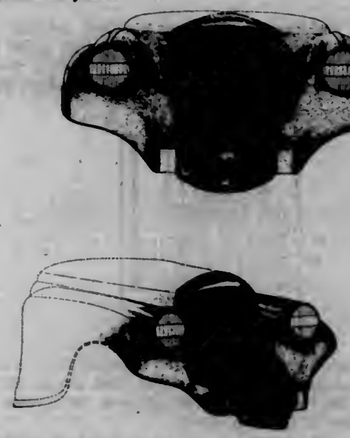
The ornamental design for a textile fabric or similar article as shown and described.

89,376. TEXTILE FABRIC OR THE LIKE. MARION R. HAMBE, Brooklyn, N. Y. Filed Jan. 18, 1933. Serial No. 46,871. Term of patent 3½ years.



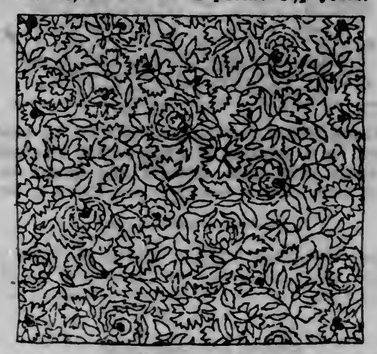
The ornamental design for a textile fabric or the like as shown and described.

89,377. COMBINED RADIATOR, HOOD, FENDER, AND HEAD LAMP CASING. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Dec. 17, 1932. Serial No. 46,476. Term of patent 14 years.



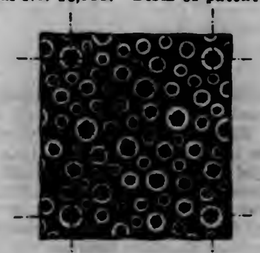
The ornamental design for a combined radiator, hood, fender and headlamp casing substantially as shown and described.

89,378. TEXTILE FABRIC OR THE LIKE. HANS J. NERGER, New York, N. Y. Filed Jan. 21, 1933. Serial No. 46,912. Term of patent 3½ years.



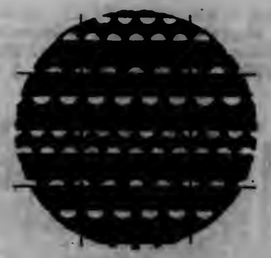
The ornamental design for a textile fabric or the like as shown.

89,379. TEXTILE FABRIC OR SIMILAR ARTICLE. LOUIS RUBINGER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 23, 1933. Serial No. 46,933. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,380. TEXTILE FABRIC. ROBERT SCHEY, New York, N. Y., assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Jan. 17, 1933. Serial No. 46,866. Term of patent 3½ years.



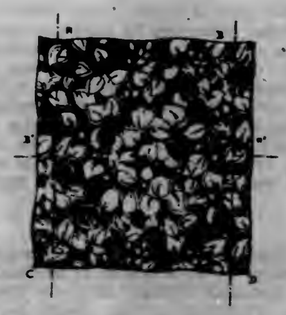
The ornamental design for a textile fabric, substantially as shown and described.

89,381. TEXTILE FABRIC OR THE LIKE. JACK SCHWEIZER, Rye, N. Y. Filed Jan. 21, 1933. Serial No. 46,913. Term of patent 3½ years.



The ornamental design for a textile fabric or the like as shown.

89,382. TEXTILE FABRIC OR SIMILAR ARTICLE. MARIE H. SMITH, Dobbs Ferry, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 23, 1933. Serial No. 46,937. Term of patent 3½ years.

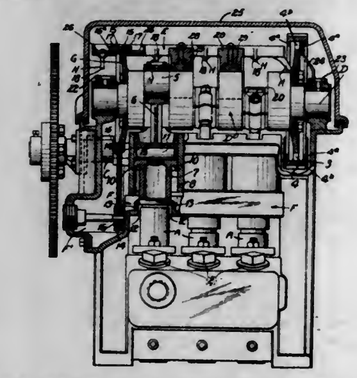


The ornamental design for a textile fabric or similar article as shown and described.

PATENTS

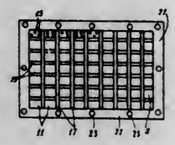
GRANTED FEBRUARY 28, 1933

1,898,994. RECIPROCATING PUMP. FRANK ACKERMAN, St. Louis, Mo., assignor to Curtis Manufacturing Company, Wellston, Mo., a Corporation of Missouri. Filed Feb. 20, 1930. Serial No. 429,966. 5 Claims. (Cl. 184—6.)



1. In a machine of the general character described, the combination of a reciprocating plunger, an operating mechanism for said plunger arranged above the same, an overhead oil trough from which oil is fed by gravity to said operating mechanism, a reservoir arranged so as to receive and collect the oil supplied to said operating mechanism, an elevator for carrying oil upwardly from said reservoir, a rotatable element onto which oil is fed by said elevator, and a scraping device for discharging oil from said rotatable element into said trough.

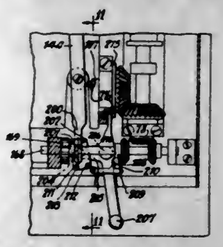
1,898,995. MOVING PICTURE SCREEN. JOHN L. CASS, Garden City, and BARTON KREUZER, Rockaway Park, N. Y., assignors to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 5, 1930. Serial No. 500,172. 4 Claims. (Cl. 88—24.)



1. A talking motion picture screen comprising a thin surface material, perforated for the transmission of sound therethrough, spaced reinforcing strips sewn horizontally on the back of said material, spaced filler strips sewn vertically between the said horizontal strips, vertical reinforcing strips superposed on said horizontal strips and over said vertical filler strips, a border material attached to said screen and overlapping the ends of said vertical and horizontal strips, and metallic grommets in said border material for permitting the rigging of said screen.

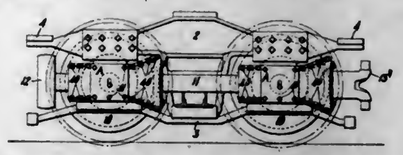
1,898,996. CALCULATING MACHINE. GEORGE C. CHASE, South Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Jan. 3, 1930. Serial No. 418,254. 1 Claim. (Cl. 235—75.)

In a calculating machine having numeral wheels, one-way active differential settable actuators therefor, operating devices adjustable to determine and effect positive or negative registration on said numeral wheels, and a rotation counting train including reversing gears and a shift lever therefor settable by said operating devices to register in accordance with the numeral wheel regis-



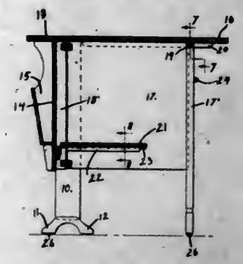
tration; a second lever interposed between said reversing gears and said first named lever, and means for adjusting the fulcrum of said second lever to reverse the operative effect of the first lever.

1,898,997. RAILWAY VEHICLE TRUCK. LEWIS E. FEIGHTNER, Elida, Ohio. Filed May 16, 1929. Serial No. 363,613. 46 Claims. (Cl. 105—117.)



1. In apparatus of the character described, a common box structure, for a plurality of axles, having longitudinally spaced-apart drive-shaft supports and means in substantially fixed relation thereto for mounting a driven gear.

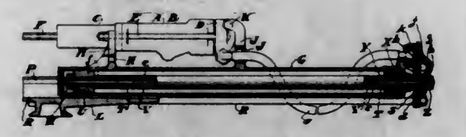
1,898,998. FOLDING TABLE. CLAUS W. GLANDT, Bennington, Nebr. Filed Apr. 10, 1930, Serial No. 443,079. Renewed Jan. 16, 1933. 3 Claims. (Cl. 45—116.)



1. In a folding table, a main frame comprising parallel vertical side-members and a horizontal top and a vertical back-member fixedly connecting said side-members, the latter each having a front foot and a rear foot, gate-leg members hinged to said side-members and foldable into overlapping parallel relation adjacent to the vertical back-member, a drop-leaf hinged to the front edge of the horizontal top and foldable to a lowered position for inclosing the folded gate-leg members between the same and the back-member, the drop-leaf being swingable to a raised position in alinement with the horizontal top, the gate-leg members being swingable forwardly beneath the raised

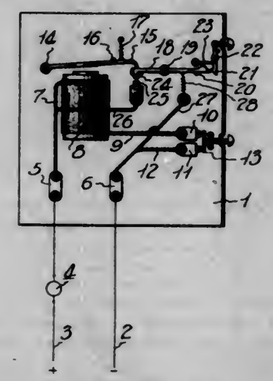
drop-leaf to support the same, and means for detachably connecting to each other the front ends of the gate-leg members to retain the same in a triangular formation relative to the back-member.

1,898,999. FEEDING DEVICE FOR ROCK DRILLS. GEORGE W. HULSHIZER, Stewartsville, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 18, 1929. Serial No. 414,953. 4 Claims. (Cl. 121—9.)



1. In a drill feeding device, the combination of a rock drill and a shell therefor, a feeding cylinder in slidable engagement with the shell, there being means on the cylinder to support the rock drill, means for clamping the first mentioned means to the rock drill, a cross head supported by the shell, a piston in the cylinder, a piston rod for the piston secured to the cross head and having passages therein for conveying pressure fluid to the ends of the cylinder to actuate the cylinder and the rock drill longitudinally of the shell, and a throttle valve in the cross head to control the passages.

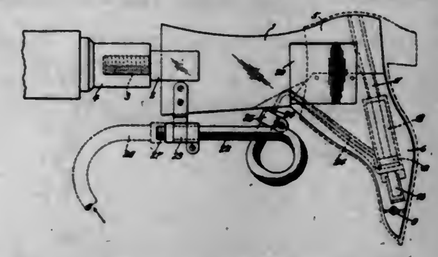
1,899,000. ELECTRIC SWITCH. CARL G. JOHNSON and KURT T. JOHNSON, Chicago, Ill. Filed Aug. 19, 1931. Serial No. 558,075. 1 Claim. (Cl. 175—375.)



An electric circuit carrying the load in series, a master switch with yielding contact also in series with the load, an electric magnet for closing said master switch actuated across said switch, an auxiliary switch placed in the circuit connecting the magnet to the master switch, so that the closing of said master switch will short circuit the electromagnet, means for locking said master switch in its closed position, and mechanical means for releasing said lock and opening the master switch when locked in its closed circuit position.

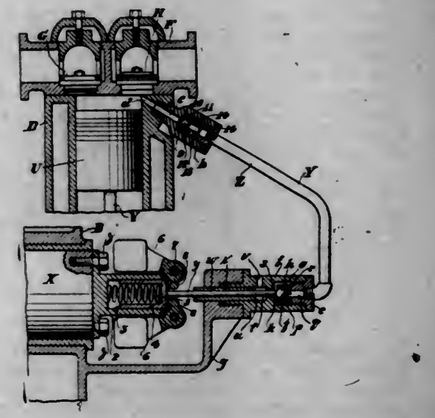
1,899,001. SHOE TREEING DEVICE. JAMES D. KRIVE, St. Louis, Mo., assignor to International Shoe Company, St. Louis, Mo., a Corporation of Delaware. Filed Sept. 24, 1931. Serial No. 564,801. 17 Claims. (Cl. 12—116.)

1. A device for treeing shoes for finishing operations comprising a heel portion adapted to be inserted in the heel portion of a shoe, two front portions located side by side in front of the heel portion and having opposite grooves in their adjacent sides, a spreader for said front portions supported by said heel portion in said grooves,



and pneumatic means for operating said spreader to spread apart said front portions and thereby smooth and stretch a shoe mounted on said treeing device.

1,899,002. UNLOADER FOR COMPRESSORS. JOHN LE VALLEY, Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 21, 1931. Serial No. 510,140. 8 Claims. (Cl. 230—29.)



1. An unloader for compressors, comprising a conduit into which pressure flows and having a ball relief valve at one end to communicate the conduit with the atmosphere, said relief valve being held in one limiting position by pressure fluid in the conduit, spring pressed means for actuating the relief valve to another limiting position, centrifugally actuating means for rendering the spring pressed means ineffective to displace the relief valve during the normal operation of the centrifugally operated means, and means near the other end of the conduit for controlling the effective capacity of the conduit.

1,899,003. OIL BURNER. LLOYD L. LOGAN, Calexico, Calif. Filed Apr. 7, 1930. Serial No. 442,284. 1 Claim. (Cl. 299—142.)

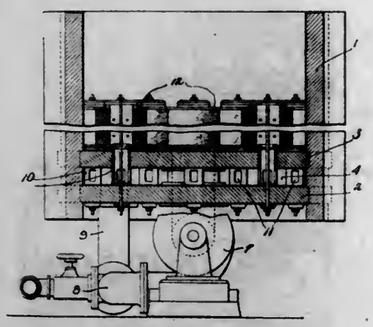
An oil burner comprising an oil line which extends substantially horizontally from a source of oil supply toward the point of combustion for a portion of its length, and is then continued for the remainder of its length in downwardly bowed form, an atomizing line extended substantially horizontally and above the first named line and across the concavity formed by the shape of the oil supply line, a nozzle upon the atomizing line within the concave

portion of the oil supply line said nozzle discharging against the rear side of the oil supply line adjacent the end thereof, a rod extending in substantial parallelism with the atomizing line, an element carried by the atomizing line with which said rod has threaded engagement, and means



for connecting the forward end of said rod to the nozzle in such manner as to permit the rod to turn while causing the nozzle to move with the rod axially of the atomizing line and toward and from the rear side of the tip of the oil line.

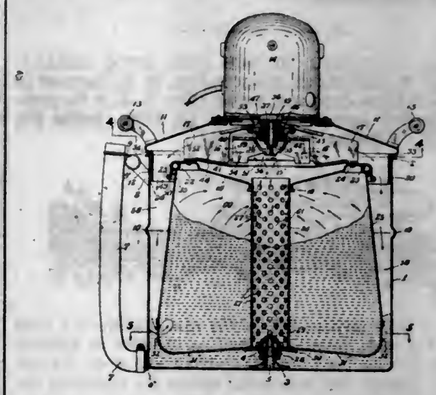
1,899,004. PROCESS OF DYEING TEXTILES. WILLIAM G. ABBOTT, Jr., Wilton, N. H., assignor, by mesne assignments, to Abbott Machine Company, Wilton, N. H., a Corporation of New Hampshire. Filed Apr. 7, 1928. Serial No. 268,171. 3 Claims. (Cl. 8—5.)



1. Process of dyeing textile materials which comprises mordanting the material with a chromium compound and wetting the material with a dye liquor in the presence of substantial surfaces of metallic chromium wet by the liquor.

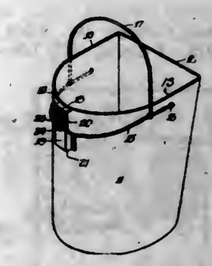
1,899,005. COMBINATION WASHING MACHINE AND EXTRACTOR. PERCY E. BARKER, Shaker Heights, Ohio, assignor to The Cinderella Washing Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 6, 1930. Serial No. 418,832. 22 Claims. (Cl. 68—37.)

1. A combination washing machine and extractor comprising outer and inner receptacles forming an inner chamber and a chamber encircling said inner chamber, the outer receptacle being adapted to retain a washing fluid and the inner receptacle having a plurality of perforations adjacent its bottom portion permitting fluid flow between said chambers, means mounting said inner receptacle for rotation in said outer receptacle, covers for said receptacles, means forming a restricted opening to the atmosphere adjacent the top of said outer receptacle, a rotary suction air propeller for withdrawing air from the inner chamber, the cover of the inner receptacle being apertured opposite the inlet side of said air propeller, means for operating said air propeller, a second air propeller rotatable relative to the first air propeller, the discharge side of the first air propeller being spaced by an air gap from the intake of the second air propeller so that said air propellers are interconnected by an air clutch, means inducing the rotation of said inner receptacle from the rotation of said second air propeller, the



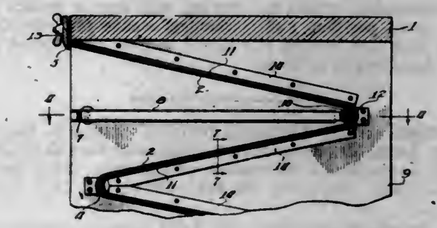
discharge side of the second air propeller being open to said encircling chamber, and means for draining said outer receptacle.

1,899,006. BUCKET. JOHN BERG, Cecil, Wis. Filed July 20, 1929. Serial No. 379,642. 6 Claims. (Cl. 265—67.)



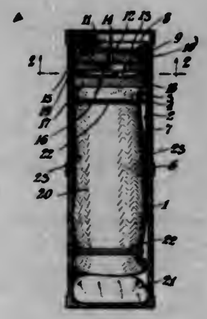
1. The combination with a bucket, of means for weighing the contents of said bucket, said weighing means comprising a housing, a balance beam pivotally associated with the side walls of the bucket and passing through said housing, a resilient member connecting said balance beam with said housing, means actuated by said balance beam for indicating the weight of the contents of the bucket, and a bail member secured to said balance beam for carrying the bucket.

1,899,007. RENEWABLE FILTER. HANS E. BIRKHOLZ, Chicago, Ill., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed Aug. 10, 1927. Serial No. 211,948. 10 Claims. (Cl. 183—71.)



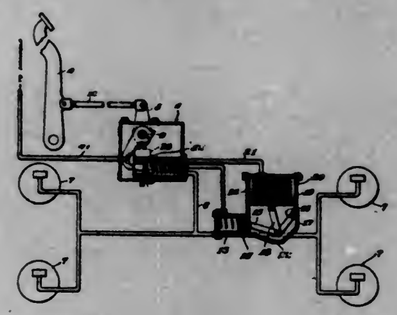
1. In an air conduit, means for inserting and supporting a sheet of filtering material across the conduit comprising stationary bars mounted in spaced relation, and frames slidably mounted on said conduit between said bars for shoving the folds of the material between the bars and supporting the folds in spaced relation.

1,899,008. LIGHTER. RICHARD E. BERTHOLD, Richmond Hill, N. Y., assignor to Cardinal Products, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 9, 1933. Serial No. 650,911. 12 Claims. (Cl. 67—7.)



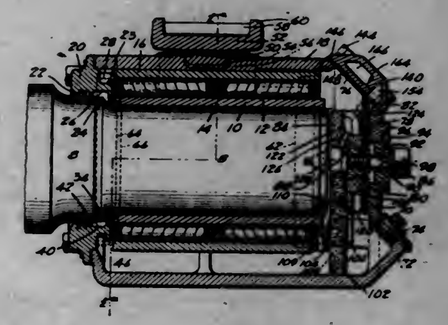
1. A lighter comprising a casing adapted to contain vaporizable fluid, a holder in said casing and a block of catalytic material supported by said holder in the path of vapor from said fluid, a surface of said block being exposed for contact with a cigarette or the like, said holder being provided with means for the admission of air to the opposite surface of said block.

1,899,009. SLACK REMOVER FOR HYDRAULIC BRAKE SYSTEMS. CLIFFORD C. BRADBURY, Glencoe, Ill., assignor to Hydraulic Brake Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 21, 1929. Serial No. 415,648. 8 Claims. (Cl. 188—152.)



1. In a fluid pressure operated system, a main pressure means for producing a pressure in the system, a secondary pressure means comprising a pressure cylinder connected to the pressure system, a piston in said cylinder, a connecting rod attached to the piston, a link connected to the connecting rod forming a toggle with the connecting rod, and means for operating the toggle to cause the piston to produce an initial pressure prior to the pressure of the main pressure means.

1,899,010. JOURNAL BOX. RICHARD J. BRITTAIN, Jr., Bloomfield, and OTTO W. YOUNG, East Orange, N. J., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 8, 1930. Serial No. 434,339. 19 Claims. (Cl. 308—41.)



1. In a device of the character described, a housing, a shaft extending into the housing and shiftable endwise therein, means providing a close joint where the shaft enters the housing, the housing having an opening, a lid closing the opening, the housing having a passage leading through it from the outside to the lid, and the lid having a passage connecting said housing passage with the interior of the housing; substantially as described.

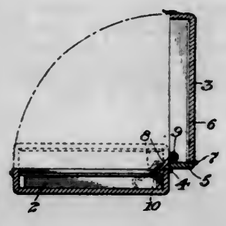
19. In a device of the character described, a housing, a shaft, a thrust block for the shaft, the housing having an end wall and an opening located in lateral opposition to the space inside of the end wall for passage of the thrust block therethrough, and means for removably securing the thrust block to the end wall; substantially as described.

1,899,011. TENNIS NET. ROYCE S. BUNKER, Baltimore, Md., assignor to W. & J. Knox Net and Twine Company, Baltimore, Md., a Corporation of New Jersey. Filed Sept. 13, 1932. Serial No. 632,891. 6 Claims. (Cl. 273—29.)



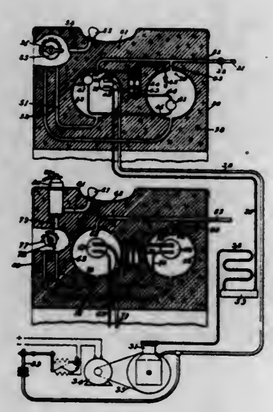
1. A net comprising, with a net proper, bands extending lengthwise of and secured respectively along longitudinal lines thereof to margins of the net proper which are angularly related to each other, one of said bands intersecting the other and the bands being secured together at the intersection and respectively having their end portions lapped back upon and secured along longitudinal lines thereof to the portions of the bands which are secured to the net proper.

1,899,012. CONVERTIBLE DISPLAY CASE. WILLIAM M. BUTTRICK, New York, N. Y., assignor to Celluloid Corporation, a Corporation of New Jersey. Filed Sept. 30, 1929. Serial No. 396,160. 3 Claims. (Cl. 206—44.)



1. A case of the character described comprising a compartment and a cover, the latter having a movable side, a hinge connecting said cover and said side, said side being also hingedly connected to the free edge of a side of said compartment which is incapable of motion in relation to that compartment.

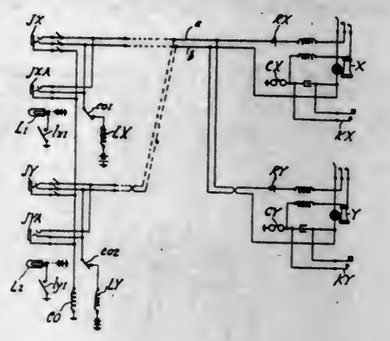
1,899,013. REFRIGERATING APPARATUS. ROBERT R. CANDOR, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 29, 1930. Serial No. 499,040. 10 Claims. (Cl. 62—141.)



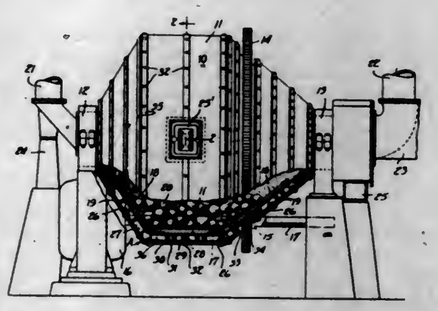
1. In a drinking water cooler, the combination of a unitary drinking water discharge device and means for securing the discharge of water at various desired temperature from the discharge device including a source of drinking water, means of a substantially constant temperature for cooling a portion of the water, means for mixing variable ratios the cooled portion with another portion of water from said source of drinking water and discharging said mixed portions from the discharge device.

1,899,014. TELEPHONE SYSTEM. DAVID ADAM CHRISTIAN and EDMUND WILLIAM PALMER, London, England, assignors to Siemens Brothers & Company, Limited, London, England. Filed June 9, 1930, Serial No. 459,864, and in Great Britain July 1, 1929. 15 Claims. (Cl. 179—30.)

1. In a telephone system, two stations connected to a common line, means for establishing a talking connection with the subscriber at one of said stations, and means comprising a rectifier at the second station for preventing the subscriber thereat from interfering with said talking connection.



1,899,015. PULVERIZING APPARATUS AND THE LIKE. CHARLES HUNTER CORBISHLEY, Glen Rock, N. J., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 20, 1930. Serial No. 496,855. 8 Claims. (Cl. 83—9.)



1. Pulverizing apparatus or the like comprising a rotatable shell and a casing secured to and spaced from said shell, said casing comprising a layer of fibrous material having an irregular surface opposite and spaced from the outer surface of the shell.

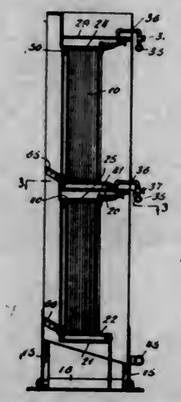
1,899,016. DEHYDRATING RUBBER DEPOSITED FROM AQUEOUS DISPERSIONS. EDWARD H. DARBY, deceased, Rome, N. Y., by Cornelia L. Darby, executrix, Rome, N. Y., assignor to American Anode, Incorporated, New York, N. Y., a Corporation of Delaware. Filed Oct. 28, 1927. Serial No. 229,520. 5 Claims. (Cl. 204—1.)



1. The process of covering continuous lengths of electrically-conductive material with a layer of normally electrically-non-conductive plastic material which comprises progressively depositing said electrically-non-conductive material in the form of an aqueous dispersion onto the electrically-conductive material, and thereafter progressively driving off from said body at least a part of its water content by electro-endosmosis.

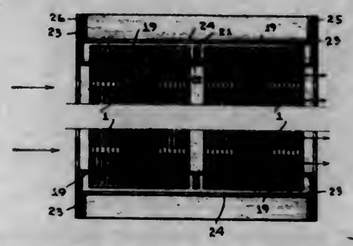
CARNEGIE LIBRARY OF ATLANTA

1,899,017. APPARATUS FOR FILTERING AIR. GEORGE S. DAUPHINEE, Brooklyn, N. Y., assignor to American Air Filter Co. Inc., Louisville, Ky., a Corporation of Delaware. Filed May 11, 1926. Serial No. 108,224. 11 Claims. (Cl. 183—21.)



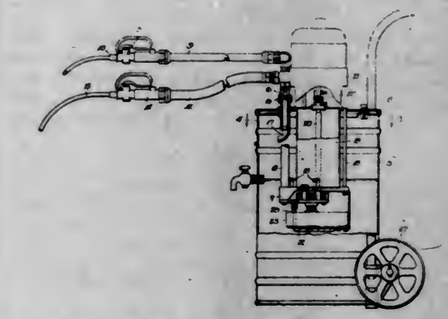
8. In an apparatus for filtering air, the combination of a lower filter unit having baffling plates arranged to provide tortuous air passages and down-flow surfaces over which liquid supplied to the top of the unit will flow downwardly and be discharged at the bottom thereof, liquid supply means extending across the top of the lower unit to distribute the liquid in a multiplicity of fine streams, an upper filter unit overlying said lower unit, drainage means for the upper unit mounted over said liquid supply means of the lower unit, supporting members for said upper unit attached to and at the top of said drainage means, said unit supporting means being spaced apart to allow liquid to adequately drain from the upper unit into the drainage means, and means for removing the used liquid.

1,899,018. FILTER. GEORGE SCOTT DAUPHINEE, Brooklyn, N. Y., assignor to American Air Filter Company, Louisville, Ky., a Corporation of Delaware. Filed Apr. 18, 1927. Serial No. 184,589. 8 Claims. (Cl. 183—76.)



2. A filter unit for fluids having as one of its filtering media a member adapted to have its front and rear surfaces covered with a viscous film to retain the impurities present in the fluid being treated, and to be periodically cleaned by flushing with fresh viscous material, said member having its working surface provided with a series of relatively closely spaced fine slits having elongated closely disposed side edges, adjacent thereto alternate levels of material comprising a series of high levels and low levels, the latter constituting grooves, and with said slits providing reservoir means for the viscous material at the end of the slits and between said high and low levels.

1,899,019. APPARATUS FOR CLEANING CONTAINERS. LEO DEUTSCH, Beaver, Pa. Filed Sept. 2, 1927. Serial No. 217,023. 7 Claims. (Cl. 184—1.5.)



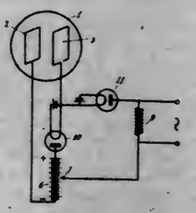
1. A motor vehicle service station unit for cleaning gear casings and the like, comprising a container for cleaning fluid, a suction line to connect the casing which is to be cleaned with said container, an ejector in said suction line, a pump arranged within said container, and having its inlet immersed in the liquid therein, means including a tubular spacing member for supporting said pump on and in spaced relation to the top wall of said container, a motor supported by said container, and means within said tubular spacing member for establishing a driving connection between said motor and said pump.

1,899,020. HAT. BERNHARD J. DRUEDING, Philadelphia, Pa. Filed May 26, 1932. Serial No. 613,622. 2 Claims. (Cl. 2—181.)



1. A hat comprising a crown and brim, and a sweat band composed of an integral sheet of material with its opposite edges formed as concentric arcs and the outer arcuate edge folded inwardly forming a fulled strip, said fulled strip being stitched to the crown adjacent to the fold and lying intermediate the crown and major part of the band.

1,899,021. GLOW LAMP CIRCUIT. MARI JOHAN DRUYVESTEYN, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 21, 1929, Serial No. 415,638, and in the Netherlands Dec. 15, 1928. 2 Claims. (Cl. 176—124.)



1. In a circuit arrangement for operating a glow discharge tube, an envelope enclosing a plurality of electrode

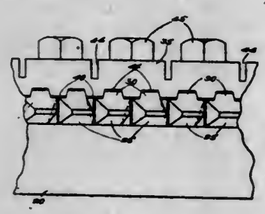
elements between which a main and an auxiliary glow discharge takes place, means for connecting the cathode of the glow discharge lamp through a plurality of parallel paths with the second electrode of the lamp to produce glow discharge, one of said parallel paths comprising a source of direct current and a thermionic current limiting device and the other of said parallel paths comprising a portion of the source of direct current for actuating the lamp, a source of controlling oscillations and a series connected resistance element.

1,899,022. METHOD OF CUTTING FABRICS. CARL DUISDIEKER, New York, N. Y. Filed Oct. 27, 1931. Serial No. 571,451. 2 Claims. (Cl. 2—67.)



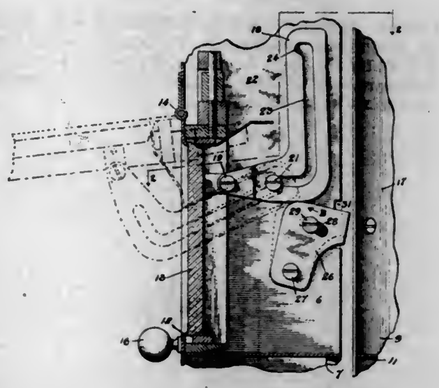
1. The method of making suits from tubular knit goods which consists in cutting two front and two rear parts from the tubular goods simultaneously and forming the shoulder straps of the front and rear parts by bias cuts with the median line of the shoulder straps on the bias.

1,899,023. GEAR CUTTER. SCHUYLER H. EARL, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Dec. 24, 1930. Serial No. 504,578. 5 Claims. (Cl. 29—105.)



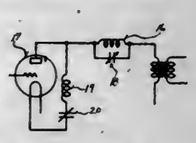
1. A gear cutter comprising a rotary head having a blade-receiving seat and a plurality of cutting blades mounted on said seat in contiguity to one another, each of said cutting blades having a longitudinal rib of wedge shape formed on one side face thereof, and a clamping member formed with radial grooves complementary to the ribs of said blades and with radially arranged wedge-shaped ribs each of the ribs of said clamping member being shaped so as to engage adjacent sides of the ribs of a pair of adjoining blades when the blades are in position on the head, so that the ribs of the blades and the clamping member interlock, and means for actuating said clamping member into clamping position.

1,899,024. DOORCHECK FOR VENDING MACHINES. THOMAS F. EARLY, Philadelphia, Pa., assignor to Horn & Hardart Baking Co., Philadelphia, Pa., a Corporation of New Jersey. Filed Jan. 9, 1931. Serial No. 507,579. 2 Claims. (Cl. 312—35.)



1. In combination with a vending machine having a movable compartment member and a closure therefor, of a latch adapted to maintain the closure in open position, a pivoted key-plate for engaging the latch, and means carried by the movable member for pressing the key-plate against the latch to release the closure.

1,899,025. RADIO RECEIVING SYSTEM. MILTON MERWIN EELLS, Chicago, Ill., assignor, by mesne assignments, to William Turnor Lewis, Racine, Wis. Filed Nov. 11, 1926. Serial No. 147,698. 5 Claims. (Cl. 179—171.)

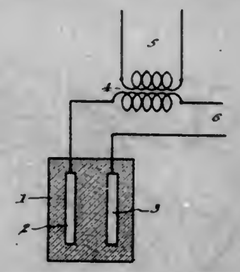


1. In a radio receiving system, the combination of a plurality of tubes having the plate circuit of one tube coupled to the grid circuit of the succeeding tube, one of said circuits having a tuned resonant impedance interposed therein to prevent the passage of radio frequency energy to the grid of the succeeding tube, said impedance being tuned to the frequency of the received energy and a bypass from the filament of one tube to one of said circuits, said bypass permitting the free passage of radio frequency energy.

1,899,026. MEANS FOR MODULATING ELECTRICAL ENERGY BY LIGHT IMPULSES. REGINALD A. FESSENDEN, Chestnut Hill, Mass. Original application filed Aug. 21, 1922, Serial No. 583,271. Divided and this application filed Jan. 8, 1927. Serial No. 159,949. 3 Claims. (Cl. 178—6.)

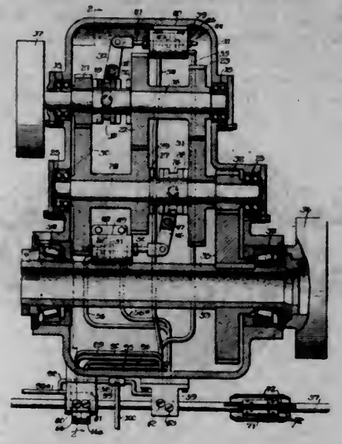
1. As a modulator of electrical energy by the action of light, a translucent condenser and a source of high frequency currents in operative relation to the terminals of

said condenser, whereby on variation in the amount of light falling on said condenser, the electrical energy flowing in the high frequency electric circuit is modulated in



accordance therewith, and means for modifying the effect of various portions of the light spectrum by staining said selenium.

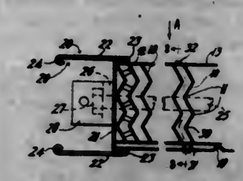
1,899,027. SPEED CONTROL MEANS. WILLIAM H. FOSTER, Elkhart, Ind. Filed Aug. 20, 1930. Serial No. 476,506. 19 Claims. (Cl. 29—64.)



1. In combination, in a turret lathe, a driving member, a work holding device, gears for connecting said driving member to said device, and a plurality of clutches for selectably connecting said gears to produce changes of speed in said device for a given speed of said driving means, fluid pressure responsive means for operating said clutches, a rotatable and longitudinally movable member whose rotative positions vary with the indexing positions of the turret of said turret lathe and whose longitudinal positions vary with the longitudinal movement of said turret, and a pair of valves for controlling the fluid pressure responsive means associated with each of said clutches, one valve of each of said pairs being responsive to said rotatable and longitudinally movable member in its rotative positions and the other valve of each of said pairs being responsive to said rotatable and longitudinally movable member in its longitudinal positions.

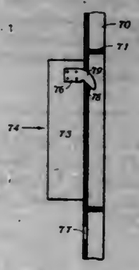
1,899,028. AIR FILTER. CHARLES H. GAGEN, Montclair, N. J., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed July 14, 1927. Serial No. 205,636. 6 Claims. (Cl. 183—75.)

1. A filter comprising a plurality of spaced plates disposed side by side to form a series of sharply bent channels through which a stream of fluid is adapted to pass, and a plurality of screens extending transversely of said plates, one of said screens adapted to present relatively little obstruction to said stream being disposed on the



inlet side of said channels, and the other adapted to present greater obstruction to said stream being disposed on the outlet side thereof.

1,899,029. SELF-SEALING FILTER. CHARLES H. GAGEN, Montclair, N. J., assignor to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Original application filed June 20, 1928, Serial No. 286,771. Divided and this application filed Oct. 18, 1930. Serial No. 489,576. 1 Claim. (Cl. 183—49.)

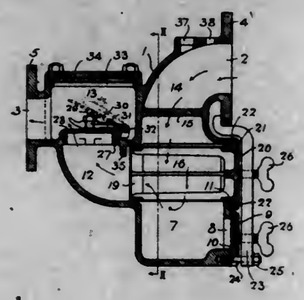


In a filter the combination of a frame presenting a unit receiving opening, the frame being formed with recesses at the sides of each opening, a unit adapted to be positioned with its edges on one side overlapped by vertical frame surfaces adjacent said opening, and inter-engaging means between said unit and the frame whereby when the unit is operatively positioned its weight constantly tends to maintain in close engagement the overlapping surfaces between said unit and frame so as to prevent the passage of air therebetween, said means comprising hooks secured to the side walls of the unit and adapted to extend into said recesses so as to engage the frame and thereby support the unit thereon, the planes of engagement between the hooks and frame inclining downwardly away from the unit.

1,899,030. LIQUID STRAINING DEVICE. LLOYD B. GRUMAN, Hillside, N. J., assignor to Ames Pump Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 27, 1930. Serial No. 478,029. 4 Claims. (Cl. 210—166.)

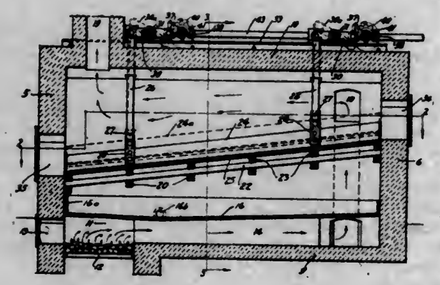
1. A device for straining solid matter from liquids and for the passage of liquids, vapors and gases therethrough, comprising a chamber; and a partition dividing the chamber into two parts and completely enclosing one part from the other part against the passage of said solid matter, but permitting liquids, vapors and gases to pass therethrough from one part to the other part, one of the parts containing an inlet at its upper portion and a portion at its lower end for the reception of solid matter entering the inlet, and the other part containing an outlet for the passage of the liquids, vapors and gases entering the inlet, after being freed from the solid matter, said partition comprising a solid part extending from the top of the chamber downwardly and terminating in a straight horizontal lower edge beneath and transversely

of which the fluids move in passing from the inlet part of the chamber to the outlet part, said outlet being disposed at least as high as said lower edge, and a substantially horizontal hollow part disposed between said upper and solid matter receiving portions and having an end adjacent said lower edge, said hollow part being



formed at least in part of a screen disposed at least as high as said lower edge with sufficient open area for the free passage of gases and vapors therethrough, and said inlet part having a portion extending across said hollow part connecting the upper portion of said inlet part with the solid matter receiving portion.

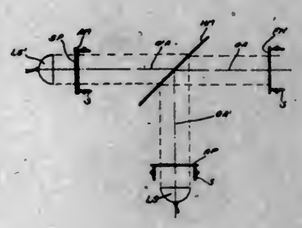
1,899,031. APPARATUS FOR SEPARATING METALS OR ALLOYS. ALBERT HANAK, Philadelphia, Pa., assignor to Girard Smelting & Refining Company, Philadelphia, Pa. Filed Apr. 11, 1930. Serial No. 443,414. 1 Claim. (Cl. 263—21.)



In an apparatus for separating lower melting from higher melting metals or alloys, the combination of a furnace of refractory material; means for heating all parts of said furnace; means for suspending within the furnace a sloped foraminated shaker tray; mechanism actuating the suspension members for vigorously shaking this tray in a vertical direction to induce lateral progression of treated material through the furnace; impact grating located below the shaker tray to induce, by said impact between grating and shaker tray, the separation of the fused low melting metals from the solid higher melting ones and a collecting pan below the impact grating for collecting the said low melting metals.

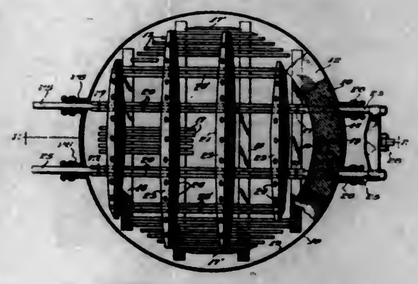
1,899,032. PRODUCTION OF PEDIGREED NEGATIVES. MAX HANDSCHIEGL, Los Angeles, Calif., assignor to Bessie Handschiegl, Los Angeles, Calif. Filed Dec. 27, 1926. Serial No. 157,129. 3 Claims. (Cl. 88—16.)

1. The method of producing a composite photograph, that includes making positive and negative images of one component with complementary opaqued parts, and thus forming complemehtary silhouettes of said component, and projecting simultaneously and in register onto



a fresh actinic surface an optical image of one of said silhouette images and an optical image of the other component masked by the other silhouette image.

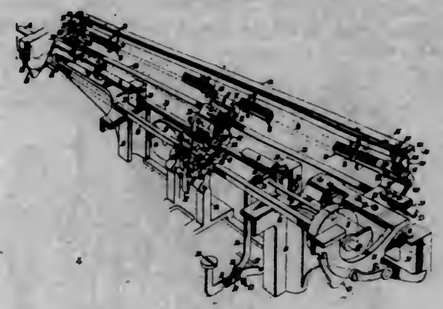
1,899,033. GRATE CONSTRUCTION. FRED B. HAYES, Fort Wayne, Ind. Filed May 3, 1929. Serial No. 360,013. 10 Claims. (Cl. 126—173.)



1. In combination with fuel burning apparatus, a stationary grate of larger diameter than the fuel combustion chamber of the apparatus located in the apparatus below said chamber, a plurality of drag beams mounted on said grate and movable thereon, links connecting said beams together, and means for reciprocating said beams in a direction transversely of the beams, said beams diminishing in width throughout substantially their entire lengths, such diminishing in width extending from the central portions of the beams toward their ends, said beams being adapted, when reciprocated, to move the spent fuel toward the end and side edges of the grate in directions parallel with the direction of movement of the beams as well as in directions substantially longitudinally of said beams.

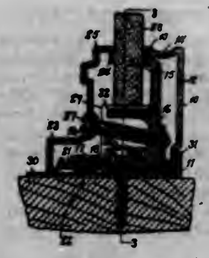
1,899,034. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed May 2, 1930. Serial No. 449,177. 5 Claims. (Cl. 197—176.)

4. In a typewriting machine, the combination with a spring-propelled carriage and a letter-spacing mechanism, of manually-operable instrumentalities effective for releasing said carriage from control of said letter-spacing mechanism, and devices for applying a braking force effective for restraining said carriage when released from said letter-spacing mechanism, said braking devices including a yieldable brake-strap and two brake-jaws to



grip the strap, each jaw having a friction surface, a key-operated arm upon which one of said jaws is provided, and a carriage-arresting stop upon said arm.

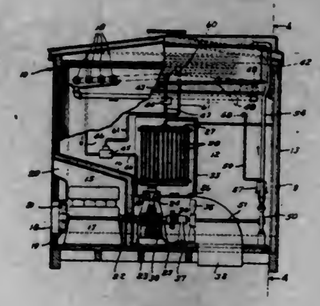
1,899,035. STORE-FRONT CONSTRUCTION. FRED HIMMEL and ISIDORE HIMMEL, New Haven, Conn., assignors to The Himmel Brothers Company, New Haven, Conn., a Corporation. Filed Oct. 31, 1931. Serial No. 572,305. 4 Claims. (Cl. 20—56.4.)



1. A store-front construction, comprising inner and outer strips, the inner strip having a base, an anchoring-block within the inner strip and formed with a hole, the base of the inner strip formed at intervals with upwardly-extending collars entering the holes in the anchoring-blocks and providing screw-holes for connecting the same with the casing, and a screw extending through said outer strip and into engagement with said anchoring-block.

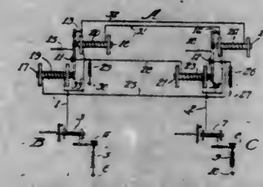
1,899,036. REFRIGERATION. GEORGE E. HULSE, New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Dec. 3, 1930. Serial No. 499,669. 22 Claims. (Cl. 62—117.)

1. In a refrigeration system, in combination, means forming a space whose temperature is to be regulated, means for circulating a fluid medium in said space, a reservoir for storing said fluid medium, a refrigeration unit employing a gaseous refrigerant and having an expansion member disposed in said reservoir in thermal contact with said fluid medium, an internal combustion engine adapted to run continuously for substantial periods of time for driving the compressor of said unit, a valve for controlling the flow of said refrigerant to said expansion member, thermostatic means responsive to the temperature of said fluid medium for controlling said valve, a pump for forcing said fluid medium through said circulating means, a by-pass associated with said circu-



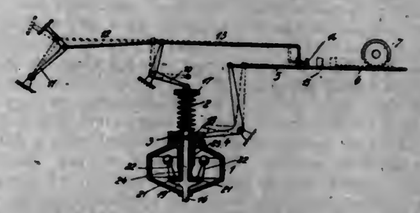
lating means, a valve for regulating the effectivity of said by-pass, and thermostatic means responsive to the temperature in said space for controlling said valve.

1,899,037. REPEATER SYSTEM. ALFRED T. JESTER, Houston, Tex. Filed Nov. 6, 1931. Serial No. 573,417. 4 Claims. (Cl. 178—71.)



1. A telegraph repeating system consisting of two telegraph lines, a pair of electro-magnetic devices for each line each having a coil, said devices controlling a common circuit point in their respective lines, one of said devices for one line when actuated actuating its armature to establish a circuit to repeat impulses to the other telegraph line through the coil of one only of the pair of devices of said other telegraph line, the other of said last named pair of devices serving for relay energizing purposes and being electrically connected to the telegraph line.

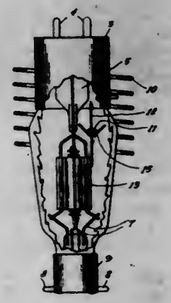
1,899,038. METHOD OF AND APPARATUS FOR REGULATING THE FUEL SUPPLY TO INTERNAL COMBUSTION ENGINES. HUGO JUNKERS, Dessau, Germany. Filed Nov. 2, 1929, Serial No. 404,393, and in Germany Nov. 9, 1928. 8 Claims. (Cl. 123—98.)



1. The method of regulating automatically the fuel supply to internal combustion engines in conformity with the speed of the engine comprising varying the fuel sup-

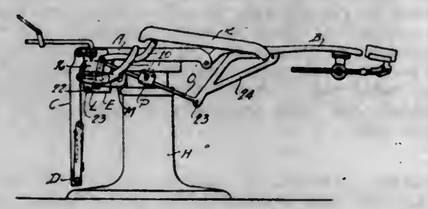
ply while the conditions requiring regulation exist by reducing the maximum fuel supply for speeds above a certain limit as compared with the maximum supply below such limit.

1,899,039. AUDION TUBE. EARL L. KOCH, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 28, 1927. Serial No. 222,418. 10 Claims. (Cl. 250—27.5.)



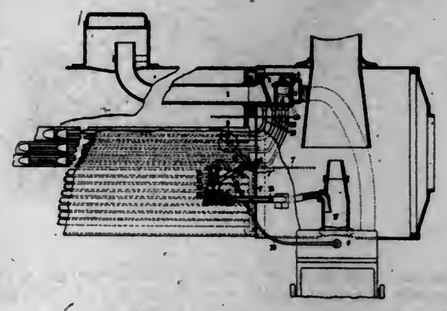
1. In an electron discharge device, a support, an inverted U-shaped deflecting member supported by said support, and a clean-up agent slidably secured to said support, said deflecting member and said clean-up agent cooperating so that when the clean-up agent is volatilized it will be substantially confined to the lower portion of said device.

1,899,040. PHYSICIAN'S CHAIR. WALTER F. KOKER, Webster Groves, Mo. Filed Dec. 7, 1929. Serial No. 412,366. 1 Claim. (Cl. 155—28.)



A chair provided with a seat, a swinging back and a swinging apron pivotally combined with said seat, bell crank levers, means for coupling said levers with the back so that said levers will always rock in one direction when the back is lowered and will always rock in the opposite direction when the back is raised, laterally-projecting pins on said levers, depending brackets on the seat provided with studs, a transversely-disposed rod at the upper end of said apron provided with a pair of rearwardly-projecting, curved arms having shoulders thereon which can be moved into and out of operative relationship with said pins by manually moving said curved arms, a tube rockably mounted on said rod, and rearwardly-projecting rack arms rigidly connected to said tube and adapted to be moved manually into engagement with the studs on said brackets so as to hold the apron at rest or in a stationary position.

1,899,041. MEANS FOR REGULATING THE SUPERHEATER TEMPERATURE OF THE STEAM IN LOCOMOTIVE ENGINES. JULJAN MADEYSKI, Warsaw, Poland, assignor to Warszawska Spolka Akcyjna Budowy Parowozow, Warsaw, Poland, a Joint-Stock Company of Poland. Filed Nov. 30, 1927, Serial No. 236,865, and in Poland Dec. 4, 1926. 2 Claims. (Cl. 122—480.)

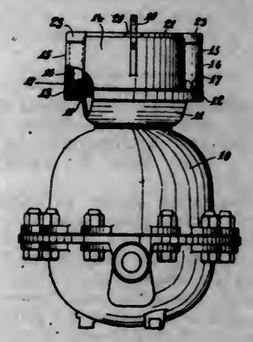


1. A locomotive boiler having tubes provided with superheating elements and tubes unprovided with superheating elements, a counterbalanced damper for the last named tubes arranged for operation by differences of pressure in the fire box and smoke box, and means, actuated by differences in pressure between the steam chest and the exhaust discharge nozzle to close the damper.

1,899,042. HYDROCARBON OIL REFINING. WILLIAM M. MALISOFF, Philadelphia, Pa., assignor to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 10, 1930. Serial No. 501,475. 6 Claims. (Cl. 196—24.)

1. A process for removing sulfur from hydrocarbon oils, which comprises washing the sulfur-containing oil with a solution of an alkali sulfide in at least one solvent from the group comprising methyl alcohol, ethyl alcohol, propyl alcohol, isopropyl alcohol, glycol, glycerine, acetone, ethyl methyl ketone, diethyl ketone, and epichlorhydrin, and separating said solution from the oil.

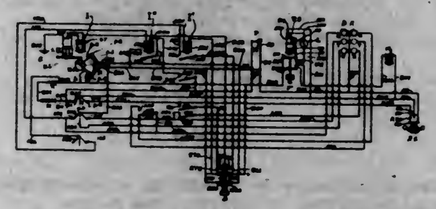
1,899,043. REGISTER BOX FOR FLUID OPERATED MECHANISMS. WILLIAM L. MARDEN, Elmhurst, N. Y., assignor to Neptune Meter Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 30, 1930. Serial No. 505,512. 2 Claims. (Cl. 73—167.)



1. In combination with a fluid operated mechanism having means to mount a register box thereon, a register box

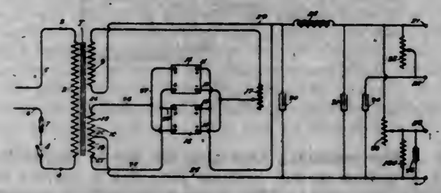
having an aperture through which indicating indicia may be viewed, extensions on the box and having wells, means in the wells to secure the box to the mounting means, and a lid on the box to prevent access to the wells.

1,899,044. TRAIN CONTROL SYSTEM. BENJAMIN W. MEISEL, Crestwood, N. Y., assignor to The Regan Safety Devices Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 1, 1926, Serial No. 138,873. Renewed July 18, 1932. 33 Claims. (Cl. 246—182.)



1. A railway cab signalling system comprising a set of cab signals to indicate the traffic condition of the immediate block, a separate set of cab signals to indicate the traffic condition of the block next ahead, train carried means for said sets of cab signals, and wayside means arranged at spaced control stations cooperating with said train carried means to selectively operate said signals in accordance with traffic conditions, said train carried means including a circuit network having means to produce persisting electrical indications corresponding to the operation of said wayside means.

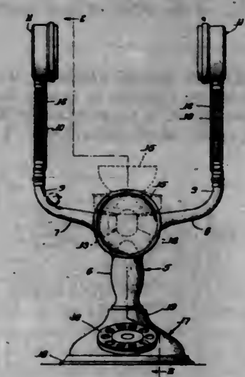
1,899,045. RECTIFIER. CARL MILLER, Chicago, Ill., assignor to Kellogg Switchboard & Supply Co., Chicago, Ill., a Corporation of Illinois. Filed June 18, 1926. Serial No. 116,785. 2 Claims. (Cl. 175—363.)



1. A device of the character described for furnishing uni-directional current including a transformer having a winding connected to a source of alternating current, a second winding for said transformer, a pair of sockets, filament terminals and auxiliary terminals for said sockets, one end of said second winding connected to an auxiliary terminal on each of said sockets, the other end of said second winding connected to another auxiliary terminal of each of said sockets, a third winding for said transformer having its respective ends connected to a filament terminal on each of said sockets, an output circuit having one side connected to the midpoint of said second winding and its other side connected to a filament terminal on each of said sockets, said device adapted to receive a full wave rectifier in either of said sockets or a pair of half-wave rectifiers in said pair of sockets.

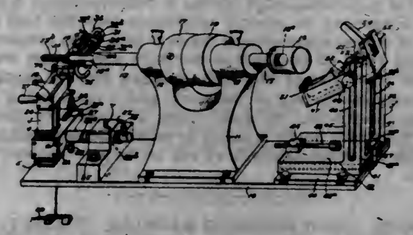
1,899,046. TELEPHONE. KATHERINE NICHOLS and RICHARD BETTIEN, Chicago, Ill.; said Bettien assignor to said Nichols. Filed Oct. 15, 1931. Serial No. 569,014. 2 Claims. (Cl. 179—100.)

1. In a device of the class described, a unit comprising a pair of receivers, a transmitter operatively connected to said receivers, a base removably supporting said unit, said unit being removable from the base, a stud carried by said base and operated by the removal or replacement of the



unit for controlling the signal circuit of the telephone system, said plug having limited slidable movement relative to the base.

1,899,047. MACHINE FOR GROOVING HEELS. WILLIAM H. NUTT, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 5, 1929. Serial No. 337,696. 61 Claims. (Cl. 12—42.)



1. In a heel grooving machine, grooving means, a holder for a heel to be grooved, a support for said holder, and a rocker member arranged to carry said support, said rocker member and support being constructed and arranged to permit the heel holder to be moved away from the grooving means in a rectilinear path and also to be rocked in a plane including said path.

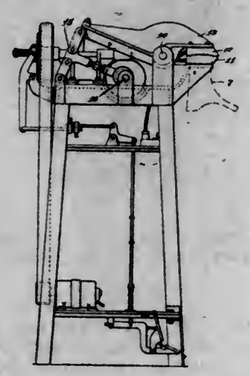
1,899,048. SYNCHRONIZING AND CONTROL MECHANISM FOR SOUND AND MOTION PICTURE APPARATUS. JEAN B. OLINGER, Milwaukee, Wis. Filed Nov. 28, 1930. Serial No. 498,672. 10 Claims. (Cl. 74—7.)



1. In combination, a pair of separated driving shafts, a motor interposed between said shafts, a regulatable mechanical driving connection between said motor and one of said shafts to accelerate or retard rotation of said shaft without affecting the other shaft, and a controllable

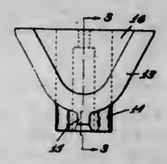
mechanical connection between said motor and the other of said shafts, there being means in said last connection for maintaining a predetermined speed ratio between the speed of operation of one of said shafts and the normal speed of operation of the other of said shafts.

1,899,049. FORMING BACK SEAMS. WALTER P. OSGOOD, Malden, Mass., assignor to Boston Machine Works Company, Lynn, Mass., a Corporation of Massachusetts. Filed July 30, 1930. Serial No. 471,665. 2 Claims. (Cl. 12—51.)



2. In a seam reducing machine, the combination with a jaw for supporting work having a concavo-convex formation comprising the quarter sections to form the heel portion of a shoe upper seamed together by a seam presenting a seam ridge on one face of the work and a seam crease on the other face of the work, said jaw directly engaging the seam crease face of the work, and a cooperating jaw acting directly on the seam ridge, of means for closing said jaws with heavy pressure to reduce the seam ridge to the thickness substantially of one of the shoe quarter sections.

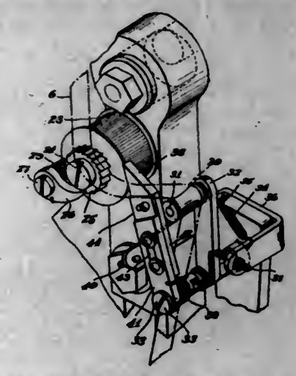
1,899,050. SEAM PRESSING MACHINE. WALTER P. OSGOOD, Malden, Mass., assignor to Boston Machine Works Company, Lynn, Mass., a Corporation of Massachusetts. Filed July 30, 1930. Serial No. 471,666. 7 Claims. (Cl. 12—51.)



1. In a seam pressing machine, the combination with means for supporting a pair of shoe quarter sections each connected by an overlapping seam to an insert, of means for reducing the whole of said overlapping seam to the thickness substantially of one of the shoe quarter sections.

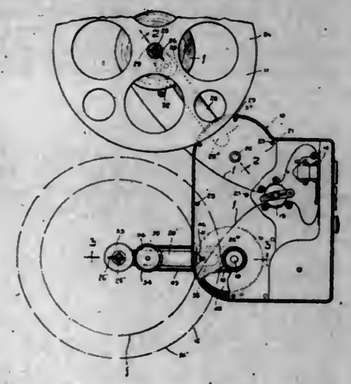
1,899,051. TAPING MACHINE. WALTER P. OSGOOD, Malden, Mass., assignor to Boston Machine Works Company, Lynn, Mass., a Corporation of Massachusetts. Filed Sept. 12, 1930. Serial No. 481,377. 20 Claims. (Cl. 154—42.)

1. A machine of the class described having, in combination, a support for a piece of sheet material to which a reinforcing strip is to be applied, means for applying the strip to the material and for feeding the reinforced



material, and means for maintaining a uniform tension on the strip during its application and feed.

1,899,052. COMBINED MOTION PICTURE CAMERA AND PROJECTING APPARATUS. FREEMAN H. OWENS, New York, N. Y. Filed Oct. 18, 1928. Serial No. 313,310. 13 Claims. (Cl. 88—17.)



3. A film rewinding apparatus for use in conjunction with a motion picture machine including a support for the operating parts of the machine, supporting members detachably attachable to said support, when projecting the film and film feeding and take-up reels each rotatably mounted on said supporting members, said rewinding apparatus including a support provided with a pair of spaced holders for detachably receiving the aforesaid supporting members of said reels when rewinding the film.

12. A combined motion picture camera and projecting apparatus comprising a relatively small compact portable casing convertible for use either as a camera or as a projector, mechanism within said casing for controlling and feeding film either for exposure or projection, support means within said casing for relatively small film feeding and take-up reels for camera use of the apparatus, relatively large film feeding and take-up reels for projection use of the apparatus, each of said projection reels being provided with an elongated extension arm for supporting the same externally of and in operative relation to the casing, said casing being provided with sockets for detachably receiving the ends of the supporting arms of the reels with a plug fit, and extensible means for connecting the take-up projection reel with the mechanism in the casing, whereby the small casing conveniently houses all of the apparatus when used as a camera, but is readily equipped with large external projection reels when used as a projector.

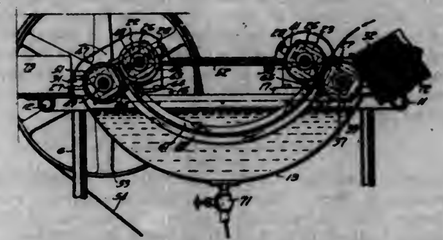
1,899,053. IMITATION PEARL. ARTHUR E. PETERSEN, Westfield, N. J., assignor to Celluloid Corporation, a Corporation of New Jersey. Filed Apr. 4, 1931. Serial No. 527,852. 7 Claims. (Cl. 18—51.)

1. Method of forming articles having a pear-like appearance comprising at least softening pieces or particles of thermoplastic composition containing pearl essence and forcing the same under suitable pressure into a mold.

1,899,054. LACQUER-BASE, LACQUER AND METHOD OF MAKING SAME. WILLETT C. PIERSON, East Orange, N. J., assignor to Leagum Corporation of Delaware, New York, N. Y., a Corporation of Delaware. Filed May 4, 1928. Serial No. 275,261. 5 Claims. (Cl. 134—26.)

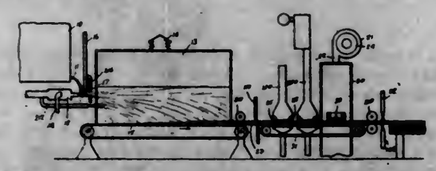
1. A lacquer-base comprising gummy leather, urea, ethylene glycol and phenol.

1,899,055. APPARATUS FOR CONDITIONING DRY MATRICES. CHARLES A. PITTS, San Francisco, Calif. Filed Sept. 1, 1928. Serial No. 303,486. 2 Claims. (Cl. 91—46.)



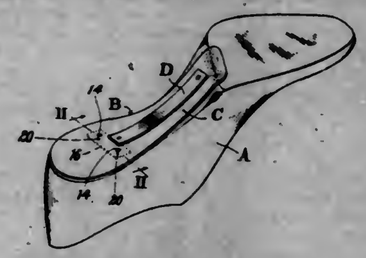
1. Apparatus for uniformly moistening dry matrices comprising a tank containing a liquid, a pair of feed rollers journaled above and at one end of said tank for feeding the matrices through said liquid, a pair of wringer rollers journaled above and at the other end of said tank for expressing excess liquid from the matrices after passage therethrough, a plurality of pairs of spaced guide bars spanning said feed and wringer rollers; said bars being curved so as to be partially immersed in the liquid and being arranged so that one bar of each pair is below the other bar of said pair to provide passages for the matrices, and means for driving said rollers.

1,899,056. PROCESS OF MAKING FELTED MINERAL FIBER. EDWARD R. POWELL, Alexandria, Ind., assignor to Banner Rock Corporation, Alexandria, Ind., a Corporation of Delaware. Filed Aug. 24, 1928. Serial No. 301,850. 13 Claims. (Cl. 154—28.)



1. In a process for the manufacture of sheet material containing mineral fibers and a binder, the improvement which consists in forming a suspension of the fibers admixed with finely divided binding material in a gaseous atmosphere, depositing the suspended admixture in successive increments on a continuously moving surface until a layer or mat of a suitable thickness is formed having the binding material uniformly disseminated throughout the matted fibers, and withdrawing the matted material after the requisite thickness is attained from the deposition zone.

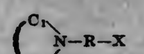
1,899,057. WORK POSITIONING MEANS. ARTHUR F. PYM, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 2, 1928. Serial No. 316,846. 10 Claims. (Cl. 12—1.1.)



1. A work positioning device comprising a member having a plurality of positioning projections upon one side thereof for entering holes in a piece of work to position the work in a definite angular relation to the device, and a plurality of positioning projections upon the other side of the device to enter holes in a last, said holes being spaced widthwise of the last to position the device lengthwise across the width of the last.

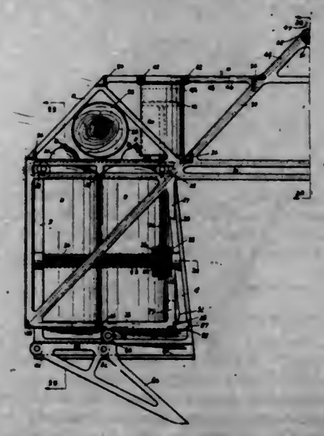
1,899,058. RUBBER COMPOSITION AND METHOD OF PRESERVING RUBBER. MARION C. REED, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Oct. 7, 1929. Serial No. 398,104. 19 Claims. (Cl. 18—50.)

1. The method of preserving rubber which comprises treating rubber with a compound possessing the structural formula



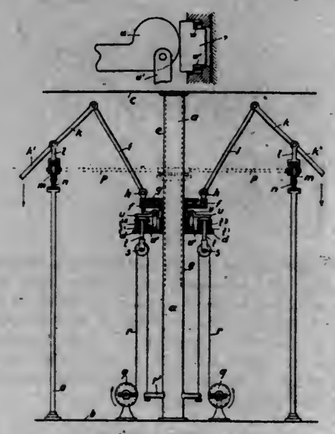
where C_1 and C_2 are terminal carbon atoms of a chain, and R is an aromatic nucleus, and X is a group selected from the class consisting of hydrogen, hydroxyl, nitroso, and amino groups.

1,899,059. SUBMARINE SALVAGER. JULIUS REICHERT and AUGUST REICHERT, Astoria, N. Y. Filed Nov. 5, 1928. Serial No. 317,192. 9 Claims. (Cl. 114—53.)



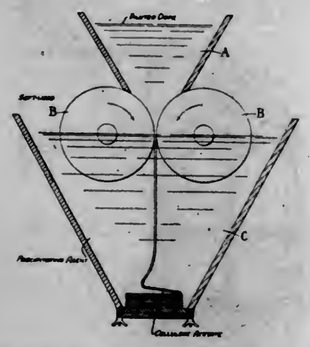
1. In combination with a submerged caisson, submerged means for evaporating a fluid and applying the pressure of the gasified fluid to the interior of the said caisson, to effect an evacuation therefrom.

1,899,060. DEVICE FOR ROTATING AND AT THE SAME TIME LIFTING THE GONDOLAS OF ROUNDABOUTS. LEOPOLD SCHMIDT, Wesermunde, Germany. Filed Dec. 5, 1931. Serial No. 579,154. 1 Claim. (Cl. 272—40.)



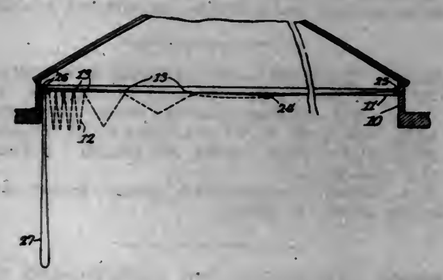
A device for rotating and at the same time lifting the gondolas of roundabouts, comprising in combination a middle column having longitudinal grooves, a shiftable guide ring engaging in the grooves of said middle column, a flange on the lower end of said ring, rope pulleys mounted on said flange, driving ropes connected to said ring through the intermediary of said pulleys, means connected to said ropes to move said ring up and down on said column, a safety device in said ring to arrest the movement of said ring in the event of fracture or giving of said ropes, a rotary disc engaging in said ring, intermediate levers connected at one end to said disc, and levers pivoted intermediate their ends connected at their inner ends to the other ends of said intermediate levers adapted to be oscillated by the up and down movement of said ring.

1,899,061. MANUFACTURE OF CELLULOSE ACETATE. OSWALD SILBERRAD, Loughton, and HARRY BLEASDALE, Edmonton, England. Filed Apr. 15, 1930, Serial No. 444,599, and in Great Britain Mar. 19, 1930. 7 Claims. (Cl. 260—102.)



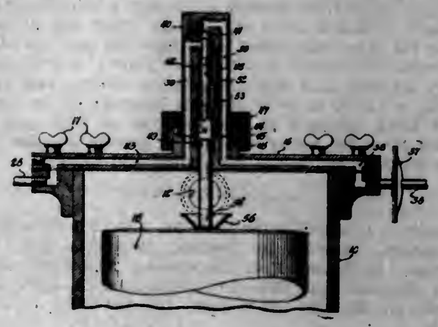
1. The process of manufacture of cellulose acetate in porous, opaque form which comprises adding to ripened acid dope substantially 60 to 75 per cent of the quantity of water required to initiate precipitation, and then bringing the so-diluted dope into contact with water in such manner that from the moment of contact the dope is submerged in a body of water in excess.

1,899,062. SPLINT SHADE SUPPORT. LE ROY J. STEFFEN, Evanston, Ill., assignor to Hough Shade Corporation, a Corporation of Connecticut. Filed Sept. 24, 1930. Serial No. 484,136. 10 Claims. (Cl. 156—16.)



6. Means for shading skylights of extended areas including a plurality of wires crossing the skylight opening, a shade formed of thin weft strips bound together with cords forming the warp of the shade, a plurality of detachable hangers engaging the warp cords slidably mounted on said wires, and means for moving the shade along the wires in either direction for extending or retracting the same.

1,899,063. LIQUID LEVEL CONTROL APPARATUS. JULIUS E. STOLL, Milwaukee, Wis., assignor to Pabst Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 5, 1931. Serial No. 566,990. 1 Claim. (Cl. 137—68.)



In a liquid level control apparatus of the type wherein a float controlled valve controls the operation of a fluid pressure motor which in turn controls the liquid supply valve, the combination with the float chamber and a float movable therein, of a head for said chamber provided with a centrally disposed bore and radially disposed passages extending to a position adjacent said bore, a tubular casing member having a centrally disposed bore provided with a valve seat and passages extending from said valve seat and communicating with said radially disposed passages, means for clamping said casing member to the head in fluid tight relation therewith, a needle valve working in said bores and controlling the passage of motive fluid through said passages past said seat, a spring mounted in said casing member and normally acting to unseat said needle valve, said needle valve having its stem extending beyond said bores for movement by said float to close said needle valve.

1,899,064. MANUFACTURE OF ELECTRODES. OLIVER W. STORRY, Madison, Wis., and CHARLES ALBERT SILVER, deceased, Madison, Wis., by Bertha Silver, administratrix, Madison, Wis., assignors to C. F. Burgess Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Continuation of application Serial No. 42,029, filed July 7, 1925. This application filed July 3, 1928, Serial No. 290,263, and in Germany July 1, 1926. 1 Claim. (Cl. 18—47.5.)

The method of making an anode of high electrical conductivity for electrolytic processes wherein said anode is disintegrated which consists in molding and pressing an electrode from pulverised graphite finer than ten mesh and fused rosin that has been treated with a hardener, removing any excess rosin during said pressing operation, and allowing said rosin to solidify while said mixture is under pressure, said pressure being high enough to secure the desired conductivity.

1,899,065. WELL SCREEN. LYLE C. TILBURY, Houston, Tex. Filed Dec. 30, 1930. Serial No. 505,521. 8 Claims. (Cl. 166—5.)



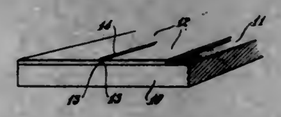
1. A well screen including an outer jacket and an inner pipe spaced from the jacket, each having a screening surface, aggregate in the space between said jacket and inner pipe, an upper and a lower ring in the jacket, said rings having countersunk, annular, recesses forming seats in which the corresponding ends of the inner pipe are seated.

1,899,066. TRANSFER AND METHOD OF MAKING THE SAME. ROSS GILBERT TONGE, Los Angeles, Calif. Filed Jan. 29, 1929. Serial No. 335,942. 1 Claim. (Cl. 41—33.)



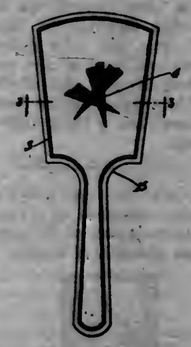
The method of making and applying a transfer, which consists in coating a waxed surface of a relatively strong but flexible backing sheet with a film of celluloid, forming a design on the exposed surface of the film when the film has dried, whereby the design carrying film and backing sheet are adapted for handling and transportation as a flexible unit with the design carrying firm protected by the backing sheet, stripping the design carrying film from the waxed surface of the backing sheet while dry and just prior to use of the design carrying film, and handling the dry design carrying film independently of any backing for mounting the same on a display surface so as to display the design with the film overlying the same and remaining as a permanent part of the transfer.

1,899,067. METHOD OF MAKING SPLICED RUBBER SHEETS. HARLAN L. TRUMBULL, Hudson, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed June 30, 1927. Serial No. 202,757. 8 Claims. (Cl. 154—42.)



1. The method of butt splicing rubber sheets which comprises square-cutting the abutting edges of the sheets, placing the sheets with abutting edges contiguous, interposing between the contiguous edges a material comprising a rubber insomer, and subjecting the rubber isomer material and the rubber sheets at the contiguous edges to heat and pressure.

1,899,068. DECORATED THERMOPLASTICS AND PROCESS OF MAKING SAME. JAMES F. WALSH, South Orange, and BJÖRN ANDERSEN, Newark, N. J., assignors to Celluloid Corporation, a Corporation of New Jersey. Filed Jan. 11, 1930. Serial No. 420,159. 2 Claims. (Cl. 41—30.)

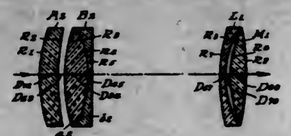


1. The process of decorating a polished thermoplastic surface comprising roughening selected portions thereof, applying a fused metallic spray to said surface and then removing the metal from the polished portions thereof.

1,899,069. PHOTOGRAPHIC AND PROJECTION OBJECTIVE. ARTHUR WARMISHAM, Leicester, England, assignor to Kapella Limited, Leicester, England, a Corporation of England. Original application filed Aug. 30, 1926, Serial No. 132,591, and in Great Britain Sept. 26, 1925. Divided and this application filed Oct. 28, 1929. Serial No. 402,887. 7 Claims. (Cl. 88—57.)

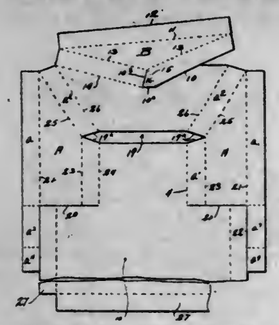
1. An objective of the Petzval type having substantially normal magnification and relatively large working aperture, in which the front component consists of two convergent members at least one of which is compound, all ce-

mented surfaces of said component being dispersive, and in which the back component includes a one-element di-



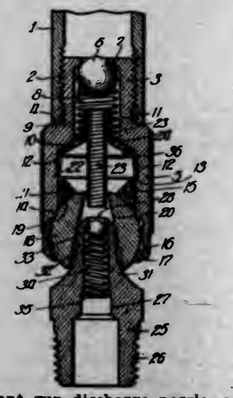
vergent member and a one-element convergent member behind said divergent element, the front surface of the divergent element being convex to the incident light.

1,899,070. FROG FORMING INSERT FOR HOSIERY BOXES. ARTHUR W. ZERBY, Reading, Pa. Filed Apr. 9, 1929. Serial No. 353,823. 4 Claims. (Cl. 206—7.)



1. An insert for hosiery boxes formed of a single sheet of cardboard, the sheet at one end having a diagonal cut extending inward and medially from the adjacent end of the sheet and a diagonal score extending inward and medially and converging toward the end of the cut, the area defined by said cut and score having two converging scores parallel to the first named cut and score, the upper end of the sheet having a transversely extending score parallel to the edge thereof, the areas defined by the first named scores forming the inner walls of an integral triangular frog, the area defined by the last named score and the end edge of the sheet forming the outer wall of the frog the end edge of the sheet forming the upper edge of the frog extending transversely of the sheet at an angle less than a right angle to the longitudinal axis of the sheet.

1,899,071. LUBRICATING APPARATUS. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 9, 1929. Serial No. 412,619. 8 Claims. (Cl. 285—161.)



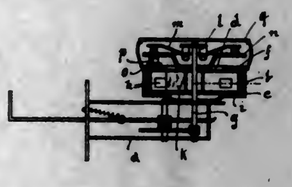
6. In a lubricant gun discharge nozzle, a nose, a nozzle piece having universal joint connection therewith and provided with a lubricant passage and a helical spring for conducting lubricant to the passage, said spring having one end secured axially in the nose and having its free end extending into the passage way to centrally align the nozzle piece.

1,899,072. CUSTOMER'S TOKEN. STANLEY ANTHONY, Boston, Mass. Filed July 30, 1931. Serial No. 553,995. 5 Claims. (Cl. 101—369.)



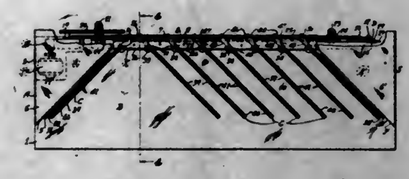
1. A customer's token consisting of an embossed-type printing plate and an unembossed rigid back plate, said plates having co-operating means comprising clenching tongues and recesses, said tongues engaging said recesses and folded to rigidly engage said plates at the back.

1,899,073. SIREN TOY WITH SPARK PRODUCING DEVICE. CARL ARNOLD, Nurmberg, Germany. Filed June 18, 1932, Serial No. 617,964, and in Germany Feb. 24, 1932. 3 Claims. (Cl. 46—46.)
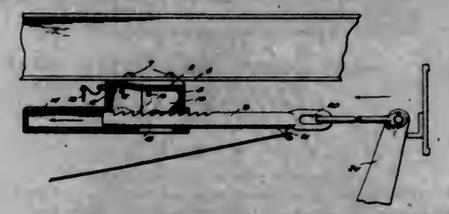


1. A siren comprising in combination a rack driving mechanism having a returning spring, a stationary casing provided with air-holes fixed on said mechanism, a cover on said casing, a driving shaft in said mechanism, a rotary casing provided with air-holes fixed on said shaft and surrounded by said stationary casing, and blades on the interior of said rotatable casing adapted to draw air into said rotatable casing and to expel same through the holes in said stationary casing to produce a siren like noise.

1,899,074. DISPLAY APPARATUS. HENRY BASCOM, St. Louis, Mo., assignor of thirty per cent to Roy Fred Toelke, St. Louis, Mo. Filed Nov. 14, 1931. Serial No. 575,009. 18 Claims. (Cl. 40—104.)



1. In a display apparatus, in combination, a plurality of pivotally mounted wings normally arranged obliquely in a row in overlapping spaced relation, means for folding the wings into oppositely oblique overlapping spaced relation for splaying the wings in pairs successively along the row, and means providing a back-ground for visual presentation between the splayed wings of the successive pairs thereof.

1,899,075. REGULATOR FOR BRAKE RIGGING. PAUL A. BLAIR, Washington, D. C. Filed Nov. 4, 1929. Serial No. 404,775. 8 Claims. (Cl. 188—200.)

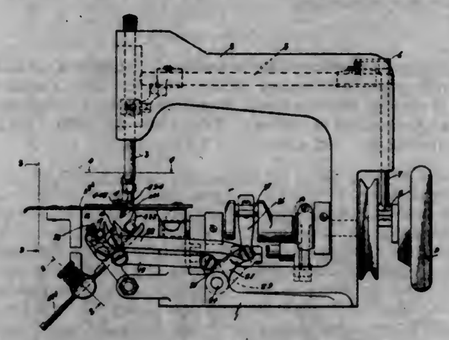


1. In a manually actuated regulator for the brakes of railway vehicles, including a housing, a take up rod adapted to be connected with a brake lever and extending into and concealed within said housing, permanent take up and holding means cooperating with said rod having a lost motion device for insuring brake shoe clearance, and a normally disconnected manually actuated member adapted to be brought into engagement with one of the movable parts for actuating said regulator.

1,899,076. METHOD OF TREATING CHLORATES FOR BLASTING PURPOSES. PER OLOV BJÖRKMAN, Tainionkoski, and LEONID IVANOFF, Abo, Finland, assignors to Fineka Elektrokemiska Aktiebolaget, Helsingfors, Finland. Filed Nov. 10, 1930, Serial No. 494,806, and in Sweden May 8, 1928. 4 Claims. (Cl. 52—12.)

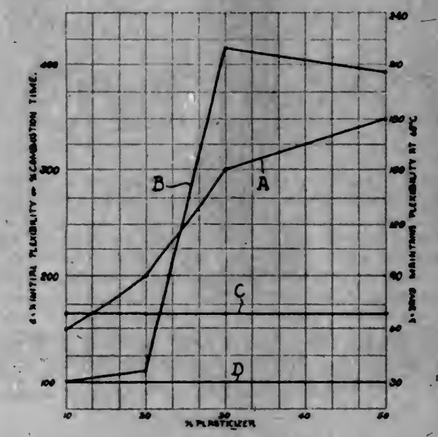
1. Method of treating chlorates for blasting purposes, which comprises mixing finely disintegrated chlorate and water to form a plastic mass, moulding said mass into blocks, drying said blocks until the chlorate dissolved crystallizes out and cements together the chlorate powder to porous briquettes having capillarity and adapted to be impregnated with a combustible liquid, the quantity of water used being so related to the chlorate that the pore volume of the finished porous briquette amounts to at least 10% of the total volume of the briquette.

1,899,077. FOLDING MACHINE AND METHOD. JEROME P. BYRON, Lynn, and ANDREW R. RIDDERSTROM, Nahant, Mass., assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 9, 1921. Serial No. 459,894. 16 Claims. (Cl. 12—55.)



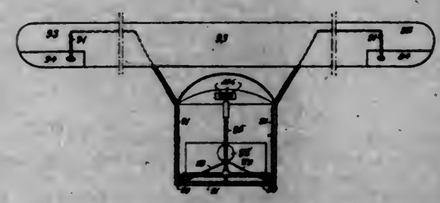
1. A machine of the class described having, in combination, two gripper jaws, means for actuating one of the jaws, a gear pivoted upon said jaw, a gear meshing with the first-named gear fixed upon the other jaw, and a gear meshing with the pivoted gear movable upon the actuation of the said first-named jaw to effect the movement of the pivoted gear and, through the latter, of the second-named gear.

1,899,078. CELLULOSIC COMPOSITION OF MATTER CONTAINING PARALDEHYDE. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 23, 1929. Serial No. 394,644. 5 Claims. (Cl. 106—40.)



1. A composition of matter comprising cellulose acetate and paraldehyde as a plasticizer for the cellulose acetate.

1,899,079. STABILIZING DEVICE. WILLIAM CHATER, Denver, Colo. Filed Mar. 8, 1932. Serial No. 597,569. 8 Claims. (Cl. 244—29.)

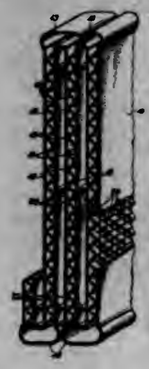


1. In combination with a fluid-traversing craft having relatively-movable, fluid-engaging elements whereby the horizontal attitude of said craft may be controlled, means automatically operable to stabilize said craft relative to one of its horizontal axes, said means comprising a tiltable unit mounted on said craft for limited oscillation in a plane perpendicular to the axis about which stabilizing effect is desired, yielding means operable to normally position said unit intermediate the limits of its range of travel, normally open switches adjacent the ends of said unit and arranged to be individually closed by downward motion of the corresponding end of said unit, independent electrical circuits controlled by said switches, an electric motor in each of said circuits, a shaft arranged to be driven in one direction by one of said motors and in the opposite direction by the other of said motors, and operative connections between said shaft and the relatively-movable craft elements.

1,899,080. HEAT EXCHANGE DEVICE. HERBERT V. DALGLIESH, Atlanta, Ga., assignor to Research & Development Corporation, Atlanta, Ga., a Corporation of Georgia. Filed Oct. 29, 1931. Serial No. 571,908. 10 Claims. (Cl. 257—245.)

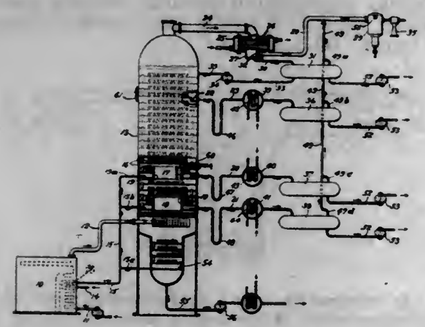
1. A heat exchange element comprising, in combination, spaced plates providing a fluid flow space therebetween, a plurality of members extending diagonally and

transversely of said space and presenting flat surfaces to the path of fluid flow, the ends of said members contacting and secured to said plates to space and brace the



same, causing turbulence of fluid flowing in said space and causing heat transfer between the interior of the body of said fluid and said plates.

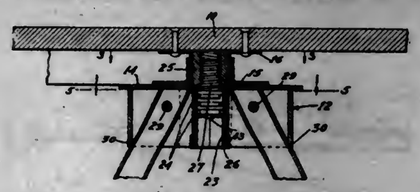
1,899,081. OIL FRACTIONATING. COURTLANDT F. DENNEY, New York, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed July 3, 1930. Serial No. 465,546. 2 Claims. (Cl. 196—94.)



2. Fractionating apparatus comprising a fractionating tower, means for introducing oil and steam to the tower, means providing a path of flow for oil vapor and steam from the top of the tower, vacuum producing means including a condenser for drawing vapors through said path of flow, a surface condenser interposed in said path of flow between the tower and said first mentioned condenser, said first mentioned condenser being adapted to condense steam drawn from the tower and the surface condenser being adapted to condense only the oil vapor passing therethrough, conduits for conducting liquid side streams from the tower, run-down tanks for collecting said side streams into separate liquid bodies outside the tower, and conduits for connecting the upper portions of each of said run-down tanks with said path of flow at a point intermediate said condensers.

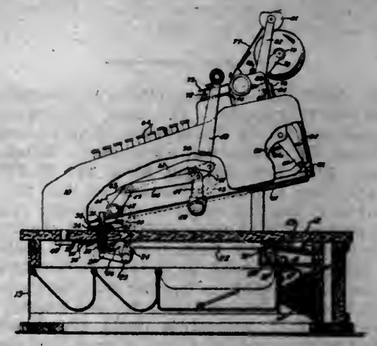
1,899,082. TABLE. WILLIAM P. DE SAUSSURE, Jr., Englewood, N. J., assignor to De Saussure Equipment Company, West New York, N. J., a Corporation of Delaware. Filed Oct. 10, 1931. Serial No. 568,046. 18 Claims. (Cl. 45—117.)

1. A table support, comprising a member having at least three pockets disposed radially and symmetrically about the vertical axis of the support, each pocket being formed of sheet metal bent about vertical lines of fold



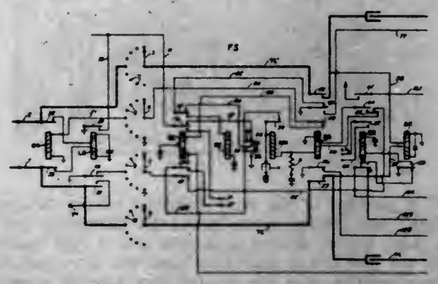
into U-form, a leg mounted between the arms of each U, and means for attaching said member to a table top.

1,899,083. DUAL CASH REGISTER. WILLIAM E. DUNNING, Alliance, Ohio, assignor to The McCaskey Register Company, Alliance, Ohio, a Corporation of Ohio. Filed Jan. 18, 1930. Serial No. 421,831. 9 Claims. (Cl. 235—22.)



1. A dual cash register including a cash drawer, a pair of adding machine units of the two motion type and each provided with recording means, a latch for normally holding the cash drawer in closed position, a releasing plunger for the latch, a single operating means for operating the recording means of both units, said operating means being arranged to also operate the plunger, said plunger being normally located out of position for being operated by said operating means, and means associated with only one of the adding machine units for moving the plunger into operative position when said last named adding machine unit is operated.

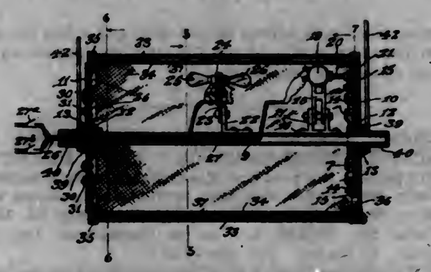
1,899,084. TELEPHONE SYSTEM. GEORGE R. EATON, Oak Park, and GLENN KINER, Chicago, Ill., assignors to Kellogg Switchboard & Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 21, 1931. Serial No. 563,928. 21 Claims. (Cl. 179—16.)



1. A telephone system including a plurality of subscribers' stations, a link circuit for interconnecting certain of said stations, a switch, a plurality of contacts

and means including a group of counting relays for altering the potential of a predetermined contact and other means for driving said switch to said predetermined contact and then stepping said switch to a desired contact.

1,899,085. ILLUMINATING MEANS. MILO H. EGAN, Franklin, Idaho. Filed Nov. 24, 1931. Serial No. 577,128. 5 Claims. (Cl. 240—10.1.)

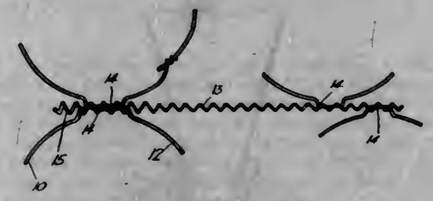


1. In an illuminating apparatus, the combination with illuminating means including a rotatable display member, of a circular track gear element mounted on the display member, and a movably supported driving member having a drive gear element that rests on the track gear element and thereby supports the weight of the driving member, said weight securing a driving coaction between the drive and track gear element.

1,899,086. PAPER PRODUCT SIZED WITH PETROLEUM HYDROCARBONS AND PROCESS OF MAKING THE SAME. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Sept. 20, 1929. Serial No. 394,141. 11 Claims. (Cl. 92—21.)

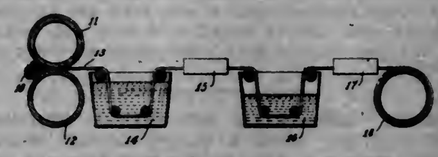
1. A paper product containing a disseminated unctuous petroleum hydrocarbon mixture serving as a water resisting agent.

1,899,087. SPRING STRUCTURE. WILLIAM B. FOSTER, Utica, N. Y., assignor to Foster Brothers Manufacturing Company, Utica, N. Y. Filed Dec. 12, 1929. Serial No. 413,667. 4 Claims. (Cl. 5—269.)



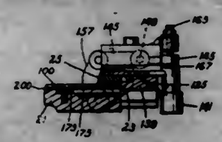
2. In a spring assembly, a plurality of rows of closely arranged coiled springs, the end springs of adjoining rows having their end coils oppositely and closely arranged and the intermediate springs of adjoining rows being staggered and having parts of their end coils in alignment but spaced from one another, a spiral wire extending longitudinally between the springs of each pair of adjoining rows, the portion of said spiral wire opposite the intermediate springs having the internal diameter of its coil of a size to closely fit one wire of the intermediate coil springs and being closely threaded upon the separate aligned parts of said intermediate springs and, operatively connected to the opposite ends of said small diametered spiral wire, a length of spiral wire having the internal diameter of its coil large enough to simultaneously encircle two adjacent wires of the coiled springs and simultaneously encircling the approaching portions of the end coils of two end springs.

1,899,088. BEAD FOR PNEUMATIC TIRE CASINGS AND METHOD OF MAKING THE SAME. WILLIAM C. GEER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed June 27, 1925. Serial No. 39,963. 5 Claims. (Cl. 154—14.)



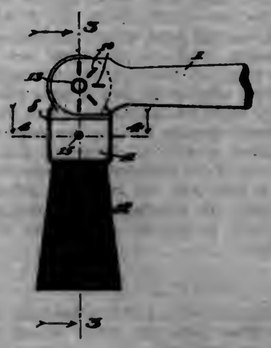
1. In the process of manufacturing a pneumatic tire casing having a bead member constructed to include a body portion of vulcanized composition, the steps which comprise shaping the body portion of the bead from a vulcanizable but unvulcanized composition which consists at least in part of Thermoprene and which is plastic at somewhat elevated temperatures but which possesses at normal temperatures a sufficient degree of hardness and strength to retain its shape under tire building conditions, incorporating in the carcass of the tire the unvulcanied bead, and thereafter simultaneously vulcanizing the vulcanizable portions of the bead and carcass.

1,899,089. FOLDING MACHINE. PERLEY R. GLASS, Salem, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Sept. 28, 1928, Serial No. 309,020. Divided and this application filed Feb. 9, 1932. Serial No. 591,871. 12 Claims. (Cl. 154—41.)



1. A machine of the class described having, in combination, a work support, a pivoted folder plate, an actuator for the folder plate, mechanism including a link for connecting the actuator with the folder plate, and means for operating the actuator.

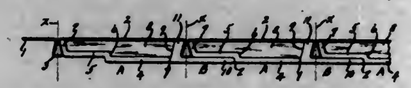
1,899,090. TYPEWRITER BRUSH. CLARA E. GOARD, Denver, Colo. Filed May 10, 1932. Serial No. 610,449. 1 Claim. (Cl. 15—172.)



As a new article of manufacture, a typewriter brush, comprising a long flat handle, a pair of long flat jaws engaging opposite sides of said handle near one end, each

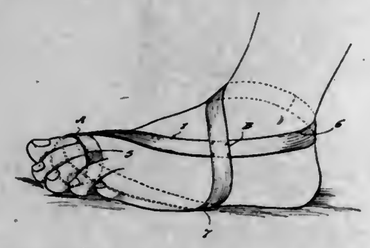
jaw provided with a large and a small aperture, each jaw provided with inwardly extending side flanges and with inwardly extending teeth on its outer end, a cylinder-like hub in the large apertures of said jaw and extending through said handle, said hub having its ends bent at right angles, a head between said jaws, a rivet in said small apertures and extending through said head, said side flanges engaging edges of said head, and said head provided with bristles extending between and engaged by said teeth on said jaws, substantially as shown and described.

1,899,091. SHEATHING FOR METAL BUILDING STRUCTURE. FRANK R. HIGLEY, Cleveland Heights, Ohio, assignor to The Insulated Steel Floor and Wall Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 26, 1931. Serial No. 518,381. 4 Claims. (Cl. 72—19.)



1. A building wall comprising a member of sheet metal bent to provide a metal wall having parallel dovetails projecting from one side thereof, and non-metallic blocks secured with said metal member by interlocking engagement with said dovetails, said blocks comprising A and B blocks of different design each hoving a portion engaging one side of said dovetails, and being there held by a block of the other design.

1,899,092. BUNION CORRECTIVE DEVICE. MARGARET M. HOGAN, Binghamton, N. Y. Filed Jan. 20, 1931. Serial No. 510,035. 1 Claim. (Cl. 128—81.)



A device of the class described comprising a single length of elastic web having its terminals secured together, said web being crossed at spaced points and stitched together at the crossings to provide a front loop, an intermediate loop, and a rear loop, the front loop being adapted to encircle the first three toes including the large toe, the crossing of the web which forms the front loop being adapted to engage the joint where the bunion occurs and provides a double thickness of elastic web material at this point to form an elastic protective shield over the bunion, the front loop of the device being relatively small and sufficiently tight to confine the three first toes in a straight condition thereby holding the joint of the great toe in a position to aid in correcting the bunion, the intermediate loop of the material being adapted to encircle the ball of the foot, and the rear loop being adapted to encircle the ankle, the elasticity of the web material permitting the loops to readily conform to movements of the wearer's foot.

1,899,093. RESILIENT HEEL. BENJAMIN KIND, Baltimore, Md. Filed June 15, 1932. Serial No. 617,456. 5 Claims. (Cl. 36—35.)

1. A rubber heel comprising a tread portion having a flexible flat tread surface, a wall integral with said tread portion and offset with respect thereto, the bottom end of said wall being spaced from said tread surface and substantially parallel thereto, a concave depression formed in said tread portion, the bottom of said depression being



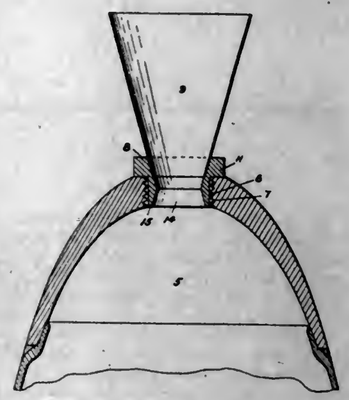
in same plane with bottom of said wall, and a boss integral with the interior of said tread portion and positioned directly above said depression.

1,899,094. PROCESS FOR THE PREPARATION OF ACETYL-METHYL-CARBINOL AND DIACETYL. ALBERT JAN KLUYVER and MARINUS ADRIANUS SCHEFFER, Delft, Netherlands, assignors to Thomas Hermanus Verhave, Senior, Delft, Netherlands. Filed May 21, 1929, Serial No. 364,935, and in the Netherlands July 10, 1928. 21 Claims. (Cl. 260—134.)

1. In the manufacture of valuable products by bacterial conversion of carbohydrate-containing material, the process which comprises preparing a fermentable carbohydrate mash, inoculating the mash with a culture of bacteria which under normal conditions of aeration produce 2.3-butylene-glycol, subjecting the fermenting mash to an intensive aeration to produce acetyl-methyl-carbinol.

2. In the manufacture of acetyl-methyl-carbinol, the process which comprises subjecting a fermentable carbohydrate mash to fermentation with bacteria which under normal conditions of aeration produce 2.3-butylene-glycol, subjecting the fermenting mash to an intensive aeration whereby a substantial proportion of acetyl-methyl-carbinol is formed, and recovering volatile fermentation products present in the escaping mixture of air and fermentation gases by washing the same.

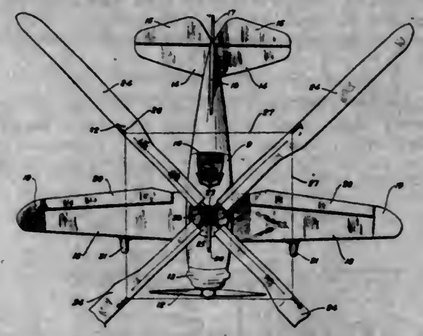
1,899,095. APPARATUS FOR LOADING PROJECTILES. THOMAS F. KNIGHT, Lyndhurst, N. J., and HENRY K. WILLIAMS, Jr., Dunkirk, N. Y. Filed Mar. 18, 1932. Serial No. 599,750. 2 Claims. (Cl. 86—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In an apparatus for loading molten explosive into a container, an adapter having an enlarged supporting head and an externally cylindrical smooth-surfaced body, a double-tapered bore in the adapter, a counterbore in the outer tapered bore, and a funnel seated in the counterbore.

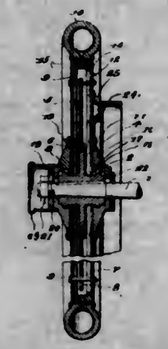
CARNEGIE LIBRARY OF ATLANTA

1,899,096. AIRCRAFT HAVING SUSTAINING ROTORS. AGNEW E. LARSEN, Huntingdon Valley, Pa., assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed June 29, 1931. Serial No. 547,692. 15 Claims. (Cl. 244—19.)



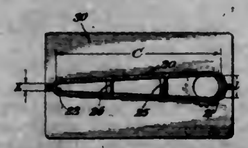
2. In a construction of the character described, a rotatably mounted and jointed blade, and a hydraulic device for controlling blade joint movements, said device being mounted on the blade a substantial distance from the center of rotation.

1,899,097. DRIVE OR POWER WHEEL FOR AUTOMOBILES. LEONIDAS N. LYON, Sr., Houston, Tex. Filed Nov. 3, 1931. Serial No. 572,884. 4 Claims. (Cl. 301—6.)



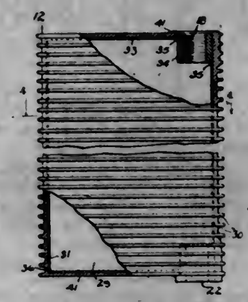
1. A wheel of the class described comprising a rim, a driving disc, means for supporting said rim and connecting said rim to said driving disc, a driving hub spindle carried by said driving disc, said driving disc having means for supporting and carrying a driving hub spool, and said driving disc having means capable of imparting driving power only to the upper portion of the wheel above its horizontal center.

1,899,098. AIR HEATER. WALTER L. MACK, Toledo, Ohio, assignor, by mesne assignments, to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Oct. 16, 1929. Serial No. 400,020. 1 Claim. (Cl. 257—137.)



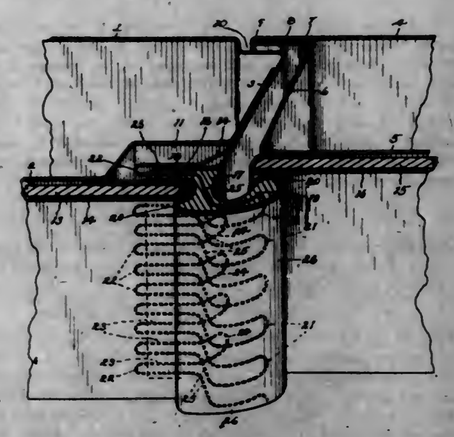
A radiator section for a space heater comprising a flattened tubular conduit, closely spaced, parallel, relatively wide and thin vanes cast integrally with said conduit in planes perpendicular to the major axial plane of said radiator, openings being provided in the respective ends of said conduit for connection to fluid circulating means, and struts cast integrally with said conduit and extending between adjacent wall portions thereof at intervals along the length of the conduit.

1,899,099. RADIATOR CONSTRUCTION. WALTER L. MACK, Toledo, Ohio, assignor, by mesne assignments, to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Oct. 16, 1929. Serial No. 400,021. 8 Claims. (Cl. 257—137.)



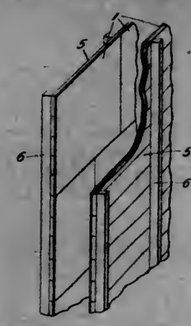
2. A radiator comprising a sheet metal compartment having side walls bent into a stream line conformation and sheet metal end walls welded to the side walls, inlet and outlet pipe bushings welded in said end walls, and an outer cast metal casing surrounding said compartment and having integral fins extending in a direction substantially perpendicular to the walls of said compartment.

1,899,100. WEATHER STRIP. CHARLES E. MCCORMICK, Royal Oak, Mich. Filed June 3, 1931. Serial No. 541,822. 3 Claims. (Cl. 20—69.)



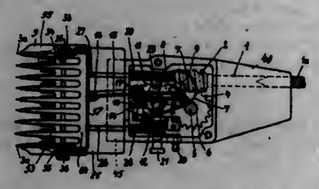
1. A weather strip comprising a relatively thick body portion formed of flexible material and with an attaching flange integral therewith and extending laterally therefrom adjacent the inner edge thereof and an integral yieldable edge portion extending laterally from said body adjacent the outer end edge of said body and in a direction opposite that in which said flange extends, said body extending, in cross-section of said strip, at substantially right angles to said flange and edge portion, whereby said edge portion is offset outwardly from the plane of said flange.

1,899,101. METHOD OF FORMING CEMENTITIOUS BODIES AND MATERIAL FOR USE IN SAME. EARL P. MARSHALL, Los Angeles, Calif. Filed Oct. 4, 1928. Serial No. 310,278. 9 Claims. (Cl. 25—154.)



1. A material for modifying the surface of cementitious bodies during setting comprising a sheet of base material and a surface modifying coating applied to one face thereof, said coating comprising a binding material adapted to soften upon contact of wet cementitious material therewith, and a water soluble color modifying agent incorporated in said binding material.

1,899,102. HAIR CLIPPER. HUGO MICHAEL, Gottingen, Germany. Filed Nov. 24, 1931, Serial No. 577,038, and in Germany Nov. 27, 1930. 11 Claims. (Cl. 30—1.)



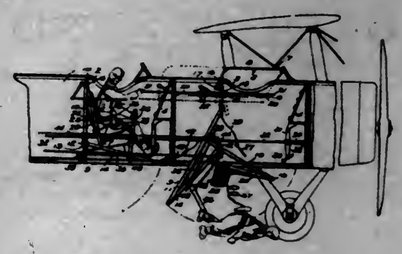
1. A hair clipper comprising a casing, a reciprocating cutter blade on said casing, means for reciprocating said blade, a comb or gauge bar mounted to be displaced on said casing for varying the position of said blade with respect to the scalp or skin, a pinion operatively connected to said blade-reciprocating means, a rack connected to said comb or gauge bar and adapted to mesh with said pinion, and means for making and breaking the meshing relation of said rack and said pinion.

1,899,103. SPINNER SLED. MICHAEL O'BRIEN, Chicago, Ill. Filed Feb. 14, 1930. Serial No. 428,429. 2 Claims. (Cl. 280—12.)



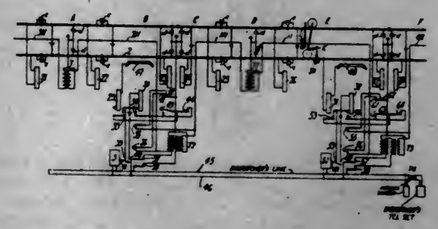
1. In a sled having a platform supported upon spaced parallel runners, a crank shaft journaled in bearings beneath said platform approximately midway between the ends of the same, a fulcrum member extending angularly from the crank portion of said crank shaft, an actuating link pivoted to said crank shaft for actuating the same to move said fulcrum member to an inoperative position inward of the tread portions of the runners or to an operative position beyond the same, said actuating link extending forwardly and upwardly through a slot in said platform, and a handle on the free end of said link.

1,899,104. TRAINING PLANE. WILLIAM C. OCKER, Kelly Field, Tex. Filed July 18, 1931. Serial No. 551,607. 7 Claims. (Cl. 244—21.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. An airplane having tandem cockpits, a false bottom in each cockpit arranged to move downwardly for discharging the occupants of the cockpits, each of said false bottoms including a seat and a control stick, and elevator and aileron control connections between the control sticks, said connections being flexible so that the opening of the bottom of either cockpit will leave the controls in the other cockpit operative.
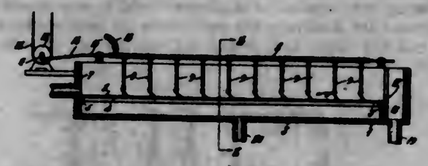
1,899,105. TELEPHONE SYSTEM. WILLIAM C. PHEBUS, Berwyn, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed June 30, 1930. Serial No. 464,792. 19 Claims. (Cl. 246—8.)



1. The combination, with a railroad track and a train operating thereon, of a closed electrical circuit comprising a single conductor paralleling the track and a ground return, said conductor being inductively transposed with respect to ground at a point substantially equidistant from the ends thereof, and a telephone set on the train inductively connected to said circuit.

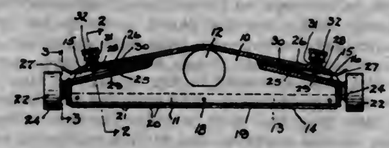
1,899,106. METHOD OF AND APPARATUS FOR TREATING PULP. GEORGE A. RICHTER and ELWOOD EBIE, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Dec. 18, 1924. Serial No. 755,730. 8 Claims. (Cl. 92—29.)

1. A mechanism of the class described comprising a tank, a series of trough-shaped screens of sufficiently coarse mesh to permit the passage of pulp fibers therethrough in said tank, means of supplying pulp to the screen at one end of said series, means for removing the pulp from the screen at the opposite end of said series, said screens being arranged to pass pulp from one to the other end of the series, a roll substantially concentrically arranged in each of said screens and whose periphery is spaced a comparatively short distance from the screen,



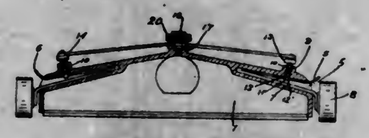
means on the periphery of said roll to cause a movement of the pulp, means for supplying wash water to certain of said screens, and means for rotating said rolls.

1,899,107. VACUUM CLEANER. FREDERICK RIEBEL, Jr., Toledo, Ohio, assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Feb. 27, 1929. Serial No. 342,979. 5 Claims. (Cl. 15—155.)



1. In apparatus of the class described, the combination of a tool having end sockets, mountings in said sockets, said mountings having arcuately movable wheel carrying parts extending outwardly beyond said sockets, and means mounted in the sockets for adjustably controlling such arcuate movement.

1,899,108. VACUUM CLEANER. FREDERICK RIEBEL, Jr., Toledo, Ohio, assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Dec. 2, 1929. Serial No. 410,988. 14 Claims. (Cl. 15—155.)

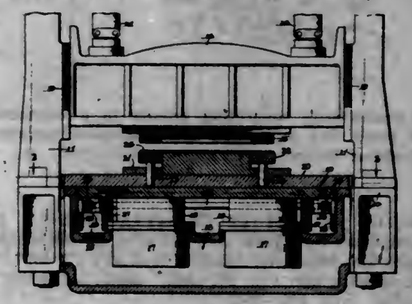


1. In a vacuum cleaner, a floor tool, individual resilient supporting devices mounted on said tool near the respective ends thereof, said devices each having a projecting movable wheel carrying part, floor wheels journalled on said parts, an adjusting screw engaged between a portion of a respective supporting device and an adjacent portion of the floor tool threadably associated with one of said portions and engaged against the other so as to carry the weight of the floor tool to said device, a resilient portion of each device being interposed between its adjusting screw and its respective floor wheel and carrying the weight of the floor tool to said wheel, and means for simultaneously rotating said adjusting screws.

1,899,109. MOLDING POWDER. KURT RIPPER, Berlin, Germany. Filed Mar. 21, 1928, Serial No. 263,595, and in Austria Mar. 25, 1927. 15 Claims. (Cl. 260—3.)

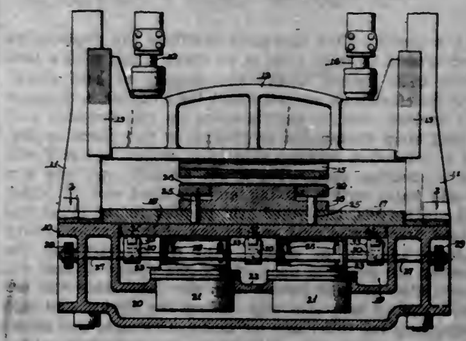
1. The process of making a molding powder which consists in reacting on thiourea with formaldehyde in the presence of water whilst applying heat, allowing the reaction to progress until a hydrophobe resinous condensation product has been formed which separates from a sample of the reaction mixture when the latter is cooling, interrupting the heating after this condition has been reached and contacting the reaction mass with water until conversion of the condensation product into a fine powder has taken place, separating such powder from the bulk of the remaining liquid, and drying it.

1,899,110. SHEET METAL DRAWING PRESS. FREDERICH J. RODE, Chicago, Ill. Filed June 10, 1932. Serial No. 616,371. 11 Claims. (Cl. 113—46.)



1. In a press, a reciprocable ram, a fixed die, a work holder, means embodying a pressure pad for yieldingly resisting the movement of the work holder in one direction, and means connected with said pad and operating when pressure is exerted upon one portion of the pad to move it against said resisting means, to cause another portion of the pad to be correspondingly moved to maintain the pad against tilting.

1,899,111. SHEET METAL DRAWING PRESS. FREDERICH J. RODE, Chicago, Ill. Filed June 10, 1932. Serial No. 616,374. 16 Claims. (Cl. 113—46.)

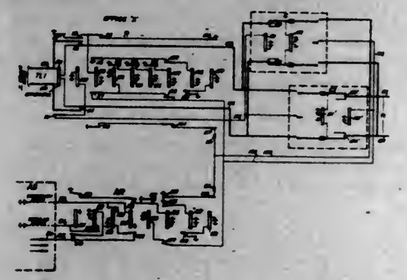


1. In a press, a pressure pad adapted to be lowered during the operation of the press, and positive means operating automatically to maintain the pad against tilting during its movement under pressure, regardless of the point at which said pressure is applied to the pad, the said means embodying rock shafts connected with different parts of the pad and connections between the shafts.

1,899,112. MULTIOFFICE TELEPHONE SYSTEM. NORMAN H. SAUNDERS, Chicago, CLARENCE E. LOMAX, Oak Park, and THOMAS F. CROCKER, Chicago, Ill., assignors to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed June 22, 1931. Serial No. 545,932. 19 Claims. (Cl. 179—27.)

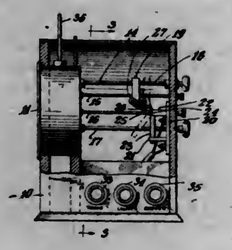
1. In a telephone system, two exchanges, a trunk line connecting said exchanges, a signal device at one ex-

change, means at the other exchange automatically operated responsive to an unstandard condition therein



for momentarily connecting ground to a conductor of said trunk line to initiate the continuous operation of said signal device.

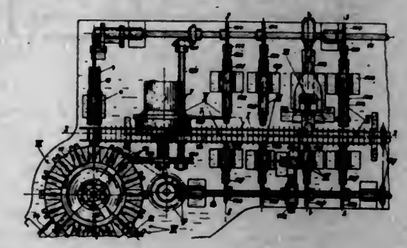
1,899,113. ALARM CLOCK ATTACHMENT. ERICH SCHAEFER, New York, N. Y. Refiled for abandoned application, Serial No. 192,010, filed May 17, 1927. This application filed Feb. 27, 1932. Serial No. 595,511. 1 Claim. (Cl. 200—35.)



In a device of the character described the combination of the alarm winding stem of an alarm clock with a two-armed knife switch within the housing of said alarm-clock for closing an electric house light circuit, a threaded part on said stem, a nut traveling on the threaded part of said stem during the unwinding of the alarm spring, and a connection between said knife switch and said nut, said connection comprising a pin on said nut, one arm of said knife switch having an elongated slot in which said pin travels, the other arm pivoted to the lower end of said first named arm and to one of the circuit closing contacts adapted to engage with its opposite end the other of the contacts upon the displacement of said pin in the slot of said switch and for depressing the adjacent end of said arm and closing the circuit and said contacts by the other arm of said switch, said nut allowing an opening of the switch by the winding of the alarm mechanism.

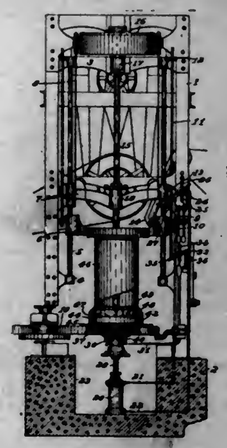
1,899,114. MACHINE FOR MANUFACTURING DRY CELLS. EDMUND SCHMIDT, Berlin-Tempelhof, Germany. Filed May 21, 1931, Serial No. 539,017, and in Germany July 15, 1930. 7 Claims. (Cl. 29—33.)

1. A machine for producing dry cells, comprising in combination a transporting device for the cells, a device for centering the carbon rods relative to the cell cups, a device for intermittently feeding the cover material in strip form, a punch for stamping the central aperture of the cover, a second punch arranged at the side of said first mentioned punch for punching the closing covers from the strip of material, an eccentric for moving both said punches in common and simultaneously, a ram arranged coaxially to said second punch on the opposite side of said transporting device adapted to push cell cups towards said second punch for receiving the stamped out cover, a cam adapted to actuate said ram, a device for pressing the covers into the cell cups, a device for pressing the cups on to the ends of the carbon electrodes, a device for soldering the pole wires on to the zinc cups of the dry cells, and means for driving all of said devices.



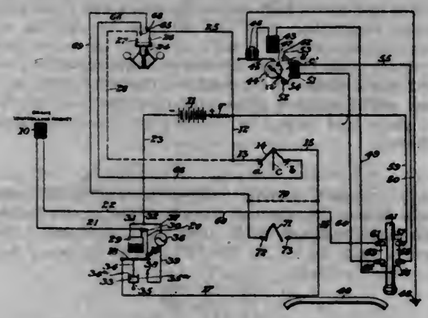
5. A machine for producing dry cells, comprising in combination a conveying device for the dry cells, a device for placing the cover on the zinc cups, a device for capping the carbon rods, an intermittently rotatable conveyor disc beside said conveying device, a device for pushing the cover and capped cells from said conveying device onto said conveyor disc, levers arranged above said conveyor disc, a wick steeped in flux on each of said levers, devices for lowering said wicks onto and for raising said wicks from said zinc cups, a tongs-like arrangement at the side of said conveyor disc for intermittently feeding the pole wire from a storage drum parallel to the longitudinal axis of the cell cups, a device for cutting off the lengths of pole wire fed, a soldering device arranged at the side of said conveyor disc adapted to solder the pole wires onto the cell cups, and means for actuating said devices.

1,899,115. MECHANISM FOR CONSTRUCTING CONCRETE PIPE. ALFRED W. SCHULTZ, Waterloo, Iowa. Filed May 17, 1930. Serial No. 453,226. 4 Claims. (Cl. 25—36.)



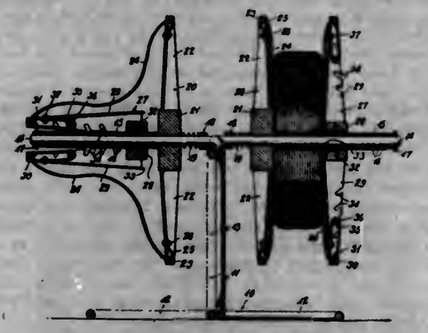
1. In apparatus of the character described, a pallet, tappets contacting with outer parts of the pallet thereabout, a plate having circumferentially equidistant radial rams of sockets seating said tappets removably and for radially adjustably seating thereof, a vibrator centrally and resiliently supporting said plate to steady the plate while agitating it, and a device adapted to shift the said devices into and out of operating relation with the pallet.

1,899,116. TRAIN CONTROL SYSTEM. ARCHIBALD G. SHAVER, Chicago, Ill., and FRED M. ROSENZWEIG, Niagara Falls, N. Y., assignors to The Regan Safety Devices Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 6, 1928, Serial No. 678,088. Renewed July 18, 1932. 38 Claims. (Cl. 246—182.)



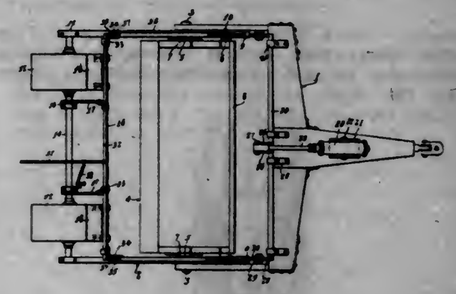
1. In a manual-automatic speed control system for vehicles, vehicle carried mechanism comprising an electro-responsive device for controlling the movement of the vehicle, an indicating means operable in response to road-side conditions for producing a "clear" or "non-clear" indication, instrumentalities under the control of the speed of the train and of said indicating means for controlling the operation of the said device so that when the indicating means is operated to a non-clear position and the speed of the vehicle is reduced from a speed above a permissive speed to a speed at or below the permissive speed prior to such operation of the indicating means to its non-clear position, the said device is not operated but is operated automatically when the vehicle exceeds the permissive speed and the indicating means is in the non-clear position, the said instrumentalities persisting when so operating the device after the speed of the vehicle is reduced below the said permissive speed, and manual means for modifying such persisting operation of the device when the speed of the vehicle has been reduced to or below the said permissive speed so as to permit the vehicle to proceed at or below said speed.

1,899,117. ADJUSTABLE REEL. HOWARD E. SHEELEY, Michigan City, Ind. Filed Nov. 3, 1930. Serial No. 493,183. 8 Claims. (Cl. 242—111.)



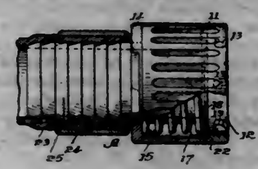
1. An adjustable reel for handling open center coils of wire or like material comprising an elongated bearing member having a rigid side reel member secured at one end thereof, a collapsible side reel member slidably mounted on said bearing member, adjustable flexible coil supporting members connecting said side reel members, and means permitting adjustment of said coil supporting members.

1,899,118. HYDRAULIC WHEEL SCRAPER. OSCAR W. SJOGREN, Huntington Park, and JESSE A. VAUGHN, Los Angeles, Calif., assignors to Killefer Manufacturing Corporation, Ltd., Los Angeles, Calif., a Corporation of California. Filed July 16, 1932. Serial No. 623,122. 6 Claims. (Cl. 37—140.)



1. A hydraulic scraper, including a front frame, a scraper bowl pivotally mounted in said frame and having stop brackets, a rear frame pivotally connected to said front frame, traction wheels journaled upon the rear end of said rear frame, a movable latch means operatively mounted upon the forward end of said rear frame and positioned to engage said bowl stop brackets, and an elevating means including a hydraulic cylinder mounted upon said front frame and operatively connected to the forward end of said rear frame for simultaneously elevating and rearwardly tilting the scraper bowl, whereby the accumulated load is retained within the bowl and the weight thereof carried by said wheels.

1,899,119. QUICK COUPLING DEVICE. WALTER M. SINGER, Glendale, Calif. Filed June 15, 1931. Serial No. 544,308. 17 Claims. (Cl. 285—175.)

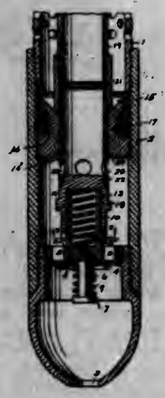


1. A coupling device comprising two coupling members, one of which is provided with relatively rotatable clamping means and the other of which is provided with relatively fixed clamping means, one of said clamping means being provided with a plurality of projections and the other of said clamping means being provided with a plurality of cam members spaced from one another by a distance somewhat greater than the width of said projections, said cam members being adapted to engage said projections upon relative rotation of said rotatable clamping means with respect to said other coupling member to effect relative movement of said rotatable clamping means inwardly toward said other coupling member, said rotatable clamping means comprising a housing, and said one coupling member comprising a sealing member slidably mounted within said housing, and a spring tending to move said sealing member forwardly in said housing, the other of said coupling members comprising a body portion adapted to be inserted within said housing and a yielding packing member adapted to engage said sealing member upon said relative inward movement of said rotatable clamping member.

1,899,120. RUBBER COMPOSITION AND METHOD OF PRESERVING RUBBER. ARTHUR W. SLOAN, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 27, 1931. Serial No. 525,870. 20 Claims. (Cl. 18—50.)

1. The method of preserving rubber which comprises treating rubber with a tertiary aminophenol.

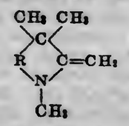
1,899,121. BACK PRESSURE VALVE MECHANISM FOR WELL PIPE. LYLE C. TILBURY, Houston, Tex. Filed Mar. 26, 1931. Serial No. 525,393. 6 Claims. (Cl. 166—20.)



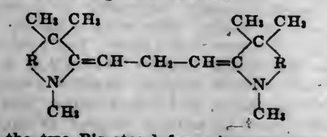
1. The combination with a screen pipe having a seat adjacent the lower end thereof provided with a fluid passageway therethrough, of a spider beneath said seat having an opening for fluid therethrough, a tubular valve guide upstanding from said spider, an inverted cup-shaped valve working over said guide, a yieldable member supported on the spider and supporting the valve and normally holding the valve in position to close said passageway, said guide having an opening to admit fluid into said guide beneath said valve and legs on the valve to prevent the valve from closing said opening.

1,899,122. MANUFACTURE OF DYESTUFFS OF THE POLYMETHINE SERIES. RICHARD TOBLER, Basel, and WALTER KERN, Sissach, Switzerland, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed May 17, 1929, Serial No. 363,989, and in Switzerland May 19, 1928. 8 Claims. (Cl. 260—47.)

7. Process for the manufacture of dyestuffs of the polymethine series, consisting in condensing, in a first step, two molecular proportions of a methylene base of the indolenine series of the general formula



wherein R stands for a benzene or naphthalene radicle, with one molecular proportion of formaldehyde, and, in a second step, the oxidation with quinones of the condensation products of the general formula

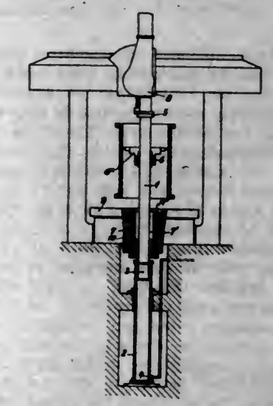


wherein the two R's stand for a benzene or naphthalene radicle, in a medium the pH of which is smaller than 7.

1,899,123. RECOVERY OF CHLORINE FROM GAS MIXTURES. BRUNO UEBLER, Berlin, Germany. Original application filed June 17, 1929, Serial No. 371,707, and in Germany Sept. 17, 1927. Divided and this application filed Oct. 17, 1930. Serial No. 487,023. 1 Claim. (Cl. 23—219.)

In the process of producing alkali nitrates from alkali chlorides and nitric acid or nitrous gases the steps which comprise separating from the mixture of chlorine and nitrosyl chloride formed in the reaction of the major quantity of the free chlorine by thermic decomposition and quick cooling down of the mixture, through which air is passed, until complete liquefaction of NO_2 and Cl_2 has taken place, and subjecting the liquefied gas to fractional distillation.

1,899,124. BORING AND TURNING MACHINE. HERMANN VOGLER, Dusseldorf, Germany, assignor to Schiess-Defries Aktiengesellschaft, Dusseldorf, Germany. Filed Dec. 3, 1931, Serial No. 578,727, and in Germany Sept. 27, 1930. 1 Claim. (Cl. 77—4.)

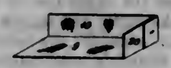


A vertical boring and turning machine, comprising an overhead support, a rotatable work table arranged below said support and having a central opening therein, a hollow spindle for said work table fitting in said opening and terminating at its upper end therein below the surface of the table, a non-rotatable boring rod axially movable through said opening and hollow spindle and having an upper end portion provided with coupling means for detachable engagement with said overhead support, a sleeve slidably mounted upon said boring rod for adjustment thereon to an operative position below and in spaced relation to the upper end portion of the rod and to an inoperative position close to said end portion of the rod, a boring head removably secured to the sleeve, means for moving said boring rod from a normal operative position in which its upper end lies above the level of the work table and is coupled to the support to an inoperative position in which its upper end is detached from the support and the rod and its upper end lies within the hollow spindle below the level of the work table, the said spindle being annularly enlarged to form a housing of a greater internal diameter than the diameter of the rod to receive such end of the rod and the sleeve when the latter is disposed in inoperative position and the uncoupled rod is lowered, and a cover to fit within the opening above the spindle and flush with the surfaces of the table when the boring rod is in lowered position.

1,899,125. BRICK HOLDER. ROSS A. WEIS, Canton, Ohio, assignor to The Stark Brick Company, East Canton, Ohio, a Corporation of Ohio. Filed Oct. 20, 1931. Serial No. 569,898. 6 Claims. (Cl. 206—46.)

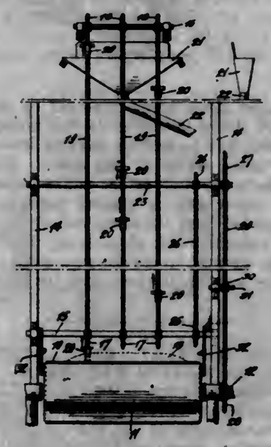
1. A combined cushioning and carrying holder for a plurality of bricks comprising a bottom and a plurality

of interconnected sides upstanding thereon, said holder having an open top and an open face, the bottom and sides corresponding in size and shape to those of the bricks intended to be carried in the holder, and the ma-



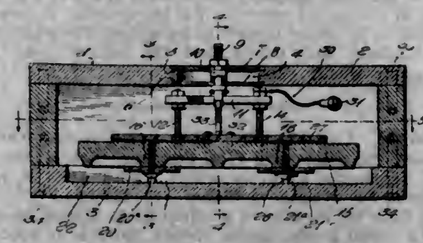
terial of the bottom and sides having sufficient strength to enable the holder to function as a carrier and having sufficient cushioning qualities to protect the bricks against abrading.

1,899,126. AUTOMATIC GRAIN SAMPLER. ARTHUR MELVILLE WOODSIDE, Port Arthur, Ontario, Canada. Filed Dec. 6, 1929, Serial No. 412,166, and in Canada Aug. 13, 1929. 1 Claim. (Cl. 73—21.)



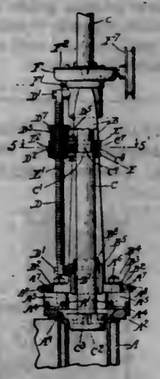
An automatic grain sampler comprising the combination with a grain conveyor belt adapted to carry a layer of grain thereon, of a series of endless travelling elements in uniform spaced relation to each other across the width of the conveyor, sample collecting means carried by the elements in staggered relation to the collecting means on each adjacent element adapted, during a portion of their travel, to dip into the grain layer to intermittently collect a sample of grain at points across and along the layer, means for discharging the collected samples and means for receiving the discharged samples.

1,899,127. PIEZO ELECTRIC CRYSTAL APPARATUS. ROBERT H. WORRALL, Washington, D. C. Filed May 14, 1930. Serial No. 452,486. 8 Claims. (Cl. 171—327.)



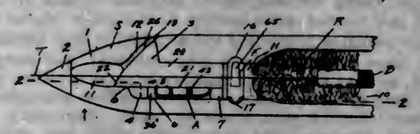
6. In a piezo electric crystal apparatus, a massive metallic casing of large heat storage capacity, a massive plate member of heat conductive material supported within said casing and spaced from the interior walls thereof for the circulation of convection currents therearound, a piezo electric crystal element supported by said plate member whereby said plate member provides an electrical connection for the lower surface of said piezo electric crystal, and conductive means insulated from said casing and projecting therethrough for completing an electrical connection from the upper surface of said piezo electric crystal element.

1,899,128. CYLINDER BORING MACHINE. GUNNAR EMIL ANDERSEN, Elmhurst, Ill., assignor of two-thirds to John D. Milne and Anton H. Tax, Chicago, Ill. Filed Aug. 4, 1926, Serial No. 126,968. Renewed May 19, 1932. 2 Claims. (Cl. 77—2.)



1. In a boring machine, a vertical frame adapted to be supported on the part to be bored, a smooth cylindrical mandrel, spaced bearings in which it is rotatably and slidably mounted, a fixed lead screw on one side of and parallel therewith, a nut rotatably mounted on the screw, and a yoke carrying the nut and being provided with two spaced members engaging separated portions of the nut and having separated spaced openings through which the screw and mandrel pass and held against longitudinal movement with respect to the mandrel and in which the mandrel is rotatably mounted, means interposed between said members whereby rotation of the mandrel rotates the nut, means for releasing the engagement of the nut with respect to the screw and the mandrel to permit movement of the mandrel independent of the nut said means simultaneously releasing the engagement of the nut with the screw so that the nut may be moved without rotation longitudinally along the screw.

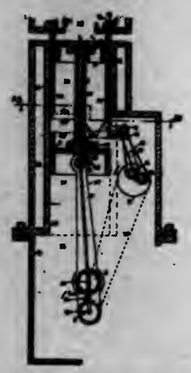
1,899,129. SHUTTLE. LUTHER C. BALDWIN, deceased, Providence, R. I., by Rhode Island Hospital Trust Company, administrator, Providence, R. I., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I., a Corporation of Rhode Island. Filed Oct. 9, 1930. Serial No. 487,554. 5 Claims. (Cl. 139—215.)



1. The combination in a shuttle for automatic looms having a bobbin chamber from which there extends forward a threading chamber from which an eye slot extends back to an eye in the side of the shuttle; of a thread directing guide plate which extends from the top of the shuttle on the eye side over and down into the threading chamber and which terminates in a nose at the top front end and from which a horn slopes down and back; a plurality of fins which extend down from under the guide plate on the

side of the shuttle eye and which have substantially horizontal bottom edges the ends of which terminate in downwardly extending tips; a take up member pivoted on a horizontal pivot near the back of the threading chamber, said member including a side bar from the lower edge of which a plurality of thread supporting arms extend horizontally under the edge of the guide plate towards the eye side of the shuttle between said fins, said side bar extending parallel with and proximate the inside wall of the threading chamber and projecting above the fingers, the free ends of said fingers being bent up; an adjustable compression spring which presses up against the underside of the take up member near its pivot; and a friction device positioned in front of the bobbin chamber having a mouth open at the top and in the path of the yarn as it unwinds from the bobbin, said mouth connecting with a throat formed by two friction guide members, the adjoining surfaces of which extend down and in a direction tangential to said path, one of said guide members being spring pressed towards the other.

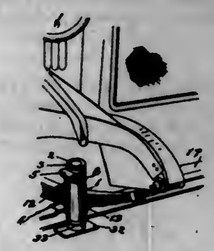
1,899,130. INTERNAL COMBUSTION ENGINE. JEAN A. H. BARKEIJ, Altadena, Calif. Filed Oct. 6, 1926, Serial No. 139,829. Renewed July 27, 1932. 9 Claims. (Cl. 123—75.)



1. An internal combustion engine, comprising a cylinder, at least one concentric sleeve in said cylinder, a piston reciprocating in said sleeve, said piston reciprocating in said sleeve with a pressure head, a crosshead below said pressure head and forming one reciprocating part therewith, said crosshead reciprocating on said cylinder, said cylinder having the same bore throughout; said crosshead reciprocating below the lower edge of said concentric sleeve valve; a lug attached to said sleeve with a wristpin, a connecting rod attached to said wristpin, said connecting rod driven by an eccentric shaft, said shaft driven by a crankshaft, reciprocating said piston, pressure head and crosshead; said cylinder provided with a slot, extending from the lower edge of said cylinder to a point substantially below the ports in said cylinder, but extending above the space swept by said lug on said sleeve; said lug of said sleeve reciprocating in said slot in said cylinder, said slot located substantially in the plane of the path of the swinging connecting rod attached to said crosshead, said plane perpendicular to said crankshaft and eccentric shaft, so that said sleeve together with said piston, pressure head and crosshead may be removed from said cylinder, without rotating said sleeve or piston appreciably, and without removing the same parts from the adjacent cylinder.

1,899,131. AUTOMOBILE JACK. WILFRID BEDARD and JOHN FRANKLIN LOCKHART, Selkirk, Manitoba, Canada. Filed Apr. 5, 1930, Serial No. 441,995, and in Canada Nov. 16, 1929. 3 Claims. (Cl. 254—102.)

1. A lifting jack for attaching to the axle of a mtor vehicle as part of the permanent equipment thereof comprising an outer cylindrical casing provided with means for permanently fastening it to the axle, said casing having the upper end thereof closed and the lower end open, a vertically extending jack screw located centrally within the casing and having the upper end thereof rotatably suspended from the upper end of the casing, a worm wheel secured to the upper end of the jack screw, thrust bearings interposed between the worm wheel and the upper end of the casing, means manually operable from the exterior of the casing for rotating the worm wheel, a series of sleeves screw threading one on the other and



having the inner sleeve screw threaded on the jack screw and the outer sleeve anchored to the casing to prevent rotation thereof but permitting endwise movement, means limiting the down travel of the several sleeves, one in respect to the other and of the inner sleeve in respect to the jack screw and a ground engaging foot piece pivotally suspnded from the lower end of the outer sleeve, said ground engaging end piece being provided with an annular flange adapted to engage with and close the lower end of the casing when the jack is in its non-extended position.

1,899,132. PIGMENTARY BASE PRODUCT AND PROCESS FOR MAKING THE SAME. AXEL VIGGO BLOM, Grosshoechstetten, Switzerland. Filed Apr. 5, 1927. Serial No. 181,278. 8 Claims. (Cl. 134—67.)

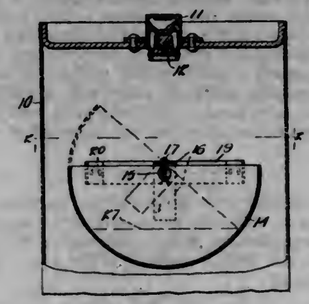
1. A pigmentary base of the character described, comprising the product produced by the oxidation of a lead alloy containing substantially 85 percent lead, 13 percent antimony and 2 percent tin, said oxidation having been carried out at a temperature between 250° C. and 280° C.

1,899,133. LIGHT ALUMINUM ALLOY. MAX BOSSHARD, Neuhausen, Switzerland, assignor to Aluminium Industrie Aktiengesellschaft, Neuhausen, Switzerland, a Joint-Stock Company of Switzerland. Filed Nov. 25, 1931, Serial No. 577,401, and in Germany Dec. 3, 1930. 4 Claims. (Cl. 75—1.)

1. A light alloy of aluminum resistant to corrosion and heat treatable for strength or hardness, characterized by a content of approximately 0.2 to 1.0 per cent of magnesium, 0.2 to 1.0 per cent of manganese, 0.05 to 2 per cent of one or more of the elements of th group consisting of cadmium, antimony and arsenic, and with a proportion of silicon not exceeding 5.0 per cent but at least so high that the whole content of manganese and magnesium is combined with silicon, and the balance being substantially wholly aluminum.

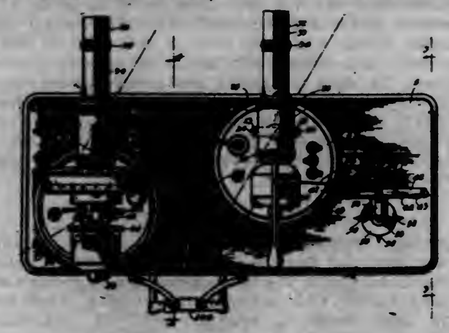
1,899,134. CAN FILLER. LEON BUEHLER, Jr., Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Apr. 19, 1928. Serial No. 271,351. 1 Claim. (Cl. 221—95.)

A filler for ice cans of a refrigerating system comprising a vessel having means therein movable to retain a predetermined volume of water, said means comprising a trough having ear portions secured to its ends, said ear portions having perforations to receive a shaft for supporting the trough, the ear portions being bent over and secured to the shaft to cause the trough to be rotated by the shaft, said shaft having one end journaled in a bracket in the vessel and having its other end extending out through the walls of the vessel by means of which shaft the trough



is rotated to position it so as to retain a predetermined quantity of water in the vessel when the vessel is emptied whereby the effective volume of the vessel is controlled within predetermined limits, substantially as set forth.

1,899,135. OPTICAL INSTRUMENT. ALEXANDER S. CAMERON, Chicago, Ill., assignor to William J. Cameron, Chicago, Ill. Filed Jan. 27, 1930. Serial No. 423,612. 10 Claims. (Cl. 88—20.)



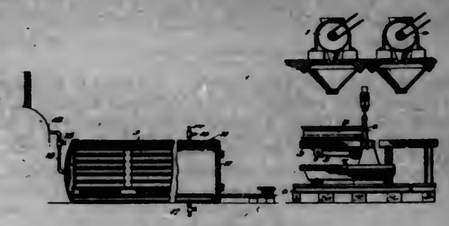
1. An instrument for exercising the eyes of a patient comprising two independent projectors arranged adjacent each other for simultaneously projecting separate colored images upon a screen to be viewed by the patient through disassociating elements, and mounting means for the respective projectors whereby they are capable of universal movement independent of each other to move either image to any position upon the screen, one of the images thus projected providing a fixation point with respect to which the other image may be moved.

1,899,136. RADIO DEVICE. NEIL R. COLLINS, Redwood City, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed July 5, 1929. Serial No. 376,289. 4 Claims. (Cl. 250—27.5.)

2. A coating preparation for electron-emitting cathodes comprising barium iodide, strontium iodide, and a small proportion of barium hydroxide.

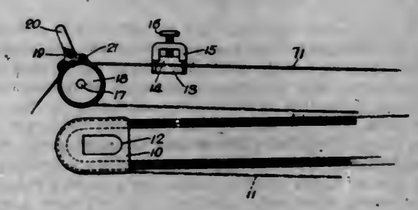
1,899,137. METHOD OF MAKING FACED CONCRETE PRODUCTS. WILLIAM H. CRUMB, Dayton, Ohio, assignor to The MacGlashan Corporation, Tecumseh, Mich., a Corporation of Delaware. Filed Jan. 22, 1930. Serial No. 422,635. 9 Claims. (Cl. 18—47.5.)

1. The method of preparing faced concrete products which comprises preparing a mixture of facing material and effecting a deposit thereof in a mold, preparing a mixture of backing material and effecting a deposit thereof in the mold upon the facing material, subjecting the materials while in the mold to vibration and to the action of



steam at substantially atmospheric pressure until the temperature thereof is substantially that of steam, and thereafter subjecting the materials to steam at a pressure in excess of that of the atmosphere.

1,899,138. MEANS FOR ELIMINATING INTERNAL STRESSES IN WIRE. ALFRED V. DE FOREST, Southport, Conn., assignor to American Chain Company, Inc., a Corporation of New York. Original application filed Feb. 17, 1928, Serial No. 255,153, now Patent No. 1,787,936, dated Jan. 6, 1931. Divided and this application filed Jan. 16, 1929. Serial No. 332,762. 7 Claims. (Cl. 140—102.)



1. Means for forming at one end of a run of wire whose other end is anchored, a stress free anchorage loop to fit a seat in an anchorage, which means comprises a form, means for drawing the wire to predetermined tension about the form to produce a loop, and means for temporarily clamping the wire in advance of the form after the wire has been tensioned, the shape and location of the form with respect to the anchorage being such that the loop will assume a fixed shape corresponding to that of the anchorage and at a location corresponding to the location of the anchorage when said run of wire is under said tension.

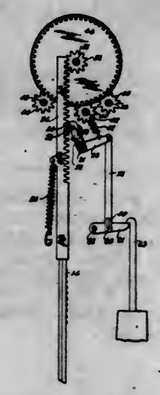
1,899,139. PHOTOGRAPHIC PRODUCTION. LUDWIG M. DIETERICH, Newark, N. J., assignor to The Dieterich Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 29, 1925. Serial No. 78,222. 4 Claims. (Cl. 95—5.)



1. A method of creating the appearance of relief, which comprises exposing a sensitive surface to the action of light rays directed thereupon through a lens system to impress an image on said surface, moving the sensitive surface and the lens system together along the optical axis of said system, then varying the relative positions

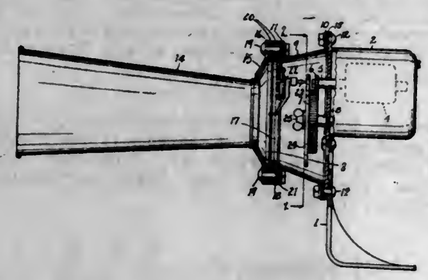
of said surface and an element of said lens system along the optical axis to a sufficient extent to maintain the same size of image as before, and again exposing said surface to the action of light rays, thereby to impress a second image on said surface registering throughout with said first-named image but having a different plane of sharpness.

1,899,140. ROTARY INDICATOR. WILLIAM E. DUNNING, Alliance, Ohio, assignor to The McCaskey Register Company, Alliance, Ohio, a Corporation of Ohio. Filed Jan. 12, 1929. Serial No. 332,149. 4 Claims. (Cl. 235—23.)



1. In combination with a machine of the character described, provided with vertical movable linear type bars, an indicating unit including a plurality of independently rotatable indicating cylinders corresponding to the type bars, rack bars for rotating the cylinders, said rack bars being disposed in the path of and arranged to be raised by engagement with the type bars, pawls for holding the rack bars in raised position, means for releasing the pawls at the beginning of each operation of the machine, a second set of reversely arranged indicating cylinders, and shaft and pinion means operatively connecting each cylinder of the second set with one of the cylinders of the first set.

1,899,141. PHONOGRAPH. CLARENCE F. EGGLESTON and DUANE D. GUTEKUNST, Jackson, Mich. Filed Oct. 8, 1928. Serial No. 310,994. 2 Claims. (Cl. 177—7.)



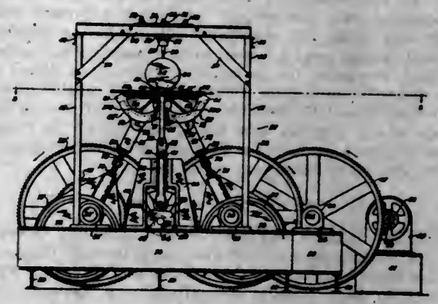
1. In a phonograph of the class described, the combination with a supporting plate, a cup-like motor casing removably secured to said plate, a motor carried by said casing having its shaft extending through said plate, a turntable carried by said plate, disposed parallel thereto and driven by said motor, a phonographic record mounted on said turntable and having thereon a single circular phonautographic groove formed to reproduce words of warning, means removably securing said record to said turntable, whereby the record may be changed, but when in place will remain so, regardless of the position of the turntable, a conical housing having flanged ends detachably secured to said plate and enclosing said turntable, a spider disposed adjacent the end of said housing, a diaphragm disposed parallel to said spider, a tone arm carried by said spider and connected to said diaphragm, a stylus mounted on said tone arm and operatively engaging said phonautographic groove, a horn having a flanged inner end disposed adjacent to the rim of said diaphragm, and means securing said horn, diaphragm, spider and housing together, said housing and said plate readily disconnectable and connectable for the purpose of changing said record.

1,899,142. GOVERNOR FOR FLUID MOTORS. JOHN E. ERICKSON, Madison, Wis., assignor to Madison-Kipp Corporation, Madison, Wis., a Corporation of Wisconsin. Filed Jan. 16, 1932. Serial No. 587,111. 8 Claims. (Cl. 137—140.)



1. In a governor for pressure fluid actuated motors, the combination of a tubular casing through which actuating pressure fluid flows; a shaft arranged to be driven by a governed motor and extending coaxially through said tubular casing; a member fixed on said shaft to rotate therewith and substantially filling the annular interval between the shaft and casing, said member being ported to permit passage of the major portion of said fluid therethrough; and a resilient metal means also mounted on said shaft to turn therewith and adapted to be flexed by centrifugal force to obstruct passage of fluid through said ported member.

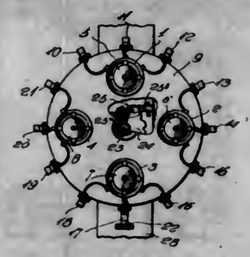
1,899,143. TUBE MANUFACTURE. CARL A. FRAHM, Massillon, and EDMUND W. RIEMENSCHNEIDER, Canton, Ohio, assignors to The Union Metal Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Feb. 18, 1929. Serial No. 340,910. 10 Claims. (Cl. 113—33.)



1. The method of making a tube from a single sheet of metal which consists in curving a sheet blank around a mandrel, by maintaining an element of the sheet blank in a fixed position relative to the mandrel, applying forces to the blank at portions thereof laterally spaced from the fixed element, the lever arm of the forces being initially greater than the diameter of the mandrel, decreasing the lever arm of the forces to increase the magnitude thereof as the curving operation nears completion, then bringing the edges of the curved blank closely together in alignment, and then welding together the aligned edges.

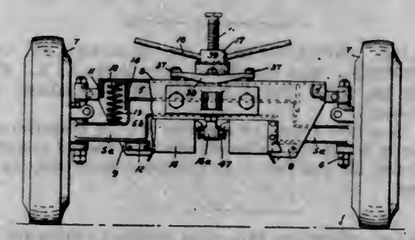
4. Apparatus for forming sheet metal tubes, including a mandrel, a jaw bar mounted adjacent the mandrel, jaw-dies each pivoted to one side of the jaw bar and extending from the other side thereof, and means for closing the jaw-dies to wrap a sheet blank around the mandrel.

1,899,144. ADJUSTABLE INDUCTANCE SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 25, 1929. Serial No. 335,111. 12 Claims. (Cl. 171—242.)



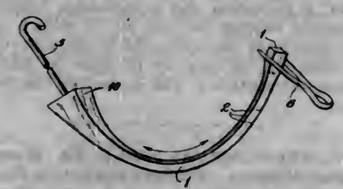
1. In an inductance system, a fixed frame, a rotatable frame supported by said fixed frame and comprising lateral members, a plurality of inductors carried by said rotatable frame, rotor contactors carried by said lateral members and in electrical relation with said inductors, and fixed contactors carried by said fixed frame and adapted to engage said rotor contactors as said rotatable frame is rotated.

1,899,145. BOGIE. ELMER C. GOEBERT, U. S. Army, Philadelphia, Pa., and THOMAS A. CONLON, Silver Spring, Md. Filed Apr. 2, 1931. Serial No. 527,188. 6 Claims. (Cl. 254—7.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



5. In a bogie, a wheeled axle, a frame, springs supporting the frame on the axle, and an elevating and depressing mechanism carried by the frame and passing through the axle.

1,899,146. GLASS BAR AND METHOD OF MAKING SAME. JAMES GROSS, Brooklyn, N. Y. Filed July 11, 1927. Serial No. 204,719. 4 Claims. (Cl. 49—79.)



1. As an article of manufacture, a polygonal glass bar having canes of contrasting color at edges thereof.

4. The method of making an edged glass bar having an external stripe along an edge, which includes the steps of attaching a glass cane to an edge of an appropriately shaped mass of glass, simultaneously drawing said cane and mass in a more or less horizontal direction, turning the axis of the partly-formed bar to a substantially vertical direction, and continuing the said simultaneous drawing with the axis of the bar substantially vertical, said drawing being performed throughout out of contact with shaping surfaces.

1,899,147. PROPELLANT POWDER. GEORGE C. HALE, Dover, N. J. Filed Mar. 1, 1932. Serial No. 596,164. 1 Claim. (Cl. 52—13.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

A propellant powder consisting of nitrocellulose, trinitrotoluene 5 to 15 per cent and mononitrobensene 2 to 10 per cent.

1,899,148. NONCORROSIVE ALLOY AND METHOD OF MAKING AND USING THE SAME. WILFORD J. HAWKINS, Claiborne, Md., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed May 2, 1928. Serial No. 274,684. 6 Claims. (Cl. 91—702.)

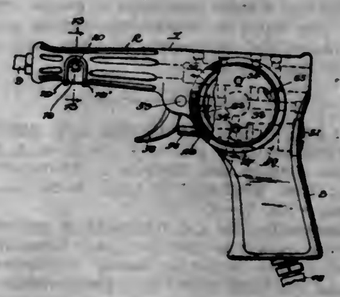
1. The method of applying a non-corrosive and acid-proof protective coating to metal, which consists in first applying to the metal to be coated an undercoat of lead containing approximately 4.5% of zinc and approximately .5% of aluminum at a temperature of approximately 875° F., and then applying to the undercoated metal a supercoat of lead containing approximately 2% of phosphor-tin at a temperature of approximately 750° F.

1,899,149. GATE SECURING MEANS. WALTER P. HAYTHORN, Ogallala, Nebr. Filed Mar. 25, 1932. Serial No. 601,238. 1 Claim. (Cl. 292—113.)



The herein described gate securing means consisting essentially of a lever having at its forward end curvilinear fulcrum means and also having at its rear end opposed hooks disposed at right angles to the lever and provided with free ends separated by an intervening space, their heel ends being disposed above and below the lever, and means connected to the lever adjacent to said fulcrum means and adapted for the connection of the lever to a fence post.

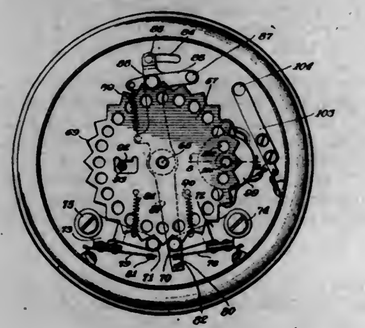
1,899,150. FLUID OPERATED TOOL. JOHN R. HOFFMAN, Madison, Wis., assignor to Madison-Kipp Corporation, Madison, Wis., a Corporation of Wisconsin. Filed Jan. 31, 1931. Serial No. 512,700. 6 Claims. (Cl. 121—20.)



1. In a fluid-operated hand tool of the character described, the combination of a tool body formed with a

piston chamber having inlet and exhaust ports; a piston located in said chamber and adapted to control said exhaust ports; a rotary valve for controlling distribution of motive fluid to said inlet ports; a turbine runner attached to said valve, the exhaust ports leading to said runner for actuation thereof solely by the exhaust fluid; and valve controlled means for supplying motive fluid only to said distributor valve.

1,899,151. REMOTE CONTROL MECHANISM. OTTO A. HOKANSON and JAMES F. KOCA, Woodstock, Ill., assignors to Woodstock Typewriter Company, Woodstock, Ill., a Corporation of Illinois. Filed Oct. 19, 1925. Serial No. 63,501. 7 Claims. (Cl. 200—7.)



1. A control device for an electric circuit comprising a pair of contact members arranged in different circuits, a third contact member pivotally mounted to move in two directions and movable into different positions to cooperate with either one or the other of said first-mentioned contact members, means to limit the pivotal movement of the third contact member in both directions, and means for engaging and disengaging said third contact member with either of said first contact members while in position to co-operate therewith.

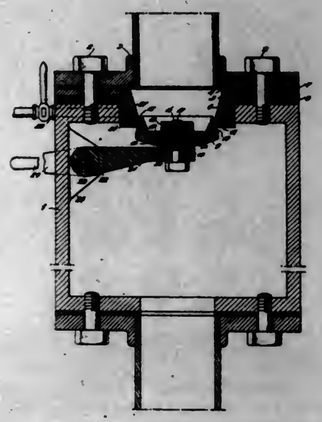
1,899,152. PROCESS OF CONDITIONING INCOHERENT FINELY DIVIDED MATERIALS. WILLIAM R. JEAVONS, Cleveland Heights, and MAHLON J. RENTSCHLER, Willoughby, Ohio. Filed Nov. 14, 1930. Serial No. 495,780. 5 Claims. (Cl. 75—65.)

1. The process of conditioning incoherent finely divided substances which consists in adding to a mixture of the same and a small proportion of barium oxide, just sufficient cold water to convert the barium oxide into barium hydrate, and forming the resultant mass into one or more integrate bodies.

1,899,153. COMPOSITION FOR AND METHOD OF TREATING MOLTEN METALS. WILLIAM R. JEAVONS, Cleveland Heights, and MAHLON J. RENTSCHLER, Willoughby, Ohio. Filed May 19, 1932. Serial No. 612,376. 7 Claims. (Cl. 75—17.)

1. A composition for the treatment of molten metals for removing impurities therefrom, said composition consisting of barium monoxide having distributed therethrough and combined therewith a predetermined proportion of water insufficient to convert all the said barium monoxide into anhydrous barium hydroxide and substantially free from water of hydration.

1,899,154. VALVE. LEWIS C. KARRICK, New York, N. Y. Filed Sept. 5, 1928. Serial No. 304,011. 9 Claims. (Cl. 251—29.)



7. Sealing means for a valve comprising a stationary valve seat having a conical opening through its center and a circular knife edge surrounding the small end of the seat opening, an outer adjustable ring surrounding the small end of said valve seat so as to form a narrow circular channel between said valve seat and said ring, a movable valve gate having a conical outer surface engageable with said knife edge, and means for passing fluid at high velocity through said channel to clean said knife edge and the corresponding surface of said valve gate.

1,899,155. IMPREGNATION OF ELECTRICAL CONDENSERS. MAX KEVELSON, New York, N. Y. Filed May 24, 1929. Serial No. 365,783. 4 Claims. (Cl. 175—41.)

1. As a new article of manufacture, an electrical condenser in which the dielectric employed therein comprises a mineral oil and castor oil blended substantially as described.

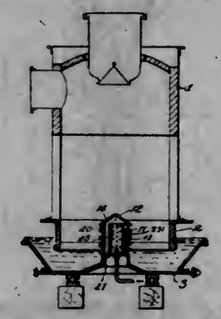
1,899,156. PROCESS FOR THE PREPARATION OF 2.3-BUTYLENE-GLYCOL FROM CARBOHYDRATES. ALBERT JAN KLUYVER and MARINUS ADRIANUS SCHEFFER, Delft, Netherlands, assignors to Thomas Hermanus Verhave, Senior, Delft, Netherlands. Filed May 21, 1929, Serial No. 364,934, and in the Netherlands July 10, 1928. 18 Claims. (Cl. 260—156.5.)

1. In the microbiological preparation of 2.3-butylene-glycol, the process which comprises preparing a sterilised mash containing a fermentable carbohydrate, a nitrogen compound, a phosphate and a carbonate, inoculating at a temperature between 25° and 50° C. with a culture of bacteria capable of producing 2.3-butylene-glycol in substantial quantity, blowing air through the mash during the ensuing fermentation, and separating resultant butylene-glycol.

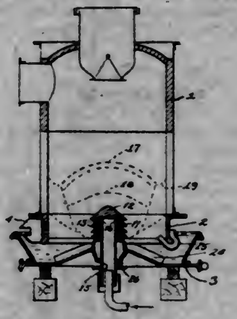
1,899,157. PRESSURE GAS PRODUCER. KARL KOLLER, Budapest, Hungary. Original application filed July 8, 1924, Serial No. 724,876, and in Czechoslovakia and Germany July 14, 1923. Divided and this application filed Aug. 16, 1929. Serial No. 386,355. 4 Claims. (Cl. 48—66.)

1. In a gas producer, a producer shaft adapted to contain a solid fuel bed, an ash-pan, a short hollow blast distributor having a cap forming a top compartment, a plurality of vertical air and steam admission chambers located in the cylindrical wall of the distributor, and adapted to deliver air and steam to the top compartment, said wall of the distributor being provided with horizontal outlet air and steam ports located between the vertical chambers, a hollow cylindrical slide valve below the top compartment and having openings adapted to register with the outlet ports, and a bottom wall for closing the bottom of the slide valve.

CARNEGIE LIBRARY OF ATLANTA



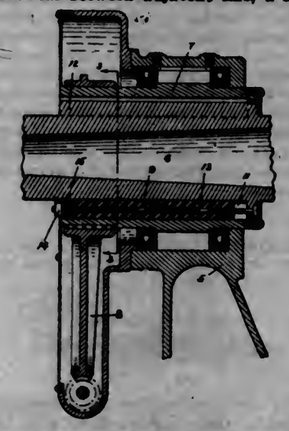
1,899,158. PRESSURE GAS PRODUCER. KARL KOLLER, Budapest, Hungary. Original application filed July 8, 1924, Serial No. 724,876, and in Czechoslovakia and Germany July 14, 1923. Divided and this application filed Aug. 16, 1929. Serial No. 386,856. 5 Claims. (Cl. 48—66.)



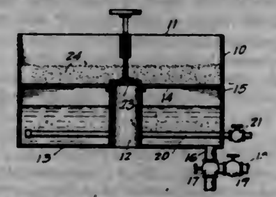
1. In a gas producer, a shaft adapted to contain a solid fuel bed, an ash-pan, a short hollow cylindrical distributor having horizontally directed outlet openings for admitting a blast of steam and air to the fuel bed in the shaft, and adjustable valve means to regulate the velocity of the blast issuing from the distributor, said means operating to vary the ratio of the total cross-sectional area of the outlets to the cross-sectional area of the interior of the distributor, and comprising a pair of perforated, cylindrical shells in said distributor relatively revoluble for adjustment and means for adjusting the position of said valve means for the purpose of regulating the blast issuing from the distributor.

1,899,159. INSULATED DRIVING CONNECTION. WALTER E. KROTZ, Philadelphia, Pa. Filed Sept. 27, 1929. Serial No. 395,662. 3 Claims. (Cl. 64—100.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A bearing including a support, a sleeve mounted in the support and provided internally with longitudinally extending fins, a driven member within the sleeve provided externally with longitudinally extending fins, the fins on the sleeve and driven member being alternately disposed and forming a wedge-way, a wedge of sound-damping material between adjacent fins, a rod anchored in the driven member and passing lengthwise through the wedge, means on the rod for translating the wedge, and means for driving the sleeve.

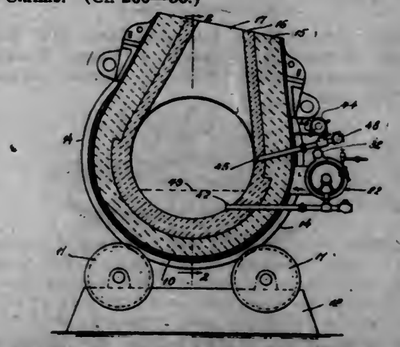


1,899,160. PROCESS OF MALTING GRAIN. REINHOLD E. KUSSROW, Oakland, Calif. Filed May 12, 1931. Serial No. 536,794. 5 Claims. (Cl. 195—24.)



1. The process of malting without transfer of grain which consists in agitating and soaking grain in water for repeated comparatively short periods, draining the water therefrom after each soaking, and germinating the grain in the presence of a continuous variable stream of air passing therethrough.

1,899,161. METALLURGICAL APPARATUS. CHARLES R. KUZELL, Clarkdale, Ariz., assignor to United Verde Copper Company, Clarkdale, Ariz., a Corporation of Delaware. Filed Nov. 2, 1929. Serial No. 404,348. 5 Claims. (Cl. 266—36.)



1. Metallurgical apparatus comprising a molten bath receptacle, a combustion chamber, means for introducing a mixture of finely divided carbonaceous material and

air under pressure into the combustion chamber, means for controlling the relative amounts of air and carbonaceous material introduced into the combustion chamber, and one or more tuyères providing direct means of communication between the interior of the combustion chamber and the interior of the molten bath receptacle below the normal bath level, the combustion chamber being so disposed with respect to the molten bath receptacle that the gas generated in the combustion chamber is forced into the molten bath receptacle by pressure developed as a result of changes in temperature and physical state of the carbonaceous material during the course of the production of the gas.

1,899,162. HOOKED CLAMP. ROLPH J. LACKNER, Ozone Park, N. Y. Filed Sept. 28, 1929. Serial No. 395,921. 1 Claim. (Cl. 24—125.)



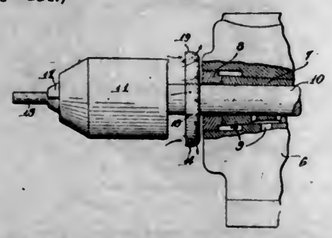
A device for the purposes set forth comprising clamp plates provided in their opposed faces with longitudinal mating grooves and with recesses at the inner ends of the grooves, said grooves being V-shaped in cross section and the recesses being of less diameter than the width of the plates, a pulley mounted in the mating recesses and about which the bight of a cable is trained with the sides of the bight engaged in the grooves, a hook having its base expanded laterally to the width of the clamping plates and merging into the recessed end of one of said plates for engaging a scaffold-suspending device, a bolt inserted through the recessed ends of the plates to secure them together and constitute an axle for the pulley, and a bolt inserted through the opposite ends of the plates between the grooves whereby the plates and the bight of the cable will be firmly clamped together.

1,899,163. PIEZO-ELECTRIC CRYSTAL. WARREN A. MARRISON, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Dec. 19, 1928, Serial No. 327,017. Divided and this application filed Nov. 1, 1930. Serial No. 492,668. 2 Claims. (Cl. 171—327.)



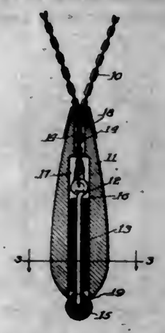
1. A quartz crystal piezo-electric resonator disc, the plane of which is parallel to the optical and one of the electrical axes of the crystal and having its diameter and thickness so related that its temperature coefficient of frequency is zero at a specified temperature.

1,899,164. PROTECTOR FOR BEARING FOR HIGH SPEED SPINDLES. CLIFFORD T. RAULE, Brookline, Pa. Filed May 3, 1926. Serial No. 106,876. 3 Claims. (Cl. 308—134.)



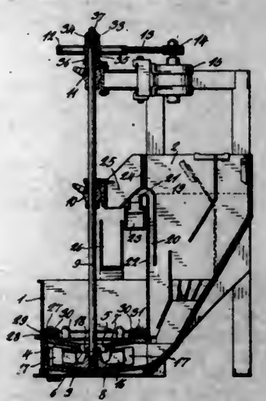
1. In a guard for a shaft-bearing, an annular cup having diagonally outward perforations near its outer circumference, mounted on the shaft adjacent the bearing and facing away therefrom.

1,899,165. COMBINED ORNAMENT AND DISPENSER. EDWARD L. RIVET, Chicago, Ill. Filed Feb. 15, 1929. Serial No. 340,258. 5 Claims. (Cl. 63—2.)



1. In a device of the kind described, the combination of an element having an enlargement at one end, and a flexible member secured to the opposite end, a metallic porous member wound upon said element and providing a container, a member slidably mounted upon said flexible element and providing a housing for said porous member, said housing member being supported by said enlargement and being movable relatively to said element while in associated relation with said element to thereby arrange said element and member to expose said porous member with said element and member in associated relation with each other.

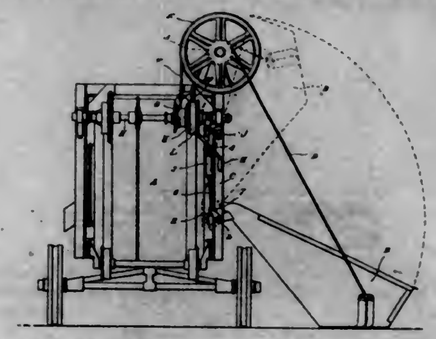
1,899,166. FLOTATION MACHINE. JOSEPH P. RUTH, Jr., Denver, Colo., assignor to The Ruth Company, Denver, Colo., a Corporation of Colorado. Filed Mar. 11, 1929. Serial No. 345,972. 5 Claims. (Cl. 261—93.)



1. Means for aerating pulp comprising, a rotatable closed impeller having an intake opening adjacent its center of rotation for the admission of air and pulp, means carried by the impeller for producing low pressure cavities along the periphery of the impeller for aiding the movement of air and a seal between the periphery of the impeller and the intake opening for preventing the air from returning to the intake.

1,899,167. BRAKE-CONTROL MECHANISM FOR CONCRETE MIXING AND OTHER MACHINES. SAMUEL SHAFER, Jr., Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 1, 1927. Serial No. 165,171. 5 Claims. (Cl. 214—130.)

1. The combination with a moving part of an apparatus, a brake for controlling its movements in one direction and a manually operated lever for controlling the brake, of connections between the moving part and the brake through which the latter is automatically controlled



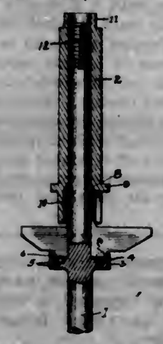
by the movements of the former and in accordance with its speed, the brake being manually operable irrespective of the automatic operating means.

1,899,168. FLEXIBLE SLIDE FASTENER. WILLIAM SHULIK, Philadelphia, Pa., assignor of one-third to Abraham Koufman, and one-third to Arthur S. Lichten, Philadelphia, Pa. Filed Sept. 22, 1931, Serial No. 564,315. Renewed May 11, 1932. 14 Claims. (Cl. 24—205.)



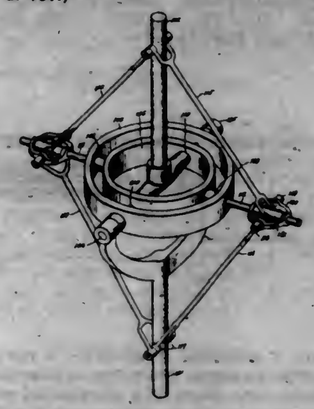
8. A flexible slide fastener including two interlocking rows of scoops, a slide having an upper wing and a lower wing and a transverse spacer member joining the two wings, grooves on the inner surfaces of said wings, forming therebetween a central passageway and two divergent passageways extending therefrom, to accommodate a row of interlocked scoops and each of two disengaged rows of scoops respectively; a finger tab pivoted about the sides of the upper wing in a manner to permit the finger tab to be swung substantially into the plane of the upper wing.

1,899,169. TOOL HOLDER. MELVIN E. TYLER, Baltimore, Md. Filed Oct. 24, 1928. Serial No. 314,646. 8 Claims. (Cl. 90—125.)



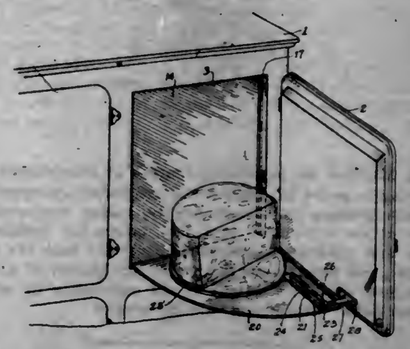
1. A valve seat-facing tool holder, comprising a pilot stem carrying an annular ledge, a member axially displaceable on said stem said member having one end slotted to form tongues, said ledge also being formed so that it may have interfitting engagement with said tongues.

1,899,170. UNIVERSAL JOINT. LAWRENCE WAINWRIGHT, U. S. Navy. Filed Dec. 7, 1931. Serial No. 579,549. 3 Claims. (Cl. 64—91.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In combination, a universal joint connecting two shafts whose axes intersect, the elements of said joint having a common line-of-pivots, a rod extending outwardly from said joint and having its axis coincide with the line-of-pivots, a first member slidable upon and rotatable about said rod, a second member slidable upon said rod with said first member but separately rotatable about said rod, a first link having one end pivoted to one shaft and the other pivoted to said first member, and a second link having one end pivoted on the other shaft and the other end pivoted to said second member, said links having their corresponding pivots equally distant from the point of intersection of said shafts.

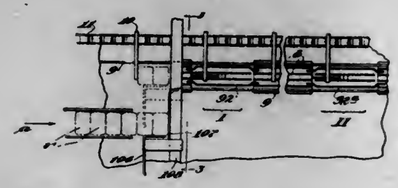
1,899,171. REFRIGERATOR CONSTRUCTION. VIRGIL P. WARREN, Atlanta, Ga. Filed Dec. 26, 1928. Serial No. 328,468. 1 Claim. (Cl. 312—186.)



In a refrigerator having a frame work providing an opening therethrough to a compartment therein, a door for said opening pivotally mounted on the outer face of the frame work by hinges mounted on an outer side edge of the frame, a closure plate pivotally mounted by one edge within the compartment by hinge means having pivots spaced from but parallel with those of the door hinges, a quadrant shaped shelf rigidly secured by one angular edge to the bottom part of the closure plate, a

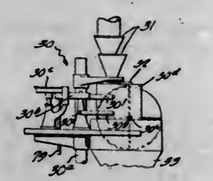
slotted slide plate secured to the shelf adjacent to and parallel with its other angular edge and a supporting bracket rigidly secured to the inner face of the door and having a pin slidable in the slot of said slide plate, whereby said shelf is supported in part by the bracket and plate and transmits motion from the door to the closure plate as specified.

1,899,172. METHOD OF AND MECHANISM FOR PACKAGING COMMODITIES. CHARLES P. WELLMAN, Medford, Mass. Filed Dec. 30, 1929. Serial No. 417,350. 19 Claims. (Cl. 249—59.)



1. The art of packaging commodities in receptacles by weight comprising as steps measuring the aggregate weight during simultaneous filling of a plurality of receptacles, and causing and controlling according to said weight movement toward and from the place of filling of a series of said receptacles, and of the flow of subetantially equal streams of the commodity into the receptacles severally at said place.

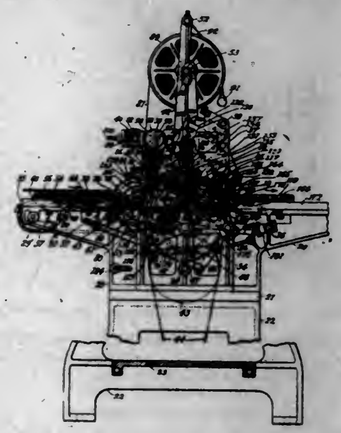
1,899,173. MECHANISM FOR WEIGHING AND PACKAGING COMMODITIES. CHARLES P. WELLMAN, West Medford, Mass. Original application filed Dec. 30, 1929, Serial No. 417,350. Divided and this application filed July 18, 1931. Serial No. 551,628. 17 Claims. (Cl. 249—59.)



1. Machine for measuring charges of commodities comprising a series of displaceable measuring receptacles to receive charges of the commodity, means for causing a flow of the commodity in a duct, means for dividing the flow and guiding the divisions severally into the receptacles, and means actuated by the attainment of a predetermined aggregate weight of the commodity in said receptacles for discharging said receptacles.

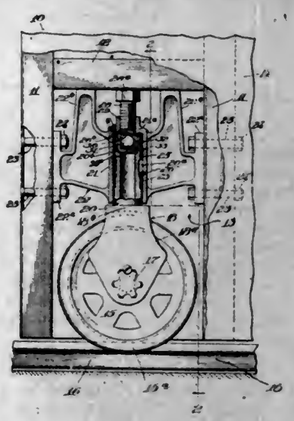
1,899,174. CIGAR ENVELOPING MACHINE. HENRY H. WHEELER, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed July 2, 1927. Serial No. 203,082. 23 Claims. (Cl. 93—7.)

1. A cigar enveloping machine, comprising a traveling assemblage receiver having separated assembling and sealing and discharging stations, means for assembling a cigar and an envelop in said receiver, means for partially enveloping the cigar at the assembling station, means for completing envelopment of the cigar between the assembling and sealing stations, means for closing by different



folds the ends of the envelop at the sealing station, and means for discharging the sealed cigar at the discharging station.

1,899,175. SUPPORTING MEANS FOR DOORS. DONALD E. WILLARD, Danville, Ill. Filed Aug. 15, 1929. Serial No. 386,084. 5 Claims. (Cl. 16—100.)

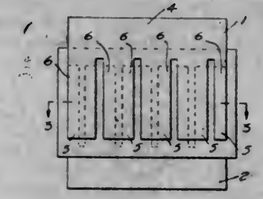


1. The combination with a door of a roller adapted to travel on a supporting track, a roller frame in which said roller is rotatably mounted, a spindle extending vertically from said roller frame, a bracket secured to said door and having a bearing hub in which said spindle is journaled, said bearing hub having a threaded aperture at one end, an adjusting bolt threadedly engaging said aperture, a retaining member mounted on said spindle and a spherical ball inserted between said retaining member and the end of said adjusting member for permitting rotation of said spindle and receiving the end-thrust thereof.

1,899,176. HIGH FREQUENCY CONDENSER. WILLIAM M. BAILEY, Lynn, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Oct. 24, 1929. Serial No. 402,163. 1 Claim. (Cl. 175—41.)

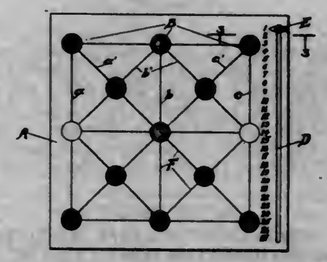
A capacitor including cooperating armatures respectively having a plurality of spaced fingers and a common

conducting support therefor, said armatures being alternately disposed with respect to each other so as to provide a plurality of divergent electrostatic fields between the



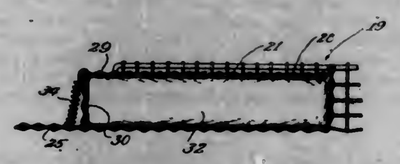
fingers of the armatures of opposite polarity thereby reducing eddy current losses in the active portions of the armatures.

1,899,177. GAME OR PUZZLE BOARD. CORNELIA F. BEDELL, Nyack, N. Y. Filed Oct. 22, 1930. Serial No. 490,359. 2 Claims. (Cl. 273—131.)



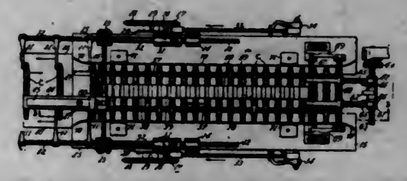
1. A puzzle game board having five parallel rows of playing stations, the stations in adjacent rows being in staggered arrangement, the outside and middle rows having three stations each and the intermediate rows having two stations each, lines joining each station to the adjacent stations, the five stations constituting one outside row and the adjacent row being of one color, and the corresponding five stations on the opposite side of the board being of second color, the central station of the middle row being of a third color, and the end stations of the middle row being blank, in combination with a set of game pieces one for each colored station and corresponding in color thereto.

1,899,178. APPARATUS FOR SHAPING MEAT FOR SMOKING. ALONZO NEWTON BENN, Chicago, Ill. Filed Aug. 29, 1929. Serial No. 389,157. 13 Claims. (Cl. 99—2.)



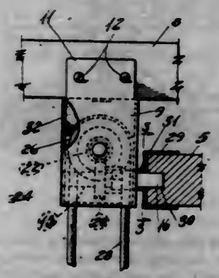
1. The combination of a meat-receiving basket, and a cage member having a top, a side and end insertable in said basket, and means for connecting said member to said basket, said side and end compressibly engaging two marginal edges of the meat against the sides of said basket to thereby shape and define all marginal edges of the meat.

1,899,179. CIGAR TRANSFERRING DEVICE. ROBERT JACOB BEUTEL, Brooklyn, and PONTUS PETERSON, Richmond Hill, N. Y., assignors to International Cigar Machinery Company, a Corporation of New Jersey. Filed Mar. 17, 1931. Serial No. 523,858. 2 Claims. (Cl. 198—218.)



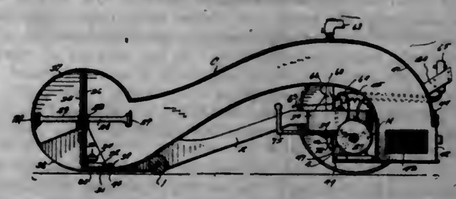
1. Means for forwarding widely spaced cigars, comprising a table, transfer fingers adapted to engage the cigars on said table, a pair of reciprocating rods extending along the table and supporting said fingers, means for reciprocating said rods, mechanism for oscillating said rods to move said fingers in and out of operative position, a rail overlying said table and pivotally supported at one of its ends from said table, and a guide plate yieldingly supported from said rail to engage the top of the cigars on the table to prevent rolling thereof.

1,899,180. BLIND TILTING MECHANISM. FRED J. BURNS, Saginaw, Mich., assignor to The Columbia Mills, Inc., Saginaw, Mich., a Corporation of New York. Filed Nov. 16, 1931. Serial No. 575,322. 14 Claims. (Cl. 156—17.)



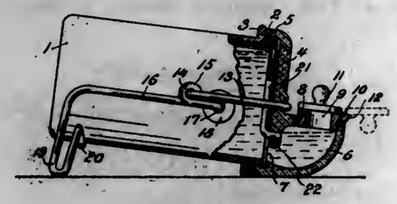
1. A Venetian blind tilting mechanism comprising a housing, a longitudinally disposed shaft mounted therein and provided with an extension adapted to detachably support a tilt rail, a sleeve mounted on said shaft a transversely disposed shaft, a worm wheel on said sleeve and a worm mounted on said transverse shaft, and manually actuated means for driving said shafts to actuate said tilt rail.

1,899,181. LAWN MOWER. PETER J. CAROLUS, St. Joseph, Mo. Filed Oct. 23, 1930. Serial No. 490,763. 6 Claims. (Cl. 56—23.)



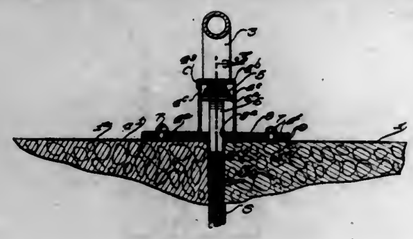
1. In a lawn mower construction including a cutting reel having cutting blades; fan blades carried by the reel and position between successive cutter blades whereby to blow the cut grass rearwardly of the reel.

1,899,182. INKSTAND. ERNEST E. CLARK, Kansas City, Mo. Filed Feb. 29, 1932. Serial No. 595,760. 6 Claims. (Cl. 120—59.)



1. In an ink stand, an ink container having a discharge opening, a removable closure for said opening having a dipping well adapted to receive a pen and communicating with said opening and disposed, when said container is in operative position, in a position in which the ink will flow by gravity through said opening into said well, and clamping means connecting said container with said closure adapted to hold the latter releasably clamped against said container, and in the clamping position serving to support the container in the operative position.

1,899,183. ROAD PAVEMENT JOINT CLEANING AND FINISHING TOOL. EDWARD M. CRUZ, Alpine, Calif. Filed Dec. 26, 1930. Serial No. 504,825. 5 Claims. (Cl. 94—95.)



1. In an expansion joint cleaning and smoothing tool, a pair of plates having smoothing portions occupying a common plane and curved marginal portions positioned in spaced apart parallel relation for rounding the contiguous edges of adjacent pavement sections, and scraper means extending between said curved portions adapted to bear against the upper surface of the expansion strip between said pavement sections.

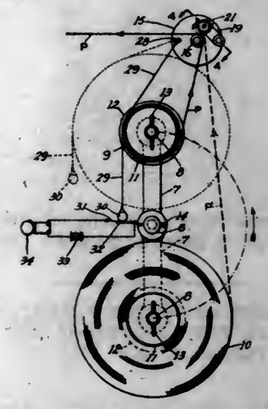
1,899,184. PRODUCING HYDROGEN AND CARBON MONOXIDE. MARTIN DE SIMÓ, Berkeley, Calif., assignor to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Mar. 24, 1930. Serial No. 438,633. 26 Claims. (Cl. 23—212.)

1. The method of oxidizing a paraffin hydrocarbon to substantially hydrogen and carbon monoxide comprising reacting the hydrocarbon with a metallic oxide in substantially molecular proportions in the absence of steam at a temperature at which the oxide is easily reduced.

16. The method of oxidizing natural gas to substantially hydrogen and carbon monoxide comprising reacting said gas with zinc oxide in substantially molecular proportions at about 950–1000° C.

26. The continuous method of oxidizing methane to substantially hydrogen and carbon monoxide comprising reacting methane with a metallic oxide in substantially molecular proportions at a temperature at which the oxide is easily reduced, removing the gases formed, regenerating the metallic oxide and recycling it in the process.

1,899,185. PAPER UNITING DEVICE FOR CONTINUOUS ROD CIGARETTE MACHINES. FRANK DI IANNI, Brooklyn, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Nov. 24, 1930. Serial No. 497,937. 5 Claims. (Cl. 242—58.)

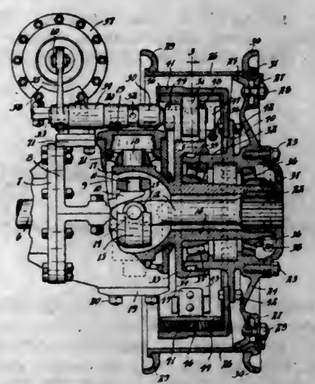


4. Means for uniting the leading end of an idle paper reel to paper from a reel in feeding position, comprising a support on one side of the paper in feeding position for supporting said paper and said leading end, a paper indenting device on the opposite side of said paper, and means mounting said device for movement toward and away from said support for indenting said paper and said leading end to unite the same by a single blow of said device.

1,899,186. CELLULOSE ACETATE LACQUER CONTAINING CHLORINATED ROSIN. LEON W. EBERLIN, Rochester, N. Y., and LORING W. BLANCHARD, Jr., Stoneham, Mass., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 25, 1932. Serial No. 588,810. 5 Claims. (Cl. 134—26.)

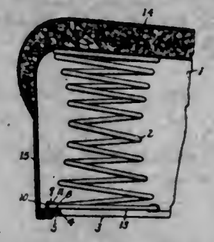
1. A coating composition comprising cellulose acetate and chlorinated rosin.

1,899,187. BRAKE FOR DRIVEN AND STEERED WHEELS. PETER S. ECKLAND and GUNNAR RYDEN, Minneapolis, Minn., assignors to Eckland Bros. Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Mar. 4, 1931. Serial No. 519,937. 2 Claims. (Cl. 188—194.)



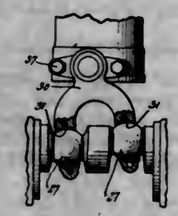
1. In a vehicle, an axle housing, a driving axle located within said housing, a stub axle connected by universal joint to said driving axle, a wheel secured to the outer end of said stub axle, a bearing for said wheel vertically pivoted to said housing, a brake drum secured to said wheel, a cooperating brake shoe mounted on said bearing, a cam shaft journaled on said bearing, a cam mounted on said cam shaft for actuating said brake shoe, an arm secured to said shaft, a fluid tight casing suitably mounted, a plunger mounted in said casing and pivotally connected to said arm and a fluid conduit running to said casing.

1,899,188. SPRING STRUCTURE. WILLIAM A. FALLS, Detroit, Mich., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Filed Nov. 30, 1931. Serial No. 577,999. 3 Claims. (Cl. 155—180.)



3. A border frame for spring structures comprising a downwardly facing channel, and an integral angular stiffening rib and clamping flange positioned in spaced relation from both edges of the channel and formed of a mid-portion of the web of the channel folded longitudinally upon itself with the folds in direct metal to metal contact forming with the web an inwardly facing groove and coacting as a unitary element, and a tacking strip fitting within said channel, the edges of the flanges of the channel being folded upon the under side of the tacking strip, there being an exposed portion of said tacking strip between said infolded edges of the channel and in opposed relation to said clamping flange and reinforcing rib.

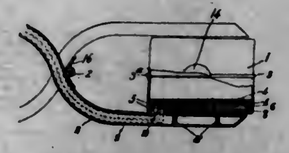
1,899,189. ENGINE. JAMES O. FINK, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Oct. 31, 1930, Serial No. 492,503. Renewed July 27, 1932. 9 Claims. (Cl. 74—38.)



1. A driving mechanism for an engine sleeve valve including, a shaft driven by the engine and adapted to impart combined reciprocating and oscillating movement to a sleeve valve, said shaft having a crank portion provided with a plurality of ball portions having their longitudinal axes disposed parallel to the axis of said shaft.

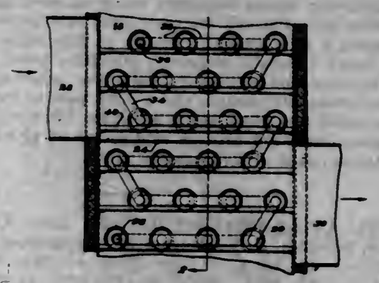
1,899,190. PERMANENT HAIR WAVING OR CURLING DEVICE. CARL OSCAR VICTOR FOGELIN, Paris, France. Continuation of application Serial No. 521,819, filed Mar. 11, 1931, and in France Dec. 31, 1930. This application filed Dec. 29, 1931. Serial No. 583,617. 11 Claims. (Cl. 132—36.)

1. In a permanent hair-waving iron, the combination of a pair of handles pivotally interconnected at their intermediate portions, two cup-shaped jaws each consisting of a circular flanged disc of uniform thickness to the flat portion of which the corresponding handle is secured, said flanged portions, when brought together through the medium of said handles, forming a completely closed cylindrical heating chamber bounded at



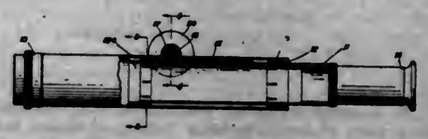
the ends by the flat portions of the jaws and adapted to receive the hair through an opening formed in the flanges of said discs, and to afford an egress for the vapors, formed during heating, through a second opening likewise formed in the flanges of said discs.

1,899,191. HEAT EXCHANGE APPARATUS. ERNEST B. FREEMAN, Newton, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed Aug. 22, 1930. Serial No. 477,030. 19 Claims. (Cl. 257—247.)



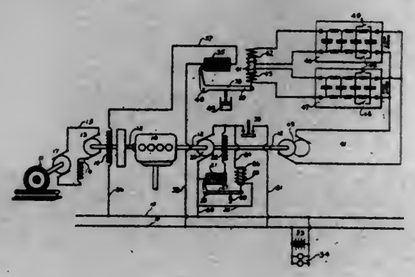
1. Heat exchange apparatus comprising a set of air tubes and a set of water tubes, the separate tubes of one set being contained within the separate tubes of the other set, a flue for hot waste gases in which the tubes are disposed, collecting chambers to divide the set of air tubes into a plurality of banks, each including a number of parallel flow tubes, and flanged detachable return bends for connecting water tubes.

1,899,192. PRECISION INSTRUMENT. WILLIAM GAERTNER, Chicago, Ill. Filed Dec. 31, 1930. Serial No. 505,679. 2 Claims. (Cl. 88—32.)



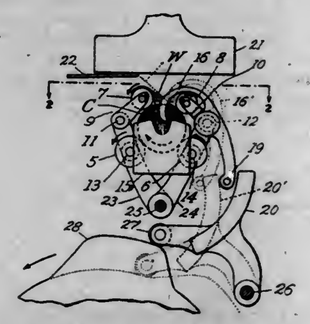
1. In a precision instrument, a draw tube having a rack mounted longitudinally thereon, a body tube embracing said draw tube and having an opening adjacent said rack, a unitary bearing sleeve enclosing said opening and integral with said body tube, a shaft frictionally mounted in said sleeve, a pinion rotated by said shaft and meshing with said rack, operating mechanism on one end of said shaft and abutting the corresponding end of said bearing sleeve, and a cap frictionally engaging the opposite end of said shaft and said bearing sleeve.

1,899,193. VEHICLE DRIVING APPARATUS AND SYSTEM. FRANK W. GODSEY, Jr., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Aug. 19, 1929. Serial No. 387,050. 12 Claims. (Cl. 290—17.)



1. In apparatus of the character described, in combination, a prime mover, a generator, means forming an electrical load for receiving energy from said generator, means for controlling the power supplied to said load, means supplying an alternating potential varying in frequency with changes in the speed of said prime mover, electromagnetic means connected to be operated by said alternating potential and for controlling said power control means, a filter passing currents of substantial magnitude above a certain frequency, said filter being interposed between said source of alternating potential and said electromagnetic means, and a filter passing currents of substantial magnitude below a certain frequency, said filter being interposed between said source of alternating potential and said electromagnetic means.

1,899,194. CIGAR HEADING DEVICE. JOHN F. HALSTEAD, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Oct. 24, 1931. Serial No. 570,923. 12 Claims. (Cl. 131—45.)



1. In a cigar wrapping mechanism, the combination with a gang of bunch rotating rollers, of means having a portion fitting the taper of the cigar head and overlying and pressing the wrapper downwardly against the head.

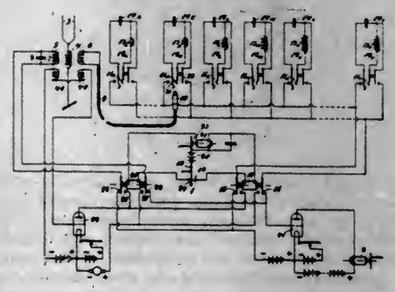
1,899,195. CLOTH WINDING BOARD. TARLTON F. HEATH, Charlotte, N. C., assignor to Baxter-Lane Paper Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 15, 1931. Serial No. 557,294. 4 Claims. (Cl. 206—50.)

1. A cloth winding board or holder having its ends built up in thickness by means of a narrow reinforcing strip secured to one side thereof, said reinforcing strip being positioned at the end edge of the board or holder as a



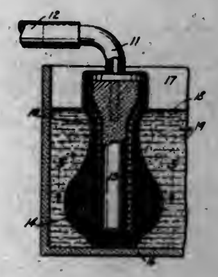
whole so as to provide a substantial end thickness, and a label member secured to the end of the board or holder as a whole.

1,899,196. RADIOTELEGRAPH SYSTEM. JOHAN GUNNAR HOLMSTRÖM, Stockholm, Sweden. Filed Jan. 13, 1931, Serial No. 508,396, and in Sweden Jan. 14, 1930. 4 Claims. (Cl. 250—13.)



1. Apparatus for intercommunication between a group of stations by means of radiant energy, including at each station, a plurality of oscillatory circuits having different frequencies individually corresponding with the reception frequencies of all the stations in the group including that of the sending station, and means at each station including a switching device providing for the simultaneous use at said station of two of said oscillatory circuits for transmission purposes, one for radiating the wave for traffic having a frequency corresponding with the reception frequency of one of the other stations in the group, and of the other of said two circuits for indicating that the sending station is busy and having the same frequency as the reception frequency of said sending station.

1,899,197. ART OF CASTING FIBER ARTICLES. ERNEST HUFF, Milwaukee, and ANDREW KEIDING, Whitefish Bay, Wis., assignors to American Lace Paper Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 19, 1930. Serial No. 462,216. 18 Claims. (Cl. 92—57.)

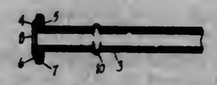


1. Casting apparatus of the class described, comprising the combination with a discharge pipe, of a porous body with the pores of which said pipe communicates,

said body having exposed surfaces of the desired contour of the article to be cast, characterized by a dimension greater than an opening in said article, a pulp container and means for establishing a pressure differential between said container and pipe whereby to deposit pulp on said porous body, said porous body being deformable sufficiently to permit its removal through said opening.

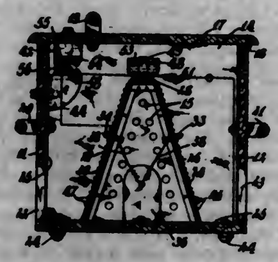
10. A casting process of the class described, comprising building up a mold with a removable porous body comprising an extension of the mold and of a size larger than an opening in an article cast thereon, depositing material on the surface of the mold and mold extension, and withdrawing the mold from said body and the article cast thereon.

1,899,198. CONTROL ROD MOUNTING. LOUIS H. KAI and HERMAN WEBER, Kalamazoo, Mich., assignors to Shakespeare Products Company, Kalamazoo, Mich. Filed June 12, 1930. Serial No. 460,575. 2 Claims. (Cl. 74—89.)



1. A mounting for control rods and the like, comprising a tubular sheet metal body of substantially constant diameter having a longitudinal seam and an out-turned flange at its outer end and an annular reinforcing bead-like rib substantially spaced from said flange, a washer-like collar loosely embracing said body at the rear of said flange and abutting said flange, and a head of thin sheet metal engaging and embracing said flange and collar and having its edge folded over the edge of said collar, said head being in substantial contact with said flange and collar, whereby to clamp said head, collar and flange in assembled relation.

1,899,199. ELECTRICAL RAT EXTERMINATOR. JOHN KAISER, Dobsina, Czechoslovakia. Filed Sept. 4, 1931. Serial No. 561,117. 4 Claims. (Cl. 43—98.)



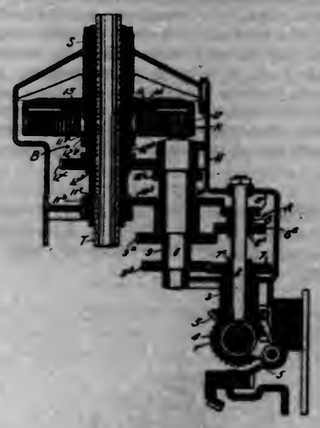
1. In a device of the class described, a box-like structure having a top cover hinged thereto, openings formed in the said structure so as to permit rats to enter therein, a pair of grids secured to the base of the said structure and angularly upwardly inclined therefrom, a top secured to the said upper extended edges of the said grids, a container pivotally mounted on brackets secured to and extended from the said top, said container adapted to hold oil for the purpose of enticing the said rats, wires transversely arranged across the entire length of the grids, and a charge of electricity applied to the wires upon the upper portion of the grids.

1,899,200. CARVING MATERIAL. WALTER H. KLAR, Springfield, Mass., assignor to Milton Bradley Company, Springfield, Mass., a Corporation of Massachusetts. Filed Apr. 20, 1931. Serial No. 531,506. 1 Claim. (Cl. 106—38.)



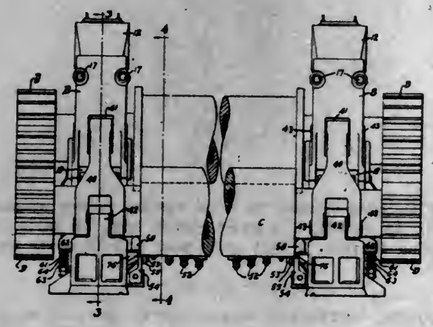
A material suitable for hand carving formed substantially by weight of 6 parts stearic acid, 24 parts low melting paraffin, 1 part hard wax, and 75 parts terra alba.

1,899,201. INTERNAL GEAR DRIVE. DAVID C. KLAUSMEYER, deceased, Cincinnati, Ohio, by H. Henry Sundermann, executor, Cincinnati, Ohio, assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 19, 1931. Serial No. 582,012. 6 Claims. (Cl. 74—57.)



1. A spindle driving transmission for drilling machines comprising a drive shaft; a second shaft arranged with its axis transverse to the axis of the drive shaft and driven thereby; a first gear rotatably journaled on said second shaft; a third shaft journaled parallel to the second shaft; four gears and a pinion fixed to rotate with said third shaft, one of said gears being permanently in mesh with the gear journaled on the second shaft; a gear unit providing second and third gears splined on said second shaft and adapted selectively to be meshed with predetermined ones of the gears on the third shaft; means selectively to clutch said gear unit to said first gear to cause the latter to be rotated; a spindle drive sleeve journaled parallel with said third shaft; a spindle splined within the sleeve; a large internal gear rotatably journaled on said sleeve and meshing with said pinion; a second gear journaled on said sleeve and meshing with one of the gears on the third shaft; and a combined clutch and gear member splined to said sleeve and adapted in one position to clutch said internal gear to the sleeve, in another position to clutch said second gear to the sleeve and in a third position to mesh the gear thereon with one of the gears on the third shaft.

1,899,202. CANE MILL. ERNST W. KOPKE and LOUIS J. STRUBBIO, St. Louis, Mo., assignors to Fulton Iron Works Company, St. Louis, Mo., a Corporation of Delaware. Filed Apr. 17, 1929. Serial No. 355,743. 2 Claims. (Cl. 100—47.)



1. A housing for a crushing mill comprising a supporting element provided with a pair of recesses arranged to receive the bearings of the lower rolls of the mill, said recesses being inclined inwardly and downwardly with respect to the housing, and being open at their outer ends at walls of said housing, and links extended across the open ends of said recesses, said links being connected at their opposite ends to portions of the housing at opposite sides of the recesses, and each of said links being provided with a rectangular passageway formed therethrough through which shims may be introduced into the associated recess to adjust the position of the bearing therein.

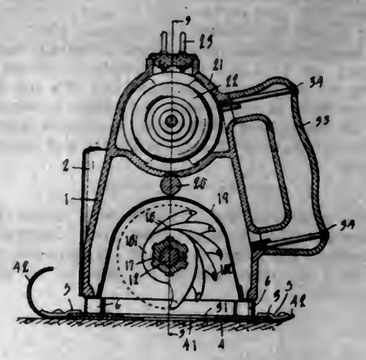
1,899,203. COMBINED BOTTLE OPENER AND KEY RING. JOSEPH CHARLES AUGUSTE LABRECHE, Montreal, Quebec, Canada. Filed June 19, 1931. Serial No. 545,458. 6 Claims. (Cl. 7—1.)



1. A key ring comprising a pair of frame-like members secured one over the other, one end of one of said members having a gap, and the contiguous end of the other member having a lap joint.

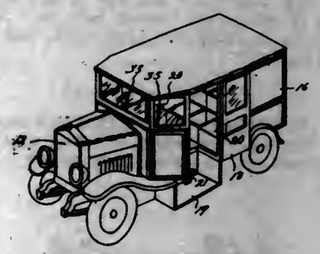
1,899,204. BUTCHER'S BLOCK PLANER AND CLEANER. JOHN G. MATTHEWS, Berea, Ohio. Filed Oct. 29, 1931. Serial No. 571,794. 5 Claims. (Cl. 144—117.)

5. In a power driven butcher block dresser and cleaner, the combination of a suitable main casing open on its under side, with vertical downwardly-opening shouldered sockets at each corner, a base frame with open center to carry the said dresser, upright tubular posts on each corner of said base frame corresponding to the sockets in said casing, a slidable shoe with central aperture secured to said base frame, springs in the said hollow posts reacting upwardly against the bottom of the said sockets



and downwardly against said posts, a planer head on a suitable mandrel carried by said casing, and an electric motor connected to drive the said planer head.

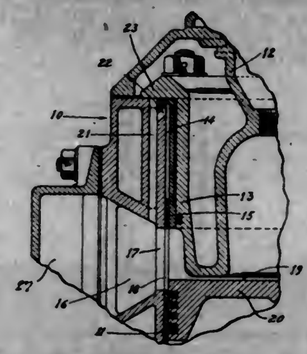
1,899,205. DELIVERY VEHICLE. EDWIN R. MAURER, Detroit, and DONALD M. FERGUSON, Highland Park, Mich., assignors, by mesne assignments, to Continental-Divco Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 1, 1929. Serial No. 382,817. 2 Claims. (Cl. 180—77.)



2. A motor delivery vehicle comprising a wheeled chassis having continuous side sills from front to rear, an internal combustion engine at the forward end of said chassis, a body on said chassis having the forward end thereof at the rear of said engine, said body projecting laterally beyond said side sills and having opposite side door openings, a pair of low level operating platforms within the boundaries of said body and outside the boundaries of said side sills, a laterally rockable steering mast projecting upwardly from said chassis between said operating platforms, gear selector rods projecting upwardly from each of said platforms, a combined brake and clutch pedal on each of said platforms and a second brake pedal on each of said platforms, said steering mast, gear selector rods and pedals being operable while standing on said platforms.

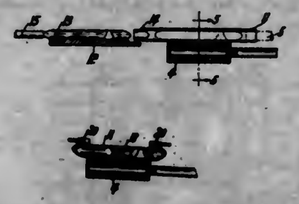
1,899,206. INTERNAL COMBUSTION ENGINE. ANDER J. MEYER, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Apr. 11, 1930. Serial No. 443,590. 24 Claims. (Cl. 123—81.)

1. In an engine of the sleeve valve type, a cylinder block having an intake chamber, a cylinder and an intake port intermediate the cylinder and intake chamber, sleeve valve means associated with the cylinder, a sleeve pocket structure accommodating the sleeve valve means, and



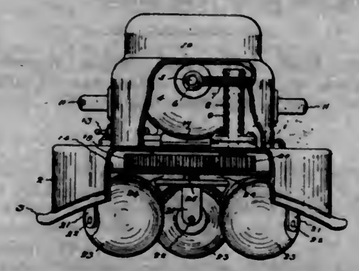
conduit means communicating at one end with the sleeve pocket and at the other end with the cylinder intake chamber, said sleeve pocket being otherwise closed.

1,899,207. METHOD OF PACKAGING ARTICLES. JOHN M. MUNSON, Lakewood, Ohio, assignor to The Dobeckmun Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 10, 1930. Serial No. 434,546. 14 Claims. (Cl. 93—3.)



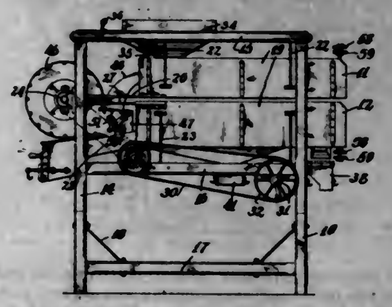
14. The process of packaging articles comprising forming a sheet of material with a fusible surface and of length greater than the article, folding the sheet to form a tubular container about a form of substantially the size of the article, so that the edges of the sheet overlap, sealing the overlapped edges, withdrawing the form and inserting the article centrally therein, plicating the projecting ends of the container, and applying heat and pressure to seal the same to which it adheres by fusion of the surface of the material.

1,899,208. MASSAGE MACHINE. DANIEL HAYNE MURPHY, West Hartford, Conn. Filed July 28, 1930. Serial No. 471,131. 9 Claims. (Cl. 128—57.)



8. An abdominal massage machine comprising a cup-shaped casing having a circular wall, an applicator plate mounted to rotate within the casing, yokes having stems located on the outer face of said plate, detachable means clamping said stems to said plate, applicators rotatably mounted on said yokes, a gear attached to the inner face of the plate, a pinion engaging said gear, and an electric motor secured within the casing and connected to rotate said pinion.

1,899,209. GRAIN CLEANING MACHINE. VICTOR MANUEL PETIT, Rojas, Argentina. Filed July 26, 1930. Serial No. 470,909. 8 Claims. (Cl. 209—319.)



1. A grain cleaning and grading machine, comprising a frame, grading boxes movably supported on said frame and provided with screening elements, means for reciprocating the grading boxes, means for supplying material to the grading boxes, means for directing the circulation of material thru the boxes, means for blowing air thru the boxes, and means for changing the inclination of the screening elements, comprising a vertical screw rotatively mounted on each of the grading boxes, followers threadedly engaged on the screw and connected with the screening elements, a worm wheel attached on the screw, a worm pinion meshing with the worm wheel and connected with a system of gears terminating in a vertical shaft, a pair of gears loosely engaged on said shaft, and a ratchet and pawl for each of the loose gears for connecting them with the shaft in such way that one may idle in one direction and the other in the opposite direction.

1,899,210. CLOSURE FOR VESSELS. WILLIAM A. RAMSAY, Honolulu, Territory of Hawaii. Filed June 17, 1931. Serial No. 545,060. 7 Claims. (Cl. 215—46.)

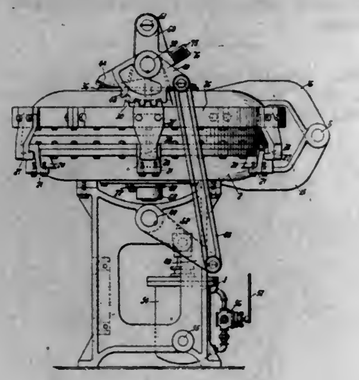


1. A closure for vessels having a depending flange provided with flutes, and an opening tab in said flange substantially embracing one of said flutes and being substantially coextensive with said flute so that the tab is stiffened by the flute whereby the upper end of the tab may be forced outward to break the flange without substantial bending of the tab itself.

1,899,211. VULCANIZER. FLORAIN J. SHOOK, Akron, Ohio, assignor, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed June 10, 1927. Serial No. 197,854. 47 Claims. (Cl. 18—17.)

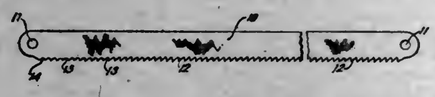
34. A vulcanizer comprising two mold sections having central apertures located therein and movable toward

and from one another, locking means for exerting a clamping action about the outer periphery of the mold and additional locking means for exerting clamping action



about the inner periphery thereof, positive connections between the inner and outer locking means, and a common actuating means for the inner and outer locking means.

1,899,212. HACK SAW BLADE. WILLIAM H. SHORTELL, Greenfield, Mass., assignor to Mills Falls Company, Greenfield, Mass., a Corporation of Massachusetts. Filed Aug. 22, 1931. Serial No. 558,732. 5 Claims. (Cl. 143—133.)



1. A saw blade provided with teeth, all having substantially the same pitch and chip clearance opening, a series of said teeth at its entering end having shallower depths than the remainder of the teeth.

1,899,213. CELLULOSE ACETATE COMPOSITIONS CONTAINING OXIMES. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 10, 1932. Serial No. 592,181. 8 Claims. (Cl. 106—40.)

1. A composition of matter comprising an organic ester of cellulose and an oxime selected from the group consisting of acetophenone oxime, diacetyl monoxime, cyclohexanone oxime and furfural oxime.

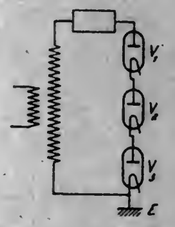
1,899,214. CELLULOSE ORGANIC ESTER COMPOSITION CONTAINING PHENYLETHYL BENZOATE. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 10, 1932. Serial No. 592,182. 7 Claims. (Cl. 106—40.)

1. A composition of matter comprising a cellulose organic ester and phenylethyl benzoate.

1,899,215. CELLULOSE ACETATE COMPOSITION CONTAINING A BROMINATED DIPHENYL ETHER. HENRY B. SMITH and STEWART J. CARROLL, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 10, 1932. Serial No. 592,183. 6 Claims. (Cl. 106—40.)

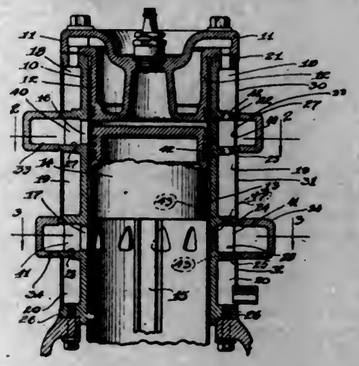
1. A composition of matter comprising an organic ester of cellulose and a brominated diphenyl ether.

1,899,216. ELECTRIC CIRCUIT WORKING WITH HIGH-VOLTAGE. ROBERT STRIGEL, Berlin-Charlottenburg, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed May 13, 1929, Serial No. 362,721, and in Germany May 16, 1928. 4 Claims. (Cl. 250—27.)



1. In an arrangement for obtaining an equal voltage distribution in electric high tension circuits, a plurality of electric discharge tubes connected in series in the circuit, each tube having a surface enlargement at one end of its anode and of its cathode, whereby the self capacity between the anodes and cathodes of said tubes is artificially enlarged.

1,899,217. INTERNAL COMBUSTION ENGINE. EDWARD S. TAYLOR, Cambridge, and CHARLES F. TAYLOR, Weston, Mass., assignors to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Feb. 25, 1931. Serial No. 518,118. 12 Claims. (Cl. 123—173.)



1. In an internal combustion engine, a cylinder structure including a cylinder and having vertically spaced jacket portions adapted for containing a cooling medium, and separate conduit sections secured to said cylinder for connecting said spaced jacket portions.

1,899,218. HUB REMOVING TOOL. NICHOLAS W. TRAUTNER, St. Paul, Minn. Filed Aug. 28, 1929. Serial No. 387,918. 3 Claims. (Cl. 29—85.)



1. A tool for removing a hub from a shaft fitting within said hub comprising, a claw member on the inner end of the tool adapted to loosely engage the hub and

having a side opening permitting lateral movement of the tool relative to said shaft, thrust means mounted on the outer end of the tool for engaging the outer end of the shaft, said thrust means being operable by the exertion of force directed laterally of the axis of said shaft and a keeper completely surrounding the periphery of the shaft to confine the outer end of the shaft against lateral movement free of said thrust means during the operation of the latter.

1,899,219. FRINGE. GARFIELD J. UNDERWOOD, Amsterdam, N. Y., assignor to Mohawk Carpet Mills, Inc., Amsterdam, N. Y., a Corporation of New York. Filed June 7, 1932. Serial No. 615,782. 2 Claims. (Cl. 139—407.)



1. The combination with a pile fabric having a heading of a fringe attached to said heading, said fringe comprising a row of relatively large fringe cords interwoven as weft with spaced groups of binder threads of relatively small size as warp to form webs connected by exposed portions of said fringe cords, said webs being substantially wider than the space between them and the fringe cords exposed between said webs being bent to bring one web into face contact with the other, each fringe cord having free ends substantially longer than the width of said webs and passing directly through each web and across the space between said webs, and means for attaching said fringe to the upper surface of said heading, said means passing through both webs and said heading.

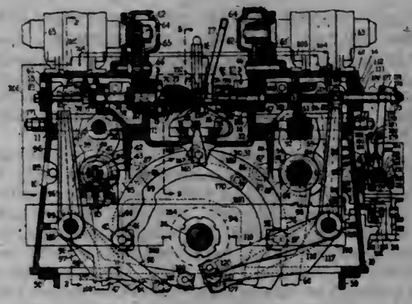
1,899,220. CAUTERIZING INSTRUMENT AND ELECTRODE. FREDERICK CHARLES WAPPLER, New York, N. Y. Filed July 15, 1931. Serial No. 551,030. 1 Claim. (Cl. 219—31.)



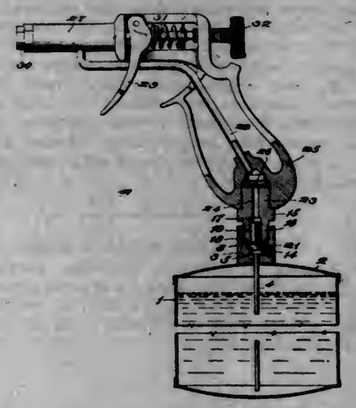
In a cautery electrode, an operative loop, a pair of uninsulated, substantially parallel, spaced, elongated conducting rods supporting said loop at their forward ends, said rods being arranged in close proximity to each other so as to be insertable as a unit into a body cavity, the rear ends of the rods diverging into slightly increased, parallel spatial relationship, and a pair of insulating discs of rigid material engaging said rods near the rear ends of the latter to hold them in fixed, spaced relationship, said discs being arranged in parallel planes perpendicular to said rods and spaced just sufficiently to permit the spaced peripheries of the discs to afford a finger grip.

1,899,221. NUT-FACING MACHINE. WILLIAM L. WARD and WILLIAM D. RIGNEY, Port Chester, N. Y., assignors to Russell Burdsall & Ward Bolt & Nut Co., a Corporation of New York. Filed Nov. 21, 1931. Serial No. 576,484. 18 Claims. (Cl. 10—83.)

1. In a nut-facing machine, the combination with means for simultaneously finishing both faces of a plurality of nuts, of an intermittently reciprocating nut-holder slide having a plurality of sets of nut pockets, means for clamping nuts in said pockets, means controlling said clamping means to release the nuts in different sets of pockets at the end of each stroke of said slide, means for ejecting the finished nuts from said pockets when they are released and feeding unfinished nuts into the empty pockets, and means for intermittently reciprocating said slide to move the clamped nuts into operative relation with said nut finishing means.



1,899,222. MEANS FOR DISPENSING LIQUIDS UNDER PRESSURE. JOHN F. WEBBER, Cleveland, Ohio. Filed Mar. 1, 1929. Serial No. 343,684. 6 Claims. (Cl. 299—95.)

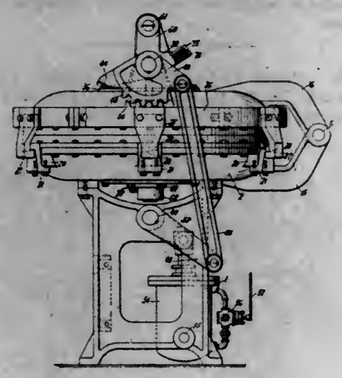


1. The combination with a container in which liquid is held under pressure, said container having a discharge opening closed by a frangible seal, of a spray gun having means for attaching the same to said container adjacent said opening and means for puncturing said seal, said gun and container having cooperating wholly metallic elements which, when brought into engagement as the gun is attached serve to effect a liquid tight joint between said gun and container.

4. The combination with a container in which liquid is held under pressure, of a dispensing gun adapted to be attached thereto, said container having an internally screw threaded socket, at the bottom of which is located a thin wall controlling communication with the interior of the container, and said gun being provided with a correspondingly threaded plug fitting said socket, and means whereby, as said plug and socket are screwed together, the said thin wall is first punctured, and then a liquid tight joint, independent of said screw threads, established between the end surface of said plug and said socket at a point inwardly of the screw threads.

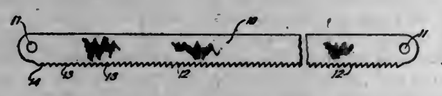
5. As an article of manufacture, a closed receptacle provided with an open, screw threaded socket having

and from one another, locking means for exerting a clamping action about the outer periphery of the mold and additional locking means for exerting clamping action



about the inner periphery thereof, positive connections between the inner and outer locking means, and a common actuating means for the inner and outer locking means.

1,899,212. HACK SAW BLADE. WILLIAM H. SHORTELL, Greenfield, Mass., assignor to Mills Falls Company, Greenfield, Mass., a Corporation of Massachusetts. Filed Aug. 22, 1931. Serial No. 558,732. 5 Claims. (Cl. 143—133.)



1. A saw blade provided with teeth, all having substantially the same pitch and chip clearance opening, a series of said teeth at its entering end having shallower depths than the remainder of the teeth.

1,899,213. CELLULOSE ACETATE COMPOSITIONS CONTAINING OXIMES. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 10, 1932. Serial No. 592,181. 8 Claims. (Cl. 106—40.)

1. A composition of matter comprising an organic ester of cellulose and an oxime selected from the group consisting of acetophenone oxime, diacetyl monoxime, cyclohexanone oxime and furfural oxime.

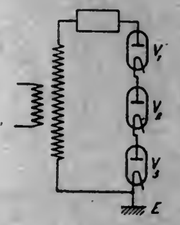
1,899,214. CELLULOSE ORGANIC ESTER COMPOSITION CONTAINING PHENYLETHYL BENZOATE. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 10, 1932. Serial No. 592,182. 7 Claims. (Cl. 106—40.)

1. A composition of matter comprising a cellulose organic ester and phenylethyl bensoate.

1,899,215. CELLULOSE ACETATE COMPOSITION CONTAINING A BROMINATED DIPHENYL ETHER. HENRY B. SMITH and STEWART J. CARROLL, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 10, 1932. Serial No. 592,183. 6 Claims. (Cl. 106—40.)

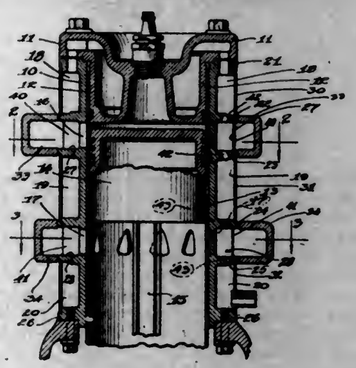
1. A composition of matter comprising an organic ester of cellulose and a brominated diphenyl ether.

1,899,216. ELECTRIC CIRCUIT WORKING WITH HIGH-VOLTAGE. ROBERT STRIGEL, Berlin-Charlottenburg, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed May 13, 1929, Serial No. 362,721, and in Germany May 16, 1928. 4 Claims. (Cl. 250—27.)



1. In an arrangement for obtaining an equal voltage distribution in electric high tension circuits, a plurality of electric discharge tubes connected in series in the circuit, each tube having a surface enlargement at one end of its anode and of its cathode, whereby the self capacity between the anodes and cathodes of said tubes is artificially enlarged.

1,899,217. INTEKNAL COMBUSTION ENGINE. EDWARD S. TAYLOR, Cambridge, and CHARLES F. TAYLOR, Weston, Mass., assignors to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Feb. 25, 1931. Serial No. 518,118. 12 Claims. (Cl. 123—173.)



1. In an internal combustion engine, a cylinder structure including a cylinder and having vertically spaced jacket portions adapted for containing a cooling medium, and separate conduit sections secured to said cylinder for connecting said spaced jacket portions.

1,899,218. HUB REMOVING TOOL. NICHOLAS W. TRAUTNER, St. Paul, Minn. Filed Aug. 23, 1929. Serial No. 387,918. 3 Claims. (Cl. 29—85.)



1. A tool for removing a hub from a shaft fitting within said hub comprising, a claw member on the inner end of the tool adapted to loosely engage the hub and

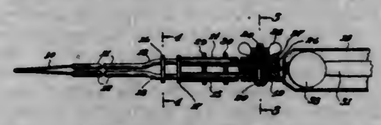
having a side opening permitting lateral movement of the tool relative to said shaft, thrust means mounted on the outer end of the tool for engaging the outer end of the shaft, said thrust means being operable by the exertion of force directed laterally of the axis of said shaft and a keeper completely surrounding the periphery of the shaft to confine the outer end of the shaft against lateral movement free of said thrust means during the operation of the latter.

1,899,219. FRINGE. GARFIELD J. UNDERWOOD, Amsterdam, N. Y., assignor to Mohawk Carpet Mills, Inc., Amsterdam, N. Y., a Corporation of New York. Filed June 7, 1932. Serial No. 615,782. 2 Claims. (Cl. 139—407.)



1. The combination with a pile fabric having a heading of a fringe attached to said heading, said fringe comprising a row of relatively large fringe cords interwoven as weft with spaced groups of binder threads of relatively small size as warp to form webs connected by exposed portions of said fringe cords, said webs being substantially wider than the space between them and the fringe cords exposed between said webs being bent to bring one web into face contact with the other, each fringe cord having free ends substantially longer than the width of said webs and passing directly through each web and across the space between said webs, and means for attaching said fringe to the upper surface of said heading, said means passing through both webs and said heading.

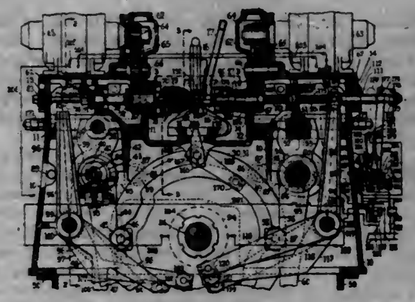
1,899,220. CAUTERIZING INSTRUMENT AND ELECTRODE. FREDERICK CHARLES WAPPLER, New York, N. Y. Filed July 15, 1931. Serial No. 551,030. 1 Claim. (Cl. 219—31.)



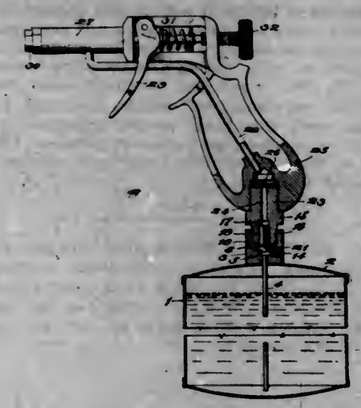
In a cautery electrode, an operative loop, a pair of uninsulated, substantially parallel, spaced, elongated conducting rods supporting said loop at their forward ends, said rods being arranged in close proximity to each other so as to be insertable as a unit into a body cavity, the rear ends of the rods diverging into slightly increased, parallel spatial relationship, and a pair of insulating discs of rigid material engaging said rods near the rear ends of the latter to hold them in fixed, spaced relationship, said discs being arranged in parallel planes perpendicular to said rods and spaced just sufficiently to permit the spaced peripheries of the discs to afford a finger grip.

1,899,221. NUT-FACING MACHINE. WILLIAM L. WARD and WILLIAM D. RIGNEY, Port Chester, N. Y., assignors to Russell Burdsall & Ward Bolt & Nut Co., a Corporation of New York. Filed Nov. 21, 1931. Serial No. 576,484. 18 Claims. (Cl. 10—83.)

1. In a nut-facing machine, the combination with means for simultaneously finishing both faces of a plurality of nuts, of an intermittently reciprocating nut-holder slide having a plurality of sets of nut pockets, means for clamping nuts in said pockets, means controlling said clamping means to release the nuts in different sets of pockets at the end of each stroke of said slide, means for ejecting the finished nuts from said pockets when they are released and feeding unfinished nuts into the empty pockets, and means for intermittently reciprocating said slide to move the clamped nuts into operative relation with said nut finishing means.



1,899,222. MEANS FOR DISPENSING LIQUIDS UNDER PRESSURE. JOHN F. WERDER, Cleveland, Ohio. Filed Mar. 1, 1929. Serial No. 343,684. 6 Claims. (Cl. 299—95.)



1. The combination with a container in which liquid is held under pressure, said container having a discharge opening closed by a frangible seal, of a spray gun having means for attaching the same to said container adjacent said opening and means for puncturing said seal, said gun and container having cooperating wholly metallic elements which, when brought into engagement as the gun is attached serve to effect a liquid tight joint between said gun and container.

4. The combination with a container in which liquid is held under pressure, of a dispensing gun adapted to be attached thereto, said container having an internally screw threaded socket, at the bottom of which is located a thin wall controlling communication with the interior of the container, and said gun being provided with a correspondingly threaded plug fitting said socket, and means whereby, as said plug and socket are screwed together, the said thin wall is first punctured, and then a liquid tight joint, independent of said screw threads, established between the end surface of said plug and said socket at a point inwardly of the screw threads.

5. As an article of manufacture, a closed receptacle provided with an open, screw threaded socket having

therein a puncturable sealing disc permanently secured thereto, said receptacle having a filling port by-passing said disc, and opening into said socket outside of said disk.

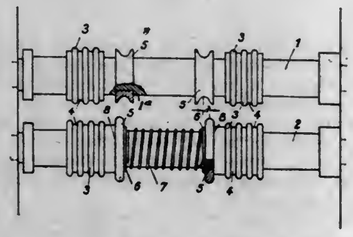
1,899,223. MANUFACTURE OF PURIFIED CELLULOSE MATERIAL FROM HEMP FIBERS. EDWARD CHAUNCEY WORDEN, 1st, Millburn, N. J., assignor to Hanson & Orth, New York, N. Y., a Firm comprising Charles D. Orth, sr., Michael J. Smith, and Charles D. Orth, jr. Filed Apr. 20, 1929. Serial No. 356,890. 4 Claims. (Cl. 92—14.)

1. A process for the production of highly purified alpha-cellulose from *Musa* fiber comprising mechanically disintegrating then heating said fiber in an aqueous solution of 3%–10% sodium hydroxide, 0.5%–8% sodium silicate, and a sulfonated oil until the hemicellulosic and non-resistant cellulosic bodies have been softened and are in condition for removal by washing, lixiviating the mass until products of reaction are removed therefrom decolorizing the resulting purified cellulosic portion with chlorine in the absence of air, washing until neutral, substantially as herein set forth.

1,899,224. MANUFACTURE OF DRIED FOOD PRODUCTS FROM RAW MEAT. WILLIAM JOHN ABBOTT, Toorak, Victoria, Australia, assignor to International Products Proprietary Limited, Melbourne, Victoria, Australia. Filed July 24, 1929, Serial No. 380,769, and in Australia May 11, 1929. 2 Claims. (Cl. 99—11.)

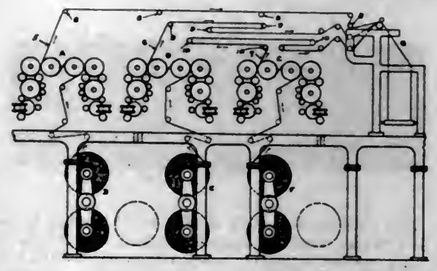
1. A process of producing a dried food product from raw meat, which comprises finely mincing the meat, removing the blood from the capillaries thereof by stirring said finely minced meat in water having a temperature between 59° and 80° F., then separating the blood water from the meat protein substance, and finally immersing and agitating the blood freed meat protein substance in water having a temperature approximately between 130° and 150° F., to liberate the blood freed water content of the meat protein substance.

1,899,225. APPARATUS FOR ROLLING SHEET METAL. JOSEF BÄHNER, Attendorn in Westfalia, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Feb. 20, 1930, Serial No. 430,045, and in Germany July 18, 1929. 2 Claims. (Cl. 153—77.)



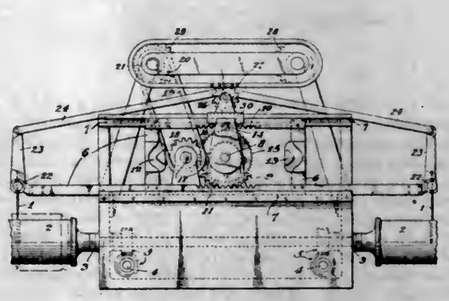
1. Means for rolling two corrugations into sheet metal such as walls of containers, comprising two pairs of rolls arranged to receive the sheet metal, a shaft, one pair of said rolls being provided with grooves and being rigid on said shaft, a second shaft, the other pair of rolls being provided with collars shaped to engage in the grooves of the first-mentioned rolls and being axially movable on the second shaft, the first and second mentioned pairs of rolls being relatively displaced in the axial direction, a spring arranged to force the rolls on the second mentioned shaft into the displaced positions, said shafts being arranged parallel and said pairs of rolls being adapted to be brought into complementary engagement, the rolls provided with collars moving axially in opposite directions against the tension of said spring and entering into the grooved rolls.

1,899,226. WEB LEAD FOR PRINTING MACHINES. HARRY V. BALL, Concord, Mass., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 20, 1931. Serial No. 558,389. 9 Claims. (Cl. 270—5.)



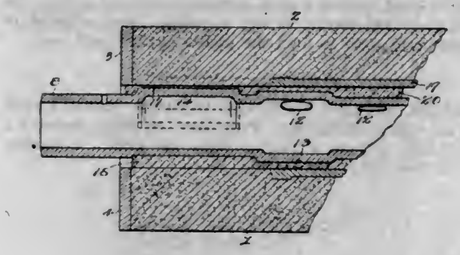
4. In a printing press, a frame, a folder on said frame, a plurality of printing units on said frame arranged at varying distances from said folder, a series of web guides interposed between each unit and said folder, said guides arranged so that the web length between each unit and said folder will be substantially equal.

1,899,227. WINDING MECHANISM. JULIUS BRENZINGER, Fairfield, Conn., assignor to The Max Ams Chemical Engineering Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed June 6, 1930. Serial No. 459,482. 3 Claims. (Cl. 242—43.)



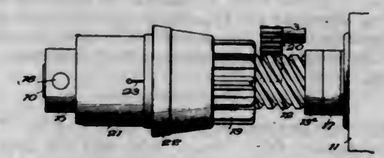
1. Winding mechanism for thread-like material including: a thread-guide, a rotatable spool, a reciprocatory member carrying the thread-guide, opposed racks on said reciprocatory member, a rotatable member, a mutilated gear on said rotatable member to alternately engage the racks, a cam and roll connection associated with said reciprocatory and rotatable members, to complete, reverse and innitiate the stroke of the reciprocatory member, and means to intermittently rotate the rotatable member.

1,899,228. ARBOR FOR PIPE CASTING MOLDS. THOMAS G. BUSH, Jr., Chattanooga, Tenn. Filed Apr. 13, 1932. Serial No. 605,040. 4 Claims. (Cl. 22—172.)



1. An arbor for use in pipe-molds having an exterior pad at its cope-side and a uniform exterior surface at its drag-side.

1,899,229. ENGINE STARTING DEVICE. PHILIP S. CLAUS, Detroit, Mich. Filed Apr. 30, 1932. Serial No. 608,505. 11 Claims. (Cl. 74—7.)

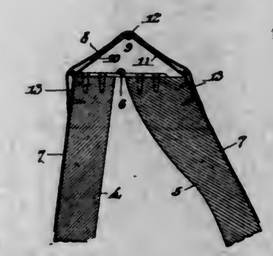


1. In an engine starter drive, the combination of a pair of alined differentially threaded members, the one having threads of greater pitch being rotated by the prime mover, and the one of lesser pitch being rotatable in unison with the threaded member of greater pitch, a drive-transferring pinion carried by the threaded member of lesser pitch and having threads engaged therewith effective, when overrun by the associated threaded member, to project said pinion into drive-transferring engagement with the engine to be driven and effective, when the pinion overruns the associated threaded member, to retract said pinion from said drive-transferring engagement, and a clutch member carried by said threaded member of greater pitch and normally spaced from clutching engagement with said pinion, said clutch member having threads engaged with those of the member by which it is carried and effective, when overrun by its associated member, to overtake, clutch, and travel with said pinion member after the latter has been projected so that by the differentially threaded character of the the threaded members the several parts will be progressively bound together for rotation as a unit.

1,899,230. GLASS MIX FOR OPAQUE CONTAINERS AND METHOD OF MAKING THE SAME. CLARENCE W. CROWELL, Beverly Hills, Calif. Filed Oct. 8, 1930. Serial No. 486,294. 15 Claims. (Cl. 106—36.1.)

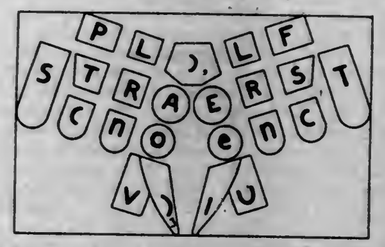
1. In a process of making black glass which will not transmit light into containers made therefrom, the step of adding an opacifier containing carbon, sulfur and copper and lead in a low state of oxidation to a glass mix or batch, said opacifier being added in quantity sufficient to produce an opaque black glass which will not transmit light.

1,899,231. JOINT CLEARER. GEORGE A. DRANE, Catskill, N. Y. Filed Apr. 5, 1932. Serial No. 603,487. 5 Claims. (Cl. 27—19.)



1. In a coffin construction, a body side, a top joined thereto, a continuous flexible liner connecting the interior of the side and top, and means associated between the side and top beneath said liner serving to bridge the joint between the side and top.

1,899,232. SHORTHAND TYPEWRITING OR STENOGRAPHIC MACHINE. MARIUS DEN OUTER, The Hague, Netherlands. Filed May 25, 1931, Serial No. 539,985, and in the Netherlands May 31, 1930. 6 Claims. (Cl. 197—100.)

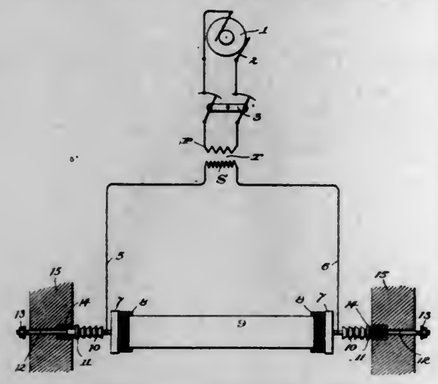


1. A shorthand typewriting machine or stenographic machine wherein the keys of the keyboard for the phonetic symbols are divided into groups, the keys for the initial consonants being situated on the left hand side, those for the final consonants on the right hand side and those for the vowels in the middle, characterized in that the subdivision is so carried out that the keys for the vowels, which are situated in the middle, are adjoined on the right and left hand by a group of three keys arranged one below another for three of the so-called liquid consonants, namely preferably for the consonants L, R, N, on the outer sides of which are arranged the groups of keys for the other necessary consonants, and other keys are provided in front of the vowels.

1,899,233. ELECTROTHERMIC PROCESS OF TREATING HIGH RESISTANCE MATERIAL. IRA H. DERBY, Indianapolis, Ind., assignor to Peter C. Reilly, Indianapolis, Ind. Filed May 8, 1929. Serial No. 361,524. 4 Claims. (Cl. 34—24.)

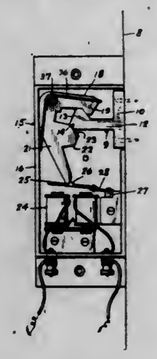
1. The process of treating woody material containing volatile matter, which consists in establishing an electri-

cal potential difference of the order or from 15,000 to 50,000 volts between opposite faces of a body of such ma-



terial, until the temperature is such as to drive off the volatile matter.

1,899,234. CLOSURE FASTENER OPERATOR. CHARLES HAROLD DE WERTH, Bronx, N. Y. Filed Mar. 16, 1932. Serial No. 599,285. 1 Claim. (Cl. 70—52.)



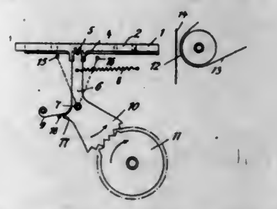
A fastener operator comprising a keeper having an upstanding head beveled on its outer side, a swingable arm having a depending head, a projection underlying the head on the arm, said projection being provided with a beveled portion on the same plane with the bevel of the keeper head, and located inwardly of the innermost side of the head of the arm, and a spring for normally maintaining the arm urged to a position maintaining the projection with its beveled portion opposed to the beveled portion of the head of the keeper and in the path of the keeper.

1,899,235. FLUID FLOW CONTROLLING MECHANISM. JAMES Q. DU PONT, Johnstown, Pa. Filed May 20, 1930. Serial No. 454,129. 8 Claims. (Cl. 303—84.)



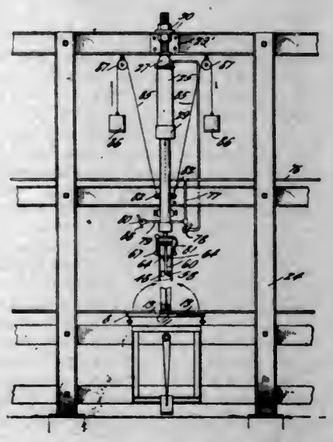
1. In combination with an hydraulic braking system for motor vehicles including a conduit connected at one end to the brake operating motor associated with one of the wheels of the vehicle and at its other end to the cylinder of the pedal operated piston, a valve connected in said conduit adjacent said cylinder, said valve comprising a cylinder and a piston therein, the cylinder being provided with a seat at one end adapted to be engaged by the piston to stop the flow of fluid in said conduit, a by-pass around said piston, a needle valve normally closing said by-pass having a stem screwed into said cylinder at said end, said piston having a spring latch adapted to engage said stem to hold the piston against said seat.

1,899,236. TIME RECORDING DEVICE. ERNST FOERSTER, Glogau, Germany. Filed Dec. 28, 1929, Serial No. 417,155, and in Germany Sept. 19, 1928. 2 Claims. (Cl. 234—36.)



1. A printing device adapted to imprint on a record sheet, comprising a plurality of slidably guided abutment bars, each bearing a distinct time mark, a clock mechanism, a plurality of pivotally mounted members having pivotal engagement with the abutment bars and interrupted engagement with the clock mechanism for actuating an appropriate abutment bar to impinge upon the strip at predetermined intervals, and means for causing the rebound of the abutment bars immediately after impingement upon the strip.

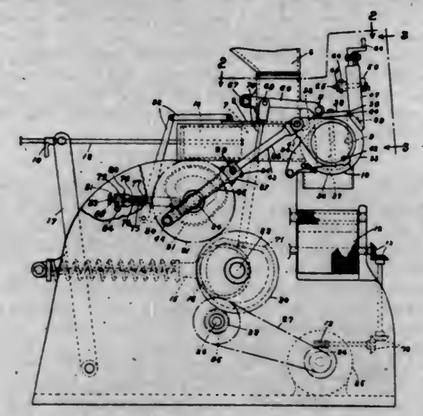
1,899,237. TILE EDGE FORMING APPARATUS. VICTOR J. HULTQUIST, Alcoa, Tenn. Filed Mar. 20, 1931. Serial No. 524,191. 29 Claims. (Cl. 25—104.)



1. In combination, tile handling apparatus for positioning and supporting a plurality of tile in a predetermined relation, and edge forming means for particularly forming similar edges of all said tile while in the tile handling apparatus.

1,899,238. DOUGH DIVIDER. WILLIAM G. KIRCHHOFF, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 19, 1930. Serial No. 469,199. 2 Claims. (Cl. 107—15.)

1. In a dough divider the combination of a chamber member rotatably mounted and movable to receiving and discharging positions and having a row of measuring chambers formed therein, reciprocable plungers in the measuring chambers, means for advancing a substance for entry into the measuring chambers as the plungers move to retracted positions while the chamber member is in the receiving position, means for moving the chamber member to the discharging position, a frame immovably secured to the chamber member and out of alignment with the path of



movement of the plungers so as to offer no obstruction to removal of the plungers in the direction of the frame, and a readily removable stop bar adjustably mounted on the frame and overhanging a part of each plunger to provide for predetermined outward movement of the plungers and which may be removed bodily from its position on the frame for allowing ready removal and cleaning of the plungers.

1,899,239. FRICTION ELEMENT. CHARLES DE LUKACSEVICS, Detroit, Mich., assignor to Lilian Byrne, Detroit, Mich. Filed Dec. 15, 1928. Serial No. 326,160. 1 Claim. (Cl. 106—7.5.)

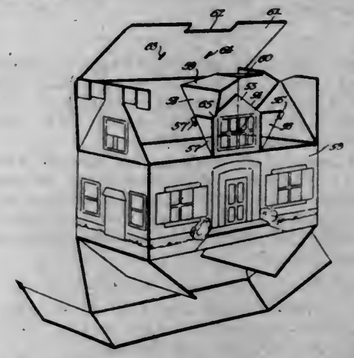
A composition friction element comprising a molded and calcined mixture containing approximately 45% black clay or graphite clay, 25% zirconium oxide, 15% feldspar and 5% each of agalmatolite, magnesite and kaolin.

1,899,240. FRONT AXLE DRIVE. ARTHUR I. MARCUM, Oakland, Calif. Filed June 18, 1928. Serial No. 286,267. 2 Claims. (Cl. 180—22.)



1. A road vehicle comprising a frame, an axle disposed beneath the forward end thereof, dirigible wheels on said axle, a power unit including an internal combustion engine supported on said frame substantially over said forwardly disposed axle, means operatively connecting said power unit to the wheels of said forward axle, a pair of relatively movable dead axles disposed adjacent the rear end of said frame, a pair of non-dirigible wheels on each of said last-named axles and free of connection to said power unit, brake mechanism for each non-dirigible wheel and means to resist the brake reactions on said axles, said means permitting the relative movement of said axles and comprising a V-shaped frame rigidly secured to each axle at the ends of the legs of the V, and a pin connected to said frame by a universal joint, said pin being slidably connected to the bight of said V-shaped frame.

1,899,241. TRANSFORMABLE CONTAINER. WILLIAM S. MARR, Nutley, N. J., assignor to Bakeries Service Corporation, New York, N. Y., a Corporation of Delaware. Filed July 3, 1931. Serial No. 548,660. 5 Claims. (Cl. 46—87.)



1. A container comprising quadrilaterally arranged upright wall members whose upper ends lie substantially in the same plane, one of said members having an extension hingedly connected to its upper end, said extension having a portion adapted to extend flatly across to the opposite wall member and having an end portion foldable along a line parallel to the hinging axis of the extension and relative to the first mentioned portion to lie behind said opposite wall member, said extension being also disposable to position said two portions as the side of a double-sloped roof, and means for retaining the free end of said end portion on the upper end of said opposite side member to sustain the extension in roof simulating position, said means comprising an extension on said opposite wall member engaged in an opening provided in said end portion, the upper portion of said last named extension being foldable to simulate a dormer and having tabs engageable in slots in the underlying roof portion.

5. In an article of the class described, a hollow body portion comprising quadrilaterally arranged upright wall members, one of said members having an extension adapted to assume an upright position and terminating in laterally projecting wings, said wings being disposable in quadrilateral arrangement with their free ends overlapping, and means presenting a slot for the reception of said overlapped ends.

1,899,242. TOOTHBRUSH HOLDER. ALEXANDER MCNAB, Bridgeport, Conn. Filed Mar. 2, 1932. Serial No. 596,185. 9 Claims. (Cl. 248—39.)



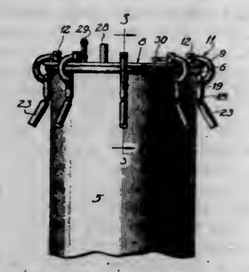
1. In combination, a tooth brush including an elongated handle, a suction cup, means securing said cup on the handle whereby the cup is disposed to face laterally of

the handle adjacent the end thereof, said means preventing rotation of the handle about its longitudinal axis relative to the cup, and said cup adapted to be brought into engagement with a substantially vertical surface whereby to have the cup support the brush in a substantially vertical position.

1,899,243. METHOD OF DISPERSING RUBBER IN WATER. EDWIN B. NEWTON, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Dec. 3, 1929. Serial No. 411,391. 9 Claims. (Cl. 134—17.)

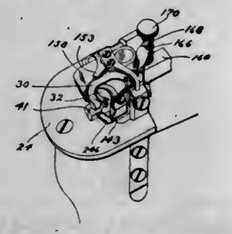
1. The method of dispersing an aqueous medium in rubber as a preliminary to the inversion of the phases and the dispersion of the rubber in an aqueous medium, which method comprises incorporating a water-insoluble soap in the rubber, and working the aqueous medium into the rubber-soap mixture.

1,899,244. PRESSURE TANK AND THE LIKE. JENS A. PAASCHE, Chicago, Ill. Filed July 5, 1929. Serial No. 376,026. 1 Claim. (Cl. 220—55.)



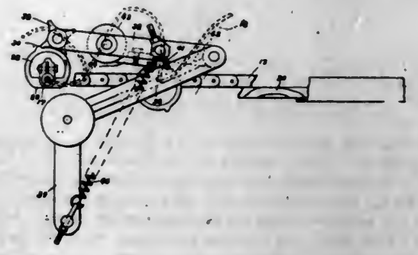
In a device of the class described, the combination of a cylindrical tank having its upper end provided with an outwardly and downwardly facing exterior shoulder, a cover for said tank, a series of blocks secured to said cover relatively close to its periphery, links for said blocks having their upper ends pivotally connected to the respective blocks, said links extending outwardly around the edge of the cover and the shoulder aforesaid, toggle blocks pivotally connected to the lower ends of the links, each toggle block having an upwardly facing pointed portion for engagement with the downwardly facing shoulder and having an inner contacting portion to engage the surface of the tank, the parts being so proportioned that when said portion engages the surface of the tank said pointed portion engages the downwardly facing shoulder at a position outwardly with respect to the line extending between the pivotal connections at the two ends of the link, substantially as described.

1,899,245. FOLDING MACHINE AND METHOD. THOMAS CARLTON ROWEN, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 29, 1923, Serial No. 683,435. Renewed Feb. 11, 1927. 16 Claims. (Cl. 12—55.)



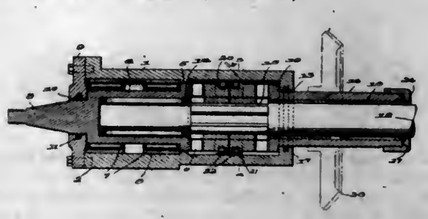
1. The method of folding a strip around the edge of a sheet of material to one face of which, along the said edge, an edge of the strip is secured so that the sheet and the strip extend from the secured-together edges at an angle to each other, the said method comprising bending the margin of the sheet, along the said edge, out of the plane of the sheet in a direction away from the strip, engaging with a member the bent portion of the sheet and the strip at the secured-together edges within the angle between the sheet and the strip, engaging with a member the margin of the sheet near the said edge along the other face of the sheet, applying pressure to one of the members to cause the first-named member to bite into the sheet and the strip at the secured-together edges, folding the unsecured portion of the strip around the secured-together edges, and pressing the folded portion of the strip against the said bent edge and the margin along the said other face of the sheet.

1,899,246. DOUGH PROOFING DEVICE. SIGMUND SCHIFF, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 24, 1931. Serial No. 511,003. 8 Claims. (Cl. 198—153.)



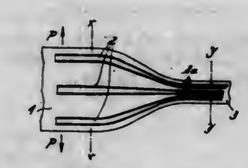
1. In combination a pair of endless chains, means to move the chains in unison through a plurality of substantially parallel paths, rods spacing the chains and mounted for free oscillation therebetween, a tilting ring fixed on each rod, a lever yieldably mounted adjacent the path of said tilting rings, a star wheel mounted on the lever for engaging the tilting wheel and effecting rotary movement of the rod and means on said lever for retaining the tilting ring and its associated rod in a predetermined position during a succeeding period of bodily movement of the said rods and tilting ring.

1,899,247. POWER TAKE-OFF DEVICE. LOUIS J. SCHULTZE, Chenoa, Ill. Filed Apr. 14, 1932. Serial No. 605,295. 1 Claim. (Cl. 74—7.)



In a power take-off device, a casing, driving and driven shafts terminating in said casing, the driven shaft having radial teeth formed on its inner end, a spline on said driving shaft, abutting sliding gear collars having radial annular teeth on their non-abutting faces mounted on said spline, a concentric sleeve with annular radial teeth formed in its inner end retained in said casing and extending outwardly along a portion of said driving shaft, and operating means for moving said abutting gear collars to selectively engage the driving and driven shafts or the driven shaft and the concentric sleeve.

1,899,248. METHOD OF PRODUCING PHOTOGRAPHIC SCREENS. VIKTOR VON GERDANOVITS, Temesvar, Rumania. Filed Nov. 14, 1929, Serial No. 407,265, and in Germany Aug. 9, 1929. 5 Claims. (Cl. 95—81.5.)



1. A method of producing regular line, mosaic and like screens for photographic purposes, and more particularly multi-color screens, consisting in first applying to a temporary carrier of expanded elastic material, filter forming materials consisting of variously colored liquid substances in adjacent and separate disposal in continuously recurring sections, then causing said colored substances to assume a plastic condition, allowing said elastic material to contract to its original size thereby causing said plastic colored substances to contract together with the said carrier and then transferring the screen thus obtained from the said temporary carrier to the carrier proper, furnished with a suitable adhesive to cause the screen to adhere.

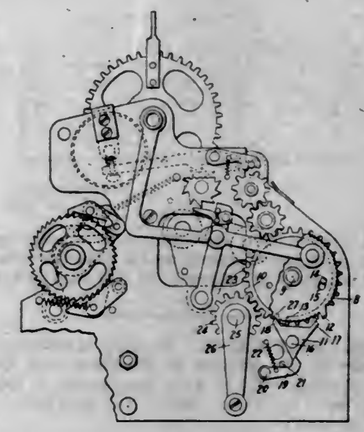
1,899,249. CLAMPING ATTACHMENT FOR REVOLVERS AND PISTOLS. GEORGE F. WALLISER and JAMES E. POOLE, Chicago, Ill. Filed Oct. 1, 1931. Serial No. 566,382. 3 Claims. (Cl. 240—6.41.)



1. A device of the character described, comprising in combination, a mounting plate, a downwardly vertically extending integral jaw at the greater central margin of one side of said mounting plate, a retaining wall extending parallel and vertically downwardly on the opposite side of said mounting plate, at the greater central margin thereof, outwardly extending parallel end arms in said wall, a rock-shaft journaled in said end arms, and a companion jaw, oscillatably and cylindrically mounted on said rock-shaft and adapted to co-operate with said fixed jaw to form a lock, and a downwardly and upwardly movable latch member, mounted upon a central bar, transverse parallel outside closure arms in the retaining wall, said latch member adapted to lock said pair of jaws releasably together.

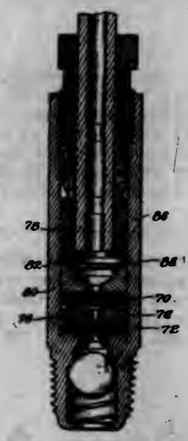
1,899,250. FULL STROKE MECHANISM. ALBERT S. WHEELBARGER and GROVER C. COIL, Dayton, Ohio, assignors to Ohmer Fare Register Company, Dayton, Ohio. Original application filed Oct. 29, 1925, Serial No. 65,532. Divided and this application filed Sept. 26, 1929. Serial No. 395,330. 12 Claims. (Cl. 74—39.)

1. In a machine of the class described, a full stroke mechanism including a shaft, a ratchet secured thereto provided with an enlarged tooth, an actuating gear, a disk secured thereto and provided with an enlarged tooth, a lost motion connection between said disk and said



ratchet, and means whereby said ratchet is locked or unlocked, said means being controlled by said enlarged teeth.

1,899,251. RESISTANCE UNIT. OSCAR U. ZEAK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 24, 1929. Serial No. 334,683. 11 Claims. (Cl. 184—7.)



1. A resistance unit of the class described including a disc-like element having a groove in one flat surface thereof and a part in a plane parallel with said surface co-operating therewith to define a lubricant passageway of relatively high resistance to the flow of lubricant therethrough.

1,899,252. BUFFING WHEEL BLANK PLIES. HARRY ZIMMERMAN, Toronto, Ontario, Canada, assignor to Beulah Belle Zimmerman, Toronto, Ontario, Canada. Filed Sept. 25, 1930. Serial No. 484,461. 4 Claims. (Cl. 51—193.)

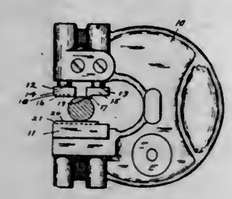
1. A blank for a pleated buffing wheel ply of regular hexagon form, comprising a hexagonal piece of material

having all its angles obtuse angles, two sides of which are the same length as the sides of the regular hexagon



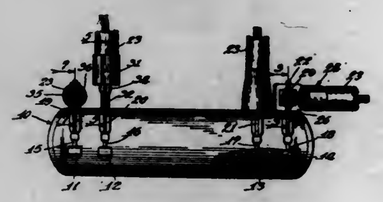
pleated blank and the other four sides of which are equal to each other and of greater length than the sides of the regular hexagon and adapted to be shortened by the pleats.

1,899,253. SNAP GAUGE. ERIK H. ALDEBORGH, Poughkeepsie, N. Y., assignor to Standard Gage Company, Inc., Poughkeepsie, N. Y., a Corporation of New York. Filed Apr. 17, 1931. Serial No. 530,754. 1 Claim. (Cl. 33—143.)



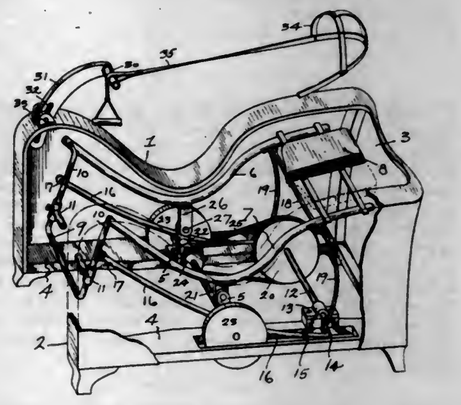
In a gauge of the class described, ganging members comprising an anvil member and two gauging members, raised parallel contact strips formed on said anvil member, raised contact strips formed on one of said gauging members in parallel relation to the contact strips on said anvil, one contact strip formed on the second gauging member at right angles to the contact strips on the first gauging member.

1,899,254. ELECTRICAL CONNECTION. PAUL S. BEAR, Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Mar. 9, 1929. Serial No. 345,693. 8 Claims. (Cl. 173—269.)



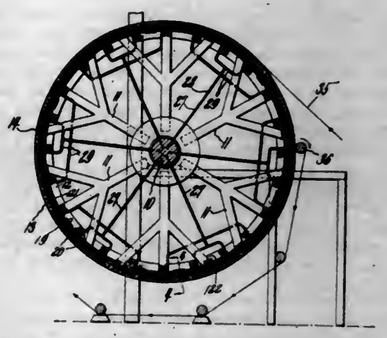
1. An electrical connection for tiltable switches comprising a clip having a main body portion for enveloping and for gripping a substantial portion of the insulation of a flexible conductor, and an extension on said main body portion having a depressed portion through the material of which a comparatively stiff wire of said tiltable switch extends to be fixed thereto whereby a fixed relation is obtained between said conductor and said stiff wire, the conducting wire extending outside of said insulating portion to be fixed to said stiff wire and said extension in a current conducting relation.

1,899,255. EXERCISING MACHINE. JOSEPH D. BELL, San Francisco, Calif. Filed Dec. 24, 1930. Serial No. 504,599. 6 Claims. (Cl. 272—58.)



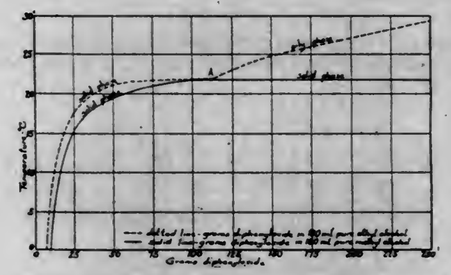
1. In an exercising device, a member to rock on a horizontal axis and to support a person in a sitting position; means on the member actuated by forward movement of the legs of the sitting person to rock the member on its pivotal axis; and a flexible support associated with a stationary part of the device to engage the head of a person sitting on the member to hold the head against rearward movement as the legs are moved forwardly.

1,899,256. DRIER ROLL. THOMAS L. BRANNEN, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 6, 1930. Serial No. 480,033. 2 Claims. (Cl. 34—4.)



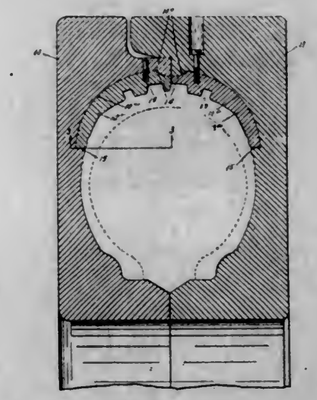
1. A driving roll comprising a plurality of blocks held edge to edge in the form of a hollow cylinder, a rotatable supporting frame within said cylinder, means resiliently connecting said blocks with said frame, means for heating said blocks, and a cylindrical layer of heat insulating material against the inner surface of said cylinder.

1,899,257. PROCESS FOR THE PURIFICATION OF DIPHENYLOXIDE. EDGAR C. BAITTON and WILLIAM R. REED, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 8, 1932. Serial No. 596,558. 5 Claims. (Cl. 260—150.)



1. The process for obtaining substantially pure diphenyloxide which comprises crystallizing diphenyloxide from solution in methyl alcohol.

1,899,258. INTERCHANGEABLE MATRIX MOLD. ALBERT A. BUSH, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 4, 1929. Serial No. 404,542. 8 Claims. (Cl. 18—44.)

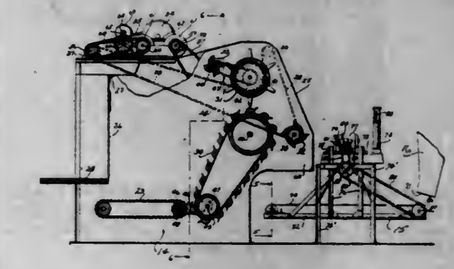


1. In a circular tire curing mold, male and female halves, a ring of tread forming matrix sections received in channels in each of said mold halves, the abutting edges of the sections in each mold half being cut on radial lines so that the various sections hold each other in place, key matrix sections in each of said matrix rings, the edges of said key sections and the matrix sections abutting therewith being cut at an angle to permit the ready insertion and removal of the key sections in the matrix ring, and means for holding said key sections in said matrix rings, thus holding all the matrix sections in the mold halves.

1,899,259. PROCESS OF REFRIGERATION. NIKODEM CARO, Berlin-Dahlem, ALBERT RUDOLPH FRANK, Berlin-Halensee, and RUDOLF WENDLANDT, and THOMAS FISCHER, Piesteritz near Wittenberg, Germany. Filed Feb. 7, 1930, Serial No. 426,785, and in Germany Feb. 8, 1929. 2 Claims. (Cl. 62—175.)

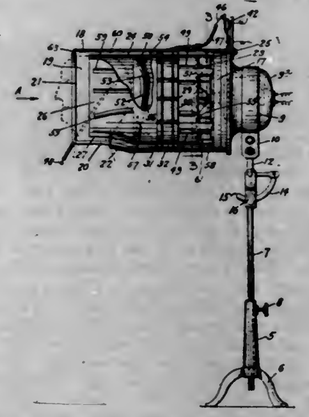
1. A process of cooling nitro compounds, such as nitric acid and nitric oxides, which consists in bringing said nitro compounds into indirect heat exchange with a mass of cold aqua ammonia, and then cooling said aqua ammonia by bringing it into indirect heat exchange with a primary refrigerant.

1,899,260. MATERIAL-HANDLING APPARATUS. ARTHUR L. CLEMENTS, Chicago, Ill., assignor to Dry-Zero Corporation, Wilmington, Del., a Corporation of Delaware. Filed Mar. 20, 1930. Serial No. 437,474. 8 Claims. (Cl. 19—69.)



1. In an automatic weighing apparatus, the combination of a weighing device, a conveyor and drive means therefor mounted on said weighing device, said weighing device registering the net weight of the material on the conveyor, means for feeding material to said conveyor, and means for automatically controlling the feeding means by said weighing device.

1,899,261. HAIR DRIER. LESLIE W. COOLEY and DAMON R. WARD, Denver, Colo. Filed Dec. 16, 1929. Serial No. 414,517. 14 Claims. (Cl. 34—26.)

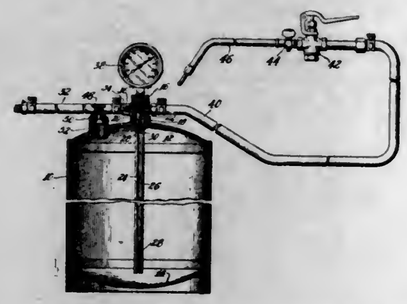


14. A hair drier comprising a shell having an open end to admit the head of a user, a fan in the shell, a heater on the outside of the shell, and means cooperating with the fan to compel air drawn into the shell to move in a closed circulatory path including the heater and the portion of the head of the user inside the shell.

1,899,262. LUBRICANT SPRAYING APPARATUS. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Nov. 20, 1929. Serial No. 408,557. 2 Claims. (Cl. 299—89.)

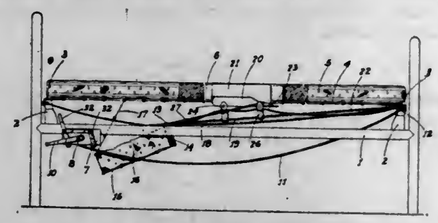
1. In a lubricant spraying apparatus, the combination of a lubricant reservoir, an inlet and a discharge tube de-

pending into said reservoir and terminating adjacent the lower end thereof, a valve pressure fluid connection in communication with the upper end of said inlet tube, a valved discharge nozzle communicating with the upper



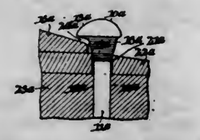
end of said discharge tube, and apertures formed in each of said tubes at a point adjacent the upper ends thereof, the aperture in said inlet tube being small relative to the aperture in said discharge tube.

1,899,263. BED AND BEDPAN COMBINATION. WILLIAM C. ELLIOTT, Modesto, Calif. Filed Aug. 1, 1931. Serial No. 554,433. 9 Claims. (Cl. 5—90.)
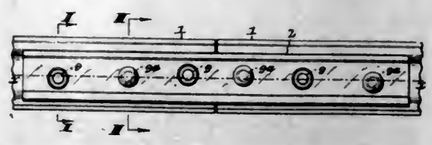


1. In combination with a bed having a mattress provided with an opening therethrough, a mattress-plug to fill the opening, a support for the plug, linkage extending between and connected at one end to one end of the support and at the other end to the mattress at point beyond the corresponding end of the opening a distance substantially equal to the length of the link, the length of the linkage being sufficient to permit the support to be lowered from the opening and then moved lengthwise of the bed in the direction of the linkage when the latter swings down from a horizontal position and about its connection with the mattress as a pivot; and operating means connected to the opposite end of the support to selectively hold the linkage taut and horizontal so that the support is alined with the opening, or to allow the support to be lowered from the opening, and to then move the support lengthwise of the bed and clear of the opening.

1,899,264. TRACK RAIL SPIKE. ROBERT FARIES, St. Davids, Pa. Filed Oct. 10, 1931. Serial No. 568,121. 2 Claims. (Cl. 85—10.)



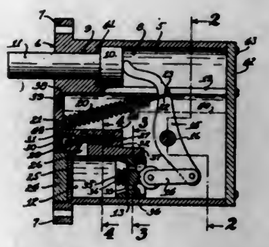
2. The combination with a track rail and a tie plate; of a spike having a parallel sided shank, a head to overhang the base flange of the track rail, and a tapered portion immediately below the head mergent with the shank, adapted, by coaction with the edges of the spike opening in the tie plate, to limit the extent of penetration of the shank into the tie with attendant anchorage of the plate against creeping on the tie, said tapered portion being of a length less than the thickness of the tie plate at the spike opening.

1,899,265. RAIL JOINT. ROBERT FARIES, St. Davids, Pa. Filed Feb. 11, 1932. Serial No. 592,265. 8 Claims. (Cl. 238—243.)



1. A rail joint bar having straight fishing surfaces continuous from end to end and parallel to the longitudinal axis of the bar, and having bolt holes arranged substantially along the arc of a circle with the center bolt holes above the end bolt holes.

1,899,266. DOORCHECK. WALTER F. FOSTER, San Francisco, Calif., assignor to Condor Company, a Corporation of Nevada. Filed June 6, 1931. Serial No. 542,592. 6 Claims. (Cl. 16—84.)

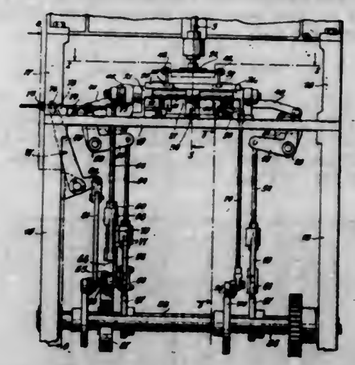


1. A door check comprising a fluid containing shell having greater height than width and adapted for insertion in a door or casing, said shell having a guide barrel in its upper portion and a cylinder in its lower portion, said barrel extending from front to rear of said shell and having a longitudinal slot in its bottom wall, and said cylinder communicating with the interior of said shell; a plunger movably mounted in said barrel and projecting through the front wall of said shell; a piston movable in said cylinder and adapted to circulate the fluid between said cylinder and the interior of said shell; a lever connecting said plunger and said piston, said lever being pivotally mounted within said shell and having its upper end operating through the slot in said barrel and engaging the rear end of said plunger; and means for restricting the circulation of said fluid.

1,899,267. MACHINE FOR AFFIXING OPENING THREADS TO ENVELOPES. CLARENCE N. FULLER, Tonawanda, N. Y., assignor to H. W. Hilliard Co. Inc., Buffalo, N. Y., a Corporation of New York. Filed Nov. 24, 1931. Serial No. 577,064. 17 Claims. (Cl. 93—76.)

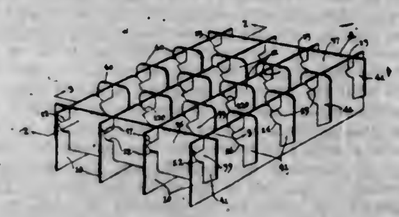
1. The combination with an envelope folding mechanism having a member movable to fold one part of an envelope blank upon another part thereof, of a reciprocating member adapted to carry a portion of a continuous length of thread across the envelope blank in front of said movable member and adjacent the joint between said parts, means for gripping said thread to hold the latter

in such position during the return movement of said reciprocating member, whereby said first mentioned part may be folded upon said portion of thread during the



operation of said movable member and means for severing said portion of thread from the remainder of said continuous length of thread.

1,899,268. EGG TRAY. REYNOLDS GUYER, St. Paul, Minn., assignor to Waldorf Paper Products Company, St. Paul, Minn., a Corporation of Minnesota. Filed Mar. 28, 1930. Serial No. 439,623. 14 Claims. (Cl. 217—33.)



1. An egg tray comprising a plurality of spaced supports, a plurality of slings disposed between said supports and hingedly attached near their upper ends to said supports, the corresponding slings between adjoining supports being connected together.

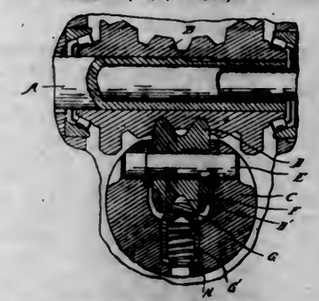
11. An egg tray comprising a plurality of spaced members, a plurality of slings disposed between said members and constructed of a single sheet of material cut to form bottoms with walls bent outwardly therefrom, said walls being cut to form straps bent outwardly therefrom intermediate the edges of said spaced members, said straps being integrally connected to said bottoms at the edges thereof opposite the edges from which said walls issue and to said walls, at localities thereof intermediate the free and attached edges thereof, and means on said walls between said straps for connecting said walls to said spaced members.

1,899,269. TOOL FOR CLEANING TUBES. CARLTON JONES HAKES, Spencer, Iowa. Filed May 23, 1932. Serial No. 613,125. 3 Claims. (Cl. 15—104.16.)



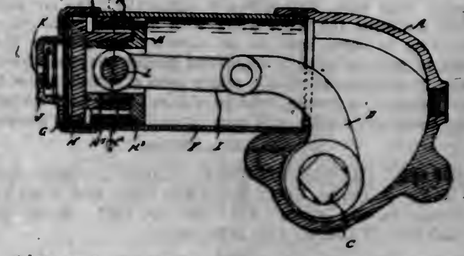
1. A tube cleaner comprising a hollow tool body having at one end a circular cutting edge, a series of annular ribs formed on the outer surface of the body with their edges shaped to form cutters, the body of the tool being formed with longitudinal slots extending from its cutting end toward its other end, and arranged with the slots communicating with the spaces between the said ribs and whereby fluid pressure on the interior of the tool may pass outwardly through the slots and through the spaces between the ribs to remove scale therefrom.

1,899,270. STEERING GEAR. EDWARD P. HAMMOND, Detroit, Mich., assignor to Marles Steering Gear Company of America, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 8, 1931. Serial No. 561,787. 3 Claims. (Cl. 74—79.)



1. In a steering gear, the combination with a roller tooth worm gearing constructed to be slightly outside of the angle of friction as to stresses originating in the ground wheels, of a friction shoe engaging the roller tooth to yieldably resist rotation thereof.

1,899,271. SHOCK ABSORBER. CHARLES F. HAMMOND, Jr., Detroit, Mich., assignor to Gemmer Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed May 25, 1931. Serial No. 539,940. 5 Claims. (Cl. 188—88.)

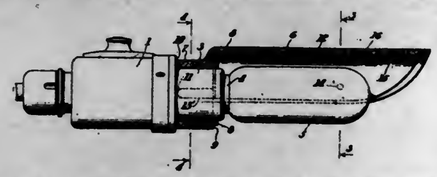


1. In a shock absorber, the combination with a cylinder, of a piston therein having a body portion and an annular sealing portion with a lost motion connection therebetween, said annular sealing portion having a frictional engagement with the wall of the cylinder to hold the same from movement by differential air pressure on the opposite ends thereof, and also having a sealing engagement with said body portion alternatively at its opposite ends and an actuating connection for reciprocating the body portion of said piston whereby on reversal of direction of movement the seal between the same and said annular portion is broken to permit equalization of pressures on opposite sides thereof.

1,899,272. ELECTRIC LAMP SHADE. HJALMAR HERTZ, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 11, 1930. Serial No. 487,933. 8 Claims. (Cl. 240—110.)

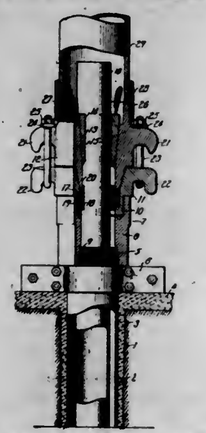
1. The combination with an electric lamp and lamp-socket, of a lamp-shade having a tubular shank fitted to

said socket, said shank having recesses extending longitudinally thereof, and a thin sheet-metal liner disposed



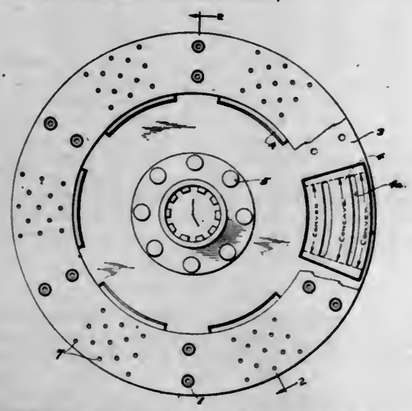
within and in spaced relation to said shade and having tongues at one end entering said recesses.

1,899,273. CASING SUPPORT AND PACKING HEAD. FRANK J. HINDERLITER, Tulsa, Okla. Filed June 12, 1930. Serial No. 460,713. 3 Claims. (Cl. 166—14.)



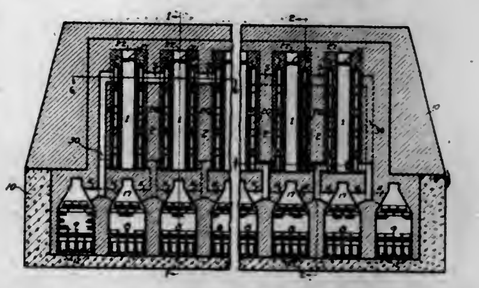
1. A combination casing ring and elevator, comprising a casing ring body and laterally extending lugs on said body undercut for cooperation with hoisting bails when the ring is being used as an elevator and having flat tops to have a U bolt connecting means snapped thereover, in combination with a casing head of a well, and a U bolt connecting means, said body when used as a casing ring being anchored to said head by said connecting means.

1,899,274. CLUTCH MEMBER. ARLEY U. HOOK and EDWIN J. DUMM, Upper Sandusky, Ohio; said Hook assignor to said Dumm. Filed Mar. 19, 1931. Serial No. 523,710. 1 Claim. (Cl. 192—107.)



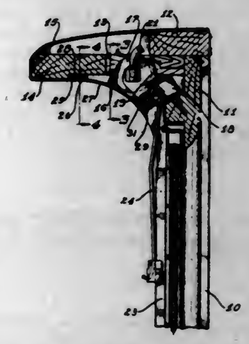
A clutch member comprising a disk having a series of openings around the same, facings riveted at intervals to opposite sides of the disk between said openings, and a flat spring plate loosely confined in said openings between the facings, each spring plate being separate from the disk, and having slots and oppositely bowed portions separated by said slots and pressing both facings outwardly from the disk.

1,899,275. BY-PRODUCT COKE OVEN. CHARLES HUMPHREY HUGHES, Hackensack, N. J., assignor to Semet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 13, 1926. Serial No. 129,051. 4 Claims. (Cl. 202—146.)



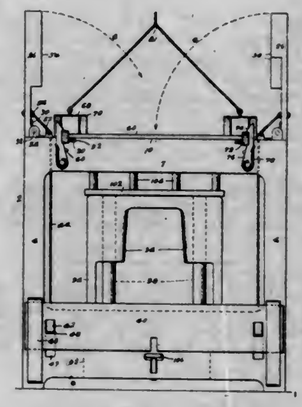
1. A battery of by-product coke ovens comprising a series of alternate coking chambers and heating walls therefor arranged side by side in a row, each of said heating walls comprising series-connected horizontal combustion flues, a regenerator beneath each coking chamber connected to the heating flues on opposite sides of each coking chamber, an air conduit leading into each regenerator, each air conduit being independent of and having no common connection with the other air conduits, a single waste gas flue positioned at one side of the row of ovens, a connection leading from each of the regenerators and communicating with said waste gas flue, means for closing one set of alternate air conduits and for opening the connections in said set to the waste gas flue and means for opening the other set of alternate air conduits and for closing the connections of said other set to the waste gas flue.

1,899,276. MOTOR VEHICLE. ARCHER L. KNAPP, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 25, 1929. Serial No. 349,543. 7 Claims. (Cl. 296—84.)



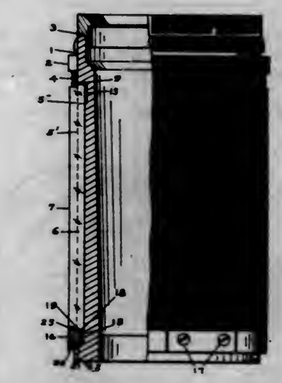
7. An automobile embodying therein a windshield, a top, means providing a hollow visor associated with said top in advance of the windshield and including a bottom wall having an opening therein, and a plate closing said opening and adapted to conceal within the visor and permit access to an actuator for a wiper blade associated with the windshield.

1,899,277. MOLDING MACHINE. FRANK E. KRAFT, Kansas City, Mo. Filed May 19, 1930. Serial No. 453,796. 4 Claims. (Cl. 25—41.)



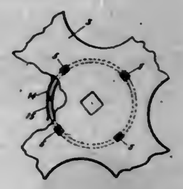
1. A machine of the character described having a top portion with a matrix therein, a filler gage having an opening and slidably mounted upon said top portion so that it may be slid forwardly to bring its opening into registry with the matrix or slid backwardly to cover the matrix, a facing gage having an opening for registry with the matrix, and arms fixed at their forward ends to the facing gage and hingedly connected at their rear ends to the top portion so that said facing gage may be lowered upon the top portion or swung upwardly out of the way so that filler gage may be advanced into position over the matrix.

1,899,278. NEEDLE BED. ROBERT H. LAWSON, Pawtucket, and AUGUSTIN GAGNÉ, Central Falls, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Sept. 16, 1929. Serial No. 392,852. 11 Claims. (Cl. 66—115.)



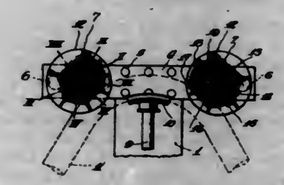
1. A slotted needle bed, needle walls therein, the needle bed at one end thereof being undercut to provide a recess and the walls each being reduced at one end and the said ends seated in the recess, the needle bed adjacent to the recess being grooved in a direction transverse to the slots, slotted ring sections seated within the mentioned groove, the slots therein being in alignment with and supplementing the slots in the needle bed.

1,899,279. PHOTOGRAPHIC FILM REEL. LEW W. LESSLER, Johnson City, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Mar. 12, 1931. Serial No. 522,008. 2 Claims. (Cl. 242—74.)



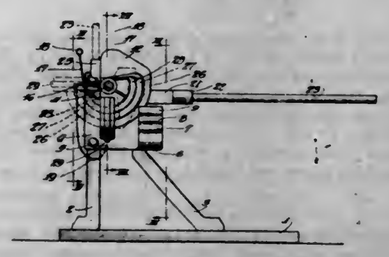
1. A reel for motion picture film comprising a core having spaced flanges secured thereto the ends of said core terminating in spaced relation to provide a single slot, and hooks provided on the ends of said core adjacent each of said flanges and in alignment with the perforations in a film to be wound on said core, the hooks on one end extending in one direction and those on the other end extending in the opposite direction.

1,899,280. PIPE BENDING MACHINE SUPPORT. GUSTAVE LIDSEEN, Chicago, Ill. Filed Mar. 30, 1931. Serial No. 526,194. 2 Claims. (Cl. 153—38.)



1. In a pipe bending machine, a rotatable pipe support comprising a roller having a pair of upstanding annular flanges with opposed curved inner faces defining a concaved channel to receive pipe to be bent on said roller, said flanges being spaced apart in stepped increasing relation to accommodate pipes of increasing diameter, said flanges also defining a channel of stepped increasing depth coincident with their stepped increasing spaced apart relation.

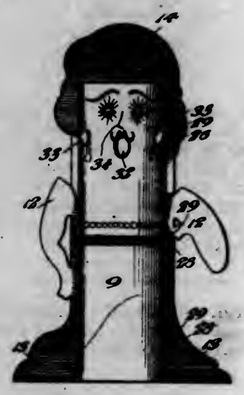
1,899,281. PIPE BENDING APPARATUS. GUSTAVE LIDSEEN, Chicago, Ill. Filed Apr. 2, 1931. Serial No. 527,115. 9 Claims. (Cl. 153—40.)



1. An article bending machine comprising a mounting plate, a pipe supporting arm secured thereon and having a plurality of pipe receiving sockets of different sizes

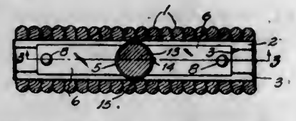
formed therein, a sheave block rotatably supported on said mounting plate and having a plurality of pipe receiving grooves of different sizes formed therein, a pipe supporting cradle removably engaged on said sheave block and having a plurality of pipe receiving sockets of different sizes therein, and means for rotating said sheave block to bend an article engaged in the machine.

1,899,282. METHOD OF AND DEVICE FOR ADVERTISING. CHARLES A. LONG, Jr., Haddon Heights, N. J. Filed Dec. 29, 1931. Serial No. 583,615. 2 Claims. (Cl. 40—126.)



1. An advertising device for producing an animated representation of the object advertised, comprising a back blank, a foldable easel for said blank comprising a portion contiguous with said back blank, a portion deflectable at an angle to said body blank and means for locking the deflectable portion in its operative position with respect to said blank, a front blank securable to said back blank, said front blank having indicia thereon and having portions cut out therefrom to represent the characteristic features of any animal in the likeness of which the object advertised is to be represented, and tabs on said front blank adapted to engage slots in said back blank for securing said blank in assembled relation, said back blank being formed to coact with said front blank in effecting the desired animated representation.

1,899,283. MOP HEAD. HENRY J. LORANO, St. Louis, Mo. Filed May 10, 1930. Serial No. 451,291. 1 Claim. (Cl. 15—229.)



A mop head comprising a mop and a holder therefor formed as a unitary structure, said holder having clamping members applied to opposite sides of the mop, rivets extending through the mop and securing said clamping members permanently together, the clamping member on the upper side of the mop consisting of a split ferrule having integral arms projecting at right angles from opposite sides of the lower end thereof.

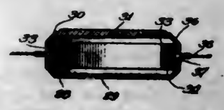
1,899,284. DISPLAY DEVICE. MITCHELL S. MANHARD, San Francisco, Calif. Filed Apr. 1, 1932. Serial No. 602,511. 2 Claims. (Cl. 40—4.)

1. An advertising device of the class described comprising a strip of pliable material adapted to be folded into a truncated cone to rest upon the shoulder of a bottle, the ends of said strip being provided with interlocking means comprising tongues extending from and projecting in the plane of the strip, arcuate slits disposed



between said tongues and the strip proper, said slits being designed to interfit and said tongues to lay flat against said cone in a vertical plane one above the other.

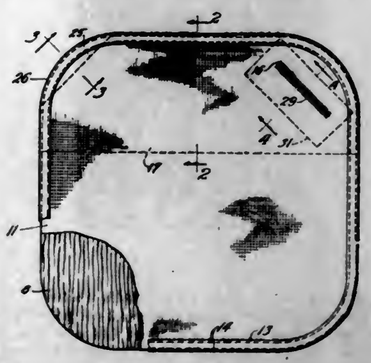
1,899,285. STRAP WATCH. ARTHUR E. MANHEIMER, Chicago, Ill., assignor, by mesne assignments, to Lug-Less Watch Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 16, 1929. Serial No. 407,648. 11 Claims. (Cl. 58—88.)



1. A watch case including a case body and a cover therefor, said body having a recess in the margin thereof beneath said cover, a strap having a shouldered end portion disposed in said recess, and means associated with said body and cover and engaging the shoulders of said portion to prevent dust entering between said recess and cover.

3. In a connection of the class described, a watch case including a case member, an attaching member therefor, one of said members having a recess and the other having a portion fitting in said recess, and means on one of said members for constricting said recess to prevent separation of said members by movement of the other member through the constriction of the recess, said means being readily removable to allow separation of said members.

1,899,286. CONTAINER FOR CHEMICAL HEATING COMPOSITION. GLENN B. MEAGHER, Chicago, Ill., assignor to The Kendall Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 1, 1931. Serial No. 566,273. 11 Claims. (Cl. 150—1.)

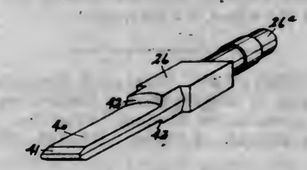


1. A container for a finely divided chemical heating mixture having an opening in a wall thereof through which water may be introduced, and a flexible, self-closing conduit disposed within the container for conducting water into the mixture, said conduit, when closed, serving to obstruct passage of particles of said mixture to said opening.

1,899,287. PROCESS FOR THE EXTRACTION OF SUGAR FROM SUGAR JUICES. ADAM MEIRO, Brussels, Belgium. Filed Jan. 30, 1931, Serial No. 512,495, and in France Aug. 26, 1930. 7 Claims. (Cl. 127—61.)

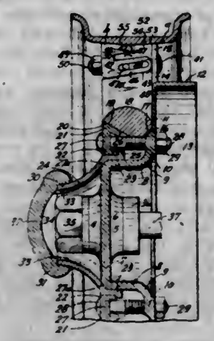
1. A process for extracting sugar, comprising the steps of evaporating a sugar juice in a non-saponifying oil having a boiling point higher than the boiling point of sugar juice maintaining the mixture of oil and juice in a state of emulsion until the coagulation and crystallization of the sugar and non-saccharine parts takes place and separating them from the oil.

1,899,288. MEANS FOR FORMING FORKED HEADS ON METAL BARS. ABRAM METCALF, Hammond, Ind. Filed Sept. 19, 1929. Serial No. 393,738. 4 Claims. (Cl. 78—60.)



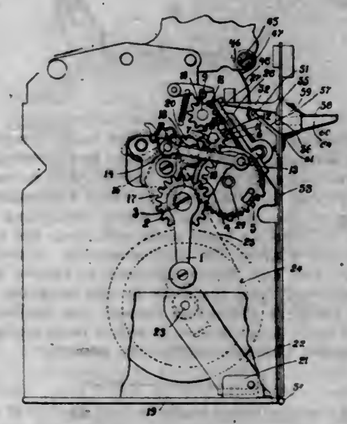
1. The combination with a die having a die impression and guide ways extending along the opposite sides of said impression, of an I-shaped edge plunger operable in said die impression and guide ways, the center portion of said plunger forming the working element thereof and the side portions of said plunger forming guide elements operable in said guide ways.

1,899,289. WHEEL. PHILIP M. MILLER, Youngstown, Ohio, assignor to Miller Devices Inc., New York, N. Y., a Corporation of New York. Filed Jan. 24, 1930. Serial No. 422,092. 9 Claims. (Cl. 301—6.)



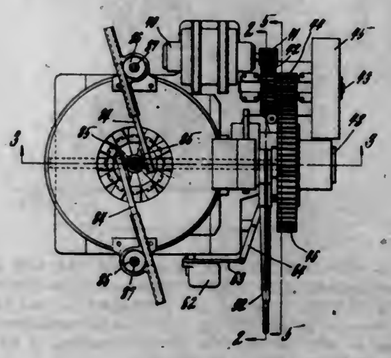
8. A cast metal vehicle wheel assembly comprising an integrally-cast spider member formed free of a hub and having a relatively large open central area to facilitate casting and lighten the wheel, an integrally-cast hub and brakedrum formed with a radially-extended cup-shaped portion from the center of which the hub barrel is transversely extended, said portion serving as a support for the spider member and providing an open central area around the hub barrel to thereby reduce the amount of metal otherwise necessary in the wheel and form a ventilating and heat-dissipating chamber, a shell member for closing off the hub barrel and cup-shaped portion from exterior view and completing the symmetry of the wheel, and means for locking the spider member and shell in assembled position on the integral hub and brakedrum.

1,899,290. CHECK EJECTING MECHANISM. WILLIAM LEONARD PADEN, Dayton, Ohio, assignor to Ohmer Fare Register Company, Dayton, Ohio. Filed May 29, 1930. Serial No. 457,272. 5 Claims. (Cl. 271—72.)



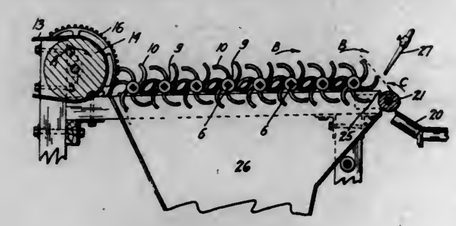
1. In a check ejecting mechanism, means to bend the forward end of the check downwardly so as to elevate the rear end thereof, and means to engage the elevated end of the check and project the check forwardly.

1,899,291. MECHANISM FOR SQUEEZING TUBE ENDS. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed July 8, 1930. Serial No. 466,441. 4 Claims. (Cl. 93—36.)



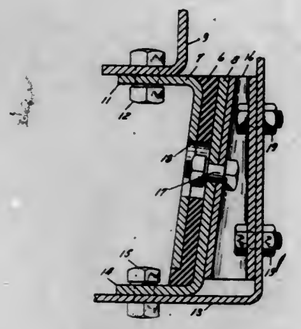
1. Mechanism of the class described comprising a mandrel adapted to receive the end portion of a tube, means for expanding said mandrel within said tube, a circular series of pressure fingers adapted to be moved against the outer surface of the tube, means for moving said fingers simultaneously to their work-engaging position in predetermined timed sequence to the expansion of said mandrel, and means for automatically turning the tube on its mandrel after each application of pressure.

1,899,292. SCREENING DEVICE. GEORGE W. RIENKS, Denver, Colo. Filed Nov. 11, 1929. Serial No. 406,456. 16 Claims. (Cl. 209—12.)



1. Apparatus for screening sugar beets, comprising a movable screening element, movable in a direction opposite to that of said screening element, and movable constantly in one direction only to effect a propulsion and screening of the beets, an auxiliary separating element disposed to intercept beets discharged from the screening element and adapted for the separation of trash from the beets, and one hopper disposed to receive dirt and trash separated from the beets by the screening element and the auxiliary separating element, the auxiliary separating element being adapted to deliver beets received from the screening element, outside the hopper.

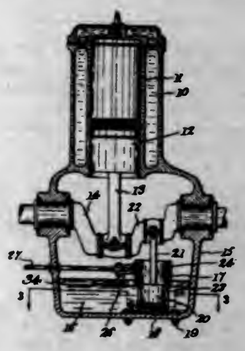
1,899,293. VIBRATION INSULATOR. ISAAC W. ROBERTSON, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 22, 1930. Serial No. 477,013. 3 Claims. (Cl. 248—14.2.)



3. A vibration insulator comprising top and bottom plates adapted to be mounted at an angle to the vertical and horizontal, a rubber pad vulcanized to and between said top and bottom plates, a horizontal attaching flange on one of said plates, said flange extending at an angle to the plate on which it is formed.

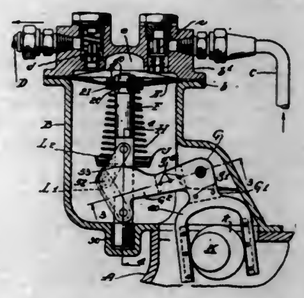
1,899,294. HYDRAULIC BRAKE FOR AUTOMOBILE ENGINES. CLYDE A. ROEDER, Omaha, Nebr. Filed July 20, 1932. Serial No. 623,677. 8 Claims. (Cl. 188—99.)

1. A brake mechanism for vehicles having an internal combustion engine with an oil sump, a brake cylinder communicating with the oil sump for normally receiving oil therefrom and returning oil to the sump, a piston in said cylinder connected to a movable part of said engine for operating the cylinder to pump the oil back and



forth from the sump, and means for checking the passage of oil between the sump and the cylinder for retarding operation of the piston and the engine.

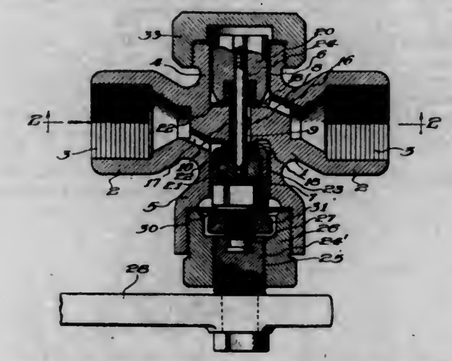
1,899,295. FUEL PUMP. WILLIAM H. SCHULZE, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Dec. 10, 1927. Serial No. 239,043. 2 Claims. (Cl. 103—38.)



1. A pumping device comprising a casing having two chambers, the first connected at one side for fluid inflow and outflow, and having a movable wall at the other side adapted for limited movement without opening the chamber and partitioning the first chamber from the second; a plunger connected to said movable wall for positive movement of said wall and plunger together in both directions, and journaled at the other end in the wall of the second chamber for guidance in its reciprocation with said movable wall member; a lever in the second chamber fulcrumed on the wall thereof, and means for giving said lever reciprocatory movement; operating connections between the lever and the plunger arranged for affording lost motion between the lever and the plunger, and a spring reacting between the movable wall and the lever for relative movement of said parts through the lost motion range of said connection between the lever and the plunger.

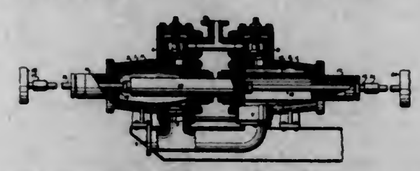
1,899,296. VALVE. EDWARD P. STEIN, Chicago, Ill., assignor to The Bastian-Blessing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 17, 1929. Serial No. 386,508. 3 Claims. (Cl. 277—13.)

1. A two-way valve comprising a body having two axially aligned valve chambers therein, a division wall between said chambers having a passage therein extending between said chambers, said division wall having an outlet port therein communicating with said passage, axially aligned bosses on said body extending substantially at right angles to the axial extent of said valve chambers, said body having a bore therein extending between one of said bosses and one of said valve chambers and having another bore therein extending between the other of said bosses and the other of said valve chambers, a valve unit comprising a valve member in each chamber, means extending through said passage and connecting said valve members for movement in unison, a removable cap closing the end of one of said valve chambers, a diaphragm for closing the end of the other of said chambers, a threaded bushing for retaining said diaphragm in position, means connecting said valve unit to said dia-



phragm, a screw member mounted in said threaded bushing and connected to said diaphragm, and a handle connected to said screw member and adapted to move said screw member to move said valve unit whereby said valve members will be moved in unison into a position wherein they are disposed to close communication between one of said bosses and said outlet port and to open communication between the other of said bosses and said outlet port whereby said handle may be moved to move said valve unit whereby communication will be opened between the one of said bosses previously out of communication with said outlet port and will be closed to the other of said bosses previously in communication with said outlet port.

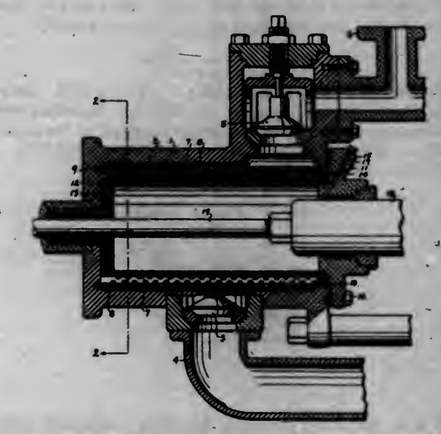
1,899,297. PUMP. JAMES S. ABERCROMBIE, Houston, Tex., assignor to Stephens Pump Company, Round Rock, Tex., a Corporation of Delaware. Filed Jan. 15, 1932. Serial No. 586,908. 4 Claims. (Cl. 103—10.)



1. The combination of a pair of power means; a pump between said power means and having a piston, and a pair of piston rods connected to and extending in opposite directions from said piston toward said power means; and couplings to operatively and detachably connect each of said power means to the rod adjacent thereto, so that said power means may be used successively and simultaneously to operate said pump.

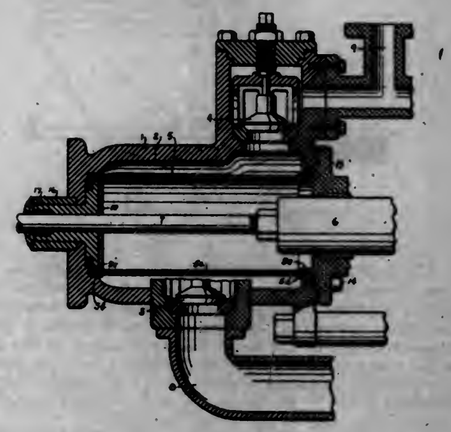
1,899,298. PUMP. JAMES S. ABERCROMBIE, JOSEPH A. TENNANT and HERBERT ALLEN, Houston, Tex., assignors, by direct and mesne assignments, to Stephens Pump Company, Round Rock, Tex., a Corporation of Delaware. Filed Jan. 15, 1932. Serial No. 586,906. 1 Claim. (Cl. 103—44.)

In a pump: a chamber having inlet and exhaust ports; a hollow expansible member in said chamber and extending substantially from one end to the other; a tubular, perforated, and substantially rigid member in said chamber, extending substantially from one end to the other, and surrounding said expansible member to limit the expansion thereof; means to seal one end of said expansible member to one end of said chamber; the other end of said expan-



sible member having an external annular flange; the adjacent end of said rigid member having an internal annular flange; said flange of said expansible member being clamped between said flange of said rigid member and the adjacent end wall of said chamber so that said expansible member is sealed to said end wall and said rigid member is held in place.

1,899,299. PUMP. JAMES S. ABERCROMBIE, JOSEPH A. TENNANT and HERBERT ALLEN, Houston, Tex., assignors, by direct and mesne assignments, to Stephens Pump Company, Round Rock, Tex., a Corporation of Delaware. Filed Jan. 15, 1932. Serial No. 586,907. 5 Claims. (Cl. 103—44.)



1. A pump having a chamber; inlet and outlet means for said chamber; a pumping member in said chamber and having a tubular, flexible rubber body; inner and outer rigid metallic rings between which one end of said body is clamped, said outer ring being substantially L-shaped in cross section and extending inwardly to form an internal annular flange; inner and outer rigid metallic

rings between which the other end of said body is clamped, the inner ring of said latter rings being substantially L-shaped in cross section and extending outwardly to form an external annular flange; said flanges being capable of resisting relatively great crushing forces; means to clamp said flanges to the end walls of said chamber; and means to expand and contract said member to draw fluid into said chamber through said inlet means and to force it out of said chamber through said outlet means.

1,899,300. DETACHABLE CLEAT. WILLIAM H. ALBEE, Marlboro, Mass., assignor to Koehler Manufacturing Company, Marlboro, Mass., a Corporation of Massachusetts. Filed Dec. 18, 1928. Serial No. 326,761. 8 Claims. (Cl. 36—59.)



1. A device of the character described comprising a base adapted to be secured to the bottom of a shoe, said base having a screw threaded socket therein, a tapered cleat, and a collar in which the lower part of said cleat is held, said collar being internally tapered to grip the tapered surface of said cleat while leaving the greater part of the cleat projecting beyond the collar and being externally screw threaded to screw into said socket, the collar being constructed for the application thereto of a tool to screw it into or out of said socket.

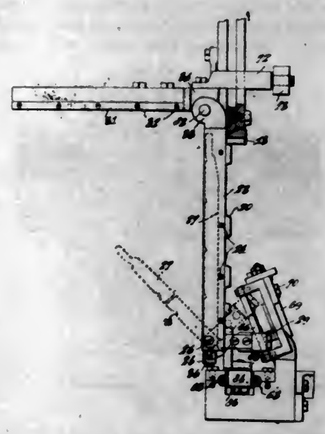
1,899,301. PRESSURE SPRAY ATTACHMENT FOR TOOTHBRUSHES. YERVANT H. BABASIN, Vernon, Tex. Filed Feb. 27, 1932. Serial No. 595,622. 8 Claims. (Cl. 15—186.)



1. An attachment for a tooth brush comprising an oblong frame of hollow material providing passages and having openings in the side portions thereof, straps across the frame to rest on the head of a tooth brush, a plate adapted to secure the brush handle attached to one end of the frame to extend along the handle of the tooth brush, a connection including a valve having a conduit leading to said one end of the frame and supply means connected to the frame and to the valve connection.

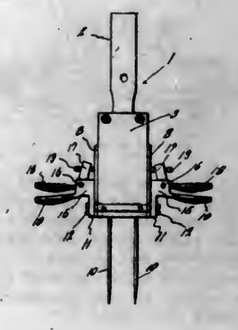
1,899,302. WAFER BAKING MACHINE. JAMES BALTON, Baltimore, Md., assignor to Joseph Shapiro, Baltimore, Md. Filed Dec. 10, 1931. Serial No. 580,167. 18 Claims. (Cl. 107—58.)

3. In wafer baking machines, an endless carrier, a set of baking units mounted thereon and each comprising an upper and a lower baking plate hinged together, means to open said plates apart and close them together again, means to deposit batter between the opened plates, means to heat said plates, and means to discharge the baked wafers from between the opened plates, said discharging



means including a wafer stripping device for each unit and cam tracks to actuate said stripping devices, said stripping devices each including provisions for interlocking with the baked wafers to hold them to one of the baking plates of each unit until the other plate of that unit has freed itself from the wafer.

1,899,303. NEEDLE HOLDER FOR SEWING MACHINES. FIORINDO BASSO, Baltimore, Md. Filed Mar. 22, 1932. Serial No. 600,521. 1 Claim. (Cl. 112—221.)

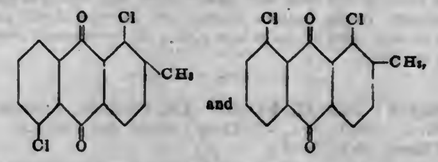


A needle holder for sewing machines comprising a supporting member attachable to the sewing machine and having a plurality of slideways therein, slides adjustably mounted in the slideways, said slides having sockets therein for the reception of the needles, the inner walls of the slideways having vertically spaced sockets therein, the opposed walls of the slideways having grooves therein,

ribs on the slides engaged in the grooves, brackets mounted on the slides, common means for securing the brackets and the needles on the slides, spring-pressed detents slidably mounted in the slides and engageable selectively in the sockets for releasably securing the needles in operative or inoperative position, said detents including reduced portions, and bifurcated bell crank levers pivotally mounted on the brackets and operatively engaged with the detents for disengaging said detents from the sockets, the bifurcations of the bell crank levers straddling the reduced portions of the detents.

1,899,304. DICHLORO-METHYL-ANTHRAQUINONES AND PROCESS OF MAKING SAME. OTTO BAYER, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 17, 1931, Serial No. 516,505, and in Germany Feb. 22, 1930. 1 Claim. (Cl. 260—57.)

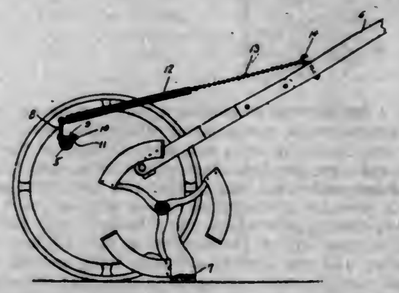
As new articles of manufacture the dichloro-2-methyl-anthraquinones corresponding to the formulæ:



and

which articles represent light yellowish crystals soluble in organic solvents, sintering at 123–130° and melting at 130–140°.

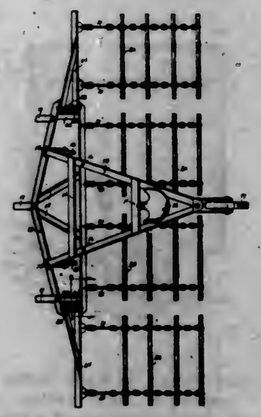
1,899,305. LAWN-MOWER ATTACHMENT. WILLIAM M. BLEY, Round Grove, Ill. Filed Oct. 31, 1931. Serial No. 572,414. 1 Claim. (Cl. 56—249.)



An attachment for a lawn mower including a handle, a rotary cutter reel and a bumper bar located in front of the reel and slightly below the horizontal plane of the top part of the reel, comprising a U-shaped bracket having one limb longer than its other, and said bracket fitting over the bar with its limbs extending upwardly therefrom, a bolt passing through an intermediate portion of the long limb and through the upper end of the short limb for clamping the bracket to the bar, a spring connected to the upper end of the long limb, a hook on the handle, and a chain connecting the spring with said hook.

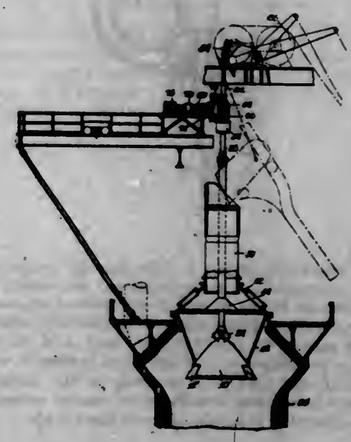
1,899,306. EARTH CONDITIONING IMPLEMENT. GLENN R. BOTNEN, Gilman, Iowa. Filed Aug. 8, 1931. Serial No. 554,797. 8 Claims. (Cl. 55—91.)

1. In a device of the class described, a frame, a second frame secured to said first frame and extending rearwardly and downwardly, wheels for supporting said frames, a plurality of harrow sections secured to said



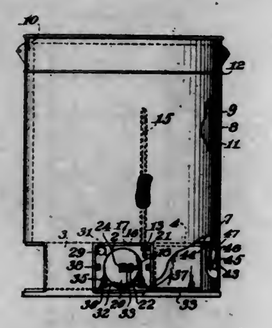
second mentioned frame, an extension wing arm hingedly secured to each end of said second mentioned frame, and a harrow section secured to each of said arms.

1,899,307. DISTRIBUTING LARGE BELL FOR BLAST FURNACES. ARTHUR J. BOYNTON and PAUL ZIMMERMANN, Chicago, Ill., assignors to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 31, 1931. Serial No. 560,301. 7 Claims. (Cl. 214—37.)



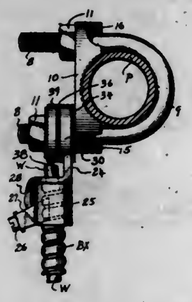
1. In a blast furnace, a distributing large bell comprising a pair of conical members co-axially disposed, each of said conical members having a radial cut-out portion in its marginal edge which cooperate with each other to distribute material discharged into the blast furnace, a tubular raising and lowering member secured to the upper conical member, a rod rotatable within said tube secured to the lower conical member, means for rotating said tubular member and rod as a unit and means for interrupting the rotation of said rod while said tubular member continues to rotate to vary the effective size of the distributing opening.

1,899,308. MINNOW TACKLE BUCKET. HERBERT S. BROWN and HERBERT L. BROWN, Oceanside, Calif. Filed June 22, 1931. Serial No. 545,990. 17 Claims. (Cl. 119—5.)



1. In a minnow bucket, an outer bucket and an inner pail having a screened in lower portion adapted to be contained in said outer bucket, a tank compartment in the bottom end of said outer bucket, and a detachable aerating tank occupying said compartment.

1,899,309. GROUNDING FITTING. STEPHEN N. BUCHANAN, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed July 26, 1929. Serial No. 381,118. 16 Claims. (Cl. 247—1.)

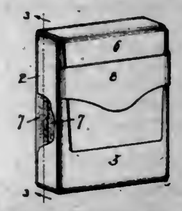


1. In a grounding fitting, a clamp having means to grip a ground conductor and make electrical connection therewith, anchorage means to engage and hold a ground wire protective covering, pivot means to adjustably attach the anchorage means to the clamp so that said anchorage means may be pointed in any direction desired to conveniently attach the protective covering to the clamp, and an insulator associated with the pivot means whereby the protective covering is insulated from the clamp.

1,899,310. PROCESS OF OBTAINING A DOUBLE SALT FROM A SINGLE SALT. GEORGE B. BURNHAM, Berkeley, Calif., assignor to Burnham Chemical Company, Westend, Calif., a Corporation of Nevada. Filed May 26, 1930. Serial No. 455,976. 11 Claims. (Cl. 23—41.)

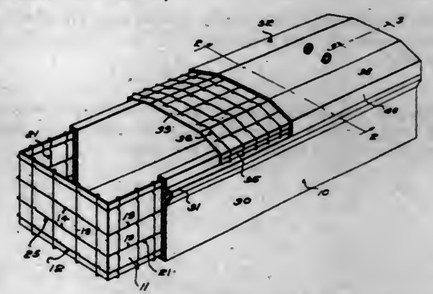
1. The process of obtaining sodium carbonate sulphate from Searles Lake brine which comprises rapidly evaporating the brine and agitating the brine to crystallize sodium carbonate sulphate and sodium chloride, and separating the sodium chloride from the sodium carbonate sulphate.

1,899,311. ARTICLE CASE. JOHN A. CASSELL, Adrian, Mich., assignor to The Sunterbach Company, Adrian, Mich., a Corporation of Michigan. Filed June 15, 1931. Serial No. 544,385. 3 Claims. (Cl. 150—32.)



1. A case of the class described, having connected front, back and bottom panels, the front and back panels having extensions at their side edges cooperating to form the case sides with the adjacent extensions in substantially edge-abutment, a reinforcing strip attached to the outer surface of the bottom panel and extending lengthwise thereof with its ends projecting up along the respective sides of the case and thence down into the case substantially to the bottom thereof and secured inside and out to said sides to unite and stiffen the extensions forming the same.

1,899,312. BURIAL VAULT. LEE COCHRAN, Anderson, S. C. Filed Jan. 26, 1932. Serial No. 589,024. 3 Claims. (Cl. 72—7.)



1. A burial vault embodying a body portion comprising an integral metal case, a metal reinforcing fabric extending over the entire outer and inner surfaces of the metal case and over the free edges of the same, said reinforcing fabric embodying longitudinal and transverse strands which cross for producing polygonal openings, said fabric having spacing elements at the corners of each polygonal opening, portions of the reinforcing fabric being welded together and the spacing elements being welded to the metal case, the arrangement being such that the reinforcing fabric and metal case form in effect an integral structure, and a concrete case having the metal case and reinforcing metal fabric embedded therein.

1,899,313. BUTTON FASTENING. ANDRÉ COQUETTE, Essonnes, France. Filed Feb. 3, 1932. Serial No. 590,720. 7 Claims. (Cl. 24—104.)



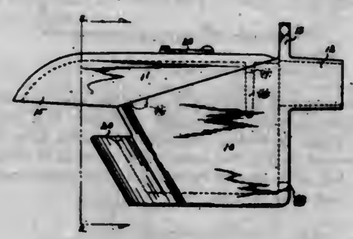
1. A device for fastening buttons, comprising in combination, a U shaped member secured to a button, both branches of said member having pointed extremities each

provided with an eyelet hole, a fastening headpiece provided with two apertures in which the branches of said U shaped member are engaged, and a sliding pin inserted in said headpiece and through the eyelet holes of said U shaped member so as to secure the latter to said headpiece.

1,899,314. PURIFICATION OF PETROLEUM AND HYDROCARBON COMPOUNDS. THADDEUS W. CULMER, Robinson, Ill., assignor to Lincoln Oil Refining Company, Robinson, Ill., a Corporation of Delaware. Filed Nov. 3, 1930. Serial No. 493,249. 17 Claims. (Cl. 196—30.)

1. The process of desulphurizing low boiling hydrocarbon oils which comprises adding to the said oils a cadmium ammonia compound.

1,899,315. OIL BURNER RETORT. EVERETT E. DEHART, Omaha, Nebr. Filed Oct. 27, 1930. Serial No. 491,481. 3 Claims. (Cl. 158—91.)



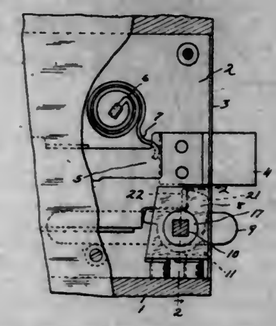
1. In an oil burner retort of the "in the door" type, comprising a pot portion having side, front and back walls and having its forward wall curved outwardly and slanted forwardly and upwardly from its base, a portion of the upper marginal edge of said forward wall being cut away to provide an opening, said openings extending approximately the entire width of said forward wall to allow flame to be projected laterally as well as forwardly of the pot, a rounded thickened marginal edge formed on said forward wall forming the base portion of said opening, an oil inlet in the back wall of said pot and adjacent the bottom thereof, an air inlet in said back wall and adjacent the top thereof, an inverted disk-like detachable lid covering the entire top portion of said pot and having a portion extending forwardly a substantial distance beyond the forward wall of said pot, said forwardly extending portion being downwardly curved to throw the flame in a downward direction, and means for attaching the lid to the pot.

1,899,316. GREASING BRUSH. WALTER F. DEHUFF, Glen Rock, Pa. Filed Dec. 31, 1930. Serial No. 505,870. 5 Claims. (Cl. 91—37.)



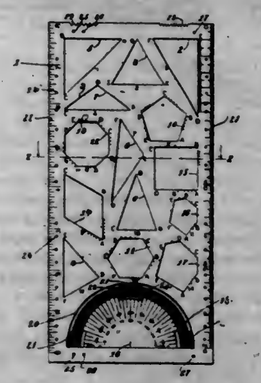
1. Pressure grease brush for greasing pans and the like comprising a brush head and a conduit for supplying the grease thereto, said conduit being divided in said head, the upper part being a tube fixed to said head, and the lower part being a spindle for rotating said brush head, said tube telescoping with sliding sealing fit into said spindle.

1,899,317. DOORLATCH CONSTRUCTION. WILLIAM C. DEVEREAUX, Detroit, Mich. Filed Oct. 26, 1931. Serial No. 571,223. 17 Claims. (Cl. 292—145.)



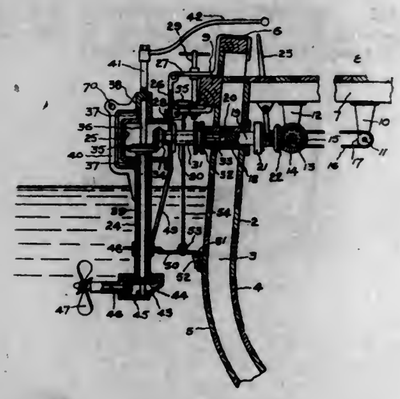
1. In a door latch, a rollback having a section of substantially circular formation provided with a web having a substantially square opening for receiving a handle stem, and lugs extending from the edges of the opening for bearing engagement with the sides of the stem, and complementary sections having opposed recesses receiving the section aforesaid and having aligned arms for engagement with a bolt shank, one of the last mentioned sections having an interlocking engagement with the first mentioned section.

1,899,318. EDUCATIONAL DRAWING INSTRUMENT. EDNA LEOLA DIXON, Baltimore, Md., assignor to Speed-Up Geometry Ruler Co., Inc., Baltimore, Md., a Corporation of Maryland. Filed Aug. 10, 1929. Serial No. 384,955. 4 Claims. (Cl. 35—12.)



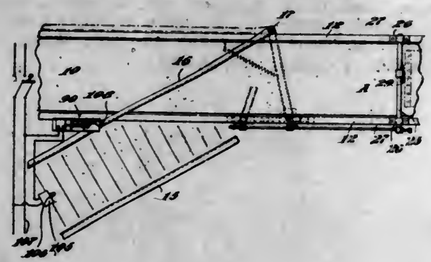
1. In an educational drawing instrument, a sheet of substantially rigid material provided with one or more polygonal cut-outs, at least one polygon having one side blank and provided on each other side with one or more marks dividing the marked sides into line segments in the same ratio for each such side.

1,899,319. AUXILIARY PROPULSIVE DEVICE FOR FISHING BOATS. JOHN JAMES DORSEY, Ecoole, British Columbia, Canada. Filed Nov. 16, 1931. Serial No. 575,378. 3 Claims. (Cl. 115—18.)



1. In an auxiliary propulsion device of the class described having a rotatable sleeve enclosing a driven shaft, a stationary support concentric with the shaft, a steering member secured to the sleeve to turn it, and means associated with the steering member adapted to engage the support to lock the steering member against rotation.

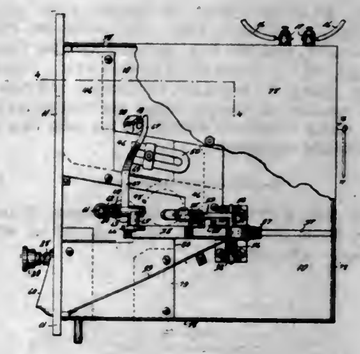
1,899,320. CONVEYER MECHANISM. LOUIS E. DUPUY, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Apr. 23, 1930. Serial No. 446,531. 18 Claims. (Cl. 198—21.)



1. The combination with a traveling conveyer of a movable deflector arm which in one position is inoperative and in another position is operative to deflect from the conveyer articles carried thereby and means for moving the deflector arm from the inoperative to the operative position, said means including a tab adjacent said conveyer and adapted to be actuated by predetermined articles and a device which engages the conveyer upon the actuation of the tab whereby the movement of the conveyer is transmitted to the deflector arm.

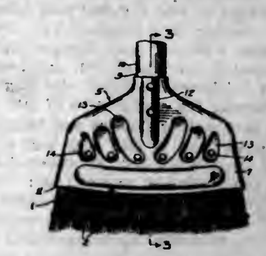
1,899,321. COIN-CONTROLLED MECHANISM. HOWARD E. FRYE, Lyman, Nebr. Filed Mar. 19, 1931. Serial No. 523,663. 11 Claims. (Cl. 194—9.)

1. A coin-controlled, switch-closing mechanism comprising a switch element pivotally mounted for oscillation between open circuit and closed circuit positions to control an associated apparatus, pivotally-mounted, switch-rocking means operable by the face and periphery of a proper coin to engage said switch element and move the latter from open circuit to closed circuit position, a coin race arranged to position a coin adjacent said switch-rocking means, a fixed support for said coin adjacent said switch-



rocking means and a manually-operable, spring-returnable slide member adapted to engage said coin and move the latter through operative engagement with said switch-rocking means during the return travel of said slide member; together with means operable by the associated apparatus to open said switch.

1,899,322. BROOM. LAWRENCE E. GOELLER, Circleville, Ohio, assignor to The M. G. Goeller's Sons Co., Circleville, Ohio, a Corporation of Ohio. Filed Jan. 8, 1931. Serial No. 507,495. 6 Claims. (Cl. 15—171.)



1. A broom construction comprising a socket member and broom head, the latter including a sweeping-sheaf and a metallic band compressively encompassing the sweeping-sheaf at one end, said broom head at the banded end and said socket being correspondingly tapered and assembled in telescoped relation, the sides of said socket being provided with inwardly projecting inclined ribs and means passing through said ribs and bands for maintaining said ribs clampably pressed against said band.

1,899,323. RADIATOR SHUTTER AND SHELL ASSEMBLY FOR AUTOMOBILES. LEE B. GREEN, Lakewood, Ohio, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 21, 1931. Serial No. 552,119. 11 Claims. (Cl. 257—132.)

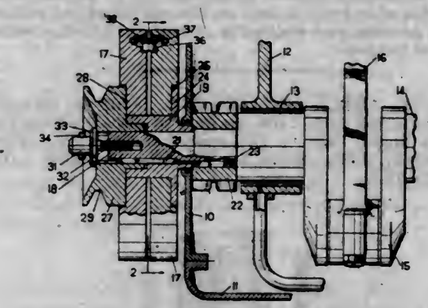
1. An assemblage for use in front of the radiator core of an automobile, comprising a sheet metal front member spaced forwardly from the core and having a panel opening for admitting air to the said core, and having rearwardly directed flanges extending part way toward the core along each edge of the said opening; a detachable

guard member of greater area than the said opening and having portions of the guard member in rearward engagement with portions of the front member radially outward



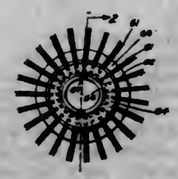
of the said opening; and releasable clamping means carried by the guard member and in hooking engagement with the said flanges.

1,899,324. INTERNAL COMBUSTION ENGINE. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 15, 1928. Serial No. 312,508. 17 Claims. (Cl. 74—6.)



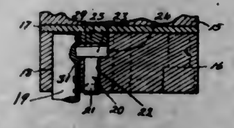
14. A vibration damper for a shaft comprising an inertia member and a thrust member, said members being mounted for rotation with respect to said shaft, an abutment carried by said shaft for limiting axial movement of said inertia member and having frictional connection therewith, and speed responsive means to move said inertia member axially to vary the friction, said means including a continuous annular resilient element interposed between said members and exerting an initial thrust therebetween.

1,899,325. COMMUTATOR ASSEMBLING MACHINE. FREDERICK J. HARDMAN and WALTER SPRUEGEL, Dayton, Ohio, assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Sept. 26, 1931. Serial No. 565,304. 38 Claims. (Cl. 29—84.)



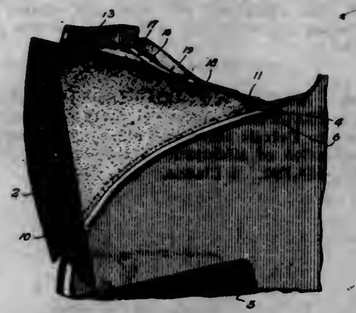
1. A commutator assembling machine comprising in combination, a magazine for holding flat pieces flat-side down, a chute for delivering wedge-shaped pieces endwise but flat-side down, means for removing the pieces from the magazine and chute to provide a group, and means for forming an annulus of a predetermined number of groups of said pieces.

1,899,326. TOOL HOLDER. FERRIS T. HARRINGTON, Detroit, Mich., assignor to Whitman & Barnes, Incorporated, Detroit, Mich., a Corporation of Michigan. Filed May 11, 1931. Serial No. 536,640. 6 Claims. (Cl. 297—77.)



5. In a tool holder, a body having a bore for receiving the shank of a tool, a recess intermediate the ends of and opening into one side of said bore, and a second bore substantially parallel to the first and opening into the recess, a seat for the shank at one end of the first mentioned bore, and a locking member mounted to turn in the second bore and having a substantially circular head in the recess and first mentioned bore, having means registrable with the first mentioned bore to permit a tool shank to be moved longitudinally of the bore toward and away from said seat, and having other means for forcing the tool shank against said seat and a wall of said bore.

1,899,327. AUTOMOBILE SEAT CAPE. WILLIAM S. HAWKINS, Washington, D. C. Filed July 21, 1931. Serial No. 552,246. 1 Claim. (Cl. 296—81.)

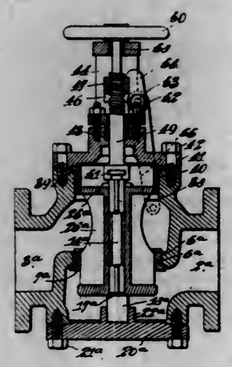


A combined cape and top for the rumble seat compartment in the rear deck of an automobile body provided with a rain gutter about the margins of the compartment, comprising a cape cover for said compartment and the occupants thereof, said cover having an edge portion provided with inverted U-shaped spring fastening clips to engage the inner flange or wall of the gutter and fastening arms for the clips secured to the cover at a point set back from the edge of the cover so as to leave a projecting part of said edge portion free to form a drain flap extending over the clips downwardly into the gutter in spaced relation to the walls thereof.

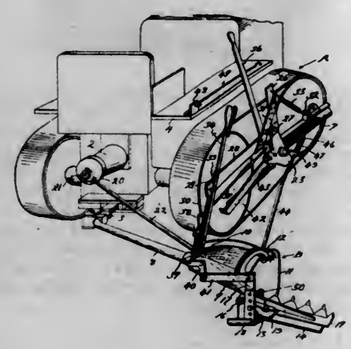
1,899,328. BALANCED THROTTLE AND TRIP VALVE. FRANK HENNEBÖHLE, Chicago, Ill. Filed May 18, 1931. Serial No. 538,375. 2 Claims. (Cl. 277—37.)

1. A balanced throttle valve comprising a casing having an inlet end and an outlet end separated by a web which has a threaded passage, a valve seat bushing screwed into said web passage and having a stop flange to engage said web, said casing having a piston chamber above the web on the outlet side of the valve, said chamber having a piston guide wall of less diameter than that of said bushing, a main valve having a head to engage the seat of said bushing

and having a barrel with guide wings extending through said bushing into said piston chamber and having a piston integrally formed with the barrel and wings and located in said piston chamber, a valve stem having a portion passing through said barrel, said stem having a valve portion and said main valve having a seat for said valve portion, the portion of said stem which lies within the barrel having guide wings at each end of the barrel, an abutment on said stem within the piston chamber, and protuberances on the piston to stop the abutment against closing off communication between said barrel and said piston chamber, and means on said stem and casing outside of the casing for actuating said stem for the purposes described.

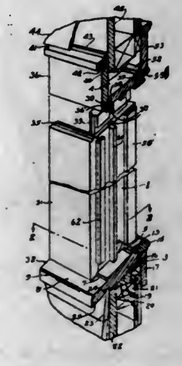


1,899,329. MOWER ATTACHMENT FOR ENDLESS TREAD TRACTORS. JOSEPH E. HORSTE, Detroit, Mich., assignor to Detroit Harvester Company, Detroit, Mich., a Corporation of Michigan. Filed May 12, 1930. Serial No. 451,780. 4 Claims. (Cl. 56—25.)



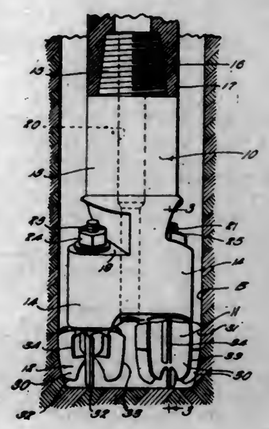
1. A mowing machine attachment for a tractor having a drawbar at the rear end thereof, a shield at one side provided with a laterally projecting lug, and an equalizing shaft extending through the shield, including an extension for the shaft, a bracket mounted on the extension and having a flange attachable to the lug of the shield, a mower bar, a connection between said mower bar and bracket, and means also connected to the mower bar and attachable to the drawbar of the tractor.

1,899,330. WINDOW FRAME. CLAUDE HORTMAN, New Orleans, La., assignor, by mesne assignments, to The Hortman-Salmen Company, Incorporated, New Orleans, La., a Corporation of Louisiana. Filed Dec. 24, 1931. Serial No. 583,126. 4 Claims. (Cl. 20—11.)



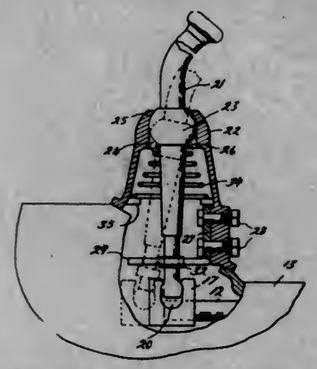
1. In a window frame, a sill having an upstanding portion formed on its upper face and extending along the rear side thereof, a window stool rabbeted to contact with the edge of and seat on said portion, said stool and portion being provided with registering grooves, and a tongue seated in said grooves.

1,899,331. WELL DRILLING BIT. JOHN H. HOWARD, Huntington Park, Calif., assignor to Globe Oil Tools Co., Los Nietos, Calif., a Corporation of California. Filed June 14, 1930. Serial No. 461,203. 11 Claims. (Cl. 255—71.)



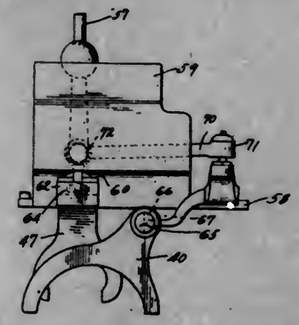
1. A well bit including, a body to rotate about a vertical axis, a cutter mounted at the lower end of the body to rotate about an axis in a plane inclined downwardly and outwardly relative to the vertical axis of the body, and cutting parts on the cutter having cutting edges to engage the formation at the bottom of a well bore to make a substantially flat bottom wall in the bore, and having substantially parallel longitudinally curved side edges curved downwardly and inwardly with respect to the axis of rotation of the cutter to engage the formation at the side of the well bore through substantial portions of their lengths to form a round bore.

1,899,332. GEAR SHIFTING MECHANISM. SCHUYLER A. JEFFRIES, Lansing, Mich., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed July 1, 1929. Serial No. 375,236. 8 Claims. (Cl. 74—39.)



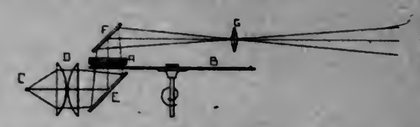
1. A transmission having in combination, a support, a shifter rail, a control lever movable in one direction to engage the rail for actuating the same, said lever having an enlarged portion adjacent the lower end thereof and having a reduced portion above the enlarged portion, a member carried by the support and engageable with the enlarged portion to prevent movement of the lever into engagement with the rail, said member having an elongated slot therein terminating in a restricted opening having a width slightly greater than the diameter of the reduced portion but substantially less than the width of the enlarged portion and arranged in alignment with the latter when the lever is in its normal position, and means permitting longitudinal movement of the lever to bring the reduced portion in alignment with the opening and thereby permit the lever to be moved to engage the reduced portion in the slot and at the same time permit the lever to operatively engage the rail.

1,899,333. GEAR SHIFTING MECHANISM. SCHUYLER A. JEFFRIES, Lansing, Mich., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed Sept. 3, 1929. Serial No. 390,095. 8 Claims. (Cl. 74—39.)



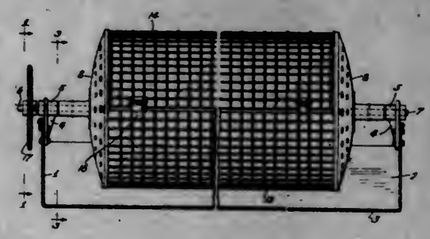
1. A variable speed transmission having in combination, a pair of units comprising gears to be meshed, and actuating mechanism for the gears including a control element movable in one direction to engage the gears in one of said units to effect different speed combinations and in another direction transverse to the direction aforesaid for engaging the gears in the other of said units to obtain still other gear combinations and further movable in a direction transverse to both the directions aforesaid to control the gears in both of said units.

1,899,334. RADIOMOVIE LANTERN SLIDE. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to C. Francis Jenkins, Inc., Washington, D. C., a Corporation of the District of Columbia. Filed Jan. 29, 1931. Serial No. 512,181. 1 Claim. (Cl. 178—6.)



In apparatus of the class described, a source of light, a liquid lantern slide through which light from said source may pass, a transparent scanning disc in operative relation to said lantern slide, and means carried by said scanning disc whereby bubbles may be formed in said liquid lantern slide.

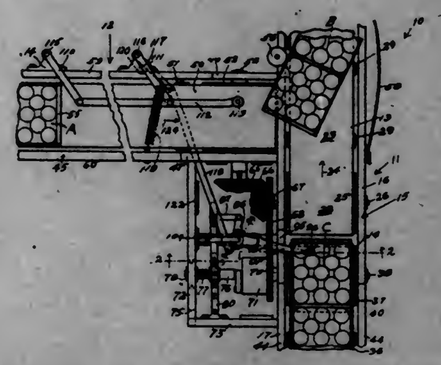
1,899,335. ROTATABLE PAN FOR BREAD BAKING. CHARLES A. KASTNER, Louisville, Ky. Filed May 12, 1932. Serial No. 610,771. 6 Claims. (Cl. 53—6.)



1. A rotatable pan for bread-baking, comprising a container having a cylindrical and foraminous peripheral wall, one circumferential half of the said wall being movable with respect to the other half thereof, and having two end plates normally fitting against both halves of the said peripheral wall, one of the said wall halves being fixedly secured to both end plates.

5. The method of baking bread or the like which consists in disposing a batch of dough within a container having a foraminous peripheral wall and having its axis disposed horizontally, and thereafter continuously rotating the said drum about its axis.

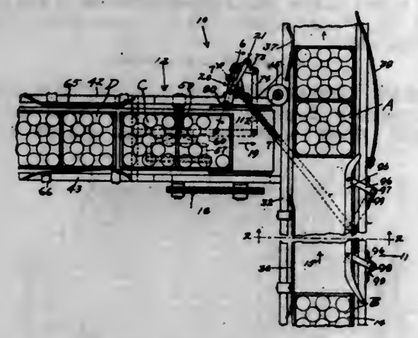
1,899,336. CONVEYER CONTROL. DANA E. KEECH, Glendale, Calif. Filed Dec. 17, 1929. Serial No. 414,667. 16 Claims. (Cl. 198—21.)



1. In an automatic conveyer intersection switch, the combination of: a primary conveyer including leading and following sections; a secondary conveyer disposed to feed

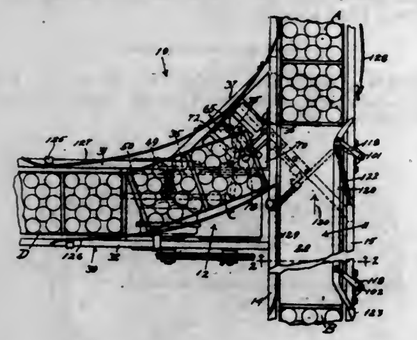
articles onto said leading section; movement controlling means; means actuated by an article on said secondary conveyer to cause said movement controlling means to cause the movement of a foremost article on said following section, when said article reaches a certain position, to be temporarily discontinued; and means rendering said controlling means inoperative as to said foremost article when said article overlaps said position, but permitting said controlling means to act upon the next article on said following conveyer section when it reaches said position.

1,899,337. CONVEYER CONTROL. DANA E. KEECH, Glendale, Calif. Filed Jan. 28, 1930. Serial No. 424,085. 5 Claims. (Cl. 198—21.)



1. In combination: a power driven conveyer adapted to carry boxes; a control for stopping and starting said conveyer, said control being actuated to stop said conveyer when moved in the direction in which this conveyer travels; and means for moving said control across the path of travel of boxes on said conveyer to displace a leading box from in front of a following box and permit the latter to actuate said control to stop said conveyer.

1,899,338. CONVEYER CONTROL. DANA E. KEECH, Glendale, Calif. Filed Jan. 28, 1930. Serial No. 424,086. 4 Claims. (Cl. 198—21.)



1. In combination: a primary conveyer; a secondary conveyer disposed at an angle thereto and adapted to discharge boxes onto said primary conveyer; means for guiding said boxes over the angle between said conveyers toward the direction of travel of said primary conveyer, as said boxes are discharged onto said primary conveyer; and a control member disposed in said angle and adapted to be extended upwardly to be actuated to perform a control function when engaged by the front of one of said boxes, contact with the bottom of a box being ineffective to actuate said control member.

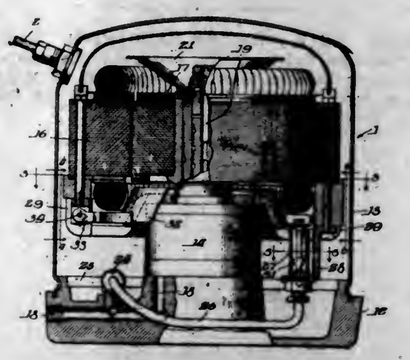
1,899,339. PROCESS FOR THE PREPARATION OF GRANULATED ACTIVE CHARCOAL. LUDWIG KLEBERT, Cologne-Deutz, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 9, 1929, Serial No. 412,923, and in Germany Dec. 13, 1928. 4 Claims. (Cl. 252—3.)

1. Process for preparing a granular highly active charcoal comprising mixing charcoal with a binding agent of the group consisting of clay and kaolin, a substance lowering the sintering temperature of the binding agent to below 1000° C., of the group consisting of the chlorides and nitrates of the alkali metals and of calcium, the oxides, hydroxides and carbonates of the alkali metals, the chlorides and nitrates of the heavy metals, and an organic binding agent, shaping the mixture and activating it at a temperature of about 850–1000° C.

1,899,340. PROCESS OF MANUFACTURING ALDEHYDES AND THE PRODUCTS. ANGELO KNORR, Berlin-Tempelhof, ALBERT WEISSENBORN, Potsdam, and EMIL LAAGE, Uerdingen, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 6, 1931, Serial No. 520,712 and in Germany Mar. 10, 1930. 12 Claims. (Cl. 260—136.)

1. The process which comprises condensing a halogeno acetic acid alkyl ester with a compound containing the atomic configuration >C=O of the group consisting of aromatic aldehydes, aliphatic ketones, aliphatic-aromatic ketones and cyclic ketones with an alkaline condensing agent in the presence of an indifferent liquid medium of the group consisting of aliphatic hydrocarbons, liquid at normal temperature, aromatic hydrocarbons of the benzene series, hydroaromatic hydrocarbons and chlorinated aromatic hydrocarbons of the benzene series, and cleaving the substituted glycinic acid ester formed.

1,899,341. MAGNETIC UNLOADER. CARL E. L. LIPMAN, Chicago, Ill., assignor to Lipman Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 27, 1931. Serial No. 518,746. 15 Claims. (Cl. 62—4.)

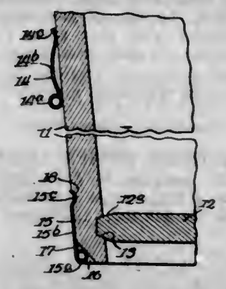


1. In a refrigerating device, a refrigerant circulatory system including a heat exchange element, a condenser, and a compressor, an electric motor for driving said compressor, means for substantially reducing the pressure of the high pressure side of the system upon starting said motor, said means being actuated by the increased field around the motor set up by the starting current.

1,899,342. BUTTER TUB. CHESTER M. MACCHESNEY, Chicago, Ill., assignor to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 1, 1929. Serial No. 351,478. 9 Claims. (Cl. 217—91.)

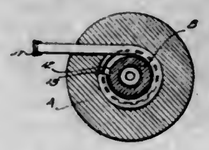
1. The combination with a container formed of nonmetallic material and having an annular groove therein,

of substantially inextensible metallic reenforcing band having an inwardly extending projection interlocking



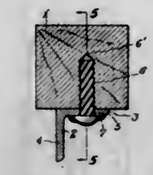
with said groove and having an inwardly extending annular bead formed thereon, said band having a drive fit on the wall of said container.

1,899,343. METHOD OF MAKING A CONNECTION. THOMAS O. MACKEY, Willowbrook, and WILLIAM DONALDSON, Huntington Park, Calif., assignors to Wieman-Kammerer-Wright Company, Incorporated, Hollydale, Calif., a Corporation of California. Filed June 14, 1930. Serial No. 461,201. 3 Claims. (Cl. 29—148.)



1. The method of connecting two parts, one fitting around the other and having a space between them including, heating an elongated normally rigid body of metal to render it malleable or pliable, inserting one end of the body in the space while at a high temperature, and then delivering force to the other end of the heated body to cause the body to occupy the space.

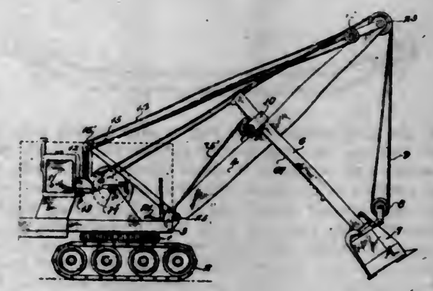
1,899,344. COMPOSITE WOOD-METAL STRUCTURAL MEMBER. STANLEY MACOMBER, Edgefield District, Ohio. Filed Dec. 4, 1928. Serial No. 323,673. 1 Claim. (Cl. 189—37.)



In a truss structure, an upper chord composed of a wood section and a metal structural member secured together longitudinally by a series of driven screw-threaded fasteners the heads of which are welded to said metal member.

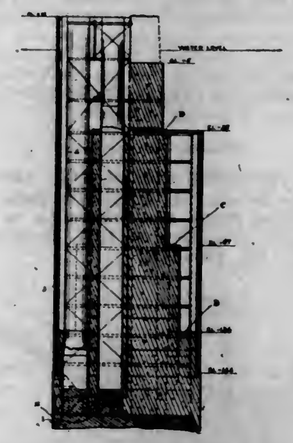
1,899,345. EXCAVATOR. KIRWAN MESSICK, Clarendon, Va. Filed Aug. 26, 1931. Serial No. 559,532. 6 Claims. (Cl. 214—135.)

1. A reversible crowd mechanism for power driven excavators comprising in combination a boom, a dipper stick for reciprocation upon said boom, rack bars secured to said dipper stick, a shipper shaft journaled upon said boom, means for driving said shipper shaft in one direction only, a sleeve loosely mounted upon said shipper shaft, gears fixedly secured to said sleeve and adapted to mesh with said rack bars secured to said dipper stick, drums formed with the opposite ends of said sleeve, means for connecting one of said drums to said shipper



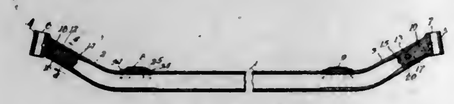
shaft whereby said dipper stick will be caused to travel in one direction, and means for connecting the other of said drums to said shipper shaft whereby said dipper stick will be caused to travel in a reverse direction.

1,899,346. SINKING OF CAISSONS AND THE BUILDING OF PIERS, ETC. JAMES SMITH MILLER, Pittsburgh, Pa., assignor to The Dravo Contracting Company, a Corporation of Pennsylvania. Filed June 10, 1932. Serial No. 616,452. 5 Claims. (Cl. 61—52.)



1. The method herein described of sinking a caisson in ground and to a depth below water-level exceeding the practicable limit of pneumatic excavation, which consists in bringing to position above its intended ultimate resting place a caisson including a bell with water-tight floor a marginal water-tight coffer wall and a plurality of wells with water-tight walls rising from orifices in its floor, one at least of such wells being situated at a point remote from the center line of the bell but within the compass of the said coffer wall, building masonry upon the upper face of the floor of the bell and excavating through the wells the underlying material, and in so doing causing the caisson to sink while water rises in the wells, maintaining the height of the walls of the wells always above water-level, and in the progress of sinking correcting tendencies of the caisson to depart from a path of vertical descent by sealing and pumping air into a well remote from the center line of the bell and continuing the dredging through another of the wells.

1,899,347. AXLE. EDMUND C. MOGFORD and GEORGE SPATTA, Buchanan, Mich., assignors to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed May 15, 1929. Serial No. 363,362. 5 Claims. (Cl. 301—124.)

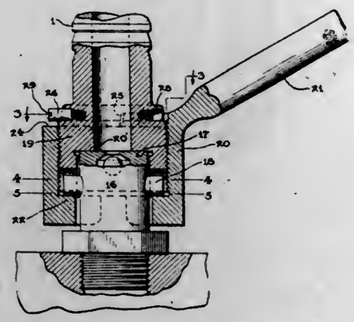


1. An axle comprising a thin walled central body portion and end portions having thicker walls which taper inwardly and terminate in small diameter free ends, said end portions being formed into upwardly extending arms, the walls of said arms being thickest at points disposed inwardly from the free ends thereof and being shaped from said points outwardly therefrom to form sockets which open into the free ends of the arms, said sockets being tapered and having maximum cross sectional area at the free ends of the arms, knuckle pieces comprising solid tapered shanks fitted in said sockets and extending to the points of maximum thickness of said arms, and heads butted against the ends of the arms, and fusion welds joining said knuckle pieces to said arms.

1,899,348. PURIFICATION OF VAT DYESTUFFS OF THE ANTHRAQUINONEAZINE SERIES. HEINRICH NERESHEIMER and WILHELM SCHNEIDER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 5, 1931, Serial No. 520,463, and in Germany Mar. 10, 1930. 3 Claims. (Cl. 260—31.)

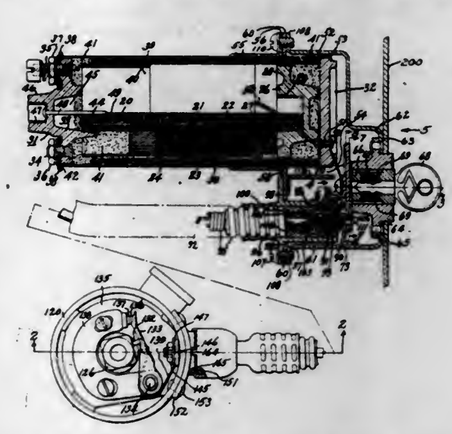
1. In the manufacture of vat dyestuffs of the N-dihydro-1.2.2'.1'-anthraquinoneazine series the step which comprises removing components not fast to chlorine from a condensation product of impure N-dihydro-1.2.2'.1'-anthraquinoneazine and formaldehyde by means of sulphuric acid of at least 70 per cent strength.

1,899,349. PRESSURE GREASE GUN. ERNEST B. NORMAN, New Orleans, La., assignor to Reliance Machine and Stamping Works, New Orleans, La., a Corporation of Louisiana. Filed Sept. 15, 1930. Serial No. 482,017. 2 Claims. (Cl. 285—177.)



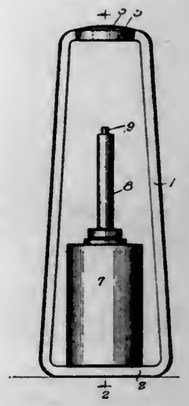
1. Coupling for attaching a grease gun to a nipple of that type comprising a cylindrical body with a flat end normal to the axis of said body, with a grease conduit opening into said flat end, and with lateral projections below said flat end, said coupling comprising an inner member having an axial bore, formed as a socket with a peripheral flange and an internal shoulder surrounding said bore, the edge of said flange being provided with a series of indents for selectively receiving the lateral projections, an outer member screwing on said inner member and having an inwardly directed ledge at its free end extending over the ends of said indents, the latter being sufficiently deep to be out of contact at their bottoms with said projections when said ledge contacts with the flat end of said nipple, the side of said ledge adjacent the ends of said indents lying in a plane perpendicular to the axis of rotation of said outer member, and having projection-admitting channels breaking its continuity and registrable selectively with said indents.

1,899,350. ANTITHEFT DEVICE. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Jan. 6, 1928. Serial No. 244,992. 10 Claims. (Cl. 200—44.)



1. A lock-switch comprising a case, having apertures in a wall thereof, members for closing said apertures and projecting into the case, stationary switch contacts insulatingly supported by said members, a movable contact for engaging the stationary contacts, and key operated means for moving the movable contact and for preventing removal of one of the stationary-contact supporting members from the case.

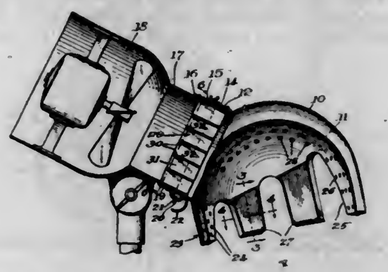
1,899,351. KING PIN EXTRACTING APPARATUS. WALTER M. OVERFELT, Rocky Mount, Va. Filed June 13, 1932. Serial No. 617,003. 5 Claims. (Cl. 29—85.)



1. A king pin extracting apparatus comprising an elongated loop having a base portion and a top portion, said top portion having an opening therein, pressure means

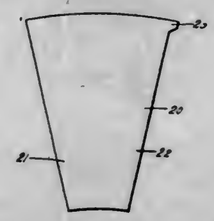
within said loop and resting on said base portion, and a pusher pin located on said pressure means and operable to force a king pin through the opening in the top portion upon actuation of the pressure means.

1,899,352. HAIR DRYING APPARATUS. GUST WILLIAM PETERSON, Long Beach, Calif. Filed Aug. 3, 1931. Serial No. 554,829. 3 Claims. (Cl. 34—26.)



2. In a hair drying machine, an open-bottomed double-walled structure, the inner wall of the structure defining a head-receiving chamber, the said structure having a circumferential series of arcuate extensions at the lower portion of the structure, certain of said extensions being larger than other circumferentially of the structure, the inner wall of the structure being perforated to afford a lateral discharge of air into the head-receiving chamber at positions above the said extensions and at positions immediately at the extensions, and means forming a part of the structure adapted for connection in a source of air supply, as and for the purpose set forth.

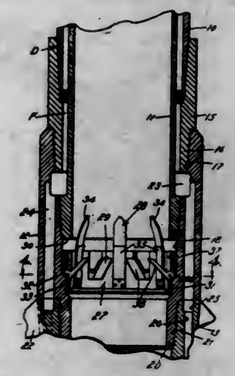
1,899,353. ELECTRIC WELDING. ALVA W. PHELPS and EDWARD A. KAEGI, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 4, 1932. Serial No. 602,979. 5 Claims. (Cl. 219—10.)



1. The method of forming a lap-weld joint in a sheet metal article which includes shaping the article so that at least one of the lapping portions of sheet metal is substantially wider at one end of the seam to be welded than along the major portion of the seam, and in applying welding current to the seam first at the said end of the seam having the lapping portion of extra width.

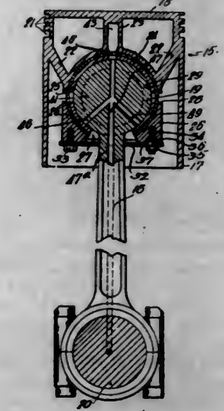
1,899,354. CORE CATCHER. JOHN B. RAGSDALE, Whittier, Calif., assignor to Globe Oil Tools Company, Los Nietos, Calif., a Corporation of California. Filed May 19, 1931. Serial No. 538,409. 5 Claims. (Cl. 255—72.)

1. A core catcher for use in a tubular tool including, a ring mounted in the tool for longitudinal movement relative thereto, means on the ring for contacting with a core extending into the tool to resist upward movement of the ring relative to the core, a dog pivotally mounted in the ring and operable to grip the core, there being an opening in the ring adapted to receive the entire dog so that it does not project into the central opening of the ring during passage of the core into the tool, and a



cam part on the tool to actuate the dog into the central opening of the ring upon upward movement of the tool relative to the ring.

1,899,355. PISTON AND CONNECTING ROD. ALLAN E. REID, Boston, Mass., assignor to Reid Piston Company, Brookline, Mass., a Corporation of Massachusetts. Filed May 20, 1930, Serial No. 453,997. Renewed July 1, 1932. 29 Claims. (Cl. 74—108.)

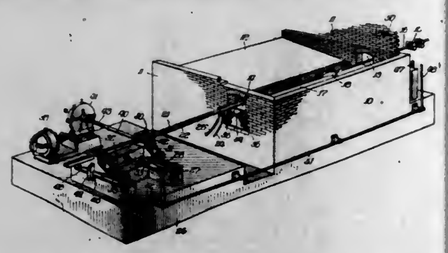


1. The combination of a piston having a head, a skirt portion, and a bearing spaced from the head, said bearing comprising substantially rigid elements united by resilient members and defining a journal opening, and a connecting rod having a head at one end adapted to fit within the journal opening in said bearing.

1,899,356. DISCHARGE MECHANISM. LOUIS C. REIS, Duluth, Minn. Filed May 21, 1931. Serial No. 539,065. 2 Claims. (Cl. 214—23.)

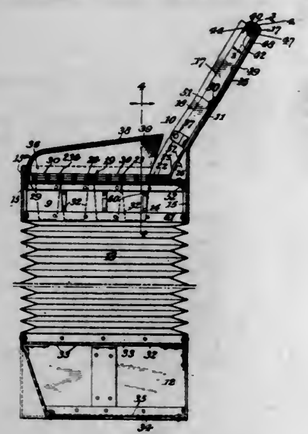
1. In discharge mechanism, in combination with a billet reheating furnace having aligned openings, a pusher arm for discharging billets from the furnace, means for supporting the arm at one of said furnace openings permitting lateral movement within the limits of the opening, a rack formed on the outer end of the arm, a carriage mounted for movement transversely of the furnace and having means mounting the rack end of the arm, power means

stationarily mounted adjacent the carriage, a shaft extending from the power means and being journalled in the carriage, means on the shaft meshing with the rack on



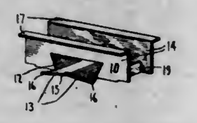
the arm, and connections from the carriage to the exit end of the furnace for operating the carriage at a point remote therefrom.

1,899,357. PIANO-ACCORDION. REINHOLD RIESCHICK, New York, N. Y. Filed Mar. 28, 1932. Serial No. 601,587. 11 Claims. (Cl. 84—376.)



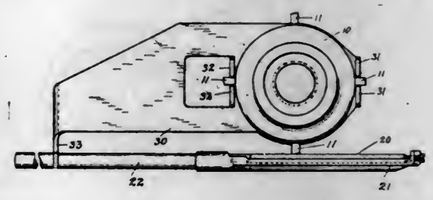
7. A piano-accordion embodying all-metal treble and bass frame structures and an attached bellows; the treble frame structure having a three plate ported panel of metal, including upper and lower fixed ported plates and a central sectional ported plate; sections thereof being riveted or otherwise secured to the upper and lower plates of said panel; another section of said central plate being slidable between said upper and lower plates for regulating the tone volumes; and means pivotally connected to the slidable plate for controlling its movements from without the treble frame structure.

1,899,358. WINDOW SCREEN. JOHN J. RITTER, Urbana, Ohio, assignor to The W. B. Marvin Manufacturing Company, Urbana, Ohio, a Corporation of Ohio. Filed Nov. 7, 1932. Serial No. 641,516. 5 Claims. (Cl. 156—38.)



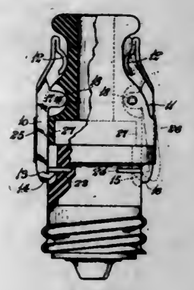
1. In an adjustable window screen having slidable sections with mating undercut grooves, a metallic clip substantially U-shaped in cross-section to form a pair of legs and an intermediate connecting portion, and wings struck from the leg portions of the clip and projecting in line with the connecting portion thereof for anchored engagement with the walls of the groove of one section, the legs of the clip being formed to slidably engage with the walls of the groove of the other section.

1,899,359. MEANS FOR HOLDING A CUTTER HEAD WHILE ITS CUTTERS ARE BEING SHARPENED. CLARENCE T. ROTTLER, Seattle, Wash. Filed Nov. 5, 1929. Serial No. 405,008. 5 Claims. (Cl. 51—57.)



1. A device of the character specified comprising a base, spaced seats on the base into which a plurality of cutters that project from a cutter-head, are positioned to prevent movement of the cutter-head relative to the base, and means carried by said base for movably supporting the handle of a cutter-sharpening implement and preventing lateral bodily movement of such handle.

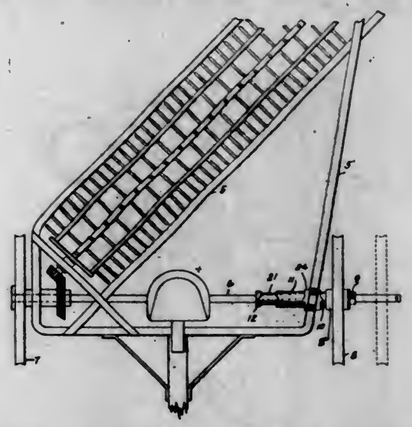
1,899,360. ELECTRIC PLUG. KENNETH B. ROUDEBUSH and HENRY G. EILERS, Cincinnati, Ohio. Filed June 2, 1931. Serial No. 541,554. 1 Claim. (Cl. 173—343.)



A two-part electric plug comprising a cap having slots in the side wall thereof, an enlarged hand-knob formed integral with said cap, a pair of oppositely disposed levers received within said slots and pivoted to said cap, spring members formed integral with each lever and adapted to normally force the lower ends of said levers towards each other, an inwardly projecting hook formed at the lower end of each lever, a body member having a pair of slots in its side wall to receive the lower end of said levers, and plates embedded within said body member and intersecting said last-mentioned slots, respectively, to engage with said hooks to releasably lock said cap upon said body.

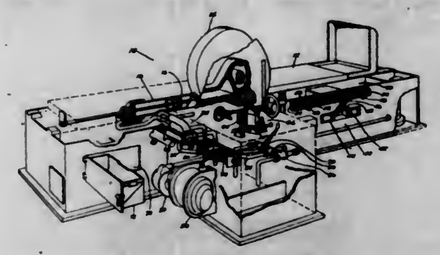
1,899,361. HAYRAKE. ALVAH B. RUTTER, Rockford, Ill., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Oct. 9, 1931. Serial No. 567,856. 7 Claims. (Cl. 56—376.)

1. In a hay rake having an axle extending beyond its frame, a movable wheel thereon, an elongated spacer having a bore therein adjustably mounted on the axle and abutting the wheel, a bearing plate engaging the spacer



to prevent the turning thereof on the axle, and means for securing the rake frame, bearing plate and spacer together on the axle.

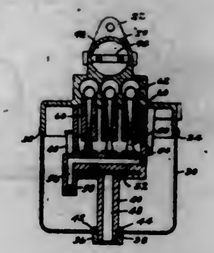
1,899,362. MACHINE TOOL. FRANK E. STRATTON, Edgewood, R. I., assignor to Diamond Machine Co., Providence, R. I., a Corporation of Rhode Island. Filed May 11, 1931. Serial No. 536,539. 6 Claims. (Cl. 51—233.)



1. In a machine tool a reciprocating work holding table, a rotating grinding tool in front of said table, a coolant trough in front of said table and underneath said tool, means to reciprocate said table, a trip lever mounted on said machine operative on movement in one direction to actuate said reciprocating means to move said table in one direction and operative on movement in the opposite direction to actuate said reciprocating means to move said table in the opposite direction, a reciprocating slide mounted on said machine in front of said trough of a much less length than that of the table, dogs adjustably mounted on said slide to actuate said trip lever adjustable within the normal reach of an operative in his normal operating position, and a reduction gearing connecting said table to said slide and located within said trough.

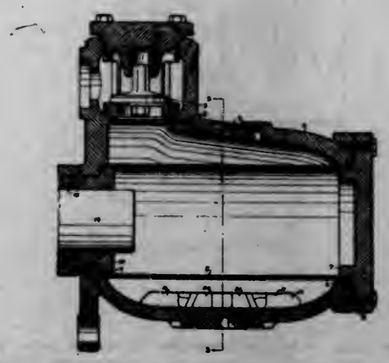
1,899,363. CHARGE FORMING DEVICE. WILFORD H. TEETER, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 25, 1928. Serial No. 308,242. 12 Claims. (Cl. 261—41.)

1. A charge forming device for internal combustion engines comprising a secondary mixing chamber, an elongated primary passage having one end opening into said secondary mixing chamber, a throttle in said primary mixing passage near the other end thereof, means for supplying a super-rich mixture of fuel and air to said primary mixing passage under all operating conditions and at a point close to that side of the throttle which is remote from said secondary mixing chamber, means near the first mentioned means for admitting air to said primary mixing passage to dilute said super-rich mixture,



said primary mixing passage and the said two means being adapted to deliver a primary mixture of properly combustible proportions to said secondary chamber for all positions of said throttle from the closed position to a predetermined open position thereof, and means controlled by movement of said throttle for admitting air to said secondary mixing chamber.

1,899,364. PUMP. JOSEPH A. TENNANT, Houston, Tex., assignor, by mesne assignments, to Stephens Pump Company, Round Rock, Tex., a Corporation of Delaware. Filed Jan. 15, 1932. Serial No. 586,764. 13 Claims. (Cl. 103—44.)

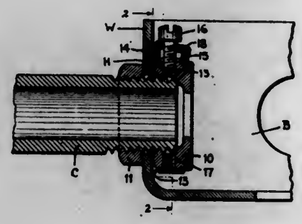


1. A pump having a barrel; inlet means for said barrel; outlet means for said barrel; an expansible member within said barrel; means to expand and contract said member to draw fluid into said barrel through said inlet means and to expel it from said barrel through said outlet means; said inlet means including an elongated fluid opening extending along substantially the length of said barrel.

1,899,365. GROUNDING BUSHING. GEORGE C. THOMAS, Jr., Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 27, 1931. Serial No. 577,422. 7 Claims. (Cl. 247—1.)

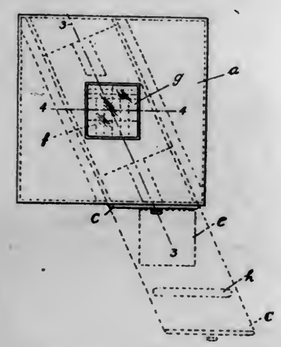
1. A grounding device comprising anchorage means to secure a conduit within a hole in a wall, a wedging surface upon a face of the anchorage means and extending at

an acute angle with respect to the face thereof, an angular wedging means having the edge of one portion engaging the wedging surface, the other portion extending substantially parallel to the axis of the anchorage means



and having a recess, and an operating screw carried by the anchorage means and passing through the recess in the wedging means to force the latter into contact with the wedging surface.

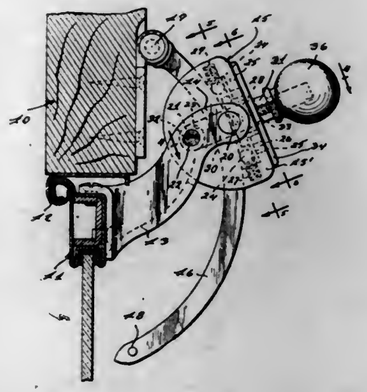
1,899,366. CARD TABLE. SAM A. THREEFOOT, Meridian, Miss. Filed Sept. 16, 1932. Serial No. 633,435. 1 Claim. (Cl. 45—75.)



A card table of square formation having a score pad opening in the middle thereof and a transparent closure plate for said opening having its top surface flush with the top surface of the table, and a rectangular score-pad-holding tray slidably mounted in the table beneath its top surface and slidable obliquely to said opening from one side of the middle of one edge of the table beneath said opening, to position the pad directly beneath said closure plate when the tray is in its innermost position and to permit the pad to be held beyond said edge when the tray is withdrawn in a position parallel to that under the opening.

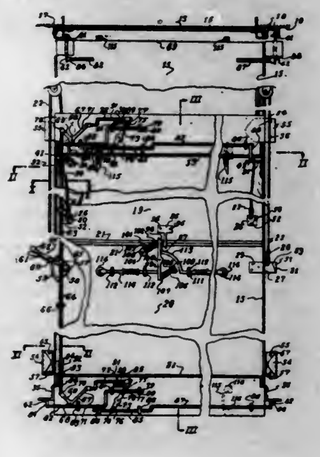
1,899,367. WINDSHIELD OPERATING MECHANISM. HAROLD G. THUNDER, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed May 4, 1931. Serial No. 535,037. 5 Claims. (Cl. 296—84.)

4. In a windshield operating mechanism, a windshield, a support upon which the windshield is pivotally mounted, a roller clutch mechanism including a pair of clutch rollers operating respectively for holding the windshield against movement in opposite directions, a windshield operating



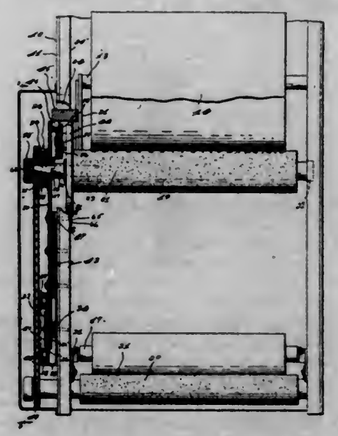
handle, and means operable by said handle for disengaging either of said clutch rollers and for moving said windshield to adjusted positions.

1,899,368. ELEVATOR DOOR CONTROL. LOUIS TORCH, Chicago, Ill., assignor to Della Rabin, Chicago, Ill. Filed Feb. 17, 1930. Serial No. 428,929. 19 Claims. (Cl. 187—60.)



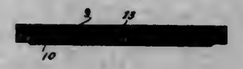
1. In an elevator structure, the combination with an elevator shaft, of a movable shaft door, an elevator car in said shaft, and cooperating means on said elevator car and shaft door to effect the opening and closing thereof responsive to the directional movement of said elevator car relative to said shaft door in either direction, said means being effective to control the opening and closing of said door within the acceleration of said elevator car.

1,899,369. TOWEL CABINET. TRACY BROOKS TYLER, Detroit, Mich., assignor to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Filed Nov. 23, 1929. Serial No. 409,317. 27 Claims. (Cl. 312—38.)



1. A towel holder having in combination, means for dispensing toweling, and means automatically set into operation by the dispensing operation, said means being operable after a portion of toweling has been withdrawn to retard the movement thereof.

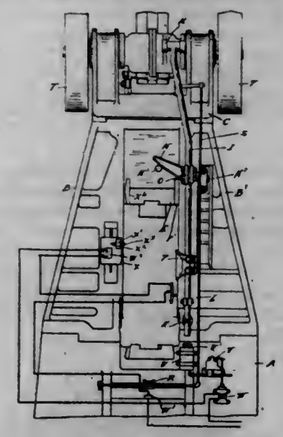
1,899,370. TILE. CARLO VENTIMIGLIA, Detroit, Mich. Filed Apr. 11, 1929. Serial No. 354,208. 1 Claim. (Cl. 72—18.)



A pressed tile comprising, a face layer formed from a fine mixture of sand and cement, a body portion formed from a coarse mixture of sand and cement to impart the requisite strength to the tile, and an intermediate layer consisting of a moderately coarse mixture of sand and cement interposed between said face layer and body portion, said intermediate layer acting as buffer to protect said fine face layer from injury by said coarse portion during formation of said tile.

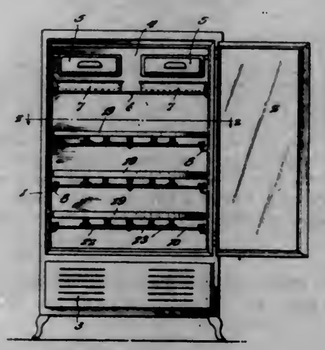
1,899,371. DROP HAMMER. RUSSELL E. WALDRON, Detroit, Mich., assignor to Dominion Forge & Stamping Company Limited, Walkerville, Ontario, Canada, a Corporation of Ontario, Canada. Filed May 25, 1931. Serial No. 539,933. 1 Claim. (Cl. 78—29.)

In a drop hammer of the type comprising friction means for lifting the hammer block and a control rod and cooperating means for automatically effecting the engagement and release of said friction means for a predetermined length of stroke of the hammer, of an auxiliary pneumatic motor for lifting said rod, electro-magnetic means controlling the operation of said motor, a circuit closer for the circuit of said electro-magnetic means operated at a predetermined point in the upward movement of the hammer block less than its full stroke whereby said



motor will lift said rod, and a circuit breaker also controlling said circuit for de-energizing said electro-magnetic means at the completion of the raising of said rod.

1,899,372. REFRIGERATOR. CARL F. WALTER, Lincoln, Nebr. Filed Jan. 5, 1932. Serial No. 584,832. 2 Claims. (Cl. 312—183.)

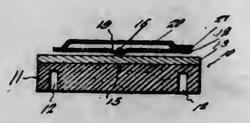


1. A refrigerator comprising a box, brackets secured in the wall of the box and consisting of hooks having upturned threaded inner ends, a frame having arms provided with terminal openings receiving the upturned ends of said brackets, nuts engaging the threaded ends of the hooks on opposite sides of the arms and bearing thereagainst to hold the frame on the brackets and permit adjustment of said frame vertically of the brackets, a food-carrying tray, and means for rotatably supporting the tray on the frame.

1,899,373. HERNIA TRUSS. CHARLES A. WARBURTON, Exeter, N. H. Filed Oct. 10, 1931. Serial No. 568,141. 1 Claim. (Cl. 128—100.)

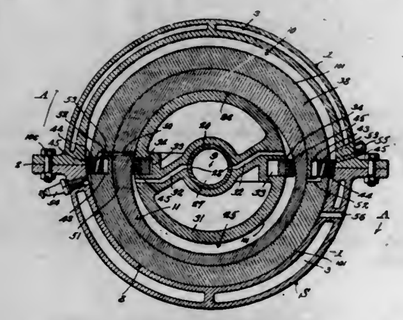
A truss embodying a pad comprising a laminated ovate body, said body including an inner ply of rubber, a reinforcing ply of leather secured to the outer face of said inner ply, and a pair of spaced parallel substantially rigid inserts interposed between said inner and outer plies, said inserts being tied together and being of wedge-shaped cross sectional shape for the purpose specified, a U-shaped

staple having headed end portions anchored in said outer leather ply and bearing against said wedge-shaped inserts and a plate having a U-shaped bend at its center and forming a depression on the outer face of the plate



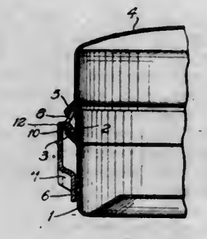
through which the bight of the staple passes, with the convex portion of the bend resting against the outer ply and a belt receiving member having its ends connected to the outer face of the plate.

1,899,374. ENGINE. MATHEW C. WERLE, Billings, Mont. Filed Jan. 2, 1932. Serial No. 584,480. 5 Claims. (Cl. 123—16.)



1. In a device of the class described, a stator, a rotor having an external surface forming a complete sphere, the rotor being journaled in the stator, and an expansible ring slidable in the rotor and cooperating with the inner surface of the stator, and one part of the inner surface of the stator being spherical and conforming to the outer surface of the rotor, another part of the inner surface of the stator being bulged away from the rotor, to form an expansion chamber.

1,899,375. CONTAINER. FREDERICK WESTERBECK, University City, Mo. Filed Feb. 5, 1930. Serial No. 425,942. 1 Claim. (Cl. 220—43.)



A sheet metal container comprising a body member and a closure member, each of said members being provided with a peripheral inclined flange, the outer edges of said inclined flanges being adjacent to each other, the inner face of each flange being at an acute angle to the adjacent wall of the container to provide an inwardly flaring space between them and a lever extending between said adjacent outer edges of the flanges, said lever having an upturned thrust element engaging the inclined inner face of the flange on said closure member and a downturned retaining element engaging the inclined inner face of the flange on said body member so that said lever is interlocked with and confined by said inclined flanges.

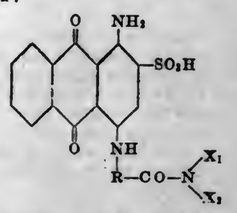
1,899,376. PAPER BAG HOLDER. LEVI WESTGAARD, Seattle, Wash. Filed May 31, 1930. Serial No. 457,725. 6 Claims. (Cl. 211—51.)



2. A paper bag holder embodying a frame for receiving a plurality of paper bags, each of the bags having a folded bottom forming a tab extending toward the upper end of the bag on the side of the bag which is to be turned outwardly in said frame, the folded bottoms affording greater thickness and causing the bags to bulge at this location; resilient presser arms positioned at the sides of said frame and adapted to extend outside of and parallel to the sides of the bags; and two spaced apart presser bars secured to said presser arms and extending crosswise of the frame adapted to engage the bags at respective locations, just above and just below said bottom tab portions, thereby forming between said presser bars an open portion into which extends the said tabs, whereby the tab of the outermost bag may be caused to extend outwardly away from the bag and said outer-most bag withdrawn through said open portion.

1,899,377. NEW ACID DYESTUFFS OF THE ANTHRAQUINONE SERIES. KARL ZAHN and HEINRICH KOCH, Frankfort-on-the-Main-Hochst, and KLAUS WEINAND, Leverkusen-I. G. Werk, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 3, 1932, Serial No. 590,783, and in Germany Apr. 16, 1931. 5 Claims. (Cl. 260—60.)

1. As new products, acid dyestuffs dyeing animal fiber from an acid bath blue tints and corresponding to the general formula:

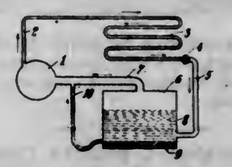


wherein R stands for a radical of the benzene series, X_1 for hydrogen, alkyl, hydroxyalkyl or cyclohexyl and X_2 for hydrogen, or X_1 and X_2 represent alkyl radicals.

1,899,378. METHOD OF AND APPARATUS FOR SEPARATING A LIQUID FROM OTHER LIQUIDS. GEORGE H. ZOUCK, Orange, N. J., and WILLIAM L. DE BAUFRE, New York, N. Y., assignors to Servel, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 20, 1926. Serial No. 142,810. 29 Claims. (Cl. 62—115.)

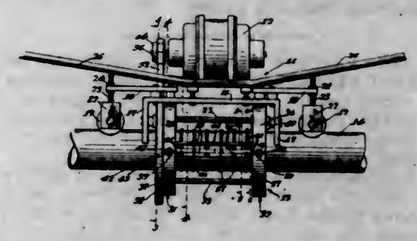
1. In a refrigerating system in which a refrigerant is adapted to be circulated, a compressor having lubricant,

a condenser for receiving said refrigerant from said compressor, an evaporator for receiving said refrigerant in liquid form from said condenser, said evaporator adapted to absorb heat from the surrounding bodies, a conduit for conducting the refrigerant in gas form from said evaporator to said compressor, some of said lubricant being carried to said evaporator by said refrigerant, a second conduit connecting said evaporator and said first conduit



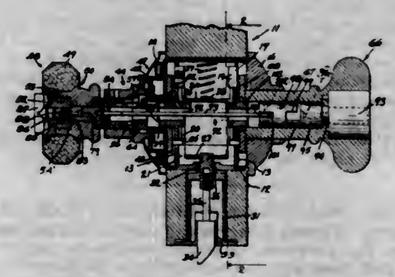
which second conduit is constantly open and which is adapted to receive relatively small amounts of the lubricant and of the refrigerant in liquid form, said second conduit extending above the top level of liquid in said evaporator and being connected to said first conduit in a manner to have the passing of the refrigerant in gas form through said first conduit cause a reduction in pressure at the end of the second conduit at the point of juncture with said first conduit.

1,899,379. PIPE CLEANING MACHINE. ERNEST H. ADAMS, Los Angeles, Calif. Filed Mar. 26, 1931. Serial No. 525,514. 5 Claims. (Cl. 15—104.04.)



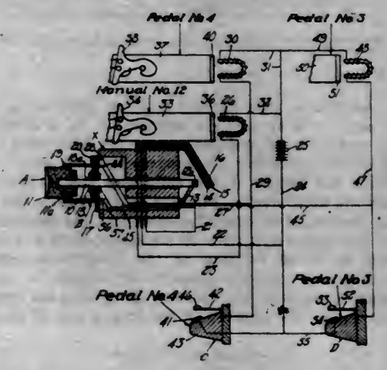
1. In a pipe cleaning machine, a rotor head comprising a pair of annuluses adapted to encircle a pipe, rods interconnecting said annuluses and spaced circumferentially with respect thereto, chains under tension between said rods and frictionally engaging said pipe, adjustable means interposed between said chains and said rods for varying the tension of said chains, and means for turning said head with respect to said pipe.

1,899,380. DOORKNOB LOCK. HENRY L. ARETS, Alhambra, Calif. Filed Mar. 11, 1931. Serial No. 521,658. 33 Claims. (Cl. 70—91.)



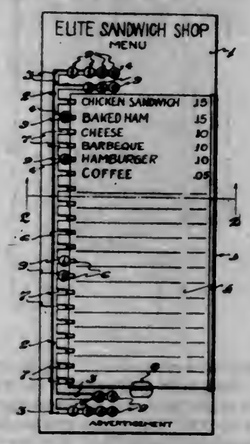
1. A door knob lock having a latch bolt, a knob, means interconnecting the knob and the bolt to actuate said bolt, a finger operated rotatable device in the knob, a slidable detent, an interconnecting means between said rotatable device and the detent to slide said detent, and means interconnecting the detent and the latch bolt to lock the latch bolt in one position or in another position of the detent to release the latch bolt for movement by the knob, a trigger operatively connected with the detent, means to move said trigger to engage the detent and hold the detent in a locking position, and means operative by the rotatable device to release the trigger from the detent to permit shifting of the detent to its unlocking position.

1,899,381. ORGAN STOP OPERATING MECHANISM. BASIL G. AUSTIN, West Hartford, Conn., assignor to The Austin Organ Company, Hartford, Conn., a Corporation of Connecticut. Filed Apr. 9, 1932. Serial No. 604,256. 11 Claims. (Cl. 84—341.)



3. Organ stop operating mechanism comprising a trace for pulling the stops of one organ, traces for pulling the stops of another organ, and means for drawing the trace of the first organ and simultaneously and selectively drawing the traces of the second organ, said means providing for the independent selective drawing of all of said traces.

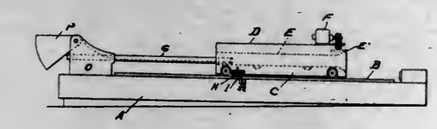
1,899,382. ARTICLE AND QUANTITY DESIGNATOR FOR MENUS AND THE LIKE. LOUIN BERRY, Fort Worth, Tex. Filed Nov. 6, 1931. Serial No. 573,846. 6 Claims. (Cl. 116—135.)



1. In a mechanical menu, a mounting for a lettered and figured card, the former having a slot arranged parallel and adjacent to the said card, a series of lateral slots extending from the said first slot opposite each of the letters

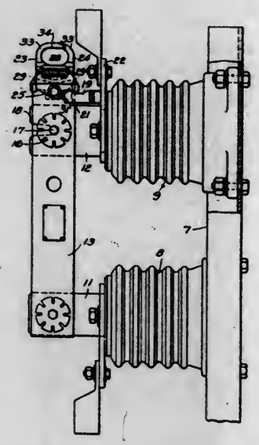
and figures on said card, the material cut from said lateral slots being turned back on the said mounting to hold the said card, figured indicators slidable in the said slots and means to hold the said indicators in the said lateral slots when arranged therein.

1,899,383. CENTRIFUGAL PIPE CASTING APPARATUS. STUART B. CLARK, Riverton, N. J., assignor to United States Pipe & Foundry Company, Burlington, N. J., a Corporation of New Jersey. Original application filed May 9, 1931, Serial No. 536,159. Divided and this application filed Nov. 5, 1931. Serial No. 573,085. 1 Claim. (Cl. 22—65.)



In a centrifugal pipe casting machine comprising a rotatable mold held at a slight inclination to a horizontal plane, a relatively retractable runner for delivering metal to the mold, operating to progressively deliver metal throughout the length of the mold and means operating to rotate the mold during the casting operation, the combination therewith of control mechanism for varying the speed of the means operative to rotate the mold and means operating in timed relation to the relative movements of the mold and runner, operative to adjust the control mechanism to increase the speed of the means for rotating the mold during the pouring of the spigot end of the pipe casting.

1,899,384. DISCONNECTING SWITCH MECHANISM. HERBERT J. CRABBS, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 17, 1928. Serial No. 254,975. 8 Claims. (Cl. 200—166.)



1. A disconnecting switch comprising a pair of spaced switch blades, switch jaws for engaging the blades, a catch member adjacent to the jaws, a latch for engaging the catch member carried by the blades and comprising a pair of pivoted latch members having hub portions spaced apart and carried on a single pivot on the blades, and a latch-positioning member disposed between the said hub portions adapted to retain the latch in a predetermined position between the said switch blades.

1,899,385. COVERING STRUCTURE. DOZIER FINLEY, Berkeley, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 2, 1931. Serial No. 512,852. 7 Claims. (Cl. 94—3.)



5. A covering structure for floors, pavements and the like comprising a base, a glass sheet secured to said base, and a bituminous treated fibrous sheet adhesively secured to said glass sheet.

1,899,386. DISPENSING POWDER PUFF. FLORIO G. FLOSI, Chicago, Ill. Filed Mar. 7, 1932. Serial No. 597,384. 5 Claims. (Cl. 132—78.5.)



1. A powder puff comprising a hollow cover, said cover having an opening therein, means for opening and positively closing the opening, a yieldable powder receptacle disposed inside the cover and removable through said opening, said cover having perforations communicating with the receptacle for dispensing powder.

1,899,387. PROCESS OF COATING ARTICLES WITH LIQUID PYROXYLIN OR THE LIKE. WILLIAM C. HAMPTON, Dayton, Ohio, assignor to The Crawford McGregor and Canby Company, Dayton, Ohio, a Corporation of Ohio. Filed May 24, 1929. Serial No. 365,781. 14 Claims. (Cl. 91—68.)

1. The herein described method of coating an article with a nitrocellulose material comprising dissolving the material into a viscous liquid, dipping the article therein, and subjecting the dipped article to the influence of a temperature control medium of greater temperature than the applied coating during the period of rapid evaporation of the solvent and subsequently of lower temperature than the applied coating to retard evaporation and swelling of the coating by expansion of entrapped solvent.

1,899,388. PROCESS OF RECOVERING ROSIN FROM COLLECTED CRUDE MATTER. ARTHUR R. HITCH and IRVIN A. EBAUGH, Brunswick, Ga., assignors, by mesne assignments, to Gillican-Chipley Company, a Corporation of Delaware. Filed Apr. 2, 1928. Serial No. 266,864. 5 Claims. (Cl. 202—46.)

1. The process of recovering rosin from "collected crude matter" including batting and strainer dross and cup skimmings which process consists in heating such collected crude matter until all of the turpentine, water, and other easily volatilized matter present is distilled off leaving a residue containing rosin, heating the residue to distill off the rosin in the presence of an inactive gas, and then heating, without distillation, the rosin distillate obtained from the residue in the presence of an inactive gas until a clear high grade non-crystallizing rosin is obtained.

1,899,389. PROCESS OF PREPARING A HIGH GRADE ROSIN. ARTHUR R. HITCH and IRVIN A. EBAUGH, Brunswick, Ga., assignors, by mesne assignments, to Gillican-Chipley Company, a Corporation of Delaware. Filed Apr. 2, 1928. Serial No. 266,865. 12 Claims. (Cl. 202—46.)

1. A process of preparing a high grade rosin, which process consists in heating rosin-containing material selected from a group comprising shredded or finely divided stump wood; gum, sap, and rosin as they exist in the live or dead plant tissue either in the needles, leaves, bark, trunk, stump or roots from coniferous pine trees until all of the turpentine, water, and other easily volatilized matter present is distilled off leaving a residue containing rosin, heating the residue and distilling off the rosin under non-decomposing conditions in the presence of a nonaqueous inactive gas.

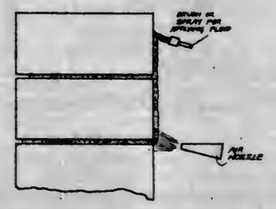
CARNEGIE LIBRARY OF ATLANTA

1,899,390. PIPE CUTTER. WINFIELD SCOTT JONES, Long Beach, Calif., assignor of three-eighths to Elmore D. Jones, and one-fourth to Charles E. Munn, Long Beach, Calif. Filed June 3, 1931. Serial No. 541,801. 5 Claims. (Cl. 81—189.)



1. A cutter, having in combination: a body, a cutter blade swingingly carried by the body, a swing arm secured to the body adjacent the cutter blade, and a sleeve within the body provided with a spring for frictionally engaging the work to be cut, said sleeve and said body being so related that rotation of the body in one direction causes telescopic movement of the sleeve within the body to bring the sleeve into contact with said arm and force the arm into blade engagement.

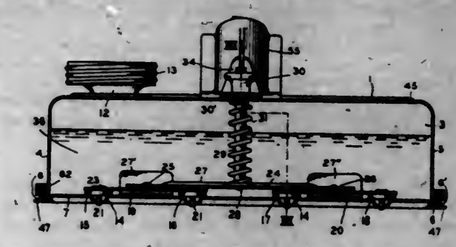
1,899,391. METHOD OF APPLYING MATERIAL. IRVING KASS, New York, N. Y. Filed Aug. 11, 1931. Serial No. 556,462. 2 Claims. (Cl. 72—128.)



1. The herein described method of treating the wall of a structure consisting in applying fluid material to the wall and thereafter applying an air blast to the fluid to force it into the wall crevices.

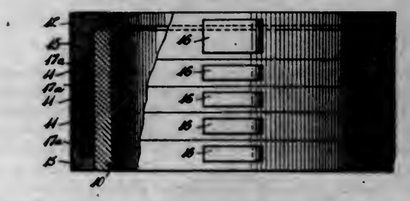
1,899,392. FLOOR WAX APPLICATOR. DENNIS F. LARKIN, San Francisco, Calif., assignor to Larkin Specialty Manufacturing Co., San Francisco, Calif., a Corporation of California. Filed May 11, 1931. Serial No. 536,332. 8 Claims. (Cl. 91—39.)

1. A wax applicator including a reservoir having outlets in the bottom thereof; a beam within said reservoir having a stem protruding therethrough; a spring interposed between said beam and the top of the reservoir;



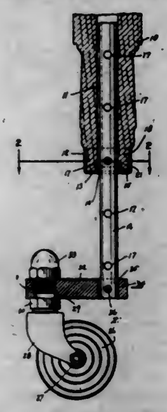
bars intermediately pivoted to the ends of said beam; and valves on the opposite ends of said bars cooperating with said outlets.

1,899,393. APPARATUS FOR MOLDING BELTS. ERNEST MEYER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 22, 1929. Serial No. 349,212. 1 Claim. (Cl. 18—42.)



Apparatus for molding V-type belts, said apparatus comprising a cylindrical mold member adapted to have a plurality of belts mounted thereon and a plurality of annular mold members adapted to be assembled on said cylindrical mold member in contact therewith and by movement axially of the latter to apply molding pressure to the belts, said annular members being so shaped that in conjunction with the cylindrical member they define a plurality of annular trapezoidal molding cavities.

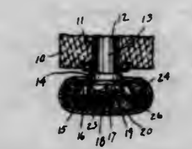
1,899,394. EXTENSIBLE OFFSET CASTER CONSTRUCTION. CLARENCE B. NOBLTING and WILLIAM H. NOELTING, Evansville, Ind., assignors to Faultless Caster Company, Evansville, Ind., a Corporation. Filed Aug. 17, 1931. Serial No. 557,462. 6 Claims. (Cl. 16—38.)



1. In combination, a tubular leg, a leg mounted on the lower end thereof and including an upwardly-directed body wall of appreciable height and enveloping the exterior of

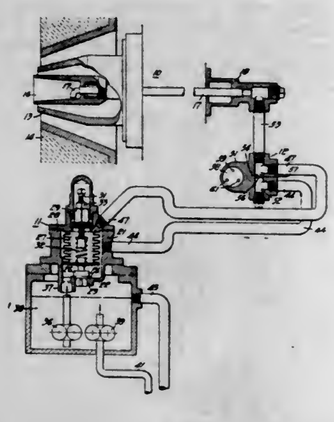
the leg and a plate portion having an aperture registering with the hollow portion of the leg, an extension member slidably mounted in the hollow of the leg, said member including a plurality of spaced transverse apertures therethrough, said body and body-enclosed portion of the leg including registering transverse apertures extending entirely across the same, and a pin retainer positioned in the body and leg apertures and in one of the member apertures for adjustably mounting the leg and member.

1,899,395. ROCKING STEM SLIDE. WILLIAM H. NOELTING, Evansville, Ind., assignor to Faultless Caster Company, Evansville, Ind., a Corporation. Filed Dec. 21, 1931. Serial No. 582 264. 5 Claims. (Cl. 16—42.)



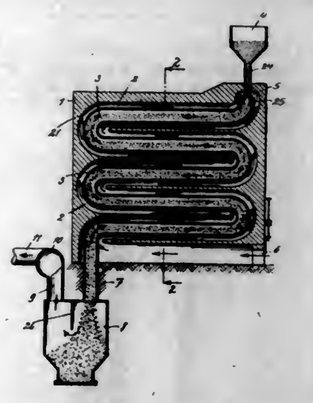
1. A rocking cushion slide comprising a load engaging stem, an upwardly directed centrally embossed plate rigid therewith, a chamber forming base therebeneath, resilient means in the chamber interposed between the base and the plate, means extending inwardly from the base and rigid therewith and overlying the plate and having an enlarged central aperture permitting rocking of the stem relative thereto, and other resilient means in the chamber and interposed between said plate and said inwardly extending means.

1,899,396. OIL BURNING APPARATUS AND METHOD. WILLIAM A. RAY, San Francisco, Calif., assignor to Ray Burner Company, San Francisco, Calif., a Corporation of Delaware. Filed Oct. 24, 1930. Serial No. 490,929. 6 Claims. (Cl. 158—36.)



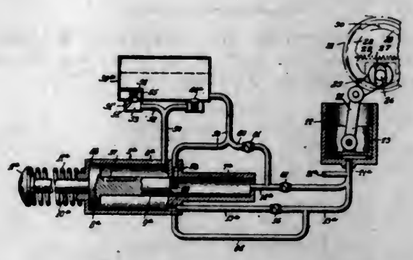
1. In an oil burning apparatus, a burner adapted to burn oil supplied to the same, a source of oil under pressure having a pipe connection with said burner, an orifice in said connection serving to restrict flow of oil to the burner, said orifice having surfaces adapted to be heated to an elevated temperature, and means for heating the orifice.

1,899,397. METHOD OF DRYING GRANULAR OR POWDERED MATERIAL BY MEANS OF A FLUID. KURT REICHE, Berlin-Halensee, Germany, assignor to Stettiner Chamotte-Fabrik Actien-Gesellschaft vormals Didier, Berlin-Wilmersdorf, Germany, a Corporation of Germany. Filed Sept. 22, 1930, Serial No. 483,444, and in Germany Sept. 23, 1929. 1 Claim. (Cl. 34—24.)



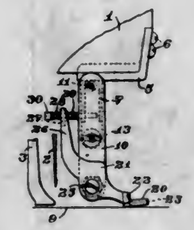
The herein described method of treating granular or pulverized material which consists in passing said material over a confined path, forcing a gas first over said path in external relation thereto and in indirect relation to the material therein, then passing said gas interiorly into said path into direct contact with said material, and increasing the velocity of said gas coincidentally with its passage into said path to such an extent that it carries the material therethrough in a suspended state.

1,899,398. HYDRAULIC BRAKE. SAMUEL W. RUSHMORE, Plainfield, N. J. Original application filed Aug. 17, 1927, Serial No. 213,490. Divided and this application filed Nov. 29, 1930. Serial No. 498,942. 6 Claims. (Cl. 60—545.)



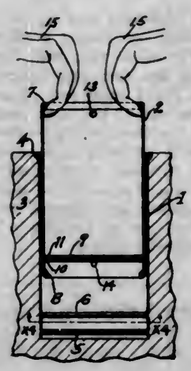
1. A fluid braking system, including a brake; fluid operated means to actuate said brake; pumping means including a low pressure cylinder, a high pressure cylinder, corresponding pistons and means for operating said pistons; connections between said cylinders and the brake actuating means to supply fluid thereto; a reservoir; means to cut out the low pressure cylinder after partial operation of the brake actuating means while the high pressure cylinder remains in operation; one of said cylinders having a port; a duct connecting said port with the reservoir; and means including a groove in one of said pistons for establishing communication between the low pressure cylinder and said port to permit liquid to flow from the low pressure cylinder to said port and thence to the reservoir.

1,899,399. YIELDING ATTACHMENT FOR SEWING MACHINES. CHARLES H. SANBORN, Newburyport, Mass., assignor to Haley, Cate, Rockwood Company, Inc., Everett, Mass., a Corporation of Massachusetts. Filed Aug. 30, 1930. Serial No. 478,920. 8 Claims. (Cl. 112—152.)



1. An attachment for sewing machines including sewing instrumentalities, comprising a support fixed to said machine, a lever pivoted adjacent to the lower end of said support, a tubular guide at one end of said lever and adapted to be positioned between two layers to be united by the sewing instrumentalities and to guide a third layer therebetween, and resilient means on the opposite end of said pivoted lever permitting said tubular guide to automatically yield on meeting increased thicknesses in either the upper or lower layers operated on by the sewing instrumentalities.

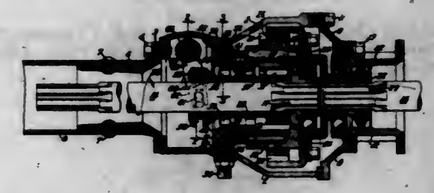
1,899,400. EASY LIFT SANITARY FLOWER CONTAINER. MAURICE E. SHAW, Los Angeles, Calif. Filed June 24, 1931. Serial No. 546,517. 4 Claims. (Cl. 47—41.)



1. A flower container comprising an outer casing provided at its top with an outwardly extending bead and at its bottom with two inwardly extending beads spaced apart and an inner receptacle having an open top and a closed bottom; said receptacle provided at its ends with inwardly extended beaded edges and means to lock the receptacle to the casing.

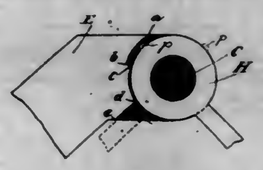
1,899,401. TRANSMISSION GEARING. CHARLES E. STARR, Whittier, Calif. Filed Apr. 11, 1931. Serial No. 529,346. 5 Claims. (Cl. 74—34.)

1. A transmission comprising a drive shaft, a driven shaft, a gear mounted for rotation with one of said shafts, a planet pinion mounted for movement with the other shaft and meshed with said gear, a fixed bearing ring, a slip ring journaled in said bearing ring, wedge means coacting with said rings for holding the slip ring against rotation in one direction, a sleeve slidably journaled on one of said shafts, a gear on the sleeve and meshed with the planet pinion, clutch teeth on the pinion mounting adapted to engage the sleeve gear, clutch teeth on the sleeve in mesh with complementary clutch teeth on the



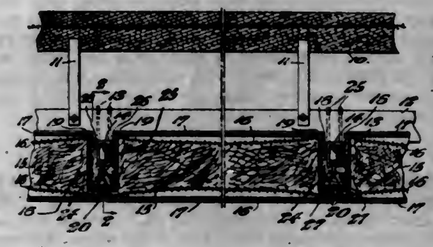
slip ring, and means for shifting the sleeve to disengage the clutch teeth on the sleeve from the clutch teeth on the ring and engage the sleeve gear with the clutch teeth on the pinion mounting.

1,899,402. SPECTACLES TEMPLE. JOHN VERRE, Hollywood, Calif. Filed Aug. 8, 1930. Serial No. 473,994. 3 Claims. (Cl. 88—58.)



1. A temple connection for spectacles comprising an endpiece attached to the frame and extending rearwardly from the plane thereof, said rearwardly extending part having a horizontal slot therein, a curved bottom to said slot, a stop shoulder intermediate the ends of said bottom, a temple ear round in shape pivotally mounted in said slot on a pivot passing through its center line, said ear being symmetrical about said center line and having a protuberance at its innermost extremity, said protuberance being symmetrical about said center line, whereby said protuberance will ride in said bottom until it engages said stop shoulder.

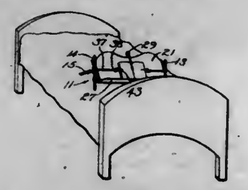
1,899,403. BUILDING CONSTRUCTION. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Apr. 8, 1932. Serial No. 603,949. 11 Claims. (Cl. 20—4.)



1. In a building construction comprising in combination longitudinal angle irons and transverse angle irons the last mentioned angle irons being supported in spaced

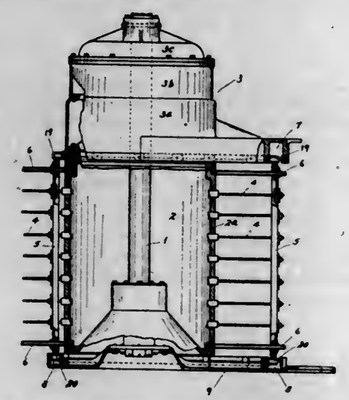
relation from the first mentioned angle irons, panels possessed of sound absorbing characteristics arranged between said transverse angle irons, and means for supporting said panels in cushioned relation from said transverse angle irons.

1,899,404. BOOKHOLDER AND TABLE. CHARLES H. WHITE, Los Angeles, Calif. Filed Nov. 28, 1930. Serial No. 498,790. 5 Claims. (Cl. 45—61.)



1. In a book holder, a panel having means to support a book and having a longitudinal slot, a block slidably mounted in said slot, a leaf engaging arm having a pivot wire extending through the block, a resilient means interconnecting said wire and the block drawing said arm toward the panel, the said arm being adapted to engage leaves of books of different thicknesses and to be turned on its pivot to disengage or engage such leaves.

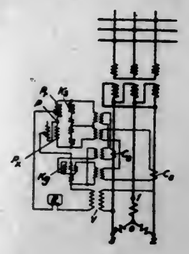
1,899,405. STRIPPER BAR MOUNTING. LOUIS E. WIRTH, Pittsburgh, Pa., assignor to Albert M. Hanauer, Pittsburgh, Pa. Filed Apr. 8, 1932. Serial No. 604,006. 4 Claims. (Cl. 56—44.)



1. In a picking assembly for use in a cotton harvesting machine, the combination of a non-revoluble shaft, a needle carrier revoluble on said shaft, a lower cam track support carried wholly by said shaft, an upper cam track support carried wholly by said shaft, lower and upper cam tracks carried respectively by said lower and upper supports in vertical alignment with each other, and stripper bars mounted to move angularly with the needle carrier and operatively contacting both cam tracks.

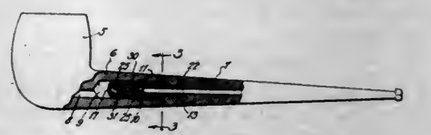
1,899,406. MEANS FOR COMPOUNDING VOLTAGE REGULATORS FOR THREE-PHASE GENERATORS. ARLE YTTERBERG, Hogberget, Ludvika, Sweden, assignor to Allmänna Svenska Elektriska Aktiebolaget, Vasteras, Sweden, a Corporation of Sweden. Filed July 14, 1931, Serial No. 550,733, and in Sweden July 15, 1930. 4 Claims. (Cl. 171—119.)

1. In voltage regulators for threephase generators, a threephase generator, a voltage regulator and compounding impedances connected in series between two terminals of said generator, said impedances being numerically equal but differing in phase angle by 60°, and current



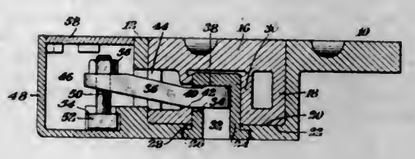
transformers adapted to force currents proportional to the currents flowing out from said two terminals to flow through said impedances.

1,899,407. SMOKING DEVICE. FRANZ ZACHARIAS, Brooklyn, N. Y. Filed June 28, 1932. Serial No. 619,630. 1 Claim. (Cl. 131—12.)



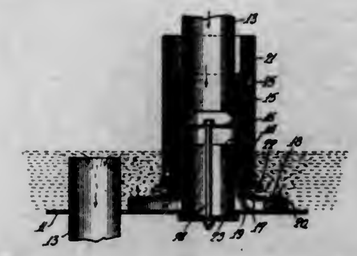
A coupling for attaching bits to the steps of smoking devices said coupling comprising a sleeve having an internal and an external thread, said sleeve being receivable in a socket in the stem and secured therein by said external thread, a flared outer end on said sleeve adapted to seat against the end of the stem and flush therewith, and a connecting member carried by the bit and projecting therefrom, said connecting member being provided with a thread for threaded engagement with the internal thread of the sleeve and an enlarged head on the free end of the coupling member, and adapted to engage the inner surface of the inner end of the sleeve when the bit and stem are in assembled position.

1,899,408. TONGUE SWITCH HOLDING DEVICE. EDWARD BELL, Jr., and ISRAEL K. DIXON, Johnstown, Pa. Filed Nov. 24, 1931. Serial No. 577,068. 5 Claims. (Cl. 246—443.)



1. A tongue switch, comprising a switch body, a tongue having a heel portion journalled in a bearing of the switch body, said bearing including a seat, a hold-down device comprising an apertured pin mounted in a seat formed in the bottom of the switch body and a member entering the aperture in the pin and reacting upwardly on the apertured part of the pin and downwardly on the switch heel and means exerting a force on said member, tending to hold the heel of the switch firmly down on its seat.

1,899,409. BUBBLE TOWER. ROBERT ROGER BOTTOMS, Louisville, Ky., assignor to The Girdler Corporation, Louisville, Ky., a Corporation of Delaware. Filed Aug. 14, 1931. Serial No. 556,957. 13 Claims. (Cl. 261—114.)



1. A bubble tower including two superposed spaced plates for supporting separate spaced layers of liquid, a liquid overflow pipe depending from the upper plate, a gas inlet pipe extending up from the lower plate, said pipes being in axial alignment but spaced apart, a cup enclosing the lower end of the first mentioned pipe and forming a liquid seal to prevent upflow of gas through said pipe, a bell enclosing the upper end of the second mentioned pipe and having the top thereof spaced below the lower end of said first mentioned pipe to prevent downflow of liquid from said latter pipe through said second mentioned pipe, and means for delivering the gas from said bell and the liquid overflowing from said cup at superposed spaced outlets, the gas being delivered at the lower of said outlets.

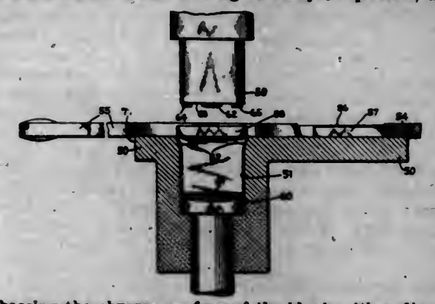
1,899,410. DIRECTIVE ANTENNA SYSTEM. EDMOND BRUCE, Red Bank, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 11, 1929. Serial No. 398,920. 22 Claims. (Cl. 250—11.)



1. An antenna comprising a conductor positioned at an angle greater than zero degrees and less than ninety degrees to a plane perpendicularly related to the path of propagation of a wave and having a length substantially equal to a half-wave length of the desired wave plus the projection of the antenna on the path of the propagated wave.

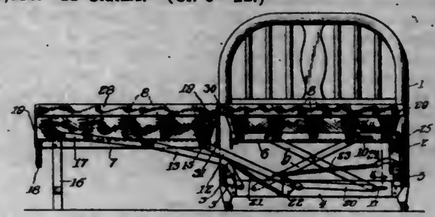
1,899,411. STOPPER-TOP AND METHOD OF MAKING THE SAME. WALTER J. FLETCHER, Albany, N. Y., assignor to The Embossing Company, Albany, N. Y., a Corporation of New York. Filed Mar. 20, 1930. Serial No. 437,330. 18 Claims. (Cl. 144—309.)

1. The method of making wooden stopper-tops comprising, forming a wood-blank having observe and reverse surfaces which are substantially parallel to each other and perpendicular to the grain of the wood and having a periphery consisting of a surface substantially perpendicular to the obverse and reverse surfaces, compressing said blank laterally by forcing it into a die-hole in a direction axial of the grain of the blank, said blank being forced into the die-hole by a cameo-die having elevations for embossing a desired impression on the reverse surface of the blank and for suitably supporting the blank adjacent the walls of the die-hole so as to prevent cracking thereof when the blank is being laterally compressed, and



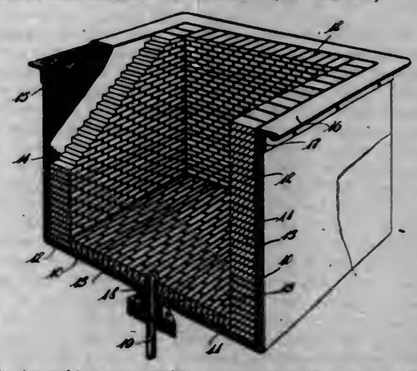
embossing the obverse surface of the blank with a die cut in intaglio for producing a relief design as the reverse surface is being embossed.

1,899,412. FOLDING BED. MARTIN FOX, Chicago, Ill., assignor to The Seng Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 26, 1925. Serial No. 4,730. 11 Claims. (Cl. 5—22.)



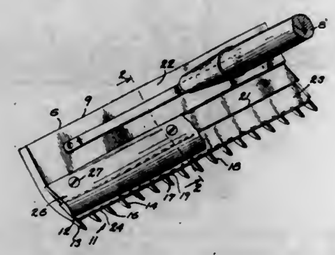
1. In a folding bed, a pair of mattress supporting sections, a support, means for supporting one section on the support to swing laterally with respect to the other, separate supporting means for the said other section comprising crossed links pivoted together intermediate their ends and having pivoted and sliding connections with both said other section and the support which also limit it to a vertical direction, and a single connection at each end between the supporting means of the two sections to positively raise or lower the second of said sections accordingly as the first section is moved laterally away from or toward the second section.

1,899,413. ACID VAT. HOWARD E. FRITZ, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 17, 1931. Serial No. 523,281. 4 Claims. (Cl. 206—2.)



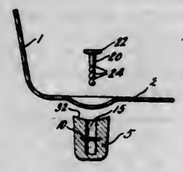
1. An acid vat comprising a metal shell and brick lining and a layer of rubber between the two, the rubber layer being adhered to the metal shell substantially throughout its extent.

1,899,414. BERMUDA GRASS CUTTER. ARCHIE M. GRAY, Compton, Calif. Filed Dec. 24, 1931. Serial No. 583,022. 1 Claim. (Cl. 30—9.)



In a garden tool, a handle, a head rigid therewith and comprising a transversely extending bar and a plurality of tines extending downwards from said bar, said tines having alined shoulders on their forward edges and said bar having a shoulder parallel to the shoulders of said tines, a blade disposed between said shoulders, a removable clamping plate holding said blade in place, the after edges of said tines being curved forwards and intersecting the forward edges thereof, said forward edges inclining upwards toward said blade and said tines riding upon said curved after edges with the points of intersection of their forward and after edges elevated above the ground when said tool is in operative position.

1,899,415. CUSHIONING FEET FOR SINK STRAINERS. GEORGE C. GUCKES, Lakewood, Ohio. Filed May 31, 1932. Serial No. 614,538. 5 Claims. (Cl. 4—290.)



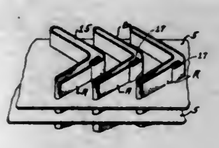
3. In combination with a metal sink strainer having a perforated bottom, a set of supporting feet for said strainer, each of said feet comprising a strainer supporting member and a connecting member for maintaining said supporting member in assembled relation with said strainer bottom, said supporting member being provided internally with a snap fastener part and with a passageway providing access to said part, said connecting member having a shank portion and a headed portion at the upper end of said shank portion, said shank portion but not said headed portion being of such size as to enable it to be extended down through one of the perforations of said strainer bottom into the passageway of said supporting member, said shank portion being provided with snap fastening means for snap fastening connection to the snap fastener part of said supporting member, whereby the supporting members of said set of supporting feet may be maintained in assembled relation with said strainer bottom by the connecting members of said set of feet, with said strainer bottom confined between said supporting members and the headed portions of said connecting members.

1,899,416. FLOOR COVERING AND THE LIKE. DAVIS LAMBERT IRWIN, High Holborn, London, and ROBERT ERNEST TIPPINS, Golders Green, London, England. Filed Oct. 6, 1928, Serial No. 310,757, and in Great Britain Oct. 13, 1927. 3 Claims. (Cl. 154—49.)



1. A floor covering comprising a bituminized fibrous backing, a linoleum composition surface, and an intermediate adhesive binder formed of an aqueous alkaline caseinate emulsion containing a water insoluble resinous substance and a bituminous substance.

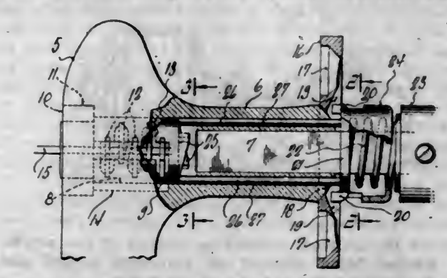
1,899,417. RADIATOR CORE. CLIFFORD B. HIGGINS, Detroit, Mich. Filed Nov. 7, 1931. Serial No. 573,657. 1 Claim. (Cl. 257—130.)



A radiator core comprising a plurality of vertically extending flat tubes each formed from sheet metal with the longitudinal edges of the metal interlocked in a seam, each tube bent along its longitudinal center to form tubular legs disposed in angular relation to each other in cross-section of said tube with said seam located adjacent said bend to give maximum flow space in each of said legs, said tubes being set in said core in parallel spaced relation with said angularly disposed legs of each tube overlapping the apex of the angle of an adjacent tube, and a plurality of spaced apart fin plates each formed of a single thickness of thin sheet metal with a plurality of slots conforming in shape to the cross-sectional shape of each of said tubes and through the aligned slots of which plates said tubes extend vertically, said plates being spaced apart vertically of the radiator, a distance not greater than the distance between adjacent tubes.

1,899,418. HANDLE. EDWARD N. JACOBI, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed June 27, 1929. Serial No. 374,203. 14 Claims. (Cl. 70—91.)

1. In a device of the character described, a movable member having an axially extended stem, a stationary member having an opening through which the stem passes, an element having an opening to non-rotatably slidably receive the stem and movable into engagement with the stationary member to restrain movement of said movable member, a lock cylinder carried by the movable member, and means connecting the lock cylinder with said element



for sliding the element along the stem out of engagement with the stationary member to permit actuation of the movable member.

1,899,419. TANTALUM SPINNERET AND METHOD OF MAKING SAME. CHARLES H. KERR, St. Davids, Pa. Filed Nov. 26, 1929. Serial No. 410,006. 6 Claims. (Cl. 76—107.)



1. The herein described process of making spinnerets which consists in immersing a sheet composed of tantalum in an iron sulphate solution, in passing a current therethrough to form an oxide on the surface of the sheet, in stamping a spinneret from the sheet and in heating the spinneret to oxidize the surface thereof.

5. As a new article of manufacture, a spinneret composed of tantalum and having a multiplicity of small apertures or capillary openings therethrough, the surfaces of said capillary openings being hardened.

1,899,420. TRANSFER AND TRANSFER COMPOSITION. WINTHROP STANLEY LAWRENCE, Brooklyn, N. Y., assignor to Kaumagraph Company, New York, N. Y., a Corporation of New York. Filed June 26, 1928. Serial No. 288,537. 4 Claims. (Cl. 134—28.)

1. A solid and fusible transfer composition containing resinous material and a material selected from the group consisting of ethyl cellulose and benzyl cellulose.

1,899,421. DISPLAY CARD. JOHN E. MORE, San Francisco, Calif. Filed Apr. 26, 1930. Serial No. 447,522. 1 Claim. (Cl. 206—79.)

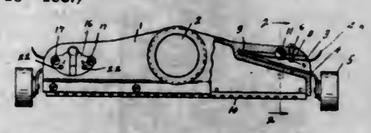


The combination with a display card made of a sheet cut out to a predetermined design and having a picture on one side thereof harmonising with the cut-out design; of a rack for holding articles to be displayed on the side of the sheet having the picture thereon, said rack being designed to merge into and form a continuation of a portion of the picture on the sheet; of inturned ends on the rack extended thru the sheet from the front to the rear side thereof; and a rubber suction gripper attached on the rear side of the sheet over the extended ends of the rack.

1,899,422. RAPID VEGETABLE TANNING PROCESS. GORDON PEACE, Cawnpore, British India, assignor of one-half to The British India Corporation Limited, Cawnpore, British India, a Corporation. Filed Aug. 23, 1928, Serial No. 301,697, and in India Dec. 8, 1927. 6 Claims. (Cl. 149—2.)

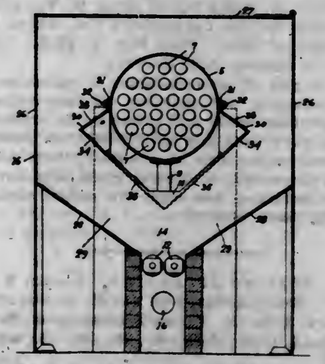
1. A process for the rapid vegetable tanning of cow, ox and buffalo hides which consists in liming and preparing the hides for tanning in the ordinary way, then subjecting the hides to the action of a pickling solution until they are completely delimed and pickled through, subjecting the pickled hides to the action of a depickling solution comprising an aqueous solution of sodium thiosulphate until they are depickled only to such an extent that the hides are brought to a degree of acidity represented by a hydrogen-ion concentration of between about pH 3.5 and pH 5.0, and only thereafter subjecting the hides to treatment with a vegetable tanning liquor of the requisite strength so as to effect their rapid tanning.

1,899,423. VACUUM CLEANER. FREDERICK RIEBEL, Jr., Toledo, Ohio, assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Sept. 9, 1929. Serial No. 391,123. 8 Claims. (Cl. 15—155.)



1. A vacuum cleaner comprising a floor tool having a socket in the end portion, a mounting comprising a pair of arms including free ends spaced apart vertically and united at their other ends, at least one of said arms being of spring material, a supporting wheel journalled upon the free end of the lower arm, said mounting being received in the socket with its connected portion innermost, and adjustable means engaging the upper arm, to vertically vary the position thereof.

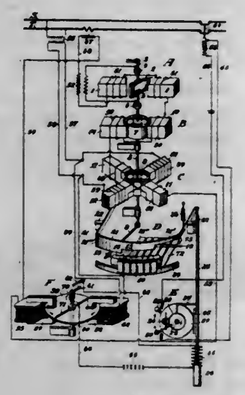
1,899,424. AUTOMATIC FUEL CONTROL FOR BOILERS. ROBERT S. RODIE, Kingston, N. Y. Filed Oct. 29, 1931. Serial No. 571,844. 4 Claims. (Cl. 110—29.)



1. In a heating apparatus, in combination, a boiler, a combustion chamber having a grate, opposed fuel passage-

ways leading to said combustion chamber and meeting at a point between the grate and the boiler, said fuel passageways being downwardly inclined toward each other for effecting gravity feed, a fuel storage chamber joining with and extending continuously and uninterruptedly upwardly from both of said fuel passageways and entirely enclosing the upper part of the boiler, and a fuel spreader positioned at each side of said boiler adjacent to the respective fuel passageway so as to control fuel flow to the combustion chamber, each of said fuel spreaders including a wing plate having an attaching and supporting lug by which it is directly connected to the boiler for vertical adjustment and extending longitudinally thereof adjacent to the respective fuel passageway so as to control and regulate the fuel level in the combustion chamber.

1,899,425. ELECTRICAL PROTECTIVE SYSTEM. MANFRED SCHLEICHER, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske Aktiengesellschaft, Berlin-Siemensstadt, Germany. Filed Apr. 23, 1927, Serial No. 186,143, and in Germany Apr. 24, 1926. 7 Claims. (Cl. 175—294.)



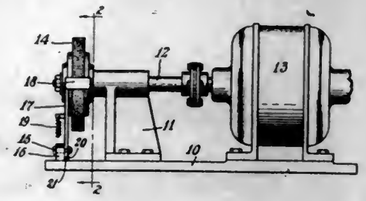
1. Electrical means for supervising electric lines comprising two resistance responsive instruments, one arranged for exact, the other one for approximate operation, a switch releasing device arranged for cooperation with said exact instrument and means arranged to be actuated by said other instrument for actuating said switch releasing device.

1,899,426. AGE RESISTING VULCANIZED RUBBER PRODUCT. WINFIELD SCOTT, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed Nov. 8, 1929. Serial No. 405,842. 9 Claims. (Cl. 18—50.)

1. The process of manufacturing a vulcanized rubber product possessing age resisting characteristics which comprises heating rubber and sulfur in the presence of an antioxidant comprising a reaction product of substantially equi-molecular proportions of a mono-hydroxy substituted aromatic hydrocarbon, a straight chain aliphatic secondary amine containing less than five carbon atoms and a saturated aliphatic aldehyde.

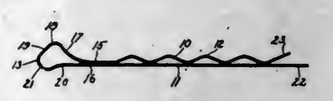
1,899,427. BUFFING APPARATUS. DONALD K. SINGER, Hartford, Conn., assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed June 8, 1928. Serial No. 283,960. 2 Claims. (Cl. 90—20.)

1. Apparatus for buffing a flexible portion of a rubber article situated adjacent an exposed underlying portion thereof, comprising a rotary buffer and a short arcuate member positioned to support the portion to be buffed and



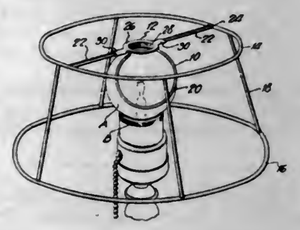
to shield the adjacent underlying portion of the article, said member being mounted for movement toward and away from said buffer radially of the latter.

1,899,428. HAIR HOLDING DEVICE. NATHAN L. SOLOMON, Brooklyn, N. Y. Filed Nov. 5, 1932. Serial No. 641,330. 6 Claims. (Cl. 132—50.)



1. A hair holding device comprising a pair of relative movable, parallel legs and an enlarged eye portion connecting the corresponding ends of said leg portions, said eye portion comprising two curved limbs merging into said leg portions and a straight portion common to and connecting said limbs.

1,899,429. SHADE FRAME CONSTRUCTION. VALENTINE B. WATRAL and BALTAZSAR V. KOLZNIK, New York, N. Y. Filed Nov. 17, 1932. Serial No. 643,002. 9 Claims. (Cl. 240—128.)



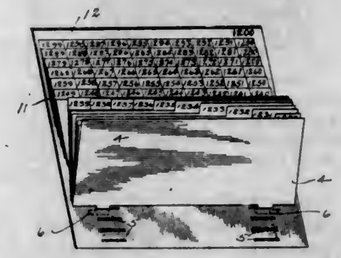
9. In a lamp shade construction, a lamp shade supporting member, a clamp attachment and a bridge attachment, both of said attachments being permanently carried by the lamp shade supporting member.

1,899,430. FILING SYSTEM. RODNEY J. WOOD, Dayton, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y., a Corporation of Delaware. Filed Feb. 7, 1921. Serial No. 443,209. 15 Claims. (Cl. 129—16.)

5. In a card index filing system, a support card, a plurality of upturned reference cards associated therewith, and forming a series of pockets to receive additional data sheets and means for detachably engaging said upturned reference cards independently at different spaced elevations upon said support card in separate spaced relation one from another whereby the margins of the reference cards will overlap one upon another.

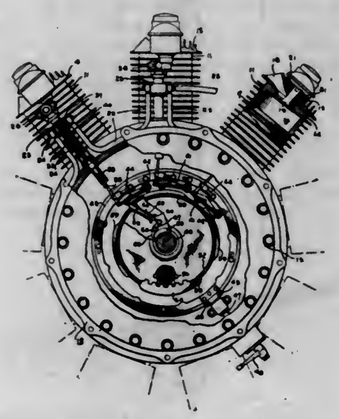
10. In a card index system, a plurality of groups of cards, each group being so formed and marked at one edge as to provide a cut-back index, a support common to the plurality of groups, the cards comprising each group being separate and detached from each other and also from said common support, a series of flaps hinged to said common support, at spaced intervals, each group of cards being positioned behind and supported by one of said flaps, the cards of the several groups being arranged upon said common support in vertically overlapped relation so that the indices are simultaneously visible, the horizontal succession of guide characters upon the exposed portions of the cards of each group being offset in spaced relation agreeing with their positions in a predetermined sequence, with guide characters of different groups having common characteristics disposed in visible vertical series upon the exposed portions of corresponding cards of the different groups.

CARNEGIE LIBRARY OF ATLANTA



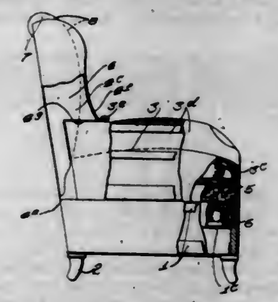
15. A filing device comprising a support card formed with a plurality of substantially parallel incisions providing a plurality of connected strips, a series of bars plaited with said strips to form an interwoven structure, and a leaf connected to each of said bars.

1,899,431. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, deceased, Detroit, Mich., by Emma F. Woolson, executrix, Bloomfield Village, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 21, 1930. Serial No. 469,325. 18 Claims. (Cl. 123—139.)



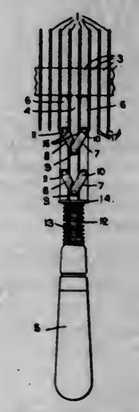
1. In an internal combustion engine, a pressure device including a plunger for injecting atomized liquid fuel into compressed air charges in a combustion space, an engine driven cam for causing injection strokes of the plunger above a predetermined engine speed, and radially reciprocable abutments carried by the cam for effecting plunger injection strokes below the predetermined engine speed.

1,899,432. COMBINATION BED AND CHAIR. MAX ADLER, San Diego, Calif. Filed Jan. 15, 1930. Serial No. 420,890. 3 Claims. (Cl. 155—49.)



2. In an article of furniture of the class wherein a seat member and a back member are hinged to opposite sides of a base member so as to form a chair when folded and a bed when extended, the combination with said seat and back members, of a pair of arm rests extending upwardly from the sides of said seat member disposed with their rear ends abutting the side marginal portions of said back member, wings arranged along the side margins of said back member their lower ends arranged to abut the upper portions of said arm rests, keepers set within said arm rests at the portions thereof covered by said wings, and downwardly directed catches disposed within said wings arranged to engage said keepers.

1,899,433. IMPLEMENT FOR CLEANING DISK KNIVES. OSCAR R. DECKERT, Brookline, Mass., assignor to Cube Steak Machine Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 11, 1932. Serial No. 585,930. 5 Claims. (Cl. 7—1.)

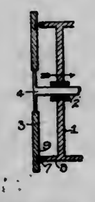


1. A device for cleaning a gang of disk knives comprising a plurality of parallel blades each of a size to fit between two adjacent knives, and spring means tending to hold the blades yieldingly in contact with each other while permitting the blades to be separated from each other sufficiently to receive the knives between them when they are inserted between the knives.

1,899,434. PROPELLER ARRANGEMENT. MARTIN DREXL, Kaldenkirchen, Germany. Filed July 15, 1931, Serial No. 550,977, and in Germany July 26, 1930. 14 Claims. (Cl. 170—167.)

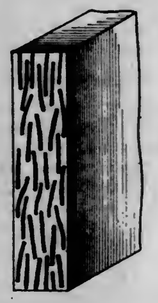
1. A propeller arrangement for propelled vehicles with short striking blades, comprising in combination a driving

shaft, blades mounted on and adapted to rotate with said shaft axially shiftable during the work, actual working surfaces of said blades arranged with axial play, means for causing axial pushing back of each of said working surfaces individually at its centre of pressure for



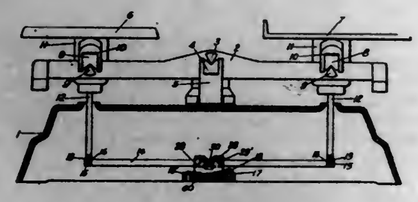
effecting a flat blow and imparting a propeller thrust produced, a thrust imparting element for each of said blades, and a thrust receiving element for each of said blades, said means becoming operative between said thrust imparting element and said thrust receiving element.

1,899,435. EXPANSION JOINT. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed May 5, 1926, Serial No. 106,985. Renewed June 30, 1930. 7 Claims. (Cl. 94—18.)



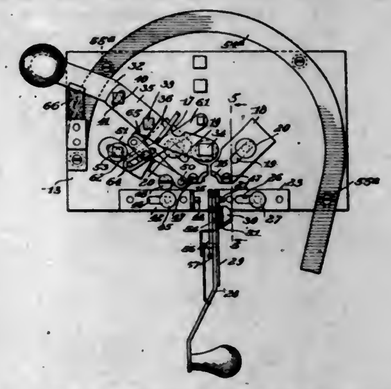
1. A foliated structure consisting of matter vegetable fibrous material, alternating in foliations of long linear dimension with a ductile waterproofed material, said fibrous foliations lying in overlapping irregular position intermediately of layers of waterproofing material, and formed into strips of expansion joint.

1,899,436. WEIGHING SCALE. EDWARD FLETCHER, Columbus, Ohio, assignor to The Exact Weight Scale Company, Columbus, Ohio, a Corporation of Ohio. Filed May 9, 1930. Serial No. 450,947. 17 Claims. (Cl. 265—54.)



1. A weighing scale comprising a body portion, a beam, outrider members, a check rod connected to said outrider member, and a bearing for said check rod, the connections between said check rod and said outrider members and said bearing and check rod being pin and hole connections of such form that a force applied to one side of either end pin will be transmitted to the same side of the bearing pin so that the substantially horizontal sides of the vertical parallelograms will always be equal.

1,899,437. WIRE BENDING MACHINE. WILLIAM E. GHENT, Atlanta, N. Y., assignor to Bogge Manufacturing Corporation, Atlanta, N. Y., a Corporation of New York. Filed June 17, 1932. Serial No. 617,824. 20 Claims. (Cl. 140—3.)



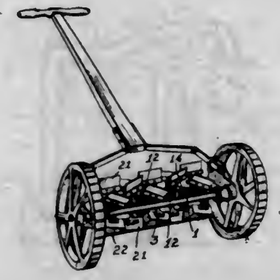
1. A machine for forming links from wire, comprising a base, a plurality of associated forming elements on the base, a manually operable device movable on the base to engage and bend the wire about one of said elements to form a loop having spaced side portions and serving during said bending operation to position the unbent portion of the wire in engagement with another of said elements, and means movable on the base to bend the wire about said last mentioned element to form a second loop at one side of the first mentioned loop.

1,899,438. WELL DRILLING APPARATUS. ALEXANDER M. GRANT, San Diego, Calif. Filed Dec. 30, 1927. Serial No. 243,572. 15 Claims. (Cl. 255—4.)



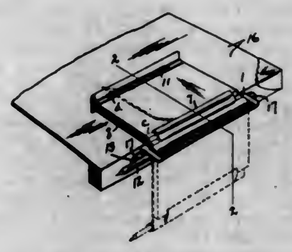
1. In a well drilling apparatus of the class described, an electric motor, cam rollers operatively connected therewith, cam means associated with said cam rollers, a hammer means associated with said cam means, a percussive drilling means positioned with the one end thereof adjacent to said hammer means for receiving impacts therefrom, and a hydraulic motor mounted within the said drilling means, said hydraulic motor adapted to rotate said drilling means.

1,899,439. LAWN-MOWER. CHESTER A. GRATIOT, Portland, Oreg., assignor to Eversharp Lawnmower Company, a Corporation of Oregon. Filed Dec. 28, 1931. Serial No. 582,758. 4 Claims. (Cl. 56—294.)



1. In a lawn mower, a cutter head composed of a driven shaft, a plurality of knife carriers having flexible knife blades attached thereto mounted upon said shaft, and resilient driving connections between said shaft and said knife-carriers.

1,899,440. SCORE PAD OR MEMORANDUM HOLDER. ALAN R. HART, Syracuse, N. Y. Filed Sept. 28, 1931. Serial No. 565,610. 6 Claims. (Cl. 281—15.)



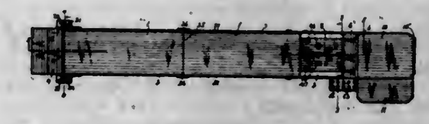
5. In a device of the class described, the combination with a table, of a frame adapted to be removably secured to the table in a plane below the top thereof and a pad-holding member slidably supported by the frame for movement from a horizontal position resting on the top of the table to a vertical suspended position at one side of the table.

1,899,441. SELF-SERVICE BOWLING ALLEY. HENRY K. HESS, Wolcott, N. Y. Filed Oct. 20, 1930. Serial No. 489,982. 7 Claims. (Cl. 273—39.)



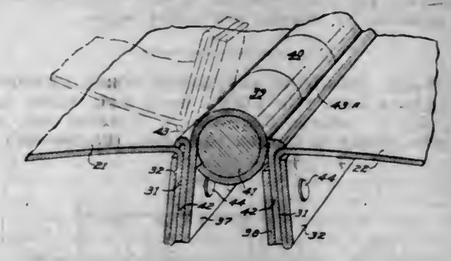
1. In a self-service bowling alley, an outgoing runway for the ball, a return runway for said ball underlying the outgoing runway, a platform at the proximal end of both runways for supporting the pins, means at the distal end of the outgoing runway for deflecting the ball downwardly therefrom, power-driven means underlying the distal end of the outgoing runway for receiving the ball from said means and propelling it along the return runway onto said platform for displacing the pins.

1,899,442. BOWLING ALLEY. HENRY K. HESS, Wolcott, N. Y. Filed June 15, 1931. Serial No. 544,555. 6 Claims. (Cl. 273—39.)



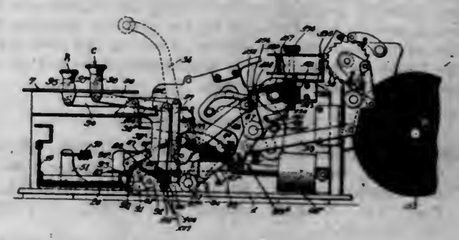
1. In a bowling alley, an outgoing runway and an underlying return runway, means for deflecting the ball from the distal end of the upper runway onto the adjacent end of the lower runway, and a rotary impeller arranged to engage the upper face of the downwardly deflected ball for impelling said ball along the return runway.

1,899,443. MOTOR VEHICLE. ARCHER L. KNAPP, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 16, 1930. Serial No. 489,094. 12 Claims. (Cl. 180—69.)



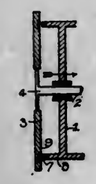
1. In a motor vehicle engine bonnet, a pair of hinged panel sections, and buffer means reinforcing the panel sections adjacent their hinged portion, said buffer means of one panel section engaging the buffer means of the other panel section to space the panel sections when opened and released.

1,899,444. ADDING AND LISTING MACHINE. THOMAS O. MEHAN, Jacksonville, Ill., assignor, by mesne assignments, to Remington Rand Inc., a Corporation of Delaware. Filed Dec. 5, 1925. Serial No. 73,393. 6 Claims. (Cl. 235—60.)



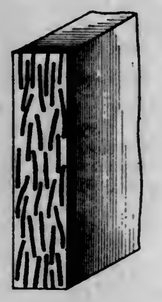
1. In a machine of the class described, the combination of a settable pin carriage, and an interlocking mechanism comprising a total key, a bail operatively connected therewith, and a stop on said bail engageable directly with said carriage for preventing the operation of said key when said carriage is displaced from normal position.

shaft, blades mounted on and adapted to rotate with said shaft axially shiftable during the work, actual working surfaces of said blades arranged with axial play, means for causing axial pushing back of each of said working surfaces individually at its centre of pressure for



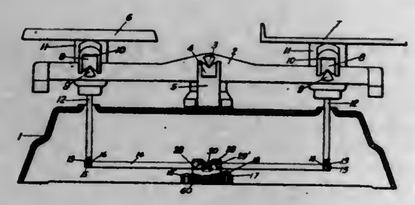
effecting a flat blow and imparting a propeller thrust produced, a thrust imparting element for each of said blades, and a thrust receiving element for each of said blades, said means becoming operative between said thrust imparting element and said thrust receiving element.

1,899,435. EXPANSION JOINT. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed May 5, 1926, Serial No. 106,985. Renewed June 30, 1930. 7 Claims. (Cl. 94—18.)



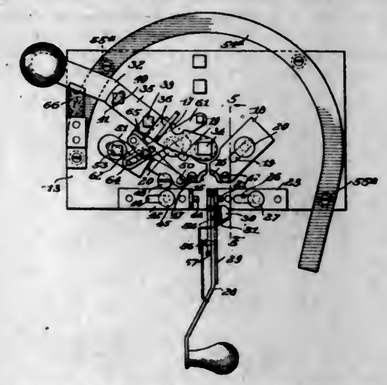
1. A foliated structure consisting of matter vegetable fibrous material, alternating in foliations of long linear dimension with a ductile waterproofed material, said fibrous foliations lying in overlapping irregular position intermediately of layers of waterproofing material, and formed into strips of expansion joint.

1,899,436. WEIGHING SCALE. EDWARD FLETCHER, Columbus, Ohio, assignor to The Exact Weight Scale Company, Columbus, Ohio, a Corporation of Ohio. Filed May 9, 1930. Serial No. 450,947. 17 Claims. (Cl. 265—54.)



1. A weighing scale comprising a body portion, a beam, outrider members, a check rod connected to said outrider member, and a bearing for said check rod, the connections between said check rod and said outrider members and said bearing and check rod being pin and hole connections of such form that a force applied to one side of either end pin will be transmitted to the same side of the bearing pin so that the substantially horizontal sides of the vertical parallelograms will always be equal.

1,899,437. WIRE BENDING MACHINE. WILLIAM E. GHENT, Atlanta, N. Y., assignor to Boggs Manufacturing Corporation, Atlanta, N. Y., a Corporation of New York. Filed June 17, 1932. Serial No. 617,824. 20 Claims. (Cl. 140—3.)



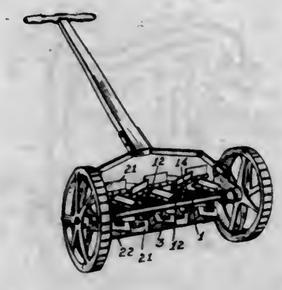
1. A machine for forming links from wire, comprising a base, a plurality of associated forming elements on the base, a manually operable device movable on the base to engage and bend the wire about one of said elements to form a loop having spaced side portions and serving during said bending operation to position the unbent portion of the wire in engagement with another of said elements, and means movable on the base to bend the wire about said last mentioned element to form a second loop at one side of the first mentioned loop.

1,899,438. WELL DRILLING APPARATUS. ALEXANDER M. GRANT, San Diego, Calif. Filed Dec. 30, 1927. Serial No. 243,572. 15 Claims. (Cl. 255—4.)



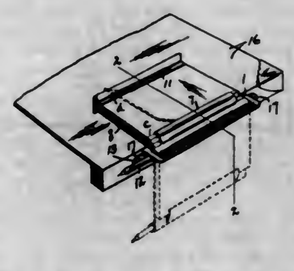
1. In a well drilling apparatus of the class described, an electric motor, cam rollers operatively connected therewith, cam means associated with said cam rollers, a hammer means associated with said cam means, a percussive drilling means positioned with the one end thereof adjacent to said hammer means for receiving impacts therefrom, and a hydraulic motor mounted within the said drilling means, said hydraulic motor adapted to rotate said drilling means.

1,899,439. LAWN-MOWER. CHESTER A. GRATIOT, Portland, Oreg., assignor to Eversharp Lawnmower Company, a Corporation of Oregon. Filed Dec. 23, 1931. Serial No. 582,758. 4 Claims. (Cl. 56—294.)



1. In a lawn mower, a cutter head composed of a driven shaft, a plurality of knife carriers having flexible knife blades attached thereto mounted upon said shaft, and resilient driving connections between said shaft and said knife-carriers.

1,899,440. SCORE PAD OR MEMORANDUM HOLDER. ALAN R. HART, Syracuse, N. Y. Filed Sept. 28, 1931. Serial No. 565,610. 6 Claims. (Cl. 281—15.)



5. In a device of the class described, the combination with a table, of a frame adapted to be removably secured to the table in a plane below the top thereof and a pad-holding member slidably supported by the frame for movement from a horizontal position resting on the top of the table to a vertical suspended position at one side of the table.

1,899,441. SELF-SERVICE BOWLING ALLEY. HENRY K. HESS, Wolcott, N. Y. Filed Oct. 20, 1930. Serial No. 489,982. 7 Claims. (Cl. 273—39.)



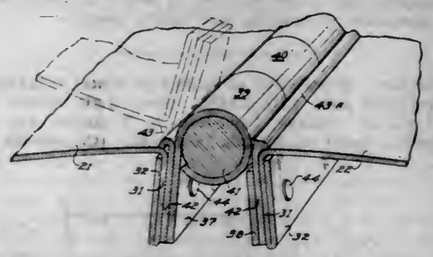
1. In a self-service bowling alley, an outgoing runway for the ball, a return runway for said ball underlying the outgoing runway, a platform at the proximal end of both runways for supporting the pins, means at the distal end of the outgoing runway for deflecting the ball downwardly therefrom, power-driven means underlying the distal end of the outgoing runway for receiving the ball from said means and propelling it along the return runway onto said platform for displacing the pins.

1,899,442. BOWLING ALLEY. HENRY K. HESS, Wolcott, N. Y. Filed June 15, 1931. Serial No. 544,555. 6 Claims. (Cl. 273—39.)



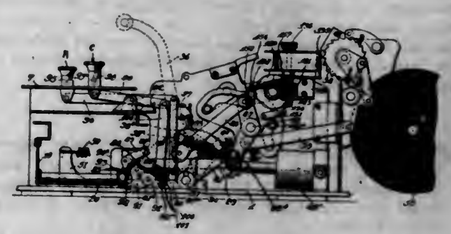
1. In a bowling alley, an outgoing runway and an underlying return runway, means for deflecting the ball from the distal end of the upper runway onto the adjacent end of the lower runway, and a rotary impeller arranged to engage the upper face of the downwardly deflected ball for impelling said ball along the return runway.

1,899,443. MOTOR VEHICLE. ARCHER L. KNAPP, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 16, 1930. Serial No. 489,094. 12 Claims. (Cl. 180—69.)



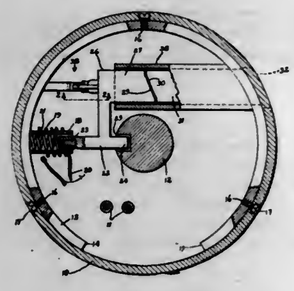
1. In a motor vehicle engine bonnet, a pair of hinged panel sections, and buffer means reinforcing the panel sections adjacent their hinged portion, said buffer means of one panel section engaging the buffer means of the other panel section to space the panel sections when opened and released.

1,899,444. ADDING AND LISTING MACHINE. THOMAS O. MEHAN, Jacksonville, Ill., assignor, by mesne assignments, to Remington Rand Inc., a Corporation of Delaware. Filed Dec. 5, 1925. Serial No. 73,893. 6 Claims. (Cl. 235—60.)



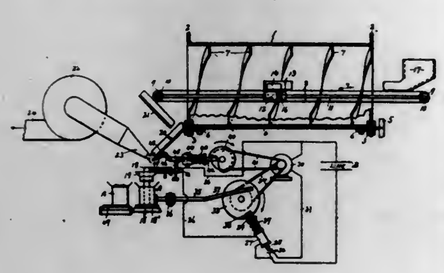
1. In a machine of the class described, the combination of a settable pin carriage, and an interlocking mechanism comprising a total key, a ball operatively connected therewith, and a stop on said ball engageable directly with said carriage for preventing the operation of said key when said carriage is displaced from normal position.

1,899,445. TELEPHONE LOCK. GUSTAVE MILLER, Washington, D. C. Filed May 24, 1932. Serial No. 613,246. 20 Claims. (Cl. 179—189.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 870 O. G. 757.)



16. In a telephone instrument, in combination with a bell circuit and a transmitter and receiver, a columnar supporting member therefor, a switch operating member extending through said columnar supporting member, means for locking said switch operating member against operation, and means operated by said bell circuit while in operation for releasing said locking means.

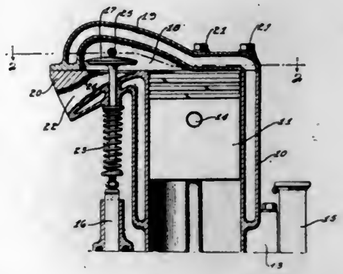
1,899,446. WEIGHING APPARATUS FOR PACKAGING ONIONS AND THE LIKE. DAVID R. C. SMITH and JOHN H. COULTER, Canastota, N. Y. Filed Apr. 15, 1929. Serial No. 355,274. 4 Claims. (Cl. 249—59.)



1. In a weighing apparatus, the combination of a scale upon which the individual containers to be filled and weighed are successively placed, mechanism for feeding the material to be weighed into the container on the scale, an electric motor, a rotary cam driven by the motor, means controlled by the scale for controlling the operation of the motor, and means actuated by the cam for stopping the flow of the material into the container on the scale when the latter is operated by a predetermined weight of the container and material therein.

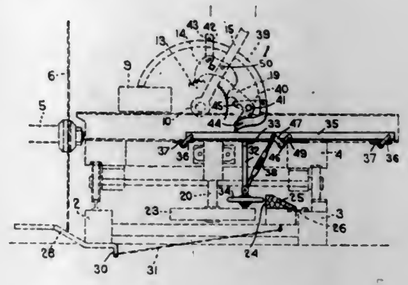
1,899,447. INTERNAL COMBUSTION ENGINE. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 29, 1929. Serial No. 358,971. 5 Claims. (Cl. 123—32.)

1. In an internal combustion engine in which air fuel are introduced separately into the combustion chamber, a cylinder structure having a piston bore extending therethrough and an offset wall portion extending from one end thereof normal to the axis of the bore, a head extending across the end of the cylinder structure formed with the offset wall, said head having a curved inner wall surface forming a combustion chamber with the cylinder structure which partially overlies the cylinder bore, air inlet passage means leading into the combustion chamber at an angle to direct the incoming air against the curved



inner surface of the head at a point overlying the cylinder bore, and means for injecting charges of liquid fuel into the combustion chamber.

1,899,448. SAWMILL. EDWARD P. TUFTS, Bow, N. H. Filed Sept. 2, 1932. Serial No. 631,520. 3 Claims. (Cl. 143—114.)

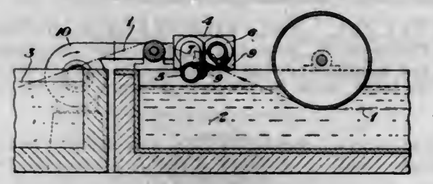


1. A sawmill having a carriage provided with transversely-extending racks, rails on which said carriage travels, a knee-supporting slide mounted on the carriage to move transversely thereof, a shaft journalled in said slide, pinions on the shaft meshing with said racks, a ratchet on said shaft, a manually-operated feed pawl co-operating with the ratchet for rotating the shaft to advance the slide, a stop pawl to prevent retrograde movement of the slide, slide-retracting means actuated by the movement of the carriage, a member pivoted to the carriage and operating when swung upwardly to release both pawls from the ratchet, a vertically-movable pawl-releasing member mounted on the carriage and extending transversely thereof, means to raise said pawl-releasing member when the slide-retracting means is rendered operative, and means actuated by the vertical movement of said pawl-releasing member to swing said pivoted member upwardly thereby to release the pawls.

1,899,449. APPARATUS FOR COATING WIRE. WALFRED A. WALLSTEN, Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey, a Corporation of New Jersey. Filed Mar. 14, 1932. Serial No. 598,795. 1 Claim. (Cl. 204—5.)

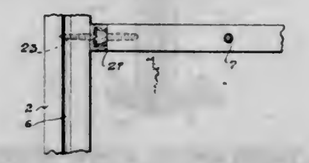
An apparatus for coating wire including baths of coating and rinsing fluids, a header arranged to one side of said coating bath, a pair of spaced conduits extending across said coating bath, means for guiding the wire from said

coating bath between said conduits and to said rinsing bath, slots in said conduits directed towards the path of travel of said wire, lips extending outwardly along said con-



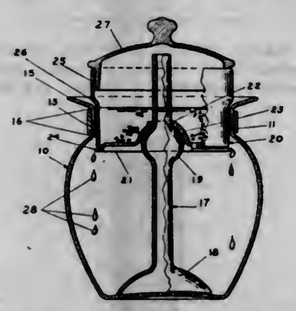
duits at each of the edges of said slots, means for varying the distances between said lips and means for supplying said header with compressed air.

1,899,450. BUILDING CONSTRUCTION. JOHN BALI and PETAR KOTUR, Gary, Ind. Filed Dec. 24, 1931. Serial No. 583,109. 2 Claims. (Cl. 20—2.)



1. A wall joint in a building structure comprising in combination with an outer wall consisting of a series of tiered timbers with abutting edges and a partition wall consisting of a series of tiered timbers with abutting edges, a series of longitudinally alined shoes applied to the inner surfaces of the timbers of the outer wall, said shoes being spaced longitudinally from each other, each shoe bridging the abutting edges of adjacent timbers in the outer wall section, means attaching the shoes to the abutting wall timbers, headed members carried at the ends of the partition wall timbers, said shoes adapted to slidably receive the heads of said members and filler blocks interposed in the spaces between the ends of the adjacent shoes and disposed between the ends of the partition wall timbers and the inner surfaces of the outer wall timbers.

1,899,451. GLASS COFFEE POT. HARRY CLIFFORD BATES, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Oct. 8, 1931. Serial No. 567,716. 8 Claims. (Cl. 53—8.)



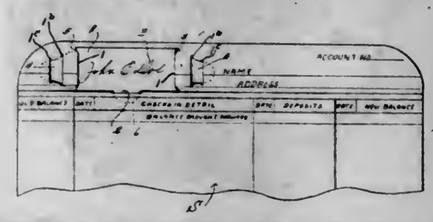
1. In an all glass coffee percolator a glass coffee basket comprising a circular plate having a centrally located hole, a peripheral flange extending downwardly and outwardly from the edge of said plate and a cylinder seated on the flange in spaced concentric relation to the hole in the plate.

1,899,452. PROCESS FOR THE PROTECTION AND AUTHENTIFICATION OF ARTICLES. EDMOND BAYLE, HENRI GEORGE, and AUGUSTIN MACHÉ, Paris, France. Filed Jan. 24, 1929, Serial No. 334,849, and in France Jan. 28, 1928. 12 Claims. (Cl. 91—67.95.)

1. A process for the authentification of articles consisting in corporating to said articles a product comprising a chloro-zincic derivative of bromethylate of hexamethyl- and penta-methylmonoethyl-p-rosaniline, a sodium salt of o-toluidine-diazo-bi-1-naphthylamine-8-sulphonic acid, and a mixture of a weak acid and a strong base, said product being adapted to give predetermined colorations with suitable reagents.

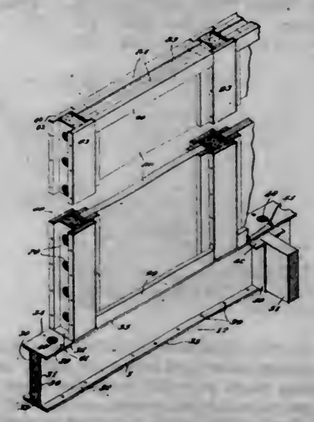
12. As a new article of manufacture for the authentification of articles, a product comprising a sodium salt of o-toluidine-diazo-bi-1-naphthylamine-4-sulphonic acid, and a mixture of biphosphate of soda and of soda.

1,899,453. LEDGER SHEET. MCWHORTER BEERS, Laurel, Miss. Filed June 7, 1930. Serial No. 459,734. 2 Claims. (Cl. 281—43.)



2. In combination with a ledger sheet having a plurality of spaced slits therethrough a signature card of a width in excess of the length of the slits and having outstanding tongues on the ends thereof adapted to be threaded into said slits, laterally extending locking means carried by the inner ends of said tongues and adapted to extend beyond the ends of said slits, said locking means cooperating with the adjacent end of the card to hold the card and the tongue against movement relative to the slit.

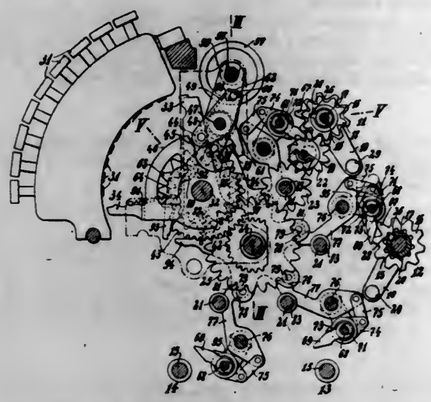
1,899,454. BUILDING CONSTRUCTION. ALBERT F. BEMIS, Newton, Mass., assignor to Bemis Industries, Incorporated, Boston, Mass., a Corporation of Delaware. Filed Dec. 16, 1929. Serial No. 414,350. 18 Claims. (Cl. 72—16.)



5. A building construction comprising hollow frame members outlining a structural wall and formed of fire-resistant material, a wall slab of fire-resistant material, the frame members being disposed about the perimeter of said slab,

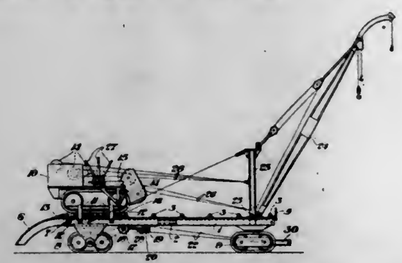
and cementitious fire-resistant material poured into said frame members, the walls of said frame members having openings through which the cementitious material extends to contact the slab.

1,899,455. TOTAL TAKING MECHANISM. ERNST BREITLING, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Dec. 26, 1928, Serial No. 328,525, and in Germany Feb. 24, 1928. 12 Claims. (Cl. 235—2.)



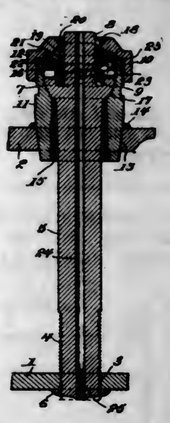
1. A total taking mechanism comprising a differential mechanism consisting of a main differential actuator, an auxiliary differential actuator and means for driving said auxiliary differential actuator complementarily to said main differential actuator, a mutual locking mechanism between said main and auxiliary differential actuators, said locking mechanism locking said auxiliary differential actuator in one position of said locking mechanism and releasing said auxiliary differential actuator and locking said main differential actuator in another position of said locking mechanism, an adding wheel connected to said main differential actuator, and means connected to said adding wheel for actuating said locking mechanism from one locking position to the other when the adding wheel passes into its zero position.

1,899,456. ERECTION APPARATUS. JAMES L. DE VOU, Pittsburgh, Pa. Filed Mar. 19, 1932. Serial No. 600,037. 3 Claims. (Cl. 254—166.)



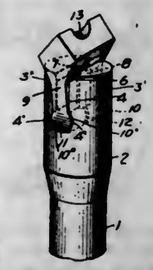
1. An erection apparatus including an elongated frame, a set of rolling units fixed under one end of said frame, a set of rolling units swiveled under the other end of said frame, a mobile self-driven power unit on said frame adjacent said fixed rolling units constructed with a plurality of cable drums and a power take-off, means for connecting said take-off to said fixed rolling unit, means including clutches for connecting said take-off to swing said swiveled rolling units and a cabled hoisting rig demountably fixed to said frame adjacent said swiveled rolling units with its operating cable arranged for connection with said cable drums.

1,899,457. TELL-TALE FLEXIBLE STAYBOLT. FREDERICK H. EINWAECHTER, Jr., WEST HALETHORPE, and ALBERT E. ANGER, Garland Park, Md. Filed Jan. 20, 1931. Serial No. 509,996. 2 Claims. (Cl. 85—1.5.)



1. In a staybolt structure, a casing comprising a sleeve and cap having outer and inner spherical seat surfaces, and said cap having an opening in its outer wall concentric with its seat surface, a bolt having an end portion disposed in said casing and provided with an inner head member having a spherical seat surface pivotally engaging the seat surface of the sleeve, an axial extension projecting beyond said inner head member and projecting outwardly through the opening in the cap, the bolt and its extension being provided with a tell-tale hole extending continuously from end to end thereof, an outer head member slidable on the bolt extension toward and from the inner head member and having a spherical seat surface pivotally engaging the seat surface of the cap, and spring-pressed means acting to force the outer head member outward and away from the inner head member and against said seat surface of the cap, the said outer and inner spherical seat surfaces of the sleeve and cap and coacting spherical seat surfaces of the outer and inner head members being formed on arcs described from a common center whereby the sleeve and cap provide a ball and socket connection allowing universal lateral oscillation of the bolt without compression of the spring or causing separation of the joint closing members.

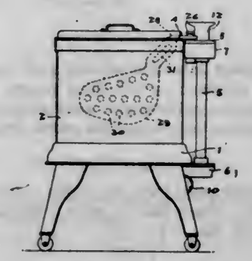
1,899,458. DRILL SHANK AND BIT. CHARLES ERICKSON, Kirkland Lake, Ontario, Canada. Filed Feb. 23, 1932. Serial No. 594,630. 1 Claim. (Cl. 255—64.)



The combination with a drill shank having a main water duct extending longitudinally therethrough and a diametric slot in the operating end thereof having a substantially

cylindrical enlargement at its inner end and having channels formed in the walls of the slot and extending from the enlargement to the operating end of the shank, of a bit fitting the slot and having a substantially cylindrical enlargement fitting the enlargement of the slot, and a deep narrow groove extending around the sides and bottom of the enlargement into which the water from the main duct is fed to discharge into and through the channels of the shank.

1,899,459. WASHING MACHINE. ARCHIBALD FAIRGRIEVE, Toronto, Ontario, Canada. Filed Jan. 21, 1931. Serial No. 510,159. 2 Claims. (Cl. 259—101.)



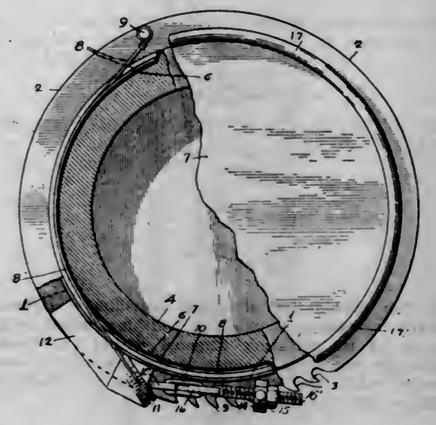
1. In a washing machine, the combination of a tub, a standard rigidly mounted beside said tub having a vertically disposed power driven shaft therein, said standard being enlarged at its upper end to form a casing, a pin vertically journalled in said casing, means in said casing operatively connecting said shaft and pin to oscillate the latter, and a blade arranged in said tub having an upwardly and outwardly extending arm portion extending out over the top edge of said tub and detachably connected with said pin to be oscillated thereby, said blade being oscillated transversely of the tub axis from side to side of the tub.

1,899,460. PUMPING SYSTEM AND APPARATUS THEREFOR. WORTHY C. HARPER, Caldwell, Ohio. Filed Apr. 13, 1931. Serial No. 529,831. 5 Claims. (Cl. 103—203.)



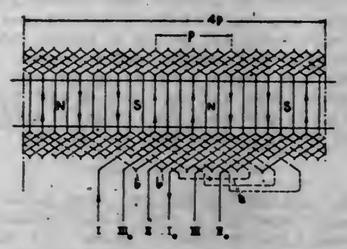
1. In a deep well pump, a working tubing, a relay by-pass chamber arranged adjacent said tubing and communicating therewith by means of ports arranged adjacent the upper and lower ends of the chamber, a member secured in said tubing between the ports communicating with the relay chamber and completely obstructing the tubing, said member being spaced a substantial distance above the lower port, and a pump rod extending through said chamber.

1,899,461. DRUM-HEAD TIGHTENING DEVICE. GEORGE HARRIS, San Francisco, Calif. Filed Feb. 12, 1932. Serial No. 592,625. 5 Claims. (Cl. 84—411.)



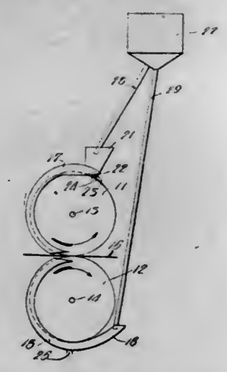
1. The combination with a drum comprising a cylinder having circumferentially grooved hoops on opposite ends thereof and a vellum-drum-head stretched over each hoop and the groove therein, of a wire bent upon itself to form a loop and having each leg thereof wound around the vellum over the grooves and having the ends of said legs anchored to said drum; and means mounted upon said drum for engaging the loop of said wire and imparting a tension to said wire to draw said vellum into said grooves and thereby provide a uniform tension on both vellum drum-heads.

1,899,462. POLYPHASE COMMUTATOR MACHINE. ALEXANDER HEYLAND, Brussels, Belgium. Filed Mar. 26, 1931, Serial No. 525,484, and in Belgium Apr. 9, 1930. 2 Claims. (Cl. 172—280.)



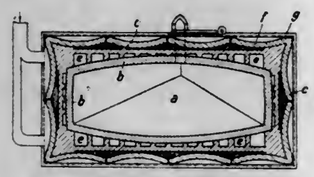
1. A system of interconnecting stator windings of polyphase commutator machines having a mean pitch corresponding to the rotor winding pitch, in which each phase of the winding within the arc of one pole is divided into a plurality of parts of like phase separated by parts of the remaining phases, and so connected that in respect of its resultant current distribution the winding corresponds to a stator winding of reduced pitch.

1,899,463. METHOD OF AND APPARATUS FOR GRINDING AND POLISHING MATERIALS. LESLIE E. HOWARD, Lockport, N. Y., assignor to Simonds Saw and Steel Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed Mar. 26, 1930. Serial No. 439,047. 3 Claims. (Cl. 51—263.)



1. The combination of means providing a circumferentially extending channel, a polishing wheel with a portion of its periphery disposed within the channel, means for supplying abrasive to the channel and means effective while the wheel is stationary for discharging abrasive from the channel.

1,899,464. POWDERED FUEL FURNACE. CARL HUPSCHMIDT, Westenfeld, near Wattenscheid, Germany. Filed July 27, 1927, Serial No. 208,817, and in Germany Sept. 24, 1925. 1 Claim. (Cl. 110—1.)



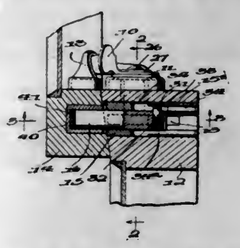
A furnace of the class described, having a furnace chamber approximately rectangular in plan, said chamber having walls curved outward to permit expansion by heat, a casing surrounding and spaced from the walls of said chamber, cushions of granular heat insulating material in the space between the walls of said chamber and the walls of said casing and serving to prevent deformation of the walls of said chamber, and a masonry structure having air flues therein partly filling the space between said chamber walls and the walls of said casing and leaving gaps in said space, the cushions of granular heat insulating material being located in said gaps.

1,899,465. ALUMINIUM ALLOY. OTTO KAMPS, Berlin, Germany. Filed May 8, 1930, Serial No. 450,877, and in Germany Mar. 3, 1930. 5 Claims. (Cl. 75—1.)

1. A light metal alloy containing 0.2 to 1.0% of silver, and 0.02 to 0.2% of thallium, the remainder principally aluminium.

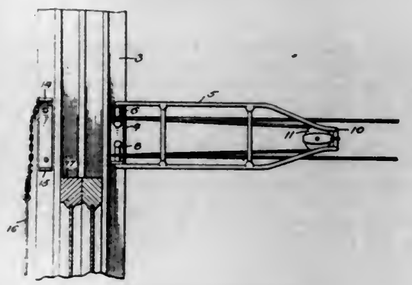
1,899,466. CLOSURE FASTENING AND LOCKING MEANS. HERMAN H. KISTNER, Baltimore, Md. Filed Mar. 17, 1932. Serial No. 599,547. 19 Claims. (Cl. 70—14.)

1. A sash-lock comprising a tubular body having an internally open detent socket and an opening leading thereto, a bolt member and means for sliding the same in said tubular body to retracted and projected positions, a transverse bore in said bolt member, a detent pin slidable in said bore, a spring arranged to urge said pin to a



position extending into said socket, said sash lock being adapted to be released by unlocking means shaped to enter said opening in said tubular body and to depress said pin to a position to disengage the same from said socket.

1,899,467. CLOTHESLINE HANGER. WILLIAM LANCE, Scranton, Pa. Filed Dec. 8, 1931. Serial No. 579,795. 1 Claim. (Cl. 68—3.)

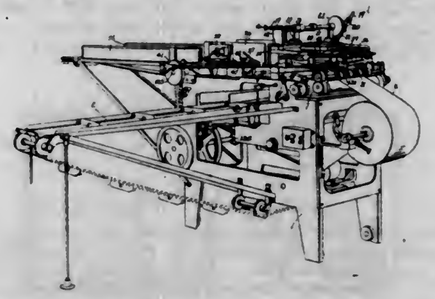


A clothes line hanger comprising a support, a bracket fixed to said support and having parallel lugs projecting at right angles to said support, said slugs being provided with axially aligned pivot apertures, a substantially U-shaped hanger having its ends bent inwardly toward each other and forming axially aligned pivot pins projecting from the ends of its parallel legs through said apertures and toward each other for substantial distances, means bracing the opposite legs of the U-shaped hanger together, and a clothes line pulley swivelled on the bight of said hanger.

1,899,468. WRAPPING MACHINE. CARL LITTLEFIELD, Battle Creek, Mich., assignor to Battle Creek Bread Wrapping Machine Co., Battle Creek, Mich. Filed Aug. 1, 1928. Serial No. 296,666. 8 Claims. (Cl. 93—2.)

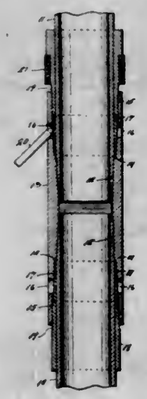
1. In a wrapping machine, the combination of a way, a pusher slide reciprocating longitudinally of said way, a pusher mounted for limited independent reciprocating movement on said slide, a spring acting to hold said pusher in its retracted position on said slide, means for reciprocating said slide and moving said pusher on said slide at the end of the stroke of the slide, an article feed means adapted to deliver articles to be wrapped into operative relation to said pusher and said way, a wrapper feed means delivering across the path of said article feed means, a rockshaft provided with angled arms, a plate-like draping member mounted on said arms, top flap folders mounted on said arms, a spring acting to return said rockshaft to its initial position, means for actuating said rockshaft including a spring, the means for actuating said rockshaft being synchronized with the actuation of said feed

means and pusher so that the draping member and top flap folders are in actuated position when the article is delivered by the feed means and are retracted from



the path of the article when advanced by said pusher, and front bottom flap and front end flap folders mounted on said slide.

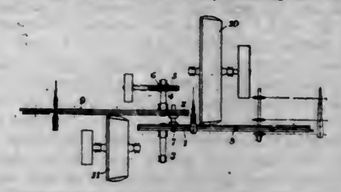
1,899,469. DRILL PIPE JOINT. HARVEY MECOM and LEE J. BLACK, Beaumont, Tex. Filed Dec. 17, 1929. Serial No. 414,748. 2 Claims. (Cl. 285—146.)



1. In a pipe coupling, two end opposed pipe sections tapered toward each other and screw-threaded on said tapered portions, a tubular coupling having its interior flared out from its middle to its ends, the inner end portions of said flaring portions being screw-threaded for engagement with the threads on the tapered portions of the opposed pipe sections, the inner faces of the flared portions of the coupling being plain for a distance beyond the first-named threads and then being screw-threaded, wedges disposed between the plain portions of the coupling and the pipe section outward of the screw-threaded ends thereof, and exteriorly threaded glands having threaded engagement with the outer ends of the flared portions of the coupling and bearing against the wedges, the coupling having drift openings in that portion of the coupling outward of the wedges whereby an instrument may be inserted to drive the wedges out or in.

1,899,470. MACHINE FOR DECORTICATING FIBER-CONTAINING FOLIATE PLANTS. FRITZ MERTZ, Magdeburg, Germany, assignor to Firm Fried. Krupp Grusonwerk Aktiengeselischaft, Magdeburg-Buckau, Germany. Filed May 9, 1931, Serial No. 536,265, and in Germany May 13, 1930. 2 Claims. (Cl. 19—12.)

1. In a decorticating machine, a plurality of sets of laterally displaced conveyors comprising a driving sheave for each conveyor, discrete shafts for said sheaves arranged coaxially with each other, driving means for one



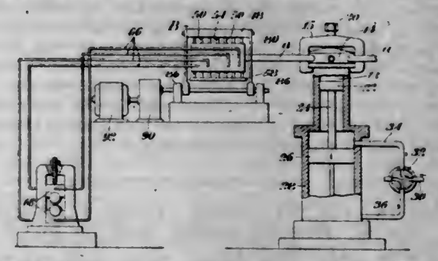
of said shafts, and detachable coupling means between said sheaves for transmitting the motion of said one shaft to the adjacent sheave.

1,899,471. HORSE BOOT. VICTOR MEYER, Brooklyn, N. Y. Filed June 18, 1931. Serial No. 545,341. 1 Claim. (Cl. 54—82.)



A boot for a part of a horse's leg comprising a leg encircling member, the leg contacting portions of which are formed of rubber and shaped to conform to the irregularities of the leg, the top and bottom portions of the boot having inside diameters which are slightly less than the corresponding outside diameters of the leg to which the boot is to be applied so as to exert a contracting and supporting pressure upon the leg when applied, said boot having an opening in its front portion intermediate the top and bottom portions, permitting protrusion of a portion of the joint during movement of the joint to which the boot is applied.

1,899,472. SYSTEM FOR LUBRICATING THE ROLL NECKS OF ROLLING MILLS. JAMES L. MILLER and HARRY R. GILCHRIST, Youngstown, Ohio. Filed June 11, 1931. Serial No. 543,698. 4 Claims. (Cl. 184—6.)



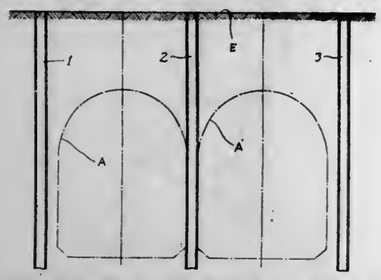
1. A system for lubricating the roll necks of rolling mill rolls comprising a plurality of roll neck bearings,

a lubricant distributor structure having a plurality of cylinders, each of which is connected by an individual duct with one of said roll neck bearings, plungers reciprocating in said cylinders for forcing lubricant to said bearings, means for supplying lubricant to said cylinders, a cross head supporting said plungers, guide rods secured to said cross head and slidingly engaging guide apertures formed in the distributor structure, means for reciprocating said cross head, valve members controlling communication between the cylinders of said distributor and said roll neck bearings, and means movable in unison with said cross head limiting the movement of said valve members in one direction and effective to cause their movement in the opposite direction.

1,899,473. HEAT INSULATING CEMENT. LOUIS R. NICHOLS, Weston, Mass. Filed Mar. 21, 1931. Serial No. 524,413. 4 Claims. (Cl. 106—18.)

1. A heat insulating composition capable of adhering to a metal surface while moist and of hardening thereon after drying, and consisting of a substantially homogeneous mixture of flue soot and a heat resistant, hydraulic cement.

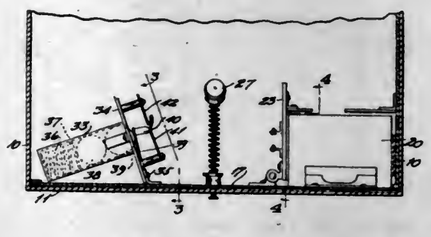
1,899,474. METHOD OF CONSTRUCTING SUBWAY TUNNELS. RYOH ONO, Odori, Sapporo, Hokkaido, Japan. Filed Sept. 14, 1931, Serial No. 562,798, and in Japan Nov. 29, 1930. 3 Claims. (Cl. 61—44.)



1. The method of constructing a tunnel which comprises driving substantially vertically into the ground a plurality of pairs of metal piles in the line of the proposed tunnel walls, each of said pairs of piles being in the same plane transversely of the tunnel, excavating a starting pit across the width of the tunnel and between said metal piles and to a depth substantially to the top of the proposed tunnel, rigidly and permanently securing by means of a metal cross beam the pair of metal piles which have been exposed in the excavating of said pit, said cross beam being located at substantially the level of the top of the proposed tunnel, driving in a forward and upward direction from the level of said cross beam a plurality of metal girders of I or T cross-section and of such length as to pass the next pair of driven metal piles, excavating beneath said metal girders, inserting supporting lagging as the excavating proceeds, said lagging being held and supported by the flanges of said metal girders, introducing side lagging between the driven metal piles as the excavating proceeds, rigidly and permanently securing by means of a second cross beam the second pair of driven metal piles, driving a second set of supporting metal girders in a forward and upward direction as before, and enclosing all of said piles, beams and girders in a finishing layer of concrete, the said lagging elements being used as a mold for the concrete.

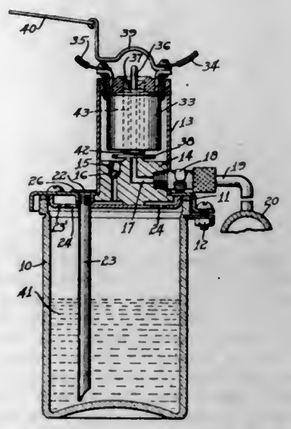
1,899,475. CIRCUIT CLOSER. GEORGE T. OSTRANDER, Joliet, Ill. Filed Oct. 8, 1930. Serial No. 487,281. 2 Claims. (Cl. 200—52.)

1. A circuit closer for devices of the kind described including a tube closed at one end, a coiled compression spring in the closed end, a follower plate in said tube resting against said spring, weight balls in said tube engaging each other and located between the open end of the tube and the follower plate, an insulating plate attached to the front end of the tube and having an opening through which one of the balls projects, a leaf spring having one end fixed to said plate and its other



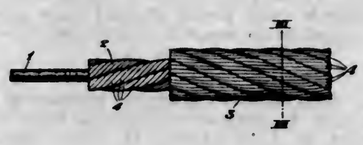
end projecting across said opening, a finger projecting from the last mentioned end of the leaf spring, a contact finger having one end fixedly supported by the plate and its other end engaged by the first finger to move therewith, and a second contact finger having one end supported from the plate and having its other end beneath the first contact finger.

1,899,476. AUXILIARY AIR VALVE AND FUEL MODIFIER FOR INTERNAL COMBUSTION MOTORS. HARRY W. PAINE, Toledo, Ohio. Filed Jan. 4, 1932. Serial No. 584,697. 12 Claims. (Cl. 123—25.)



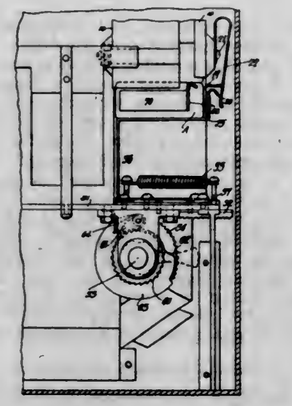
1. A fuel modifying means for an internal combustion motor having an inlet manifold and driving a generator, said means comprising a casing having a chamber therein, a container for oil removably attached to the underside of said casing, a connecting passage through the floor of said chamber into the upper part of said container, a tube carried by the casing, projecting downward into the container and providing a passage from the outer air to a point beneath the normal level of the oil in the container, means providing an outlet passage from the chamber to the manifold, a valve normally closing said outlet passage, and an electro-magnet connected with the wiring system of the generator and moving the valve to and maintaining it in open position during all the time the current from the generator is as great as a predetermined minimum.

1,899,477. FISHING LINE. FRED S. PHELPS, Sausalito, Calif., assignor to The American Steel and Wire Company of New Jersey, a Corporation of New Jersey. Filed Mar. 4, 1932. Serial No. 596,837. 4 Claims. (Cl. 117—52.)



1. A fishing line comprising a fibrous core over which a plurality of strands is arranged in oppositely wound layers, each strand consisting of intertwisted wires of corrosion resistant metal.

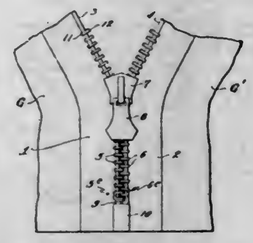
1,899,478. VENDING MACHINE. STELLARIO PISANO and JACK FARDELLA, Brooklyn, N. Y. Filed May 10, 1930. Serial No. 451,891. 3 Claims. (Cl. 312—67.)



1. In a vending machine, a chute for containing the articles to be dispensed, a spring member at the lower end of the chute having a projection for engaging the lowermost article in the chute for holding the articles in said chute, a reciprocatory member having a part for supporting an article, a spring for normally holding the member with said part under the chute, an upwardly extending portion on said article receiving part, and of less height than an article seated on said part for engaging and moving the projection on the spring member out of engagement with said lowermost package or article when the reciprocatory member is in receiving position, whereby an article from the chute will drop upon said receiving part of the reciprocatory member, the article on the receiving part of the reciprocatory member being adapted to be pushed therefrom by the lowermost article in the chute when said reciprocatory member is returned toward normal position by the spring, and manually operated means for operating said reciprocatory member.

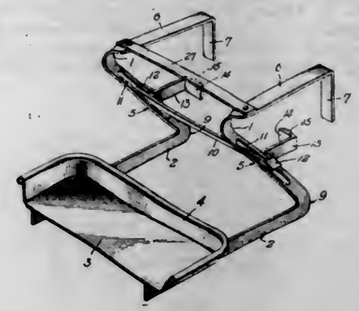
1,899,479. FASTENER UNIT. GEORGE E. PRENTICE, Berlin, Conn. Filed Oct. 3, 1932. Serial No. 635,930. 8 Claims. (Cl. 24—205.)

3. A guide unit for use in slide operated fasteners of the kind having a series of fastener elements attached to the edge of a flexible stringer, said unit having upper and lower arms disposed in substantially parallel spaced



relation, one of said arms being plain and the other having a pin and socket.

1,899,480. SUPPORT FOR SERVING TRAYS. FREDERICK F. RAVLIN, Miami, Fla. Filed Oct. 4, 1932. Serial No. 636,245. 5 Claims. (Cl. 45—51.)

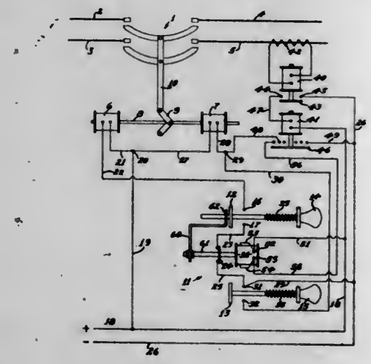


1. A tray and a support therefor, said support including tray-carrying arms having upstanding relatively inclined sections, said inclined sections terminating in hooks on the opposite side of said arms from their tray receiving portion, and members adjustable longitudinally of such inclined portions of the arms to provide a bearing contact for such support below and opposed to said hooks.

1,899,481. SWITCH FOR CONTROLLING ELECTRICALLY OPERATED CIRCUIT INTERRUPTERS. CLIFFORD L. REALS, Syracuse, N. Y. Filed Feb. 20, 1931. Serial No. 517,231. 7 Claims. (Cl. 175—294.)

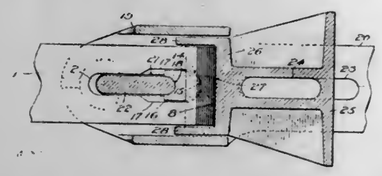
1. The combination with an electric circuit, an interrupter therein, electro-magnetic means operable to close the interrupter and electro-magnetic means operable to open the interrupter of a switch having switch members operable to close circuits respectively through said opening and closing means, the switch members being normally open and having means tending to open them, a normally closed safety switch connected in series with the switch member controlling the flow of current through said electro-magnetic means which operates to close the interrupter, means operated by abnormal conditions in the circuit closed by the interrupter, for opening said normally closed safety switch, and closing a circuit through the electro-magnetic means which operates to

open the interrupter, and resetting connections between the switch member which controls the flow of current to the electro-magnetic means operating to close the inter-



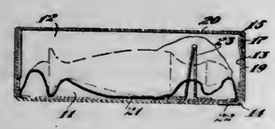
rupter, and said safety switch, to close the safety switch when said switch member to which it is connected returns to open position.

1,899,482. DRAFT APPLIANCE FOR RAILWAY CARS. WILLIAM J. REGAN, Wilkinsburg, and ENOCH GEORGE, Jr., Pittsburgh, Pa., assignors to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1928. Serial No. 257,320. 1 Claim. (Cl. 213—69.)



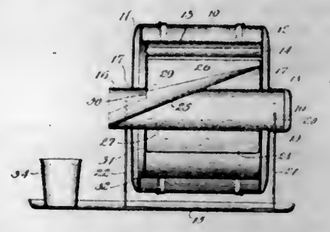
In a draft rigging, the combination with a coupler; of a yoke having a hooded forward section, defined in part by upper and lower walls; a shock absorbing device having front follower acting means; and means detachable from the yoke occupying each of the spaces defined by the front face of said follower acting means, top or bottom wall of the hood section, and corresponding opposed surface of the butt end of the coupler shank, said removable means being held in relatively spaced relation by said follower.

1,899,483. CONTAINER FOR DISPLAYING MERCHANDISE. RUSSELL I RHODES, Jr., North Attleboro, Mass., assignor to The Mason Box Company, Attleboro Falls, Mass., a Corporation of Massachusetts. Filed Sept. 17, 1930. Serial No. 482,491. 3 Claims. (Cl. 206—44.)



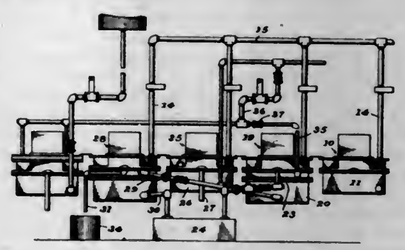
1. A container of the class described comprising rectangular top and bottom sections angularly movable relative to each other from closed position to display position, and means pivotally interconnecting the sections, said means comprising a hinge member pivoted to the outer surface of the bottom at a lower corner thereof and to the inner surface of the top section, and movable angularly within the top section upon relative movement of the sections, and the movable portion of the hinge member lying close to the inner surface of the top section when the container is closed, thereby affording ample space for reception of an article mounted upon the bottom section.

1,899,484. DISPENSING CABINET. WILLIAM H. ROSS, Brooklyn, N. Y., assignor of one-half to Victor Nivois, New York, N. Y. Filed Feb. 19, 1931. Serial No. 517,019. 5 Claims. (Cl. 312—75.)



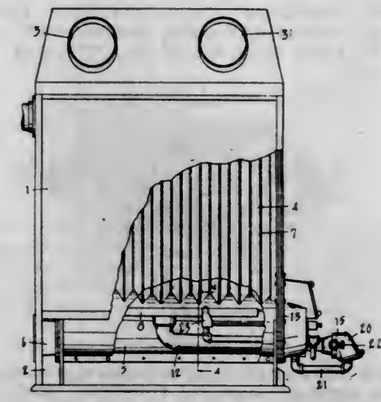
1. A device for containing and dispensing cigarettes and similar articles comprising a cylindrical casing having longitudinal article receiving grooves in its inner walls, closures for the ends of said casing, a tubular support mounted through said casing with its ends projecting outwardly through said closures, one end of the tubular support being open and a portion of the top of the support being cut away adjacent said open end, a guide for the articles to be dispensed connected to said support, walls of said guide flaring outwardly from adjacent said support towards the top of the casing, a chute mounted in inclined position between said walls and extending through the cut away portion of the tubular support, with its lower end disposed in the open end thereof, standards for holding the casing above a supporting surface, and means for holding the tubular support and chute against rotation and permitting rotation of said casing.

1,899,485. METHOD OF AND MEANS FOR TREATING GLASS ARTICLES. ROWLAND D. SMITH, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed June 12, 1930. Serial No. 460,702. 7 Claims. (Cl. 41—9.)



1. The method of treating glass articles which includes rinsing freshly frosted articles with a fortifying solution, adding the rinsings to the fortifying solution together with sufficient water to maintain the proper dilution, conducting the fortifying solution together with the rinsings to a settling tank in order to remove suspended solids, subsequently rinsing the articles with water, fortifying the articles by spraying them with the fortifying solution from which the suspended solids have been removed and washing them with water.

1,899,486. GAS FURNACE. THOMAS W. TORR, Dowagiac, Mich., assignor to Rudy Furnace Company, Dowagiac, Mich. Filed June 28, 1930. Serial No. 464,522. 4 Claims. (Cl. 158—118.)



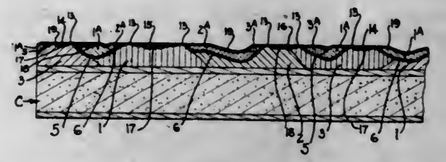
1. In a structure of the class described, the combination of a horizontally elongated burner chamber, a radiator opening to the top of said burner chamber, an elongated main burner disposed horizontally within said burner chamber, a pilot burner disposed within said burner chamber in operative relation to said main burner, a mixing tube for said burner projecting through one end wall of the burner chamber, a gas nozzle operatively associated with said mixing tube, a primary air inlet valve for said mixing tube, a primary air inlet chamber housing mounted on the outer end of said mixing tube and enclosing said primary air inlet valve, said housing being provided with a door affording access to said primary air valve and nozzle, and a primary air conduit opening only to the bottom of said burner chamber and to said housing, said burner chamber having an air inlet in its end wall opposite to said mixing tube.

1,899,487. GARMENT. CLARA B. WALSH, New York, N. Y. Filed Mar. 26, 1932. Serial No. 601,418. 2 Claims. (Cl. 2—98.)



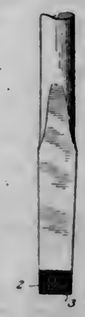
1. The combination comprising an outer coat, a section flatly overlying the body of said coat and permanently attached entirely around the neck of said coat, and a second section extending from the outer portion of said first section to the neck and flexibly overlying said first section, said sections being permanently associated in their outer portions only, and said collar having a hollow interior throughout the greater part of its length and being adapted to be extended over and enclose the collar of a second coat.

1,899,488. SURFACE ORNAMENTATION AND METHOD OF PRODUCING SAME. JOHN J. WEBER, Wilmette, Ill., assignor to J. H. Jochum, jr., Chicago, Ill. Filed June 15, 1928. Serial No. 285,632. 12 Claims. (Cl. 41—38.)



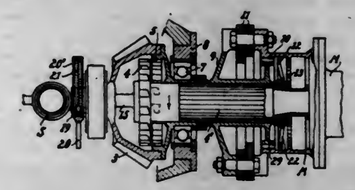
1. In a method of producing decorative material the steps of applying deposits of plastic material in different colors in spaced relation over the surface of a carrier, causing the deposits to merge into each other along marginal zones, and applying different coats of glazing in different areas over the surface of the layer.

1,899,489. SCREW DRIVER. GODFREY WICKBERGH, Seattle, Wash. Filed Oct. 2, 1931. Serial No. 566,527. 4 Claims. (Cl. 145—50.)



1. A screw driver comprising a blade provided with knurled working surfaces adapted to enter the walls of the slot of a screw head and having the points of the knurled working surfaces disposed in opposite directions from the median line of the blade.

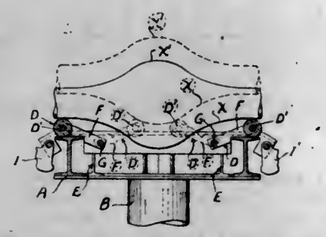
1,899,490. MECHANISM FOR DRIVING PROPELLERS. LUDWIG WIEDMANN, Friedrichshafen, Germany, assignor to Zahnradfabrik Friedrichshafen Aktiengesellschaft, Friedrichshafen, Germany. Filed Apr. 2, 1932, Serial No. 602,846, and in Germany Apr. 25, 1931. 6 Claims. (Cl. 192—67.)



1. Mechanism of the type comprising a driving member and a driven member; a claw coupling between said members; and a resilient coupling between said members;

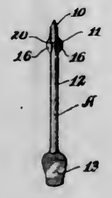
means for disconnecting said claw coupling; means for preventing such disconnection while power is transmitted between said driving and said driven members, said latter means being in operative relation to said resilient coupling.

1,899,491. AUTOMOBILE LIFT. FRANK ACKERMAN, St. Louis, Mo., assignor to Curtis Manufacturing Company, Wellston, Mo., a Corporation of Missouri. Filed June 11, 1931. Serial No. 543,548. 6 Claims. (Cl. 254—89.)



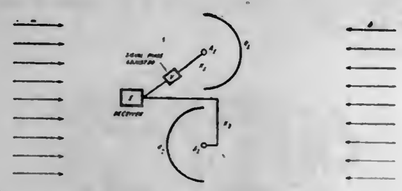
4. An automobile lift, comprising a vertically-movable platform, a longitudinally-shiftable structure on said platform, rear axle supporting devices, and pivotally mounted arms on said shiftable structure that carry said devices.

1,899,492. TEAT DILATOR. WARD L. BEEBE, St. Paul, Minn. Filed Oct. 24, 1929. Serial No. 402,094. 5 Claims. (Cl. 128—341.)



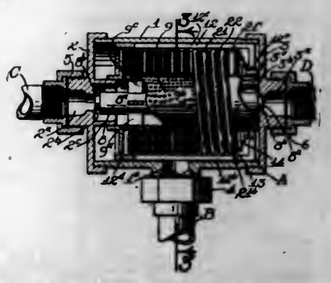
3. A dilator having a flexible thin body shank, an inserting end, a shoulder formed in said shank by flattening a portion thereof, and a strengthening rib extending from the body of the shank to the inserting end past the shoulder portion.

1,899,493. RECEIVING SYSTEM. OTTO BÖHM, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie, m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 30, 1929, Serial No. 336,112, and in Germany Mar. 31, 1928. 2 Claims. (Cl. 250—11.)



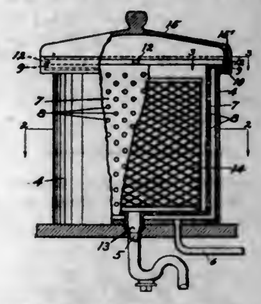
1. A receiving system, especially for short waves comprising two antennæ or antenna systems, each of which is furnished with a reflector, the reflector of one of said systems being mounted upon a side opposite the reflector of the other system, said two antennæ or antenna systems being associated with a joint receiver responsive to all of the signal energy collected upon the two antennæ or antenna systems.

1,899,494. THERMOSTATIC CONTROLLED MIXING HEAD. DELMER Q. BOWMAN, Newhall, Calif. Filed Apr. 20, 1931. Serial No. 531,385. 17 Claims. (Cl. 236—12.)



1. In a device of the class described, a casing having hot and cold water inlets and a discharge outlet, valve means for controlling the flow of water through said inlets, a thermostat operatively connected to said valve means, and a mixing tube, said inlets being positioned at the opposite ends and connected by said tube, said tube having means for causing water mixed therein to impinge against the thermostat.

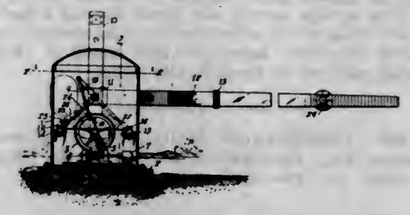
1,899,495. DISH WASHING MACHINE. GENARO CELAYA, Los Angeles, Calif. Filed Mar. 11, 1930. Serial No. 434,954. 1 Claim. (Cl. 141—9.)



A dish washing machine including in combination an outer container with a drainage connection and a pipe connection for supplying water under pressure thereto, said container having an annular enlargement around its top to provide a seat, an intermediate container having an annular flange around its top to rest upon said seat with its wall spaced from said outer container and provided with discharge openings of tapering form to form restricted openings into said intermediate container, said intermediate container having a drainage connection at its bottom with said first drainage connection, a dish holder in said intermediate container, and a cover for said containers, the annular space between the outer and intermediate containers being closed at the top by said annular flange and said seat.

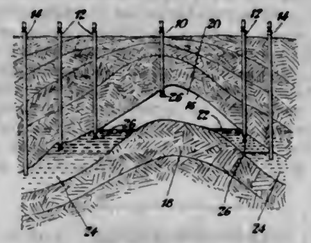
1,899,496. AUTOMATIC RAILWAY CROSSING GATE. CHARLES T. DAY, Bradley Beach, N. J. Filed Jan. 15, 1932. Serial No. 586,863. 8 Claims. (Cl. 39—7.)

4. An automatic railway crossing gate, comprising a gate arm, an electric motor, an operative connection between said motor and said gate to open and close the latter, a pair of normally open switches for controlling said motor, means connecting said switches whereby the closed switch is opened by a partial closing of the other, a member movable alternately in opposite directions simultaneously with said gate, an electromagnetic means



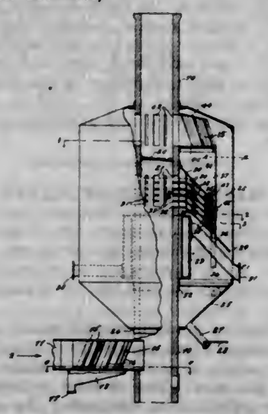
common to both said switches for closing them mounted on said member and moved thereby into operative relation to said switches alternately, said member engaging and partially closing the open switch and opening the closed switch at each limit of its movement.

1,899,497. METHOD OF DEVELOPING OIL FIELDS. HENRY L. DOHERTY, New York, N. Y. Filed May 22, 1925. Serial No. 31,996. 8 Claims. (Cl. 166—21.)



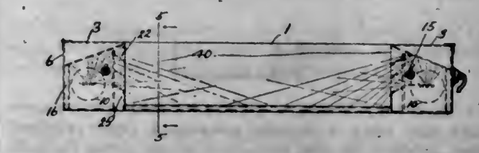
1. A method of extracting oil from a virgin oil field comprising treating the field as a unit, providing one or more wells which penetrate the oil body underlying the field and through which oil may flow to the surface, maintaining a body of gas under pressure above the oil body, and compensating for the oil withdrawn from the field by introducing to the field below the oil an equivalent amount of water under pressure sufficient to maintain the upper oil level substantially constant.

1,899,498. SEPARATOR. JOHN H. FEDELER, New York, N. Y. Filed Dec. 4, 1928. Serial No. 326,677. 6 Claims. (Cl. 183—79.)



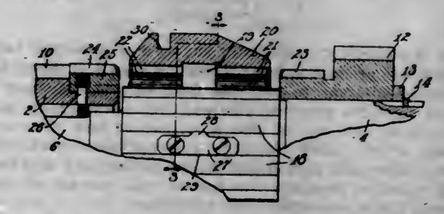
4. In a separator for dust-laden gases, a stack provided with a damper, a bypass for the gases around said damper and comprising a chamber and a passage communicating with said stack beneath said damper and extending outwardly to said chamber, said passage being inclined downwardly from the stack to the chamber and provided with gutters to receive dust, said passage being constructed and arranged to impart a centrifugal movement to the gases passing therethrough, whereby solid particles may be separated from the gases and received in said gutters, and means for removing the dust from said gutters.

1,899,499. LECTERN LIGHTING UNIT. CLARENCE ERROL FERREE and GERTRUDE RAND FERREE, Baltimore, Md. Filed Oct. 14, 1931. Serial No. 568,784. 7 Claims. (Cl. 240—2.)



1. The combination in a lectern lighting unit of a support for the work, a lighting box at each side of the support, said lighting box containing a source of illumination, a reflector above the source of illumination inclined upwardly toward the work support, an upright reflector on the side of the source of illumination away from the work support, an upright diffusing plate on the opposite side of the source of illumination from said latter reflector.

1,899,500. OVERRUNNING CLUTCH MECHANISM. OTTO E. FISHBURN, Muncie, Ind., assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind., a Corporation of Delaware. Filed Apr. 25, 1931. Serial No. 532,766. 5 Claims. (Cl. 192—48.)

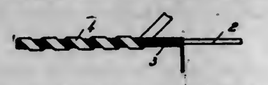


1. In a device of the character described, the combination with a driving member and a driven member, of means for connecting said members comprising a clutch including a clutch member on one of said members, having a plurality of oppositely disposed wedging surfaces, a plurality of rollers cooperating with said surfaces, a stop on said clutch member preventing movement of said rollers into wedging engagement with the wedging surfaces, a second stop on said member for preventing movement of the rollers into wedging engagement with said wedging members in one direction and a second clutch member with which said rollers cooperate to lock the clutch members together and having means for connecting it with the other of the driving or driven members and means for operatively moving said rollers relatively to said stops.

1,899,501. CABLE FOR COMMUNICATION CIRCUITS. WILHELM GABRIEL, Berlin-Spandau, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany, a Corporation of Germany. Filed June 27, 1930, Serial No. 464,303, and in Germany July 5, 1929. 7 Claims. (Cl. 178—45.)

1. A conductor for communication cables with uniformly distributed inductance, having magnetizable material

placed upon it in at least two layers, the inner layer consisting of magnetizable material of low but constant



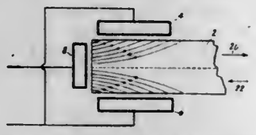
permeability, the outer layer consist of magnetizable material of high but less constant permeability.

1,899,502. ELECTROMAGNET. OTTO HACHFELD, Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany. Filed Jan. 24, 1931, Serial No. 510,887, and in Germany Mar. 28, 1930. 2 Claims. (Cl. 175—336.)



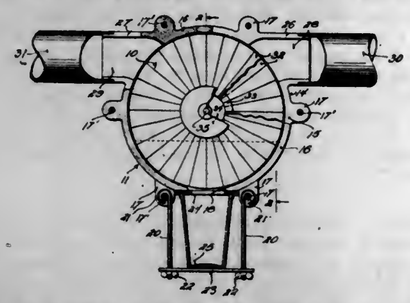
1. In a relay, a core, a winding on said core for operating said relay, a rectifier comprising copper oxidized discs mounted on said core, said copper discs partially surrounding said core so as to be electrically disconnected at their ends to prevent the relay from operating and releasing in a sluggish manner due to the formation of eddy currents in the discs when the winding is energized and deenergized.

1,899,503. ELECTROMECHANICAL VIBRATOR. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 5, 1927. Serial No. 189,161. 7 Claims. (Cl. 171—327.)



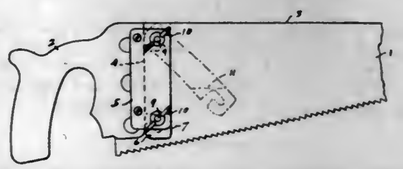
1. A piezo-electric resonator having a piezo-electric body adapted to produce flexural vibrations, a pair of electrodes mounted adjacent to two side faces of said body, and a third electrode mounted adjacent and substantially parallel to an end face of said body, two of said electrodes being of the same polarity, said resonator projecting freely into space beyond said electrodes whereby said free end vibrates flexurally relative to the portion of the crystal mounted between said electrodes.

1,899,504. AIR WASHER AND HUMIDIFIER. EMIL J. HANSON, Milwaukee, Wis., assignor to U. S. Die Casting Company, Milwaukee, Wis., a Corporation. Filed July 17, 1930. Serial No. 468,602. 5 Claims. (Cl. 261—92.)



1. In a device of the character described the combination of a casing forming an air conduit, a rotor mounted within said casing, a liquid reservoir within said casing, means for maintaining a predetermined liquid level in said reservoir, said rotor having a plurality of spaced vanes adapted to pass successively through the liquid in said reservoir and through the air flowing through said conduit to present moist surfaces to the air to free the same from foreign matter, said liquid forming a bath to free said vanes of the accumulated foreign matter, and a container removably secured to said casing to form a sediment reservoir for liquid in said casing.

1,899,505. COMBINATION TOOL. HARVEY HOVGAARD, Houston, Tex. Filed Mar. 25, 1930. Serial No. 438,692. 3 Claims. (Cl. 33—75.)



1. An implement of the character described including a blade having a straight edge, a handle to which the blade is attached, said handle having an extension which forms, with said blade, a groove, a transverse leg on one side of the blade seated in the groove and having a straight edge, said leg having marginal, oppositely arranged J-slots, bolts extending through the blade and through said slots, and positioned to permit the longitudinal adjustment of the leg on the said bolts to bring the open end of either slot opposite its bolt, nuts on said bolts, said bolts and nuts forming means for securing said leg to said blade.

1,899,506. DISPENSING NOZZLE. ALBERT E. HUTT, New Rochelle, N. Y. Filed Apr. 15, 1930. Serial No. 444,392. 2 Claims. (Cl. 251—116.)

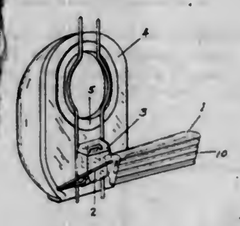


1. In a device of the character stated, a handle member, having a rear inlet chamber adapted for a hose attachment, a front plunger chamber, a partition separating said chambers, a pipe fixed in said partition, open at its rear end and closed at its front end and provided with an outwardly flaring, conical, terminal portion having a port therein, a plunger carried by said handle and slidable longitudinally upon said fixed pipe, and having a front terminal conical seat conforming to the front contour of said fixed pipe, a flange on the front of said plunger, and a spring intermediate said partition and the rear of said plunger.

1,899,507. MANUFACTURE OF SILVER SALT. ALPHONS O. JAEGER, Mount Lebanon, and HERBERT J. WEST, Crafton, Pa., assignors, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed Mar. 28, 1931. Serial No. 526,135. 5 Claims. (Cl. 260—57.)

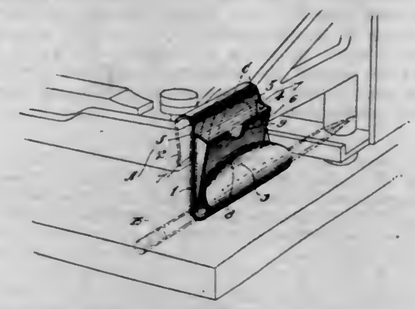
5. A method of producing sulphonated anthraquinone dye intermediates which are free from objectionable coloring matter, which comprises catalytically oxidizing anthracene in the vapor phase to form anthraquinone, without further purification, condensing the anthraquinone and subsequently sulphonating the crude material to provide the dye intermediate.

1,899,508. RESILIENT PERCH FOR BIRD CAGES. THOMAS J. [illegible], Chicago, Ill. Filed Sept. 2, 1930. Serial No. [illegible]46. 4 Claims. (Cl. 119—26.)



1. A resilient feed and water perch for bird cages having a feed or water cup and means for attaching the cup to the exterior of the cage, comprising a short bar adapted to be positioned adjacent the cup upon the interior of the cage, and a resilient support therefor attached at one end to the bar and engaged at the other end by the cup to hold the bar across the front of the cup, said engagement holding said bar in place.

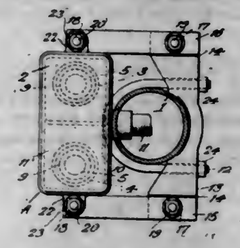
1,899,509. ERASER AND PENCIL HOLDER ATTACHMENT FOR TYPEWRITERS. BERNARD LAPIN, Newark, N. J., assignor to Nevalost Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed Aug. 13, 1932. Serial No. 628,724. 2 Claims. (Cl. 120—8.)



1. A device of the character described, comprising a body of resilient sheet material having means at one side and one end for attaching the body to a bar of a typewriter frame, a pocket on the other side of said body having an open end facing the first-mentioned end of said body to receive a typewriter eraser with its plane approximately parallel to said body, and an integral flange at the other end of said body and adjacent the other end of said pocket returned in opposed relation to and partially overlying said pocket to hold a pencil or the like.

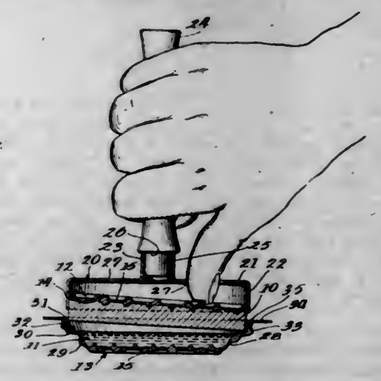
1,899,510. JUNCTION BOX. WILLIAM H. B. LAVARACK, Pine Bush, N. Y., assignor to Railroad Accessories Corporation, New York, N. Y., a Corporation of New York. Filed June 8, 1931. Serial No. 542,768. 2 Claims. (Cl. 247—21.)

1. In a combined junction box and support, in combination: a substantially box-like structure formed with depending wells, each formed with an orifice in its lower wall adapted for the reception of cable ends, the wall of said box-like structure being further formed with a threaded orifice adapted alternatively for receiving a cable or a standard pipe plug; lugs, one at each end of the box-like structure; orificed means positioned under each lug and adapted to serve as supports; a cover for the box-like structure, said cover provided with orificed lugs aligning with the lugs of the box-like structure; and bolts passing through the orifices of the support, through the lugs



on the box-like structure, and through the lugs on the cover for retaining the cover firmly to the box-like structure and the structure to the supports.

1,899,511. ICE CREAM SANDWICH. SOL S. LEAF, Chicago, Ill., assignor to Overland Candy Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 8, 1931. Serial No. 579,747. 4 Claims. (Cl. 99—16.)



1. An ice cream sandwich comprising a baked crispy wafer formed with a relatively flat bottomed surface and with an upwardly extending wall, an annular supporting surface formed on said wall, a filling in said wafer, a filling of a different character supported upon said annular supporting surface, and a secondary wafer covering said latter filling.

1,899,512. PROCESS FOR MAKING ALCOHOL-WEAK BEVERAGES. ADOLF LEWINSON, Berlin-Charlottenburg, Germany. Filed Aug. 8, 1930, Serial No. 474,065, and in Germany Sept. 9, 1929. 5 Claims. (Cl. 195—36.)

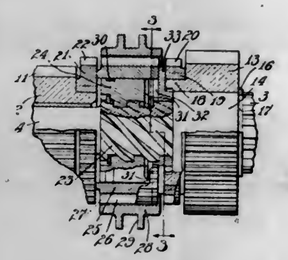
1. A process for making an alcohol-weak beverage by fermentation accompanied by the formation of carbon dioxide which consists in adding material containing the sap of cranberries to a solution containing sugar and then fermenting said solution, the proportion of material containing the sap of cranberries being sufficient to check the fermentation of said solution so that it may be stored without becoming undesirably alcoholic.

1,899,513. REELING-OFF SILK COCOONS. BERNARD LOEWE, Milan, Italy. Filed Dec. 11, 1930, Serial No. 501,661, and in Germany June 10, 1929. 15 Claims. (Cl. 19—3.)

1. A method of treating silk worm cocoons consisting in first treating the cocoons in a preliminary bath of a weak solution of a basic ammonium compound of a concentra-

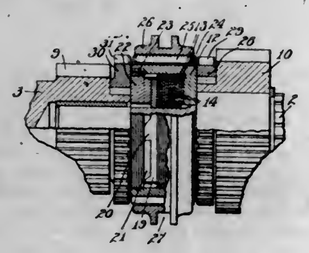
tion below 0.5% continuing this preliminary bath until this solution has penetrated all layers of silk of the cocoons and then treating them with a caustic alkali solution of a concentration up to 2° Bé. at room temperature for at least a minute, then reeling off the cocoons in water at room temperature.

1,899,514. FREE WHEELING TRANSMISSION MECHANISM. KENNETH E. LYMAN, Rockford, Ill., assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind., a Corporation of Delaware. Filed Nov. 15, 1930. Serial No. 495,837. 5 Claims. (Cl. 192—48.)



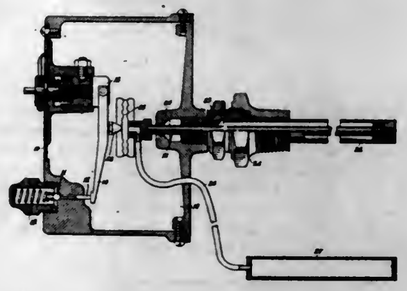
1. The combination with a driving member and a driven member, of a nut threaded on said driven member and forming one member of a clutch, a second clutch member adapted for cooperation with the first clutch member, means axially shiftable independently of said second clutch member for connecting said second clutch member with the driving member, and friction driving means between said first and second clutch members for causing a relative rotation between the ring member and the member to move said nut into engaging and disengaging position.

1,899,515. FREE WHEELING TRANSMISSION MECHANISM. KENNETH E. LYMAN, Rockford, Ill., assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind., a Corporation of Delaware. Filed Nov. 26, 1930. Serial No. 498,815. 4 Claims. (Cl. 192—48.)



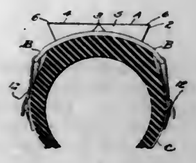
1. In an automobile transmission the combination with a driving member and a driven member, of a friction clutch including a ring member normally disconnected from said driving and driven members, interdigitated friction discs connected to the driven member and to said ring member, a pressure member connected to the driven member and a second pressure member connected to the ring member for causing a frictional engagement between said discs on a relative rotation between said nut and said driven member in one direction and axially movable means on the ring member for connecting said ring member with the driving member.

1,899,516. CONTROL APPARATUS. ARTHUR R. MABBY, Waterbury, Conn., assignor to The Bristol Company, Waterbury, Conn., a Corporation of Connecticut. Filed Feb. 4, 1930. Serial No. 425,852. 4 Claims. (Cl. 236—91.)



1. Control apparatus comprising two independently expansible members having a common axis of expansion and the one being secured at one end and at its opposite end carrying the other member, means operatively associated with the free end of the last-named expansion member for communicating the algebraic sum of their combined movements, and respective means responding to different conditions to cause movement of each of said expansible members under variations in conditions to which said means are exposed, the entire resulting linear movement of its members being transmitted along the axis common to said expansion members.

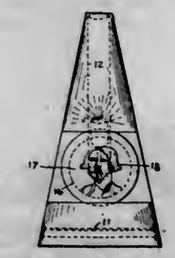
1,899,517. ICE GRIP NONSKID. THOMAS ANTHONY MASTER, South Otselic, and LOUIS D'ANGELO, Binghamton, N. Y. Filed May 14, 1931. Serial No. 537,372. 1 Claim. (Cl. 152—14.)



An anti-skid device for vehicle wheels comprising in combination with side chains of a plurality of transverse arcuate strips adapted to be connected to the side chains, said strips being provided at either end with a transverse slot and perforations, a body portion mounted on each transverse strip, said body portion being cruciform with its outer edges undercut and its outer surface having intersecting ridges, the ends of the body portion being within the limits of the dimensions of the strip means for connecting the ends of the strip with the side chains and means disposed in the transverse slots of the strip for embracing the felloe.

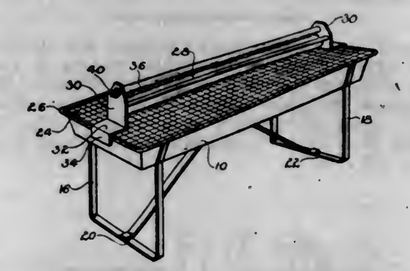
1,899,518. TRANSLUCENT PYROTECHNIC DEVICE. JOHN C. MOORE, Brooklyn, N. Y. Filed Feb. 11, 1932. Serial No. 592,260. 5 Claims. (Cl. 102—20.)

1. A pyrotechnic device comprising a conical casing having a translucent area therein, a normally concealed pictorial representation situated in said translucent area, means for effecting a pyrotechnic display exteriorly of the



casing, and means for subsequently illuminating the interior of the casing so that the pictorial representation will appear to view.

1,899,519. WATERING TROUGH FOR POULTRY. ALFRED NEILSEN, Kirkland, Wash. Filed Apr. 30, 1930. Serial No. 448,445. 1 Claim. (Cl. 119—72.)



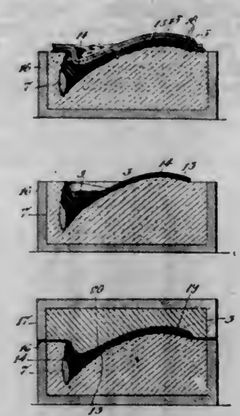
A poultry watering device comprising a drip pan having supporting legs, a removable mesh-screen on the top of the pan forming a floor for the poultry, a longitudinally disposed trough above the screen, brackets forming end walls of the trough, each of said brackets having an integral foot-plate supported on the mesh-screen and pan and a retaining flange overhanging an end wall of the pan, a pair of bolts fixed in the brackets, and a guard-bar disposed longitudinally of and above the trough and journaled to revolve on said bolts.

1,899,520. GROUND ANCHOR. DAVID NETTENSTROM, Chicago, Ill., assignor of one-half to Harry C. Wanner, Chicago, Ill. Filed Aug. 19, 1929. Serial No. 386,850. 4 Claims. (Cl. 189—92.)



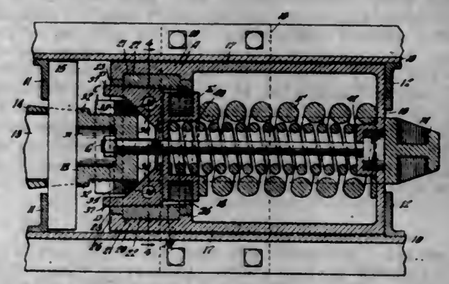
1. A ground anchoring device comprising an anchor rod having a transversely extended portion at the upper end and retaining means at the lower end consisting of a plurality of super-imposed flange members similar in outline and eccentrically mounted on the rod, the rod being fixed to one of said members and the other members mounted to rotate on the rod, said flange members having sectorally extending bosses projecting from their adjacent faces, the angular extent of said sector bosses aggregating 360 degrees, and in the collapsed position of the flange members occupying circumferentially successive positions about the axis of the rod, and extending axially past each other for mutual engagement to transmit rotative movement successively from the member which is fixed to the rod.

1,899,521. METHOD OF MAKING REENFORCED VULCANITE DENTURES. UZA NUDELL, New York, N. Y., assignor to Baker & Company, Inc., Newark, N. J., a Corporation of New Jersey. Filed Nov. 2, 1931. Serial No. 572,593. 2 Claims. (Cl. 32—4.)



2. The method of making reenforced vulcanized dentures, consisting in swaging a base plate upon a model and a palate plate upon said base plate, swaging a sheet of wire gauze upon said base plate on the model, securing said palate plate and base plate in superposed relation and setting teeth in wax thereon, investing said waxed case and melting out the wax, removing the palate plate, packing the flask with a layer of vulcanizable composition and pressing with the base plate in position, placing wire gauze in position on said composition with a layer of padding thereover and pressing again with the base plate removed to force gauze into the surface of the composition, removing padding, placing thin layer of composition over gauze, closing flask and vulcanizing, and removing denture from flask.

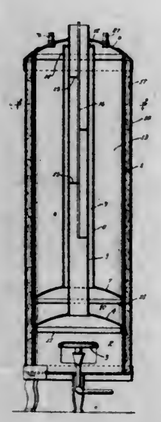
1,899,522. FRICTION SHOCK ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 30, 1929. Serial No. 403,412. 4 Claims. (Cl. 213—32.)



4. In a friction shock absorbing mechanism, the combination with a friction shell having opposed sets of flat side walls extending lengthwise of the mechanism, one of said opposed sets being perpendicular to a horizontal plane, and the other set being perpendicular to a vertical plane; of a pair of opposed friction shoes cooperating

with one of said sets of flat walls, a second pair of friction shoes cooperating with the other set of flat walls, said pairs of shoes having cooperating wedge faces converging inwardly of the mechanism and perpendicular to a horizontal plane; a wedge member having wedge faces at opposite sides thereof having wedging engagement with the other set of shoes, the wedge faces of said wedge being disposed in planes perpendicular to a vertical plane; and spring resistance means opposing inward movement of the shoes.

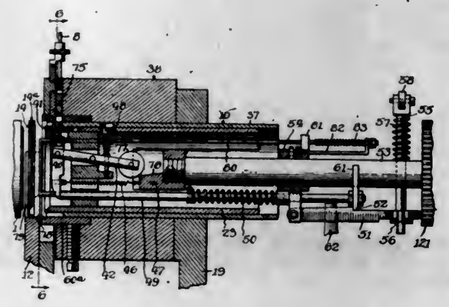
1,899,523. WATER HEATER. OSAN W. OTT, Los Angeles, and ARTHUR J. SMITHERS, Alhambra, Calif., assignors to Pacific Pipe and Supply Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 26, 1931. Serial No. 511,253. 5 Claims. (Cl. 122—17.)



1. In a water heater of the kind described, the combination of a shell having a service water chamber for the service water to be heated, a water inlet and a water outlet therefor, a fire box with a head in the lower part of the shell, a hot gas flue extending up from the said head for carrying up gases of combustion from the fire-box, a water head mounted in the shell above the fire-box head and cooperating with the fire-box head and the shell to form a trapped water compartment over the fire-box head, a tubular jacket surrounding the said flue and connected to the water head so as to form a trapped water jacket around the flue communicating with the said water compartment, a cover head secured to the said shell, and means located remote from the ebullition point adjacent said fire-box head, for maintaining pressure communication between the water jacket and the service water space within the said shell and operating to maintain equilibrium of pressures without circulation of water between the trapped water in the jacket and the service water being heated in the water space of the shell, said pressure communicating means being the sole means of communication between the water jacket and the service water compartment.

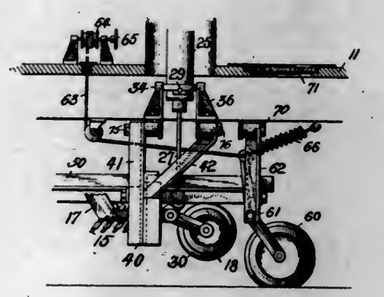
1,899,524. METHOD OF MAKING AND APPLYING GASKETS TO JAR CAPS. MERRITT G. PARKS, Gary, Ind. Filed Dec. 4, 1930. Serial No. 499,908. 4 Claims. (Cl. 113—80.)

1. The method of forming and applying plastic gaskets to jar caps which consists in forming a strand of raw rubber composition material, forming the end of the strand into a circle, severing the circularly formed portion of the strand from the remainder thereof, holding the end of the remainder of the strand during and after the severing operation, and compressing said portion against a jar cap to unite the ends of said portion and



affix it to the cap while confining said portion to limit the radial width to which it may be expanded by such compression.

1,899,525. AUTOMATIC RAIL LOCATOR FOR BRUSHES OF FISSURE DETECTOR CARS. WALTER M. PERRY, Brooklyn, and GEORGE L. JONES, East Williston, N. Y., assignors, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 18, 1930. Serial No. 436,822. 15 Claims. (Cl. 175—183.)

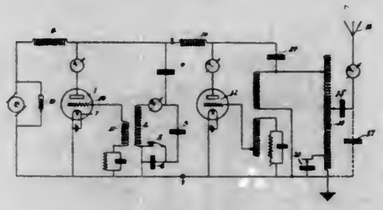


1. In combination, a rail flaw detecting mechanism adapted to be mounted on a car, means whereby said mechanism may be raised to ineffective position, means whereby said mechanism may be lowered to effective position, and means whereby said mechanism during movement thereof to effective position is moved laterally so as to insure engagement thereof with said rails.

1,899,526. VARNISH. MAX PHILLIPS, Washington, D. C. Filed Feb. 12, 1929. Serial No. 339,733. 1 Claim. (Cl. 134—26.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

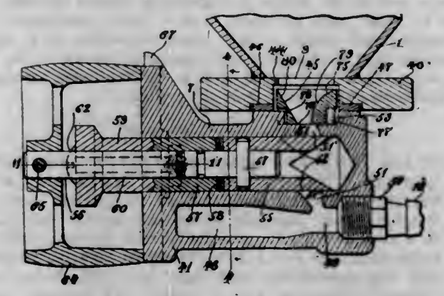
A varnish comprising lignin substantially identical with that produced by digesting corn cobs in alkali solution, reacting the resulting solution with sulfuric or hydrochloric acid to form a granular precipitate, and a solvent mixture of two or more ingredients selected from the group consisting of ethyl alcohol, methyl alcohol, isopropyl alcohol, benzene, acetone, ethyl acetate, amyl acetate, and furfural.

1,899,527. SYSTEM FOR TRANSMITTING ELECTRO-RADIANT ENERGY. ELLISON S. PURINGTON, Gloucester, Mass., assignor to John Hays Hammond, jr., Gloucester, Mass. Filed Dec. 23, 1925. Serial No. 77,194. 7 Claims. (Cl. 250—17.)



1. In a radio system, a three electrode vacuum tube, an oscillatory circuit energized by said tube, a grid circuit for said tube coupled for feed-back to said oscillatory circuit, a second vacuum tube associated therewith, a capacitance path between the circuits connecting the plates and filaments of said tubes, an oscillatory circuit for said second tube, an inductive circuit coupled in parallel with said second oscillatory circuit and a grid filament circuit coupled to said inductive circuit to produce feed-back to the grid of said second tube.

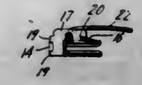
1,899,528. SAND BLAST TANK APPARATUS. WILLIAM A. ROSENBERGER, Hagerstown, Md., assignor to Pangborn Corporation, Hagerstown, Md., a Corporation of Maryland. Filed Aug. 18, 1928. Serial No. 300,578. 5 Claims. (Cl. 51—12.)



1. The combination with a sand blast tank of a mixing valve, a passage connecting the tank to the valve to supply abrasive to the valve from the tank by gravity, a tapered bushing having an eccentric opening forming part of said passage the bushing having a restricted area about its bottom portion, means for relieving the pressure on the particles immediately below said restricted area, means for positively locating the bushing in a plurality of positions whereby the relation of the passage in the bushing to the remainder of the passage is varied varying the size of the opening and regulating the flow of abrasive from the tank to the valve and a separate control valve for further determining and regulating the supply of abrasive to the mixing valve.

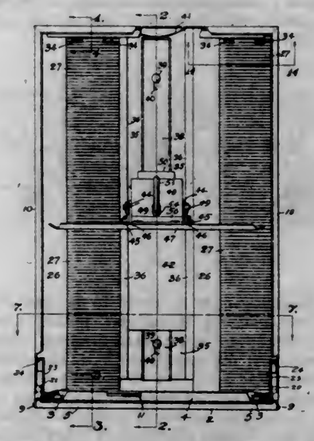
1,899,529. SLIDER FOR AUTOMATIC FASTENERS. EUGENE W. RUTHERFORD, New Haven, Conn., assignor to The Shoe Hardware Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 15, 1931. Serial No. 537,512. 4 Claims. (Cl. 24—205.)

4. In a separable fastener slider comprised of a pair of parallelly arranged wings attached together at one end, the combination with a bail holder provided at one end with a slot of a width substantially equal to the thickness of the material of the wings, of a holding element fitting into said slot and formed of a portion of the



material of one of the wings, said portion being struck up from the wing to a point above the surface of such wing.

1,899,530. FILE CONTAINER FOR LOOSE LEAF SHEETS. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Corporation of Massachusetts. Filed Sept. 14, 1929. Serial No. 392,706. 5 Claims. (Cl. 129—16.)



1. A filing tray for loose leaf sheets having a floor of smooth and rough sections, a rear sheet support pivoted to one end of said tray and capable of being tilted, and means whereby the tilting of said support changes the relative levels of the floor sections by moving the rough sections both longitudinally and vertically for adjustment with the smooth sections.

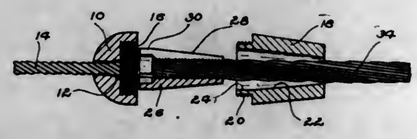
2. A filing tray having a rear sheet support, a follower plate adjustable to various positions within said tray, means for locking said plate in said positions and means for simultaneously tilting said follower plate and changing its spacing and locking the same with relation to said sheet support.

4. A filing tray having a tiltable rear sheet support, a longitudinal rack supported by the tray for lengthwise adjustments, resilient means normally urging said rack toward the rear sheet support and a follower plate mounted for adjustment to various positions within the tray and carrying locking means for engaging the teeth of the rack and said follower plate being capable of adjustments intermediate said teeth owing to the resilient lengthwise movement of said rack.

1,899,531. WIRE PULLER. LOUIS P. SEIFNER, Seattle, Wash., assignor of one-half to Josephine C. Larsin, Seattle, Wash. Filed July 11, 1931. Serial No. 550,157. 3 Claims. (Cl. 24—126.)

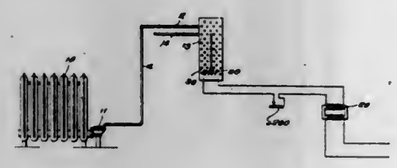
3. A wire puller consisting of an internally threaded draft head, a pulling cable secured to said draft head; a clamp sleeve having an external threaded portion,

adapted to engage the threaded portion of the draft head, and a tapered bore; and a plurality of toothed jaw members having a combined outer surface tapered to match the



taper of the clamp sleeve, adapted to cooperate with the tapered bore of the clamp sleeve to clamp a cable end positioned in said sleeve.

1,899,532. TEMPERATURE CONTROLLING MEANS. WILFRED SHURTLEFF, Moline, Ill., assignor to The Herman Nelson Corporation, Moline, Ill., a Corporation of Illinois. Filed Feb. 8, 1929. Serial No. 338,405. 3 Claims. (Cl. 236—68.)



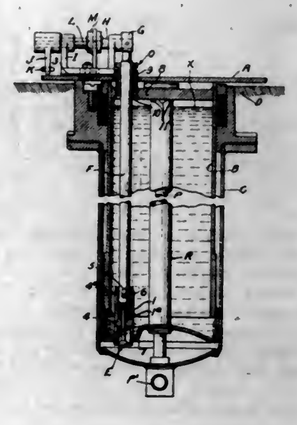
1. The combination of a room to be heated, heating means for the room, a thermostat within a perforated casing for controlling said heating means subject to a predetermined still air temperature in the room, an independent heated adjacent the thermostat within said perforated casing for subjecting said thermostat to a temperature in a variable excess of said predetermined room temperature, said excess temperature being subject to dissipation by air in motion to operate said thermostat and cause said heating means to increase the room temperature in response to said air in motion independently of said predetermined temperature to provide a compensated room temperature substantially equivalent to still air temperature.

1,899,533. SIGN AND METHOD FOR MAKING IT. WILLIAM H. SPENCER, New York, N. Y., assignor to The Frink Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Apr. 29, 1931. Serial No. 533,659. 4 Claims. (Cl. 204—8.)



1. The method of forming an ornamental sign, which method consists in roughening portions of the smooth surface of a permanent plate glass base to outline the characters which are to form the legend in the completed sign, in roughening other portions of the smooth surface of the glass separated from the first-mentioned roughened surfaces by intervening smooth surfaces, in simultaneously electroplating the first-mentioned and second-mentioned roughened surfaces together with the intervening smooth surfaces, and finally in polishing the electroplated intervening smooth surfaces.

1,899,534. AUTOMOBILE LIFT. EDWIN H. STEEDMAN, St. Louis, Mo., assignor to Curtis Manufacturing Company, Wellston, Mo., a Corporation of Missouri. Filed May 5, 1930. Serial No. 449,847. 18 Claims. (Cl. 245—93.)



1. An automobile lift, comprising an upwardly-movable platform or chassis engaging portion, a cylinder having a head at its lower end, a piston in said cylinder for sustaining said platform, constructed so as to serve as a holder for an incompressible liquid means for forcing said liquid from said piston into the space between the inner end of the piston and the head of the cylinder so as to raise said platform, and a valve structure for trapping said liquid in said space consisting of a valve element and a co-acting seat, mounted so as to be removable from the upper end of the cylinder, without withdrawing the piston from the cylinder.

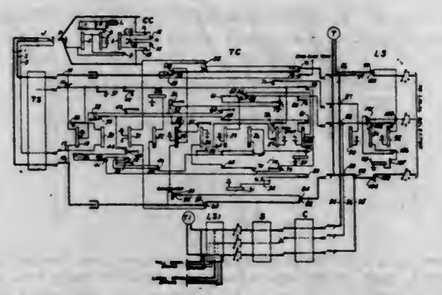
1,899,535. PROCESS AND COMPOSITION FOR RUBBERIZING WATER REPELLENT MATERIAL AND PRODUCT THEREOF. MERWYN C. TRAGUE, Jackson Heights, N. Y., assignor to General Rubber Company, New York, N. Y., a Corporation of New Jersey. Original application filed Apr. 1, 1925, Serial No. 20,010. Divided and this application filed Aug. 18, 1927, Serial No. 213,966. Renewed Aug. 5, 1932. 14 Claims. (Cl. 91—68.)

1. A process for treating water repellent material which comprises preliminarily applying to said material a sulphonated organic polar compound, and then allowing rubber in the form of an aqueous dispersion of rubber to enter into intimate contact with said material.

10. A process for rubberizing water repellent material which comprises preliminarily treating said material with material from the group comprising sulphonated castor oil, sulphonated cotton seed oil, sulphonated olive oil, sulphonated arachis oil, ortho toluidine, sodium sulphanilite, thiourea, sodium salicylate, ammonium linolenate and isolinolenate, saponin, sodium dioxynaphthalene disulphonate, potassium oleate, and sodium naphthalene sulphonate, treating said material with an aqueous dispersion of rubber, and drying.

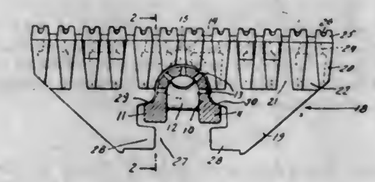
1,899,536. AUTOMATIC TELEPHONE SYSTEM. VICTOR S. THARP, Elmhurst, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 2, 1930. Serial No. 479,151. 20 Claims. (Cl. 179—27.)

1. In a preferred-service telephone system, a toll switchboard, a subscriber's line, an automatic switch, means at the switchboard for transmitting series of digit impulses to directively operate said switch, means in the switch responsive solely to said impulses for establishing a talking connection with said line when the line is busy in either



a local connection or a toll connection, and means including a relay in said switch controlled from the switchboard for releasing the first connection provided the same is a local connection.

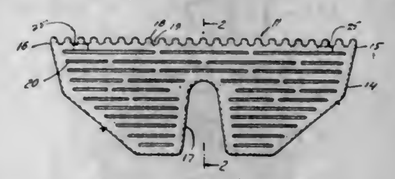
1,899,537. FURNACE GRATE. JAMES S. THOMPSON, New Rochelle, N. Y., assignor to Firebar Corporation, Cleveland, Ohio, a Corporation of Delaware. Filed Mar. 8, 1930. Serial No. 434,254. 9 Claims. (Cl. 126—180.)



1. A grate bar comprising a longitudinal member having its end portions upwardly offset, trunnions projecting from the offset portions of said member, the tops of said trunnions lying above the top of said member, and fuel-supporting units removably mounted on said member, each unit having a recess to receive the member and having parts underlying portions of said member and preventing free upward removal of the unit from the member, said parts being spaced a distance greater than the diameter of the trunnion and greater than the width of the offset portions of said member, said unit being removable by a movement lengthwise of the member followed by a movement transverse thereto at such an angle as to cause said parts to pass on either side of the trunnion or of the offset portion at the end of said member.

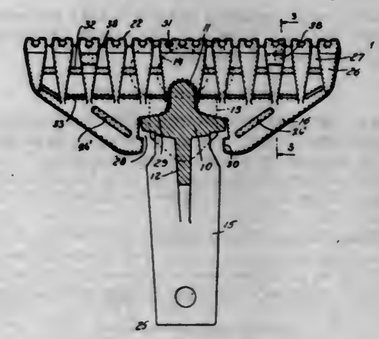
1,899,538. GRATE BAR. JAMES S. THOMPSON, New Rochelle, N. Y., assignor to Firebar Corporation, Cleveland, Ohio, a Corporation of Delaware. Filed June 25, 1931. Serial No. 546,779. 16 Claims. (Cl. 126—168.)

1. In a grate bar, a removable finger bar which comprises a single piece of sheet metal having a continuous one-piece top and side portions connected to the top along its edges and depending therefrom, said top being formed with at least one ridge extending from one boundary of the top to another, the top of said ridge constituting a fuel



support, said side portions having spaced parts bent out of the plane of the metal and serving to stiffen the side portions.

1,899,539. GRATE BAR. JAMES S. THOMPSON, New Rochelle, N. Y., assignor to Firebar Corporation, Cleveland, Ohio, a Corporation of Delaware. Filed June 25, 1931. Serial No. 546,778. 24 Claims. (Cl. 126—180.)



1. A grate bar which comprises a carrier and a plurality of removable fuel-supporting units thereon, each unit being hollow, made of a single piece of sheet metal, and having portions spaced inward from its edges bent out of the plane of the sheet and serving to prevent cumulative expansion effects.

1,899,540. LIGHTNING ARRESTER. HAROLD M. TOWNE, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 11, 1931. Serial No. 562,317. 2 Claims. (Cl. 175—30.)

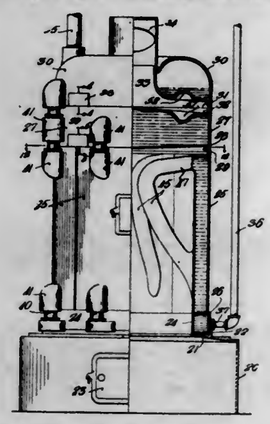


1. In a discharge unit for an arrester, an insulating casing formed in two sections, and a spring secured to the inner face of each casing section by a rivet, whereby a discharge element may be held between said springs, the rivets extending through the casing sections to form external contacts.

1,899,541. HEATER CONSTRUCTION. HUGH J. WALKER, Woburn, Mass. Filed Aug. 27, 1932. Serial No. 630,676. 3 Claims. (Cl. 122—218.)

1. A heater of the class described comprising a base section, separable upright wall sections, and a top section,

and fluid conduits interconnecting the respective wall sections with the base and top sections, the respective wall sections having integral, inwardly directed arms providing

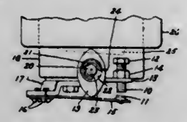


offset water tubes extending radially toward the center of the heater, and said tubes being narrow at their bottoms and relatively broad at their tops.

1,899,542. MOLDING POWDER AND THE PROCESS OF MAKING SAME. JAMES F. WALSH, East Orange, and MANUEL R. XIMENEZ, South Plainfield, N. J., assignors to Celluloid Corporation, a Corporation of New Jersey. Filed Feb. 26, 1929. Serial No. 342,716. 1 Claim. (Cl. 106—37.)

A molding composition in powdered form containing in close combination approximately 100 parts of pyroxylin of about 10.80 to 11.40 percent nitrogen, 75 to 80 parts of aromatic phosphate, and 300 to 350 parts of gypsum.

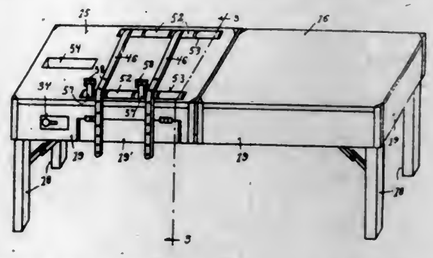
1,899,543. CONTACT BREAKER. HERBERT T. WARNER, deceased, Coventry, England, by Ruth Warner, administratrix, Frome, England, assignor to General Electric Company, a Corporation of New York. Filed Apr. 3, 1930, Serial No. 441,338, and in Great Britain Apr. 3, 1929. 1 Claim. (Cl. 200—30.)



In combination with stationary and rotatable elements, a contact breaker including relatively movable contacts carried by said rotatable element, means for resiliently retaining said contacts in engagement with each other, a cam carried by said stationary element, a pivoted member secured to said rotatable element and arranged to engage said cam and said resilient contact supporting means, and means for biasing said pivoted member in such position as to open said contacts, said cam being formed to engage said pivoted member to close said contacts and to release the same so as to separate said contacts at a speed independent of the speed of said rotatable element.

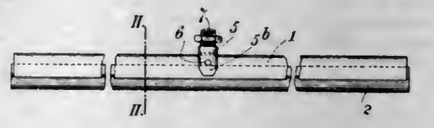
1,899,544. VIBRATORY APPARATUS. KARL H. WHITNEY, Kirksville, Mo., assignor to Whitmanis Manufacturing Company, Inc., Kirksville, Mo., a Corporation of Missouri. Filed Dec. 24, 1930. Serial No. 504,489. 4 Claims. (Cl. 128—63.)

2. Vibratory apparatus comprising a patient supporting member having slots near opposite sides and idler rollers journaled in said slots, a mechanical vibrating member mounted upon the rear face of said patient supporting member intermediate of said slots and provided with centrally attached rocker arms located in substantial alignment with said slots, a pair of pneumatically cushioned



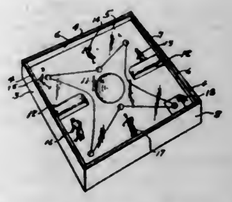
relatively thick pads resting side by side upon the patient, and a pair of flexible connecting members each attached at opposite ends to one pair of rocker arm ends and looped over one pair of idler rollers and one of said pads to impart movement in different directions to said respective pads.

1,899,545. WIPER FOR WINDSCREENS OF MOTOR VEHICLES AND FOR LIKE PURPOSES. HARRY WILLIS, Bangor, Northern Ireland, assignor to Willis Wiper Co., Limited, Belfast, Northern Ireland. Filed Nov. 28, 1931, Serial No. 577,744, and in Great Britain Feb. 5, 1931. 3 Claims. (Cl. 15—250.)



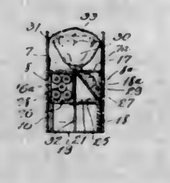
1. A windscreen wiper blade comprising, a rigid holder of U-cross section, a folded strip of pliable leather having its edges clamped in said holder, and a tubular rubber member inside the fold of said strip forming a wiping edge thereon of enlarged circular cross-section.

1,899,546. SQUARE GOLF GAME. HARRY H. WILSON, Newark, N. J. Filed Aug. 8, 1930. Serial No. 473,829. 3 Claims. (Cl. 273—116.)



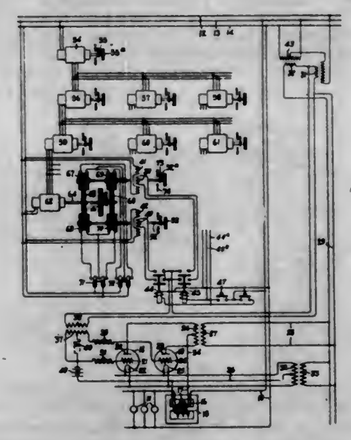
1. A square golf game comprising, a body having an upper surface which is substantially flat and square in shape, said upper surface providing a playing field having a plurality of shallow holes or cups disposed therein in spaced relation from one another, a vertical casing extending around the margins of said playing field to thereby positively limit the area of play to said playing field, said playing field having a relatively large recess in the central portion thereof providing a hazard of the general form of a lake, barrier projections extending from said vertical casing toward said lake, said barrier projections terminating short of the marginal edges of said lake to thereby provide limited play areas adjacent the margin of said lake in the proximity of said barriers, and a ball movable over said playing field for successive engagement in said holes or cups, it being necessary in playing the game to roll the ball over said limited play areas without having the ball drop into the lake or strike a barrier projection.

1,899,547. PACKING AND DISPLAY BOX. FRANK J. ADDIS and PAUL P. ADDIS, Brooklyn, N. Y. Filed Aug. 8, 1932. Serial No. 627,828. 20 Claims. (Cl. 206—44.)



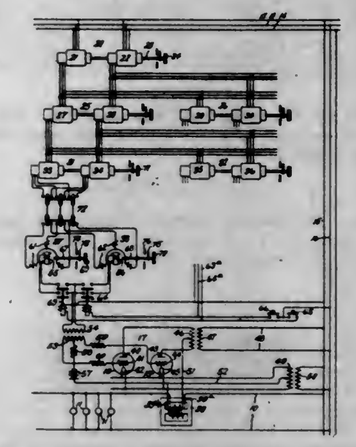
15. A box for packing and displaying candle holders and associated articles of the class described, comprising an outer box part open at the top, means centrally within and formed independently of said outer box part for supporting candle holders therein to display the same in the open top of said box part, means for supporting other articles within said box part, and an opening formed in the side wall structure of said box part to render said other articles visible therethrough.

1,899,548. ILLUMINATION CONTROL SYSTEM. ALLEN E. BAILEY, Jr., Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 28, 1929. Serial No. 374,592. 17 Claims. (Cl. 175—312.)



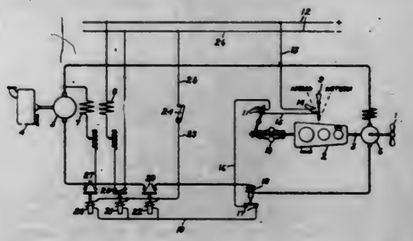
1. The combination in an illumination control system having a plurality of lamp circuits, of means for controlling said circuits comprising illumination intensity control means connected to each of said circuits, a separate electric discharge device provided with an input circuit and an output circuit connected to each of said illumination intensity control means, a plurality of individual control devices associated with each of said discharge devices, means for selectively connecting a corresponding one of each of said pluralities of control devices to the input circuit of its associated electric discharge device, and a master control device for controlling said circuits in unison.

1,899,549. ILLUMINATION CONTROL SYSTEM. ALLEN E. BAILEY, Jr., Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 25, 1929, Serial No. 381,047. Renewed May 13, 1932. 8 Claims. (Cl. 175—312.)



1. In an illumination system, a lamp circuit, an electric discharge device provided with an input circuit and with an output circuit operatively associated with said lamp circuit, a pair of polyphase electrical devices for supplying alternating electromotive forces having opposite phase sequence to said input circuit, and a switching device for selectively connecting said input circuit with said devices.

1,899,550. POWER SYSTEM. ROYCE A. BEEKMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 23, 1931. Serial No. 546,327. 6 Claims. (Cl. 172—8.)

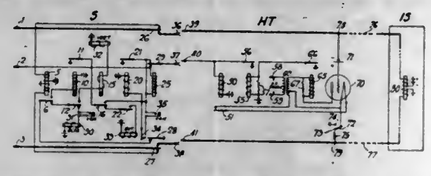


6. A power system comprising a reversible load device, means for operating said load device, a series motor connected to said load device, a prime mover, a generator driven by said prime mover, means for electrically connecting said generator to said motor, means for reversing said load device, and means responsive to the operation of said last-mentioned means for interrupting said electrical connection between said generator and said motor.

1,899,551. AUTOMATIC TELEPHONE SYSTEM. JOHN I. BELLAMY, Brookfield, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 14, 1930, Serial No. 495,591. Renewed Mar. 7, 1932. 28 Claims. (Cl. 179—16.)

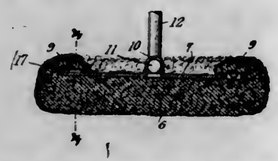
1. In a telephone system, a trunk line, a vacuum tube having its grid-filament circuit bridged across said trunk

line, automatic switches for extending a calling subscriber's line to said trunk line, means responsive to said



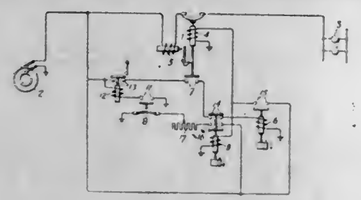
extension for rendering said tube operative, and means controlled by said tube for maintaining said automatic switches operated.

1,899,552. SCOURING DEVICE. SIDNEY M. BOOKMAN, New York, N. Y. Filed June 16, 1930. Serial No. 461,437. 4 Claims. (Cl. 15—210.)



1. A scouring device comprising a relatively stiff disk, a piece of metallic wool below the disk having edge portions extending upwardly and inwardly over the edge of the disk and forming an annulus of metallic wool above the disk, means united with the disk to facilitate detachably securing a handle to the disk, and means for interlocking the disk with said piece of metallic wool.

1,899,553. CIRCUIT BREAKER CONTROL SYSTEM. ERNST BOHRE, Copenhagen, Denmark, assignor to General Electric Company, a Corporation of New York. Filed Sept. 25, 1930, Serial No. 484,411, and in Germany Oct. 10, 1929. 7 Claims. (Cl. 175—294.)

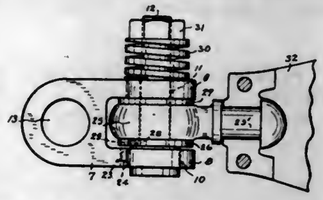


1. In combination, a circuit breaker, closing means therefor, means including electrically heated means for limiting the number of times said closing means can close said circuit breaker, and means responsive to each operation of said closing means for completing while said circuit breaker is open, a heating circuit for said electrically heated means and for maintaining said heating circuit completed for a definite time which is independent of the reclosing time of the circuit breaker.

1,899,554. PROCESS FOR COMPOUNDING RUBBER. WILLIAM S. CALCOTT and WILLIAM A. DOUGLASS, Penns Grove, N. J., and OLIVER M. HAYDEN, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 13, 1927. Serial No. 239,810. 18 Claims. (Cl. 18—50.)

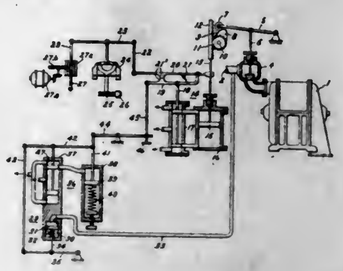
12. The rubber product having incorporated therein phenyl-alpha-naphthylamine and meta-toluylene-diamine which have been reduced to particles of colloidal dimensions in the presence of stearic acid.

1,899,555. HEEL PULLEY BLOCK HOLDING DEVICE. ALVIN R. CAMPBELL, San Francisco, Calif. Filed Aug. 2, 1929. Serial No. 383,116. 1 Claim. (Cl. 287—100.)



A pulley block holding device embodying a bracket; a hanger having a bifurcated end portion with a bolt shank receiving hole in one arm of said bifurcated end, a bolt head receiving hole in the other arm; means pivotally engaging the end of the hanger, opposite the bifurcated portion, to the said bracket for horizontal movement; a bolt slidably mounted in the said holes in the bifurcated end portion of the hanger, having means on said bolt head engaging the hanger and preventing turning of a bolt; a pulley block swivel member pivotally mounted upon said bolt for vertical movement; a washer member non-rotatably secured upon said bolt and disposed between said swivel member and said bolt head; another washer member disposed between the swivel member and one of the arms of said bifurcated portion of the hanger; a compression spring on said bolt on the outside of said last named bifurcated arm; and a nut on said bolt retaining said compression spring under pressure, whereby said swivel member is frictionally disposed as respects one arm of said bifurcated hanger and said non-rotatably mounted washer, thereby permitting the swivel member to be yieldingly held in any desired position of its vertical travel.

1,899,556. ELASTIC FLUID TURBINE. REED J. CAUGHEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 1, 1931. Serial No. 566,292. 6 Claims. (Cl. 137—158.)

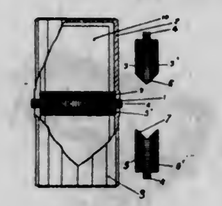


1. The combination with an elastic fluid turbine having an admission valve to which an elastic fluid of fluctuating pressure is supplied, and a speed governor for controlling the valve, of additional means inoperative at loads below a predetermined value for closing the valve at loads exceeding said value without affecting the speed governor position in terms of increase in pressure of the elastic fluid supplied to the valve.

1,899,557. SHAVING SOAP CASE. RENÉ JEAN GABRIEL CHARLOT, Paris, France, assignor to Thibaud Gibbs & Cie., Paris, France, a Corporation of France. Filed Dec. 28, 1931, Serial No. 583,505. and in France Jan. 9, 1931. 3 Claims. (Cl. 206—56.)

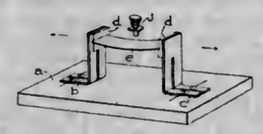
1. In combination with a container for soap sticks and the like small cylindrical bodies comprising two opposed

covers having an inner thread at their periphery, the provision of two independent half-rings each provided with two outer threads for engaging the threads in the



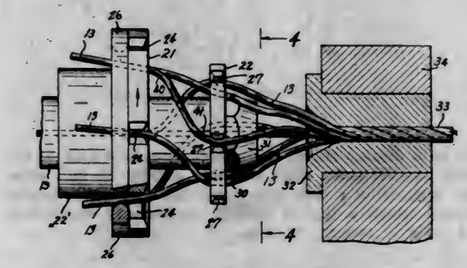
two covers respectively and comparatively deep projections raised on the inside of and substantially in the middle of each half-ring for engaging the soap-stick or like body.

1,899,558. THERMAL RESPONSIVE DEVICE. ALFRED COHN, Berlin-Charlottenburg, and FRANZ DAUSINGER, Berlin-Treptow, Germany, assignors to General Electric Company, a Corporation of New York. Filed Sept. 8, 1930, Serial No. 480,418, and in Germany Dec. 3, 1929. 8 Claims. Cl. 297—12.)



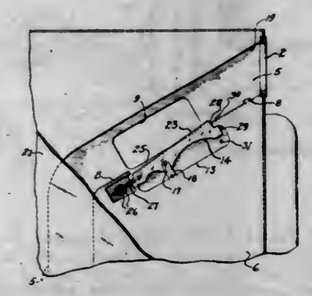
6. A thermal responsive device comprising a pair of bimetallic supports each of which is slotted to form a heating current path therethrough, a resilient member mounted between said supports and biased for snap action, said supports being arranged to move in the same direction in response to the heating thereof so as to release said resilient member only in response to a difference in the heating of said supports.

1,899,559. MACHINE FOR MAKING WIRE CABLE. JOHN C. DAMON, Boston, Mass., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 14, 1928. Serial No. 292,626. 3 Claims. (Cl. 117—20.)



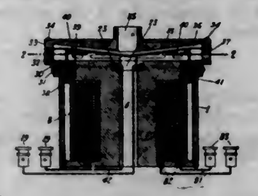
1. In a machine for making wire cable, a revolving head having guides for the wires, a pair of die plates mounted to rotate with said head and extending transversely of the axis of rotation, said plates being spaced from each other longitudinally of the direction of movement of the cable and provided with guides forming bending means for the wires comprising notches extending inwardly from the peripheries of the plates.

1,899,560. SPURIOUS COIN SEPARATOR. EDWARD P. DONNELLAN, Brooklyn, N. Y., assignor of one-third to John J. Donnellan, Brooklyn, N. Y., and one-third to James L. Donnellan, Brooklyn, N. Y. Filed Aug. 27, 1931. Serial No. 559,705. 8 Claims. (Cl. 194—103.)



1. A spurious coin separator comprising, a member having a coin slot therein for conveying coins toward a receiving receptacle, said member having a spurious coin discharge opening communicating with said slot, said member being transversely inclined in a direction toward said opening, a lever pivotally carried by said member and positioned adjacent said slot and said discharge opening, said member having a passage between said lever and said slot through which said lever is arranged to project so as to extend into said slot above the adjacent margin of said discharge opening for the purpose of ejecting spurious coins through said discharge opening, said lever being depressible by a proper coin so as to be offset below the adjacent margin of said discharge opening.

1,899,561. TELEPHONE RECEIVER. HERBERT GROVE DORSEY, Washington, D. C., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Continuation of application Serial No. 579,191, filed Aug. 2, 1922. This application filed Oct. 16, 1926, Serial No. 142,123. Renewed Mar. 21, 1930. 23 Claims. (Cl. 179—115.5.)

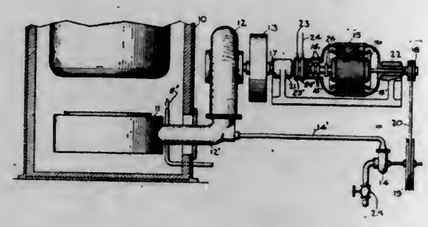


17. In a sound reproducing device, the combination with a diaphragm, of means secured to said diaphragm for vibrating the same, a support, and flexible membranous means fastened to the peripheral edge of said diaphragm and connected to said support for mounting the same in said support.

1,899,562. PROCESS FOR THE REMOVAL OF ARSENIC FROM SULPHUR. JOHN STANLEY DUNN, Norton-on-Tees, England, assignor to Imperial Chemical Industries, Limited, London, England, a British Company. Filed Feb. 10, 1932, Serial No. 592,186, and in Great Britain Feb. 11, 1931. 4 Claims. (Cl. 23—227.)

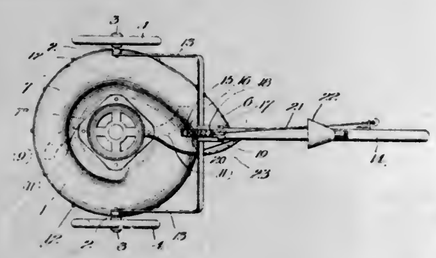
1. In a process for the removal of arsenic from impure sulphur, the step of contacting said sulphur at elevated temperature with a reagent comprising a molten sulphur compound of an alkali metal.

1,899,563. OIL BURNER CONTROL. JOHN EATON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 22, 1931. Serial No. 545,903. 18 Claims. (Cl. 158—28.)



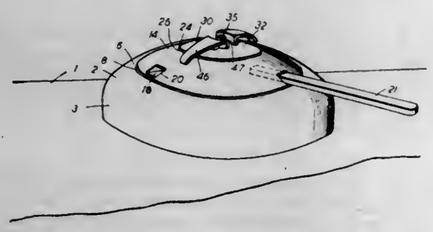
5. An oil burner having separate means for supplying liquid fuel and air for combustion, and means for differentially controlling said separate means and automatic means operative to cause said differential means to vary the mixture of fuel and air during operation of said burner.

1,899,564. LAWN MOWER. CHARLES A. FREY, Kansas City, Mo. Filed Dec. 24, 1928. Serial No. 328,207. 12 Claims. (Cl. 56—25.)



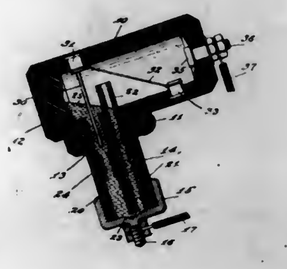
1. In a lawn mower, including a support and a blade rotatably carried by the support, a housing having a bottom inlet and an outlet disposed in substantially the horizontal plane and tangentially of the rotating blade, and means for operating said blade.

1,899,565. MANHOLE COVER. OTTO N. GREDELL, Kansas City, Mo., assignor to Standard Steel Works, North Kansas City, Mo., a Corporation of Missouri. Filed Mar. 15, 1930. Serial No. 436,092. 5 Claims. (Cl 220—39.)



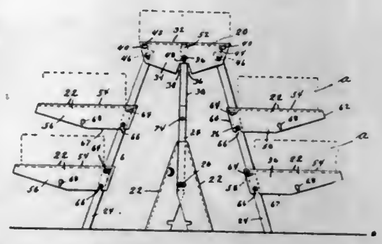
1. In a device of the character described, a recessed cover having a depending threaded flange and a laterally directed lever-receiving aperture, and means fixed to said cover in the recess for anchoring the inner end of a lever adapted to be inserted in the aperture for rotating the cover.

1,899,566. CIRCUIT BREAKER. STANLEY S. GREEN, Indianapolis, Ind., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind., a Corporation of Illinois. Filed Nov. 5, 1928. Serial No. 317,221. 24 Claims. (Cl. 200—113.)



1. An electric circuit controller, comprising a container movable to different controlling positions, a conduit having its passage communicating with said container at two separate places, a quantity of liquid conductor located within the space formed by said container and passage but too small to fill it, one of said communicating places between the conduit and the container being at all times above the level of any liquid conductor in the container and the other being above such level when the container is in one position but below such level when the container is in another position, and two electrodes which may be connected together by said liquid conductor through the passage provided by said conduit, said conduit being arranged so that upon excess current there occurs a vaporization of liquid conductor within the conduit that blows liquid conductor out of the conduit to break the connection provided through the conduit between the two electrodes, the parts being so arranged that such blowing out is mainly at that communicating place which is capable of being submerged.

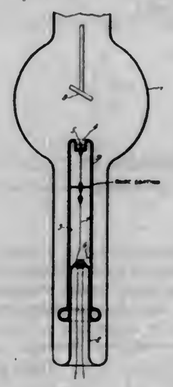
1,899,567. DISPLAY STAND. RICHARD J. HAUG, Nashua, N. H. Filed Oct. 13, 1930, Serial No. 488,245. Renewed July 20, 1932. 23 Claims. (Cl. 211—85.)



1. In a display stand, the combination of a pair of inclined parallel rails, shelf members carried by said rails each comprising a top plate and depending side plates between which a rail is located, and means connecting said rails in spaced relation.

1,899,568. CATHODE STRUCTURE FOR VACUUM TUBES. WALTER HOFMANN, Rudolstadt in Thuringia, Germany, assignor to General Electric Company, a Corporation of New York. Filed Aug. 1, 1927, Serial No. 209,858, and in Germany Aug. 7, 1926. 2 Claims. (Cl. 250—35.)

1. An electric discharge device comprising an evacuated receptacle which terminates in a reentrant stem, a cathode and a cooperating anode contained in the receptacle, a support for the cathode comprising a metal tube secured at one end to said stem and supporting the cathode at

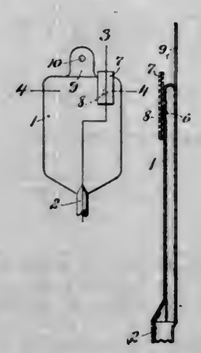


the other end, said tube being coated with refractory oxide and having its edges rounded whereby electron emission from the tube is precluded.

1,899,569. PROCESS OF COATING METALS. GOODWIN H. HOWE, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 28, 1929. Serial No. 366,775. 11 Claims. (Cl. 91—70.1.)

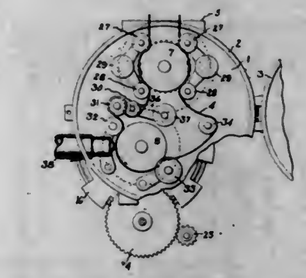
1. The process of providing a foundation metal with a protective coating resistant to corrosion which consists in heating the foundation metal at a temperature in the approximate range 700° C. to 900° C. in the presence of a mixture of a coating metal and a metal which has a lower melting point than the coating metal and an affinity for the foundation metal.

1,899,570. AUTOMOBILE RADIATOR CONDENSER. PHILIP L. HOWE, Wilson, Tex. Filed Dec. 9, 1931. Serial No. 579,868. 1 Claim. (Cl. 257—25.)



In an automobile radiator condenser, an expansible flexible closed container for liquid normally held collapsed solely by external atmosphere pressure and having an inlet adapted for connection with the discharge end of a radiator overflow pipe, and having above said inlet an outlet, said container having a flexible strip integral therewith and having a free portion normally held solely by atmospheric pressure against said container and closing said outlet, said portion being movable by any pressure in said container greater than atmospheric to uncover said outlet.

1,899,571. FILM DRIVING MECHANISM. EDWARD W. KELLOGG, Moorestown, N. J., assignor to General Electric Company, a Corporation of New York. Filed Nov. 12, 1930. Serial No. 495,192. 8 Claims. (Cl. 271—2.3.)



1. Film driving apparatus comprising a sprocket and a drum each arranged to engage the film, and means for driving both the sprocket and the drum, said means tending to drive the drum at a greater speed than the sprocket, the speed of the drum being restrained by the film leaving the sprocket.

1,899,572. METHOD OF DISSOLVING TITANIUM TETRACHLORIDE IN AQUEOUS SOLVENTS. PAUL KUBELKA, Prague, Czechoslovakia, assignor to Krebs Pigment & Color Corporation, Newark, N. J., a Corporation of Delaware. Filed Feb. 12, 1932, Serial No. 592,656, and in Germany Feb. 27, 1931. 3 Claims. (Cl. 23—87.)

1. In a process for the preparation of a titanium chloride solution, the step which comprises introducing titanium tetrachloride into an agitated aqueous solvent below the surface of said solvent.

1,899,573. PROCESS OF PREPARING CLEAR SOLUTIONS OF TITANIUM CHLORIDE. PAUL KUBELKA, Sprague, Czechoslovakia, assignor to Krebs Pigment & Color Corporation, Newark, N. J., a Corporation of Delaware. Filed Feb. 12, 1932, Serial No. 592,657, and in Germany Feb. 23, 1931. 2 Claims. (Cl. 23—87.)

1. In a process for the preparation of a clear aqueous titanium chloride solution, the step which comprises dissolving titanium tetrachloride in an aqueous titanium chloride solution containing at least 150 grams of HCl free and combined per liter.

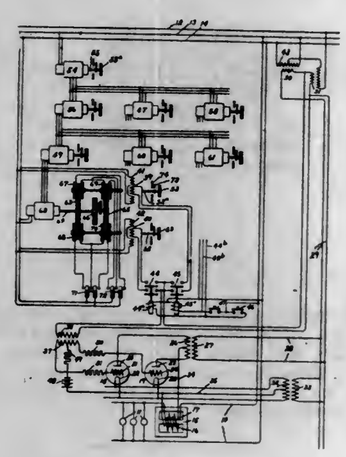
1,899,574. PROCESS OF PREPARING CONCENTRATED CLEAR SOLUTIONS OF TITANIUM CHLORIDE. PAUL KUBELKA, Prague, Czechoslovakia, assignor to Krebs Pigment & Color Corporation, Newark, N. J., a Corporation of Delaware. Filed Feb. 12, 1932, Serial No. 592,658, and in Germany Feb. 25, 1931. 2 Claims. (Cl. 23—87.)

1. In a process of preparing an aqueous solution of titanium chloride comprising adding titanium tetrachloride to an aqueous solvent, wherein the solution becomes turbid and precipitates titanium oxygen compounds at low concentrations, the step of adding titanium tetrachloride to said turbid solution.

1,899,575. CONTROL SYSTEM. HAROLD B. LA ROQUE, Upper Darby, Pa., assignor to General Electric Company, a Corporation of New York. Filed July 19, 1929, Serial No. 379,556. Renewed May 13, 1932. 19 Claims. (Cl. 175—312.)

1. In a control system the combination with an electric discharge device provided with an input and an output

circuit of a load circuit connected with said output circuit, a source of alternating current supply, means connected with said source for supplying at least two dephased com-

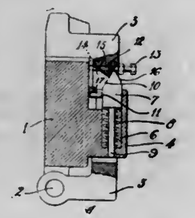


ponents of alternating voltage to one of said circuits and means movable to vary the magnitude of one of said components.

1,899,576. METHOD OF PROTECTING CONCRETE SURFACES DURING CURING. PAUL C. LEMMERMAN, East Cleveland, and RAYMOND F. REMLER, Lakewood, Ohio, assignors to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Nov. 13, 1930. Serial No. 495,418. 6 Claims. (Cl. 25—154.)

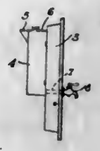
1. The method of protecting a concrete surface during curing which comprises applying to said surface a sodium silicate solution containing a non-precipitating amount of a non-caustic electrolyte.

1,899,577. KNITTING MACHINE NEEDLE BAR LOCK. KARL RICHARD LIEBERKNECHT, Oberlungwitz, Germany, assignor to Kalio Inc., New York, N. Y., a Corporation of New York. Filed Mar. 19, 1932, Serial No. 599,913, and in Germany July 9, 1931. 7 Claims. (Cl. 66—114.)



1. A knitting machine having a needle-bar, a section of which is swingable out of knitting position, means for continuously adjusting the alignment of said section with the other section of the needle-bar, and resilient means for maintaining said swingable portion in any adjusted position.

1,899,578. LIQUID COOLER FOR REFRIGERATORS. LYNN G. LINDSAY, near Dayton, Ohio, assignor to Trupar Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 11, 1931. Serial No. 556,397. 1 Claim. (Cl. 62—42.)

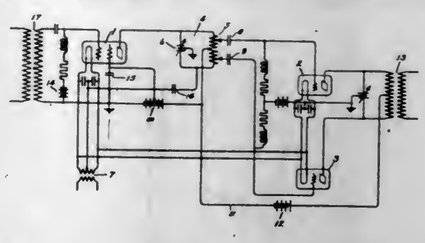


In a refrigerator casing having a door to afford access to the interior thereof, an elongated shallow liquid container secured to the upper inside portion of said door, a funnel inlet portion flared outwardly from the top part of the front wall of the container, a tube projecting from the bottom of said container through said door, and a faucet secured to said tube on the front side of said door.

1,899,579. PROCESS FOR MAKING DIBENZANTHRONE FROM THE CORRESPONDING BZ1.BZ1'-DIBENZANTHRONYLS. ARTHUR LÜTTRINGHAUS, Mannheim, HEINRICH NERESHEIMER, Ludwigshafen-on-the-Rhine, and HANS EMMER, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 9, 1926, Serial No. 153,725, and in Germany Dec. 14, 1925. 2 Claims. (Cl. 260—61.)

1. The process of producing vat dyestuffs of the dibenzanthrone series which comprises treating a Bz1.Bz1'-dibenzanthronyl with an alkaline condensing agent at a temperature above 100° C. and up to about 135° C.

1,899,580. SIGNAL SYSTEM. LAMBERT H. LYNN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 4, 1929. Serial No. 404,722. 7 Claims. (Cl. 179—171.)

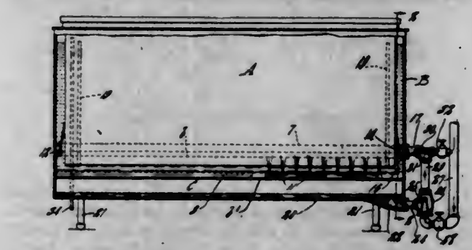


1. In combination, an electron discharge device having a grid, an anode, and a cathode, a load circuit connected between said anode and cathode, a connection between an intermediate point on said load circuit and said cathode and means for maintaining the potential on opposite sides of said load circuit in balanced relation with respect to said cathode, the side of said tuned circuit opposite said anode being effectively disconnected from said grid except through said anode and cathode.

1,899,581. HEATER. LAWRENCE J. MARINGER, Buffalo, N. Y., assignor to R. G. Wright & Company, Buffalo, N. Y. Filed Dec. 11, 1931. Serial No. 580,334. 17 Claims. (Cl. 257—77.)

1. A fluid heating and circulating system for heaters, including a container for the liquid to be heated and a tank

into which said container extends and which forms with said container a space for the circulation of heating fluid, means for admitting heating fluid in the lower

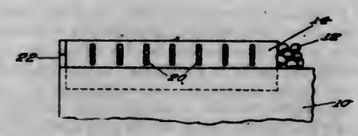


portions of said space and directing said heating fluid upwardly and means at the upper portion of said space for withdrawing fluid therefrom.

1,899,582. CARRYING OUT FRIEDEL CRAFTS AND SIMILAR CONDENSATION REACTIONS WITH NON-AROMATIC COMPOUNDS. HERMANN MARK and MANFRED DUNKEL, Mannheim, and ERNST ROELL, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 28, 1929, Serial No. 343,556, and in Germany Mar. 5, 1928. 8 Claims. (Cl. 260—134.)

1. The process of carrying out condensation reactions with non-aromatic compounds which comprises treating an aliphatic saturated hydrocarbon with a halogenated oxygen-bearing organic compound in the presence of a volatile metal halide in a closed vessel and at a temperature above the boiling point at atmospheric pressure of the non-aromatic ingredient of the reaction mixture but below the temperature at which the reaction components are cracked.

1,899,583. MEANS OF DISPLAY AND METHOD OF PACKING. JOHN D. MARTIN, Rayo, Calif. Filed Sept. 17, 1930. Serial No. 482,571. 1 Claim. (Cl. 217—3.)



A display container, including a box adapted for the reception of goods, separate extensions for the box sides, inside the same and adapted to project upwardly from the sides of the box and to be supported in position by the contents of the box, and display covers integral with said side extensions, the side extensions being provided with ventilating openings, said side and cover elements being open at the ends for merchandise display purposes after the container has been opened, and cleats placed over said open ends for lid retaining means when the container is closed.

1,899,584. METHOD OF FORMING SHAPED ARTICLES. LOUIS NAVIAS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 18, 1928. Serial No. 319,184. 2 Claims. (Cl. 25—156.)

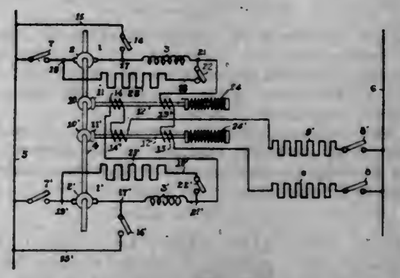
2. The method of forming a shaped, machinable article from a normally non-plastic, refractory oxide, which comprises mixing with said oxide a basic gel composed of flour, ammonia and water, the latter being approximately 80% by weight of the gel, extruding the mixture to shape it into the desired form and firing the product at a temperature sufficiently high to sinter it and remove carbonaceous material and to impart the required mechanical strength thereto.

1,899,585. ADJUSTABLE SEAT CONSTRUCTION. AUGUST L. NELSON and FRANK W. PEASE, Grand Rapids, Mich., assignors to Hayes Body Corporation, Grand Rapids, Mich., a Corporation of Michigan. Filed Oct. 26, 1931. Serial No. 571,014. 2 Claims. (Cl. 155—14.)



1. In a construction of the class described, spaced apart tracks of substantially channel form each having an upper web and depending spaced apart side flanges, said webs having longitudinal slots therein, bearing plates located against the underside of said webs, one at each slot, a screw threaded stud passing upwardly through each bearing plate and slot, an inverted channel shaped slide through which the studs pass located one over each track, members each having a screw-threaded opening therethrough secured to each slide and through each of which a stud passes, a seat through the bottom of which the studs pass located over the slides, and means for connecting the seat with said studs comprising nuts threaded onto the upper ends of said studs above the bottom of the seat.

1,899,586. MOTOR CONTROL SYSTEM. ROBERT MONTAGUE PHILLIPS, Cleveland, Ohio, assignor to The Electric Controller & Mfg. Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 16, 1930. Serial No. 482,220. 12 Claims. (Cl. 188—172.)



1. In an electric motor system, a plurality of electric motors, a magnetically operated brake for each motor, and a plurality of operating windings for each brake, a winding of each brake being in the circuit of each of the motors.

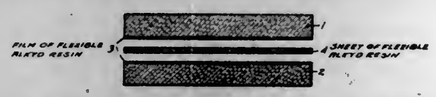
1,899,587. INCANDESCENT ELECTRIC LAMP. JEAN QUESSEQUE, Issy-les-Moulineaux, France, assignor to General Electric Company, a Corporation of New York. Filed Sept. 24, 1931, Serial No. 564,888, and in France Oct. 31, 1930. 2 Claims. (Cl. 176—16.)



1. In a gas-filled electric lamp, the combination of a light source comprising a refractory metal adapted to be

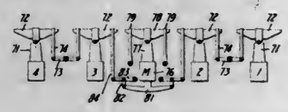
heated and a screen member comprising a hollow body having a multiplicity of openings in the sides thereof located above said light source when said lamp is in use and extending longitudinally of said lamp.

1,899,588. LAMINATED GLASS. HARRY C. ROHLFS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 18, 1930. Serial No. 421,832. 4 Claims. (Cl. 49—81.)



1. A laminated glass structure comprising a plurality of sheets of glass, a sheet of flexible alkyd resin firmly uniting said glass sheets, said flexible alkyd resin being the reaction product of a polybasic organic acid, an alcohol having three or more hydroxyl groups in the molecule, a dihydric alcohol, and a dibasic aliphatic acid.

1,899,589. LOCOMOTIVE. PERCY G. SANBORN, San Francisco, Calif., assignor of one-half to Frank E. Madden, Oakland, Calif. Filed June 30, 1931. Serial No. 547,922. 3 Claims. (Cl. 105—37.)

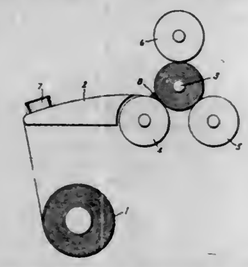


1. A locomotive comprising a frame, rotatable wheels, an equalizing system connecting said wheels and said frame, a crankshaft connected to said frame through said equalizing system, means for driving said crankshaft, and means for connecting said crankshaft and said wheels for simultaneous rotation.

1,899,590. METHOD OF CURING CONCRETE. WILLIAM K. SCHWEITZER, East Cleveland, Ohio, assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Nov. 17, 1930. Serial No. 496,857. 2 Claims. (Cl. 25—154.)

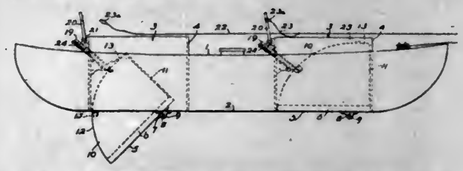
1. The method of protecting concrete surfaces during curing which comprises applying to the surface of the uncured concrete a sodium silicate solution containing a nonprecipitating amount of an ammonium salt.

1,899,591. LAMINATED MATERIAL. HARRY D. SEGAR, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 8, 1930. Serial No. 480,299. 8 Claims. (Cl. 154—2.6.)



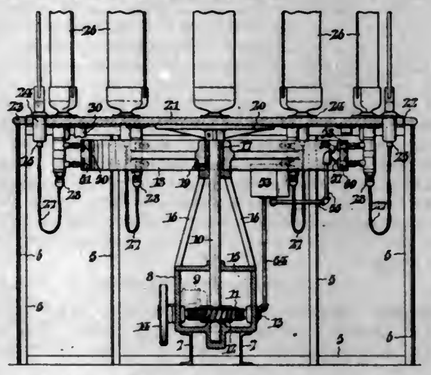
1. A laminated structure comprising sheets of fibrous material cemented together with a composition comprising shellac and an alkyd resin containing a relatively large proportion of unsaturated monobasic aliphatic acid chemically combined therein, said structure being oil-tight parallel to the laminations thereof.

1,899,592. DUMP POCKET FOR SCOWS. WILLET A. SESSION, Detroit, Mich., assignor of one-half to Helen A. Session Cavin. Filed Nov. 30, 1931. Serial No. 578,048. 6 Claims. (Cl. 114—36.)



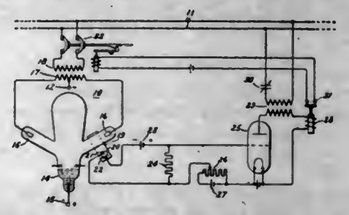
1. In a scow having a dump pocket, a door pivoted adjacent to the bottom of said pocket upon an axis transverse to the direction of normal travel of said scow, said door having plates rising from its lateral edges and a plate rising from one of its transverse edges and rigidly connecting the first mentioned plates.

1,899,593. ELECTRICALLY HEATED DRYING MACHINE. WALTER W. SIBSON and JOHN W. DENNIS, Philadelphia, Pa., assignors to The Philadelphia Drying Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 4, 1930. Serial No. 433,015. 9 Claims. (Cl. 219—19.)



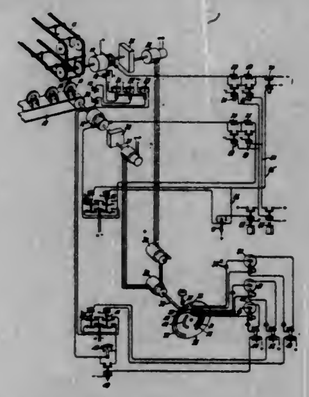
1. In a drying machine including a rotary table, a sequence of electrically-heated individually-removable drying forms pivotally-socketed in the table, an enclosure above which the table is rotatable; means imparting motion to the table housed in the enclosure; a stationary current conductor in said enclosure, and co-active brush devices carried by the table, serving to close electric circuits through the respective drying forms incident to rotation of said table.

1,899,594. MEANS FOR PREVENTING ARC BACK. HELLMUT SIMON, Berlin-Friedenau, Germany, assignor to General Electric Company, a Corporation of New York. Filed Sept. 16, 1930, Serial No. 482,354, and in Germany Oct. 10, 1929. 15 Claims. (Cl. 175—368.)



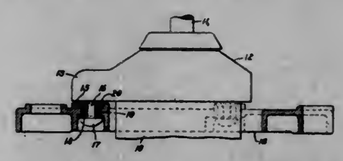
1. The combination with an arc discharge device comprising an anode and a cathode, of an element arranged to be responsive only to light from arc-back between said anode and cathode.

1,899,595. CONVEYER SYNCHRONIZING CONTROL. WILLIAM B. SNYDER and DUDLEY E. CHAMBERS, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Dec. 30, 1931. Serial No. 583,900. 8 Claims. (Cl. 198—20.)



1. In a material conveying apparatus, the combination of a pair of conveyers one of which is arranged to receive material from the other when a given point on one conveyer is in a predetermined position with respect to a given point on the other conveyer, of driving means for each of said conveyers, control means for one of said driving means, and means responsive to the positional displacement between said conveyers for operating said control means so as to vary the speed of one of said conveyers until said given points are again in positional correspondence with each other.

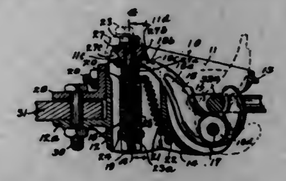
1,899,596. MOTOR MOUNTING. HERBERT STEIN, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Feb. 5, 1931, Serial No. 513,767, and in Germany Feb. 12, 1930. 2 Claims. (Cl. 248—16.)



1. A motor having a frame, a plurality of resilient members carried by said motor frame, said resilient members having their axes extending substantially parallel to the axis of said motor, a supporting frame spaced from said motor frame and having recesses retaining said resilient members and having constricted openings presented in a direction approximately tangential to said motor to provide for releasing said resilient member upon turning said motor frame with respect to said supporting frame to force said resilient members through said constricted openings so that said motor can be removed therefrom.

1,899,597. DRAFT OR COUPLING DEVICE. GEORGE H. STERLING, Glenwood, Minn. Filed Sept. 9, 1929, Serial No. 391,148. Renewed July 25, 1932. 7 Claims. (Cl. 280—33.16.)

5. A draft device comprising a casing, a hook-like latch mounted for forward and rearward swinging movement at the forward portion of said casing, said latch having a rearwardly projecting free end, a latch-engaging member disposed at the top of said casing, resilient means holding said member in normal position, said latch-engaging member having a plurality of downwardly and outwardly inclined sides, and having a plurality of downwardly and outwardly inclined under surfaces and having a downwardly extending portion adapted when in a certain position to engage with said casing.

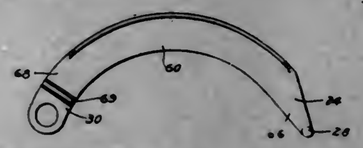


1,899,598. VALVE RESEATING TOOL. JOHN TEKAVEC, Cleveland, Ohio. Filed June 13, 1930. Serial No. 460,921. 1 Claim. (Cl. 90—12.5.)



A valve reseater having, in combination, a threaded tool stem, a support provided with a U-shaped coupling, the support being longitudinally bored and threaded, and having formed at right angles to the longitudinal bore a second threaded bore, the second bore having circumferential interruptions formed longitudinally therein, a clamp having a threaded face to conform to the contour of the threaded tool stem located in said second bore and having a periphery cooperating with the interruptions of the bore a screw in said second bore cooperating with the bore and the clamp so as to advance and withdraw the clamp, a threaded conical adapter having a smooth longitudinal bore adapted to receive and snugly engage the threaded tool stem, said adapter also having an annular groove formed in the upper end thereof adapted to cooperate with the U-shaped coupling so that the adapter is laterally slidable into the coupling and when positioned thereon, the longitudinal bore in the support and the bore in the adapter are in alignment.

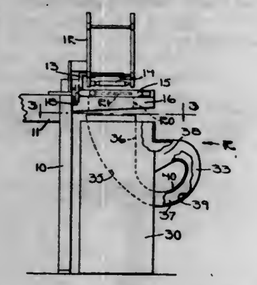
1,899,599. METHOD OF MAKING A BRAKE MEMBER. GEORGE J. THOMAS, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 31, 1928. Serial No. 281,661. 1 Claim. (Cl. 29—152.)



The herein described method of making a brake member which comprises cutting a suitable section from a straight length of T section rolled steel stock, cutting away the

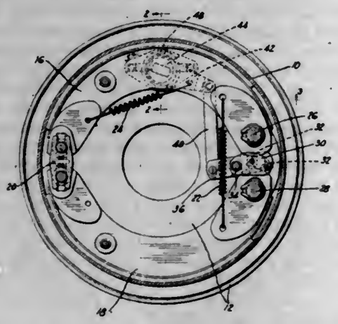
rim flange of said T section at the ends of the section to leave projecting web ends, tapering one projecting web end to form a cam follower, and bending said section into a substantially semi-circular shape at all points except at said cam follower, the underside of the web at said end remaining straight.

1,899,600. BOBBIN CAN FOR AUTOMATIC LOOMS. WALTER H. WAKEFIELD, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 13, 1930. Serial No. 502,190. 5 Claims. (Cl. 139—255.)



1. In a weft replenishing loom operating with a shuttle, means to expel an exhausted bobbin from the shuttle, a receptacle for the bobbin, and means defining a looped guide through which the bobbin passes interposed between the shuttle and receptacle.

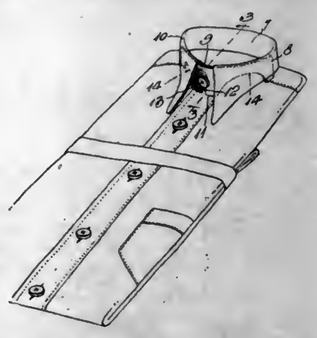
1,899,601. BRAKE. KARL M. YOST, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 29, 1930. Serial No. 491,827. 8 Claims. (Cl. 188—78.)



1. A brake comprising a backing plate having friction means mounted thereon, in combination with a floating applying device for the friction means at one side of the backing plate, a support at the top of the backing plate, a shaft journaled in the support and having an operating arm, a spring tensioned between said arm and the friction means, and a link connecting said arm and the applying device.

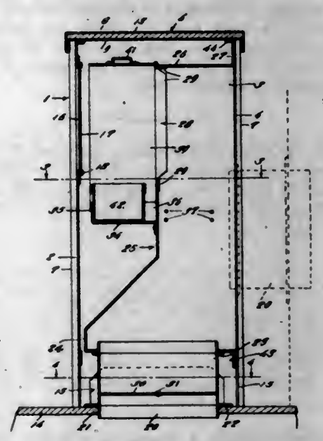
1,899,602. COLLAR SUPPORT. PAUL E. ALEXANDER, Takoma Park, Md. Filed May 19, 1931. Serial No. 538,542. 4 Claims. (Cl. 223—18.6.)

1. A device for supporting an attached collar of a shirt when the latter is secured upon a laundry board for delivery, comprising a one-piece strip of relatively stiff material adapted for reception between the inner and outer walls of the collar and having a straight upper edge extending uni-directionally throughout its length for reception in the crease at the upper edge of the collar, said strip being provided with a lower edge adapted to rest upon the shirt substantially at the base of said inner wall to support said strip substantially perpendicular to the



board-carried shirt, said strip being of a length to extend only throughout substantially the front half of the collar and having a substantially central downwardly open notch to receive the usual collar button of the shirt.

1,899,603. HOT AIR DEFLECTOR. BERNARD O. ANDERSON, East McKeesport, Pa. Filed Mar. 26, 1932. Serial No. 601,346. 4 Claims. (Cl. 98—38.)



1. A hot air deflector comprising a cabinet having an outlet opening in the upper portion of its front, a conduit mounted in the cabinet having an outlet passage therein aligned substantially with the outlet opening, said conduit being connected with a source of hot air supply, a support mounted on the conduit below the outlet passage therein and projecting horizontally therefrom toward the front of the cabinet, and a substantially U-shaped hood mounted on the support.

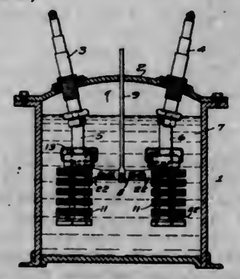
1,899,604. CIRCUIT CLOSING DEVICE. JOHN ANDERSON, Lawrence, Mass. Filed Oct. 16, 1929. Serial No. 400,078. 5 Claims. (Cl. 200—52.)

1. A detector circuit maker for cloth treating machines, comprising a transverse bar of insulating material, means for supporting the bar in front of the machine, a lower electrical conducting contact plate embedded in the bar and over which the cloth is adapted to pass in its travel to the machine, upstanding pins carried by the bar at opposite ends of the lower contact plate, an upper electrical conducting contact plate having openings therein adapted to freely receive said pins for supporting the upper contact plate over the lower contact plate, and insulating strips



carried by the bar at opposite ends of the lower contact plate and extending above the same for spacing and insulating the upper contact plate from the lower contact plate.

1,899,605. CIRCUIT INTERRUPTER. BENJAMIN P. BAKER, Turtle Creek, and ERNEST G. KEES, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 10, 1929. Serial No. 413,012. 42 Claims. (Cl. 200—150.)



1. In a circuit interrupter, a body of liquid, a pair of contact members one of which is movable to draw an arc, and an arc extinguishing structure for extinguishing said arc in contact with said liquid, including means of insulating material defining a passage in which said contact member is movable, the part of said passage along which said contact member is moved having portions thereof of a width not materially greater than the width of said movable contact member, and portions of said passage along the length of the arc path being closed on three sides and open on the fourth side whereby the gas formed by the action of the arc on said liquid is caused to flow laterally through the arc and out said open side of the passage.

1,899,606. PREPARATION FOR FRESH FRUIT FOR MARKET. ERNEST M. BROGDEN, Santa Monica, and MILES L. TROWBRIDGE, Palms, Calif., assignors to Brogdex Company, Winter Haven, Fla., a Corporation of Florida. Filed Mar. 2, 1925. Serial No. 12,779. 10 Claims. (Cl. 99—1.)

1. In the preparation of fresh fruit for market, the process of protecting the same against blue mold decay and the like which comprises subjecting fresh fruit to the action, under super-atmospheric pressure, of a warm aqueous mold-inhibiting solution containing borax and sodium carbonate in the proportion of at least 2 ounces of each per gallon.

1,899,607. PROCESS OF PRODUCING SALTS OF HYDROFLUOSILICIC ACID. MAX BUCHNER, Hanover-Kleefeld, Germany. Filed Feb. 17, 1931, Serial No. 516,495, and in Germany Feb. 24, 1930. 11 Claims. (Cl. 23—88.)

8. Process of producing a hydrofluosilicic acid salt comprising mixing a metal fluoride with hydrofluosilicic acid and introducing silicon fluoride into this mixture.

11. A process of producing a hydrofluosilicic acid salt which comprises contacting a material of the group consisting of alkali metal fluoride, alkaline earth metal fluoride and ammonium fluoride with hydrofluosilicic acid and introducing silicon fluoride to this mixture at an elevated pressure.

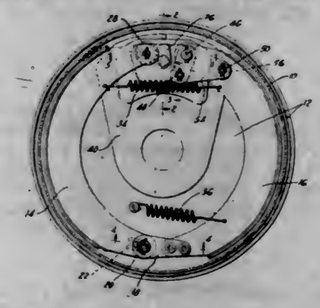
1,899,608. METAL WORKING. EDWARD C. BULLARD, Southport, Conn., assignor to The Bullard Company, a Corporation of Connecticut. Filed July 8, 1932. Serial No. 621,398. 9 Claims. (Cl. 82—1.)



1. A method of working metal which includes the steps of subjecting a rotating work piece to the successive actions of a plurality of roughing blades radially stepped with respect to each other and a plurality of non-stepped finishing blades by a single continuous rotary movement of a tool.

8. The method of turning metal which consists in subjecting the surface of the work to the successive action of a rotating series of blades of a step-bladed cutter, while the work and blade are moving with respect to each other at cutting speed, the axis of rotation of the cutter being within the confines of the work circumference.

1,899,609. BRAKE. JOHN R. CAUTLEY and FREDERICK C. FRANK, South Bend, Ind., assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 15, 1930. Serial No. 488,768. 16 Claims. (Cl. 188—78.)



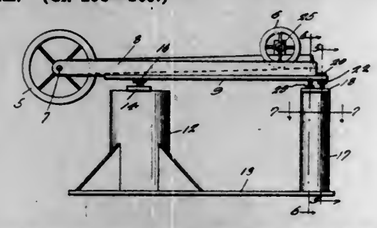
1. A brake assembly comprising a backing plate having a central axle opening, an annular stamping secured to the plate about said opening and having a part projecting radially outward paralleling said plate and spaced therefrom, and friction means having an anchor supported at one end by the plate and at the other end by said part.

1,899,610. FOAM PREVENTION AGENT. LEO JAMES CLAPSADDLE, Buffalo, N. Y., assignor to Carbide & Carbon Chemicals Corporation, a Corporation of New York. Filed Jan. 6, 1931. Serial No. 507,045. 11 Claims. (Cl. 252—5.)

1. A composition of matter comprising an alcohol and calcium acetate.

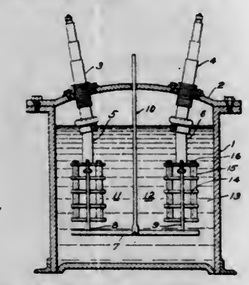
6. The method of diminishing foaming of ethylene glycol solution which comprises adding calcium acetate to the solutions.

1,899,611. UNIT CONVEYER FOR CONCRETE PRODUCT MACHINES. TORINO S. D'ONOFRIO, Watertown, Mass. Filed Aug. 4, 1931. Serial No. 555,115. 1 Claim. (Cl. 198—109.)



A conveyer of the class described comprising front and rear upright hollow members, a horizontal frame including a pair of spaced horizontal bars, vertically arranged screw shafts passing through threaded holes in the upper ends of the upright member and having their upper ends connected with the frame, a shaft passing thru the front ends of the horizontal bars, a pair of wheels attached to said shaft, a yoke-shaped frame having the ends of its limbs pivoted to the shaft, upright bearing members on the limbs of the yoke-shaped frame adjacent its bight part, a shaft carried by said bearing members, wheels carried by the shaft, vertically arranged screw shafts carried by the rear upright member and having their upper ends engaging the bight part of the yoke-shaped frame, cables passing over the first-mentioned wheels with their upper reaches resting on the second-mentioned wheels and supporting means for the cables located rearwardly of the above-mentioned wheels and their supporting means.

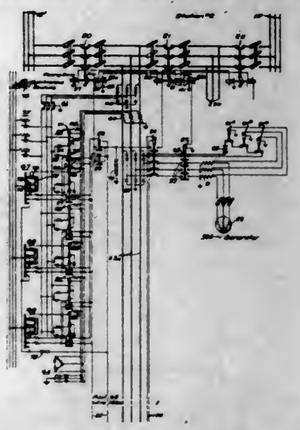
1,899,612. CIRCUIT INTERRUPTER. LLOYD W. DYER, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 4, 1930. Serial No. 441,520. 13 Claims. (Cl. 200—150.)



1. In combination with circuit-interrupter contact members, of unit members each comprising a plurality of contiguous insulating plates having aligned holes, the holes in some of the plates of each unit having larger dimensions than the other plates of that unit for forming pockets and a substance which evolves gas when acted upon by an arc retained in said pockets.

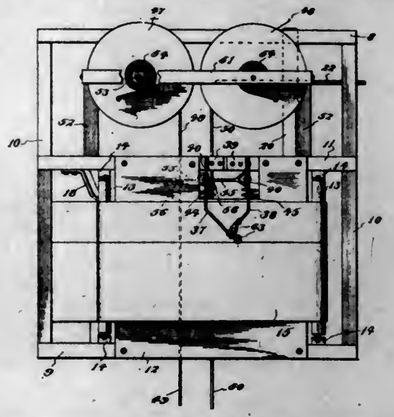
1,899,613. STABLE POWER SYSTEM WITH HIGH-SPEED BREAKERS AND RELAYS. ROBERT D. EVANS, Swissvale, and CHARLES LE G. FORTESCUE, Pittsburgh, Pa., and LESLIE N. CRICHTON, East Orange, N. J., and JOHN B. MACNEILL, Wilkinsburg, and SAMUEL B. GRISCOM and CHARLES F. WAGNER, Swissvale, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 30, 1929. Serial No. 403,890. 43 Claims. (Cl. 175—294.)

1. As a means for increasing the stability, the continuity of service and/or the power limits of an electrical system comprising synchronous machines connected through step-up transformers and multi-circuit polyphase transmission lines of such reactance that the power-carrying capacity, with stability, is limited by reactance in the system, the combination, with said system, of sectionalizing means comprising a quick-acting, trip-free circuit-breaker means at each end of each section, means for interconnecting the parallel multi-circuit lines at



one or more points, and quick-acting means for selectively opening the two circuit-breaker means at the two ends of a faulty section in the event of a fault in one section, characterized by the fact that both of said circuit-breaker means on the faulty section have arc-suppressing means operative to cause the circuit breaker to open the circuit of the faulty line within not more than approximately one-fifth of a second after the occurrence of a serious fault requiring to be cleared.

1,899,614. RECORDING DEVICE FOR AIRPLANES. CHARLEY L. GOLDTRAP, Phoenix, Ariz. Filed Oct. 10, 1929. Serial No. 398,784. 7 Claims. (Cl. 234—36.)



1. In combination with an airplane having landing gear movable towards and away from its fuselage, a recorder including a record strip, a marker movable towards and away from said strip, means to move the marker into contact with said strip, means to move the marker out of contact with said strip rendered inoperative when the landing gear is out of contact with the ground, and means for imparting movement to said strip whereby the marker will form lines upon the strip when in contact therewith.

1,899,615. AIR-DEPOLARIZED PRIMARY BATTERY GEORGE W. HEISE, Malverne, N. Y., assignor to National Carbon Company, Inc., a Corporation of New York. Filed Aug. 10, 1925. Serial No. 49,404. 12 Claims. (Cl. 136—136.)

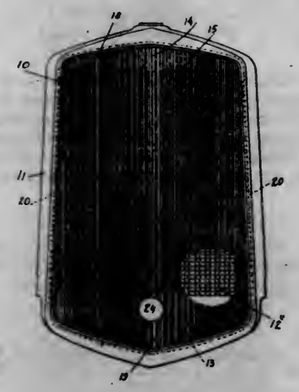


2. An air-depolarized cell comprising an anode, a cathode containing finely subdivided carbon exposed to the atmosphere and having distributed therethrough a small proportion of a depolarizing catalyst, a current-collecting device contacting with said cathode, and a paste layer between anode and cathode, said elements assembled under compression.

1,899,616. GALVANIC CELL. GEORGE W. HEISE, Lakewood, Ohio, assignor to National Carbon Company, Inc., a Corporation of New York. Filed Oct. 28, 1929. Serial No. 403,131. 4 Claims. (Cl. 136—107.)

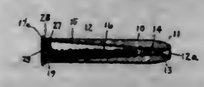
1. In a freshly made galvanic cell having an anode, and a cathode containing a depolarizer and solid ammonium halide, an immobilized electrolyte in the space between the anode and the cathode containing a substantial quantity of an ammonium halide in solid form and an aqueous solution saturated with respect to said halide.

1,899,617. METHOD OF MAKING AN AUXILIARY FRONT FOR A RADIATOR UNIT. FERDINAND B. HERZ, Detroit, Mich., assignor to Long Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 18, 1930. Serial No. 435,588. 1 Claim. (Cl. 29—160.)



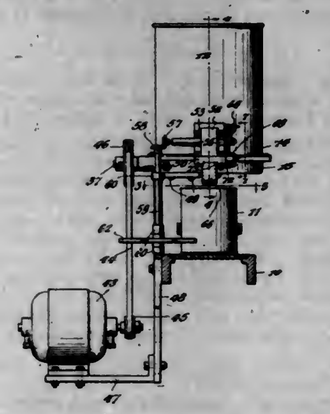
The method of making an auxiliary front adapted for positioning between the rear faces of the front panels of a motor vehicle radiator shell and the radiator core within the shell which consists in folding a flat sheet metal blank to form a plurality of spaced ribs therein, removing portions of the blank intermediate the ribs to form openings in the blank, cutting the blank to the contour of the radiator shell, prefashioning a reinforcing member to the shape of the front panels of the radiator shell, shaping the blank so that the surface thereof conforms to the shape of the reinforcing member, and fixing the reinforcing member to the rear face of the blank.

1,899,618. CARTRIDGE. JOHN HOLTHE, Stratford, Conn. Filed July 7, 1932. Serial No. 621,183. 8 Claims. (Cl. 102—26.)



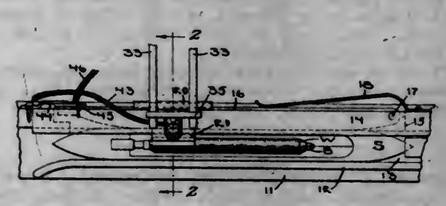
1. A cartridge comprising a projectile having a bore extending axially therethrough; a plug of slow burning material closing the front end of the bore; an explosive charge within said bore; a metal plug in the rear end of the bore forming a seal for the explosive charge.

1,899,619. DEVICE FOR DEPOSITING SALT IN CANNED GOODS. DAMON MARCEL HUME, Redkey, Ind. Filed Feb. 5, 1932. Serial No. 591,185. 7 Claims. (Cl. 226—99.)



4. A device for depositing salt in moving cans comprising a hopper, a funnel shaped false bottom in the hopper, an agitator below the false bottom, a heating chamber below the agitator, means disposed externally of the hopper for rotating the agitator, and can operated means for dispensing a predetermined quantity of salt from the hopper laterally of the agitator.

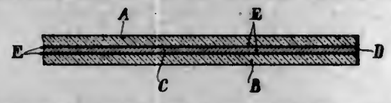
1,899,620. ELECTRICAL WEFT DETECTOR FOR LOOMS. THOMAS KERR, Long Island City, N. Y., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 6, 1931. Serial No. 527,981. 5 Claims. (Cl. 139—272.)



1. In a loom having a lay and a shuttle, a binder on the lay to be engaged and moved by the shuttle, an electric binder contact to be closed by the binder, electrically ac-

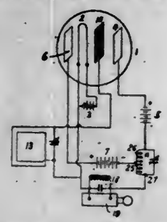
tuated means to change the operation of the loom, an electric weft detector for the shuttle, and an electric circuit to include the binder contact and the detector means, the closing of the circuit being dependent upon movement of the binder by the shuttle.

1,899,621. PROCESS OF PRODUCING COMPOSITE SHEETS OF SAFETY GLASS. CONRAD HUBERT HERMANN LAMBERTY, London, England, assignor of one-half to Edward Berkeley Cherlton Woodbury, London, England. Filed Dec. 22, 1930, Serial No. 504,163, and in Great Britain July 22, 1930. 1 Claim. (Cl. 49—81.)



The process of producing a composite sheet of safety glass, which consists in coating two glass sheets with a mixture consisting as to not less than 15% and not more than 25% of acetic acid, and as to the remainder of glycerine, placing between the coated glass sheets a sheet of solid gelatine, and uniting the three sheets by pressure.

1,899,622. FREQUENCY CHANGER. LUCIEN LEVY, Paris, France. Filed Oct. 29, 1928, Serial No. 315,843, and in France June 4, 1927. 4 Claims. (Cl. 250—20.)



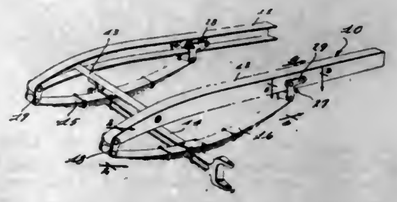
1. An electric wave frequency changer comprising a vacuum tube, comprised of a cathode, a grid, a plate, and an auxiliary cathode placed at the opposite side of the cathode from the plate and nearer to said cathode than is the plate; an input circuit for said tube connected to the grid and cathode, said input circuit having means for impressing thereon oscillations at a frequency F; an output circuit for said tube including a first circuit oscillating at a frequency F'; a second oscillating circuit tuned to the difference frequency F—F', and a source of direct current, all connected in series; and means for coupling the said auxiliary electrode of the vacuum tube with the first oscillating circuit in such manner that the variations of potential of said auxiliary electrode are shifted with the current variation, in order to generate oscillations at the frequency F' in the first oscillatory circuit.

1,899,623. ELECTRODE ALLOY. ERWIN F. LOWRY, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1930. Serial No. 471,895. 6 Claims. (Cl. 176—126.)

1. In an electrical glow discharge device an electrode having a surface comprising a nickel-cobalt alloy containing a material having an amphoteric hydroxide.

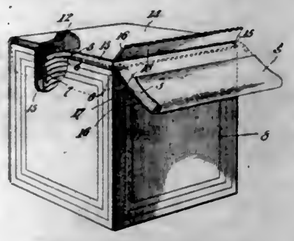
1,899,624. VEHICLE SPRING MOUNTING. EARLE S. MACPHERSON, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed May 5, 1930. Serial No. 450,019. 3 Claims. (Cl. 267—54.)

1. In a vehicle, the combination with a chassis, of a spring supported from the chassis, means connecting the spring to said chassis permitting longitudinal movement of the spring relative to the chassis, said means including, a lever having one end pivotally connected to one end of the spring, means for supporting the lever from the chassis including a pair of pivots connected to the lever intermediate the ends thereof and at the free end of the



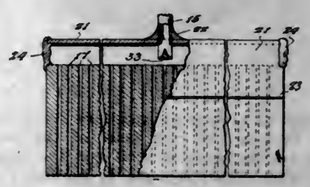
same, tubular members surrounding the pivots in concentric relation to the latter and supported on the frame, and elastic members compressed within the tubular members and surrounding the said pivots, the elastic members surrounding the pivot for the free end of the lever being compressed to a less degree than the other elastic member permitting limited angular movement of the lever.

1,899,625. PACKAGING SURGICAL COTTON. WALTER J. METTS, Highland Park, N. J., assignor to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed Aug. 27, 1931. Serial No. 559,801. 8 Claims. (Cl. 206—58.)



1. The combination of a flexible flat sided tubular cardboard structure open at both ends to allow full freedom of flexure of the side walls, a roll of surgical dressing disposed in said tubular structure and held against creepage in unwinding by the binding fit of the side walls, and a receptacle for the tubular structure and its contained roll.

1,899,626. OXY-ACETYLENE BURNER. BRYAN M. MILLER, Washington, D. C. Filed June 17, 1931. Serial No. 545,123. 3 Claims. (Cl. 158—27.4.)



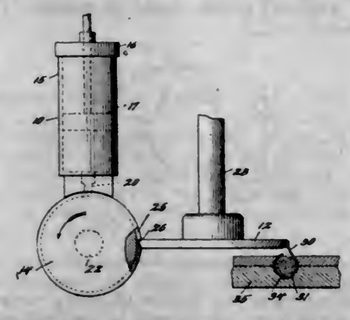
1. An oxy-acetylene burner comprising a tubular handle for supplying a combustible fluid, a jet block of relatively great width with respect to its length having long jet passages corresponding in length to the width of the block and opening through the front and rear wall of the block, the sides of the block being tapered near the rear wall to provide a rear wall of small area, a sheet metal

manifold having diverging portions engaging the tapered faces of the jet block and extending beyond the rear face of the jet block and coacting with said rear face in connecting all the intake ends of the jet passages of the block, and means for connecting said tubular handle to said manifold.

1,899,627. DEHYDRATING CAUSTIC ALKALI SOLUTIONS. CLARENCE E. MILLER, Canton, N. C., assignor to The Champion Fibre Company, Canton, N. C., a Corporation of Ohio. Filed Aug. 19, 1931. Serial No. 558,187. 7 Claims. (Cl. 23—184.)

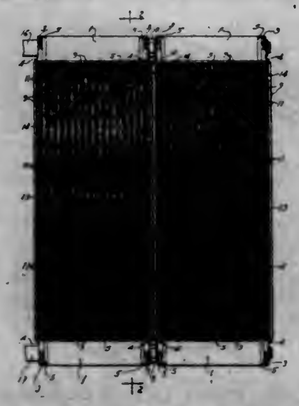
1. Process of evaporating a solution of an alkali metal hydroxide which comprises exposing the latter directly in contact with burning hydrogen.

1,899,628. CIGARETTE MAKING MACHINE. WALTER EVERETT MOLINS, London, England. Filed Oct. 9, 1931. Serial No. 567,937. 4 Claims. (Cl. 131—43.)



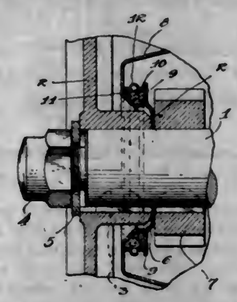
1. In paste applying apparatus for use in cigarette making machines of the continuous rod type, the combination with a paste container, of a secondary wheel for receiving paste from said container, a main paste wheel for receiving paste from said secondary wheel and depositing the same on the cigarette paper, said main paste wheel having a bevelled paste receiving periphery and being disposed with the face of smaller diameter adjacent the cigarette rod.

1,899,629. STEEL PIPE AND FIN HEATER. CLARK T. MORSE, Detroit, Mich., assignor to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 26, 1931. Serial No. 571,096. 17 Claims. (Cl. 257—153.)



4. In a radiator consisting of sections, a pair of headers for each section, each header having at each end a cut-back portion, pipes connecting said headers, fins on said pipes, and means in the cut-back portions connecting each header of one section to a header of another section and forming a passageway between the headers, said headers and said means being so formed that when the headers are connected by said means the ends of the fins of one section will be closely adjacent the ends of the fins of the other section.

1,899,630. OIL RETAINING PACKING FOR RODS AND SHAFTS. VICTOR E. NELSON, Pontiac, Mich., assignor to Universal Oil Seal Company, Pontiac, Mich., a Corporation of Michigan. Filed Dec. 14, 1928. Serial No. 326,099. 5 Claims. (Cl. 286—7.)

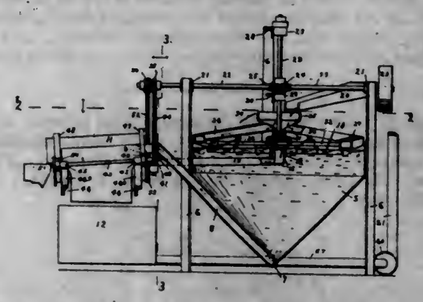


1. In a packing ring, a stationary housing having an annular beveled face, a shaft rotatable in the housing, a flanged member secured to the shaft within the housing and in spaced relation with the beveled face thereof, a compressible packing ring having a beveled face fitting the beveled face of the housing and a flat face fitting the companion face of the flanged member, the packing ring being provided with an annular groove in its outer periphery and a coiled spring positioned in the annular groove and compressing the packing ring into engagement with the companion faces of the housing and flanged member.

1,899,631. AIRPLANE PROPELLER. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Filed May 28, 1929. Serial No. 366,771. 8 Claims. (Cl. 170—159.)

1. An airplane propeller consisting of an alloy of aluminum containing berryllium and silicon.

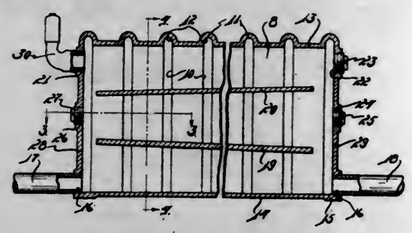
1,899,632. GRAVITY OPERATING DEVICE FOR SORTING FRUITS OR VEGETABLES. GEORGE J. OLNEY, Westernville, N. Y. Filed Mar. 18, 1931. Serial No. 522,849. 14 Claims. (Cl. 209—173.)



2. In a liquid and gravity operating device for separating and sorting fruits and vegetables, the combination of an open-topped liquid-containing separating tank, a distributing chute for feeding the incoming material and liquid

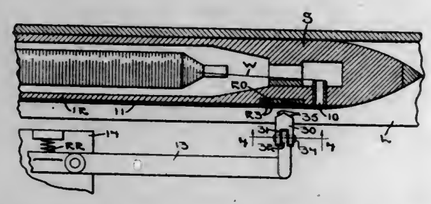
to said tank, said chute being movably mounted above said tank with its discharge end movable slowly in an extended path about said tank, the receiving part of said chute being relatively fixed in location, means for so moving said chute and a stationary feeding trough having its discharge end leading into the relatively-fixed receiving part of the distributing chute.

1,899,633. RADIATOR. JOSEPH PALERMITI, Flint, Mich. Filed Sept. 4, 1931. Serial No. 561,179. 2 Claims. (Cl. 257—124.)



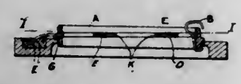
2. In a radiator of the class described, a hollow body for the reception of heating finid; a plurality of spaced outwardly bulged portions forming radiating fins on said body and communicating therewith, said body being provided on its inner surface with shallow compartments along each of said outwardly budged portions; and a plurality of baffle plates positioned in said body extending from side to side thereof and terminating inwardly of each of the ends of said body and inclined toward each other and toward the horizontal.

1,899,634. THREAD CUTTER AND SHUTTLE THEREFOR. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 21, 1931, Serial No. 517,561. Renewed Aug. 16, 1932. 11 Claims. (Cl. 139—263.)



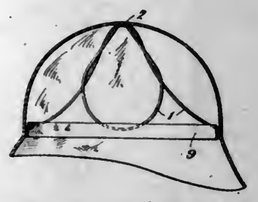
1. In thread parting mechanism for looms, a shuttle movable forwardly in the loom, a weft parting member on the shuttle, a second parting member mounted independently of the shuttle, one of the members having spaced cutting edges, and the other member having a pair of inclined surfaces each disposed to engage one of the edges.

1,899,635. MEANS FOR LUBRICATING RINGS AND TRAVELERS IN DOUBLING AND LIKE FRAMES. THOMAS KILPATRICK POWRIE, Paisley, Scotland. Filed Apr. 22, 1931. Serial No. 532,038. 7 Claims. (Cl. 118—59.)



6. In a device for lubricating rings and travelers, the combination of a ring plate having an annular opening, a lubricant saturated pad carried by said plate, a ring in said opening, a traveler on said ring, and a wick for conducting lubricant from said pad to the bearing surface of said ring, said ring comprising a vertically disposed bearing surface for said traveler, a substantially horizontally disposed wick supporting surface merging with said vertically disposed bearing surface, and a plurality of spaced openings extending through the body of said ring and aligned with said wick supporting surface, said wick being threaded thfough said openings and having a portion of its length lying upon and supported by said horizontally disposed wick supporting surface in position to be contacted by the traveler flying on said vertically disposed bearing surface, said wick having another portion of its length disposed exteriorly of said ring in contact with the outer surface thereof and positioned to facilitate maintaining said first mentioned portion of said wick in contact with said horizontal wick supporting surface, the ends of said wick being in communication with said lubricant saturated pad.

1,899,636. HAT SHAPER. RAYFORD RAULERSON, Dubuque, Iowa. Filed Dec. 4, 1930. Serial No. 500,054. 3 Claims. (Cl. 2—185.)

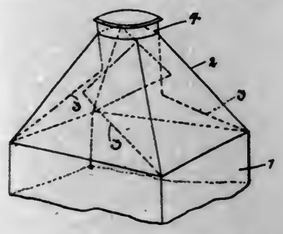


1. A hat shaper comprising a central relatively thin flat disk, and a plurality of normally flat resilient loops secured thereto, each loop having anchoring portions embedded in the disk and disposed at substantially right angles to each other, the free ends of the loops being separated and adapted to be flexed downwardly to conform to the shape of the interior of a hat.

1,899,637. CHEMICAL PULPING AND REFINING PROCESS. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed June 17, 1931. Serial No. 545,073. 4 Claims. (Cl. 92—11.)

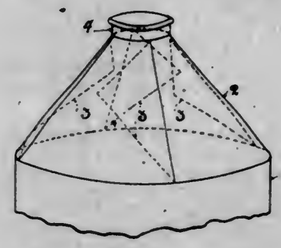
1. A process which comprises pulping raw cellulosic material in a non-acid sulphite cooking liquor, subjecting the resulting pulp to the action of an alkaline refining liquor of at least about 5% alkalinity, calculated in terms of caustic soda equivalent, and washing the refined pulp.

1,899,638. METHOD OF MAKING METAL CONTAINERS. GILBERT ALAN ROBINSON, Sutton-on-Hull, England. Filed Mar. 31, 1932. Serial No. 602,379, and in Great Britain Jan. 5, 1931. 2 Claims. (Cl. 113—120.)



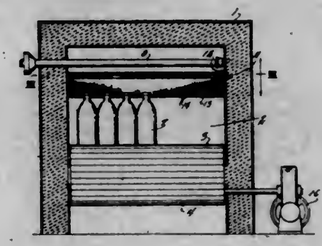
1. The method of making a metal container from a blank which consists in forming a hollow body from the blank, folding the upper portion of the body at spaced points inwardly to provide an inclined top and four inwardly extending triangular flaps, flattening the flaps against the inner face of the top, securing the flaps to the top and inserting a spout at the reduced end opening in the mouth of the top.

1,899,639. METHOD OF MAKING METAL CONTAINERS. GILBERT ALAN ROBINSON, Sutton-on-Hull, England. Filed Mar. 31, 1932, Serial No. 602,381, and in Great Britain Jan. 5, 1931. 1 Claim. (Cl. 113—120.)



The method of making a metal container from a blank which consists in forming a cylindrical body from the blank, folding the upper portion of the body at spaced points inwardly to provide a conical top and four inwardly extending triangular flaps, flattening the flaps against the inner face of the conical top, securing the flaps to the top, and inserting a spout in the reduced end opening at the mouth of the top.

1,899,640. GLASS TREATMENT. FRANZ G. SCHWALBE, Toledo, Ohio. Filed Feb. 15, 1929. Serial No. 340,036. 6 Claims. (Cl. 49—47.)

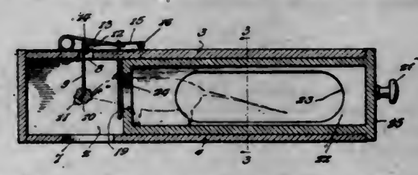


1. Annealing equipment comprising a lehr having an endless conveyor embodying a carrying section in the lehr and a return section, heating means for the return section, electric terminal means for the conveyor, electric terminal means clear of the carrying section of the conveyor and in the lehr, and electric current supply to the terminal means to be completed by ware on the conveyor.

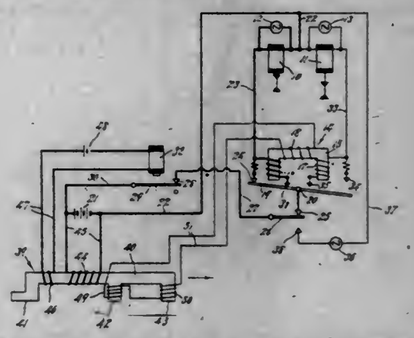
4. In glass manufacture the method of adjusting glass against internal strains arising therein including providing glass in form to maintain its shape as a solid formed article while approaching a molten state, sending an electric current through the formed article of glass, maintaining the temperature of the glass against rise to an extent to deform the glass, preserving the preformed shape of the article, and progressing the articles in series for being effective in multiple to complete said circuit.

1,899,641. TRAP. ABRAHAM G. SCHWARTZ and HARVEY A. SCHWARTZ, Long Branch, N. J. Filed Apr. 21, 1932. Serial No. 606,726. 2 Claims. (Cl. 43—86.)

1. A trap comprising a body having an open end, a drawer slidably fitted in the body and provided with an opening through its inner end, a bait chamber being defined between the drawer and the closed end of the body, a bait holder and a choker within the bait chamber, the choker being disposed adjacent the partition and around the opening therein, and means upon the top of the body for springing the same.

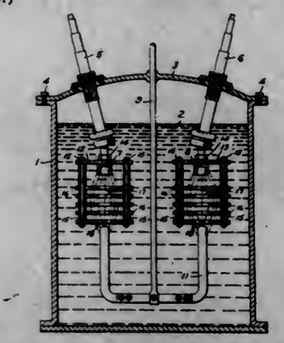


1,899,642. AUTOMATIC TRAIN CONTROL. DANIEL HERBERT SCHWEYER, Easton, Pa. Filed Aug. 18, 1926. Serial No. 130,012. 33 Claims. (Cl. 246—63.)



1. Automatic train control apparatus comprising a train-carried inductor having a direct current energised exciting coil and a plurality of impulse coils in inductive relation with the exciting coil, the impulse coils being reversed with reference to the flux of the exciting coil, a track inductor with which said train-carried inductor is cooperable to render the exciting coil active and having controlled means to selectively impede the flow of magnetic flux from the exciting coil through either of the impulse coils, and polarized train-controlling means controlled by reverse impulses from said impulse coils to obtain different conditions selectively.

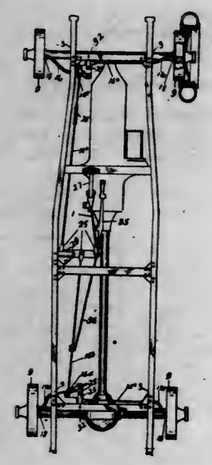
1,899,643. OIL CIRCUIT BREAKER. JOSEPH SLEPIAN, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 3, 1929. Serial No. 411,271. 9 Claims. (Cl. 200—150.)



1. In an arc-extinguishing structure, a body of fluid, a plurality of plates having openings therein, means for caus-

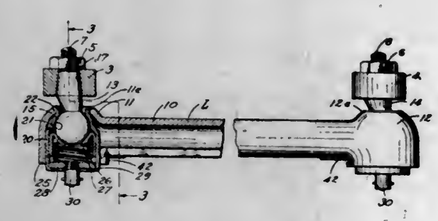
ing an arc through said openings, said plates being of Fuller board for retaining said liquid by capillary attraction in contact with the arc and being spaced substantially uniformly along the whole length of the arc.

1,899,644. FOUR-WHEEL BRAKE. JOHN SNEED, Kansas City, Mo., assignor to Steeldraulic Brake Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 2, 1924. Serial No. 690,123. 14 Claims. (Cl. 188—204.)



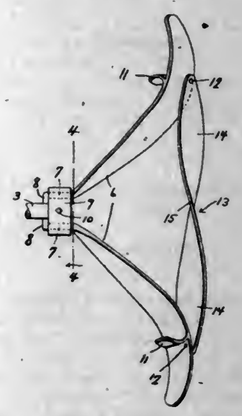
1. In combination with the frame and wheels of a vehicle, a brake drum carried by each wheel, a pair of brake shoes mounted adjacent each drum, and means for simultaneously moving the brake shoes into braking positions including a brake pedal, a central equalizer lever connected with the brake pedal, a pair of cables pivoted upon the equalizer lever at predetermined distances from its fulcrum, multiple-armed levers floatingly fulcrumed adjacent the front and rear wheels and respectively connected with said cables, a pair of cables connected to each multiple-armed lever and extending to the adjacent wheels, and means engaging the brake shoes adapted to be actuated upon movement of the last mentioned cables.

1,899,645. METHOD OF FORMING LINKS. JOHN SNEED, Grosse Pointe Shores, Mich. Original application filed July 16, 1928, Serial No. 293,107. Divided and this application filed Nov. 25, 1929. Serial No. 409,540. 14 Claims. (Cl. 29—152.)



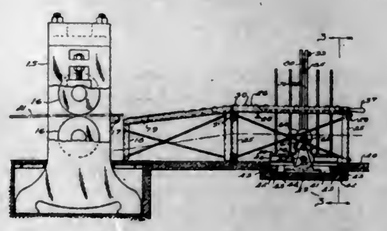
1. The method of making a tie rod for use in vehicle steering gear with integral cupped ends from sheet stock which consists in drawing the stock into a longitudinally extending channel part and into partially spherical and partially cylindrical end parts, bringing the edges of the channel part together along a longitudinal seam to form a tubular part and forcing the stock adjacent the ends of the seam in the cylindrical portion of the end parts together to form a closed cylinder with a joint adjacent said seam and thereafter welding at least the ends of said seam and said joints.

1,899,646. PROPELLER. ALFRED SOUTIER, Quincy, Mass. Filed Aug. 2, 1932. Serial No. 627,277. 3 Claims. (Cl. 170—169.)



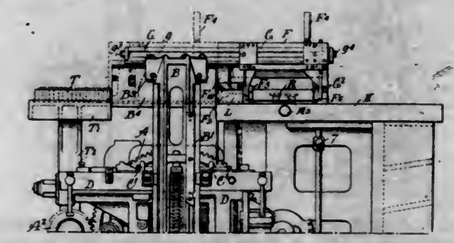
1. A propeller comprising a pair of blades, and means for mounting the blades on a propeller shaft, said means including a head fixed on the shaft and having notches in diametrically opposite sides thereof, shanks on the inner ends of the blades engaged in the notches, inturned lips on the free ends of the shanks engaged with the head, a ring encircling the head and shanks for retaining said shanks in the notches, and means for securing the ring on the head.

1,899,647. BREAK-DOWN LOADING DEVICE. JOHN HOMER STEELE, Wyandotte, Mich., assignor to Michigan Steel Corporation, a Corporation of Delaware. Filed Sept. 29, 1930. Serial No. 485,019. 18 Claims. (Cl. 214—7.)



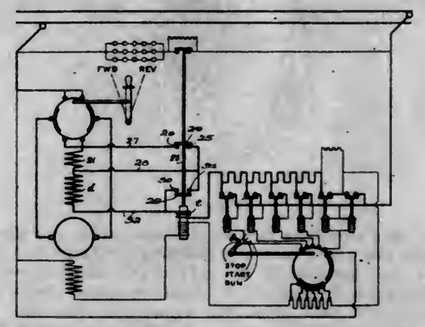
1. In a handling means suitable for use in advancing hot break-down sheets from a substantially horizontal position, as presented by a rolling mill, to a substantially vertical position upon a cradle: a substantially horizontal transfer table provided both with rolling means for directing said sheets as received, and with a tiltable frame which includes a portion disposable below the top of said table and a portion extending above said cradle; means for so actuating said frame as to dispose said sheets on said cradle in an angular position, and means for reversing the movement of said frame to have the laterally extending end engage said sheets and raise them to substantially vertical position.

1,899,648. TYPOGRAPHICAL MACHINE. ANTHONY J. STOUGES, Queens Village, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed July 8, 1931. Serial No. 549,371. 37 Claims. (Cl. 199—49.)



1. In a typographical machine, the combination of a line transporter movable vertically from and to a normal line receiving level, a fixed flat horizontally disposed table for supporting a composed matrix line at said level in endwise alinement with the transporter, and manually operated means for transferring the composed line from said table into the transporter.

1,899,649. SYSTEM OF CONTROL FOR ELECTRICALLY DRIVEN VEHICLES. WILLIAM ARTHUR STEVENS, Maidstone, England, assignor to Guy Motors Limited, Wolverhampton, England, a Company of Great Britain. Original application filed Feb. 27, 1930, Serial No. 431,855, and in Great Britain Dec. 19, 1929. Divided and this application filed Mar. 25, 1931. Serial No. 525,224. 2 Claims. (Cl. 172—179.)



1. In an electrically propelled vehicle, in combination, a dynamo-electric machine having an armature, a shunt field winding, a main series field winding and an auxiliary series field winding wound with a different number of turns and in a direction opposite to said main series field winding, a circuit adapted when closed to short-circuit said main series field winding, a second circuit adapted when closed to short-circuit said auxiliary series field winding, and means associated with said machine operably responsive to the direction of the current in said armature to open said first mentioned circuit and to close said second mentioned circuit when the machine is acting as a motor and to close said first mentioned circuit and to open said second mentioned circuit when the machine is acting as a generator.

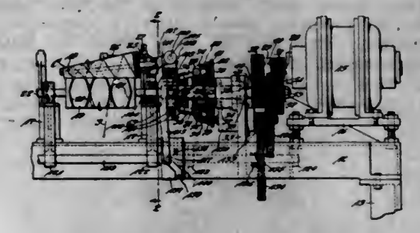
1,899,650. PROPELLER. WILLIAM STELZER, Chicago, Ill., assignor to American Propeller Company, Baltimore, Md., a Corporation of Maryland. Filed Apr. 21, 1928. Serial No. 271,820. 4 Claims. (Cl. 170—162.)

1. A revoluble propeller for aircraft comprising a plurality of blades having tapered tip portions, means for rigidly interconnecting said blades adjacent the inner ends thereof with said blades substantially axially aligned,



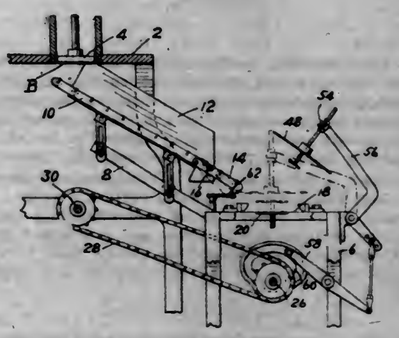
and means for rotatably supporting said interconnected blades the said blades being angularly disposed with respect to the rotational axis of said blades.

1,899,651. WINDING MACHINE. ERNEST R. SWANSON, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed July 21, 1931. Serial No. 552,282. 20 Claims. (Cl. 242—18.)



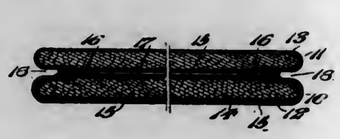
1. In a winding machine, the combination of means for rotating a package, means for traversing yarn on the package, a clutch, and means for intermittently operating the clutch to disrupt the synchrony between the rotation of the package and the traversing motion of the yarn.

1,899,652. MACHINE FOR MAKING PASTEBOARD BOXES. JOHN H. STORTZ, Philadelphia, Pa. Filed May 16, 1930. Serial No. 452,849. 10 Claims. (Cl. 93—36.)



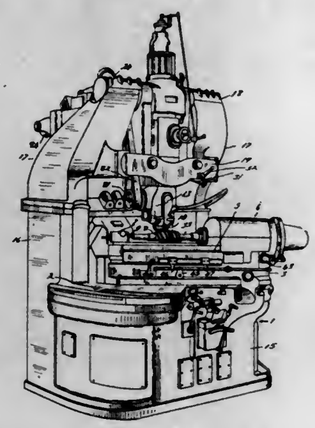
1. Mechanism for bending inwardly the sides of a box of flexible material including a support for the box, a plurality of inwardly movable jaws arranged to engage the sides of the box, and means for holding the box in engagement with the support during operation of the jaws.

1,899,653. PLASTER BOARD OR OTHER PANEL STRUCTURE. EDMOND F. VENZIE, Philadelphia, Pa., assignor to Frederick M. Venzie, Philadelphia, Pa. Filed June 16, 1932. Serial No. 617,539. 7 Claims. (Cl. 154—45.9.)



1. As a new article of manufacture, a panel comprised of superimposed units to form an integral structure, said units having adhesively secured therebetween in spaced relation thin strips of suitable material arranged in parallelism with the outermost of said strips disposed adjacent to the longest edges of the respective units to provide a marginal groove for metal clip accommodation, there being left remaining a central air space between said units.

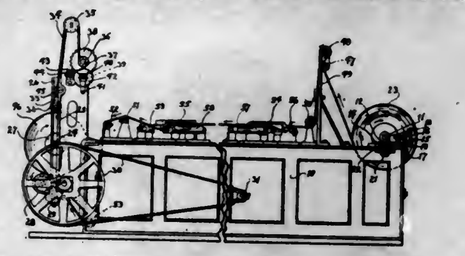
1,899,654. WORM GRINDING MACHINE. FREDERICK A. WARD, Detroit, Mich., assignor to The Gear Grinding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 31, 1931. Serial No. 560,450. 10 Claims. (Cl. 51—95.)



1. In a grinding machine, the combination of a rigid frame having a bed or table portion and an upwardly extending bifurcated portion overhanging the same, a rotary and axially movable work holder mounted on said table beneath said overhanging portion to be angularly adjustable about a vertical axis centrally between the furcations, a frame pivotally mounted in and depending from said bifurcated overhanging portion, a grinder wheel mounted at the lower end of said depending frame in operative relation to the work, and a trimmer between the furcations of said bifurcated portion with which said grinder is engaged by the swinging of said depending frame.

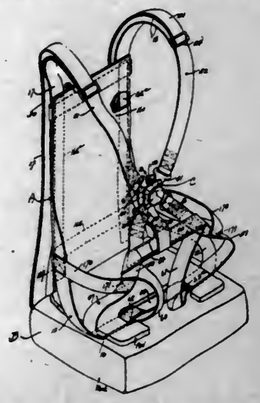
1,899,655. MACHINE FOR PRODUCING GUMMED WEB. ALBERT S. WEBSTER, Ottawa, Ontario, Canada, assignor to American Bank Note Company, New York, N. Y., a Corporation of New York. Filed Dec. 30, 1930. Serial No. 505,621. 9 Claims. (Cl. 91—18.)

1. A machine for producing gummed web embodying therein a support for a reel of gummed web, a rewind mechanism, guide rollers between and parallel with said support and said rewind mechanism, a plurality of oppositely pitched breaker blades intermediate said guide rollers extending obliquely to the line of travel of the



web, and guide rollers parallel with and positioned upon opposite sides of and above the operative edge of said blades respectively.

1,899,656. PARACHUTE HARNESS. FRANK SPENCER WIGLEY, Barnes, London, and LEONARD FREDERICK AUSTING, Bromley, England, assignors to Irving Air Chute Company, Inc., Buffalo, N. Y., a Corporation. Filed Sept. 11, 1930, Serial No. 481,317, and in Great Britain Sept. 24, 1929. 38 Claims. (Cl. 244—21.)



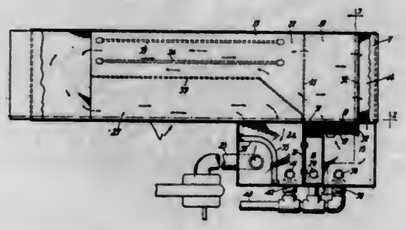
1. In a parachute harness the combination of a sling in which the wearer sits and including a seat portion with side riser portions at the ends of the seat portion and terminating in suspension straps, shoulder straps connected with said suspension straps for placement over the shoulders of a wearer so that the ends thereof lie to the front of the wearer, releasable leg engaging means connected with the sling and extending to the front of the wearer, and quick connector means releasably connecting together the shoulder straps and leg engaging means at the same location at the front of the wearer.

35. In an aviator's harness the combination of a flexible harness sling having a flexible loop as a part thereof for extension upwardly between the legs of a wearer to the front of the wearer, flexible leg portions connected as a part of the sling for fitting about the outer sides of the legs of the wearer in releasably threaded relation through the said loop to provide therewith leg receiving openings, and means to releasably connect the free ends of the leg portions in body attachment with the wearer.

1,899,657. WASHING MACHINERY. ERICH R. ZADEMACH, Elizabeth, N. J., assignor to Metalwash Machinery Company, New York, N. Y., a Copartnership comprised of Herman O. Boehme, Erich R. Zademach, and Albert C. Nolte. Filed Oct. 1, 1927. Serial No. 223,466. 9 Claims. (Cl. 210—44.)

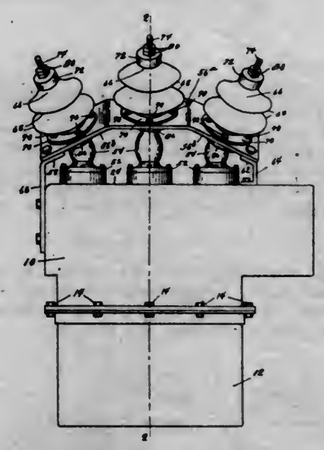
1. In a machine of the character described, including nozzles for spraying washing liquid upon work material

in combination a drain plate for said liquid, a muck tank into which said drain plate discharges, a skimmer in said muck tank, a settling basin communicating with said muck tank, strainers between said basin and tank, a heating chamber communicating with said settling basin, a sub-



merged weir between said heating chamber and basin, a discharge chamber communicating with said heating chamber, a partition between portions of said chambers and means communicating with said discharge chamber for circulating said washing liquid.

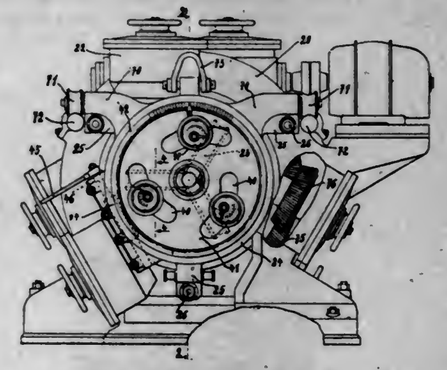
1,899,658. OUTDOOR ELECTRICAL APPARATUS. CHESTER D. AINSWORTH, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Nov. 25, 1929. Serial No. 409,534. 9 Claims. (Cl. 247—6.)



1. An electrical apparatus having an enclosing casing, a flexible cable extended out of the top of said casing having a water tight connection with said casing, a supporting frame located above the top of and carried by said casing, an insulating bushing carried by and extended above said frame in surrounding and enclosing relation with the upper end of said cable and having a terminal at its upper end which is connected with the conductor of said cable, and means providing a water tight seal between said cable and bushing.

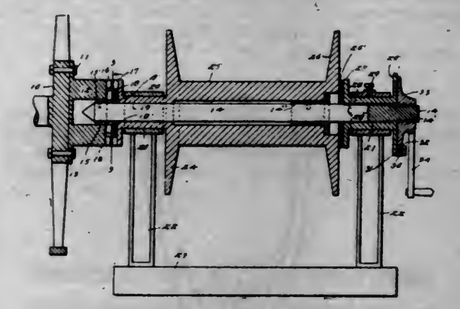
1,899,659. ROLLING MILL. GUSTAV ASBECK, Dusseldorf-Rath, Germany. Filed Mar. 18, 1931, Serial No. 523,521, and in Germany Aug. 29, 1930. 19 Claims. (Cl. 80—34.)

1. A rolling mill, comprising a plurality of cooperating rolls arranged to move relatively to and away from each other, rockingly mounted bearing blocks one for each of said rolls for adjustably moving the rollers bilaterally of each other and each comprising bearing members one on each side of the roll and having said rolls eccentrically



mounted therein, and means common to all of said blocks for rocking the same in directions for setting said rolls toward and away from one another.

1,899,660. REEL FOR MEASURING LINES. ADAM BECKER, Kane, Pa., assignor of one-fourth to H. Hollingsworth, Kane, Pa. Filed May 14, 1930. Serial No. 452,828. 6 Claims. (Cl. 192—19.)



1. In a device of the class described, a shaft, a rotatable element including clutch teeth, a sleeve movable by the shaft into engagement with said teeth, a spool mounted on tthe shaft, friction devices active in successive separate stages, said friction devices being positioned beyond one end of the spool and surrounding the shaft, and rotatable means for moving the shaft longitudinally of its axis, in both directions, one rotatable movement producing engagement of the sleeve and clutch to the exclusion of the friction devices, and movement in the opposite direction producing reverse relative position of the clutch and friction devices.

1,899,661. FORM-FITTING PARACHUTE PACK. WILLIAM BIRD, Buffalo, N. Y., and GUY M. BALL, Los Angeles, Calif., assignors to Irving Air Chute Company, Inc., Buffalo, N. Y., a Corporation. Filed Aug. 11, 1930. Serial No. 474,586. 5 Claims. (Cl. 244—21.)

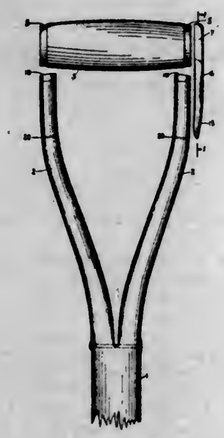
1. In a parachute pack the combination of a container including an elongated body portion of flexible material having flexible marginal flaps secured thereto, an elongated resilient form-fitting frame secured to the body portion of the container in a co-extensive relation therewith, said frame being resiliently yieldable longitudinally, a parachute canopy, harness, means connecting the harness with the pack, operating means to releasably hold

the flaps folded about the parachute canopy with the latter packed on the body portion of the container in a compact form-fitting relation, said operating means hold-



ing the flaps so that the wire frame is flexed transversely and under tension when the pack is closed and in a body form-fitting relation.

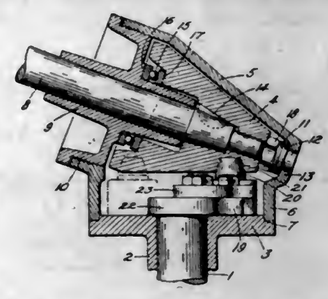
1,899,662. D-HANDLE. WILLIAM H. BERGMANN, Cleveland, Ohio, assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 13, 1930. Serial No. 495,405. 8 Claims. (Cl. 294—57.)



1. In a D-handle, an implement shaft having a pair of split-separated arms extending divergingly therefrom, a hand grip superposed substantially upon the ends of said arms, and a pair of reenforcing elements, each securing an end of said hand grip to one of said arms.

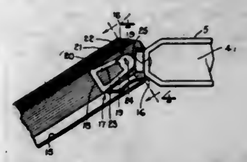
1,899,663. GEARING FOR STEERING MECHANICALLY PROPELLED VEHICLES AND FOR OTHER PURPOSES. REGINALD BISHOP, London, England. Filed Nov. 7, 1930, Serial No. 494,162, and in Great Britain Nov. 8, 1929. 7 Claims. (Cl. 74—41.)

1. Gearing, comprising a rotatable shaft, a rock shaft disposed in angular relation to the rotatable shaft, a member mounted on said rotatable shaft having a grooved conical wall, and a crank member carried by said rock shaft and operatively engaged in the groove in the conical wall of said member, said groove being of graduated depth to compensate for the travel of the crank pin relative to



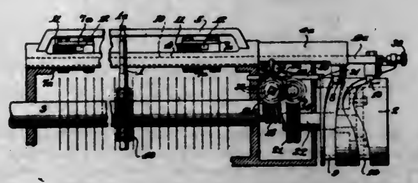
the grooved conical member whereby intimate working contact between the pin and grooved conical wall is maintained.

1,899,664. LORGNETTE. WALTER A. BLOCKER, Mount Vernon, N. Y., assignor to Lugene Inc., New York, N. Y., a Corporation of New York. Filed Oct. 8, 1930. Serial No. 487,114. 6 Claims. (Cl. 88—41.)



1. A lorgnette comprising a lens frame and lenses therein, the overall width of the frame corresponding substantially to the width of the lenses, a tubular handle-case open at one end, a slider movable longitudinally within the handle, and a pivotal connection between the slider and the lens frame, the slider including opposite spring arms engaging within edge formations of the handle.

1,899,665. WOODWORKING MACHINE. RICHARD SAMUEL BROOKMAN, Loughborough, England. Filed Nov. 10, 1930, Serial No. 494,799, and in Great Britain Nov. 12, 1929. 5 Claims. (Cl. 144—87.)

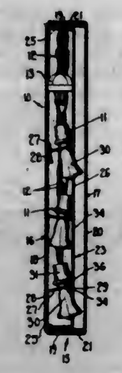


1. A dovetailing machine comprising a work table, a series of vertical cutters, a removable and interchangeable rotary cam device having two cam tracks, longitudinal motion being imparted to the work table directly from one cam track and transverse motion being imparted to said work table from the second track indirectly through intermeshing racks and toothed wheels.

1,899,666. CHRISTMAS TREE LIGHTING SET PACKAGE. ABRAHAM L. BUSCHMAN, New York, N. Y. Filed June 18, 1931. Serial No. 545,187. 14 Claims. (Cl. 206—44.)

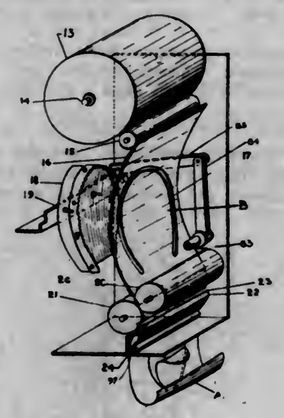
1. A Christmas tree lighting set package comprising a box and a sheet member within said box having a plu-

rality of openings, a plurality of sockets wired in series circuit within the box, and lamps attached to said sockets, each lamp comprising a base and a bulb, the base of each



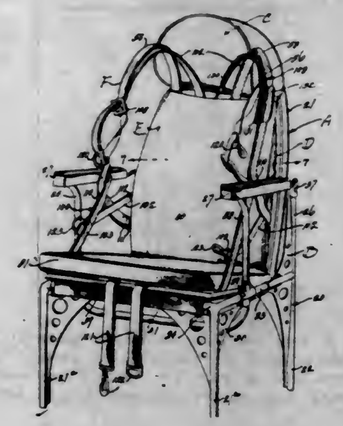
of said bulbs extending through one of said openings and being screwed to a socket whereby said sheet member is clamped between the bulbs and sockets.

1,899,667. VENDING MACHINE. CESAR BUSTAMANTE, New York, N. Y., assignor to David Stern, Brooklyn, N. Y. Filed Mar. 26, 1930. Serial No. 438,953. 8 Claims. (Cl. 164—20.)



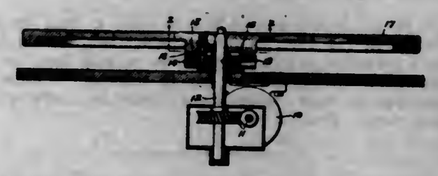
1. In a dispensing apparatus, means for supporting a roll of paper, feeding means adapted to engage and feed paper from off the roll, means for cutting a slot in the paper, and means for severing a section of paper from the roll, and means for operating all of said means, said operating means being arranged to operate the feeding means in alternation, first with one cutting mechanism and then with the other.

1,899,668. PARACHUTE APPARATUS. LOUIS J. CAMPBELL, New York, and LYMAN HANOVER FORD and HAROLD GLENN ROGERS, Buffalo, N. Y., assignors to Irving Air Chute Company, Inc., Buffalo, N. Y., a Corporation. Filed May 8, 1930. Serial No. 450,806. 14 Claims. (Cl. 244—21.)



3. In parachute apparatus a body attaching harness having shoulder straps, and shape holding elements fixedly attached to the shoulder straps for holding them in open looped inverted U-shaped position.

1,899,669. TURNTABLE DRIVE. BENJAMIN R. CARSON, Collingswood, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Oct. 8, 1930. Serial No. 487,115. 7 Claims. (Cl. 192—53.)

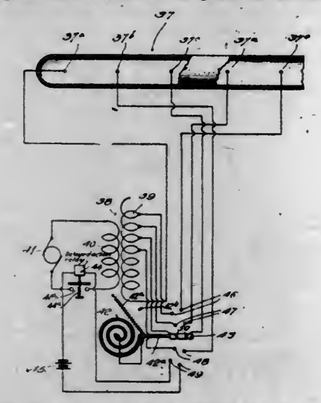


1. In combination, a spindle having a collar secured thereto and having a recess therein, friction means in said recess, a supporting member freely mounted on said spindle and being adapted to be driven by the action of said friction means upon rotation of said spindle, and additional driving means comprising a pair of pins acting to drive said supporting member when its speed falls below that of said spindle, one of said pins being further adapted to yield under the action of the other pin to permit rotation of said supporting member after said spindle has come to rest.

1,899,670. ELECTRICAL TRANSFORMER. BEN J. CHROMY, Hopkins, Minn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Original application filed May 23 1929, Serial No. 365,534. Divided and this application filed July 12, 1930. Serial No. 467,604. 8 Claims. (Cl. 177—346.)

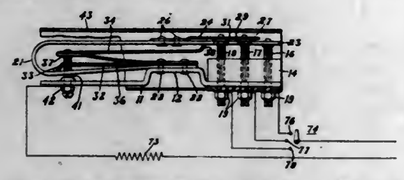
1. A transformer comprising a primary winding, a thermally responsive secondary winding associated there-

with, a tapped secondary winding coupled with said primary winding and a switching device carried by a portion of said thermally responsive secondary winding and adapted to be shifted in position according to the



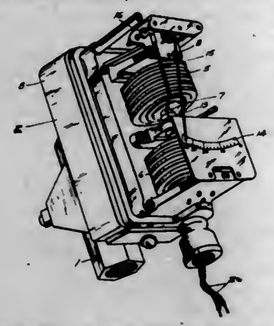
expansion of said thermally responsive secondary winding depending upon the amplitude of current induced therein from said primary for establishing connection with selected taps on the aforesaid tapped secondary winding.

1,899,671. THERMOSTATIC SWITCH. EARL K. CLARK, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 18, 1930. Serial No. 468,854. 7 Claims. (Cl. 200—138.)



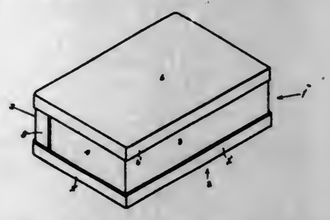
1. In a thermostatic switch, a base, a fixed contact member on the base, a spring contact bar on said base and a plurality of bimetal members on said base for actuating the spring contact bar in sequence in different directions at right angles to each other relatively to the fixed contact member.

1,899,672. FLUID-FLOW INDICATOR. GEORGE D. CLARK, Sharpsville, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 18, 1929. Serial No. 333,467. 5 Claims. (Cl. 73—167.)



2. In combination, a Venturi tube, a casing mounted thereon including air traps, differentially expansible bellows mounted on the casing, means providing communicating passages between said bellows and the high and low-pressure sections of said tube, respectively, through said air traps and means responsive to differential movement of the bellows.

1,899,673. CONTAINER AND SHIPPING PACKAGE. THOMAS CRAWFORD, Bristol, England. Filed Apr. 12, 1932, Serial No. 604,718, and in Great Britain Mar. 26, 1931. 7 Claims. (Cl. 206—44.)

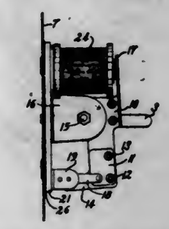


1. A combined display tray and container, including the combination of a display tray comprising a bottom member, means for building up said display tray into a container comprising a plurality of removable wall members each adapted to engage with the periphery of said bottom member and extend upward therefrom and a removable lid adapted to engage with the upper edges of said wall members and thereby cooperate with said bottom member in retaining said wall members in assembled condition, said wall members being self supporting and freely exposed at the vertical corner edges and forming the sole means spacing said lid from said bottom member and being mutually separable and freely removable from the bottom member upon removal of said lid from off the same.

1,899,674. PROCESS FOR THE PRODUCTION OF FERRIC OXALATE. LEO P. CURTIN, Cranbury, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Apr. 28, 1932. Serial No. 608,143. 3 Claims. (Cl. 260—11.)

1. A method of preparing ferric oxalate which comprises introducing hydrogen peroxide into an aqueous solution containing ferrous oxalate and oxalic acid.

1,899,675. CIRCUIT BREAKER. WILLIAM W. DASHNER, Logansport, Ind., assignor to R-B-M Manufacturing Co., Logansport, Ind., a Corporation of Indiana. Filed July 8, 1929. Serial No. 376,557. 3 Claims. (Cl. 200—87.)



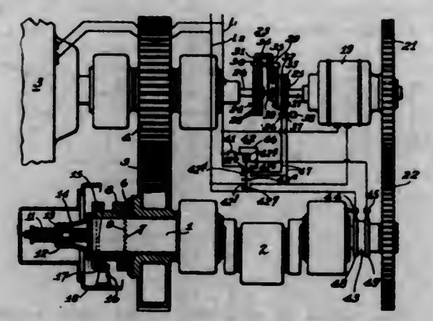
1. In a circuit breaker of the class described, a base, a bracket mounted thereon, an armature pivoted at its midpoint to said bracket, an electromagnet disposed on said base and adjacent one end of said armature and operable to move the armature in one direction about its pivot, a second bracket on said base, a spring mounted thereon and engaging said armature to close an electrical circuit through said armature and the bracket upon which the same is mounted, an insulator on said armature engaged by said spring after the armature has been moved by said electromagnet, a lever attached to said armature for manually moving it about its pivot in the opposite direction to reestablish said circuit through it, means cooperating with said lever to indicate the position of said armature, and a projection on said armature arranged to strike said base to limit the movement of said armature by said lever.

1,899,676. METHOD OF REPAIRING TIRE CASINGS. JOSEPH J. DETTLING, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 25, 1928. Serial No. 295,143. 3 Claims. (Cl. 154—14.)



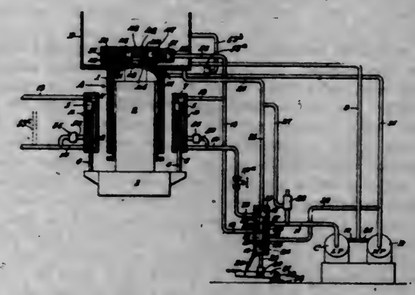
1. The herein described method of repairing pneumatic tire casings which comprises cutting the inner ply of the reinforcing fabric of the casing around the damaged portion thereof to form an opening in said ply which is elongated circumferentially of the tire casing and which tapers substantially to a point at both ends, two opposite sides of the opening being parallel to the cords of the ply fabric and the other two sides thereof extending substantially at right angles to said cords, cutting similar progressively smaller openings in successive plies of the reinforcing fabric to form a recess with stepped sides, applying a thin layer of raw rubber to the stepped sides of the recess, and vulcanizing in the recess a tire patch having superposed pieces of reinforcing fabric formed to fit in the openings of the plies of reinforcing fabric of the casing.

1,899,677. CONTROL SYSTEM. ROBERT H. ELLIS, Pittsburgh, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 30, 1931. Serial No. 533,937. 8 Claims. (Cl. 192—82.)



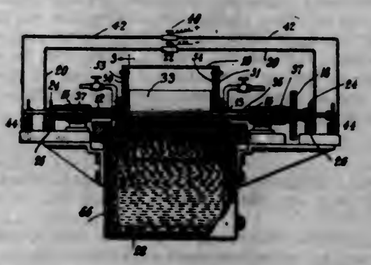
1. The combination with a clutch mechanism comprising a continuously actuated driving member, a normally stationary driven member, and a motor operably coupled to said driven member for imparting rotation thereto; of a control for said motor comprising a starting circuit having a switch connected therein which is adapted when energized to complete said starting circuit when the driving and driven members of the clutch mechanism bear a substantially definite preselected relation to one another.

1,899,678. HYDRAULIC PRESS. WALTER ERNST, HOWARD F. MACMILLIN, and REIDER THORESON, Mount Gilead, Ohio, assignors to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed Apr. 11, 1930. Serial No. 443,488. 8 Claims. (Cl. 138—17.)



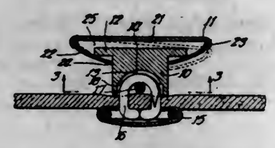
1. The combination with a hydraulic press including a main cylinder, a reciprocatory ram therein, an auxiliary cylinder, and a piston therein and having connection with said ram; of a source of high pressure fluid pressure; a high pressure delivery pipe affording communication between said source and said main cylinder; a high pressure branch pipe communicating at one of its ends with said source and at its other end being adapted to communicate with an exhaust; a source of low pressure fluid pressure; a low pressure delivery pipe in communication with said low pressure source; separate low pressure auxiliary pipes respectively communicating with said auxiliary cylinder at the opposite ends thereof; and valve means in said high pressure branch pipe for controlling communication of said high pressure source with said exhaust, and interposed between said low pressure delivery pipe and said low pressure auxiliary pipes for controlling admission of the low pressure fluid separately to the respective ends of the auxiliary cylinder to effect reciprocations of said ram.

1,899,679. BARREL PLATING APPARATUS AND PROCESS. COLIN G. FINK, New York, N. Y., and RALPH D. EASH, East Orange, N. J., assignors to Chemical Treatment Company, Inc., New York, a Corporation of New York. Filed June 3, 1926. Serial No. 113,390. 11 Claims. (Cl. 204—5.)



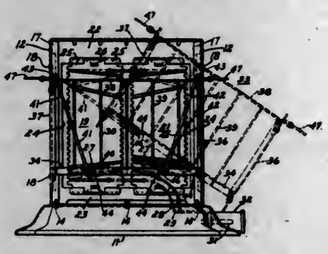
11. The method of electrodepositing chromium upon articles electrically cathodic in a barrel plating apparatus, which comprises limiting the number of tumbles to 15 tumbles or less per minute during the passage of current to said articles and maintaining a concentration of approximately 200–300 grams per liter of chromic acid in the plating bath.

1,899,680. BUTTON. IRA D. FORD, Roseland, Ontario, Canada, assignor to Universal Button Fastening & Button Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 14, 1931. Serial No. 580,923. 2 Claims. (Cl. 24—95.)



2. A flexible button of the character described comprising in combination, an integral solid die member enlarged at one end and having a die cup formed in its opposite extremity, the latter extremity providing a base for the button, said member serving as the shank of the button and being of substantial depth beyond the die cup to prevent penetration by an attaching fastener prong, said die cup being provided with means for engaging a pronged attaching fastener, a button head consisting of a sheet metal collet which surrounds the shank of said die member and a sheet metal shell attached to said collet, said sheet and collet being shaped to envelop said enlargement loosely whereby to permit said head to tilt on said shank, said enlargement being flat at the end and serving to transmit force to the die cup during the attachment of the button, said head being free to rest directly on the flat end of said enlargement during the attaching operation.

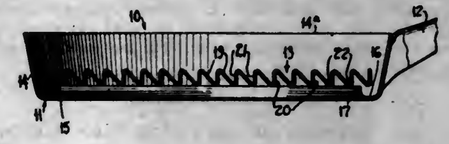
1,899,681. VERTICAL TOASTER. FRANK F. FORSHEE, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 15, 1931. Serial No. 562,871. 4 Claims. (Cl. 53—5.)



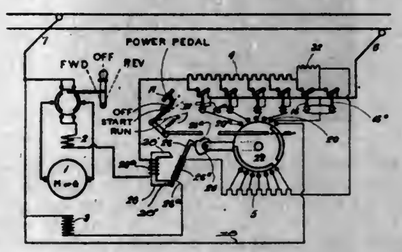
1. In a toaster, in combination, a frame, opposed heating elements, a bread-holder, supporting links for said holder disposed on opposite ends thereof, said links being pivotally mounted on said frame, the opposite ends of said links being pivotally connected to said holder, the distance between the upper ends of said links being greater than the distance between the lower ends thereof, to effect a downwardly tilting movement of one end of the bread holder and an upwardly tilting movement of the other end thereof upon swinging movement of the bread holder.

1,899,682. GRIDIRON. FRED GOLDENBERG, Bronx, N. Y. Filed Mar. 28, 1931. Serial No. 525,952. 2 Claims. (Cl. 53—5.)

2. A gridiron comprising a one-piece open-bottom member having an outer peripheral wall having its bottom reflexed inwardly and upwardly forming a continuous peripheral channel having an inner rim edge disposed below the top edge of said outer wall, a handle attached to said outer wall, and a closed-bottom grid-member removably resting on said rim edge and disposed below the upper edge of said outer wall, said grid-member comprising a single piece of sheet material having a series of parallel inclined wall portions interconnected by a series of alternating substantially upright wall portions forming channels open at both ends of said wall portions and overlying said first peripheral channel, said upright wall portions having apertures therein, said grid member removably retained in position on said rim edge within said open bottom member by said outer peripheral wall.

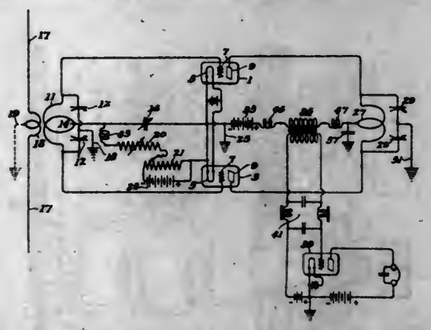


1,899,683. ELECTRICALLY DRIVEN VEHICLE. SYDNEY SLATER GUY, Wolverhampton, and WILLIAM ARTHUR STEVENS, Maidstone, England. Filed May 29, 1930, Serial No. 457,304, and in Great Britain July 19, 1929. 7 Claims. (Cl. 172—179.)



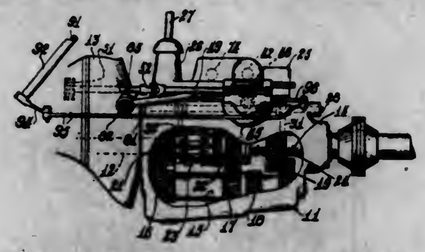
1. In a system for an electrically driven vehicle, a dynamo-electric machine, controlling means therefor including a controller device having a neutral position and a plurality of operating positions, means operable for actuating said device to one of said operating positions, means for returning said device to the neutral position after an operation of said first-named means and means responsive to the change of direction of the current flow for retaining said device in one of said operating positions.

1,899,684. RADIO APPARATUS. CARLETON D. HAIGIS, Haddonfield, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Jan. 16, 1931. Serial No. 509,156. 9 Claims. (Cl. 250—20.)



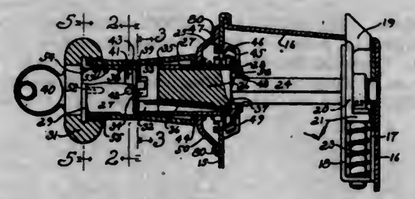
1. The method of modulated carrier wave reception which includes deriving a plurality of unidirectional components from a modulated carrier wave, generating oscillations, conjointly utilizing said components to modify said oscillations at a predetermined periodicity correlated to the frequency of the carrier wave, and demodulating said modified oscillations.

1,899,685. AUTOMATIC GEAR SHIFTING MECHANISM. HANS A. HANSON, Milwaukee, Wis. Filed May 1, 1931. Serial No. 534,238. 15 Claims. (Cl. 74—57.)



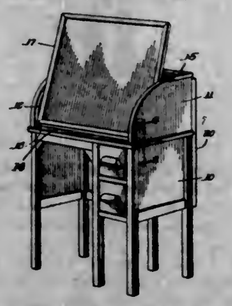
1. In a change speed gear transmission of the type in which two shift rods are individually associated with sets of shiftable gears, power operated means to shift said gears comprising, in combination, a power operated shaft having a disengageable cam element thereon, oscillatably rotatable means actuated by said cam element, gear shifting means carried by said shift rods, means associated with and operable by said oscillatably rotatable means to engage selectively said gear shifting means, and manually controlled means for selecting the gear to be shifting and for connecting said cam element with the power operated shaft.

1,899,686. DOORLATCH. ABRAHAM VANDER HENST, Grand Rapids, Mich., assignor to W. B. Jarvis Co., a Corporation of Michigan. Filed June 15, 1928. Serial No. 285,512. 14 Claims. (Cl. 70—91.)



1. In combination, a rotatable shaft provided with an enlargement on one end thereof forming a shoulder, and a door handle provided with a hollow stem rotatably received on said enlargement and enveloping the same, the free end of said stem being turned over at said shoulder to prevent said shaft from being withdrawn from said stem in that direction.

1,899,687. DESK AND BLACKBOARD ARRANGEMENT. ELLA E. HERRMANN, Cannelton, Ind., assignor to The Lehman Company of America, Cannelton, Ind., a Corporation of Indiana. Filed Jan. 27, 1932. Serial No. 589,191. 2 Claims. (Cl. 45—90.)



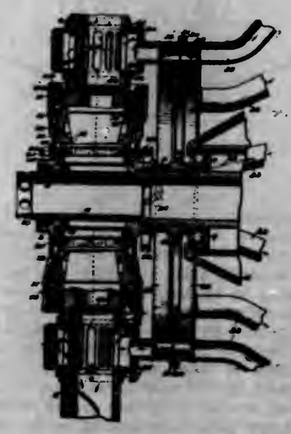
1. In combination, a roller-top desk having a horizontal table portion, arcuate side portions extending upwardly therefrom, said sides being provided with a channel adjacent the periphery thereof, a roller-top traveling in said channels, a cap-board joining said sides at their upper portion, and pegs extending inwardly from said sides adjacent the front of the desk and spaced from the table portion thereof, with a blackboard having slots for engaging said pegs to support said blackboard.

1,899,688. PROCESS FOR THE PRODUCTION OF IMPREGNATED PAPER AND THE LIKE. HARRY HILL, Belvedere, England, assignor to Callender's Cable and Construction Company Limited, London, England, a British Company. Filed Mar. 31, 1931, Serial No. 526,757, and in Great Britain Apr. 10, 1930. 2 Claims. (Cl. 91—68.)



1. An improved process for the impregnation with liquid or semi-liquid material of paper or other material in the form of long pieces, which process comprises embossing the material at a plurality of comparatively small areas but leaving the greater part of the material lying in the original plane thereof and substantially unaffected, rolling it up in such a way that the raised parts form spacers to keep the layers of the roll apart, thus producing a roll of sufficiently open form, and finally impregnating the roll.

1,899,689. PROPELLER. GEORGE F. HOUSTON, South Bend, Ind., assignor to Bendix Research Corporation, East Orange, N. J., a Corporation of Indiana. Filed Aug. 4, 1930. Serial No. 472,951. 16 Claims. (Cl. 170—172.)

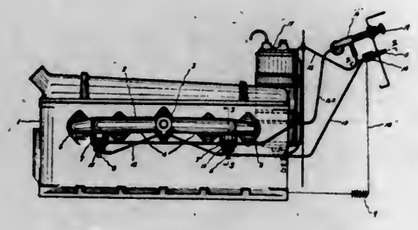


1. In an aeroplane propeller having a plurality of hollow blades, means for rotating said propeller, means for conducting the exhaust gases from an engine to said hollow blades and means for varying the pitch of said blades while the propeller is rotating.

1,899,690. MANIFOLD CONSTRUCTION. EDWARD E. HUNTINGTON, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 4, 1926. Serial No. 133,685. 1 Claim. (Cl. 123—122.)

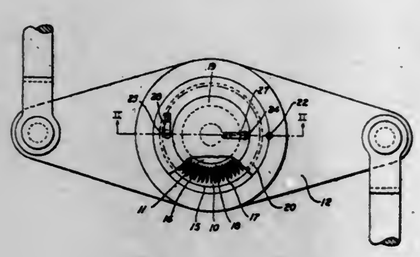
In an internal combustion engine, an intake manifold comprising a downwardly sloping portion, a branch adapt-

ed to feed a plurality of cylinders extending from the end of said downwardly sloping portion toward said engine, a fuel receiving downwardly extending pocket lo-



cated near the junction of said branch with said manifold proper, and means operating independent of the operation of the engine for heating fuel in said pocket.

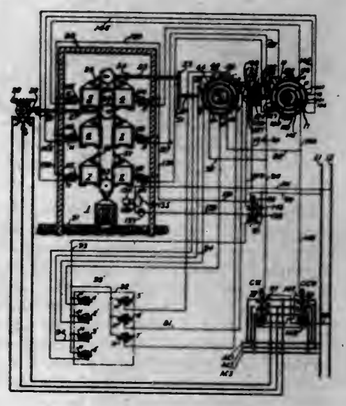
1,899,691. FLOATING BEARING. CHARLES JABLOW, Pittsburgh, and BRIAN WHEELER, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 19, 1930. Serial No. 503,370. 2 Claims. (Cl. 308—36.)



1. In combination, a floating bearing having an outwardly extending flange rotatively mounted upon the end of a stationary member, an oscillatory member rotatively mounted upon the said floating bearing, a member having an opening therein connected to the end of said stationary member, a member having an opening therein connected to said oscillatory member, radially disposed projections provided on the flange of said bearing, a plurality of pawls for making engagements with said projections, one of said pawls being disposed in the opening of the member connected to said oscillatory member for rotating said bearing relative to said stationary member when the said oscillatory member is being operated in one direction and the other pawl being disposed in the opening of the member connected to said stationary member for securing said bearing fixed relative to said stationary member when the said oscillatory member is being operated in the opposite direction.

1,899,692. CIRCUITOUS ELEVATOR. HENRY D. JAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 26, 1930. Serial No. 498,420. 29 Claims. (Cl. 187—16.)

1. In a control system for a motive means for moving a plurality of receptacles in an endless path successively past a plurality of stations, control means comprising an operating means, at each of the said stations other than a predetermined one of said stations, operable to effect



the actuation of the motive means to move any receptacle adjacent to the operating means operated to the predetermined station and stop it thereat.

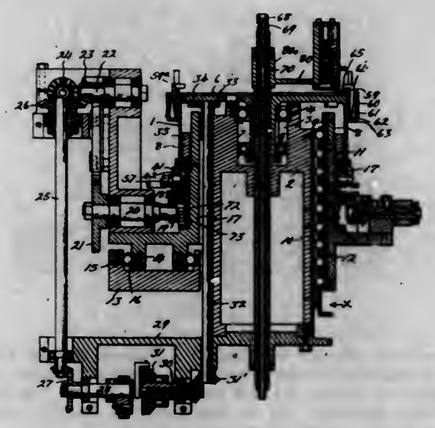
1,899,693. SUSPENSION POTENTIAL TRANSFORMER. GUSTAV E. JANSSON, Atlantic, Mass., assignor to Condit Electrical Manufacturing Corporation, Hyde Park, Mass., a Corporation of Massachusetts. Filed Feb. 27, 1931. Serial No. 518,725. 25 Claims. (Cl. 175—356.)



1. A high tension suspension type transformer comprising a string of superposed units each including a core structure comprising a magnetic circuit having vertical and upper and lower horizontal legs, a winding surrounding a vertical leg of said core structure and insulated therefrom, and a weatherproof housing enclosing said winding, and means for suspending the units one from another comprising an insulating suspending member which is connected with the lower horizontal leg of the upper core and the upper horizontal leg of the next lower core and electrically insulates said cores from each other.

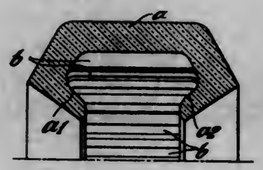
CARNEGIE LIBRARY OF ATLANTA

1,899,694. BRUSH MACHINE. CONRAD JOBST, Toledo, Ohio, assignor to The Toledo Automatic Brush Machine Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 2, 1930. Serial No. 479,372. 16 Claims. (Cl. 300—11.)



1. In a brush machine, the combination of a work carrier, a series of work holders mounted on said carrier adapted for the free insertion of the brush backs therein and the free withdrawal of the brushes when completed at spaced points in the cycle, a locating bearing for accurately positioning the front face of the brush back in said holder and means for rigidly clamping and holding the brush backs in said holders against said face intermediate said points.

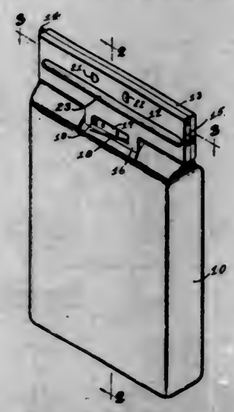
1,899,695. PIPE JOINT. PERCY GRAHAM JOHNSON, Letchworth, England, assignor to Victaulic Company Limited, London, England. Filed Mar. 15, 1932, Serial No. 599,019, and in Great Britain Aug. 10, 1931. 4 Claims. (Cl. 285—193.)



1. A hollow pipe joint sealing ring of flexible material having an opening which when in position in the joint is open to fluid pressure from the pipes so as to be sealed thereby, comprising a hollow ring having an opening on its inner side and of which the edges form sealing lips, and a plurality of transverse ribs formed on its inner surface, the ribs being shaped to exert mechanical pressure on the full width of the lips only when in position on the joint and force them on their bearing surfaces in the joint by contact pressure independently of the fluid pressure.

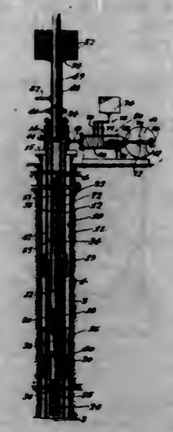
1,899,696. WATERPROOF BATHING RECEPTABLE. JOSEPH M. KARNOFSKY and JACK E. FREEDMAN, Waterbury, Conn. Filed Oct. 17, 1930. Serial No. 489,356. 6 Claims. (Cl. 150—5.)

1. In a bathing receptacle, a flat waterproof bag, a pair of hinged sheet metal clip members for clamping upon the upper end of said bag, means for detachably connecting said clip members to form a tight seal, and an attaching strip having bent over end lugs for securing one of



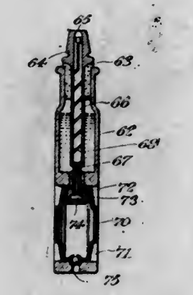
said clip members to one side of said bag, said clip members having interfitting ribs and grooves pressed out of the material thereof for strengthening the construction.

1,899,697. METHOD OF AND APPARATUS FOR HYDRAULICALLY PUMPING OIL WELLS. OTTO B. KIBELE, Wilmington, and ERIC R. ERICSON, San Pedro, Calif.; said Ericson assignor to said Kibele. Filed Nov. 14, 1930. Serial No. 495,680. 9 Claims. (Cl. 103—46.)



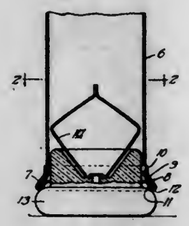
1. A pump of the character described comprising an outer string of tubing, an inner string of tubing disposed within the outer string of tubing, a check valve secured to the inner string of tubing adjacent the lower end thereof, a working barrel, members connecting said working barrel at each end thereof to said inner string of tubing, a tubular plunger provided with check valves adapted to open upwardly, said plunger slidably mounted in said inner string of tubing and extending through said working barrel and an opening formed in each of the members connecting said working barrel to said inner string of tubing, a piston secured to said plunger and disposed in said working barrel, there being ports formed in said working barrel below said piston and ports in said plunger above said piston, a head secured to the upper end of said outer tubing, packing means carried by said head forming a fluid tight seal around the inner string of tubing, and hydrostatic displacement means communicating with the outer string of tubing for the purpose set forth.

1,899,698. ATOMIZER. JAMES J. KLEIN, Brooklyn, N. Y. Filed Dec. 21, 1929. Serial No. 415,631. 5 Claims. (Cl. 299—88.)



3. An atomizer comprising, in combination, a nozzle, a casing providing a perfume container and a bellows chamber, a bellows within said bellows chamber, connections comprising a sleeve projecting into said perfume container and a tubular member fitted within said sleeve having a central bore connected to said bellows and leading to said nozzle and an exterior helical groove also leading to said nozzle for conducting perfume from said perfume container to said nozzle.

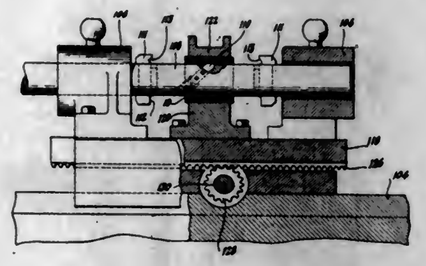
1,899,699. FURNITURE POST END CONSTRUCTION. FRANK KUSTERLE, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 12, 1929. Serial No. 413,441. 5 Claims. (Cl. 45—137.)



1. A tubular furniture or like post having an end portion enlarged in cross-sectional dimension relative to the corresponding dimension of the adjacent portion of the post, and a self-retaining separate annular end trimming fitting snugly over and shaped longitudinally to conform to the shape of said enlarged post end and adjacent post portion, whereby said trimming is locked to the post against endwise removal from such post end, and an inturned flange part integral with said trimming and engaging the end of the post to prevent displacement of the trimming along the post.

1,899,700. TURNING AND BORING MACHINE. CHARLES LANDERS, Lansing, Mich. Original application filed Jan. 23, 1928, Serial No. 248,842. Divided and this application filed Nov. 20, 1929. Serial No. 408,495. 3 Claims. (Cl. 77—3.)

1. The combination of a rotatable shaft, cutting elements longitudinally spaced on said shaft comprising immovably spaced end facing tools and an interior boring tool arranged between said end facing tools, disconnectible clamping means surrounding said shaft and arranged to clamp a plurality of bearing segments in the form of a cylinder about the shaft between the end facing tools, means for rotating said shaft, and means for



producing relative longitudinal movement of said shaft and clamping means, whereby the bearing segments are caused to engage the end facing tools to face the ends of the segments, and to pass over the interior boring tool to bore the interior of said segments.

1,899,701. ALLOY. ROBERT H. LEACH, Fairfield, Conn., assignor to Handy & Harman, New York, N. Y., a Corporation of New York. Filed July 12, 1932. Serial No. 622,108. 2 Claims. (Cl. 75—1.)

1. An alloy which consists of silver from about 48% to 52%, copper from about 12% to 16%, zinc from about 14% to 18%, and cadmium from about 16% to 20%.

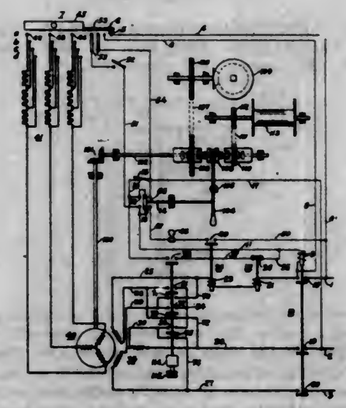
1,899,702. MAGAZINE BARREL FOR GUNS. CHARLES F. LEFEVER, Plymouth, Mich., assignor to Daisy Manufacturing Company, Plymouth, Mich., a Corporation of Michigan. Filed Feb. 18, 1929. Serial No. 340,978. 5 Claims. (Cl. 124—11.)



1. In a gun, a combined shooting and magazine barrel formed of an integral sheet metal blank fashioned into cylindrical segments about two spaced parallel axes continuous throughout their length, an extension at the end of one of said segments, a head mounted on said extension to be arranged concentric to the axis thereof, and a liner tube inserted within and in direct contact with said cylindrical segment and head.

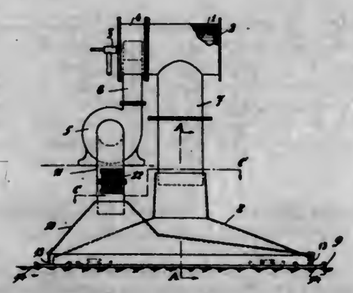
1,899,703. ELECTRIC MOTOR DRIVE FOR WELL DRILLING EQUIPMENT. ARTHUR LINDNER, Staaken near Spandau, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 12, 1931, Serial No. 574,514, and in Germany Nov. 18, 1930. 7 Claims. (Cl. 255—19.)

1. An electric motor drive for well-drilling equipment comprising, in combination, a drill table, a hoist, a motor having a polyphase winding, driving means including a coupling for connecting said motor to drive either the drill table or the hoist, a source of polyphase alternating-current and means controlled by said coupling for con-



necting the polyphase winding in star-circuit relation with said source when the coupling is such as to cause the motor to be in driving connection with the drill table.

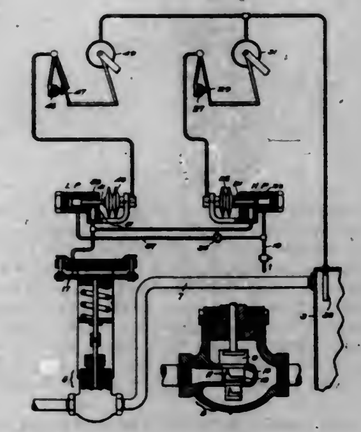
1,899,704. APPARATUS FOR HEATING SURFACES. GEORGE HINTON LUTZ, Chicago, Ill. Filed Jan. 28, 1932, Serial No. 589,488, and in France Nov. 23, 1931. 9 Claims. (Cl. 126—271.2.)



1. An apparatus for heating surfaces comprising in combination, a chamber, means for forcing air into said chamber at one end thereof, fuel burning means located in said chamber, a heat spreading and confining member for covering the surface to be heated, a conduit for connecting said hood with the other end of said chamber, and means located adjacent said hood for catching the used hot gases which pass the edges of said heat spreading member and returning them back again to said chamber.

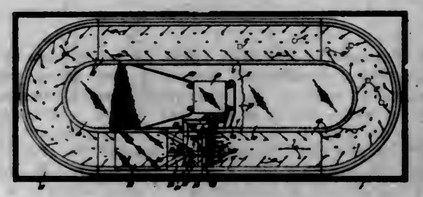
1,899,705. CONTROLLER. CLESSON E. MASON and ARNOLD M. DIXON, Foxboro, Mass., assignors to The Foxboro Company, Foxboro, Mass., a Corporation of Massachusetts. Filed Sept. 15, 1930. Serial No. 482,126. 15 Claims. (Cl. 236—82.)

1. Means for controlling the flow of fluid to a locus thereby to affect the value of a variable condition at the locus comprising, in combination with means responsive to the variable condition at the locus, a valve having ports of marked different area, a motor for moving the valve successively to bring into action said ports and



control couples governed by said responsive means to supply pressure fluid at respectively different pressures to said motor.

1,899,706. GAME APPARATUS. ALEXANDER W. McCLEAN, Webster Groves, Mo. Filed May 22, 1931. Serial No. 539,162. 10 Claims. (Cl. 273—86.)



1. A game apparatus comprising a raceway having a bottom wall, a plurality of air jets for delivering currents of air across said raceway, and a plurality of irregularly spaced air jets for delivering currents of air through said bottom wall, said jets being adapted to propel counters around said raceway.

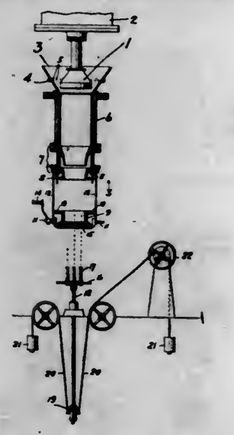
1,899,707. DEPILATORY AND METHOD OF COMPOUNDING THE SAME. RALPH H. McKEE, New York, N. Y., and EARLE H. MORSE, Nutley, N. J., assignors to Alexander Herz, New Rochelle, N. Y. Filed Jan. 4, 1932. Serial No. 584,758. 8 Claims. (Cl. 167—89.)

1. A depilatory compound for use in rapidly removing hair from the human body and containing as an active depilating agent a relatively concentrated alkaline solution of a stannite more soluble than calcium stannite, and a stabilizing agent for said stannite.

1,899,708. CHECKER BRICK MOLDING MACHINE. FRED M. MILLER, Bala, Pa. Filed Mar. 7, 1931. Serial No. 520,860. 8 Claims. (Cl. 25—30.)

1. A molding machine including a cylinder, means for extruding the clay from said cylinder, a die forming an

outlet for clay from said cylinder, a mold box movably mounted for vertical movement with respect to said die



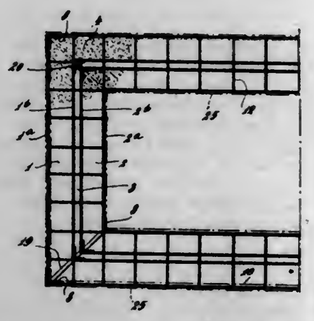
and rotatable about a horizontal axis, and an off bearing table mounted for vertical movement and located to carry said mold box into position adjacent said die.

1,899,709. PROCESS OF MAKING BRICKS. FRED M. MILLER, Bala, Pa. Filed Mar. 24, 1931. Serial No. 524,866. 2 Claims. (Cl. 25—156.)



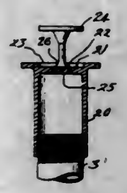
1. The method of making bricks having in cross section laterally and downwardly extending ribs, which process consists in making two superposed, spaced columns of clay, of which one is of the cross section recited and of which the other is in cross section the complement of the lower part of the first column to support the ribs of the same, by extruding clay through two superposed, spaced dies conforming in contour to the cross sections of the respective columns.

1,899,710. STRUCTURE FOR REFRIGERATORS AND OTHER DEVICES. CHARLES P. MINNING, Los Angeles, Calif. Filed Apr. 15, 1931. Serial No. 530,220. 8 Claims. (Cl. 72—48.)



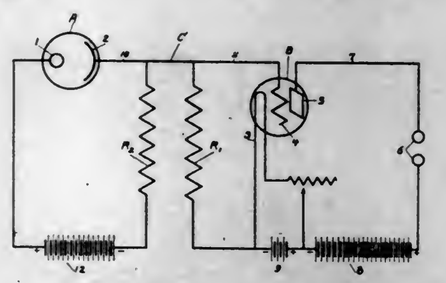
1. A structure comprising inner and outer nettings, intervening separated nettings of smaller mesh than the inner and outer nettings and continuous cementitious material between the inner and outer nettings and the intervening nettings, making layers with air spaces between the intervening nettings.

1,899,711. SELF-CLEANING SPRAY HEAD. ELMER G. MUNZ, Detroit, Mich. Filed Nov. 18, 1929. Serial No. 408,047. 12 Claims. (Cl. 299—61.)



2. A device for irrigating large areas comprising a casing having a conical discharge orifice, a plug with conical walls parallel to the walls of said orifice, said plug being arranged within said casing and adapted to be moved from a position remote from said orifice into a position within said orifice by fluid pressure and serrations in one of said conical elements at the point of discharge from said device for subdividing the discharged fluid into a series of finely divided streams.

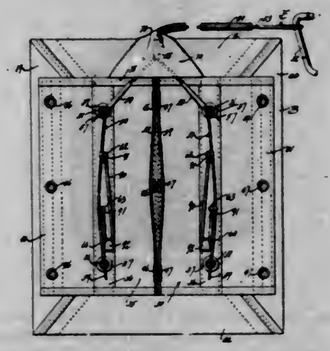
1,899,712. ELECTROSTATIC POTENTIAL CONTROL FROM PHOTOELECTRIC CELLS. THEODORUS H. NAKKEN, Brooklyn, N. Y., assignor to Naaken Patents Corporation, a Corporation of Delaware. Filed May 21, 1929. Serial No. 364,873. 4 Claims. (Cl. 250—41.5.)



1. In cooperative combination means for transforming light impulses into dynamic electric current impulses comprising a photoelectric couple comprising a cathode body and an anode and a thermionic triode amplifier comprising a cathode, a gride and a plate; a plate circuit for said triode amplifier including a translating device and a source of electrical energy and constituting a circuit in which current impulses are adapted to traverse; a link means electrically connecting one electrode of said photo-electric couple with the grid of said triode amplifier; a high resistance connecting said link means with the cathode of said triode amplifier; a local insulated source of potential having connections from opposite polarity points minus to the cathode of said photo-electric couple and plus to the anode of said photo-electric couple, the connection from said local source to the electrode of said photo-electric couple which is connected to said link means including a high resistance of a value having a limiting effect upon the rate of flow of electrons relatively to the average rate of electron emission of said cathode body under the influence of said light impulses, the end of said resistance opposite to the end connected to said link means being free from connection with the cathode of said triode amplifier.

CARNEGIE LIBRARY OF ATLANTA

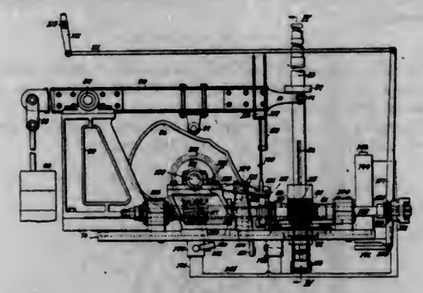
1,899,713. PARACHUTE PACK. ERWIN HOUSE NICHOLS, Brooks Field, Tex., assignor to Irving Air Chute Company, Inc., Buffalo, N. Y., a Corporation. Filed Nov. 7, 1929. Serial No. 405,388. 27 Claims. (Cl. 244—21.)



1. A container or cover for a parachute made of flexible material and comprising a body portion having marginal flaps thereabout, a semi-rigid frame co-extensive with and holding the body portion in shape for packing of a parachute thereon, and a detachable cover, the cover and flaps only having cooperative fastener parts thereon, and means for releasably connecting the fastener parts for holding the cover and flaps in container formation for compact housing the parachute therein upon said body.

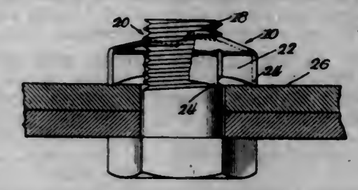
2. In a parachute pack the combination of a container, a parachute for the container, and releasable fastening means for closing the container upon the parachute including a rip cord, and extensible elastic means connecting the rip cord with the container and urging the rip cord in a safetied retaining relation with the remainder of the fastening means.

1,899,714. LIFTING AND ROTATING APPARATUS. SAMUEL A. NEIDICH, Edgewater Park, N. J., assignor to Sylvania Industrial Corporation, Fredericksburg, Va., a Corporation of Virginia. Original application filed Feb. 12, 1929, Serial No. 339,470. Divided and this application filed Aug. 5, 1932. Serial No. 627,598. 3 Claims. (Cl. 74—14.)



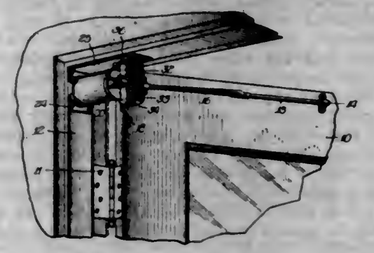
1. The combination of a vertically movable carriage; means to automatically intermittently raise and lower said carriage; means to automatically intermittently turn said carriage; wherein the means to raise and lower said carriage includes a cam having a plurality of crests, and wherein said carriage is carried by a vertically reciprocatory shaft; a collar rigidly connected with said shaft; a lever arm fulcrumed on an axis at right angles to the axis of said vertical shaft and bearing against said collar; and means carried by said lever arm for cooperation with said cam; whereby said carriage is raised and lowered by rotation of said cam.

1,899,715. LOCK NUT. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed July 14, 1930. Serial No. 467,651. 1 Claim. (Cl. 151—37.)



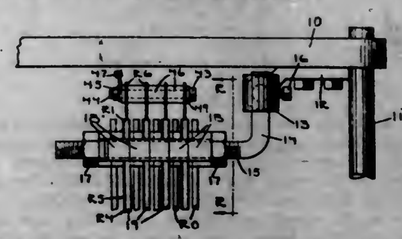
A lock nut of sheet metal construction having an apertured body portion of conical shape which is adapted to be applied to a threaded member, and side sections angularly disposed with respect to said body portion and distribute along the margin thereof, said side sections having teeth for lockingly engaging a work piece, said conical body portion being adapted to yield axially under pressure in response to the clamping of the nut against the work piece and said side sections being disposed in such a manner as to readily receive a tightening wrench.

1,899,716. AIR DOORCHECK. LEWIS C. NORTON, Pasadena, Calif., assignor to Norton-Lasier Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 5, 1931. Serial No. 513,611. 3 Claims. (Cl. 16—70.)



1. In a door check, a cylinder, a piston disposed in said cylinder; one end of said cylinder having a restricted passage for regulating the escape of air therefrom, a yoke rotatably mounted on a stationery member located outside of and at the end of the cylinder opposite the restricted passage, a coil spring associated with the yoke, connections from the yoke to the piston and from the yoke to a door, and means also rotatably mounted on the member for adjusting the tension of said coil spring.

1,899,717. ELECTRICAL WARP STOP MOTION. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed June 27, 1930. Serial No. 464,358. 8 Claims. (Cl. 139—358.)



1. In a warp stop motion having a plurality of similar spacing units each positioning an electric contact bar, a

live electrode for each bar, a built-up connecting means for the electrodes including a support common to the electrodes and separate contacting elements on the support located between and in contact with the electrodes, there being a unit for each element.

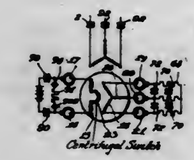
1,899,718. JACKET CROWN, MODEL, AND METHOD OF APPLYING. LEON LEROY POSTON, Vinton, Iowa. Filed Mar. 23, 1928. Serial No. 264,212. 7 Claims. (Cl. 32—30.)



3. A metal model of a natural tooth after it has been prepared to receive a procelain crown, said model extending from a base, said base having a groove or gateway running from near the junction of the model and the base, to the bottom of the base, said gateway being provided with a gate to be used when desired.

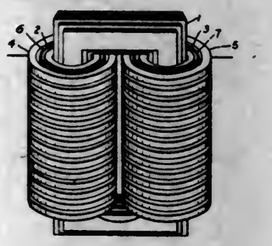
7. The method of reducing and reshaping a natural tooth to a form generally accepted as the best shape to receive a porcelain jacket crown, by means of markers of suitable metal, having sockets formed in duplicate and semi-duplicates of the porcelain crown to be used, which comprises first, roughly reducing the natural tooth to size and form that will allow the metal semi-duplicate with the largest socket to be forced thereon, whereby it will mark the tight places; the tooth being then reduced at these points to allow the semi-duplicate with the next smaller socket to be forced thereon to mark where the tooth should be further reduced, and in like manner the tooth is further reduced, using markers with successively smaller sockets until the one that is a duplicate of the crown can be used to make the final marks for the finished reduction to make a good fit of the porcelain crown.

1,899,719. SYNCHRONOUS MOTOR HAVING HIGH STARTING AND PULL-IN TORQUES. HENRY V. PUTMAN, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 14, 1929. Serial No. 385,902. 21 Claims. (Cl. 172—280.)



14. A salient-pole, rotating-field, poly-phase, self-starting synchronous motor characterized by having a combined damper and starting winding and a direct-current field winding on the rotor, and a centrifugal switch for open-circuiting and close-circuiting said field winding in response to the speed, said switch being of a type which closes quickly at some speed between 50 and 98 percent speed and opens quickly at some speed between zero and 40 percent speed.

1,899,720. NONOSCILLATING TRANSFORMER. HENRY V. PUTMAN, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 6, 1931. Serial No. 567,210. 17 Claims. (Cl. 175—356.)



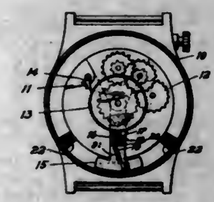
1. In an electrical apparatus, a winding comprising a plurality of coil structures connected together, and a series of insulating barriers for said coil structures, each barrier of the series surrounding a different number of coil structures.

1,899,721. SAFETY MECHANISM FOR AIRCRAFT. GEORGE J. REGAS, Wheeling, W. Va. Filed Aug. 5, 1930. Serial No. 473,230. 12 Claims. (Cl. 244—21.)



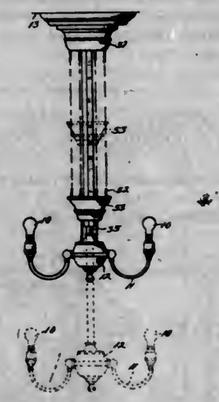
12. A safety mechanism for aircraft comprising a parachute, a compartment formed therein in which the parachute is normally retained in inoperative position and mechanical means including a pivoted member arranged on the forward portion of the aircraft and secured thereto, said pivoted member being adapted to be moved through an arc of approximately 180° for dislodging only a portion of the parachute for the subjection of that portion of the parachute to air currents for the purpose of subsequently dislodging the complete parachute and rendering it operative.

1,899,722. SELF-WINDING WATCH. MAX REINER, Bronx, N. Y., assignor, by mesne assignments, to Perpetual Self Winding Watch Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 11, 1929. Serial No. 413,170. 10 Claims. (Cl. 185—43.)



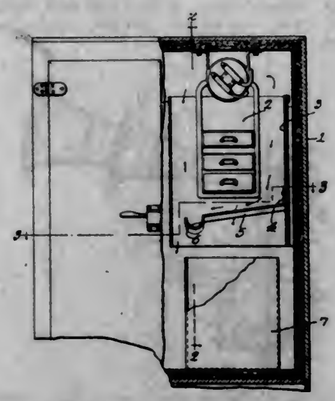
1. In a self-winding watch, a pendulum, a ratchet wheel, a lever pivoted to said pendulum, a pawl carried by said lever to cooperate with said ratchet wheel, and resilient means tending to maintain predetermined relation between said pawl and pendulum.

1,899,723. LAMP FIXTURE. WILLIAM REHINER, Detroit, Mich. Filed Feb. 2, 1931. Serial No. 514,967. 4 Claims. (Cl. 240—69.)



1. In a device of the character described, a supporting plate, a tubular member fixed to said supporting plate and projecting downwardly therefrom, a second tubular member mounted for sliding movement within said first mentioned tubular member, a lamp bulb carried by said second mentioned tubular member, electrical leads passing through said supporting plate, electrical leads for said lamp bulb, means for electrically connecting said first mentioned leads to said second mentioned leads irrespective of movement of said tubular members relative to each other, said means including a pair of rods connected to said first mentioned leads and tubular members connected to said second mentioned leads for telescopically receiving said rods, a counterweight slidable on said first mentioned tubular member, and a connection between said counterweight and said second mentioned tubular member whereby said counterweight balances the weight of said second mentioned tubular member and the lamp bulb supported thereby.

1,899,724. DEFROSTING ATTACHMENT FOR MECHANICAL REFRIGERATORS. FORREST O. RISK, Rhinelander, Wis. Filed June 16, 1930. Serial No. 461,444. 1 Claim. (Cl. 62—89.)

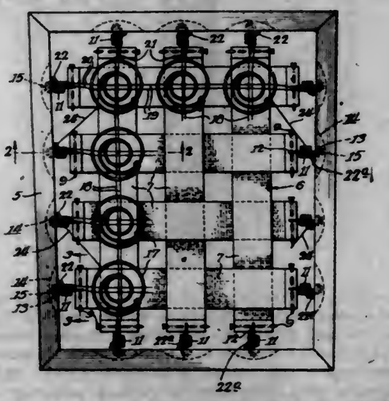


The combination with the casing and unit of a mechanical refrigerator, of a relatively deep water receptacle removably mounted in the casing and covering a small horizontal area which is small than the height of the receptacle, and a laterally and rearwardly inclined deflecting member below the entire area occupied by the unit for delivering water into the container, said member having a gutter along its lower edge, an attaching flange at its opposite edge secured to a wall of the casing, and an upstanding retaining flange between the gutter and the attaching flange, said member being spaced at three sides from the walls of the casing to provide air passages, the gutter being positioned to drain into the receptacle.

1,899,725. MANUFACTURE OF LUSTERLESS RAYON. WILLIAM F. RICHTER, Apollo, Pa., assignor to Chemical Holding Corporation, Apollo, Pa., a Corporation of Delaware. Filed Oct. 28, 1930. Serial No. 491,815. 3 Claims. (Cl. 18—54.)

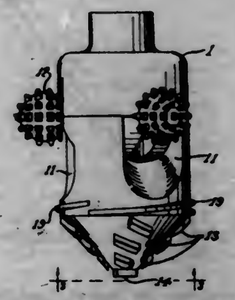
1. In a process of preparing permanently lusterless artificial fibers from viscose the step comprising precipitating the viscose in a bath consisting of about 5 to 7 per cent of sulfuric acid, and about 1.5 to 4.5 per cent of nickel sulfate.

1,899,726. SEAT CONSTRUCTION. SAMUEL RUSNAK, Chicago, Ill. Filed Jan. 29, 1931. Serial No. 512,028. 7 Claims. (Cl. 155—179.)



1. In a seat construction of the class described, the combination of a main frame, a seat bottom embodying a strip of webbing anchored to said frame, and means for anchoring said strip to said frame comprising a pin extending transversely of the webbing strip adjacent its ends and penetrating the strip at a plurality of transversely spaced points to anchor the pin in the strip, and a connector having means at one end engaged around said pin and its opposite end attached to said frame.

1,899,727. COMBINATION CUTTING DRILL AND REAMING BIT. HARVEY DAVID SANDSTONE, Los Angeles, Calif. Filed Aug. 8, 1930. Serial No. 473,855. 2 Claims. (Cl. 255—76.)



1. In a well drilling device, the combination in a bit adapted for engagement with a revolving shaft of a sec-

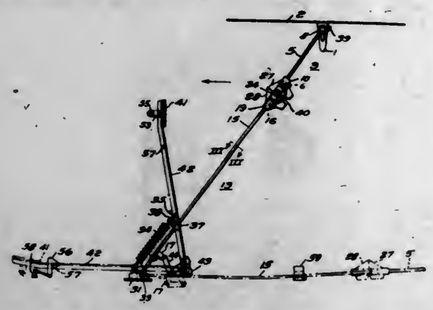
tional body having juxtapositioned on its periphery spiral lifting means whereby loosened earth and drill grindings coming in contact therewith are automatically carried upwards and in contact with auxiliary reamer and cutter heads operatably positioned outwards and upwards by centrifugal force, said auxiliary reamer and cutter heads uniformly enlarging the well hole simultaneously with the operation of the drilling cutters at and adjacent the apex of the said sectional body and pounding and breaking said loosened earth and drill grindings and packing the well wall to a substantial solid surface.

1,899,728. WELL DRILLING APPARATUS. HARVEY D. SANDSTONE, Portland, Oreg. Filed Oct. 16, 1931. Serial No. 569,275. 7 Claims. (Cl. 255—1.)



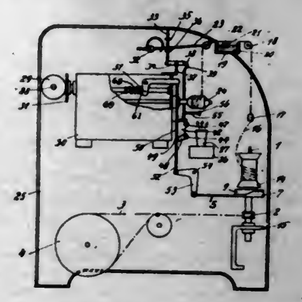
1. Drilling apparatus, consisting of a drill-head having a drilling-face and water-passages therethrough with their outlets in said drill-face, concentric cylinders connected to said drill-head having an annular space therebetween whereby water may circulate to communicate with the passages in said drill-head, a hammer mounted in the bore of said inner cylinder including a piston, a valve device including ducts leading from the cylinder bore and to said annular space, and means to actuate said hammer to lift and drop upon said drill-head and to pump water through said ducts, space, and passages to the drilling-face of the drill-head.

1,899,729. CURRENT COLLECTOR. WILLIAM SCHAAKE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 29, 1931. Serial No. 565,769. 14 Claims. (Cl. 191—55.)



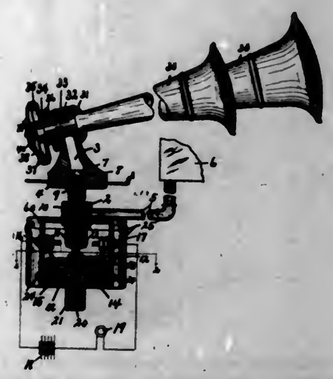
1. A current collector for electric vehicles comprising, in combination, a slider shoe for engaging a trolley conductor, an articulated frame for supporting the slider shoe, said frame being characterized by having its surface stream-lined to minimize the wind resistance thereof, resilient means disposed to cooperate with the frame for biasing the slider shoe into engagement with the trolley conductor, and a wind vane operatively connected to the frame for urging the slider shoe into engagement with the trolley conductor.

1,899,730. DOUBLING MACHINE AND TWINING SPINDLES IN COMBINATION WITH BOBBIN-WINDERS AND STOP MOTION DEVICES FOR SAME. ERNST SCHWEIZER, Zurich, Switzerland. Filed Apr. 15, 1931, Serial No. 530,352, and in Switzerland Nov. 17, 1929. 13 Claims. (Cl. 117—28.)



1. In a doubling and winding machine including winding means having a bobbin shaft driven with variable rotational velocity to ensure constant draft of the thread, the combination of rotatable mounting means for thread supply means, means for driving the bobbin shaft, means for rotating the mounting means, means for twisting the thread in its passage from the supply means to the winding means, a thread feeler, a bobbin feeler, and means for stopping simultaneously the bobbin shaft and the mounting means on actuation of the thread feeler by breakage or exhaustion of the thread or jamming of the thread or on actuation of the bobbin feeler on completion of a bobbin.

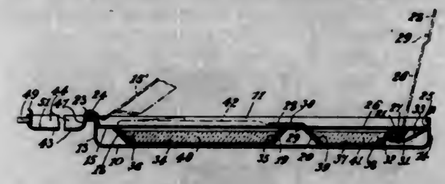
1,899,731. SIGNALING DEVICE. THEODORE J. SCOFIELD, LLOYD E. JOHNSON, and FRED WILLIAM BILLIG, Jackson, Mich., assignors to The Sparks-Withington Company, Jackson, Mich., a Corporation of Ohio. Filed Sept. 19, 1927. Serial No. 220,450. 2 Claims. (Cl. 137—139.)



1. In a device of the class described, a casing having opposed openings, an apertured boss secured in one of said openings, one end of the aperture in the boss having a greater cross sectional area than the other end, a valve

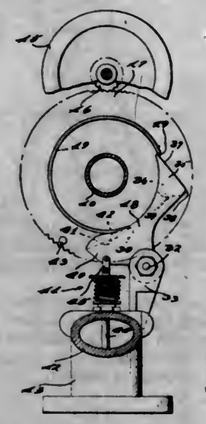
seat at the outer end of the larger end of such aperture, a source of air under pressure, a conduit leading from the larger end of such aperture to the source of air under pressure, a valve stem having a valve at one end adapted to seat in the valve seat slidably mounted in the smaller end of the aperture in the boss and extending into the larger end of such aperture, an armature on the valve stem, an electric magnet surrounding the second opening in the casing, a cup secured in such opening, a spring seated in the cup and adapted to releasably hold the valve to its seat, and means for energizing the magnet whereby the valve will be moved from its seat.

1,899,732. CONTAINER. ANDREW GRAHAM SHIELDS, Attleboro, Mass., assignor to Filkwik Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Mar. 30, 1932. Serial No. 601,909. 15 Claims. (Cl. 132—83.)



1. In a container, in combination, a bottom member having a bottom and upwardly extended sides, a frame having an opening therein adapted to be positioned across said bottom member, tray-carrying means carried by one side of said frame preventing the horizontal removal of a tray carried thereby, a removable tray carried by said tray-carrying means and positioned in alignment with said frame opening and means for removably retaining said frame across said bottom member.

1,899,733. BOILER CLEANER. NORMAN L. SNOW, New Canaan, Conn., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed May 19, 1924, Serial No. 714,513, Patent No. 1,756,394. Divided and this application filed Mar. 31, 1930. Serial No. 440,510. 11 Claims. (Cl. 122—392.)

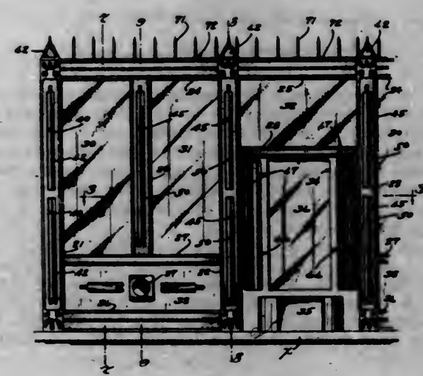


1. In a boiler cleaner, the combination with a blower element, of a valve for controlling the admission of cleaning fluid thereto, a pivotal lever so associated with the valve that swinging movement of the lever effects an actuation of the valve, and means operable upon continuous movement of said blower element in one direction for positively swinging the lever in opposite directions.

1,899,734. REMOVAL OF OXIDS FROM FERROUS METAL. FRANKLIN STOCKTON, Pittsburgh, Pa., assignor to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed Jan. 18, 1930. Serial No. 421,816. 2 Claims. (Cl. 148—8.)

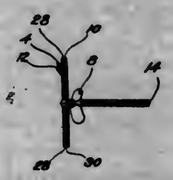
1. The method of removing oxid in the form of scale resulting from heating ferrous metal articles from said articles which includes as a step the immersion of the articles in a solution containing approximately 20 per cent. sodium hydroxid (NaOH) and approximately 1 per cent. potassium permanganate ($KMnO_4$).

1,899,735. BULLET-RESISTING STRUCTURE. OLIVER B. MCCLINTOCK, Minneapolis, Minn., assignor to O. B. McClintock Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Jan. 22, 1932. Serial No. 588,089. 16 Claims. (Cl. 20—1.01.)



1. A structure of the class described having a post provided with a sound opening and a baffle that is laterally spaced and offset with respect to said post and sound opening to form a tortuous passage and cut off straight line vision through the sight opening in the post.

1,899,736. OPHTHALMIC MOUNTING AND METHOD OF MAKING THE SAME. JAMES AUGUSTUS SWEENEY, Providence, R. I. Filed Mar. 9, 1929, Serial No. 345,862. Renewed July 18, 1932. 3 Claims. (Cl. 88—47.)

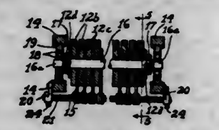


1. An ophthalmic mounting comprising a bendable member having a groove rectangular in cross section, and a correspondingly shaped bendable layer of enamel in the groove, the enamel being constituted of charcoal and gum resin.

1,899,737. RESILIENT GRIZZLY AND SCREEN. CHARLES B. ULRICH, Jamestown, N. Y. Filed May 26, 1930. Serial No. 455,593. 7 Claims. (Cl. 209—104.)

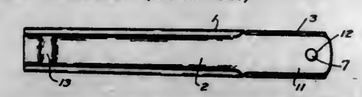
7. In a screen, the combination of a plurality of rollers, each of said rollers consisting of a plurality of first disks of resilient material of substantially the same diameter and thickness, a plurality of second disks of smaller diameter than said first disks and of a thickness substantially equal to the maximum smallest dimension of pieces of

material of largest size intended to pass through the screen, a shaft for each of said rollers supporting said first and second disks in alternate arrangement thereon, means



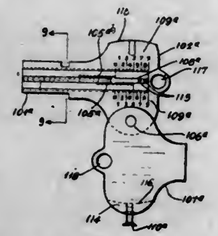
carried by each of said shafts for holding the corresponding disks thereon, and bearings supporting said rollers in parallel relation.

1,899,738. RAZOR BLADE HOLDER. JOSEPH VOGT, Peekskill, N. Y. Filed July 21, 1932. Serial No. 623,789. 3 Claims. (Cl. 30—25.)



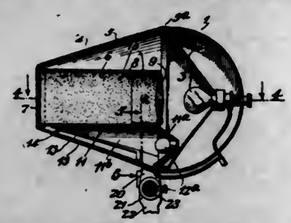
1. In combination, a back having tapering flanges at the sides and an extension at one end, projections on said extension adapted to hold razor blades, and a front plate having a projection at one end and an opening at the other adapted to receive one of the projections on the back, said front plate adapted to slide into the flanges of the back and be held therein in such a position that it will clamp razor blades to the back.

1,899,739. KEY. OSWALD D. VON MEHREN, New York, N. Y., assignor to Mehren Lock Co., Inc., Clifton, N. J., a Corporation of New Jersey. Filed Feb. 26, 1929, Serial No. 342,723. Renewed July 26, 1932. 15 Claims. (Cl. 70—9.)



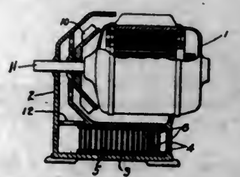
1. A combination lock key embodying a blank having shank and handle portions, lock operating plungers extending longitudinally of the shank and parallel to one another and housed wholly within the confines of the blank to be supported for their entire lengths at all times, said plungers being mounted for longitudinal adjustment relative to the shank and each other, and means for locking all of the rods against inadvertent movement.

1,899,740. AUTOMOBILE HEADLIGHT. WILLIAM J. WALSH, Jersey City, N. J. Filed Apr. 29, 1931. Serial No. 538,585. 2 Claims. (Cl. 240—41.3.)



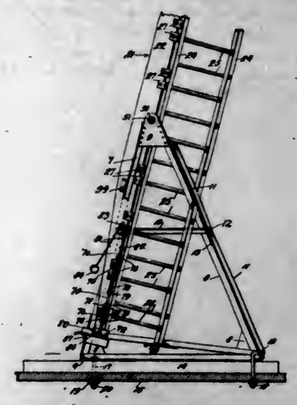
1. A unit for mounting in front of a headlight comprising a substantially horizontal tubular light director to direct a beam of light forward from the headlight and limit lateral dispersion, means forming a compartment at the under side of said director and including a reflector having a forwardly facing rear portion and a horizontally elongated downwardly facing portion extending forward from said rear portion, a lamp mounted in said compartment in a position to have its rays directed forward and downward by the reflector, the compartment having an aperture at its under side for passage of the rays from said lamp and reflector forward and downward, a door for said aperture having a transparent panel, all of said elements being joined together in the unit, and means to detachably connect the unit to the headlight.

1,899,741. DYNAMO-ELECTRIC MACHINE. FRIEDRICH BAUER, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 20, 1930, Serial No. 453,919, and in Germany May 24, 1929. 2 Claims. (Cl. 172—239.)



1. A unitary electrical device comprising a direct-current motor, a current-rectifying device for supplying direct current to said motor from an alternating-current source, a casing enclosing both said motor and said rectifier, and a fan for circulating air through said casing to cool both the rectifier and the motor.

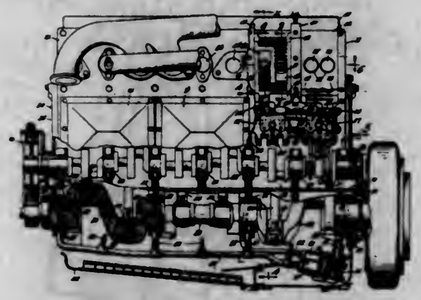
1,899,742. EXTENSION LADDER. CHARLES A. BAY, Morristown, N. J. Filed May 29, 1930. Serial No. 457,010. 7 Claims. (Cl. 228—6.)



1. In apparatus of the class described, the combination with a supporting frame, of a ladder pivoted thereon, ladder latching means to hold said ladder in raised position, and means controlled by said ladder latching means to indicate when latching is effected.

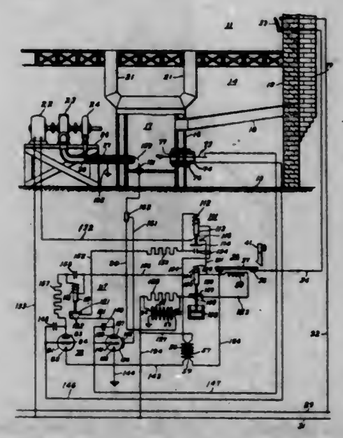
1,899,743. SLIDE VALVE ENGINE. GEORGE P. BERRY, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 13, 1928. Serial No. 325,881. 13 Claims. (Cl. 123—188.)

1. In an internal combustion engine, a cylinder, a wall having therethrough adjacent circular intake and exhaust ports opening into the cylinder, a wall spaced from the first-mentioned wall so as to form therebetween a valve chamber and having therethrough circular intake and exhaust ports in axial alignment with the intake and exhaust ports in the first-mentioned wall, a reciprocating valve through which extend a pair of ports whose outer transverse edges are of arcuate contour mounted to slide in the chamber adjacent the first mentioned wall, a reciprocating valve through which extend a pair of ports, one having an inner transverse edge of arcuate contour mounted to slide in the chamber adjacent the second mentioned wall and means to operate the valves so as to open the



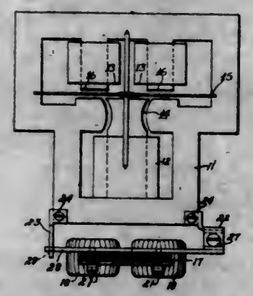
exhaust port by moving the outer edge of one of the ports in the first-mentioned valve over the inner edge of the exhaust port in the first-mentioned wall, to close the exhaust port by moving the inner edge of the second-mentioned port in the second-mentioned valve over the outer edge of the exhaust port in the second-mentioned wall, to open the intake port by simultaneously moving opposite edges of the other ports in the valves over each other when those edges are located intermediate the inner and outer edges of the intake ports in the walls, and to close the intake port by moving the outer edge of the last-mentioned port in the first-mentioned valve over the inner edge of the intake port in the first-mentioned wall.

1,899,744. OIL BURNER CONTROL SYSTEM. JOHN V. BREISKY, Pittsburgh, and THOMAS DRAPER, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 9, 1928. Serial No. 318,294. 8 Claims. (Cl. 158—28.)



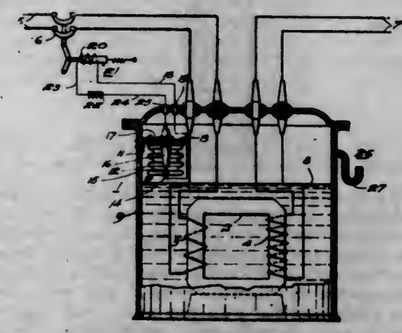
1. In fuel burner control apparatus, an ignition system, a plural electrode electric discharge device capable of being excited by said ignition system, a fuel supply system capable of being actuated by the excitation of said discharge device, a contactor capable of responding to the condition of said fuel supply system to interrupt the action of said ignition system, and thereby to deenergize said electric discharge device and means responsive to the condition of the fuel adapted to hold said plural electrode tube in a state of excitation.

1,899,745. PROTECTIVE APPARATUS. JOHN V. BREISKY, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 20, 1930. Serial No. 489,826. 9 Claims. (Cl. 172—278.)



1. In an induction-disc-type electro-responsive means, energizing means therefor including primary and secondary windings, means movably associated with said primary winding for effecting a proportionate degree of energization of said secondary winding in accordance with the magnitude of flux linkage between said primary winding and said associated means.

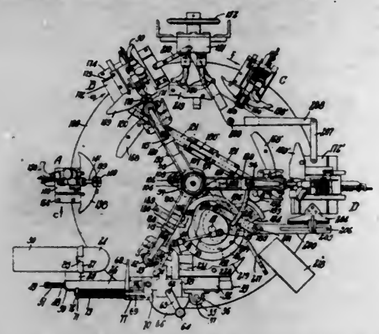
1,899,746. PROTECTIVE SYSTEM FOR TRANSFORMERS. ROY L. BROWN, Sharpsville, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 3, 1929. Serial No. 352,108. 5 Claims. (Cl. 175—294.)



2. In combination, a sealed casing containing oil, a translating device submerged therein, a power circuit connected to said translating device, a circuit-interrupting means for disconnecting the translating device from the power circuit, an electro-magnet for actuating said interrupting means, and means responsive to a fault within said casing for actuating the aforementioned electromagnet, said means comprising a collapsible member responsive only to a rapid increase in pressure within said casing, a contact member associated with said collapsible member, a stationary contact member located within the collapsible member and so positioned as to be engaged by the contact member associated with the collapsible

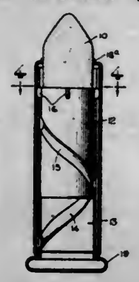
member upon a predetermined rate of change in the pressure condition within said sealed casing, the collapsible member being so biased as to normally keep the contact members apart.

1,899,747. HEEL-TRIMMING MACHINE. MALCOLM S. CATE, Waltham, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Aug. 16, 1929. Serial No. 386,389. 18 Claims. (Cl. 164—63.)



18. In a trimming machine the combination of a carrier adapted to be moved step by step, a work holder mounted for rotary movement on said carrier, a trimming device normally urged toward the carrier and adapted to be moved in a direction transverse to said normal urge, and means for indexing said carrier, rotating the work support thereon, and effecting transverse movement of the trimming device in determinate timed sequence.

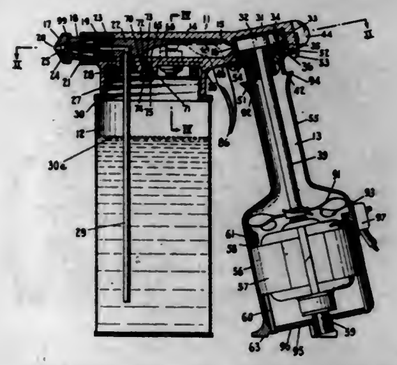
1,899,748. RECEPTACLE FOR LIP STICKS. EDWARD S. CORNELL, Jr., Watertown, Conn. Filed Sept. 19, 1931. Serial No. 563,779. 11 Claims. (Cl. 206—56.)



1. In a receptacle, the combination of a carrier member for containing the article to be dispensed, an outer member serving as the wall of the body of the receptacle, a bottom member for the receptacle, and a member disposed intermediate said carrier member and said outer member, said intermediately disposed member and said carrier member being provided with cam groove and cam bead follower elements for supporting and displacing said carrier member to and from concealed and exposed positions, said carrier member and said intermediately disposed member having a length materially less than said outer member, said bottom member being operatively connected with said intermediately disposed member.

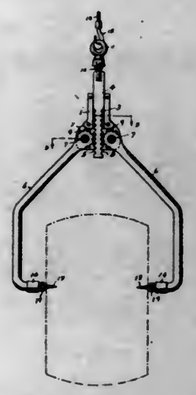
1,899,749. SPRAYING DEVICE. SIMON DEUTSCH, South Bend, Ind., assignor to The Electric Sprayit Company, South Bend, Ind., a Corporation of Delaware. Filed Feb. 25, 1929. Serial No. 342,611. 7 Claims. (Cl. 299—89.)

1. In an atomizing device, a container for liquid to be atomized, a compressed fluid discharge duct, a discharge nozzle at the end of said duct, a liquid discharge duct extending from near the bottom of said container into said fluid discharge duct and having a discharge tip back of the opening of said nozzle, a source of compressed fluid, means for producing a continuous flow of said fluid into said fluid discharge duct and said container, and valve means for controlling the pressure conditions in said container to cause liquid from said container to be discharged through said tip or to cause fluid from said duct to flow in a reverse direction through said liquid discharge duct into said container.



6. A hand-portable spraying machine comprising a compressor unit including an electric motor and an air compressor driven by said motor, said motor having an enclosure surrounding its interior, a compressed air supply duct connected to said compressor, a spray unit at the end of said duct, a container for liquid to be sprayed joined to said duct and connected to cause compressed air supplied by said compressor to atomize liquid from said container through said spray unit, and a fan on said compressor unit driven by said motor and mounted to suck cooling air from the space outside said motor and discharge it over said compressor without passing it through the interior of said motor.

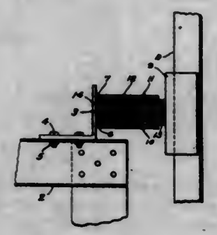
1,899,750. GRAPPLE. JOSEPH W. O. DORMAN, Houston, Tex. Filed Jan. 8, 1932. Serial No. 585,438. 1 Claim. (Cl. 294—106.)



A grapple including a head formed of sections bolted together, spaced side plates integral with and depending from said sections, said head having a longitudinal bearing aligned with the space between said plates, a rack bar slidable in said bearing and having oppositely disposed

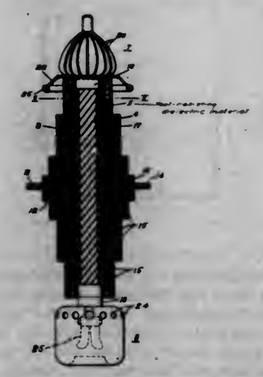
rack faces, hooks mounted at one end to pivot between said side plates, arcuate racks formed integrally with the pivoted ends of said hooks and in mesh with said rack faces said hooks having portions which diverge from the head and having outer end portions disposed in parallel relation and whose free ends are turned inwardly, said inwardly turned portions being enlarged and being provided with internally threaded sockets, spikes fitted into said sockets whose inner ends have enlarged heads and whose outer ends are pointed and glands fitted over said spikes and screwed into said sockets whose inner ends abut the corresponding heads to retain said spikes in place.

1,899,751. ELEVATOR GUIDE. JAMES DUNLOP, Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company, a Corporation of Illinois. Filed Dec. 20, 1929. Serial No. 415,457. 4 Claims. (Cl. 187—95.)



1. In an elevator system, a hatchway, an elevator operable in said hatchway, guide rails for said elevator, guide-rail shoes therefor, a lateral extension on each of said shoes, a lateral extension on said elevator opposite each of said first named extensions, the adjacent ends of said extensions being telescoped the one within the other and a vibration-absorbing non-metallic member interposed between the adjacent lateral extensions, whereby they are maintained in spaced concentric relations.

1,899,752. HIGH VOLTAGE BUSHING. WALTHER ESTORFF, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 8, 1929, Serial No. 361,321, and in Germany May 10, 1928. 3 Claims. (Cl. 173—18.)



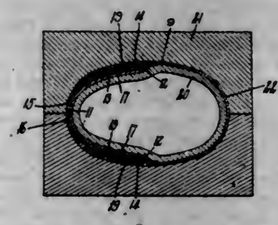
1. A high-voltage bushing comprising a tubular body of insulating material, a conductor therein, cooling means connected to said conductor adjacent to one end thereof and a single means for controlling the electrostatic field of the bushing and shielding said cooling means from said field.

1,899,753. MONEY CLIP. GUSTAV E. FELSENTHAL, New York, N. Y. Filed Nov. 28, 1931. Serial No. 577,780. 1 Claim. (Cl. 24—81.)



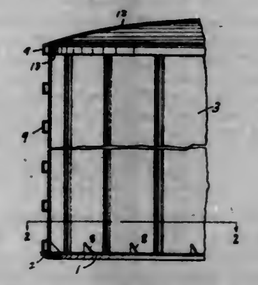
A clip for holding paper money in folded condition having a broad flat body portion and integral gripping tongue members of substantial contact area at each extremity bent in reverse direction to one another with their ends in contact with the body portion, said tongue members being of different lengths, the longed tongue adapted to frictionally hold the middle part of the bills in position, the shorter one adapted to engage the folded over edges of the bills.

1,899,754. MOLDED PAC TYPE BOOT AND PROCESS OF CONSTRUCTING SAME. ALFRED A. GLIDDEN and THOMAS M. KNOWLAND, Watertown, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed June 13, 1929. Serial No. 370,593. 11 Claims. (Cl. 18—56.)



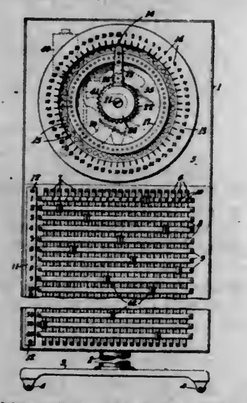
4. A step in the process of constructing a rubber boot having a gusset in the leg portion thereof which consists in spacing the longitudinally and transversely curved folds of the gusset apart, and also spacing portions of adjacent surfaces of said gusset and leg portions apart during the molding and vulcanizing operation, and smoothing said surfaces by confining mold pressure.

1,899,755. WELDED TANK CONSTRUCTION. ERIC GRIGIS, Houston, Tex. Filed Feb. 1, 1929. Serial No. 336,799. 4 Claims. (Cl. 220—75.)



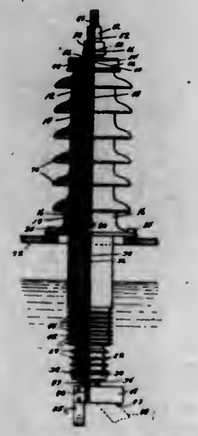
3. A tank having a bottom, vertical wall plates erected on the bottom, the adjacent vertical edges of the plates being offset outwardly and free edges of said offset portions confronting each other and being spaced apart, a strip of fusible metal between said spaced edges and welded thereto.

1,899,756. MACHINE FOR CONTROLLING LIGHT INTENSITIES OF MOTION PICTURE PRINTERS. HERMANN JANSSEN and EDMUND WISNIEWSKI, New York, N. Y. Filed July 9, 1931. Serial No. 549,634. 5 Claims. (Cl. 95—75.)



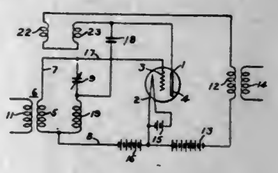
1. In a machine of the class described, the combination of a circuit for a film printing light having a series of terminals corresponding to scenes of the film, a closer for energizing said circuit successively through each of said terminals, mechanism actuated by the movement of the film to relatively move said closer to automatically continue energizing said circuit an indefinite number of times through said series of terminals, a rheostat in said circuit having a series of contacts corresponding to light intensities, a series of conductors in said circuit corresponding to said terminals and scenes of the film, a device for each of said conductors accessible to manipulation while the machine is in operation to selectively join the conductor with any one of said contacts to permit setting of the devices of the initial conductors and terminals while said closer is cooperating with the subsequent terminals and conductors, and means to disengage said closer from and reengage it with said mechanism while the machine is in operation to selectively contact it with any one of said terminals.

1,899,757. INSULATOR. GUSTAV JANSSON, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 23, 1926. Serial No. 89,889. 15 Claims. (Cl. 173—318.)



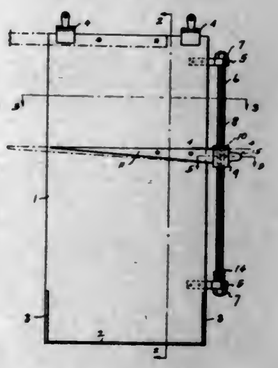
1. In an electric insulator, the combination of an outer insulating tube having a series of integral petticoats, an inner insulating tube having straight tubular walls, coextensive with the length of said outer tube and an enlarged externally corrugated section disposed below the lower end of said outer tube, a metal cap overlying the upper ends of said tubes, and attached to said outer tube only, and an attaching flange connected with said outer tube intermediate its ends.

1,899,758. AMPLIFYING SYSTEM. KENNETH W. JARVIS, Cincinnati, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 17, 1926. Serial No. 123,211. 9 Claims. (Cl. 179—171.)



9. In an inherently oscillatory thermionic-tube amplifier, feed-back means for preventing self oscillation over the range of frequencies for which said amplifier is designed and additional feed-back means for preventing self-oscillation at frequencies above said range, one of said feedback means being capacitive and the other inductive in character.

1,899,759. COPYHOLDER. FLOYD J. KAVANAUGH, Galveston, Tex. Filed Oct. 26, 1929. Serial No. 402,604. 1 Claim. (Cl. 120—33.)

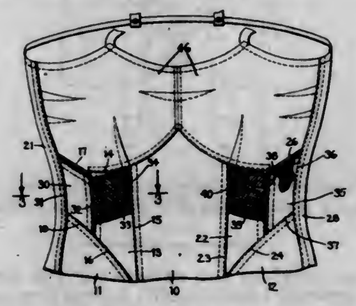


In a copy holder having a rod for supporting a line finder bearing, said rod having a longitudinal groove; a bearing slidable on said rod, a line finder attached to the bearing, an outwardly extending grip on said bearing, said bearing being also turnable on the rod, a spring dog housed within the bearing and having a free portion which normally runs in said groove and which is shaped to ride out of said groove, upon the turning of the bearing, and to thereupon grip said rod to retain said bearing in a selected position on the rod, and a bushing in the bearing above said dog and closely surrounding the rod, said bushing being formed to retain a lubricant for lubricating the rod.

1,899,760. CHANGEANT OR OPALESCENT GLASS. NORBERT KREIDL, Reitendorf a/Tess, Czechoslovakia, assignor to Firm Glashuttenwerke vorm. J. Schreiber & Neffen, Reitendorf a/Tess, Czechoslovakia. Filed July 30, 1930, Serial No. 471,894, and in Czechoslovakia Aug. 8, 1929. 6 Claims. (Cl. 49—82.)
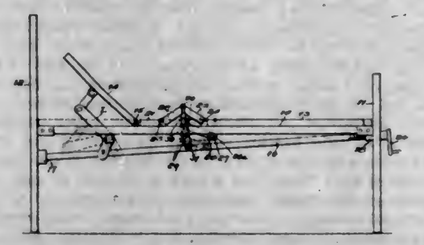
1. A changeant glass comprising a plurality of layers, at least one of which is of a fluorescent light-transmitting glass and at least one of which is a differently intensely colored, light-transmitting glass.

1,899,761. GARMENT. WALDEMAR KOPS, New York, N. Y., assignor to Kops Brothers, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 20, 1931. Serial No. 569,880. 5 Claims. (Cl. 2—30.)



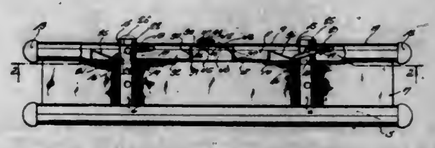
1. A garment of the class described comprising a girdle, a pair of elastic bands in the front portion of said girdle adjacent the top, said bands being stitched to said girdle along their ends and their lower edges but being free of said girdle along their upper edges to permit the upper edge of the girdle to yield, an inelastic wing member superposed over each of said bands, and an elastic member attached to each of said wing members and to the front portion of said girdle, each of said bands and a related elastic member extending upwardly at an angle from a common vertical line at the front of the garment.

1,899,762. BED. ZACK S. LOGAN and WILLIAM P. PIKE, Louisville, Ky., assignors to The Logan Co., Louisville, Ky., a Corporation of Kentucky. Filed Aug. 25, 1930. Serial No. 477,598. 5 Claims. (Cl. 5—66.)



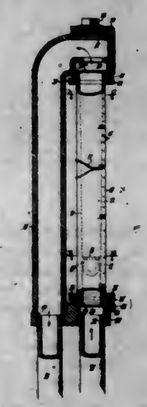
2. The combination with a bed frame, of a spring frame section fixed to said bed frame, a pair of body supporting spring frame sections hinged to each other and to the fixed section, an operating shaft disposed to reciprocate longitudinally of the bed frame, a pair of transverse shafts, one mounted on the bed frame and the other to swing in an arc about the first said shaft, a plurality of arms connecting said transverse shafts, connections between the movable transverse shaft and the body supporting spring frame sections, and a connection between the movable transverse shaft and the longitudinal shaft whereby movement of the latter causes the former to swing about its pivot and raise and lower the body supporting frame sections.

1,899,763. LOOSE LEAF BINDER. ADOLPH G. LOTTER, Milwaukee, Wis., assignor to Stationers Loose Leaf Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 2, 1931. Serial No. 560,752. 7 Claims. (Cl. 129—12.)



6. In a loose leaf binder including a post and a hollow binder head engageable therewith, a locking element within the binder head and engageable with the post for securing the binder head and post against relative movement in one direction, means mounting said locking element for movement to and from operative position, a releasing member within the binder head and shiftable to move the locking element out of one position and towards the other, an actuator carried by the releasing member and extending externally of the binder head, and a connection between the actuator and the binder head for securing the releasing member against accidental actuation from either of its limits of movement, said connection requiring depression of part of said actuator into the binder head to effect its release.

1,899,764. GAS-MEASURING DEVICE. ADOLPH W. MACHLET, Elizabeth, N. J. Filed Dec. 2, 1929. Serial No. 410,956. 2 Claims. (Cl. 73—167.)



2. The process of making one piece flow-meter tubes having conical bores comprising providing molded transparent tubes having a generally conical bore and of a material that may be readily machine cut, then machine cutting the interior of each tube to provide a conical bore corresponding to the degree of precision of a selected standard tube, and graduating the tubes precisely alike corresponding to such standard tube.

1,899,765. METHOD OF COATING THERMIONIC CATHODES. LEON MCCULLOCH, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 22, 1928. Serial No. 301,443. 8 Claims. (Cl. 250—27.5.)

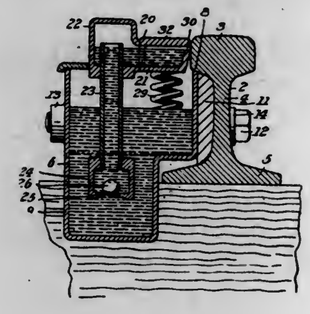
1. The process of treating a conductive element which comprises coating said element with an aqueous solution of a trinitride of an alkaline earth metal and subsequently heating said element in the decomposition temperature of the trinitride in an atmosphere of carbon dioxide.

1,899,766. CONVEYER. JAMES B. MCWILLIAMS, Pittsburgh, Pa. Filed Nov. 25, 1930. Serial No. 498,080. 3 Claims. (Cl. 198—198.)



3. As an article of manufacture, a conveyer belt comprising a fabric reinforced body portion having upwardly extending elastic side walls formed integrally with the body portion, the side walls of one end section of the conveyer extending into overlapping relationship with the side walls of another end section, there being readily deformable cleats extending transversely of the conveyer belt and formed integrally with the body and said side walls.

1,899,767. LUBRICATOR. LAWRENCE A. MERK, Pittsburgh, Pa., assignor to Railway Maintenance Corporation, Aspinwall, Pa., a Corporation of Pennsylvania. Filed Apr. 26, 1929. Serial No. 358,265. 9 Claims. (Cl. 184—3.)



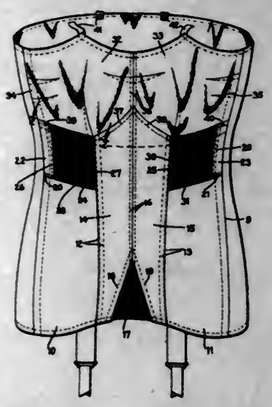
1. A lubricator, comprising a tank adapted to contain lubricant, a reservoir having a portion within the tank forming a conduit between the tank and reservoir, a check valve in the conduit, the reservoir being movable in relation to the tank to replenish the reservoir, the check valve preventing backflow into the tank, means operable by a moving car for causing movement of the reservoir, and an outlet from the reservoir for applying lubricant, the reservoir being adapted to contain a substantial quantity of standing lubricant, the outlet having a substantially horizontal lower surface over which the standing lubricant may easily flow.

1,899,768. SAWDUST WOOD FIBER BOARD AND METHOD OF MAKING SAME. JAMES V. NEVIN, Scotia, Calif., assignor to The Pacific Lumber Company, San Francisco, Calif., a Corporation of Maine. Filed Dec. 22, 1930. Serial No. 504,217. 10 Claims. (Cl. 18—55.)

10. Nailable, sawable and flexible synthetic lumber consisting of a large proportion (80–90%) of coarsely fibrous wood and a small proportion (10–20%) of a hardened synthetic resin.

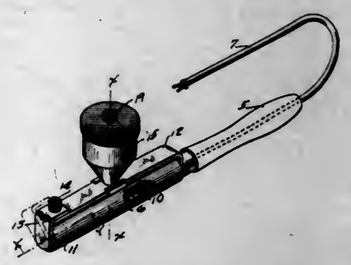
1,899,769. GARMENT. GERTRUDE NICKERSON, Milford, Conn., assignor to Kops Brothers, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 4, 1931. Serial No. 561,127. 3 Claims. (Cl. 2—30.)

1. A combination garment comprising a front, girdle member having a central portion extending above the waist-line, a brassière attached to the upper edge of said central portion, anchor members between said front member and said brassière and attached to both at the sides thereof, and a pair of elastic straps extending from said



anchor members to the edges of said central portion, said straps being secured along their lower edges to said front member.

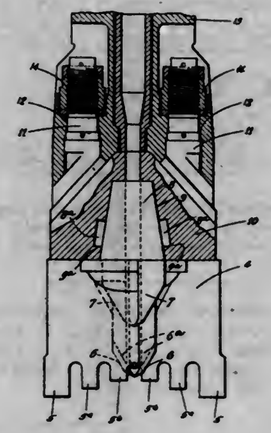
1,899,770. METHOD AND APPARATUS FOR PROMOTING OSMOTIC ABSORPTION. HERBERT OPPENHEIMER, New York, N. Y. Filed June 26, 1926. Serial No. 118,637. 9 Claims. (Cl. 128—57.)



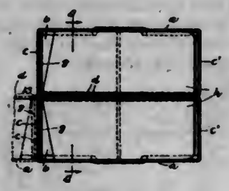
5. A massaging element comprising an elongated handle, an elongated heating element attached to said handle and extending longitudinally thereof, a frame comprising a portion disposed between the heating element and the handle, and extending at right angles to the axis of said handle and a second portion extending from said first portion and extending parallel to said heating element and spaced therefrom, an elongated hollow roller rotatably mounted on said heating element, an angle shaped member having a portion screwed to the free end of said second portion of said frame and a portion parallel to said first portion of said frame adapted to contact one end of said roller, said second portion of said frame being provided with a screw threaded opening, and a container having a portion screwed to said opening and being provided with an opening to permit substance within said container to pass to said roller.

1,899,771. BLADE TYPE BIT. CLARENCE E. REED, Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 5, 1929. Serial No. 383,707. 3 Claims. (Cl. 255—61.)

1. An earth boring bit for rotary drilling designed for deep and fast penetration having a transverse row of stepped and spaced teeth with wide and deep grooves therebetween for initially engaging the formation, a second transverse row of stepped and spaced clean-up teeth at right angles to said first row for cutting out the material left by the teeth of said first row, the outer teeth of both said rows being of greatest forward projection and the other teeth of both said rows being of less forward projection as the vertical axis of the bit is approached, and reaming wings for maintaining the gauge of the drill hole, said wings being disposed in the transverse plane of said row of clean-up teeth but at a higher horizontal level than any of said clean-up teeth.

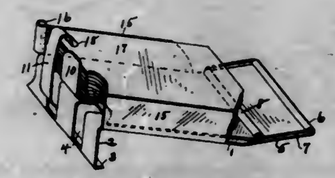


1,899,772. FOLDABLE PAPER CARTON. RALPH R. RICHARDSON, Chicago, Ill., assignor to Chicago Carton Company, Chicago, Ill., a Corporation of Illinois. Filed May 7, 1930. Serial No. 450,367. 2 Claims. (Cl. 229—27.)



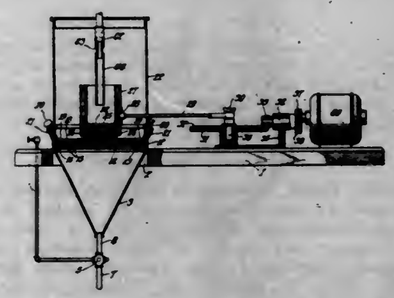
1. A foldable carton formed of a single, substantially rectangular, paper-board blank, and comprising two compartments each having a bottom wall and opposite side and end walls hinged to the bottom wall with the inner adjacent end walls connected at their upper edges along a creased fold line and with slots formed in the blank adjacent the edges of the bottom and side walls, the said side walls having foldable flaps on their outer edges provided with tongues for engaging said slots and said end walls having foldable flaps on their end edges of slightly less height than said end and side walls and arranged to extend between the side walls and the flaps thereof, and covers for the compartments having separate foldable flanges at their end and side edges of substantially the same height as said side and end walls and adapted to extend within the compartments and rest upon the bottom walls, substantially as described.

1,899,773. MEMORANDUM PAD. WILLIAM A. RINGLER, Wayne, Pa., assignor to Frank A. Weeks Mfg. Co. Inc., New York, N. Y., a Corporation of New York. Filed July 11, 1931, Serial No. 550,098. Renewed Oct. 1, 1932. 12 Claims. (Cl. 40—120.)



1. A memorandum pad, consisting of a pad support, a pad carrier and a hinged member connected with said pad support and pad carrier, said carrier having sheet retaining clips which interlock with the rear portion of the pad support.

1,899,774. METHOD OF AND APPARATUS FOR TESTING LOADING MATERIAL USED IN PAPER MANUFACTURE. HENRY A. ROTHCHILD, Appleton, and JOHN A. LIMPERT, Kimberly, Wis., assignors to Paper Patents Company, Neenah, Wis., a Corporation of Wisconsin. Filed Oct. 25, 1929. Serial No. 402,365. 14 Claims. (Cl. 73—51.)



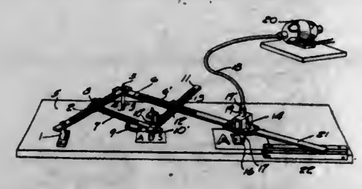
4. The method of testing loading material for use in paper manufacture that consists in exposing a section of Fourdrinier screen of predetermined weight to the frictional or wearing action of a volume of liquid containing loading material in suspension, circulating said liquid through said screen for a definite period, and thereafter weighing said screen section to ascertain the percentage of loss in weight due to said exposure.

8. An apparatus for testing loading material for use in paper manufacture, comprising the combination of a tank, a support adapted to receive a sheet and arranged transversely of said tank, a body mounted adjacent said support and means for moving said body in frictional relation with the sheet on said support.

1,899,775. INSTRUMENT FOR INDIVIDUAL VARYSIZING OF TYPE. ALBERT E. SCHNABLE, New York, N. Y. Filed June 25, 1927. Serial No. 201,319. 1 Claim. (Cl. 90—13.1.)
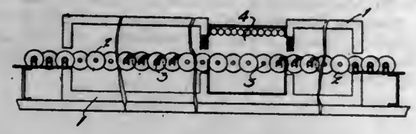
An instrument having a pantograph with a fixed pivotal support, a table for copy and matrix support in substantially the same plane, a reproducing drill-supporting arm forming a part of said pantograph having a freely floating table engagement near one end, a sill for the engagement of the other end of said arm adjustable for a

normal cutting position of the drill and yieldable to permit variable depression of the arm simultaneous with its guidance for routing, an intermediate drill chuck carried by said arm suspended between said two supports and



flexible driving means actuated by a remotely supported motor, said sill having members resiliently pressed apart, and adjustable means limiting their movement away from each other.

1,899,776. MEANS FOR PREVENTING SCALE IN ANNEALING FURNACES. ALBERT H. SHONKWILER and JUSTIN W. MACKLIN, Lakewood, Ohio, assignors to The Otis Steel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 24, 1929. Serial No. 388,143. 10 Claims. (Cl. 51—255.)



1. In a continuous furnace having conveying rollers and a number of parallel shafts therefor, means carried by said shafts and bearing on conveying rollers on another shaft for preventing the formation of irregularities on the rim surfaces of said rollers.

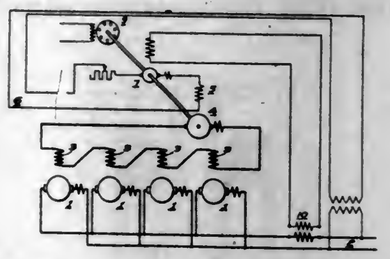
1,899,777. LENS, NATHAN M. STANLEY, Dayton, Ohio, assignor, by mesne assignments, of one-half to The Univis Corporation, Wilmington, Del., a Corporation of Delaware, and one-half to United Kingdom Optical Company, Limited, London, England. Filed Mar. 5, 1929. Serial No. 344,302. 15 Claims. (Cl. 88—54.)



1. In a lens, a major lens and an insert of different glass from the major lens, said insert consisting of a circular member less than a full circle with a flat top, the vertical dimension thereof being greater than the radius of the circle but less than the diameter of the circle.

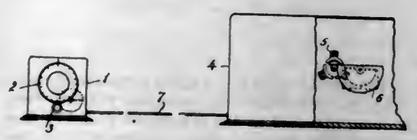
1,899,778. REGENERATIVE BRAKING OF SINGLE PHASE COMMUTATOR MOTORS. ROBERT STIX, Vienna, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 21, 1929, Serial No. 387,305, and in Austria Aug. 22, 1928. 4 Claims. (Cl. 172—276.)

1. In a regenerative braking system, in combination, a single phase commutator motor, a single phase source of power for the motor, a constant speed exciter-generator for exciting the motor, and independent of the motor speed means for differentially exciting the exciter-generator responsive to the single phase current flowing in the power source and to the voltage of the power source to cause a current component in the exciter generator excitation



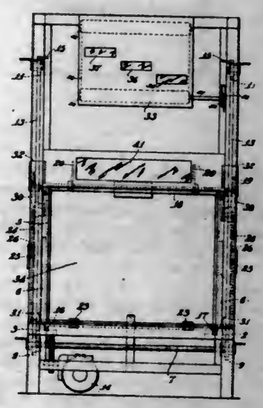
circuit proportional to and in opposition to the regenerated current, thereby to provide for the delivery of a current at the power source having a desired power factor.

1,899,779. REMOTE CONTROL SYSTEM. ROY E. THOMPSON, Nyack, N. Y., assignor to Thompson Patents Corporation, New York, N. Y., a Corporation of New York. Filed July 14, 1928. Serial No. 292,885. 2 Claims. (Cl. 200—12.)



1. Remote control apparatus for a radio receiver comprising a commutator having a plurality of conductive segments, a contact member operable to engage said segments successively, an electromagnetic locking device operable when de-energized to restrain said contact member against operation, and mechanism for positively locking said device in its restraining position while said electromagnetic device is de-energized.

1,899,780. ADVERTISING AND LIKE DEVICES. ERNEST ALFRED TURNER, Keston, England. Filed June 30, 1932, Serial No. 620,142, and in Great Britain May 2, 1931. 9 Claims. (Cl. 40—36.)



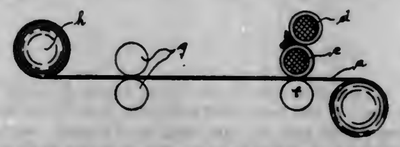
1. A device of the character described comprising a frame, rails extending forwardly and rearwardly with respect to the frame, a series of plates disposed vertically in face to face relationship and slidably mounted on said rails, conveyor means for successively transferring the foremost plate of the series to the rear of the series, and means to slide the series of plates forwardly on said rails each time the foremost plate is transferred to the rear of the series.

1,899,781. STOMACH TUBE OR THE LIKE. JOHN RUSSELL TWISS, New York, N. Y. Filed Apr. 27, 1932. Serial No. 607,875. 20 Claims. (Cl. 128—350.)



6. An appliance of the class described, comprising a flexible conduit tube and a bucket attached thereto, said bucket having its wall intermediate its relatively larger end portions depressed relative to said end portions and perforated, and a channel extending through said relatively larger end portions and communicating with the perforation for the passage of fluid between said channel and the interior of the bucket and conduit tube, said channel opening to the outside of the bucket and guarded by the end portion against closure by a collapsed wall of the cavity in which the bucket is located.

1,899,782. MATERIAL FOR FACING BOTTLE CAPS AND METHOD OF MAKING SAME. ALBIN H. WARTH, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 17, 1929. Serial No. 414,614. 9 Claims. (Cl. 91—68.)



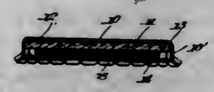
3. As a new article of manufacture, paper having a high gloss and having a coating of varnish on one surface of the paper and a coating of gutta percha on the other surface thereof.

1,899,783. BOTTLE CAP AND METHOD OF MANUFACTURING SAME. ALBIN H. WARTH, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md., a Corporation of New York. Original application filed May 5, 1929, Serial No. 360,895. Divided and this application filed Oct. 31, 1930. Serial No. 492,546. 6 Claims. (Cl. 215—39.)



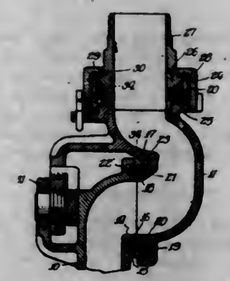
1. A bottle closure comprising a metallic shell, a cushion disk in said shell, a facing disk of hard paper having a varnished outer surface, said disk being of smaller diameter than and concentric with said cushion disk, and a stratum of heat-fusible, acid-resistant and water insoluble adhesive material coextensive in area with the facing disk between the latter and the cushion disk and uniting the two disks.

1,899,784. BOTTLE CAP. ALBIN H. WARTH, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md., a Corporation of New York. Filed Apr. 1, 1931. Serial No. 527,012. 2 Claims. (Cl. 215—39.)



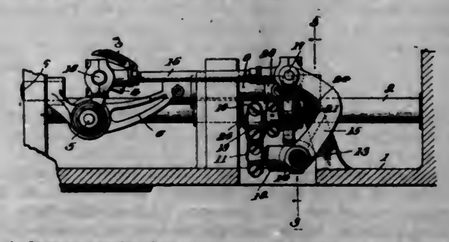
1. A bottle cap having therein a liner of cushion material provided with a facing spot member of slightly porous bleached kraft paper provided on its exposed surface with a coating of varnish, said spot member being united to the cushion material by a backing layer of waterproof adhesive.

1,899,785. GASKET HOLDING MEANS. LEONIDAS D. WOODRUFF, Chicago, Ill., assignor to Harris Trust & Savings Bank, trustee, Chicago, Ill., a Corporation of Illinois. Filed Feb. 21, 1929. Serial No. 341,621. 7 Claims. (Cl. 285—163.)



1. In combination, two cooperating conduit members capable of relative rotation, an annular gasket for preventing leakage between said members, said gasket being within and having engagement peripherally with one of said members, and spring means reacting between said one member and said gasket for preventing relative rotation between said one member and said gasket.

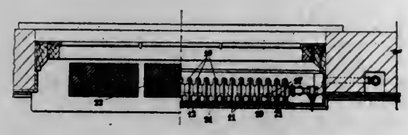
1,899,786. LOOPER MECHANISM FOR SEWING MACHINES. FREDERICK F. ZEIBE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 13, 1929. Serial No. 362,680. 1 Claim. (Cl. 112—200.)



A looper mechanism for sewing machines including a looper, a carrier therefor, a looper support to which the carrier is pivoted, said looper support including a sup-

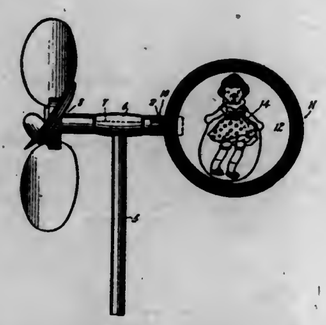
porting shaft, a main shaft at one side of, below and parallel with the supporting shaft, an eccentric thereon, a rock shaft at right angles to the main shaft, an arm carried thereby, a link connecting said arm to said looper carrier, a second arm carried by said rock shaft, an eccentric strap cooperating with the eccentric and connected to said last-named arm, an arm on the supporting shaft depending therefrom, a link pivoted to the eccentric strap adjacent the eccentric and having an adjustable connection with the arm on the supporting shaft whereby the lateral movements of the eccentric strap impart an oscillation to said supporting shaft.

1,899,787. RADIATOR AND THE LIKE. FREDERICK HUGH AUSTEN, Leicester, England, assignor to The Veneeray Invisible Heating Company, Limited, London, England. Filed Aug. 18, 1930, Serial No. 476,133, and in Great Britain Sept. 11, 1929. 7 Claims. (Cl. 257—136.)



6. A radiator comprising a flat face area adapted for presentation towards the room space, a loop element formed integral therewith and projecting rearwardly of said face area to afford a heating surface for circulating air, an aperture formed in said face, and a removable covering panel held in heat transference association with the radiator and having securing means engaged in said aperture.

1,899,788. ANIMATED WIND TOY. JAMES ARTHUR BALDWIN, Lawrence, Mass. Filed Nov. 10, 1932. Serial No. 642,096. 3 Claims. (Cl. 46—14.)



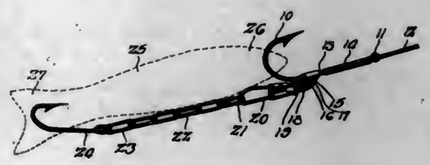
1. A toy including a rotary shaft, a support therefor, a wind wheel at one end of the shaft and a panel at the opposite end of the shaft bearing on its opposite faces co-related pictorial representations adapted to be successively displayed upon rapid rotation of the shaft by the wind wheel, to give the effect of motion or animation to the pictorial representations.

1,899,789. NECKWEAR. JAMES C. BARBETTI, Vineland, N. J. Filed Dec. 30, 1932. Serial No. 649,615. 4 Claims. (Cl. 2—150.)



1. A made-up tie comprising a tie strip including a face and knot formed portion, said knot portion being provided with a neck encircling band portion having a free end, a tail member attached at one end to the knot, said band extending at its free end portion through the knot and longitudinally in the said tail member.

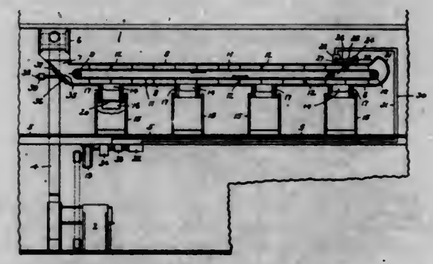
1,899,790. FISHING APPARATUS. ROBERT J. BLUM, Marengo, Ill. Filed May 13, 1931. Serial No. 537,148. 3 Claims. (Cl. 43—40.)



1. A fishing device of the class described including a head hook, a tail hook, and a flexible connection between the head hook and the tail hook, said flexible connection comprising a plurality of link members and a snap carried by said head hook whereby to vary the length of said chain and adjust said head hook and tail hook relative to each other.

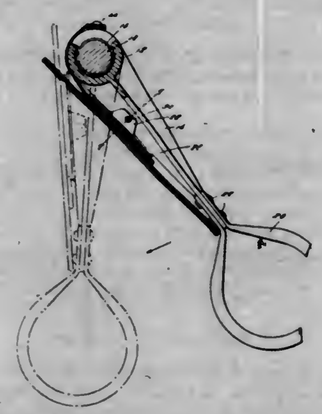
1,899,791. RETURN TYPE RAKE DISTRIBUTOR AND ELECTRIC CONTROL. JOHN B. BRENNEN, Atlanta, Ga. Filed Sept. 19, 1930. Serial No. 483,121. 6 Claims. (Cl. 19—74.)

1. In an automatic electric control for a cotton handling machine, the combination with a cotton cleaning machine, an electric motor, a circuit, of a distributor unit comprising a trough to receive cotton from the cleaning machine, an endless distributor operating therein, the said distributor having transverse series of rake teeth to draw the cotton delivered to the trough, over the bottom thereof, and a series of hoppers to receive cotton delivered from the trough in its passage therethrough, of a feeler positioned to be engaged by surplus cotton carried by the distributor to its upper stretch, upon filling of the hoppers, a limit switch in said circuit and actuated by the movement of the feeler, and a timed relay in circuit with the



limit switch for maintaining the motor out of operation for a predetermined time, independent of the actuation of the feeler.

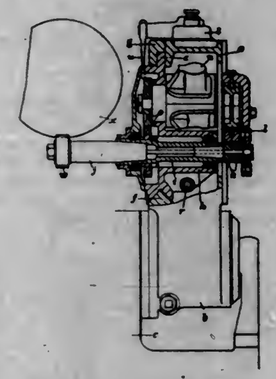
1,899,792. ADVERTISING DEVICE. MICHEL D. BUIVID, Stratford, Conn. Filed Mar. 1, 1932. Serial No. 596,110. 4 Claims. (Cl. 105—354.)



1. The combination with a fixed support and a strap hanger rotatably supported thereon, of an advertising device comprising a holder rigidly secured to said strap hanger, and a plate slidably supported by said holder and bearing advertising matter, said plate having an extension secured to said fixed support whereby rotation of said hanger will slidably move said holder with respect to said plate.

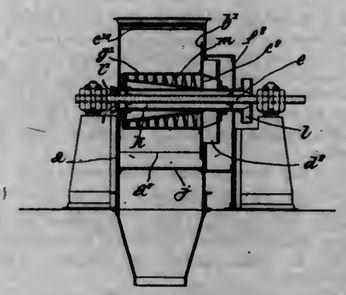
1,899,793. GEAR WHEEL GRINDING MACHINE. RICHARD JOHN BULLOWS, Birmingham, England, assignor to The Gear Grinding Company Limited, Handsworth, Birmingham, England. Filed Apr. 23, 1932, Serial No. 607,175, and in Great Britain Oct. 14, 1931. 3 Claims. (Cl. 51—95.)

1. In gear wheel tooth grinding machines of the kind specified, the combination of a body part, a slide carried on the body part, a work spindle carried on the slide, fluid operated motors adapted respectively for reciprocating the slide and for imparting intermittent indexing movements to the work spindle, and means for imparting to the spindle the motion required for rolling the work piece relatively



to the grinding disc, the whole forming a unit which can be pivotally or otherwise mounted on the bed of the machine in proper relationship with the grinding disc.

1,899,794. DUST SEPARATOR. CHRISTIAN COUPARD, Paris, France. Filed May 15, 1931, Serial No. 537,716, and in Belgium May 17, 1930. 4 Claims. (Cl. 183—77.)

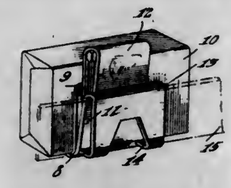


1. An apparatus of the class described comprising a shaft, a filtering element mounted in spaced relation to said shaft, means for guiding a dust laden gas against the external periphery of said filtering element, a discharge conduit, a ventilator mounted on said shaft and operative to draw gases from the interior of said filtering element toward said discharge conduit, and a rotatable conveyer mounted in the interior of said filtering element.

1,899,795. PACKAGE HOLDER. PAUL W. DAVIS and JAMES M. BOOTH, Kansas City, Mo. Filed June 26, 1931. Serial No. 547,118. 2 Claims. (Cl. 224—25.)

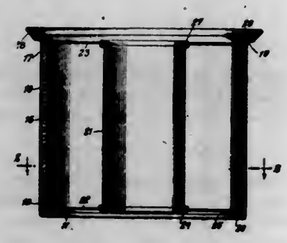
1. In a package holder, a length of material doubled on itself, one end projecting beyond the other end, the said material at the looped end extending at an angle to an intermediate portion and the shorter end of said strip extending parallel with the looped portion and at an angle to the intermediate portion in spaced relation to the looped portion to hold a package, the other end of

said length of material being shaped to occupy a position substantially parallel with the wall formed by the shorter end and in spaced relation thereto and operative to coact



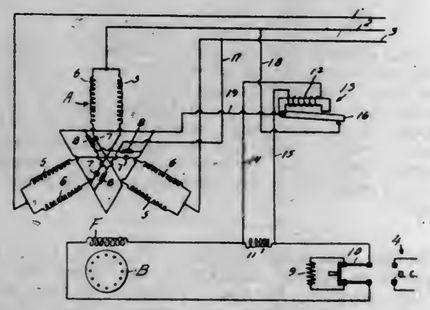
therewith to hold a package between them and a loop formed as a continuation of the longer end of the material adapted to receive a supporting agent.

1,899,796. COMBINED SPOOL AND CONTAINER. GERARD CHARLEMAGNE DEANE, Yonkers, N. Y. Filed Mar. 5, 1931. Serial No. 520,365. 5 Claims. (Cl. 206—52.)



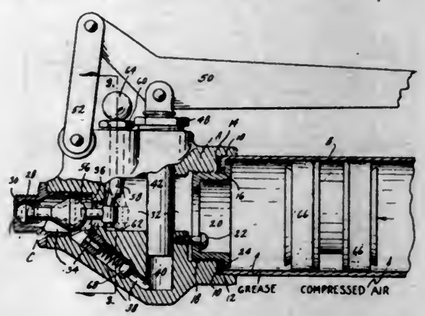
1. A new article of manufacture comprising the combination of a container section, a material holding section, said container section having a rib on the inside thereof extending between the opposite ends thereof, and said holding section having a notched member which co-operates with said rib to detachably retain said holding section associated with the container section subject to the application of turning movement and an outward pulling force on the holding section to detach it from the container section.

1,899,797. DYNAMO-ELECTRIC MACHINE. RUPERT N. EARLY, Minneapolis, Minn., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn. Filed Jan. 25, 1929. Serial No. 334,881. 23 Claims. (Cl. 172—274.)



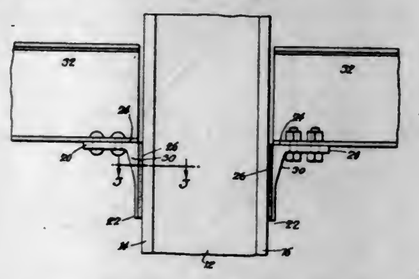
1. The combination of an electric motor having a primary winding comprising two winding sections normally connected in parallel, a secondary winding, and means responsive to the electrical condition of said secondary winding for temporarily interrupting the parallel connection of said primary sections.

1,899,798. GREASE GUN HEAD AND RESERVOIR CONSTRUCTION. IVAN L. EASTMAN, Bryan, Ohio, assignor to The Aro Equipment Corporation, Bryan, Ohio, a Corporation of Ohio. Filed Oct. 17, 1932. Serial No. 638,105. 12 Claims. (Cl. 221—47.3.)



5. For use with a reservoir having grease under pressure therein, a grease gun head construction comprising a grease gun head connected with said reservoir and having a discharge nozzle, a passageway between said nozzle and said reservoir, a valve seat in said discharge nozzle, a second valve seat in said passageway, a valve member in said passageway adapted to be selectively seated against either of said seats or positioned spaced from each of said seats and a booster pump between said reservoir and the portion of said passageway between said seats.

1,899,799. WELDED BRACKET CONNECTION. JAMES H. EDWARDS, Passaic, N. J. Filed June 5, 1928. Serial No. 283,017. 3 Claims. (Cl. 189—36.)

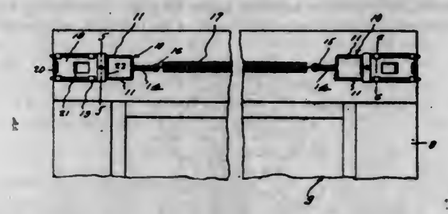


1. A rolled section having a bracket secured thereto adapted to form a seat for a beam or girder, said bracket having legs at an angle to each other, one of said legs being substantially rectangular in cross section, and the other leg having a portion of substantially rectangular cross section which merges into a thickened wedge-shaped fillet portion, and fused metal joints uniting the bracket to said rolled section continuously along the edges of said fillet portion.

1,899,800. WINDOW FIXTURE. WILLIAM F. FERGUSON, Candler, N. C. Filed July 22, 1932. Serial No. 624,098. 1 Claim. (Cl. 156—23.)

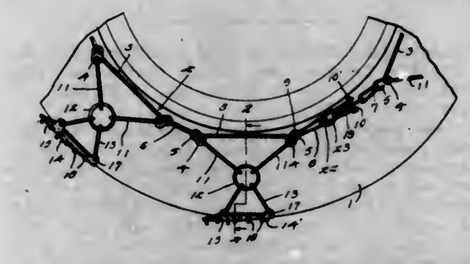
A window fixture construction of the class described comprising, in combination, a pair of duplicate anchoring devices, each device being in the form of a wire frame of general U-shaped form including spaced parallel arms terminating at their free ends in laterally directed anchoring prongs, the bight portion of said frame being formed into a shank terminating in a spring retaining hook, a coiled spring having eyes at its opposite ends detachably connected with the adjacent hooks, a slide for each frame, each slide comprising a plate formed with

integral portions slidably embracing the arms of the frame, and laterally directed adaptation elements to accommodate curtain hangers, window shades and the like,



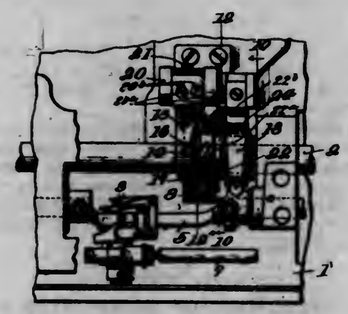
a clamping clip carried by each plate, a retaining bolt for said clip, said clip being engageable with the arms of the frame to hold the slide in an adjusted position.

1,899,801. ANTISKID CHAIN FOR PNEUMATIC TIRES. VINCENZO GRAZIANI, Detroit, Mich. Filed Feb. 27, 1932. Serial No. 595,599. 2 Claims. (Cl. 152—14.)



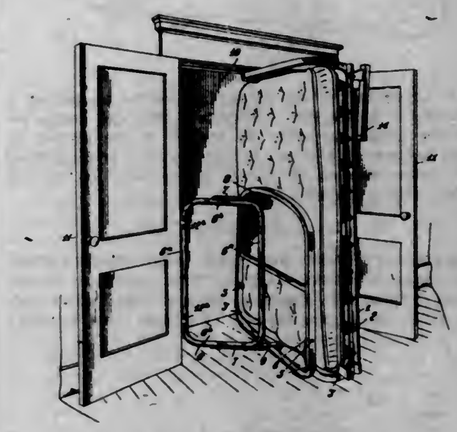
1. An anti-skid device for pneumatic tires, comprising a plurality of traction elements designed to be disposed circumferentially of the tread of a tire and in spaced relation, an annular strand for disposition upon either side of the tire and each comprising a series of bar elements each terminating in an eye at each end and a hook forming a continuation of each eye, links connecting the adjacent hooks of the bar members, and connecting means between the eyes of each bar member and the adjacent side of a traction element.

1,899,802. THREAD CONTROLLING MECHANISM FOR SEWING MACHINES. WALTER M. HANNEMAN, Evansville, Ind., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1928. Serial No. 304,633. 15 Claims. (Cl. 112—248.)



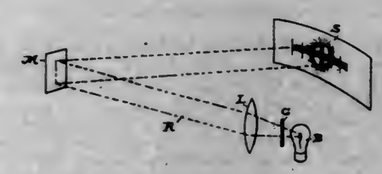
1. A thread controller for sewing machines comprising a rotating shaft, a thread controlling element mounted on said shaft and having a laterally projecting cylindrical flange, thread guides located within and without the periphery of the flange, a stationary cam cooperating with said rotating controller, the edge of said flange being shaped so that the thread is under constant control during the taking up and giving up of the thread and said stationary cam being so positioned relative to the rotating controller as to cooperate therewith in the taking up of the thread and the giving up of the thread.

1,899,803. DISAPPEARING BED. JACOB HOFFMANN, Highland Park, Ill., assignor to Hub Metal Bed Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 12, 1931. Serial No. 568,413. 4 Claims. (Cl. 5—170.)



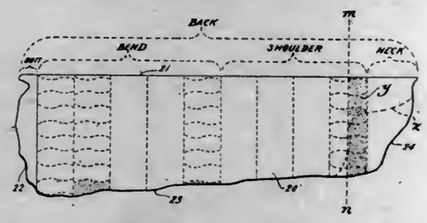
1. A disappearing folding bed comprising a head end frame, a bed spring frame pivotally mounted thereon so as to be movable from vertical to horizontal position, a rectangular supporting member of one piece continuous tubing comprising vertical and horizontal joined arms, horizontally extending bars fastened to said horizontal arms and pivotally connected to substantially the middle of the top and bottom, respectively, of said head end frame adjacent the ends of one of said vertical arms, an anchoring member adapted to be secured in vertical position within a recess in a room, the other of said vertical arms being hinged to said anchoring member.

1,899,804. LINE IMAGE PRODUCER. JOHN J. HOPFIELD, West Lafayette, Ind., assignor to Purdue Research Foundation, La Fayette, Ind., a Corporation of Indiana. Filed July 20, 1931. Serial No. 552,058. 4 Claims. (Cl. 116—14.)



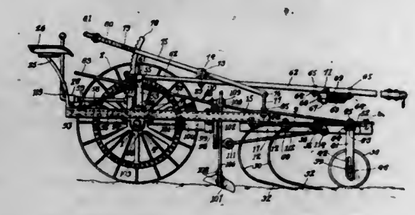
1. Apparatus for determining fine deflections of an object capable of deflection; comprising a source of light, a mirror adapted to be deflected by the object, a scale, and a cylindric member of small diameter and permeable by light interposed between the source of light and the mirror and producing a light line image reflected by the mirror onto the scale.

1,899,805. METHOD OF AND APPARATUS FOR USE IN CUTTING LEATHER. THOMPIKE D. HOWE, Boston, Mass., assignor, by mesne assignments, to Solescope, Incorporated, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 4, 1931. Serial No. 572,928. 42 Claims. (Cl. 164—17.)



34. Apparatus for use in cutting leather comprising a support for the leather, a movable cutter, and means for optically projecting upon the surface of the leather an image designating a proper relative position of the leather and cutter such as to enable the operator to cut the leather with a minimum of waste.

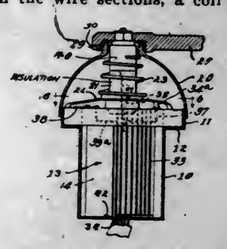
1,899,806. COTTON CHOPPER AND CULTIVATOR. CLAUDIUS V. JONES, Jackson, Miss., assignor of one-half to Howard C. Ferguson, Jackson, Miss. Filed June 4, 1932. Serial No. 615,449. 2 Claims. (Cl. 97—13.)



1. In a cotton chopping machine, a hoe member disposed at an angle to the longitudinal and transverse medians of the machine, a shank to which said hoe member is secured at an angle, and means operatively connected with said shank for imparting a vertically disposed, revolving movement to said hoe member transversely of the machine, said means including a rotatable disc mounted transversely on the machine and having a horizontal axis, an upwardly inclined arm formed on said shank at a right angle thereto, said arm extending transversely of the machine, and means for pivotally connecting the outer end of said arm to said disc eccentrically of the latter.

1,899,807. CONTROLLING DEVICE. HENRY E. KAVANAUGH, Chicago, Ill. Filed Aug. 22, 1928, Serial No. 301,338, and in Canada Oct. 16, 1928. Renewed May 23, 1932. 7 Claims. (Cl. 201—48.)

7. In a switch device, a casing, a cover therefor, a core member of insulating material arranged in said casing and formed from a pair of cooperating sections having semicircular depressions formed in the inner faces thereof to provide a central bore when the sections are joined together, one of said sections being provided with a reduced portion, a length of resistance wire wound about the reduced portion and through the bore in a manner to provide spaced wire sections upon the top of the core, a cylindrical member of insulating material rising from the core member and having a reduced lower end mounted for rocking movement in the bore, a metallic band surrounding the cylindrical member and arranged adjacent the upper end thereof, said band being arranged in spaced relation with respect to the cover, a contact member surrounding the cylindrical member and being secured thereto, said contact member being disposed for wiping engagement with the wire sections, a coil spring surrounding the cylindrical member to normally hold the metallic band out of engagement with the cover, a handle for rotating the cylindrical member for disposing the contact member into and out of engagement with respect to the wire sections, and said handle being adapted to rock said cylindrical member to cause the metallic band to engage the cover.



1,899,808. PROCESS OF COKING CARBONIZABLE MATERIAL. LUDWIG KERN, Webster Groves, Mo. Filed Feb. 23, 1929. Serial No. 342,315. 7 Claims. (Cl. 202—34.)

1. The process of coking solid carbonizable material, which comprises pulverizing said material, treating the pulverized material with a plasticizing agent adapted to react with at least part of said material to convert said material into a plastic mass, and to evolve carbon dioxide and volatile sulfur compounds, forming said plastic mass into briquettes, and subjecting said briquettes to a destructive distillation, and thereby forming coke.

1,899,809. PROCESS OF COKING SOLID CARBONIZABLE MATERIAL. LUDWIG KERN and FERNANDO C. KERN, Webster Groves, Mo. Filed June 18, 1930. Serial No. 462,126. 2 Claims. (Cl. 202—34.)

1. The process of coking solid carbonizable material having gangue constituents predominantly high in silica, comprising comminuting said material to an extent sufficient to mechanically detach gangue constituents from said material, adding a plasticizing agent comprising an alkaline solution to said comminuted material, said alkaline solution reacting with the siliceous constituents of said gangue material to form a binder for the remainder of said carbonizable material and thereby to plasticize the entire mass of comminuted material, subjecting the plastic mass to a destructive distillation, and thereby forming coke.

1,899,810. POROUS SILICEOUS CARBON AND THE MANUFACTURE THEREOF. LUDWIG KERN, Webster Groves, Mo. Filed June 18, 1930. Serial No. 462,129. 3 Claims. (Cl. 252—3.)

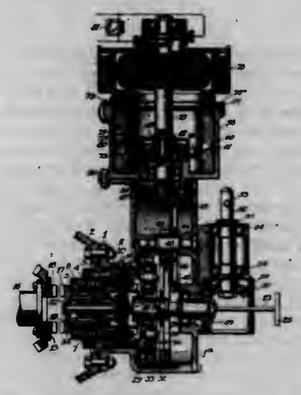
1. The process of preparing a bone-char substitute which comprises heating carboniferous silica materials at a temperature sufficient to expel the volatile constituents thereof, comminuting said material, and heating the comminuted material with acid to dissolve therefrom metallic constituents, removing the excess of acid, and washing and drying the residue.

1,899,811. FUEL AND THE MANUFACTURE THEREOF. LUDWIG KERN, Webster Groves, Mo. Filed June 18, 1930. Serial No. 462,130. 6 Claims. (Cl. 44—8.)

1. The liquid fuel comprising a fuel oil of specific gravity from 0.70 to 0.90, said oil having in suspension therein a carbon powder of a fineness greater than the order of 200 mesh and a gravity of the order of from 0.30 to 0.50.

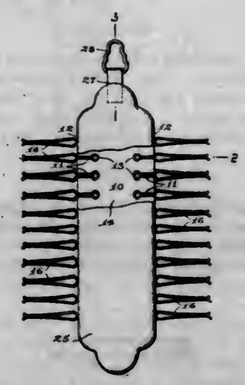
6. The process of preparing a liquid fuel which comprises forming a porous, light carbon powder in the following manner: comminuting carbonaceous distillable material, plasticizing said comminuted material, and rapidly heating said plastic material to a carbonization temperature, whereby said material is inflated, cooling said inflated material and pulverizing the same; and mixing said carbon powder with fuel oil whereby a substantially permanent suspension is obtained.

1,899,812. ENGINE STARTER. RAYMOND P. LANSING, East Orange, N. J., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Nov. 16, 1925, Serial No. 69,534. Renewed June 16, 1931. 7 Claims. (Cl. 171—76.)



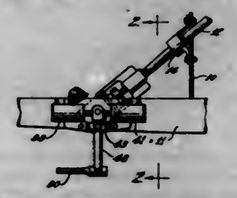
1. In apparatus of the character described, a gear train adapted to constitute a drive for an internal combustion engine starter, manually operable means for driving said train, a machine to be driven, a flywheel driven by said gear train, and means associated with said flywheel for connecting said machine thereto to be driven thereby.

1,899,813. NECKTIE RACK. JOSEPH LESTER, New York, N. Y. Filed July 16, 1931. Serial No. 551,254. 2 Claims. (Cl. 211—120.)



1. In a necktie rack, a base normally disposed vertically, the base having a plurality of slots extending through each of its sides, each slot having its top and bottom approximately parallel, with the inner end of the slot terminating in an enlargement and with the slots and the enlargement extending through the front and the back of the base, a plurality of flat elongated supporting members of approximately the same width as the thickness of the base, each member having its central portion fitting one of the enlargements and with two parallel shanks disposed one above the other in the slot extending from the enlargement, the shanks having arms extending beyond the sides of the base, and front and back members secured to the front and back of the base for retaining the supporting members in position.

1,899,814. HYDRAULIC STEERING MECHANISM. HERMAN L. LEWIS, Don Martin, Mexico. Filed Sept. 22, 1931. Serial No. 564,427. 1 Claim. (Cl. 280—87.)



In fluid pressure operated automotive vehicle steering mechanisms, a rockable member pivotally mounted between its ends in the chassis of the vehicle and having pivotal connection at its lower end with the steering gear connecting rod of the vehicle, said rockable member including a bifurcated upper end providing a pair of spaced arms, a pair of spaced fluid pressure operated pistons, a slidable piston rod having said pistons attached to its ends, a substantially square housing formed on said piston rods between said pistons, a block slidably mounted in said housing, a pin carried by said block having its ends mounted in openings in said spaced arms, and means associated with the steering post of the vehicle for exerting fluid pressure on said pistons to operate said slidable piston rod.

1,899,815. COLLAPSIBLE PICTURE FRAME. NATHANIEL M. LURRAIN, Woodside, N. Y. Filed Oct. 14, 1932. Serial No. 637,838. 6 Claims. (Cl. 40—155.)



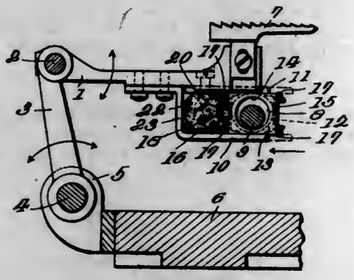
1. A collapsible picture frame comprising a plurality of bars each bar being formed of sheet material folded to produce an inclined face, a base and back wall arranged at right angles to each other, and means having a plurality of friction surfaces for frictionally securing said bars together, said means being arranged at the respective ends of the respective bars.

6. The combination with an easel having a bracing structure including a removable bracing rod, of a picture frame formed of four bars removably connected at their respective ends, one of said bars being connected permanently to the easel.

1,899,816. FEEDING MECHANISM FOR SEWING MACHINES. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Dec. 16, 1927, Serial No. 240,533, and in Germany Feb. 25, 1927. 5 Claims. (Cl. 112—215.)

1. A four-motion feeding mechanism for sewing machines including in combination a feed bar, a feed dog

carried thereby, said feed bar having a forked bracket attached thereto, a cam located between the feed bar and the forked bracket for raising and lowering said feed bar, a plate located in front of said cam for shielding the same from dust, lint and dirt, said plate being movable up and



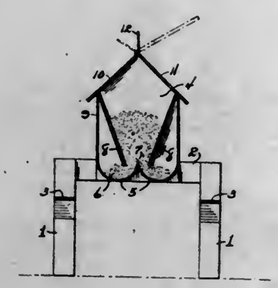
down with the feed bar, and means for supporting lubricating pads at the upper and lower edges of said plate which are adapted to contact with the feed bar and the forked bracket respectively to keep the dust, lint and dirt away from the cam.

1,899,817. THERAPEUTIC MILK PRODUCT AND PROCESS OF MAKING SAME. MORRIS C. MATT, Philadelphia, Pa., assignor to Abbotts Dairies, Inc., Philadelphia, Pa., a Corporation of Maryland. Filed May 23, 1931. Serial No. 539,640. 20 Claims. (Cl. 99—11.)

1. A therapeutic milk product comprising viable bacillus acidophilus distributed in cultured buttermilk containing viable streptococcus lactis, the bacillus acidophilus being present in a therapeutically effective amount.

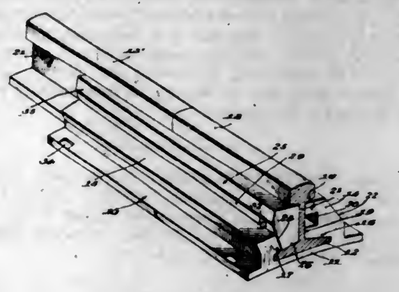
8. The step in the process of preparing a therapeutic milk product which comprises thoroughly mixing together viable bacillus acidophilus and cultured buttermilk containing viable streptococcus lactis, the bacillus acidophilus being present in therapeutically effective amounts.

1,899,818. CHICKEN FEEDER. WILLIAM B. MCCRAY, Winchester, Ind. Filed May 18, 1931. Serial No. 538,299. 1 Claim. (Cl. 119—52.)



A poultry feeder comprising a receptacle having a top, a bottom wall divided into compartments, spaced rods rising from the outer edges of the bottom wall of the receptacle, inclined side boards located within the receptacle and having upper edges meeting the upper ends of said rods and a roof board hinged to the top of the receptacle and when closed having an edge portion resting upon the upper ends of one row of rods and extending beyond the vertical plane of said row of rods and the outer edge of one of the bottom compartments.

1,899,819. RAIL JOINT CHAIR. AUGUST MCDERMOTT, Cabot, Pa. Filed May 19, 1932. Serial No. 612,828. 3 Claims. (Cl. 238—207.)



1. In a rail joint, a joint chair comprising a base having a central seat upon which two rails are adapted to rest, said base being provided with upwardly extending side shoulders, said shoulders being constructed to receive the base flanges of said rails, one of said shoulders having a face abutting the web of said rails and further having a longitudinal recess, said other shoulder stopping short of the web of said rails and having a tapered formation throughout its length, a tapered wedge disposed between said last named shoulder and the web members of said rails, one of said web members having an aperture, said wedge having an aperture for registry with said first named aperture, a dowel pin disposed within said apertures and projecting into said recess, and said dowel pin having an aperture in that portion disposed within the recess for reception of a cotter pin.

1,899,820. GAME. DAVID E. MILNE, Chattanooga, Tenn. Filed Oct. 1, 1931. Serial No. 566,358. 3 Claims. (Cl. 273—100.)



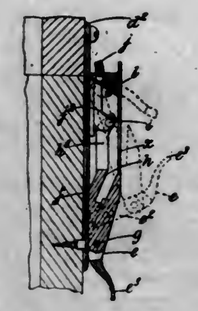
1. A game comprising a mat having a pin mounted thereon, and a resilient ring, said ring being hollow and having edges spaced apart on the inner periphery thereof to prevent the bound of the ring when tossed at the pin and being provided on the outer periphery with gripping lugs.

1,899,821. CONTAINER. CECIL J. PARKER, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md., a Corporation of New York. Filed Sept. 28, 1931. Serial No. 565,500. 7 Claims. (Cl. 215—37.)



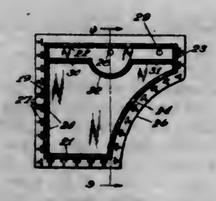
1. A container closure adapted to be applied and removed by a turning movement comprising a skirt having retaining means thereon and a top, said closure having therein a sealing gasket comprising a rubber-like composition having included as an ingredient therein a lubricating material which provides a non-adhesive anti-frictional sealing surface.

1,899,822. FASTENING FOR ATTACHÉ CASES, BAGS, TRUNKS, AND THE LIKE. ALFRED LEO PEBL, Birmingham, England. Filed Dec. 2, 1930, Serial No. 499,449, and in Great Britain Dec. 6, 1929. 4 Claims. (Cl. 292—247.)



4. Fastening for attaché cases, trunks, boxes, gramophone and wireless cases and the like, comprising in combination an attachment plate to be secured to one part of the case, a lug to be secured to the other part of the case, a manually operable lever fulcrumed to the attachment plate to swing transversely thereon to two positions, a securing link cooperating at its one end with said lug, a swingable member pivoted at its one end to the link and at its other to the lever at a point inwards of the fulcrum of the lever, and means connecting the inner end of the securing link to the attachment plate for automatically controlling the movements of said link from said lever through the intervention of the member to cause said link to positively engage and disengage said lug in coupling and uncoupling the fastenings.

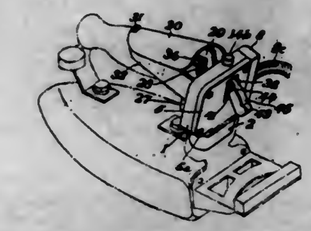
1,899,823. PANEL FOUNDATION MAKING. BION C. PLACE, Detroit, Mich., assignor of one-half to George E. Gagnier, Detroit, Mich. Filed July 2, 1931. Serial No. 548,464. 10 Claims. (Cl. 45—138.)



1. A foundation for an automobile or similar panel comprising a fibrous body shaped to fit the surface to which the panel is to be applied, and a narrow strip of compacted fibrous material secured to said body to stiffen same and to serve as a riser in the ornamentation of said foundation.

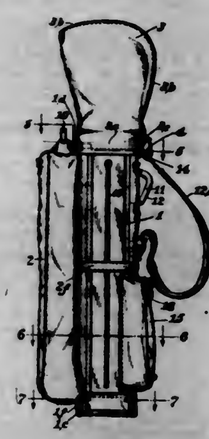
9. The method of attaching stiffening strips generally paralleling the edges of a foundation for a trim panel, which consists in applying a plurality of relatively straight strips to the foundation so that a separate strip is used to generally parallel each side of the foundation, and forming a miter joint between the adjacent edges of the separate strips by permitting said strips to lap after completion of the attachment thereof by cutting said overlapping edges on a bias.

1,899,824. ELECTRICAL CONNECTER. RICHARD FITZ POWER, Hampstead, London, England. Original application filed Dec. 17, 1931, Serial No. 581,727, and in Great Britain Dec. 22, 1930. Divided and this application filed Mar. 29, 1932. Serial No. 601,852. 10 Claims. (Cl. 200—51.)



1. The combination in an attachment plug for an electric sad iron adapted to fit the terminal of the iron with a control switch on the plug and a key hinged forwardly of the attachment to actuate the switch to the "on" position having a spring associated with the key normally keeping the switch "open" of a finger protruding at the rear of the attachment operatively connected to the key, the finger having a cam face, and an abutment on the rear face of the attachment disposed to act on the cam face when the iron is stood on end and to force the finger relatively to the attachment and thereby the key to close the switch as a result of standing the iron on end at the expense of tensioning the spring.

1,899,825. GOLF BAG. MILTON B. REACH, Springfield, Mass., assignor to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Filed Apr. 24, 1931. Serial No. 532,596. 32 Claims. (Cl. 150—1.5.)

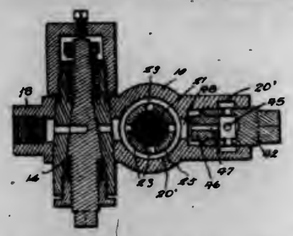


1. In combination in a golf bag, a golf club receiving portion, a portion providing a pocket and detachably secured to said first named portion, a cover for the first named portion, said cover being secured to said pocket portion and removable therewith as a unit from said first named portion.

1,899,826. VALVE MOUNTING MEANS FOR BLOW-DOWN CONTROL. CYRUS WILLIAM RICE, Pittsburgh, Pa. Filed July 28, 1928. Serial No. 294,641. Renewed Aug. 8, 1932. 4 Claims. (Cl. 251—97.)

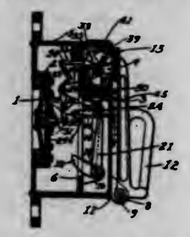
1. In valve mounting means, a casing having a bore therein, a sleeve projecting into the bore, said sleeve

having an enlarged inner diameter near one end portion, there being a threaded chambered element engaging the other end of the sleeve and adapted to bear on the housing, a valve member within the sleeve and projecting into the



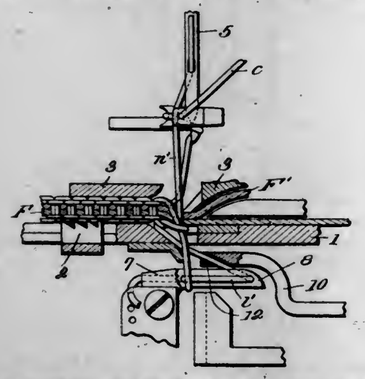
chambered element, and retaining and adjusting devices operable independently and respectively from within and without the chambered element for securing the valve member in position with reference to the sleeve.

1,899,827. RELEASE MECHANISM. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 23, 1928. Serial No. 314,511. 19 Claims. (Cl. 189—45.)



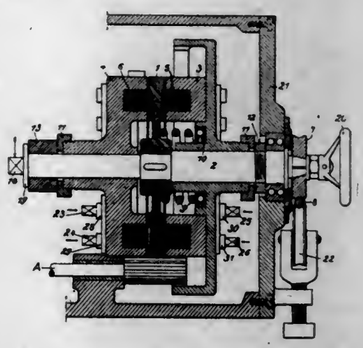
16. A release device for sustained loads comprising an element operative by predetermined movement from a normal position to release the load, said element being normally exposed at the opposite sides thereof to equal pressures, and means for decreasing the pressure at one side of said element to thereby effect movement of the element releasing the load.

1,899,828. STITCH FORMING MECHANISM FOR SEWING MACHINES. CHARLES F. RUBEL, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 15, 1931. Serial No. 530,349. 3 Claims. (Cl. 112—199.)



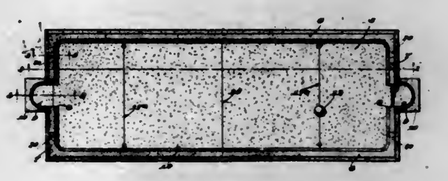
1. A spreader for spreading the looper thread in a stitch forming mechanism comprising a body portion having a recess in its under face forming a vertical retaining wall for the looper thread, said retaining wall having a projecting finger at the lower edge thereof adapted to retain the looper thread in contact with said retaining wall during the spreading of the looper thread loop.

1,899,829. AUTOMATIC MACHINE WITH MAGNETIC PLATES FOR REGULATING ARCS. ROBERT SARAZIN, Neuilly-sur-Seine, France. Filed Mar. 19, 1931, Serial No. 523,889, and in France Mar. 24, 1930. 16 Claims. (Cl. 219—8.)



1. In a regulating device of the type described, a shaft, a disk made of a magnetizable metal rigidly keyed on said shaft, two magnetizable plates mounted loose on said shaft on either side of said disk respectively, means for oppositely driving said plates, and electric means for magnetically energizing one of said plates, whereby it is brought into contact with the intermediate disk.

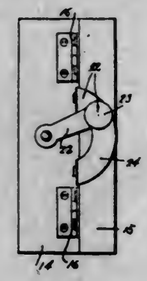
1,899,830. GAME APPARATUS. ALFRED K. SMALL, Jr., De Land, Fla. Filed Mar. 21, 1932. Serial No. 600,283. 2 Claims. (Cl. 273—2.)



1. A game apparatus comprising a concrete base member, upstanding side and end walls formed integrally therewith and producing an enclosure, a shoulder formed integrally on the inner face of said walls, a resilient ball element movable over said base and into contact with said shoulders, one of said walls and said base being formed with a water drain opening for draining water from said enclosure, said drain opening having its inner end opening beneath said shoulder on the wall, a pair of the opposite end walls being provided with openings, and brackets bridging the openings.

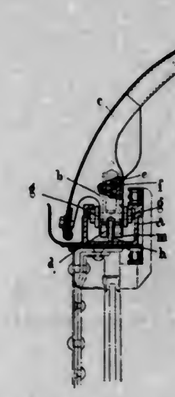
1,899,831. CURTAIN DRYING FRAME. ROMUALDO SPANO, Utica, N. Y. Filed July 16, 1932. Serial No. 622,965. 5 Claims. (Cl. 45—24.)

1. In a curtain drying frame, crossed frame bars, curtain clamping members carried thereby and each including a hinged clamping strip, a screw rod supported on the frame bar and a clamping arm carried by the screw rod and movable into engagement with the clamping strip for holding the strip in closed clamping position, and an arcuate wear-strip interposed between the clamping strip and clamping arm, and having angle ends overlying an edge of the clamping strip and secured thereto and an



angle strip intermediate the ends of the wear strip overlying the other edge of the clamping strip and secured thereto.

1,899,832. ROLLER HOOD FOR POWER DRIVEN VEHICLES. FRITZ STEINECKE, Sindelfingen near Stuttgart, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany, a Company of Germany. Filed Apr. 22, 1931, Serial No. 532,089, and in Germany Mar. 14, 1930. 6 Claims. (Cl. 296—105.)



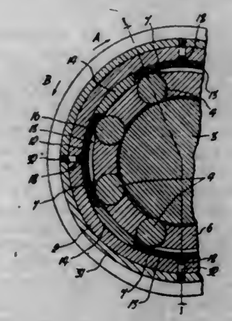
1. A device for guiding roller hoods comprising a guiding track, a second guiding track, a member guided upon the first guiding track, a member guided below the second guiding track connected with the hood, a recess in the second member, a projection on the first member adapted to slide vertically in the recess of the second member and helical spring in the recess adapted to press the two members apart and against their guiding tracks.

1,899,833. GAME. HOWARD M. STROBEL, New York, N. Y. Filed Mar. 19, 1932. Serial No. 600,008. 5 Claims. (Cl. 273—133.)



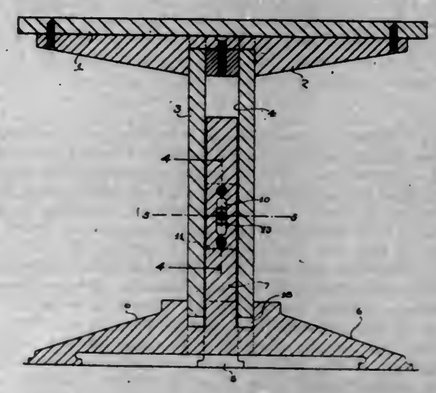
4. A game device of the character described including a base, a transparent casing extending from the base, a plurality of balls arranged in the casing and a transparent hollow arm projecting into the casing, said arm having an aperture near one end and a fluted passageway extending to said aperture from said base, said balls being adapted to be moved into said passageway and into said aperture.

1,899,834. CLUTCH. GEORGE FREDERICK THOMAS, Camberwell, Victoria, and THOMAS DUNCAN LEAPER, St. Kilda, Victoria, Australia. Filed Feb. 18, 1930, Serial No. 429,353, and in Australia Apr. 2, 1929. 10 Claims. (Cl. 192—44.)



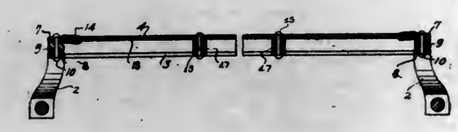
1. In a clutch or like device a driving member, a driven member, said members having concentrically spaced circular surfaces, one surface being plain and the other provided with cam faces which are spaced apart and elongated circumferentially, rollers disposed between the cam faces and the plain circular face, and control means including a presser member operable to press the rollers against the plain face and having a surface which cooperates with the plain face to thereby form between them a path along which the rollers are rolled by friction with said face into different positions circumferentially of said cam faces according to differential speed of rotation of the driving and driven members.

1,899,835. PEDESTAL TABLE. MARTIN THUM, Rochester, N. Y. Filed Feb. 18, 1930. Serial No. 429,393. 6 Claims. (Cl. 45—111.)



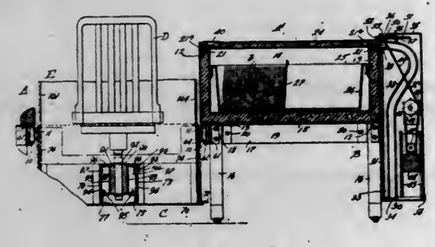
1. In a pedestal table, the combination with a hollow pedestal, and two legs rigidly secured to the pedestal and projecting outwardly and downwardly therefrom in opposite directions, of a support adjustable vertically in the hollow pedestal and having two legs projecting outwardly and downwardly therefrom to be adjusted simultaneously with the support.

1,899,836. SPRING BED BOTTOM. MARTIN THUM, Rochester, N. Y. Filed Feb. 28, 1930. Serial No. 432,191. 6 Claims. (Cl. 5—192.)



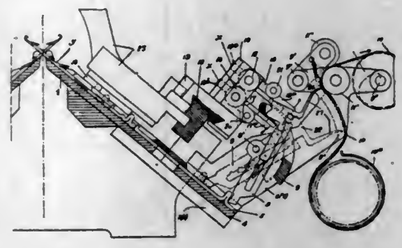
2. In a spring bed bottom the combination with a frame of longitudinally and horizontally extending intermediate webbings each resiliently connected at opposite ends to the frame, sag preventing devices between which said intermediate webbings are located, each of said sag preventing devices comprising two longitudinally and horizontally extending flexible straps located one above the other and rigidly secured together—through the medium of longitudinally spaced members—in vertical spaced relationship, the webbings being arranged so that normally they are in a substantially horizontal plane with the upper straps of the sag preventing devices and a plurality of transverse means extending from one sag preventing device to another and which transverse means cooperate in providing support from the sag preventing devices for the longitudinally extending webbings which are intermediate the sag supporting devices thus connected, and means for resiliently connecting the straps of the sag preventing devices to the frame.

1,899,837. FILING STRUCTURE. CHARLES B. ULRICH, Jamestown, N. Y., assignor to Art Metal Construction Company, Jamestown, N. Y. Filed Jan. 21, 1930. Serial No. 422,436. 2 Claims. (Cl. 45—2.)



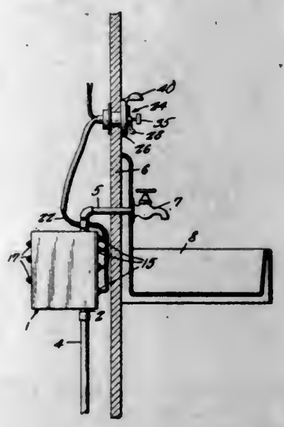
1. A filing unit comprising a relatively low open topped compartment having opposite parallel side and end walls and a bottom wall, all of fire-proof construction, means for supporting a plurality of records on edge in said compartment so that all of said records are accessible at one time, a horizontal cover for said compartment which is also of fireproof construction, interfitting shoulders on said cover and said side and end walls of said compartment, said cover being movable from its horizontal compartment closing position to an upright position at the back of and adjacent said compartment to uncover and expose the records therein, a separate upright narrow enclosure at the back of said compartment into which said cover extends when in said upright position, said enclosure having a narrow opening through which said cover passes into and out of said enclosure, a slide for closing said opening when said cover is in its horizontal compartment closing position, and which is movable to an open position by the movement of said cover to its upright position, and means for returning said slide to a position in which it closes said opening when said cover is returned to its compartment closing position.

1,899,838. KNITTING MACHINE. GEORGES VOLLENWEIDER, Colombes, France. Filed July 30, 1930, Serial No. 471,841, and in France July 30, 1929. 8 Claims. (Cl. 66—75.)



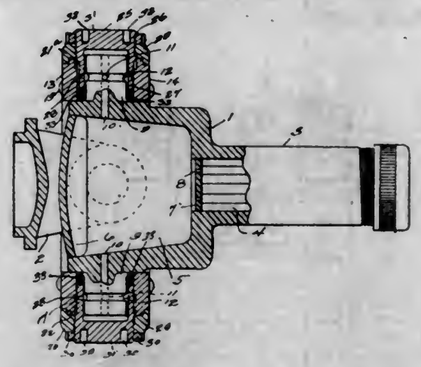
1. Apparatus for manufacturing fancy figured multicolored loop work (tricot, etc.) on a hand knitting machine, comprising a grooved bed, needle jacks in the grooves of said bed, oscillating levers for moving said jacks and "ascension" cam plates for actuating said levers.

1,899,839. WATER HEATER. EDWARD J. VON RUDEN, Cashton, Wis. Filed Mar. 20, 1931. Serial No. 524,181. 1 Claim. (Cl. 219—39.)



An electrical water heater comprising a heating chamber to receive water from a source and having a controlled outlet, partitions in said chamber to divide the latter into compartments of different sizes, said partitions spaced slightly from one wall of the chamber to provide restricted passages between the compartments, an electrical heating element for each compartment, and each heating element being of a size to contact with the walls of the chamber except one wall of the latter to provide a restricted passage, the restricted passages formed by the heating elements being located at an opposite side of the heating chamber from the passages formed by the partitions, a main switch connected to an electrical source and to one pole of each of the heating elements, a manually operated switch electrically connected to the main switch and contacts electrically connected to the other poles of the heating elements and adapted to be engaged by the manually operated switch whereby one or more of the heating elements may be connected to the electrical source for heating the water in the differential compartments.

1,899,840. UNIVERSAL JOINT WITH ADJUSTABLE BUSHINGS. VILLOE P. WILLIAMS, Baltimore, Md., assignor, by mesne assignments, to Estelle P. Williams, Baltimore, Md. Filed Mar. 20, 1931. Serial No. 524,173. 7 Claims. (Cl. 64—102.)



1. In a universal joint having knuckles carrying pins, a split ring retaining the pins to complete the operative assembly of the joint, one of the knuckles provided with a sealed cavity in an integral part thereof for storing lubricant, said pins and said ring being provided with ducts forming a closed system of oil distribution from the cavity in the knuckle, circulation of the oil in which is attained by centrifugal force, bushings about the pins, and packing about the bases of the pins, the bushings being arranged above the packing and adjustable longitudinally of the pins and removable to change the packing or compress the same to prevent leakage of oil from about the bases of the pins.

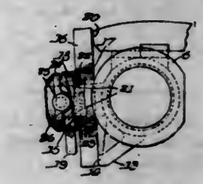
1,899,841. SAFETY RAZOR. RAYMOND V. ACKEN, Pittsburgh, Pa. Filed Feb. 18, 1931. Serial No. 516,689. 1 Claim. (Cl. 30—12.)



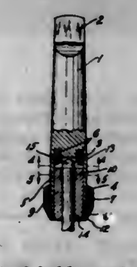
The combination with a safety razor including a cap plate and guard, blade and handle in which the blade is secured between the cap plate and guard and these parts held assembled when the handle is attached to the cap plate, of a supplemental plate interposed between the handle and the guard and conforming to the rear face of the latter where it contacts with the same, said plate extending over the back faces of the teeth of the guard in contact with the same to shroud the latter and provide in conjunction with the teeth a plurality of closely related shallow cells for charging with cream or soap prior to beginning the shaving operation.

1,899,842. HOSE COUPLER. FRANCIS N. BARD, Highland Park, Ill., assignor to Barco Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 21, 1931. Serial No. 558,434. 9 Claims. (Cl. 285—68.)

1. A hose coupler comprising a head having means for interlockingly engaging with corresponding means on a companion head for connecting said heads together, and means for preventing disconnection of the heads, including a bar loosely mounted on a fixed pivot so as to permit rotary and tilting movements of the bar relatively to the pivot, a pair of fixed abutments providing a line contact in a plane perpendicular to the longitudinal axis of said bar when disposed in operative position, and an annular cam member disposed between said abutment members and said bar and loosely pivoted coaxially with the bar so as to also be capable of rotary and tilting movements, said cam member being rotatable independently of the bar to urge both ends of the bar toward the head with equal force irrespective of the tilt of said bar induced by obstruction to its movement.

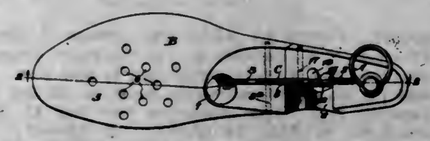


1,899,843. TOOL HOLDER. THOMAS D. BASCOM, Cleveland, Ohio, assignor to The Standard Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 21, 1931. Serial No. 510,186. 1 Claim. (Cl. 279—49.)



In combination, a tool holder and a tool adapted to be removably connected thereto for rotation therewith, said holder having a shank provided at its tool-holding end with a clamping nut threaded thereon, said tool-holding shank end being also provided with a generally cylindrical, axially disposed socket for receiving a collet and the connecting end of the tool, said collet being adapted to receive said tool connecting end, said shank being provided at the inner end of said socket with two diametrically opposed driving pins projecting into said socket inner end, said collet being a one-piece member provided at its inner end with a diametrically disposed slot for receiving the driving pins of said shank, whereby said collet is connected to said shank for rotation therewith, said collet being provided at its outer end with a pair of clamping jaws adapted to be clamped about said tool by said clamping nut, said tool being provided at its connecting end with a driving tang adapted to extend into the diametrically disposed slot of said collet, whereby said tool is connected to said collet for rotation therewith.

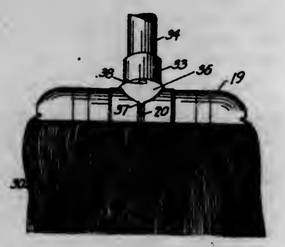
1,899,844. SHOE TREE. CHARLES A. BATCHELDER, St. Albans, Me. Filed Feb. 19, 1932. Serial No. 594,095. 3 Claims. (Cl. 12—128.6.)



1. A shoe tree including heel and toe sections, said sections respectively having a guideway and a slot, an arm pivotally connected to the section having the slot

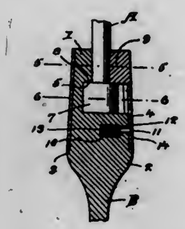
and also having its end opposite the pivotal connection adapted to slide in said guideway, said arm being provided with a slot and having teeth at one edge thereof, a latch having a finger engaging ear and a spring centering post, a spring fitted in a socket in the heel member and adapted to normally urge said latch into locking relation with the teeth of the arm, and a pivot pin for connecting the latch to the heel section through the slot in the arm.

1,899,845. MOP HOLDER. CHARLES E. BENEDICT, Denver, Colo. Filed Nov. 5, 1931. Serial No. 573,098. 8 Claims. (Cl. 15—229.)



3. In a mop holder of the class described, a mop head enclosed in the web of an ordinary string or yarn mop, said mop head consisting of a spring metal strip curved upward from the center toward the ends, and secured within said mop web by a hollow rivet through the center thereof.

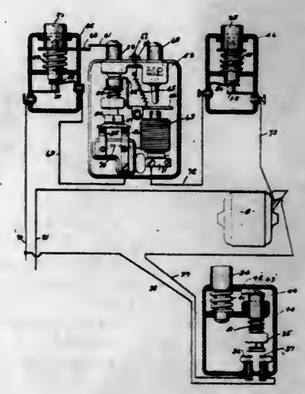
1,899,846. ROD JOINT. CLAUD A. BOYD, Frisco, Tex. Filed May 9, 1932. Serial No. 610,174. 2 Claims. (Cl. 287—103.)



1. A rod joint of the character described comprising a body portion having recesses formed therein to provide a chamber, headed means detachably and swivelly mounted within said chamber, a cover surrounding the body portion, a lug formed with said cover and arranged in said chamber, said lug cooperating with the cover for securing the headed means within the chamber, and a latching means for said cover.

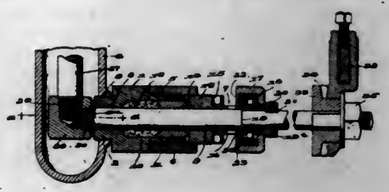
1,899,847. PRESSING MACHINE. PHILIP N. BRAUN, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Refiled for abandoned application Serial No. 39,026, filed June 23, 1925. This application filed July 15, 1932. Serial No. 622,713. 14 Claims. (Cl. 68—9.)

1. In a pressing machine, the combination of cooperating pressing elements, one of which is movable toward and from the other, power means for actuating the movable element including an electric circuit, an electric motor connected in said circuit, a pair of push buttons connected in series in said circuit, automatic means for breaking the circuit when the press is closed and a third push button switch connected in series with the motor and in shunt with the former push buttons, the third push button switch having means for holding it closed momentarily only.



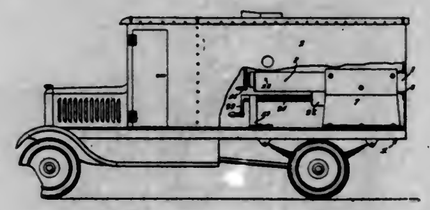
3. In a pressing machine, the combination of cooperating pressing elements, one of which is movable toward and from the other and counterbalancing means connected to the movable element to open it, power means for actuating the movable element including an electric circuit, an electric motor connected in said circuit, an overload switch in said circuit, a manually operable member for closing the overload switch, a normally open manually operated switch in said circuit operable when said manually operated member is actuated to close the overload switch and motion transmitting means between the motor and the movable pressing element.

1,899,848. STUFFING BOX AND BEARING UNIT. LYLE W. BROWNE, Marshalltown, Iowa, assignor to The Fisher Governor Company, Marshalltown, Iowa. Filed June 6, 1931. Serial No. 542,655. 4 Claims. (Cl. 308,134.)



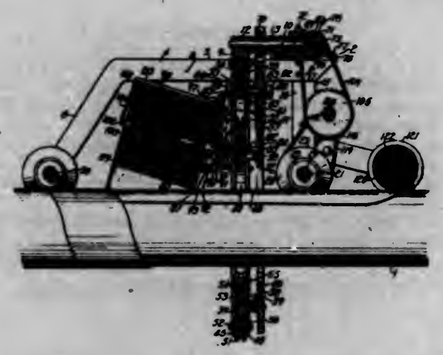
1. In combination with a float arm casing or the like, a journal in one wall thereof, a shaft projecting from said casing through said journal and adapted to be connected to an actuating means within said casing, a stuffing box in said journal, a sleeve removably secured to the outer end of said journal, a series of internal threads within said sleeve, a screw threaded compression plug adapted to operatively engage said sleeve threads and lying within the radial confines of said sleeve, said plug being adapted to compress packing in said stuffing box, and a longitudinal extension on said sleeve, carrying at its outer end a bearing for the outer end of said shaft.

1,899,849. TRANSFER SAFETY DEVICE. CARL F. BURCK, Buffalo, N. Y. Filed Apr. 22, 1932. Serial No. 606,921. 5 Claims. (Cl. 214—38.)



1. A device for transporting valuables comprising an armored motor vehicle body having an opening, a strong box slidably mounted in the body, means operated from the interior of the body to slide the strong box through the opening into a building, and means for opening and closing the strong box from the interior of the body.

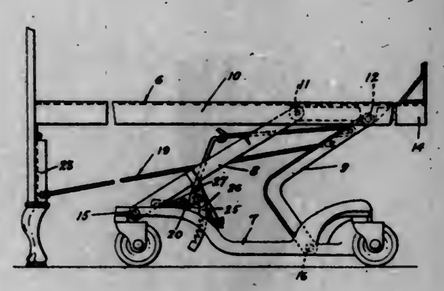
1,899,850. PIPE WRAPPING MACHINE. KELLIS H. BURTON and HERMAN KRAMER, Tulsa, Okla., assignors, by mesne assignments, to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed May 10, 1930. Serial No. 451,227. 9 Claims. (Cl. 242—11.)



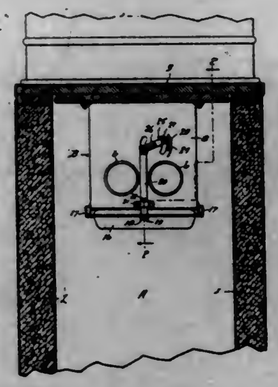
1. In a machine for wrapping conduit, a frame including traction rollers movable on the conduit, a wrapping roll carrier on the frame, means for supporting a roll of track-laying material on the frame, and means for simultaneously moving the carrier longitudinally and rotatably on the conduit to wind the wrapping material spirally around the conduit and to lay a track of material on the conduit for the traction rollers.

1,899,851. MOUNTING MEANS FOR FOLDABLE ROLL-ABOUT BEDS. GORDON F. CANE, San Francisco, Calif., assignor, by mesne assignments, to Thorn Thompson, San Francisco, Calif. Filed July 23, 1929, Serial No. 380,318. Renewed July 22, 1932. 1 Claim. (Cl. 5—142.)

In a roll-about foldable bed, a wheeled truck, an upending bed frame, front and rear links pivotally connected to said truck and bed frame, the connecting points of the front and rear links with the truck being respectively disposed adjacent to the front and rear extremities of the truck whereas the frame connecting points of the front links are disposed over a point substantially midway of the front and rear extremities of the truck and the frame connecting points of the rear links are located over and substantially in line with the rear extremity of said truck when the bed frame is extended for use, said rear links being substantially L shaped and having portions thereof extended under the frame when the latter is in upended position.



1,899,852. TEMPERATURE CONTROL MEANS FOR REFRIGERATION COMPARTMENTS. LEE S. CHADWICK, Shaker Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 29, 1930. Serial No. 424,228. 11 Claims. (Cl. 62—95.)

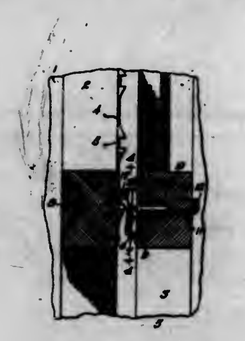


1. Refrigeration apparatus comprising an enclosure for the refrigeration compartment, a cooling unit within said compartment, an open bottom casing about the cooling unit having an opening spaced above its bottom, and a drip tray removably supported below and adjustable toward and from the open bottom of said casing.

1,899,853. SAFETY WINDOW AIR ADJUSTER. JOSEPH C. CHALUPA, Berwyn, Ill. Filed Feb. 8, 1932. Serial No. 591,729. 2 Claims. (Cl. 292—215.)

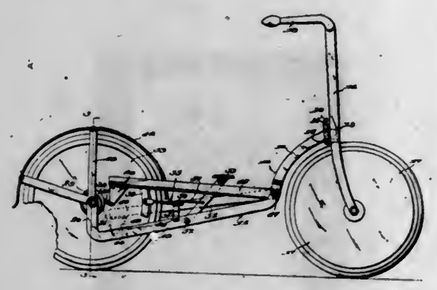
1. A means for latching upper and lower sashes in a window frame for the admission of fresh air into a room,

comprising a rack plate fixed on one of the sashes, a double ended dog carried by the second sash having a central boss and a pivot passing through said boss, a lever passing through said sash and having an outer angle end and spring means influencing the lever in one direction, stop means for limiting such movement of the



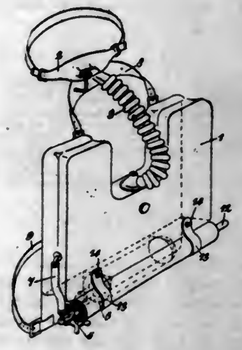
lever and a cam member secured to and offset from the inner end of the lever and having its outer face notched to normally receive the boss of the double ended dog therein and likewise to contact with the inner face of the dog at points equidistant from the opposite sides of the pivot for swinging either end of said dog to engage with the rack.

1,899,854. TWO-PEDAL COASTER. ALBERT N. COOPER, Santa Ana, Calif., assignor to Jesse A. Mackey, Placentia, Calif. Filed Aug. 27, 1931. Serial No. 559,791. 2 Claims. (Cl. 208—36.)



1. In a coaster, a frame having a steering wheel and a drive wheel, said drive wheel having a hollow cylindrical hub, counter-sunk annular ratchet members in the bore of said hub near the ends thereof, an axle mounted in said frame and extending through the hub, pulleys oscillatably mounted upon said axle adjacent the respective ends of said hub, each pulley including a trunnion forming a bearing for said hub and for spacing said hub from said axle, a plurality of pawl members pivotally mounted on said trunnions for operative connection with respective ratchet members in one direction of oscillation of said pulley members, a flexible strap member encircling and secured to each pulley, treadle members rockably mounted upon said frame at their forward ends and having their rear ends secured to the respective strap members, and spring means for returning the pedal members to their raised positions.

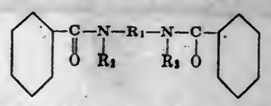
1,899,855. SUBMARINE ESCAPE APPARATUS. ROBERT HENRY DAVIS, London, England. Filed Feb. 18, 1932, Serial No. 593,909, and in Great Britain Nov. 9, 1931. 11 Claims. (Cl. 114—16.6.)



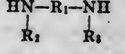
1. A submarine escape outfit of the type specified, in which there is incorporated a fin for checking the speed of buoyancy ascent of the wearer through the water, which fin is movable from an operative position in which it projects laterally from the general external contour of the outfit to a stowage position in which it lies snug against the wall of the breathing bag of the outfit, so as in this position to be substantially within the general external contour of the outfit.

1,899,856. UNSULPHONATED DIACYLATED DIAMINES AND PROCESS OF MAKING SAME. GUILLAUME DE MONTMOLLIN, JACOB DANUSER, GÉRALD BONHÔTE, and HANS JOHNER, Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Sept. 22, 1931, Serial No. 564,466, and in Switzerland Sept. 27, 1930. 13 Claims. (Cl. 260—124.)

1. Process for the manufacture of unsulphonated diacylated diamines of the general formula



wherein each benzene nucleus carries an OH-group, and wherein in each benzene nucleus the para-position to the OH-group is substituted by an alkyl- or alkoxy group, R_2 and R_3 meaning H or alkyl, and R_1 meaning an aromatic radicle, consisting in causing two molecular proportions of such unsulphonated hydroxycarboxylic acids of the benzene series in which the para-position to the OH-group is occupied by a substituent, to react, in presence of dehydrating agents and in the heat, on one molecular proportion of an aromatic diamine of the general formula

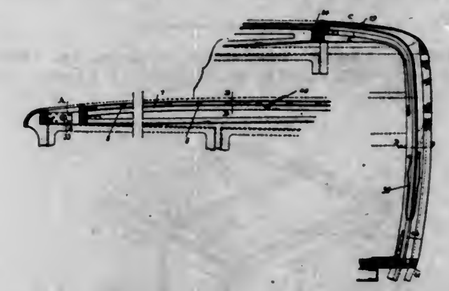


wherein R_1, R_2 and R_3 have the above mentioned significations.

1,899,857. MOVABLE TOP PANEL FOR VEHICLES. JEAN LOUIS DUBOS, Neuilly sur Seine, France. Filed June 19, 1928, Serial No. 286,550, and in France Oct. 5, 1927. 3 Claims. (Cl. 296—137.)

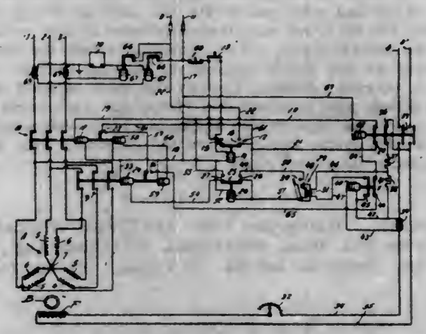
1. In a vehicle, the combination of a body having a compartment at the rear thereof, a window therein, a

roof frame, said frame having guide-ways extending longitudinally of said roof and vertically of said compartment, a flexible roof panel slidable within said guide-



ways, a window in said panel, means to move said panel within said guide-ways to aline said windows, and a flexible strap member secured within and extended across said compartment to support said panel.

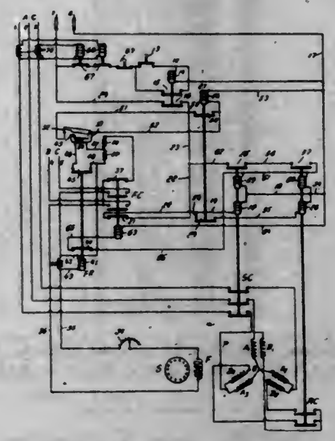
1,899,858. DYNAMO-ELECTRIC MACHINE. RUPERT N. EARLY, Minneapolis, Minn., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn. Filed Feb. 24, 1930. Serial No. 430,702. 25 Claims. (Cl. 172—274.)



1. The combination of an electric motor having a polyphase primary winding a plurality of phases of which each comprise two winding sections, a source of alternating current, separate switches for connecting the sections of each of said plurality of phases to said source, means for closing said switches, and means for delaying the closing of one of said switches until after the other switch has been closed, whereby current is first supplied to one of said sections and then to both sections in parallel relation.
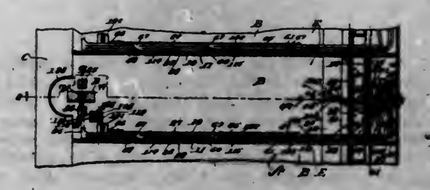
1,899,859. DYNAMO ELECTRIC MACHINE. RUPERT NUCKOLLS EARLY, Minneapolis, Minn., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Nov. 22, 1930. Serial No. 497,543. 5 Claims. (Cl. 172—274.)

1. The combination of an electric motor comprising a polyphase primary winding comprising a plurality of winding sections forming at least two similar polyphase circuits with the impedance of one circuit alone greater than both circuits in parallel, said sections respectively comprising coils having at least one of their corresponding coil sides disposed at separate poles of the primary winding, and starting means for the motor comprising means for connecting one of said circuits to a source of polyphase current and switching means for connecting the other circuit in parallel with said first circuit whereby the motor may be started on one circuit with relatively



low starting current by initially connecting said first circuit alone to a source of current and thereafter connecting the second circuit in parallel with said first circuit whereby both circuits become energized by said source of current.

1,899,860. GAME APPARATUS. LORENZO F. FLOWER, Boulder, Colo. Filed Dec. 16, 1930. Serial No. 502,841. 5 Claims. (Cl. 273—32.)

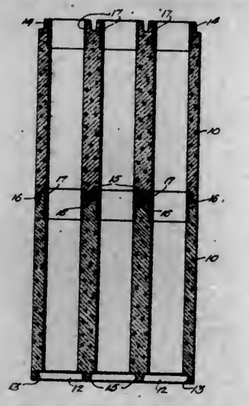


1. In a game apparatus of the character described a base representative of a game course and teeing station, a series of targets of varying play valuations confronting the course, a series of ball runways at one side of the course and extending from the target to the teeing station, mechanism for delivering balls from the targets to the runways, and means located in the runways at determined intervals thereof and selectively movable for delivering balls from the runways to said course correspondingly to the target plays.

1,899,861. TILE. EDWARD N. GACKENBACH, Jenkintown, Pa., assignor to American Conduit Corporation, Wilmington, Del., a Corporation of Delaware. Filed Mar. 20, 1930, Serial No. 437,422. Renewed Aug. 4, 1932. 2 Claims. (Cl. 247—32.)

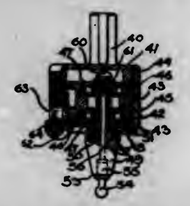
1. A multi-duct tile, comprising a body having a plurality of parallel ducts formed therethrough, an end of each duct having an enlargement forming a bell, the opposite end of each duct having a surrounding flange producing a projecting spigot, the spigots being of greater length than the bells whereby in the assembled relation

of the tile, spaces are provided between the ends of the tile for the reception of a liquid sealing element hardening when dry, the spigot ends of the ducts having incor-



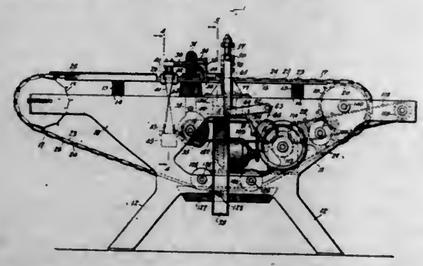
porated therein a reinforcing element forming portions of the inner wall of the duct and the inner wall of the spigot.

1,899,862. ABRADING. LLOYD W. GODDU, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 6, 1929. Serial No. 405,150. 2 Claims. (Cl. 51—133.)



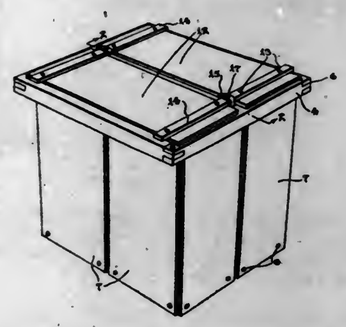
1. In a device of the character described a detachable support having an eccentric portion, a housing attached to said eccentric portion, said housing having a rotatable bearing support therein, said bearing support being rotatable about an axis offset from and extending substantially parallel with the longitudinal axis of the detachable support, a bearing in the bearing support offset from the axis of said bearing support and a rotatable pin member in said bearing, said pin member being adjustable to varying positions relative to the axis of the detachable support.

1,899,863. FRUIT PITTING MACHINE. ANTHONY GOTELLI, Brooklyn, N. Y. Filed Oct. 2, 1930. Serial No. 486,019. 12 Claims. (Cl. 146—17.)



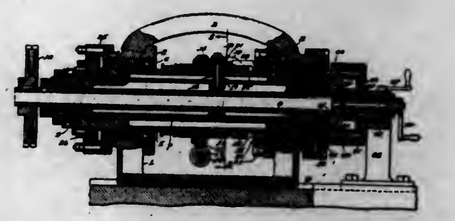
1. In a fruit pitting machine, a conveyor for carrying the fruit, said conveyor including upwardly extending rows of pins on which the fruit is impaled, the pins in adjacent rows being arranged in diverging relation and operating to position the pit in the path of an ejector, means for slitting the fruit and an ejector for forcing the pit through the slit.

1,899,864. CRATE. DUKE GUICE, Greenville, Ala. Filed July 8, 1931. Serial No. 549,550. 1 Claim. (Cl. 217—122.)



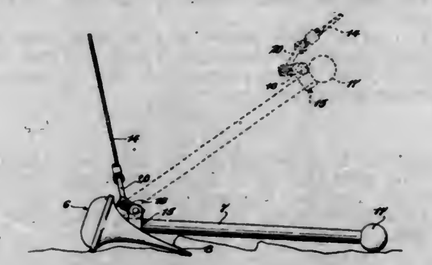
A rectangular wood crate comprising a top frame and a bottom frame, bottom boards resting on and secured to the bottom frame, spaced removable top boards resting on the top frame, side wall boards forming an enclosure between said frames, each of said side wall boards having its upper end arranged within and secured to the top frame and its lower end arranged outside of and secured to the bottom frame, strips extending across the upper surface of and rigidly secured to the top boards, and metal tongues extending through the space between said top boards and securing said strips and top boards to the top frame, each tongue having one of its ends secured to the top frame and its other end extending over and secured to one of said strips.

1,899,865. MACHINE FOR MILLING THREADS. PETER P-G. HALL, Philadelphia, Pa. Filed Aug. 29, 1929. Serial No. 389,154. 11 Claims. (Cl. 10—154.)



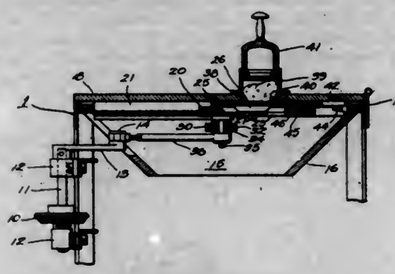
1. In a machine for milling threads, the combination of a rotatable main container, a secondary container eccentrically mounted in the main container, a cutter spindle rotatable in the secondary container, a pair of cutter heads carried by the cutter spindle and relatively longitudinally movable with respect to each other, means for driving the cutter spindle, means for partially revolving the secondary container in the main container and for rotating the main container, means operative to move the main container, the spindle and one of said heads in a predetermined longitudinal direction when the main container is rotating, and means operative to move the other head longitudinally in a predetermined direction simultaneously with the movement of the first head.

1,899,866. ANCHOR. CLAYTON J. HARVEY, Buffalo, N. Y., assignor to Jewell Steel & Malleable Co., Buffalo, N. Y., a Corporation of New York. Filed June 27, 1932. Serial No. 619,396. 10 Claims. (Cl. 114—208.)



1. An anchor including a body provided with flukes, an elongated shank, a runner carried by said shank and to which a suitable hauling line may be connected, said runner being freely movable between said body and the free end of said shank and means for locking said runner in the vicinity of said body to prevent it from slipping away from the latter when it is in such position and force is applied to said line to effect disengagement of said flukes.

1,899,867. VEGETABLE CUTTING MACHINE. CARL HEILINGER, Philadelphia, Pa., assignor to Trainor Food Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 21, 1929. Serial No. 415,807. 1 Claim. (Cl. 146—78.)



A vegetable slicing machine, comprising a pair of reciprocal slide plates mounted to move at right angles in relation to each other, means comprising an opening in a cover and over which opening the slide plates are adapted to move alternately, cutting blades on the slide plates to move over the opening, a hopper engaged over and in register with the opening for the reception of the vegetable, a gravity member engaged in the hopper and resting upon the vegetable to hold it in position adjacent the slide plates, and means for operating the plates to cause the blades to alternately advance through the vegetable, said plates having adjacent engaging inclined edges for regulating the moving relation of the foregoing elements, said opening having a marginal abutment shoulder with which the gravity member engages to limit its downward movement after completing the cutting of the vegetable, and manually set abutments, with which the cutting edges of the blades may abut to insure a complete cut through the vegetable, said blades having cutting edges at both ends and being reversibly mounted on the slide plates.

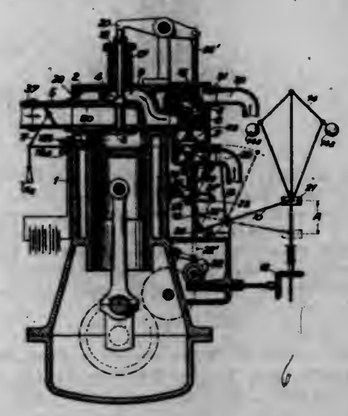
1,899,868. PORTABLE CONVERTIBLE LAMP. JOSEPH J. HERLBAUER, Long Island, N. Y. Filed Apr. 2, 1930. Serial No. 440,880. 20 Claims. (Cl. 240—10.67.)

1. A portable electric hand lamp including an elongated battery casing, a lamp-carrying, beam-projecting head, a switch mechanism mounted on the casing and controlling the lamp circuit, said head having a projection and being movably mounted relatively to the casing, and the latter including a section to engage the projection and maintain



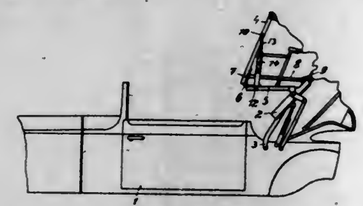
the head in stationary position, said section being operable to provide clearance when the head is to be moved, and being mounted with respect to the casing so as to be always coaxial thereof.

1,899,869. GAS ENGINE. HERMANN HEUSSER, Winterthur, Switzerland, assignor to the Firm Schweizerische Lokomotiv und Maschinenfabrik, Winterthur, Switzerland. Filed Aug. 18, 1931, Serial No. 557,873, and in Switzerland Aug. 28, 1930. 5 Claims. (Cl. 123—120.)



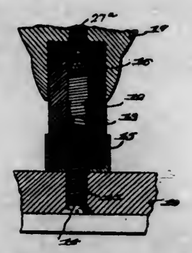
1. In a multicylinder gas engine in combination, gas inlet ducts for a gaseous fuel, air inlet ducts for auxiliary air, primary mixing chambers, valves between said mixing chambers and said air ducts, valves between said mixing chambers and said fuel ducts, a governor, said valves operated by said governor for producing a non-explosive gas-air mixture, ducts for the non-explosive gas-air mixture leaving said primary mixing chambers, working pistons, connecting rods, a crankshaft, combustion chambers, main air ducts for combustion air having regulating means inserted therein, secondary mixing chambers, valve means between said secondary mixing chambers and the ducts for the non-explosive air-gas mixture, means for adjusting said latter valves for producing an explosive air-gas mixture, positively operated valves between said secondary mixing chambers and said combustion chambers, and means for igniting said explosive mixture in said combustion chambers.

1,899,870. COLLAPSIBLE HOOD FOR VEHICLES. ALEXIS KELLNER, Berlin, Germany. Filed Jan. 13, 1931, Serial No. 508,523, and in Germany Jan. 16, 1930. 2 Claims. (Cl. 296—117.)



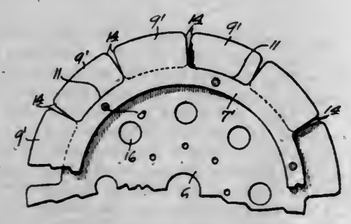
1. A collapsible vehicle hood, comprising in combination tiltable hood supports, bipartite longitudinal tilt bars hinged to said supports, a spring element movably connected at one end to the front part of said tilt bars and movably connected at the opposite end to the rear part of said tilt bars, the spring being tensioned in the opening of the hood and serving to assist the closing of the hood, and draw bars wholly independent of the spring element and movably connected to the front part of the tilt bars and to the tiltable hood supports.

1,899,871. FLEXIBLE STEM. FRED L. LAKE, Dallas, Tex. Filed Feb. 25, 1931. Serial No. 518,247. 3 Claims. (Cl. 306—20.)



3. In a rubber stamp construction, a flexible rubber stem, a coiled spring embedded in said stem, a handle, means for securing said stem and said spring to said handle, a screw carried by the base for securing the opposite end of said spring, and means carried by the base and arranged to surround the lower portion of the stem for preventing the breaking of the stem near the base.

1,899,872. CLUTCH DISK. GEORGE S. LANE, Ridgewood, N. J. Filed Mar. 3, 1931, Serial No. 519,728. Renewed July 22, 1932. 10 Claims. (Cl. 192—107.)



1. In a device of the character described, a clutch disk comprising a pair of parallel flat plates, each plate having the outer periphery thereof scalloped to form a series of friction segments around the plate periphery, said plates being secured to each other face to face, the segments of one plate being located opposite the recesses of the other plate.

1,899,873. ALLOY. ROBERT H. LEACH, Fairfield, Conn., assignor to Handy & Harman, New York, N. Y., a Corporation of New York. Continuation of application Serial No. 622,108, filed July 12, 1932. This application filed Aug. 13, 1932. Serial No. 628,768. 3 Claims. (Cl. 75—1.)

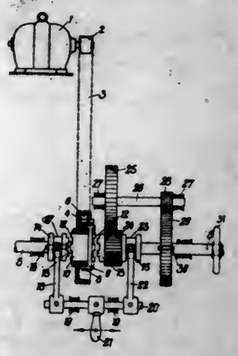
1. An alloy which consists of silver from about 48% to 52%, copper from about 12% to 16%, zinc from about 14% to 18%, cadmium from about 16% to 20%, and phosphorus from about 0.5% to 2%.

1,899,874. SYSTEM FOR CONTINUOUSLY CLEANING THE BALLAST OF RAILWAY TRACKS. MAURICE HENRI LEMAIRE, Valenciennes, France. Filed June 26, 1931, Serial No. 547,157, and in France July 28, 1930. 7 Claims. (Cl. 262—2.)



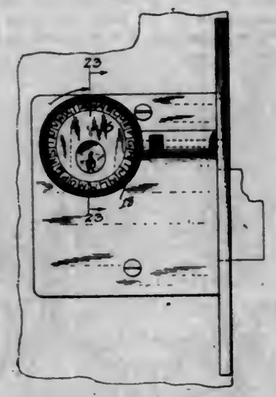
1. A device for cleaning railway track ballast comprising a beam movable along the track, a plurality of lifting devices carried by the beam and having rail engaging members connected therewith and operable to lift the rails from the ballast, a plurality of endless conveyors surrounding the beam and rails, a screen supported by the beam, and means for conducting the ballast elevated by the conveyors to the screen, as and for the purpose set forth.

1,899,875. DRIVING MECHANISM FOR FLAT KNITTING FRAMES. KARL KLAUS LIEBERKNECHT, Oberlungwitz, Germany. Filed Nov. 29, 1930, Serial No. 499,055, and in Germany Dec. 4, 1929. 2 Claims. (Cl. 74—57.)



1. A drive for flat knitting machines comprising in combination with a motor, a driving shaft driven by said motor, a rotatable non-shiftable sleeve arranged on said driving shaft, coupling teeth on both end faces of said sleeve, a drum keyed on said sleeve, a belt pulley loosely mounted on said sleeve, a friction band carried by the pulley and extending over said drum, a coupling sleeve shiftably splined on said driving shaft adapted to be coupled to said non-shiftable sleeve at one side thereof, to directly drive said driving shaft, a second shiftable coupling sleeve splined on said driving shaft on the opposite side of said non-shiftable sleeve, a gear carried by said second coupling sleeve, a counter-shaft, a reducing gearing including the aforesaid gear with a transmission ratio of approximately 1:10 on said driving shaft and counter-shaft and a hand adjusting means on said driving shaft adapted to allow said driving shaft to be turned by hand for an additional reduction of speed down to an including zero when said motor is running and said reducing gear is engaged.

1,899,876. LOCK. HAROLD MACHINIST, San Quentin, Calif., assignor of one-tenth to Margaret Slater, Berkeley, Calif. Filed Sept. 21, 1931. Serial No. 564,165. 6 Claims. (Cl. 70—53.)



2. In a device of the character described, the combination with a cylinder lock comprising a barrel having a key actuated mechanism positioned therein, said mechanism including a plurality of pins adapted to be projected from said barrel, a plurality of selector rings rotatably positioned on said barrel, each of said selector rings having an opening formed therethru, a stop ring mounted on each selector ring, a throw-off ring mounted on certain of said selector rings, a dial carried by one of said selector rings, a striker pin carried by said dial and adapted to actuate said selector rings whereby said rings are free to rotate relative to said barrel.

1,899,877. BLOCK FOR X-RAY DENTAL FILMS. FLORIAN J. MARTIN, Medford, Wis. Filed Feb. 3, 1930. Serial No. 425,592. 1 Claim. (Cl. 250—34.)

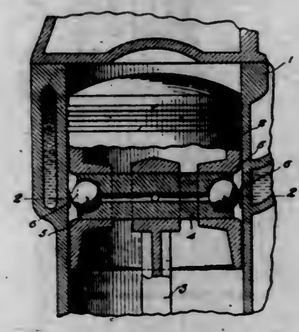


A dental X-ray film holder comprising a base adapted to be arranged between the teeth of the patient, said base having an opening therethrough, and oppositely beveled walls above and below said opening, a modeling composition of relatively soft material adapted to be received by said opening, and adapted to receive the impression of the teeth when bit upon to maintain the holder in the mouth of the patient, and means forming part of said holder for supporting a film fixed relatively thereon.

1,899,878. DYESTUFFS OF THE DIBENZANTHRONE SERIES AND PROCESS OF MAKING SAME. WILHELM MOSER, Riehen, near Basel, Switzerland, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 3, 1931, Serial No. 566,812, and in Switzerland Oct. 14, 1930. 4 Claims. (Cl. 260—61.)

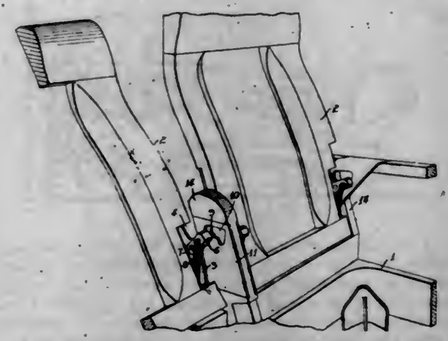
4. As new products the chlorine and bromine containing at least tetrahalogenated dibenzanthrones dyeing cotton blue to greenish blue tints fast to water, which dibenzanthrones contain at least 3 atoms of chlorine and at least one atom of bromine, the said products being dark powders, and dissolving in sulfuric acid to blue-violet solutions.

1,899,879. SAFETY WRIST PIN. JAMES R. NOSS, Aliquippa, Pa. Filed Feb. 15, 1932. Serial No. 593,139. 2 Claims. (Cl. 74—108.)



1. A safety wrist pin comprising a wrist pin body having formed in the ends thereof seats, anti-friction balls journalled in said seats and adapted to prevent the ends of the wrist pin body from engaging with the walls of a cylinder.

1,899,880. SEAT-BACK CONTROL. SYDNEY PAUL, Lima, Ohio, assignor to Superior Body Company, Lima, Ohio, a Corporation of Ohio. Filed Nov. 22, 1930. Serial No. 497,388. 6 Claims. (Cl. 155—163.)

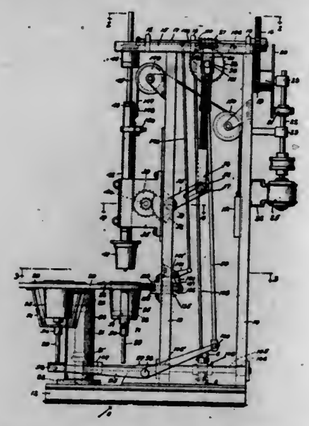


3. In combination, a seat frame, a back pivoted thereto for adjustment to upright or reclining position, co-engaging catch members on the seat frame and back respectively to latch the back in either position, one of said catch members being relatively fixed and the other pivoted, a spring acting on the pivoted catch member and urging it toward latching position with the seat back in either position, and means engaged with the pivoted catch member to shift it past dead center with reference to said spring when the seat back is moved forwardly from its upright position, thus releasing the back for movement to its reclining position.

1,899,881. POT FORMING MACHINE. FRANK Y. PEARNE, Alhambra, and WILLIAM MCCLINTOCK, Los Angeles, Calif., assignors of one-third to Frank R. Galbreath, Los Angeles, Calif. Filed Feb. 6, 1931. Serial No. 513,880. 14 Claims. (Cl. 25—26.)

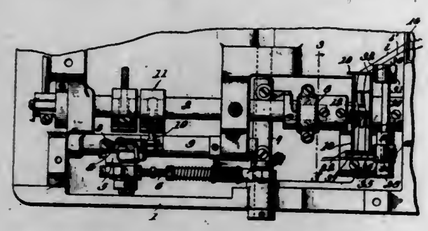
1. An automatic molding machine embodying: a rotary table; a plurality of molds in said table; a core member

positioned above said table for intermittent movement into said molds; rack means for reciprocating said core



member; means for intermittently rotating said table; and a friction brake for retarding the movement of said table.

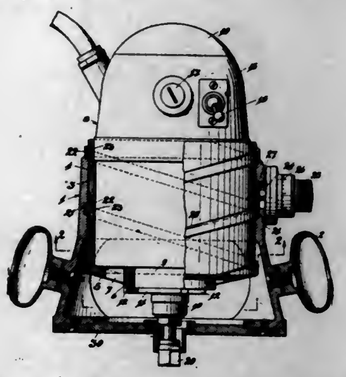
1,899,882. THREAD CONTROLLING MECHANISM FOR SEWING MACHINES. CHARLES F. RUBEL and FREDERICK F. ZEIER, Chicago, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 26, 1929. Serial No. 416,611. 3 Claims. (Cl. 112—248.)



1. A thread controlling mechanism for sewing machines including a rotating shaft, a thread controlling element mounted on said shaft for rotation therewith and having means adapted to engage the thread for controlling the same, thread guides located at opposite sides of said shaft and said thread controlling element and disposed so that the thread passing between said guides is led into engagement with the peripheral surface thereof, a shaft extending in a direction at right angles to a plane containing the axis of the shaft supporting said thread controlling element on which said thread guides are mounted, said thread guides being disposed at one side of the axis of the shaft supporting the same whereby when said shaft is rotated said thread guides are moved away from the thread controlling element and rendered accessible for threading.

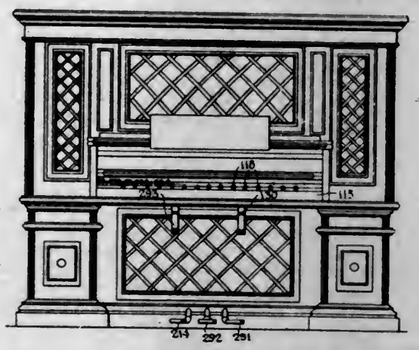
1,899,883. ADJUSTABLE AND INTERCHANGEABLE MOUNTING FOR MOTOR DRIVEN TOOLS. ELMER P. SACREY, Liverpool, N. Y. Filed June 25, 1930. Serial No. 463,769. 12 Claims. (Cl. 144—136.)

1. In a motor driven tool, the combination of a body provided with a motor receiving recess open at its outer end, a motor placeable in the recess through the outer end thereof, the bottom wall of the recess being provided with a hub having a lengthwise slot opening through its opposite ends and the motor having a fixed member mounted concentric with its shaft and movable through the slot upon relative endwise movement of the motor when being placed into and out of the recess and movable into and out of interlocking engagement with the outer end wall of the hub upon relative rotary movement of the body and said member, all whereby the motor is removable and replaceable in the body and interlocked therein upon relative endwise and rotary movement of the body and the motor.



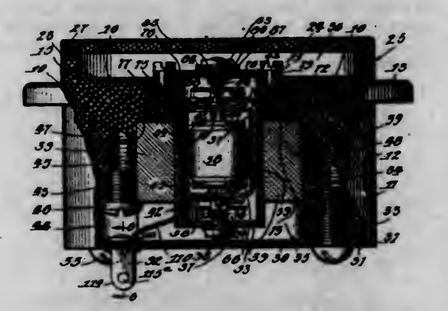
10. In a motor driven tool, a body portion formed with a passage; a motor having a shaft provided with means for holding a tool and having a housing, slidably fitting the passage, mounted in the passage; spiral interlocking means connecting the motor housing and the body portion; and means mounted on the body portion and coacting with the motor housing to turn the same and thereby shift the motor axially to vary the cutting depth.

1,899,884. ELECTRICAL MUSICAL INSTRUMENT. MELVIN L. SEVERY, Los Angeles, Calif., assignor to The Vocalsevro Company, Los Angeles, Calif., a Corporation of Delaware. Filed Aug. 4, 1930. Serial No. 472,969. 23 Claims. (Cl. 84—1.)



4. The method of producing simple tones throughout the range of a musical instrument, which consists in providing twelve different pitches for each octave of said instrument, the said simple tones being produced by members of magnetic material, each said member being carried and revolved by one of six rotatively-timed shafts and being shaped to create repetitious, rhythmic variations in the magnetic field created between such member and an opposed adjacent, associated, magnetizable core, thus causing rhythmic motions of the same whenever magnetized; regulating the degree of said motions to secure proper musical expression; and transmitting the motions of said cores to members adapted to impress these movements efficiently upon the surrounding atmosphere.

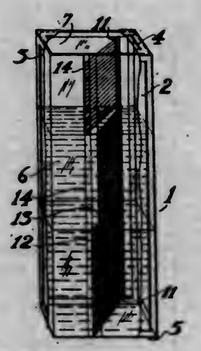
1,899,885. ELECTRICAL MEASURING INSTRUMENT. RAY SIMPSON, River Forest, Ill., assignor, by mesne assignments, to Jewell Electrical Instrument Company, a Corporation of New Jersey. Filed Oct. 22, 1930. Serial No. 490,415. 10 Claims. (Cl. 171—95.)



1. A magnetic structure for electrical devices, comprising a sheet metal pole piece unit of substantially cup-shape, the pole pieces being separated by slots and joined by integral parts adapted to be saturated with flux, an integral bridge across one end adapted to support a bearing and proportioned to be saturated with flux.

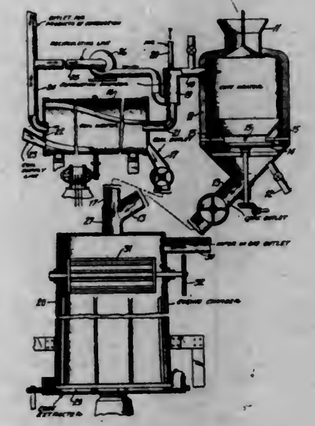
10. A casing for electrical instruments, comprising an insulating body of molded phenolic condensation compound having a socket in its rear side for receiving a movement and having a laterally projecting attaching flange, an insulating cover plate for closing said socket, threaded members passing through said cover plate and having direct threaded engagement with the material of said molded casing, an upwardly projecting wall carried by the other end of said casing, a transparent cover plate carried by said wall and a bezel ring engaging said cover plate and frictionally engaging the outside of said latter wall.

1,899,886. GAUGE GLASS. DANIEL E. STINES, Plainfield, and JOHN W. PACKIE, Green Village, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed June 20, 1932. Serial No. 618,264. 6 Claims. (Cl. 116—118.)



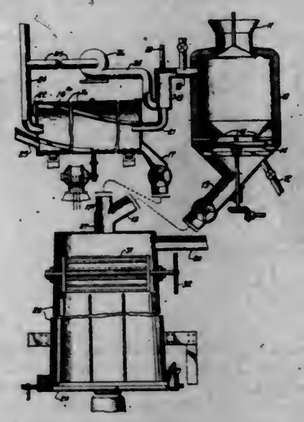
1. The method of indicating the levels of immiscible fluids with different refractive indices which comprises passing narrow beams of light horizontally through vertical columns of fluids and observing the change of the points of emergence of the narrow beams of light disclosing the different fluids having a different angle of refraction.

1,899,887. METHOD OF COKING COAL. ERNEST W. THIELE, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed May 14, 1928. Serial No. 277,766. 9 Claims. (Cl. 202—14.)



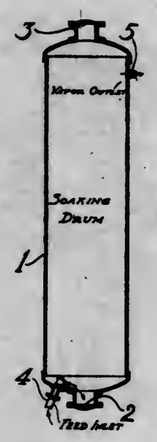
1. The method of coking coal which comprises, highly heating coke, by partial combustion thereof, to a temperature sufficient to coke coal, admixing the said heated coke with coal in sufficient quantity to raise the coal to a coking temperature, and causing the coal to coke in the absence of substantial combustion.

1,899,888. APPARATUS FOR CARBONIZATION OF COAL. ERNEST W. THIELE, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Original application filed May 14, 1928, Serial No. 277,766. Divided and this application filed July 27, 1929. Serial No. 381,480. 14 Claims. (Cl. 202—93.)



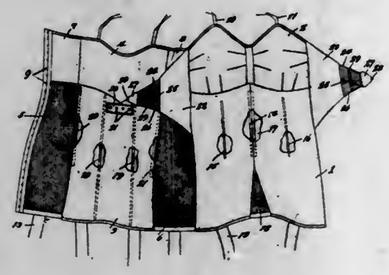
1. An apparatus for coking coal comprising a retort, means for partially burning coke to heat it to a high temperature, means for conveying said highly heated coke to said retort, a chamber for preheating fresh coal to be coked, means for supplying preheated coal from said preheating chamber to said retort, means for withdrawing volatile matter from said retort, and means for withdrawing coke from said retort.

1,899,889. ELIMINATING WATER HAZARD IN TREATING OILS. CHARLES D. BAYNE, Baytown, Tex., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Apr. 25, 1929. Serial No. 357,898. 2 Claims. (Cl. 196—147.)



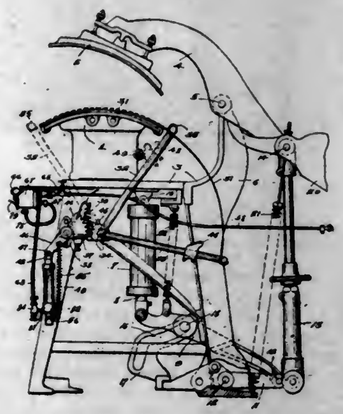
1. In a drum for the heat and pressure treatment of hydrocarbons, a manhead neck in the bottom of the drum of smaller diameter than the drum and a manhead carried by the neck, and a nozzle supported within the drum with its inlet opening through the drum and its delivery orifice positioned at the bottom of the drum to deliver fluid downwardly against a wall of the neck whereby any liquid in the neck is subject to be struck by the incoming fluid.

1,899,890. FOUNDATION GARMENT. KATHERINE E. CUNNINGHAM, Chicago, Ill., assignor to Associated Apparel Industries, Inc., Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1932. Serial No. 601,897. 5 Claims. (Cl. 2—30.)



1. A foundation garment comprising a brassière adapted to cover the body across the busts and a connected front section adapted to cover the diaphragm and abdomen, flaps secured to the sides of said brassière and down the sides of said front section to about the waist line, sets of elastic straps attached to the outer ends of said flaps and including an upper diagonal strap arranged to exert a downward pull on the upper front edge of the brassière, a lower diagonal strap connected to the upper strap and diverging therefrom at an angle to exert an upward pull on said front section in the region of the abdomen, and a shorter horizontal strap secured to an intermediate portion of said diagonal straps in position to exert a pull across the lower front edge of the brassière and the upper edge of said front section in the region of the diaphragm, and means for holding said straps under tension at the back of the garment.

1,899,891. IRONING PRESS AND WORKHOLDER. EARNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Oct. 22, 1927. Serial No. 228,041. 14 Claims. (Cl. 68—9.)



10. An ironing machine comprising a press frame, a pressing head and buck, a work holder therefor comprising a shaft mounted on the press frame remotely from the buck; a swingable frame carried on the shaft and adapted to swing from the rear of the machine toward and from the buck and below the buck, and including a frame portion which comes to rest at the front edge of the buck, another frame portion at the rear edge of the buck and spaced from the first portion; a thin clamp band of sufficient length to reach transversely across the buck and having its ends secured to the spaced frame portions; motor means carried on the machine frame remotely from the buck, and operatively associated with the shaft, and adapted to apply torque to the shaft to move the swingable frame toward and under the buck, and to carry the clamp band over the end and across the buck; and means operatively associated with the shaft and cooperating with the motor means to direct the swingable frame and its clamp band downwardly after the band has reached final position transversely of the buck.

12. A pressing machine, comprising in combination, upper and lower pressing elements having relative movement one toward and from the other, a work grip cooperating with the lower pressing element, means supporting the work grip for movement over the lower pressing element into and out of position over the pressing face of said lower pressing element and movable perpendicularly toward and from said element, and means for actuating the work grip to successively move the same over the lower pressing element and then move the work grip perpendicularly toward the pressing element to grip the work and for moving the work grip out of operative position in the reverse order.

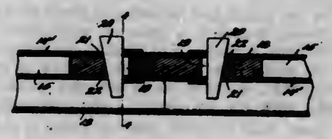
1,899,892. HEAT-INSULATED PAPER BAG AND METHOD OF MAKING THE SAME. JOHN N. D'ESTE, Milo, Me., and WILLIAM R. TOWER, Newton, Mass., assignors to Jiffy Pad & Excelsior, Inc., Boston, Mass., a Corporation of Delaware. Filed Aug. 27, 1931. Serial No. 559,658. 7 Claims. (Cl. 229—53.)

1. A heat-insulated bag for perishable food stuffs comprising layers of paper formed and united to provide a flexible flat-bottomed bag with an outer wall of paper and an inner wall of paper, said outer and inner walls containing and enclosing therebetween a layer of flexible fibrous



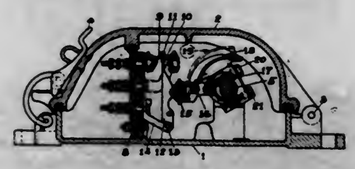
heat-insulating material substantially surrounding said inner wall and flat bottom of said bag, and providing air cells between the walls.

1,899,893. CONVEYER. CADWALLADER EVANS, Jr., Scranton, Pa. Filed Aug. 3, 1931. Serial No. 554,839. 3 Claims. (Cl. 198—220.)



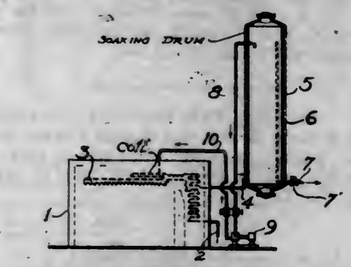
1. A conveyer of the class described comprising, in combination, a plurality of elongated trough-like sheet metal members arranged end to end, a force transmitting element connected to each such member and extending from end to end thereof, and means detachably securing the adjacent ends of adjacent elements together, said means being adapted to automatically take up wear and maintain a rigid connection between said elements.

1,899,894. CIRCUIT CONTROLLER. OSCAR S. FIELD, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Mar. 20, 1930. Serial No. 437,445. 4 Claims. (Cl. 200—6.)



1. In a circuit controller for railway track switches and the like, a movable contact, a front and a back contact, a shaft for operating the movable contact from one to the other of the fixed contacts, drive means for said shaft, a resiliently biased arm, a toggle connecting the arm to the shaft for moving the movable contact to a neutral position upon the drive means becoming disconnected from said shaft, the toggle being on dead center when the contact is in neutral position thus to prevent the biased arm from moving the contact beyond neutral position.

1,899,895. PROCESS FOR PYROLYTIC CONVERSION OF PETROLEUM OILS. FRANK A. HOWARD, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed June 29, 1927. Serial No. 202,191. 1 Claim. (Cl. 196—51.)

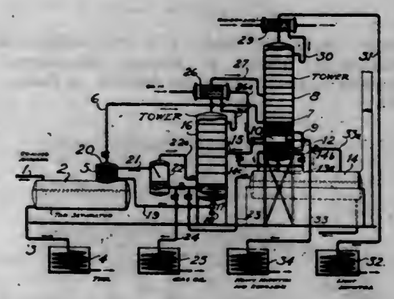


The improvement in cracking which comprises flowing a stream of the oil through an elongated narrow heating zone under conditions to give substantial cracking, then through a thermally insulated enlarged digestion zone in which the oil is held for a relatively long time under cracking conditions, continuously abstracting oil from said digestion zone, uniting such abstracted oil with said stream in the heating zone at an intermediate point, heating the combined stream, returning the same to the digestion zone, and continuously withdrawing all of the fluid products from the digestion zone in a single stream.

1,899,896. PRODUCTION OF SODIUM SULPHHYDRATE AND SODIUM SULPHIDE. ROBERT B. LEBO, Elizabeth, and HERBERT G. M. FISCHER, Westfield, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed May 5, 1931. Serial No. 535,304. 6 Claims. (Cl. 23—134.)

1. An improved process for the production of sodium sulphhydrate substantially free from organic matter or mercaptan odors from gases containing both hydrogen sulphide and mercaptans which comprises, contacting an excess of the gas with an aqueous solution of caustic soda, the absorption capacity of the said solution for hydrogen sulphide being insufficient to absorb all the hydrogen sulphide of the gas, and withdrawing an aqueous solution of sodium sulphhydrate.

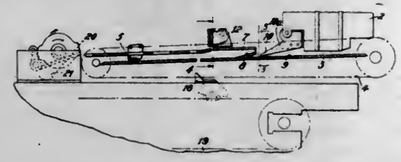
1,899,897. METHOD FOR SEPARATING CRACKED HYDROCARBON MATERIAL. NATHANIEL E. LOOMIS, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Oct. 22, 1927. Serial No. 227,880. 2 Claims. (Cl. 196—94.)



1. An improved process for separating mixtures of hydrocarbons into a series of valuable condensates, comprising separating vapors from tarry materials, passing the vapors in indirect heat exchange with condensate from a

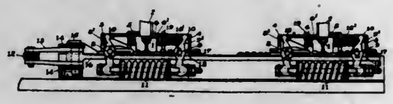
later stage of the operation, passing remaining vapors in indirect heat exchange with a second condensate formed in a later stage of the operation, whereby a portion of the vapors is condensed and the said second condensate is reboiled, passing remaining vapors into a rectifying zone in which they are in part condensed to form the condensate which is in indirect heat exchange with the vapors first separated from the tarry material, and recovering a final vapor product from the system.

1,899,898. MACHINE FOR PACKING CIGARETTES. WALTER EVERETT MOLINS and GEORGE DANIEL HORGAN, Deptford, London, England. Filed May 1, 1931, Serial No. 534,412, and in Great Britain May 6, 1930. 6 Claims. (Cl. 226—5.)



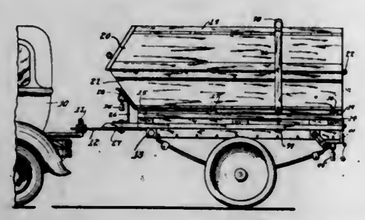
1. In apparatus for arranging oval cigarettes in lapped formation, the combination with means for moving a batch of cigarettes in the direction of their length with the major axes thereof substantially horizontal, guide means through which the cigarettes are moved for engaging the same to tilt the major axes, and converging guides through which the tilted cigarettes are moved for compacting the cigarettes to obtain the desired lapped formation.

1,899,899. CAR RETARDER FOR RAILROADS. WESLEY V. MORGAN, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Feb. 24, 1930. Serial No. 430,714. 4 Claims. (Cl. 188—62.)



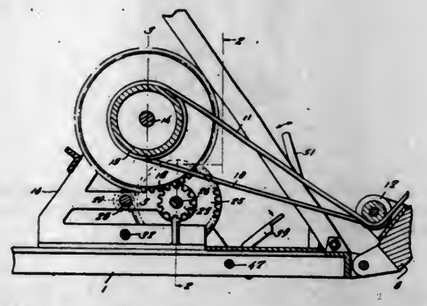
1. In a car retarder of the track brake type, in combination with a pair of running rails, a shoe beam at each side of each running rail, a brake shoe carried by each shoe beam, one of the shoe beams and shoe at each rail being formed to constitute a horizontal plane support face extending away from the rail with an upstanding shoulder at the rear thereof and parallel to the rail of strength and height to prevent a derailment.

1,899,900. FOLDING BOAT AND TRAILER CARRIER THEREFOR. GEORGE A. NELSON, Wauwatosa, Wis. Filed May 9, 1932. Serial No. 610,074. 4 Claims. (Cl. 9—2.)



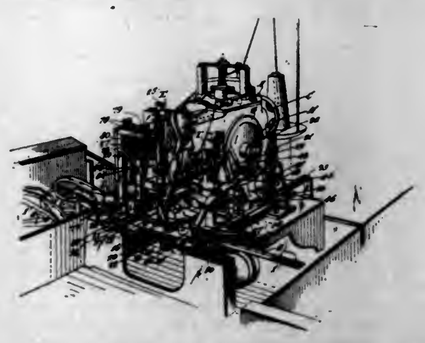
1. A folding boat comprising two hinged sections adapted to be folded one upon the other, a hasp fastened to one section and adapted to pass through the other section, and locking means at the outer side of the boat and engaged by the hasp for securing the hinged sections in folded relation.

1,899,901. CROWDING AND RACKING-IN MECHANISM FOR EXCAVATOR CRANES. STEPHEN N. NICKEISS, Laureldale, Pa., assignor of one-half to Temple Slag Company, Temple, Pa. Filed Mar. 29, 1932. Serial No. 601,820. 6 Claims. (Cl. 214—135.)



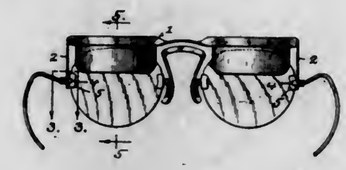
1. An excavator crane comprising in combination, a main operating drum, and means for operating the drum in one direction at variable speeds and in the opposite direction at one speed, and including a shaft on which said drum is loosely mounted, a gear on said shaft adjacent each end of said drum, one of said gears being fast and the other of said gears being loose relative to the shaft, a counter shaft, a gear loose on the counter shaft and meshing with the gear fast on the first named shaft, a second gear fast on said counter shaft and meshing with the gear loose on the first named shaft, a brake operatively associated with the gear fast on said counter shaft, clutch control means for driving said counter shaft, means for driving the said gear loose on said counter shaft, means for clutching the last mentioned gear to said counter shaft, and planetary gearing for driving said drum from the first named shaft at variable speeds in one direction and at one speed in the opposite direction.

1,899,902. METHOD OF AND APPARATUS FOR MAKING HOOK AND EYE TAPE. LEO ROSEMAN, Newark, N. J. Filed Jan. 21, 1931. Serial No. 510,195. 12 Claims. (Cl. 112—2.)



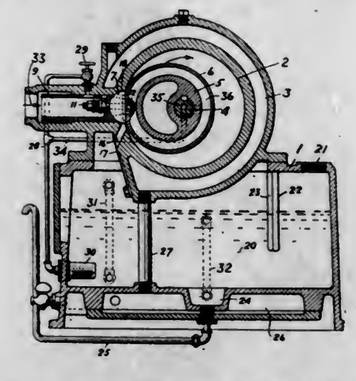
2. Apparatus of the character described for making hook fastener tape which comprises a strip of fabric having hook fastener elements thereon with the bill portions partially bent into the finished shape, including means for sewing the hooks on said strip, and means for completing the bending of said bill portions to finish the bills.

1,899,903. ATTACHMENT FOR SPECTACLES. ARTHUR R. SIMON, La Porte, Ind., and WILLIAM R. UHLEMANN, Chicago, Ill., assignors of one-third to Richard H. Uhlemann, Chicago, Ill. Filed Jan. 7, 1932. Serial No. 585,194. 3 Claims. (Cl. 2—13.)



1. A disconnectable attachment for spectacles, comprising means for correcting and varying the conditions in the light path of the spectacle lens, a carrier frame for such means formed of a strip of rigid material of a length corresponding with the width of the spectacles, and having angular downwardly extending end extensions adapted for engagement with the outer edges of the spectacle frame with the main portion of the carrying frame in adjacent relation to the upper edge of said spectacle frame in actual use, the lower end of each angular extension being formed with a pair of inturned rear prongs in vertical spaced relation and with a forward inturned prong in spaced and staggered relation to the rear prongs aforesaid with said prongs adapted for holding engagement with the lens frame or clip of the spectacles.

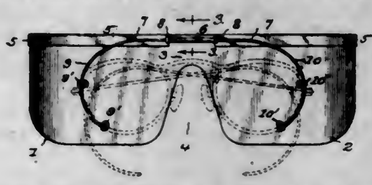
1,899,904. ROTARY PUMP. OLIVER STEELE SLEEPER and CHARLES J. WESTIN, Philadelphia, Pa., assignors to F. J. Stokes Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 20, 1929. Serial No. 415,393. 12 Claims. (Cl. 230—147.)



1. A rotary pump including a cylinder having inlet and outlet passages, a piston, a slide valve having rectilinear motion, a bolt mounted on a pivot on said piston and forming a pivotal connection between said piston and said slide valve, and a ball seat on said bolt providing for rotary movement between said valve and said bolt.

1,899,905. GLARE DIMMER ATTACHMENT. WILLIAM R. UHLEMANN, Chicago, Ill., assignor of two-thirds to Richard H. Uhlemann, Chicago, Ill. Filed Apr. 26, 1932. Serial No. 607,563. 2 Claims. (Cl. 2—13.)

1. In a spectacle attachment of the type herein described, the combination of a dimmer member of sheet material, a sheet metal holder for said member folded along its length into a flattened return bend provided at its midlength with an integrally formed pivot sleeve, and an attaching member formed of resilient wire pivotally mounted at its middle in the aforesaid pivot sleeve, said attaching means being of an open and approximately oval shape providing hook shaped outer portions with each of said

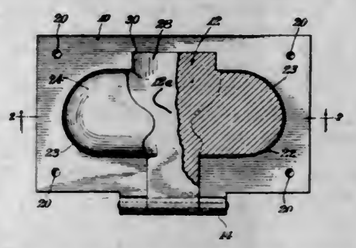


portions carrying clips in spaced relation and adapted for engagement with the lens or lens frame of a pair of spectacles in straddle relation to the attaching lugs thereof for the temple bows.

1,899,906. METHOD OF CASTING READILY OXIDIZABLE METALS. ARTHUR W. WINSTON, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 20, 1929. Serial No. 415,615. 7 Claims. (Cl. 22—192.)

1. The method of casting a readily oxidizable metal such as magnesium or its alloys so as to eliminate excessive burning thereof which includes the steps of forming a mold having a facing containing a solid carbonaceous material having free carbon and a relatively large proportion of non-aqueous constituents which are volatile at the temperature reached in casting, applying to the surface thereof solid carbonaceous material in finely divided form and then pouring the molten metal in contact therewith.

1,899,907. APPARATUS FOR BALANCED MOLDING OF RUBBER ARTICLES. PHILIP E. YOUNG, Fairhaven, Mass., assignor to Acushnet Process Company, a Corporation of Massachusetts. Filed Nov. 22, 1930. Serial No. 497,408. 3 Claims. (Cl. 18—35.)

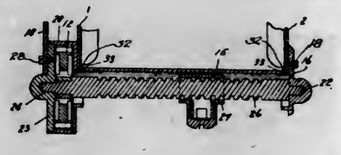


1. A structure for the molding of hollow molded rubber articles having relatively large openings comprising a shell adapted to mold a plurality of such articles simultaneously and a common integral core for said shell adapted to complement the mold in the molding operation the shell being divided longitudinally and the longitudinal axis of the core being substantially parallel to the longitudinal dividing line of the shell, said shell and said core when in molding position having shaped spaces between them for the molding of the desired articles, said shaped spaces being disposed in substantially balanced relationship relative to said core, whereby the resultant hydraulic pressures generated are substantially balanced.

1,899,908. FISHING REEL. WALTER L. ADAMS, Akron, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 14, 1928. Serial No. 254,188. 7 Claims. (Cl. 242—84.4.)

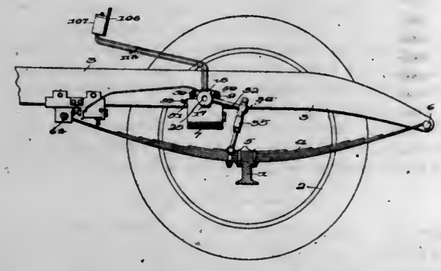
1. In a fishing reel structure, front and back plates, an operating crank on the front plate, a housing extending

between the front and back plates, a level wind mechanism enclosed within the housing, said housing being re-



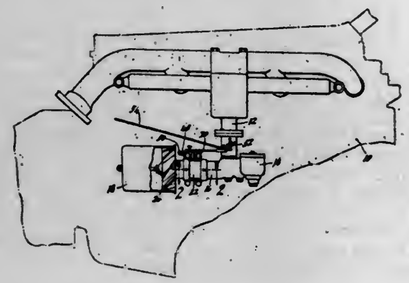
movably secured to the plates and interlocked therewith, whereby the housing braces the plates and maintains them at a fixed distance apart.

1,899,909. SHOCK ABSORBING MECHANISM. JOHN WICKLIFFE GRAY, Chattanooga, Tenn., assignor of one-half to Bernard V. Curnen, Chattanooga, Tenn. Filed July 22, 1932. Serial No. 624,097. 17 Claims. (Cl. 188—87.)



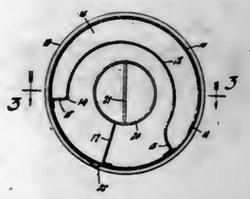
1. In a vehicle, the combination with a chassis, of a hydraulic shock absorber therefor, and remote control means constructed and arranged to damp at least one-half its range of oscillatory motion independently of the other half.

1,899,910. CRANK CASE VENTILATION. HERBERT G. KAMRATH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Corporation of Michigan. Filed Aug. 3, 1927. Serial No. 210,426. 12 Claims. (Cl. 123—119.)



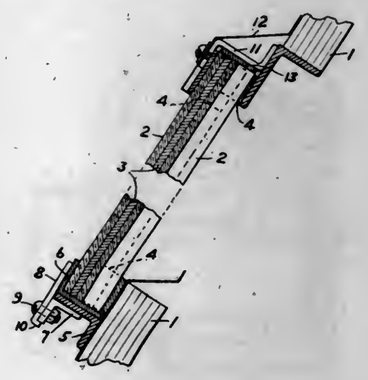
1. In combination with an internal combustion engine including an air intake and a throttle, openings leading from the intake into the engine crankcase, an element in said intake for deflecting a part of the incoming air into one of the openings and movable to vary the effective size of said opening, and means operated by opening and closing of the throttle for moving said element.

1,899,911. AIR CLEANER AND MUFFLER. HERBERT G. KAMRATH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Corporation of Michigan. Filed Nov. 30, 1928. Serial No. 322,849. 3 Claims. (Cl. 183—79.)



1. In a device of the class described, a cylindrical shell having in a side wall thereof an air intake opening, a curved wall secured at its opposite ends to the side wall of the shell so as to form therewith a parti-annular passage which communicates at its opposite ends with the air intake opening and the interior of the shell, a baffle plate secured to the side wall of the shell between the ends of the curved wall and extending radially inwardly therefrom, a dust discharge opening in the side wall of the shell, and means to conduct clean air from the interior of the shell.

1,899,912. CORRUGATED GLASS WINDOW AND LIGHT. PAUL G. MASTERS, Philadelphia, Pa., assignor to Pennsylvania Wire Glass Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Oct. 14, 1930. Serial No. 488,605. 6 Claims. (Cl. 108—16.)

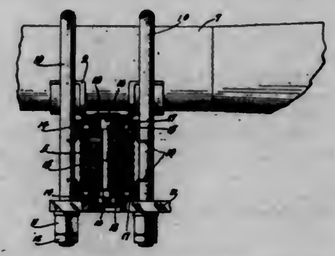


1. A building construction having an opening, spaced supports secured to the building construction, and arranged above and below the opening, sheets of corrugated glass closing the opening and held by the supports, said sheets of glass at their vertical edges lapping the neighboring sheets, and strips of permanent shape flat on one edge and corrugated on the other edge and interposed between the supports and glass sheets.

1,899,913. REAR CHASSIS SPRING MOUNTING. CHARLES LE ROY MCCUEN, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 20, 1931. Serial No. 517,155. 8 Claims. (Cl. 267—52.)

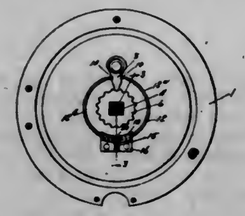
1. In a motor vehicle, the combination with an axle and a load supporting multiple leaf spring having an as-

sembly bolt passing therethru, of a cushioned connection between the axle and spring, including a pair of spaced spring pads carried by the axle on opposite sides of the spring, and each provided with an aperture in registry with the assembly bolt, a strap of elastic deformable ma-



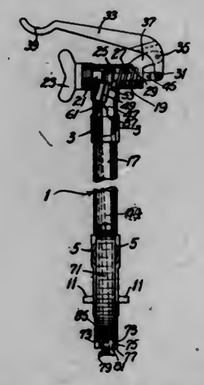
terial between each pad and an adjacent side of the spring, each strap having an integral domed portion projecting at one side into the registering aperture of the pad and receiving in its other side an adjacent end of the bolt.

1,899,914. CLICK SPRING FOR FISHING REELS. CHARLES T. PFLUEGER, Akron, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 11, 1928. Serial No. 253,664. 10 Claims. (Cl. 242—84.6.)



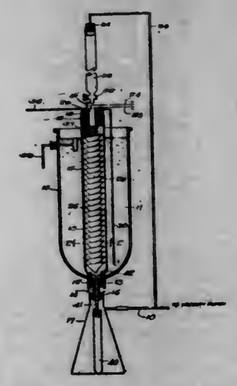
9. A click spring composed of two independent wire sections having radial extensions in contact at one end.

1,899,915. ELECTRICAL CUT-OUT. CLAUD L. MATTHEWS and THEODORE BIRKENMAIER, St. Louis, Mo., assignors to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 2, 1932. Serial No. 596,186. 16 Claims. (Cl. 200—117.)



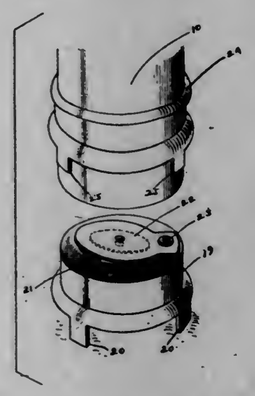
1. In a switch, line terminals, terminal engaging elements adapted to be engaged and disengaged therewith, a tube joining said terminal engaging elements to form a cartridge, a fuse link electrically joining said terminal engaging elements and passing through said tube, means for tensioning said link and means associated with one of said terminal engaging elements for releasing said link at the point of contact with the terminal engaging element, and means for transferring any resulting arc to a point remote from the point of fastening of the link to said terminal engaging element.

1,899,916. VACUUM DISTILLATION. ELMER H. PAYNE, Wood River, Ill., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Dec. 18, 1929. Serial No. 414,931. 3 Claims. (Cl. 196—114.)



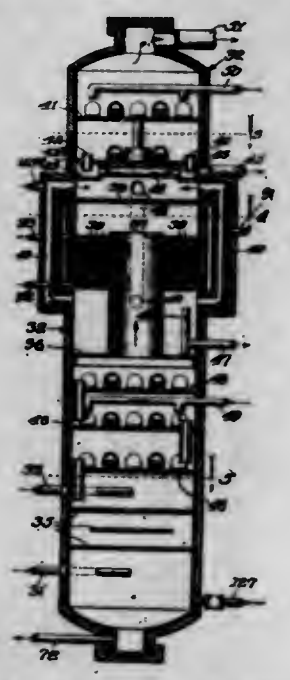
1. In a vacuum distillation apparatus for distilling mineral oils, a column, means for heating said column, and a helical trough around said column and in terminal contact therewith, said trough having a substantially flat bottom so that the oil will flow thereon in a relatively thin film.

1,899,917. BILGE PUMP. LOUIS EDWARD PERKINS, New York, N. Y. Filed Nov. 6, 1928, Serial No. 317,573. Renewed July 20, 1932. 3 Claims. (Cl. 103—216.)



1. In a bilge pump comprising a tubular barrel section, a valve carrying member consisting of a tapered body portion having an annular flange formed around the lower end, a series of downwardly extending legs, and a slip collar member associated with said tubular section for removably securing the valve carrying member to the tubular member.

1,899,918. FRACTIONATION OF HYDROCARBON OILS. ROBERT E. WILSON, Chicago, Ill., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Original application filed Oct. 18, 1926, Serial No. 142,316. Divided and this application filed Oct. 14, 1929. Serial No. 399,609. 5 Claims. (Cl. 196—139.)

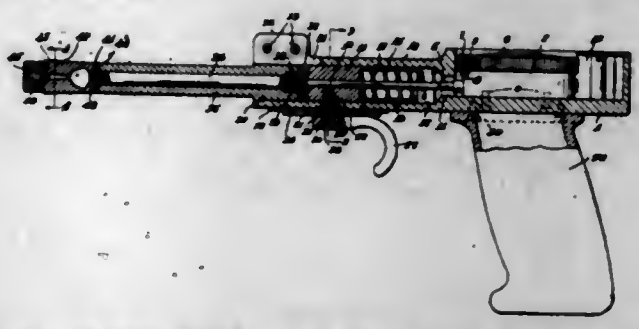


1. In a fractionating column, a vertical shell, means for supplying vaporized products in the lower portion thereof, fractionating plates above the point of supply of said vaporized products, a partition above said fractionating plates, said partition being provided with a vapor opening, a vapor conduit extending vertically from said vapor opening, said conduit providing a passageway between its wall and the shell of the column, cooling means in the passageway, said cooling means effecting condensation of a portion of the vapors emerging from the conduit, means for collecting all condensate above said partition and for withdrawing it from the column at the point of collection therein, a transverse partition spaced above the opening of said vapor conduit, means for collecting vapor from below the cooling means in the passage between the conduit and the shell of the still and for conducting such vapor above the last mentioned partition, fractionating plates above the last mentioned partition and the point of supply of vapor above said partition, cooling means in the shell above said last partition, and means for collecting all condensate formed above the last mentioned partition and for withdrawing it from the column at the point of collection therein.

1,899,919. MANUFACTURE OF MIXED ALKYL PHENYL ESTERS. MICHAEL N. DVORNIKOFF, St. Louis, Mo., assignor to Monsanto Chemical Works, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 15, 1931. Serial No. 569,109. 4 Claims. (Cl. 260—103.)

1. The method of manufacturing mixed alkyl phenyl esters of polycarboxylic acids, which are capable of forming inner anhydrides, that comprises forming the acid chloride mono-alkyl ester of the acid and subsequently reacting such acid chloride ester with a phenol.

1,899,920. CYLINDER GAUGE. CAESAR B. LITTERIO, Providence, R. I., assignor to Federal Products Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 20, 1931. Serial No. 531,448. 5 Claims. (Cl. 33—178.)



1. In a cylinder gauge of the kind described, a standard, an indicator carried thereby, a plunger adapted to transmit movement to said indicator, a stem carried at one end by said standard and having opposed slots adjacent to its outer end, a substantially U-shaped movable member of spring metal mounted in said stem, the arms of said U-shaped member constituting feelers, means to normally spread said feelers through said slots and beyond the diameter of said stem, means to effect movement of said member toward and from said spreading means, and means to transmit the movement of said member to said plunger.

ROLL NO. BB

OFFICIAL GAZETTE
UNITED STATES
PATENT OFFICE

JAN & FEB 1933

VOLS. 426 & 427

MICRO — PHOTO INC

CLEVELAND 3, OHIO